

BITS Pilani  
**annual  
report** 2017



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Appendix 'K': Ref. BG Agenda Item No.71.14  
Appendix 'H': Ref. GB Agenda Item No.57.09

**ANNUAL REPORT  
2017**

**REPORT OF THE BOARD OF GOVERNORS AS TO  
THE STATE AND CONDITION OF THE INSTITUTE FOR  
THE PERIOD 1ST JANUARY 2017 TO 31ST DECEMBER 2017**



**BITS Pilani**  
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# ANNUAL REPORT 2017

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**BITS Pilani**

# **annual report** 2017

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**Part A: A quick glance**



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## GOVERNANCE AND MANAGEMENT



**Chancellor**  
Dr. Kumar Mangalam Birla



**Pro-Chancellor**  
Smt. Shobhana Bhartia



**Vice-Chancellor**  
Prof. Souvik Bhattacharyya

## OTHER SENIOR OFFICERS OF THE INSTITUTE

Prof. Ashoke Kumar Sarkar  
*Director, Pilani Campus*

Mr. Arun Khetan  
*Chief Financial Officer (on-deputation)*

Prof. G Raghurama  
*Director, K.K. Birla Goa Campus*

Prof. Sanjay Kumar Verma  
*Dean, Academic Research (Ph.D. Programme)*

Prof. G. Sundar  
*Director, Hyderabad Campus & Off-Campus Programmes and Industry Engagement*

Prof. S. Balasubramaniam  
*Dean, Academic and Resource Planning*

Prof. Ranendra N. Saha  
*Director, Dubai Campus*

Prof. R. Mahesh  
*Dean, Faculty Affairs*

Prof. S.C. Sivasubramanian  
*Acting Registrar*

Prof. Niranjan Swain  
*Dean, Practice School*

Prof. Arya Kumar  
*Dean, Alumni Relations*

Prof. S. Gurunarayanan  
*Dean, Admissions and Work Integrated Learning Programmes*

Prof. Sunil Bhand  
*Dean, Sponsored Research and Consulting*

Prof. Suman Kapur  
*Dean, International Programmes and Collaboration*

## DISTINGUISHED ALUMNUS AWARD 2017

“BITS PILANI Distinguished Alumnus Award” In 2017 To the following alumni:

### **Prof. Govindan Rangarajan**



Prof Govindan Rangarajan obtained his M.Sc. (Hons.) in Physics from BITS Pilani in the year 1985 and subsequently did his Ph.D. from University of Maryland, College Park, USA in 1990. He served as Staff Scientist, Lawrence Berkeley Laboratory, University of California, Berkeley, USA from 1990 to 1992 before returning to India as an Assistant Professor at the Indian Institute of Science (IISc), Bangalore. He is presently serving as Professor, Department of Mathematics. He also heads the Division of Interdisciplinary Research (this Division comprises 10 Departments and Centres of IISc including the Centre for

Nanoscience and Engineering, Department of Computational and Data Sciences, Supercomputer Education and Research Centre, Robert Bosch Centre for Cyber Physical Systems etc.). He is an Honorary Professor, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore.

His research interest lies in the general areas of nonlinear dynamics, time series analysis and applied stochastic dynamics; having applications in the areas of neuroscience, geophysics and accelerator physics etc. He has published more than 75 research papers in international journals of repute. His research contributions are highly relevant for applications in diversified fields and have a great recognition amongst scientific community by having a citation indices of 2674, H-index of 23 and i10 index of 41.

He has received widespread recognition for his extraordinary contributions to research. He is a J. C. Bose National Fellow, Fellow of the Indian Academy of Sciences, Fellow of the National Academy of Sciences, India and a Homi Bhabha Fellow. He has been knighted by the Government of France (Knight of the Order of Palms) in 2006. He is a recipient of the Platinum Jubilee Award Lecture, Indian Science Congress Association, 2013.

The Distinguished Alumnus Award in the category of Academic Teaching and Research is awarded to Prof. Govindan Rangarajan, in recognition of his outstanding contributions to the society. Through his achievements, Prof. Govindan Rangarajan has brought glory and laurels to his Alma Mater – BITS Pilani.



### **Prof. Narayana R. Aluru**

Prof Narayana R. Aluru holds a Bachelors degree in Civil Engineering from BITS Pilani in 1989. He subsequently did his M.S. in Civil Engineering from Rensselaer Polytechnic Institute in 1991 and Ph.D. in Civil (Major) & Electrical (Minor) from Stanford University in 1995. He was Postdoctoral Associate, MIT during July1995-Dec1997. He is currently a Kritzer Professor in the Dept. of Mechanical Science and Engineering and Co-Chair, Molecular and Electronic Nanostructures Research Initiative, Beckman Institute for Advanced Science and Technology from July 2005 onwards at the University of Illinois at Urbana-Champaign.

He has to his credit more than 200 publications in internationally acclaimed journals in the areas of Computational Microtechnology (MEMS, Bio-MEMS, and Microfluidics), Multiphysics and Multiscale Computational Methods, and Computational Nanotechnology (NEMS, Nano fluidics, and Bio-Nano). His research contributions include development of multiphysics simulation tools for MEMS, development of multiscale techniques for NEMS and nanofluidic systems, revealing new physical phenomena encountered in confined nanofluidic transport, development of multiscale techniques for DNA sequencing and protein recognition through nanopores, identifying energy efficient materials for water desalination, and demonstration of blue energy using nanoporous 2D membranes. Prof. Aluru's work on computational micro and nanotechnology has been outstanding and highly cited, resulting in an h-index of 61 and over 13,100 citations (as of June 2017).

He has been serving as Associate Editor of leading international journals - IEEE/ASME Journal of Microelectromechanical Systems (2004-2014); IEEE Transactions on Circuits and Systems II (Jan 2004-Dec 2005); Micro and Nanofluidics since 2015; ASME Journal of Applied Mechanics since 2017; and is on Editorial Boards of internationally acclaimed journals - Computer Methods in Applied Mechanics and Engineering, International Journal for Multiscale Computational Engineering, Interaction and Multiscale Mechanics, and Journal of Computational Electronics.

He has received widespread recognition for his extraordinary contributions to the field of teaching and research. He is recipient of prominent Honours/Awards for his research work such as NSF CAREER Award, 1999; NCSA Faculty Fellow (1999, 2006, 2014); Xerox Award, 2002; CMES Distinguished Young Author Award, 2001; Willett Faculty Scholar, 2002-08; ASME Gustus L. Larson Memorial Award, 2006; USACM Gallagher Young Investigator Award, 2007; Richard W. Kritzer Distinguished Professor, 2009; Fellow, US Association for Computational Mechanics (USACM), 2011; Fellow, ASME, 2011, and The J. Tinsley Oden Medal from USACM in 2017.

For his extraordinary contributions to teaching, he has been honoured by College of Engineering Teaching Excellence Award, 2012, Engineering Council Award for Excellence in Advising, 2012, and his students have consistently ranked him Excellent in teaching year after year.

The Distinguished Alumnus Award in the category of Academic Teaching and Research is awarded to Prof Narayana R Aluru, in recognition of his outstanding contributions to the society. Through his achievements, Prof Narayana R Aluru has brought glory and laurels to his Alma Mater – BITS Pilani.

### **Mr. Hari Menon**



Mr. Hari Menon obtained his M.Sc. (Tech.) in Science & Technology Development from BITS Pilani in the year 1983. Hari started his career with ORG Systems, subsequently moving on to work with many of the best and most respected names in the country, including TVS Electronics, Wipro Infotech, Planetasia.com and Integrated Data Systems. He was the CEO of 'Indiaskills' – the Vocational Education joint venture between Manipal Group and City & Guilds (UK), as well. Hari's entrepreneurial journey began in 1999 when he co-founded Fabmart, one of the pioneers in e-commerce in India and its physical

extension – Fabmall, a chain of grocery stores in South India, which was acquired by Aditya Birla Group in 2006 and renamed 'More'.

Mr. Hari Menon is the CEO of BigBasket.com, a company he co-founded in December 2011 with a vision of setting up India's finest online food and Grocery Company. BigBasket.com, India's largest online supermarket, delivers the entire range of groceries, fresh fruits and vegetables, fresh meat, dairy products, processed foods, toiletries, personal care products, gourmet foods and a wide range of household products in 25 cities in India. Their range has 18000 products and over 1000 brands. The key to success of BigBasket lies in constant innovation using technology and unmatched Customer Service (in all aspects). BigBasket processes more than 45,000 orders per day, has a team of 14,000 members and a base of 5 million customers.

He has received widespread recognition for his extraordinary contribution as an entrepreneur. He and his company are recipients of distinct and prominent awards namely - Consumer Internet Company of the Year by VC Circle Awards 2016; BigBasket was recognized by YourStory as the 4th in the Top 100 Indian startups with gravity defying momentum in 2015; Best Startup of the year 2014 by Bangalore Management Association; Best Online Grocer at the Coca Cola Golden Spoon Awards 2016; and very recently, BigBasket was the first runner up (Silver) at the Global e-Commerce Summit Awards held in Barcelona. BigBasket was also awarded the Best Retail and e-commerce App of the Year at the AWS Mobility Awards 2017. Bigbasket was also been rated the Top Brand in the Forrester's India Customer Experience Index 2016 report. To his independent credit, Hari has been awarded for entrepreneurship by the Indira Group of Institutions; AUDI-RITZ ICON AWARDS from RITZ lifestyle magazine in category of Entrepreneurship and "Champion of Tomorrow" by CEO INDIA Magazine. He is a regular speaker at most major retail and e-commerce forums/events in India.

He is a fond lover of music and cricket. He is awesome on the guitar and used to play the guitar for his rock band, 'The Thunk', at BITS Pilani. The band played at cultural festivals and music clubs.

The Distinguished Alumnus Award in the category of Entrepreneurship is awarded to Mr. Hari Menon, in recognition of his outstanding contribution to society as an Entrepreneur. Through his achievements, Mr. Hari Menon has brought glory and laurels to his Alma Mater – BITS Pilani.



### **Mr. Harish Bhat**

Mr. Harish Bhat graduated with a Bachelor's degree in Electronics and Electrical Engineering from BITS Pilani in 1985. He subsequently completed his post graduate studies in business management from IIM Ahmedabad in 1987, graduating at the top of his batch and winning the IIM Ahmedabad Gold Medal for scholastic excellence. At BITS Pilani, he also served as President of the BITS Students' Union in 1984.

Harish Bhat is Chairman, Tata Coffee Ltd. and Brand Custodian of Tata Sons. He joined the Tata Group in 1987, as an officer in the Tata Administrative Service. He is a Director on the Boards of several Tata Group Companies, including Tata Global Beverages, Tata Coffee, Titan Company, Trent, Tata Starbucks, Infiniti Retail and Tata AIA Life Insurance Company. Prior to his appointment in Tata Sons, he was the Managing Director and the CEO of Tata Global Beverages.

He has played a key role in driving many strategic plans in the Tata Group over the past two decades, including the launch and nurturing of many iconic brands, the successful turnaround of the jewellery business, as well as the acquisition of Tetley. He has played a key leadership role in building some of India's largest and most successful consumer brands – Tanishq, Fastrack, Titan, Tata Tea and Chakra Gold Tea. He has played a key role in the first ever acquisition of a global brand by an Indian Company – Tetley by Tata Tea, which was a pioneering move.

Mr. Harish Bhat has written extensively in the areas of marketing, consumer behavior and business history. He has authored the best-selling book *Tata Log*, a contemporary history of the Tata Group, which was published by Penguin in 2012. His second book, titled *The Curious Marketer*, has been published in 2017 by Penguin Random House. He writes a popular monthly column on marketing and consumer behavior in one of India's national business newspapers, The Hindu Business Line.

He has received great recognition for his extraordinary contributions to the corporate world. He is a recipient of the Chevening Scholarship for young managers in 1997, awarded by the British Government. He has been a member of the Consumer Insights Panel of the Economic Development Board, Government of Singapore. In 2017, he received the *Champions of Excellence* award from the Advertising Agencies Association of India, for his sustained and excellent contributions, over the past three decades, to the profession of marketing and advertising.

The Distinguished Alumnus Award in the category of Professional Management of Business is awarded to Mr. Harish Bhat, in recognition of his outstanding contributions to the society, as a Corporate Leader. Through his achievements, Mr. Harish Bhat has brought glory and laurels to his Alma Mater - BITS Pilani.

### **Mr. Raghu Rajagopal**



Mr. Raghu Rajagopal did his M.Sc. (Tech.) in Engineering Technology from BITS, Pilani in the year 1990. He is Co-Founder and the CEO of DATRI, Head – Global Strategy - Ivy Mobility, Co-Founder and Director - The Green Peppers, Managing Trustee of Punarjanmam. He was into software development and software consulting prior to co-founding a social enterprise that he believes will make a world of difference for patients with life-threatening diseases such as leukemia.

He has served as Head – Chennai Development Center in i-flex that was acquired by Oracle, EVP- Sales and Marketing in Swift Response a BPO company acquired by Aegis, and CEO India, SVP Strategic Accounts in Seranova prior to plunging into a journey of contributing to a vital cause of the society. He was an active volunteer in a US donor search campaign for one of his friend's fiancé with an Indo-Pakistan genetic makeup to find a life-saving match.

Mr. Rajagopal is the Co-founder and CEO of DATRI (Sanskrit word that means donor), a not-for-profit organization that was established in 2009, working for the patients suffering from several blood disorders including blood cancer and Thalassemia. He is passionate about cancer-cure and is involved in addressing the challenges faced by people of Indian origin who are suffering from these fatal blood disorders.

The probability of finding a match for Indian patients suffering from serious blood disorders is as low as less than 1%. There are over 1,00,000 patients with fatal blood disorders in India alone. Realising the importance, along with Dr Nezh Cereb, President and Co-Founder of Histogenetics, a State-of-the-Art Lab specialised in Human Leukocyte Antigen (HLA) Typing, and Dr Soo Young Yang, Chairman and Founder of Histogenetics, Raghu set up DATRI. Today DATRI is the largest blood stem cell donors registry in India with over 2,35,000 potential donors and has facilitated 275 transplants as of June 2017.

Raghu has been very active in the entrepreneurial eco-system in the US and India. He is also actively involved in 'The Green Peppers', a Millet based food company that specialises in healthy food options. He is the Head of Global Strategy for 'Ivy Mobility', a mobile solutions company that is a leader in the FMCG vertical.

Raghu is also the Managing Trustee for Punarjanmam Foundation that helped flood affected individuals and organizations. This organization has helped over 75 families with their children's education and in the occupation of the affected beneficiaries.

The Distinguished Alumnus Award in the category of Public Life/Social Entrepreneurship is awarded to Mr. Raghu Rajagopal, in recognition of his outstanding contributions to the society. Through his achievements, Mr. Raghu Rajagopal has brought glory and laurels to his Alma Mater- BITS Pilani.



## A.1 HIGHLIGHTS OF ACHIEVEMENTS DURING THE YEAR 2017

### Pilani Campus

1. Convocation 2017 was held on July 23, 2017 to commemorate 845 BITS Pilani students graduating from the Institute. The chief guest for the day was Dr Tessy Thomas, Director, Advanced Systems Laboratory, DRDO Hyderabad. Prof Souvik Bhattacharyya and Prof Ashoke K. Sarkar, Director, Pilani Campus presented their respective reports on BITS Pilani, Pilani Campus and introduced the Guest of Honour Prof Santanu Chaudhary, Director, CSIR-CEERI, Pilani. Mr. Abhinav Baid (2013A7TS018P), Mr. Vaibhav Garg (2013A3PS587P), Mr. Harshit Jain (2013A7PS289P) were awarded the Gold Medal, Silver Medal and Bronze Medal respectively for their exemplary academic performance throughout. Prof Arya Kumar announced the Distinguished Alumnus Award for the year 2017 for Prof Govindan Rangarajan, Professor, Department of Mathematics and Chairman, Division of Interdisciplinary Research, IISc, Bangalore for Academic Teaching and Research, Prof Narayana R. Aluru, Richard W. Kritzer, Distinguished Professor, Department of Mechanical Science and Engineering, University of Illinois, Urbana-Champaign, USA for Academic Teaching and Research, Mr. Hari Menon, Co-founder, CEO and Head of Merchandising, Big Basket for Entrepreneurship, Mr. Harish Bhat, Chairman, Tata Coffee Ltd. and Brand Custodian of Tata Sons for Professional Management of Business and Mr. Raghu Rajagopal, CEO/Co-Founder, DATRI for Public Life /Social Entrepreneurship.
2. A total of 170184 candidates, including 43198 girls, from all over the country applied for BITSAT 2017-test. The candidates had the option of choosing their own centers, date and time for the test, which was conducted during 14th May to 31st May, 2017.
3. 14 Board toppers of Class XII of 2017 have joined three campuses of BITS Pilani this year.
4. Campus placement improved during the year. Four campuses put together, number of companies visiting our campuses for recruitment rose from 594 in 2016 to 632 in 2017.
5. Ranking of BITS PILANI by various magazines in 2017

Magazines	Year	Heading	Ranking
India Today	May 2017	Top 25 Engineering Colleges	4
		Zone-Wise Top 5 Engineering Colleges - North Zone	3
		Top 5 Private Engineering Colleges	1
The Week	May 2017	Top Private Engineering Colleges Zone-wise - North	1
		Top All India Non-Government	1
Outlook	June 2017	Top 10 Private Colleges	1
		Top 10 in placement	2
		Top 3 Zone-wise	2
		Top 10 in Infrastructure	5
		Top 100 Engineering College	6
		Top 10 in Academic Excellence	6
		Top 10 in Selection Process	6
		Top 10 Industry Interface	6
The Week	June 2017	Top Private Engineering Colleges Zone-wise - North	1
		Top All India Private Engineering Colleges	1
		Top All India Engineering Colleges	7
Dataquest	June 2017	<b>The Top 100 Private T-Schools of India for 2017</b>	1
		Top 150 Engineering Institute Rankings	4

6. The Prof L.K. Maheshwari Distinguished Alumnus Award distribution ceremony was held on January 5, 2017 at the BITS, Pilani Campus. The award was presented to Prof Mohan Manubhai Trivedi, Professor, Department of Electrical and Computer Engineering, University of California, San Diego for his outstanding contribution in Electrical & Instrumentation Engineering. Prof S. C. Sivasubramanian, Dean Administration & Acting Registrar, BITS Pilani, Pilani Campus was the Chief Guest of the ceremony. Prof Navneet Gupta, Secretary of the LKM Foundation, welcomed the guests and introduced the activities of the Prof L.K. Maheshwari foundation trust. Prof V. K. Chaubey highlighted the achievements of Prof Mohan Manubhai Trivedi.

7. BITS Pilani, Pilani Campus celebrated the 68th Republic Day on 26th January 2017 with great enthusiasm. This memorable occasion was graced by the presence of Chief Guest, Professor Ashoke K. Sarkar, Director, Pilani Campus, Prof S.C. Sivasubramanian, Dean, Administration & Acting Registrar, Deans, Associate Deans, Unit Chiefs, Heads of various departments, other faculties and their families, staff and students. Prof Ashoke K. Sarkar hoisted the national flag, the symbol of our National pride and identity, This was followed by rendition of the National Anthem. The ceremony ended with loud cries of 'Jai Hind' by the audience.
8. BITS Pilani, Pilani Campus celebrated its 66<sup>th</sup> Founders Day on Wednesday, February 1, 2017 (Basant Panchami) with great passion and enthusiasm. Many faculty members assembled on this auspicious day and offered floral tributes to the statue of the founder chairman, the Late Shri Ghanshyam Das Birla. During the ceremony nine members of the non-teaching staff who are due to retire this year were felicitated by the distinguished guests. In addition, 16 awards were also given to select non-teaching staff for their outstanding achievements in their field of work and significant contributions made to the administration and functioning of the Institute.
9. NSS BITS Pilani, Pilani campus organized a Blood Donation Camp during February 4-5, 2017. It was inaugurated by Prof. Souvik Bhattacharyya, Vice-Chancellor, BITS Pilani in the presence of Prof. Ashoke K. Sarkar, Director, Pilani Campus; Prof. S.C Sivasubramanian, Dean Administration, Prof. Anupam Singhal, NSS Program Coordinator, along with Mr. Aseem Sindwani, President, NSS; Mr. Abhishek Kumar Jha, Vice President NSS, and Blood Donation Camp Coordinators Mr. Bikram Singh Bisht and Miss Pranati Jain. Organized under the supervision of a team of 19 doctors from the Indian Red Cross Society, New Delhi the event marked the 36th installation of the camp. Dr. R..P. Pareek, Chief Medical Superintendent, Prof H.D. Mathur, Associate Dean ARCD, along with many other professors and staff members graced the occasion. A large number of NSS volunteers and other students also participated in this event.
10. One of the biggest achievements of Nirmaan this year was the registration of women empowerment projects as a Self-Help Group under the Amrita Federation of the Women and Child Department, Rajasthan. With this move the beneficiaries have access to a common Savings bank account in the WCD, Rajasthan. A Sanitation Drive was also conducted in the village of Baas to spread awareness among women about health and hygiene and the importance of sanitary napkins. Besides, career counseling sessions were conducted in two schools. An Effective Public Speaking workshop was conducted in Birla Balika Vidya Peeth and a talk was delivered in two schools by the board toppers of our campus. Also SOLE personal computers were set up in the Harinagar community.
11. Around 25 Alumni of the BITS 1972-77 batch returned to Pilani with their families to celebrate their Ruby Jubilee of graduation on February 10, 2017. Coming from various parts of the globe, the bunch of ex-BITSians included successful professors, entrepreneurs, ex-servicemen and corporates. There was also a welcome and faculty felicitation function for their former Professors where Prof Sheshu, Prof Kashiramka, Prof Yadav, Prof MMS Anand and Prof Krishna Mohan were honoured by the alumni. This was preceded by an extensive interaction with Prof Ashoke K. Sarkar, Director, Pilani Campus and Prof Souvik Bhattacharyya, Vice Chancellor, BITS Pilani. Prof Bhattacharyya outlined the vision and challenges ahead of BITS, and gathered the alumni's support for the road ahead. The batch responded positively, with the promise of support from BITSAA to develop BITS into a world-class institution.
12. BITS Pilani, Pilani Campus, organized a 2-day Workshop on Analytical Instruments for Chemical and Environmental Engineers (WAICEE-2017) in its 3<sup>rd</sup> edition, during February 10 - 11, 2017. WAICEE-2017 was inaugurated by the Chief Guest Dr Siddharth Mukherjee, Director, Technology, Air Liquide Global E & C Solutions India Pvt. Ltd., Prof Souvik Bhattacharyya, Vice-Chancellor, BITS Pilani and Prof Ashoke K. Sarkar, Director, Pilani Campus were also present. This workshop equipped participants with skills required to handle and operate sophisticated analytical instruments, which are imperative in the present industrial environment.
13. "Together at Bits", a cultural evening involving children, BITS' students, faculty and their families, was organized in the central auditorium of the Institute on February 18, 2017. Marking the first time in the Institute's history, in a three hour long programme, the stage was shared by students, faculty members and their families. Prof Ashoke K. Sarkar, Director, Pilani campus along with his wife, and Prof R. N. Saha, Director, BITS Pilani, Dubai Campus graced the function. The event witnessed participation in a large number. The event conducted by Prof Sanjiv Kumar Choudhary and Mr. Akash Singh was jointly organized by the Teaching Learning Centre, Staff Association and the Students' Union of Pilani Campus.
14. Basant Book Festival -2017 was inaugurated by Prof Ashoke K. Sarkar, Director Pilani Campus at Vishwakarma Mess on February 23, 2017 in the presence of Mr. Giridhar Kunkur, the Librarian and Chief, Publications and Media Relations Unit with the aim of encouraging the reading habit among the people of all age groups,. During the inauguration, the Book AURORA: Creative Short Stories, written by the Students of BITS Pilani, Pilani Campus during a competition organized by the BITS Library was launched by Prof Ashoke K. Sarkar. The book launch was followed by several events. Raghav Sharma, one of the authors of the short story shared his heartwarming story. Sachin Tripathi and Kuppa Sai Sashank, students from the Poetry Club recited poems. Nearly 26,000 books, covering areas such as, Science, Technology, Engineering, History, Social Sciences, Literature, Biography, Fiction, Dictionaries, Encyclopedias, Children's

- Books, and books on general reading were on display during the festival by six different publishers and well known booksellers.
15. SPORTECH'17 - A sports was organised by IIT, Delhi during 24th - 27th February, 2017 in which 48 colleges and around 1600 students from various parts of the country participated. Out of these, 149 students were from BITS Pilani campus, Rajasthan. They won Gold, Silver and Bronze medals in various categories.
  16. A workshop on the "Impact of Pradhan Mantri Gramin Sadak Yojna (PMGSY) Roads on Accessibility in Rural Areas" at BITS Pilani, was organized on May 6, 2017. The purpose of the workshop was to share the outcomes of PMGSY with engineers working at different levels in the Public Works Department in the state of Rajasthan. Prof Ashoke K. Sarkar, Director, Pilani campus presented a complete overview and background of the workshop.
  17. Organized annually by the UNESCO in order to promote reading, publishing and copyright among the public worldwide, World Book Day 2017 was celebrated at BITS Pilani promoting "Reading as a Habit". As a part of this initiative, the library displayed an interesting collection of books on William Shakespeare and other works of literature by well-known authors and favorites of faculty members during April 23-29, 2017. Mr. Giridhar Kunkur, Librarian and Unit Chief, Publications and Media Relations Unit, BITS, Pilani organized a contest "Draw a Book Cover" for children of BITS faculty and staff in the Library on April 23, 2017 to celebrate the World Book Day. A total of 71 children, divided into two age groups of 7-9 years and 10-15 years, participated in the contest. The selection criteria were based on the following four factors: Creativity, Drawing, Coloring and Neatness. A panel of three judges Mrs. Anamika Das Gupta, Mrs. Kajal Belgamwar and Dr Sushila Shekhawat selected the winners from these two age groups. From the age group 7-9 years, Ms. Suhani Gupta, Ms. Namyra and Mr. Shubham Sethi stood first, second and third respectively. From age group 10-15 years Ms. Taruna Kumari, Ms. Akshita Panwar and Ms. Adyasha Giri secured the first, second and third positions respectively. Five consolation prizes each, in both age groups, were awarded to the contestants. The prize distribution ceremony was held on April 24, 2017. The prizes were distributed by Prof Ashoke K. Sarkar, Director Pilani Campus.
  18. The Vice-Chancellor, Prof Souvik Bhattacharyya, Director, BITS Pilani, Pilani Campus, Prof Ashoke K. Sarkar, and faculty members met the graduating students over high tea on April 26, 2017 at the VFAST Hostel Lawns. The event was organized by BITSAA. The Vice-Chancellor and Director delivered inspiring speeches to begin the proceedings. Dr Kumar Neeraj Sachdev, Associate Dean, Students Welfare Division, Prof S.C. Sivasubramanian, Dean, Administration & Acting Registrar and Dr Surekha Bhanot, from Department of EIE & Chief of the Instrumentation Unit shared their thoughts with the students.
  19. The Third International Yoga Day was celebrated at BITS Pilani on June 21, 2017 in which a number of activities were conducted with the immense support received from Director Prof Ashoke K. Sarkar, Dean, Administration & Acting Registrar, Prof S. C. Sivasubramanian, faculty members, staff, students and family members of the staff. The event started with a Yoga Demonstration and meditation session under the guidance of Yogacharya Dinesh Kumar. The three best performers were presented with prizes by Prof S. C. Sivasubramanian. The Institute also organized a display of Posters and an On Line Essay Writing Competition for students with a word limit of 1000 words about the "Benefit of Yoga in Student's Life".
  20. BITS Pilani, Pilani Campus organized a sapling plantation drive as a part of their commitment to improve the green cover in the campus. The Plantation Drive 2017 commenced on July 19, 2017 under which 750 saplings such as Arjuna, Amrood, Anar, Shahtoot, Lassua, Jamun, Janti, Neem, Sissam, Roheda, Pilkhen, Kachnar, Papdi, Chandni were planted.
  21. BITS Pilani has formed a new university-wide Alumni Cell led by Prof Arya Kumar, Dean, Alumni Relations. This Cell will connect with the BITS Pilani global alumni network and involve them in the Institute's development plans in association with BITSAA (BITS Alumni Association). The Alumni Cell will have a strong student-alumni team led by the Dean, Alumni Relations with cross-campus support provided by various Faculty-in-Charge (FIC), Alumni Relations in each campus of BITS Pilani. The main purpose of the Cell would be to constantly connect the global alumni and conceptualize, develop and organize various alumni led initiatives related to campus development, student life and academic processes. The institute Alumni Cell and BITSAA would function seamlessly across all processes.
  22. An interactive workshop on Goods and Service Tax (GST) was conducted by Accounts and Finance Section (AFS) of BITS, Pilani campus at NAB Audi on July 26, 2017. A detailed presentation GST relating to the concept of the new Act, Registration, statutory compliance, Returns etc. on was also presented. The Director, Prof Ashoke K. Sarkar was the Chief Guest and Prof Sivasubramanian, Dean, Administration & Acting Registrar presided over the workshop. Mr Maneesh Agarwal, Chartered Accountant, Brij Kishore and Company was the guest speaker. Prof Satyen Sharma, Head, Accounts and Finance also gave a detailed presentation on GST.
  23. Prof Hari Om Bansal, Department of Electrical and Electronics Engineering, attended an International Conference on Control Engineering and Artificial Intelligence (CCEAI 2017) and presented a paper titled "Performance Analysis of Hybrid Electric Vehicle over Different Driving Cycles" at Kuala Lumpur, Malaysia during January 13-15, 2017.

24. Dr Neetu Yadav, Department of Management, participated in the 2nd Asia-Pacific Region System Dynamics Conference of the System Dynamics Society and presented a paper titled "Sustaining Competitive Edge of Indian Outsourcing IT-ITes Industry: A Systems Approach" at National University of Singapore, Singapore during February 19-22, 2017.
25. Dr Manoj Soni, Department of Mechanical Engineering, and Dr M. Srinivas, Department of Mechanical Engineering, BITS Pilani, Hyderabad campus, jointly conducted a two-day training program for graduate engineers and plant officials on "Power Plant Engg.- Power plant performance calculation" module at Grasim Industries (Cellulosic Division), Vilayat, Gujarat during March 24-25, 2017.
26. The Department of Mechanical Engineering and the Mechanical Engineering Association of BITS, Pilani, Pilani Campus organised the Chitrarth Dagar Memorial Award Ceremony on April 19, 2017 in the memory of Chitrarth Dagar. The parents of Chitrarth, Mr. R. C. Dagar and Mrs. Sunita Dagar, were present to reward the meritorious students with 'Chitrarth Dagar Scholarship'. Prof Ashoke K. Sarkar, Director Pilani Campus and the faculty members of the Department of Mechanical Engineering were also present at the formal gathering to attend the event. The scholarship was awarded to Mr. Harsh Sharma, a third year student of mechanical engineering. Chitrarth was a true music lover and a regular member of Gurukul. This year Mr. Dhisant Sanghani, was awarded with the Music Award, which is given to a member of Gurukul.
27. Prof P. Srinivasan and Dr Manoj Soni, Department of Mechanical Engineering, jointly conducted a two-day training program for graduate engineers and plant officials on "Boiler Technology" module at Grasim Industries, Nagda, MP during May 30-31, 2017.
28. Dr Kamallesh Kumar, Department of Civil Engineering, attended the 2<sup>nd</sup> International Conference on Science, Engineering, Law & Management (ICSELM) and presented a paper titled, "Net Safe Bearing Capacity of Glass Fibre Reinforced Pilani Soil Under Surface Footing Conditions" at the Republic of Mauritius during June 1-2, 2017.
29. Mr. Sanjeev Jakhar, (2013PHXF002P) and Dr Manoj Soni, Department of Mechanical Engineering, were awarded the prestigious DST, Govt. of India and the Indo-US Science and Technology Forum (IUSSTF), Building Energy Efficiency Higher & Advanced Network (BHAVAN) Fellowship for research for 3 months from June 2017 to August 2017 at the University of Nevada, Las Vegas, USA.
30. Prof Kumar Neeraj Sachdev, Department of Humanities and Social Sciences, attended the 4th International ELLTA Conference on Perspectives on Leadership, Learning and Social Enterprise in Asia: Sharpening Focus on Research Collaborations and Publications and presented a paper titled "Education, Learning and Change: A Philosophical Analysis" held at Asian Institute of Technology, Bangkok, Thailand during July 25 – 27, 2017.
31. Dr Sandhya Mehrotra, Department of Biological Sciences, was short-listed for a Visiting Professor Fellowship under the "INSA-CAS International Bilateral Exchange/ Collaboration Program 2017" by the Indian National Academy of Sciences.
32. Dr Vishal Saxena, Department of Biological Sciences, was short-listed for a Visiting Professor Fellowship under the "INSA-CAS International Bilateral Exchange/ Collaboration Program 2017" by the Indian National Academy of Sciences. Dr Saxena also received the "2017 American Society of Microbiology (ASM) and Indo-US Science & Technology Forum (IUSSTF) Indo-UD Research Professorship" award to visit University of South Florida, Tampa, USA.
33. Five best stories from 4000 entries were selected for Mahindra Transport Excellence Awards. Roshni Chhabra, a student of BITS Pilani (Chemical Engineering) was one of the five shortlisted writers. The award ceremony was held on 3rd February 2017 at The Hotel Ashoka, New Delhi. Shri. Nitin Gadkari, Hon. Minister of Ministry of Road Transport and Highways, Government of India, graced the occasion as the Chief Guest.
34. A students team comprising of Mr. Vandit Gandotra, Project Lead (2013B1A3265P), Mr. Piyush Sharda (2013B4A3440P) and Mr. Tanmay Sharma (2013A8PS156P) from the Department of Electrical & Electronics Engineering, bagged the Silver position in the National KPIT Sparkle 2017-Smart City Innovation Challenge. The team's proposal on Efficient Traffic Management was selected from among 1700 projects from all over India and awarded a cash prize of ₹ 2,50,000. The team's prototype was based on the idea to give power to the citizens to report traffic violations and act as Virtual Traffic Officers. It is useful in providing timely support in emergency situations, improving law enforcement and analyzing traffic violation trends. The final round, conducted in Pune during February 18-19, 2017, was judged by a panel of jury headed by Prof Alberto Vincentelli, professor of EECS at University of California, Berkeley. The award ceremony was graced by Shri Prakash Javadekar, Union Minister, MHRD, Prof R. A. Mashelkar, Ex-DG, CSIR, Dr Kiran Karnik, former President, NASSCOM and Shri Vipin Goenka, GC Member, CRIS among others.
35. Vidhi Jain (2014A7PS113P) won the award of "Citi Women Leader Award (CWLA)" in the event Citi India Diversity Week at Citi India, First International Financial Centre (FIFC) in Mumbai on March 8, 2017, She also won the award "ACM-W Scholar Award for Conference" during presentation at the ACM Student Research Competition (SRC) in a conference on Human Factors in Computing Systems (ACM CHI 2017) in Denver, Colorado, USA during May 6-11, 2017. Ms. Jain also won the award: Mitacs Globalink Research



- Intern Award for summer internship on machine learning at Simon Fraser University, Burnaby, Canada during May-July, 2017.
36. Microsoft Corporation selected two students from BITS Pilani this year for their World Summit along with the World's biggest development conference 'Build' which selected only 100 from a pool of over one lakh applicants. Anshu Agrawal (2015B2A40868P) and Akshit Bordia (2014B4A20593P) attended the Summit held at Seattle, WA, USA during May 10-12, 2017. Akshit and Anshu also played an integral role in organizing Microsoft India's national summit held at BITS Pilani during March 23-26, 2017.
  37. BITS Pilani students' team "Negative Time" comprising Rajat Jain (2015A7PS0549P), Mrigesh Madaan (2015A7PS0146P), Anirudh Krishna (2015A7PS0081P) won the national finals of the Imagine Cup at a conference held by Microsoft in Delhi. Imagine Cup is one of Microsoft's many efforts to transform skill development, nurture budding technologists and foster a collaborative and innovative spirit. BITS Pilani students' team has created a product named "Content Holmes," an online parenting solution that helps parents keep their kids protected from cyber-bullying, depression, and porn addiction. The team attended the event during 24-25, July, 2017 in Seattle, USA.
  38. The 35<sup>th</sup> edition of BITS Pilani's technical fest, APOGEE 2017 - The Retrofuture was organised from March 23-26, 2017. This year, the fest featured the legendary cricket umpire Simon Taufel, the famous string theorist Shiraz Minwalla and former Cabinet Minister and advocate, Salman Khurshid. The fest hosted former editor of Open magazine, Mr Manu Joseph, writer and BITS Pilani alumnus, Mr. Shashi Warriar, filmmaker, Mr. Anubhav Shrivastava and photographer cum author, Mr Ryan Lobo. In addition, several workshops were also conducted by various professionals, related to a number of technical fields, including app development, 3D modelling, financial markets, surface computing and ethical hacking. Events such as the Hackathon and Checkmate saw participation in large numbers. Events such as Ahvaan and Armageddon tested the creativity of participating students. There were multiple events for the financially curious such as Business Master, Stock Market Simulation and Espoir that employ business strategies and intensive analytical thinking to introduce students to the real time trade experience. The technical fest also witnessed several quizzes on different subjects. An art gallery, a photography exhibition and Mithali, the battle of bands style music competition, were also part of the fest. This year's stand-up comedy show featured the incisive and immensely relatable one-liners of Zakir Khan, Winner of Comedy Central's 'India's Best Stand Up Comedian' and most recently starring in 'On Air with AIB'.
  39. Extropy 2k17, the first edition of the much awaited Chemical Engineering extravaganza of BITS Pilani, Pilani campus was organized from February 24-26, 2017 by the Department of Chemical Engineering. The inauguration ceremony was graced by Dr H.K. Mohanta, Dr Pradipta Chattopadhyay and Dr A.K. Pani. Extropy included events such as Industry 101, where students had to bridge the gap between industries and institutional learning to handle some of the fundamental challenges commonly found in industries. Extropy also included a series of workshops and lectures, a technical workshop on the Chemical Engineering software Aspen with a prime focus on equipping participants with the technical know-how and applications of Aspen.
  40. Students Academic Cell (SAC) of BITS-Pilani is a newly launched initiative to further strengthen the academic ambience in the institute. First event, jointly organized by SAC and the Department of Mechanical Engineering, was an Open House to show case laboratory infrastructure facilities that are available in Mechanical Engineering Department to all the students of the campus. The Open House was inaugurated by Prof Ashoke K. Sarkar, Pilani Campus in the Thermal Sciences Lab on August 28, 2017 at 3.00 PM.
  41. NSS, BITS Pilani, in association with the Sports Council, BITS, Pilani had organized JUNOON, for the differently abled children during 9-10<sup>th</sup> September, 2017. The Chief Guest for this event was one of the world's best current para shuttler, Mr. Anand Kumar Boregowda. He was ranked World's No.1 para shuttler in the year 2013 and got the recognition he deserved. In 2014, the Karnataka government awarded him the Ekalavya Award for his outstanding contribution to the sport.
  42. The Avery Dennison Foundation Spirit of Invention 'InvEnt' Scholarship Program has been designed to recognize and reward the 'spirit of invention' amongst entrepreneurial and high-achieving students in the fields of science, engineering and technology at selected higher education institutions in India. This year, 10 students have been selected from five institutes and colleges in India, out of which four students of BITS Pilani, Pilani Campus have been selected for 2017 Spirit of Invention (InvEnt) Scholarship Awards. An impressive scholarship awards function was organized at Gurgugram on September 4, 2017, which was well attended by past and present student winners, Avery Dennison team members, and faculty representatives from various institutes and colleges. The winning Pilani Campus students' names are Nishad Sahu (1st Year, Electrical and Electronics Engineering); Rituraj Mahendra Patil (1st Year, Manufacturing Engineering); Siddharth Mehta (1st Year, Electronics and Instrumentation Engineering); and Sombuddha Chakravarty (1st Year, Electrical and Electronics Engineering).
  43. ITC Infotech, a global scale full service provider of technology solutions and a fully owned subsidiary of ITC Ltd, successfully concluded the Third Chapter of 'iTech 2017', its annual technology innovation and co-creation platform. iTech, an ITC Infotech initiative. This platform focuses on leveraging emerging and disruptive technologies to create business-ready solutions and to address some of the most challenging problems faced by the industry. As part of iTech 2017, a codeathon and a startup showcase was held on

July 22 & 23, 2017, at its Bangalore Campus. "Latch" the winning team from BITS Pilani, comprising of Partho Sarthi, Suvigya Vijay and Amritanshu Jain won the iTech 2017 and received the grand prize of Rs.3,00,000.

44. The inaugural function of the renovated and air-conditioned Section of G.D. Birla Rare Books Collection" at BITS Pilani Library by Prof. Souvik Bhattacharyya, Vice Chancellor, BITS Pilani was held on Wednesday, 23rd August 2017 in the august presence of Prof. A. K. Sarkar, Director, BITS Pilani, Pilani Campus. A large number of senior faculty members, research scholars, students and staff of the institute were present to witness this event.
45. The Prof. SS Ranganathan Memorial Teaching Excellence Award, 2017 ceremony was held in BITS Pilani, Pilani campus on 4th September 2017. Prof. P. Srinivasan, Associate Professor in Mechanical Engineering Department of BITS Pilani, Pilani Campus was conferred this year's award. This award carries a certificate and Rs. 100000/- of cash.
46. Indo-German conference on sustainable manufacturing, organized by the Indo-German centre for sustainable manufacturing, was inaugurated on 15th September 2017, Friday at NAB auditorium. The two day conference aims are in synergy with the goals of skill India, Digital India, Swachh Bharat, and Make in India.
47. Readathon – a reading challenge for the children in the age group 5-15 years was organized for the first time by BITS Pilani library to inculcate reading habits among children from 1st of August to 30th September 2017. Readathon is a unique concept which provides opportunity to our children to vibrate in resonance with the highly charged academic environment of BITS Pilani"
48. The Aditya Birla Group. Epitomizing the philosophy of its legendary leader – the late Aditya Vikram Birla – one man who made a difference. Rooted in Indian values, yet global in vision. Rock solid in fundamentals. Nurturing a culture where success does not come in the way of the need to learning afresh, to keep innovating, to keep experimenting. This year, four students had been shortlisted from BITS, Pilani for the 18th Aditya Birla Scholarship Programme – Class of 2017-18. Finally two students from BITS, Pilani - one each from Goa Campus and Hyderabad Campus got selected for the scholarship award. The two students are: Mr. Pavan Srihari Darbha (Hyderabad Campus) and Mr. Devashish Vikas Gupta (Goa Campus)
49. Mechanical engineering department, BITS Pilani, Pilani campus, organized a two day workshop on "Additive Manufacturing-Applications and Recent Trends", AMART 2017 from 30th to 31st October 2017. The chief guest, Prof P. M. Pandey, Professor, Mechanical Engineering Department, IIT Delhi inaugurated the event in the presence of Prof. Souvik Bhattacharyya Vice Chancellor, BITS Pilani, Prof. A.K. Sarkar, Director of Pilani campus, Prof. P. Srinivasan H.O.D. Mechanical Engineering and Prof K. S. Sangwan. In the welcome address, H.O.D. Mechanical Engineering Department, Prof. P Srinivasan, welcomed the gathering and highlighted the achievements of the department for the past one year.
50. Prof. V Lakshminarayanan Memorial Lecture was held on 4<sup>th</sup> December 2017 at BITS Pilani, Pilani Campus. As a mark of respect to the great teacher, educationist, administrator and philosopher all modeled in one, the first Director of BITS Pilani, Prof V Lakshminarayanan (VLN) was a legendary leader.
51. Mechanical engineering department, BITS Pilani, Pilani campus, organized a two day workshop on "Additive Manufacturing-Applications and Recent Trends", AMART 2017 from 30th to 31st October 2017. The chief guest, Prof P. M. Pandey, Professor, Mechanical Engineering Department, IIT Delhi inaugurated the event in the presence of Prof. Souvik Bhattacharyya Vice Chancellor, BITS Pilani, Prof. A.K. Sarkar, Director of Pilani campus, Prof. P. Srinivasan H.O.D. Mechanical Engineering and Prof K. S. Sangwan. In the welcome address, H.O.D. Mechanical Engineering Department, Prof. P Srinivasan, welcomed the gathering and highlighted the achievements of the department for the past one year.
52. An International Conference on Nano and Functional Materials, (NFM-2017) was organized by Department of Chemistry, BITS Pilani, Pilani Campus, between November 16-18, 2017 in association with Materials Research Society of India (MRSI) Rajasthan chapter. About 150 participants (5 from abroad) attended the three-day conference that witnessed 43 plenary & invited talks by scientists and faculty members from different university/ research institutes across the country, 15 oral presentations and about 102 poster presentations by young researchers (Ph.D. scholars) exploring variety of research fields bonding with nano and material science.
53. 12<sup>th</sup> National Conference on Solid State Ionics (NCSSI-12) is being organized by Department of Physics, BITS Pilani and Indian Solid State Ionics Society at BITS, Pilani with a theme, "Solid State Ionics: Fundamentals to Energy Storage and Conversion Devices" during December 21-23, 2017. Solid State Ionics (SSI) is a multidisciplinary scientific and industrial field dealing with ionic and electronic transport phenomena in solids and their technological applications.
54. Sanat Sharma, a second year undergraduate student of Computer Science at BITS Pilani, Pilani Campus is declared the winner of the Global 'Capture The Flag' Cyber Challenge in the recently concluded Global Conference on Cyber Space (GCCS 2017) that was held at JW Marriott, New Delhi during November 20-21, 2017. The award and certificate were presented by the Honorable Prime Minister of India, Shri Narendra Modi Ji.

55. Prof. L.K. Maheshwari Distinguished Alumnus Award-2017 conferring ceremony was held on 11th November at the BITS Pilani Campus, Rajasthan. Award was presented to Shri Sunil Nanda, Founder, Thinkit Technologies. Prof. A. K. Sarkar, Director, BITS-Pilani, Pilani Campus was Chief Guest of the ceremony. Prof. Navneet Gupta, Secretary of LKM foundation and Head of EEE Dept. welcome the guests and gave the introduction of the activities of Prof. L.K. Maheshwari foundation trust. Prof. Surekha Bhanot read the achievements of Shri Sunil Nanda.
56. TLC organized an interaction with Prof. Garrick E. Louis, Director of Graduate Studies, Systems & Information Engineering and Director, The Small Infrastructure and Development Center, University of Virginia Charlottesville, VA on 27 December, 2017 in Room no. 2147. During the interaction Prof. Garrick talked about the possibilities of collaboration between his University and BITS Pilani in the areas of teaching and research.

### **Dubai Campus**

1. On August 26, 2017, the "Convocation 2017" was held at BITS Pilani, Dubai Campus. Amidst great pride and honor, 382 students of the 14th batch of BITS Pilani, Dubai Campus, were awarded with Engineering and Management Degrees in a magnanimous ceremony filled with professors, students and parents who cheered the occasion with thundering applause. The occasion was graced by the Chief Guest, Mr Navdeep Suri, the Ambassador of India to UAE. During this prestigious event the degrees were conferred on 353 First Degree Graduates, 28 Higher Degree Graduates and 1 scholar who completed the Ph.D.. Khoja Zaidali Haiderali, Amartya Das Sharma were respectively awarded gold and silver medals. Bronze medal was awarded to two scholars Lauren Alisha Fernandes Aamir Jamal Ahsan Jamal.
2. In Jan 2017, BITS Pilani, Dubai Campus hosted the BITSAA Global Meet 2017 organized by BITSAA and officially inaugurated by Dr. Eesa M. Bastaki, President of University of Dubai.
3. In January 2017, Dr. Mary Lourde in association with CETA, UAE organized a national level quiz competition in the UAE-CETA Knowledge Quest 2017 for high school children at BPDC campus. Around 800 people participated in the event and it was a big success.
4. In Jan 2017, Dr. Vincent Shantha Kumar delivered a guest lecture on Bio-corrosion of Metallic Glasses at Seoul National University, Seoul, South Korea. He visited Prof. E.S. Park, Materials Science lab in Seoul National University, and successfully carried out experiments during his visit and jointly co-authored a research paper.
5. In February 2017, IORTA, a 14 member robotics team from BITS Pilani, Dubai Campus finished 6th in the National Category for their idea Smart Oil Spill Solution using Drones in the third edition of The UAE Drones for Good Award.
6. In February 2017, Dr. Ramchandran S (Biotechnology), Dr. Trupti Gokhale (Biotechnology), Dr. Neeru Sood (Biotechnology) and Dr. BG Prakash Kumar (Chemical Engineering), Prof. C. Babu, Department of Forage Crops, Tamil Nadu Agricultural University (TNAU) and Mr Khalil. Ur. Rahman (ICBA) received seed grant of AED 120000 from BITS Pilani, Dubai Campus for their research project entitled "Optimization of Selected High Yield Grass Species for Biomass and Bioenergy Applications using Saline and Recycled Wastewater".
7. In February 2017, Dr. R. Karthikeyan (Mechanical Engineering), Dr. Vishal Gangadhar Naranje (Mechanical Engineering), Dr. V. Kalaichelvi (EEE) and Dr. Vilas H Gaidhane (EEE) received seed grant of AED 90000 from BITS Pilani, Dubai Campus for their research project entitled "Design and Development of Closed Loop Control System to improve the Process Capability of Incremental Sheet Metal Form".
8. In February 2017, Dr. Vincent Shantha Kumar (Mechanical Engineering) Dr. R. Karthikeyan (Mechanical Engineering), Prof. D.M. Kulkarni (BITS Pilani, K.K. Birla, Goa Campus) received seed grant of AED 90000 from BITS Pilani, Dubai Campus for their research project entitled " Bio-Tribocorrosion Studies on Bulk Metallic Glasses".
9. On 9 February 2017, CIIED held a workshop in collaboration with InternsME which was attended by 72 students. Hosted by Ms. Noor Irfan- the Success Executive at InternsME- the workshop targeted the employability of students who graduate from BITS Pilani, Dubai.
10. On 22 February 2017, Mr. N G Shankar, Senior President- Corporate Audit Aditya Birla Management Corporation Pvt. Ltd conducted an interactive session on Internal Audit and Risk Management.
11. On 24-25 February 2017, Dr. A.B. Chattopadhyay delivered Key-note address in the International Conference on "Recent Trends in Renewable Energy and Smart Grids(ICRRESG-17)", organized by College of Engineering and Technology, MODY University, Laxmangarh ,Rajasthan ,India.
12. BITS Pilani, Dubai Campus received Indywood Education Excellence Award 2017 – UAE Chapter.

13. On 3-4 March 2017, the HULT Prize Regional Finals on the topic "Refugees – Reawakening Human Potential" were held in Dubai, which saw 52 teams from US, Canada, Pakistan, Australia, France and other nations.. BITS Team Karamfal (Mihir Prabhudesai, Tarun Krishna, Adhitya Natarajan & Anand Maheshwari) along with Campus Director for HULT Prize, Rahul Jain (Vice President, CIIE) took the flag of BITS to the Regional Finals. Their idea received immense appreciation from the judges and peers, and was evinced as a promising start-up pitch.
14. On 11 March 2017, Dr A R Abdul Razak of EEE Dept. organized a workshop on "PSPICE".
15. On 14 March 2017, Shresh Kumar Mathur and Jitesh Gurav secured The Mavericks! Business Quiz Prize during the ITL World Magnate, an inter-university business festival held at the SP Jain School of Global Management, Dubai.
16. During 22-23 March 2017, Amartya Das Sharma, Arun S, Shikhar Singh participated in the 17<sup>th</sup> Gulf Programming Contest, held at Gulf University for Science and Technology, Kuwait. They won the Fifth Prize in this prestigious and highly competitive Programming Contest by solving 6 problems (out of 11).
17. During 24 March to 4 April 2017, CIIEE successfully held its latest edition of the BPDC Case Challenge. The winners were Tejas Kulkarni and Athul Krishnan, and the runner-up was Shraddha Shetty.
18. On 25 March 2017, AIChE Students' chapter BPDC and ChESA has organized a workshop on MATLAB for beginners.
19. On 28 March 2017, CIIE organized an InternsME Video Resume Session by Mr. Supratik Mukherjee (Product Manager, InternsME) to elucidate with examples how a proper Video CV can be prepared. The session was followed by a Video Recording session, where based on a few guidelines, students could prepare their own Video Resumes.
20. On 2 and 3 April 2017, a Design and 3D Printing workshop was organized by IEEE, PES and IORTA.
21. During 12-13 April 2017, Zaman SF, Khalil-Ur-Rahman, Ismail S, Prakash Kumar BG, Neeru Sood, Trupti Gokhale and Subramanian R received second prize for poster presentation on Optimization of Growth Conditions for Biomass Production and Characterization for Bioenergy Applications, in the conference Current Trends in Biotechnology-CTBT 2017 held at Manipal University Dubai.
22. During 17- 20 April 2017, Jashn '17 - the students' most awaited inter-collegiate cultural event of the year was held at BITS Pilani, Dubai Campus.
23. During 21-22 April 2017, two teams of Chemical Engineering students (out of three teams) ranked 2<sup>nd</sup> and 3<sup>rd</sup> in the Case Study competition at two-day Inter-collegiate seminar on *Energy Reserves and Resources (ERR)* organized by American University of Sharjah.
24. On 29 April 2017, Rohit Vasu secured third position in Microelectronics Olympiad held at American University of Sharjah.
25. On 29 April 2017, Dr Vilas Gaidhane of EEE Dept. organized a workshop on "Multisim".
26. On 30 April 2017, a Hands-on Experience Workshop was organized by the department on a process safety modelling software ALOHA (Area Locations of Hazardous Atmosphere).
27. On 30 April 2017, Tarun Krishna and Adhitya Natarayan won the ASME Innovation challenge held at BITS Pilani, Dubai Campus which urged students from various universities to bring forth their innovations in the fields of manufacturing units, smart cities, infrastructure and cyber security.
28. In May 2017, two teams of Chemical Engineering students were selected for the final round of the Abu Dhabi Undergraduate Research Competition (URC).
29. On 2 May 2017, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) at BITS Pilani, Dubai Campus conducted an informative and insightful symposium on energy efficient buildings from an international perspective. Sponsored by Team Testa, the symposium included several Keynote speakers including Dr. Tiberiu Catalina from the Technical University of Civil Engineering, Bucharest. Other speakers included Ms. Sandhya Prakash, Founder of Beacon Energy Solutions and Mr. Abdul Razak Malik, CEO of Royal City Contracting.
30. On 3 & 4 May 2017M Dr B G Prakash Kumar acted as a session Chair in 2<sup>nd</sup> Student Research Colloquium on "*Advances in Engineering & IT*" (AEIT-2017), Manipal Univ., Dubai Campus
31. On 5 May 2017, the winning teams of BITS Pilani Dubai Campus in the Hackathon Challenge 2017 were honoured by Dubai Electricity and Water Authority (DEWA).
32. On 20 May 2017, Alina Zaidi, Sabiha Shaik and Rewant Verma - students of BITS Pilani, Dubai Campus triumphed in the Microsoft Office Specialist Championship 2017 conducted by FAME (Financial Accounting & Management Education) Training Institute, Dubai. The BITS team winners Alina Zaidi and Sabiha Shaik



represented UAE in the world championship held in July in Anaheim, California where Alina Zaidi was among the top ten winners in MS EXCEL 2013 Category.

33. In July 2017, Team IFOR participated in the International Aerial Robotics Competition 2017 held at the American Venue in Atlanta, Georgia, USA and presented a paper on Unmanned Aerial Vehicle.
34. On 15 July 2017, Dr. A.B. Chattopadhyay delivered a special lecture as a Guest of honor in the International workshop on "MATLAB Application in Electrical Engineering" in Millia Institute of Technology, Purnea, Bihar, India.
35. In July 2017, Dr. R. Udaya Kumar (Mechanical Engineering) and Dr. Shashank Khurana (Mechanical Engineering) received a grant of AED 12000 from Star Cements Ltd., Ras al-Khaimah (U.A.E.) for their consultancy project entitled "Energy Auditing and Energy Conservation".
36. In July 2017, Dr. Vishal Gangadhar Naranje (Mechanical Engineering), Dr. R. Karthikeyan (Mechanical Engineering), Dr. V. Kalaichelvi (EEE) and Mr. Nandakumar (Computer Science) received a grant of AED 10000 from Star Cements Ltd., Ajman Cement Plant (U.A.E.) for their consultancy project entitled "Development of Computer Application for Prediction of Cement Strength".
37. In July 2017, Dr. Vishal Gangadhar Naranje (Mechanical Engineering), Dr. R. Karthikeyan (Mechanical Engineering), Dr. V. Kalaichelvi (EEE) and Mr. Nandakumar (Computer Science) received a grant of AED 10000 from Star Cements Ltd., Ras al-Khaimah (U.A.E.) for their consultancy project entitled "Development of Mobile Application for Raw Mix Cost Optimization".
38. In July 2017, Dr. Shazi Hasan (EEE), and Dr. Mary Lourde (EEE) received a grant of AED 18000 from Star Cements Ltd., Ras al-Khaimah (U.A.E.) for their consultancy project entitled "Harmonic Mitigation Techniques for Cement Industry".
39. During 19-23 July 2017, Formula 6 car team ( Captain-Mr Jasjeev Singh, III yr Mechanical) under the guidance of Prof R. Karthikeyan and Team Gear Shifters( Captain-Mr Sadjyot Biswal, IV yr Mechanical) under the guidance of Prof R. Udaya Kumar participated in the 13th edition of prestigious Formula SAE Italy & Formula Electric Italy Competition held in the Riccardo Paletti Circuit - Varano de" Melagari(PR), Italy.
40. CIIE once again collaborated with Astrolabs, the only Google TechHub in the MENA Region to introduce the Digital Marketing Track and Web Development Track Scholarship programs of \$3200 (each) for free to students of BITS Pilani, Dubai Campus.
41. During 18 -21 August 2017, Dr. Vincent Shantha Kumar delivered an invited talk on Bio-corrosion Studies on Zr Based Metallic Glasses in International Symposium for Advanced Materials Research (ISAMR 2017), at Sun Moon Lake, Taiwan.
42. On 28 August 2017, a workshop on Teaching Effectiveness was organized by the Dept of HSS in collaboration with Teaching Learning Centre and was conducted by Dr Tamali Bhattacharyya, Project Manager, IIT Kharagpur.
43. On 14 September 2017, AIChE Students' chapter BPDC promoted the Virtual Career Fair 2017 organized by AIChE.
44. On 14 September 2017, BPDC Civil Engineering Student Association (SKYLINE) was inaugurated. The Department of Civil Engineering in collaboration with Practice School Division organized an inaugural talk by Mr. Hemant Gor, Sr. Engineer – Civil & Structural, PETROFAC Intl LLC, Sharjah.
45. On 16 September 2017, AIChE Students' chapter BPDC organized an Introductory Workshop on the software MATLAB.
46. During 16-17 September 2017, Dr. Nishant Pandya was invited as member of International Advisory Committee of International Conference on "*Paradigm shift in Chemical engineering education, processes and technology*", IEI, Ahmedabad, Gujarat, India.
47. On 4 October 2017, a delegate from Hong Kong University of Science and Technology, Hong Kong, visited Dubai Campus and interacted with faculty and students.
48. During 8-12 October 2017, Sarthak Sethi of ECE, a first year student of BITS Pilani, Dubai Campus won First Prize at Gitex Technology Week 2017, in the final round of this year's Student Lab Competition sponsored by Accenture. Sarthak Sethi clinched the top prize for his unique concept 'ThumbFi: A Smart Biometric', that uses fingerprint technology to enable people with disabilities to operate their devices. He won the cash-prize of Dh50,000 (INR 9 lakh) in addition to an all-expenses paid trip to witness the launch of the satellite AL Yah 3 in French Guinea. Sarthak was also awarded an internship with Accenture to further his passion for developing innovative technology solutions.
49. On 12 October 2017, ChESA Organized a Six Sigma Workshop.

50. On 12 October 2017, SKYLINE arranged a guest lecture by Tamim Emad Youssef, Technical Sales Manager/Applications Services handling the regions of GCC, Africa, South America and South East Asia with JK CEMENT WORKS (FZC).
51. During 12-14 October 2017, Team Trepit including Tarun Krishna, Adhitya Natarajan, Harsith Rani, Mohamed Nawaz, and Pranay Addepalli won the Runners-up - Startup Weekend, Elevison- Best Marketing Plan Award, and Guiddoo- Superstars of Startup Weekend Award held in Ras Al-Khaimah..
52. During 15-18 October 2017, BITS Pilani, Dubai Campus Team of students Mr. Rewant Verma (4th Year CSE), Ms. Alina Zaidi (4th Year CSE) and Mohamed Nawaz (3rd Year MECH) were declared as 2nd runner-up at BSE Financial Trading Contest held at the Abu Dhabi National Exhibition Center.
53. During 10 -23 October 2017, The Wolf of Wall Street – ‘Stock Market and Market Simulation Competition’, a flagship of BITS Pilani Dubai Campus was organized in which 66 teams participated from different universities. The teams that emerged victorious were Gurus Of Dalal Street, The Lone Ranger and AlphaQ.
54. During 23-25 October 2017, Vaishak Thiruvekitam, Shivanarain Ravichandran and Mahathi Kishorekumar under the guidance of Dr Shashank Khurana won a Consolation Prize in Pan-India Student Design Contest held as a part of inaugural International Conference on Sports Engineering 2017 in Jaipur, India.
55. During 25-26 October 2017, Technofest 2017 was organized at BITS Pilani, Dubai Campus.
56. On 29 and 30 October 2017, Team Jisr consisting of students, namely Jaskanwar Singh, Jayant Panwar, Kelvin DeCosta, Somil Mathur and Tushar Agarwal from BITS Pilani, Dubai Campus won the 2nd position in ATXHackathon organized by Al Noor Training Center for persons with disabilities powered by Microsoft. The team presented their working prototype Jisr which can translate sign language to text and vice versa, therefore, enabling a two-way communication between the hearing impaired and hearing communities. Another team IIMAY consisting of Sarthak Sethi, Satyarth Vaidya, Jeevan Sandhu and Mihir Prabhudesai from BITS Pilani, Dubai Campus won the 3rd position in this event. The team presented their application IIMAY which can convert a whole conversation between multiple people into sign language so it is much more convenient for a deaf person to interact in meetings.
57. On 30 October 2017, a mental health awareness workshop was organized at the Institute.
58. On 7 November 2017, Mr. Ramnath Venkatraman, Head of Business Learning, Noor Bank, UAE conducted an interactive session on Islamic Economy.
59. On 11 and 12 November 2017, Vedant Bajaj, Ritwick Dsouza, Aditya Popat, Shaurya Sood, Saugaat Allabadi from BITS Pilani, Dubai Campus won the second prize of €300 each in Accenture Digital Global Hackathon for their project "HealthMe", a mobile application using blockchain, providing peer-to-peer, community-driven medical insurance and health records. Another team of students Sarthak Sethi and Chirag Ghag won the third prize of €200 each in the same event for their project "FeedUs" a web platform for connecting charity organizations to institutions which have left over/waste food like Restaurants, Hotels, Supermarkets etc so it can be used for the poor. The web portal provided real time statistics of leftover / waste food left with kitchens.
60. During 16-18 November 2017, Team Avenue Inc., co-founded by Karthik Bharadwaj, a Mechanical Engineering student of BITS Pilani, Dubai Campus clinched the top Prize at Startup Weekend Dubai Edition . The team received a cash prize of Dollars 12,000 IBM Credit in addition to one year working space and mentor-ship from The Bureau Dubai, and qualified for Global Startup Weekend.
61. On 17 and 18 November 2017, Department of Mechanical Engineering organized a Two-Day Workshop on “Industrial Applications of Decision Making Methods and Optimization Techniques”. Prof R V Rao coordinated this workshop which had participants from various local Industries and universities.
62. Another BITS Pilani, Dubai Campus team 'ProfileUp' consisting of Rachit Mishra, Shehab Abdul, Abhishek Das, Padma Priya, Sultan Morbiwala, Burhanuddin won the Consolation Prize and free mentorship at Startup Weekend Dubai Edition.
63. On 22 November 2017, Dr Thuppil Venkatesh, Principal Advisor Quality Council of India (QCI) & National Referral Centre for Lead Projects in India (NRCLPI), Professor-Emeritus Department of Biochemistry & Biophysics, St. John's Medical College, Bangalore, India conducted an interactive session on Creativity and Innovation.
64. During 19-23 November 2017, the much-awaited Coca Cola presents 15th BITS Sports Festival (BSF) was held with Padma Bhushan Awardee and renowned Tennis Champion, Sania Mirza gracing the closing ceremony as the Chief Guest.
65. BITS Pilani Dubai students emerged as the overall champions for the 6th consecutive year in BSF 2017, winning Gold in Badminton (Girls), Cricket (Boys) Cricket (Girls), Throw-ball (Girls) and winning Silver in Badminton (Boys), Basketball (Girls), Chess (Boys), Table Tennis (Boys) Table Tennis (Girls) and Lawn Tennis (Girls).

66. During 23 - 25 November 2017, BITS Pilani Dubai Campus students Sarthak Sethi, Nilanchal Nilamadhab, Shivam Mishra, Mridul Bhandari, Rishabh Kaushik, Hrishikesh Uralath won second prize at RTA Dubai Taxi Hackathon. The Institute team won a cash prize of AED 15,000 for their project 'ClickRavel', which is a smart taxi order button POS, which can be used to instantly order a taxi by just a tap. There's no need of a mobile phone with the customer. It has smart authentication via the 3 line "MRZ" code on Passport and Emirates ID of the customer. It can be installed in places like hotels, restaurants, bus stops, metro stations etc.
67. On 26 November 2017, BITS Pilani, Dubai Campus received an award for Strongest Faculty Engagement in EXPO Live University Innovation Program for an impassioned participation from its faculty as academic evaluators.
68. On 26 November 2017, BITS Pilani, Dubai Campus celebrated a number of victories clinching 4 awards at the very prestigious EXPO Live University Innovation Programme. The event EXPO Live University Innovation Program-finale pitch, as part of Dubai Expo 2020 had 4 participating teams from BITS Pilani, Dubai Campus amongst the 21 teams from several other universities. All 4 participating teams from the Institute emerged victorious in this final round to qualify for the grant. Over 280 proposals were submitted to the EXPO Live University Innovation Program by students from 33 universities in the UAE. It is noteworthy that BITS Pilani, Dubai Campus had the maximum number of teams for the finale pitch of EXPO Live University Innovation Program. The winning teams from the Institute were: IORTA, Aurora, BITS EEE1 and Vim Pulveres.
69. On 28 and 29 November 2017, Department of Mechanical Engineering organized an International Conference on Recent Advances in Materials & Manufacturing Technologies (IMMT) 2017. Over 130 participants from academics and research background from over 40 universities including the IITs, all campuses of BITS Pilani in India , NUS Singapore, Masdar UAE and many more prestigious universities participated and presented their research papers.
70. In December 2017, BITS Pilani Dubai Team won the overall Trophy in the Skyline Carnival a cultural Festival organized by Skyline University College Dubai. The BITS Pilani team took part in Fashion Show , Music, Dance and Photography winning first prize in Fashion Show and Photography.
71. On 4 December 2017, Hult Prize 2018 challenge was held on the topic "Harnessing the power of energy to transform the lives of 10 million people", intriguing the minds of young budding engineers, to find alternative energy solutions for this fast-paced era. The event was held in BITS Pilani, Dubai Campus, with 10 zealous and skilled teams in participation. Three teams, exhibited massive potential, and outperformed, the other participating teams with their prospective viewpoints and strategies: The first position was secured by Team Metamorph (Urvashi Satwani, Jaskanwar Singh, Tushar Agarwal and Somil Mathur). Team Perpetual Motion Squad (Jitesh Gurav, Rajdeep Ghosh, Sidharth Agarwal and Anuj Lihori) bagged the second position. The third place was won by Team AKNT (Nawaz Muallim, Tarun Krishna, Sohail Danish and Adhitya Natarajan).
72. On 12 December 2017, CIIE organized the Mantra Awards 2017 for BITSAA International, which received 19 applications to the 5 categories from the students. The jury comprising of 5 faculty members and 1 student member scrutinized the applications and interviewed the students.
73. On 22 December 2017, Dr R Gomathi Bhavani chaired the session on "Green Technology Track" at 2017 IEEE International Conference on Technological Advancements in Power and Energy ( TAP Energy 2017), Amrita University, Kollam, Organized by IEEE Power and Energy Society, Kerala section.
74. One Chemical Engineering student was selected as Annual Report Sub-Committee Member and Middle East/Africa Sub-region Chair, ESC (Executive Student Committee) AIChE.
75. Prof A P Singh has been nominated as an expert in the Ministry of Environment, Forest and Climate Change and by Himachal Pradesh Public Service Commission, He was also nominated as an External Member of Advisory Committee for Special Assistance Programme(SAP) by the University Grant Commission, New Delhi.
76. Students from Flummoxed Quizzing Association of BITS Pilani, Dubai Campus proved their mettle by securing a top position in the GITEX quiz held in the year 2017.

## K.K. Birla Goa Campus

1. Convocation 2017 ceremony was held on August 13, 2017 at K.K. Birla Goa Campus for the graduating students who completed the eligibility requirements in the academic year 2016-17. Shri. Ramachandra Guha – an eminent Indian historian and biographer was the Chief Guest. Degrees were awarded to 416 First Degree, 24 Higher Degree and 16 Ph.D. Degree students from BITS Pilani, K.K. Birla Goa Campus. Three students from Bachelor's degree programmes were awarded Medals: Gold medal – Mr. Talluri Varsheet; Silver medal - Mr. Ayush Sharma; and Bronze medals Mr. Sudeep Mishra.
2. Prof. Narendra Nath Ghosh, Department of Chemistry has been elected as Fellow of Royal Society of Chemistry, UK recognizing his efforts in the field of the chemical sciences. RSC is the world's leading chemistry community, advancing excellence in the chemical sciences.
3. Dr. Anirban Roy, Department of Chemical Engineering was awarded the Innovative Project Award 2017 by the Indian National Academy of Engineering, for his work on Low Cost Hemodialysis Membranes. He has also been nominated as a member of the academy for next 5 years.
4. Prof Arun V Kulkarni, Department of Physics has been selected for the IUCAA Associateship Program for the duration 1st Aug'2017 to 31st July'2020. He shall be working in the areas of 1) Gravitational Wave detection and LIGO, and 2) Numerical Relativity.
5. Dr. Mainak Banerjee, Department of Chemistry was appointed as a Member of the Royal Society of Chemistry. He was also appointed as a member of the screening/selection committee for screening/promotion of teachers of Goa University as Vice-Chancellor's nominee. Dr. Mainak Banerjee was invited as a member of the jury committee for 11<sup>th</sup> T.Y. B.Sc. Chemistry Symposium, March 2017.
6. Dr. Utpal Roy, Department of Biological Sciences was awarded 'Indian National Science Academy (INSA) Visiting Scientist' award to work for a month at the "Department of Medical Microbiology" PGIMER, Chandigarh in the month of June 2017. The INS-approved project was 'Determination of Minimum Inhibitory Concentration (MIC) of mycelial mold and preliminary pharmacokinetic study using the HPLC-purified antifungal compound from *Bacillus subtilis*.
7. Prof. Halan Prakash, Department of Chemistry was invited as a "Visiting Faculty" at NIREAS -International Water Research Center (IWRC), University of Cyprus, during June and July, 2017, to deliver a course on "Advanced Oxidation Process- (AOP) and Antibiotic resistance".
8. Dr. Debasis Patnaik, Department of Economics, became a member of the Education Committee in Goa Management Association (GMA) after being elected to Membership, Executive Committee, third time in a row. He was also felicitated by Kadapa University on 22nd December 2017
9. Dr. Debasis Patnaik, Department of Economics won the bid for hosting the World Conference on Regional Science in BITS Goa from May 29th-June 1st 2018 in a competition of 6 countries.
10. Prof. P. M. Singru along with Ayush Raizada, Vishnuvardhan Krishnakumar, Akhil Garg, won a Best Paper Award for their work on "Modeling of a Magneto-Rheological (MR) Damper using Genetic Programming" presented at the 12<sup>th</sup> IPRoMM National Workshop on Industrial Problems on Machines & Mechanics during December 22-23, 2016 held at VNIT, Nagpur.
11. Dr. Varinder Singh, Department of Mechanical Engineering was appointed in Program Committee for organizing 11th Indian Subcontinent Decision Sciences Institute (ISDSI) conference at IIM Trichy during Dec 2017.
12. P. Dhanumjaya, Department of Mathematics was a resource person for an International Workshop: CIMPA: Summer School on Multiscale Computational Methods and Error Control ,held at IIT Kanpur, from June 26, 2017 to July 21, 2017.
13. Prof. Ranjan Dey, Department of Chemistry was awarded the Bengali Social and Cultural Association (BSCA), Maanpatra Samman and a citation on 15<sup>th</sup> April 2017 for distinction in the field of education in Allahabad, U.P.
14. Prof. Basavadatta Mitra, Department of Humanities and Social Sciences was nominated as a member of the Education Committee, Goa Chamber of Commerce and Industries, 7th time in a row. In the present term, she has been assigned the vertical for Industry Exposure to draw up a comparative study of the best practices followed for Industry Exposure in the top technical institutions in India and Abroad and prepare a concept note for reformation of the current internship programme offered in local technical colleges of Goa. The report will be presented to the Vice-chancellor for recommendation for implementation.
15. Prof S. D. Manjare, Department of Chemical Engineering chaired the SDEWES2017 conference session: "Sustainability comparisons and measurements 2" that was held on Saturday, October 7<sup>th</sup>, 2017 during International Conference on Sustainable Development of Energy, Water and Environment System, held at Dubrovnik, Croatia During 4<sup>th</sup> – 8<sup>th</sup> October 2017.



16. Dr. S. S. Baral and Prof S. D. Manjare were appointed as the distinguished scientists, to be a member the Scientific Advisory Board of the 1st Latin American SDEWES Conference on Sustainable Development of Energy, Water and Environment Systems, to be held during January 28-31, 2018, at Rio de Janeiro, Brazil.
17. Dr. Vikas Chaudhari, Department of Mechanical Engineering chaired a session at International Mechanical Engineering Congress & Exposition (IMECE- 2017), ASME 2017 conference held on 3- 9 November 2017 at Tampa Convention Center, Tampa, Florida, USA.
18. Prof Sunil Bhand, Department of Chemistry chaired a session and also made an oral presentation of his research paper "Molecularly imprinted polymer decorated nanoparticles for selective determination of Tetracycline in milk" at 12th Workshop on Biosensors and Bioanalytical Micro techniques in Environmental and Clinical Analysis, International Biosensor Conference organized by Italian National Research Council at Rome, ITALY during 25-29 Sept. 2017.
19. Dr. Kiran D. Mali Department of Mechanical Engineering gave talk on "Effect of Fit of the Clamping Bolts in the Plate-Fixture Assembly on the Natural Frequency of Clamped Rectangular Plate". doi:10.1115/IMECE2017-71260, at ASME's International Mechanical Engineering Congress and Exposition (IMECE2017) 3-9 November 2017| Tampa, Florida, USA.
20. Avidipto Chakraborty (2012B3A7506G), a student of BITS Pilani, K.K. Birla Goa Campus, topped CAT 2016 with a 100 percentile score, beating 2.3 lakh applicants competing for admission to the prestigious Indian Institute of Management and other elite business schools. Focusing on mock tests and the analysis generated therein, he pulled off this academic achievement without enrolling for coaching classes.
21. Kishore Gopal Krishnan (2014B5A40523G) won gold medal in "The National Graduate Physics Exam" (NGPE). Kishore Gopal Krishnan (2014B5A40523G) won gold medal in "The National Graduate Physics Exam" (NGPE). this exam awards scholarships to encourage students to take-up physics as a career. S. N. Bose National Centre for Basic Sciences, Kolkata, allows direct admission to toppers in NGPE, after an interview, in their integrated Ph.D. programme.
22. Devashish Vikas Gupta (2017A4PS0151G) was awarded the highly prestigious Aditya Birla Scholarship. Since his early childhood, Devashish was fascinated by Mathematics, Music and Science. While studying in the 11th grade, he got intensely involved in research in the fields of Physics and Mathematics. He has the distinction of having published two research papers in international journals and is currently working on his third research paper.
23. The startup "Drone Nation", by our students Vichar Shroff, Chetan Reddy & Nikhil Khedekar, was selected for receiving incubation support and finance grant from Nidhi-Prayas, DST, Government of India. The aim was to develop a Drone for Agriculture at the iCreate campus in Ahmedabad. Drone Nation is one of the 5 teams selected in the final round from among more than 2000 teams that participated from the entire country. NIDHI-PRomotion and Acceleration of Young and Aspiring innovators and start-ups (PRAYAS) is a DST program that focuses on supporting innovators to develop their innovative idea into a prototype and also turning nurturing ideas and innovations into successful startups. The selected innovators get access to prototype grant of up to Rs.10 lakhs, infrastructure, and mentorship, thus bridging the gap between idea and prototyping.
24. Urvashi Jain (2014B1A70697G) awarded the Khorana Scholarship which was conducted in joint support by the Department of Biotechnology, Government of India, Indo-US Science and technology Forum (IUSSTF) and WINStep Forward. This scholarship funded all the expenses including travel, accommodation and health insurance apart from a stipend of \$2500 for the two months summer internship at the University of California San Diego, CA, USA, under the mentorship of Prof. Bing Ren at the Ludwig Institute for Cancer Research. Her project involved "the study of epigenetic regulation in cancer stem cells.
25. Rohan Goel (2014A7PS014G) secured two internships abroad one in May-July 2017 at Dublin Institute of Technology in Ireland and the other in August-December 2017 at LIRMM, University of Montpellier in France. Moreover, one of his papers along with Prof. R.K Roul has been accepted in 7th International Conference on Pattern Recognition and Machine Intelligence ([www.isical.ac.in/~premi17/index.php](http://www.isical.ac.in/~premi17/index.php)) which is scheduled to be presented in December after which it will be published.
26. Ketan Pant (2013A8PS413G) received an admit from Stanford University for his Master's in Electrical Engineering and is pursuing the same starting September 2017. He was also among the 59 of the 1186 applicants to be awarded the K.C Mahindra Scholarship for post graduate studies abroad for the year 2017. He was also 1 of the 3 students to be awarded the BITSAA Graduate Application Scholarship for 2017.
27. Siddharth Kumar (2014A1PS545G), a 4th-year undergraduate majoring in Chemical Engineering, is currently pursuing his Thesis (Internship) at a joint lab of Massachusetts Institute of Technology, Harvard University and Brigham and Women's Hospital in Boston. Siddharth worked on developing DMD based Bio 3D Printer, cell phone expansion microscope device, hand held Bio 3D Printer and robotic 3D Imaging tool for Bioreactors. His work focused mainly on the Mechatronics aspect of the devices. He published one research paper during his stay at MIT.

28. Dhanajai Sharma (2014A3PS197G) secured an internship at Acoustic Research Laboratory, National University of Singapore.
29. Jiss Maria Louis (2015PHXF401G), a Ph.D. student from the Department of Biological Sciences, won the Best Oral Award (First Position) at National Conference of Young Researchers 2017 conducted at Goa university from 16th-17th March for the talk entitled "TNF alpha mediated alternative splicing in type 2 diabetes: a genome wide approach".
30. Rachith Aiyappa (2014B4A7469G) finished runner up in the Mens' Singles Lawn Tennis event conducted by Clube Tennis De Gasper Dias in association with the Goa State Tennis Association (GSTA). It was an all Goa Ranking tennis tournament conducted in January 2017.
31. Devansh Raj Sharma (2012B1A3662G) co-authored a research paper during his internship from January to June 2017. Details: Michael S. Werner, Bogdan Sieriebriennikov, Tobias Loschko, Suryesh Namdeo, Masa Lenuzzi, Mohannad Dardiry, Tess Renahan, Devansh Raj Sharma, Ralf J. Sommer; Environmental influence on *Pristionchus pacificus* mouth form through different culture methods; Scientific Reports 7, 7207 (2017); doi:10.1038/s41598-017-07455-7; published: 3rd August 2017.
32. Yashasvi Joshi (2013A8PS751G) graduated this year with a score of 99.80 percentile in CAT 2016. Subsequently, she got calls for interviews from all IIMs and offers for admission to the top IIMs like IIM Ahmedabad, Bangalore, Calcutta, Lucknow and Indore. Currently, she is studying in IIM Ahmedabad (Batch of 2017-19).
33. Vatsal Tolasaria (2013B2A1684G) won the 2nd Place at the All Goa open major Ranking Tennis singles Championship, at BPS Margao, Organized by BPS Club Margao, Goa
34. Lokesh Garg (2015B3A30418G) and Akhil Kamath (2015A8PS0533G) have formed a startup, "ZConnect", which is an online version of a physical community, a local social network, which helps the localities in every possible interaction. Currently they have around 1700 users on campus. With the same idea they participated in 3 competitions in the last semester and succeeded in all three; the team got 1st position in Eureka by Goa Institute of Management, 2nd position in Uttishtha'17 by IIM Kashipur and also have been selected for the 3rd and final round of Finnovatica, organized by Fullerton India, for the prize money of 10-25Lakhs. Shubham Kumar: 2015A3PS0158G and Hardik Gupta: 2016B3A80390G also contributed towards this project.
35. Jain Honey Ashok (2014B1A30875G) was selected for a funded 2-month research internship at Unité de glycobiologie structurale et fonctionnelle (UGSF-CNRS) in Lille, France from May 2017 to July 2017. UGSF selects 2-3 students every year from various backgrounds, including pharmacy, chemistry and informatics, regionally, nationally and internationally. Her research at UGSF focused on the computational modeling of biomolecular interaction and structural bioinformatics techniques. She worked on Score\_set database of CAPRI protein docking experiment and also redesigned and re-implemented the Score\_set website. During her stay, she also got the opportunity to attend the JOBIM-2017 conference held at Lille.
36. Patil Siddhant Vitthal (2015A8PS0475G) has published a conference proceeding titled as "Colour Analysis and Classification Based on Machine Learning Technique Using RGB Camera" in 2017 IEEE - International Conference on Computational Intelligence and Computing Research (ICCIC). This work was done at Central Electronics Engineering Research Institute (CEERI), Chennai as part of Practice school-1 programme. He also presented a paper titled as "Design of Voltage Amplifiers with Optimization of Multiple Design Parameters" in 2018 IEEE - International Conference on Devices, Circuits and Systems (ICDCS). This work was done under the guidance of Dr. Pravin S. Mane.
37. Jayant Jhamb's (2015B2A40678G) & Shreyash Kumar's (2015A4PS0147G) design idea UMAMS (Universal Modular Armoured Mobility Solution) has been selected for the quarterfinals at the third phase of INDIA INNOVATION CHALLENGE DESIGN CONTEST 2017 organized by DST and Texas Instruments Inc., held at IIM Bangalore. This contest is aimed to give a jump-start by sculpting the innovation by university level students with technical support from Texas Instruments, business mentorship from IIMB, funding and prizes of INR 3.8 crores from DST & TI.
38. Unay Shah (2016A3PS0143G) won the photography contest "I am Shutterbug Student Photography Contest" organized by Nikon India. He has been selected among 451 entries from students from all over India. He received a Nikon D5600 DSLR camera as the winning prize.
39. National Conference on New Frontiers in Chemistry: From Fundamentals to Applications: New Frontiers in Chemistry: From Fundamentals to Applications (NFCFA2017) a two-day national conference was organized by the Department of Chemistry, BITS Pilani, K.K. Birla Goa Campus, from 28<sup>th</sup> – 29<sup>th</sup> January, 2017. It was the 2<sup>nd</sup> edition of NFCFA. The aim of the conference was to hold an open deliberation on the state-of-the-art developments in important areas of R & D of chemistry and allied sciences.
40. CALDAM Indo-German Pre-Conference School on Algorithms and Combinatorics: The Department of Mathematics, BITS Pilani, K.K. Birla Goa Campus, hosted a 2-day workshop on "CALDAM Indo-German

Pre-Conference School on Algorithms and Combinatorics” on 13th and 14th of February, 2017. The school was designed for Ph.D. scholars and teachers in computer science and discrete mathematics organized jointly by BITS Pilani, K.K. Birla Goa Campus and RKM Vivekananda University, Belur, West Bengal and Karlsruhe Institute of Technology, Germany.

41. Conference on Algorithms and Discrete Applied Mathematics: The 3<sup>rd</sup> International Conference on Algorithms and Discrete Applied Mathematics (CALDAM-2017) was organized by Department of Mathematics from 16-18 February 2017. It intended to bring together researchers working in the areas of algorithms and applied discrete mathematics and to provide a high-quality forum for the dissemination and discussion of research results in these broad areas.
42. Regional Workshop On Outcome Based Learning Using Pedagogy Framework Model: The Teaching Learning Centre, BITS Pilani, K.K. Birla Goa Campus, organized a two-day Regional Workshop On "Outcome Based Learning Using Pedagogy Framework Model" in collaboration with Centre for Educational Technology (CET), Indian Institute of Technology (IIT), Kharagpur, under the MHRD Government of India funded project, "Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning (Main Phase)" at BITS Pilani, K.K. Birla Goa Campus, on 10<sup>th</sup> and 11<sup>th</sup> of February, 2017. 43 participants from various institutions in and around Goa participated in the event.
43. A Two-day workshop on "Use of Unit-Level Data of NSS, ASI and Economic Census": The Department of Economics organized a workshop on empirical analysis using unit-level data of National Sample Survey, Annual Survey of Industries and Economic Census on 2-3 March, 2017. The workshop was attended and acclaimed by the faculty, research scholars and students.
44. Workshop on Mathematica: The Department of Mathematics, BITS Pilani, K.K. Birla Goa Campus, organized a 1-day workshop on "Introduction to MATHEMATICA" on 03 March 2017. The workshop was designed for educating undergraduate students, Ph.D. scholars and teachers of BITS-Goa in MATHEMATICA. The workshop was jointly organized by the Department of Mathematics, BITS Pilani, K.K. Birla Goa Campus, and Wolfram technologies, USA.
45. Fourth International Workshop on multi-modal cognition: AttL is 2017: ATTENTIVE LISTENER IN THE VISUAL WORLD, the fourth International workshop on multi-modal cognition was organized by the Cognitive Neuroscience Lab, Department of Biological Sciences, BITS Pilani, K.K Birla Goa Campus, from 3<sup>rd</sup> to 4<sup>th</sup> of March, 2017. The workshop's theme was multi-modal cognition with an emphasis on the interaction between language and vision.
46. Filmmaking workshop: The Department of HSS, organized a Filmmaking workshop for the students of the course, Short Film and Video Production (GSF243) on 11 and 12 March 2017. Thirty five students participated in the two-day workshop held at BITS Pilani, K.K. Birla Goa Campus.
47. BITS GOA ECONOMICS CONCLAVE: The BITS Goa Economics Conclave was organized by the Department of Economics, BITS Pilani, KK Birla Goa Campus, on 20<sup>th</sup> and 21<sup>st</sup> of March 2017. The theme of the event this year was "Changing Contours of Indian Economy: Welfare Implications & Policy Responses."
48. WORKSHOP ON TEACHING STRATEGIES IN MATHEMATICS: Aiming to provide an intense training on teaching mathematics at undergraduate level for college and university faculty, a two-day workshop on 'Teaching Strategies in Mathematics' was held on 28-29 April 2017 at Birla Institute of Technology and Science Pilani, K.K Birla Goa Campus. The Department of Mathematics, BITS Goa, was the first Indian academic institute to win the prestigious Elsevier Mathematical Sciences Sponsorship Fund – 2017.
49. The 55<sup>th</sup> National Metallurgist's Day and the 71<sup>st</sup> Annual Technical Meeting was held at BITS Pilani, K.K. Birla Goa Campus, from 11<sup>th</sup> to 14<sup>th</sup> November 2017. The NMD-ATM 2017 was hosted by the Indian Institute of Metals, Goa chapter, organized jointly with IIM, Mumbai, and IIM Pune chapters. This annual mega-event aims to bring metallurgists and material engineers from the industry and academia to come together to share their experiences and learnings about metallurgy and material engineering, from all over India and abroad. The theme of the international symposium this year is "Light Weighting for Defense, Aerospace and Transportation".
50. Workshop on Problem Identification, Ideation and Conceptualization: Centre for Innovation, Incubation and Entrepreneurship, BITS Pilani, K.K Birla Goa Campus, organized a one day workshop on "Problem Identification, Ideation and Conceptualization on 30<sup>th</sup> Nov 2017
51. A workshop on Novel Sanitation approaches and Emerging Trends in Wastewater Treatment Technology: was organized by the Department of Biological Sciences from December 19 to 21, 2017. Participants had the opportunity to examine the potential of emerging treatment processes including the use of novel sanitation approaches like Terra Preta Sanitation, bio augmentation techniques, constructed wetlands, anaerobic digestion, and physical/chemical/electrochemical processes.

52. Experimental Methods in Cognitive Neuroscience: A 2-Day National workshop on “Experimental Methods in Cognitive Neuroscience” was organized by the Cognitive Neuroscience Lab, Department of Biological Sciences, BITS Pilani, K.K. Birla Goa Campus from 15<sup>th</sup> – 16<sup>th</sup> December, 2017. Two technical demonstrations from Tobii and EGI were conducted during the workshop. A total of 30 participants attended the workshop from various National colleges and universities.
53. Workshop on Process Modeling and Simulation: The department of Chemical Engineering conducted a two day’s workshop on Process Modeling and Simulation for Industries & academicians during 21 -22 December, 2017. Around 25 participants from various industries and universities participated in the workshop.

### Hyderabad Campus

1. Convocation was conducted on Sunday 06th August, 2017, Chief Guest Dr. Rajendra Singh, Chairman, Tarun Bharat Sangh, the Vice Chancellor Prof. Souvik Bhattacharyya and Prof. G Sundar, Director, Hyderabad Campus have participated. During the Convocation 744 students from First Degree, Higher Degree and Ph.D have received their degrees. Three students from Bachelor’s degree programmes were awarded Medals: Gold medal – Adithya Murali; Silver medal – Devendra Singh Shekhawat and Bronze medal – Kinjal Jain.
2. Dr G Geetha Kumari, received a Letter of Appreciation from Intelligence Bureau, Ministry of Home Affairs, Govt. of India, on 11 April, 2017, regarding the successful development of the Cloud Forensic Investigator Toolkit (CFIT), designed and developed as the outcome of the DIT-funded project.
3. Dr Rahul Nigam was made an associate member of Inter-University Centre for Astronomy & Astrophysics (IUCAA), Pune for a further period of 3 years .
4. Dr Sarmistha Banik was made an associate member of Inter-University Centre for Astronomy & Astrophysics (IUCAA), Pune for a further period of 3 years.
5. Prof P Yogeeswari & Dr Aruna Malapati received “Women in Education” Award presented at the Dewang Mehta National Education Awards function held at Institute of Public Enterprise, Hyderabad (15 April, 2017).
6. 11<sup>th</sup> Foundation day was celebrated on 28 April and 15 non-teaching staff members were felicitated.
7. Ramalingaswami Fellowship by DBT has been awarded to Dr. Ruchi Jain Dey in Nov. 2017
8. Dr. Gireesha T. Mohannath has been awarded Ramanujan Fellowship by the DST in July 2017
9. Ramalingaswami Fellowship by DBT has been awarded to Dr. Gireesha T. Mohannath in Nov.2017
10. In December 2017 the National Symposium on Convergence of Chemistry and Materials 2017 : Department of Chemistry hosted one of its kind of conference wherein renowned professors and researchers came to showcase and talk about their latest works.
11. Prof. K Srinivasa Raju became the Associate Editor, ISH Journal of Hydraulic Engineering, Taylor & Francis
12. Prof. K. Srinivasa Raju was Nominated by Vice Chancellor, Jawaharlal Nehru Technological University (JNTU), Hyderabad as Subject Expert (Water Resources Engineering) for Faculty Recruitment at JNTU Hyderabad in May 2017
13. Dr. A. Guha Ray, Dr. A. Kar submitted Patents: Filed a patent in September 2017 and the Indian Patent Application No: 201711033016 on the Title: Treatment process for cellulose based geotextile and geotextile obtained therefrom by A. Guha Ray, A. Kar and S. Gupta.
14. Students Mr. Darshan chauham, Miss Reeti Sarkar, & Mr. Kaushal Raut have been admitted to doctoral programmes at Portland State University, TU Delft, & Georgia tech respectively.
15. Miss C. Leela Sushitha from the present final year first degree batch was awarded the prestigious IASc-INSANA-SASI Summer Research Fellowship at IISC., Bangalore.
16. A week long Book Festival was organised in October 2017 in association with the campus book store. Over 22 leading publishers had participated. There was a good response among the students, faculty and the campus community. This event was organised by the library.
17. Prof. Chittaranjan Hota became Senior Member, IEEE
18. Dr. Aruna Malapati and Prof. P Yogeeswari were awarded "Prof. Indira Parikh 50 Women in Education Leaders" citation at 6th World Education Congress on 23 Nov 2017 at Mumbai.



19. Dr Gourish Goudar and Dr. Suvadip Batabyal awarded Best Paper award in Ph.D. Forum in 11th IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS 2017).
20. Mr Sanket Mishra, research scholar of the department received TCS Ph.D. fellowship for four years July 2016-June 2020. He works in the area of Internet of Things.
21. Dr. Soumya J's Ph.D. thesis has been nominated for Best Thesis Award at VLSI Design Conference held at Hyderabad during 11 Jan 2017
22. Dr. Santosh Mahapatra was awarded Trinity College London Language Examination Fellowship for IATEFL 2018
23. Dr. Santosh Mahapatra was awarded AARMS grant by British Council for a teacher mentoring project (February, 2017)
24. Dr R. Parameshwaran recognized as Editorial Board Member, International Journal of Hydromechatronics, 2017
25. On 23 August, a guest lecture on "Full Potential Multiple Scattering Theory with space-filling scattering sites for X-ray absorption spectroscopy," by Prof. Keisuke Hatada, Department of Physics, Faculty of Science, University of Japan was organised by Dept. of Physics
26. On 27 October a talk by Padma Vibhushan Dr E Sreedharan, former chief of Delhi Metro was organised by Dept. of Civil engineering
27. On 2 November, a guest lecture on "Random Walks in Physics" by Padma Sri. Prof. Mustansir Barma, TIFR Centre for Interdisciplinary Sciences, Hyderabad was organised by Dept. of Physics
28. Prof. Kannan Ramaswamy and Prof. Aravinda Raghavan have been selected by IISER-Pune to train STEM teachers in India on Research-based Pedagogical Tools as part of Newton-Bhabha programme sponsored by DBT, MHRD, IISER-Pune, and British Council.
29. On 18 September 2017 the first BITS Colloquium series talk by Prof. M. S. Ananth, former Director, IIT Madras was organised..
30. In July, a team from National Cancer Institute visited the Dept. of Biological Sciences for collaborations in cancer research and in conducting workshops.
31. On 6 August 2017, a state-of-art micro-electro mechanical systems (MEMS) cleanroom, which is a joint contribution of the BITS, Hemair Systems and Department of Science and Technology, Government of India was inaugurated at BITS Pilani, Hyderabad campus by Prof. Souvik Bhattacharyya, Vice-chancellor and Prof. G. Sundar, Director, Hyderabad campus and Industry Engagement & Off-campus Programmes.
32. Department of Mechanical Engineering, BITS Pilani, Hyderabad Campus (Host) and Department of Mechanical & Aerospace Engineering, IIT-Hyderabad (Co-host) jointly organised the IHMTC-2017 under the auspices of Indian Society of Heat and Mass Transfer (ISHMT) between 27 and 30 December. Also, this conference was Co-sponsored by American Society of Thermal and Fluids Engineers (ASTFE) and International Centre for Heat and Mass Transfer (ICHMT).
33. Dr Swati Biswas, Dr Balaram Ghosh and Dr Muddineti Omkara Swami had submitted a Patent " A nano-micellar composition for drug delivery and method for preparing the same. No: 102711016379
34. Dr Swati Biswas, Dr Balaram Ghosh and Vishnu Kiran Rompicharla and Rakruthi Trivedi had submitted a patent " A chemotherapeutic composition for treating malignant tumors and method for preparing the same. No: 201711028012.

## A.2 ADMINISTRATIVE APPOINTMENTS

The following administrative appointments were made during the year:

A. The following have been appointed as Deans as per details given below:

S.No.	Name	Administrative Function	Period
<b>Pilani Campus</b>			
1.	Prof. Arya Kumar	Alumni Relations	22/05/2017 to 21/05/2020
<b>Hyderabad Campus</b>			
1.	Prof. Niranjan Swain	Administration (Officiating)	27/05/2017 to till further orders
<b>K.K. Birla Goa Campus</b>			
1.	Prof. Sunil Bhand	Sponsored Research and Consulting	13 June 2017 until further orders
2.	Prof. Dhananjay M Kulkarni	Administration	13 June 2017 until further orders

B. The following have been appointed as Associate Deans as per details given below:

S.No.	Name	Administrative Function	Period
<b>K.K. Birla Goa Campus</b>			
1.	Prof. Narendra Nath Ghosh	International Programmes & Collaboration	21/11/2017 to till further orders

C. The following has been appointed as Unit Chief as per details given below:

S.No.	Name	Administrative Function	Period
<b>Pilani Campus</b>			
1.	Prof. J.P. Mishra	Software Development & Educational Technology	21/06/2017 to till further orders

H. The following have been appointed as Heads of Departments as per details given below:

S.No.	Name	Department	Period
<b>Pilani Campus</b>			
1	Prof. J.P. Mishra	Computer Science & Info. Systems (Officiating)	21/06/2017 to till further orders
<b>Hyderabad Campus</b>			
1.	Prof. Tathagata Ray	Computer Science and Info. Systems	20/05/2017 to 30/09/2018
2.	Prof. Sanket Goel	Electrical & Electronics Engineering	20/05/2017 to 30/09/2018
<b>K.K. Birla Goa Campus</b>			
1	Prof. Srikanth Mutnuri	Biological Sciences	21/11/2017 to 20/11/2019
2	Prof. Saroj Sundar Baral	Chemical Engineering	21/11/2017 to 20/11/2019
3	Prof. Anjan Chattopadhyay	Chemistry	21/11/2017 to 20/11/2019
4	Prof. Ashwin Srinivasan	Computer Science & Information Systems	21/11/2017 to 20/11/2019

S.No.	Name	Department	Period
5	Dr. Aswini Kumar Mishra	Economics	21/11/2017 to 20/11/2019
6	Dr. Amalin Prince A.	Electrical & Electronics Engineering	21/11/2017 to 20/11/2019
7	Dr. Reena Cheruvalath	Humanities and Social Sciences	21/11/2017 to 20/11/2019
8	Prof. Prasanna Kumar N.	Mathematics	21/11/2017 to 20/11/2019
9	Dr. Ranjit Shankarrao Patil	Mechanical Engineering	21/11/2017 to 20/11/2019
10	Dr. Deepak N. Murthy Pachattu	Physics	21/11/2017 to 20/11/2019
<b>(c) Dubai Campus</b>			
1.	Prof. Shazi Shah Jabeen	Humanities and Social Sciences	05/01/2017 to 31/05/2018
2.	Prof. M.V.N. Sankaram	Civil Engineering (Acting)	30/08/2017 to till further orders

I. The following have been appointed as Professor-in-charges as per details given below:

S.No.	Name & Campus	Name of Centre	Period
<b>K.K. Birla Goa Campus</b>			
1.	Prof. Srinivas Krishnaswamy	Centre for Innovation, Incubation and Entrepreneurship (CIIE)	31/08/2017 until further order

J. The following have been appointed as Faculty-in-charges as per details given below:

S.No.	Name & Campus	Name of Centre	Period
<b>Pilani Campus</b>			
1.	Dr. Rajeev Sakhuja	Institute Functions	13/01/2017 to till further orders
<b>K.K. Birla Goa Campus</b>			
1.	Prof. Mridula Goel	Centre for Innovation, Incubation and Entrepreneurship (CIIE)	31/08/2017 until further notice
2.	Prof. Gaurav Dhar	Teaching Learning Centre	24/08/2017 until further notice
<b>Dubai Campus</b>			
1.	Dr. Trupti Swarup Gokhale	Center for Innovation, Incubation & Entrepreneurship	1/9/2017 to till further orders
2.	Dr. Maneesha	Teaching Learning Center	1/9/2017 to till further orders

K. The following faculty members have been appointed as Research Board Members as per details given below:

S.No.	Name	Administrative Function	w.e.f.
<b>Hyderabad Campus</b>			
1.	Prof. Anupam Bhattacharya	Research Board Member	08-12-2017 to 07-12-2019
2.	Prof. Sanket Goel	Research Board Member	08-12-2017 to 07-12-2019

L. Prof. Angshuman Sarkar, K.K. Birla Goa Campus is appointed as Chief Warden with effect from 1<sup>st</sup> January 2018 for a period upto 31<sup>st</sup> December 2019.

M. The following faculty members have been appointed as Resident Warden of the hostels as per details given below:

S.No.	Name	Hostel	w.e.f.
<b>Pilani Campus</b>			
1.	Dr. Nitin Chaturvedi	Gandhi Bhawan	10/04/2017
2.	Dr. Jitendra Singh Rathore	Budh Bhawan	10/04/2017
3.	Dr. Paritosh Shukla	Vishwakarma Bhawan	27/07/2017
<b>K.K. Birla Goa Campus</b>			
1.	Dr. Amit Sethia	CH-1	1-Jan-2018
2.	Prof. Angshuman Sarkar	CH-2	1-Jan-2018
3.	Prof. Mainak Banerjee	CH-3	1-Jan-2018
4.	Prof. P. Bhavana	CH-4	1-Jan-2018
5.	Dr. Sanjay Kumar Sahay	CH-5 & CH-6	1-Jan-2018
6.	Dr. K.A.Geetha	CH-7	1-Jan-2018
7.	Dr. Arnab Banerjee	AH-1	1-Jan-2018
8.	Prof. Raghu Nath Behera	AH-2	1-Jan-2018
9.	Dr. Vikas V. Chaudhari	AH-3	1-Jan-2018
10.	Dr. Ch.V.V.S.N.V. Prasad	AH-4	1-Jan-2018
11.	Dr. Mali Kiran Dinakar	AH-5	1-Jan-2018
12.	Dr. Rajoshri Sen Gupta	AH-6	1-Jan-2018
13.	Dr. Ravi Prasad Aduri	AH-7	1-Jan-2018
14.	Dr. Sunil Kumar V.	AH-8	1-Jan-2018
15.	Dr. Karthikeyan G.	AH-9	1-Jan-2018
<b>Hyderabad Campus</b>			
16.	Prof. Manab Chakravarthy	Gautam Bhawan, Warden	17-07-2017 to 16-05-2020
17.	Dr Subhash Goshal	Krishna Bhawan, Warden	17-07-2017 to 16-05-2020

The names and designations of senior officers of different campuses are given in Annexure (Pilani Campus, 'Annexure B1-14'; K.K. Birla Goa Campus, 'Annexure B2-1'; Hyderabad Campus, 'Annexure B3-1' and Dubai Campus, 'Annexure B4-1').

## **A.3 ADMINISTRATIVE BODIES**

### **General Body**

The General Body of the Institute held its 56<sup>th</sup> Meeting on 20<sup>th</sup> March, 2017 under the Chairmanship of Smt. Shobhana Bhartia, Pro-Chancellor of the Institute as the Chancellor could not attend the meeting due to some unavoidable exigencies. Details are given in 'Annexure A-1'.

### **Board of Governors**

The Board of Governors of the Institute held its 70<sup>th</sup> Meeting on 20<sup>th</sup> March, 2017 under the Chairmanship of Smt. Shobhana Bhartia, Pro-Chancellor of the Institute as the Chancellor could not attend the meeting due to some unavoidable exigencies. Details are given in 'Annexure A-2'.

### **Finance Committee**

The Finance Committee of the Institute held its 56<sup>th</sup> Meeting on 20<sup>th</sup> March, 2017 under the Chairmanship of Shri Hemant Kumar, Member, Finance committee of the institute as the chancellor could not attend the meeting due to some unavoidable exigencies.

### **Senate**

The Senate of the Institute met three times during the year. It held its 180<sup>th</sup>, 181<sup>st</sup> and 182<sup>nd</sup> meetings on 7<sup>th</sup> March, 2017, 11<sup>th</sup> July, 2017 and 28<sup>th</sup> November, 2017 respectively.

### **Examination Committee**

The Examination Committee met 5 times during the year for analysis and declaration of grades; approval of Ph.D. thesis reports; approval of award of degrees/medals for eligible students; deciding cases of scrutiny, unfair means and related matters.

## **A.4 ADMISSIONS**

### **BITSAT 2017**

A total of 170184 candidates, including 43198 girls, from all over the country applied for BITSAT 2017 test. The candidates had the option of choosing their own centers, date and time for the test, which was conducted during 14<sup>th</sup> May to 31<sup>st</sup> May, 2017.

In addition to this 186 applications are also received for admissions under International students scheme.

### **BITSAT 2017 Highlights are**

- Computer-based objective type online test, conducted from 14<sup>th</sup> May to 31<sup>st</sup> May, 2017 in 58 centers across India and in Dubai.
- 142073 candidates including 34187 girls appeared in BITSAT-2017 for 2850 seats.
- Use of secure high-end Technology.
- Choice of date, time and center for candidates, and immediate result on computer screen.
- Eligibility criteria for admission to Integrated First degree programmes: A Minimum 75% aggregate marks in Mathematics, Physics & Chemistry with a minimum of 60% in each (in 10+2 stream).

In addition to admission through BITSAT:

direct admission offers were made to board toppers irrespective of their BITSAT score. 14 board toppers joined BITS in 2017.

86 students were admitted under 'International students admissions scheme' .

The results of admissions to BITS were made available on Internet. Candidates applying for admission to BITS could find the latest information on the status of their application at <http://www.bitsadmission.com/>. Information on waiting list status, fee payment status etc. was made available and thousands of applicants used this instant access for information.

The number of admissions made to various programmes of the Institute in the year 2017 are given in the table below. The numbers in brackets indicate number of female students. The details such as programme-wise cut-off scores etc. are given in 'Annexure A-3'. A comparison of the cut-off marks/scores for admissions to BITS since 1966 are given in 'Annexure A-4'

	II Semester 2016-2017	I Semester 2017-2018
<b>1. BITS Pilani, Pilani Campus</b>		
Integrated First Degree Programmes		1064(157)
Higher Degree Programmes		336(102)
Doctoral Programmes	29(13)	52(21)
<b>Total</b>	<b>29(13)</b>	<b>1452(280)</b>
<b>2. BITS Pilani , K.K. Birla Goa Campus</b>		
Integrated First Degree Programmes	-	830(114)
Higher Degree Programmes	-	90(39)
Doctoral Programmes	19(07)	28(11)
<b>Total</b>	<b>19(07)</b>	<b>948(164)</b>
<b>3. BITS Pilani, Hyderabad Campus</b>		
Integrated First Degree Programmes	-	1084(207)
Higher Degree Programmes	-	146(56)
Higher Degree (3 year Integrated Programmes)	-	-
Doctoral Programmes	36(15)	36(12)
<b>Total</b>	<b>36(15)</b>	<b>1266(275)</b>
<b>4. BITS Pilani, Dubai Campus</b>		
Integrated First Degree Programmes	8(03)	300(112)
Higher Degree Programmes	13 (05)	17(08)
Doctoral Programmes	01 (00)	04(01)
<b>Total</b>	<b>22(08)</b>	<b>321(121)</b>
<b>5. Work-Integrated Learning Programmes</b>		
Integrated First Degree Programmes	709(103)	656(48)
Higher Degree Programmes	3959(1183)	2855(567)
PG Certificates & Diploma Programmes	-	320(53)
<b>Total</b>	<b>4668(1286)</b>	<b>3831(668)</b>
<b>GRAND TOTAL (1+2+3+4+5)</b>	<b>4774(1329)</b>	<b>7818(1508)</b>

## A.5 FLEXIBILITIES: DUAL DEGREE ADMISSIONS

During the academic year 2017-2018, 661 students (308 at Pilani, 209 at Goa and 144 at Hyderabad and 0 at Dubai) were permitted to work concurrently for two first degrees under Dual Degree scheme. Details are given in 'Annexure A-5'.

## A.6 AWARD OF DEGREES AND MEDALS

### (a) Award of Degrees

During the year, a total of 11394(3644) degrees were awarded. The details on the award of degrees are given below. The numbers in brackets indicate number of female students.

	Number of degrees awarded				
	Pilani Campus	Goa Campus	Hyderabad Campus	Dubai Campus	WILP
80th Award (vide Board of Governors approval on 20.03.2017)	78(15)	46(9)	40 (14)	25(6)	5774 (2378)
81st Award (vide Board of Governors approval on 13.07.2017)	1294(260)	746 (143)	855 (188)	358(119)	2178(512)
<b>Total</b>	<b>1372(275)</b>	<b>792(152)</b>	<b>895 (202)</b>	<b>383(125)</b>	<b>7952(2890)</b>

### (b) Award of Medals for Academic Year 2016-2017

#### A. BITS Pilani, Pilani Campus

The list of students who were awarded various medals, for the students graduated at the end of First Semester, Second Semester and Summer Term of the academic year 2016-2017 is given in the following table:

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
<b>Integrated First Degree Programmes (No. of students: 802)</b>						
1.	2013A7TS018P	ABHINAV BAID	M	9.94	FIRST	GOLD
2.	2013A3PS587P	VAIBHAV GARG	M	9.88	SECOND	SILVER
3.	2013A7PS289P	HARSHIT JAIN	M	9.86	THIRD	BRONZE

#### B. BITS Pilani, K.K. Birla Goa Campus

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
<b>Integrated First Degree Programmes (No. of students: 565)</b>						
1.	2013A7PS045G	TALLURI VARSHEETH	M	9.92	FIRST	GOLD
2.	2013A7PS083G	AYUSH SHARMA	M	9.68	SECOND	SILVER
3.	2013A3PS626G	SUDEEP MISHRA	M	9.5	THIRD	BRONZE

#### C. BITS Pilani, Hyderabad Campus

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
<b>Integrated First Degree Programmes (No. of students: 653)</b>						
1.	2012B4A7498H	ADITHYA MURALI	M	9.72	FIRST	GOLD
2.	2013A7PS204H	DEVENDRA SINGH SHEKHAWAT	M	9.70	SECOND	SILVER
3.	2013A7PS162H	KINJAL JAIN	F	9.69	THIRD	BRONZE

#### D. BITS Pilani - Dubai Campus

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
<b>Integrated First Degree Programmes (No. of students: 370)</b>						
1.	2013A7TS061U	KHOJA ZAIDALI HAIDERALI	M	9.96	FIRST	GOLD
2.	2013A7TS162U	AMARTYA DAS SHARMA	M	9.94	SECOND	SILVER
3.	2013A3PS076U	LAUREN ALISHA FERNANDES	F	9.93	THIRD	} (Bracketed) BRONZE
4.	2013AAPS049U	AAMIR JAMAL AHSAN JAMAL	M	9.93	THIRD	

#### A.7 MoUs

The Institute has signed Memoranda of Understanding with the following reputed organizations during 2017.

1. BASF India Limited, Mumbai
2. Saint Petersburg Electrotechnical University, Russia
3. Mytrah Energy (India) Private Limited, Hyderabad
4. The Graduate School of Engineering, Hiroshima University, Japan
5. Memorial University of Newfoundland, Canada
6. Sun Pharmaceutical Industries Ltd. Vadodara
7. CSS Corp Private Limited, Chennai
8. National Research Development Corporation, New Delhi
9. Tide Technocrats Private Limited, Bangalore
10. Sarudbhava Formulations Pvt. Ltd., Secunderabad
11. Natco Pharma Ltd., Hyderabad
12. Synopsys India Pvt. Ltd., Bangalore
13. General Electric India Industrial Pvt. Ltd., New Delhi
14. Apollo Tyres Ltd., Kochi
15. Al Ain University of Science and Technology, Al Ain, UAE
16. The University of Nottingham, UK
17. University College Dublin, Ireland
18. CSIR-Central Electronics Engineering Research Institute, Pilani



## A.8 NUMBER OF STUDENTS REGISTERED

	No. of Students Registered					Total
	Pilani Campus	Goa Campus	Hyderabad Campus	Dubai Campus	Work-Integrated Learning Programs	
Second Semester 2016-2017	4584	2854	3312	1644	17737	30131
First Semester 2017-2018	4948	3196	3820	1581	18023	31568
Summer Term 2016-2017	893	630	858	459	-	2840
<b>GRAND TOTAL</b>						<b>64539</b>

The above table includes students registered in First Degree, Higher Degree and Ph.D. Programmes.

### Category-wise Distribution of Ph.D. Students

During Second Semester 2016-2017, a total of 853 Ph.D. students were on-rolls, while a total of 849 Ph.D. students were on-rolls during First Semester 2017-2018.

S.No.	CATEGORY	No. of Ph.D. Students on Rolls							
		II Semester 2016-2017				I Semester 2017-2018			
		Pilani	Goa	Hyderabad	Dubai	Pilani	Goa	Hyderabad	Dubai
1	Research Scholars (FT+PT)	295	178	249	31	301	184	255	28
2	Lectures and Staff	22	26	19	05	15	21	15	02
3	Ph.D. Aspirants	16	03	09	0	13	03	09	03
<b>TOTAL</b>		<b>333</b>	<b>207</b>	<b>277</b>	<b>34</b>	<b>329</b>	<b>208</b>	<b>279</b>	<b>33</b>
<b>GRAND TOTAL</b>		<b>853</b>				<b>849</b>			

## A.9 COURSES OFFERED

Semester/ Summer Term	Pilani Campus	Goa Campus	Hyderabad Campus	Dubai Campus	Work-Integrated Learning Programmes
II Semester 2016-2017	403	285	336	208	687
I Semester 2017-2018	468	281	339	228	552
Summer Term 2016-2017	29	5	15	10	-

## A.10 DEGREES OFFERED AT DIFFERENT CAMPUSES

### Pilani Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
<p><b>B.E.</b></p> <ul style="list-style-type: none"> <li>Chemical</li> <li>Civil</li> <li>Computer Science</li> <li>Electrical &amp; Electronics Engineering</li> <li>Electronics &amp; Instrumentation</li> <li>Manufacturing Engineering</li> <li>Mechanical</li> </ul> <p><b>B.Pharm.</b></p> <p><b>M.Sc.</b></p> <ul style="list-style-type: none"> <li>Biological Sciences</li> <li>Chemistry</li> <li>Economics</li> <li>Mathematics</li> <li>Physics</li> </ul> <p><b>M.Sc.</b></p> <ul style="list-style-type: none"> <li>General Studies</li> </ul>	<p><b>M.E.</b></p> <ul style="list-style-type: none"> <li>Biotechnology</li> <li>Chemical</li> <li>Civil with Specialization in Structural Engineering.</li> <li>Civil with Specialization in Transportation Engineering.</li> <li>Civil with Specialization in Infrastructure Engineering &amp; Management</li> <li>Computer Science</li> <li>Communication Engineering</li> <li>Design Engineering</li> <li>Embedded Systems</li> <li>Manufacturing Systems Engineering</li> <li>Mechanical</li> <li>Microelectronics</li> <li>Software Systems</li> </ul> <p><b>M.Pharm.</b></p> <p><b>M.Pharm.</b> (with Specialization in Pharmaceutics)</p> <p><b>M.Pharm.</b> (with Specialization in Pharmaceutical Chemistry)</p> <p><b>Master of Business Administration (M.B.A.)</b></p>
<p><b>C. Ph.D.</b></p>	

### K.K. Birla Goa Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
<p><b>B.E.</b></p> <ul style="list-style-type: none"> <li>Chemical</li> <li>Computer Science</li> <li>Electrical &amp; Electronics Engineering.</li> <li>Electronics &amp; Communication Engg.</li> <li>Electronics &amp; Instrumentation Engg.</li> <li>Mechanical</li> </ul> <p><b>M.Sc.</b></p> <ul style="list-style-type: none"> <li>Biological Sciences</li> <li>Chemistry</li> <li>Economics</li> <li>Mathematics</li> <li>Physics</li> </ul>	<p><b>M.E.</b></p> <ul style="list-style-type: none"> <li>Biotechnology</li> <li>Chemical Engineering</li> <li>Computer Science</li> <li>Design Engineering</li> <li>Embedded Systems</li> <li>Microelectronics</li> </ul>
<p><b>C. Ph.D.</b></p>	

## Hyderabad Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
<p><b>B.E.</b></p> <ul style="list-style-type: none"> <li>Chemical</li> <li>Civil</li> <li>Computer Science</li> <li>Electrical and Electronics</li> <li>Electronics &amp; Communication</li> <li>Electronics &amp; Instrumentation</li> <li>Mechanical</li> <li>Manufacturing Engineering</li> </ul> <p><b>B. Pharm.</b></p> <p><b>M.Sc.</b></p> <ul style="list-style-type: none"> <li>Biological Sciences</li> <li>Chemistry</li> <li>Economics</li> <li>Mathematics</li> <li>Physics</li> </ul>	<p><b>M.E.</b></p> <ul style="list-style-type: none"> <li>Biotechnology</li> <li>Chemical Engineering</li> <li>Civil with Specialization in Structural Engineering</li> <li>Civil with Specialization in Transportation Engineering</li> <li>Computer Science</li> <li>Communication Engineering</li> <li>Design Engineering</li> <li>Mechanical</li> <li>Mechanical with Specialization in Thermal Engg.</li> <li>Microelectronics</li> </ul> <p><b>M.Pharm.</b> (with Specialization in Pharmaceuticals)</p>
<p><b>C. Ph.D.</b></p>	

## Dubai Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
<p><b>B.E.</b></p> <ul style="list-style-type: none"> <li>Biotechnology</li> <li>Chemical</li> <li>Civil</li> <li>Computer Science</li> <li>Electrical and Electronics</li> <li>Electronics and Communication</li> <li>Electronics and Instrumentation</li> <li>Mechanical</li> </ul>	<p><b>M.E.</b></p> <ul style="list-style-type: none"> <li>Biotechnology</li> <li>Design Engineering</li> <li>Microelectronics</li> <li>Software Systems</li> </ul> <p><b>Master of Business Administration (M.B.A.)</b></p>
<p><b>C. Ph.D.</b></p>	

### A.11 PLACEMENT

	Pilani	Goa	Hyderabad	Dubai
Number of companies which conducted campus interviews	209	153	185	85
Number of offers made	881	502	618	86

## A.12 FACULTY DATA

As on January 1, 2018, the number of faculty members in each campus is given below:

Designation	Pilani		Goa	Hyderabad	Dubai	Total
	On Campus	Off Campus				
<b>Tenured</b>						
Senior Professors	4	-	2	2	1	9
Professors	29	-	10	13	17	69
Associate Professors	48	12	33	42	13	148
Assistant Professors	141	23	87	105	37	393
<b>Non-Tenured</b>						
Sr. Professor Emeritus	1	-	-	-	-	1
Professors on Contract	-	-	-	-	-	-
Visiting Professors	-	-	-	-	1	1
Assistant Professors on Contract	-	-	-	-	-	-
Visiting Assistant Professors	5	-	4	-	-	9
Sr. Lecturers	-	-	-	-	-	-
Lecturers	10	17	18	9	4	58
Visiting Faculty	2	-	3	2	-	7
Adjunct Faculty	-	-	-	-	-	-
Instructors	-	2	-	-	-	2
Professor Emeritus	-	-	-	-	-	-
Visiting Associate Professor	-	-	-	-	-	-
<b>Total</b>	<b>240</b>	<b>54</b>	<b>157</b>	<b>173</b>	<b>73</b>	<b>697</b>

During the year 2017, 99 new faculty members (33 in Pilani, 27 in Goa, 27 in Hyderabad and 12 in Dubai) joined. 80 faculty members (29 in Pilani, 25 in Goa, 20 in Hyderabad and 6 in Dubai) left the Institute for reasons such as planned/forced separation, resignation, expiry of term and retirement. Details are given in 'Annexure A-6'.

## A.13 PRACTICE SCHOOL STATISTICS

### University-Industry Linkages

An important aspect of education at BITS is its institutionalized linkages with the world of work. The Institute attaches great importance to the University-Industry Linkages and gives mutually reinforcing thrust to it through various avenues like Practice School (PS), Work Integrated Learning Programmes (WILP), Technology Innovation Centre (TIC) and off-campus Ph.D.

## Practice School Programme

All integrated first degree and higher degree programmes of the Institute provide for a Practice School option. The past statistics show that almost all the students admitted, opt for this programme. During the calendar year 2017 the Practice School programme was operated at 517 stations, with 12 stations hosting both Practice School-I (PS-I) and Practice School-II (PS-II), accommodating 4503 students and 176 faculty members. Categorization of PS stations is given below:

S.No.	Categories of Organizations	No. of Organization in	
		PS-II & PS for Higher Degree	PS-I
1.	Banks and other Financial Institutions	32 (18)	2 (2)
2.	Design, Development, Consultancy and Software Organization.	220 (175)	48 (45)
3.	National Research Laboratories and other Research centers	21 (21)	37 (32)
4.	Production, Manufacturing and Public Work Units	42 (46)	106 (98)
5.	Publishing Houses, News Agencies and Museums	5 (1)	4 (5)
<b>Total</b>		<b>320 (261)</b>	<b>197 (182)</b>

In 2017, an integrated practice school allotment for 4503 students was carried out across Pilani, Goa and Hyderabad campuses. The statistical details of the centre-wise distribution of students and faculty at PS-I stations are given in **Annexure A-7'** followed by the details of the Operational Statistics of PS-II and PS for higher degree in **Annexure A-8**. Growth statistics of PS-I, PS-II and PS for higher degree are given in **Annexure A-9**, while facilities available at various PS-II stations are given in **Annexure A-10**.

**Following is the break up of students who were registered in PS-I, PS-II & PS for Higher Degree:**

PS-I	Summer Term 2016-2017	(2184)	2189
PS-II	II Semester 2016-2017	(762)	845
	I Semester 2017-2018	(1072)	1175
<b>PS for Higher Degree</b>			
	II Semester 2016-2017	(237)	294
	I Semester 2017-2018	(00)	00
<b>Total</b>		<b>(4255)</b>	<b>4503</b>

**Note:-**The figures shown in brackets relate to the year 2017.

## Dubai Campus

During the calendar year 2017, the Practice School Programme was operated at 141 stations, with 32 stations hosting both Practice School-I (PS-I) and Practice School – II (PS-II), accommodating 783 students and 58 faculty members. Categorization of PS stations is given below:

S. No.	Category of Organizations	No. of Organizations	
		PS-II	PS-I
1.	Banks & other financial Institutions.	00 (00)	01 (01)
2.	Design, Development, Consultancy and Software Organization.	31 (23)	31 (33)
3	Trading	09 (11)	09 (07)
4	Production, Manufacturing and Maintenance	34 (35)	46 (48)
5	Other	02 (07)	09 (08)
<b>Total</b>		<b>76 (76)</b>	<b>96 (97)</b>

With the present annual PS intake of 783 students, the PS programme covers almost entire eligible student population of the Institute. It is worthy to note that the Practice School operation at the Dubai Campus has been

conducted successfully since 2002. The statistical details of the distribution of students and faculty at PS-I stations are given in **Annexure B4-15** followed by the details of the Statistics of PS-II are given in Annexure B4-16. The Growth statistics of PS-I, PS-II are given in **Annexure B4-17**, while facilities available at various PS-II stations are given in **Annexure B4-18**.

Following is the breakup of students who were registered in PS-I, PS-II. (Note: The data pertaining to the calendar year 2016 is given in parenthesis.)

PS-I	Summer Term 2017	423(404)
PS-II	II Semester 2016-2017	180 (182)
PS-II	I Semester 2017-2018	180 (140)
<b>Total</b>		<b>783 (726)</b>

#### **A.14 WORK INTEGRATED LEARNING PROGRAMMES (WILP)**

Since 1979, the Institute has been participating in the human resources development activities of the industries by evolving several degree programmes that integrate the working environment of the employees with the learning environment required by the Institute. These programmes are offered in several domains like Information Technology, Engineering Technology and Management.

The Institute conducts **Work Integrated Learning Programmes (WILP)** as a means of continuing education for employed professionals to meet the Learning & Development needs of a diverse spectrum of industries. These programmes are conducted through a collaborative partnership between BITS Pilani and the organization / industry, to build technical competencies and enable advancement of workplace skills. In a world of rapidly evolving technologies, these programmes represent a successful model to meet the consequent need for continuous education and up-skilling of the workforce.

Over the past three decades, these programmes have grown manifold, meeting the requirements of over 4000 organizations. At present, over 22,000 employed professionals are pursuing various degree programmes through WILP.

#### **SALIENT FEATURES**

In line with the educational philosophy of the Institute of integrating theory with practice, the student's own work environment provides an ideal ground for a meaningful combination of the two through assignments, case studies, work experience, and projects. The interplay of work or practice and education is ensured since students are admitted only to a programme that is in line with their work profiles, and with the endorsement and active support of the employer.

The programmes are industry focused, with highly contemporary and relevant curriculum, and the individual courses are taught at the same level of rigor as in programmes on the campus. Instruction is delivered at the workplace, using a judicious combination of asynchronous electronic means, and synchronous, faculty-led classes conducted either physically or through the use of technology. Extensive use is made of virtual laboratories, remote laboratories, simulations, case studies, assignments and projects drawn from the workplace for enhanced experiential learning.

#### **COURSES OFFERED**

The number of courses, offered during the year 2017 is as follows:

	<b>Number of Courses offered</b>
Second Semester 2016-2017	687
First Semester 2017-2018	552



## PROGRAMMES OFFERED

### Currently Operative Work Integrated Learning Programmes

Programmes	Collaborating / Sponsoring Organization
<b>Certificate</b>	
1. Manufacturing Practice	- Bosch, Bangalore
<b>Post Graduate Certificate</b>	
1. Internet of Things	- Designed for the HRD requirements of a diverse spectrum of IT Industries
2. Big Data Engineering	- Designed for the HRD requirements of a diverse spectrum of IT Industries
3. Manufacturing Practice	- Bosch, Bangalore
<b>Post Graduate Diploma</b>	
1. Finance	- Designed for the HRD needs of Business organizations
2. Manufacturing Management	- Bosch, Bangalore
<b>B.Tech. Programmes</b>	
1. Engineering Design	- Eaton Technologies, Pune; L&T, Vadodara
2. Engineering Technology	- Designed for the HRD needs of a diverse spectrum of Engineering Industries; and John Deere, Pune
3. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries; and Wipro Bangalore
4. Manufacturing Technology	- Kirloskar Oil Engines, Kolhapur, Bharat Forge, Cummins, Pune, Tata Motors, Jamshedpur, TACO, Pune; Maruti Suzuki, Gurgaon; Mahindra Motor Vehicles, Pune
5. Marine Engineering	- Tolani Maritime Institute, Induri
6. Nautical Technology	- Tolani Maritime Institute, Induri
7. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy - Mumbai
8. Process Engineering	- Aditya Birla Group, Mumbai; JSW Steel, Toranagallu; Vedanta, Jharsuguda; BPCL, Mumbai
<b>M.Sc. Programmes</b>	
1. Business Analytics	- Designed for the HRD needs of a diverse spectrum of Business organizations
2. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries
<b>M.B.A. Programmes</b>	
1. Consultancy Management	- Designed for the HRD needs of a diverse spectrum of Consulting firms
2. Finance	- Designed for the HRD needs of a diverse spectrum of Business organizations
3. Hospital & Health Systems Management	- Designed for the HRD needs of a diverse spectrum of Health care organizations
4. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Manufacturing Industries
5. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
<b>M.Tech. Programmes</b>	
1. Automotive Engineering	- Tata Technologies, Tata Motors, Pune
2. Computing Systems & Infrastructure	- Designed for the HRD requirements of a diverse spectrum of IT Industries; and Wipro Technologies, Bangalore
3. Design Engineering	- Designed for the HRD needs of a diverse spectrum of Engineering Industries; and John Deere, Pune

Programmes	Collaborating / Sponsoring Organization
4. Embedded Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries; and Cisco, Bangalore; UTC, Bangalore, Hyderabad; Cluster programme, Pune, Bangalore
5. Environmental Engineering	- Goa State Pollution Control Board, Goa
6. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Manufacturing Industries
7. Microelectronics	- Designed for the HRD requirements of a diverse spectrum of IT Industries; and Synopsys, Bangalore;
8. Pharmaceutical Operations and Management	- Designed for the HRD requirements of a diverse spectrum of Pharmaceutical Industries; and Lupin, Mumbai, Sun Pharma, Vadodara
9. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
10. Science Communication	- National Council of Science Museums, Kolkata
11. Software Engineering	- Wipro Technologies, Dell-EMC, SAP Labs, Sabre, Oracle, Bangalore; Avaya, Cybage, Tech Mahindra, Pune; IGate, Hexaware, Mumbai; Qualcomm, Hyderabad; Cognizant, Verizon, Chennai
12. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries; and Wipro Technologies, Cisco, Bangalore; TCS, Hyderabad
13. Systems Engineering	- Wipro Infotech, Bangalore
14. Transportation Engineering	- PWD, Goa

## ADMISSIONS

The number of students admitted in each of the semester is given below.

	PG Certificate & Diploma Programmes	Integrated First Degree Programmes	Higher Degree Programmes	Total
Second Semester 2016-2017	-	709(103)	3959(1183)	4668(1286)
First Semester 2017-2018	320(53)	656(48)	2855(0567)	3831(0666)

The programme-wise details are given in 'Annexure B5-1'.

## NUMBER OF STUDENTS REGISTERED

The registration processes for both the semesters were completed on the first day of each semester.

Semester	Number of students registered
Second Semester 2016-2017	17737
First Semester 2017-2018	18023

Details of Registration of students for the First Semester 2015-2016 are given in 'Annexure B5-2'.

## AWARD OF DEGREES

During the year, a total of 7952 students graduated. The details on the award of degrees are given below.

Award	80 <sup>th</sup> Award	81 <sup>th</sup> Award	Total
Integrated First Degrees	668(32)	472(79)	1140(111)
Higher Degrees	5106(2346)	1706 (433)	6812(2779)
<b>Total</b>	<b>5774(2378)</b>	<b>2178(512)</b>	<b>7952(2890)</b>

Statistical details of these degrees are given in Annexure B5-6.

## A.15 ALUMNI AFFAIRS DIVISION (AAD) ACTIVITIES

### Distinguished Alumnus Award 2017:

“BITS Pilani Distinguished Alumnus Awards” were conferred to the following alumni in 2017:

S.No	Name	Affiliation	Category
1	Prof. Govindan Rangarajan	Professor, Dept. of Mathematics and Chairman, Division of Interdisciplinary Research, IISc, Bangalore	Academic Teaching and/or Research
2	Prof. Narayana R. Aluru	Richard W. Kritzer, Distinguished Professor, Dept. of Mechanical Science and Engg, University of Illinois, Urbana Champaign, USA	Academic Teaching and/or Research
3	Mr. Hari Menon	Co-founder, CEO and Head of Merchandising, BigBasket.com	Entrepreneurship
4	Mr. Harish Bhat	Chairman, Tata Global Beverages & Tata Coffee Limited, India and Brand Custodian, Tata Sons, India	Professional Management of Businesses
5	Mr. Raghu Rajagopal	CEO/Co-Founder, DATRI	Public Life / Social Entrepreneurship

This is in recognition of their significant and outstanding contributions to entrepreneurship or academic teaching and/or research or Professional Management of Businesses.

### Alumni Relations, Pilani campus

A new university-wide Alumni Cell led by Dean, Alumni Relations was created by the institute in the month of May 2017. This Cell will connect with the BITS Pilani global alumni network and involve them in the Institute's development plans in association with BITSAA International and other BITSAA chapters across the country and other parts of the world.

The Alumni Cell consists of nine member strong student-alumni team at Pilani and students teams at each campus led by the Dean, Alumni Relations with the cross-campus support provided by Faculty-in-Charges (FICs), Alumni Relations in each campus of BITS Pilani would work for building stronger networking and connect with Alumni.

The main purpose of the Cell is to constantly connect the global alumni and conceptualize, develop and organize various alumni led initiatives related to campus development, student life and academic processes. The institute Alumni Cell and BITSAA would have seamless functioning across all processes. The Alumni Cell would anchor fundraising campaigns leading to BITS Pilani having direct control on the benefits accruing from such initiatives.

Prof. Arya Kumar, currently Professor in the Department of Economics & Finance at Pilani Campus, had assumed charge as the first Dean, Alumni Relations of BITS Pilani.

The celebration of BITSians' Day that was initiated in 2013 have seen an astronomical increase in participation every year. BITSians Day 2017 was celebrated across nook and corner of the world in different organisations and chapters of BITSAA. The representation of the BITSian spirit from New Zealand to Canada and Japan to Europe, was witnessed across 25 countries and more than 120 locations. Offices and universities saw an outpouring of the BITSian essence, and there was a deluge of BITSians Day memories on the social media as well.

The Silicon Valley Chapter of BITSAA International organized BITSync 2017 between 8th and 9th September, 2017 to connect with BITSians. It is the number one BITSian conference in the USA attended by BITSians from all over the US, from more than 40 different batches, in various roles. Some of the prominent speakers who addressed the conference included John Chambers, Executive Chairman of the Board, Cisco; Joel Peterson, Founding Partner & Chairman, Peterson Partners; Deepa Thomas, Author, and Kelly Ahuja CEO, Versa Networks. Prof Souvik Bhattacharyya and Prof Arya Kumar addressed the gathering of more than 250 BITSians from Bay area through Telepresence facility in the opening session of the conference and shared about developments at BITS front including the distinct emphasis that is being placed to connect with Alumni for the growth and development of the institute.

BITS has initiated a project to provide permanent e-mail ID's to all Alumni for communicating and getting connected with them with the help of UMS Consultants, a software provider company by one of our Alumni from Goa campus

BITS – 75 Trust organized Gurudakshina programme to felicitate 10 Guru's who taught the batch during 1970-75 on 22nd October, 2017 at Bangalore. Mr. Hanuman Bengani, Dr Vijay Chandru and batch mates took a lead to organize the programme. Around 150 BITSians along with their family members participated in the programme. Prof Arya Kumar, Dean Alumni Relations shared his thoughts about the good work being done by the Trust to honour their teachers from 2009 onwards and in promoting start-ups.

BITS ECHO – a Newsletter brought out by Student Alumni Relations Cell for Alumni was launched Mr. Debu Bhattacharya, Vice Chairman of Hindalco and Novelis, Chairman of the Business Review Council (Manufacturing) of Aditya Birla Group (Member) on 17th October 2017. This is one initiative that will bring BITS campuses closer to Alumni. They will get a feel of what's happening in Pilani, in Dubai, in Goa and in Hyderabad. Particularly newsbytes that are relevant to them. The purpose is to share, engage, invite and thank Alumni. It would value the connect with BITS Pilani that has shaped Alumni to face greater challenges of life and to bring in a name and fame to Alma Mater. Two issues of BITS ECHO – a newsletter have been brought out for sharing with Alumni across the globe during the year.

BITS Alumni under the leadership and initiative taken by Mr. N S Parthasarthy and Mr. Sreenivasan Seshasayee have instituted "Prof SSR Memorial Teaching Excellence Award". The first award function was organized on 4th September, 2017 wherein family members of Late Prof S S Ranganathan, Mr N S Parthasarthy and Ms Namita Sood – Alumni, Faculty Members and Students participated.

BITS Pilani has signed an MOU with Team Beyond Borders Pty. Ltd. (TBB) – Sydney, Australia; a company by Sanjay Singhai of 1988 Batch. TBB has agreed to provide free of cost license of a software product which it has developed to BITS Pilani for strengthening the industry and academia relations and to provide additional learning opportunity to BITS students.

Sunil Nanda was conferred the Prof L K Maheshwari Foundation Distinguished Alumnus Award 2017 by Dr AK Sarkar, Director BITS Pilani - Pilani Campus on 11th November 2017. Sunil Nanda gave a talk titled "The Profound, the Elegant and the Useful". A whole lot of classmates of Sunil Nanda from different parts of India and across the globe had descended at Pilani to cheer up and watch emotion choked buddy Sunil Nanda receiving this coveted alumnus award.

Prof. V Lakshminarayanan Memorial Lecture was held on 4th December 2017 at BITS Pilani, Pilani Campus. As a mark of respect to the great teacher, educationist, administrator and philosopher all modelled in one, the first Director of BITS Pilani, Prof V Lakshminarayanan (VLN) was a legendary leader. Born in 1906, he came to Pilani in 1946, served the Institute in various capacities until 1970 and left for his heavenly abode in 1984. Prof. Surendra Pal delivered the Prof. V. Lakshminarayanan Memorial Lecture on "Aerospace Paradigm of India." Prof. Pal is a space communication technologist, an accomplished researcher, an academician, an administrator and a visionary of great repute is an alumnus of Birla Institute of Technology and Science, Pilani and Indian Institute of Science Bangalore.

During the year, a number of alumni related events were organized including Silver Jubilee Reunion, Golden Jubilee Reunion, Farewell parties to passing out graduates. More than 300 Alumni of 1988-92 batch participated in a Silver Jubilee Reunion, which was organized between 10th and 12th November 2017. More than 130 Alumni of 1967-72 batch with their family members participated in a golden Jubilee Reunion organized between 27th and 29th October, 2017. Six Alumni of 1970-74 pharmacy batch visited the campus during September 29<sup>th</sup> – Oct 2<sup>nd</sup> 2017. Seven Alumni of the first batch of MMS (1971-76) celebrated their reunion during Nov 4<sup>th</sup> - 6<sup>th</sup> 2017. Around 80 Alumni of 1977-82 batch were on campus with their family members to celebrate their reunion during Nov 19<sup>th</sup> -21<sup>st</sup> 2017. The nineteen veteran alumni of 1959-63 Batch were on campus to celebrate their Reunion for three days – 24<sup>th</sup> Nov to 26<sup>th</sup> Nov 2017. Some of them came here after long period of 55 years. Around 10 Alumni of 1971-76 batch came to Pilani to relive their old golden days during Dec 24<sup>th</sup> -25<sup>th</sup> 2017.

Silver Jubilee reunion batch of 1988 Batch joined hands together to contribute Rs 1.30 crores to the institution for research/faculty enrichment or infrastructure development that would be jointly decided by the institute and batch representatives. Golden Jubilee Batch of 1967 took an initiative to collect around Rs 38.7 lakhs to be contributed for the growth and development of the BITS Pilani.

BITS Alumni Fund for Children's Education (BAFCE) is a charitable fund instituted by the 1987 batch on behalf of all alumni coinciding with their Silver Jubilee Reunion. The purpose of BAFCE endowment is to provide financial assistance for college education for children and wards of eligible employees of the BITS eco-system in Pilani.

Graduating student tea parties were organized on 26th April, 2017 and on 27th November, 2017. Prof Souvik Bhattacharyya, Vice Chancellor, Prof A K Sarkar, Director and Prof Arya Kumar Dean Alumni Relations shared their thoughts with the passing out batch and wish them to excel in their chosen fields of interest. They also highlighted upon the need for getting remain connected and give back to their Alma Mater in tangible and intangible ways.

A series of talks by leading academicians and entrepreneurs were organized in collaboration with Campus Mentoring Network, BITSAA International for the benefit of students.

Various scholarships were awarded to the students through BITSAA international.

### **K.K. Birla GOA Campus:**

#### **Embryo & On-campus Lectures:**

Alumni Affairs, BITS Pilani K.K. Birla Goa Campus has organized 15 Embryo & On-campus talks from January – December, 2017.

#### **BITSians Day:**

The fourth edition of 'BITSians Day' was celebrated on 4<sup>th</sup> of August, 2017. A BITS – RUN (Marathon) was organized on the same day to celebrate the spirit of "Once a BITSian, Always a BITSian".

#### **Batch Reunion:**

Alumni Affairs of BITS Pilani K.K. Birla Goa Campus organized the first ever reunion of our campus from 11-12 February 2017. Alumni of the batch 2004, 2005 and 2006 are invited along with their spouse. The event involved talks by some of the alumni about their days in BITS and there was an introduction to Alumni Mentorship Programme (AMP), a pilot project set-up with the help of the alumni mentoring few on-campus students on different areas as selected. Following this, there was a dinner at Royal Orchid Resort & Spa with one of our campus alumni, Mr. Nishant Suri, a well-known stand-up comedian's performance.

#### **Metanoia:**

Keeping in mind its resolute mission to keep the alumni of BITS connected to their Alma mater and to maintain the integrity and strength of the vast alumni community, Alumni Affairs Division – Student Team Goa conducted the second edition of Alumni Summit on 26<sup>th</sup> of August, 2017. The speakers reminisced about their life back at BITS campuses and their journey thereafter.

Six speakers who were invited are:

1. Shreyas Habbu, Chief Minister's Fellow, Government of Maharashtra
2. Bandan Jot Singh, Expeditioner - First Indian Sikh to raise the Indian Flag on Antarctica.
3. Padmini Chettur, Dancer & Founder, Padmini Chettur Dance Company
4. Shashi Warriar, Author
5. Nishith Rastogi, Founder, Locus.sh
6. B Sandhya, Additional Director General of Kerala Police in India

#### **Research Scholarship:**

One of our alumni Mr. Satish Sankaralingam initiated a research scholarship for BE students and an amount of Rs. 15,000/- was awarded to Hardik Hingorani, Shashwat Verma and Sukirt Thakur as recognition to their research work.

#### **Prof. Suresh Ramasamy Memorial Award 2017-18:**

The project idea 'Imitato Robotics' done by the students: Vadaga Ananyo Rao, Shardul Walwadkar and Chakshu Moar was selected for Prof. Suresh Ramasamy Memorial Award 2017-18.

**Regular Activities:**

Other regular activities like bi-annual Director's Tea Party, batch snap sessions, Alumni Affairs Division registrations, souvenir distributions, bringing out the yearbook 'Melange' for out-going students, hosting visiting alumni on campus, etc.

**Hyderabad Campus****Alumni Cell, Hyderabad Campus**

During the year, Alumni cell organized BITSian's day, Farewell parties to passing out graduates and scholarships to the students through BITSAA international. Brief about some of the prominent activities organized during the year are as under:

**Farewell to Graduating Students**

Graduands Farewell party organized by Alumni Relations Cell on 26<sup>th</sup> April,2017 and 22<sup>nd</sup> November,2017 at Library Quadrangle.

To bid a farewell to graduating students, speaking on the occasion, Director, Prof G. Sundar, congratulated the students and called upon them to make their Institution proud. He advised the students to be connected with their alma mater. Around 400 students, faculty and staff members were present in the function.

Several students spoke on these farewells and conveyed their gratitude to the Institute and the teachers for helping them learn and grow. They said that staying at BITS and facing the challenges has made them better human beings while building leadership qualities

**Hyderabad Alumni Meet**

Students of BITS Pilani Hyderabad Campus had an opportunity of attending the BITSAA Hyderabad Alumni Meet, organized in the Plaza Hotel, Begumpet on 11<sup>th</sup> February,2017. Many alumni of the institute, right from the first batch of Pilani Campus to the most recently graduated students of Hyderabad Campus had a chance to interact with one another and share their BITSian feeling. The Director of Hyderabad Campus, Sundar G and Alumni Affairs Faculty –In- Charge, Prof. P. N. Rao attended the event being a BITSian himself. Sanjay Khendry, Anu Khendry, Raghuram Salguti and Parth Shah from BITSAA organized the Annual Meet.

**Prodigy Finance**

An overview of the financial aspects of pursuing a masters /Ph.D. in science, engineering or business abroad. The webinar by Prodigy Finance, organized in association with BITSAA was organized on 15<sup>th</sup> March 2017. .

**BITSian Day**

BITSian Day was celebrated on 4<sup>th</sup> August 2017 wherein three prominent Alumni namely Anudeep Ayyagari, Sidarth Yerram, Srikar Mokkaapati, Srujana Rao and Rajshekar Behar shared their thoughts with students and faculty.

**BITS2MS/Ph.D. Series**

The short presentation on various career choices in technical fields after graduation from BITS, and how to maximize the opportunities at BITS to prepare for higher education was arranged on 27<sup>th</sup> September 2017. Paritosh Ramanan, Batch of 2009, Pilani Campus - Ph.D., Computational Science, Georgia Institute of Technology; Gauri Jagatap, Batch of 2010, Goa Campus - Ph.D., Electrical Engineering, Iowa State University and Ketan Pant, Batch of 2013, Goa campus - M.S. Electrical Engineering, Stanford University shared their thoughts with students.

**Embryo & On-campus Lectures:**

A series of lectures were organized under Embryo for the benefit of students and faculty during the year.



## **Dubai Campus**

### **Career Mentorship Program**

On March 23rd 2017, two esteemed alumni, Ghurair Sheikh and Chandra Bhople, joined Dubai campus for an interactive session as part of the Career Mentorship Program, organized by the Alumni Affairs Division. The topic for the session was entrepreneurship and overall career guidance. The two extremely proficient and accomplished entrepreneurs laid out their experiences and formulated the three main principles on constructing and establishing a successful business. They lead the students through all the possible difficulties that could arise and the broadened on the method of avoiding and overcoming them. The students were asked to put forth their thoughts on the problems they faced relating to their careers. It was an incredible experience to watch as these problems turned to dust and new, but more directional questions arose. The latter part of this session was dedicated to personality development. Since the key ingredient in achieving success is self confidence, they cultivated this ideal by inviting all students to come forth and present a few lines on select topics. This was followed by exercises in an attempt to counter stage fright. Overall, the session was a huge success. The 20 participants gained greatly from the interaction and got a head start into approaching their fields of choice.

### **Workshop on Professional Management on 29th April 2017**

A one day workshop on "Project Planning using Microsoft Project Professional 2013" was conducted by Mr. Lalit Jain (BITS Alumni, batch 1976) on 29th April 2017. Mr. Lalit has worked as a freelance project manager and trainer. He is presently with Professionals and Accountancy Center. He has provided training in Primavera, Microsoft Project, PMP and Project Management Essentials to big corporate clients like Eversendai Engineering, Descon Engineering, Al Banna Engineering, Aban Investment, etc. The workshop was attended by 20 students on first cum first serve basis. Students got focused attention and hands on training at the workshop.

### **BGM 2017, DUBAI**

BPDC hosted the BGM 2017 on 6th and 7th January 2017 organized by BITSAA. The curtains for BGM 2017 (or BGM 3.0 as it is now being fondly called) opened on Day 0, 5th Jan with delegates arriving in Dubai. On Day 1, 6th Jan at 9:00am BGM 2017 was officially inaugurated by HE Dr. Eesa M. Bastaki, President of University of Dubai. He highlighted how there is no competition, only cooperation, between world class universities. HE Anurag Bhushan, Consulate General of India in Dubai also addressed the audience. Our very own Ranvir Trehan delivered the Keynote Address.

Three panel discussions were hosted on 6th - Bots & Robots (Technology), Dream Sparkers (Venture Capitalists), and Yearn to Learn and Earn (Education) - as well as a discussion between faculty and alumni on extending the BITS & BITSAA Connect. The much sought after Speed Mentoring session with Venture Capitalists was also held on 6th. Laughter Yoga, Campus Tours etc. brought in the fun factor. Day 1 concluded with a nostalgic Gala Nite with lots of music, dance and laughter. And guess what, we also got our own Dabbas & Topis!

Day 2 (7th Jan) began with calming yet energizing sound of Gongs. The panel discussions for the day were: Different Strokes (Social Entrepreneurship), Make In India (Industry), and Corporates & Ethics (Industry). BGM 2017 concluded with a grand Arabian Nite in the desert on Day 2, where we also celebrated the Golden Jubilee of 1962 - 1967 batch. A bevy of Arabian dances, NYOTH Band, BGM special music by Sanjeev Punj's team, unlimited nostalgia and partying - all came together under the desert skies to bid farewell to yet another confluence of BITSian spirit!

### **BITSAA Middle East Quiz Night**

BITSAA Middle East Quiz Night was organized on 12th May 2017 at BPDC. The Quiz night provided a wonderful platform for interaction between the students and Alumni of BITS. Several teams registered for the quiz with a mix of alumni and students.

## **A.16 FINANCE AND FUND SUPPORT**

The accounts of the Institute for the financial year 2016-2017 have been audited by M/s. S.R. Batliboi and Co.LLP, Gurgaon, who are the Statutory Auditors of the Institute. M/S Aneja Management Consultants Pvt Ltd, Chartered Accountants, Mumbai are the Internal Auditors.

## Finance and Funds during 2016-2017

**Investments** : As on 31st October, 2017, the investment in shares & Units of Mutual Funds (out of Corpus fund) stood at Rs. 1896.51 lakhs. The total fixed deposits with banks stood at Rs. 12129.06 lakhs.

**Expenditure** : The excess of income over expenditure as per Income & Expenditure Account was Rs.10694.60 lakhs.

**Pension to Staff** : As on 31<sup>st</sup> October 2017, thirty one members of the staff were receiving pension. During the financial year 2016-2017, the Institute spent Rs. 38.06 lakhs on pension.

**Gratuity to Staff** : Institute has paid Rs. 207.88 lakhs to 51 staff members who left the institute.

**Medical Facilities** : During the financial year 2016-2017, the Institute spent Rs. 285.57 lakhs net for providing medical facilities to the students and staff of the Institute. The expenditure included contribution to Birla Sarvajanic Hospital, Mahadev Singhi Eye Hospital, medical reimbursement and amount spent on visits of various specialists to medical centres.

**Financial Assistance to Students:** The Institute spent Rs. 631.30 lakhs on scholarships to staff children/spouse/self to cover the fees for education at the Institute and local schools. Further, 3025 students received financial assistance of Rs. 2054.78 lakhs from different sources, details of which are given below:

S. No.	Particulars	No. of Students	Amount in Rs.
1.	UGC PG Scholarship	129	6388500
2.	Students Aid Fund	179	3759795
3.	Other States Scholarship	2	184650
4.	Institute Merit Scholarship	371	34514870
5.	Institute Merit-cum-Need Scholarship	2344	160629875
<b>Total</b>		<b>3025</b>	<b>205477690</b>

### A. SAP-DRS

UGC has selected four groups of the Institute under Special Assistance Programme (SAP) at the level of Departmental Research Scheme (DRS)

S. No.	Name of Department	Period	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
1.	Pharmacy phase II	5 Years	71.50	63.33
2.	Biological Science	5 Years	31.50	27.02
3.	Chemistry	5 Years	35.00	30.05
4.	Mechanical Engineering	5 Years	38.00	36.64
5.	Mathematics	5 Years	51.50	23.70
6.	Physics	5 years	51.50	46.50
7.	Chemical Engineering	5 Years	48.00	38.67
8.	Civil	5 Years	67.30	54.36
9.	Biological Science Phase II	5 Years	70.75	5.65
10.	Chemistry Phase II	5 Years	70.00	0
<b>Total</b>			<b>535.05</b>	<b>331.57</b>

**B. UGC Infrastructure Development Grant**

S. No.	Department	Period in Years	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
1.	Mathematics	1 Year	20.00	20.00
2.	Physics	1 Year	20.00	20.00
3.	Civil	1 Year	20.00	20.00
<b>Total</b>			<b>60.00</b>	<b>60.00</b>

**C. UGC Innovative Program (UGC Master Programme in Public Health)**

UGC has granted a project for establishing a Public Health Program under the scheme of UGC Innovative Programmes.

Period	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
5 Years	Non Recurring 18.00; Recurring: 11.00 ; <b>Total: 29.00</b>	<b>22.81</b>

**D. UGC Funded Centre for Women Studies**

UGC has granted a project for establishing a Centre for Women Studies under the scheme of Development of Women's Studies in Indian Universities and Colleges.

Period	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
5 Years	Non Recurring 20.00; Recurring: 21.00; Others (3.00 p.a.): 9.00 <b>Total: 50.00</b>	<b>35.08</b>

**Financial Details of Department of Science & Technology Grants:****A. DST Funded Technology Business Incubator**

DST has granted a project for establishing Technology Business Incubator at BITS, Pilani.

S. No.	Co-coordinator & Name of Group	Period	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
1.	Dr. Arya Kumar and Dr. Anu Gupta	6 Years	Non Recurring: 138.35 Recurring: 53.00 for 5 years <b>Total: 191.35</b>	140.32

**B. Grants under DST- FIST:**

S. No.	Department	Period	Amount Sanctioned (Rs. in Lakhs) (50:50 Basis)	Amount Released (Rs. in Lakhs)
1	Physics	5	58.00	23.44
2.	Chemical Engineering	5	80.50	36.8
3.	Civil Engineering	5	80.00	32.00
4.	Pharmacy	5	135.00	62.50
5.	Chemistry Level I	5	87.00	35.5
6.	Computer Science	5	53.00	24.00
7.	Mathematics	5	100.00	37.50

S. No.	Department	Period	Amount Sanctioned (Rs. in Lakhs) (50:50 Basis)	Amount Released (Rs. in Lakhs)
8.	EEE & I	5	138.00	67.37
9.	Mechanical Engineering	5	163.00	68.00
10	Biological Science	5	55.00	25.25
11	Chemistry Level II	5	165.00	76.00
<b>Total</b>			<b>1109.50</b>	<b>488.36</b>

#### Financial Details of Department of Electronics and Information Technology: TIDE Scheme

S. No.	Co-coordinator & Name of Group	Period	Amount Sanctioned (Rs. in Lakhs)	Amount Released (Rs. in Lakhs)
1.	Dr. Arya Kumar and Dr. Anu Gupta	3 Years	<b>155.00</b>	<b>146.15</b>

### **BITS Pilani, Dubai Campus**

#### **SCHOLARSHIPS**

##### **Financial Assistance to Students**

746 students received financial assistance of AED: 4,368,659/- under different categories for the Academic Year 2016-17, the details of which are given below:-

S.No	Particulars	No. of Students	Amount in AED
1	Institute Merit Scholarship	659	3,157,500
2	Higher Degree and Doctoral Scholarship	16	93,000
3	Need - Based Scholarship ( Physically Challenged, Bereaved Family discount )	6	75,125
4	Others ( Staff , Siblings, Sports , Special Concessions )	65	1,043,034
<b>Total</b>		<b>746</b>	<b>4,368,659</b>

### **A.17 OBITUARIES**

The Institute deeply mourns the sad demise of the following during the year:

- Ms. Ritika Sharma, ID No. 2014PHXF430P, a student of Pilani Campus died on 14<sup>th</sup> March 2017.
- Mr. Varun Terala, ID No. 2016A8PS0249P, a student of Pilani Campus died on 30<sup>th</sup> December 2017 at Hyderabad.
- Mr. Harshit Sharma, ID No 2014A8PS0399G, a student of K.K. Birla Goa Campus died on 14<sup>th</sup> August 2017.
- Mr. Chamala Narsimha Reddy, ID No: 2014A7PS0059G, a student of K.K. Birla Goa Campus died on 4<sup>th</sup> September 2017.

**Note:** The complete annual report (Part A and Part B) along with the annexures is given in soft copy.

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## GENERAL BODY

The 56<sup>th</sup> meeting of the General Body of the institute held 20<sup>th</sup> March 2017 under Chairmanship of Smt. Shobhana Bhartia, Pro-Chancellor of the institute as the Chancellor could not attend the meeting due to some unavoidable exigencies .

The Pro-Chancellor heartily welcomed the members and thanked them for attending the meeting and apprised the members that overall enrolment grew marginally in FY'16 over FY'15. New admissions were constrained by hostel capacity. 2217 students were admitted to our First Degree Bachelor's Programme for the year FY16 with marginal decrease over the previous year's number of 2250. The intake was constrained owing to inadequate hostel rooms as a consequence of delays in regulatory approvals for the construction of planned new student hostels at our Hyderabad and Goa Campuses. The approvals have since been obtained and construction has commenced.

Admission to our Higher Degree (Master's Programme) and PhD Programmes was at 453 (369 Master's and 84 PhD) students compared to 512 (378 Master's and 134 PhD) during the previous year. The focus on admissions to our Master's and PhD Programmes continues.

However, the number of applicants registering for our BITSAT entrance test recorded a decline in 2016-17. As against 1.95 Lac applicants who registered for the 2015 Tests, 1.78 Lac students registered in 2016. The IIT JEE also saw a drop of around 10% in registrations.

The Pro-Chancellor also apprised the members that the Student Placement Office continued to deliver improvements. For the period April to March, the number of recruiters visiting the Indian Campuses increased from 528 in 2015-16, to 530 in the current year. Key first-time recruiters included a number of reputed companies such as Daikin, Flow Traders, App Dynamics, Arcasium, Nutanix, Atkins, Cairn India, Vedanta. Additionally, existing, sought after recruiters like Rolls Royce, Nestle, Reckitt Benckiser, Visa International, Works Applications (a Tokyo headquartered ERP system manufacturer), and Saint-Gobain, McKinsey, BCG, ICICI Bank, Tata Communications, Citibank, Barclays Technology, JP Morgan, Credit Suisse, Morgan Stanley, Walmart Labs, Amazon, Intuit, Bank of America continued to hire from BITS. 76% of our Bachelor's students have been placed. The median annual salary increased from Rs. 8.5 Lac to Rs. 9 Lac and the average salary has grown by 7.6%.

The Pro-Chancellor informed the members that our Work Integrated Learning Programmes (WILP) has begun moving the pedagogical approach to learner-centred, discussion-oriented, practical-based, hands-on approach to instruction, built around essential content in digital form, with a significant focus on work integration. Several experiential learning initiatives including virtual laboratories, remote laboratories, games-based learning, electronic simulations, case studies have been found to be quite effective in engaging the students actively in the teaching-learning process. In consonance with the emphasis on skills-based training, we have also begun offering short-term and certificate programmes. In addition, we have designed and implemented a structured approach to faculty development, which ensures that our faculty members operate in a conducive environment that promotes continuous learning, and are enabled, enhanced and enriched with contemporary tools and techniques spanning the entire teaching-learning lifecycle. Digital content was created and deployed for 50 courses; 103 guest faculty members have been recruited through a more robust process, and a common program assessment framework for the entire WILP has been put in place.

The Pro-Chancellor also informed the members that at Dubai campus admission of First Degree students in AY16-17 decreased to 330 and total enrolment decreased from 1,765 to 1,644. The percentage of girls in First Degree increased from 32% to 37% in AY 16-17. A number of improvement initiatives have been initiated during the year. 64% of the registered students were placed in 2016 compared to 56% in 2015. There was a 45% increase in recruiter participation. There was a 14% increase in students getting placed through campus placement from 79 in 2015 to 90 in 2016

The Pro-Chancellor apprised that Institute's efforts to hire high quality faculty continues. The focus is on entry-level positions (Assistant Professors) and on those who have earned their PhDs from reputed Universities in India and overseas. The emphasis on faculty recruitment is on select areas where requirements are the highest. The overall mix of our faculty has improved. Attracting and retaining quality faculty will and must remain a priority, and will continue to receive high attention.

The Pro-Chancellor informed that BITS's focus on enhancing the scale of sponsored research is yielding results. Sponsored research grant approvals has seen a healthy rise last year. During 2016-17 (first 10 months), 84 project proposals were approved to receive research grants totalling over Rs. 25 crore which is 39% higher than the average grant per year for the previous 5 years. 101 PhDs were conferred in 2016.

The Pro-Chancellor told the members that the Modernisation and Expansion plans at the three Indian campuses are in full swing. Of this, contracts / orders to the extent of Rs. 885 crore has been committed in the last three

years. The goal is to complete these in three years from 2016. On Pilani Campus, construction has commenced at multiple sites. Renovation and augmentation of three existing hostels have been completed. New Courtyard Building, New Science Block and Sewage Treatment Plant are the newly created buildings. New housing for married PhD students providing accommodation for 60 families is also scheduled for completion in end-2017. Recreation Ground have been completed. For Goa Campus, all regulatory approvals have been obtained from the Goa Panchayat and Work is in full swing for boys hostel. In Hyderabad campus, lecture theatre complex is handed over.

The Pro-Chancellor informed the members that the engagement with alumni continues to strengthen, with alumni participating and supporting BITS in many ways. The last Alumni Global Meet was held in January 2017 at the BITS Pilani - Dubai Campus.

The Pro-Chancellor mentioned that the income for 2016-17 is estimated at Rs. 449 Cr. compared to last year at Rs. 475 Cr. Expenses are estimated to be Rs. 307 crore compared to budget of Rs. 325 crore. The expenses are well within budget demonstrating good financial discipline. Earnings before Interest, Depreciation and Tax (EBIDTA) is estimated to be at Rs. 142 crore compared to budget of Rs. 150 crore. Net Earnings is estimated at Rs. 99 crore. compared to budget of Rs. 89 crore. Capital Expenditure during the year is estimated at Rs. 245 crore. Cash and Cash equivalents as on March 31, 2017 is estimated at Rs. 229 crore. There is no debt in books of the Indian campuses. Surplus cash reserves and generation was used for capex spending.

In Dubai Campus, the financials are healthy and meeting budgeted targets. EBIDTA and Net surplus have been better than budget and the Campus continues to generate adequate surplus to repay the loans. Out of total loan amount of US\$ 27.8 million, total amount repaid till 31st August 2016 is US\$ 13.4 million. During last year, prepayment of US\$ 3 million was made in addition to scheduled repayment.

The Pro-Chancellor informed the members that total Income is budgeted at Rs. 549 crore for 2017-18 and total expenses budgeted are Rs. 401 crore. EBIDTA is budgeted at Rs. 148 crore compared to Rs. 142 crore of current year. Net Income/Surplus is budgeted at Rs. 89 crore compared to Rs. 99 crore in current year. Drop is mainly on account of higher depreciation and lower interest income. Capex spending is budgeted at Rs. 442 crore during FY18. Out of this, Rs. 389 crore is on account of Project Parivartan at Pilani and Expansion at Goa and Hyderabad campuses. Other routine Capex is budgeted at Rs. 53 crore. The cash balance as at March 31, 2018 is estimated to be Rs. 77 crore.

Prof. Souvik Bhattacharyya shared that BITS Pilani was ranked 9th in University category of the National Institutional Ranking Framework (NIRF) of the MHRD and is the only non-Government Institute in top 10. He also told about Institutional Knowledge Analysis Cell and improvement in research performance and progress made in the incubation, innovation and entrepreneurship front including the external funding received.

The members unanimously appreciated the same.

The General Body noted the actions of the Chancellor approving the following:

- (a) Appointment of Prof. Souvik Bhattacharyya as Vice-Chancellor of the Institute with effect from 13th June 2016 for a period of five years.
- (b) Extension of Prof. Ranendra N. Saha as Director, Dubai Campus with effect from 24th March 2016 for a term of three years and his appointment as Acting Director, K.K. Birla Goa Campus with effect from 11th August 2016 to 31st October 2016.
- (c) Appointment of Prof. G. Sundar as Director, Hyderabad Campus with effect from 17th July 2016 for a period of three years.
- (d) Appointment of Prof. G. Raghurama, as Director, K.K. Birla Goa Campus with effect from 1st November 2016 for a period of five years.
- (e) Appointment of Prof. G. Sundar as President of BITS Pilani Hyderabad Campus TBI Society with effect from 18th July 2016 in place of Prof. V.S. Rao who was relieved from the services of the Institute on 17th July 2016.

The General Body received and recorded the reports on Research Activities of the Institute and collaboration with various Institutions/organisations both within India and abroad.

The General Body adopted the Report of the Board of Governors as to the state and condition of the Institute for the period from 1<sup>st</sup> January 2016 to 31<sup>st</sup> December 2016. While adopting the report the members expressed their happiness and satisfaction over the functioning of the Institute. The General Body also adopted the Balance Sheet and Income & Expenditure Account for the year ended on 31<sup>st</sup> March 2016 and approved the Budget Estimates of the Institute for the financial year 2017-2018 as recommended by Finance Committee and Board of Governors.

## BOARD OF GOVERNORS

The Board of Governors of the institute held its 70<sup>th</sup> Meeting on 20<sup>th</sup> March 2017 under Chairmanship of Smt. Shobhana Bhartia, Pro-Chancellor of the Institute as the Chancellor could not attend the meeting due to some unavoidable exigencies.

The Pro-Chancellor heartily welcomed the members and thanked them for attending the meeting and apprised the members that overall enrolment grew marginally in FY'16 over FY'15. New admissions were constrained by hostel capacity. 2217 students were admitted to our First Degree Bachelor's Programme for the year FY16 with marginal decrease over the previous year's number of 2250. The intake was constrained owing to inadequate hostel rooms as a consequence of delays in regulatory approvals for the construction of planned new student hostels at our Hyderabad and Goa Campuses. The approvals have since been obtained and construction has commenced.

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- (e) Ex-gratia payment of Rs. 7 Lac to Prof. V.S. Rao in the appreciation of his services as Acting Vice-Chancellor of the Institute.
- (f) Appointment of Prof. G. Sundar as President of BITS Pilani Hyderabad Campus TBI Society with effect from 18th July 2016 in place of Prof. V.S. Rao who was relieved from the services of the Institute on 17th July 2016.

- (g) Increase in the number of seats in the category of admission to the children of faculty and staff from 15 to 25 in B group i.e. in Science programmes (5 Each in the Science programmes) with effect from the Academic Year 2016-17.
- (h) Payment of Performance-linked Variable Pay to the Directors and Deputy Director of the Institute for the Academic Year 2014-15 and 2015-16.
- (i) Recommendations of the Review Committee in respect of faculty members of the Institute.
- (j) Resignation of Shri Kris Ramachandran from the membership of the Board of Governors with effect from 17th March 2017.
- (k) Nomination of Shri D. Bhattacharya, Vice-Chairman of Hindalco Industries for the membership of the Board of Governors under the constituency "Four Members co-opted by the Board of Governors of the Institute" with effect from 15th March 2017 for the term ending on 29th April 2018.

The Board received and recorded the reports on Research Activities of the Institute and collaboration with various Institutions/organisations both within India and abroad.

The Board adopted the Report as to the state and condition of the Institute for the period from 1st January 2016 to 31st December 2016 and resolved to recommend the same to the General Body for adoption. While adopting the report the members expressed their happiness and satisfaction over the functioning of the Institute. The Board of Governors also approved the Balance Sheet and Income & Expenditure Account for the year ended on 31st March 2016 and recommended the same to the General Body for adoption.

The Board also recommended to the General Body the Budget Estimates of the Institute for the financial year 2017-2018 for its approval.

The Board of Governors, through its Circulatory Resolution dated 15th July 2016 has approved the conferment of 5694 degrees (79th Award) on the students who have graduated since the last meeting of the Board and also approved 5963 Degrees (80th Award) on the students who have graduated since the Circulatory Resolution dated 15th July 2016 and 13 medals to eligible students for the academic year 2015-16.

**DETAILS OF ADMISSIONS MADE DURING THE YEAR 2017**

**(A) On-Campus Programmes:  
Second Semester 2016-2017**

***BITS Pilani, Dubai Campus***

<b>PROGRAMMES</b>	<b>No. of students joined</b>
<b>1. Integrated First Degree Programmes:</b>	
B.E.	
Chemical Engineering	01 (01)
Electrical and Electronics Engineering	00 (00)
Mechanical Engineering	01 (00)
Computer Science	05 (01)
Electronics and Instrumentation Engineering	00 (00)
Biotechnology	00 (00)
Electronics and Communication Engineering	01 (01)
<b>Total</b>	<b>08 (03)</b>
<b>2. Higher Degree Programmes:</b>	
M.E.	
Biotechnology	00 (00)
Design Engineering	02 (00)
Microelectronics	04 (01)
Software Systems	03 (03)
M.B.A	04 (01)
<b>Total</b>	<b>13 (05)</b>
<b>Grand Total</b>	<b>21 (08)</b>

**3. Doctoral Programmes (Ph.D.):**

<b>BITS Pilani, Pilani Campus</b>	29 (13)
<b>BITS Pilani, K.K. Birla Goa Campus</b>	19 (07)
<b>BITS Pilani, Hyderabad Campus</b>	36 (15)
<b>BITS Pilani, Dubai Campus</b>	01 (00)
<b>Total</b>	<b>85 (35)</b>



First Semester 2017-2018

PROGRAMMES	No. of students joined	BITSAT Cut-off scores	
		Highest	Lowest
<b>1. Integrated First Degree Programmes</b>			
<b>(a) Pilani Campus</b>			
<b><u>Group A</u></b>			
B.E.			
Chemical	81(15)	336	306
Civil	79(4)	334	294
EEE	119(10)	434	355
Mechanical	96(1)	394	334
B. Pharm.	42(22)	288	221
Computer Science	149(11)	442	382
Electronics & Instrumentation	72(13)	362	332
Manufacturing	36(7)	328	288
	674(83)		
<b><u>Group B</u></b>			
M.Sc.			
Biological Sciences	50(14)	326	237
Chemistry	76(15)	327	265
Economics	88(15)	365	323
Mathematics	91(13)	365	312
Physics	78(14)	342	304
	383(71)		
<b><u>Group C</u></b>			
M.Sc.			
Gen. Studies	7(3)		
	7(3)		
<b>Total :</b>	<b>1064(157)</b>		
<b>(b) K.K. Birla Goa Campus:</b>			
<b><u>Group A</u></b>			
B.E.			
Chemical	79(13)	323	276
Electrical & Electronics	82(8)	348	320
Mechanical	99(2)	355	304
Computer Science	160(13)	403	350
Electronics & Instrumentation	78(9)	327	301
Electronics & Communication	82(15)	355	322
	580(60)		
<b><u>Group B</u></b>			
M.Sc.			
Biological Sciences	23(9)	317	202
Chemistry	36(10)	317	235
Economics	68(16)	306	290
Mathematics	72(12)	347	273
Physics	51(7)	344	270
	250(54)		
<b>Total :</b>	<b>830(114)</b>		

**(c) Hyderabad Campus:**

**Group A**

B.E.

Chemical	70(22)	306	272
Civil	62(12)	314	273
EEE	100(13)	354	310
Mechanical	117(5)	347	297
B.Pharm.(Hons.)	35(25)	302	200
Computer Science	220(25)	384	339
Electronics & Instrumentation	52(14)	320	298
Electronics & Communication	113(24)	343	320
Manufacturing	35(7)	300	269

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**804(147)**

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**Group B**

M.Sc.

Biological Sciences	22(4)	302	202
Chemistry	43(17)	299	222
Economics	81(13)	336	279
Mathematics	72(13)	323	258
Physics	62(13)	307	251

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**280(60)**

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**Total : 1084(207)**

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**Note:**

- The above list consists of 86(26) students who are admitted under 'International students admissions' at Pilani 32(5), Hyderabad 27(11) and Goa 27(10).
- The above list consists of 14 students who are First rank holders from different central/ state boards admitted under 'direct admission of board toppers' scheme.
- The above numbers also include 36 admissions of staff children(27) and of BET school students(9), made under special dispensation consisting of 1 in Bio Sciences, 5 in Chemistry, 8 in Economics, 8 in Mathematics, 7 in Physics and 7 in General Studies.

**(d) Dubai Campus:**

***Admission to Integrated First Degree Programmes***

B.E.

Chemical Engineering	12 (04)
Civil	12 (04)
Electrical and Electronics Engineering	22 (08)
Mechanical Engineering	60 (04)
Computer Science	132 (55)
Electronics and Instrumentation Engineering	05 (03)
Biotechnology	33 (23)
Electronics and Communication Engineering	24 (11)

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**Total 300(112)**

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## 2. Higher Degree Programmes :

### (a) Pilani Campus

M.E.	
Biotechnology	18(17)
Chemical Engineering	24(05)
Civil (Structural Engineering)	16(03)
Civil (Transportation Engineering)	14(01)
Civil (Infrastructure Engineering)	8(01)
Computer Science	23(03)
Communication Engineering	19(06)
Design Engineering	12( 0)
Embedded Systems	18(06)
Manufacturing Systems Engineering	14( 0)
Mechanical Engineering	12( 0)
Microelectronics	24(07)
Software Systems	25 (13)
MBA	80(21)
M.Pharm.	10(09)
M.Pharm. (Pharmaceutics)	9(04)
M.Pharm. (Pharmaceutical Chemistry)	10(06)
<b>Total</b>	<b>336(102)</b>

### (b) Goa Campus

M.E.	
Biotechnology	15(10)
Chemical Engineering	13(08)
Computer Science	17(08)
Design Engineering	16(01)
Embedded Systems	15(07)
Microelectronics	14(05)
<b>Total</b>	<b>90(39)</b>

### (c) Hyderabad Campus

M.E.	
Biotechnology	17(14)
Chemical Engineering	9(05)
Civil (Structural Engineering)	11(01)
Civil (Transportation Engineering)	7(01)
Computer Science	18(07)
Communication Engineering	14(07)
Design Engineering	14(00)
Mechanical Engineering	14(03)
Microelectronics	15(04)
M.Pharm. (Pharmaceutics)	18(12)
Thermal	9(02)
<b>Total</b>	<b>146(56)</b>
Higher Degree (3 year Integrated) Programme	-
<b>Total</b>	<b>146(56)</b>

**(d) Dubai Campus**

M. E.	
Biotechnology	00 (00)
Design Engineering	04 (00)
Microelectronics	02 (02)
Software Systems	04 (04)
M.B.A	07 (02)
<b>Total</b>	<b>17 (08)</b>

**3. Doctoral Programmes (Ph.D.):**

<b>(a) Pilani Campus</b>	52 (21)
<b>(b) K.K. Birla Goa Campus</b>	28 (11)
<b>(c) Hyderabad Campus</b>	36 (12)
<b>(d) Dubai Campus</b>	04 (01)
<b>Total</b>	<b>120 (45)</b>

**Work-integrated Learning Programmes**

**1. Integrated First Degree Programmes:**

**B.Tech.**

Engineering Technology	292(011)
Information Systems	232(049)
Power Engineering	122(001)

**M.Sc.**

Business Analytics	51(033)
Information Systems	12(009)

**Sub Total** **709(103)**

**2. Higher Degree Programmes:**

**M.Tech.**

Computing Systems & Infrastructure	729 (307 )
Design Engineering	207 (2 )
Embedded Systems	127 (20 )
Manufacturing Management	144 (7 )
Microelectronics	50 (2 )
Pharmaceutical Operations & Management	31 (2 )
Quality Management	120 (1 )
Software Engineering	1659 (653 )
Software Systems	694 (146 )

**MBA**

Consultancy Management	55 (3 )
Finance	40 (5 )
Manufacturing Management	59 (1 )
Quality Management	44 (34 )

**Sub total** **3959 (1183)**

**Total** **4668(1286)**

**(B) First Semester 2017-2018**

<b>PROGRAMMES</b>	<b>No. of students joined</b>
<b>1. PG Certificate &amp; Diploma Programmes:</b>	
<b>Certificate</b>	
Manufacturing Practice	38 (000)
<b>Post Graduate Certificate</b>	
Big Data Engineering	217 (049)
Manufacturing Practice	62 (001)
<b>Post Graduate Diploma</b>	
Finance	3 (001)
	<b>Sub total</b>
	<b>320(053)</b>
<b>2. Integrated First Degree Programmes:</b>	
<b>B.Tech.</b>	
Engineering Technology	342 (12)
Manufacturing Technology	106 (11)
Power Engineering	43 (0)
Process Engineering	24 (2)
<b>M.Sc.</b>	
Business Analytics	141 (23)
	<b>Sub total</b>
	<b>656(048)</b>
<b>3. Higher Degree Programmes:</b>	
<b>M.Tech.</b>	
Computing Systems & Infrastructure	140 (26)
Design Engineering	292 (25)
Embedded Systems	243 (53)
Environmental Engineering	34 (9)
Manufacturing Management	231 (16)
Microelectronics	133 (21)
Pharmaceutical Operations & Management	118 (18)
Quality Management	155 (16)
Software Engineering	124 (38)
Software Systems	1055 (264)
<b>MBA</b>	
Consultancy Management	63 (14)
Finance	55 (14)
Hospital & Health Systems Management	80 (33)
Manufacturing Management	72 (5)
Quality Management	60 (15)
	<b>Sub total</b>
	<b>2855(567)</b>
	<b>Total</b>
	<b>3831(666)</b>

## SUMMARY

		II Semester 2016-2017	I Semester 2017-2018
<b>1. BITS, Pilani – Pilani Campus</b>			
	Integrated First Degree Programmes	-	1064(157)
	Higher Degree Programmes	-	336(102)
	Doctoral Programmes	29(13)	52( 21)
	<b>Total</b>	<b>29(13)</b>	<b>1452(280)</b>
<b>2. BITS, Pilani – K.K. Birla Goa Campus</b>			
	Integrated First Degree Programmes	-	830(114)
	Higher Degree Programmes	-	90( 39)
	Doctoral Programmes	19(07)	28 (11 )
	<b>Total</b>	<b>19(07)</b>	<b>948(164)</b>
<b>3. BITS, Pilani – Hyderabad Campus</b>			
	Integrated First Degree Programmes	-	1084(207)
	Higher Degree Programmes	-	146( 56 )
	Higher Degree (3 year Integrated Programmes)	-	-
	Doctoral Programmes	36(15)	36 (12)
	<b>Total</b>	<b>36(15)</b>	<b>1266(275)</b>
<b>4. BITS, Pilani – Dubai Campus</b>			
	Integrated First Degree Programmes	08(03)	300(112)
	Higher Degree Programmes	13 (05)	17(08)
	Doctoral Programmes	01 (00)	04(01)
	<b>Total</b>	<b>22 (08)</b>	<b>321 (121)</b>
<b>5. Work-Integrated Learning Programmes</b>			
		<b>II Semester 2016-17</b>	<b>I Semester 2017-18</b>
	PG Certificate & Diploma Programmes	Nil	320(0053)
	Integrated First Degree Programmes	709(0103)	656(0048)
	Higher Degree Programmes	3959(1183)	2855(0567)
	<b>Total</b>	<b>4668(1286)</b>	<b>3831(0666)</b>
			<b>8499(1952)</b>

**ADMISSIONS: QUALITY OF STUDENTS' INPUT**

Year of Admission	Percentage of marks in Qualifying Subjects (General PCM)	
	Max.	Min.
1966-67	93.7	38.2
1967-68	91.2	52.0
1968-69	95.0	47.3
1969-70	92.7	51.6
1970-71	96.7	45.0
1971-72	92.3	56.2

Year of Admission	Semester	Normalised aggregate percentage	
		Highest	Lowest
1972-73	I Sem.	94.30	65.22
	II Sem.	88.16	65.22
1973-74	I Sem.	100.00	70.97
	II Sem.	94.41	70.97
1974-75	I Sem.	97.83	73.00
	II Sem.	97.83	80.11
1975-76	I Sem.	97.00	78.61
	II Sem.	96.14	79.76
1976-77	I Sem.	99.73	78.50
	II Sem.	92.30	69.63
1977-78	I Sem.	100.00	79.11
	II Sem.	97.19	82.84
1978-79	I Sem.	100.00	60.00
	II Sem.	98.05	79.67
1979-80	I Sem.	100.00	69.46
	II Sem.	99.87	84.24
1980-81	I Sem.	100.00	78.72
	II Sem.	(No admissions made)	
1981-82	I Sem.	100.00	81.10
	II Sem.	97.15	86.30
1982-83	I Sem.	100.00	84.13
	II Sem.	100.00	86.64
1983-84	I Sem.	100.00	84.68
	II Sem.	99.22	85.35
1984-85	I Sem.	99.89	85.60
	II Sem.	96.67	85.60
1985-86	I Sem.	100.00	85.05
	II Sem.	99.04	85.56
1986-87	I Sem.	100.00	88.63
	II Sem.	97.61	88.63



Year of Admission	Semester	Normalised aggregate percentage	
		Highest	Lowest
1987-88	I Sem.	100.00	88.11
	II Sem.	97.81	88.37
1988-89	I Sem.	100.00	88.86
	II Sem	100.00	92.63
1989-90	I Sem	100.00	89.03
	II Sem	98.96	89.03
1990-91	I Sem	100.00	90.90
	II Sem.	100.00	93.87
1991-92	I Sem.	100.00	90.96
	II Sem.	100.00	96.11
1992-93	I Sem	100.00	93.81
	II Sem.	100.00	94.71
1993-94	I Sem.	100.00	93.91
	II Sem.	100.00	95.02
1994-95	I Sem.	100.00	94.53
	II Sem.	99.52	94.99
1995-96	I Sem.	100.00	94.70
	II Sem	98.66	96.07
1996-97	I Sem.	100.00	95.27
	II Sem.	97.87	95.30
1997-98	I Sem.	100.00	95.31
	II Sem.	99.52	95.32
1998-99	I Sem.	100.00	95.10
	II Sem.	100.00	95.31
1999-2000	I Sem.	100.00	96.09
	II Sem.	98.89	96.70
2000-01	I Sem.	100.00	96.11
	II Sem.	99.79	96.11
2001-02	I Sem.	100.00	97.15
	II Sem.	100.00	97.44
2002-03	I Sem.	100.00	98.069
	II Sem.	100.00	98.069
2003-04	I Sem.	100.00	98.374
	II Sem.	100.00	98.374
2004-05	I Sem.	100.00	97.323
	II Sem.	99.673	97.323

Year of Admission	Semester	BITSAT Test Score	
		Highest	Lowest
2005-06	I Sem.	434	245
	II Sem.	366	267
2006-07	I Sem.	430	283
	II Sem.	300	283
2007-08	I Sem.	411	260
	II Sem.	386	251
2008-09	I Sem.	419	230
2009-10	I Sem.	422	255
	II Sem.	304	251
2010-11	I Sem.	398	258
2011-12	I Sem.	414	211
2012-13	I Sem.	414	258
2013-14	I Sem.	418	266
2014-15	I Sem.	430	160
2015-16	I Sem.	419	201
2016-17	I Sem.	423	224
2017-18	I Sem.	442	200

**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR 2017-2018 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES UNDER VARIOUS PRIORITIES**

(i) Pilani Campus:

**FIRST PRIORITY**

(From Group 'B' to Group 'A' Programmes)

Programmes* From ↓ To →	A1	A2	A3	A4	A5	A7	A8	AB	Total
B1	13	10	04	08	-	11	07	06	59
B2	09	07	16	13	-	09	09	03	66
B3	03	09	17	09	-	14	05	03	60
B4	08	04	12	08	-	21	06	03	62
B5	07	07	05	11	-	12	12	06	60
<b>Total</b>	40	37	54	49	-	67	39	21	307

**OTHER PRIORITIES**

Programmes* From ↓ To →	B5	Total
A3	01	01
<b>Total</b>	01	01

**Transfer within same tier**

Programmes* From ↓ To →	A3	A4	A7	Total
A1	2	2		4
A2		1		1
A3			1	1
A4	1		1	2
A8	2		1	3
AB		1		1
B4			1	1
B5			1	1
<b>Total</b>	5	4	5	14

### Transfer within B to B

Programmes* From ↓ To →	B1	B3	B4	B5	Total
B1			3	1	4
B2		1	2		3
B4	1	1		1	3
B5		1	1		2
Total	1	3	6	2	12

### Vertical Transfers

From	To	No. of Students
B.E. (Hons.) Computer Science	M.E. Computer Science	1
B.E. (Hons.) Electronics & Communication	M.E. Embedded Systems	1
B.E. (Hons.) Manufacturing Engineering	M.E. Manufacturing Systems Engg.	2
B.E. (Hons.) Electrical & Electronics	M.E. Software Systems	1
M.E. Civil with Specialization in Transportation Engg	Ph.D. in Civil Engg.	1
M.E. Civil with Specialization in Infrastructure Engg. & Management	Ph.D. in Civil Engg.	1
<b>Total</b>		<b>7</b>

(ii) K.K. Birla Goa Campus:

**FIRST PRIORITY**  
(From Group 'B' to Group 'A' Programmes)

Programmes* From ↓ To →	A1	A3	A4	A7	A8	AA	Total
B1	5	8	11	2	10	4	40
B2	8	5	6	10	9	5	42
B3	2	6	6	14	8	6	42
B4	2	6	2	16	6	8	39
B5	3	12	4	10	5	5	38
<b>Total</b>	<b>20</b>	<b>37</b>	<b>29</b>	<b>52</b>	<b>38</b>	<b>28</b>	<b>204</b>

**OTHER PRIORITIES**

Programmes* From ↓ To →	B3	B4	B5	Total
A3	1			1
A4		1	1	2
A7		1		1
A8	1			1
<b>Total</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>5</b>

**Transfer within same tier**

Programmes* From ↓ To →	A3	A7	A8	Total
A8	1			1
B1		1	1	2
B3		1		1
B4		1		1
B5		1		1
<b>Total</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>6</b>

**Transfer within B to B**

Programmes* From ↓ To →	B1	B2	B3	B4	B5	Total
B1				1		1
B2			2	1	1	4
B3						
B4			1			1
B5				2		2
<b>Total</b>			<b>3</b>	<b>4</b>	<b>1</b>	<b>8</b>

**Vertical Transfers: NIL**

(iii) Hyderabad Campus:

**FIRST PRIORITY**

(From Group 'B' to Group 'A' Programmes)

Programmes* From ↓ To →	A1	A2	A3	A4	A7	A8	AA	AB	Total
B1	2	4	3	4	2	2	5	2	24
B2	2	2	3	1	7	3	8	1	27
B3	2	3	6	4	9	2	5	2	33
B4	3	2	1	6	12	1	3	2	30
B5	1	4	7	3	7	4	3	0	29
<b>Total</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>18</b>	<b>37</b>	<b>12</b>	<b>24</b>	<b>7</b>	<b>143</b>

**OTHER PRIORITIES**

Programmes* From ↓ To →	B1	Total
A1	1	1
<b>Total</b>	<b>1</b>	<b>1</b>

**Transfer within same tier:**

Programmes* From ↓ To →	A3	A7	AA	Total
A1	1	-	-	1
A2	-	-	1	1
A3	-	1	-	1
A4	1	1	-	2
A8	-	-	1	1
AB	-	1	-	1
<b>Total</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>7</b>

**Transfer within B to B**

Programmes* From ↓ To →	B3	B4	B5	Total
B1	-	1	2	3
B2	2	2	1	5
B4	-	-	1	1
B5	2	1	-	3
<b>Total</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>12</b>

### VERTICAL TRANSFERS

From	To	No. of Students
B.E. Civil	M.E. Civil Specialization in Structural Engg	1
B.Pharm.	M. Pharma. (Pharmaceutics)	1
M.E. Mechanical	Ph.D.	1
M.E. Mechanical	Ph.D.	1
Total		4

**(iv) Dubai Campus:**

#### FIRST PRIORITY

(From Group 'B' to Group 'A' Programmes)

**Nil**

#### Transfer within same tier:

Programmes* From ↓ To →		A3	A4	A9	AAP	TOTAL
A1				1		1
A3			1			1
A4	1					1
A7	1	1	2		3	7
A9	1					1
<b>Total</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>11</b>

\*Legend :

- A1 B.E. Chemical
- A2 B.E. Civil
- A3 B.E. Electrical & Electronics
- A4 B.E. Mechanical
- A5 B.Pharm.
- A7 B.E. Computer Science
- A8 B.E. Electronics and Instrumentation
- A9 B.E. Biotechnology
- AA B.E. Electronics & Communication
- AB B.E. Manufacturing Engineering
- B1 M.Sc. Biological Sciences
- B2 M.Sc. Chemistry
- B3 M.Sc. Economics
- B4 M.Sc. Mathematics
- B5 M.Sc. Physics
- C2 M.Sc. General Studies
- C5 M.Sc. Engineering Technology
- C6 M.Sc. Information Systems
- C7 M.Sc. Finance



## FACULTY DATA

### Pilani Campus

List of Faculty members who joined between 01-01-2017 to 31-12-2017.

S.No.	Name of the faculty member	Designation	Department	Date of Joining
1.	Asutosh Kar	Assistant Professor-I	EEE	02-01-2017
2.	Mahaveer Singh	Visiting Faculty	PHAR	09-01-2017
3.	Lucky Sharan	Visiting Faculty	EEE	09-01-2017
4.	Ashish Misra	Visiting Faculty	EEE	09-01-2017
5.	Vinita Tiwari	Visiting Faculty	EEE	09-01-2017
6.	Mahesh Angira	Visiting Faculty	EEE	09-01-2017
7.	Vineet Kumar	Visiting Faculty	EEE	09-01-2017
8.	Akshaya G	Lecturer (OC)	CS&IS	09-01-2017
9.	Arun Chauhan	Assistant Professor-I	CS&IS	06-02-2017
10.	Aashish Mathur	Assistant Professor-I	EEE	15-02-2017
11.	Saurabh Chadha	Assistant Professor-I	MGTS	03-04-2017
12.	Nirankush Dutta	Visiting Faculty	MGTS	05-04-2017
13.	Tamal Chakraborty	Assistant Professor-I	CS&IS	01-05-2017
14.	Surabhi Koul	Visiting Assistant Professor	MGTS	01-05-2017
15.	Varun Sharma	Assistant Professor-I	ME	08-05-2017
16.	Manoj Kannan	Assistant Professor-I	BIO	01-06-2017
17.	Pratyush Banerjee	Visiting Assistant Professor	MGTS	15-06-2017
18.	Bhanu V. Reddy Kuncharam	Assistant Professor-I	CHE	10-07-2017
19.	Meghana Tare	Assistant Professor-I	BIO	13-07-2017
20.	Kusum Lata	Visiting Faculty	PHY	20-07-2017
21.	Syamantak Majumder	Assistant Professor-I	BIO	25-07-2017
22.	Vinay Chamola	Assistant Professor-I	EEE	01-08-2017
23.	Rajesh Kumar	Assistant Professor-I	MATH	31-07-2017
24.	Mayuri Abhijeet Digalwar	Visiting Assistant Professor	CS&IS	25-07-2017
25.	Rajan Pandey	Visiting Faculty	ECFI	19-07-2017
26.	Keyur Bhanuprasad Joshi	Visiting Assistant Professor	ME	16-08-2017
27.	Venkatesh K. Prabhakar Rao	Visiting Assistant Professor	ME	17-08-2017
28.	Aakash Chand Rai	Visiting Assistant Professor	ME	10-10-2017
29.	Shashank Gupta	Assistant Professor-I	CS&IS	18-11-2017
30.	Simanchal Kar	Assistant Professor-I	ME	01-12-2017
31.	J. Jennifer Ranjani	Assistant Professor-I	CS&IS	04-12-2017
32.	Arindam Das	Visiting Assistant Professor	ME	20-12-2017
33.	Puneet Mishra	Assistant Professor-I	EEE	22-12-2017

**List of Faculty members who left the Institute between 01-01-2017 to 31-12-2017**

S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
1.	Raman Sharma	Assistant Professor-I	13-01-2017	Resigned
2.	Mukundhan Chakravarthy	Lecturer (OC)	03-03-2017	Resigned
3.	Aashish Mathur	Assistant Professor-I	18-05-2017	Resigned
4.	Nikhil Saboo	Assistant Professor-I	27-05-2017	Resigned
5.	Vinita Tiwari	Visiting Faculty	13-06-2017	Resigned
6.	Satyabrata Sahoo	Assistant Professor-I	10-07-2017	Resigned
7.	H.S. Jabbal	Adjunct Faculty	17-07-2017	Term Expired
8.	Gyanan	Lecturer (OC)	17-07-2017	Term Expired
9.	Rajan Pandey	Lecturer	17-07-2017	Term Expired
10.	Pankaj Vyas	Visiting Asstt. Professor	17-07-2017	Term Expired
11.	Mahaveer Singh	Visiting Faculty	17-07-2017	Term Expired
12.	Umesh Dhyani	Assistant Professor-II	17-07-2017	Retired
13.	Lucky Sharan	Visiting Faculty	17-07-2017	Term Expired
14.	Kusum Lata	Associate Professor	17-07-2017	Retired
15.	Vineet Kumar	Visiting Faculty	17-07-2017	Term Expired
16.	Rajendra Prasad Pareek	Professor	17-07-2017	Retired
17.	C H Ramesh Kumar	Visiting Faculty	17-07-2017	Term Expired
18.	Ashish Mishra	Visiting Faculty	17-07-2017	Term Expired
19.	Surabhi Bothra	Lecturer (OC)	16-09-2017	Resigned
20.	Sreedhar Madichetty	Lecturer (OC)	31-10-2017	Resigned
21.	Arun Chauhan	Assistant Professor-I	21-11-2017	Resigned
22.	Sarvesh Satija	Assistant Professor-II	15-12-2017	Resigned
23.	Arun Kumar Giri	Associate Professor	16-12-2017	Resigned
24.	Archana Kulkarni	Assistant Professor-I	22-12-2017	Resigned
25.	Rajendra Narayan Paramanik	Assistant Professor-I	22-12-2017	Resigned
26.	Tamal Chakraborty	Assistant Professor-I	22-12-2017	Resigned
27.	Amit Goel	Assistant Professor-II	31-12-2017	Term Expired
28.	Ravi Inder Singh	Assistant Professor-II	31-12-2017	Resigned
29.	Anubha Dadhich	Assistant Professor-II	31-12-2017	Term Expired

**K.K. Birla Goa Campus**

**List of Faculty Members Joined for the period from 01-Jan-2017 to 31-Dec-2017**

S.No	Name	Designation	Department	Date of Joining
1	Akshay Rane	Assistant Professor	Mathematics	2-Jan-2017
2	Anoop George	Visiting Assistant Professor	Hum. & Soc. Sci.	12-Jan-2017
3	Vivek Rangarajan	Assistant Professor	Chemical Engineering	13-Feb-2017
4	Ashish Chittora	Assistant Professor	EEE	23-Feb-2017
5	Anoop George**	Assistant Professor	Hum. & Soc. Sci.	20-Mar-2017
6	Pradeep Kumar Sow	Assistant Professor	Chemical Engineering	3-Apr-2017
7	Sandeep Jose	Assistant Professor	Mechanical Engineering	17-Apr-2017
8	Shivam Verma	Assistant Professor	EEE	28-Apr-2017
9	Bhupendra Reniwal	Assistant Professor	EEE	15-May-2017
10	Sukumar Vellakkal	Visiting Assistant Professor	Economics	22-May-2017
11	Sandeep Singh	Assistant Professor	Mechanical Engineering	5-Jun-2017

S.No	Name	Designation	Department	Date of Joining
12	Hrishikesh Sonalika	Assistant Professor	EEE	1-Jul-2017
13	Richa Singhal	Assistant Professor	Chemical Engineering	10-Jul-2017
14	Rahul Thakur	Assistant Professor	CS & IS	15-Jul-2017
15	Anirban Roy	Assistant Professor	Chemical Engineering	17-Jul-2017
16	Parichay Patra	Assistant Professor	Hum. & Soc. Sci.	17-Jul-2017
17	Sharad Sontakke	Assistant Professor	Chemical Engineering	25-Jul-2017
18	Mahadev Gawas	Visiting Faculty	CS & IS	25-Jul-2017
19	Amol Deshpande	Visiting Assistant Professor	Chemical Engineering	25-Jul-2017
20	Shubhangi Gawali	Visiting Faculty	CS & IS	25-Jul-2017
21	Swati Agarwal	Visiting Assistant Professor	CS & IS	28-Jul-2017
22	Rajendra Kumar Roul	Visiting Faculty	CS & IS	1-Aug-2017
23	Sreejith K.K.	Visiting Assistant Professor	Hum. & Soc. Sci.	1-Aug-2017
24	Sarang C. Dhongadi**	Assistant Professor	EEE	10-Aug-2017
25	Sreejith V.**	Visiting Assistant Professor	CS & IS	1-Sep-2017
26	Pritanshu Ranjan	Assistant Professor	Mechanical Engineering	5-Dec-2017
27	Amol Deshpande**	Assistant Professor	Chemical Engineering	12-Dec-2017

**\*\* indicates Re-designation**

**List of Faculty Members left between 01-Jan-2017 to 31-Dec-2017**

S.No	Name	Designation	Department	Date of Exit
1	Jyotsna Kulkarni	Lecturer	EEE	18-Mar-2017
2	Saibal Ganguly	Professor	Chemical Engineering	8-May-2017
3	Lucy Gudino	Assistant Professor	CS & IS	17-Jul-2017
4	J.V. Rao	Associate Professor	CS & IS	17-Jul-2017
5	Pinky Pawaskar	Lecturer	Economics	17-Jul-2017
6	Jessica Pereira	Lecturer	Mathematics	17-Jul-2017
7	G. Surendran	Lecturer	Chemical Engineering	17-Jul-2017
8	M. Sreedhar Babu	Lecturer	Mechanical Engineering	17-Jul-2017
9	Rajendra Kumar Roul	Lecturer	CS & IS	17-Jul-2017
10	Mahadev Gawas	Lecturer	CS & IS	17-Jul-2017
11	Meenakshi Raman	Professor	Hum. & Soc. Sci.	17-Jul-2017
12	Amol Deshpande	Lecturer	Chemical Engineering	17-Jul-2017
13	Shubhangi Gawali	Lecturer	CS & IS	17-Jul-2017
14	K.E. Raman	Professor Emeritus	EEE	17-Jul-2017
15	William Henry Spates	Visiting Associate Professor	Hum. & Soc. Sci.	17-Jul-2017
16	Debdulal Thakur	Assistant Professor	Economics	20-Jul-2017
17	Anoop George	Assistant Professor	Hum. & Soc. Sci.	29-Jul-2017
18	R. Femi	Lecturer	EEE	29-Jul-2017
19	Soumyadip Bandyopadhyay	Assistant Professor	CS & IS	31-Jul-2017
20	Anoop S. Kumar	Assistant Professor	Economics	13-Dec-17
21	Ruma Ghosh	Assistant Professor	EEE	14-Dec-17
22	Rajendra Kumar Roul	Visiting Faculty	CS & IS	31-Dec-17
23	Meetha V. Shenoy	Lecturer	EEE	31-Dec-17
24	Ch. S. Sankhar Reddy	Lecturer	EEE	31-Dec-17
25	Geeta Patil	Lecturer	CS & IS	31-Dec-17

## Hyderabad Campus

List of Faculty members who joined between 01-01-2017 to 31-12-2017.

S.No.	Name of the faculty member	Designation	Discipline	Date of Joining
1	Sunny Kumar Singh	Assistant Professor-I	Economics and Finance	10-Jan-17
2	Bheemeshwar Reddy A	Assistant Professor-I	Economics and Finance	6-Feb-17
3	Suchismita Satpathy	Assistant Professor-I	Human. & Social Sci	17-Apr-17
4	Shaikshavali Chitraganti	Assistant P5rofessor-I	EEE	1-May-17
5	Vivek Sharma	Assistant Professor-I	Biological Sciences	1-May-17
6	Jamma Trinath	Assistant Professor-I	Biological Sciences	1-May-17
7	Lavanya Suresh	Assistant Professor-I	Human. & Social Sci	5-May-17
8	Pranesh Bhargava	Assistant Professor-I	Human. & Social Sci	17-May-17
9	Sudeepta Mishra	Assistant Professor-I	CS & IS	19-May-17
10	Asrifa Sultana	Assistant Professor-I	Mathematics	23-May-17
11	Shinde Vijay Maruti	Assistant Professor-I	Chemical Engineering	1-Jun-17
12	Mithun Mondal	Assistant Professor-I	EEE	1-Jul-17
13	Saroj Mondal	Assistant Professor-I	EEE	14-Jul-17
14	Gireesha Thipperudrappa Mohannath	Assistant Professor-I	Biological Sciences	14-Jul-17
15	Neha Bharill	Visiting Faculty	CS & IS	14-Jul-17
16	Subhash Narayan Karbelkar	Associate Professor	Physics	18-Jul-17
17	Bahurudeen A	Assistant Professor-I	Civil Engineering	26-Jul-17
18	Ruchi Jain Dey	Assistant Professor-I	Biological Sciences	28-Jul-17
19	Basudev Majumder	Assistant Professor-I	EEE	31-Jul-17
20	Piyush Khandelua	Assistant Professor-I	Biological Sciences	1-Aug-17
21	Pragya Komal	Assistant Professor-I	Biological Sciences	1-Nov-17
22	Sudha Radhika	Assistant Professor-I	EEE	22-Nov-17
23	Prasant Kumar Samantray	Assistant Professor-I	Physics	1-Dec-17
24	Tanmay Chatterjee	Assistant Professor-I	Chemistry	14-Dec-17
25	Angan Sengupta	Assistant Professor-I	Chemical Engineering	18-Dec-17
26	Jhuma Sen Gupta	Assistant Professor-I	Mathematics	20-Dec-17
27	Harish Vijay Dixit	Assistant Professor-I	EEE	26-Dec-17

List of Faculty members who Left the Institute between 01-01-2017 to 31-12-2017

S.No.	Name of the faculty member	Designation	Date of Leaving	Reason
1	S Swaminathan	Professor	28-Feb-17	Resignation
2	Shrikant Yashwant Charde	Associate Professor	21-Apr-17	Resignation
3	Adonis Vasile Lupulescu	Assistant Professor-II	31-May-17	Resignation
4	Sanjeev Kumar Singh	Lecturer	15-May-17	Resignation
5	A V Ravi Teja	Assistant Professor-I	27-May-17	Resignation
6	Shinde Vijay Maruti	Assistant Professor-I	30-Jun-17	Resignation
7	Srinivasa Rao Zinka	Assistant Professor-I	30-Jun-17	Resignation
8	Ananth Saradhi	Lecturer	17-Jul-17	Term Ended
9	Prafulla Kalapatapu	Lecturer	17-Jul-17	Term Ended
10	Y Yoganandam	Professor	17-Jul-17	Resignation
11	Olympia Bhatt	Lecturer	17-Jul-17	Term Ended
12	Arup Maharatna	Professor	17-Jul-17	Retirement
13	Ramsankar V	Lecturer	22-Jul-17	Resignation

S.No.	Name of the faculty member	Designation	Date of Leaving	Reason
14	V N Surendra Kamadi	Assistant Professor-I	10-Jul-17	Resignation
15	Abdul Quadir	Assistant Professor-I	16-Dec-17	Resignation
16	Asrifa Sultana	Assistant Professor-I	9-Dec-17	Resignation
17	Neha Bharill	Visiting Faculty	16-Dec-17	Resignation
18	Basudev Majumder	Assistant Professor-I	16-Dec-17	Resignation
19	Mr Abhishek Kumar Thakur	VFAC	31-Dec-17	Term Ended
20	Mr Shamuel Tharu	VFAC	31-Dec-17	Term Ended

### Dubai Campus

#### List of Faculty members who joined between 01-01-2017 to 31-12-2017

S.No.	Name of Faculty	Designation	Discipline	Date of Joining
1.	Dr. Venkata Rao Ravipudi	Visiting Professor	Mechanical	18-Jun-17
2.	Dr. Pallab Sanpui	Assistant Professor	Biotechnology	29-Jun-17
3.	Dr. Sridhar Gangaputhiran	Assistant Professor	Civil	02-Jul-17
4.	Dr. Mainak Dutta	Assistant Professor	Biotechnology	02-Jul-17
5.	Dr. Mrutyunjaya Sahu	Assistant Professor	Humanities and Social Sciences	10-Jul-17
6.	Dr. Nilesh Goel	Assistant Professor	Electrical & Electronics	17-Jul-17
7.	Dr. Sartaj Rasool Rather	Assistant Professor	Humanities and Social Sciences	26-Jul-17
8.	Mr. Gaurav Saxena	Lecturer	Computer Science	30-Jul-17
9.	Dr. Snehaunshu Chowdhury	Assistant Professor	Mechanical	30-Jul-17
10.	Dr. Namita Khanna	Assistant Professor	Biotechnology	01-Aug-17
11.	Mr. Saurabh Jain	Lecturer	Computer Science	14-Nov-17
12.	Dr. Angel Arul Jothi Joseph	Assistant Professor	Computer Science	20-Nov-17

#### List of Faculty members who Left the Institute between 01-01-2017 to 31-12-2017

S.No.	Name of Faculty	Designation	Date of Leaving	Reason
1.	Dr Lajwanti Kishnani	Assistant Professor	04/01/2017	Resignation
2.	Ms. M. Pushkala	Senior Lecturer	10/1/2017	Term End
3.	Dr. Mubeena Iqbal	Assistant Professor	17/5/2017	Term End
4.	Dr. Manoj Kannan	Visiting Assistant Professor	31/05/2017	Term End – Joined @ Pilani
5.	Dr. AjitPratap Singh	Professor	19/8/2017	Term End
6.	Dr. Venkata Rao Ravipudi	Visiting Professor	28/12/2017	Resignation

**DETAILS OF DISTRIBUTION OF PS-I STUDENTS AND FACULTY OVER PRACTICE SCHOOL - I STATIONS DURING THE SUMMER 2017**

S.No	Center Name	Station Name	No. of Student	No. of Faculty
1	AHMEDABAD	ADANI POWER	9	1*
		INFIBEAM	15	1*
		RAJNAGAR TEXTILE MILLS (NATIONAL TEXTILE CORPORATION LTD)	9	1*
2	ALWAR	HONDA MOTORCYCLE & SCOOTER INDIA PVT. LTD.	8	1**
3	ANGUL	NATIONAL ALUMINIUM COMPANY LIMITED - SMELTER PLANT	12	1*
		NATIONAL ALUMINIUM COMPANY LTD - POWER PLANT	12	1*
4	BAHADURGARH	HINDUSTAN PETROLEUM CORPORATION LTD.	5	1*
5	BANGALORE	ELECTRONO SOLUTIONS PVT. LTD.	8	1**
		ERICSSON BANGALORE R & D	5	1**
		HAL AEROSPACE DIVISION	6	1**
		HAPPIEST MINDS	8	1**
		HINDUSTAN AERONAUTICS LIMITED	6	1**
		HINDUSTAN AERONAUTICS LIMITED ROTARY WING RESEARCH & DESIGN CENTER	9	1**
		HONDA MOTORCYCLE & SCOOTER INDIA PVT. LTD.	6	1**
		HORTONWORKS	4	1**
		I-LOADS (WDSI)	10	1**
		INDIAN INSTITUTE OF SCIENCE	21	1**
		INVENTO MAKERSPACES PVT. LTD.	8	1**
		NUTANIX <sup>+</sup>	5	1**
		SEN SEI TECHNOLOGIES	5	1**
SUNPLUS SYSTEM SOLUTIONS PVT. LTD.	4	1**		
TAPCHIEF <sup>+</sup>	5	1**		
6	BHARUCH	BIRLA CELLULOSIC	12	1*
7	BHAVNAGAR	CENTRAL SALT AND MARINE CHEMICALS RESEARCH INSTITUTE	4	1*
8	BHILAI	BHILAI STEEL PLANT	39	1
9	BHOPAL	AIIMS	19	1*
		NEW BHOPAL TEXTILE MILLS BHOPAL (NATIONAL TEXTILE CORPORATION LTD)	9	1*
10	BHUBANESHWAR	THE INSTITUTE OF MINERALS AND MATERIALS TECHNOLOGY	10	1*
11	CHENNAI	CARBORUNDUM UNIVERSAL LTD.	15	1**
		CENTER FOR MEDICAL GENETICS	5	1**
		CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE	15	1
		CENTRAL LEATHER RESEARCH INSTITUTE <sup>+</sup>	39	1**
		EYWA PHARMA PVT. LTD.	5	1**
		I-LOADS	8	1**
		NATIONAL METALLURGICAL LABORATORY	5	1**
		TAMIL NADU EGOVERNANCE AGENCY	15	1**
		TAMIL NADU SCIENCE AND TECHNOLOGY CENTRE	13	1**
WHEELS INDIA LTD.	4	1**		
12	COIMBATORE	CAMBODIA MILLS (NATIONAL TEXTILE CORPORATION LTD.)	5	1*
		COIMBATORE MURUGAN MILLS (NATIONAL TEXTILE CORPORATION LTD.)	5	1*
		SOUTHERN REGIONAL OFFICE (NTCL)	5	1*
		ZF WINDPOWER	9	1*
13	DAMANJODI	NATIONAL ALUMINIUM COMPANY LIMITED - SMELTER PLANT	19	1
14	DEHRADUN	INDIAN INSTITUTE OF PETROLEUM	4	1*
		INDIAN INSTITUTE OF REMOTE SENSING	17	1*
		WADIA INSTITUTE OF HIMALAYAN GEOLOGY	20	1*
15	DELHI	DELHI METRO RAIL CORPORATION	6	1*
		DRDO-SSPL	10	1*

S.No	Center Name	Station Name	No. of Student	No. of Faculty
		NATIONAL TEXTILE CORPORATION LIMITED	10	1*
16	DHANBAD	CSIR-CENTRAL INSTITUTE OF MINING AND FUEL RESEARCH (CIMFR)	19	1
17	FARIDABAD	ESCORTS	12	1*
		SUPERSEALS INDIA LTD.	7	1**
18	GANDHINAGAR	BHASKARACHARYA INSTITUTE FOR SPACE APPLICATIONS AND GEOINFORMATIC	22	1*
		GUJARAT ENVIRONMENT MANAGEMENT INSTITUTE	17	1*
		INSTITUTE OF SEISMOLOGICAL RESEARCH (ISR) DST	10	1*
19	GAUHATI	GAUHATI REFINERY	25	1
20	GOA	ABBOTT INDIA LTD.	4	1*
		CG PPI ADHENSIVE PRODUCTS LTD	4	1*
		DEPARTMENT OF AGRICULTURE	6	1**
		ENCUBE ETHICALS PVT	5	1*
		FUNSKOOL (INDIA) LTD.	5	1*
		GOA STATE INFRASTRUCTURE DEVELOPMENT CORP LTD (GSIDC)	4	1*
		HELIX TECH.	5	1*
		HELPAGE INDIA	9	1*
		MORMUGAO PORT TRUST	10	1*
		NATIONAL CENTRE FOR ANTARTIC AND OCEAN RESEARCH	9	1**
		NATIONAL INSTITUTE OF OCEANOGRAPHY	10	1*
		ORCHID BIO MEDICAL SYSTEMS	8	1*
		PARINATI SOLUTIONS PRIVATE LIMITED	6	1*
		PENTAIR WATER INDIA PVT. LTD.	3	1*
		PUTZMEISTER	4	1*
		QUALPRO DIAGNOSTICS	7	1*
		SMART LINK NETWORK SYSTEMS	5	1*
STARFLEX SEALING INDIA PVT. LTD.	5	1*		
ZEPHYR BIOMEDICAL	8	1*		
21	GURGAON	CONVERGENT TECHNOLOGIES	6	1**
		MARUTI SUZUKI INDIA LIMITED	10	1*
		POWER GRID CORPORATION OF INDIA	7	1*
		VALUE FIRST DIGITAL MEDIA PVT. LTD.	10	1*
22	HALOL	ADITYA BIRLA INSULATORS <sup>+</sup>	4	1
23	HAZIRA	ESSAR POWER	11	1*
24	HYDERABAD	AYASTA TECHNOLOGIES PVT. LTD.	4	1*
		DRDO - ASL	6	1*
		DRDO - CAS	5	1**
		DRDO - RCI	11	1*
		G.M.R. VARALAKSHMI FOUNDATION	16	1**
		H.B.L. POWER SYSTEMS LTD.	12	1**
		IBOT CONTROL SYSTEMS INDIA PVT LTD	5	1*
		KALYANI CENTRE FOR TECHNOLOGY AND INNOVATION	8	1**
		L.V.PRASAD EYE INSTITUTE	11	1*
		NATIONAL INFORMATICS CENTER (NIC)	10	1**
		NCCCM	15	1**
		RA CHEM PHARMA	5	1
		SERVOMAX INDIA PVT. LTD.	20	1**
		SUDHEESAH SMART SOLUTIONS	5	1**
VASUDHA PHARMA CHEM LIMITED	5	1*		
TELANGANA E-GOVERNANCE	26	1**		
25	JABALPUR	WEST CENTRAL RAILWAY	17	1
26	JAFRABAD	ULTRATECH CEMENT LIMITED	10	1**



S.No	Center Name	Station Name	No. of Student	No. of Faculty
27	JAGGAYAPET	THE RAMCO CEMENTS LTD.	25	1
28	JAIPUR	FOREST RESEARCH INSTITUTE	4	1*
		JAIPUR DEVELOPMENT AUTHORITY	14	1*
		KEC INTERNATIONAL LTD.	17	1*
29	JAMNAGAR	ESSAR POWER	9	1**
30	JHARSUGUDA	SESA STERLITE LTD. (VEDANTA ALUMINIUM & POWER)	15	1*
31	JODHPUR	BIRLA WHITE CEMENTS	13	1*
		DRDO	4	1*
		REGIONAL REMOTE SENSING CENTRE	5	1*
32	KALPAKKAM	INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH (IGCAR)	49	1
33	KOLKATA	DELTA STEP LEARNING PVT. LTD	5	1**
		DEPARTMENT OF PLANNING STATISTICS AND PROGRAM IMPLEMENTATION	15	1*
		HEDGE QUANTS ADVISORY LLP	9	1*
		IRRIGATION AND WASTE WATER DEPARTMENT	8	1*
		TEXMACO LTD.	9	1**
		WEST BENGAL E-GOVERNANCE	20	1**
34	KOTPUTLI	ULTRATECH CEMENT LTD.	6	1**
35	KOVAYA	ULTRATECH CEMENT LIMITED	11	1**
36	LUCKNOW	CENTRE OF SCIENCE & TECHNOLOGY	12	1
37	MAHAPE	L & T	2	1*
38	MALKHED	RAJSHREE CEMENT	13	1
39	MANESAR	HONDA MOTORCYCLE & SCOOTER INDIA PVT. LTD.	9	1**
40	MOHALI	IDS INFOTECH LTD	11	1*
		SEMI- CONDUCTOR LABS MOHALI	6	1*
41	MUMBAI	APEX PACKAGING	5	1**
		ASTECH SYSTEMS	6	1*
		ATOMIC ENERGY REGULATORY BOARD	11	1*
		BEN LINE AGENCIES (INDIA) PVT. LTD.	4	1*
		BOMBAY STOCK EXCHANGE (BSE)	5	1*
		CENTURY RAYON*	20	1**
		HINDUSTAN PETROLEUM CORPORATION LIMITED	5	1*
		HOMI BHABHA CENTRE FOR SCIENCE EDUCATION	15	1*
		INDIA UNITED MILLS (NATIONAL TEXTILE CORPORATION LTD)	10	1*
		KEVA	6	1*
		L&T-CORPORATE TRAINING-TECHNICAL C-TEA MADH	2	1*
		LENEST	14	1**
		MUMBAI RAIL VIKAS CORPORATION LTD.	10	1*
		ORIENT ENTERPRISES	5	1*
		PODAR MILLS MUMBAI (NATIONAL TEXTILE CORPORATION LTD)	5	1
		PRS PERMACEL PVT LTD	5	1*
		QUORG TECHNOLOGIES	9	1**
		REGIONAL OFFICE (NTCL)	15	1*
		TATA MILLS- DADAR (MUMBAI) (NATIONAL TEXTILE CORPORATION LTD)	10	1**
		WATCONSULT	7	1*
YRALS DIGITAL INDIA PVT LTD*	6	1**		
42	MUNDRA	ADANI POWER	20	1
43	NAGDA	GRASIM CHEMICALS	11	1*
		GRASIM INDUSTRIES*	26	1**
44	NAGPUR	METAL FAB HIGH TECH PVT LTD.	13	1
45	NANDYAL	NANDI GROUP OF COMPANIES	16	1
46	NEEMUCH	VIKRAM CEMENT WORKS	4	1
47	NEW DELHI	505 ARMY BASE WORKSHOP	20	1*
		G.M.R. VARALAKSHMI FOUNDATION	5	1**
		INDIAN RED CROSS SOCIETY BLOOD BANK	19	1*

S.No	Center Name	Station Name	No. of Student	No. of Faculty
		JAGUAR OVERSEAS LTD.	5	1*
		MAPMY INDIA	9	1*
		PROKURE	7	1*
48	NOIDA	QA INFOTECH	10	1*
49	PILANI	BIRLA MUSEUM	7	1**
		CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE <sup>+</sup>	36	1**
50	PITHAMPUR	MAHLE ENGINE COMPONENTS INDIA PVT. LTD.	10	1*
		PINNACLE INDUSTRIES LTD.	9	1*
51	POWAI	L & T HEAVY ENGINEERING	4	1*
52	PUNE	BHARAT FORGE LTD <sup>+</sup>	11	1**
		INTER-UNIVERSITY CENTRE FOR ASTRONOMY AND ASTROPHYSICS (IUCCA)	5	1**
		LIVEWEAVER INDIA PVT.LTD	11	1**
		NATIONAL CHEMICAL LABORATORY <sup>+</sup>	6	1**
		TATA COMMUNICATIONS LTD.	6	1**
		TATA TECHNOLOGIES LIMITED	12	1**
53	RAIPUR	RAWAN CEMENT WORKS	14	1*
54	REDDIPALAYAM	REDDIPALAYAM CEMENT WORKS	13	1
55	RENUKOOT	HINDALCO INDUSTRIES LIMITED	9	1
56	RENUSAGAR	HINDALCO INDUSTRIES LIMITED	7	1
57	RISHRA	ADITYA BIRLA INSULATOR <sup>+</sup>	4	1**
58	ROURKELA	ROURKELA STEEL PLANT	95	1
59	SAHIBABAD	BHUSHAN STEEL LTD	15	1**
60	SHAMBUPURA	ADITYA CEMENT WORKS	8	1
61	SIMGA	HIRMI CEMENT WORKS	12	1*
62	SURAT	GEPIL	8	1*
		HAPPY HOME GROUP	10	1*
		JNJ MACHINES PVT. LTD.	12	1*
63	TADPATHRI	ULTRATECH CEMENT LIMITED	7	1
64	THANE	ECLIPSE INSTRUMENTATION PVT. LTD.	5	1*
65	THIRUVANANTHA PURAM	VIKRAM SARABHAI SPACE CENTRE (VSSC)	9	1*
66	TIRORA	ADANI POWER	12	1
67	TRISSUR	ALAGAPPA TEXTILE MILLS (NATIONAL TEXTILE CORPORATION LTD.)	5	1*
		KERALA LAXMI MILLS THRISSUR ( KERALA) (NATIONAL TEXTILE CORPORATION LTD)	5	1*
68	TRIVANDRUM	CENTRE FOR DEVELOPMENT OF IMAGING TECHNOLOGY	5	1*
		UST GLOBAL <sup>+</sup>	19	1*
69	UDAIPUR	PYROTECH ELECTRONICS PVT. LTD.	9	1*
		VINAYAK BUILDTECH	4	1*
70	UMIAM	NORTH EASTERN SPACE APPLICATIONS CENTRE	15	1
71	VIJAYAWADA	EFFTRONICS SYSTEMS PVT. LTD.	10	1
72	VIJAYNAGAR	JSW STEEL	36	1
73	VISAKHAPATNAM	HINDUSTAN PETROLEUM CORPORATION LIMITED	5	1*
		SARDA METALS & ALLOYS	6	1*
		VISHAKAPATNAM STEEL PLANT	99	1
74	VITHALPUR	HONDA MOTORCYCLE & SCOOTER INDIA PVT. LTD.	8	1*
<b>Total</b>			<b>2189</b>	<b>111</b>

\* Faculty looking after more than one PS-I station

\*\* PS-II Faculty looking after PS-I

+ PS-I organizations hosting PS-II also

**SOME PRACTICE SCHOOL - II STATISTICS**

**Statistical Details of the Distribution of Students & Faculty over Practice School-II and Practice School  
(for Higher Degree) Stations during the year 2017**

S.No.	Stations	Second Semester 16-17 (12.01.2016 -17.06.2016)		First Semester 17-18 (04.07.2017-14.12.2017)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>Ahmedabad</b>						
1	Fairfield and Power Drive Technology Pvt. Ltd.	2	1*	-	-	2
2	SKF India Ltd.	-	-	1	1*	1
<b>Aurangabad</b>						
3	Skoda Auto India Pvt. Ltd.	2	1*	2	1*	4
<b>Bangalore</b>						
4	Altair Engineering India Pvt. Ltd.	2	1*	3	1*	5
5	Altimetrik India Pvt Ltd	1	1*	-	-	1
6	Altisource Business Solutions	3	1*	-	-	3
7	Amazon Development Center	31	1	26	1	57
8	Amazon Fulfillment Center	2	1*	-	-	2
9	American Express India	1	1*	3	1*	4
10	Analog Devices - Design and Simulation	8	1*	4	1*	12
11	Analog Devices - Design Verification	-	-	4	1*	4
12	Apollo Tyres Ltd. - IoT	2	1*	5	1*	7
13	Apple India Private Limited	-	-	2	1*	2
14	Aranca	-	-	4	1*	4
15	ARM Embedded Technologies Private Limited	3	1*	12	1*	15
16	Aruba Networks - Network Programming	3	1*	-	-	3
17	Aurigo Software	2	1*	2	1*	4
18	Beckman Coulter (formerly ReaMetrix India P Ltd)	2	1*	2	1*	4
19	belong.co	4	1*	6	1*	10
20	Blue Jeans Network India Pvt. Ltd.	5	1*	7	1*	12
21	Bundl Technologies Private Limited (Swiggy)	2	1*	7	1*	9
22	CA Technologies	-	-	4	1*	4
23	Capillary Technologies - Testing Automation	3	1*	3	1*	6
24	Centre for Artificial Intelligence & Robotics	4	1*	3	1*	7
25	Cerner	-	-	5	1*	5
26	Centre for Cellular And Molecular Platforms (C-CAMP)	1	1*	-	-	1
27	Cisco Systems (India) Pvt. Ltd - Embedded Sytems	-	-	1	1*	1
28	Cisco Systems (India) Pvt. Ltd - Machine Learning	51	1	1	1*	52
29	Cisco Systems (India) Pvt. Ltd - Software Engineering	-	-	1	1*	1
30	Cypress Semiconductor India Pvt Ltd.	8	1*	-	-	8
31	Decision Resources Group	2	1*	-	-	2
32	EMC	4	1*	12	1*	16
33	EnSci - A Unit of Weir Minerals India Pvt. Ltd.	3	1*	1	1*	4
34	Ericsson Global India Pvt. Ltd.	6	1*	8	1*	14
35	Ernst & Young Global Delivery Services	3	1*	-	-	3
36	Fiber Link	4	1*	-	-	4
37	Genpact	-	-	14	1*	14
38	GE Digital	6	1*	-	-	6
39	GiftXOXO	4	1*	-	-	4
40	Goldman Sachs India Pvt. Ltd. - Operations	9	1*	10	1*	19
41	Hindustan Unilever Research Centre	12	1*	1	1*	13
42	Hortonworks	2	1*	-	-	2
43	HSBC	5	1*	-	-	5
44	IMS Health	7	1*	-	-	7
45	Infinera - Embedded Software Testing	7	1*	4	1*	11
46	Infinera - VLSI Testing	-	-	4	1*	4
47	Infiniti Research	4	1*	-	-	4
48	InMobi - Software Development	8	1*	2	1*	10
49	InMobi - Supply Chain	-	-	18	1*	18

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		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
50	Intel India Technology Pvt. Ltd.- VLSI Design	14	1*	-	-	14
51	Intel - Computer and VLSI Architecture	-	-	7	1*	7
52	Intel - Embedded Software	-	-	4	1*	4
53	Intel - GPU and VLSI Design	-	-	8	1*	8
54	Intel - Machine Learning	-	-	2	1*	2
55	Intel - Testing & Verification	-	-	6	1*	6
56	J. P MORGAN CIB - e trading	2	1*	-	-	2
57	J. P Morgan CIB-RFT	22	1*	-	-	22
58	J.P. Morgan Chase	24	1*	-	-	24
59	JP Morgan Chase - Technology	-	-	3	1*	3
60	JPMC CIB Operations	-	-	3	1*	3
61	JPMC CIB Operations - Robotics Automation	-	-	9	1*	9
62	JDA Software Solutions	5	1*	22	1*	27
63	John F Welch Technology Center (GE)	14	1*	2	1*	16
64	KPIT Technologies	2	1*	-	-	2
65	KPMG	2	1*	-	-	2
66	MathWorks India Private Limited	2	1*	-	-	2
67	Media Iq Digital	17	1*	16	1	33
68	Mercedes Benz	4	1*	6	1*	10
69	National Aerospace Laboratories	2	1*	2	1*	4
70	National Centre for Biological Sciences	2	1*	3	1*	5
71	National Entrepreneurship Network	7	1*	14	1*	21
72	National Instruments Systems (India) Pvt. Ltd.	4	1*	1	1*	5
73	NetApp	10	1*	2	1*	12
74	NextGen PMS Pvt. Ltd	2	1*	9	1*	11
75	Novozymes South Asia Pvt. Ltd.	3	1*	-	-	3
76	Nutanix Technologies India Pvt. Ltd.*	8	1*	4	1*	12
77	Nvidia Graphics - Hardware	37	1	16	1*	53
78	Nvidia Graphics -Software	14	1*	12	1*	26
79	Paypal	20	1*	2	1*	22
80	Petasense - Embedded Software	-	-	1	1*	1
81	Petasense - Machine Learning	-	-	1	1*	1
82	Petasense - Services & App Development	-	-	1	1*	1
83	PricewaterhouseCoopers (PWC)	-	-	2	1*	2
84	Philips Research India	2	1*	-	-	2
85	Qualcomm india private limited	8	1*	-	-	8
86	Qubole	4	1*	6	1*	10
87	Robert Bosch Center for Cyber Physical Systems	2	1*	2	1*	4
88	S.R. Batliboi & CO. LLP	1	1*	2	1*	3
89	Sabre Holdings(Formely Sabre Travels)	5	1*	-	-	5
90	Samsung R &D Institute - Image & Video Processing	18	1*	18	1*	36
91	Samsung R &D Institute - Software Systems	-	-	10	1*	10
92	Sattva Media & Consulting Pvt Ltd	2	1*	2	1*	4
93	Shell Technology Center	-	-	2	1*	2
94	Siftery	-	-	2	1*	2
95	SKF India Ltd.	-	-	1	1*	1
96	Seagate Technology HDD (India) Pvt. Ltd.	2	1*	-	-	2
97	Skoda Auto India Pvt. Ltd.	1	1*	-	-	1
98	StateStreet Global Advisors	-	-	2	1*	2
99	Symantec Software Solutions Pvt. Ltd -Data Analytics	9	1*	2	1*	11
100	Symantec Software Solutions Pvt. Ltd. - App Development	-	-	2	1*	2
101	TapChief +	2	1*	4	1*	6
102	TESCO Hindustan Service Centre	-	-	5	1*	5
103	Tata Digital Health	3	1*	-	-	3
104	Texas Instruments (I) Pvt. Ltd. -VLSI Design	-	-	8	1*	8
105	Texas Instruments (I) Pvt. Ltd -RF Micro Electronics	14	1*	-	-	14
106	TimeInc.(Time Analytic & Shared Services Pvt. Ltd.)	4	1*	3	1*	7
107	Tonbo Imaging Pvt Ltd. - Embedded Systems	-	-	4	1*	4
108	Tonbo Imaging Pvt Ltd. - Image & Video Processing	7	1*	1	1*	8
109	Toshiba Software (India) Pvt Ltd	1	1*	-	-	1
110	Vizury Interactive Solutions	2	1*	-	-	2
111	Viacom 18 Pvt Ltd	-	-	1	1*	1
112	VMware Software India Pvt. Ltd.	6	1*	5	1*	11
113	Vymo	-	-	4	1*	4
114	Walmart Global Technology Services	12	1*	20	1*	32
115	Zendrive India Pvt Ltd	-	-	2	1*	2

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		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
116	Zeotap India Pvt. Ltd.	3	1*	5	1*	8
117	Zinnov Management Consulting Pvt. Ltd.	6	1*	7	1*	13
118	Zoomcar India Pvt. Ltd.	2	1*	4	1*	6
<b>Bhopal</b>						
119	LHD India	-	-	2	1*	2
<b>Chandigarh</b>						
120	HERON A ParexelCompany	6	1*	-	-	6
<b>Chennai</b>						
121	Amazon Development Center	6	1	9	1*	15
122	Amazon Fulfillment Center	2	1*	-	-	2
123	Central Leather Research Institute (CLRI) <sup>+</sup>	-	-	2	1*	2
124	HDFC Bank	2	1*	-	-	2
125	Paypal	8	1	6	1*	14
126	PricewaterhouseCoopers (PWC)	-	-	1	1*	1
127	S.R. BATLIBOI & CO. LLP	-	-	2	1*	2
128	Structural Engineering Research Centre	-	-	2	1*	2
129	Qualcomm India Pvt Limited	2	1*	-	-	2
130	Vestas Technology Ltd.	4	1*	-	-	4
<b>Delhi</b>						
131	Amazon Development Center	14	1*	5	1*	19
132	Edupristine	-	-	1	1*	1
133	Quality Council of India	3	1*	-	-	3
<b>Dharwad</b>						
134	Tata Motors Ltd.	6	1*	2	1*	8
<b>Faridabad</b>						
135	Rite Infotech Pvt Ltd	-	-	2	1*	2
<b>Goa</b>						
136	CIPLA Ltd	7	1*	-	-	7
137	IFB Industries	2	1*	2	1	4
<b>Greater Noida</b>						
138	ST Microelectronics(I) Pvt.Ltd.	10	1*	-	-	10
<b>Gurgaon</b>						
139	Amazon Fulfillment Center	1	1*	-	-	1
140	American Express India	2	1*	4	1*	6
141	Ernst & Young Pvt Ltd.	-	-	2	1*	2
142	Futures First Info Services Pvt Ltd	-	-	7	1*	7
143	IMS Health	15	1*	-	-	15
144	KPMG	3	1*	-	-	3
145	Mahle Filters India Ltd	1	1*	-	-	1
146	Of Business.com	-	-	3	1*	3
147	Orange Business Services	-	-	2	1*	2
148	Pluss Advanced Technologies Pvt. Ltd.	2	1*	2	1*	4
149	PricewaterhouseCoopers (PWC)	7	1*	11	1*	18
150	Rivigo Services Pvt Ltd	5	1*	-	-	5
151	S.R. BATLIBOI & CO. LLP	-	-	1	1*	1
152	SRF Ltd.	2	1*	5	1*	7
153	Zinnov Management Consulting Pvt. Ltd.	3	1*	2	1*	5
<b>Harihar</b>						
154	Grasim Polyfiber	-	-	1	1*	1
<b>Halol</b>						
155	Aditya Birla Insulators <sup>+</sup>	3	1	-	-	3
<b>Hosur</b>						
156	Faiveley Transport Rail Tech.India Ltd (FTRTIL)	2	1	-	-	2
<b>Hyderabad</b>						
157	Adaquare	2	1*	-	-	2
158	Amazon Business Intelligence	-	-	12	1*	12
159	Amazon Development Center	22	1*	20	1*	42
160	Amazon Fulfillment Center	1	1*	-	-	1
161	Autodesk	-	-	2	1*	2
162	AutoRABIT	-	-	4	1*	4
163	Biophore	-	-	3	1	3
164	CA Technologies	2	1*	9	1*	11
165	Cisco Systems (India) Pvt. Ltd - Software Engg.	-	-	2	1*	2
166	Centre for DNA Fingerprinting and Diagnostics	2	1*	-	-	2
167	Dr. Reddys Laboratories	4	1*	-	-	4
168	GGK Technologies - Data Analytics	7	1*	12	1*	19
169	GGK Technologies - Mobile App Development	-	-	2	1*	2

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		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
170	GGK Technologies - Mobile Services	-	-	2	1*	2
171	IMI Mobile	3	1*	14	1*	17
172	IndustryARC	11	1*	-	-	11
173	JDA Software Solutions	6	1*	8	1*	14
174	Jochebed Tech Solutions	-	-	3	1*	3
175	John F Welch Technology Center (GE)	2	1*	-	-	2
176	Market Data Forecast	18	1*	14	1*	32
177	Merilytics	2	1*	-	-	2
178	Mol De Analytics	3	1*	1	1*	4
179	Mordor Intelligence	13	1*	43	1	56
180	My smart price	2	1*	2	1*	4
181	Mytrah Energy (India) Private Limited	2	1*	3	1*	5
182	Next Education India Pvt. Ltd.	-	-	19	1*	19
183	NR Equipments	-	-	1	1*	1
184	Nvidia Graphics - Hardware	6	1*	-	-	6
185	Nvidia Graphics - Software	-	-	8	1*	8
186	PricewaterhouseCoopers (PWC)	-	-	5	1*	5
187	Qualcomm india private limited	11	1*	-	-	11
188	Red pine signals	2	1*	-	-	2
189	ReportGarden Technologies Pvt. LTd.	4	1*	16	1*	20
190	Synergiz Global	2	1*	1	1*	3
191	Synopsys India Pvt. Ltd.	-	-	2	1*	2
192	Tau Films India Pvt. Ltd	2	1*	2	1*	4
193	Thomson Reuters	1	1*	-	-	1
194	Worley Parsons India	2	1*	3	1*	5
195	Xilinx India Technology Services Pvt. Ltd.	-	-	5	1*	5
<b>Jaipur</b>						
196	CEG Limited	3	1*	-	-	3
197	Futures First Info Services Pvt. Ltd.	-	-	2	1*	2
198	NBC Bearings	2	1*	-	-	2
<b>Jamshedpur</b>						
199	Tata Motors Ltd.	3	1*	11	1*	14
<b>Kolkata</b>						
200	IFB Engineering Division	1	1*	-	-	1
<b>Lucknow</b>						
201	Tata Motors Ltd.	10	1*	26	1*	36
<b>Mumbai</b>						
202	Aditya Birla Corporate IT	1	1*	-	-	1
203	Aditya Birla Corporate World Class Manufacturing	2	1*	-	-	2
204	Aditya Birla Science & Technology Company Ltd.	6	1*	5	1*	11
205	AlphaMD	2	1*	2	1*	4
206	Amazon Operations	2	1*	-	-	2
207	Century Rayon <sup>+</sup>	2	1*	2	1*	4
208	Credit Suisse	26	1*	-	-	26
209	Credit Suisse - Credit Analytics	-	-	6	1*	6
210	Credit Suisse - Global Markets Controls COO	-	-	3	1*	3
211	Credit Suisse - Market Risk Quant	-	-	4	1*	4
212	Credit Suisse - MLR Non-quant	-	-	6	1*	6
213	Credit Suisse - Model Risk Management	-	-	4	1*	4
214	Credit Suisse - Prime Services	-	-	4	1*	4
215	Credit Suisse - Risk & Finance Data Analytics Reporting	-	-	4	1*	4
216	DBOI (Deutsche Bank) - Operations	11	1*	15	1*	26
217	Development Consultants Pvt. Ltd. (DCPL)	3	1*	1	1*	4
218	Dorsch Consult (India) Pvt. Ltd.	1	1*	-	-	1
219	Edelweiss Financial Services	2	1*	4	1*	6
220	EduPristine -Neev Knowledge Management Pvt. Ltd.	2	1*	2	1*	4
221	Geometric Limited	2	1*	2	1*	4
222	Grasim Industries Pulp and Fibre Division	-	-	2	1*	2
223	HDFC Bank	6	1*	-	-	6
224	Henkel	1	1*	1	1*	2
225	Here Maps - Data Structures	-	-	6	1*	6
226	Here Maps - Distributed Data	-	-	2	1*	2
227	Here Maps - Software Testing	9	1*	4	1*	13
228	Hourglass Research	2	1*	3	1*	5
229	Indus OS	2	1*	-	-	2
230	J P Morgan Services – Quant	-	-	10	1*	10

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231	J P Morgan Services -Centralized Research Group(CRG)	-	-	7	1*	7
232	J P Morgan Services- Global Markets Group(GMG)	-	-	3	1*	3
233	J P Morgan services- Global research Centre(GRC)	-	-	8	1*	8
234	JPMC CIB Operations	-	-	9	1*	9
235	JPMC CIB Operations- Robotics Automation	-	-	16	1*	16
236	J. P MORGAN CIB - e trading	2	1*	-	-	2
237	J.P. Morgan Chase	36	1*	-	-	36
238	J.P. Morgan Services India Pvt. Ltd	17	1*	-	-	17
239	KPMG	3	1*	-	-	3
240	Morningstar	7	1*	6	1*	13
241	MSCI (Global Implementation Services)	-	-	2	1*	2
242	MSCI (IMR)	-	-	1	1*	1
243	MSCI (NPD Index Research)	-	-	2	1*	2
244	MSCI (Solution Management)	-	-	1	1*	1
245	Multi Commodity Exchange of India Ltd.	-	-	2	1*	2
246	My POS Technologies Pvt. Ltd.	2	1-	2	1*	4
247	MSCI	4	1*	-	-	4
248	Nomura Global Finance	-	-	2	1*	2
249	Nomura Global Markets	7	1*	4	1*	11
250	Nomura Global Risk	-	-	8	1*	8
251	PricewaterhouseCoopers (PWC)	2	1*	3	1*	5
252	S.R. BATLIBOI & CO. LLP	-	-	3	1*	3
253	Skoda Auto India Pvt. Ltd.	5	1*	8	1*	13
254	Star TV	-	-	2	1*	2
255	Thornton Tomasetti	2	1*	2	1*	4
256	UPGRAD	3	1*	-	-	3
257	Viacom18 Media Pvt. Ltd	6	1*	6	1*	12
258	VMS (Vakil Mehta Seth) Consultants Private Limited	2	1*	2	1*	4
259	Worley Parsons India	2	1*	5	1*	7
260	Yrals Digital India Pvt.Ltd.*	-	-	4	1*	4
<b>Nagda</b>						
261	Grasim Industries Ltd.*	4	1*	5	1*	9
<b>Nagpur</b>						
262	Techure Structures Pvt Ltd.	-	-	2	1*	2
<b>Navi mumbai</b>						
263	Hindalco Innovation Centre - Semifab Taloja	4	1*	2	1*	6
<b>New Delhi</b>						
264	Central Road Research Institute	2	1*	-	-	2
265	Ecom Express Pvt. Ltd.	2	1*	2	1*	4
266	National Council of Applied Economic Research	3	1*	2	1*	5
267	National Institute of Science and Tech. Dev. Studies (NISTADS)	-	-	2	1*	2
<b>Noida</b>						
268	Adobe Systems	3	1*	-	-	3
269	Genpact	5	1*	2	1*	7
270	HCL Technologies	2	1*	-	-	2
271	Indiamart Intermesh Ltd.	2	1*	-	-	2
272	Mentor Graphics	4	1*	7	1*	11
273	Nucleus Software Export Ltd	7	1*	15	1*	22
274	Pitney Bowes Software India Pvt. Ltd.	3	1*	-	-	3
275	Tolexo Online Pvt Ltd	3	1*	-	-	3
<b>Pantnagar</b>						
276	Tata Motors Ltd.	3	1*	2	1*	5
<b>Pilani</b>						
277	Central Electronics Engineering Research Institute*	4	1*	1	1	5

S.No.	Stations	Second Semester 16-17 (12.01.2016 -17.06.2016)		First Semester 17-18 (04.07.2017-14.12.2017)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>Porvorim</b>						
278	Browntape Technologies Pvt. Ltd.	3	1*	-	-	3
<b>Pune</b>						
279	Autodesk India Pvt. Ltd.	-	-	3	1*	3
280	Avaya India Private Limited	-	-	10	1*	10
281	B.G.Shirke Construction Technology Pvt. Ltd.	2	1*	2	1*	4
282	Bharat Forge Ltd <sup>+</sup>	4	1*	2	1*	6
283	Cadence Design Systems India Pvt Ltd. - CAD Software	-	-	2	1*	2
284	Cadence Design Systems India Pvt Ltd. - Processor Design	-	-	2	1*	2
285	Credit Suisse - Risk & Finance Data Analytics Reporting	-	-	4	1*	4
286	Credit Suisse- Finance Change	-	-	2	1*	2
287	Credit Suisse	12	1*	-	-	12
288	Divgi TorqTransfer Systems Pvt. Ltd Shivare	-	-	2	1*	2
289	Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari	-	-	2	1*	2
290	EMC	2	1*	-	-	2
291	Geometric Limited	-	-	1	1*	1
292	Halliburton Technologies	2	1*	1	1*	3
293	IDeaS - SAS - Analytics	-	-	1	1*	1
294	IDeaS - SAS - Software Development	-	-	3	1*	3
295	Johnson Controls	3	1*	-	-	3
296	National Chemical Laboratory <sup>+</sup>	-	-	1	1*	1
297	Nvidia Graphics - Software Systems	-	-	10	1*	10
298	Nvidia Graphics - Hardware	6	1*	-	-	6
299	Reflexis Systems India Pvt Ltd.	3	1*	5	1*	8
300	Searce	-	-	2	1*	2
301	SKF India Ltd.	-	-	2	1*	2
302	Skoda Auto India Pvt. Ltd. (Chakan)	1	1*	-	-	1
303	Sokrati Technologies Pvt. Ltd.	1	1*	4	1*	5
304	Spicer India Ltd.	1	1*	-	-	1
305	Symantec Software Solutions Pvt. Ltd - Data Analytics	6	1*	5	1*	11
306	Symantec Software Solutions Pvt. Ltd. - Data Structures and Algorithms	-	-	3	1*	3
307	Tata Autocomp Systems Ltd.	4	1*	5	1*	9
308	Tata Chemical Innovation Center	1	1*	5	1*	6
309	Tata Motors Ltd.	14	1*	26	1*	40
310	vConstruct Private Limited	2	1*	-	-	2
311	Veritas Software Technologies India	2	1*	-	-	2
<b>Rishra</b>						
312	Aditya Birla Insulators <sup>+</sup>	3	1	-	-	3
<b>Sanand</b>						
313	Tata Motors Ltd.	-	-	5	1*	5
<b>Secunderabad</b>						
314	Ducere Technologies - Embedded Systems	-	-	1	1*	1
315	Ducere Technologies - Pattern Recognition	-	-	1	1*	1
<b>Sirsi</b>						
316	Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari	1	1*	-	-	1
<b>Thailand</b>						
317	Aditya Birla Chemicals(Thailand)Ltd-Sulphites	-	-	2	1*	2
<b>Trivandrum</b>						
318	Klientas	2	1*	-	-	2
319	Leap Consulting	1	1*	-	-	1
320	UST Global Infiniy Labs <sup>+</sup>	-	-	22	1*	22
		<b>1139</b>	<b>60</b>	<b>1175</b>	<b>58</b>	<b>2314</b>

+ Stations hosting PS-I also

\* Faculty looking after more than one PS-II Station



**PRACTICE SCHOOL GROWTH STATISTICS**

**PRACTICE SCHOOL-I**

<b>Session</b>	<b>No. of students who attended PS-I</b>	<b>No. of faculty who supervised PS-I</b>	<b>No. of PS-I stations</b>
Summer 1973	15	04	01
Summer 1974	89	17	09
Summer 1975	244	26	14
Summer 1976	355	33	28
Summer 1977	349	32	38
Summer 1978	335	35	38
Summer 1979	474	45	53
Summer 1980	397	34	42
Summer 1981	372	33	36
Summer 1982	462	39	44
Summer 1983	476	43	49
Summer 1984	491	40	52
Summer 1985	514	42	52
Summer 1986	507	38	49
Summer 1987	497	35	49
Summer 1988	552	42	59
Summer 1989	574	42	58
Summer 1990	572	46	63
Summer 1991	530	43	62
Summer 1992	625	53	78
Summer 1993	648	56	87
Summer 1994	612	55	81
Summer 1995	607	54	80
Summer 1996	648	54	89
Summer 1997	628	53	86
Summer 1998	638	53	87
Summer 1999	568	42	73
Summer 2000	656	52	85
Summer 2001	770	52	100
Summer 2002	807	52	98
Summer 2003	861	60	115
Summer 2004	861	57	95
Summer 2005	840	54	83
Summer 2006	1376	68	129
Summer 2007	1340	79	138
Summer 2008	1399	72	133
Summer 2009	1355	68	121
Summer 2010	1926	95	204
Summer 2011	2065	107	203
Summer 2012	2036	105	183
Summer 2013	2081	74	178
Summer 2014	2038	93	170
Summer 2015	2096	107	182
Summer 2016	2184	100	182
Summer 2017	2189	111	197

**PRACTICE SCHOOL-II FOR INTEGRATED FIRST DEGREE**

<b>Semesters</b>	<b>No. of students who attended PS-II</b>	<b>No. of faculty who supervised PS-II</b>	<b>No. of PS-II stations</b>
Second Sem. 72-73	10	04	01
First Sem. 73-74	12	04	01
Second Sem. 73-74	12	08	01
First Sem.74-75	36	05	06
Second Sem. 74-75	56	15	09
First Sem.75-76	31	06	05
Second Sem. 75-76	75	12	15
First Sem.76-77	121	18	15
Second Sem. 76-77	110	21	18
First Sem.77-78	151	16	16
Second Sem. 77-78	159	19	20
First Sem.78-79	166	23	20
Second Sem. 78-79	171	23	26
First Sem. 79-80	159	25	23
Second Sem. 79-80	153	25	22
First Sem.80-81	183	27	25
Second Sem. 80-81	195	26	28
First Sem.81-82	181	28	30
Second Sem. 81-82	184	27	31
First Sem.82-83	208	26	32
Second Sem. 82-83	212	23	34
First Sem.83-84	213	30	31
Second Sem. 83-84	200	23	35
First Sem.84-85	217	30	34
Second Sem. 84-85	213	37	41
First Sem. 85-86	239	33	41
Second Sem. 85-86	231	34	46
First Sem.86-87	248	36	47
Second Sem. 86-87	249	40	45
First Sem.87-88	231	40	48
Second Sem. 87-88	232	36	46
First Sem.88-89	274	39	51
Second Sem. 88-89	269	30	51
First Sem.89-90	275	31	49
Second Sem. 89-90	272	32	49
First Sem.90-91	272	30	49
Second Sem. 90-91	274	29	57
First Sem. 91-92	306	32	62
Second Sem. 91-92	297	36	66
First Sem.92-93	297	38	68
Second Sem. 92-93	281	34	69
First Sem.93-94	311	36	69
Second Sem. 93-94	314	38	79
First Sem.94-95	335	36	80
Second Sem. 94-95	344	35	79
First Sem.95-96	330	43	84
Second Sem. 95-96	323	40	91
First Sem.96-97	321	42	92
Second Sem. 96-97	323	43	89
First Sem.97-98	320	42	86
Second Sem. 97-98	330	42	87
First Sem.98-99	317	36	82
Second Sem. 98-99	327	37	89

Semesters	No. of students who attended PS-II	No. of faculty who supervised PS-II	No. of PS-II stations
First Sem. 1999-2000	324	42	84
Second Sem. 1999-2000	335	42	91
First Sem. 2000-2001	347	43	85
Second Sem. 2000-2001	336	44	93
First Sem. 2001-2002	330	43	88
Second Sem. 2001-2002	349	36	84
First Sem. 2002-2003	400	40	99
Second Sem. 2002-2003	406	43	93
First Sem. 2003-2004	427	42	88
Second Sem. 2003-2004	426	43	88
First Sem. 2004-2005	456	44	94
Second Sem. 2004-2005	459	46	101
First Sem. 2005-2006	499	53	110
Second Sem. 2005-2006	470	48	113
First Sem. 2006-2007	458	46	103
Second Sem. 2006-2007	570	53	128
First Sem. 2007-2008	708	53	153
Second Sem. 2007-2008	763	54	165
First Sem. 2008-2009	864	54	174
Second Sem. 2008-2009	730	61	193
First Sem. 2009-2010	862	62	194
Second Sem. 2009-2010	871	66	229
First Sem. 2010-2011	897	62	219
Second Sem. 2010-2011	874	69	261
First Sem. 2011-2012	1085	72	259
Second Sem. 2011-2012	1087	63	273
First Sem. 2012-2013	1190	64	256
Second Sem 2012-2013	1147	63	263
First Sem 2013-2014	1127	60	246
Second Sem 2013-2014	1128	49	244
First Sem 2014-2015	1138	48	221
Second Sem 2014-2015	1107	45	208
First Sem 2015-2016	1078	46	179
Second Sem 2015-2016	760	51	172
First Sem 2016-2017	1070	57	162
Second Sem 2016-2017	812	57	168
First Sem 2017-2018	1174	57	226
Second Sem 2017-2018	787	54	218

#### PRACTICE SCHOOL FOR HIGHER DEGREE

Semesters	No. of students who attended PS	No. of faculty who supervised PS	No. of PS stations where Higher Degree students were also sent
Second Sem. 91-92	18	09	12
First Sem.92-93	39	19	20
Second Sem. 92-93	41	19	21
First Sem.93-94	35	16	17
Second Sem. 93-94	41	11	15
First Sem.94-95	43	18	22
Second Sem. 94-95	45	17	17
First Sem.95-96	53	29	36
Second Sem. 95-96	52	27	35
First Sem.96-97	60	25	36
Second Sem. 96-97	55	25	33
First Sem.97-98	45	21	28

Semesters	No. of students who attended PS	No. of faculty who supervised PS	No. of PS stations where Higher Degree students were also sent
Second Sem. 97-98	56	22	29
First Sem.98-99	38	20	28
Second Sem. 98-99	46	19	24
First Sem. 1999-2000	62	26	34
Second Sem. 1999-2000	63	26	33
First Sem. 2000-2001	39	23	27
Second Sem. 2000-2001	50	26	36
First Sem. 2001-2002	85	23	27
Second Sem. 2001-2002	100	27	39
First Sem. 2002-2003	69	25	35
Second Sem. 2002-2003	46	20	22
First Sem. 2003-2004	02	02	02
Second Sem. 2003-2004	59	22	27
First Sem. 2004-2005	43	11	16
Second Sem. 2004-2005	88	20	32
First Sem. 2005-2006	46	16	19
Second Sem. 2005-2006	95	22	31
First Sem. 2006-2007	50	18	24
Second Sem. 2006-2007	111	30	47
First Sem. 2007-2008	55	23	31
Second Sem. 2007-2008	129	41	67
First Sem. 2008-2009	63	35	53
Second Sem. 2008-2009	174	48	84
First Sem. 2009-2010	38	18	21
Second Sem. 2009-2010	146	40	78
First Sem. 2010-2011	63	29	41
Second Sem. 2010-2011	181	42	96
First Sem. 2011-2012	78	29	44
Second Sem. 2011-2012	230	40	105
First Sem. 2012-2013	72	22	34
Second Sem 2012-2013	217	16	75
First Sem 2013-2014	2	4	2
Second Sem 2013-2014	217	35	88
First Sem 2014-2015	0	0	0
Second Sem 2014-2015	32	12	14
First Sem 2015-2016	2	1	1
Second Sem 2015-2016	239	43	85
First Sem 2016-2017	0	0	0
Second Sem 2016-2017	284	45	88
First Sem 2017-2018	0	0	0
Second Sem 2017-2018	269	41	104

+ It may be noted that the faculty members and PS stations indicated in this table are common to that of integrated First Degree PS-II Programme and thus numbers shown under the columns 3 and 4 are subsets of the respective columns of table "PRACTICE SCHOOL - II FOR INTEGRATED FIRST DEGREE" given above.

**FACILITIES AVAILABLE AT PS-II STATIONS DURING THE YEAR 2017**

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
<b>AHMEDABAD</b>				
1	SKF India Ltd, Ahmedabad	Rs. 6000/- p.m.	Students to make their own arrangements	No
2	Fairfield and Power Drive Technology Pvt Ltd, Ahmedabad	Rs. 5000/- p.m	Students to make their own arrangements	No
<b>AURANGABAD</b>				
3	Skoda Auto India Pvt. Ltd.	Rs. 8000/- p.m	Students to make their own arrangements	No
<b>BANGALORE</b>				
4	Altair Engineering India Pvt. Ltd.	Rs. 15100/- p.m	Accommodation provided for initial 15 days	No
5	Altimetrik India Pvt Ltd	Rs. 7500/- p.m	Students to make their own arrangements	No
6	Altisource Business Solutions	Rs. 35000/- p.m	No	No
7	Amazon Development Centre	Rs. 40000/- p.m	Accommodation will be provided for 1st week	Daily conveyance from home to office will be provided. Sodexo coupons worth Rs.1100/- per month are given to the students. Amazon will also take care of flight tickets to and fro. Only the company will book the tickets and they will reach out one week before joining for travel and accommodation.
8	Amazon Fulfilment Centre	Rs. 40000/- p.m	No	No
9	American Express India	Rs. 30000/- p.m	Students to make their own arrangements	No
10	Analog Devices - Design and Simulation	Rs. 25000/- p.m	Students to make their own arrangements	1. Full postal address with pin code: RMZ Infinity, Tower D Level 6, No3 Old Madras Road. Bangalore Pincode: 560016 2. Total Sodexo Food Coupons worth Rs.1000 provided per month
11	Analog Devices - Design Verification	Rs. 25000/- p.m	No	No
12	Apollo Tyres Ltd. - IoT	Rs. 25000/- p.m	Students to make their own arrangements	Students should have the PAN card at the time of on boarding.
13	Apple India Private Limited	Rs. 45000/- p.m	No	No
14	Aranca	Rs. 15000/- p.m	No	No
15	ARM Embedded Technologies Private Limited	Rs. 28000/- p.m	Students to make their own arrangements	No
16	Aruba Networks - Network Programming	Rs. 25000/- p.m	No	No
17	Aurigo Software	Rs. 35000/- p.m	Students to make their own arrangements	For B.E.(Hons.) Computer Science/M.E. (Computer Science)Stipend: INR 35,000 per month For B.E.(Hons.) Civil Engineering M.E.(Civil - Structural Engineering) M.E.(Civil - Infrastructure Systems) M.E.(Civil - Transportation Engineering) Stipend: 30000
18	Beckman Coulter (formerly ReaMetrix India P Ltd)	Rs. 15000/- p.m	Students to make their own arrangements	No
19	Belong.co	Rs. 20000/- p.m	Students to make their own arrangements	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
20	Blue Jeans Network India Pvt. Ltd.	Rs. 50000/- p.m	Temporary accommodation for 2 weeks at the time of joining will be provided	No
21	Bundl Technologies Private Limited (Swiggy)	Rs. 20000/- p.m	Students to make their own arrangements	No
22	CA Technologies	Rs. 35000/- p.m	Students to make their own arrangements	No
23	Capillary Technologies - Testing Automation	Rs. 50000/- p.m	Students to make their own arrangements	No
24	Centre for Artificial Intelligence & Robotics	Rs. 12000/- p.m	Students to make their own arrangements	To encourage participation of students in Govt. of India (CSIR) Research Labs for PS - II the Institute is offering scholarship to students with CGPA 7 & above subject to a maximum of Rs.12000/- pm after deduction of (any) stipend amount being paid by the organization.
25	Centre for Cellular And Molecular Platforms (C-CAMP)	Rs. 12000/- p.m	Students to make their own arrangements	Rs. 12,000 will be paid, if the CGPA is greater than 7 (at the time of joining the PS, i.e. January 2017)
26	Cerner	Rs. 22000/- p.m	Students to make their own arrangements	No
27	Cisco Systems (India) Pvt. Ltd - Embedded Sytems	Rs. 34000/- p.m	Students to make their own arrangements	No
28	Cisco Systems (India) Pvt. Ltd - Machine Learning	Rs. 34000/- p.m	Students to make their own arrangements	Free doctor consultation on office premises. Access to gym. Tea/coffee.
29	Cisco Systems (India) Pvt. Ltd - Software Engineering	Rs. 34000/- p.m	Students to make their own arrangements	No
30	Cypress Semiconductor India Pvt Ltd.	Rs. 25000/- p.m	Students to make their own arrangements	No
31	Decision Resources Group	Rs. 25000/- p.m	Students to make their own arrangements	The interns will be working on some of the key projects for biopharmaceutical companies as well as managed care organizations. The nature of the work will be Research & Analytics oriented and will provide the candidates the exposure with the key dynamics which global pharmaceutical companies are facing.
32	EMC	Rs. 25000/- p.m	Students to make their own arrangements	No
33	EnSci - A Unit of Weir Minerals India Pvt. Ltd.	Rs. 20000/- p.m	Students to make their own arrangements	No
34	Ericsson Global India Pvt. Ltd.	Rs. 35000/- p.m	Students to make their own arrangements	No
35	Ernst & Young Global Delivery Services	Rs. 25000/- p.m	No	No
36	Fiber Link	Rs. 30000/- p.m	Students to make their own arrangements	No
37	GE Digital	Rs. 27500/- p.m	No	No
38	Genpact	Rs. 15000/- p.m	No	
39	GiftXOXO	Rs. 10000/- p.m	Students to make their own arrangements	No
40	Goldman Sachs India Pvt. Ltd. - Operations	Rs. 25000/- p.m	Outstation candidates will be provided initial 7 days accommodation.	One time economy airfare reimbursement to & from Bangalore
41	Hindustan Unilever Research Centre	Rs. 20000/- p.m	Students to make their own arrangements	No
42	Hortonworks	Rs. 45000/- p.m	Students to make their own arrangements	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
43	HSBC	Rs. 25000/- p.m	No	No
44	IMS Health	Rs. 16500/- p.m	No	No
45	Infinera - Embedded Software Testing	Rs. 35000/- p.m	Students to make their own arrangements	No
46	Infinera - VLSI Testing	Rs. 35000/- p.m	No	No
47	Infiniti Research	Rs. 20000/- p.m	No	No
48	InMobi - Software Development	Rs. 25000/- p.m	Students to make their own arrangements	Free Canteen Facility
49	InMobi - Supply Chain	Rs. 25000/- p.m	No	No
50	Intel - Computer and VLSI Architecture	Rs. 22000/- p.m	No	No
51	Intel - Embedded Software	Rs. 22000/- p.m	No	No
52	Intel - GPU and VLSI Design	Rs. 22000/- p.m	No	No
53	Intel - Machine Learning	Rs. 22000/- p.m	No	No
54	Intel - Testing & Verification	Rs. 22000/- p.m	No	No
55	Intel India Technology Pvt. Ltd.- VLSI Design	Rs. 22000/- p.m	Students to make their own arrangements	Stipend BE - 22000 ME - 28000
56	J. P MORGAN CIB - e trading	Rs. 60000/- p.m	No	No
57	J. P Morgan CIB-RFT	Rs. 60000/- p.m	Students to make their own arrangements	First class to and fro train fare from hometown to PS-II station is provided. Free Food, coupons worth Rs.1250 p.m.
58	J.P. Morgan Chase	Rs. 26250/- p.m	Students to make their own arrangements	No
59	JDA Software Solutions	Rs. 25000/- p.m	Students to make their own arrangements	No
60	John F Welch Technology Centre (GE)	Rs. 25000/- p.m	Students to make their own arrangements	Rs.30000 per month per student for Masters and Rs.25000 per month for Bachelor Degree
61	JP Morgan Chase - Technology	Rs. 26250/- p.m	Students to make their own arrangements	No
62	JPMC CIB Operations	Rs. 26250/- p.m	No	No
63	JPMC CIB Operations - Robotics Automation	Rs. 26250/- p.m	Students to make their own arrangements	No
64	KPIT Technologies	Rs. 15000/- p.m	No	No
65	KPMG	Rs. 15000/- p.m	No	No
66	MathWorks India Private Limited	Rs. 35000/- p.m	No	No
67	Media Iq Digital	Rs. 26500/- p.m	Students to make their own arrangements	The stipend will be 30KPM (26,500.00 in cash and the rest 3.5K in benefits like food, health club, etc)
68	Mercedes Benz	Rs. 20000/- p.m	Students to make their own arrangements	No
69	National Aerospace Laboratories	Rs. 12000/- p.m	Students to make their own arrangements	No
70	National Centre for Biological Sciences	Rs. 12000/- p.m	Accommodation on campus is subject to availability. The organization coordinator should be contacted through the PS-II Instructor, well in advance to enquire about accommodation in NCBS. Else the student should make their own arrangement	No
71	National Entrepreneurship Network	Rs. 15000/- p.m	Students to make their own arrangements	No
72	National Instruments Systems (India) Pvt. Ltd.	Rs. 20000/- p.m	Students to make their own arrangements	Free Evening snacks
73	NetApp	Rs. 35000/- p.m	Students to make their	Stipend: Rs. 30000 for B.E/Dual

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
			own arrangements	Degree, 35000 for M.E per month per student and company bus on payment basis
74	NextGen PMS Pvt. Ltd	Rs. 41000/- p.m	Students to make their own arrangements	Stipend 41000 For All Students
75	Novozymes South Asia Pvt. Ltd.	Rs. 15000/- p.m	No	No
76	Nutanix Technologies India Pvt. Ltd.	Rs. 90000/- p.m	Students to make their own arrangements	8.75 CGPA First class to and fro train fare from hometown to PS-II station
77	Nvidia Graphics - Hardware	Rs. 30000/- p.m	Students to make their own arrangements	To and fro air fare between Hometown and Bangalore will be reimbursed by the organisation. One way air fare for travel between home and the company will be reimbursed by the company.
78	Nvidia Graphics -Software	Rs. 30000/- p.m	Students to make their own arrangements	To and fro air fare between hometown and Bangalore will be reimbursed by the company. One-way airfare from hometown to PS-II station will be reimbursed.
79	PAYPAL	Rs. 50000/- p.m	Students to make their own arrangements	No
80	Petasense - Embedded Software	Rs. 40000/- p.m	Students to make their own arrangements	No
81	Petasense - Machine Learning	Rs. 40000/- p.m	No	No
82	Petasense - Services & App Development	Rs. 40000/- p.m	No	No
83	Philips Research India	Rs. 25000/- p.m	No	No
84	PricewaterhouseCoopers (PWC)	Rs. 40000/- p.m	Students to make their own arrangements	No
85	QUALCOMM INDIA PRIVATE LIMITED	Rs. 20000/- p.m	Provided by the organization	No
86	Qubole	Rs. 45000/- p.m	Students to make their own arrangements	No
87	Robert Bosch Center for Cyber Physical Systems	Rs. 10000/- p.m	Students to make their own arrangements	No
88	S.R. BATLIBOI & CO. LLP	Rs. 21100/- p.m	Students to make their own arrangements	No
89	Sabre Holdings(Formely Sabre Travels)	Rs. 25000/- p.m	Company will provide 2 weeks of accommodation in the beginning.	Students can either opt for ITPL or Volvo bus passes on their own. Food court can be used for meals on payment basis.
90	Samsung R &D Institute - Image & Video Processing	Rs. 35000/- p.m	One week initial accommodation	Airfare & 500 km from their hometown to Bangalore.
91	Samsung R &D Institute - Software Systems	Rs. 35000/- p.m	No	No
92	Sattva Media & Consulting Pvt Ltd	Rs. 12000/- p.m	Students to make their own arrangements	No
93	Seagate Technology HDD (India) Pvt. Ltd.	Rs. 30000/- p.m	No	No
94	Shell Technology Center	Rs. 40000/- p.m	No	No
95	Siftery	Rs. 35000/- p.m	No	No
96	SKF India Ltd.	Rs. 6000/- p.m	No	No
97	Skoda Auto India Pvt. Ltd.	Rs. 14000/- p.m	Students to make their own arrangements	No
98	StateStreet Global Advisors	Rs. 40000/- p.m	No	No
99	Symantec Software Solutions Pvt. Ltd - Data Analytics	Rs. 40000/- p.m	Students to make their own arrangements	No
100	Symantec Software Solutions Pvt. Ltd. - App Development	Rs. 40000/- p.m	No	No
101	TapChief	Rs. 10000/- p.m	Students to make their own arrangements	No



S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
102	Tata Digital Health	Rs. 45000/- p.m	No	No
103	TESCO Hindustan Service Centre	Rs. 30000/- p.m	Students to make their own arrangements	No
104	Texas Instruments (I) Pvt. Ltd. - RF Micro Electronics	Rs. 25000/- p.m	Students to make their own arrangements	No
105	Texas Instruments (I) Pvt. Ltd. - VLSI Design	Rs. 25000/- p.m	Students to make their own arrangements	No
106	TimeInc.(Time Analytic & Shared Services Private Limited)	Rs. 15500/- p.m	Students to make their own arrangements	No
107	Tonbo Imaging Pvt Ltd. - Embedded Systems	Rs. 28000/- p.m	No	No
108	Tonbo Imaging Pvt Ltd. - Image & Video Processing	Rs. 15000/- p.m	Students to make their own arrangements	The Stipend for Computer science and EEE/ECE/EIE is Rs.28000 and Mechanical Discipline is 15000. Tea and Snacks are Free.
109	Toshiba Software (India) Pvt Ltd	Rs. 25000/- p.m	No	No
110	Viacom 18 Pvt Ltd	Rs. 30000/- p.m	Students to make their own arrangements	No
111	Vizury Interactive Solutions	Rs. 25000/- p.m	No	No
112	VMware Software India Pvt. Ltd.	Rs. 35000/- p.m	Students to make their own arrangements	Reimbursement of To and Fro Economy Airfare on actuals
113	Vymo	Rs. 30000/- p.m	No	No
114	Walmart Global Technology Services	Rs. 30000/- p.m	1st week accommodation is provided by organization	Subsidized breakfast Free lunch Free tea & snacks Walmart will book the to & fro air ticket. Students are not to book themselves. Reimbursement will not be provided
115	Zendrive India Pvt Ltd	Rs. 40000/- p.m	Students to make their own arrangements	No
116	Zeotap India Pvt. Ltd.	Rs. 45000/- p.m	Accommodation provided for initial 14 days.	No
117	Zinnov Management Consulting Pvt. Ltd.	Rs. 35000/- p.m	Students to make their own arrangements	Stipend for Any discipline students is Rs.15000 and for Computer Science(A7) students it would be Rs. 35000
118	Zoomcar India Pvt. Ltd.	Rs. 25000/- p.m	Students to make their own arrangements	No
<b>BHOPAL</b>				
119	LHD INDIA	Rs. 15000/- p.m	Students to make their own arrangements	187, Zone-1, Maharana Pratap Nagar (MP Nagar), Bhopal - 462023 Air-conditioned work space will be provided to each student.
<b>CHANDIGARH</b>				
120	HERON A ParexelCompany	Rs. 15000/- p.m	No	No
<b>CHENNAI</b>				
121	Amazon Development Center	Rs. 40000/- p.m	Accommodation will be provided for 1st week	Daily conveyance from home to office will be provided. Sodexo coupons worth Rs.1100/- per month is given to the students. Amazon will also take care of flight tickets to and fro. Only the company will book the tickets and they will reach out one week before joining for travel and accommodation.
122	Amazon Fulfilment Centre	Rs. 40000/- p.m	No	No
123	Central Leather Research Institute (CLRI)	Rs. 12000/- p.m	Students to make their own arrangements	Students with CG greater than or equal to 7 at the time of registration

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
124	HDFC Bank	Rs. 40000/- p.m	Students to make their own arrangements	No
125	PAYPAL	Rs. 40000/- p.m	Acco. for boys only	No
126	PricewaterhouseCoopers (PWC)	Rs. 40000/- p.m	Students to make their own arrangements	No
127	Qualcomm India Pvt Limited	Rs. 30000/- p.m	Provided by the organization	Cab Facilities provided for conveyance to/from office.
128	S.R. Batliboi & Co. Llp	Rs. 21100/- p.m	Students to make their own arrangements	No
129	Structural Engineering Research Centre	Rs. 12000/- p.m	Students to make their own arrangements	Students with CG greater than or equal to 7 at the time of registration
130	VESTAS TECHNOLOGY LTD.	Rs. 15000/- p.m	Students to make their own arrangements	No
<b>DELHI</b>				
131	Amazon Development Center	Rs. 40000/- p.m	Students to make their own arrangements	1) Amazon will take care of to and fro Travel 2) Initial Accommodation will be given for 15 days. 3) Food Coupons worth Rs. 1100 Will be given Per month
132	Edupristine	Rs. 40000/- p.m	No	No
133	Quality Council of India	Rs. 25000/- p.m	Students to make their own arrangements	Actuals for the field trip
<b>DHARWAD</b>				
134	Tata Motors Ltd.	Rs. 18000/- p.m	Students to make their own arrangements	Subsidized food
<b>FARIDABAD</b>				
135	Rite Infotech Pvt Ltd	Rs. 18000/- p.m	No	No
<b>GOA</b>				
136	CIPLA Ltd	Rs. 14000/- p.m	No	No
137	IFB Industries	Rs. 15000/- p.m	Arranged by the institute	No
<b>GREATER NOIDA</b>				
138	ST Microelectronics (I) Pvt.Ltd.	Rs. 26000/- p.m	Students to make their own arrangements	All mentioned
<b>GURGAON</b>				
139	Amazon Fulfillment Center	Rs. 40000/- p.m	No	No
140	American Express India	Rs. 30000/- p.m	Accommodation will be provided by the organization for initial 7 days	Reimbursement of actual fare during field trips Cab facility for everyday pick and drop 8.5 hours per day working. No fixed timings
141	Ernst & Young Pvt Ltd.	Rs. 15100/- p.m	No	No
142	Futures First Info Services Pvt Ltd	Rs. 20000/- p.m	Students to make their own arrangements	No
143	IMS Health	Rs. 16500/- p.m	No	No
144	KPMG	Rs. 15000/- p.m	No	First class train fare from/to home/PS station. Reimbursement of local conveyance.
145	Mahle Filters India Ltd	Rs. 8000/- p.m	Students to make their own arrangements	No
146	Of Business.com	Rs. 30000/- p.m	No	No
147	Orange Business Services	Rs. 30000/- p.m	No	No
148	Pluss Advanced Technologies Pvt. Ltd.	Rs. 12000/- p.m	Students to make their own arrangements	Second Saturday will be off
149	PricewaterhouseCoopers (PWC)	Rs. 40000/- p.m	Students to make their own arrangements	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
150	Rivigo Services Pvt Ltd	Rs. 40000/- p.m	No	For Tech 40000 K, For operations 25000K
151	S.R. BATLIBOI & CO. LLP	Rs. 21100/- p.m	Students to make their own arrangements	No
152	SRF Ltd.	Rs. 12000/- p.m	Students to make their own arrangements	Formals to be used in office
153	Zinnov Management Consulting Pvt. Ltd.	Rs. 18000/- p.m	Students to make their own arrangements	No
<b>HALOL</b>				
154	Aditya Birla Insulators	Rs.15000/-p.m.	No	No
<b>HARIHAR</b>				
155	Grasim Polyfiber	Rs. 5000/- p.m	No	No
<b>HOSUR</b>				
156	Faiveley Transport Rail Technologies India Ltd (FTRTIL)	Rs. 18000/- p.m	Provided by the organization	No
<b>HYDERABAD</b>				
157	Amazon Development Center	Rs.40000/-p.m.	Initial accommodation for 2 weeks	No
158	Adaequre	Rs.15000/-p.m.	Students to make their own arrangements	No
159	Amazon Business Intelligence	Rs.40000/-p.m.	Students to make their own arrangements	No
160	Autodesk	Rs.25000/-p.m.	Initially one week accommodation	No
161	Auto RABIT	Rs.27000/- p.m.	No	No
162	Amazon Fulfillment Center	Rs. 40000/- p.m	No	No
163	Biophore	Rs.8000/-p.m.	No	No
164	CA Technologies	Rs.30000/-p.m.	Students to make their own arrangements	No
165	Cisco Systems (India) Pvt. Ltd - Software Engineering	Rs.34000/-p.m.	Students to make their own arrangements	No
166	Centre for DNA Fingerprinting and Diagnostics	Rs 12000/-p.m.	Provided by the organization	&Double;To encourage participation of students in Govt. of India (CSIR) Research Labs for PS - II BITS Pilani is offering scholarship to students with CGPA 7 & above subject to a maximum of Rs.12000/-pm after deduction of (any) stipend amount beingpaidby the organization. Double; Company Shuttle is available from the hostel to the Organization
167	Dr. Reddys Laboratories	Rs.10000/-p.m.	Students to make their own arrangements	No
168	GGK Technologies - Data Analytics	Rs.20000/-p.m.	Students to make their own arrangements	No
169	GGK Technologies - Mobile Services	Rs.20000/-p.m.	No	No
170	GGK Technologies - Mobile App Development	Rs.20000/-p.m.	No	No
171	IMI Mobile	Rs.25000/-p.m.	No	No
172	IndustryARC	Rs.12000/-p.m.	Students to make their own arrangements	No
173	JDA Software Solutions	Rs.26000/-p.m.	No	No
174	John F Welch Technology Center (GE)	Rs.25000/-p.m.	No	No
175	Jochebed Tech Solutions	Rs.20000/-p.m.	No	No
176	My smart price	Rs.25000/-p.m.	No	No
177	Mordor Intelligence	Rs.17000/-p.m.	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
178	Market Data Forecast	Rs.18000/-p.m.	Students to make their own arrangements	No
179	Mol De Analytics	Rs.12000/-p.m.	No	No
180	Mytrah Energy (India) Private Limited	Rs.25000/-p.m.	Accommodation will be provided for the first 2 weeks following which PS Students will be required to make their own accommodation arrangements.	No
181	Merilytics	Rs.20000/-p.m.	Students to make their own arrangements	No
182	Next Education India Pvt. Ltd.	Rs.30000/-p.m.	Students to make their own arrangements	No
183	NR Equipments	Rs.12000/-p.m.	No	No
184	Nvidia Graphics - Hardware	Rs.30000/-p.m.	Students to make their own arrangements	To & Fro airfare will be given once
185	Nvidia Graphics - Software	Rs.30000/-p.m.	Students to make their own arrangements	No
186	PricewaterhouseCoopers (PWC)	Rs.40000/-p.m.	Students to make their own arrangements	No
187	Qualcomm india private limited	Rs.20000/-p.m.	Provided by the organization	No
188	ReportGarden Technologies Pvt. LTd.	Rs.25000/-p.m.	Students to make their own arrangements	No
189	Red Pine Signals	Rs.20000/-p.m.	No	No
190	Synergiz Global	Rs.15000/-p.m.	No	No
191	Synopsys India Pvt. Ltd.	Rs.20000/-p.m.	No	No
192	Tau Films India Pvt. Ltd	Rs.30000/-p.m.	Students to make their own arrangements	No
193	Thomson Reuters	Rs.16600/-p.m.	No	No
194	Worley Parsons India	Rs.16000/-p.m.	No	No
195	Xilinx India Technology Services Pvt. Ltd.	Rs.20000/-p.m.	No	No
<b>JAIPUR</b>				
196	CEG Limited	Rs.10000/-p.m.	No	No
197	Futures First Info Services Pvt. Ltd.	Rs.20000/-p.m.	No	No
198	NBC Bearings	Rs.4000/-p.m.	Provided by the organization	No
<b>JAMSHEDPUR</b>				
199	Tata Motors Ltd.	Rs.18000/-p.m.	Students to make their own arrangements	No
<b>KOLKATA</b>				
200	IFB Engineering Division	Rs.15000/-p.m.	Students to make their own arrangements	No
<b>LUCKNOW</b>				
201	Tata Motors Ltd.	Rs.18000/-p.m.	Students to make their own arrangements	Snacks are provided during office hours
<b>MUMBAI</b>				
202	Aditya Birla Science & Technology Company Ltd.	Rs.11000 /-p.m.	Accommodation for two males & two females or all 4 males or 4 females	No
203	AlphaMD	Rs.17000/-p.m.	No	No
204	Aditya Birla Corporate World Class Manufacturing	Rs.22000/-p.m.	Students to make their own arrangements	No
205	Aditya Birla Corporate IT	Rs.22000/-p.m.	Students to make their own arrangements	No
206	Amazon Operations	Rs.40000/-p.m.	No	No
207	Century Rayon	Rs.7500/-p.m.	Only for Boys	No
208	Credit Suisse	Rs.25000/-p.m.	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
209	Credit Suisse - Market Risk Quant	Rs.25000/-p.m.	No	No
210	Credit Suisse - MLR Non-quant	Rs.25000/-p.m.	No	No
211	Credit Suisse - Credit Analytics	Rs.25000/-p.m.	No	No
212	Credit Suisse - Model Risk Management	Rs.25000/-p.m.	No	No
213	Credit Suisse - Risk & Finance Data Analytics Reporting	Rs.25000/-p.m.	No	No
214	Credit Suisse - Prime Services	Rs.25000/-p.m.	No	No
215	Credit Suisse - Global Markets Controls COO	Rs.25000/-p.m.	No	No
216	DBOI (Deutsche Bank) – Operations	Rs.30000/-p.m.	Students to make their own arrangements	No
217	Development Consultants Pvt. Ltd. (DCPL)	Rs.8000/-p.m.	Accommodation not available for girls!	No
218	Dorsch Consult (India) Pvt. Ltd., Mumbai	Rs.14000/-p.m.	Provided only for boys	No
219	Edelweiss Financial Services	Rs.30000/-p.m.	Students to make their own arrangements	No
220	EduPristine - Neev Knowledge Management Pvt. Ltd.	Rs.40000/-p.m.	Students to make their own arrangements	No
221	Geometric Limited	Rs.16000/-p.m.	Students to make their own arrangements	No
222	Grasim Industries Pulp and Fibre Division	Rs.17000/-p.m.	No	No
223	HDFC Bank	Rs.20000/-p.m.	No	No
224	Here Maps - Software Testing	Rs.30000/-p.m.	Students to make their own arrangements	No
225	Hourglass Research	Rs.17000/-p.m.	Students to make their own arrangements	No
226	Here Maps - Data Structures	Rs.30000/-p.m.	No	No
227	Here Maps - Distributed Data	Rs.30000/-p.m.	No	No
228	Henkel	Rs.20000/-p.m.	Students to make their own arrangements	Students should bring their own laptops as computers are not provided by the company
229	Indus OS	Rs.30000/-p.m.	No	No
230	J P Morgan Services - Quant	Rs.40000/-p.m.	Students to make their own arrangements	No
231	J P Morgan Services -Centralized Research Group(CRG)	Rs.40000/-p.m.	Students to make their own arrangements	No
232	J P Morgan Services- Global Markets Group(GMG)	Rs.40000/-p.m.	Students to make their own arrangements	No
233	J P Morgan services- Global research Centre(GRC)	Rs.40000/-p.m.	Students to make their own arrangements	No
234	JPMC CIB Operations	Rs.26250/-p.m.	No	No
235	JPMC CIB Operations- Robotics Automation	Rs.26250/-p.m.	No	No
236	J.P. Morgan Chase	Rs.26250/-p.m.	No	No
237	J. P MORGAN CIB - e trading	Rs.60000/-p.m.	Students to make their own arrangements	No
238	J.P. Morgan Services India Pvt. Ltd	Rs.40000/-p.m.	Students to make their own arrangements	No
239	KPMG	Rs.15000/-p.m.	No	No
240	Morningstar	Rs.35000/-p.m.	Students to make their own arrangements	No
241	MSCI	Rs.40000/-p.m.	Students to make their own arrangements	No
242	MSCI (Global Implementation Services)	Rs.40000/-p.m.	Students to make their own arrangements	No
243	My POS Technologies Pvt. Ltd.	Rs.50000/-p.m.	Students to make their own arrangements	No
244	MSCI (NPD Index Research)	Rs.40000/-p.m.	Students to make their own arrangements	No
245	MSCI (Solution Management)	Rs.40000/-p.m.	Students to make their	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
			own arrangements	
246	Multi Commodity Exchange of India Ltd.	R.s15000/-p.m.	No	No
247	My POS Technologies Pvt. Ltd.	Rs.50000/-p.m.	No	No
248	MSCI (IMR)	Rs.40000/-p.m.	Students to make their own arrangements	No
249	Nomura Global Markets	Rs.50000/-p.m.	Students to make their own arrangements	No
250	Nomura Global Finance	Rs.50000/-p.m.	No	No
251	Nomura Global Risk	Rs.50000/-p.m.	Students to make their own arrangements	No
252	PricewaterhouseCoopers (PWC)	Rs.40000/-p.m.	No	No
253	Skoda Auto India Pvt. Ltd.	Rs.14000/-p.m.	Affordable accommodations can be found in nearby colonies - JB Nagar, Poonam Nagar, Shanti Nagar, Sher-E-Punjab	No
254	S.R. BATLIBOI & CO. LLP	Rs.21100/-p.m.	Students to make their own arrangements	No
255	Star TV	Rs.65000/-p.m.	No	No
256	Thornton Tomasetti	Rs.15000/-p.m.	Students to make their own arrangements	No
257	UPGRAD	Rs.40000/-p.m.	No	No
258	Viacom18 Media Pvt. Ltd.	Rs.30000/-p.m.	Students to make their own arrangements	No
259	VMS (Vakil Mehta Seth) Consultants Private Limited	Rs.10000/-p.m.	Students to make their own arrangements	No
260	Worley Parsons India	Rs.19000/-p.m.	Students to make their own arrangements	No
261	Yrals Digital India Pvt.Ltd.	Rs.16000/-p.m.	Students to make their own arrangements	No
<b>NAGDA</b>				
262	Grasim Industries Ltd.	Rs.8000/-p.m.	Provided by the organization	Safety Shoes Purchase and Insurance required
<b>NAGPUR</b>				
263	Techture Structures Pvt Ltd.	Rs.30000/-p.m.	Students to make their own arrangements	No
<b>NAVI MUMBAI</b>				
264	Hindalco Innovation Centre - Semifab Talaja	Rs.10000/-p.m.	Students to make their own arrangements	Company bus for conveyance to office shall be provided subjected to seat availability
<b>NEW DELHI</b>				
265	Central Road Research Institute	Rs.12000/-p.m.	Students to make their own arrangements	Students having CGPA above 7.00 will get stipend from PSD.
266	Ecom Express Pvt. Ltd.	Rs.30000/-p.m.	No	No
267	National Council of Applied Economic Research	Rs.6500/-p.m.	Students to make their own arrangements	Students with CG greater than or equal to 7 at the time of registration will be eligible for scholarship
268	National Institute of Science and Tech. Dev. Studies (NISTADS)	Rs.3000/-p.m.	No	To encourage participation of students in Govt. of India (CSIR) Research Labs for PS - II BITS Pilani is offering scholarship to students with CGPA 7 & above subject to a maximum of Rs.12000/-pm after deduction of (any) stipend amount being paid by the organization
<b>NOIDA</b>				
269	Adobe Systems	Rs.40000/-p.m.	14 day accommodation at time of joining	No
270	Genpact	Rs.15000/-p.m.	No	No
271	HCL Technologies	Rs.18000/-p.m.	Students to make their	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
			own arrangements	
272	Indiamart Internesh Ltd.	Rs.20000/-p.m	No	No
273	Mentor Graphics	Rs.30000/-p.m.	Initial Accommodation will be provided from 3rd July to 9th July 2017	Subsidized breakfast and lunch Joining Date is 4 <sup>th</sup> July, 2017
274	Nucleus Software Export Ltd	Rs.25000/-p.m.	Students to make their own arrangements	Accommodation will be provided for the first seven days
275	Pitney Bowes Software India Pvt. Ltd.	Rs.30000/-p.m.	No	No
276	Tolexo Online Pvt Ltd	Rs.20000/-p.m	No	No
<b>PANTNAGAR</b>				
277	Tata Motors Ltd.	Rs.18000/-p.m.	Students to make their own arrangements	No
<b>PILANI</b>				
278	Central Electronics Engineering Research Institute	Rs.12000/-p.m.	Students to make their own arrangements	Scholarship is paid by BITS if CG is above 7. No stioend is given by CEERI Pilani.
<b>PORVORIM</b>				
279	Browntape Technologies Pvt. Ltd.	Rs.25000/-p.m.	No	No
<b>PUNE</b>				
280	Autodesk India Pvt. Ltd.	Rs.25000/-p.m.	No	No
281	Avaya India Private Limited	Rs.25000/-p.m.	Students to make their own arrangements	No
282	B.G.Shirke Construction Technology Pvt. Ltd.	Rs.10000/-p.m.	Students to make their own arrangements	Stipend for PG Students is 11,500/-
283	Bharat Forge Ltd	Rs.5000/-p.m.	Students to make their own arrangements	Station accept only boys
284	Cadence Design Systems India Pvt Ltd. - CAD Software	Rs.18000/-p.m	Students to make their own arrangements	Building No 1 , First Floor, CommerZone, Samrat Ashok Road, Yerawada Pune- 411006
285	Cadence Design Systems India Pvt Ltd. - Processor Design	Rs.18000/-p.m	Students to make their own arrangements	No
286	Credit Suisse - Risk & Finance Data Analytics Reporting	Rs.25000/-p.m.	No	No
287	Credit Suisse- Finance Change	Rs.40000/-p.m	No	No
288	Credit Suisse	Rs.25000/-p.m.	Students to make their own arrangements	No
289	Divgi TorqTransfer Systems Pvt. Ltd Shivare	Rs.12000/-p.m.	No	No
290	Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari	Rs.12000/-p.m.	Students to make their own arrangements	No
291	EMC	Rs.25000/-p.m.	No	No
292	Geometric Limited	Rs.15600/-p.m	No	No
293	Halliburton Technology Center	Rs.12000/-p.m.	No	No
294	IDeaS - SAS - Analytics	Rs.25000/-p.m.	No	No
295	Johnson Controls	Rs.10000/-p.m.	No	No
296	National Chemical Laboratory	Rs.12000/-p.m.	Students to make their own arrangements	Students with CG greater than or equal to 7 at the time of registration
297	Nvidia Graphics - Software Systems	Rs.30000/-p.m.	No	No
298	Nvidia Graphics - Hardware	Rs.30000/-p.m.	Students to make their own arrangements	Company will provide one way air fare reimbursement for travelling between home and the company.
299	Reflexis Systems India Pvt Ltd.	Rs.20000/-p.m.	Students to make their own arrangements	No
300	Searce	Rs.25000/-p.m.	Initial one week accommodation provided by company	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
301	SKF India Ltd.	Rs.6000/-p.m.	Students to make their own arrangements	No
302	Skoda Auto India Pvt. Ltd. (Chakan)	Rs.12000/-p.m.	Students to make their own arrangements	No
303	Sokrati Technologies Pvt. Ltd.	Rs.10000/-p.m.	No	No
304	Spicer India Ltd.	Rs.8000/-p.m.	Students to make their own arrangements	No
305	Symantec Software Solutions Pvt. Ltd - Data Analytics	Rs.40000/-p.m.	Students to make their own arrangements	No
306	Symantec Software Solutions Pvt. Ltd. - Data Structures and Algorithms	Rs.40000/-p.m.	No	No
307	Tata Autocomp Systems Ltd.	Rs.12000/-p.m.	No	No
308	Tata Chemical Innovation Center	Rs.10000/-p.m.	No	No
309	Tata Motors Ltd.	Rs.18000/-p.m.	Students to make their own arrangements	No
310	vConstruct Private Limited	Rs.15000/-p.m.	Students to make their own arrangements	No
311	Veritas Software Technologies India	Rs.40000/-p.m.	Students to make their own arrangements	No
<b>RISHRA</b>				
312	Aditya Birla Insulators	Rs.15000/-p.m.	No	No
<b>SANAND</b>				
313	Tata Motors Ltd.	Rs.18000/-p.m.	No	No
<b>SECUNDERABAD</b>				
314	Ducere Technologies - Embedded Systems	Rs.20000/-p.m.	No	No
315	Ducere Technologies - Pattern Recognition	Rs.20000/-p.m.	No	No
<b>SIRSI</b>				
316	Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari	Rs.20000/-p.m.	Students to make their own arrangements	No
<b>THAILAND</b>				
317	Aditya Birla Chemicals(Thailand)Ltd-Sulphites	Rs.5000/-p.m	No	No
<b>TRIVANDRUM</b>				
318	Klientas	Rs.10000/-p.m.	Students to make their own arrangements	If staying for one term - INR 10000 pm If staying for two internship terms 10000 per month for the first term (5.5 months) of internship and 15000 per month for the second term of internship. Bonus: INR 20000 if staying for two terms of internship - INR 10000 to be paid at the starting for the second term and INR 10000 to be paid in the last month of the second term.
319	Leap Consulting	Rs.7000/-p.m.	No	No
320	UST Global Infiniy Labs	Rs.10000/-p.m.	No	Company is focussing on offering PPO



**LIST OF PROJECT ASSIGNMENTS FOR SECOND SEMESTER 2016-2017**

<b>1.</b>	<b>FAIRFIELD AND POWER DRIVE TECHNOLOGY PVT LTD, AHMEDABAD</b>
	1.LANE DETECTION USING COMPUTER VISION TECHNIQUES
	2.INTELLIGENT RESOURCE MANAGER
<b>2.</b>	<b>SKODA AUTO INDIA PVT. LTD, AURANGABAD</b>
	3.SUBSCRIBER SPECIFIC DEBUGGING INFRASTRUCTURE
	4.SALES AUTOMATION USING LEADSQUARED
<b>3.</b>	<b>ALTAIR ENGINEERING INDIA PVT. LTD, BANGALORE</b>
	5.DRR IMPROVEMENT, HIRA AND FMEA
	6.SIMULATION OF FINE BLANKING PROCESS AND PROCESSES RELATED TO MANUFACTURING OF PARTS IN A FINE BLANKING PRESS
<b>4.</b>	<b>ALTIMETRIK INDIA PVT LTD, BANGALORE</b>
	7.AUTOMATED TESTING OF OLCM
<b>5.</b>	<b>ALTISOURCE BUSINESS SOLUTIONS, BANGALORE</b>
	8.TEAM EFFICIENCY ANALYTICS
	9.MSSQL RE-PLATFORMING, UI TEST AUTOMATION AND AHV SUPPORT FOR SSMS
	10.FRONT END DEVELOPMENT FOR DDSM
<b>6.</b>	<b>AMAZON DEVELOPMENT CENTER, BANGALORE</b>
	11. AERIAL VEHICLE TRACKER 2. VIDEO QUALITY ASSESSMENT 3. IR VIDEO COLOURIZATION
	12.ANALOG AND MIXED SIGNAL VERIFICATION OF PSOC-6&APOS;S HARD IP
	13.AUTOMATED TESTING AND VALIDATION IN A PYTHON BASED ENVIRONMENT
	14.AUTOMATION IN MEMORY CHARACTERIZATION
	15.AUTOMATION OF DATABASE MANAGEMENT SYSTEM FOR CYPRESS DEVICES
	16.BENCHMARKING STORAGE AND RETRIEVAL FRAMEWORK
	17.BLOCK LEVEL VERIFICATION OF AMS CHIP
	18.BOOT-TIME OPTIMIZATION
	19.CARPARK OCCUPANCY IDENTIFICATION USING CONVOLUTIONAL NEURAL NETWORK
	20.CARRIER FREQUENCY OFFSET ESTIMATION FOR WLAN
	21.CONSTRAINED RANDOM BASED TEST BENCH DEVELOPMENT FOR PERI IP
	22.CY22801 PROGRAMMING KIT: PCB LAYOUT
	23.DESIGN AND SIMULATION OF SUB BLOCKS IN ADUX1060
	24. DESIGN OF HIGH-VOLTAGE I/O BUFFERS USING LOW-VOLTAGE TRANSISTORS.
	25.DEVELOPING GEO-POINTING MODULE AND GRAPHICAL USER INTERFACE FOR INERTIALLY STABILIZED TWO AXIS SYSTEMS
	26.DEVELOPING AN OSD(ON SCREEN DISPLAY) DISPLAY MANAGER FOR A THERMAL IMAGING CAMERA
	27.ECOFRIENDLY SURFACE TREATMENT FOR THE CORROSION RESISTANCE OF ALUMINIUM AIRCRAFT ALLOY (AA 2124)
	28.FLOORPLAN EFFICIENCY IMPROVEMENT USING SCRIPTING
	29.FRAMEWORK OF CHIPSIZE STANDARDIZATION
	30.FUNCTIONAL & DESIGN VERIFICATION OF JESD204 COMMUNICATION INTERFACES FOR HIGH-SPEED DATA CONVERTERS
	31.HANDLING IMPAIRMENTS IN FLEXIBLE OFDM COMMUNICATION SYSTEMS
	32.IMPROVEMENT OF FLOORPLAN EFFICIENCY
	33.MULTISPECTRAL PANORAMA STITCHING ON JETSON TX1, ULTRA FAST VIDEO STABILIZATION ON
	34.SNAPDRAGON 210/805
	35.OPTIMIZATION OF EXISTING WIP RATIO PROCESS
	36. PROFILING OF COEL (COOLED ELECTRONICS) PERIPHERAL COMMUNICATION, IMPLEMENTATION OF PIPELINED 3X3 GAUSSIAN FILTER USING STATE MACHINE ON FPGA.
	37.SEMICONDUCTOR INDUSTRY COMPLIANCE IN AUTOMOTIVE SECTOR AND STUDY OF OS JEOPARDY REVIEW FOR AM BUSINESS
	38.STANDARD CELL LAYOUTS AND AUTOMATION
	39.TEST CHIPS DESIGN VERIFICATION
	40.TESTING THE DPD ALGORITHM OF AD9375
	41.USB 3.1 LINK LAYER VERIFICATION
	42.VERIFICATION FOR ADXL261 USING SYSTEM VERILOG AND UVM
<b>7.</b>	<b>AMAZON FULFILLMENT CENTER, BANGALORE</b>
	43. MEDIUM RISK REVIEW OF MODELS USING SR 11-7 GUIDANCE
	44. WORKING OF P&L ATTRIBUTION AND ACCOUNT OWNERSHIP RECONCILIATION
<b>9.</b>	<b>ANALOG DEVICES - DESIGN AND SIMULATION, BANGALORE</b>
	45.CFD MODELING OF THE EXTRUSION PROCESS
	46.ENHANCEMENT IN FULL CUSTOM FLOW TO MITIGATE POST LAYOUT CHALLENGES IN ADVANCE TECHNOLOGY NODES
	47.HARDWARE ACCELERATOR DESIGN FOR LBP ALGORITHM
	48.IMPACT ASSESSMENT OF STANDARDS AND LABELING PROGRAMME FOR ENERGY EFFICIENT APPLIANCES DURING THE XII FIVE YEAR PLAN
	49.LAND VALUE CAPTURE MECHANISMS, URBAN TRANSPORT AND ENERGY VEHICLES
	50.UVM AND SV BASED VERIFICATION OF INTERNALLY DEVELOPED TRANSACTORS
	51.VERIFICATION OF ETHERNET TRANSACTOR

<b>10.</b>	<b>APOLLO TYRES LTD. – IOT, BANGALORE</b>
	52.DEVELOPMENT OF THERAPEUTIC AREA NEWSLETTERS PUBLISHING TOOL
	53.TRENDS IN REGULATORY REJECTIONS OF ONCOLOGY DRUGS
<b>11.</b>	<b>ARM EMBEDDED TECHNOLOGIES PRIVATE LIMITED, BANGALORE</b>
	54.COMPARATIVE ANALYSIS OF ALTERNATIVE PAYMENT AND QUALITY MODELS
	55.MARKET ACCESS CHALLENGES OF INDIAN PHARMA COMPANIES
	56.PRODUCTIZE MARKET ASSESSMENT KEY PERFORMANCE INDICATORS FOR PHARMA COMPANIES
<b>12.</b>	<b>ARUBA NETWORKS - NETWORK PROGRAMMING, BANGALORE</b>
	57.AUTOMATING REPETITIVE WEB BROWSER TASKS USING EXCEL VBA
	58.PRODUCTIVITY IMPROVEMENT
	59.TOTE ANALYSIS,SIOC ANALYSIS,REPORTING IMPROVEMENTS AND OPERATIONS SETUP
<b>13.</b>	<b>AURIGO SOFTWARE, BANGALORE</b>
	60.STUDY OF PRODUCTIONISATION OF BS-IV TIPPER VEHICLE FROM CHASSIS ASSEMBLY LINE
	61.TO ANALYZE VARIOUS ASPECTS OF CLIENTS OPERATIONS AND SALES DATA TO GET INSIGHTS ON FURTHER STRATEGIES AND FLAWS IN THE CURRENT OPERATIONS AND AUTOMATION OF THE PROCESS
<b>14.</b>	<b>BECKMAN COULTER (FORMERLY REAMETRIX INDIA P LTD), BANGALORE</b>
	62.DESIGN PROCESS AND METHODOLOGY FOR STRUCTURAL ELEMENTS
	63.ESTIMATION OF MODULUS OF RESILIENCE BY INDIRECT TENSILE STRENGTH TEST FOR ASPHALT MIXES
<b>15.</b>	<b>BELONG.CO, BANGALORE</b>
	64.QUALITY IMPROVEMENT THROUGH VALIDATION & STANDARDIZATION
	65.QUALITY IMPROVEMENT ON TCF LINE 3
	66.STANDARDIZATION AT TRIM LINE 3 AND PROCESS VERIFICATION OF 1ST SIGNA CAB ASSEMBLY AT LUVCKNOW PLANT
	67.ZINC RECOVREY FROM ETP SLUDGE
<b>16.</b>	<b>BLUE JEANS NETWORK INDIA PVT. LTD, BANGALORE</b>
	68.BUSINESS AND CLIENT ANALYTICS
	69.CIRCUITRY FOR MEASUREMENT OF ACCESS TIME IN MEMORIES
	70.EXPOSURE ANALYSIS OF TRADES
	71.INTEGRATED CAPITAL AND RISK ANALYSIS
	72.MEASURES OF RISK AND GREEK SENSITIVITIES
	73.PRICE TESTING AND STRUCTURED TRADE REVIEW
	74.RISK ANALYSIS OF THE HEDGE FUND PORTFOLIOS
<b>17.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), BANGALORE</b>
	75.CIRCUITRY FOR MEASUREMENT OF ACCESS TIME IN MEMORIES
	76.PRICE TESTING AND STRUCTURED TRADE REVIEW
<b>18.</b>	<b>CAPILLARY TECHNOLOGIES - TESTING AUTOMATION), BANGALORE</b>
	77.EVALUATING THE EFFECT OF DIFFERENT TREATMENT FLUIDS ON CORE SAMPLES IN CORE FLOW
	78.FORMULATION AND EVALUATION OF BREAKER FLUID FOR REMOVAL OF FILTER CAKE IN DRILLING APPLICATIONS
<b>19.</b>	<b>CENTRE FOR ARTIFICIAL INTELLIGENCE &amp; ROBOTICS, BANGALORE</b>
	79.EQUITY DERIVATIVES INDICES STRUCTURING
	80.END TO END AUTOMATION OF BUSINESS WORK BY MAKING TOOLKITS AND UNDERSTANDING OF THE VARIOUS PROCESSES HELD TO CONTROL TRADES
	81.ECONOMIC RISK CAPITAL
<b>20.</b>	<b>CENTRE FOR CELLULAR AND MOLECULAR PLATFORMS (C-CAMP), BANGALORE</b>
	82.DETERMINATION OF TRAFFIC DENSITY USING SNAP SHOT DATA AND PROPOSING A MULTIPLICATIVE FACTOR FOR THE FUNDAMENTAL EQUATION OF TRAFFIC FLOW
<b>21.</b>	<b>CISCO SYSTEMS (INDIA) PVT. LTD - MACHINE LEARNING, BANGALORE</b>
	83.1) TESTFLOW A REGRESSION FRAMEWORK FOR TESTING THE PRODUCT FLOW 2) BILLBOT A WEB APPLICATION FOR CENTRALISING THE LOCAL TESTING OF SOFTWARE COMPONENTS
	84.ANALYSIS AND DESIGN OF PRECAST PRESTRESSED CONCRETE I GIRDER
	85.APPLICATION DEVELOPMENT(CARICA)
	86.APPLICATION DEVELOPMENT, TESTING AND AUTOMATION
	87.APPLICATION OF LEAN PRINCIPLES TO THE LCV ASSEMBLY LINE
	88. BLAST ANALYSIS OF A CYLINDRICAL PIPE TO CALCULATE THE PRESSURE VARIATION INSIDE THE CYLINDER AND FURTHER USE THIS TO CALCULATE THE FAILURE CRITERIA FOR THE CYLINDER.
	89.BOOST A BUILDING N OUR STRENGTHS TOGETHER, SEARCHSERV-BOT , OPERATIONAL DASHBOARD
	90.BUILDING INSIGHTS FROM CUSTOMER DATA AND CREATING ALERT DASHBOARD
	91.BUSINESS ACTIVITY MONITORING
	92.CUSTOM CAMEL COMPONENT
	93.DASHBOARD AND PLATFORM FOR PAYLOAD VERIFICATION
	94.DATA MANAGEMENT AND MATERIAL VISIBILITY AT BFL
	95.DATA MANAGEMENT AND VISIBILITY
	96.DATA PATH DESIGN FOR IP CAMERA FEED WITH ARCHIVING AND LIVE STREAM CAPABILITY
	97.DENT ANALYSIS
	98.DESIGN AND DEVELOPMENT OF VERIFICATION AS A SERVICE
	99.DEVELOPMENT OF API SPECIFICATION TOOL
	100.ENHANCEMENT OF ACTIVITIES SEARCH
	101.ESTIMATION OF MANPOWER USING MOST STUDY, LINE BALANCING AND IDENTIFICATION OF NON-VALUE ADDED ACTIVITIES

	102.FOSTERING USER ENGAGEMENT THROUGH PAYPAL PURCHASE REVIEWS, SOCIAL SHARING AND REWARDS
	103.FOSTERING USER ENGAGEMENT THROUGH PURCHASE REVIEWS, SOCIAL SHARING AND REWARDS
	104.GENERATION & EXPRESSION OF ALPHA AMYLASE MUTANTS
	105.IMPLEMENTATION OF FPTI FOR REWARDS TEAM
	106.IMPLEMENTATION OF STANDARDISED WORK AND JIDOKA IN LCV SHOPA
	107.IMPROVE PRODUCTIVITY USING MOST STUDY-BIW &FRAME SHOP
	108.INSIGHTS FROM ACTIVITIES HADOOP FEED, MONITORING AND ALERT SYSTEM FOR ACTIVITY SERVICES AND PAYMENTS SOR RECONCILIATION WITH ACTIVITIES DATA-STORE
	109.JIDOKA IMPLEMENTATION IN LCV SHOP - HUMAN ERRORS IDENTIFICATION AND ELIMINATION (AND) IMPROVING PRODUCTIVITY OF MUFFLER SUBASSEMBLY IN LCV SHOP
	110.LIVE ALERTING AND MONITORING DASHBOARD
	111.MOST ANALYSIS OF MODEL : LP 410 34WB BS4
	112.ODM RULE TEST COVERAGE
	113.OFFER MANAGEMENT TOOL NOTIFICATIONS
	114.OFFER RECONCILIATION SYSTEM
	115.OFFERSEARCHSERV
	116.PARALLELIZATION OF PAYPAL RISK MANAGEMENT STRATEGIES
	117.PAVEMENT DESIGN AND TRAFFIC ANALYSIS
	118.PERSONALIZATION: DESIGN AND DEVELOPMENT
	119.PRODUCT ANALYSIS AND DASHBOARD DEVELOPMENT FOR ADAPTIVE PAYMENTS
	120.REPORT GENERATION STATUS
	121.SHADOW SYSTEM
	122.SITE DIRECTED MUTAGENESIS AND EXPRESSION STUDIES OF MANNANASES
	123.STANDARDIZATION
	124.THE STUDY AND IMPLEMENTATION OF STANDARDIZED WORK
	125.TO ELUCIDATE THE ROLE OF ORIGIN OF REPLICATION IN BACTERIAL GEMONE EXPRESSION AND ORGANIZATION
	126.TRAFFIC STUDY AND PAVEMENT DESIGN
	127.UI FOR INTEGRITY CHECK, LIVE MONITORING TOOL FOR SERVERS
	128.XGBOOST: DEVELOPMENT AND DEPLOYMENT AT AMERICAN EXPRESS
<b>22.</b>	<b>CYPRESS SEMICONDUCTOR INDIA PVT LTD, BANGALORE</b>
	129.CO-CREATION OF COLD TESTING OF 1.05L CRAIL ENGINES WITH HOT TESTING PERFORMANCE
	130.DIGITAL VLO
	131.FACIAL FEATURE EXTRACTION AND RECOGNITION USING MACHINE LEARNING
	132.FACIAL FEATURE EXTRACTION AND RECOGNITION USING MACHINE LEARNING
	133.FUNCTIONAL VERIFICAITON OF DDR4 LRDIMM
	134.HIGH SPEED ETHERNET IOL TEST SUIT DEVELOPMENT
	135.MACHINE LEARNING ON WATER QUALITY
	136.WARRANTY REDUCTION OF FUEL LEVEL SENSORS
<b>23.</b>	<b>DECISION RESOURCES GROUP, BANGALORE</b>
	137.DESIGN AND STRUCTURAL ANALYSIS OF UNDERGROUND WATER TANK OF PRATIKSHA NAGAR, SION, MUMBAI
	138.STRATEGY AND BUSINESS DEVELOPMENT IN THE SOLAR ENERGY DIVISION (GOVERNMENT PROJECTS)
<b>24.</b>	<b>EMC, BANGALORE</b>
	139.EFFICIENT SERVICE PLANNING IN THE AUTOMOBILE INDUSTRY
	140.INDUSTRIAL PRODUCTION DASHBOARDS
	141.POWERTRAIN STRATEGY FOR ALL SKODA MODELS TILL 2025, SUMMARY OF GLOBAL TRENDS IN THE AUTOMOBILE INDUSTRY
	142.PRIME RISK MANAGEMENT & STOCK LOAN
<b>25.</b>	<b>ENSCI - A UNIT OF WEIR MINERALS INDIA PVT. LTD, BANGALORE</b>
	143.ANALYSIS AND DESIGN OF BUILDINGS
	144.ANALYSIS AND DESIGN OF STRUCTURES
	145.RECTIFICATION OF DIE DESIGNS AND ESTABLISHMENT OF A PROJECT LIFECYCLE MANAGEMENT SYSTEM
<b>26.</b>	<b>ERICSSON GLOBAL INDIA PVT. LTD, BANGALORE</b>
	146.AUTOMATION OF OPENSTACK INSTALLATION
	147.CSLOGANALYZER
	148.FIXING ISSUES DETECTED BY SCA
	149.KPI & UNIT TESTING
	150.REGRESSION TESTING INFRASTRUCTURE
	151.RTSP PROTOCOL IMPLEMENTATION
<b>27.</b>	<b>ERNST &amp; YOUNG GLOBAL DELIVERY SERVICES, BANGALORE</b>
	152.GDS TICKETING AUTOMATED TESTING
	153.GEO BRANDING AND ABSENT ITEM ANALYSIS
	154.ZEOCORE DATA PLATFORM
<b>28.</b>	<b>FIBER LINK, BANGALORE</b>
	155.GLOBAL MARKET CONTROLS ATTESTATION
	156.MACRO INVESTIBLE INDICES - QUANTITATIVE RESEARCH
	157.RISK MANAGEMENT USING QUANTITATIVE RESEARCH TECHNIQUES AND BUILDING OF COMMODITY INDICES

<b>29.</b>	<b>GE DIGITAL, BANGALORE</b>
	158.CHARACTERIZATION OF CRITICALITY FOR AXLE PARTS
	159.PROCESSES VALIDATION AND MOP IMPROVEMENT
	160.QUALITY CONTROL ON SIGNA LINE
	161.QUALITY IMPROVEMENT IN TCF LINE-3
	162.SUPPLIER QUALITY IMPROVEMENT AND WCQ LEVEL 3 PREPARATION
	163.ZERO STATION- RELAYOUT & PROCESS PLANNING & VALIDATION OF THE ASSEMBLY OF RETARDER & GEAR BOX
<b>30.</b>	<b>GIFTXOXO, BANGALORE</b>
	164.AN EXCURSION IN ASYNCHRONOUS DIGITAL LOGIC
	165.EQUITY RESEARCH ON US HEALTHCARE IT SECTOR
<b>31.</b>	<b>GOLDMAN SACHS INDIA PVT. LTD. – OPERATIONS, BANGALORE</b>
	166.ANALYTICS AND STRATEGY PLANNING FOR A FITNESS FIRM IN THE US
	167.CLOUD EXTENDER HEALTH CHECK ALERTS
	168.DEVELOPMENT AND CONFIGURATION OF CLIENT DASHBOARD SYSTEMS - P3
	169.DEVELOPMENT AND SIMULATION OF HYDRAULICALLY ACTUATED QUADRUPED LOCOMOTION GAITS
	170.DOUBLE TRACK METHOD FOR TRAJECTORY TRACKING OF AUTONOMOUS VEHICLES
	171.IMPROVEMENT IN THE PRODUCTION PROCESS - SHAPING AND SLIPHOUSE DEPARTMENT
	172.SERVER SIDE THROTTLING & SQS DLQ MANAGEMENT
	173.SMART MATCH AND SUPPORT FOR SWEEPING PREPAY INVOICES
	174.TESTING THE CART SERVICE BY MOCKING DOWNSTREAM SERVICES
<b>32.</b>	<b>HINDUSTAN UNILEVER RESEARCH CENTRE, BANGALORE</b>
	175.COMPARATIVE ANALYSIS OF "NEWS AGGREGATOR" PLATFORMS
	176.PREPARATION OF EQUIPMENT TRACKER AND FAILURE MODE ASSESSMENT LIST
	177.RANKING OF PHARMA COMPANIES ON THE BASIS OF THEIR SOCIAL MEDIA PRESENCE, AND ESTABLISHING THEIR PATIENT-CENTRICITY
	178.GENERATE A LIST OF TESTING REAGENTS USED (BOTH MADE AND PURCHASED) IN TESTING, SOURCE OF RAW MATERIALS, STORAGE CONDITION, EXPIRATION DATING ASSIGNED AND THE VERIFICATION/VALIDATED STATE OF THESE REAGENTS
	179.IMPACT OF PATENT STATUS AND DRUG EXCLUSIVITIES ON LIFE CYCLE MANAGEMENT STRATEGIES
	180.QUALITY METRICS: KEY PERFORMANCE INDICATORS
	181.ANALYTICAL CHARACTERISATION OF MOLECULAR ANTIBODY BIOSIMILAR TRASTUZUMAB
	182.STATISTICAL MODELING AND ANALYSIS OF THE PROCESS OF MANUFACTURING OF A BIOSIMILAR DRUG
	183.SOCIAL LISTENING REPORT ON HYPERCHOLESTEROLEMIA
	184.HEALTH INSURANCE LANDSCAPE IN INDIA: OPPORTUNITIES AND CHALLENGES
	185. TO DEVELOP INNOVATIVE CONTRACTS DATABASE, ORPHAN DRUG DATABASE AND UPDATE THE COUNTRY ANALYSIS REPORT OF PHILIPPINES.
	186.DEVELOPMENT OF BRAND EQUITY MODEL FOR PHARMACEUTICAL COMPANY
<b>33.</b>	<b>HORTONWORKS, BANGALORE</b>
	187.EROSION RESISTANT COATINGS FOR AEROSPACE APPLICATIONS
	188.MARKET RESEARCH
<b>34.</b>	<b>HSBC, BANGALORE</b>
	189.DOUBLE; DESIGNING RESTFUL WEB SERVICES, JSON EDITOR
	190.EMAIL TEMPLATE EDITOR
	191.MICRO-SERVICE ARCHITECTURE FOR SOURCING KNOWLEDGE PLATFORM
	192.OPTIMIZING THE CODE TO INCREASE THROUGHPUT OF MYSQL DATABASE
	193.ZEOCORE DATA PLATFORM
<b>35.</b>	<b>IMS HEALTH, BANGALORE</b>
	194.A REPORT ON BIM COORDINATION, PROPOSAL MODELLING
	195.ANALYSIS AND DESIGN OF RESIDENTIAL BUILDING AT DELHI
	196.BUILDING INFORMATION MODELING (BIM)
	197.PRODUCT DEVELOPMENT - SYNTRACK
	198.PROJECT MANAGEMENT FOR VARIOUS INFRASTRUCTURE PROJECT
	199.SHOP DRAWING REVIEW AND PEER REVIEW
	200.SHOP DRAWING REVIEW AND PEER REVIEW
<b>36.</b>	<b>INFINERA - EMBEDDED SOFTWARE TESTING, BANGALORE</b>
	201.CHARACTERIZATION OF DURACLONE B27 REAGENT FOR FLOW CYTOMETRY
	202.DESIGN AND DEVELOPMENT OF REGULATORY MATRIX: PHARMACEUTICAL REGULATORY AND PHARMACOVIGILANCE REQUIREMENTS OF REGULATED AND SEMI-REGULATED MARKETS ACROSS THE GLOBE
	203.DEVELOPMENT OF ASSAYS TO DETECT AND QUANTIFY POLYPHOSPHATES IN MAMMALIAN CELLS AND TISSUES
	204.DOMAIN SWAPPING
	205.EXPLOITING THE ADAPTATION MECHANISMS OF PSYCHROPHILES FOR PROTEIN PRODUCTION
	206.FLOW CYTOMETRY BASED DETECTION OF IMMUNE FUNCTION, IMMUNE ACTIVATION AND IMMUNE MONITORING
	207.FORMULATION AND EVALUATION OF A PRO-KINETIC DRUG IN THE TREATMENT OF FUNCTIONAL DYSPEPSIA
<b>37.</b>	<b>INFINITI RESEARCH, BANGALORE</b>
	208. ANALYSIS AND DEVELOPMENT OF ULTRA-LOW VOLTAGE ENABLER CIRCUITS FOR SRAM.
	209.ASSESSMENT OF FUTURE AVIATION OPPORTUNITIES IN INDIA
	210.GST AND ITS IMPACT ON MANUFACTURING IN INDIA

<b>38.</b>	<b>INMOBI - SOFTWARE DEVELOPMENT, BANGALORE</b>
	211.BIOPHYSICAL & THERMODYNAMIC STUDIES OF SERICIN
	212.CORRELATING FOAM PROPERTIES WITH SURFACTANT SOLUTION PROPERTIES OF SINGLE AND MIXED SURFACTANT SYSTEMS
	213.CSSD FIRMWARE DEVELOPMENT
	214.EFFECT OF FOAM BOOSTING MOLECULES ON LOW AND HIGH IONIC STRENGTH SURFACTANT COMPOSITION SYSTEMS
	215.MODELLING ION ELECTROSORPTION IN BI-POLAR POROUS ELECTRODES FROM AN MULTI-IONIC ELECTROLYTE
	216.OBJECTIVE ANALYSIS ON CUSTOMIZED TOOLS FOR DRIVER PROFILING
	217.SILICA-CARBON FILLERS FOR TIRES
	218.STABILITY OF PARTICULATE SUSPENSION (DEVELOPMENT OF NEW SETUP AND INITIAL MEASUREMENTS)
<b>39.</b>	<b>INTEL INDIA TECHNOLOGY PVT. LTD.- VLSI DESIGN, BANGALORE</b>
	219.1. RENAL CELL CARCINOMA: SOCIAL MEDIA LISTENING , 2. MARKET STUDY OF CONSUMER HEALTH SEGMENT IN EUROPE AND MIDDLE EAST
	220.BASELINE PROJECTION TOOL DEVELOPMENT WITH USER-FRIENDLY INTERFACE MICROSOFT EXCEL
	221.COST-EFFECT ANALYSIS ON THE BUDGET IMPACT OF BIOSIMILAR INFlixIMAB (REMSIMA) FOR TREATMENT OF AUTOIMMUNE DISEASES
	222.DEVELOPING MALADY CANVAS AS A BUSINESS STRATEGY FRAMEWORK
	223.GLOBAL BIOSIMILAR LANDSCAPE
	224.ORPHAN DRUG MARKET ANALYSIS
	225.PIPELINE ASSESSMENT OF TOP 10 PHARMACEUTICAL COMPANIES IN THE WORLD FOR TYPE 2 DIABETES
	226.RANKING OF PHARMA COMPANIES ON THE BASIS OF THEIR SOCIAL MEDIA PRESENCE AND ESTABLISHING THEIR PATIENT-CENTRICITY
	227.SEGMENTATION AND TARGETING OF PHYSICIANS IN NORDIC COUNTRIES
	228.TECHNOLOGY DEVELOPMENT OF PILOT SCALE PRODUCTION OF CARBON BLACK-LATEX MASTERBATCH
	229.TRENDLINING OF CBT 124 SPECIFICATIONS AND ANALYTICAL CHARACTERIZATION OF CBT 127
	230.UNMET CLINICAL NEEDS IN AREA OF PAIN MANAGEMENT
<b>40.</b>	<b>J. P MORGAN CIB - E TRADING, BANGALORE</b>
	231.DRAUP
	232.THE PURPOSE OF CONFERENCE EDUCATION SESSION
<b>41.</b>	<b>J. P MORGAN CIB-RFT, BANGALORE</b>
	233.ANDROID DEVELOPMENT
	234.CAPROLACTAM MARKET RESEARCH
	235.DATA BASE PROJECT
	236.DATA BASE PROJECT
	237.DATA CRAWLER
	238.DEVICE DRIVER PORTING & VERIFICATION
	239.GOOGLE MAP API FOR E-COMMERCE
	240.OILFIELD SURFACTANTS MRKET
	241.REPORT ON REAL TIME LOCATION SYSTEM
	242.ROBOTICS PROCESS AUTOMATION
	243.THE PURPOSE OF CONFERENCE EDUCATION SESSION
<b>42.</b>	<b>J.P. MORGAN CHASE, BANGALORE</b>
	244.AN AMALGAM OF TECHNOLOGY AND CONSULTING
	245.AUTOMATION OF REGRESSION TESTING OF METADATA
	246.BRANDING, LOCALIZATION, CUSTOMER ONBOARDING AND SERVICES FOR MAAS360
	247.BULK GENERATION OF GIFT CARDS USING TASK QUEUEING
	248.COMPREHENSIVE STUDY OF EXISTING PLANT LAYOUT AND DEVELOPING PROPOSALS FOR EFFICIENT AND EFFECTIVE LAYOUTS
	249.DEVELOPMENT AND SIMULATION OF ENTIRELY HYDRAULICALLY ACTUATED QUADRUPED WALKING GAITS
	250.DEVELOPMENT OF A DOUBLE TRACK METHOD FOR TRAJECTORY TRACKING OF AN AUTONOMOUS GROUND VEHICLE
	251.DEVELOPMENT OF TOOLS AND SERVICES FOR AMAZON
	252.DOCUMENT TAGGING FOR AUTOMATED PROCESSING (QR CODE ON TAX IDENTITY FORMS)
	253.EVENT AGGREGATION USING TIMER BASED MECHANISM
	254.FRONT END WEB DEVELOPMENT
	255.IDENTIFYING ABUSIVE CUSTOMERS AND ROUTING THEM TO CONCESSION ABUSE PREVENTION TEAM
	256.ONE CLICK SUMMARY PAGE DEVELOPMENT
	257.PAYEE MANAGEMENT
	258.PROJECT1: REPAIR STATUS EMAIL NOTIFICATION PROJECT2: REPAIR STATUS XML FILE VALIDATOR
	259.SALES FORECASTING OF FMCGS
	260.SEMI-AUTOMATION IN MATERIAL HANDLING TO REDUCE WORKFORCE AND COST
	261.SIM REPORTING TOOL & G2S2
	262.TRACES COMMAND LINE TOOL
	263.VARIATION TABLE REDESIGN
	264.WEB DEVELOPMENT USING ANGULARJS
	265.WEB-DEVELOPMENT USING ANGULARJS

	266.WINDOWS APP MANAGEMENT ADMIN UTILITY
<b>43.</b>	<b>JDA SOFTWARE SOLUTIONS, BANGALORE</b>
	267.CHARACTERISATION OF SURFACTANTS USING FOAMABILITY AND FOAM STABILITY METHODS
	268.RECOVERY OF ANIONIC SURFACTANT DOBS FROM WASTEWATER USING ION EXCHANGE RESINS
	269.SEMICONDUCTOR TESTING SYSTEMS: NI-PXI BASED SOLUTION FOR SEMICONDUCTOR TESTING
	270.TESTING AND VERIFICATION OF STAG HOUND AND HARDWARE DESIGN OF STAG-HOUND TI
	271.ZINC RECOVERY FROM SLUDGE
<b>44.</b>	<b>JOHN F WELCH TECHNOLOGY CENTER (GE) , BANGALORE</b>
	272.COPQ REDUCTION: REDUCTION OF DENT GENERATION
	273.CREATING DASHBOARD FOR OEMS (BACKEND)
	274.DATA DOMAIN DIAGNOSIS- D3
	275.DEVELOPING FRONTEND FRAMEWORK FOR OEM DASHBOARD FOR CLIENTS
	276.DIFTR INITIATIVE
	277.DROGON 2.0 : DISPLAY DRIVER TEST AUTOMATION FRAMEWORK
	278.ENTERPRISE CONTENT MANAGEMENT
	279.IMAGE PROCESSING FOR VIDEO ENCODING A REMOTE DESKTOP SOLUTION
	280.IMPROVING RESOURCE MANAGER MODULE FOR NVIDIA&APOS;S LINUX GRAPHICS DRIVER
	281.KERNEL MODE DRIVERS AND WINDOWS DISPLAY DRIVER MODEL
	282.NV-CPL NEXT
	283.PFMEA ENRICHMENT
	284.RESOURCE MANAGER COMPONENT - PCIE
	285.SIZING AUTOMATION AND AUTOMATION OF DUTI TEST CASES
<b>45.</b>	<b>KPIT TECHNOLOGIES, BANGALORE</b>
	286.DYNAMODB TO RELATION DATABASE SYSTEM SYNCHRONIZATION
	287.DATA REPOSITORY FOR SHIPMENT TRACKING ANALYTICS
<b>46.</b>	<b>KPMG, BANGALORE</b>
	288.SOCIAL IMPACT CONSULTING IN DEVELOPMENT SECTOR
	289.OUTBOUND PRODUCTIVITY
<b>47.</b>	<b>MATHWORKS INDIA PRIVATE LIMITED, BANGALORE</b>
	290.IMPROVEMENT IN THE EFFICIENCY OF WORKSHOPS TO IMPROVE SAME DAY DELIVERY
	291.IACS 2017
<b>48.</b>	<b>MEDIA IQ DIGITAL, BANGALORE</b>
	292.1) DESIGN OF FULLY DIFFERENTIAL OTA FOR SWITCHED CAPACITOR APPLICATION 2) DESIGN OF BANDGAP REFERENCE CIRCUIT FOR 200MV REFERENCE VOLATEGE. 3) DESIGN OF NANOPOWER BANDGAP REFERENCE CIRCUIT.
	293.2) AUTOMATING G2S2 CONFIGURATION CHANGES RUN THROUGH PIPELINES FOR DETECTING ERRONEOUS DATA.
	294.ADB LOGPARESER
	295.AMAZON E-READER PRODUCTS MEMORY MANAGEMENT AND AUTOMATION TOOLS
	296.AUTOMATION OF VMWARE IDENTITY MANAGER
	297.CHANNEL ACQUISITION IN GERAN
	298.CLOUD BASED CUSTOMIZATION FOR FIREOS DEVICES
	299.CONFIGURABLE DATA VALIDATOR
	300. DESIGN OF A LOW POWER MEASUREMENT DEVICE.
	301.DEVELOPING FRAMEWORK FOR COMPETITIVE ANALYSIS BETWEEN DEVICES THROUGH INSTRUMENTED TESTING IN WLAN
	302.DEVELOPMENT OF A LIBRARY TO MAKE BLUETOOTH TOOLS COMPATIBLE WITH ANDROID O
	303.FIRE TV OVERLAYS AND AFFILIATES PROGRAM
	304.JIT LLVM COMPILER FOR HEXAGON DSP AND CHECKERS FOR CLANG STATIC ANALYZER
	305.MONITORING HEALTH OF SYSTEM MODULES [DEVICE HANG DETECTION]
	306.RF LINK MANAGEMENT-DEVELOPMENT OF NEW FEATURES
	307.STATISTICAL ANALYSIS OF COMMS CONTACTS ER OF ALEXA
	308.TRSMIGRATION OF FIREWALL RULE FROM LEGACY TO DISTRIBUTED
<b>49.</b>	<b>MERCEDES BENZ, BANGALORE</b>
	309.BULKOFFER PROCESSING
	310.DESIGN AND IMPLEMENTATION OF USER INTERFACE FOR IMMUNOLOGY AGENT
	311.TEXT VALIDATION FRAMEWORK FOR ENHANCED BRAND CONTENT
<b>50.</b>	<b>NATIONAL AEROSPACE LABORATORIES, BANGALORE</b>
	312.IMPROVE PRODUCTION CAPACITY OF HOLLOW-3 CATEGORY INSULATORS
	313.METHODOLOGY FOR SILICON QUALIFICATION OF MEMORIES: DESIGN AND VERIFICATION
<b>51.</b>	<b>NATIONAL CENTRE FOR BIOLOGICAL SCIENCES, BANGALORE</b>
	314.CIVIL RIGHTS COMPLIANCE IN TRANSPORTATION
<b>52.</b>	<b>NATIONAL ENTREPRENEURSHIP NETWORK, BANGALORE</b>
	315.(AUTOMATED FILLING OF TRANSLATION TABLE IN QIK DEVELOPER TOOL
	316.AUDIT-THICKCLIENT
	317.CAPTURE PLANNING AND TENDER COSTING ANALYSIS OF BRAKES AND SAFETY DIVISION IN FAIVELEY TRANSPORT INDIA
	318.DATA ANALYSIS FOR THE SAMS OMS USING ELK STACK
	319.TENDER COST PREPARATION
	320.WALMART-PIPELINE-AUDITOR
<b>53.</b>	<b>NATIONAL INSTRUMENTS SYSTEMS (INDIA) PVT. LTD, BANGALORE</b>
	321.IMMUNOTHERAPY LANDSCAPES ASSESSMENT IN ONCOLOGY
	322.IMPLEMENTATION OF STANDARDIZED WORK AND HIRA MATRIX

	323.IMPLEMENTATION OF STANDARDIZED WORK FOR J BIW
	324.MARKET AND COMPETITIVE LANDSCAPE ANALYSIS OF ANTI HIV DRUGS ACCROSS EUROPE
<b>54.</b>	<b>NETAPP, BANGALORE</b>
	325.DESIGN OF INERTIALLY STABILIZED TWO AXIS GIMBAL SYSTEM
	326.DEVELOPING MEASUREMENT TECHNIQUE FOR FOAM ANALYSIS TO CORRELATE/PREDICT WITH THE CONSUMER PERCEPTION
	327.EFFECT OF PERSONAL CARE FORMULATIONS ON GRAM POSITIVE AND GRAM NEGATIVE BACTERIA
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	329.PREDICTING VISCOSITY OF BINARY SURFACTANT SYSTEMSS USING DPD AND QSPR METHODS
<b>55.</b>	<b>NEXTGEN PMS PVT. LTD, BANGALORE</b>
	330.INDEPENDENT PRICE VERIFICATION, AUTOMATION, \$AFIT AND CONTROL DATABASE
	331.PRICING OF FIXED INCOME INSTRUMENTS AND HEDGING STRATEGY FOR CLIENTS
<b>56.</b>	<b>NOVOZYMES SOUTH ASIA PVT. LTD, BANGALORE</b>
	332.DESIGN PROCESS AND METHODOLOGY FOR STRUCTURAL ELEMENTS
	333.PRODUCT DEVELOPMENT
	334.STRATEGY AND BUSINESS DEVELOPMENT FOR MYTRAH & APOSS SOLAR ROOFTOP BUSINESS
<b>57.</b>	<b>NUTANIX TECHNOLOGIES INDIA PVT. LTD, BANGALORE</b>
	335.ADVERTISING STRATEGY CREATION FOR E-COMMERCE CLIENTS
	336.COUNTERPARTY CREDIT RISK - ANALYSIS OF XVA MANAGEMENT
	337.DEVELOPING PRE-PROVISION NET REVENUE MODEL UNDER STRESS SCENARIO
	338.EQUITY RESEARCH
	339.STRUCTURING AND PRODUCT DEVELOPMENT
<b>58.</b>	<b>NVIDIA GRAPHICS – HARDWARE, BANGALORE</b>
	340.SOCIAL MEDIA MANAGEMENT AND CONTENT PROMOTION FOR EVENTS
	341. AREA OPTIMIZATION TECHNIQUES FOR A FUNCTIONAL BLOCK IN VLSI CIRCUIT DESIGN & FUNCTIONAL SCAN CHAIN TESTING FOR RFCTRL BLOCK.
	342.AUTO-COLLAGE & LAYOUTS
	343.BEHAVIORAL MODEL GENERATION & SCHEMATIC COMPARISON
	344.BUILDING A RECOMMENDATION ENGINE
	345.CLASSIFICATION OF SIGN BOARDS USING MACHINE LEARNING ALGORITHMS AND PERFORMANCE COMPARISON OF GREENPLUM DB AND PG-STROM
	346.COGNITIVE CHATBOT: LUCY
	347.CREATIVE FILTERS AND CAPTURE EFFECTS
	348.DATA PATH DESIGN FOR IP CAMERA FEED WITH ARCHIVING AND LIVE STREAM CAPABILITY
	349.DESIGN OF 0.9V LOW DROPOUT (LDO) REGULATOR
	350. EEG SIGNAL PROCESSING AND BRAIN COMPUTER INTERFACING FOR EYE-BLINK DETECTION AND MENTAL COMMANDS APPLICATION IN VR GAMING.
	351.EVENT MANAGEMENT AND MARKETING
	352.EYE REPLACEMENT AND BINARY SIZE REDUCTION
	353.FINNONE LOAN MANAGEMENT SYSTEM
	354.GRID OPTIMIZATION IN ROBOT COVERAGE ENVIRONMENTS
	355.HOLD BUFFER REDUCTION FOR POWER OPTIMIZATION IN GRAPHICS DESIGNS AND AUTOMATION USING PERL/TCL
	356.INTERNAL AUDITING AND CONSULTANCY
	357.LAZY LOADING AND PRESCRIPTIVE ANALYSIS
	358.LOW ENERGY BLUETOOTH AND ITS INTERFACE WITH MOBILE
	359.MACHINE LEARNING BASED MARKET LEAD GENERATION
	360.MATRIX FACTORIZATION FOR CATEGORY RECOMMENDATION AND LOOKALIKE GENERATION
	361.OPTIMIZATION OF DIGITAL CIRCUIT IN TERMS OF SPEED, POWER AND AREA USING BACK END DESIGN EDA TOOLS
	362.OPTIMIZING ATTENDANCE SYSTEM USING FACE RECOGNITION USING OPENCV
	363.OPTIMIZING ATTENDANCE SYSTEM USING OPENCV
	364.PERFORMANCE ANALYSIS OF MOBILE AND INFRA SYSTEM GUIDANCE
	365.PORTING OF C CODE MODULE FOR 2G FIRMWARE
	366.PORTING OF C CODE TO HS47D ASSEMBLY AND TARGET OPTIMIZATION OF C CODE FOR HS47D FOR 2G FIRMWARE
	367.POWER ANALYSIS AND LOW POWER DESIGN IN CHIP DEVELOPMENT
	368.QUALIFYING ARCHITECTURE VALIDATION SUITES(AVS) ON A SEPARATE SECURE/NONSECURE MEMORY ORGANISATION
	369.QUERY BUILDER
	370.SIMULATION BASED VERIFICATION OF GBB MODULE
	371.SOFTWARE DEVELOPMENT FOR CONVERSION OF DATA FROM LVF TO AOCV FILE FORMATS
	372.SPARSE CHANNEL ESTIMATION USING COMPRESSIVE SENSING
	373.SYSTEM LEVEL MODELLING OF COMPONENTS IN THE RX-TX HSSIO SYSTEM
	374.UPDATE USING MICROCONTROLLER & GSM MODULES
	375.VLSI-DESIGN AND VERIFICATION USING EDA TOOLS AND TCL SCRIPT
<b>59.</b>	<b>NVIDIA GRAPHICS –SOFTWARE, BANGALORE</b>
	376.A METHODOLOGY OF DIGITIZING PAPER BASED CLINICAL DOCUMENT BY OPTICAL CHARACTER RECOGNITION AND HANDWRITING RECOGNITION
	377.ARTIFICIAL INTELLIGENCE IN COMPUTER GRAPHICS
	378.AUTOMATION OF CONTINUOUS INTEGRATION (CI) DASHBOARD
	379.CLUSTERING OF REGRESSION FAILURES
	380.CPPUTEST FOR L2TP MODULE

	381.CSLOGANALYZER - A LOG ANALYSIS WEB BASED TOOL
	382.EGLSTREAM AND INTEROP FEATURE ENHANCEMENTS
	383.E-MAIL, PN AND SMS MARKETING: CONTENT AND ANALYTICS
	384.REGRESSION TEST INFRASTRUCTURE
	385.ROBOT OPERATING SYSTEM FOR NVIDIA AUTONOMOUS DRIVE PLATFORM
	386.ROBOT OPERATING SYSTEM FOR NVIDIA™S DRIVE PLATFORM
	387.T124 FLASHING TOOLS VALIDATION
	388.TESTING AND INSTRUMENTATION OF ACTOR MODEL WITH KAMON
	389. TO RESOLVE BUGS, ADD FEATURES AND ENHANCEMENTS AS WELL AS MONITOR THE BROWNTAPE WEB APP FOR ITS SMOOTH FUNCTIONING.
<b>60.</b>	<b>PAYPAL, BANGALORE</b>
	390.3D PRINTING AND AGGFLOW
	391.BVTS FOR ASYNCHRONOUS AND SUBMODEL BUILDS OF HYPERVIEW
	392.CONDITION MONITORING OF A CENTRIFUGAL PUMP
	393.COST SAVING OF ELECTRICAL WORK AT CHAKAN
	394.COST SHEET REVIEW AND RATIONALIZATION OF PVC PARTS
	395.DATA ANALYSIS FOR MATHEMATICAL MODELLING OF FLATNESS OF COLD ROLLED ALUMINIUM
	396.FATIGUE STANDALONE APPLICATION DEVELOPMENT
	397.HEAT TRANSFER MODELLING OF ALUMINIUM ROLLING INGOT IN A PREHEAT FURNACE
	398.IMPLEMENTATION OF DIGITAL MARKETING AND OPERATIONS SUPPORT FOR IEDGE LEARNING
	399.MARKET RESEARCH ON TEMPERATURE CONTROLLED CARRY BAGS IN FROZEN FOOD INDUSTRY
	400.PROCESS DEVELOPMENT AND DESIGN CALCULATIONS FOR AGROCHEMICAL PRODUCTION
	401.PULP ANALYSIS, SPINNING & AFTERTREATMENT
	402.RECIPE FOR DCS
	403.REPLACEMENT OF CONVENTIONAL LIGHTING BY LED'S THROUGH ESCO MODE
	404.STUDY OF PRODUCTION HOUSES AND LAUNCH OF CONSUMER BASED MOBILE APPLICATION
	405.SYNTHESIS OF POLYMER NANOCOMPOSITE MEMBRANE FOR THE REMOVAL OF HEAVY METAL IONS FROM INDUSTRIAL WASTEWATER
	406.WASTE HEAT RECOVERY FROM COMMINATION PROCESS
	407.WASTEWATER TREATMENT PROCESS & DESIGN MODIFICATIONS FOR A€EVOR-CLASA€ EQUIPMENT
<b>61.</b>	<b>PHILIPS RESEARCH INDIA, BANGALORE</b>
	408. TO MANAGE CLIENTS DAILY OPERATIONS AND FORMULATE STRATEGIES FOR THEIR CONTINUOUS GROWTH THROUGH COMPETITOR ANALYSIS AND PROMOTIONS ON DIFFERENT MARKETPLACES.
<b>62.</b>	<b>QUALCOMM INDIA PRIVATE LIMITED, BANGALORE</b>
	409.APPLICATION OF DIGITAL CRAFTSMANSHIP ON MHCV HYBRID BUS
	410.IMPLEMENTATION OF STANDARDIZED WORK
	411.IMPLEMENTATION OF STANDARDIZED WORK IN E2 LINE ( FRAME ASSEMBLY LINE)
	412.IMPLEMENTATION OF STANDARDIZED WORK IN THE ENGINE ASSEMBLY
	413.REDUCTION OF RACK-AND-PINION FAILURES IN THE POWER STEERING SYSTEM OF TATA™S UTILITY VEHICLES
	414.SKILL MAPPING
	415.STATIC TEST LEVEL 0 ANALYSIS
<b>63.</b>	<b>QUBOLE, BANGALORE</b>
	416.API DEVELOPMENT AND NEW RELIC CONFIGURATION
	417.ATTENDEE PLAYBACK EXPERIENCE SDK
	418.DATA DOMAIN FILESYSTEM
	419.ZFS KERNEL DUMP COLLECTION AND DEBUGGING
<b>64.</b>	<b>ROBERT BOSCH CENTER FOR CYBER PHYSICAL SYSTEMS, BANGALORE</b>
	420. VARIABLE FREQUENCY DRIVES' PERFORMANCE ANALYSIS AND PREVENTING THE FAILURES.
<b>65.</b>	<b>S.R. BATLIBOI &amp; CO. LLP, BANGALORE</b>
	421.ZEOCORE
<b>66.</b>	<b>SABRE HOLDINGS(FORMELY SABRE TRAVELS), BANGALORE</b>
	422.CNC INVESTIGATIONS AND REPORTING
	423.PRODUCT CONTROL THROUGH INVESTIGATING AND REPORTING P&L & CREATING EFFICIENCY IN PROCESSES'€
	424.PROJECT P7 AND ITS VARIOUS COMPONENTS AND ROLLOUTS
	425.SPECIFIC WRONG WAY RISK - TRADE CORRELATION METHODOLOGY ENHANCEMENT
	426.STABILIZATION OF APAC EQD : AUS & CONVERTIBLES BUSINESS
<b>67.</b>	<b>SAMSUNG R &amp; D INSTITUTE - IMAGE &amp; VIDEO PROCESSING, BANGALORE</b>
	427.ANALYSIS OF DELAYED ORDERS
	428.ANALYSIS OF ZINNOVA'S GLOBAL ENGINEERING INSIGHTS PLATFORM R&D FOOTPRINT TRACKING
	429.DASHBOARD PREPARATION FOR PERFORMANCE AND PORTFOLIO TRACKING
	430.DATA GENERATION, CLEANING, ANALYZING AND DEVELOPING ANALYSIS REPORTS FOR THE BUSINESS
	431.DRAUP PLATFORM
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	433.FEASIBILITY OF MULTI BUREAU AGNOSTIC SCORECARD AND FRAUD ANALYTICS
	434.IN DNR CAP ROUTING
	435.INDUSTRY ANALYSIS '€ EXCELLENCE INITIATIVES DRIVEN FROM GLOBAL CENTRES AND STRATEGIC ENGINEERING PROCUREMENT
	436.MAKING COMPREHENSIVE REPORTS ON VARIOUS FOOD & BEVERAGES MARKET OF THE WORLD



	437.MONETIZATION ANALYSIS FOR REUTERS CONSUMER MEDIA AND SOCIAL MEDIA ANALYSIS FOR REUTERS INDIA
	438.PRIMARY RESEARCH AND PRESALES OBJECTIVES IN INFINITI RESEARCH
	439.SECONDARY RESEARCH ANALYSIS
	440.SECONDARY RESEARCH IN INFINITI RESEARCH IN FOOD AND BEVERAGE VERTICAL
	441.SOCIAL IMPACT CONSULTING IN THE DEVELOPMENT SECTOR
	442.TARGETED COUNT STRATEGIES, DEFECT IDENTIFICATION AND AUTOMATION USING SQL
	443..VARIOUS ASSIGNMENTS LEADING TO CREATION OF INSIGHTS FOR THE GLOBAL ENGINEERING INSIGHTS PLATFORM (GEIP)
<b>68.</b>	<b>SATTVA MEDIA &amp; CONSULTING PVT LTD, BANGALORE</b>
	444.INDEPENDENT REVIEW OF ENERGY AUDIT FOR FINANCIAL YEAR 2015-16
	445.MARKET POTENTIAL FOR WAREHOUSING NEAR DADRI, NCR
<b>69.</b>	<b>SEAGATE TECHNOLOGY HDD (INDIA) PVT. LTD, BANGALORE</b>
	446.DEVELOP AN RTC DEVICE DRIVER TO REGISTER AS AN I2C PERIPHERAL
	447.DYNAMIC MODELLING AND OPTIMIZATION OF SUSPENSION OF FRONT LOAD WASHING MACHINE
<b>70.</b>	<b>SKODA AUTO INDIA PVT. LTD, BANGALORE</b>
	448.COMPETITIVE ANALYSIS OF AURIGO MASTERWORKS WITH ECOSYS EPC
<b>71.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD - DATA ANALYTICS, BANGALORE</b>
	449.1. WEB APP UI AND FLOW IMPROVEMENT 2. MIXPANEL TRACKING FOR PRIMETIME WEB UI
	450.BROWNFIELD SUPPORT IN ENTITY CENTRIC WORKFLOWS
	451.CONVERSION AND MIGRATION OF A PHYSICAL MACHINE TO V-CLOUD AIR
	452.DATA CENTRE DESIGNER
	453.ENHANCING DATABASE NOTIFICATION SYSTEM & IDF PROFILING PAGE
	454.HYPER-V HOST UPGRADE
	455.IOS AND WINDOWS APPLICATION FEATURE DEVELOPMENT
	456.NEAR SYNC REPLICATION
	457.NUTEST: TEST AUTOMATION FRAMEWORK AND UNIT TESTING
	458.SALESFORCE PROVISIONING ADAPTER
<b>72.</b>	<b>TAPCHIEF, BANGALORE</b>
	459.AUTOMATION SCRIPTING
	460.DEVELOPING THE WEB MEETING CLIENT
<b>73.</b>	<b>TATA DIGITAL HEALTH, BANGALORE</b>
	461.DEVELOPING THE WEB MEETING CLIENT
	462.FUNCTIONAL TEST FRAMEWORK AND TOOLBOX DEVELOPMENT
	463.PERFORMANCE MEASUREMENT AUTOMATION, MULTI-CORE KERNEL PATCH VALIDATION & SE DIRECT SYSCALL ROUTING FOR CONTROL STATION
<b>74.</b>	<b>TEXAS INSTRUMENTS (I) PVT. LTD. - RF MICRO ELECTRONICS, BANGALORE</b>
	464.1) GENERATING A STEP FILE FROM A STL FILE. 2) OPTIMIZING THE CREATION OF AN INFILLED SOLID. 3) WEB DEVELOPMENT.
	465.A) DETECTION AND DIAGNOSIS OF OSCILLATIONS IN CONTROL LOOPS B) DATA ANALYTICS IN PREDICTION OF OPTIMUM PARAMETERS FOR A VERTICAL ROLLING MILL
	466.AUTOMATION IN PARTS BUSINESS REPORTS USING VBA
	467.AUTOMATION OF REPORT GENERATION FOR REGRESSION TESTING OF DFM PRO
	468.DESIGNING AND DEVELOPMENT OF PHARMACEUTICAL REGULATORY MATRIX AND THE PREPARATION OF A WHITE PAPER ON THE TREATMENT CYCLE OF HEPATITIS C VIRUS IN INDIA
	469.DEVELOPMENT OF AN INJECTABLE FORMULATION 505B2 AND 505J
	470.DEVELOPMENT OF HOME-GROWN BOT APPLICATION
	471.FUNCTIONALISATION OF FURAN
	472.MAPPING OF CONCERNS THUS IMPROVING CSI
	473.MAPPING OF MLL DOMAINS RESPONSIBLE FOR ITS SUB-CELLULAR LOCALIZATION
	474.OPTIMIZATION OF ACTIVITY ASSAY FOR AMYLASE
	475. PREPARATION OF PENDING CARS DAILY TRACKER, PREPARATION OF INITIAL TOOL KIT AND SPECIAL TOOLS LIQUIDATION.
	476.PROCESS OPTIMIZATION DURING C-C BOND FORMATION IN FURAN
	477.ROOT CAUSE OF ANALYSIS OF SCRATCHES, DENTS AND CONTAMINATION AT VEHICLE FINAL INSPECTION OF HALL B AND C
<b>75.</b>	<b>TIMEINC.(TIME ANALYTIC &amp; SHARED SERVICES PRIVATE LIMITED), BANGALORE</b>
	478.DAMAGE APP FOR LOGISTICS TEAM
	479.DEVELOPMENT OF LOGISTICS SOLUTIONS FOR THE WALMART ORDER FULFILLMENT
	480.RETURNS DASHBOARD
	481.RUNNING HEALTH CHECKS AND DETERMINING STATUS OF SERVICES OVER A NETWORK AND SNAPVX
<b>76.</b>	<b>TONBO IMAGING PVT LTD. - IMAGE &amp; VIDEO PROCESSING, BANGALORE</b>
	482.BUDGET IMPACT MODEL FOR TRASTUZUMAB IN KSA
	483.DIGITAL FRAMEWORK ON TOP 15 GLOBAL PHARMA COMPANIES
	484.IMPLEMENTATION OF FIREPATH ANALYSIS ON BUS PLATFORM
	485.LANDSCAPING OF GASTRIC CANCER
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	487.PREPERATION OF MARKET RESEARCH REPORT ON USAGE OF MEDICAL MARIJUANA IN USA
	488.PRODUCTION PLANS FOR TOYOTA PIECE GEAR, REVENUE PER EMPLOYEE CALCULATION, AND LEAN IMPLEMENTATION AFTER ANALYSING OVERALL EFFECTIVENESS ASSESSMENT
<b>77.</b>	<b>TOSHIBA SOFTWARE (INDIA) PVT LTD, BANGALORE</b>
	489.COMPARISON OF THE EFFICACY OF VARIOUS TREATMENTS IN GAUCHER & APOSS DISEASE: A

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<b>78.</b>	<b>VIZURY INTERACTIVE SOLUTIONS, BANGALORE</b>
	490.PERFORMANCE ANALYSIS OF AREAS UNDER 8 CITIES: ANALYZE THE 8 CITIES AND HELP IN INITIATING STRATEGIC ROAD MAP TO START NIGHT DELIVERIES
	491.TOO MANY TO MENTION
<b>79.</b>	<b>VMWARE SOFTWARE INDIA PVT. LTD, BANGALORE</b>
	492.EQUITY RESEARCH
	493.ICE MIGRATION
	494.RISK MANAGEMENT
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<b>80.</b>	<b>WALMART GLOBAL TECHNOLOGY SERVICES, BANGALORE</b>
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<b>81.</b>	<b>ZEOTAP INDIA PVT. LTD, BANGALORE</b>
	505.ASIA INSURANCE
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<b>82.</b>	<b>ZINNOV MANAGEMENT CONSULTING PVT. LTD, BANGALORE</b>
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<b>83.</b>	<b>ZOOMCAR INDIA PVT. LTD, BANGALORE</b>
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<b>84.</b>	<b>HERON A PAREXELCOMPANY, CHANDIGARH</b>
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	516.DESIGN OF LVDS TRANSMITTER IN 65 NM TECHNOLOGY
	517.DESIGN OF PLUG N PLAY ARCHITECTURE FOR TZ
	518. DEVELOP TEST FRAMEWORK FOR TESTING OF RACE CONDITIONS.
	519.MULTIMEDIA TEST FRAMEWORK DEVELOPMENT
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<b>85.</b>	<b>AMAZON DEVELOPMENT CENTER, CHENNAI</b>
	521.DEVELOPMENT AND TESTING OF ESD VERIFICATION TOOLS FOR ICS
	522.FIRMWARE FOR USB TYPE C/PD CONTROLLER FOR FW TEST AUTOMATION
	523.INTERNAL TOOL TO OPTIMIZE BUILDS
	524.LOW NOISE COMPACT USB MODULAR 15 GHZ SIGNAL GENERATOR
	525.SAFETY MONITORING OF AUTOMOTIVE RADAR
	526.SERVER MONITORING TOOL - A WEB APPLICATION
<b>86</b>	<b>AMAZON FULFILLMENT CENTER, CHENNAI</b>
	527.INTELLIGENT MERGE CHECK TOOL
	528.SPYGLASS LINT AND CDC AUTOMATION
<b>87.</b>	<b>HDFC BANK, CHENNAI</b>
	529.CHARACTERIZING 28GBPS CDR BY OPTIMIZING CDR BANDWIDTH & VCO GAIN PARAMETERS
	530.OPTIMIZING 28GBPS SERDES PERFORMANCE USING TRANSMIT EMPHASIS AND RECEIVE EQUALIZATION
<b>88.</b>	<b>PAYPAL, CHENNAI</b>
	531.DESIGN AND TEST OF A LOCKING MECHANISM FOR LEGO MINDSTORMS EV3
	532.LED DRIVER DESIGN
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	535.SYSTEMVERILOG MODELING OF ANALOG BLOCKS TO REDUCE SIMULATION TIME
	536.SYSTEMVERILOG MODELLING OF ANALOG BLOCKS TO REDUCE SIMULATION TIME
	537.USB 2.0 MODE RECEIVER
<b>89.</b>	<b>QUALCOMM INDIA PVT LIMITED, CHENNAI</b>
	538.IEEE 1588 PRECISE TIMING PROTOCOL SIMULATOR
	539.NETWORK FUNCTIONAL VIRTUALIZATION
<b>90.</b>	<b>VESTAS TECHNOLOGY LTD, CHENNAI</b>
	540.DESIGN OF DC/DC SWITCHING REGULATORS IN SIMPLIS
	541.ESTABLISHMENT OF LINKS BETWEEN SHIM CHIPS BY TUNING THE SERDES

	542.HIGH SPEED ANALOG FRONT END DESIGN FOR 14 BIT PIPELINE ADC
	545.IEEE 1588 PRECISE TIME PROTOCOL SIMULATOR
<b>91.</b>	<b>AMAZON DEVELOPMENT CENTER, DELHI</b>
	546.BUILD AUTOMATION USING MAVEN PLUGIN
	547.DATA ANALYSIS AND VISUALIZATION FOR GDC ORGANISATION
	548.DEVELOPING AN AUTOMATION TOOL TO CREATE, SCHEDULE THE JOBS AND TO BUILD A DEVICE MONITORING SYSTEM
	549.HEALTH MONITORING SYSTEM FOR WIRELESS LAN CONTROLLER
	550.NETWORK TRAFFIC PREDICTION
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	552.YANG DATA MODELS FOR IOS XR
<b>92.</b>	<b>QUALITY COUNCIL OF INDIA, DELHI</b>
	553.AUTOMATION OF RELEASE PROCESS
	554.ENHANCEMENTS OF LOG PARSER TOOL (LP TOOL) AND DEVELOPMENT OF APP TROUBLESHOOTING BOT IN CISCO SPARK
	555.PYTHON CLI BINDING AND PYTHON UT AUTOMATION
<b>93.</b>	<b>TATA MOTORS LTD, DHARWAD</b>
	556.EMERGENCY LIGHTING
	557.INTEGRATING ENCHANCED THREAT TELEMTRY
	558.INTEGRATION OF ENHANCED TELEMTRY AND THREAT ANALYTICS (ETTA) WITH WEB SECURITY APPLIANCE(WSA)
	559.MANAGEMENT INTERFACE USING BLUETOOTH
	560.MANUFACTURER USAGE DESCRIPTION (MUD) SERVER AND COAP SUPPORT EXTENTION
	561.YANG DATA MODELS FOR IOS XR
<b>94.</b>	<b>CIPLA LTD, GOA</b>
	562.AUTOMATION OF ENGINE VALIDATION PROCESS
	563.DEVELOPMENT OF CISCO SPECIFIC INTERNAL SOFTWARE
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	565.ENGINE VALIDATION AUTOMATION
	566.NTP BUILD AUTOMATION
	567.PACKET DROP AUTO TRIAGING
	568.PERFORMANCE IMPROVEMENT OF ESA & ADDITIONAL ACTIONS FIELD FOR AMP INCOMING MAIL POLICIES
<b>95.</b>	<b>IFB INDUSTRIES, GOA</b>
	569.Unit Testing Framework for IOS
	570.UNIT TESTING AUTOMATION ON CISCO SWITCHING AND ROUTING PRODUCTS
<b>96.</b>	<b>ST MICROELECTRONICS(I) PVT.LTD, GREATER NOIDA</b>
	571.REFERENTIAL INTEGRITY ANALYSIS IN UNSTRUCTURED DATA OBJECTS
	572.PERFORMANCE IMPROVEMENT OF EMAIL SECURITY APPLIANCE
	573.NEXT GENERATION SECURITY MANAGEMENT APPLIANCE (NGSMA)
	574.1. IEEE 802.1X AUTHENTICATION SUPPORT WITH MACSEC 2.IOS XR MANAGEMENT PLANE PROTECTION AND THIRD PARTY APPLICATION LPTS PROGRAMMING
	575.MIGRATING A MONOLITHIC APPLICATION TO A MICROSERVICES ARCHITECTURE
<b>97.</b>	<b>AMAZON FULFILLMENT CENTER, GURGAON</b>
	576.INFRASTRUCTURE DEVELOPMENT AND VERIFICATION OF MEMORY CONTROLLER
<b>98.</b>	<b>AMERICAN EXPRESS INDIA, GURGAON</b>
	577.AUTOMATION OF ANALYZING SIMULATION AND COVERAGE RESULTS FOR TEGRA
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<b>99.</b>	<b>IMS HEALTH, GURGAON</b>
	579.CORE SOFTWARE GROUP - BUSINESS OPERATIONS & ENTERPRISE
	580.CSG(CORE SOFTWARE GROUP) BUSINESS OPERATIONS
	581.DATA ANALYSIS AND VISUALIZATION FOR GDC ORGANIZATION
	582.DESIGN OF A WORKFLOW EDITOR FOR GENERATING TELEMTRY TEMPLATE
	583.DEVELOPMENT OF PRIVATE REST API AND ACCESS CONTROL POLICY WORKFLOW CACHE
	584.3DNAC UI DEVELOPMENT
	585.INTEGRATION OF TEST FRAMEWORK FOR POLARIS FEATURES
	586.NEXT GENERATION SECURITY MANAGEMENT APPLIANCE
	587.PROJECT MANAGEMENT OF FIXED PRICE ENGAGEMENTS
	588.SMART INVENTORY MANAGEMENT SYSTEM AND CUSTOMER CONFIG LOCATOR
	589.SWIFT AUTOMATION FRAMEWORK FOR WIRELESS CLIENT AND MOBILITY STATE MACHINE
	590.TEST FRAMEWORK INTEGRATION FOR ENTERPRISE NETWORK PLATFORM FEATURES
	591.UI DEVELOPMENT FOR CISCO'S INTERNAL MOBILE APPLICATION
	592.UVM COVERAGE CODING FOR FUNCTIONAL VERIFICATION
	593.UNIT TESTING AUTOMATION ON CISCO SWITCHING AND ROUTING PRODUCTS
<b>100.</b>	<b>KPMG, GURGAON</b>
	594.DEVELOPMENT OF AN ENHANCED VERSION OF A PERFORMANCE DATA MINING TOOL
	595.PCI-E REGISTER VERIFICATION
	596.VERIFICATION OF PCIE IN TEGRA SOC
<b>101.</b>	<b>MAHLE FILTERS INDIA LTD, GURGAON</b>
	597.VERIFICATION OF DEBUG FEATURES IN A SOC
<b>102.</b>	<b>PLUSS ADVANCED TECHNOLOGIES PVT. LTD, GURGAON</b>
	598.LIGHT WEIGHT AUTOMATION FRAMEWORK USING PY-ATS
	599.PTP OVER ETHERCHANNEL

<b>103.</b>	<b>PRICEWATERHOUSECOOPERS (PWC), GURGAON</b>
	600.HSHUB POWER ANALYSIS AND VERIFICATION ENHANCEMENTS
	601.LOW POWER ARCHITECTURE, DESIGN AND VERIFICATION
	602.MARGIN SIMULATIONS AND KEEPER LEAKER ANALYSIS
	603.PCIE FORMAL VERIFICATION
	604.TEGRA PRE-SILICON SIMULATION PLATFORM
	605.UNIT LEVEL ATPG TESTING OF DIGITAL DESIGN
	606.VERIFICATION OF DEBUG BUS ON SOC
<b>104.</b>	<b>RIVIGO SERVICES PVT LTD, GURGAON</b>
	607.DESIGNING TESTCASES
	608.ENABLE LOG::LOG4PERL IN PERFORMANCE INFRASTRUCTURE OPTION PROCESSING
	609.ENHANCEMENT OF CHECKER SCRIPTS AND AUTOMATION IN VERIFICATION
	610.PCIE REGISTER VERIFICATION
	611.RTL STATIC VERIFICATION
<b>105.</b>	<b>SRF LTD, GURGAON</b>
	612.SPARK NETWORK ANALYTICS PLATFORM
	613.UT AUTOMATION IN NCS 4K Router
<b>106.</b>	<b>ZINNOV MANAGEMENT CONSULTING PVT LTD, GURGAON</b>
	614.CTC.ECOV AND PERFORMANCE VERIFICATION FOR COPY ENGINE
	615.EXPLORATION OF GPU LIGHT WEIGHT POWER ESTIMATION METHODOLOGIES
	616.IMPROVED LOGGING IN PERFORMANCE INFRASTRUCTURE OPTION PROCESSING
<b>107.</b>	<b>ADITYA BIRLA INSULATORS, HALOL</b>
	617.FUNCTIONAL & PERFORMANCE VERIFICATION OF GPU <sup>Å</sup> 'S CROSSBAR UNIT IN UVM BASED VERIFICATION ENVIRONMENT
	618.POWER SEQUENCING, ENHANCING BOOT PERFORMANCE MODEL AND MODELLING DYNAMIC POWER OF A TEGRA SOC
	619.REGISTER VERIFICATION ENHANCEMENT
<b>108.</b>	<b>FAIVELEY TRANSPORT RAIL TECHNOLOGIES INDIA LTD (FTRTIL), HOSUR</b>
	620.HARDWARE DECODER VALIDATION
	621.TOP CLUSTER SOC VERIFICATION
<b>109.</b>	<b>ADAEQUIRE, HYDERABAD</b>
	622.DEVELOPING AN AUTOMATED TEST FRAMEWORK
	623.MISRA-C COMPLIANCE
<b>110.</b>	<b>AMAZON DEVELOPMENT CENTER, HYDERABAD</b>
	624.AUTOMATION
	625.AUTOMATION IN ASSET SERVICING
	626.CIB ROBOTICS - PROJECT MANAGER
	627.COST & FINANCIAL ANALYSIS OF COLLECTION PROCESS & AUTOMATION
	628.COUNTERPARTY CREDIT RATINGS
	629.DATA ANALYTICS
	630.DETAILED ANALYSIS OF INCREASING TRADE FAILURES IN BFT
	631.DIALER AND COLLECTIONS ANALYTICS AND WAREHOUSE CREATION
	632.DODD FRANK AND INTEREST RATES REFIXING ISSUE
	633.FINANCIAL MANAGEMENT IN COMPLIANCE
	634.NETWORK ANALYSIS
	635.PROJECT MANAGEMENT - ROBOTICS PROCESS OPTIMIZATION
	636.ROBOTIC PROCESS AUTOMATION IMPLEMENTATION AND ANALYSIS
	637.ROBOTICS
	638.ROBOTICS AUTOMATION PROCESS
	639.ROBOTICS PROCESS AUTOMATION
	640.ROBOTICS PROCESS AUTOMATION IN INVESTMENT BANKING
<b>111.</b>	<b>AMAZON FULFILLMENT CENTER, HYDERABAD</b>
	641.DESIGN AND CFD ANALYSIS OF GAS TURBINE DIFFUSER
<b>112.</b>	<b>CA TECHNOLOGIES, HYDERABAD</b>
	642.ANALYTICS AND SUPPORT AT BELONG
	643.TALENT LANDSCAPE
<b>113.</b>	<b>CENTRE FOR DNA FINGERPRINTING AND DIAGNOSTICS, HYDERABAD</b>
	644.CFD ANALYSIS OF LP TURBINE IN GAS TURBINE
	645.SEMI-FORMAL VERIFICATION OF CLOCK GATING IN SUBUNITS OF GPU PIPELINE, STATIC VERIFICATION AND LATENCY
<b>114.</b>	<b>DR. REDDYS LABORATORIES, HYDERABAD</b>
	646.ILA CONFIG TOOL VALIDATION
	647.IMPLEMENTING AND DEBUGGING OF ARM FEATURES
	648.PERFORMANCE INFRASTRUCTURE DEVELOPMENT FOR TEGRA MSS
	649.POWER ANALYSIS IN PHYSICAL DESIGN
<b>115.</b>	<b>GKK TECHNOLOGIES - DATA ANALYTICS, HYDERABAD</b>
	650.DEVOPS MATURITY ASSESSMENT TOOLKIT AND CIO DASHBOARD FOR GE TRANSPORTATION
	651.FEATURE AND UI ENHANCEMENTS TO EVENT MANAGEMENT FRAMEWORK OF LOYALTY APPLICATION
	652.LINUX KERNEL DEVICE DRIVERS
	653.ON-BOARDING PROJECT
	654.OPERATIONS MANAGEMENT
	655.PROJECT PERFORMANCE PREDICTION USING MACHINE LEARNING

	656.SERVICE BROKER FOR A MPP DATA WAREHOUSE
<b>116.</b>	<b>IMI MOBILE, HYDERABAD</b>
	657.FINANCE PROCESS AUTOMATION
	658.GAME STREAM
	659.WEB DEVELOPMENT AND IONIC APPS (PRODUCT DEVELOPMENT)
<b>117.</b>	<b>INDUSTRYARC, HYDERABAD</b>
	660.AUTOMATIZATION OF GAS TURBINE CLEARANCE OPTIMIZATION PROCESS USING ISIGHT
	661.COMBINED CYCLE STARTUP SELECTOR PROGRAM
	662.DESIGN OF SUBSCALE PULVERIZER
	663.DEVELOPING BUSINESS CASE SOLUTIONS FOR GE POWER
	664.EXPERIMENTAL AND NUMERICAL STUDIES OF DRY ABRASION WEAR
	665.INTERNAL INTERFACE MIGRATION FOR FIELD SERVICES ERP
	666.LITERATURE STUDY AND CFD ANALYSIS OF HRSG
	667.PREDIX-INDUSTRIAL INTERNET OF THINGS
	668.REGRESSION TEST OF LINUX BASED EMBEDDED DEVICES
	669.RELAY AUTOMATION AND TESTING
<b>118.</b>	<b>JDA SOFTWARE SOLUTIONS, HYDERABAD</b>
	670.ASIC VERIFICATION
	671.BENCHMARKING DATA MASKING TECHNIQUES ON SENSITIVE SENSOR DATA USING HADOOP
	672.DEVOPS MATURITY ASSESSMENT
	673.MARKET RESEARCH
	674.PERFORMANCE IMPROVEMENT IN MANUFACTURING PLANTS USING DIGITAL TECHNOLOGIES AND ANALYSIS
<b>119.</b>	<b>JOHN F WELCH TECHNOLOGY CENTER (GE), HYDERABAD</b>
	675.AUTOMATION OF CFD TRADING PROCESS AND UAT TESTING
<b>120.</b>	<b>MARKET DATA FORECAST, HYDERABAD</b>
	676.WEB DEVELOPMENT AND APP DEVELOPMENT
	677.AUTOMATING TICKET HANDLING PROCESS
	678.GEOCODING PICKUP POINT LOCATIONS
	679.SELLER REIMBURSEMENT AND CLAWBACK ENGINE
	680.PROCESS MIGRATION FROM SAS TO BIG DATA
	681.VEHICLE TRACKING FOR LOGISTICS
	682.DEVELOPMENT AND AUTOMATION OF TOOLS
	683. CREATING AND AUTOMATING SOFTWARE SCRIPTS AND TEST CASES OVERSEEING QUALITY-ASSURANCE TESTING FOR CLIENT SOFTWARE AND DEVELOPMENT SYSTEMS.
	684.SUPPLY CHAIN STRATEGIST
<b>121.</b>	<b>MERILYTICS, HYDERABAD</b>
	685.HISTORICAL SIMULATION FULL REVALUATION AND ERROR REMEDIATION
<b>122.</b>	<b>MOL DE ANALYTICS, HYDERABAD</b>
	686.CONTINUOUS MONITORING FRAMEWORK
<b>123.</b>	<b>MORDOR INTELLIGENCE, HYDERABAD</b>
	687.AFFILIATE PARTNER STRATEGY & OPERATIONS À WADOGO, INMOBI
	688.BRAND REGISTRY REGISTRATION PIPELINE
	689.BUSINESS FRANCHISE MODEL
	690.CREATING A NEW BUSINESS MODEL - THE DELIVERY FRANCHISE
	691.DATA ANALYTICS AND VISUALIZATION TO STUDY TRENDS IN THE HIRING INDUSTRY
	692.EXTRACT INFORMATION FROM UNSTRUCTURED DOCUMENTS
	693.INMOBI EXCHANGE AND OPERATION OF PMPS
	694.OFFLINE SUPPORT: REACHING WHERE EVEN INTERNET DOESNÀ™T
	695.OVERVIEW OF DIGITAL ADVERTISING ECOSYSTEM AND DELIVERY MANAGEMENT
	696.PROCESS MIGRATION FROM SAS TO BIG DATA
	697.SALES OPERATIONS AND ANALYTICS FOR LOGISTICS
	698.SELLER REFERRAL SYSTEM IN AMAZON
	699.SUPPLY AND DEMAND À WADOGO
<b>124.</b>	<b>MY SMART PRICE, HYDERABAD</b>
	700. COST OPTIMIZATION OF MINERAL LUBE OIL SYSTEM.
<b>125.</b>	<b>MYTRAH ENERGY (INDIA) PRIVATE LIMITED, HYDERABAD</b>
	701.DEBUGGING FAILURES IN FULL CHIP VERIFICATION
	702.TEGRA FABRIC SOC VERIFICATION
<b>126.</b>	<b>NVIDIA GRAPHICS – HARDWARE, HYDERABAD</b>
	703.AUTOMATION
	704.CREDIT RATINGS ANALYSIS
	705.ROBOTICS PROCESS AUTOMATION
	706.ROOT CAUSE ANALYSIS AND TRACKING OF EQUITIES INDEX NON DECOMPOSITIONS AND EXCEPTIONS IN NON-LINEAR IRC DATA
<b>127.</b>	<b>QUALCOMM INDIA PRIVATE LIMITED, HYDERABAD</b>
	707.AUTOMATION OF OPERATION&APOS;S PROCESSES
	708.COUNTERPARTY CREDIT RATINGS
	709.LOCATION BASED INCLUSION OF BUSINESS LOAN CUSTOMERS FOR CROSS SELL CAMPAIGNS
	710.MARKET RISK MANAGEMENT
	711.PROCESS AUTOMATION
	712.ROBOTIC PROCESS AUTOMATION

<b>128.</b>	<b>RED PINE SIGNALS, HYDERABAD</b>
	713.ROBOTICS PROCESS AUTOMATION (RPA)
<b>129.</b>	<b>REPORTGARDEN TECHNOLOGIES PVT. LTD, HYDERABAD</b>
	714.DATA ANALYTICS AND FUZZY MAPPING
	715.PERFORMANCE ANOMALY SIGNATURE FOR STORAGE SYSTEMS
<b>130.</b>	<b>SYNERGIZ GLOBAL, HYDERABAD</b>
	716.DEADLOCK VERIFICATION OF MCF
	717.MEMORY HUB PERFORMANCE MONITORS AND PERFSIM VERIFICATION
<b>131.</b>	<b>TAU FILMS INDIA PVT. LTD, HYDERABAD</b>
	718.PREDICTION OF PROJECT PERFORMANCE USING ML
	719. SEMI FORMAL VERIFICATION OF SECOND LEVEL CLOCK GATING FOR I/O IPs.
<b>132.</b>	<b>THOMSON REUTERS, HYDERABAD</b>
	720.EVENT BASED CACHING FOR MATERIAL ANALYTICS
<b>133.</b>	<b>WORLEY PARSONS INDIA, HYDERABAD</b>
	721.CREDIT RATING ANALYSIS & RISK TRACKER HEAT MAP
	722.PROCESS AUTOMATION AND DATA MANAGEMENT
<b>134.</b>	<b>CEG LIMITED, JAIPUR</b>
	723.CONTINUOUS INTEGRATION TESTING FOR FELXGROUP SNAPMIRROR EXPAND
	724.BUDWEISER 2.0
	725.IMPLEMENTING UI TEST CASES FOR SALES & OPERATIONS PLANNING TEAM
<b>135.</b>	<b>NBC BEARINGS, JAIPUR</b>
	726.REPORTING AND WORKING IN BD STRATEGY AND OPERATIONS
	727.SSET OPTIMIZATION AND ENHANCEMENT
<b>136.</b>	<b>TATA MOTORS LTD, JAMSHEDPUR</b>
	728.INMOBI NORTH AMERICA AFFILIATE PARTNER STRATEGY & OPERATIONS
	729.THIRD PARTY SUPPLY-WADOGO(AFFILIATE DEMAND)
	730.WEB DEVELOPMENT USING FRONT END JAVASCRIPT FRAMEWORK as EXTENDED JS (EXT JS)
<b>137.</b>	<b>IFB ENGINEERING DIVISION, KOLKATA</b>
	731.WMS ARCHITECTURE
<b>138.</b>	<b>TATA MOTORS LTD, LUCKNOW</b>
	732.AMAZON PRODUCT ADVERTISING SDK AND PROD SYSTEM SOAP MONITOR
	733.APPROVED HEADCOUNT MANAGEMENT AND ALLOCATION PLATFORM
	734.AUTOMATING CLIENT REQUEST RATE THRESHOLD MONITORING AND EXPLORING ELASTIC SEARCH AS AN ALTERNATIVE TO THE EXISTING INDEXING SERVICE
	735.BLACKWHITE: A SECURE DEDUPLICATION SOLUTION
	736.BUYBOX WINNER ON OFFER LISTING PAGE
	737.CONTENT REVIEW AUTOMATION
	738.INBOUND PRIORITIZATION DASHBOARD
	739.INTERNAL GST PORTAL AND TB ORCHESTRATOR SERVICE AND CANCEL TAX AND INVOICE API
	740.LAUNCHING PUSH PROGRAMS WORLDWIDE, MIGRATION OF SAP EPC TEMPLATES AND CREATION OF GENERIC DEALS PUBLISHER
	741.VIEW LAYER SERVICE FOR TRANSACTION HISTORY OVER ELASTICSEARCH
<b>139.</b>	<b>ADITYA BIRLA CORPORATE IT, MUMBAI</b>
	742.RISK MANAGEMENT BY ENSURING TRADE DOCUMENTATIONS ARE ACCURATE
<b>140.</b>	<b>ADITYA BIRLA CORPORATE WORLD CLASS MANUFACTURING, MUMBAI</b>
	743.GAMIFYING ONBOARDING
	744.SEARCH RELEVANCY AND BENCHMARKING
<b>141.</b>	<b>ADITYA BIRLA SCIENCE &amp; TECHNOLOGY COMPANY LTD, MUMBAI</b>
	745.ENHANCEMENTS AND TESTING OF A WORK ROUTING PLATFORM, DESIGN AND DEVELOPMENT OF AN INTERNAL PROJECT
	746.INVICTUSSELLERAGGREGATIONANDNOTIFICATIONSERVICE
<b>142.</b>	<b>ALPHAMD, MUMBAI</b>
	747.EMPLOYEE ENGAGEMENT IMPROVING CUSTOMER LIFE CYCLE AND A EMAIL MARKETING
	748.UNDERSTANDING M&A DEAL ADVISORY THROUGH ACQUISITION OF SABMILLER BY ABINBEV
<b>143.</b>	<b>AMAZON OPERATIONS, MUMBAI</b>
	749.RISK MANAGEMENT BY ENSURING ACCURATE TRADE REPRESENTATION
	750.ROBOTICS PROCESS AUTOMATION
<b>144.</b>	<b>CENTURY RAYON, MUMBAI</b>
	751.INTERACTIVE VIRTUAL CLASSROOM
	752.3-D RECONSTRUCTION FROM MULTI-MILLION IMAGES
<b>145.</b>	<b>CREDIT SUISSE, MUMBAI</b>
	753.ACCOUNT ANALYSIS FOR A TECH CLIENT AND PRIVATE CLOUD LANDSCAPE IN INDIA
	754.AMAZON CHECKOUT MODIFICATIONS
	755.ARCHIVAL SERVICE, ORACLE TO CASSANDRA DATABASE MIGRATION
	756.BIG DATA INTEGRATION IN ATHENA, PATTERN DETECTION IN RISK CENTRAL DATA USING CLUSTERING
	757.BUILDING SYNERGIES: MATCHING BUSINESS REFORMS TO IMPROVE EASE OF DOING BUSINESS™, HEALTH EXPENDITURE BY INDIAN HOUSEHOLDS: A GENDER-AWARE INPUT OUTPUT ANALYSIS
	758.CATEGORIZATION, RTS REDUCTION AND BUYING TREND OF E-COMMERCE PRODUCTS
	759.DATA DRIVEN PLANNING FOR MANPOWER SANCTIONS, VOLUMES, EXPANSION, AND STUDY OF HUB PROCESS
	760.DEBUG TOOL

	761.DEPLOYMENT QUEUE MANAGEMENT AND MAP POLICY IMPLEMENTATION IN OFFER LISTING PAGE
	762.DEVELOPMENT OF VARIOUS MODULES FOR THE ISSUER CREDIT EXPOSURE SYSTEM AND CORTEX LIQUIDITY TO ASSIST TRADERS IN MAKING VARIOUS TRADE RELATED DECISIONS, AND A COMPREHENSIVE DASHBOARD TO TEST THE RESILIENCY OF THE IN-HOUSE PRIVATE CLOUD, GAIA
	763.DEVOPS DASHBOARD
	764.DIGITAL TRANSFORMATION, PRODUCT INNOVATION FOR CLIENTS AND STUDY- MEESHO, LARGE INDIAN ENTERPRISES
	765.IMPROVEMENTS IN INBOUND THROUGHPUT PER HOUR
	766.INFRASTRUCTURE OPTIMIZATION AND PRDUCTION INEFFICIENCIES
	767.INTELLECTUAL PROPERTY PROTECTION USING DATA ANALYTICS & PATENT EVALUATION TECHNIQUES
	768.INVENTORY EXPLORATION AND PRIORITIZATION FRAMEWORK
	769.LICENSE COMPLIANCE ADVISORY AND SOFTWARE ASSET MANAGEMENT
	770.MORPHEUS
	771.RESEARCHING NEW AREAS IN ENERGY FOR AN INDIAN OIL AND GAS COMPANY
	772.SBM - 500 (SWACHH SURVEKSHAN - 2017)
	773.SELF SERVICE PORTAL FOR RISK ACCOUNT MANAGEMENT POINT
	774.SENTIMENT ANALYSIS OF FINACIAL DATA
	775.SOFTWARE LICENSE REVIEW AND INTELLECTUAL PROPERTY
	776.SWACHH SURVEKSHAN, DEPARTMENT OF INDUSTRIAL POLICY AND PROMOTION AND NATIONAL TRUST - ASSESSMENT OF NGOS
	777.THIRD PARTY DUE DILIGENCE
<b>146.</b>	<b>DBOI (DEUTSCHE BANK) – OPERATIONS, MUMBAI</b>
	778.CA POLICY EDITOR
	779.DEVELOPMENT OF GUI FOR OPEN-SOURCE SIMULATION FRAMEWORK FOR VEHICLE BODY SYSTEMS
	780.DIGITAL AND GLOBAL TECHNOLOGY TRANSFORMATION
	781.FINDING SIMILAR QUESTIONS AND SPAM DETECTION IN DISCUSSION FORUMS
	782.PRODUCT VALIDATION FRAMEWORK TESTING
	783.QUICKFIX-J BASED API/ADAPTER TO CONNECT CLIENT WITH FIX BASED ORDER GATEWAY
	784.SCALA APPLICATION DEVELOPMENT FOR ODF PRODUCT CREATION
	785.USER PROFILE CREATION AND USER CATEGORIZATION
	786.VALIDATING MAPDATA THROUGH VARIOUS TOOLS
	787.WEB SCRAPING OF 1MG.COM AND FDA WEBSITE, WRITING APIS FOR AND MAINTAINING MDM SYSTEM, MANAGING AWS DEPLOYMENT
	788. WEB SCRAPING OF 1MG.COM AND FDA WEBSITES, DEVELOPING AND MANAGING ORDER MANAGEMENT SUITE.
<b>147.</b>	<b>DEVELOPMENT CONSULTANTS PVT. LTD. (DCPL), MUMBAI</b>
	789.APPBASE STANDALONE SUPPORT
	790.COMMITCONSISTENCYWATCHER
	791. REST API SERVICE TO IMPLEMENT AND PERFORM COMPARATIVE ANALYSIS OF DIFFERENT APPROACHES FOR WEB INFORMATION EXTRACTION.
<b>148.</b>	<b>DORSCH CONSULT (INDIA) PVT. LTD, MUMBAI</b>
	792.GURUPA MIGRATION OF INTERNAL TOOLS
<b>149.</b>	<b>EDELWEISS FINANCIAL SERVICES, MUMBAI</b>
	793.AUTOMATION IN CONFIRMATION GENERATION
	794.IDENTIFYING POTENTIAL COUNTRIES FOR FUTURE EXPANSION; & ARRANGING MEETINGS FOR MENTOR&APOS;S VISIT TO PROSPECTIVE COUNTRIES
<b>150.</b>	<b>EDUPRISTINE - NEEV KNOWLEDGE MANAGEMENT PVT. LTD, MUMBAI</b>
	795.AUTOMATED UTILIZATION DASHBOARD
	796.FUND SERVICES TRADES BLOTTER AUTOMATION
<b>151.</b>	<b>GEOMETRIC LIMITED, MUMBAI</b>
	797.DOUBLING OF FARMERS INCOME BY 2022
	798.INFRASTRUCTURE RESEARCH - USA
<b>152.</b>	<b>HDFC BANK, MUMBAI</b>
	799.ASSOCIATION RULES MINING, OBJECT DETECTION
	800.DEVELOPMENT OF PERSONALIZATION CLIENT APPLICATION
	801.DEVELOPMENT OF ROUTE PLANNING AND MANAGEMENT PLATFORM
	802.INDIAN IDENTITY SDK FOR AADHAAR CARD
	803.PERFORMANCE ANALYSIS OF CAPTIVE PORTAL AUTHENTICATION
	804.TO DEVELOP AND DEPLOY A QUICKFIX-J BASED CLIENT, QUICKFIX-J BASED SERVER AND RFQ REQUEST MICROSERVICES ON EC2 CLOUD INSTANCES OF AWS
<b>153.</b>	<b>HERE MAPS - SOFTWARE TESTING, MUMBAI</b>
	805.AUTOMATION OF JPMC PROCESSES AND MAPPING OF TRADE BLOTTERS
	806.FUND OF HEDGE FUNDS, OPERATIONS
	807.MODELLING, DESIGN VALIDATION & OPTIMIZATION OF WIND TURBINE
	808.RISK CONTROL BY ENSURING ACCURATE TRADE REPRESENTATION
	809.ROBOTIC PROCESS AUTOMATION
	810.ROBOTICS PROCESS AUTOMATION OF PRIME PROCESSES
	811.TRADE CAPTURE PROCESS AUTOMATION
	812.TRADE CAPTURE PROCESS AUTOMATION (CUSTODY AND FUND SERVICES)
<b>154.</b>	<b>HOURLASS RESEARCH, MUMBAI</b>
	813.A COMPREHENSIVE ON SME CLUSTERS IN INDIA

	814.EQUITY DERIVATIVE CONTROL RECONCILIATIONS AND BI PROJECTS
<b>155.</b>	<b>INDUS OS, MUMBAI</b>
	815.CLINICAL APPLICATION DEVELOPMENT FOR WEB - ADNEX
	816.TCP/IP STACK OPTIMISATION FOR IOT DEVICES/ RS/RA MODULE DESIGN FOR IPV6
<b>156.</b>	<b>J. P MORGAN CIB - E TRADING, MUMBAI</b>
	817.AUGMENTATION OF IRECS EFFICIENCY THROUGH DATA ANALYSIS, BRDS ON BOTS AND P2Z REPORTS
	818. SCRIPTING TO AUTOMATE RULE-BASED TASKS TO ENSURE BOTH ACCURACY AND SPEED, AS WELL AS SAVING VALUABLE MAN-POWER.
<b>157.</b>	<b>J.P. MORGAN CHASE, MUMBAI</b>
	819.3D RECONSTRCTIION FROM IMAGES
	820.ADVANCED INDEXING AND SEARCHING
	821.AGENT DEVELOPMENT IN
	822.AUTOMATIC CODE COMPLETION
	823.AUTOMATION OF USER EXPERIENCE
	824.BRAND POSITIONING AND LEAD ANALYSIS
	825.BUILDING IMAGE SEGMENTATION MODEL FOR SATELLITE IMAGE
	826.CENTRALIZED APPLICATION PERFORMANCE MANAGEMENT AND MONITORING FOR BIG DATA SYSTEMS
	827.DESIGN & DEVELOPMENT OF MODEL FOR IMAGE PROCESSING FOR TEMPLATE MATCHING AND OBJECT DETECTION
	828.DESIGN AND SCHEDULING OF WORKFLOWS FOR 3D CONTENT GENERATION ON THE CLOUD
	829.DESIGN OF CLOUD ARCHITECTURE FOR 3D CONTENT MANAGEMENT
	830.DEVELOPMENT OF CONTROL STRATEGIES FOR SIMULATION FRAMEWORK FOR AUTOMOTIVE BODY COMPONENTS
	831.DEVELOPMENT OF WAYLAND DEBUGGER FOR TIZEN 3.0
	832.DEVICE PROXY SERVICE
	833.ELECTRIC MOTOR SIMULATION AND ANALYSIS
	834.FEATURE DEVELOPMENT, BUG FIXING
	835.FINDING MALICIOUS URLS USING MACHINE LEARNING
	836.IDENTIFY MONETISATION AND NEW PROGRAM OPPORTUNITIES
	837.IMPROVEMENT IN PRODUCTIVITY OF OUTBOUND DEPARTMENT
	838.IMPROVING PRODUCTIVITY AND QUALITY OF INBOUND OPERATIONS
	839.KERNEL A COMMON USER VALIDATION INTERFACE ACROSS PRODUCTS & VISUALIZATION OF DATA THROUGH VARIOUS CHARTS AND GRAPHS USING D3.JS DATA DRIVEN DOCUMENTS TECHNOLOGY
	840.LEAD SCORING MODEL
	841.3MIGRATION OF TESTING SCRIPTS, DEBUGGING OF PVF
	842.MULTIBODY DYNAMICS AND AUTOMATION OF PRE-PROCESSING OF MOUNTING BRACKETS FOR MODAL AND STATIC ANALYSIS IN NASTRAN AND ABAQUS SOLVERS USING ANSA
	843.NAVIGATION MODULE AND COLLISION DETECTION IN VIRTUAL REALITY
	844.NLU AGENT DEVELOPMENT
	845.NON PE FILE INTENTION FINDER
	846.OPTIMIZATION OF CYNARA AND AUTOMATION OF GDB ANALYSIS USING LOCAL SERVER
	847.PREDICTIVE ANALYTICS
	848.PREPARATION OF STANDALONE APPLICATION TO ASSIST PROCESS OF DEBUGGING
	849.PROGRAM STRATEGY AND OPERATIONS
	850.PROGRESSIVE COMPRESSION OF ARBITRARY TEXTURED MESHES
	851.SECURITY FEATURES IN A NEW ARUBA PLATFORM
	852.SENSITIVITY ANALYSIS OF TIBIA BONE IN A 3-POINT BENDING TEST
	853.VISUAL PLACE RECOGNITION
<b>158.</b>	<b>J.P. MORGAN SERVICES INDIA PVT. LTD, MUMBAI</b>
	854. 1. OPGSP FUNDS FLOW AND 2. NODAL TICKET RESOLUTION AUTOMATION
	855.ADDING CONTENT RANKING FEATURES AND CONTENT AGGREGATION FOR RANKING ANALYTICS
	856.AUTOMATED LOG ANALYSIS USING MACHINE LEARNING
	857.BIG DATA INTEGRATION IN ATHENA, PATTERN DETECTION IN RISK CENTRAL DATA USING CLUSTERING
	858.CONSOLIDATED HEALTH REPORT IN THE KDB INFRASTRUCTURE
	859.DESTINATION BASED PACKAGING AND GST INTERSTATE TRANSHIPMENTS FLASH CHANGES
	860.DEVELOPING FAULT TOLERANT AND SECURE JAVA WEBAPP FOR COOKIE MATCHING SERVICE AND HOTEL TEMPLATE
	861. DEVELOPMENT OF AN INTERACTIVE PLATFORM FOR DATA COLLECTION.
	862.DEVOPS DASHBOARD
	863.ENHANCEMENT OF SUPPORT, CONSOLIDATION OF END OF DAY RECONCILIATION MAILS AND RESTART HEALTH REPORTS, DATA FEEDERS FOR REFERENCE DATA
	864.MEESHO
	865.SBM 500, DIPP, NATIONAL TRUST
	866. SELF SERVICE METADATA MANAGEMENT FOR E-COMMERCE MARKETING CAMPAIGNS.
	867.SKILLING INDIA, UNIVERSAL BASIC INCOME
	868.SOCRATES WEB UI DEVELOPMENT
	869.SOFTWARE ASSET MANAGEMENT
	870.SYSTEM SERVICES AND SYSTEM CONTAINERS SUPPORT IN YARN
<b>159.</b>	<b>KPMG, MUMBAI</b>
	871.DESIGN VALIDATION AND NOISE MODE TUNING OF WIND TURBINE



	872.IMPROVEMENT OF ANNUAL ENERGY PRODUCTION OF A WIND TURBINE
	873.STUDY OF THE IMPACT OF DIFFERENT OPERATING CONDITIONS ON LOADS ACTING ON THE WIND TURBINES AND INVESTIGATION OF SOME OF THE TURBINE FAILURES
<b>160.</b>	<b>MORNINGSTAR, MUMBAI</b>
	874.DATA ANALYTICS - AUDIT
	875.DERIVATIVE VALUATIONS
	876.PRODUCT OPTIMIZATION THROUGH SALES AND OPERATIONS
	877.RISK MANAGEMENT BY ENSURING TRADE DOCUMENTS ARE ACCURATE
	878.ROBOTIC PROCESS AUTOMATION
<b>161.</b>	<b>MSCI, MUMBAI</b>
	879.COVER CODING FOR TIME INC. MAGAZINE AND ITS COMPETITORS
	880.EQUITY DERIVATIVE CONTROL RECONCILIATION
	881.MANAGEMENT OF SOCIAL MEDIA FOR WADHWANI FOUNDATION
	882.ROBOTICS PROCESS AUTOMATION
<b>162.</b>	<b>MY POS TECHNOLOGIES PVT. LTD, MUMBAI</b>
	883.ROBOTIC PROCESS AUTOMATION
<b>163.</b>	<b>NOMURA GLOBAL MARKETS, MUMBAI</b>
	884.ROBOTIC PROCESS AUTOMATION
	885.EXPANSION AND OPERATION OF NEN ECOSYSTEM AND LAUNCH OF STARTUP HELPDESK
	886.OPERATIONS AND EXPANSION OF NEN ECOSYSTEM AND LAUNCH OF STARTUP HELP DESK
	887.ROBOTIC PROCESS AUTOMATION
	888.ROBOTICS
	889.ROBOTICS PROCESS AUTOMATION
	890.SUPPLY MANAGEMENT
<b>164.</b>	<b>PRICEWATERHOUSECOOPERS (PWC), MUMBAI</b>
	891.ADVERTISEMENT RELEVANCY FOR RECOMMENDATION ADS
	892.GOODS AND SERVICES TAX (GST) COMPLIANCE IN SELLER REGISTRATION PROCESS
<b>165.</b>	<b>SKODA AUTO INDIA PVT. LTD, MUMBAI</b>
	893.CUSTOMER RISK ASSESSMENT
	894.IMPACT OF BREXIT ON UK AS WELL AS GLOBAL ECONOMY
	895.INDIAMART CATEGORY MANAGEMENT- TAXONOMY CORRECTION, SEO, ISQS OPTIMIZATION, NET PROMOTER SCORE ANALYSIS
	896.MANAGEMENT CONSULTING
	897.PRODUCT DEVELOPMENT AND DIGITAL MARKETING
<b>166.</b>	<b>THORNTON TOMASETTI, MUMBAI</b>
	898.BUYBACK EXCHANGE PROGRAM ON AMAZON INDIA
	899.CMTTECH ASIN IMPORTER ENCHANCEMENTS

<b>167.</b>	<b>UPGRAD, MUMBAI</b>
	900.DASHBOARD PUBLICATION AND AUTOMATION
	901.ROBOTICS PROCESS AUTOMATION
<b>168.</b>	<b>VIACOM18 MEDIA PVT. LTD, MUMBAI</b>
	902.AUTOMATION OF BANK LOANS RISK ANALYSIS
	903.CONDUCTION AND MANAGEMENT OF ENTREPRENEURSHIP PROGRAMS IN SOUTHEAST ASIAN COUNTRIES
	904.MANAGEMENT OF SOCIAL MEDIA FOR WADHWANI FOUNDATION
	905.REWARDS OF YOUR CHOICE
	906.ROBOTIC PROCESS AUTOMATION (RPA)
	907.WIRE REPOSITORY AUTOMATION
<b>169.</b>	<b>VMS (VAKIL MEHTA SETH) CONSULTANTS PRIVATE LIMITED, MUMBAI</b>
	908.NEXTGEN WEBSERVICES EXPLORER AND POWERSEARCH
	909.REGIONAL YOUR ACCOUNT WEBSITE
<b>170.</b>	<b>WORLEY PARSONS INDIA, MUMBAI</b>
	910.TRENDS IN MERGER & ACQUISITION OF HEALTHCARE SECTOR COMPANIES
<b>171.</b>	<b>GRASIM INDUSTRIES LTD, NAGDA</b>
	911.CORPORATE EMPLOYEE PROGRAMME FOR HSBC INDIA
	912.COVERAGE ASSESSMENT OF FINANCIAL CRIME RISKS
	913.PERFORMANCE ANALYSIS OF US MAGAZINE INDUSTRY: (ISSUE LEVEL TREND ANALYSIS AND IDEA GENERATION FOR EFFECTIVE COVER SUBJECTS) & (OPTIMIZATION OF MAGAZINE PRINTING, CIRCULATION BASED ON DATA ANALYTICS)
	914.STREAMLINING OF GLOBAL PLANNING MODELS
<b>172.</b>	<b>HINDALCO INNOVATION CENTRE - SEMIFAB TALOJA, NAVI MUMBAI</b>
	915.IOT -OPPORTUNITIES, CHALLENGES AND STRATEGIES
<b>173.</b>	<b>CENTRAL ROAD RESEARCH INSTITUTE, NEW DELHI</b>
	916.PRINT DISTRIBUTION MANAGEMENT OF TIME INC BOOKAZINES IN US AND CANADA MAGNETS
	917.PRINT DISTRIBUTION MANAGEMENT OF TIME INC. CLIENTS
<b>174.</b>	<b>ECOM EXPRESS PVT. LTD, NEW DELHI</b>
	918.ONE-CLICK HTTPS SETUP FOR WEB APPLICATIONS HOSTED ON CLOUD PLATFORMS
	919.REALTRANS ANDROID APPLICATION
<b>175.</b>	<b>NATIONAL COUNCIL OF APPLIED ECONOMIC RESEARCH, NEW DELHI</b>
	920.AUTOMATED VALIDATION FRAMEWORK FOR RISK INSIGHT
	921.ONE-CLICK HTTPS SETUP FOR WEBSITES HOSTED ON CLOUD PLATFORMS
	922.REAL TIME DATA STREAMS

<b>176.</b>	<b>ADOBE SYSTEMS, NOIDA</b>
	923.AUTOMATED VALIDATION FRAMEWORK FOR RISK INSIGHT
	924.BIG DATA IN QUBOLE
	925.EXTRACT, TRANSFORM AND LOAD FROM THE CLINIC DATABASES TO A CENTRAL RAW WAREHOUSE
<b>177.</b>	<b>GENPACT, NOIDA</b>
	926.ANGULAR 2 APPLICATION
	927.AWS DYNAMODB BACKUP AND RESTORE, AND CLINICAL NLP
	928.CONVERSATION FRAMEWORK
	929.PIPELINE DEVELOPMENT
	930.STUDY & DEVELOPMENT OF JDA FULFILLMENT & TESTING
	931.TRANSPIRATION MANAGEMENT SYSTEM WEB
<b>178.</b>	<b>HCL TECHNOLOGIES, NOIDA</b>
	932.ALLOCATION
	933.STRONG AUTHENTICATION USING BIO-METRIC; MOBILE APPLICATION AND WEB APPLICATION USING CDK (CREDENTIAL DEVELOPMENT KIT)
<b>179.</b>	<b>INDIAMART INTERMESH LTD, NOIDA</b>
	934.CMDB VISUALIZATION
	935.DEVOPS
<b>180.</b>	<b>MENTOR GRAPHICS, NOIDA</b>
	936. CROSS-PLATFORM MOBILE APP FOR SSL CERTIFICATE EXPIRY ALERT AND RENEWAL/UPSELL NOTIFICATION.
	937.PRESTO AND DRIVERS
	938.QDS HIVE METRICS COLLECTION
	939.SCAN ENHANCEMENTS FOR NETWORK THROTTLING AND IMPROVEMENT IN SENSOR DIAGNOSTIC TOOL
<b>181.</b>	<b>NUCLEUS SOFTWARE EXPORT LTD, NOIDA</b>
	940.ANGULAR 2
	941.APPLICATION MONITOR
	942.DATADOG AND UI PROJECT
	943.PARSING OF HL7 MESSAGES AND ORG ADMIN WEB APPS
	944.STRONG AUTHENTICATION FOR WINDOWS LOGIN USING UNIVERSAL SECOND FACTOR
	945.THREAT PROJECTION USING APACHE SPARK
	946.WEB-DEVELOPMENT
<b>182.</b>	<b>PITNEY BOWES SOFTWARE INDIA PVT. LTD, NOIDA</b>
	947.AGGREGATED DATA LAKE
	948.DEVELOPMENT OF SINGLE SIGN ON SYSTEM
	949.REALTRANS APPLICATION DEVELOPMENT
<b>183.</b>	<b>TOLEXO ONLINE PVT LTD, NOIDA</b>
	950.BOTMAN.AI - A SMART PLATFORM FOR BUILDING INTELLIGENCE BASED CHAT BOTS
	951.PIPELINE TECHNICAL DIRECTOR
	952.WEB DEVELOPMENT
<b>184.</b>	<b>TATA MOTORS LTD, PANTNAGAR</b>
	953.CURISHEALTH - THE COMPLETE HMIS SUITE
	954.CONFIGURATION MANAGEMENT
	955.DIGITAL MARKETING AND RESEARCH AND DEVELOPMENT OF CHATBOTS ON MESSAGING PLATFORMS
<b>185.</b>	<b>CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE, PILANI</b>
	956.ANALYSIS OF ARTIFICIAL INTELLIGENCE
	957.NODES
	958.PRODUCT QUALITY TESTING
	959.RECCOMENDER SYSTEMS
<b>186.</b>	<b>BROWNTAPE TECHNOLOGIES PVT. LTD, PORVORIM</b>
	960.INDUSTRIAL RESEARCH ON HEALTHCARE AND AGRICULTURE DOMAINS
	961.MARKET RESEARCH AND ANALYSIS
	962.QUANTITATIVE AND QUALITATIVE RESEARCH IN CHEMICALS AND MATERIALS DOMAIN
<b>187.</b>	<b>B.G.SHIRKE CONSTRUCTION TECHNOLOGY PVT. LTD, PUNE</b>
	963.MARKET RESEARCH IN HEALTHCARE DOMAIN
<b>188.</b>	<b>BHARAT FORGE LTD, PUNE</b>
	964.CREATING MARKET AND CUSTOM INDEXES
	965.DESIGNING AND IMPLEMENTING INITIATIVES TO GROW VOOT
	966.PATENT ANALYTICS À INFRINGEMENT ANALYSIS AND PATENT LANDSCAPES
	967.PRIME BROKERAGE RISK MANAGEMENT AND FINANCING RISK MANAGEMENT
<b>189.</b>	<b>CREDIT SUISSE, PUNE</b>
	968.BLUEBOX REPORTING IN XML
	969.EXCEPTION GENERATION FOR HMD USING MACHINE LEARNING
	970.FACTOR AND THEMATIC INDEX
	971.INDEX OPERATIONS - EVERYDAY ACTIVITIES
	972.MOBILE PRODUCT DEVELOPMENT TARGETED AT INVESTMENT RESEARCH AND MANAGEMENT
	973.PATENT ANALYTICS
	974.PLANNING AND EXECUTING INITIATIVES FOR GROWING VOOT
	975.PROFIT AND LOSS REPORTING
	976.RISK AND CONTROL INTERN

<b>190.</b>	<b>EMC, PUNE</b>
	977.DESIGN OPTIMAL SMART BETA STRATEGIES FOR EQUITY INDEXES IN DEVELOPED AND DEVELOPING MARKETS
	978.INDEXES TECHNOLOGY OPERATIONS
<b>191.</b>	<b>HALLIBURTON TECHNOLOGIES, PUNE</b>
	979.CAMPAIGN OPTIMIZATION AND INSIGHT REPORT
	980.STANDARD REPORTING SYSTEM FOR ANALYSIS AND INSIGHTS
<b>192.</b>	<b>JOHNSON CONTROLS, PUNE</b>
	981.CAMPAIGN ANALYSIS
	982.CAMPAIGN ANALYSIS & INSIGHTS
	983.DASHBOARDS FOR MEDIA IQ DIGITAL
<b>193.</b>	<b>NVIDIA GRAPHICS - HARDWARE, PUNE</b>
	984.1) EVALUATING EXISTING BUSINESS PERFORMANCES AND NEW INITIATIVES TO PROPEL GROWTH IN LIVE ENTERTAINMENT BUSINESS. 2) REVIEW CHARACTERISTICS OF 2ND GEC VS FLAGSHIP CHANNELS ACROSS MULTIPLE MARKETS AND UNDERSTAND THE AUDIENCE BEHAVIOR.
	985.CREDIT STRUCTURING
	986.GLOBAL SECURITY MAPPING 2016
	987.INDEXES TECHNOLOGY OPERATIONS
	988.MOBILE PRODUCT DEVELOPMENT TARGETED AT INVESTMENT RESEARCH AND MANAGEMENT
	989.STRUCTURING & STRUCTURED PRODUCTS
<b>194.</b>	<b>REFLEXIS SYSTEMS INDIA PVT LTD, PUNE</b>
	990.AMAP - THE ANALYTICS, MODELLING AND ACTION PLATFORM
	991.AMAP DEVELOPMENT & API FOUNDATION ECOSYSTEM
	992.DATA ANALYSIS
<b>195.</b>	<b>SKODA AUTO INDIA PVT. LTD. (CHAKAN), PUNE</b>
	993.QUANT TRADING STRATEGIES AND PORTFOLIO OPTIMIZATION
<b>196.</b>	<b>SPICER INDIA LTD, PUNE</b>
	994.MSCI INDEX RESEARCH
<b>197.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD - DATA ANALYTICS, PUNE</b>
	995.BUSINESS INTELLIGENCE TOOLS AND DASHBOARDS
	996.DIGITAL ADVERTISING & MARKETING RESEARCH, IMPLEMENTATION AND ANALYSIS
	997.DPI-MANAGER(DATA PROVIDER INSTANCE MANAGER)
	998.ENHANCEMENT, COLLECTION & INTEGRATION OF DATA & CONTRIBUTION TO AMAP
	999.SOC POWER DESIGN
	1000.TARGETTED REGRESSION
<b>198.</b>	<b>TATA AUTOCOMP SYSTEMS LTD, PUNE</b>
	1001.A REPORT ON MAREKET RESEARCH AND INDUSTRIAL PROMOTIONAL ARTICLES
	1002.HRM AND AUTOMATIONS
	1003.PROMOTION WRITING
	1004.REPORT ON COMPANY PROFILING, SECONDARY RESEARCH & MARKET ESTIMATION
<b>199.</b>	<b>TATA CHEMICAL INNOVATION CENTER, PUNE</b>
	1005.BUSINESS INTELLIGENCE
<b>200.</b>	<b>TATA MOTORS LTD, PUNE</b>
	1006.BUSINESS DEVELOPMENT IN A MARKET RESEARCH FIRM
	1007.COMPANY PROFILING, SECONDARY RESEARCH & MARKET ESTIMATION
	1008.MARKET ANALYSIS OF COMPANIES IN AGRICULTURE AND HEALTHCARE DOMAINS
	1009.MARKET RESEARCH
	1010.MARKET RESEARCH AND ANALYSIS
	1011.MARKET RESEARCH IN HEALTH CARE DOMAIN
	1012.MARKET RESEARCH ON VARIOUS INDUSTRIES IN HEALTHCARE & AGRICULTURE DOMAIN
	1013.PORTFOLIO MANAGEMENT USING MULTIFACTOR INVESTING IN R
	1014.RELATIONAL DATABASE MANAGEMENT
	1015.REPORT DESCRIPTIONS AND PROMOTIONS
	1016.TALENT MANAGEMENT : BEST PRACTICES
	1017.TRIBELocal
<b>201.</b>	<b>VCONSTRUCT PRIVATE LIMITED, PUNE</b>
	1018.MARKET RESEARCH
	1019.MARKET RESEARCH AND ANALYSIS
<b>202.</b>	<b>VERITAS SOFTWARE TECHNOLOGIES INDIA, PUNE</b>
	1020.BUSINESS ANALYTICS - MONITORING CAMPAIGNS
	1021.CAMPAIGN ANALYSIS

<b>203.</b>	<b>ADITYA BIRLA INSULATORS, RISHRA</b>
	1022.CAMPAIGN ANALYSIS IN DIGITAL ADVERTISING
	1023.DESIGN OF NBUNIVERSITY PORTAL FOR VERITAS EMPLOYEES
	1024.PROJECTS IN MEDIA IQ
<b>204.</b>	<b>DIVGI TORQTRANSFER SYSTEMS PVT. LTD. – BHOSARI, SIRSI</b>
	1025.DEVELOPMENT AND TESTING OF BACKUP AND RESTORE COMPONENT OF CLEARWELL EDISCOVERY PRODUCT
<b>205.</b>	<b>KLIENTAS, TRIVANDRUM</b>
	1026. DEVELOPMENT OF AN ELECTRONIC PRESSURE INDEPENDENT CONTROL VALVE (EPICV) WITH UNIVERSAL MODULE FOR HVAC APPLICATIONS.
	1027.DEVELOPMENT OF ELECTRONIC PRESSURE INDEPENDENT VALVE FOR HVAC APPLICATIONS
<b>206.</b>	<b>LEAP CONSULTING, TRIVANDRUM</b>
	1028.DESIGN OF ACTUATOR

#### LIST OF PROJECT ASSIGNMENTS FOR FIRST SEMESTER 2017-2018

<b>1.</b>	<b>SKF INDIA LTD, AHMEDABAD</b>
	1. WEB BASED REAL TIME MACHINE MONITORING SYSTEM
<b>2.</b>	<b>SKODA AUTO INDIA PVT. LTD, AURANGABAD</b>
	2. (i) STANDARDIZATION OF REPORT (II) PROCESS SUPPORT PRESENT STATUS AND IMPROVEMENT ACTIONS (III) IMPROVEMENT AND FAST RESPONSE DEFECT FEEDBACK MECHANISM WITH BETTER COMMUNICATION. (iv) STANDARDIZATION OF TACT IN TERMS OF LAYOUT, STORAGE, IDENTIFICATION AND MATERIAL FLOW
<b>3.</b>	<b>ALTAIR ENGINEERING INDIA PVT. LTD, BANGALORE</b>
	3.DATA EXTRACTION AND INTEGRATION TO DATABASE
	4.MULTIBODY DYNAMICS MODELING AND ANALYSIS OF A REGULAR HUMAN HAND TO DEVELOPMENT OF A PHYSICAL PROSTHETIC HAND
	5.OPTIMIZATION PROBLEMS IN MULTI-BODY DYNAMICS
<b>4.</b>	<b>AMAZON DEVELOPMENT CENTER, BANGALORE</b>
	6.AMAZON VENDOR SERVICES
	7.ASSOCIATE REPORTING SERVICE MIGRATION FROM ELASTICSEARCH 1.7 TO 5.6
	8.ASSOCIATES PAYPORTAL FOR PAY@STORE
	9.CONTEXTUAL EXTRACTION FROM IMAGES USING DEEP LEARNING
	10.DPX RESOURCE UTILIZATION
	11.ENCODER PROFILE SERVICE
	12.FEATURE ENHANCEMENTS FOR VENDOR SUCCESS PROGRAM
	13.GLOBAL LENDING MARKETPLACE
	14.INTERNAL SERVICE OPTIMIZATION AND TUNING
	15.LABELLING TOOL AND ML MODELS FOR ONELINK
	16.LOG4J MIGRATION & AMAZON VENDOR CENTRAL
	17.METRIC GENERATION USING BIG DATA TECHNOLOGY AND DEVELOPING WEB PORTAL
	18.MIGRATIONS
	19.OMEGA BIDDER
	20.ORDER CANCELLATION BY CUSTOMER FOR SELLERFLEX 2.0
	21.PALLET EACH STOW WEB APPLICATION FOR AMAZON&APOS;S KIVA FULFILLMENT CENTRES
	22.PROOF OF CONCEPT FOR CONTENT CLASSIFICATION, BUILDING URL DISCOVERY PIPELINE
	23.QUANTIFYING WEBSITE QUALITY
	24.REPORTING AND CURATION SERVICE REDESIGN
	25.SELLERS PROVIDERS NETWORK
	26.SPONSORED PRODUCTS PLUGIN & API INTEGRATION
	27.TOOL DEVELOPMENT FOR VALIDATING BUSINESS RULES FOR FRAUD DETECTION
	28.V2 MIGRATION FOR INDIA SHIPMENT
	29.VARIABLE DELIVERY PROMISE, JUSPAY BROWSER INTEGRATION
	30.WEBLAB METRIC WHITELIST SERVICE
<b>5.</b>	<b>AMERICAN EXPRESS INDIA, BANGALORE</b>
	31.MACHINE LEARNING ALGORITHMS AND BIG DATA TOOLS
	32.MIGRATION OF THE EXISTING SAS PROCESSES TO BIG-DATA ENVIRONMENT
<b>6.</b>	<b>ANALOG DEVICES - DESIGN AND SIMULATION, BANGALORE</b>
	33.STUDY AND SIMULATION OF CIRCUITS DESIGNED FOR PROJECT 'ADUX1060'
	34.DESIGN AND SIMULATION OF BASIC SUB BLOCKS IN ANALOG ELECTRONICS
	35.DESIGN OF ANALOG CMOS BLOCKS FOR FSADA4574
	36.SYSTEM LEVEL ANALYSIS AND BENCHMARKING OF A NEW ARCHITECTURE OF DATA CONVERTERS

<b>7.</b>	<b>ANALOG DEVICES - DESIGN VERIFICATION, BANGALORE</b>
	37.DEVELOP CODE AND FRAMEWORK FOR TESTING THE CORESIGHT™ ON-CHIP DEBUG FEATURES ON ADSP-SC589
	38.IMPLEMENTATION OF DSP WITH WIRELESS RADIO MODULE
	39.OVERHEAD PEOPLE DETECTION USING CONVOLUTIONAL NEURAL NETWORK
	40.STUDYING CORDIC BLOCK AND ITS PERFORMANCE
<b>8.</b>	<b>APOLLO TYRES LTD. – IOT, BANGALORE</b>
	41. ANDROID APP TO RECEIVE DATA FROM BLE DEVICE AND DESKTOP APP TO PLOT REAL TIME GRAPH
	42.RFID BASED BLUETOOTH COMMUNICATION ANDROID APP
	43.TALKING TYRE PROJECT
	44.TYRE PROFILE MANAGEMENT SYSTEM
<b>9.</b>	<b>APPLE INDIA PRIVATE LIMITED, BANGALORE</b>
	45.SCOUR SEARCH & RETAIL DAILY NEWS
	46.THE SENTIMENT SUITE
<b>10.</b>	<b>ARANCA, BANGALORE</b>
	47.FUND FACTSHEET GENERATOR (EXCEL AND CLOUD BASED)
	48.PORTFOLIO OPTIMIZATION USING BLACK-LITTERMAN AND ASSOCIATED STRATEGIES
	49.PORTFOLIO MANAGEMENT
<b>11.</b>	<b>ARM EMBEDDED TECHNOLOGIES PRIVATE LIMITED, BANGALORE</b>
	50.ANALYSIS OF SYNTHESIS PERFORMANCE IN DIFFERENT EDA TOOLS FOR LATEST TECHNOLOGY NODES AND STANDARD CELL PROTOTYPING
	51.CHARACTERIZE AND IMPROVE THE QUALITY OF ADDRESS TRANSLATION SYSTEM VERIFICATION
	52.CLUSTER LEVEL IMPLEMENTATION FOR OCTA CORE PROCESSOR WITH TWO BIG AND SIX LITTLE CORES FOR FINFET TECHNOLOGY
	53.CPU IMPLEMENTATION FOM
	54.CUSTOM CLOCK TREE STRUCTURES
	54.DEVELOPMENT OF A LIGHTWEIGHT CHECKER TOOL FOR ARCHITECTURAL SECIFICATION ANOMALIES
	55.DEVELOPMENT OF REGRESSION TESTS FOR VARIOUS SOFTWARES
	56.DYNAMIC MODELING OF POWER PINS IN GATE-LEVEL VERILOG MODELS
	57.ELECTRONIC DESIGN AUTOMATION AND &DOUBLE;THE BULL FIGHT&DOUBLE; ON PPA
	58.LIBRARY BENCHMARKING AND PPA HEADLINES
	59.MIGRATION TO SOC INTEGRATION TOOL - ARM SOCRATES
	60.SYSTEM GUIDANCE FOR INFRASTRUCTURE
<b>12.</b>	<b>AURIGO SOFTWARE, BANGALORE</b>
	61.SPRINT METRICS (AURIGO DASHBOARD)
	62.SPRINT METRICS
<b>13.</b>	<b>BECKMAN COULTER (FORMERLY REAMETRIX INDIA P LTD) , BANGALORE</b>
	63.DURACLONE B27 REAGENT PERFORMANCE VERIFICATION AND FEASIBILITY OF DURACLONE 34845 REAGENT
	64.VERIFICATION OF DURACLONE B27 REAGENT & CHARACTERIZATION, VERIFICATION AND VALIDATION OF TRI T-STAT (CD 3/4/8)
<b>14.</b>	<b>BELONG.CO, BANGALORE</b>
	65.ANALYSIS OF EMAIL DATA AND ELASTICSEARCH
	66.AUTOMATION OF REPORTING
	67.AUTOMATION/TECH FOR OUTBOUND HIRING
	68.CALL REJECTION ANALYSIS AND CALENDAR USAGE
	69.RESUME PARSING
	70.STANDARDIZATION AND VERTICALIZATION
<b>15.</b>	<b>BLUE JEANS NETWORK INDIA PVT. LTD, BANGALORE</b>
	71.ATTENDEE PLAYBACK SDK
	72.BACKEND SUPPORT FOR BLUEJEANS HUDDLE
	73.BUILD FIBER FOR LINUX
	74. CALCULATION OF GPU METRICS OF BLUEJEANSAPP FOR ANALYSIS.
	75.CONVERTING UI TO ANGULAR 4, USER LEVEL BILLING ENTITLEMENT
	76.INDIGO OPTIMIZATIONS AND IMPROVEMENTS
	77.OUTLOOK ADD-IN MODIFICATIONS AND QA FOR BLUEJEANS
<b>16.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), BANGALORE</b>
	78.CONTENT ENRICHMENT
	79.CUSTOMER EXPERIENCE(CX) IMPROVEMENT
	80.DATA SCIENCE APPLICATIONS AT SWIGGY
	81.RAIN OPERATIONS AND ANALYSIS

	82.TRADE DISCOUNTS AND SWIGGY SELECT
	83.UNDERSTANDING AND IMPROVING REPEAT RATES
<b>17.</b>	<b>CA TECHNOLOGIES, BANGALORE</b>
	84.ALERTING & MONITORING SYSTEM FOR ONLINE PAYMENTS
	85.DOCKERIZATION OF TRANSACTION MANAGEMENT
	86.MICROGATEWAY FOR MANAGING MICROSERVICES
	87.THE ALERTING & MONITORING SYSTEM FOR ONLINE PAYMENTS
<b>18.</b>	<b>CAPILLARY TECHNOLOGIES - TESTING AUTOMATION, BANGALORE</b>
	88.SOFTWARE? ?DEVELOPMENT? ?FOR? ?CAMPAIGNS? ?TEAM
	89.REST APIS MONITORING AND TESTING
<b>19.</b>	<b>CENTRE FOR ARTIFICIAL INTELLIGENCE &amp; ROBOTICS, BANGALORE</b>
	90.COMPUTATIONAL FLUID-STRUCTURE INTERACTION IN FLAPPING WING AERODYNAMICS
	91.TRAJECTORY PLANNING OF A FOUR WHEELED ROBOT
	92.UNSUPERVISED DOMAIN ADAPTATION USING WASSERSTEIN METRIC
<b>20.</b>	<b>CERNER, BANGALORE</b>
	93.ANALYSIS OF VIDEOS USING COMPUTER VISION AND MACHINE LEARNING
	94.APPLICATION DEVELOPMENT OF ANDROID-BASED HYBRID APP
	95.CERNER SMART HEALTH
	96.CERNER SMART HEALTH / AMAZON REKOGNITION
	97.DEVELOPMENT OF WEB BASED APPLICATION
<b>21.</b>	<b>CISCO SYSTEMS (INDIA) PVT. LTD - EMBEDDED SYTEMS, BANGALORE</b>
	98. RGBD SLAM MAPPING AND NAVIGATION
<b>22.</b>	<b>CISCO SYSTEMS (INDIA) PVT. LTD - MACHINE LEARNING, BANGALORE</b>
	99. END-TO-END FRAMEWORK FOR IOT ECOSYSTEMS
<b>23.</b>	<b>CISCO SYSTEMS (INDIA) PVT. LTD - SOFTWARE ENGINEERING, BANGALORE</b>
	100.RGBD SLAM MAPPING AND NAVIGATION
<b>24.</b>	<b>EMC, BANGALORE</b>
	101.A REPORT ON AUTOMATION USING ATAP FRAMEWORK
	102.ARCHITECTURE OF NETWORK MODELLING ENGINE FOR NEXTGEN SMARTS
	103.AUTOMATION OF NAS USING TITANS FRAMEWORK
	104.AVAMAR VIRTUAL EDITION AUTODEPLOYMENT
	105.DATABASE MANAGEMENT SYSTEM
	106.DEVELOPMENT OF ROOT CAUSE ANALYSIS ENGINE
	107.INSTANT ACCESS AND RECOVERY OF HYPER-V VM
	108.NETWORK TOPOLOGY DISCOVERY
	109.SMARTS DEPLOYMENT ARCHITECTURE
	110.SMARTS EXPRESSION ENGINE
	111.SOFTWARE DEVELOPMENT OF NETWORKER&APOS;S VDI PLUGIN
	112.WHITE BOX COVERAGE
<b>25.</b>	<b>ENSCI - A UNIT OF WEIR MINERALS INDIA PVT. LTD, BANGALORE</b>
	113.HOPPER DESIGN AND ANALYSIS THROUGH FEM
<b>26.</b>	<b>ERICSSON GLOBAL INDIA PVT. LTD, BANGALORE</b>
	114.AGILE SOFTWARE DEVELOPMENT IN C# USING VISUAL STUDIO ANDASP.NET WEB API FOR THE MEDIAFIRST TV PLATFORM OF ERICSSON
	115.AUTOMATION OF UNIT TEST COVERAGE FOR DHCPV6 FUNCTIONALITY CODE IN BNG PRODUCT
	116.CONTAINERSATION OF ANALYTICS TOOLS
	117.IPOS BUILD OPTIMIZATION
	118.MONITORING PERFORMANCE OPTIMIZED DATA CENTERS
	119.O AGILE SOFTWARE DEVELOPMENT IN C# USING VISUAL STUDIO AND ASP.NET WEB API FOR THE MEDIAFIRST TV PLATFORM OF ERICSSON
	120.OFFLINE TROUBLESHOOTING FOR SDN
	121. SUBSCRIBER SPECIFIC DEBUGING.
<b>27.</b>	<b>GENPACT, BANGALORE</b>
	122.COMPUTER VISION THROUGH DEEP LEARNING
	123.CUSTOMER ANALYTICS
	124.DEVELOPMENT AND CUSTOMIZATION OF A CHATBOT
	125.EUROPEAN PROCESS EFFICIENCY AND ROBOTIC PROCESS AUTOMATION(RPA)
	126.F&A (FINANCE AND ANALYTICS)
	127.HEALTH INSURANCE FRAUD ANALYTICS
	128. IDENTIFYING WIDESPREAD OPPORTUNITIES USING MARKET STRUCTURE TOOL.
	129.MARKETING & SALES ANALYTICS

	130.MERCK SPEND ANALYSIS
	131.PROJECTS IN DATA SCIENCE
	132.ROBOTIC PROCESS AUTOMATION
	133.ROBOTICS PROCESS AUTOMATION (RPA) FOR EUROPEAN DELIVERY TEAM (EDT)
	134.TIME SERIES FORECASTING SHINY APP
	135.WEB CHAT MINING AND ANALYTICS ,CUSTOMER ANALYTICS
<b>28.</b>	<b>GOLDMAN SACHS INDIA PVT. LTD. – OPERATIONS, BANGALORE</b>
	136.1. RISK MANAGEMENT BY ENSURING ACCURATE TRADE REPRESENTATION 2. TRADE AUTOMATION
	137.A] INTER SYSTEMS RECONCILIATIONS(BAU) b] ROOT CAUSE ANALYSIS C] WORKFLOW AUTOMATION
	138.BUSINESS ANALYTICS SOLUTIONS FOR REGULATORY OPERATIONS
	139.MAXIMIZE AUTOMATION OF CONFIRMATION GENERATION USING UNIFORM AND LOW-MAINTENANCE DESIGN APPROACH
	140.RISK ANALYSIS AND AUTOMATION
	141.RISK MANAGEMENT AND AUTOMATION
	142.3RISK MANAGEMENT BY ENSURING ACCURATE TRADE REPRESENTATION
	143. RISK MANAGEMENT BY ENSURING ACCURATE TRADE REPRESENTATION. AND, TRADE AUTOMATION
<b>29.</b>	<b>HINDUSTAN UNILEVER RESEARCH CENTRE, BANGALORE</b>
	144.COMPUTATIONAL PREDICTION OF STABILITY CONSTANTS OF CHELATORS
<b>30.</b>	<b>INFINERA - EMBEDDED SOFTWARE TESTING, BANGALORE</b>
	145.AUTOMATION AND WEB DATA MIGRATION
	146.LARGE NETWORKS VISUALISATION AND EVALUATION
	147.OSUBMIT
	148.SERDES CONFIGURATION
<b>31.</b>	<b>INFINERA - VLSI TESTING, BANGALORE</b>
	149.CDR TUNING ON 28GBPS LINKS ACCORDING TO LOSS BUCKETS FOR ERROR REDUCTION
	150.COMPREHENSIVE STUDY ON LINT AND CDC VERIFICATION METHODS
	151.PIF INTERRUPT AUTOMATION IN LXTF20 FRAMEWORK
	152.VERIFICATION OF I2C IO EXPANDER
<b>32.</b>	<b>INMOBI - SOFTWARE DEVELOPMENT, BANGALORE</b>
	153.DEVELOPMENT AND AUTOMATION OF TOOLS IN WADOGO TEAM
	154.WADOGO DEMAND
<b>33.</b>	<b>INMOBI - SUPPLY CHAIN, BANGALORE</b>
	155.GLOBAL SUPPLY DEMAND COORDINATION
	156.ANALYSIS – PARTNER MANAGE
	157.CAMPAIGN MANAGEM
	158.DEMAND SIDE SALES FLOW + MQL/SQL
	159.DIGITAL MARKETING ECOSYSTEM AND DELIVERY MANAGEMENT SYSTEM
	160.INDIA STRATEGIZING AND OPTI
	161.INMOBI AFFILIATE PARTNER STRATEGY & OPERATIONS - WADO
	162.INMOBI EXCHANGE AND OPERATION OF PMPS
	163.MARKET INTELLIGENCE- STRATEGY & OPERATIONS
	164.PERFORMANCE ADVERTISING
	165.SALES & PERFORMANCE ADVERTI
	166.SUPPLY AND DEMAND – WADOGO
	167SUPPLY SIDE MARGIN REPORTS
	168.THIRD PARTY SUPPLY-WADOGO(AFFILIATE DEMAND)
	169.WADOGO DEMAND ONBOARDING
<b>34.</b>	<b>INTEL - COMPUTER AND VLSI ARCHITECTURE, BANGALORE</b>
	170.AUTOMATION OF SERVER PLATFORM TESTING AND VALIDATION
	171.DESIGN OF EBB ANALYZER TOOL
	172.DEVELOPMENT OF (I) INFERENCE ACCELERATOR GRAPH OPTIMIZER & (II) INFERENCE ACCELERATOR SOFTWARE STACK ON UBUNTU
	173.DEVELOPMENT OF INFERENCE ACCELERATOR GRAPH OPTIMIZER
	174.NON VOLATILE MEMORY PLATFORM VALIDATION
	175.SERVER PLATFORM INTEGRATION AND VALIDATION
<b>35.</b>	<b>INTEL - EMBEDDED SOFTWARE, BANGALORE</b>
	176.CAPS SCRIPT AND HEADER FILES DEVELOPMENT
	177.FRONT END VERIFICATION OF THE INTEL GRAPHICS PROCESSOR UNIT
	178.OPTIMIZATION, PROPAGATION, MT BUILD IN WCDMA FIRMWARE

	179.OPTIMIZATION,MT BUILD,PROPAGATION OF WCDMA FIRMWARE
<b>36.</b>	<b>INTEL - GPU AND VLSI DESIGN, BANGALORE</b>
	180.STUDY AND CHARACTERIZATION OF DIGITAL STANDARD CELL LIBRARY AND IC DESIGN USING INDUSTRY STANDARD EDA TOOLS
	181.A WALK-THROUGH OF SOC VALIDATION CYCLE VIA FLOW AUTOMATION TO GENERATE FPGA FRIENDLY RTL, DRIVERS DEVELOPMENT AND CODE OPTIMIZATION TO MEET MEMORY CONSTRAINTS
	182.BACKEND REPORT AUTOMATION
	183.FIFO PROFILING
	184.POWER ACTIVITY OF DFX LOGIC IN FUNCTIONAL MODE
	185.SUBSYSTEM INTEGRATION
	186.TLM BASED EMULATION TRACKERS FOR MEMORY/CACHE INTERFACES
	187.VLSI PHYSICAL DESIGN FLOW
<b>37.</b>	<b>INTEL - MACHINE LEARNING, BANGALORE</b>
	188.FUNCTIONAL SAFETY OF AUTONOMOUS DRIVING
	189.INTELLIGENT FAN CONTROL AND HAPTICS IN GAMING
<b>38.</b>	<b>INTEL - TESTING &amp; VERIFICATION, BANGALORE</b>
	190.AUTOMATION OF POWER ESTIMATION FLOW FOR SOFT IP
	191.DESIGN OF REUSABLE MONITOR FOLLOWING AMBA AXI PROTOCOL USING SYSTEMVERILOG
	192.FORMAL EQUIVALENCE VERIFICATION IN ASIC SOC DESIGNS
	193.PORTING OF SIMULATION TEST CASES FOR 3GFW-CV
	194.TESTING AND VERIFICATION OF QBAS FEATURE AND IMPLEMENTATION OF IRAT FEATURE
<b>39.</b>	<b>JDA SOFTWARE SOLUTIONS, BANGALORE</b>
	195.TESTING AND VALIDATION OF JDA CONNECT SERVICE FRAMEWORK
	196.AUTOMATION OF SCRIPTS USING SELENIUM AND DOTNET
	197.AUTOMATION OF TEST CASES FOR SALES AND OPERATION PLANNING TEAM
	198.AUTOMATION OF THE WORKFLOW DRIVEN TESTING FRAMEWORK FOR A NETWORK DESIGN AND OPTIMIZATION TOOL
	199.AUTOMATION OF TMS SERVICES
	200.BUILD A PAGE ON WMS USING PAGE BUILDER PAGE
	201.BUILDING PROJECT MANAGEMENT
	202.CI REVERT-FIX AND PERFORMANCE ANALYSIS
	203.CLOUD SERVICE AUTOMATION
	204.CONTINUOUS INTEGRATION(CI) REVERT AND FIX
	205.DATABASE MANAGEMENT OF A SUPPLY CHAIN MODEL USING NEO4J AND CYPHER
	206.DEMAND FORECAST POC AND DATA ANALYSIS
	207.LPOPT-OPTIMIZATION , QUEUE-SCHEDULING FOR BACKLOG
	208.POC : DEMAND & FORECASTING -- SUPPLY CHAIN PLANNING AND OPERATIONS
	209.SCRIPT AUTOMATION USING SELENIUM
	210.SERVER SIDE AUTOMATION USING POWERSHELL
	211.TESTING OF INTEGRATION OF TMS AND WMS
	212.UPGRADE MANAGER
	213.USER INTERFACE (UI) FOR VALIDATION OF EDI FILES
	214.VARIOUS DATA INTERPRETATIONS ON MANUFACTURING PLANNING PRODUCTS
	215.WEBSITE FOR CUSTOMER DETAILS MANAGEMENT
<b>40.</b>	<b>JOHN F WELCH TECHNOLOGY CENTER (GE), BANGALORE</b>
	216.CFD ANALYSIS OF SUPERSONIC EJECTORS
	217.CFD ANALYSIS OF OXY-FUEL COMBUSTION IN A COAL PLANT
<b>41.</b>	<b>JP MORGAN CHASE – TECHNOLOGY, BANGALORE</b>
	218.NEPTUNE API
	219.REAL TIME APPLICATION DEVELOPMENT
	220. TEXT CLASSIFIER USING LSTM.
<b>42.</b>	<b>JPMC CIB OPERATIONS, BANGALORE</b>
	221.NR RECERTIFICATION AND IMPROVEMENT INITIATIVES
	222.PROCESS IMPROVEMENT
	223.PROCESS IMPROVEMENT FOR RECONCILIATION
<b>43.</b>	<b>JPMC CIB OPERATIONS - ROBOTICS AUTOMATION, BANGALORE</b>
	224.AUTOMATION OF CUSTODY FUND SERVICES TRADES AND RECONCILIATIONS & OPERATIONS UNIT
	225.AUTOMATION OF MANUAL RECONCILIATION
	226.ROBOTICS PROCESS AUTO
	227.ROBOTICS PROCESS AUTOMATION
	228.ROBOTICS PROCESS AUTOMATION IN FINANCIAL SECTOR



<b>44.</b>	<b>MEDIA IQ DIGITAL, BANGALORE</b>
	229.DIGITAL ADVERTISING & ANALYSIS
	230.AIQX
	231.ANALYTICS AND REPORTING
	232.AUTOMATION OF INSIGHTS THROUGH TABLEAU
	233.CAMPAIGN ANALYSIS AND IR REPRESENTATION
	234.DATA ANALYTICS / DIGITAL ADVERTISING
	235.DATA PIPELINES: INGESTION OF DATA
	236.EMPLOYING TABLEAU TO CREATE STANDARD DASHBOARDS TO REDUCE THE TURNAROUND TIME OF THE INSIGHT REPORTS
	237.FEATURE SELECTION
	238.INSIGHT REPORTS
	239.INSIGHTS IN MEDIA IQ
	240.MEDIA CAMPAIGN INSIGHT-GENERATION BASED ON DATA ANALYTICS
	241.SALES INSIGHT ON REFORMATION DAY VERTICAL
	242.TEESRI ANKH
	243.UNDERSTANDING AND MANAGING AN AD CAMPAIGN
<b>45.</b>	<b>MERCEDES BENZ, BANGALORE</b>
	244.EXTERNAL AERODYNAMICS OF TRUCKS USING OPENFOAM
	245.INTEGRATION OF VICERAL FAT INTO 50TH PERCENTILE MALE FINITE ELEMENT HUMAN MODEL TO IMPROVE ORGAN INTERACTIONS UNDER CRASH
	246.INTRODUCTION TO ELECTRIC MOTORS
	247.NUMERICAL MODELLING OF REFUELLING USING OPENFOAM
	248.STUDY OF ELECTROMAGNETIC FORCES IN PERMANENT MAGNET MOTOR
	249.VOF-LPT HYBRID SOLVER USING OPENFOAM
<b>46.</b>	<b>NATIONAL AEROSPACE LABORATORIES, BANGALORE</b>
	250.DEVELOPMENT OF HAFNIUM CARBIDE BASED SOALR SELECTIVE COATINGS
	251.EXPERIMENTAL INVESTIGATION OF FLUID STRUCTURE INTERACTION OF FLAPPING WING MAV
<b>47.</b>	<b>NATIONAL CENTRE FOR BIOLOGICAL SCIENCES, BANGALORE</b>
	252.ARE ENGG/SCIENCE GRADUATES IN INDIA MAKING BETTER CAREER CHOICES NOW THAN IN THE PAST
	253.EFFECT OF LIGAND CONCENTRATION, SIGNALLING RECEPTOR CONCENTRATION AND BINDING RECEPTOR CONCENTRATION ON WINGLESS SIGNALLING
	254.HOST PLANT MEDIATED HERBIVORE-PARASITOID INTERACTION
<b>48.</b>	<b>NATIONAL ENTREPRENEURSHIP NETWORK, BANGALORE</b>
	255.GLOBAL EXPANSION SEA
	256.GLOBAL EXPANSION IN SOUTH EAST ASIA
	257.GLOBAL EXPANSION OF WADHWANI FOUNDATION INTO THE AFRICAN REGION
	258.GLOBAL SKILLS NETWORK - CONTENT
	259.GLOBAL SKILLS NETWORK – PROGRAM MANAGEMENT
	260.GRAPHIC DESIGN - BRANDING
	261.GSN – CONTENT
	262.INTERNSHIP AT WADHWANI FOUNDATION
	263.MENTORING FOR ENTREPRENEURS AT WADHWANI FOUNDATION (NATIONAL ENTREPRENEURSHIP NETWORK CONTENT)
	264.NATIONAL ENTREPRENEURSHIP NETWORK – CONTENT DEVELOPMENT FOR NEN STUDENT CURRICULUM AND PRACTICUM
	265.NATIONAL ENTREPRENEURSHIP NETWORK – IMPACT M
	266.TO CREATE AN INTELLIGENT INFORMATION DATABASE FOR ENTREPRENEURS
	267.UNEARTH THE JOURNEY AND CHALLENGES OF ENTREPRENEURSHIP
<b>49.</b>	<b>NATIONAL INSTRUMENTS SYSTEMS (INDIA) PVT. LTD, BANGALORE</b>
	268.GATHERING FEATURE USAGE DATA FOR BUSINESS DECISIONS
<b>50.</b>	<b>NETAPP, BANGALORE</b>
	269.PERFORMANCE ANOMALY SIGNATURE FOR STORAGE SYSTEM
<b>51.</b>	<b>NEXTGEN PMS PVT. LTD - NON IT, BANGALORE</b>
	270.BUILDING DIGITAL DASHBOARDS
<b>52.</b>	<b>NEXTGEN PMS PVT. LTD - NON IT, BANGALORE</b>
	271.BUILDING DIGITAL DASHBOARDS
	272.CSR: STRATEGY CONSULTING, MONITORING & EVALUATION AND IMPACT ASSESSMENT
<b>53.</b>	<b>NUTANIX TECHNOLOGIES INDIA PVT. LTD, BANGALORE</b>
	273.AUTOMATION AND TOOLBOX DEVELOPMENT
	274.INTEGRATING WITH POWERSHELL TARGETS FROM LINUX BOX

	275.TOOLBOX DEVELOPMENT AND AUTOMATION FOR NCC
	276.UI AUTOMATION OF NUTANIX CLUSTER CHECKS
<b>54.</b>	<b>NVIDIA GRAPHICS – HARDWARE, BANGALORE</b>
	277.AUTOMATED FLOW AND TEST BENCH IMPROVEMENTS
	278.AUTOMATION OF LAUNCH AND DOCUMENTATION OF TESTBENCH
	279.BRING UP OF THE SOC
	280.DESIGN FOR TESTABILITY - CAD
	281.FULLCHIP VERIFICATION AND TESTBENCH IMPROVEMENTS
	282.GPU MEMORY ARCHITECTURE
	283.INTEGRATING VIRTUAL CPU MODEL WITH SYSTEM FPGA SOC
	284.NVPDM ANALYTICS
	285.PCIE VERIFICATION , INFRASTRUCTURE DEVELOPMENT AND BRINGUP
	286.RANDOM ACCESS MEMORY INITIALIZATION FOR VERIFICATION USING ATPG
	287.REDUCING PROJECT MIGRATION EFFORT FOR TEGRA PROJECT TREE
	288.UNIT LEVEL VERIFICATION OF GPU SUBUNITS
	289.VALIDATING ARM V8.X FEATURES
	290.VERIFICATION OF GPU SUBUNITS
	291.VERIFICATION OF POWER ESTIMATION FEATURES
	292.VIRTUAL PROTOTYPING FOR SYSTEM ON CHIPS
<b>55.</b>	<b>NVIDIA GRAPHICS -SOFTWARE, BANGALORE</b>
	293.ADDING SUPPORT FOR FEATURES ON AUDIO SERVER
	294.AUTOMATED TEST INFRASTRUCTURE
	295.AUTOMATED TESTING OF MULTIMEDIA APPS USING JENKINS
	296.AUTOMOTIVE CAMERA CALIBRATION
	297.AUTOWARE ON NVIDIA&APOS;S AUTONOMOUS DRIVE PLATFORM
	298.DESIGNING THE UI AND API FOR PROBE
	299.DEVELOPMENT OF AUTOMATED TEST TOOL FOR SOFTWARE UPDATES
	300.DT&APOS;FICATION OF HDMI DRIVERS AND BUG FIXING
	301.SSTI DEVELOPMENT
	302.TEST AUTOMATION, VIRTUALIZATION , FLASHING AND UPDATE TOOL
	303.UNIT TESTING GPU AND DEBUGGING HDMI FAILURE
	304.X DRIVER & KERNEL INTERACTION AND VERIFY DISPLAY TESTS AUTOMATION
<b>56.</b>	<b>PAYPAL, BANGALORE</b>
	305.MERCHANT PRODUCT PRICING OPTIMISATION
<b>57.</b>	<b>PETASENSE - EMBEDDED SOFTWARE, BANGALORE</b>
	306.DEVELOPMENT OF GREENTEA TESTING FRAMEWORK FOR TX
	307.FULL STACK WEB DEVELOPMENT
	308.WEB DEVELOPMENT AND DEVOPS
<b>58.</b>	<b>PRICEWATERHOUSECOOPERS (PWC), BANGALORE</b>
	309.INTEGRATED FARE SYSTEM FOR MUMBAI
	310.PROJECT MANAGEMENT CONSULTANT FOR 2 SMART CITIES: HUBLI-DHARWAD AND SHIVAMOGGA
<b>59.</b>	<b>QUBOLE, BANGALORE</b>
	311.ADD MULTI-CLOUD SUPPORT IN UI TEST FRAMEWORK
	312.DEEP LEARNING CLUSTERS
	313.DEVELOPING QUBOLE NOTEBOOKS
	314.FEATURE ROLLOUT INFRA
	315.PROMETHEUS - A MONITORING SOLUTIOJ
	316.USING APACHE KNOX AS A GATEWAY FOR APACHE HADOOP ECOSYSTEM
<b>60.</b>	<b>ROBERT BOSCH CENTER FOR CYBER PHYSICAL SYSTEMS, BANGALORE</b>
	317.CATALOGUE SERVER AND DEMO WEB APPLICATION
	318.MMWAVE RADAR SENSING TO LOCALIZE STATIC AND MOVING OBJECTS
<b>61.</b>	<b>SAMSUNG R &amp; D INSTITUTE - IMAGE &amp; VIDEO PROCESSING, BANGALORE</b>
	319.5G COMMUNICATIONS PHY LAYER SIMULATIONS.
	320.ACCURATE STEREO BASED DEPTH ESTIMATION
	321.AUTOMATING LOG ANALYSIS OF 5G MAC LAYER AND GENERATING FRIENDLY LOGS FROM THEM
	322.COMPLICATIONS AND WATCH FACE RECOMMENDATION

	323.DEEP LEARNING BASED METHODS FOR FASHION CLOTHING ANALYSIS: DETECTION AND RECOGNITION
	324.DEPLOYING A MONOLITH AS MICROSERVICES ON CLOUD
	325.DESIGN OF A LOW COMPLEXITY FEATUREMAP COMPRESSION ALGORITHM
	326.DEVELOPING SMART APPLICATIONS BASED ON TEXTUAL ANALYSIS
	327.ECG IDENTIFICATION
	328.HINT BASED TEXT PREDICTION
	329.INTELLIGENT HINT PROVIDER
	330.LANGUAGE MODELLING AND EMOJI PREDICTION USING LANGUAGE MODELLING
	331.NEURAL NETWORK BASED LANGUAGE MODELLING
	332.ROBOT FRAMEWORK
	333.ROBUST PLACE DESCRIPTION FOR VISUAL PLACE RECOGNITION
	334.SMART CHARGING ALERTS
	335.SOURCE CODE TRANSLATION FROM MICROSOFT UWP TO TIZEN
<b>62.</b>	<b>SAMSUNG R &amp;D INSTITUTE - SOFTWARE SYSTEMS, BANGALORE</b>
	336.ENHANCEMENT OF STABILITY OF TIZENRT OS
	337. GPU ENABLED ACCELERATION OF MACHINE LEARNING MODELS.
	338.IRIS RECOGNITION USING CONVOLUTIONAL NEURAL NETWORKS
	339.LOAD PATTERN ANALYSIS AND MODELLING
	340.MEDIA RELEVANCE MODULE
	341.NEURAL LANGUAGE MODEL FOR HINDI
	342.PERCEIVED BRIGHTNESS OF LMNOS DISPLAY
	343.POLICY CONTROL USING REINFORCEMENT LEARNING IN ANDROID SYSTEMS
	344SOURCE USAGE BASED CONTEXT SERVICE
	345.3TEXT PREDICTION USING TOPIC MODELING AND LANGUAGE MODELING
<b>63.</b>	<b>SATTVA MEDIA &amp; CONSULTING PVT LTD, BANGALORE</b>
	346.FUNDING EDUCATION WITH IMPACT
	347.VARIOUS PROJECTS UNDERTAKEN AT SATTVA DURING JULY- DECEMBER LIKE PRACTICAL ACTION, DIGITAL FINANCIAL INCLUSION
<b>64.</b>	<b>SHELL TECHNOLOGY CENTER, BANGALORE</b>
	348. ELECTROCHEMICAL GENERATION OF HYDROGEN PEROXIDE AND SURFACE ANALYSIS VIA AFM.
	349.MAJOR HAZARDS IDENTIFICATION, QRA AND CONSEQUENCES ANALYSIS FOR &APOS;BUKOM&APOS; REFINERY, SINGAPORE
<b>65.</b>	<b>SIFTERY, BANGALORE</b>
	350.SIFTERY INTERNSHIP PROJECT
<b>66.</b>	<b>SKF INDIA LTD, BANGALORE</b>
	351.KANBAN SYSTEM & OTHER PROJECTS
<b>67.</b>	<b>S.R. BATLIBOI &amp; CO. LLP, BANGALORE</b>
	352.AUTOMATION OF ENGAGEMENT TRACKER & JECAAT MEMO DOCUMENTATION
<b>68.</b>	<b>STATESTREET GLOBAL ADVISORS, BANGALORE</b>
	353.OPTIMIZATION SOFTWARE VERSIONS COMPARISON NECESSARY FOR UPGRADATION
	354.RISK ANALYSIS OF CLIENT PORTFOLIOS
<b>69.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD - DATA ANALYTICS, BANGALORE</b>
	355.DESIGN OF REPORT GENERATION FRAMEWORK IN AURA DASHBOARD & APPLICATION VALIDATION AND TESTING
<b>70.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD. - APP DEVELOPMENT, BANGALORE</b>
	356.STRONG AUTHENTICATION DEMO USING VIP SERVICES
<b>71.</b>	<b>TAPCHIEF, BANGALORE</b>
	357.BENEFITS OF ADOPTING DEVOPS AS A CULTURE IN EARLY STAGE STARTUPS
	358.SUPPLY MANAGEMENT AND SATISFACTION AT TAPCHIEF
	359.TAPCHIEF: B2B SALES & MARKETING
	360.WHITE LABEL OPERATIONS & SUPPLY ACQUISITION
<b>72.</b>	<b>TESCO HINDUSTAN SERVICE CENTRE, BANGALORE</b>
	361.DATA RECONCILIATION BETWEEN TERADATA AND HADOOP
	362.DESIGN & DEPLOYMENT OF TASK TRACKER TOOL AND REPORT AUTOMATION
	363.OPTIMIZATION AND SCHEDULING OF SERVICE HELP DESK
	364.RATIONALIZATION AND AUTOMATION OF TRADE SUMMARY REPORTS
	365.REPORTING AUTOMATION ON TABLEAU
<b>73.</b>	<b>TEXAS INSTRUMENTS (I) PVT. LTD. -ANALOG, BANGALORE</b>
	367.AMS VERIFICATION FOR BATTERY MONITORING IC.
	368.DESIGN OF AN ULTRA-LOW POWER OSCILLATOR

	369.ENABLEING DEFECT BASED TESTING
	370.SWITCH AUTOMATION ON INNOVUS
	371.TESTING THE CHARACTERISTICS OF VOLTAGE REFERENCES
	372.TI DESIGN FOR SERVO MOTOR CONTROL OF SERVICE ROBOTS.
	373.VALIDATION OF PARAMETERS OF MUX36XXX
<b>74.</b>	<b>TIMEINC.(TIME ANALYTIC &amp; SHARED SERVICES PRIVATE LIMITED)</b>
	374.VBA AUTOMATION, DATABASE MANAGEMENT AND API DEVELOPMENT
	375.PROCUREMENT (OPERATIONS)
	376.RETAIL RESEARCH
<b>75.</b>	<b>TONBO IMAGING PVT LTD. - EMBEDDED SYSTEMS, BANGALORE</b>
	377.AUTOMATION OF THE GPS AND COMPASS TESTING MECHANISM AND DETERMINING THEIR ACCURACY
	378.DATA LOGGER
	379.PEDESTRIAN DETECTION
	380. WEAPON SHOCK SIMULATOR
<b>76.</b>	<b>TONBO IMAGING PVT LTD. - IMAGE &amp; VIDEO PROCESSING, BANGALORE</b>
	381. POINT NON UNIFORMITY CORRECTION AND C IMPLEMENTATION OF GRAPHICS LIBRARY FOR FPGA
<b>77.</b>	<b>VIACOM 18 PVT LTD, BANGALORE</b>
	382.START-UP ENGAGEMENT PROGRAM
<b>78.</b>	<b>VMWARE SOFTWARE INDIA PVT. LTD, BANGALORE</b>
	383.AUTOMATION OF TENANT TEARDOWN, CMS ENABLEMENT HTTPS ON JENKINS
	384.CONFIGURING NVME-OF FABRICS TARGET AND EXTEND MULTISTREAMING FEATURE
	385.DESIGN AND PROTOTYPE OF REMOTE MEMORY
	386.INTEGRATING CITRIX REMOTE DESKTOP SERVICES WITH VMWARE IDENTITY MANAGER
	387.REMOTE MEMORY
<b>79.</b>	<b>VYMO, BANGALORE</b>
	388.BACKEND DEVELOPMENT USING NODEJS
	389.IOS DEVELOPMENT USING REACT NATIVE AND BACKEND DEVELOPMENT USING NODEJS
	390.MARKET RESEARCH AND LEAD GENERATION
	391.VYMO SOLUTIONS: WORLD'S FIRST PERSONAL SALES ASSISTANT
<b>80.</b>	<b>WALMART GLOBAL TECHNOLOGY SERVICES, BANGALORE</b>
	392.AUTOMATED PERFORMANCE TESTING
	393.AUTOMATED PURGING FRAMEWORK IMPLEMENTATION AND POST-IMPLEMENTATION MONITORING
	394.AUTOMATING QUERY EXECUTION
	395.CREATING AND ENHANCING DASHBOARDS
	396.DATA SANITIZATION AND ITS INTEGRATION
	397.DATASCOPE
	398.DISTRIBUTOR CARRIER CONFIGURATION API&APOS;S
	399.IMAGE ANALYSIS FOR DETECTION OF FORGERY
	400.IMPLEMENTATION OF IN MEMORY DATABASE USING APACHE IGNITE
	401.OBSERVER PLANE DASHBOARD
	402.PAYLOAD PROCESSING FOR LOAD TESTING
	403.REAL-TIME ARCHITECTURE FOR BIG-DATA PROCESSING
	404.REORDERING OF EVENTS, UI AUTOMATION
	405.SMART FORECASTING
	406.SUPPLIER PORTAL
	407.TESTING AUTOMATION FOR ORDER FULFILLMENT
	408.UI DEVELOPMENT USING ANGULAR 4
	409.VIRTUAL REALITY AND AUGMENTED REALITY APPLICATION DEVELOPMENT IN UNITY
	410.VIRTUAL REALITY AND WEB APPLICATION DEVELOPMENT
	411. WALMART CATALOG CLEAN UP.
<b>81.</b>	<b>ZENDRIVE INDIA PVT LTD, BANGALORE</b>
	412.PHONE STATIONARY DETECTOR
	413.SETTING UP THE ELASTIC STACK
<b>82.</b>	<b>ZEOTAP INDIA PVT. LTD, BANGALORE</b>
	414.BACKEND ENGINEERING
	415.DATA CRAWLER
	416.EYE
	417.ZEOSPHERE
	418.ZEOTAP AUDIENCE TARGETING

<b>83.</b>	<b>ZINNOV MANAGEMENT CONSULTING PVT. LTD, BANGALORE</b>
	418.DRAUP
	419.BLOCKCHAIN AND ITS APPLICIONS
	420.DRAUP
	421.INDUSTRY ANALYSIS AND STRATEGIC ENGINEERING PROCUREMENT
	422.INDEPENDENT SERVICE VENDORS- GLOBAL R&D HOTSPOTS
	423.MERGERS & ACQUISITION FOR CLIENT IN THE AUTOMOTIVE INDUSTRY
	424.SIGNAL PROCESSING
<b>84.</b>	<b>ZOOMCAR INDIA PVT. LTD, BANGALORE</b>
	425.BUSINESS INTELLIGENCE DASHBOARD
	426.DATA ANALYTICS
	427.ZAP - PRE SALES AND POST SALES
<b>85.</b>	<b>LHD INDIA, BHOPAL</b>
	428.AUTOMATING SERVICE DELIVERY
	429.MULTI RESTAURANT FOOD ORDERING SYSTEM
<b>86.</b>	<b>AMAZON DEVELOPMENT CENTER, CHENNAI</b>
	430.ANDROID DEVELOPMENT
	431.AUTOPANELDTECTION
	432.DATA ANALYSER
	433.FACE UNLOCK FEATURE IN FIRE TABLET
	434.INGRID
	435.REZCO DOWEN OBSERVER
<b>87.</b>	<b>CENTRAL LEATHER RESEARCH INSTITUTE (CLRI), CHENNAI</b>
	436.EXTRACTION OF CELLULOSE FROM GROUNDNUT HUSK, SUGARCANE BAGASSE AND IT&APOS;S APPLICATION IN LEATHER FINISHING
	437.PREDICTIVE MODEL FOR CALORIMETRIC CONTROL OF POLYHYDROXYBUTYRATE PRODUCTION IN FED-BATCH MODE
<b>88.</b>	<b>PRICEWATERHOUSECOOPERS (PWC), CHENNAI</b>
	438.PROGRAMME MANAGEMENT CONSULTANT FOR CHENNAI SMART CITY LTD.
<b>89.</b>	<b>S.R. BATLIBOI &amp; CO. LLP, CHENNAI</b>
	439.IMPROVEMENT OF AUDIT PROCEDURES AND CUSTOMER SERVICE USING MACHINE LEARNING AND BIG DATA
<b>90.</b>	<b>STRUCTURAL ENGINEERING RESEARCH CENTRE, CHENNAI</b>
	440. DAMAGE IDENTIFICATION AND LOCALIZATION IN BUILDINGS AND BEAMS IN THE PRESENCE OF ENVIRONMENTAL VARIATIONS.
	441.DEVELOPMENT OF ROBUST METHODS FOR DAMAGE IDENTIFICATION AND LOCALIZATION IN THE STRUCTURE
<b>91.</b>	<b>AMAZON DEVELOPMENT CENTER, DELHI</b>
	442.BUILDING A SERVICE AND MODEL TO RETURN CONTAINER DETAILS IN RESPONSE TO USER QUERIES
	443. DESIGN AND DEVELOP RE-DRIVE FEATURE FOR OMNI NOTIFICATION SERVICE WHICH HANDLES ALL NOTIFICATIONS TO THE CUSTOMERS OF AMAZON HUB.
	444.METRIC SYSTEM AND EVENT ANALYSIS FOR INTENT DISCOVERY ML PLATFORM (PHOEBE)
	445.STOREAPP TEST AUTOMATION USING ESPRESSO AND UIAUTOMATOR
	446.ZIP5 LEVEL EAD PROBABILITY DISTRIBUTION CURVE GENERATION FOR AMAZON LOCKERS
<b>92.</b>	<b>EDUPRISTINE, DELHI</b>
	447.OPEN SOURCE RESPONSIVE WEB APPLICATION DEVELOPMENT TO IMPROVE E-LEARNING MARKETING AND INTERNAL OPERATIONS
<b>93.</b>	<b>TATA MOTORS LTD, DHARWAD</b>
	448.ANALYZING AND INCREASING PRODUCTIVITY IN INDIRECT AREAS
	449.ESTIMATION OF MANPOWER USING MOST STUDY, LINE BALANCING AND IDENTIFICATION OF NON-VALUE ADDED ACTIVITIES
<b>94.</b>	<b>RITE INFOTECH PVT LTD, FARIDABAD</b>
	450.QR CODE CLASSIFIER USING MACHINE LEARNING AND IMAGE PROCESSING ALGORITHMS
<b>95.</b>	<b>IFB INDUSTRIES,GOA</b>
	451.DESIGN AND DEVELOPMENT OF DYNAMIC VIBRATION ABSORBER FOR FRONT LOAD WASHING MACHINE
	452.LOAD SENSING & CLOTH TYPE DETECTION IN WASHING MACHINE
<b>96.</b>	<b>AMERICAN EXPRESS INDIA, GURGAON</b>
	453.COMPREHENSIVE MERCHANT DASHBOARD
	454.INTERACTIVE BUSINESS INSIGHT ONE CLICK TOOL
	455.MIGRATION OF MODEL TRACKING PROCESS TO BIG DATA ENVIRONMENT

	456.MIGRATION TO BIG DATA ENVIRONMENT
<b>97.</b>	<b>ERNST &amp; YOUNG PVT LTD, GURGAON</b>
	457.DISTRIBUTED ENERGY RESOURCES: A MARKET ANALYSIS OF INDIA'S EMERGING DISTRIBUTED ENERGY MARKET AND DEVELOPING BUSINESS MODELS FOR ROOFTOP SOLAR IN INDIA
	458.DEMAND SIDE MANAGEMENT AND ENERGY EFFICIENCY
<b>98.</b>	<b>FUTURES FIRST INFO SERVICES PVT LTD, GURGAON</b>
	459.CANDLESTICK PATTERN AND TECHNICAL INDICATORS
	460.CANDLESTICK PATTERNS AND TECHNICAL ANALYSIS FOR MARKET ANALYSIS
<b>99.</b>	<b>OF BUSINESS.COM, GURGAON</b>
	461.BACKEND DEVELOPMENT OF TENDER CRAWLER FRAMEWORK TO FETCH TENDER DATA FOR BIDASSIST
	462.FRONT END DEVELOPMENT OF CRM SYSTEM (OASYS)
<b>100.</b>	<b>ORANGE BUSINESS SERVICES, GURGAON</b>
	463.ARTIFICIAL INTELLIGENCE CHATBOT FOR TRANSPORTATION
	464.INTRUSION DETECTION AND PREVENTION IN SOFTWARE DEFINED NETWORKING
<b>101.</b>	<b>PLUSS ADVANCED TECHNOLOGIES PVT. LTD, GURGAON</b>
	465.DEVELOPMENT OF EMULSIONS BASED ON PHASE CHANGE MATERIALS
	466.MARKET RESEARCH IN COLD CHAIN AND SOFTWARE DEVELOPMENT FOR CHEMICAL CALCULATIONS
<b>102.</b>	<b>PRICEWATERHOUSECOOPERS (PWC), GURGAON</b>
	467.DETAILED PROJECT REPORT FOR ESTABLISHMENT OF IMS VARANASI
	468.ELECTRIC VEHICLES- RECENT TRENDS, DEVELOPMENTS & FUTURE PREDICTIONS
	469.GLOBAL PORT BENCHMARKING, INNOVATION IN GLOBAL PORTS AND OVERVIEW OF TRENDS AND OUTLOOK OF CARGO AT INDIAN PORTS
	470.INDEPENDENT REVIEW OF ENERGY AUDIT FOR RAJASTHAN DISCOMS FY 2015-16
	471.INDEPENDENT REVIEW OF ENERGY AUDIT OF RAJASTHAN DISCOMS FOR THE FINANCIAL YEAR 2015-16
	472.INLAND WATERWAYS TRANSPORT SECTOR
	473.ONE BELT ONE ROAD INITIATIVE: AN OPPORTUNITY FOR BANGLADESH
	474.MUNICIPAL ENERGY EFFICIENCY PROGRAMME
	475.POTENTIAL OF TOURISM ECONOMIC ZONES IN INDIA
	476.REPOSITORY OF PROJECT DEVELOPMENT
	477. VARANASI SMART CITY PROJECT - WASTE MANAGEMENT.
<b>103.</b>	<b>S.R. BATLIBOI &amp; CO. LLP, GURGAON</b>
	478.JOURNAL ENTRY COMPUTER AIDED AUDITING TECHNIQUES(JE-CAAT) & APPLICATION OF BENFORD ANALYSIS IN AUDITING
<b>104.</b>	<b>SRF LTD, GURGAON</b>
	479.APPLICATION OF VARIOUS CONCEPTS OF CHEMICAL ENGINEERING IN MULTI-PURPOSE PLANT
	480. PROCESS SCALE- UP AND ENGINEERING ACTIVITIES RELATED TO MULTI PURPOSE PLANTS.
	481.REPORT ON DEDICATED PLANT DESIGN FOR AGRO-CHEMICAL PRODUCT
	SCALE-UP METHODOLOGIES AND REACTOR DESIGNING
	482. SCALE-UP STUDIES AND CAMPAIGN
<b>105.</b>	<b>ZINNOV MANAGEMENT CONSULTING PVT. LTD, GURGAON</b>
	483. ANALYSIS OF CURRENT MARKETING AND ADVERTISING LANDSCAPE OF INDIA. CHANNEL PARTNER PROFITABILITY OF THE BIGGEST PLAYERS IN INDIAN MARKET
	484.STRATEGY MAKING AND UNDERSTANDING THE MARKET TRENDS
<b>106.</b>	<b>GRASIM POLYFIBER, HARIHAR</b>
	485.POSSIBLE MODIFICATIONS FOR ENHANCING BRIGHTNESS AND WHITENESS OF PULP, AND DERESINATION
<b>107.</b>	<b>AMAZON BUSINESS INTELLIGENCE, HYDERABAD</b>
	486.1) SELLER COUPON UI, 2) NOTIFICATION SERVICE FOR SELLERS, 3) VISUALIZATION FOR SELLER COUPONS
	487.1. WRITE THREE NEW APIS 2.) DEVELOP AN CRM PAGE TO GET ALL THE INFORMATION ABOUT A SHIPPER
	488.ADDRESS NORMALIZATION AND SUGGESTION (INDIA)
	489.ANALYZE AND DEVELOP LRB EFFECT SIMULATOR ,DEVELOPMENT OF INDIA_PORTAL, PREDICT ACTUAL DAY OF DELIVERY IN INDIA
	490.AUTOMATION OF ADDRESS VALIDATION
	491.AUTOMATION OF RABBIT WBR, SORT ZONE VISUALIZATION PORTAL, DATA MIGRATION TO REDSHIFT
	492.AUTOMATION OF VPS CLEAR RECEIPTS
	493.DEBUGGING PAGE FOR ALEXANDRIA ADMIN PORTAL

	494.DEVELOPING DASHBOARD FOR LIVE DATA VISUALIZATION, BUILDING DATA PIPELINE FOR STACKING GEO-CODE CORRECTION CASES & FORECAST OF DELIVERY STATION INBOUND VOLUMES IN ITALY
	495.ENHANCING INVOICE VALIDATION SERVICE TO SUPPORT BV/CV RULES MIGRATION
	496.FINANCE DECK FOR ZERO FOR EUROPE
	497.HFC PEEK
	498.IHS INTELLIGENCE TOPOLOGY ANALYTICS PORTAL
	499.IMAGE TEMPLATE CREATION AND EDITING ENGINE
	500.IMPLEMENT TRANSACTION SWEEPER ACTION CHAIN
	501.INDIA NETWORK OPTIMIZATION, SERVIC TIME ANALYSIS AND APPLICATION OF TILEREDUCE FRAMEWORK
	502.INTERNAL SERVICE PORTAL FOR MYP TEAM
	503.MEXICO PAYMENT COMPLEMENT INGESTION SUPPORT & OTHER PROJECTS
	504.MIGRATE A TABLE FROM ORACLE TO DYNAMODB, ADD DEFAULT CASE TO DECISION TREE, DESIGN PAGINATION FOR AN API
	505.ONE STOP REPOSITORY OF ADAPTIVE TRANSPORTATION OPTIMIZATION SERVICE (ATROPS) CONFIGURATIONS
	506.ORDER HISTORY MANAGEMENT TOOL
	507.PRINT AT HOME GIFT CARDS
	508.RECONCILIATION IN PAYEESERVICEROLLINGSTONE
	509.RETURNS ANALYTICS DASHBOARD
	510.SCREENING GRAPH HANDLER FOR AUTOMATIC DOCUMENT SCREENING PLATFORM
	511.SCENARIO COST SIMULATOR AUTOMATION OF CUSTOMER INTERCEPTION LOGS AUTOMATION OF AUDITORS METRICS
	512. SELF SERVICE PORTAL FOR OPERATIONAL MONITORING AND AUTOMATING MACROS IN DATA COLLECTION EXCEL TOOL.
	513.SELLER POWERED COUPONS
	514.SITE FOR INVENTORY MANAGEMENT
	515.SOP AUTOMATION
	516.TREASURE TROVE, VISUAL FUNNEL, POEM
<b>108.</b>	<b>AUTODESK, HYDERABAD</b>
	517.FUSION TEAM MONITORING WITH NEWRELIC
	518.IMPROVING UPLOAD WORKFLOW OF FUSION 360 WEB APPLICATION
<b>109.</b>	<b>AUTORABIT, HYDERABAD</b>
	519.DEVELOPMENT OF T.A.F.
	520. DEVELOPMENT OF TAF & INTEGRATION OF BUSINESS INTELLIGENCE TOOL IN AUTORABIT.
	521.INTEGRATION OF BUSINESS INTELLIGENCE IN AUTORABIT
	522.INTEGRATION OF BUSINESS TOOL
<b>110.</b>	<b>BIOPHORE, HYDERABAD</b>
	523.ANALYTICAL METHOD DEVELOPMENT OF NICHE PHARMACEUTICAL PRODUCTS
	524.BUSINESS DEVELOPMENT IN PHARMACEUTICAL INDUSTRY
	525.TO DEVELOP AN ANALYTICAL METHOD AND PERFORM ASSAY AND DISSOLUTION FOR THE GIVEN DRUG
<b>111.</b>	<b>CA TECHNOLOGIES, HYDERABAD</b>
	526.ELASTIC SEARCH AND VIRTUAL ANALYST
	527.IMPLEMENTING KAFKA AND OPENID CONNECT IN CA PPM
	528. INTEGRATION OF VOICE USER INTERFACE FOR MAINFRAME OPERATIONAL INTELLIGENCE.
	529.KAFKA AND OPENID CONNECT
	530.SMART SEARCH AND VIRTUAL ANALYST
	531.VOICE USER INTERFACE USING ALEXA
	532.YUI UPGRADATION AND AUTOMATION ON CAGEN PRODUCTS
<b>112.</b>	<b>CISCO SYSTEMS (INDIA) PVT. LTD - SOFTWARE ENGINEERING, HYDERABAD</b>
	533.PERFORCE MIGRATION
	534.PERFORCE SERVER SETUP AND ANALYSIS OF ROOT FINDING ALGORITHM
<b>113.</b>	<b>GGK TECHNOLOGIES - DATA ANALYTICS, HYDERABAD</b>
	535.1. GERMAN LEGAL TEXT SUMMARY GENERATOR, 2. RESERVATION-CANCELLATION PREDICTION
	536.1. HRMS 2. QAMS
	537.CHURN OUT PREDICTION OF E-COMMERCE CUSTOMERS
	538.DATA SCIENCE ALGORITHMS AND POCS
	539.DEEP LEARNING IN MULTIPLE INDUSTRIES
	540.DEVELOPMENT OF ONLINE ASSESSMENT APP
	541.EXPLORA.BI-WEB APP FOR DATA ANALYSING AND REPORTING

	542.ETHEREUM BLOCKCHAIN & RIVERA
	543.PREDICT CHURN FOR VIP CUSTOMERS
	544.PREMEDICS
	545.RESERVATION AND CANCELLATION PREDICTION IN TRAVEL DOMAIN
	546.SUPPORTING WORK FOR BRIDG 1.0
<b>114.</b>	<b>GGK TECHNOLOGIES - MOBILE APP DEVELOPMENT, HYDERABAD</b>
	547.1. HRMS 2. QAMS
	548.DEVELOPMENT OF ONLINE ASSESSMENT APP
	549.HRMS/RESUME PARSING
	550. WORDPRESS CMS (CONTENT MANAGEMENT SYSTEM).
<b>115.</b>	<b>IMI MOBILE DATA ANALYTICS, HYDERABAD</b>
	551.ANT BASED EAR DEVELOPMENT AND DEPLOYMENT ON WILDFLY
	552.BACK END DEVELOPMENT OF THE PLATFORM
	553.BOTMAN – A PLATFORM FOR BUILDING INTELLIGENCE BASED CHAT BOTS
	554.DATA ANALYSIS IN ENTERPRISE SOLUTION
	555.DATA ANALYTICS IN ENTERPRISE SOLUTIONS
	556.DEVELOPMENT OF PROOF OF CONCEPTS IN IMICONNECT PRODUCT TEAM USING IMICONNECT PLATFORM AND IMIBOT
	557.GOVERNMENT OF TELANGANA’S T APP FOLIO & MARKET RESERACH
	558.IDEATION OF SOLUTIONS AND DEPLOYMENT OF COMMUNICATION SERVICES AS PART OF ENTERPRISE
	559.IDEATION OF SOLUTIONS AND DEPLYMENT OF COMMUNICATION SERVICES AS A PART OF ENTERPRISE DELIVERIES TEAM
	560.IMI CHAT DEVELOPMENT - SOFTWARE ENGINEERING AND PRODUCT MANAGEMENT
	561.IMI CONNECT INTEGRATION WITH CUSTOMER SERVICES PLATFORM
	562.REAL TIME COMMUNICATION WITH WEBRTC
	563.SERVICE FULFILLMENT ENGINE NODE DEVELOPMENT
	564.VARIOUS PROJECTS UNDERTAKEN BY DATA ANALYTICS AND R&D DEPARTMENTS
<b>116.</b>	<b>JDA SOFTWARE SOLUTIONS, HYDERABAD</b>
	565.APPSCAN AND SMOKE TESTING USING SELENIUM
	566.ESCROW FOR LOGISTICS PROCUREMENT FOR VERSIONS 8.2,2017.1 & 2017.2
	567.JUNIT TESTING
	568.SELENIUM WEBDRIVER TESTING
	569.TEST CASE WEB AUTOMATION USING THE SELENIUM WEBDRIVER FRAMEWORK
	570.TMMOBILE APP - AN APP BY JDA FOR TRANSPORTATION MANAGEMENT
	571.WEB TEST CASE AUTOMATION USING SELENIUM WEBDRIVER FRAMEWORK
<b>117.</b>	<b>JOCHEBED TECH SOLUTIONS, HYDERABAD</b>
	572.COMMUNICATING WITHOUT OPENING A PORT, LIGHT-WEIGHT APPLICATION LAYER PROTOCOL OVER MQTT
	573.DETECTING ANOMALOUS DRIVING PATTERNS
	574.NETWORK SECURITY APPLICATION
<b>118.</b>	<b>MARKET DATA FORECAST, HYDERABAD</b>
	575.INDUSTRIAL MARKET RESEARCH IN AGRICULTURE, HEALTHCARE AND FOOD AND BEVERAGES DOMAINS
	576.INDUSTRIAL MARKET RESEARCH IN HEALTHCARE, AGRICULTURE AND FOOD & BEVERAGES DOMAINS
	577.INDUSTRIAL RESEARCH ON COMPANIES IN HEALTHCARE & AGRICULTURE AND FOOD & BEVERAGE DOMAINS
	578.MARKET REPORT PREPARATION
	579.MARKET RESEARCH IN HEALTH CARE ,AGRICULTURE AND FOOD & BEVERAGES
	580.MARKET RESEARCH ON COMPANIES IN FOOD & BEVERAGE, HEALTHCARE AND AGRICULTURE DOMAINS
	581. MARKET RESEARCH ON COMPANIES IN HEALTHCARE, AGRICULTURE & F&B DOMAINS.
<b>118.</b>	<b>MOL DE ANALYTICS, HYDERABAD</b>
	582.DEVELOPMENT OF A RANKING LIBRARY IN JAVA FOR SPORTS
<b>119.</b>	<b>MORDOR INTELLIGENCE, HYDERABAD</b>
	583.BASICS OF MARKET RESEARCH
	584.ELEMENTS OF MARKET RESEARCH IN THE FOOD & BEVERAGES INDUSTRY
	585.GLOBAL LIGNIN MARKET
	586.GOBAL POTASSIUM MARKET
	587.HEALTHCARE INTELLIGENCE CENTERS
	588.HEALTHCARE INTELLIGENCE CENTRE ON DIABETES MARKET



	589.MARKET INTELLIGENCE
	590.MARKET RESEARCH
	591.MARKET RESEARCH AND ANALYTICS
	592.MARKET RESEARCH IN HEALTHCARE
	593.MARKET RESEARCH- QUALITATIVE AND QUANTITATIVE ANALYSIS
	594.MARKET RESEARCH REPORT
	595.QUANTITATIVE AND QUALITATIVE MARKET RESEARCH IN AUTOMOTIVE, FEED, AEROSPACE AND DEFENCE DOMAIN
	596. TO PREPARE MARKET REPORTS BASED ON RECENT TRENDS AND DEVELOPMENTS IN THE ENERGY & POWER SECTOR ACROSS THE WORLD.
<b>120.</b>	<b>MY SMART PRICE, HYDERABAD</b>
	597.DASHBOARD FOR USER PURCHASE SEGMENTATION
	598.KIBANA DASHBOARD
<b>121.</b>	<b>MYTRAH ENERGY (INDIA) PRIVATE LIMITED, HYDERABAD</b>
	599.RAISING DEBT FOR ROOFTOP SOLAR PROJECTS + BUILDING SALES AND MARKETING FOR ROOFTOP SOLAR PROJECTS
	600.SOLAR MARKET IN SRI LANKA AND VIETNAM FROM A FOREIGN INVESTOR VIEWPOINT
	601.VENDOR ANALYSIS AND MATERIAL MONITORING
<b>122.</b>	<b>NEXT EDUCATION INDIA PVT. LTD, HYDERABAD</b>
	602.APPLICATION OF MICROSERVICES ARCHITECTURE TO NEXT LEARNING PLATFORM
	603.AUTOMATED QUESTION ANSWERING SYSTEM
	604.DATABASE MIGRATION
	605.DATABASE WAREHOUSING AND DATABASE MIGRATION
	606.DATABASE WAREHOUSING AND DATABASE MIGRATION
	607.DEVELOPING WEB APPLICATION
	608.DEVELOPMENT OF APIS AND USER INTERFACES FOR VARIOUS NEXT NLP MODULES USING MICROSERVICE ARCHITECTURE
	609.DEVELOPMENT OF SMART CLASSROOM APPLICATION USING STRUTS FRAMEWORK(TEACHNEXT)
	610.DEVELOPMENT OF SMART CLASSROOM SOLUTION USING JAVASCRIPT AND ANGULAR4
	611.DEVELOPMENT OF WEB APPLICATION USING MICROSERVICES ARCHITECTURE
	612.MAINTENANCE OF NEXT – LMS (LEARNING MANAGEMENT SYSTEM)
	613.MICROSERVICE ARCHITECTURE AND WEB APPLICATION
	614.MICROSERVICE ARCHITECTURE : NEXT LEARNING PLATFORM (NLP) A CREATING MICROSERVICES FOR MODULES AND INTEGRATION OF SERVICES
	615.R&D - DATABASE MANAGEMENT OPERATIONS
	616.&DOUBLE;DOCKER SWARM&DOUBLE;; - CORE INFRASTRUCTURE
	617.REVAMPING OF WEB APPLICATIONS FOR STUDENT ASSESSMENT
	618.WEB DEVELOPMENT AND ENHANCEMENT USING MICROSERVICE ARCHITECTURE AND BUSINESS PROCESS MANAGEMENT
<b>123.</b>	<b>NR EQUIPMENTS, HYDERABAD</b>
	619.PERFORMANCE ANALYSIS OF US MAGAZINE INDUSTRY: ISSUE LEVEL TREND ANALYSIS AND IDEA GENERATION FOR EFFECTIVE COVER SUBJECTS
<b>124.</b>	<b>NVIDIA GRAPHICS – SOFTWARE, HYDERABAD</b>
	620.ENHANCEMENT STORAGE DRIVERS
	621.MISRA-C COMPLIANCE OF BOOTLOADER
	622.SCO OVER HCI, CODE INSTRUMENTATION FOR COMMUNICATION REPOSITORIES
	623.MISRA C
	624.AUTOMATED TESTING AND SCRIPTING
	625.STATIC CODE ANALYSIS AND CODE COVERAGE
	626.SYSTEM SOFTWARE
	627.GAMESTREAM STABILITY EFFORTS
<b>125.</b>	<b>PRICEWATERHOUSECOOPERS (PWC), HYDERABAD</b>
	628.1. CII SOUTH ENERGIZING SURVEY 2. HEALTH ASSESSMENT REPORT PHILIPPINES 3. HEALTH ASSESSMENT REPORT INDONESIA 4. LAST MILE CONNECTIVITY 5. COUNTRY ASSESSMENT REPORT OF KENYA, LAOS AND VIET NAM 6. INLAND WATERWAYS INDUSTRY REPORT 7. INNOVATIVE FINANCING WAYS FOR INFRASTRUCTURE PROJECTS
	629.A COMPREHENSIVE METHOD FOR LOCATION SITE ASSESSMENT
	630.BATTERY STORAGE FOR INTEGRATION OF RENEWABLES IN TAMIL NADU
	631.OPEN ACCESS TOOL
<b>126.</b>	<b>REPORTGARDEN TECHNOLOGIES PVT. LTD, HYDERABAD</b>
	632.DEVELOPMENT OF REPORTGARDEN SPECIFIC INTERNAL SERVICES
	633.HELIUM CONNECTORS

<b>127.</b>	<b>SYNERGIZ GLOBAL, HYDERABAD</b>
	634.SCHEDULING, MONITORING AND MANAGEMENT
<b>128.</b>	<b>SYNOPSIS INDIA PVT. LTD, HYDERABAD</b>
	635.PDK DEVELOPMENT AND VALIDATION
	636.PDK DEVELOPMENT, VALIDATION AND FEATURE IMPLEMENTATION
<b>129.</b>	<b>TAU FILMS INDIA PVT. LTD, HYDERABAD</b>
	637.PIPELINE DEPARTMENT WORK
	638.TACO (TAU ARTIST CONSOLE)
<b>130.</b>	<b>WORLEY PARSONS INDIA, HYDERABAD</b>
	639.(i) AUTOMATING THE PROCESS OF UPDATING THE TAGS MATURITY (ii) PREDICTION OF RESOLVER GROUP (iii) CONTENT BASED IMAGE RETRIEVAL SYSTEM FOR ENGINEERING DRAWINGS (iv) REAL-TIME OBJECT DETECTION FOR ENSURING SAFETY IN CONSTRUCTION SITES
	640.APPLICATION OF MACHINE LEARNING CONCEPTS, TEXT ANALYTICS AND DATA LINKING TECHNIQUES ON COMPANY PROCESSES
	641.LINKED ENTERPRISE DATA MANGEMENT
<b>131.</b>	<b>XILINX INDIA TECHNOLOGY SERVICES PVT. LTD, HYDERABAD</b>
	642.DESIGNING A TIMEOUT FRAMEWORK USING TIMERS
	643.IMPLEMENTATION AND STATIC TIMING ANALYSIS (STA) OF DESIGNS USING VIVADO DESIGN SUITE
	644.PERFORMANCE ANALYSIS OF INTERCONNECT
	645.SYSTEM LEVEL VALIDATION OF ETHERNET AND INTERLAKEN IP
	646.VALIDATION OF XILINX MIPI CSI-2 SUBSYSTEMS
<b>132.</b>	<b>FUTURES FIRST INFO SERVICES PVT. LTD, JAIPUR</b>
	647.DEVELOPMENT OF INDICATORS AND TRADING STRATEGIES IN FUTURES MARKETS BASED ON HISTORICAL DATA
	648.PROCESSING AND ANALYSIS OF MARKET DATA IN R AND DEVELOPMENT OF DATA VISUALIZATION TOOLS ON EXCEL VBA
<b>133.</b>	<b>TATA MOTORS LTD, JAMSHEDPUR</b>
	649.ANALYSIS AND PREPARATION OF PROCESS SHEETS AND PROCESS FLOW DIAGRAMS OF PROCESSES FOR A RANGE OF TRUCK MODELS IN FBV AREA
	650.DO IT FIRST TIME RIGHT IN BIG CAB FABRICATION LINE
	651.IMPLEMENTATION OF MATERIAL REQUIREMENT PLANNING SYSTEM
	652.IMPROVING PRODUCTIVITY IN INDIRECT AREAS AND SD-1015 PRODUCTION LINES
	653.LINE BALANCING AND PRODUCTIVITY IMPROVEMENT OF SIGNA
	654.LONG MEMBER IDENTIFICATION AND, REDUCTION IN TIME AND COMPLEXITY IN DIE PREPARATION FOR BS-IV MODEL LONG MEMBERS
	655.MAPPING OF PRESS SPECIFICATION AT THE SUPPLIER'S END
	656.PRODUCT MARGIN IMPROVEMENT FOR COMMERCIAL VEHICLES THROUGH CLASSICAL VALUE ANALYSIS AND VALUE ENGINEERING
	657.PRODUCTION LINE IMPROVEMENT OF ASSEMBLY LINE AND LINE BALANCING USING MOST
	658.REDUCING IPTV (INCIDENCES/COMPLAINTS PER THOUSAND VEHICLES) OF VEHICLE SPEED SENSOR
	659.TO ENHANCE THE PRODUCTIVITY OF CENTRALIZED PAINT SHOP
<b>134.</b>	<b>TATA MOTORS LTD, LUCKNOW</b>
	660.CONDUCTING PCP AUDITS TO ANALYSE, REVIEW PFMEA AND CP FOR PROCESS IMPROVEMENT OF PARTS CONTRIBUTING TO HIGH PPM
	661.FRONT AXLE SHOP FLOOR MANAGEMENT
	662.OPTIMIZING MANPOWER DEPLOYMENT IN INDIRECT AREAS BASED ON COST, WORKFORCE AND FUNCTIONAL EFFICIENCY
	663.PROCESS STANDARDIZATION AND PROCESS VALIDATION OF BS-4 FITMENTS
	664.PRODUCTIVITY AND QUALITY IMPROVEMENT BY DEFECT ANALYSIS AND TIME ANALYSIS ON TRIM LINE
	665.PRODUCTIVITY AND QUALITY IMPROVEMENT THROUGH QUALITY ASSURANCE MATRIX
	666.QUALITY AND PRODUCTIVITY IMPROVEMENT IN TCF LINE-2
	667.QUALITY AND PRODUCTIVITY IMPROVEMENT IN TRIM LINE 3
	668.QUALITY MANAGEMENT
	669.REDUCTION IN WARRANTY CLAIMS BY ANALYZING IPTV TRENDS AND RESOLVING THE ROOT CAUSE OF THE TOP DEFECTS; PRODUCTIVITY AND QUALITY IMPROVEMENT USING QUALITY ASSURANCE MATRIX.
	670.REDUCTION IN WARRANTY FAILURES OF CLUTCH SYSTEM THROUGH SIX SIGMA METHODOLOGY AND QUALITY CONTROL
	671.STANDARDISE WORK AND PROCESS IMPROVEMENT IN TCF LINE 3
	672.STANDARDIZED WORK ON MATEC LINE (MCD-I)
	673. TO IMPROVE TAKT TIME REQUIRED TO PRODUCE CAB FROM TOUCH UP THROUGH DEFECT REDUCTION.

	674.VLO SCORE REDUCTION BS-4 BUSES
<b>135.</b>	<b>ADITYA BIRLA SCIENCE &amp; TECHNOLOGY COMPANY LTD, MUMBAI</b>
	675.DEVELOPMENT OF PREDICTIVE MODEL FOR ALUMINIUM SMELTER
	676. CONVERSION OF SODIUM FROM SPIN BATH, TO CAUSTIC, AND RECOVERY OF ZINC.
	677.EFFECT OF MINERALIZER ON PHASE EVOLUTION OF GREY CEMENT DURING CLINKERIZATION
	678.INDUSTRIAL WASTE WATER TREATMENT BY ZNO INFUSED GRAPHENE MEMBRANE
	679.TECHNOLOGY DEVELOPMENT FOR PILOT SCALE PRODUCTION OF LATEX CARBON BLACK MASTERBATCH
<b>136.</b>	<b>ALPHAMD, MUMBAI</b>
	680.PREDICTIVE MODELING OF PHARMACEUTICAL PATENTS
	681.TO STUDY AND ESTABLISH PARTNERSHIP WITH NON-GOVERNMENT ORGANIZATIONS WITH FOCUS ON HEALTH AND ENVIRONMENT AND APPLICATION OF BIG DATA IN HEALTHCARE
<b>137.</b>	<b>CENTURY RAYON, MUMBAI</b>
	682.BOD REDUCTION BY REMOVING HEMICELLULOSE FROM WASTE CAUSTIC
	683.REDUCTION OF BOD BY SEPARATING HEMICELLULOSE FROM WASTE CAUSTIC
<b>138.</b>	<b>CREDIT SUISSE - CREDIT ANALYTICS, MUMBAI</b>
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	812.ANALYSIS OF WARRANTY CLAIMS & AUTOMATION USING VBA
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	825.DEVELOPING USER RETENTION STRATEGIES FROM USAGE INSIGHTS FOR VOOT
	826.DIGITAL MARKETING
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<b>179.</b>	<b>WORLEY PARSONS INDIA, MUMBAI</b>
	831.DATA WAREHOUSE AND DATA ANALYTICS
	832.DESIGN OF A WEBSITE AND MOBILE APPLICATION DEVELOPMENT
	833.DESIGN OF GIS BASED EMERGENCY RESPONSE SYSTEM
	834.MOBILE APPLICATION DEVELOPMENT AND UI/UX DESIGNING
	835.WEB APPLICATION DEVELOPMENT
<b>180.</b>	<b>YRALS DIGITAL INDIA PVT.LTD, MUMBAI</b>
	836.ARTICLE SUMMARISATION, OBJECT DETECTION, FACE RECOGNITION
	837.IMAGE EFFECTS
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<b>181.</b>	<b>GRASIM INDUSTRIES LTD, NAGDA</b>
	840.AUDITING OF CHARCOAL CALCINER SYSTEM AND ITS HANDLING TO MINIMSE CHARCOAL LOSSES
	841.DESIGN OF PLATE AND FRAME HEAT EXCHANGER FOR COLD SUMP ZONE RECYCLING
	842.INCREASING THE EFFICIENCY OF CYCLONE AND SCRUBBERS IN SALT DRYER
	843.REFRIGERATION LOAD IN VISCOSE PRODUCTION & CS2 RECOVERY IN SPINNING PROCESS
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	845.BUILDING INFORMATION MODELLING
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<b>183.</b>	<b>HINDALCO INNOVATION CENTRE - SEMIFAB TALOJA, NAVI MUMBAI</b>
	847.AUTOMATION OF DETERMINATION OF WINDOW FEASIBILITY
	848.DATA ANALYSIS OF ALUMINIUM COIL PROFILE USING PROCESS PARAMETERS FROM THE HOT ROLLING MILL

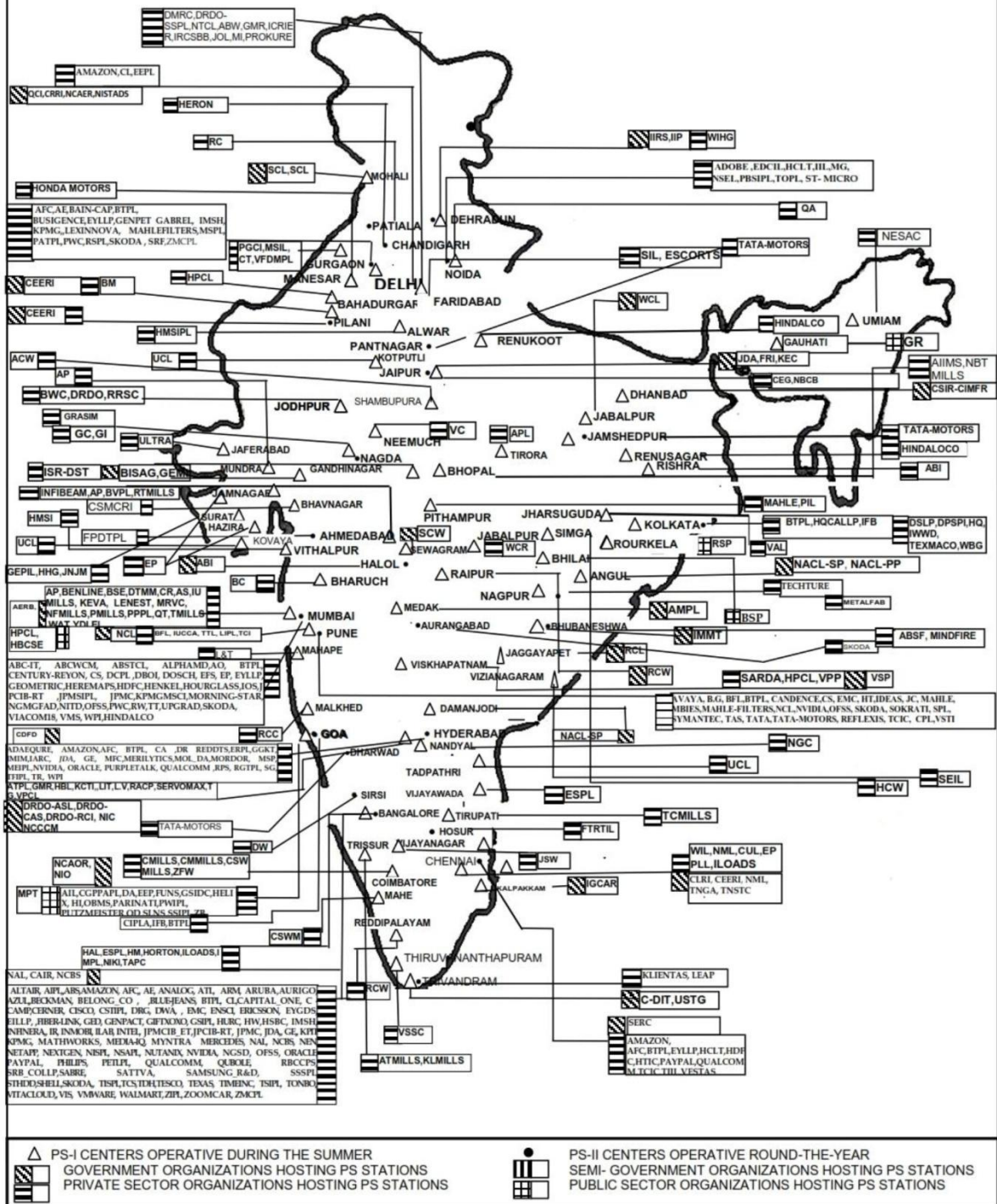
<b>184.</b>	<b>ECOM EXPRESS PVT. LTD, NEW DELHI</b>
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	852.VULNERABILITY ANALYSIS OF CHILDREN IN INDIA
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	853.NISTADS OUTREACH PROGRAM
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<b>187.</b>	<b>GENPACT, NOIDA</b>
	855.ANALYSIS OF RAW TEXTUAL DATA TO EXTRACT INSIGHTS BUSINESS INTELLIGENCE
	856.ON BOARDING DELAY AND REVENUE LEAKAGE
<b>188.</b>	<b>MENTOR GRAPHICS, NOIDA</b>
	857.DEVELOPMENT OF LINT TOOL CHECKS
	858.IMPLEMENTATION OF REEDSOLOMON ENCODER AND DECODER
	859.LOW POWER VERIFICATION
	860.SYSTEM VERILOG OPTIMIZATION
	861.TESTING AND DEVELOPMENT OF HDLENGINE TOOL
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<b>189.</b>	<b>NUCLEUS SOFTWARE EXPORT LTD, NOIDA</b>
	864.ARDUINO BASED ASSET TRACKING SYSTEM, GOOGLE DIALOG FLOW BASED PERSONAL ASSISTANT
	865.ASSET TRACKING DEVICE AND GOOGLE HOME BASED LOAN LENDING ASSISTANT
	866.AUTOMATION OF WEB SERVICE TESTING
	867.BIB MIS REPORT RESTRUCTURING
	868.FRAUD DETECTION WITH DEEP LEARNING ALGORITHMNS
	869.GOOGLE HOME BASED LOAN LENDING ASSISTANT
	870.LOAN LENDING BOT
	871.NEO MONITORING UTILITY
	872.QUARTZ JOBS MONITORING UTILITY, LOG MASKING UTILITY, JSP PARSER
	873.TOMCAT CLUSTERING
	874.WIZARD BASED AUTO DEPLOYMENT
	875.WIZARD BASED AUTO-DESK SETUP
<b>190.</b>	<b>TATA MOTORS LTD, PANTNAGAR</b>
	876.IMPROVING WORK PRODUCTIVITY STANDARDS IN INDIRECT AREAS
<b>191.</b>	<b>CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE, PILANI</b>
	877.ANLYSIS OF MEMS CAPACITIVE ACCELEROMETER
<b>192.</b>	<b>AUTODESK INDIA PVT. LTD, PUNE</b>
	878.AUTODESK FUSION 360
	879.FUSION 360
	880.SOURCE CODE DEVELOPMENT ENGINEER
<b>193.</b>	<b>AVAYA INDIA PRIVATE LIMITED, PUNE</b>
	881.1. BUILDING THE AUTOMATION FRAMEWORK FOR CALL CENTER ELITE 2. WEBSITE DEVELOPMENT FOR COBROWSE SNAP-IN
	882.AVAYA EP&T SECURITY DASHBOARD
	883.BOTCONNECTOR AUTOMATION TESTING AND DEVOPS
	884. DEPLOY AN EMAIL SERVER AND STACKOVERFLOW LIKE WEBAPP FOR COMMUNICATION MANAGEMENT.
	885.DEVELOPMENT OF AVAYA EQUINOX APPLICATION FOR ANDROID AND WINDOWS CRASH DUMP DECODER UTILITY
	886. IMPLEMENTING NEW FEATURES AND FIXING BUGS IN AVAYA COMMUNICATION DEVICES.
	887. JUNIT TESTING OF SOCIAL CONNECTOR, INSTALLATION & DEPLOYMENT OF OCEANALYTICS ELITE AND CALL FLOW AUTOMATION
	888.TEST AUTOMATION FRAMEWORKS
	889.TEST AUTOMATION OF AVAYA CRM CONNECTOR 2.0 USING ROBOT FRAMEWORK
	890.WEB APPLICATION DEVELOPMENT USING REACTJS AND JAVA
<b>194.</b>	<b>B.G.SHIRKE CONSTRUCTION TECHNOLOGY PVT. LTD, PUNE</b>
	891.STRUCTURAL ANALYSIS AND DESIGN OF A G+14 STOREY BUILDING
	892.UNDERGROUND WATER TANK DESIGNING
<b>195.</b>	<b>BHARAT FORGE LTD, PUNE</b>
	893.DESIGN AND MODELLING OF HOWITZER
	894.PREDICTION OF BEHAVIOR OF SHELL FIRED FROM A MILITARY GUN(IN-FLIGHT)
<b>196.</b>	<b>CADENCE DESIGN SYSTEMS INDIA PVT LTD. - CAD SOFTWARE, PUNE</b>
	895.DESIGN AND DEVELOPMENT OF N+1 CORE SUBSYSTEM USING XTENSA DEVICES
	896.ENHANCEMENT OF DEBUG TESTBENCH FOR XTENSA PROCESSOR
	897.INTEGRATION OF DIFFERENT API
	898.PHYSICAL DESIGN CHARACTERIZATION AUTOMATION
<b>197.</b>	<b>CREDIT SUISSE - RISK &amp; FINANCE DATA ANALYTICS REPORTING, PUNE</b>
	899.SCENARIO EXPOSURE ANALYSIS
<b>198.</b>	<b>CREDIT SUISSE- FINANCE CHANGE, PUNE</b>
	900.BUSINESS PROCESS ANALYSIS AND RE-ENGINEERING

<b>199.</b>	<b>DIVGI TORQTRANSFER SYSTEMS PVT. LTD, PUNE</b>
	901.DESIGN AND SETUP OF AN ASSEMBLY LINE FOR NEXTRAC AND TORQUE MODIFICATION OF NEXTRAC
	902.IMPLEMENTING LEAN MANUFACTURING ON THE SHOP FLOOR
	903.IMPLEMENTING TOTAL QUALITY MANAGEMENT (TQM) AT DIVGI-TTS, SHIVARE
	904.PRODUCTIVITY IMPROVEMENT USING LEAN TOOLS & REDESIGNING
<b>200.</b>	<b>GEOMETRIC LIMITED, PUNE</b>
	905.IMPLEMENTATION OF ADVANCED TOOLPATH GENERATION MODULE FOR 2.5 AXIS FEATURES
<b>201.</b>	<b>HALLIBURTON TECHNOLOGY CENTER, PUNE</b>
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<b>202.</b>	<b>IDEAS - SAS – ANALYTICS, PUNE</b>
	907.HR RECRUITMENT DATA ANALYSIS, CASE DATA ANALYSIS OF ROA/CARE DEPARTMENT, COGNITIVE ANALYSIS
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	909.INTRA OFFICE APPLICATION DEVELOPMENT
	910.ONLINE RESPONSIVE WEB APPLICATION FOR EMPLOYEE ENGAGEMENT SURVEY
<b>204.</b>	<b>NATIONAL CHEMICAL LABORATORY, PUNE</b>
	911.STUDY AND SIMULATION OF REACTIVE DISTILLATION COLUMN AND DATA CONFIGURATION
<b>205.</b>	<b>NVIDIA GRAPHICS - SOFTWARE SYSTEMS, PUNE</b>
	912.APPLYING DEEP LEARNING FOR SCENE UNDERSTANDING
	913. DEVELOP AND DEPLOY TEST SCENARIOS FOR IMPROVING & AUTOMATING TEST COVERAGE OF NVIDIA GPU KERNEL DRIVER ACROSS VARIOUS UNIX PLATFORMS AND ALSO WORK ON DEFECT RESOLUTION TO IMPROVE QUALITY OF NVIDIA GPU KERNEL DRIVER.
	914.GAME STREAMING WITH MEDIACODEC NDK
	915.IMPSTANDALONE TOOL FOR IMP VALIDATION
	916.MOSAIC MOBILE APP
	917.NVIDIA INSTALLER ENHANCEMENT
	918.PROVIDE NVAPI SUPPORT FOR THE ONECORE INITIATIVE AND UWP
	919.TOOL DEVELOPEMENT FOR STATIC CODE ANALYSIS USING COVERITY
	920.VIRTUALIZED ENVIRONMENT FOR SIMULATED GPU TESTING
	921.WAYLAND BASED LINUX FOR TEGRA SAMPLES FOR CUSTOMER REFERENCE
<b>206.</b>	<b>SEARCHE, PUNE</b>
	922.GOOGLE CLOUD PLATFORM
	923.MAKING CHANGE EASY WITH GOOGLE APPS FOR WORK
<b>207.</b>	<b>SKF INDIA LTD, PUNE</b>
	924.SUPB MANUFACTURING
	925.SPS DEPLOYMENT MAINTENANCE EXCELLENCE
<b>208.</b>	<b>SOKRATI TECHNOLOGIES PVT. LTD, PUNE</b>
	926.BUSINESS DEVELOPMENT IN SOKRATI
	927.BUSINESS OPERATIONS AT SOKRATI
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	929.OUTBOUND BUSINESS DEVELOPMENT
<b>209.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD - DATA ANALYTICS, PUNE</b>
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	931.IMPLEMENTING DOCKER WITH JENKINS
	932.MEETING ASSISTANT PROJECT
	933.NOPHISH - CHROME EXTENSION FOR PHISHING DETECTION
	934.OPTIMUS PRIME
<b>210.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD. - DATA STRUCTURES AND ALGORITHMS, PUNE</b>
	935.1. MIGRATING NMS APP TO ANDROID O AND 2. ANOMALY DETECTION
	936.COMPATIBILITY AND MIGRATION OF NORTON MOBILE SECURITY TO ANDROID OREO
	937.GRAPH ANALYTICS
<b>211.</b>	<b>TATA AUTOCOMP SYSTEMS LTD, PUNE</b>
	938.DATA CAPTURING, ANALYSIS AND DECISION MAKING IN A SUPPLY CHAIN
	939.IMPROVING 6-ROD BOGIE SUSPENSION BY FINITE ELEMENT ANALYSIS
	940.OPERATIONS SUPPORT AND DIGITAL MARKETING IMPLEMENTATION
	941.REPLACEMENT OF POLYSTYRENE THERMOCOL PACKING
	942.SOURCING AND COST SAVINGS PROJECT ON VARIOUS TOOLING REQUIREMENTS
<b>212.</b>	<b>TATA CHEMICAL INNOVATION CENTER, PUNE</b>
	943.CHARACTERIZATION OF SURFACE PROPERTIES FOR TIRE GRADE SILICA
	944. DEVELOPMENT AND OPTIMIZATION OF NOVEL CATALYST COATING TECHNIQUES FOR POLYMER MEMBRANE ELECTRODE ASSEMBLY IN A FUEL CELL.
	945. EMERGING MATERIALS AND INNOVATIVE TECHNOLOGY DEVELOPMENT IN PROTON EXCHANGE MEMBRANE FUEL CELL.
	946.MODELLING AND OPTIMIZATION OF SODIUM BICARBONATE PRODUCTION FROM MAGADI TRONA ORE
	947.SYNTHESIS AND CHARACTERIZATION OF SILANE FUNCNTIONALISED CARBON SILICA COMPOSITES FOR TYRES
<b>213.</b>	<b>TATA MOTORS LTD, PUNE</b>
	948.ANALYSIS OF WALK HOME FAILURES AND WARRANTY FAILED PARTS
	949.BENCH MARKING OF GLOBAL DATA FOR FUTURISTIC DEFENCE TECHNOLOGY



	950.CAB SKEW IN 1109
	951.COST REDUCTION STRATEGY ON PAINTS & ANALYSIS OF WHEEL RIMS
	952.DESIGNING IT TOOL FOR ADVANCED PRODUCT QUALITY PLANNING SYSTEM
	953.IMPLEMENTATION OF STANDARDISED WORK TECHNIQUES
	954.IMPLEMENTATION OF STANDARDIZED WORK
	955.IMPLEMENTATION OF TMWS MOST@ IN PAINT SHOP, KITTING AT ENGINE ASSEMBLY LINE, SAFARI STORME LINE, DIFTR
	956.JDP IQS IMPROVEMENT AND WARRANTY ISSUE ANALYSIS
	957.JDP-IQS IMPROVEMENT A€VOC CAPTURING AND RESOLUTION
	958.MEASURING WORK CONTENT & BALANCING OF ASSEMBLY LINE
	959.MOP OPTIMIZATION OF H LCV POST-CHASSIS LINE
	960.PROCESS STANDARDIZATION IN WINGER ASSEMBLY LINE
	961.QUALITY CONTROL: WARRANTY ISSUES DETECTION & RESOLUTION FOR MODEL X
	962.STANDARDIZATION
	963.STANDARDIZATION OF D3 ICV/HCV CHASSIS ASSEMBLY LINE AND WHEEL ALIGNMENT
	964.STANDARDIZATION OF G85 GEAR BOX ASSEMBLY LINE
	965.STANDARDIZATION WORK
	966.STRATEGY ANALYSIS AND PREPARATION
	967.STUDYING THE CAUSES OF LESS LOAD & HIGH SMOKE, ANALYZING THE REASON FOR LESS OIL LEVEL, AND DEVELOPING A PFMEA REPORT FOR 3L & 5L ENGINES
<b>214.</b>	<b>TATA MOTORS LTD, SANAND</b>
	968.1.2 L NGTC ENGINE LAUNCH MANAGEMENT
	969.ESTABLISHING WORK PRODUCTIVITY IN INDIRECT AREAS
	970.LAUNCH MANAGEMENT-TIAGO LIMITED EDITION
	971.MANUFACTURING DEFECT AND QUALITY ANALYSIS
	972.PRODUCTIONALIZATION OF NEW ENGINE
<b>215.</b>	<b>DUCERE TECHNOLOGIES - EMBEDDED SYSTEMS, SECUNDERABAD</b>
	973.ELDERLY FALL RISK ANALYSIS
	974.GAIT ANALYSIS USING MACHINE LEARNING TECHNIQUES
<b>216.</b>	<b>ADITYA BIRLA CHEMICALS(THAILAND)LTD-SULPHITES, THAILAND</b>
	975.PEROXIDE PRODUCTIVITY IMPROVEMENT THROUGH PLANT OPTIMIZATION
	976.ROOT CAUSE ANALYSIS OF CAKING IN PMBS & SMALL CRYSTAL SIZES OF SODIUM SULFITE PRODUCTS
<b>217.</b>	<b>UST GLOBAL INFINIY LABS, TRIVANDRUM</b>
	977.ADITI
	978.AUTOMATION OF WEB APPLICATION PENETRATION TESTING
	979.AUTONOMOUS CAR TRAINING DATA GENERATOR AND SIMULATOR
	980.BAD DATA CLEANING USING MACHINE LEARNING
	981.BLOCKCHAIN BASED ELECTRONIC HEALTH RECORD MANAGEMENT SYSTEM
	982.DATA CLEANING USING MACHINE LEARNING
	983.DEEP MINER
	984.DIGITAL ASSISTANT
	985.DRIVER-LESS CAR SIMULATION
	986.INATA - INTELLIGENT ALGORITHMIC TRADING SOFTWARE DEVELOPMENT
	987.KERALA POLICE TRAFFIC VIOLATION PREVENTION APP
	988.ROBOTIC PROCESS AUTOMATION
	989.SCRIPT ANALYZER
	990.SMART TRAFFIC VIOLATION PREVENTION
	991.TIMESHEET AUTOMATION USING UIPATH STUDIO

# BITS PRACTICE SCHOOL STATIONS 2017-2018



### Alumni Realtion Cell

BITS Pilani has formed a new university-wide Alumni Cell led by Prof Arya Kumar, Dean, Alumni Relations. This Cell will connect with the BITS Pilani global alumni network and involve them in the Institute's development plans in association with BITSAA (BITS Alumni Association). The Alumni Cell has a strong student-alumni team led by the Dean with the cross-campus support provided by Faculty-in-Charges (FICs), Alumni Relations in each campus of BITS Pilani. The main purpose of the Cell is to constantly connect with alumni and conceptualize, develop and organize various alumni led initiatives related to campus development, student life and academic processes. The institute Alumni Cell and BITSAA would have seamless functioning across all processes.

#### **Distinguished Alumnus Award 2017:**

"BITS Pilani Distinguished Alumnus Award" in 2017 to the following alumni:

S.No	Name	Affiliation	Category
1	Prof. Govindan Rangarajan	Professor, Dept. of Mathematics and Chairman, Division of Interdisciplinary Research, IISc, Bangalore	Academic Teaching and Research
2	Prof. Narayana R. Aluru	Richard W. Kritzer, Distinguished Professor, Dept. of Mechanical Science and Engg, University of Illinois, Urbana-Champaign, USA	Academic Teaching and Research
3	Mr. Hari Menon	Co-founder, CEO and Head of Merchandising, BigBasket.com	Entrepreneurship
4	Mr. Harish Bhat	Chairman, Tata Global Beverages & Tata Coffee Limited, India and Brand Custodian, Tata Sons, India	Professional Management of Businesses
5	Mr. Raghu Rajagopal	CEO/Co-Founder, DATRI	Public Life / Social Entrepreneurship

This is in recognition of their significant and outstanding contributions to entrepreneurship or academic teaching and/or research or Professional Management of Businesses.

#### **Formation of Alumni Relations Cell**

A new university-wide Alumni Cell led by Dean, Alumni Relations was created by the institute in the month of May 2017. This Cell will connect with the BITS Pilani global alumni network and involve them in the Institute's development plans in association with BITSAA International and other BITSAA chapters across the country and other parts of the world.

The Alumni Cell consists of nine member strong student-alumni team at Pilani and students teams at each campus led by the Dean, Alumni Relations with the cross-campus support provided by Faculty-in-Charges (FICs), Alumni Relations in each campus of BITS Pilani would work for building stronger networking and connect with Alumni.

The main purpose of the Cell is to constantly connect the global alumni and conceptualize, develop and organize various alumni led initiatives related to campus development, student life and academic processes. The institute Alumni Cell and BITSAA would have seamless functioning across all processes. The Alumni Cell would anchor fundraising campaigns leading to BITS Pilani having direct control on the benefits accruing from such initiatives.

Prof. Arya Kumar, currently Professor in the Department of Economics & Finance at Pilani Campus, had assumed charge as the first Dean, Alumni Relations of BITS Pilani.

#### **BITS ECHO – a Newsletter**

BITS ECHO brought out by Student Alumni Relations Cell for Alumni was launched Mr. Debu Bhattacharya, Vice Chairman of Hindalco and Novelis, Chairman of the Business Review Council (Manufacturing) of Aditya Birla Group (Member) on 17th October 2017. This is one initiative that will bring BITS campuses closer to Alumni. They will get a feel of what's happening in Pilani, in Dubai, in Goa and in Hyderabad. Particularly newsbytes that are relevant to them. The purpose is to share, engage, invite and thank Alumni. It would value the connect with BITS Pilani that has shaped Alumni to face greater challenges of life and to bring in a name and fame to Alma Mater. Two issues of BITS ECHO – a newsletter have been brought out for sharing with Alumni across the globe during the year.

#### **BITSian Day**

The celebration of BITSians' Day that was initiated in 2013 have seen an astronomical increase in participation every year. BITSians Day 2017 was celebrated across nook and corner of the world in different organisations and chapters of BITSAA. The representation of the BITSian spirit from New Zealand to Canada and Japan to Europe, was witnessed across 25 countries and more than 120 locations. Offices and universities saw an outpouring of the BITSian essence, and there was a deluge of BITSians Day memories on the social media as well.

### **Prof S S R Memorial Teaching Excellence Award**

BITS Alumni under the leadership and initiative taken by Mr. N S Parthasarthy and Mr. Sreenivasan Seshasayee have instituted "Prof SSR Memorial Teaching Excellence Award". The first award function was organized on 4th September, 2017 wherein family members of Late Prof S S Ranganathan, Mr N S Parthasarthy and Ms Namita Sood – Alumni, Faculty Members and Students participated.

### **BITSunc 2017**

The Silicon Valley Chapter of BITSAA International organized BITSync 2017 between 8th and 9th September, 2017 to connect with BITSians. It is the number one BITSian conference in the USA attended by BITSians from all over the US, from more than 40 different batches, in various roles. Some of the prominent speakers who addressed the conference included John Chambers, Executive Chairman of the Board, Cisco; Joel Peterson, Founding Partner & Chairman, Peterson Partners; Deepa Thomas, Author, and Kelly Ahuja CEO, Versa Networks. Prof Souvik Bhattacharyya and Prof Arya Kumar addressed the gathering of more than 250 BITSians from Bay area through Telepresence facility in the opening session of the conference and shared about developments at BITS front including the distinct emphasis that is being placed to connect with Alumni for the growth and development of the institute.

### **Alumni – Permanent E mail ID's**

BITS has initiated a project to provide permanent e-mail ID's to all Alumni for communicating and getting connected with them with the help of UMS Consultants, a software provider company by one of our Alumni from Goa campus

### **MOU with Team Beyond Borders**

BITS Pilani has signed an MOU with Team Beyond Borders Pty. Ltd. (TBB) – Sydney, Australia; a company by Sanjay Singhai of 1988 Batch. TBB has agreed to provide free of cost license of a software product which it has developed to BITS Pilani for strengthening the industry and academia relations and to provide additional learning opportunity to BITS students.

### **Prof L.K.M. Foundation Distinguished Alumni Award**

Sunil Nanda was conferred the Prof L K Maheshwari Foundation Distinguished Alumnus Award 2017 by Dr AK Sarkar, Director BITS Pilani - Pilani Campus on 11<sup>th</sup> November 2017. Sunil Nanda gave a talk titled "The Profound, the Elegant and the Useful". A whole lot of classmates of Sunil Nanda from different parts of India and across the globe had descended at Pilani to cheer up and watch emotion choked buddy Sunil Nanda receiving this coveted distinguished alumnus award. He has three decades of experience in VLSI Technology in all three areas of Research, Development and Management. He graduated with a BE (Hons) Electronics from BITS, Pilani (75-80) followed by MSc Computer Engineering from University of Iowa (80-82). Besides VLSI Design, he is a recognized industry expert in domains of Computer Architecture and Computer Graphics. He has multiple patents to his name related to these domains.

### **Prof. V. Lakshminarayanan Memorial Lecture held at BITS Pilani**

Prof. V Lakshminarayanan Memorial Lecture was held on 4th December 2017 at BITS Pilani, Pilani Campus. As a mark of respect to the great teacher, educationist, administrator and philosopher all modelled in one, the first Director of BITS Pilani, Prof V Lakshminarayanan (VLN) was a legendary leader. Born in 1906, he came to Pilani in 1946, served the Institute in various capacities until 1970 and left for his heavenly abode in 1984.

Prof. Surendra Pal delivered the Prof. V. Lakshminarayanan Memorial Lecture on "Aerospace Paradigm of India." Prof. Pal is a space communication technologist, an accomplished researcher, an academician, an administrator and a visionary of great repute is an alumnus of Birla Institute of Technology and Science, Pilani and Indian Institute of Science Bangalore. During his 42 years of career at ISRO, he developed many innovative technologies which were and even now are new for other world space agencies.

### **Alumni Cell Pilani Campus**

During the year, a number of Alumni related events were organized including Silver Jubilee Reunion, Golden Jubilee Reunion, Ruby reunion, Farewell parties to passing out graduates and scholarships to the students through BITSAA international. Brief about some of the prominent activities organized during the year are as under:

#### **Visit by 1970-74 Pharmacy Batch Alumni**

Alumni of 1970-74 Batch (B Pharm) was on campus to celebrate their Reunion for four days: 29<sup>th</sup> September to 2<sup>nd</sup> Oct 2017. There were 6 extra ordinary achievers in different walks of life who had come with their families to rejoice their past memories. During these four days, the batch visited different places such as museum, saraswati temple, library, institute research labs and interacted with faculty members.

#### **Golden Jubilee Reunion of 1967-1972 Batch**

After 45 years of graduation, around 140 Alumni along with their family members from the Batch of 1967-72 came back to their Alma Mater to celebrate their Golden Jubilee Reunion during 27<sup>th</sup> Oct to 29<sup>th</sup> Oct 2017. Prof Souvik Bhattacharyya and Prof Sarkar addressed them about developments at the BITS front. Prof Arya Kumar shared about initiatives taken by the institute in recent past to build strong alumni connect for mutually beneficial relationships for institutional development. Batch took an initiative and collected around Rs 38.7 lakhs to be contributed for the growth and development of the BITS Pilani. Batch showed his deep desire to be connected with the alma mater in all possible ways.

Visit to Museum/Shivganga, interaction with students and grand Music Night was organized during this visit.

#### **Reunion of 1971-1976 MMS Batch**

Seven Alumni of first Batch of MMS from BITS Pilani visited Pilani campus between November 4th and 5th, 2017 and interacted with faculty and students of management Department for looking into the possibilities of contributing back to the development of management programme by way of curriculum development, guest lectures and placement support.

#### **Silver Jubilee Reunion of 1988-1992 Batch**

More than 300 Alumnus of Batch of 1988-1992 of BITS Pilani Campus joined for the Silver Jubilee Meet on campus between 10th and 12th November 2017. More than 150 of them came from abroad – USA, UK, Canada, Hong Kong, Singapore, Malaysia, Dubai etc. The batch includes senior IAS officers, Educationists, entrepreneurs, venture capitalists, investment bankers, NGO Founders, researchers etc. Prof Souvik Bhattacharyya addressed the batch online from Goa Campus in the telepresence room. He shared a road map for better connectivity with Alumni and sought their contribution in many ways for the growth of the institute. Prof A K Sarkar, Director Pilani campus shared the future developmental plans of the institute. Batch took lot of interest in finding the developments on campus and contributing back to the Alma Mater. Alumni felicitated the teachers who taught them during their studies at BITS. Batch joined hands together to contribute Rs 1.30 crores to the institution for research/faculty enrichment or infrastructure development that would be jointly decided by the institute and batch representatives.

A campus walk, visit to Museum/Shivganga/Pahadi Mandir, interaction with students and grand Music Night was organized during this visit.

#### **Reunion of 1977-1982 Batch Alumni**

Around 80 alumni with their family members celebrated their reunion during Nov. 19<sup>th</sup>-21<sup>st</sup>, 2017. During interaction, Prof Souvik Bhattacharyya, the Vice-Chancellor, BITS Pilani shared his thoughts on the various possibilities to work together for the development of the institute. He also discussed his ideas of better connectivity with Alumni and their role towards institute growth. Prof A K Sarkar, Director Pilani campus shared the developmental plans of the Pilani Campus.

A campus walk, visit to Museum/Shivganga, interaction with students and grand Music Night was organized during this visit.

#### **Reunion of 1959-1963 Batch Alumni**

Nineteen veteran Alumni from the batch of 1959 along with their spouses visited Pilani campus between Visited 24th to 26th Nov 2017. It was rare to see the kind of energy they had and spirit of proud to be BITSians. Prof Arya Kumar, Dean Alumni Relations shared the institute vision on the various possibilities to work together for the development of the institute. He also narrated them about the journey of the institute in almost last six decades.

#### **Reunion of 1971-1976 Batch Alumni**

Ten Alumni of 1971-76 batch came to visit their alma mater during Dec 24<sup>th</sup> -25<sup>th</sup> and to relive their old golden days.

#### **BITS 1975 Trust**

The Gurudakshina programme by BITS 75 Trust was organised on 22<sup>nd</sup> October, 2017 at Bangalore to felicitate 10 prominent Gurus. It was a marvellous event that could fructify with the untiring efforts put in by Mr. Hanuman Bengani, Dr Vijay Chandru and many more. The music programme revived many memories including golden era songs performed by Mr Rakesh, Mrs. Harsha and the team. The Trust has successfully nurtured two ventures and is in the process of supporting the third one. Prof Arya Kumar Dean Alumni Relations shared about the developments at institute front and especially a new and distinct impetus given to connect with Alumni for strengthening ties for growth and development of the institute. He also shared about the developments at the institute in the areas of teaching, innovation and entrepreneurship areas in different campuses with special emphasis on distinct strategy in which alumni engagement for growth and development of the institute is being revamped. Mrs. Sandhya Mitra while accepting the award on behalf of Late Prof. C R Mitra shared about his dedicated contributions in the field of higher education with distinct touch of having societal and community concerns. All those Guru's who were felicitated shared about their experiences while at BITS and highlighted about an opportunity to contribute to the innovations introduced during initial phase between 1970 and 75 at BITS that has taken this institution to great heights.

#### **Prof SSR Memorial Teaching Excellence Award**

BITS Alumni under the leadership and initiative taken by Mr. N S Parthasarthy and Mr. Sreenivasan Seshasayee have instituted "Prof SSR Memorial Teaching Excellence Award". Prof S S Ranganathan (SSR) was one of the very popular teachers in the Department of Electrical and Electronics Engineering. Committee constituted for identifying the "Best Teacher" award went into details of all nominations received. The consensus of the jury members based on processing of nominations received and a thread bare discussion led to conferring Prof SSR Memorial Teaching Excellence Award – 2017 to Prof. P Srinivasan of Mechanical Engineering Department. The award function was organized in Pilani Campus on 4th September, 2017 wherein family members of Late Prof S S Ranganathan, Mr N S Parthasarthy and Ms Namita Sood – Alumni, Faculty Members and Students participated.

### **BITS Alumni Fund for Children's Education (BAFCE)**

BITS Alumni Fund for Children's Education (BAFCE) is a charitable fund instituted by the 1987 batch on behalf of all alumni coinciding with their Silver Jubilee Reunion. The

The purpose of BAFCE endowment is under the broad category of providing financial assistance for college education for children and wards of eligible employees of the BITS eco-system in Pilani. The Board of BAFCE will perform the administration and selection of beneficiaries.

### **Farewell to Graduating Students**

A high tea party was organized to bid a farewell to graduating students of class 2017. Farewell to graduating students of 2013-17 batch of First degree and 2015-2017 batch of Higher degree was held at the VFAST lawns on Wednesday, 26<sup>th</sup> April 2017. Speaking on the occasion, Vice Chancellor, Prof Souvik Bhattacharyya and Director, Prof A K Sarkar, congratulated the students and called upon them to make their family and their institution proud. Prof Surekha Bhanot, Prof KN Sachdev, Prof Shibashish and Prof H O Bansal shared their thoughts for the benefit of the graduating students.

Similar farewell graduating party was organized on 27<sup>th</sup> November 2017 to bid farewell to graduating students of class 2018. Around 500 students of 2014-18 batch of First degree and 2016-2018 batch of Higher degree were present in the function. Vice Chancellor, Prof Souvik Bhattacharyya, Director, Prof A K Sarkar, and Prof Arya Kumar, Prof Surekha Bhanot, Prof KN Sachdev and Prof H O Bansal shared their thoughts with students and wish them very best in their future endeavors and advised them to be connected with their alma mater.

Several students also spoke on these farewells and conveyed their gratitude to the Institute and the teachers for helping them learn and grow. They said that their learning at BITS has made them better human beings while building leadership qualities.

**Embryo & On-campus Lectures:** BITS Alumni relation Cell organized various lectures in collaboration with CMN (Campus Mentoring Network) and BITSAA International.

### **Alumni Cell, K K Birla GOA Campus**

#### **Embryo & On-campus Lectures:**

Alumni Affairs, BITS Pilani K K Birla Goa Campus has organized the following 15 Embryo & On-campus talks from January – December, 2017. Details are as follows:

<b>S.No</b>	<b>Date</b>	<b>Title of The Talk</b>	<b>Speaker's Name</b>
1	7th Jan, 2017	The purpose of life: Modern day Existentialism	Mr. Ojas Mehta
2	31 <sup>st</sup> Jan, 2017	A Talk by Debarghya Das	Mr. Debarghya Das
3	15 <sup>th</sup> Mar, 2017	Financing your Master's abroad	Mr. Rishabh Goel
4	18 <sup>th</sup> Mar, 2017	BITS2Business School	Mr. Apoorv Bappat Mr. Anand Ramachandran Mr. Rishabh Goel
5	18 <sup>th</sup> Mar, 2017	CAT Champs	Mr. Mohit Menon Mr. Avidipto Chakraborty Mr. Rishabh Mehra
6	31 <sup>st</sup> Mar, 2017	Artificial Intelligence	Mr. Shobhit Agarwal
7	31 <sup>st</sup> Mar, 2017	What to do in BITS to be a Successful Entrepreneur?	Mr. Raghu Rajagopal
8	6 <sup>th</sup> Apr, 2016	The purpose of Life and pursuing your passion	Mr. Ojas Mehta
9	12 <sup>th</sup> Aug, 2017	A talk by Distinguished Alumnus Award 2017 winner	Mr. Hari Menon
10	26 <sup>th</sup> Aug, 2017	Metanoia – 3 <sup>rd</sup> Annual BITS Alumni Summit	Shreyas Habbu Bandan Jot Singh Padmini Chettur, Shashi Warriar Nishith Rastogi B Sandhya
11	27 <sup>th</sup> Sept, 2017	BITS2MSPHD	Ketan Pant Gauri Jagtap Paritosh Raman
12	4 <sup>th</sup> Oct, 2017	Life at BITS	Sajal Chakravarty
13	10 <sup>th</sup> Oct, 2017	Progenitor Cells in the developing kidney – Balancing Renewal and Differentiation	Harini Ramalingam
14	15 <sup>th</sup> Nov, 2017	BITS2Civil Services	Hari Krishna Reddy Sanskriti Jain Ankur Aggarwal
15	18 <sup>th</sup> Nov, 2017	Future in core domain of EEE/EnI	Siddharth Malhotra

#### **Batch Reunion:**

Alumni Affairs of BITS Pilani K. K. Birla Goa Campus organized the first ever reunion of our campus from 11-12 February 2017. Alumni of the batch 2004, 2005 and 2006 are invited along with their spouse. The event

involved talks by some of the alumni about their days in BITS and there was an introduction to Alumni Mentorship Programme (AMP), a pilot project set-up with the help of the alumni mentoring few on-campus students on different areas as selected. Following this, there was a dinner at Royal Orchid Resort & Spa with one of our campus alumni, Mr. Nishant Suri, a well-known stand-up comedian's performance.

#### **BITSians Day:**

The fourth edition of 'BITSians Day' was celebrated on 4<sup>th</sup> of August, 2017. A BITS – RUN (Marathon) was organized on the same day to celebrate the spirit of "Once a BITSian, Always a BITSian".

#### **Metanoia:**

Keeping in mind its resolute mission to keep the alumni of BITS connected to their Alma mater and to maintain the integrity and strength of the vast alumni community, Alumni Affairs Division – Student Team Goa conducted the second edition of Alumni Summit on 26<sup>th</sup> of August, 2017. The speakers reminisced about their life back at BITS campuses and their journey thereafter.

Six speakers who were invited are:

1. Shreyas Habbu, Chief Minister's Fellow, Government of Maharashtra
2. Bandan Jot Singh, Expeditioner - First Indian Sikh to raise the Indian Flag on Antarctica.
3. Padmini Chettur, Dancer & Founder, Padmini Chettur Dance Company
4. Shashi Warriar, Author
5. Nishith Rastogi, Founder, Locus.sh
6. B Sandhya, Additional Director General of Kerala Police in India

#### **Research Scholarship:**

One of our alumni Mr. Satish Sankaralingam initiated a research scholarship for BE students and an amount of Rs. 15,000/- was awarded to Hardik Hingorani, Shashwat Verma and Sukirt Thakur as recognition to their research work.

#### ***Prof. Suresh Ramasamy Memorial Award 2017-18:***

The project idea 'Imitato Robotics' done by the students: Vadaga Ananyo Rao, Shardul Walwadkar and Chakshu Moar was selected for Prof. Suresh Ramaswamy Memorial Award 2017-18.

#### ***Research Scholarship:***

One of our alumni Mr. Satish Sankaralingam initiated a research scholarship for BE students and an amount of Rs. 15,000/- was awarded to Hardik Hingorani, Shashwat Verma and Sukirt Thakur as recognition to their research work.

#### ***Regular Activities:***

Other regular activities like bi-annual Director's Tea Party, batch snap sessions, Alumni Affairs Division registrations, souvenir distributions, bringing out the yearbook 'Melange' for out-going students, hosting visiting alumni on campus, etc.

#### **Alumni Cell, Hyderabad Campus**

During the year, Alumni cell organized BITSian's day, Farewell parties to passing out graduates and scholarships to the students through BITSAA international. Brief about some of the prominent activities organized during the year are as under:

#### **Farewell to Graduating Students**

Graduands Farewell party organized by Alumni Relations Cell on 26<sup>th</sup> April, 2017 and 22<sup>nd</sup> November, 2017 at Library Quadrangle.

To bid a farewell to graduating students, speaking on the occasion, Director, Prof G. Sundar, congratulated the students and called upon them to make their Institution proud. He advised the students to be connected with their alma mater. Around 400 students, faculty and staff members were present in the function.

Several students spoke on these farewells and conveyed their gratitude to the Institute and the teachers for helping them learn and grow. They said that staying at BITS and facing the challenges has made them better human beings while building leadership qualities.

#### **BITSAA Hyderabad Alumni Meet**

Students of BITS Pilani Hyderabad Campus had an opportunity of attending the BITSAA Hyderabad Alumni Meet, organized in the Plaza Hotel, Begumpet on 11<sup>th</sup> February, 2017. Many alumni of the institute, right from the first batch of Pilani Campus to the most recently graduated students of Hyderabad Campus had a chance to interact with one another and share their BITSian feeling. The Director of Hyderabad Campus, Sundar G and Alumni Affairs Faculty –In- Charge, Prof. P. N. Rao attended the event being a BITSian himself. Sanjay Khendry, Anu Khendry, Raghuram Salguti and Parth Shah from BITSAA organized the Annual Meet. The organizers invited the Music Club and Dance Club of BITS Hyderabad to perform at the Annual Meet. Eight members from Dance Club and six members from Music Club gave mind-blowing performances. Music Club chose songs from each decade since the 1960's to which all the Alumni joined in.

## Prodigy Finance

An overview of the financial aspects of pursuing a masters /PhD in science, engineering or business abroad. The webinar by Prodigy Finance, organized in association with BITSAA was organized on 15<sup>th</sup> March 2017. .

## BITSian Day

The following alumnus were invited and they shared their knowledge and experinec with the students on BITSian Day:

**Anudeep Ayyagari** is a 2009 batch alumnus of BITS Pilani, Hyderabad Campus. He has been an intern at Hindustan Aeronautics Limited. Apart from that he has also been associated with Polycom, Expertshub, Psy Creations, Zippr, GrabOn, HungerBox and IVedika. He is currently working as the Design head for the popular app Tapzo.

**Sidarth Yerram** joined BITS Pilani Hyderabad Campus in 2010. He became the President of Students' Union, BPHC due to his active involvement and contributions to campus affairs. He has been an intern at Tesco, Bengaluru and has also worked as Manager-Enterprise Sales at OneDirect - CEM. He is a co-founder of the start-up LinQ Store.

**Rajshekar Behar** is a 2011 batch BITSian, who completed his B.E. in Computer Science Engineering from BITS Pilani Hyderabad Campus. He has worked as the Placement Co-ordinator at the Placement Division, BITS Pilani Hyderabad Campus. He has also been an intern at Cisco Systems. Currently, he is working as the Marketing Lead for Julia Computing.

**Srikar Mokkalapati** graduated in 2016, completing his B.E. in Computer Science from BITS Pilani Hyderabad Campus. Instead of pursuing his lucrative career in Computer Science Engineering, he opted for a startup. His startup called "Kheyti" design, adapt and implement low cost farming solutions that help smallholders get increased, regular and predictable income.

**Srujana Rao** joined BITS Pilani Hyderabad Campus in 2013 to pursue her B.E. in Mechanical Engineering. She has worked as the Cultural Secretary, Students' Union, BPHC. She has interned at Hindustan Aeronautics Limited and is currently interning at Technion International.

## BITS2MS/PhD Series

The short presentation on various career choices in technical fields after graduation from BITS, and how to maximize the opportunities at BITS to prepare for higher education was arranged on 27<sup>th</sup> September 2017.

**Paritosh Ramanan**, Batch of 2009, Pilani Campus - PhD, Computational Science, Georgia Institute of Technology; **Gauri Jagatap**, Batch of 2010, Goa Campus - PhD, Electrical Engineering, Iowa State University and **Ketan Pant**, Batch of 2013, Goa campus - M.S. Electrical Engineering, Stanford University shared their thoughts with students.

## Embryo & On-campus Lectures:

Embryo & On-campus talks from January – December, 2017. Details are as follows:

### (a) Talks by Non-Bitsian

1/30/2017	Debarghya Das
2/5/2017	Balaji Viswanathan
3/18/2017	Shamir reubin
3/18/2017	Tess Joseph
3/18/2017	Anam Hashim
3/18/2017	Vipul Singh
3/18/2017	Nimisha Verma
3/18/2017	Dhruv Sehgal
3/19/2017	Shashi Tharoor
8/16/2017	Tim Bedding
8/20/2017	David J.Peterson
9/6/2017	LGBTQ (4)
9/8/2017	Aijaz Hussain
9/15/2017	Rahul Vishwakarma
9/22/2017	Adityavikram Hirani
10/27/2017	A.S. Kiran Kumar
10/28/2017	Dilip Chabbria
10/29/2017	Abhas Mitra
11/3/2017	AIIESEC



**(b) Talks by Bitsian**

2/10/2017	GRE GMAT Talk - <b>Aditi Ghosh</b>
2/10/2017	GRE GMAT Talk - <b>Varun Natu</b>
2/10/2017	GRE GMAT Talk - <b>Aditya Taank</b>
2/15/2017	CATchamps- <b>Siddharth Laddha</b>
2/15/2017	CATchamps- <b>Rachit Goel</b>
2/15/2017	CATchamps- <b>Vinayak Krishnamurthy</b>
4/7/2017	PPO Talks- <b>Mithilesh Mundada</b>
4/7/2017	PPO Talks- <b>Rohit Nagpal</b>
4/7/2017	PPO Talks- <b>Rahul Sapre</b>
4/7/2017	PPO Talks- <b>Muskan Mittal</b>
4/7/2017	PPO Talks- <b>Aditya Taank</b>
4/7/2017	PPO Talks- <b>Rajat Modi</b>
4/7/2017	PPO Talks- <b>Rishabh Gupta</b>
4/13/2017	Summer Productivity Talk- <b>Piyush Sinhal</b>
4/13/2017	Summer Productivity Talk- <b>Rahul Sapre</b>
4/13/2017	Summer Productivity Talk- <b>Shivam Bhagat</b>
4/13/2017	Summer Productivity Talk- <b>Nikhil Jain</b>
4/13/2017	Summer Productivity Talk- <b>Mohammad Owais Shaik</b>
4/13/2017	Summer Productivity Talk- <b>Harshit Agarwal</b>
8/4/2017	Bitsian's Day Talk- <b>Srujana Rao</b>
8/4/2017	Bitsian's Day Talk- <b>Srikar Mokkaapati</b>
8/4/2017	Bitsian's Day Talk- <b>Rajshekar Behar</b>
8/4/2017	Bitsian's Day Talk- <b>Anudeep Ayyagari</b>
8/5/2017	Placement Talk- <b>Furqan Arab</b>
8/5/2017	Placement Talk- <b>Anna Shekhawat</b>
8/5/2017	Placement Talk- <b>Kaushal Raut</b>
8/5/2017	Placement Talk- <b>Abhilash Chandashiv</b>
8/5/2017	Placement Talk- <b>Harsh Garg</b>
8/28/2017	Foreign internship talk- <b>Vinay Datta Renigunta</b>
8/28/2017	Foreign internship talk- <b>Aniketh Reddy</b>
8/28/2017	Foreign internship talk- <b>Aditya Dusi</b>
8/28/2017	Foreign internship talk- <b>Varun Natu</b>
8/28/2017	Foreign internship talk- <b>Nimisha Agrawal</b>
8/28/2017	Foreign internship talk- <b>Aditi Ghosh</b>
8/28/2017	Foreign internship talk- <b>Shakti Prasad Padhy</b>

**Dubai Campus**

Alumni Relation cell at Dubai campus organised various activities during the year which are given below.

**BITS Global Meet**

Alumni Affairs Division, in collaboration with BITSAA Middle East, kick started the year 2017 with the biggest event yet. BITS Global Meet was a two-day event hosted by BITS Pilani, Dubai Campus. Alumni from all over the globe, along with their families poured in. These two days brought hundreds of student volunteers and alumni together for a memorable evening of entertainment and socializing, followed by a fun filled desert safari trip. This event helped reconnect with former batch mates, and provided the students with a chance to interact with their alumni, and explore the opportunities beyond campus.

**BITSAA ME Quiz Night**

On the 12<sup>th</sup> of March, BITS Pilani, Dubai Campus saw one of its most exciting, collaborative, and fun filled events of the year. The BITSAA ME Quiz Night was organized to be an interactive evening of fraternization between faculty, students, and alumni. This activity clad event consisted of multiple rounds of quizzing between teams consisting of alumni and students. Each team performed their very best and exhibited great knowledge on the history of BITS, general knowledge, and current affairs. Alumni poured in from all over Middle East to partake in this event. This encouraged the vision of a cohesive community and head students to learn greatly from their alumni.

## **BITSIANS DAY**

August 5<sup>th</sup>, commemorated as Bitsians Day is cherished across the globe by students and alumni alike. Each year, on this day, a newfound strength flurries within the student body when they realize how high they fly with BITS Pilani as their launch pad. For alumni, it is the awakening of memories. A reminiscence of a beautiful past which shaped them to be the individuals that they are today. For the newly graduated batch, it is a feeling of home, and of how their lives have turned around within a year. To celebrate this joyful day, BITS Pilani, Dubai Campus, echoes a time lapse of the priceless moments captured within these halls, and generates extreme admiration for those who, with their honour and dignity, have carried our legacy forward, for generations to witness.

**Embryo & on-Campus Lectures:** BITS Alumni Affairs Division Organized various lectures in collaboration with BITSAA Middle East.

### **✚ WHAT TO DO IN BITS TO BECOME A SUCCESSFUL ENTREPRENEUR**

On the 31<sup>st</sup> of March, Alumni Affairs Division organized a talk on 'What we need to do in BITS to be a successful entrepreneur'. The talk was conducted by Dr. Raghu Rajgopal, the co-founder CEO of DATRI Foundation, and Global Strategy Head for IVY Mobility. It was conducted via telepresence room and focused on the required skill development during college years. He brushed on the aspects which are looked into before choosing career paths. Since majority of the students are concerned about the right time to begin entrepreneurship, he answered that by interacting with the students on the basis on interest, and provided them with recommendations which are sure to shape their future in a positive manner.

### **✚ BITSAA 75 STARTUPS'**

On 8<sup>th</sup> April 2017, BITS Pilani alumni Mr. Hanuman Bengani and Mr. Satish Thatte were invited to aid students in the process of selection and mentorship across campuses, as part of the BITS 75 charitable trust. This Trust has been mentoring and funding startups of students for years since its inauguration. As part of their third venture, the 'Request for Proposals (RPF) for entrepreneurial initiative was launched. This session was aimed at interacting and briefing the students about the same. This session was held in BITS Pilani, Pilani Campus, but was conducted across all campuses via telepresence.

### **✚ PROJECT MANAGEMENT WORKSHOP**

On 29<sup>th</sup> April, Alumni Affairs Division invited Mr. Lalit Jain for a one day training program on 'Project Management using Microsoft Project Professional 2013'. This training session focused on the importance, use, and construction of an effective plan to aid in the management of projects while in college and afterwards. To construct a plan, he encouraged us to use the Microsoft Project Professional 2013 software, which had multiple features needed to organize work, and incorporate an changes that might occur along the way. Once the training program was completed, the attendees were awarded with certificates on the successful completion of a professionally fruitful program.

### **✚ CAREER MENTORSHIP PROGRAM**

On October 2<sup>nd</sup>, two esteemed alumni, Ghurair Sheikh, Chandra Bhopale and Deepak Mehrato, joined us for an interactive session as part of the Career Mentorship Program. The topic for the session was entrepreneurship and overall career guidance. The two entrepreneurs laid out their experiences and formulated three main principles on constructing and establishing a successful business. The latter part of this session was dedicated to personality development. They cultivated ideals of self-confidence by inviting all students to come forth and present a few lines on select topics. This was followed by exercises in an attempt to counter stage fright. The participants gained greatly from the interaction and gained a head start into approaching their fields of choice.

### **✚ BITS MS2PHD**

On the September 20<sup>th</sup>, Alumni Affairs division hosted an interactive talk session with Mr. Kartik Satyanarayan, alumnus of the Goa campus. The session focused on answering queries on post graduation studies, planning and approaching higher education effectively. He gave students insights into every detailed aspect which students tend to ignore in their quest for success. The students gained a lot from this interactive session assuring a head start into their respective careers.

## RESEARCH PROJECT GRANTS

### Pilani Campus

#### Ongoing projects:

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lacs)
<b>Department of Management</b>				
1.	Entrepreneurship Development Programs on campus	Prof. Arya Kumar	National Entrepreneurship Network	22,67,000
2.	Development and validation of service quality index in Indian Telecom & Banking Sector	Dr. Arun Kumar & Dr. Jyoti	ICSSR	4,00,000
3.	Modelling of Employee Performance and Human Capital, Assessment and Optimization of Productivity of Indian Manufacturing Industry	Dr. Udayan Chanda & Dr. Praveen Goyal	ICSSR	5,00,000
4.	Empirical investigation of management practices in the Indian manufacturing sector	Dr. Jayashree Mahesh	BITS Pilani RIG grant	2,00,000
<b>Department of Humanities and Social Sciences</b>				
5.	Rural women empowerment and sustainable growth	Sangeeta Sharma	DST, 2015	30 Lakhs
6.	Bringing back peacocks to Pilani	Sangeeta Sharma	BITS Alumni	10 lakhs
7.	Epistemology Revisited: Postmodern Discourses, Alternative forms of Cognition and Interdisciplinarity of Knowledge	Anupam Yadav	Indian Council of Philosophical Research New Delhi	2 Lakhs
8.	Participatory Exclusions of women and the poor in community Forestry: A Comparative Study of Implementation of the ROFR Act Across 3 States of India	Sailaja Nandigama, Sanjiv Kumar Choudhary, and Kumar Sankar Bhattacharya	Indian Council of Social Science Research (ICSSR), New Delhi	7 Lakhs
<b>Department of Computer Science and Information Systems</b>				
9.	Area Exploration using Miniature Robots" is in progress.	Prof. Sudeept Mohan (PI), Prof. J P Misra (Co-PI), Dr. Avinash Gautam (Co-PI)	CAIR, DRDO	20 Lakhs
<b>Department of Chemistry</b>				
10.	Synthesis of novel N-fused polycyclic compounds through transition metal catalyzed cascade/C-H functionalization reactions	Dr. Anil Kumar	DST-SERB	32.84
11.	Sustainable Catalytic Route to C4-C6 Carboxylic Acids by Carbonylation of Polyols	Dr. Bibhas Ranjan Sarkar	BITS Pilani (ACRG)	5.5
12.	Design and Syntheses of Heavy Metal based Aggregation Induced Emission Active Complexes and their Application in Bio-imaging	Dr. Inamur Rahaman Laskar	DST	35.9
13.	Asymmetric synthesis of [2.2.2] azabicyclo-isoquinclidine derivatives: Towards the synthesis of related alkaloids	Dr. Indresh Kumar	DST-SERB	43.296
14.	Decoration of Co-catalyst on the Ultrathin 2D Sheets of Metal Chalcogenides and Their Application in Photoelectrochemical Water Splitting	Mrinmoyee Basu	DST	35
15.	Decoration of Plasmonic Nanoparticles on Ultrathin 2D Nanostructure of Metal Chalcogenides and Their Application in Photoelectrochemical Water Splitting and Photocatalysis	Mrinmoyee Basu	DST-SERB	19.82

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lacs)
16.	Design and Synthesis of Multi-functional Smart Low Molecular Weight Gelators (LMWGs)	Dr. Rajeev Sakhuja	BITS Pilani	4.5
17.	Development and application of density functional reactivity theory based modeling techniques to understand the energetic of reactive and non-reactive interactions	Dr. Ram Kinkar Roy	DST	31.55
18.	Effect of Chemical Nature of Spacer group, Headgroups and Counterions of Gemini Surfactants on Solvation Dynamics and Rotational Relaxation of Coumarins in Aqueous Micelles	Dr. Subit K. Saha	CSIR	15.9
19.	Investigation of unfolding and refolding of proteins by gemini surfactants with varying spacer groups using fluorescence spectroscopy and small-angle neutron scattering techniques	Dr. Subit K. Saha	UGC-DAE CSR	6.63
<b>Department of Mechanical</b>				
20.	DAAD JINGEL – Joint indo-German Experience Lab	Prof. K. S. Sangwan		Euro 346954, 2016-19.
21.	Design of healthcare supply chain for enhancing availability and reducing wastage of generic medicines for rural areas in Rajasthan	Prof. Srikanta Routroy, & Dr. Sunil Dubey	Department of Science and Technology (DST) Rajasthan	Rs. 5.88 Lakhs, 2016-19
22.	Modelling immune response to salmonella during typhoid	Amol M. Marathe	Department of Science and Technology (DST)	43.52 Lakhs, 2015-18
<b>Department of Civil</b>				
23.	Impact of PMGSY Roads on Accessibility in Rural Areas	A. K. Sarkar Ajit Pratap Singh	NRRDA, Ministry of Rural Development, Gov. of India	22.63
24.	Development of Copper Bio-Leaching methodology/technique from tailing waste at Hindustan Copper Limited, Khetri	Anupam Singhal S.K. Verma (BIO)	Ministry of Mines, New Delhi	30.00
25.	Potential of Marble Slurry as a Mineral Admixture in Concrete	Anshuman Dipendu Bhunia	DST, New Delhi	28.38
26.	Dynamic buckling response of composite structures	S. N. Patel	CSIR, New Delhi	11.52
27.	Conjunctive use of rainwater and Groundwater to provide safe drinking water with intervention of Advanced Technology	Rajiv Gupta	DST, New Delhi	126.43(DST) 77.70 (Coll.)
28.	Development of Low carbon ternary cement for durable and sustainable concrete	Bahurudeen A	Additional competitive Research Grant, BITS Pilani	9.25
29.	"Modeling Pedestrian Flow Using a Continuum Model"	Durgesh Vikram	BITS Research Initiation Grant	2.0
30.	"Experimental investigation on Structural Performance of RC Frame with Deep Beams under Gravity loading"	G. Muthukumar	BITS Research Initiation Grant	2.0
<b>Ongoing Consultancy Projects</b>				
31.	Road Safety Audit for Reengus-Sikar stretch of NH-11 (43.887 km)	A K Sarkar A. P. Singh Amit Goel	National Highway Authority of India	18.11
32.	Road safety audit of widening and strengthening of existing Bikaner-Phalodi section to four lane from Km 4+200 to Km 55+250 and two lane from Km 55+250 to Km 163+500 of NH-15 on BOT (Toll) basis in the state of Rajasthan	A. K. Sarkar A P Singh P K Sahu Durgesh Vikram	NHI, New Delhi	53.50
<b>Department of Chemical Engineering</b>				
33.	Design and development of a novel biomass stove for cooking application	Dr. Pratik N Sheth	BITS, Pilani	9.00 2016 - 2018
34.	Hydrogen production from ethanol by temperature reforming methods using modified Ni-Sn/Al <sub>2</sub> O <sub>3</sub> and Ni-Sn/CeO <sub>2</sub> Catalysts	Dr. Banasri Roy	DST-SERB	19.34 2016 - 2019
35.	Dual Catalytic Monolith Reactor for Biogas Reforming	Dr. Srinivas Appari	BITS, Pilani	8.25 2017 - 2019

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lacs)
36.	Particle Image Velocimetry studies on a bench-scale cold-flow Fluidized Catalytic Cracking (FCC) riser unit.	Dr. Priya C Sande	BITS, Pilani	10.00 2017 - 2019
37.	Mixed-Matrix membranes (MMM) for separation of CO <sub>2</sub> /CH <sub>4</sub> for biogas up-gradation	Dr. Bhanu Vardhan Reddy Kuncharam	BITS, Pilani	2.00 2017 - 2019
<b>Department of Physics</b>				
38.	Investigations on Li <sup>+</sup> ion conducting glass-ceramics containing NASICON structured nano crystallites	Dr. Anshuman Dalvi	SERB	37.65 Started from 29th October, 2016
39.	EXAFS Investigations on Polymer nanocomposites (2016-2019)	Dr. Anshuman Dalvi	DAE CRS	10.35 Sanctioned in November, 2016 started in March 2017
40.	Theoretical Study of Electron impact double ionization of atoms and molecules	Dr. R. Choubisa	SERB	22.63 Approved Nov 2016 started in March 2017
41.	Studies on Quarkonium Suppression in Asymmetric Nuclear Collision at LHC	Dr. M. Mishra	SERB	16.03 Approved Nov 2016 started in March 2017
42.	Dynamical and Topological Properties of Floquet Systems: A comparative study of perturbative schemes	Dr. J.N. Bandyopadhyay, Co.PI Dr. T.G. Sarka	SERB	19.11 Approved Nov 2016 started in March 2017
43.	Generation and Characterization of Attosecond Pulses with Specific Polarization and its Applications	Dr. Amol R. Holkundkar Co.PI Dr. J.N. Bandyopadhyay	SERB	19.70 Approved Nov 2016 started in March 2017
44.	Surface Plasmon Resonance Instrument	Dr. Raj Kumar Gupta, Co.PI Dr. V. Manjuladevi	DST/IDP	56.15 sanctioned Dec 2016 started in March 2017
<b>Department of Economics and Finance</b>				
45.	An Economic Appraisal of renewables vs non-renewables: a case of Rajasthan	Krishna M	ICSSR	INR 2,00,000
46.	Environmental and Economic Implications of British Columbia's Carbon Tax for India	Monika Gupta	BITS Pilani	INR 2,00,000

#### Projects Sanctioned

S.No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
<b>Department of Management</b>				
1.	Developing and Validating Customer Relationship Management Index for Indian Airline	Dr. Jyoti & Dr. Arun Kumar	ICSSR	1,50,000
<b>Department of Humanities and Social Sciences</b>				
2.	Bringing back peacocks to Pilani	Sangeeta Sharma	BITS Alumni	10 lakhs
3.	Epistemology Revisited: Postmodern Discourses, Alternative forms of Cognition and Interdisciplinarity of Knowledge	Anupam Yadav	Indian Council of Philosophical Research New Delhi	2 Lakhs
4.	Participatory Exclusions of women and the poor in community Forestry: A Comparative Study of Implementation of the ROFR Act Across 3 States of India	Sailaja Nandigama, Sanjiv Kumar Choudhary, and Kumar Sankar Bhattacharya	Indian Council of Social Science Research (ICSSR), New Delhi	7 Lakhs
<b>Department of Mathematics</b>				
5.	Mathematics-aided Architectural Design Layouts	Dr. Krishnendra Shekhawat	SERB-DST	Rs. 15,44,660, 2017-20
6.	Numerical Approximations: Solution and Convergence Analysis for Non-linear Aggregation-Breakage Equations	Dr. Rajesh Kumar	BITS Pilani	Rs. 2,00,000, 2017-19
<b>Department of Computer Science and Information Systems</b>				

S.No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
7.	"Design and implementation of Content Based Recommender System for effectively answering Web based "	Dr. Yashvardhan Sharma (PI), Dr. Lavika Goel (Co-PI)	DST-ICPS	Rs.40,00,000 3 years
8.	"Design and implementation of coordinated multi-robot system for area coverage under constrained wireless communication"	Dr. Virendra Singh Shekhawat (PI), Prof. Sudeept Mohan (Co-PI), Prof. J P Misra (Co-PI), Dr. Avinash Gautam (Co-PI)	DST-ICPS	Rs.40,00,000 3 years
9.	"Development of a Cyber Physical System Based Smart Water Grid for Community Usage"	Dr. Kamlesh Tiwari (Co-PI), Dr. Amit Dua (Co-PI)	DST-ICPS	Rs.70,00,000 3 years
10.	"Realization of Flexible and Scalable VANET with multi-tenancy support using Software Defined Networking and Network Virtualization (Ref. No. T855)	Dr. Ashutosh Bhatia (PI), Dr. K. Haribabu (Co-PI)	DST-ICPS	Rs.40,00,000 3 years
<b>Department of Chemistry</b>				
11.	Synthesis of D-glucose derived glycoconjugates and their application in molecular recognition and catalysis	Dr. Ajay K. Sah	DST	30.09
12.	Studying Catalytic Carbonylation of Polyols – Sustainable Route to Carboxylic Acids	Dr. Bibhas Ranjan Sarkar	DST-SERB	32.296
13.	Design, synthesis and tubulin inhibition activity studies of novel indolyl heterocycles	Dr. Dalip Kumar	CSIR	21
14.	Synthetic Probes for Staudinger Ligation: Synthesis and application of Phosphane based templates.	Dr Kiran Bajaj	DST	29.7
15.	Transition-metal-catalyzed synthesis of fused heterocycles via C-C/C-N bond forming strategies	Dr. Rajeev Sakhujia	DST-SERB	33.27
16.	Probing the Nature of Intermolecular X–H...Se (X = O and N) Hydrogen Bonding Interactions using Matrix Isolation Infrared Spectroscopy	Dr. Shamik Chakraborty	SERB	73.546
<b>Department of Mechanical</b>				
17.	Design and Development of a Power Assistive Hybrid e- Trike for Differently Abled Person in Rural and Urban Regions of India	Sachin U. Belgamwar, CoPI: J S Rathore	DST-TIDE	92.00 lakhs*(Collaboration with CEERI)
18.	Development of a fault diagnosis scheme for Aero-Bearing with multiple localized defect using non-linear mathematical modeling and experimental analysis.	Arun Kumar Jalan, Co PI: Sachin U. Belgamwar	ARDB:	15.550 lakhs.
19.	ReValue: Innovative technologies for improving resource utilization in the Indo-European fish value chains	S. Bhattacharyya, Co PI: M S Dasgupta, S. Routroy	DBT	120.00 lakhs.
20.	Study of Lubricant and application method for enhanced surface finish and reduced draw load on cold drawn steel tubes		TI India Ltd., Chennai	27.44 lakhs*(Collaboration with BITS Goa and BITS Hyderabad)
21.	An investigation of energy consumption of machine tools	Girish Kant	BITS-CRG	9.65 lakhs
22.	Development of PLA and ABS hybrid filaments for strength enhancement and biomedical applications.	Varun Sharma.	BITS Pilani RIG	2.00 lakhs.

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lacs)
<b>Department of Civil</b>				
23.	Preparation of State of the Art Report (SOAR) on Fog vision system for roads	Rajiv Gupta	MORTH, NOIDA, U.P	4.35
24.	Preparation of State of the Art Report (SOAR) on Development of innovative non-destructive techniques for determination of in-situ strength and permeability of concrete	Amit Goel	MORTH, NOIDA, U.P	2.50
25.	Investigation of ductile characteristics of high strength concrete beams reinforced with high strength steel and basalt fibre under elevated temperature conditions	G. Muthukumar	Additional competitive Research Grant, BITS Pilani	9.75
26.	Road safety audit of widening and strengthening of existing Bikaner-Phalodi section to four lane from Km 4+200 to Km 55+250 and two lane from Km 55+250 to Km 163+500 of NH-15 on BOT (Toll) basis in the state of Rajasthan.	A. K. Sarkar A P Singh P K Sahu Durgesh Vikram	NHI, New Delhi	53.50
<b>Department of Chemical Engineering</b>				
27.	Dual Catalytic Monolith Reactor for Biogas Reforming	Dr. Srinivas Appari	BITS, Pilani	8.25 2017- 2019
28.	Particle Image Velocimetry studies on a bench-scale cold-flow Fluidized Catalytic Cracking (FCC) riser unit.	Dr. Priya C Sande	BITS, Pilani	10.00 2017- 2019
29.	Mixed-Matrix membranes (MMM) for separation of CO <sub>2</sub> /CH <sub>4</sub> for biogas up-gradation	Dr. Bhanu Vardhan Reddy Kuncharam	BITS, Pilani	2.00 2017- 2019
<b>Department of Physics</b>				
30.	Electro-optical response of Nematic Liquid Crystals doped with nanorods	Dr V. Manjuladevi	SERB	38.5 Approved June 2017
<b>Department of Economics and Finance</b>				
31.	An Economic Appraisal of renewables vs non-renewables: a case of Rajasthan	Krishna M	ICSSR	INR 2,00,000
32.	Environmental and Economic Implications of British Columbia's Carbon Tax for India	Monika Gupta	BITS Pilani	INR 2,00,000

#### Projects completed

S.No.	Project Title	Principal/Co-principal Investigator	Agency	Sanction (Rs. in Lakhs)
<b>Department of Management</b>				
1.	Campus Sustainability in India: Issues and Challenges (A Study of Select Institutions of Higher Education)	Dr. Neetu Yadav	BITS Pilani RIG grant	2,00,000
<b>Department of Mathematics</b>				
2.	A study of near-semiring generated from certain mappings"	Dr. Jitender Kumar	BITS Pilani	1,00,000 August 2016-17
3.	Earthquake Modelling from GPS Observations in Northwest Himalaya	Dr. Sumanta Pasari	BITS Pilani	2,00,000 May 2016 to September 2017
<b>Department of Computer Science and Information Systems</b>				
4.	"Design and Development of Opinion Mining Framework"	Dr. Yashvardhan Sharma	Department of Science & Technology (DST)	13.26 lakhs 3 and half Years (July 2013-Jan 2017)
<b>Department of Chemistry</b>				
5.	Organocatalytic approach towards bioactive important six-membered nitrogen heterocycles	Dr. Indresh Kumar	BITS Pilani	8.2
6.	Study of native chemical ligation at tryptophan and aspergine sites and its application in peptide synthesis.	Dr. Kiran Bajaj	DST-SERB	31.3
7.	Competition between charge transfer and proton transfer processes in some newly designed Schiff Bases: Spectroscopic and	Dr. Shamik Chakraborty	DST	24.98

S.No.	Project Title	Principal/Co-principal Investigator	Agency	Sanction (Rs. in Lakhs)
	theoretical investigations in condensed Phase			
8.	Graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) based semiconductor heterostructures for catalysis and electrocatalysis.	Dr. Surojit Pande	BITS Pilani	6.95
9.	Experimental Investigation on CO <sub>2</sub> Based Refrigeration System in Trans-critical Cycle	Prof. M. S. Dasgupta, Co-Investigator: Dr. D. K. Gupta	Department of Science and Technology (DST)	Rs. 27.5 Lakhs
10.	Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)		Department of Science and Technology (DST)	163 Lakhs. 2012-17
11.	Studies in fluidized bed combustor with co firing rice husk and coal under oxy fired conditions,	Dr. Ravi Inder Singh	Department of Science and Technology (DST)	30.13 Lakhs 2014-2017
12.	Developing suitable pedagogical methods for various classes (Energy Technology) intellectual calibers and research in e-learning - Anchored by IIT Kharagpur	Dr. Manoj Soni	MHRD	7 Lakhs 2015-17
13.	Development and validation of control oriented model for unbalanced rotating systems with soft suspensions	Dr. Sandip Dhar	RIG	2 Lakhs, 2016-17
14.	Development and validation of a Finite Volume Method based flow solver for the compressible two-phase flows with phase change	Dr. Shyam S. Yadav	RIG	1 Lakh 2016-17
15.	A preliminary study on developing and investigating tungsten inert gas (TIG) welding process for producing free form metallic parts	Dr. Prateek Kala	RIG	2 Lakhs, 2016-17
16.	Design and fabrication of a test rig to experimentally investigate propulsive characterisation of a wiggling elastic flagella	Dr. J. S. Rahore	RIG	1 Lakh 2016-17
17.	Electrical and thermal characterisation of nano-composites,	Dr. Sachin U. B	RIG	1 Lakh 2016-17
<b>Department of Civil</b>				
18.	Roof top Rainwater Harvesting for Safe, Potable and Healthy Drinking Water and Ground Water Replenishment for BITS Pilani, Pilani campus	Rajiv Gupta	BITS, Pilani, CoE-WWE	91.00
19.	Zinc Recovery from Industrial Waste using Bioleaching.	Suresh Gupta (CHE) S.K. Verma (BIO) Anupam Singhal	BITS Pilani CoE-WWE	48.00
20.	Study of Structural Response and Strengths of Thin-Walled FRP Composite Girders	S. B. Singh	CSIR, New Delhi	18.00
21.	Development of Copper Bio-Leaching methodology/technique from tailing waste at Hindustan Copper Limited, Khetri	Anupam Singhal S.K. Verma (BIO)	Ministry of Mines, New Delhi	30.00
22.	Development of an Automated Non-Destructive Test system for Condition Evaluation of Pavements	Amit Goel	Additional competitive Research Grant, 5BITS Pilani	9.45
23.	"Assessment of pozzolanic performance of sugarcane bagasse ash from different disposal sites	Bahurudeen A	BITS Research Initiation Grant	2.0
24.	"Development of Freight Generation Model in Urban Areas: A Case study of Jaipur metropolitan Region"	Prasanta Kumar Sahu	BITS Research Initiation Grant	2.0
25.	"Use of copper slag as aggregate replacement in asphalt pavements"	Nikhil Saboo	BITS Research Initiation Grant	2.0
26.	"Development of Geopolymer Mortar Using mustard husk Briquette Ash"	Vishakha V Sakhare	BITS Research Initiation Grant	2.0
<b>Consultancy Projects completed</b>				
27.	Civil Engineering department undertaken more than consultancy works from government departments		PHED, PWD, WPIL and DRDO	10.50
<b>Department of Chemical Engineering</b>				
28.	Zinc Recovery from Industrial Waste using Bioleaching	Dr. Suresh Gupta	BITS, Pilani	48.00 2014- 2017
29.	Syngas production by reforming of biogas over Ni-based catalytic monoliths	Dr. Srinivas Appari	BITS, Pilani	2.00 2015 -2017
30.	Bioremediation of waste automobile engine oil	Dr. Amit Jain	BITS, Pilani	2.00 2015 -2017



S.No.	Project Title	Principal/Co-principal Investigator	Agency	Sanction (Rs. in Lakhs)
31.	Non linear modeling and simulation of chemical process	Dr. Ajaya Kr. Pani	BITS,Pilani	2.00 2016 -2017
32.	Experimental studies on a bench-scale cold-flow FCC unit	Dr. Priya C Sande	BITS,Pilani	2.00 2016 -2017
<b>Department of Physics</b>				
33.	Study of laser interaction with atomic clusters and preformed plasma(2014-2017)	Amol Holkundkar	DST	15
34.	Thermodynamic studies on force induced transitions in DNA molecule in crowded environment (2014-17)	Navin Singh	DST-SERB	18.648
35.	Detection of contaminants using functional ultrathin films (2014-2017)	RK Gupta	BITS Pilani	9.32
36.	Time-resolved Spectroscopy of Fluorescent Molecules in Micellar Systems (2014-2017)	D. D. Pant	DST	53.01
37.	The study of Post-reionization HI distribution using the red shifted 21 cm signal and Ly- $\alpha$ forest towards understanding cosmic acceleration. (2014 -2017)	Tapomoy Guha Sarkar	DST	10.38

#### KK Birla Goa Campus:

#### Ongoing Sponsored Research Projects

S.No	Title of the project	Name of Principal Investigator	Dept.	Name of the coinvestigator(s)	Funding Agency	Sanctioned amount of the project (Rs)	Sanction date & Duration
<b>Government Funded Projects</b>							
1	Exploration of Antifungal lead molecules from the wild type Bacillus subtilis RLID 12.1 purification and molecular characterization along with optimizing production	Dr. Utpal Roy	Biological Sciences	Co-PI Prof. Arunaloke Chakrabarti	DBT	3804600] (BITS share out of 4869600)	02-03-17 3 years
2	Study on the role of Tonoplast Intrinsic Protein Family members in arsenite accumulation and their transport in rice	Dr. Kundan Kumar	Biological Sciences	Co- Investigator Dr. Sudhakar Srivastava, Banaras Hindu University	BRNS	2939900	27/2/2017 3 years
3	Developing Bioactive compound -Enriched Functional Food ingredients from Dillenia Indica and Valorization of its Pomace	Dr. Srikanth Mutuni	Biological Sciences		Biotech Consortium India Limited (DBT Twinning)	4215000	14/3/2017 3 years
4	Demonstration of river Sal cleaning by vertical wetland and river bank filtration	Dr. M. Srikanth	Biological sciences	Dr. Fraddy D'souza Fellow and Area Convener, The Coastal Ecology & Marine Resources Centre, The Energy and Resources Institute, Panaji Dr. Kavita Vithal Patil, Research Associate, The Coastal Ecology & Marine Resources Centre, The Energy and Resources Institute, Panaji	DBT (river cleaning)	5015000 (BITS share out of total 6885000)	26/5/2017 2 years

S.No	Title of the project	Name of Principal Investigator	Dept.	Name of the coinvestigator(s)	Funding Agency	Sanctioned amount of the project (Rs)	Sanction date & Duration
5	Small sale and sustainable household grey water recycling	Dr. M. Srikanth (coprincipal investigator) Project partner with Indian Inst. of Science	Biological sciences	Dr. Hoysall N Chanakya Chief research scientist And associate faculty Centre for Contemporary Studies (CCS) and Centre for Infrastructure, Sustainable Transport and Urban Planning (CISTUP) Prof. Ghangrekar, IIT, Kharagpur Arun Kumar, NITK, Surathkal	DST/MHRD under IMPRINT scheme	3192000 (according to PI,s check list performance for financial concurrence)	3/5/2017  (Disbursement letter from H N Chanakya) 3 Years
6	Sanitation, water and solid waste for development	Dr M Srikanth	Biological Sciences		Agreement between EAWAG, Switzerland and BITS, Goa	726000 First installment CHF 9000 Second installment CHF 2000	17 months  30-11-2018
7	Novel sustained release biodegradable polymer coated urea and zinc nanofertilizers for synchronizing fertilizer uptake, improving productivity and prevention of bacterial wilt disease in chilli (Capsicum annum L)	Dr. Gauri Anil Achari Mentor Dr. Meenal Kowshik	Biological Sciences		SERB	1920000	08-02-17 3 years
8	Demonstration of a waste to energy project by anaerobic co digestion of food waste and septage	Dr. M. Srikanth	Biological Sciences		DBT	16160000	01-10-17 2 years
9	Process Improvements in Urrakh and Feni Production in Goa" (Pilot Scale Process and thermal Efficiency improvement measures)	Dr. S. D. Manjare	Chemical Eng.	Prof. Pramod V. Pathak, Chairman , Environmental Impact Assessment Agency, Goa	DSTE, Goa	250000	13/10/2017
10	Computational Study of the Catalytic Mechanism Some Diaryldiselenide-based Glutathione peroxidase Mimetics	Dr. Raghu Nath Behera	Chemistry	NA	SERB	1642280	01-04-17 3 years
11	Design and synthesis of grapheme oxide based AIE-sensor for selective detection of Hg(II) and Organic mercury in aqueous medium	Dr. Amrita Chatterjee	Chemistry	Co- Investigator Prof. N. N. Ghosh	UGC- DAE -CRS	213000	02-01-17 3 years
12	Development of PCDA-liposome based detection kit for Alzheimer's disease biomarker	Dr. Amrita Chatterjee	Chemistry	Co- Investigator Dr. Malabika Biswas, Dr. Ramesha C. K.	SERB	2663200	14/3/2017 3 years
13	Experimental and Computational study of Boron Doped TiO2 and ZnO Nanocrystals	Dr. Jayadevan K.P.	Chemistry	Co-investigator R.N. Behera	SERB	2332515	15/3/ 2017 3 years
14	A Polydiacetylene-Based Fluorescent Sensor for the detection of arsenic species and uranyl ion in water by conventional and nuclear analytical methods	Dr. Mainak Banerjee	Chemistry	Dr. Amrita Chateejee	BRNS	2792500	29/12/2017 3 Years

S.No	Title of the project	Name of Principal Investigator	Dept.	Name of the coinvestigator(s)	Funding Agency	Sanctioned amount of the project (Rs)	Sanction date & Duration
15	Nano-based detection of organophosphate pesticides using metal-organic framework conjugates	Prof. Sunil Bhand	Chemistry	Consortium Project among BITS Goa, Amity University and IARI, ICAR N Delhi BITS Goa CCPI: Prof. Sunil Bhand (Chemistry)	NASF, ICAR	Total funding Rs. 1, 77, 00,000 BITS Goa share 43, 20, 000	3 Years
16	Design and Development of Remotely configurable Arbitrary Ramp Generator for Frequency modulated continuous Wave Reflectometry Using Hardware Software co-Desing	Dr. Neena Goveas	CS&IS	Co-Investigator Dr. A. Amalin Prince	DAE-BRNS	2802500	23/1/ 2017 2 years
17	Knowledge- Rich Deep Models for Optimisation	Prof. Ashwin Srinivasan	CS&IS		SERB	2250290	16/05/2017 3 years
18	Predictive Mathematical Modeling and Analysis for Effective Diagnosis and Control of Diabetes Mellitus with associated Co-infections and Diseases among Indians.	Dr. P Danumjaya	Mathematics		SERB	1568490	31/3/2017 3 years
19	Thoretical and numerical study of Elliptic and Parabolic partial differential equations with interferences	Dr. P Danumjaya	mathematics		NBHM - DAE	1348100	31/3/2017 3 years
20	A study on the inequalities involving complex polynomials	Dr. Prasanna Kumar	Mathematics		NBHM - DAE	1304100	31/3/2017 3 years
21	A Study on the Bernstein-type inequalities for the polar Derivative of a Complex Polynomial	Dr. Prasanna Kumar	Mathematics		CSIR	1646000	26-4-2017 3 years
22	Study on dark energy, dark matter and cosmic acceleration of the Universe in modified gravity	Dr. Gauranga Charan Samanta	Mathematics	Dr. Prasanta Kumar Das	CSIR	1696000	26-4-2017 3 years
23	Room temperature Hydrogen Storage and sensing using Reduced Graphene Oxide-MoS <sub>2</sub> Nanocomposites	Dr E S Kannan	Physics	NA	SERB	3061520	03-09-17 3 years
24	Spin seebeck Effect in novel heterostructures	Dr. Ram Shanker Patel	Physics	Co- Investigator Dr. Kartik Senapati and Dr. Pratap Kumar Sahoo, NISER Bhubaneswar	SERB	5083821	14/03/2017 3 years
25	Signature of Space-time noncommutativity in high energy colliders	Dr. Prasanta Kumar Das	Physics	NA	SERB	1885515	03-09-17 3 year
26	Studies on biomolecular transport through nuclear pore complexes using a dual fluorescence channel confocal microscope	Dr. Nandakumar Patincharath	Physics	co-investigator Dr. Meenal Kowshik	SERB	4404104	03-02-17 3 years
27	Ecofriendly flexible CZTS solar cells	Dr. Teny Theresa John	Physics	Prof. M. K. Jayaraj, CUSAT, Kochi	SERB	2925560	08-04-17 3 years
28	Crack growth direction in amorphous silica under extreme temperatures using molecular mechanics (application to Reusable launch Vehicle (RLV))	Dr. Gaurav Singh	Mechanical Eng.	Co- Investigator Dr. Subhas Ghosal, Hyderabad Campus	ISRO	1608000	22/2/2017 2 years
29	An Acoustic Study characterization and standardization of the Sarasvati Veena	Dr. Pravin M Singru	Mechanical Eng.	Co- Investigator Radhika Vathsan	SERB	3695560	15/3/2017 3 years

S.No	Title of the project	Name of Principal Investigator	Dept.	Name of the coinvestigator(s)	Funding Agency	Sanctioned amount of the project (Rs)	Sanction date & Duration
30	Higher Overall stiffness of triangular shaped ductile/brittle Lattice Composite Structure compared to square and hexagonal shaped structure	Dr. Gaurav Singh	Mechanical Eng.		SERB	4463010	23-6-2017 Approval letter dated on 2-4-17 3 years
<b>Industry Projects</b>							
31	Study of lubricant and application method for enhanced surface finish and reduced draw load on cold drawn steel tubes	Dr. Varinder singh	Mechanical Eng.	Prof Amit Kumar Gupta Prof Srinivas P Regalla Dr Tufan Chandra Bera	Tube Investments of India Ltd, Chennai	2743500	Approved Invoice date 21-7-2017 Invoice amount 991200 (first year installment) 3 years
<b>Consultancy</b>							
32	Research & Analysis of Bacterial Content in Washing Machine	Dr. M. Srikanth	Biological sciences		IFB Private Limited	189750	2 months
33	Tide Technocrats Pvt Ltd	Dr. M. Srikanth	Biological sciences		Tide Technocrats Pvt Ltd	490000	12 months
34	Detection and quantification of enzymes in detergents and Patch Test Assays with Allergic reactions	Dr. M. Srikanth	Biological sciences		IFB Private Limited	253700	14/8/2017 3 months
35	Rationality, Uncertainty and cognition of financial markets: An Experimental Approach	Dr. Anoop S. Kumar	Economics		IUCAE, University of Kerala	75000	21-1-2017 STP14/2017 6 months
36	No increase in pollution load (NIPL) certificate for M/s Deccan Chemicals Ltd (erstwhile Syngenta India Ltd) for effecting change in product mix in respect of the products mentioned in their consent to operate	Dr. S D Manjare	Chemical Eng.		Deccan Fine Chemicals (India) Private Ltd	172500	
37	Synthesis and validation of methods for vortioxetine HBr.	Dr. Mainak Banerjee	Chemistry		UNICHEM India Ltd	547000	3 months
38	Simulation of industrial pallets using ROTOSIM	Dr Sachin Waigaonkar	Mechanical Eng.		Sintex Industries Ltd	23000	

### Hyderabad Campus

#### Ongoing projects:

S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
1	Studies on CO <sub>2</sub> capture from flue gases using regenerable solid adsorbents	Prof. Srikanta Dinda	CSIR	Chemical Engineering	2600000	3years	18.06.2015
2	Spectral element methods for elliptic and parabolic interface problems in R2 on parallel computers	Dr. N. Kishore Kumar	DAE	Mathematics	1359100	3years	10.09.2015
3	Pharmacological evaluation of novel double stranded RNA dependent protein kinase (PKR) inhibitors for diabetic cardiomyopathy	Dr. Arti Dhar	CSIR	Pharmacy	2300000	3years	02.06.2015
S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
4	Cell Penetrating Peptide Octa-Arginine anchored, Multifunctional	Dr. Swati Biswas	DBT	Pharmacy	3703695	3years	14.11.2014

S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
	poly(amidoamine)Dendrimer to Promote delivery of chemotherapeutics in cancer						
5	Investigations of folding of Cysteine-rich Neurotoxins in Ionic Liquids by Molecular Dynamics simulation and Quantum Mechanical calculations	Dr. Durba Roy	DST	Chemistry	2522800	3years	16.09.2015
6	Photocatalytic Nox abatement: From mechanism and material peoperties to catalytic performance	Dr. Sounak Roy	DST	Chemistry	2448000	3years	14.05.2014
7	Design and snthesis & biological evaluation of Mycobacterium tuberculosis serine/threonine protein kinase (BPknB) inhibitors	Prof. D Sriram	DST-2015	Pharmacy	2761000	3years	11.09.2015
8	Bianchi Type Cosmological Models in Modified Theories of Gravitation	Prof.Bivudutta misra	DST	Mathematics	1108800	3years	24.04.2014
9	Role of double stranded RNA dependent protein kinase (PKR) in hypertension: Mechanism and prevention	Dr. Arti Dhar	DST	Pharmacy	2604000	3years	24.10.2015
10	Evaluation of promising algal isolates for sustainalbe biofuel production interagted with CO2 sequestration	Dr. Shailender Kumar Sing	DST-Young Scientist	Biological Sciences	3370000	3years	03.07.2015
11	Finding Aggregation-Induced Emission Active Materials: Design, Synthesis and Photophysical Studies of Sterically Hindered Triarylethenes and Tetraarylethenes	Prof. Manab chakravrthy	DST-2	Chemistry	3838000	3years	13.05.2014
12	Non -Invasive Delivery of siRNA to treat Melanoma	Dr.Vamsi krishna venuganti	DBT-RGYI	Pharmacy	2284800	3years	19.08.2014
13	Structure based rational design and synthesis of mycobacterium tuberculosis inhibitors	Prof.Swamina than	DBT	Biological Sciences	5967500	3years	26.08.2014
14	Nano-scale characterization of human hair fibres by using indentation technique.	Dr. A Ramesh babu	DST	Chemical Engineering	2662000	3years	05.06.2014
15	D - a-Tocopherol conjugated co-polymer based micelles for improved delivery of chemotherapeutics with reversal of multiple drug resistance	Dr. Swati Biswas	DST	Pharmacy	2240000	3years	01.08.2014
16	Role of interleukin-22 in diabetic wound healing band regeneration	Dr. Onkar Kulkarni	DST	Pharmacy	2726000	3years	27.06.2016
17	Microfiudic -diffusivity -meter: CO2 diffusivity sensor during carbon sequestration in the oil-reservoirs	Prof. Sanket Goel	DST	EEE	2191000	3years	01.01.2014
18	Integrated urban flood management in India	Prof. Srinivasa Raju	ITRA	Civil Engineering	1906000	3years	20.09.2013

S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
19	Photocurable organic-inorganic hybrid precursors for the fabrication of metal oxide micro/nanostructures	Dr.Ramakrishan Ganesan	DST	Chemistry	2598000	3years	31.10.2013
20	Biofuels from lignocellulosic biomass waste: Biosolubilization and biomethanation of lignin	Dr. Asma Ahmed	DST -FT	Chemical Engineering	2410000	3years	04.06.2014
21	Novel Minimal-Solid Lubricant Mixture Application Method for Performance Improvement in Turning	Prof. N Suresh kumar reddy	DST	Mechanical Engineering	3250000	3years	10.01.2013
22	Structure based rational design and synthesis of mycobacterium tuberculosis inhibitors	Prof. K V G Chandra Sekhar	DST FT	Chemistry	2200000	3years	11.12.2013
23	Towards metalloneurochemistry inside a niosome: a fluorescence spectroscopy approach	Dr. Amit Nag	DST	Chemistry	2498000	3years	28.05.2015
24	Characterization of a mouse embryonic stem cell model to study the effects of increased levels of DNA methyltransferase 1 (DNMT1) on abnormal neurogenesis	Prof. Nagamohan	DST	Biological Sciences	4038400	3years	23.09.2014
25	Transgenic Embryonic stem cell models for studying the role elevated levels of DNMT1 and DNMT3A in neuropsychiatric disorders	Prof. Nagamohan	DBT	Biological Sciences	2410000	3years	02.09.2014
26	Gravitational waves from oscillations and instabilities in neutron stars	Dr. Sarmistha Banik	DST	Physics	1476000	3years	03.09.2014
27	Advancing host-directed therapy for tuberculosis/MDR-TB: Development of novel PKB/AKT1 and Protein Kinase R inhibitors as an adjunctive treatment for tuberculosis	Prof. D. Sriram	DBT-Tata Innovation	Pharmacy	2700000	3years	23.03.2016
28	Development of an encryption algorithm for secure transmission of color images	Dr. Manish Kumar	DST	Mathematics	1508053	3years	25.05.2016
29	Performance evaluation of backfill soils partially replaced with building derived materials	Dr. Anasua Guha ray	DST	Civil Engineering	2443710	3years	12.09.2016
30	"Hydrogen storage in mesoporous polymer derived ceramics for automotive applications	Dr. Sujith	DST	Mechanical Engineering	4238240	3years	27.09.2016
31	Enhancement of mechanical properties of Ti-6Al-4V using constrained groove pressing and heat treatment	Prof. Amit Kumar Gupta	DRDO	Mechanical Engineering	4560000	3years	02.05.2016
32	Functional role of histone deacetylase 5 (HDAC5) in the pathogenesis of chronic kidney diseases and renal fibrosis	Dr. Onkar Kulkarni	DBT-IYBA	Pharmacy	7016800	3years	30.09.2016
33	Investigations on pro-inflammatory cytokine inhibitory low molecular weight metabolites of Pseudomonas sp. ABS -36 for the treatment of renal injury	Prof. A Sajeli Begum	DST	Pharmacy	2439363	3years	22.12.2016

S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
34	Synthesis, study of optical properties and Anticancer activity of unique di-substituted tetracyanoquinodimethanes	Prof. Jayanti Subbalakshmi	DST	Chemistry	2574605	3years	04.01.2017
35	Development of a Non-invasive biodegradable polymeric micro projection ocular patch for effective corneal delivery of anti-microbial agents to treat fungal infections of eye	Dr. V Vamsi Krishna Venuganti	ICMR	Pharmacy	4225150	3years	02.02.2017
36	STRATEGIES FOR FAULT-TOLERANT NETWORK-ON-CHIP DESIGN "	Dr. Soumya J	DST	EEE	2593140	3years	06.03.2017
37	Development of an accurate and robust unstructured grid-based adjoint approach for compressible turbulent flows	Dr. Anil Nemili	DST	Mathematics	1590600	3years	01.10.2016
38	Polymorphism studies and molecular characterization of plasmodial Rhoptry neck protein 2 (RON-2) from Indian fields isolates	Prof. Vidya Rajesh	DST-SERB	Biological Sciences	3492000	3years	29.03.2017
39	Protein structure and stability modulation due to In-Cell and In-Vitro Crowding: Molecular insights on the origin of the effects of crowding	Prof. Ramakrishna Vadrevu	DST	Biological Sciences	5436000	3years	21.03.2017
40	Mechanistic basis of abnormal neurogenesis due to HSN1E-associated DNA methyltransferase1 (Dnmt1) mutation and pharmacological intervention for phenotypic correction	Dr. Naga Mohan K	DBT	Biological Sciences	6845800	3years	01.03.2017
41	Investigations of knowledge on Dengue fever followed by education and post impact behavioural changes among the rural communities of shameerpet mandal of Rangareddy district of Telangana state	Prof. Sajeli Begum	ICMR-ICSSR	Pharmacy	1089792	3years	30.03.2017
42	Career Persistence of Indian Women Professionals in Information Technology sector: Brakes , Accelerators, Challenges and Opportunities	Dr. Swati Alok	ICSSR	Economics	200000	1year	01.06.2017
43	Understanding the Role of Antimicrobial S100A12 ( Calgranulin C) Mediated Host Defense in Pseudomonas Keratitis and Developing Nano-tools for Efficient Delivery of S100A12	Dr. Swati Biswas	DST(LVP EI)	Pharmacy	5500600	3years	05.06.2017
44	Improving the seismic performance of dynamically similar buildings using damper connected control technique	Dr. S C Mohan	DST	Civil Engineering	4314540	3years	23.06.2017
45	Multiobjective evolutionary approach for solving water distribution network design optimization	Prof. A Vasan	CSIR	Civil Engineering	2235400	3years	16.05.2017

S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
46	Formability Study of Inconel 625 alloy at Elevated Temperatures for Aerospace Applications	Dr. Nitin R. Kotkunde	DST	Mechanical Engineering	3143250	3years	10.07.2017
47	Comparison of phase velocities of Rayleigh waves, love waves and Torsional waves in various anisotropic geo-media	Dr. Sumith Kumar Vishwakarma	DST	Mathematics	1366800	3years	27.06.2017
48	Cryogenically-Conditioned Micro and Nanoencapsulated Phase Change Material Slurries for Cool Thermal Energy Storage Applications	Dr. R. Parameshwaran	DST	Mechanical Engineering	2776340	3years	17.07.2017
49	Efficacy of Appropriately Tailored Biopolymer and Carbonaceous Adsorbents for the separation and Recovery of Europium	Prof. N. Rajesh	DST	Chemistry	2959370	3years	04.08.2017
50	Application of topology optimization to enhance energy efficiency and performance of industrial manipulator	Dr. Arshad Javed	DST	Mechanical Engineering	2943600	3years	17.07.2017
51	Design, Synthesis and Biological Evaluation of HDAC3 Selective Inhibitors as Long Term Memory Enhancers	Dr. Balaram Ghosh	DST	Pharmacy	2987800	3years	07.08.2017
52	Metal-Oxide and nano composite based low-power non-volatile switching device : a novel approach	Dr. Souvik Kundu	DAE-BRNS	EEE	3490650	3years	01.08.2017
53	Development of metamaterial base support	Dr. Sabareesh G R	DMDE DRDO	Mechanical Engineering	1380000	3years	27.04.2017
54	Investigations on naphthalene and anthracene based phosphosates/phosphates: important sources for alkene based new algeers and polyaryllkanes	Prof. Manab Chakravarty	CSIR	Chemistry	1700000	3years	05.05.2017
55	Photocatalytic reduction of CO <sub>2</sub> to biofuels	Dr. Sounak Roy	CSIR	Chemistry	400000	3years	02.05.2017
56	Development of pH-responsive smart capsule containing targeted multilayer film for drug delivery: The proof-of-concept study in colorectal cancer model	Dr. Vamsi Krishna Venuganti	DST	Pharmacy	5554225	3years	16.08.2017
57	Construction of arbitrary Tensor Networks using cross approximation techniques	Dr. N. Kishore kumar	DAE	Mathematics	289500	3years	01.01.2015
58	Regenerating Tank systems for enhanced livelihoods: An evaluaiton of Mission Kakatiya (MK) project in Telangana	Dr. Srinivas Sajja	ICSSR	Humanities	24000	1year	01.04.2016
<b>International Projects</b>							
1.	Mycobacterium tuberculosis acetyl coenzymes a carbonylase inhibitors: stucture based drug design, synthesis and biological evaluation	Prof. D. Sriram	DST Indo-Poland	Pharmacy	1189000	2years	22.04.2015
2	Tumor targeted for nanomedicines Photodynamic therapy	Dr. Swati Biswas	DST-Indo Belarus	Pharmacy	958000	2years	20.05.2015



S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
3	Structured-based Design of Orphan nuclear Receptor Modulators to treat Diabetes and its complications by targeting RORalpha and Rev-erbalpha	Prof. P. Yogeewari	ICMR Indo-France	Pharmacy	2161600	2years	15.07.2014
4	Enzymes from Purine and Pyrimidine Biosynthetic pathway as targets for the development of Mycobacterium tuberculosis drugs	Prof. P. Yogeewari	DBT-Indo-Brazil	Pharmacy	4822990	3years	27.08.2014
5	Parallax Lightweight code self-verification for IoT Devices	Prof. C. Hota	DeitY	CSIS	3830000	4years	02.07.2015
6	UK-India Centre for Advanced Technology for Minimization of indiscriminate use of Antibiotics (UKICAT-MA)	Dr. Vamsi Krishna venuganti	DBT-MRC	Pharmacy	3500000	3years	11.08.2015
7	Strategies against antibiotic resistance in Mycobacterium tuberculosis and Pseudomonas aeruginosa : new drugs for old targets and old drugs for new targets	Prof. D. Sriram	DBT-Indo-sweden2	Pharmacy	6192000	3years	27.01.2014
8	Strategies against antibiotic resistance in Mycobacterium tuberculosis and ESKAPE pathogens; new drugs and new targets	Prof. D. Sriram	DBT Indo Sweden	Pharmacy	6700068	3years	15.11.2017
<b>DST Fist</b>							
1	Pharmacy		DST Fist		6700000	5years	26.12.2012
2	Biology		DST Fist		11000000	5years	04.10.2013
3	Chemistry		DST Fist		9000000	5years	04.08.2014
4	Civil Engineering		DST Fist		990000	5years	30.09.2014
5	Mathematics		DST Fist		4900000	5years	21.11.2014
<b>Consultancy Projects</b>							
S.No	Title of the Project	Principal Investigator	Funding agency	Department	Sanctioned Amount	Duration	Sanctioned date
1	Development for sustained release injectable formulations	Dr. Swati Biswas	Daewoong Pharmaceutical Co.,Ltd	Pharmacy	2200000	2years	01.09.2015
2	Algorithms for Narrow Beamwidth Emitter Location(Anabel)	Prof. Yoganandam	DLRL	EEE	994948	1year	11.05.2015
3	Simulation and Modelling to Minimize Porosity level in Aluminum Castings by Ultrasonic Casting	Prof. N.S.K Reddy	L&N Structural Engineers	Mechanical Engineering	803200	2years	02.04.2016
4	Effluent Treatment Plant (ETP) and Sewage Treatment Plant (STP)	Prof. Suman Kapur	ABG	Biological Sciences	2157440	1year	01.05.2016
5	"Design and Thermal Analysis of Electronic Controller Mounted on Disc"	Prof. Jeevan Jaidi	HBL Power Systems Ltd.	Mechanical Engineering	249997	1year	15.04.2016
6	"Analytical development studies for pharmaceutical products"	Dr. Vamsi Krishna Venuganti	Intera Healthcare Pvt Ltd	Pharmacy	1830855	1year	02.05.2016
7	Technical and knowledge support for preparation and filing of drugs master file (DMF) as per common technical documents (CTD) for sennosides USP including the analytical requirements	Prof. Punna Rao	Shashi Phytochemical Industries	Pharmacy	574560	2years	26.09.2016

8	Maintenance of sanitation and solid waste management for swachh Andhra Pradesh	Dr. Sankar Ganesh	Ascent Leadership & Management	Biological Sciences	350550	1year	15.10.2016
9	Development of epigenomes-targeted liposomes for the cancer specific delivery of chemotherapeutic drug, Doxorubicin	Dr. Balaram Ghosh	SUN Pharma Advanced Research Company Ltd.	Pharmacy	2900000	3years	19.05.2016
10	Development of pulse position modulation modem	Prof. Yoganandam	DPPMM	EEE	402500	1year	01.03.2017
11	Developing a web portal for power curve guarantee test	Dr. Sabareesh G Rajasekharan	Mytrah Energy (India) Pvt Limited	Mechanical Engineering	148995	1year	23.03.2017
12	Web portal for downloading the reanalysis data & long term correlation with measured data	Dr. Aruna Malapati	Mytrah Energy (India) Pvt Limited	CSIS	148995	1year	23.03.2017
13	Screening of Immunoglobulin gene sequences of interest	Prof. Suman Kapur	Consultancy project	Biological Sciences	563886	1year	01.05.2016
14	Synthesis of iron oxide nanoparticles for propellant fuel applications	Dr. Balaji Gopalan & Dr. Ramakrishnan Ganesan	Premier Explosives Limited	Chemistry	1215000	1year	02.03.2017
15	Implementation of Digital Beam forming for Radar	Dr. S K Sahoo	HBL	EEE	332760	1year	13.09.2017
16	Development and characterization of a topical gel formulation of a candidate drug	Dr. Vamsi Krishna Venuganti	Sarudbhava Formulations Pvt. Ltd.	Pharmacy	600000	2years	23.06.2017
17	Transcutaneous delivery of liraglutide using zein microneedle array	Dr. V Vamsi Krishna Venuganti	NACTO	Pharmacy	2242500	1year	09.05.2017
18	Preparations and Characterization of a topical gel formulation of topical gel formulation of IS107	Dr. V Vamsi Krishna Venuganti	ISSAR	Pharmacy	563500	6months	01.05.2017
19	Novel Casting approach to improve quality of aluminum alloy casting : Hybrid ultrasonic assisted bottom pour stir casting process	Prof. N. Suresh Kumar Reddy	DRDL	Mechanical Engineering	984500	3years	08.06.2017
20	Development and characterization of a topical formulations	Dr. V. Vamsi Krishna Venuganti	ISSAR-2	pharmacy	979400	1year	01.05.2017

#### Projects sanctioned during the year

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
<b>Biological Sciences</b>					
1.	Polymorphism Studies and Molecular Characterization of the Plasmodial Rhoptry Neck Protein 2 (RON 2) from Indian Field Isolates	Prof. Vidya Rajesh	DST - SERB	34,92,000	3 years
2.	Harnessing mucosal immunity towards improved resistance against tuberculosis.	Ruchi Jain Dey	Ramalingaswamy Fellowship, DBT	32.50 Lakhs (Approved in Nov 2017, Awaiting sanction letter)	5 years (2018-2023)
3.	Epigenetics of megabase-scale rRNA gene regulation and genomic instability of rDNA and telomeres	Dr. Gireesha T. Mohannath	DST-SERB (Ramanujan Fellowship)	38 Lakhs (Approved in July 2017, Awaiting sanction letter)	5 years (2018-2023)
4.	Mechanistic basis of abnormal neurogenesis due to HSN1E-associated DNA methyltransferase 1 (Dnmt1) mutation and pharmacological intervention for phenotypic correction		Dr. Kommu Naga Mohan	DBT	68.40 3 years
<b>Chemistry</b>					
5.	Efficacy of appropriately tailored	N Rajesh	DST	29	3 years

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
	biopolymer and carbonaceous adsorbents for the separation and recovery of Europium				(2017-2020)
6.	Synthesis, Study of optical properties and Anti-cancer activity of di-substituted tetracyanoquinodimethane	Jayanty Subbalakshmi	DST	25.74605	3 years
7.	Investigations on naphthalene and anthracene-based phosphonates/phosphates: Important sources for alkene based new AIEgens and polyarylethanes		CSIR	18	3 years (2017-2020)
8.	Photocatalytic reduction of CO <sub>2</sub> to biofuels	Sounak Roy	CSIR	4	2017-2020
<b>Civil Engineering</b>					
9.	Improving the seismic performance of dynamically similar buildings using damper connected control technique	Dr. S. C. Mohan	DST	INR 43.2 Lakhs	July 2017 - July 2020
10.	Coastal wetland Characterization using L and S bands of Polarimetric SAR data	Dr Rajitha K	ISRO-SAC	INR 13.58 Lakhs	Dec-2017-Dec-2020
11.	State of the art on the utilization of higher percentage of reclaimed asphalt pavement (rap) in hot asphalt mixes (ham) with warm mix additives - laboratory and field evaluation	Prof. Sridhar Raju	MoRTH	INR 6.255 Lakhs	Aug 2017-Mar 2018
12.	Preparation of State of the Art Report (SOAR) on Effect of Temperature Stresses in Concrete Pavement.	Prof. V VinayakaRam	MoRTH	INR 6.44 Lakhs	Aug 2017-Mar 2018
13.	Preparation of State of Art Report (SOAR) on Use of Polymer Fibers and Steel Fibers for improvement in concrete properties"	Prof. P N Rao	MoRTH	INR 6.587 Lakhs	Aug 2017-Mar 2018
<b>Electrical and Electronics Engineering</b>					
14.	Metal-oxide and nanocomposite based low-power non-volatile switching device: a novel approach	Souvik Kundu	BRNS, DAE	35	3 years
15.	Strategies for Fault-Tolerant Network-on-Chip Design	Soumya J and S K Sahoo	SERB	26	3 years
16.	Modelling and Simulation of Quartz Accelerometer for Navigation System	S K Dubey and Sanket Goel	DRDO	5.3	1 year
17.	Investigations of the effects of photon up-conversion materials on the electrical performance of ferroelectric/semiconductor heterojunction photovoltaic devices	Souvik Kundu, Kannan R and B. Hari	SERB	35	3 years
<b>Economics and Finance</b>					
18.	Career Persistence of Indian Women Professionals in Information Technology (IT) Sector: Brakes, Accelerators, Challenges and Opportunities	Swati Alok (and Sudatta Banerjee)	ICSSR	200000/-	1 year
<b>Mechanical Engineering</b>					
19.	Cryogenically-conditioned micro and nanoencapsulated phase change material slurries for cool thermal energy storage applications	Dr. R. Parameshwaran	DST-SERB ECR	27.76	2017-2020
20.	Formability study of inconel 625 alloy at elevated temperatures for aerospace applications	Dr. Nitin Kotkunde	DST-SERB ECR	31.43	2017-2020
21.	Application of topology optimization to enhance energy efficiency and performance of industrial manipulator	Dr. Arshad Javed	DST-SERB ECR	29	2017-2020

22.	Development of meta material base support for isolating vibration	Dr. Sabareesh GR	DMDE, DRDO	13.8	2017-2018
23.	Novel casting approach to improve quality of aluminum alloy casting	Prof. NSK Reddy	DRDL, DRDO	9.85	2017-2020
24.	Modelling and simulation of quartz accelerometer for navigation system	Dr. Satisk K. Dubey	RCI, DRDO	5.3	2017-2018
25.	Heat Transfer Enhancement Study of Li-ion Battery Pack (Phase-1)	Prof. Jeevan Jaidi	HBL Power Systems Ltd., Hyderabad	5.31	Dec. 2017-March 2018
<b>Mathematics</b>					
26.	Development of an accurate and robust unstructured grid-based adjoint approach for compressible turbulent flows	Anil Nemili	SERB-DST	15.906	2017-2020
27.	Development of an accurate adjoint method for 2D Euler equations in mesh free framework	Anil Nemili	Aeronautical Research & Development Board (ARDB)	15.77	2017-2019 (Approved)
28.	Comparison of phase velocities of Rayleigh waves, Love waves and Torsional waves in various anisotropic geo-media	Sumit Kumar Vishwakarma	SERB-DST	13.668	2017-2020
29.	Characterizing the sets of periodic points of automorphisms on a solenoid	Sharan Gopal	SERB-DST	20.8932	2017-2020
<b>Pharmacy</b>					
30.	Development of a Non-invasive biodegradable polymeric microprojection ocular patch for effective corneal delivery of anti-microbial agents to treat fungal infections of eye	Dr. Vamsi Krishna Venuganti	ICMR	4225150	
31.	Investigations of knowledge on Dengue fever followed by education and post impact behavioural changes among the rural communities of shameerpet mandal of rangareddy district of Telangana state	Prof. Sajeli Begum	ICMR-ICSSR	418387	
32.	Understanding the Role of Antimicrobial S100A12 ( Calgranulin C) Mediated Host Defense in Pseudomonas Keratitis and Developing Nano-tools for Efficient Delivery of S100A12	Dr. Swati Biswas	DST	5500600	
33.	Design, Synthesis and Biological Evaluation of HDAC3 Selective Inhibitors as Long Term Memory Enhancers	Dr. Balaram Ghosh	DST	2987800	
34.	Preparations and Characterization of a topical gel formulation of topical gel formulation of IS107	Dr. V Vamsi Krishna Venuganti	ISSAR	563500	
35.	Transcutaneous delivery of liraglutide using zein microneedle array	Dr. V Vamsi Krishna Venuganti	NACTO	2242500	
36.	Development and characterization of a topical gel formulation of a candidate drug	Dr. Vamsi Krishna Venuganti	Sarudbhava Formulations Pvt. Ltd.	300000	
37.	Development of pH-responsive smart capsule containing targeted multilayer film for drug delivery: The proof-of-concept study in colorectal cancer model	Dr. Vamsi Krishna Venuganti	DST	2476400	
38.	Strategies against antibiotic resistance in Mycobacterium tuberculosis and ESKAPE pathogens; new drugs and new targets	Prof. D Sriram	DBT Indo Sweden-3	6700068	
39.	Development and characterization of a topical formulations	Dr. Vamsi Krishna Venuganti	ISSAR-2	979400	

## MEMBERS OF VARIOUS BODIES AND COMMITTEES OF THE INSTITUTE

### (A) GENERAL BODY

**Chancellor:**

Dr. Kumar Mangalam Birla

**Pro-Chancellor:**

Smt. Shobhana Bhartia

**Founding Member:**

Shri B.K. Birla

**Vice-Chancellor, BITS:**

Prof. Souvik Bhattacharyya

**Members admitted by General Body:**

1. Shri Sidharth Birla
2. Shri Tridib Kumar Das
3. Prof. Asis Datta
4. Smt. Manjushree Khaitan
5. Shri Hemant Kumar
6. Prof. L.K. Maheshwari
7. Shri Enrico Malerba

**Four Alumni Term Members:**

1. Prof. D. Balasubramanian
2. Shri Raju Reddy

**Representative of MHRD, Govt. of India:**

Shri V.S. Pandey

**Representative of UGC:**

Vacant

**Representative of CSIR:**

Dr. Santanu Chaudhury

**Representative of AICTE:**

Dr. S.K. Chopra

**Representative of FICCI:**

Vacant

**Non-Member Secretary:**

Prof. S.C. Sivasubramanian, Acting Registrar

### (B) BOARD OF GOVERNORS

**Chancellor:**

Dr. Kumar Mangalam Birla

**Pro-Chancellor:**

Smt. Shobhana Bhartia

**Honorary Treasurer:**

Vacant

**Vice-Chancellor of BITS:**

Prof. Souvik Bhattacharyya

**One Director of Campuses by rotation:**

Prof. G. Sundar

**One Nominee of AICTE:**

Prof. Rajive Kumar

**Three Nominees of the Government of India:**

1. Shri R. Subrahmanyam

**Four Nominees of the BET:**

1. Shri B.K. Birla
2. Shri Sidharth Birla
3. Shri Hemant Kumar

**Three Members Selected by the General Body:**

Vacant

**Four Members coopted by the Board of Governors:**

1. Smt. Manjushree Khaitan
2. Shri D. Bhattacharya

**One Nominee of the Zuari Industries Limited:**

Shri Akshay Poddar

**Non-Member Secretary:**

Prof. S.C. Sivasubramanian, Acting Registrar

### (C) FINANCE COMMITTEE

**Chancellor:**

Dr. Kumar Mangalam Birla

**Honorary Treasurer:**

Vacant

**One Person nominated by the Board:**

Vacant

**One Person nominated by the BET:**

Shri Hemant Kumar

**Vice-Chancellor:**

Prof. Souvik Bhattacharyya

**Registrar:**

Prof. S.C. Sivasubramanian (Acting),  
Member-Secretary

## (D) BUILDING AND WORKS COMMITTEE

**Chairman (Vice-Chancellor):**

Prof. Souvik Bhattacharyya

**Members:**

**Director, Pilani Campus:**

Prof. Ashoke Kumar Sarkar

**Director, Hyderabad Campus:**

Prof. G. Sundar

**Director, K.K. Birla Goa Campus:**

Prof. G. Raghurama

**Nominated members (2):**

1. Dr. Anshuman, Pilani Campus
2. Prof. P.N.K. Rao, Hyderabad Campus

**Member-Secretary:**

Prof. S.C. Sivasubramanian, Acting Registrar

*Mr. Anand K Patil, K.K. Birla Goa Campus will be special invitee to the committee*

## (E) PURCHASE COMMITTEE

**Convenor:**

**Unit Chief, CPU:**

Prof. N.V. Muralidhar Rao

**Members:**

**Director:**

Prof. Ashoke Kumar Sarkar

**Dean, Administration:**

Prof. S.C. Sivasubramanian

**Head, Accounts & Finance:**

Shri Satyen Sharma

## (F) FACULTY SELECTION COMMITTEES

1. **University Level Selection Committee:**
  - Vice-Chancellor (or his nominee) – Chairman
  - At least two external experts in the concerned discipline
  - Directors of the BITS campuses
  - One of the Chairmen of the Department Level Shortlisting committees from one of the campuses in the concerned Department/Discipline
  - Dean of Faculty Affairs – Convenor
  - Associate Dean(s) of Faculty Affairs - Invitees
2. **University Level Shortlisting Review Committee:**
  - Vice-Chancellor (or his nominee) - Chairman
  - Directors of BITS Campuses
  - Dean of Faculty Affairs - Convenor
3. **Campus Level Shortlisting Review Committee (one for each of the campuses)**
  - Director of the campus - Chairman
  - 2 or more Senior Professors or Professors – to be identified by the campus Director
  - Associate Dean of Faculty Affairs of the campus - Convenor
4. **Department Level Application Shortlisting Committee (at least 3 members) (one for each campus and for each discipline)**
  - Chairperson – to be nominated by the campus Director from amongst:
    - (a) The HODs, if he/she is a Senior Professor or Professor, ELSE
    - (b) Any Senior Professor or Professor from the Department, ELSE
    - (c) Any Senior Professor or Professor from a related discipline, ELSE
    - (d) Any Senior Professor or Professor from the campus
  - All other Senior Professors, Professors and Associate Professors from the Department,
  - Additionally up to two Senior Professors or Professors from the campus if the members above are fewer than 3 – to be nominated by the campus Director.

**Note:** The shortlisting committee will seek the views of all faculty members in the department in its effort to shortlist or not shortlist a candidate by having them express their opinion at any time, but particularly during the audio-visual interaction with the candidate.

## MEMBERS OF THE SENATE

### **Chairman (Vice-Chancellor):**

Prof. Souvik Bhattacharyya (Sr. PROF)

### **Vice-Chairman (Director, Pilani Campus):**

Prof. Ashoke Kumar Sarkar (Sr. PROF)

### **Secretary:**

Prof. S.C. Sivasubramanian (PROF)

### **Directors:**

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Dubai Campus
2. Prof. G. Raghurama (Sr. PROF),  
K.K. Birla Goa Campus
3. Prof. G. Sundar (Sr. PROF.), Hyderabad Campus  
& Off-Campus Programmes & Industry Engagement

### **Deans:**

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2. Prof. S. Gurunarayanan (PROF)
3. Prof. R. Mahesh (PROF)
4. Prof. Sanjay Kumar Verma (PROF)

##### **K.K. Birla Goa Campus**

1. Prof. Sunil Bhand (PROF)

##### **Hyderabad Campus**

1. Prof. Suman Kapur (Sr. PROF)
2. Prof. Niranjana Swain (PROF)

#### **Campus Wise:**

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1. Prof. Dhananjay M Kulkarni (PROF)

##### **Hyderabad Campus**

1. Prof. M.B. Srinivas (PROF)

##### **Dubai Campus**

1. Prof. Priti Bajpai (PROF)
2. Prof. Ramadoss Roop Kumar (PROF)
3. Prof. B. Muralidharan (PROF)
4. Prof. Thoppil George Thomas (PROF)

#### **Associate Deans:**

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2. Prof. Anshuman Dalvi (ASOP)
3. Prof. Hemant Ramanlal Jadhav (ASOP)
4. Prof. Anil Kumar (ASOP)
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6. Prof. Hitesh Datt Mathur (ASOP)
7. Prof. Bijay Kumar Rout (ASOP)

8. Prof. Srikanta Routroy (ASOP)
9. Prof. Kumar Neeraj Sachdev (ASOP)
10. Prof. P. Srinivasan (ASOP)
11. Prof. K. Venkatasubramanian (ASOP)

### **Off-Campus Centre**

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2. Prof. Gopalakrishnan Venkiteswaran  
(ASOP), *Chennai*

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2. Prof. Prasanta Kumar Das (ASOP)
3. Prof. Ranjan Dey (ASOP)
4. Prof. Neena Goveas (ASOP)
5. Prof. Aditya Prasad Koley (PROF)
6. Prof. Sampatrao D. Manjare (ASOP)
7. Prof. Narendra Nath Ghosh (ASOP)
8. Dr. C.K. Ramesha (ASTP)
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10. Prof. Raghunath A. Ratabole (ASOP)

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3. Prof. K. Kumar (PROF)
4. Prof. Neeru Sood (PROF)

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#### **Pilani Campus**

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3. Prof. Anil Kumar Bhat
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5. Prof. V.K. Chaubey
6. Prof. Ashis Kumar Das
7. Prof. Navneet Goyal

8. Prof. Anu Gupta
  9. Prof. Chandra Bhan Gupta
  10. Prof. Rajiv Gupta (Sr. PROF)
  11. Prof. Arya Kumar
  12. Prof. Rajiv Kumar
  13. Prof. R.K. Mittal (Sr. PROF) (on EoL)
  14. Prof. Rashmi Ranjan Mishra
  15. Prof. Sudeept Mohan
  16. Prof. Bandi Venkata Prasad
  17. Prof. N.V. Muralidhar Rao
  18. Prof. Ram Kinkar Roy
  19. Prof. Subit Kumar Saha
  20. Prof. Kuldip Singh Sangwan
  21. Prof. Chandra Shekhar (Sr. PROF Emeritus)
  22. Prof. Shamsher Bahadur Singh
  23. Prof. Ajit Pratap Singh
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  2. Prof. S. Krishnaswamy
  3. Prof. Dipankar Pal
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  5. Prof. Santonu Sarkar
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  3. Prof. Addepalli Ramu
  4. Prof. P.N.K. Rao
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  2. Prof. C. Periasamy
  3. Prof. Dawood Jalaluddin Shariff
  4. Prof. Ram Karthikeyan
  5. Prof. Krishna Kumar Singh
  6. Prof. R. Udayakumar
  7. Prof. S. Vadivel
  8. Prof. B. Vijayakumar
  9. Prof. Adhir Baran Chattopadhyay
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  2. Prof. Rakesh Choubisa
  3. Prof. Sanjiv Kumar Choudhary
  4. Prof. P.R. Deepa
  5. Prof. Devika
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  9. Prof. Raj Kumar Gupta
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  18. Prof. Jitendra Panwar
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  25. Prof. Debi Datt Pant
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  27. Prof. Sangeeta Sharma
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  29. Prof. Anupam Singhal
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  10. Prof. H. Viswanathan, *Bangalore*
  11. Prof. Satya Sudhakar Yedlapalli, *Bangalore*
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  2. Prof. Raghu Nath Behera
  3. Prof. Dibakar Chakraborty
  4. Prof. Gaurav Dar
  5. Prof. Shibu Clement
  6. Prof. Mridula Goel
  7. Prof. Meenal Kowshik
  8. Prof. Basavadatta Mitra
  9. Prof. Patincharath Nandakumar
  10. Prof. Vijayashree Nayak
  11. Prof. Bhavana P.
  12. Prof. Rabi Narayan Panda
  13. Prof. R.P. Pradhan



14. Prof. Halan Prakash
  15. Prof. Utpal Roy
  16. Prof. Pravin M. Singru
  17. Prof. Radhika Vathsan
  18. Prof. Mainak Banerjee
  19. Prof. Amrita Chatterjee
  20. Prof. Tarkeshwar Singh
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  22. Prof. Judith Maria Braganca
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  4. Prof. Anupam Bhattacharya
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  7. Prof. Jeevan Jaidi
  8. Prof. R. Krishnan
  9. Prof. Bivudutta Mishra
  10. Prof. Anand Magadi Narasimhamurthy
  11. Prof. M. G. Prasuna
  12. Prof. Aravinda N. Raghavan
  13. Prof. Kannan Ramaswamy
  14. Prof. BVVSN Prabhakar Rao
  15. Prof. V.R. Vinayaka Ram
  16. Prof. Y.V. Daseswara Rao
  17. Prof. Punna Rao Ravi
  18. Prof. N. Suresh Kumar Reddy
  19. Prof. Pradyumn Kumar Sahoo
  20. Prof. S. K. Sahoo
  21. Prof. I. Sreedhar
  22. Prof. Jayanty Subbalakshmi
  23. Prof. K. Sumithra
  24. Prof. Ramakrishna Vadrevu
  25. Prof. Meenakshi Viswanathan
  26. Prof. Subhash Narayan Karbelkar
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  2. Prof. Vijaya Ilango
  3. Prof. Kavita Sunil Jerath
  4. Prof. Geetha Kannan
  5. Prof. Maneesha
  6. Prof. Jagadish Nayak
  7. Prof. Mary Lourde R.
  8. Prof. A. Srinivasa Rao
  9. Prof. Trupti Swarup Gokhale
- Heads of Departments:**
- Pilani Campus**
1. Dr. Anil Gaikwad Bhanudas (ASTP)
  2. Prof. Gajendra Singh Chauhan (ASOP)
  3. Prof. Balram Dubey (PROF)
  4. Prof. Navneet Gupta (ASOP)
5. Prof. Prabhat Nath Jha (ASOP)
  6. Prof. Bharti Khungar (ASOP)
  7. Prof. Janardan Prasad Misra, Offg. (PROF)
  8. Prof. Ravi Kant Mittal (ASOP)
  9. Prof. Hare Krishna Mohanta (ASOP)
  10. Dr. (Mrs.) Leela Rani (ASTP)
  11. Dr. Arun Kumar Vaish (ASTP)
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  2. Prof. Srikanth Mutnuri (ASOP)
  3. Prof. Anjan Chattopadhyay (ASOP)
  4. Dr. Ranjit Shankarrao Patil (ASTP)
  5. Dr. Amalin Prince A. (ASTP)
  6. Prof. Ashwin Srinivasan (Sr. PROF)
  7. Dr. Deepak Narayana Murthy Pachattu (ASTP)
  8. Dr. Aswini Kumar Mishra (ASTP)
  9. Dr. Reena Cheruvalath (ASTP)
  10. Prof. Prasanna Kumar N (ASOP)
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  2. Prof. Manab Chakravarty (ASOP)
  3. Prof. Srikanta Dinda (ASOP)
  4. Prof. Sunny Jose Gosman (ASOP)
  5. Prof. Amit Kumar Gupta (ASOP)
  6. Prof. Naga Mohan Kommu (ASOP)
  7. Prof. Tathagata Ray (ASOP)
  8. Prof. Sridhar Raju (ASOP)
  9. Prof. Dipak Kumar Satpathi (ASOP)
  10. Prof. D Sriram (PROF)
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  2. Prof. Tapan Kumar Datta (ASOP)
  3. Prof. Mullapudi V. Nagasankaram (ASOP)
  4. Dr. Nishant Harishbhai Pandya (ASTP)
  5. Dr. Abdul Razak Abdul Ravoof (ASTP)
  6. Prof. Ramachandran Subramanian (ASOP)
  7. Dr. Santhosh Kumar Vasudevan (ASTP)
- Co-opted Members:**
1. Dr. Shuvendu Narayan Patel (ASTP),  
*Pilani Campus*
  2. Mr. Karri Babu Ravi Teja (LECT),  
*Pilani Campus*
  3. Dr. Amol Deshpande (ASTP),  
*K.K. Birla Goa Campus*
  4. Dr. Indrani Talukdar (ASTP),  
*K.K. Birla Goa Campus*
  5. Dr. Vamsi Krishna Venuganti (ASTP),  
*Hyderabad Campus*
  6. Dr. Chandu Parimi (ASTP),  
*Hyderabad Campus*
  7. Dr. Amarnath G (ASTP), *Dubai Campus*

8. Dr. V. Kalaichelvi (ASTP), *Dubai Campus*

**Librarians:**

1. Shri Giridhar M. Kunkur, *Pilani Campus*

2. Shri R. Sivakumar, *Dubai Campus*  
*Workshop Superintendent:*

1. Shri G.J. Desai, *K.K. Birla Goa Campus*

**Chief Wardens:**

1. Prof. Shibasish Chowdhury (ASOP),  
*Pilani Campus*

2. Prof. Angshuman Sarkar (ASOP),  
*K.K. Birla Goa Campus*

3. Dr. Kumar Pranav Narayan (ASTP),  
*Hyderabad Campus*

4. Dr. Santhosh Kumar Vasudevan (ASTP),  
*Dubai Campus*

**Admissions Officer:**

1. Prof. S. Gurunaryanan (PROF),  
*Pilani Campus*

2. Prof. Thoppil George Thomas (PROF),  
*Dubai Campus*

**Placement Officer:**

1. Prof. Mani Sankar Dasgupta (PROF),  
*Pilani Campus*

2. Mr. Abdul Razzak Sohail,  
*Dubai Campus*

**Student Members:**

1. Mr. Saurabh Shankar Shetty, 2014B3A70718P

2. Ms. Upasana Chakraborty, 2014AAPS0047U

3. Mr. Sarthak Singh, 2014B2A80710G

4. Mr. Neel M. Shah, 2014B3A70753H

## MEMBERS OF THE SENATE APPOINTED BODIES

### (A) RESEARCH BOARD

*Chairman (Vice-Chancellor):*

Prof. Souvik Bhattacharyya

*Vice Chairman (Dean, ARD):*

Prof. Sanjay Kumar Verma

*Secretary (Registrar):*

Prof. S.C. Sivasubramanian (Acting)

*Directors of all BITS Campuses:*

1. Prof. Ashoke Kumar Sarkar
2. Prof. Ranendra N. Saha
3. Prof. G. Raghurama
4. Prof. G. Sundar

*Deputy Directors:*

Vacant

*Dean, Sponsored Research & Consulting:*

Prof. Sunil Bhand

*Chief Research & Development Officer:*

Vacant

*Faculty Members (8):*

1. Prof. Pratik N Sheth, *Pilani Campus*
2. Prof. V. Manjuladevi, *Pilani Campus*
3. Prof. Meenal Kowshik, *K.K. Birla Goa Campus*
4. Dr. Sachin D. Waigaonkar, *K.K. Birla Goa Campus*
5. Prof. Anupam Bhattacharya, *Hyderabad Campus*
6. Prof. Sanket Goel, *Hyderabad Campus*
7. Dr. Trupti S. Gokhale, *Dubai Campus*
8. Dr. Vishal G. Naranje, *Dubai Campus*

### (B) ACADEMIC COUNSELLING BOARD

#### I. Pilani Campus:

*Chairman : Assicuate Dean , ARCD*

Prof. Bijay Kumar Rout

*Dean, ID:*

Prof. S. Gurunarayanan

*Associate Dean, SWD:*

Prof. Kumar Neeraj Sachdev

*Faculty Members (2):*

1. Dr. Indresh Kumar
2. Dr. Smita Raghuvanshi

*Student Members (2):*

1. Ms. Jaskirat Kaur Chohan, 2015A5PS0936P
2. Mr. Anamaya Vishal Jha, 2015A3PS0204P

#### II. K.K. Birla Goa Campus:

*Chairman : Associate Dean , ARCD*

Prof. Neena Goveas

*Associate Dean, ID:*

Prof. Aditya Prasad Koley

*Associate Dean, SWD:*

Prof. Ramesha C.K.

*Faculty Members (2):*

1. Dr. Reena Cheruvalath
2. Dr. Varinder Singh

*Student Members (2):*

1. Ms. Akshay Gupta, 2015B2A80699G
2. Mr. Anay Joshi, 2015A3PS0277G

#### III. Hyderabad Campus:

*Chairman : Associate Dean , ARCD*

Prof. Morapakala Srinivas

*Associate Dean, ID:*

Prof. A. Vasani

*Associate Dean, SWD:*

Prof. Sandip Shridharrao Deshmukh

*Faculty Members (2):*

1. Prof. Sanket Goel
2. Dr. Archana Srivastava

*Student Members (2):*

1. Ms. Snehal Rajesh Wadhvani, 2014A7PS0430H
2. Mr. Kevin Biju, 2014A7PS0032H

#### IV. Dubai Campus:

*Chairman : Associate Dean , ARCD*

Prof. A. Somasundaram

*Dean, ID:*

Prof. T.G. Thomas

*Dean, SWD:*

Prof. Priti Bajpai

*Faculty Members (2):*

1. Dr. Vilas Haridas Gaidhane
2. Dr. Bhaskaran S.

*Student Members (2):*

1. Mr. Ayush Gulati, 2013A7PS0190U
2. Mr. Rambhia Aakash Nitin, 2013AAPS0266U

### **(C) ACADEMIC MONITORING BOARD**

*Chairman : Dean, WILPD:*

Prof. S. Gurunaryanan

*Associate Deans, WILPD:*

1. Prof. Anil Kumar
2. Prof.. Raghunath A. Ratabole
3. Prof. Srinivasa Prakash Regalla
4. Prof. K. Venkatasubramanian
5. Prof. Gopalakrishnan Venkiteswaran

*Dean, ID:*

Prof. S. Gurunaryanan

*Dean, PSD:*

1. Prof. Niranjan Swain, Hyderabad Campus
2. Prof. B. Muralidharan, Dubai Campus

*Dean, ARD*

Prof. Sanjay Kumar Verma

*Associate Dean, ARCD:*

Prof. Bijay Kumar Rout (Pilani Campus)

### **(D) ACADEMIC GOVERNING COMMITTEE**

*Dean, Instruction Division*

Prof. S. Gurunaryanan

*Associate Dean, Academic Registration & Counselling Division*

Prof. Bijay Kumar Rout, Pilani Campus

Prof. Neena Goveas, K.K. Birla Goa Campus

Prof. Morapakala Srinivas, Hyderabad Campus

Prof. Somasundaram Arumugam, Dubai Campus

*Dean, Practice School Division*

Prof. Niranjan Swain, Pilani Campus

Prof. B. Muralidharan, Dubai Campus

*Dean, Academic Research*

Prof. Sanjay Kumar Verma

*Dean, Work Integrated Learning Programmes Division*

Prof. S. Gurunaryanan

*Dean, Admissions Division*

Prof. S. Gurunaryanan, Pilani Campus

Prof. Thoppil George Thomas, Dubai Campus

**Convenorship rotates amongst these members depending on the item to be discussed.**

### **(E) DOCTORAL COUNSELLING COMMITTEE**

*Convenor*

Prof. Sanjay Kumar Verma, Dean, ARD

*Dean, Sponsored Research & Consulting Division*

Prof. Sunil Bhand

*Associate Dean, Academic Research Division of each Campus*

1. Prof. Hemant Ramanlal Jadhav, Pilani Campus
2. Prof. Ranjan Dey, K.K. Birla Goa Campus

3. Prof. P.K. Thiruvikraman, Hyderabad Campus

4. Prof. Anand Kumar, Dubai Campus

*One Faculty Member from each Campus*

Prof. Raj Kumar Gupta, Pilani Campus

Prof. Nanda Kumar Patincharath, K.K. Birla Goa Campus

Prof. R. Gururaj, Hyderabad Campus

Prof. Trupti Swarup Gokhale, Dubai Campus

### **(F) STANDING COMMITTEE FOR STUDENTS' DISCIPLINE**

#### **I. Pilani Campus:**

*Chairman : Associate Dean , SWD*

Prof. Kumar Neeraj Sachdev

*Chief Warden:*

Prof. Shibasish Chowdhury

*Faculty Members(2):*

1. Prof. Abhijeet K. Digalwar
2. Dr. Leela Rani

*Student Member (2):*

1. Ms. Jain Prachi Yogesh, 2013B1A30503P
2. Ms. Shreeya Nasa, 2015A8PS0437P

#### **II. K.K. Birla Goa Campus:**

*Chairman : Associate Dean, SWD*

Prof. Ramesha C.K.

*Chief Warden:*

Prof. Angshuman Sarkar

*Faculty Members (2):*

1. Dr. Rajorshi Sen Gupta
2. Dr. Jegatha Nambi Krishnan

*Student Member (2):*

1. Mr. Nikhil Kumar, 2015A8PS0324G
2. Ms. Malani Prachi Santosh, 2015A7PS0145G

### III. Hyderabad Campus:

*Chairman : Associate Dean, SWD:*

Prof. S.S. Deshmukh

*Chief Warden:*

Prof. Kumar Pranav Narayan

*Two Faculty Members (2):*

1. Dr. Swathi Alok

2. Prof. R. Gururaj

*Student Member (2):*

1. Mr. Piyush Sinhal, 2014AAB30502H

2. Ms. K. Sanjana, 2015A1PS0705H

### IV. Dubai Campus:

*Chairman : Dean , SWD:*

Prof. Priti Bajpai

*Chief Warden:*

Dr. Santosh Kumar Vasudevan

*Two Faculty Members (2):*

1. Dr. Venkatesan Kalaichelvi

2. Dr. Vincent Shantha Kumar

*Student Member (2):*

1. Mr. Shresh Kumar Mathur,  
2015A4PS0344U

2. Ms. Rishika Mini Thulasi, 2015A7PS0294U

### (G) NOMINATIONS COMMITTEE

*Chairman (Vice-Chairman of the Senate):*

Prof. Ashoke Kumar Sarkar

*Deputy Directors:*

Vacant

*Members of Senate (4):*

1. Prof. Anu Gupta, *Pilani Campus*

2. Prof. P. Yogeewari, *Hyderabad Campus*

3. Prof. Gaurav Dar, *K.K. Birla Goa Campus*

4. Prof. Shah Jabeen Shazi, *Dubai Campus*

*Secretary:*

Prof. S.C. Sivasubramanian, Acting Registrar

### (H) LIBRARY COMMITTEE

#### I Pilani Campus:

<b><u>S.N.</u></b>	<b><u>Department</u></b>	<b><u>Name of the member</u></b>
1.	Biological Sciences	Dr. Sudeshna Mukherjee
2.	Civil Engineering	Dr. Muthukumar G.
3.	Chemical Engineering	Dr. Srinivas Appari
4.	Chemistry	Prof. Anil Kumar
5.	Computer Science & Information Systems	Dr. Kamlesh Tiwari
6.	Off-Campus Work-Integrated Learning Programmes	Shri Pawan Sharma
7.	Economics & Finance	Dr. Krishna M.
8.	Electrical & Electronics Engineering	Dr. Arnab Hazra
9.	Humanities and Social Sciences	Prof. Pushp Lata
10.	Mathematics	Dr. Sangita Yadav
11.	Mechanical Engineering	Dr. Girish Kant
12.	Management	Dr. Neetu Yadav
13.	Pharmacy	Dr. M.M. Pandey
14.	Physics	Prof. Rakesh Choubisa

Shri Giridhar M. Kunkur (Librarian) - Chairman of the Library Committee

## II. K.K. Birla Goa Campus:

<u>S.N.</u>	<u>Department</u>	<u>Name of the member</u>
1.	Biological Sciences	Dr. Arnab Banerjee
2.	Chemical Engineering	Dr. Rajagopal Vellingiri
3.	Chemistry	Dr. Subhadeep Banerjee
4.	Computer Science & Information Systems	Dr. Ramprasad Joshi
5.	Economics	Dr. VVSNV Prasad Chundru
6.	Electrical & Electronics Engineering	Dr. Pravin Mane
7.	Humanities and Social Sciences	Dr. Amitendu Bhattacharya
8.	Mathematics	Dr. P. Danumjaya
9.	Mechanical Engineering	Dr. Sandeep Singh
10.	Physics	Dr. Chandradew Sharma

Dr. Anuradha V (Deputy Librarian) - Chairman of the Library Committee

## III. Hyderabad Campus:

<u>S.N.</u>	<u>Department</u>	<u>Name of the member</u>
1.	Biological Sciences	Dr. Piyush Khandelia
2.	Civil Engineering	Dr. K. Rajitha
3.	Chemical Engineering	Dr. Balaji Krishnamurthy
4.	Chemistry	Prof. K. Sumithra
5.	Computer Science & Information Systems	Prof. Anand Narsimhamurthy
6.	Economics and Finance	Dr. Dushyant Kumar
7.	Electrical & Electronics Engineering	Dr. Sumit Kumar Chaterjee
8.	Humanities and Social Sciences	Dr. Suchismita Satpathy
9.	Mathematics	Dr. Sharan Gopal
10.	Mechanical Engineering	Dr. K. Suresh
11.	Pharmacy	Dr. Swati Biswas
12.	Physics	Prof. Subhash Narayan Karbelkar

Shri M.S. Uday Kumar (Deputy Librarian) - Chairman of the Library Committee

## IV. Dubai Campus:

<u>S.N.</u>	<u>Department</u>	<u>Name of the member</u>
1.	Biotechnology	Dr. Pallab Sanpui
2.	Chemical Engineering	Dr. Rajib Ghosh Chaudhuri
3.	Civil Engineering	Dr. G. Sridhar
4.	Computer Science	Dr. B. Vijay Kumar
5.	Electrical & Electronics Engineering, Electronics and Communication Engineering and Electronics and Instrumentation Engineering	Dr. Sunil Thomas
6.	General Sciences	Dr. Vijaya Ilango
7.	Humanities and Social Sciences	Dr. Mrutujanjaya Sahu
8.	Mechanical Engineering	Dr. Shashank Khurana

Shri R. Sivakumar (Librarian) - Chairman of the Library Committee

## (I) ADMISSION COMMITTEE

*Vice-Chancellor (Chairman):*

Prof. Souvik Bhattacharyya

*Members:*

*Director, Pilani Campus:*

Prof. Ashoke Kumar Sarkar

*Director, K.K. Birla Goa Campus:*

Prof. G. Raghurama

*Director, Hyderabad Campus:*

Prof. G. Sundar

*Director, Dubai Campus:*

Prof. Ranendra N. Saha

*Director (Off-campus Programmes):*

Prof. G. Sundar

*Dean/Associate Dean (Admissions), Pilani Campus, (Convenor):*

Prof. S. Gurunarayanan (Dean)

## MEMBERSHIP

The Institute continued to be a member of the following distinguished bodies:

1. Association of Commonwealth Universities, *London*.
2. Association of Indian Universities, *New Delhi*.
3. Current Science Association, *Bangalore*.
4. Federation of Indian Chambers of Commerce and Industry – Higher Education Network, *New Delhi*.
5. India International Centre, *New Delhi*.
6. Indian Association of Social Science Institutions, *New Delhi*.
7. Indian Distance Education Association, *Hyderabad*.
8. Indian Institute of Foreign Trade, *New Delhi*.
9. Indian Society for Technical Education, *New Delhi*.
10. Institution of Communication Engineers and Information Technologists, *New Delhi*.
11. International Association of Universities, *Paris*.
12. International Council for Open and Distance Education, *Norway*.
13. National Council of Applied Economic Research, *New Delhi*.
14. Petrotech Society, *New Delhi*.
15. Pharmacy Council of India, *New Delhi*.
16. The Institution of Engineers (India), *Kolkata*.
17. World Association for Cooperative Education, *Boston*
18. Council for Advancement and Support of Education, *Washington*

## STATISTICS OF Ph.D. QUALIFYING EXAMINATION

### BITS, PILANI - PILANI CAMPUS

This year a total of 66 candidates were permitted to appear in the Qualifying examination. The details are provided below:

#### I. Statistical Information for Ph.D. Programme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed	Did not appear and dropped
II Sem. 2016-17	32	32	27	5	0
I Sem. 2017-18	34	34	29	5	0
<b>Total</b>	<b>66</b>	<b>66</b>	<b>56</b>	<b>10</b>	<b>0</b>

#### II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2016-17	-	-	-	-
I Sem. 2017-18	-	-	-	-
<b>Total</b>	-	-	-	-

#### III. Analysis of candidates permitted to appear in Ph.D. qualifying examination

(i)	BITS Faculty (Total)	(ii)	Aspirants of High Standing and proven competence (Total)	(iii)	Full time Students (Total)
	-		(16 Pass, 2 Fail)		48

Discipline wise Break-up		Organizational Break-up		Discipline wise Break-up	
EEE	5	Research	8	Biosciences	07
Management	2			Chemistry	04
Mechanical	1			Chemical	03
				EEE	13
				Mathematics	04
				Mechanical	12
				CSIS	02
				Lang. & Hum.	02
				Management	04
				Pharmacy	02
				Physics	03
				Econ. & Fin.	03
				Civil	<b>07</b>
					<b>66</b>



## STATISTICS OF Ph.D. QUALIFYING EXAMINATION

### BITS, PILANI - KK BIRLA GOA CAMPUS

#### I. Statistical Information for Ph.D. Programme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2016-17	10	10	10	0
I Sem. 2017-18	20	20	19	01
<b>Total</b>	<b>30</b>	<b>30</b>	<b>29</b>	<b>01</b>

#### II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2016-17	03	03	03	0
I Sem. 2017-18	01	01	01	0
<b>Total</b>	<b>04</b>	<b>04</b>	<b>04</b>	<b>0</b>

#### III. Analysis of candidates permitted to appear in Ph.D. qualifying examination

(i)	BITS Faculty (Total)	(ii)	Aspirants of High Standing and proven competence (Total)	(iii)	Full time Students (Total)
	04		08		18

<b>Discipline wise Break-up</b>	03
Biosciences	03
Chemistry	05
Chemical	01
EEE	02
Mathematics	07
Mechanical	06
CSIS	01
Lang. & Hum.	02
Management & Econ. & Fin.	00
Pharmacy	00
Physics	00
Civil	30

## STATISTICS OF Ph.D. QUALIFYING EXAMINATION

### BITS, PILANI - HYDERABAD CAMPUS

#### I. Statistical Information for Ph.D. Programme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2016-17	42	42	28	14
I Sem. 2017-18	49	49	39	10
<b>Total</b>	<b>91</b>	<b>91</b>	<b>67</b>	<b>24</b>

#### II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2016-17	-	-	-	-
I Sem. 2017-18	-	-	-	-

**Total**

#### III. Analysis of candidates permitted to appear in Ph.D. qualifying examination

(i)	BITS Faculty (Total)	(ii)	Aspirants/Part time of High Standing and proven competence (Total)	(iii)	Full time Students (Total)
	-		42		49

#### Discipline wise Break-up

Biosciences	11
Chemical	07
Chemistry	03
Civil	08
CSIS	05
Econ. & Fin.	24
EEE	06
H&SS	11
Mathematics	05
Mechanical	09
Pharmacy	01
Physics	01
<b>Total</b>	<b>91</b>

## STATISTICS OF Ph.D. QUALIFYING EXAMINATION

### BITS, PILANI - DUBAI CAMPUS

#### I. Statistical Information for Ph.D. Programme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2016-17	1	1	1	-
I Sem. 2017-18	6	6	4	2
<b>Total</b>	<b>7</b>	<b>7</b>	<b>5</b>	<b>2</b>

#### II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2016-17	-	-	-	-
I Sem. 2017-18	1	1	1	-
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	-

#### III. Analysis of candidates permitted to appear in Ph.D. qualifying examination

(i)	BITS Faculty (Total)	(ii)	Aspirants of High Standing and proven competence (Total)	(iii)	Full time Students (Total)
	1		-		1

Discipline wise Break-up	Discipline wise Break-up
	Biosciences 0
	Chemistry 0
	Chemical 0
	EEE 1
	Mathematics 0
	Mechanical 1
	CSIS 2
	HSS - Lang. & Hum. 3
	Management 0
	Pharmacy 0
	GS- Physics 0
	Econ. & Fin. 0
	Civil 0
	<b>Total</b> <u>7</u>

**BITS Pilani**

# **annual report 2017**

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**Part B1: Pilani Campus**



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**BITS PILANI – PILANI CAMPUS****B1.1 SENIOR OFFICERS OF THE INSTITUTE****DIRECTOR**

Prof. Ashoke Kumar Sarkar

**ACTING REGISTRAR**

Prof. S.C. Sivasubramanian

**New Administrative appointments**

The following administrative appointments were made during the year:

A. The following has been appointed as Dean as per details given below:

S.No.	Name	Administrative Function	Period
1.	Prof. Arya Kumar	Alumni Relations	22/05/2017 to 21/05/2020

B. The following has been appointed as Unit Chief as per details given below:

S.No.	Name	Administrative Function	Period
1.	Prof. J.P. Mishra	Software Development & Educational Technology	21/06/2017 to till further orders

C. The following has been appointed as Head of Departments as per details given below:

S.No.	Name	Department	Period
1	Prof. J.P. Mishra	Computer Science & Info. Systems (Officiating)	21/06/2017 to till further orders

D. The following has been appointed as Faculty-in-charges (Campus wise):

S.No.	Name & Campus	Name of Centre	Period
1.	Dr. Rajeev Sakhuja	Institute Functions	13/01/2017 to till further orders

E. The following faculty members have been appointed as Resident Warden of the hostels as per details given below:

S.No.	Name	Hostel	w.e.f.
1.	Dr. Nitin Chaturvedi	Gandhi Bhawan	10/04/2017
2.	Dr. Jitendra Singh Rathore	Budh Bhawan	10/04/2017
3.	Dr. Paritosh Shukla	Vishwakarma Bhawan	27/07/2017

The names and designations of senior officers of Pilani campus are given in 'Annexure B1-13'.

**B1.2 ADMISSIONS**

The number of students admitted in each of the semester is given below.

	Integrated First Degree Programmes	Higher Degree Programmes	Doctoral Programmes (PhD)	Total
Second Semester 2016-2017	–	–	29(13)	<b>29(13)</b>
First Semester 2017-2018	1064(157)	336(102)	52(21)	<b>1452(280)</b>

The programme-wise details are given in 'Annexure B1-1'.



### B1.3 DUAL DEGREES AND TRANSFERS

#### (a) Dual Degree

During the Academic year 2017-2018, 308 students were permitted to work concurrently for two first degrees under Dual Degree scheme. See 'Annexure B1-2' for details.

#### (b) Transfers within same tier

During the Year 2017, a total no of 14 students were permitted to transfer from the initial allotment of First Degree programme to the other programmes of First Degree.

#### (c) Vertical Transfers

During the year 2017, 5 students were permitted to transfer from First Degree to Higher degree and 2 students were permitted to transfer from Higher Degree to Ph.D. Programme at Pilani Campus.

#### B1.3(a) Minor Programme

During the Academic year 2017-18, 155 students were admitted in Minor Program, out of them 144 are in Finance, 7 are in Physics and 4 are in Film & Media .

### B1.4 ACADEMIC CALENDAR

The Academic year of the Institute is divided into two semesters and a summer term.

	Starting Date	Ending Date	Number of instruction days(excluding the examination days)
Second Semester 2016-2017	12-1-2017	16-5-2017	78
First Semester 2017-2018	1-8-2017	14-12-2017	86
Practice School II 2016-17	12-1-2017	17-6-2017	133
Practice School I 2016-17	22-5-2017	17-7-2017	50
Practice School II 2017-18	4-7-2017	14-12-2017	140
Summer Term 2016-2017	22-5-2016	15-7-2016	47

### B1.5 COURSE OFFERED

The number of courses offered during the year 2017 is as follows:

	Number of Courses offered
II Semester 2016-2017	403
I Semester 2017-2018	468
Summer Term 2016-2017	29

The list of new courses introduced during 2017 are given in 'Annexure B1-7'.

#### Project -oriented Courses.

During this year a large number of students worked on time-bound projects of various types. The information about the projects done and the names of the students who worked on the projects and the names of the instructors are given in Annexure 'B1-6'

### B1.6 REGISTRATION OF STUDENTS

The registration processes for both the semesters was completed on the first day of each semester.

	Number of students registered
Second Semester 2016-2017	4584
Summer Term 2016-2017	893
First Semester 2017-2018	4948

Details of registration of students for the First Semester 2017-2018 are given in 'Annexure B1-3'.

### B1.7 ACADEMIC COUNSELLING BOARD (ACB)

During the year, the Academic Counseling Board estimated the extent to which students under its purview fell short of the minimum academic performance, drew up a time-frame within which afflictions were to be removed, determined the package of courses for their registration in each semester and laid down the necessary stipulations for achieving intermediate targets. It further monitored their progress and applied necessary mid-course corrections, wherever required. The statistical summary of the number of On-campus students under its purview during the year is given below:

		II Semester 2016-2017	I Semester 2017-2018
1.	Total number of students under the purview of ACB at the beginning of the semester	183	272
2.	No. of students declared out of its purview at the end of the semester	84	214
3.	No. of students who left the Institute during the semester	0	0
4.	No. of new students who came under the purview of ACB at the end of the semester	174	195
5.	Total No. of students under the purview of ACB during the next semester	272	253

### B1.8 AWARD OF DEGREES AND MEDALS

#### a. Award of Degrees

##### On Campus Programmes

During the year 78 degrees were awarded in the Board of Governors meeting held on 20-3-2017 (80<sup>th</sup> Award) and 1294 degrees were awarded on 13-7-2017 (81<sup>st</sup> Award), through a Circulatory Resolution. Statistical details of these degrees are given in 'Annexure B1-4'.

#### b. Award of Medals

For Academic Year 2016-2017

The list of students who were awarded various medals, for the students graduated at the end of First Semester, Second Semester and Summer Term of the academic year 2016-2017 in the following table:

S.N.	ID.No.	NAME	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
<b>Integrated First Degree Programmes (No. of students: 803)</b>						
1.	2013A7TS018P	ABHINAV BAID	M	9.94	FIRST	GOLD
2.	2013A3PS587P	VAIBHAV GARG	M	9.88	SECOND	SILVER
3.	2013A7PS289P	HARSHIT JAIN	M	9.86	THIRD	BRONZE

### B1.9 CAMPUS INTERVIEWS AND PLACEMENT

Number of companies which conducted campus interviews	209
Number of interviews	1651
Number of offers made	881

The statistics (discipline-wise) and the list of organizations which conducted campus interviews during the year are given in Annexure 'B1-5'.

**Employment of Graduates during the Year 2017**

Programme	Number graduated	Employed	Unemployed	Not Registered for Placements / Higher Studies / Deregistered from Placements
<b>On-Campus Programmes</b>				
<b>B.E.(Hons.)</b>				
Chemical	62	54	4	4
Civil	56	37	7	12
Computer Science	129	129	0	0
EEE	97	84	2	11
Electronics & Instrumentation	63	59	1	3
Mechanical	83	66	8	9
Manufacturing	35	26	2	7
<b>B.Pharm</b>	11	8	1	2
<b>M.Sc.(Hons.)</b>				
Bio. Sciences	49	36	6	7
Chemistry	39	25	2	12
Economics	55	48	2	5
Mathematics	50	41	2	7
Physics	46	29	4	13
<b>M.Sc.(Tech.)</b>				
General Studies	14	7	7	0
Information Systems	3	1	0	2
Finance	10	8	0	2
<b>M.E.</b>				
Biotechnology	11	3	6	2
Chemical	19	8	7	4
Civil (Spl. in Structural Engg.)	11	8	1	2
Civil (Spl. in Transportation Engg.)	11	10	0	1
Civil (Spl. in Infrastructure Engg. and Management)	4	2	2	0
Communication Engg.	9	9	0	0
Computer Science	23	20	2	1
Design Engg.	13	7	5	1
Embedded System	11	8	1	2
Manufacturing Systems Engg.	11	8	3	0
Mechanical	16	15	1	0
Microelectronics	13	13	0	0
Software Systems	23	23	0	0
<b>M.Pharm</b>	9	5	4	0
<b>M.Pharm. (Spl. In Pharmaceutics)</b>	16	9	7	0
<b>M.Pharm. (Spl. Pharmaceutical Chemistry)</b>	4	2	2	0
<b>MBA</b>	70	61	9	0
<b>Total</b>	<b>1076</b>	<b>862</b>	<b>91</b>	<b>109</b>

## B1.10 DEPARTMENT-WISE REPORT

In the following pages, a brief summary of the main activities and achievements of different departments of the campus are highlighted.

### B1.10.1 Department: Biological Sciences

Number of faculty members (as on 31<sup>st</sup> December 2015)

<b>Senior Professors, Professors</b>	02
<b>Associate Professors</b>	07
<b>Assistant Professors</b>	07

<b>Head of the Department:</b>	Prof. Prabhat Nath Jha
<b>Contact details:</b>	prabhatjha@pilani.bits-pilani.ac.in
<b>Number of PhD Scholars:</b>	31
<b>Number of RA:</b>	02 (DST Young Scientist)

#### Ph.D. Thesis Submitted during the year: 2017

- Gurpreet Kaur Sidhu (2011PHXF0011P) Analyzing Structural and Functional Evolutionary links between RuBisCO and Carbo Concentrating Mechanism (CCM) Proteins
- Isha Pandey (2010PHXF0413P) Comparative Genome Analysis and Localization of Hypothetical Conserved Plasmodial Proteins.
- Kumar Avishek (2013PHXP0107P) Studies on Genration and Characterization of Live Attenuated Leishmania Parasites as Vaccine Candidates of Visceral Leishmaniasis
- Namita Singh (2013PHXF110P) Studies on Immuno-molecular Pathways Triggered by Chlamydia trachomatis Infection in First Trimester Spontaneous Abortion
- Nitu Kumari (2013PHXF0109P) Identification and Characterization of Urinary Proteins as Post Surgery Surveillance Markers in Urothelial Carcinoma
- PA Boopathi (2007PHXF424P) In vivo transcriptome Profiling of Plasmodium vivax Clinical Isolates: New Insights ito Severe Malaria
- Panchsheela Nogia (2011PHXF0013P) Targeting Cyanobacterial Bicarbonate Transporter BicA into Chloroplast of Model C3 Plants and Analyzing Transient Expressio and Localization
- Rini Dhawan (2011PHXF0404P) Immune Responses of Anopheles stephensi and Anopheles culicifacies against Malaria Parasite development
- Shreshtha Malvia (2013PHXF0111P) Study of Gene Expression and Methylation Profiles Associated with Early and Late Onset Indian Breast Cancer Patients
- Zarna Rajeshkumar Pala (2011PHXF0010P) Characterization of SUF Pathway (Iron-Sulphur Cluster Biogenesis) Functional in the Apicoplast of Plasmodium vivax.

#### A. SPONSORED RESEARCH ACTIVITIES:

##### (i) Ongoing projects:

- (PI: Rajdeep Chowdhury, Co-PI:Sudeshna Mukherjee) "Mutant-p53 gain-of-function: its role in regulating lncRNA expression and associated chemoresistance in human cancer cells" Funding Agency: DBT, Govt. of India, New Delhi; Sanctioned Amount: 25 Lakhs; Duration: 3 Years (2015-2018).
- (PI: Shilpi Garg) "Characterization of major components of (FeS) Cluster assembly pathway in Plasmodium vivax" Funding Agency: Department of Science and Technology (DST), Govt. of India, New Delhi; Sanctioned amount 23 lakhs Duration: 3 years (2014-2017).
- (Co-PI: Sandhya Marathe): "Modeling immune response to Salmonella during typhoid". Funding Agency: DST-SERB, Govt. of India, New Delhi, Sanctioned amount 43.52 lakhs, Duration: 3 years (2016-2019)

##### (ii) Projects sanctioned during the year 2017: NIL

##### (iii) Projects completed

- (PI: Jitendra Panwar) "Mechanistic studies on extracellular biosynthesis of metal nanoparticles" Funding Agency: Department of Science & Technology (DST), Govt. of India, New Delhi; Sanctioned Amount: 50.1456 Lakh; Duration: 3 Years (Jan. 2013- Jan. 2017).

##### (iv) Project proposals approved during the year 2017: NIL

**B. PUBLICATIONS:**

The faculty members of the Department published a total of 26 papers in various International/ National refereed journals during the year and has one patent. The list is as follows:

1. Saggu GS, Garg S, Pala ZR, Kochar SK, Kochar DK, Saxena V. 2017. Characterization of 4 hydroxy-3-methylbut-2-en-1-yl diphosphatesynthase (IspG) from *Plasmodium vivax* and it's potential as anantimalarial drug target. *Int. J. Biol. Macromol.* 96:466–473
2. Kono T, Mehrotra S, Endo C., Kizu N, Matusda M, Kimura H, Mizohata E, Inoue T, Hasunuma T., Yokota A., Matsumura H, Ashida H., 2017. A RuBisCO-mediated carbon metabolic pathway in methanogenic archaea. *Nature Commun.* 8, 14007.
3. Singh RP, Nalwaya S, Jha PN. 2017. The draft genome sequence of the plant growth promoting rhizospheric bacterium *Enterobacter cloacae* SBP-8: Genome Data. DOI information: 10.1016/j.gdata.2017.03.006.
4. Singh RP, Jha P, Jha PN. 2017. Analysis of fatty acid composition of PGPR *Klebsiella* sp. SBP-8 and its role in ameliorating salt stress in wheat. *Symbiosis.* DOI 10.1007/s13199-017-0477-4.
5. Singh RP, Jha P, Jha PN. 2017. Bio-inoculation of plant growth-promoting rhizobacterium *Enterobacter cloacae* ZNP-3 increased resistance against salt and temperature stress in wheat plant (*Triticum aestivum* L.). *J. Plant Growth Regul.* 36:783–798.
6. Ashoka P, Chander S, Chow LMC, , Wong ILK, Singh RP, Jha PN, Murugesan S (2017). Synthesis and in-vitro anti-leishmanial activity of (4-arylpiperazin-1-yl)(1-(thiophen-2-yl)-9H-pyrido[3,4-b]indol-3-yl)methanone derivatives. *Bioorganic Chemistry*, 70:100-106.
7. Jain N, Bhargava A, Pareek V, Akhtar MS. Panwar J. 2017. Does seed size and surface anatomy play role in combating phytotoxicity of nanoparticles? *Ecotoxicology*, 26: 238-249.
8. Fageria L, Pareek V, Dilip RV, Bhargava A, Pasha SS, Laskar IR, Saini H, Dash S, Chowdhury R, Panwar J. 2017. Biosynthesized protein-capped silver nanoparticles induce ROS-dependent pro-apoptotic signals and pro-survival autophagy in cancer cells. *ACS Omega*, DOI: 10.1021/acsomega.7b00045.
9. Malvia S, Bagadi SA, Dubey US, Saxena S., 2017 Epidemiology of breast cancer in Indian women. *Asia Pac. J. Clin. Oncol.* (Accepted)
10. John A, Vetrivel U, Subramanian K, Deepa PR. 2017. Comparative docking of dual conformations in human fatty acid synthase thioesterase domain reveals potential binding cavity for virtual screening of ligands. *J Biomol Struct Dyn.* 35:1350-1366.
11. Padma Murali, Deepa PR, Raghavan Subramanyan, Farida Farzana A J., Nithya Lakshmi M., Murali Raman., 2017. Mathematical Modeling of Coronary Artery Disease (CAD):Analysis Reveals HbA1c and Total Cholesterol to be Significant Risk Predictors, *Appl. Math.* 7: 1-4.
12. Dubey, P., Dubey, U.S. and Dubey, B., 2017. B.Modeling the role of acquired immune response and antiretroviral therapy in the dynamics of HIV infection. *Mathematics and Computers in Simulations.* DOI information: 10.1016/j.matcom.2017.07.006.
13. Rai A, Pradhan P, Nagraj J, Lohitesh K, Chowdhury R and Jalan S. 2017. Understanding cancer complexome using networks, spectral graph theory and multilayer framework. *Sci. Rep.* 7: 41676.
14. Alam P, Dash S, Climent C, Kaur G, Choudhury AR, Casanova D, Alemany P, Chowdhury R\*, Laskar IR\*. 2017. Aggregation Induced Emission' Active Iridium(III) Complexes with Applications in Mitochondrial Staining. *RSC Advances* (\*co-corresponding authors), 7: 5642-48.
15. Mukherjee S, Dash S, Lohitesh K and Chowdhury R., 2017. The dynamic role of autophagy and MAPK signaling in determining cell fate under cisplatin stress. *PLoS One.* 12: e0179203.
16. Singh RP, Runthala A, Khan S., Jha PN., 2017. Quantitative proteomics analysis reveals the tolerance of wheat to salt stress in response to *Enterobacter cloacae* SBP-8. *PLoS ONE* 12(9): e0183513.
17. Mishra S, Chauhan P, Gupta S, Raghuvanshi S, Singh R, Jha PN. 2017. CO<sub>2</sub> sequestration potential of halo-tolerant bacterium *Pseudomonas aeruginosa* SSL-4 and its application for recovery of fatty alcohols. *Process Safety and Environmental Protection.* doi.org/10.1016/j.psep.2017.08.013
18. Shukla P, Sharma A, Fageria L, Chowdhury R. 2017. Novel Spiro/non-Spiro Pyranopyrazoles: eco-Friendly Synthesis, in-vitro Anticancer Activity, DNA binding, and in-silico Docking Studies"; *Curr. Bioactive Comp.* (in Press).
19. Mehrotra R, Renganaath K, Kanodia H, Loake GJ, Mehrotra S. 2017. Towards combinatorial transcriptional engineering. *Biotechnol. Adv.* doi: 10.1016/j.biotechadv.2017.03.006).
20. Tomar V, Sidhu GS, Nogia P, Mehrotra R, Mehrotra S, 2017. Regulatory components of carbon concentrating mechanisms in aquatic unicellular photosynthetic organisms. *Plant Cell Rep.* DOI 10.1007/s00299-017-2191-3.
21. Asati V, Sharma PK. 2017. Identification of an isoflavone glycoside hydrolyzing  $\beta$ -glucosidase in the seeds of the desert legume *Prosopis cineraria*. *Legume Research.* Article accepted for publication, Ref. No. LR-3798.
22. Nogia P, Tomar V, Sidhu GS, Mehrotra R, Mehrotra S. 2017. Relative efficiencies of transient transformation of *Arabidopsis thaliana* and *Nicotiana tabacum* upon heterologous expression of membrane proteins. *Indian J. Biotechnol.* (Accepted)

23. Shanmugam BK, Easwaran SN, Lakra R, Deepa PR, Mahadevan S. 2017. Metabolic pathway and role of individual species in the bacterial consortium for biodegradation of azo dye: A biocalorimetric investigation. *Chemosphere*. 188: 81-89
24. Anuradha Devi, Anupam Singhal, Rajiv Gupta, S K Verma and A N Singh. 2017. Utilization of Industrial Waste as a fertilizer in Ornamental Plants. *Res J Chemistry and Environment*, Vol 21:1-7.
25. Raja Hari Gudlavalleti, Member IEEE, Subash Chandra Bose, Sanjay Kumar Verma, Punit Khatri, Joy Scaria, Shripal Dhewa, Vinod Kumar Chaubey (2017) A Novel Fluorometric Bio-sensing based Arsenic Detection System for Groundwater *IEEE Sensors Journal*. Vol 17 (17) 5391-5398
26. Singh RP, Jha PN (2017). The PGPR *Stenotrophomonas maltophilia* SBP-9 augments resistance against biotic and abiotic stress in Wheat Plants. *Frontiers in Microbiology*. doi:10.3389/fmicb.2017.01945.

#### C. CONFERENCES ATTENDED/ PAPERS PRESENTED:

1. Rajesh Mehrotra, Pinky Dhatwal, Zaiba Hasan Khan, Sandhya Mehrotra. (2017). ACGT cis regulatory elements as mediator of plant stress response. EMBO Conference on "Micro and metabolic regulators in plants, Thiruvanthapuram, Kerala 01-04 February 2017.
2. Vandana Tomar, Panchsheela Nogia, Rajesh Mehrotra and Sandhya Mehrotra. (2017). An insight into the Regulatory Components of Carbon Concentrating Mechanisms in Aquatic Unicellular Photosynthetic Organisms. EMBO Conference on "Micro and metabolic regulators in plants, Thiruvanthapuram, Kerala 01-04 February 2017.
3. Tanmay Kulshrestha, Ankita Gupta and Shibasish Chowdhury. (2017). Classification of DNA Structure through Structure Network Analysis, 9th international conference on Bioinformatics and Computational Biology- BICOB 2017 on March 20-22, 2017 at Honolulu, Hawaii, USA.
4. Parva Sharma and Shibasish Chowdhury, (2017). "The role of Nitrogen assimilation pathway on high protein content of *Arthrospira platensis*: An In-silico analysis" In: Annual symposium of the Indian Biophysical Society, 23rd – 25th March 2017, IISER Mohali, India.
5. Ashis Das, Boopathi P.A., Subuddhi A, Pandey I, Kaur R. Kochar S.K. Kochar D.K. (2017). Systems Networks and HUB Genes to identify Pathogenesis Molecules and Possible Therapeutic Targets in Complicated *P. falciparum* and *P. vivax* malaria. International Conference on Challenges in Drug Discovery and Delivery. March 2-4 2017 BITS Pilani. Pilani Campus.
6. Rajdeep Chowdhury and Sudeshna Mukherjee. (2017). Cross talk between autophagy and intracellular MAPK signaling regulate optiosarcoma cell survival response under cisplatin stress The 8th International Symposium on Autophagy, Japan, May 29th to Jun 1st, 2017.
7. Kumar Udit Saumya, Shaswat Singh, Neelam Mahala, Manohar Lal, Atish Paul, Uma S. Dubey. (2017). Comparative Bioinformatic Analysis of camel milk proteins with their Bioactive Peptides with potential antimicrobial and anticancer properties. National conference on Bioinformatics and Computational Biology organizes by supercomputing facility for bioinformatics and computational Biology. Breaking Barriers through bioinformatics and Computational Biology at IIT Delhi. 31 July – 1 Aug 2017.

#### D. BOOKS PUBLISHED/EDITED /BOOK CHAPTERS DURING THE YEAR:

1. Yadav, R.S., Mahatma, M.K. Thirumalaisamy, P.P., Meena, H.N., Arora, S. and Panwar, J. 2017. Arbuscular mycorrhizal fungi (AMF) for sustainable soil and plant health in salt-affected soils. In: *Bioremediation of Salt Affected Soils: An Indian Perspective*, Arora, S. Singh, A.K. and Singh, Y.P. (Eds.), Springer International Publishing, Switzerland, pp. 133-156.

#### E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED:

1. An online workshop by Nitant Siksha was organized to orient the FD/HD students aspiring for Ph.D. abroad regarding preparation of CV, writing mails, and LOR.
2. Department of Biological Sciences organized a TWO day hands on workshop on Flow Cytometry from 18th -19th Jan 2017. Lectures on basic principle of Flow Cytometry preceded hands on experimental demonstration of some selected FACS based experiments during the two day workshop.

#### F. INVITED TALKS GIVEN BY BITS FACULTY

#### G. INVITED TALKS ARRANGED IN THE DEPARTMENT

1. Dr. Bhupendra Verma, Institute of Biotechnology, University of Helsinki, Finland, delivered a talk on 'Minor spliceosome mediated novel alternative splicing cascades: mechanisms and link to human diseases'.
2. Prof. Sanjay Kapoor, Dept. of Plant Molecular Biology, Delhi University delivered a talk on 'A Quest for the Regulators of Reproductive Development in Rice'. (August, 2017)
3. Prof. Sudhir Sopory, Padma Bibhushan, Ex Vice chancellor, JNU and Ex-Director ICGEB, delivered talk on 'Stress tolerance in plants"- role of glyoxalases.
4. Prof. Bani Mallick, Distinguished Professor and Fullbright Fellow, University of Texas A &M, USA delivered a talk on 'Big Data Genomics and Cancer. The talk was organized by United States-India Educational Foundation (USIEF).

**H. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS**

1. Prof. Vishal Saxena was awarded "Visiting Professor Fellowship" under Senior Scientist category of "2017 ASM- IUSSTF Indo - US Research Professor Fellowship Programme".
2. Dr. Rajdeep Chowdhury was awarded "SERB Travel Award" for attending the conference "The 8th International Symposium on Autophagy", Japan, May 29th to Jun 1st, 2017.
3. Dr. Sandhya Mehrotra was awarded for "Visiting Professor Fellowship" under Senior Scientist category of "INSA-CAS International Bilateral Exchange/ Collaboration Programme-2017".
4. Prof. Vishal Saxena was awarded "Visiting Professor Fellowship" under Senior Scientist category of "INSA-CAS International Bilateral Exchange/ Collaboration Programme-2017".
5. Arpit Bhargava, and Gagandeep Singh Saggi, Former Ph.D. Student, has been awarded SERB National Post-Doctoral Fellowship by DST, New Delhi in March 2017
6. Preeti Dubey, Former Ph.D. student of Department of Mathematics doing interdisciplinary research with Uma S. Dubey (as Co- supervisor) presently doing Post Doctoral research in Department of Medicine, Loyola College, Chicago.

**I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION**

1. Dr. Rajdeep Rajdeep Chowdhury visited Genotypic Technology Pvt. Ltd., Bangalore under Industry Immersion Program

**J. SIGNIFICANT NEW EQUIPMENTS/ EXPERIMENTAL FACILITY ADDED DURING THE YEAR**

1. Oxygraph Plus, Ultracentrifuge (01 Nos), High speed centrifuge (02 Nos), Mini Centrifuge (02 Nos), FACS, Horizontal Laminar Flow (04 Nos), Weighing Balance (02 Nos), pH Meter (04 Nos), water Bath (02 Nos), Autoclave (02 Nos), Growth Chamber (01 Nos).

**K. DEPARTMENTAL ASSOCIATION/ CLUB ACTIVITIES****Biological Society**

The Biological Society in its traditional way executed APOGEE-2015, showing the recent development in modern biology through excellent working and non-working models. Senior members of the Biological Society have also been involved in orientation for freshly joined students and discussions regarding the future scope of Biology and Biotechnology. Other traditional activities such as welcome for new members, B1 alfresco and farewell for graduating students were also organized.

**L. STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS****a. Success of students at national level tests (various PG/Ph.D. entrance tests and tests for JRF etc)**

- Monika Sandhu, Ph.D. Student has been sanctioned a 3- year Project under WOS-B scheme of DST.
- Surbhit Johri, 3rd year M.Sc. student, has received prestigious H.G.Khorana Fellowship awarded by Indo-US Science and Technology Forum.
- Sahitya Murli, M.E., Biotechnology student, was selected to participate in summer school on Food security at Tel Aviv University.
- Harsh Kanodia has been selected to attend workshop on Computational Approaches to Memory and Plasticity course 2017 to be convened by NCBS, Bangalore

**B1.10.2 Department: Civil Engineering**

Number of faculty members (as on 31 December 2017)

<b>Professors &amp; Senior Professors</b>	04
<b>Associate Professors</b>	04
<b>Assistant Professors</b>	08
<b>Lecturers</b>	01
<b>Visiting Faculty</b>	-

**Head of the Department** : Prof. Ravi Kant Mittal**Contact details** : ravimittal@pilani.bits-pilani.ac.in**Number of Ph.D. Scholars** : 21**Ph.D. Thesis Submitted during the year** : 04**B. SPONSORED RESEARCH ACTIVITIES****(i) Projects Sanctioned during the year 2017**

S.No.	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lakhs)
1.	Preparation of State of the Art Report (SOAR) on Fog vision system for roads	Rajiv Gupta	MORTH, NOIDA, U.P	4.35
2.	Preparation of State of the Art Report (SOAR) on Development of innovative non-destructive techniques for determination of in-situ strength and permeability of concrete	Amit Goel	MORTH, NOIDA, U.P	2.50
3.	Investigation of ductile characteristics of high strength concrete beams reinforced with high strength steel and basalt fibre under elevated temperature conditions	G. Muthukumar	Additional competitive Research Grant, BITS Pilani	9.75
4.	Road safety audit of widening and strengthening of existing Bikaner-Phalodi section to four lane from Km 4+200 to Km 55+250 and two lane from Km 55+250 to Km 163+500 of NH-15 on BOT (Toll) basis in the state of Rajasthan.	A. K. Sarkar A P Singh P K Sahu Durgesh Vikram	NHI, New Delhi	53.50

**(ii) Ongoing projects (Sanctioned Prior to 2017):**

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Amount Sanctioned (Rs. in Lakhs)
1.	Impact of PMGSY Roads on Accessibility in Rural Areas	A. K. Sarkar Ajit Pratap Singh	NRRDA, Ministry of Rural Development, Gov. of India	22.63
2.	Development of Copper Bio-Leaching methodology/technique from tailing waste at Hindustan Copper Limited, Khetri	Anupam Singhal S.K. Verma (BIO)	Ministry of Mines, New Delhi	30.00
3.	Potential of Marble Slurry as a Mineral Admixture in Concrete	Anshuman Dipendu Bhunia	DST, New Delhi	28.38
4.	Dynamic buckling response of composite structures	S. N. Patel	CSIR, New Delhi	11.52
5.	Conjunctive use of rainwater and Groundwater to provide safe drinking water with intervention of Advanced Technology	Rajiv Gupta	DST, New Delhi	126.43(DST) 77.70 (Coll.)
6.	Development of Low carbon ternary cement for durable and sustainable concrete	Bahurudeen A	Additional competitive Research Grant, BITS Pilani	9.25
7.	"Modeling Pedestrian Flow Using a Continuum Model"	Durgesh Vikram	BITS Research Initiation Grant	2.0
8.	"Experimental investigation on Structural Performance of RC Frame with Deep Beams under Gravity loading"	G. Muthukumar	BITS Research Initiation Grant	2.0



**(iii) Projects completed in the year 2017**

S.No.	Project Title	Principal/Co-principal Investigator	Agency	Amount (Rs. in Lakhs)
1.	Roof top Rainwater Harvesting for Safe, Potable and Healthy Drinking Water and Ground Water Replenishment for BITS Pilani, Pilani campus	Rajiv Gupta	BITS, Pilani, CoE-WWE	91.00
2.	Zinc Recovery from Industrial Waste using Bioleaching.	Suresh Gupta (CHE) S.K. verma (BIO) Anupam Singhal	BITS Pilani CoE-WWE	48.00
3.	Study of Structural Response and Strengths of Thin-Walled FRP Composite Girders	S. B. Singh	CSIR, New Delhi	18.00
4.	Development of Copper Bio-Leaching methodology/technique from tailing waste at Hindustan Copper Limited, Khetri	Anupam Singhal S.K. Verma (BIO)	Ministry of Mines, New Delhi	30.00
5.	Development of an Automated Non-Destructive Test system for Condition Evaluation of Pavements	Amit Goel	Additional competitive Research Grant, 5BITS Pilani	9.45
6.	“Assessment of pozzolanic performance of sugarcane bagasse ash from different disposal sites	Bahurudeen A	BITS Research Initiation Grant	2.0
7.	“Development of Freight Generation Model in Urban Areas: A Case study of Jaipur metropolitan Region”	Prasanta Kumar Sahu	BITS Research Initiation Grant	2.0
8.	“Use of copper slag as aggregate replacement in asphalt pavements”	Nikhil Saboo	BITS Research Initiation Grant	2.0
9.	“Development of Geopolymer Mortar Using mustard husk Briquette Ash”	Vishakha V Sakhare	BITS Research Initiation Grant	2.0

**(iv) Ongoing Consultancy Projects:**

S.No.	Project Title	Sponsored by	Sanction Amount (Rs. In Lakhs)	Investigators
1.	Road Safety Audit for Reengus-Sikar stretch of NH-11 (43.887 km)	National Highway Authority of India	18.11	A K Sarkar A. P. Singh Amit Goel
2.	Road safety audit of widening and strengthening of existing Bikaner-Phalodi section to four lane from Km 4+200 to Km 55+250 and two lane from Km 55+250 to Km 163+500 of NH-15 on BOT (Toll) basis in the state of Rajasthan	NHI, New Delhi	53.50	A. K. Sarkar A P Singh P K Sahu Durgesh Vikram

**(iv) Consultancy Projects completed this year:**

Civil Engineering department undertaken more than Rs. 10.50 lacs consultancy works from government departments such PHED, PWD, WPIL and DRDO etc. in various areas and completed successfully.

**C. PUBLICATIONS****Papers published by Faculty in Journals**

S.No	Title of the paper	Authors	Name of Journal	Volume, Issue No, and Year
1.	A parametric study on response of FRP strengthened masonry walls under blast loading	S. B. Singh, Aditi Chauhan, and Pankaj Munjal	Asian Journal of Civil Engineering (BHRC),	Vol. 18, pp 593-605, 2017
2.	A Review of Performance of Fibre Reinforced Polymer Strengthened Structures under Fire Exposure	S. B. Singh and Abhinav Sethi	Proceedings of Indian National Science Academy (INSA)	Vol. 83 (1), pp 1-12, 2017
3.	A scenario based impact assessment of trace metals on ecosystem of	Srinivas, R., Singh, A. P., and Sharma R	International Journal of Water Resources Management	DOI: 10.1007/s11269-017-1738-y (I.F.

S.No	Title of the paper	Authors	Name of Journal	Volume, Issue No, and Year
	river Ganges using multivariate analysis coupled with fuzzy decision-making approach			2.848)
4.	A study on environmental and economic impacts of using waste marble powder in concrete	Singh, M, Chaudhary, S., Srivastava, A, Sangwan, K. S. and D. Bhunia	Journal of Building Engineering (Elsevier)	Vol. 13, pp 87-95, 2017
5.	An effective technique to estimate Cross Model parameters	Durgesh Vikram and Nikhil Saboo	ASCE Materials in Civil Engineering	(DOI: 10.1061/(ASCE) MT.1943-5533.0002043)
6.	An investigation on effect of partial replacement of cement by waste marble slurry	Singh, M, Srivastava, A, and D. Bhunia	Construction and Building Materials (Elsevier)	Vol. 134, pp 471-488, 2017
7.	Application of sustainable construction materials for urban slum houses	R. V. Ralegaonkar, H. R. Gavali, V. V. Sakhare, A. Puppala, P. B. Aswath	International Journal of Environmental Science and Development	Vol 8 (3), pp: 182-186, 2017
8.	Assessment of air quality in Haora river basin using fuzzy multiple-attribute decision making techniques	Singh, A. P., Chakrabarti S., and Kumar, S. and Singh, A.	Environmental Monitoring and Assessment	DOI: 10.1007/s10661-017-6075-3 (I.F. 1.687)
9.	Assessment of subsurface temperature distribution from the gauged wells of Puga Valley, Ladakh	Shibani K. Jha and Harish Puppala	Journal of Geo-Thermal Energy	Vol. 127, pp- 116-127, 2017
10.	Behavior of shear wall with openings - A review	Muthukumar, G. and Manoj Kumar	The Indian Concrete Journal	Vol. 91 (2), pp 38-46, 2017
11.	Bond strength and compressive stress-strain characteristics of brick masonry	S. B. Singh, and Pankaj Munjal	Journal of Building Engineering (Elsevier)	Vol. 9, pp 10-16, 2017
12.	Comparative Study of Accelerated Carbonation of Plain Cement and Fly-ash concrete	Shaik Hussain, Dipendu Bhunia, and S. B. Singh	Journal of Building Engineering (Elsevier)	Vol. 10, pp 26-31, 2017
13.	Development and investigation of cellular light weight bio-briquette ash bricks.	V. V. Sakhare and R. V. Ralegaonkar.	Clean Technologies and Environmental Policy, Springer	Vol 19 (1), pp: 235-242, 2017
14.	Development of a comprehensive fuzzy based approach for evaluating sustainability and self-purifying capacity of river Ganges	Srinivas, R. and Singh, A. P.	ISH Journal of Hydraulic Engineering, Taylor and Francis publication	DOI:10.1080/09715010.2017.1400407
15.	Development of a Need-Based Approach for Rural Road Network Planning	Kanuganti, S., Dutta, B., Sarkar, A.K., Singh, A. P.	Transportation in Developing Economies	Doi:10.1007/s40890-017-0044-y
16.	Energy efficient slum house using alternate materials	R. V. Ralegaonkar, H. R. Gavali, V. V. Sakhare, A. Puppala and P. B. Aswath	Proceedings of the Institution of Civil Engineers- Energy, ICE publishing	Vol 170 (3), pp: 93-102, 2017
17.	Evaluation of marble slurry incorporated concrete using Non-destructive test methods	Singh, M, Srivastava, A, Bhunia, D	Materials Today Proceedings (Elsevier)	Vol. 4, pp- 9482-9845, 2017
18.	FRP Truss Bridge Fabrication and Response	S. B. Singh and Himanshu Chawla	Civil Engineering and Construction Review (CE&CR)	Vol. 30 (2), pp 52-57, 2017
19.	Impact assessment of industrial wastewater	Srinivas, R. and Singh, A. P.	International Journal of Environment,	DOI: 10.1007/s10668-

S.No	Title of the paper	Authors	Name of Journal	Volume, Issue No, and Year
	discharge in a river basin using interval-valued fuzzy group decision-making and spatial approach		Development and Sustainability, Springer	017-9994-9
20.	Influence of Distributed Dead Loads on Vehicle Position For Maximum Moment in Simply Supported Bridges	Gupta, Tanmay and Kumar Manoj	Journal of the Institution of Engineers (India): Series A	Vol. 98 (1-2), pp 201-210, 2017
21.	Investigation of Factors Affecting the Consistency of Short-Period Traffic Counts	Kenno, S. Y., Sahu, P., Mehran, B., and Sharma, S.	Journal of Modern Transportation	Vol. 25 (3), pp-150-162, 2017
22.	Linear Response of Prestressed Concrete Skewed Box Beam Bridge Girder using CFRP Tendons	S. B. Singh and Tanmay Gupta	Journal of Structural Engineering, CSIR-SERC	Vol. 44 (2), pp 1-8, 2017
23.	Net Safe Bearing Capacity of Glass Fiber Reinforced Pilani Soil Under Surface Footing Conditions	Kamalesh Kumar	International Journal of Control Theory and Applications.	Vol. 10 (28), pp 55-58, 2017
24.	Parametric Study of Carbon FRP Prestressed Concrete Box Girders	S. B. Singh and Siddharth Awasthi	The Indian Concrete Journal	Vol. 91 (2), pp 47-56, 2017
25.	Pressure Settlement Behavior of Strip Footing Resting on Tire Chip Reinforced Sand	Mittal, R.K. and Gill, G.	International Journal of Geotechnical Engineering, Taylor & Francis	DOI: <a href="https://doi.org/10.1080/19386362.2017.1408195">https://doi.org/10.1080/19386362.2017.1408195</a>
26.	Prospects of renewable energy sources in India: Prioritization of alternative sources in terms of Energy Index	Shibani K. Jha, Harish Puppala	Journal of Energy	Vol. 127, pp- 116-127, 2017
27.	Reply to discussion on Behavior of shear wall with openings - A review	Muthukumar, G. and Manoj Kumar	The Indian Concrete Journal	Vol. 91 (2), pp 38-46, 2017
28.	Simultaneous Dynamic Demand Estimation Models for Major Seaports in India	Patil, G.R., and Sahu, P.	Transportation Letters, The International Journal of Transportation Research	Vol 9 (3), pp: 141-151, 2017
29.	Statistical Investigation of Truck Type Distribution on Cold Region Highways during Winter Months	Roh, H-J., Sahu, P., Sharma, S., and Mehran, B.	KSCE Journal of Civil Engineering	<a href="https://doi.org/10.1007/s12205-017-0573-2">https://doi.org/10.1007/s12205-017-0573-2</a>
30.	Status of Environmental Pollution in Agra Industrial Cluster: An IEPI Approach	Singh, A. P., Vidyarthi, A.K., Madan, K. and Singh, A.	Pollution Research	Vol. 36 (3), pp 578-587, 2017
31.	Strategy to control indoor temperature for redevelopment of slum dwellings	V. V. Sakhare, and R. V. Ralegaonkar	Journal of Indoor and Built Environment	DOI: <a href="https://doi.org/10.1177/1420326X17712107">https://doi.org/10.1177/1420326X17712107</a>
32.	Structural Response of Concrete Skew Box-Girder Bridges – A State-of-the-Art Review	Gupta, Tanmay and Kumar Manoj	Int. Journal of Bridge Engineering	Vol. 5 (1), pp 37-59, 2017
33.	Study of flexural response of engineered cementitious composite faced masonry structures	S.B. Singh, Richa Patil, Pankaj Munjal	Engineering Structures (Elsevier)	Vol. 150, pp 786-802, 2017
34.	Time Series Prediction for Water Resource	Gaurav Kumar and Rajiv Gupta	International Journal of Control Theory and	Vol. 10 (6), pp 39-45, 2017

S.No	Title of the paper	Authors	Name of Journal	Volume, Issue No, and Year
	Management in Semi-Arid Zone		Applications.	
35.	Triaxial Testing Response Determination of Coal Dust Mixed Pilani Soil	Kamalesh Kumar and Utpal Sannyashi	International Journal of Civil Engineering and Concrete Structures	Vol. 2 (2), pp 7-12, 2017
36.	Utilization of Industrial Waste as a Fertilizer in ornamental plants	Devi Anuradha, Singhal Anupam, Gupta Rajiv, Verma Sanjay and Singh Arun Nihal	Research Journal of Chemistry and Environment.	Vol. 21 (4), pp 1-7, 2017
37.	Scenario Planning for Water Resource Management in Semi Arid Zone	Rajiv Gupta and Gaurav Kumar	Physics and Chemistry of the Earth,	DOI: 10.1016/j.pce.2017.12.004 JPCE2639
38.	Detection of Cadmium Ion in Potable Water Using Quartz Crystal Microbalance	Parul Taneja · V. Manjuladevi · Rajiv Gupta · Raj Kumar Gupta	Molecular Symposia (Wiley),	Vol 376, Dec. 2017. DOI:10.1002/masy.201600207

#### D. PAPERS PUBLISHED BY FACULTY IN CONFERENCES:

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
1.	Long term effect of partially replacing cement by waste marble slurry in concrete	Singh M., Pankaj Lamba., Srivastava A., and Bhunia D.,	First Congress on Technical Advancement (ASCE)	Duluth, Minnesota, September 10-13th, 2017.
2.	Spatial temporal analysis of major seaport freight flows in India	Sahu, P., Padhi, A., Patil, G., Mahesh, G., and Sarkar, A.,	96th Annual Meeting, Transportation Research Board (TRB)	Washington D.C., USA, 08th -12th January, 2017
3.	A Comparative Study on Time Series Extrapolation of Spatial Data	Gaurav Kumar & Rajiv Gupta	National Remote Sensing Centre (NRSC) - User Interaction Meet	Hyderabad, January 24-25, 2017
4.	A fuzzy based multi-criteria approach for assessing the sustainability of river Ganga	Srinivas, R., and Singh, A.P.	International Conference 'Incessant Ganga', Water and land management Institute, Water Resource Department, Govt. of Bihar	Patna, Bihar, 25-26 February 2017
5.	Aluminium industrial rejects: A potential resource for development of geopolymeric building materials	A Mohammed Najjar, M J Chaddha, P G Bhukte, V. V. Sakhare, N Azad, S Vadsariya, K R Rao, K Janbhandu, M T Nimje, S P Puttewar, A Agnihotri and S Jain	96th Annual Meeting, Transportation Research Board (TRB)	Washington D.C., USA, 08th – 12th January, 2017
6.	Assessment of Inter-laminar Shear Strength in Hybrid Fiber Reinforced Composites	S. B. Singh, Sudhir Vummadisetti, and Himanshu Chawla	20th International Conference on Composite Structures (ICCS20)	Paris, 4-7 September 2017
7.	Buckling and Postbuckling Studies of Laminated Composite Stiffened Plates	S.N. Patel	American Society for Composites (ASC) 32nd Annual Technical Conference	Purdue, USA, 23-25, October 2017
8.	Copper Bio-leaching technique for tailing waste at Hindustan Copper Limited, Khetri (Rajasthan)	Sandeep Kumar, SK Verma, and Anupam Singhal,	Advanced technology and innovations in mining industry	Khetri, Jan 22, 2017
9.	Critical Evaluation of Indian Standard for The Design of Laterally Loaded piles	Rawat, S., Prasad, V. and Mittal, R.K.	7th Conference on Deep Foundation Technologies for Infrastructure Development in India, Deep Foundation Institute.	Chennai, October 5-7, 2017

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
10.	Critical Evaluation of Site classification in the latest revision of Indian Seismic Code	Mittal, R.K., Rawat, S. and Tangirala, A. (2017). .,	Indian Geotechnical Conference – 2017, IIT Guwahati, India	Guwahati, December 14-16, 2017.
11.	Dynamic Buckling of Angle Ply Laminated Composite Plates Subjected to In-Plane Compression Loads	V. Keshav and S.N.Patel	3rd Indian Conference on Applied Mechanics (INCAM-2017), , Department of Applied Mechanics, Motilal Nehru National Institute of Technology(MNNIT).	Allahabad, 5-7 July 2017,
12.	Improving Load Carrying Capacity of Copper Tailings by Waste Tire Chip Reinforcement	Gill, G. and Mittal, R.K.	Indian Geotechnical Conference – 2017, IIT Guwahati, India	Guwahati, December 14-16, 2017.
13.	Evaluating Efficiency of Geo5 In the Analysis of Pile Foundation	Rawat, S., Varghese, E., Mittal, R.K. and Kaushik, P	7th Conference on Deep Foundation Technologies for Infrastructure Development in India	Chennai, October 5-7, 2017.
14.	Evaluation of tack coat materials and application rates for asphalt interlayer bond strength	Vinayak Malaghan and Amit Goel	4th Conference of Transportation Research Group of India (CTRG)	Mumbai, 17-20 December 2017
15.	Evaluation of use of Bottom Ash in cement masonry and concrete regarding their mechanical properties	Rajiv Gupta	European Advanced Materials Congress, International Association of Advanced Materials	22-24 August 2017
16.	Flexural Response of CFRP Strengthened Masonry Walls	S. B. Singh and Pankaj Munjal	20th International Conference on Composite Structures (ICCS20)	Paris, 4-7 September 2017
17.	Flood-risk mapping using GIS	Rajiv Gupta, Harshvardhan Jha, Kamila Varma, Bikram Mann	International Perspective on Water Resources and the Environment Conference, IPWE 2017,	Wuhan, China, January 4-6, 2017
18.	Free Vibration Study of Plates Made up of Carbon Nanotubes Reinforced Composite Material	S.N. Patel	3rd Indian Conference on Applied Mechanics (INCAM-2017)	5-7 July 2017
19.	Goel, Development of relationship between DCP and LWD estimates for unbound layers of flexible pavements	V. Vyas, A. Goel	National Conference on Sustainable Engineering Practices In Materials, Water & Energy Technologies(SEPMWE T-2017)	Bahal, 18-19 March 2017
20.	Identification of Suitable Ready Mix Concrete Suppliers using Geographic Information System	Nivedha, P., Athira, G., Bahurudeen A., and Sahu P	71 <sup>st</sup> RILEM Week & ICACMS, 2017	Chennai, September 3 - 8, 2017
21.	Impact-based integrated simulation model to enhance water quality of Ganges.	Srinivas, R., and Singh, A.P.	3rd International Conference on the Status and Future of the World's Large Rivers, New Delhi, India	New Delhi, 18-21 April 2017
22.	Nonlinear dynamic response of laminated composite stiffened plates	S.N. Patel	International Conference on Composite Materials and Structures, IIT Hyderabad	Hyderabad, 27-29 December 2017
23.	Purifying Porous Concrete for Drinking Water	Rajiv Gupta, Ayub Ahmed and Gaurav Tyagi	5th Asia Conference on Mechanical and Materials Engineering (ACMME 2017) at University of Tokyo	Tokyo, Japan, June 9-11, 2017
24.	Quantification of Ideal Spatial Accessibility Using Three	Harish, P., Kanuganti, S., Sarkar, A.K., Singh A.P.	96th Annual meeting of Transportation	Washington, D.C, 08-12 January

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
	Step Floating Catchment Area Method		Research Board, 08-12 January 2017,	2017
25.	Spatial temporal analysis of major seaport freight flows in India	Sahu, P., Padhi, A., Patil, G., Mahesh, G., and Sarkar	71st RILEM Annual Week & ICACMS 2017	Chennai, September 3 - 8, 2017
26.	Study on feasibility of adding phase change material in wearing course using cold mix technology	Piyush Sharma and Amit Goel	71st RILEM Annual Week & ICACMS 2017	Chennai, September 3 - 8, 2017
27.	Time Series Prediction for Water Resource Management in Semi-Arid Zone	Gaurav Kumar & Rajiv Gupta	2nd International Conference on Sustainable Computing Techniques in Engg. Science and Management, Jain Engg. College, Belgaum, Karnataka, India	Belgaum, January 27-28, 2017
28.	Resilience Based earthquake design of buildings: current practice, problems and opportunities in Indian scenario	Harish Kumar Mulchandani and G Muthukumar	ASCE India Conference on urbanization challenges in emerging economies	New Delhi, 13th-14th December, 2017
29.	Use of Hazard Consistent Ground Motions to Achieve Earthquake Resilient Design of Buildings	Harish Kumar Mulchandani and G Muthukumar	ASCE India Conference on urbanization challenges in emerging economies	New Delhi, 13th-14th December, 2017
30.	Model Tests on Strip Footings Resting on Tire-Chip Reinforced Sand Under Inclined Loading,	Gill, G. and Mittal, R.K.	ASCE India Conference on urbanization challenges in emerging economies	IIT-New Delhi, 13th-14th December, 2017

#### F. BOOKS/BOOK CHAPTERS PUBLISHED DURING THE YEAR

##### Book/Book Chapter

- Kumar K. (2017), "Basic Geotechnical Earthquake Engineering", 2nd Edition, New Age International Publishers.
- Rajiv Gupta and David James, (2017) edited the papers of International Conference on Sports Engineering (ICSE 2017), October 23-25, Jaipur, India and published by Excel Printing, New Delhi.
- Bahurudeen, A, Prasanta K. Sahu, and Nikhil Saboo, "Construction materials and technology", National Mission Project on Pedagogy (Main Phase), outcome based technical notes, 2017, Sponsored by IIT Kharagpur.
- Muthukumar, Manoj Kumar, and S. B. Singh, "Structural Analysis-II, National Mission Project on Pedagogy (Main Phase), outcome based technical notes, 2017, Sponsored by IIT Kharagpur.

#### G. INVITED TALKS/KEY-NOTE LECTURES DELIVERED/SESSION CHAIRING BY FACULTY MEMBERS

- Prof. S.B. Singh delivered Invited lecture at workshop on "Design and Development of Sustainable Concrete in the Era of Global Warming organized by NIT Surathakal on 9<sup>th</sup> January 2017 on FRP and ECC Applications for Structures
- Prof. S.B. Singh delivered Invited lecture at NIT Surathakal on 9<sup>th</sup> January 2017 on FRP and ECC Applications for Structures.
- Prof. Rajiv Gupta delivered a session Talk on Allocation using GIS and GA; One-Week Short-Term Training Program (14-19 March, 2017) on 'Sustainable Construction Engineering for Smart City Development'. Department of Civil Engineering, VNIT, Nagpur, 2017
- Prof. Rajiv Gupta delivered a keynote speech on Building Information Modeling: Plugs-in for Structural Design Optimization, Construction Practices, and Seismic Response, International Conference on Emerging Technology in Structural Engineering (ETSE-2017), KDK College of Engineering and Institute for Engineering Research and Publication, Nagpur, 17th-18th March, 2017,
- Prof. Rajiv Gupta delivered an Invited talk on Water Sustenance through Citizen Empowerment, on Water Day, 22nd March 2017 Basant Kumar Birla Institute of Engineering and Technology, Pilani
- Prof. Rajiv Gupta delivered a Keynote speech on Desert Development Technologies: A Review, during 2nd National Conference on "Technology enabling Modernization of Rural India" on 13th-14th April 2017 in Suresh Gyan Vihar University, Jaipur.

- Prof. Rajiv Gupta delivered a speech during the Inaugural 2nd National Conference on “Technology enabling Modernization of Rural India” on 13th-14th April 2017 in Suresh Gyan Vihar University, Jaipur.
- Prof. Prasanta Kumar Sahu delivered a talk on “Recent research in freight generation modeling – An Indian Context”, National Institute of Technology, Surathkal, March, 2017.
- Mr. Srinivas, R delivered a keynote lecture on “Present Threats and Best management practices for river Mahanadi” at 'National Consultation on Mahanadi: Yesterday, Today and Tomorrow', Bhubaneswar on September 5, 2017.

#### H. CONFERENCES, SEMINARS & WORKSHOPS, INVITED TALKS CONDUCTED:

- 1) Dr. Velmurugan, (Scientist F, Traffic Engineering and Safety Division, CRRI, New Delhi) delivered expert lecture on Road Safety Issues and Case Studies on Road Safety and An overview of Highway Capacity Studies on April 24, 2017.
- 2) Civil Engineering Association (CEA) has conducted STAAD PRO Software workshop series, primarily focused on design and analysis of concrete structures on September 2, 2017.
- 3) Mr. Sitaramanjaneyulu, Senior Principal Scientist, Pavement Evaluation Division, CRRI delivered a talk on “State of Art NDT Techniques of Pavement Evaluation and Innovative of Pavement Technologies for Construction and Maintenance” on 18<sup>th</sup> September 2017.
- 4) Department of Civil Engineering has organized a 3-day training session for 'Abaqus software' from 18-20 September 2017.
- 5) Department of Civil Engineering has organized a National Level workshop on “Impact of PMGSY Roads on Accessibility in Rural Areas” on May 6, 2017.
- 6) Department of Civil Engineering conducted a training session on “Mx Roads” during September 2017.

#### I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION - NII

#### J. AWARDS AND RECOGNITIONS

##### FACULTY:

- Prof. Rajiv Gupta (Rajiv Gupta, Ayub Ahmed and Gaurav Tyagi) won the Best Session Paper award on “Purifying Porous Concrete for Drinking Water”, 5<sup>th</sup> Asia Conference on Mechanical and Materials Engineering (ACMME 2017) at University of Tokyo, Tokyo, Japan during June 9-11, 2017.
- On invitation, Dr. Prasanta Kumar Sahu visited University of Regina during January 2017.

##### STUDENTS:

- Kabil Bhargava (2014A2PS0796P) and Harshoman Sinha (2016A2PS0830P) won the prestigious OP Jindal Engineering and Management Scholarship in the year 2017.
- Mr. Rishi Badola and Mr. Prateek Arora (both fourth-year first-degree students) are selected as the grand winners of Student Quiz, celebrating 2017 India Engineers' Day, conducted by Institution of Civil Engineers, London.
- Siddharth Awasthi (2011A2PS516P) completed his M.S. in Structural Engineering from Stanford University, USA in the year 2017.
- Prem Gandhi (2012A2PS585P) has got admission at Purdue University for Construction Management program in the year 2017.
- Onkar Ashish (2014A2PS0602P) and Mayank Vikhona (2014A2PS0623P) secured first runner up position in all over the world and first position in India in Bentley International Student Design global competition in 2017.
- Rishi Badola (2014A2PS0591P) was awarded a scholarship of INR 40,000/- on securing an All India Rank of 7 in Nationwide Education Scholarship Test (NEST – Senior-II) conducted across India in January 2017.
- Rishi Badola (2014A2PS0591P) and Akshansh Rai (2014A2TS0788P) won the first prize in bending moment online quiz based on civil engineering organized by Ethos India in Feb-March, 2017 and sponsored by 'TATA TISCON'.
- Pratyaksh Agarwal (2013A2PS671P) got offer letter for admission in London Business School for Masters in Management course through GMAT in the year 2017.
- Richa Priyadarshini (third year first degree student) was awarded two-month research internship at the Technical University, Munich in the year 2017.

**K. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR**

1. Acoustic Emission: Final Assembly One Channel USB AE Node
2. Regulated DC power, Permeability Cell, Vacuum Desiccator
3. Constant & Varying Head App. & Darcy Friction Factor Apparatus
4. All Days Electronic Theodolite 2 Sec. Accuracy
5. Plastic Mould 150mm Cube, Compressor for Demolding
6. Hobart Motor Mixer-10 Liter Capacity
7. PH/ORP Meter, 230 V (EDGE@DEDICATED)

**L. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES**

The Civil Engineering Association (CEA) and Civil Students Society organized the following events in the year 2017.

**Formal Meet**

A formal meet was held on 12th August, 2017 in Lecture Theatre Complex. The meet was attended by faculty members, research scholars, newly admitted students and senior year students in order to brief the scope and expectations of a civil engineer. The meet started with an address by Prof. Ashoke Kumar Sarkar, Senior Professor in Civil Engineering Department. The association team made a brief presentation about the civil engineering profession. The meet finally concluded with interaction of freshmen entrants with faculty members and seniors. One-on-one interaction of the students with the faculty over snacks initiated the bond that will be developed over the years. Later informal interaction was also held with the senior students to satisfy the queries of newly admitted students by the Civil Engineering Association (CEA).

**APOGEE Meets**

Three APOGEE Project Meets were held. Intense brainstorming was done to discuss ideas as well as the project pitching rounds to follow. Several exciting events were planned for APOGEE 2018. Emphasis was given to make the APOGEE events better and more challenging. Project ideas were encouraged and many projects got selected for further rounds.

**Other Events**

CEA organized the event "Jenga" on 15th August 2017 and attracted 80 participants to build the tallest tower out of the small blocks with an intention to enhance their thinking ability about the stability of structures.

Civil Students Society (CSS) conducted a talk by GATE AIR-1 and AIR-2 which was attended by a large number of students from campus. CSS also organized a general quiz and two group discussions for personality development of students in the semester. Many students participated in the competition by forming their own groups.

The Training Head of CEA conducted a workshop on STAADPRO (02-09-2017) and a certification workshop on Primavera was also organized by CEA.

**Farewell Meet**

A farewell meet was organized for the passing out class of 2017, in the First semester on 21st November 2017. This event was attended by faculty members of the Civil Engineering department. The CEA bid farewell to its graduating students. This event was preceded by the farewell dinner.

**Site Visits:**

An on-campus site visit to the newly constructed Sewage Treatment plant on 25th August, 2017 was organized for the benefit of the students. The visit was supervised by, Dr. Anupam Singhal, Department of Civil Engineering, who gave his valuable inputs throughout the visit. It received wide response and appreciation.



**B1.10.3 Department: Chemical Engineering**

Number\* of faculty members (as on 31 December 2017)

<b>Professor</b>	01*
<b>Associate Professor</b>	03
<b>Assistant Professor</b>	09+01*
<b>Lecturers</b>	01*

\* Off Campus.

**Head of the Department:** Prof. H. K. Mohanta**Contact details:** harekrishna@pilani.bits-pilani.ac.in**Number of PhD Scholars:** 10 + 1\* (\* Part Time)**Ph.D. Thesis Submitted during the year:** 01**A. SPONSORED RESEARCH ACTIVITIES****Total number of Sponsored Projects in the department:** 07**i. Ongoing projects**

Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)	Year
Design and development of a novel biomass stove for cooking application	Dr. Pratik N Sheth	BITS, Pilani	9.00	2016 - 2018
Hydrogen production from ethanol by temperature reforming methods using modified Ni-Sn/Al <sub>2</sub> O <sub>3</sub> and Ni-Sn/CeO <sub>2</sub> Catalysts	Dr. Banasri Roy	DST-SERB	19.34	2016 - 2019
Dual Catalytic Monolith Reactor for Biogas Reforming	Dr. Srinivas Appari	BITS, Pilani	8.25	2017 - 2019
Particle Image Velocimetry studies on a bench-scale cold-flow Fluidized Catalytic Cracking (FCC) riser unit.	Dr. Priya C Sande	BITS, Pilani	10.00	2017 -2019
Mixed-Matrix membranes (MMM) for separation of CO <sub>2</sub> /CH <sub>4</sub> for biogas up-gradation	Dr. Bhanu Vardhan Reddy Kuncharam	BITS, Pilani	2.00	2017 - 2019

**ii. Projects sanctioned during the year**

Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)	Year
Dual Catalytic Monolith Reactor for Biogas Reforming	Dr. Srinivas Appari	BITS, Pilani	8.25	2017- 2019
Particle Image Velocimetry studies on a bench-scale cold-flow Fluidized Catalytic Cracking (FCC) riser unit.	Dr. Priya C Sande	BITS, Pilani	10.00	2017- 2019
Mixed-Matrix membranes (MMM) for separation of CO <sub>2</sub> /CH <sub>4</sub> for biogas up-gradation	Dr. Bhanu Vardhan Reddy Kuncharam	BITS, Pilani	2.00	2017- 2019

**iii. Projects completed this year**

Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)	Year
Zinc Recovery from Industrial Waste using Bioremediation	Dr. Suresh Gupta	BITS, Pilani	48.00	2014- 2017
Syngas production by reforming of biogas over Ni-based catalytic monoliths	Dr. Srinivas Appari	BITS, Pilani	2.00	2015 -2017
Bioremediation of waste automobile engine oil	Dr. Amit Jain	BITS, Pilani	2.00	2015 -2017
Non linear modeling and simulation of chemical process	Dr. Ajaya Kr. Pani	BITS, Pilani	2.00	2016 -2017
Experimental studies on a bench-scale cold-flow FCC unit	Dr. Priya C Sande	BITS, Pilani	2.00	2016 -2017

**B. PUBLICATIONS****(i) The faculty of the department published papers in international refereed journals during the year.**

1. **Smita Raghuvanshi**, Vikrant Bhakar, Chelikani Sowmya, K.S. Sangwana, Waste water treatment plant life cycle assessment: treatment process to reuse of water, *Procedia CIRP*, Vol. 61, pp. 761-766, 2017.
2. Somesh Mishra, **Smita Raghuvanshi**, **Suresh Gupta**, Kaushik Raj, Application of novel thermo-tolerant haloalkalophilic bacterium *Halomonas stevensii* for bio mitigation of gaseous phase CO<sub>2</sub>: Energy assessment and product evaluation studies, *Process Biochemistry*, Vol. 55, pp. 133-145 (2017).
3. Somesh Mishra, Piyush Chauhan, **Suresh Gupta**, **Smita Raghuvanshi**, Rajnish P. Singh, Prabhat N. Jha, CO<sub>2</sub> sequestration potential of halo-tolerant bacterium *Pseudomonas aeruginosa* SSL-4 and its application for recovery of fatty alcohols, *Process Safety and Environmental Protection*, 111, 582–591 (2017).
4. Priya, **Srinivas Appari**, T Aniruddha, R Sanket, A Bahurudeen, Quantification of Carbon Content in cogeneration boiler waste and Its Effect on pozzolanic Reactivity, *Materials Today: Proceedings*, 4 (9), 9656-9663 (2017).
5. Vivek Pawar, **Srinivas Appari**, Dayadeep S Monder, Vinod M Janardhanan, Study of the Combined Deactivation Due to Sulfur Poisoning and Carbon Deposition during Biogas Dry Reforming on Supported Ni Catalyst, *Industrial & Engineering Chemistry Research* 56 (30), 8448-8455 (2017).
6. **Pradipta Chattopadhyay**, R. Arun Karthick, Characterization and Application of Surfactant Foams Produced from Ethanol-Sodium Lauryl Sulfate-Silica Nanoparticle Mixture for Soil Remediation, *Macromolecular Symposia*, 376(1), DOI: 10.1002/masy.201600182, 2017.
7. B. Patil, S. Sharma, **H.K. Mohanta**, **Banasri Roy**, BINIVOX Catalyst for Hydrogen Production from Ethanol by Low Temperature Steam Reforming (LTSR), *Journal of Chemical Sciences*, 129(11), 1741-1746, 2017.
8. P. Chopra, A.Ghosh, **Banasri Roy**, T. K. Ghanty, Theoretical Prediction of Noble Gas Inserted Halocarbenes: FNgCX (Ng = Kr, and Xe; X = F, Cl, Br, and I), *Chem Phys*, Vol. 494, pp.20–30 (2017).
9. B. Singh, S. Ghosh, S. Aich, **Banasri Roy**, Low temperature solid oxide electrolytes (LT-SOE): A review, *J. Power Sources*, Vol. 339, 103-135 (2017).
10. S. Sharma, B. Patil, A. Pathak, S. Ghosalkar, H. K. Mohanta and B. Roy, "Application of BICOVOX catalyst for hydrogen production from ethanol", *Clean Technologies and Environmental Policy*, DOI 10.1007/s10098-017-1394-1.
11. A. Rao, V. S. Pundir, A. Tiwari, Y. Padarathi, N. V. M. Rao, S. Aich, B. Roy, "Investigating the Effect of Dopant Type and Concentration on TiO<sub>2</sub> Powder Microstructure via Rietveld Analysis", *Journal of Physics and Chemistry of Solids*, 13 164–176 (2018).
12. R. Arun Karthick, **Pradipta Chattopadhyay**, Remediation of Diesel Contaminated Soil by Tween-20 Foam stabilized by Silica Nanoparticles, *International Journal of Chemical Engineering and Applications*, 8(3), pp. 194- 198 (2017).

**(ii) The faculty of the department published papers in international/national conferences during the year.**

1. Dhage Sumit, **Gupta Suresh**, **Jain Amit**, Bioremediation of Waste Engine Oil by Bacteria Isolated from Engine-oil Contaminated Soil, *Proceedings of 6th National Conference On Chemical & Environmental Sciences (NCCES -2017)*, Under aegis of The Indian Science Congress Association (Kurukshetra Chapter) April 01, 2017, Panipat, India.
2. Dhage Sumit, **Gupta Suresh**, **Jain Amit**, "Experimental and growth kinetics studies of bacterium isolated from waste automobile engine oil contaminated soil" *Proceedings of International Conference on Waste Water Management (ICWW-2017)*, August 17-19, 2017, Coimbatore, India.
3. R. Arun Karthick, **Pradipta Chattopadhyay**, Remediation of Diesel Contaminated Soil by Tween-20 Foam stabilized by Silica Nanoparticles, *Proceedings of 4th International Conference on Chemical and Food Engineering (ICCFE 2017)*, Osaka, Japan, March 28-30, 2017.
4. Jain, V., Kishore, P., Kumar, R. A., & **Pani, A. K.** (2017, January). Inferential Sensing of Output Quality in Petroleum Refinery Using Principal Component Regression and Support Vector Regression. In *Advance Computing Conference (IACC)*, 2017 IEEE 7th International (pp. 461-465). IEEE, 5-7 January 2017.
5. Tapas K Patra and **P N Sheth**, "Parametric study of downdraft biomass gasification using a comprehensive transport and kinetic model", *Proceedings of AIChE Annual Meeting 2017*, Oct 29- Nov 3, Minneapolis, USA.

**C. CONFERENCES/WORKSHOPS ATTENDED/PAPERS PRESENTED**

1. **Amit Jain** attended the International Conference on Waste Water Management (ICWW-2017), August 17-19, 2017, Coimbatore, India.
2. Priya, Shruti Gupta. **Srinivas Appari**, Detailed kinetic modeling of NH<sub>3</sub> decomposition on Platinum, APCAT 7 (2017), January 17- 21, 2017, ICT Mumbai.
3. Shruti Gupta, Prasad Sunil Sahu, **Srinivas Appari**, Syngas production by reforming of biogas over Ni- based catalytic monoliths, CHEMCON- 2017, Haldia Institute of Technology, Haldia, West Bengal, India, December 27-30, 2017.
4. **Amit Jain** attended the International conference on Advanced Production and Industrial Engineering, New Delhi, India on October 6, 2017.
5. **Smita Raghuvanshi** attended & presented paper entitled "Waste water treatment plant life cycle assessment: treatment process to reuse of water", in 24th CIRP Conference on Life Cycle Engineering (CIRP LCE) 2017 held at Kamakura Japan, from March 8-10, 2017.
6. Roshan Chandra, Raman Sharma and **Arvind Kumar Sharma**, Attrition of Bed Particles in a Re-Circulating Fluidized Bed Reactor, IEA Clean Coal Centre's 8th International Conference on Clean Coal Technologies (CCT 2017), May 8 -12, 2017, Cagliari, Italy.
7. Abhishek Mishra, Roshan Chandra, Raman Sharma and **Arvind Kumar Sharma**, Cold Model Study of Re-Circulating Fluidized Bed Reactor for Chemical Looping Combustion, 6th National Conference on Chemical and Environmental Sciences: Emerging Dimensions & Challenges Ahead (NCCES -2017), April 1, 2017, Panipat, India.
8. **Pradipta Chattopadhyay** attended & presented paper entitled "Remediation of Diesel Contaminated Soil by Tween-20 Foam stabilized by Silica Nanoparticles", Proceedings of 4th International Conference on Chemical and Food Engineering (ICCFE 2017), Osaka, Japan, March 28-30, 2017.
9. **Pradipta Chattopadhyay** attended workshop- 4th Advance course in Surface Sciences being organized at New Delhi from Oct 30th- Nov 2nd, 2017.
10. **Pratik N Sheth** attended the National Workshop On Hydrogen Energy And Fuel Cell, JAN 23-24, 2017 Organized by: National Institute Of Solar Energy, Mnre, Gurgaon
11. **Pratik N Sheth** attended International Conference on Sports Engineering, Oct 23-25, 2017 at Jaipur organised by BITS Pilani.
12. Parth Joshi, Tapas Kumar Patra and **Pratik N Sheth**, "Design Modifications to Improve Tar cracking and Catalytic Tar reforming in Biomass Gasification Systems: A review", Proceedings of International Symposium & 70 th Annual Session of IChE in association with International Partners (CHEMCON-2017), Department of Chemical Engineering, Haldia Institute of Technology, Haldia, West Bengal, India, December 27-30, 2017.
13. Sharma, B. Patil, H.K. Mohanta, B. Roy, Ethanol Steam Reforming Over BICUVOX Catalyst for Hydrogen Production, Proceedings of the 70th Annual Session of Indian Institute of Chemical Engineers (CHEMCON-2017), Dec 27-30, 2017, Haldia Institute of Technology, Haldia, West Bengal.
14. **Pratik N Sheth** and **Srinivas Appari** attended the India Energy Forum by CERAWEEK, IHS Markit, Taj Diplomatic Enclave, Oct 8-10, 2017.

**D. BOOKS/BOOK CHAPTERS PUBLISHED:**

1. Sheth, P.N., S. Gupta and S. Kumar (2017). Energy Integration in Process Plants. In Sustainable Utilization of Natural Resources, Edited by Prasenjit Mondal and Ajay K. Dalai, CRC Press: 513-537.

**E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED**

1. Dr. Amit Jain, Dr. H K Mohanta & Dr. Ajaya Kr. Pani conducted the Workshop on "Introduction to Matlab and Simulink for Chemical Engineers", February 4-5, 2017.
2. Dr Smita Raghuvanshi was one of the organizing secretaries in Joint Indo German Conference on Sustainable Engineering, held from Sep 15-16, 2017, organized by Indo-German Center for Sustainable Manufacturing & Dept of Mechanical Engineering at BITS-Pilani, Pilani campus.
3. Dr Suresh Gupta and Dr Pratik N Sheth conducted the 3rd Workshop on Analytical Instruments for Chemical and Environmental Engineers, WAICEE – 2017, organized during Feb 10-11, 2017.

**F. INVITED TALKS GIVEN BY BITS FACULTY:**

1. Dr Smita Raghuvanshi has delivered a talk on "Gas chromatography-mass spectrometry analysis of products obtained from CO<sub>2</sub> mitigation using bacterial species", in International Conference on Molecular Spectroscopy - ICMS-2017 held from 8-10 Dec, 2017 at Mahatma Gandhi University, Kottayam, Kerala, India.
2. Dr Arvind Kumar Sharma delivered an invited lecture on Environmental Protection : Issues and Perspectives, TEQIP-II Sponsored FDP, Development in Sustainable Energy & Environment Protection, Dept. of Chemical Engineering, BIET, Jhansi, India, March 27-31, 2017.

**G. INVITED TALKS ARRANGED IN THE DEPARTMENT**

1. Dr Ajay Kumar, Associate Professor, Department of Biosystems and Agricultural Engineering, Oklahoma State University, Stillwater Campus, USA delivered a lecture entitled "Energy and Chemicals from Biomass and Wastes: Challenges and Opportunities" on 11th July 2017.
2. Mr Ganpati Kamble, Technical Head, Josts Engineering Com Ltd, delivered a talk entitled "Fluid Mechanics instrumentation used in research and industry" on 24th August 2017.
3. Mr. Divyesh Patel, Alumni 1977 Batch delivered talk on "green energy technologies in oil and gas industry and semiconductor manufacturing/ novel applications of graphene in electric car battery, semiconductor and marine industries"20/11/2017.
4. Dr. Siddharth Mukherjee, Director-Technology, Air Liquide Global E&C Solutions India Pvt., delivered talks on on-campus Course: Process Design Principles II on 19.8.17,09.09.17 and 18.11.17.

**H. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS**

1. Dr. Pradipta Chattopadhyay has received INSA Award in Decemeber 2017 (Bilateral Exchange Programme 2018) to visit Poland for 3 weeks in Summer, 2018.
2. Dr. Arvind Kumar Sharma has been a Member of School Management Committee (SMC) for Birla School, Pilani, India.
3. Dr. Arvind Kumar Sharma prepared GATE (level) questions for test/examination conducted for the selection of faculty at Dr. A. P. J. Abdul Kalam Technical University (AKTU) - Lucknow, India | July 2017.
4. Dr. Arvind Kumar Sharma has been an examiner for M.Tech. Thesis at HBTU Kanpur, India | Oct 2017.

**Students:**

1. A team consisting of 5 students (Varun Mahesh; Harsha Mohan; Rayaam Ghosh; B. Saicharan; Pranjali Agrawal) and a faculty member (**Dr Pratik N Sheth**) won the 2nd Prize and 300 USD in the Pan India Student Design Contest

**I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION AND INDUSTRY IMMERSION**

1. International Collaboration- Dr. Pradipta Chattopadhyay received INSA Award (Bilateral Exchange Programme 2018)
2. International Collaboration- Dr. Banasri Roy received Fellowship for Indian Scientists Abroad Under Bilateral Exchange Programme 2017, Indian National Science Academy (INSA). She Visited West Pomeranian University of Technology from June 1st to 29th 2017. The West Pomeranian University of Technology signed a cooperation agreement with BITS-Pilani, Pilani campus.

**J. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR**

1. Fermenter
2. Recirculating bed setup
3. HPLC Column Washing Pump
4. Digital Interfacial Tensiometer

**K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES****Chemical Engineering Association:**

The Chemical Engineering Association helped the organizers of Extropy 2017- the chemical fest of BITS Pilani in the best possible way like managing their accounts, connecting them with APOGEE organizers, recruiting juniors etc. Extropy 2017 was organized for the first time in February 2017. It started with a talk on IPR and Patents by Dr. Nitin Deshpande, HUL, Bangalore. Various activities like Aspen workshop, Industry 101, interactive quiz, chem hunt, water tag etc. were conducted and gained wide participation amongst students.

Just after Exropy, association worked for APOGEE 2017. This year four events were organized as follows:-

1. Dexter's Laboratory- A three round event in collaboration with chemistry and bio association. Chemical Assoc conducted the first round that is quizzing round
2. Chemhunt- the online event was conducted with the help of coding club.
3. Chem E car- the participants were given some ingredients like baking soda, vinegar, plastic bottles and they had to prepare a car which can cover longest distance.
4. Chem wars- it was a quizzing event which checked the knowledge in chemistry of participants.

All the four events attracted huge amount of audience and were a great success.

On April 21st 2017, the Association organized farewell ceremony for the passing out students which was followed by dinner. In the ceremony, various students were also awarded for their outstanding performance in academics.

The new semester started with the informal interaction held on 8th August where 1st year B.E. & M.E. students were called to meet the office bearers of ChEA for answering various questions regarding Chemical Engineering, the Chemical Engineering Association (ChEA) and Indian Institute of Chemical Engineering (IICHE) as well as about various events organized in BITS. The Association collected data from the final year students about their summer internships and shared brief data from internships and placements in chemical engineering. The Chemical Engineering Association along with the other departmental associations celebrated Engineers Day on 15th September by organizing events like Quiz, Power Point Presentations, Poster Presentations on the theme "Role of Engineers in developing India". For APOGEE – 2018 the association organized its first APOGEE meet in November, 2017 to briefly explain students about APOGEE and various events organized during APOGEE- mainly about Project Presentation, Poster Presentation rules, categories and important dates.

#### **IChE Pilani Regional Center:**

An invited talk and interactive session of Dr K N Ponnani with B.E, M.E. and Ph.D. students have been organized on 17th January 2017. Dr. Ponnani is a Professor (on Contract) in the Department of Chemical Engineering, BITS Pilani, Goa Campus and has almost 36 years of experience in industrial R&D and has been involved in designing, fabricating, installing and commissioning bench scale, pilot scale and demonstration units in a spectrum of industries.

A One day Workshop on "Introduction to Matlab and Simulink for Chemical Engineers" have been organized on February 5, 2017. The total registration for the workshop was 35 and all the participants successfully completed the workshop and the participation certificates were also given.

During February 10-11, 2017, IChE Pilani Regional Centre in association with Department of Chemical Engineering, BITS-Pilani, Pilani Campus, has conducted a 3<sup>rd</sup> Workshop on Analytical Instruments for Chemical and Environmental Engineers (WAICEE – 2017). The workshop provided exceptional opportunity to postgraduate students, research scholars and faculty members to get knowledge and training in some of the very important analytical instruments for research such as GC, FTIR, AAS, DSC, XRD, BET surface area analyzer etc. This premier workshop also brought together galaxy of personalities (**Dr Tarun Chattapadhyay**, Senior R&D Scientist, Analytical Chemistry Honeywell UOP, **Dr Siddharth Mukherjee**, Director – Technology, Air Liquide Global E&C Solutions India Pvt. Ltd. , **Dr Asit Dutta**, Toshvin Analytical Ltd. and **Mr Jagdish M Naidu**, Product Manager – Inorganic Chemistry, Perkin Elmer from industry and academia who delivered expert lectures on several related basic and advanced topics.

#### **Participation in the workshop (WAICEE-2017)**

Total 40 participants (17 outside BITS + 23 BITS participants) were registered for the workshop. Outstation participants included faculty members, research scholars and PG students from Manipal University, Jaipur, MNIT Jaipur, Amity University, NEERI – Nagpur, Banasthali University and SVU College of Engg., Tirupati. BITS participants included the research scholars and ME students from Biological Sciences, Chemistry and Pharmacy departments.

On March 21, 2017 IChE PRC Students' chapter have organized "Hinteria", a quiz contest. The event was focused on checking the basic concepts of Chemistry of senior secondary education 11<sup>th</sup> and 12<sup>th</sup>. The Questions were based on the elementary chemistry, physics. The papers make the students go to their coaching class's time. It was a 2 hour event conducted at BITS Pilani, Pilani Campus. It had 3 rounds: 1.) Elimination; 2.) Classified; 3.) Ecstasy. Elimination was the first round. There were 3 Goodies Round after the end of each round in which goodies were distributed to students. Top 10 teams based on their score was nominated for the final round. There were 40 participants out whom 3 teams were selected for winner, and runner ups.

Dr. Siddharth Mukherjee, Director- Technology, Air Liquide Global E&C Solutions India Pvt. Ltd. visited BITS Pilani, Pilani Campus to deliver talks on "Principles of Process Design", organized by Department of Chemical Engineering and IChE Pilani Regional Center. The talks were held on April 1 and April 8, 2017. The design principles of heat exchangers, distillation column, pumps, condenser etc. and challenges in their commissioning were discussed.

**B1.10.4 Department: Chemistry**Number of faculty members (as on 31<sup>st</sup> December 2017)

<b>Professors</b>	04
<b>Associate Professors</b>	05
<b>Assistant Professors</b>	08
<b>Research Associate</b>	01
<b>DST Inspired Faculty</b>	01

**Head of the Department:** Prof. Bharti Khungar**Contact details:** bkhungar@pilani.bits-pilani.ac.in**Number of Ph D Scholars:** 42**Ph.D. Thesis Submitted and awarded during the year: Awarded: 8, Submitted: 3****A. SPONSORED RESEARCH ACTIVITIES**

Total number of Sponsored Projects in the department: 15. Details are given below.

**(i) Ongoing projects**

<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Title of the Project</b>	<b>Amount (Lakhs)</b>
Dr. Anil Kumar	DST-SERB	Synthesis of novel N-fused polycyclic compounds through transition metal catalyzed cascade/C–H functionalization reactions	32.84
Dr. Bibhas Ranjan Sarkar	BITS Pilani (ACRG)	Sustainable Catalytic Route to C4-C6 Carboxylic Acids by Carbonylation of Polyols	5.5
Dr. Inamur Rahaman Laskar	DST	Design and Syntheses of Heavy Metal based Aggregation Induced Emission Active Complexes and their Application in Bio-imaging	35.9
Dr. Indresh Kumar	DST-SERB	Asymmetric synthesis of [2.2.2] azabicyclo-isoquinucilidine derivatives: Towards the synthesis of related alkaloids	43.296
Mrinmoyee Basu	DST	Decoration of Co-catalyst on the Ultrathin 2D Sheets of Metal Chalcogenides and Their Application in Photoelectrochemical Water Splitting	35
Mrinmoyee Basu	DST-SERB	Decoration of Plasmonic Nanoparticles on Ultrathin 2D Nanostructure of Metal Chalcogenides and Their Application in Photoelectrochemical Water Splitting and Photocatalysis	19.82
Dr. Rajeev Sakhuja	BITS Pilani	Design and Synthesis of Multi-functional Smart Low Molecular Weight Gelators (LMWGs)	4.5
Dr. Ram Kinkar Roy	DST	Development and application of density functional reactivity theory based modeling techniques to understand the energetic of reactive and non-reactive interactions	31.55
Dr. Subit K. Saha	CSIR	Effect of Chemical Nature of Spacer group, Headgroups and Counterions of Gemini Surfactants on Solvation Dynamics and Rotational Relaxation of Coumarins in Aqueous Micelles	15.9
Dr. Subit K. Saha	UGC-DAE CSR	Investigation of unfolding and refolding of proteins by gemini surfactants with varying spacer groups using fluorescence spectroscopy and small-angle neutron scattering techniques	6.63

**(ii) Projects sanctioned**

Principal Investigator	Funding Agency	Title of the Project	Amount (Lakhs)
Dr. Ajay K. Sah	DST	Synthesis of D-glucose derived glycoconjugates and their application in molecular recognition and catalysis	30.09
Dr. Bibhas Ranjan Sarkar	DST-SERB	Studying Catalytic Carbonylation of Polyols – Sustainable Route to Carboxylic Acids	32.296
Dr. Dalip Kumar	CSIR	Design, synthesis and tubulin inhibition activity studies of novel indolyl heterocycles	21
Dr Kiran Bajaj	DST	Synthetic Probes for Staudinger Ligation: Synthesis and application of Phosphane based templates.	29.7
Dr. Rajeev Sakhuja	DST-SERB	Transition-metal-catalyzed synthesis of fused heterocycles via C-C/C-N bond forming strategies	33.27
Dr. Shamik Chakraborty	SERB	Probing the Nature of Intermolecular X–H...Se (X = O and N) Hydrogen Bonding Interactions using Matrix Isolation Infrared Spectroscopy	73.546

**(iii) Projects completed**

Principal Investigator	Funding Agency	Project Name	Amount (Lakhs)
Dr. Indresh Kumar	BITS Pilani	Organocatalytic approach towards bioactive important six-membered nitrogen heterocycles	8.2
Dr. Kiran Bajaj	DST-SERB	Study of native chemical ligation at tryptophan and aspergine sites and its application in peptide synthesis.	31.3
Dr. Shamik Chakraborty	DST	Competition between charge transfer and proton transfer processes in some newly designed Schiff Bases: Spectroscopic and theoretical investigations in condensed Phase	24.98
Dr. Surojit Pande	BITS Pilani	Graphitic carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) based semiconductor heterostructures for catalysis and electrocatalysis.	6.95

**B. PUBLICATIONS**

The faculty members of the department published fifty-three papers in international/national refereed journals during the year.

- M. P., Tantak, D. D., Mukherjee, A. Kumar, G. Chakrabarti, Dalip Kumar, A facile and microwave-assisted rapid synthesis of 2-arylamino-4-(3'-indolyl)-thiazoles as apoptosis inducing cytotoxic agents, *Anticancer Agents Med Chem* 2017, 17, 442.
- T. Varma, D. S. Agarwal, A. Sarmah, L. Joshi, Rajeev Sakhuja, D. D. Pant, Solvent effects on the absorption and emission spectra of novel (E)-4-((4-(heptyloxy)phenyl)diazanyl)benzyl (((9H-fluoren-9-yl)methoxy)carbonyl)-D-alaninate (Fmoc-al-az): Determination of dipole moment by experimental and theoretical study., *Journal of Molecular Structure* 2017, 1129, 248.
- Kiran Bajaj, Rajeev Sakhuja, Aziridine-Mediated Ligation at Phenylalanine and Tryptophan Sites., *Chemistry - An Asian Journal* 2017, 12, 1869.
- M. K. Mehra, M. P. Tantak V., Arun I. Kumar, Dalip Kumar, Metal-free regioselective formation of C-N and C-O bonds with the utilization of diaryliodoniumsalts in water: Facile synthesis of N-arylquinolones and aryloxyquinolines, *Org. Biomol. Chem* 2017, 15, 4956-4961.
- S. M. A. Shakoor, S. K. Mandal, Rajeev Sakhuja, An Articulate Oxidative Transition Metal-Free Homocoupling of Imidazo Heterocycles via C(sp<sup>2</sup>)-C(sp<sup>2</sup>) Bond Formation, *Eur. J. Org. Chem.* 2017, 18, 2596.
- M. P., Tantak, T. L., Klingler, V., Arun, A., Kumar, R., Sadana, Dalip Kumar, Design and synthesis of bis(indolyl)ketohydrazide-hydrazones: Identification of potent and selective novel tubulin inhibitors, *Eur. J. Med. Chem.* 2017, 136, 184.
- S.N.C., Sridhar, G., Ginson, P.O. V. Reddy, M. P., Tantak, Dalip Kumar, A. T. Paul, Synthesis, evaluation and molecular modelling studies of 2-(carbazol-3-yl)-2-oxoacetamide analogues as a new class of potential pancreatic lipase inhibitors, *Biorg. Med. Chem.* 2017, 25, 609.

8. Mari Ikeda, Ajay Kumar Sah, Miki Iwase, Rina Murashige, Jun-ichi Ishi-i, Masatoshi Hasegawa, Chihiro Kachi-Terajima, Ki-Min Park, Shunsuke Kuwahara, and Yoichi Habata, C–H...Cl- hydrogen bonds in solution and in the solid-state: HgCl<sub>2</sub> complexes with cyclen-based cryptands, *Dalton Trans.*, 2017, 46, 3800.
9. Mari Ikeda, Ajay Kumar Sah, Miki Iwase, Rina Murashige, Shunsuke Kuwahara and Yoichi Habata, Double-armed and tetra-armed cyclen-based cryptands, *Supramolecular Chemistry*, 2017, 29, 370–377.
10. Ramaraju, P., Mir, N. A., Singh, D., Sharma, P. and Kant, R., Kumar, I, An unprecedented pseudo-[3+2] annulation between N-PMP-aldimines and aqueous glutaraldehyde: Direct synthesis of pyrrole-2,4-dialdehydes, *Eur. J. Org. Chem.*, 2017, 3461.
11. M. Basu, R. Nazir, C. Mahala, P. Fageria, S. Chaudhary, S. Gangopadhyay, and S. Pande, Ag<sub>2</sub>S/Ag Heterostructure: A Promising Electrocatalyst for the Hydrogen Evolution Reaction, *Langmuir*, 2017, 33, 3178–3186.
12. R Nazir, P. Fageria, M. Basu, S. Gangopadhyay and S. Pande, Decoration of Pd and Pt nanoparticles on a carbon nitride (C<sub>3</sub>N<sub>4</sub>) surface for nitro-compounds reduction and hydrogen evolution reaction, *New J. Chem.*, 2017, 41, 9658.
13. Paritosh Shukla, EDITORIAL: A Unique One-Stop Publication Platform for All Organic and Bioorganic Research, *MOJBOC*; 2017; 1(1), 0006. <http://medcraveonline.com/MOJBOC/MOJBOC-01-00006.pdf>.
14. Paritosh Shukla, Akshay Sharma, and Ashok Sharma, Food Additives from an Organic Chemistry Perspective, *MOJBOC*; 2017; 1(3); 00015. doi: 10.15406/mojboc.2017.01.00015.
15. Paritosh Shukla, Ashok Sharma, Leena Fageria and Rajdeep Chowdhury, Novel Spiro/non-Spiro Pyranopyrazoles: eco-Friendly Synthesis, in-vitro Anticancer Activity, DNA binding, and in-silico Docking Studies, *Current Bioactive Compounds (CBC)*; 2017; DOI: 10.2174/1573407213666170828165512.
16. Nazir, R.; Fageria, P.; Basu, M.; Pande, S., Decoration of Carbon Nitride Surface with Bimetallic Nanoparticles (Ag/Pt, Ag/Pd, and Ag/Au) via Galvanic Exchange for Hydrogen Evolution Reaction, *J. Phys. Chem. C*, 2017 121, 19548-19558.
17. S Dhiman, NK Nandwana, S Dhayal, HK Saini, D Kumar, A Kumar, A facile synthesis of quinazolin-4(3H)-ones via copper-catalyzed one-pot, three-component tandem reaction, *ChemistrySelect*, 2017 (in press).
18. GM Shelke, Anil Kumar, Sc(OTf)<sub>3</sub>-catalyzed oligomerization of indole: One pot synthesis of 2-(2,2-bis(indol-3-yl)ethyl)anilines and 3-(indolin-2-yl)indoles, *Synthesis* 2017, 49, 4321-4326.
19. K Pandey, S Choudhary, Saroj and Anil Kumar, A facile and convenient synthesis of chromenes using reusable sulfonic acid functionalized imidazolium salt, *ChemistrySelect*, 2017, 2, 4452–4455.
20. M Jha, S Dhiman, T. S. Cameron, D. Kumar, Anil Kumar, Au-catalyzed synthesis of thiopyrano[2,3-b]indoles featuring tandem rearrangement and hydroarylation, *Org. Lett.* 2017, 19, 2038-2041.
21. S Budania, GM Shelke, Anil Kumar, Anil Kumar, Synthesis of 3-alkenylated indole and bis(indol-3-yl) derivatives catalyzed by sulfonic acid functionalized ionic liquid under ultrasound irradiation, *Synth. Commun.* 2017, 47, 646-654.
22. S Choudhary, K Pandey, Saroj, Anil Kumar, Functionalized ionic liquid-assisted chromatography-free synthesis of bis(indolyl)methanes, *Mol. Divers.* 2017, 21, 155-162.
23. NK Nandwana, S Dhiman, HK Saini, I Kumar, Anil Kumar, Synthesis of quinazolinones, imidazo[1,2-c]quinazolines and imidazo[4,5-c]quinolines through tandem reductive amination of aryl halides and oxidative amination of C(sp<sup>3</sup>)-H bond, *Eur. J. Org. Chem.* 2017, 514–522.
24. Bharti Khungar, Ankita Roy, Anand Kumar, Biswajit Sadhu, Mahesh Sundararajan, Predicting the redox properties of uranyl complexes using electronic structure calculations, *Int. J. Quantum Chem.*, 2017, 117(12), e25370.
25. Sonam Sharma, Roshan Nazir, Surojit Pande and Bibhas R. Sarkar, Microwave Assisted Efficient Suzuki-Miyaura Cross-Coupling Reactions in Water Catalyzed by Nano-Pd/gC<sub>3</sub>N<sub>4</sub> Composite, *ChemistrySelect* - 2017, Article in Press.
26. Sunita Kumari, Rishika Aggrawal, Sonu, Sayantan Halder, G. Sundar and Subit K. Saha, Effect of Hydrophobicity of Tails and Hydrophilicity of Spacer Group of Cationic Gemini Surfactants on Solvation Dynamics and Rotational Relaxation of Coumarin 480 in Aqueous Micelles, *ACS Omega* 2017, 2, 5898–5910.
27. Sonu, Sayantan Halder, Sunita Kumari, Rishika Aggrawal, Vinod K Aswal and Subit K Saha, Study on interactions of cationic gemini surfactants with folded and unfolded bovine serum albumin: Effect of spacer group of surfactants, *Journal of Molecular Liquids*, 2017, 243, 368-379.
28. Sunita Kumari, Sonu, G. Sundar, and Subit K. Saha, Effect of organic and a Hofmeister series of inorganic counterions on the solvation dynamics and rotational relaxation in aqueous micelles of hexadecyltrimethylammonium surfactants, *Journal of Photochemistry and Photobiology A: Chemistry*, 2017, 345, 98-108.



29. Archana Choudhary; Bidisa Das; Saumi Ray, Encapsulated Schiff base nickel complex in zeolite Y: Correlation between catalytic activities and extent of distortion supported by experimental and DFT studies, *Inorganica Chimica Acta*; 2017, 462, 256-265.
30. Aabid Hamid, Atul Anand and Ram Kinkar Roy, The charge transfer limit of a chemical adduct: the role of perturbation on external potential, *Phys. Chem. Chem. Phys.* 2017, 19, 10905-10912.
31. P. Alam, S. Dash, C. Climent, G. Kaur, A. Roy Choudhury, D. Casanova, P. Alemany, R. Chowdhury, I. R. Laskar, Aggregation Induced Emission' Active Iridium(III) Complexes with Applications in Mitochondrial Staining, *RSC Adv.*, 2017, 7, 5642-5648.
32. S. Maji, P. Alam, G. S. Kumar, S. Biswas, P. K. Sarkar, B. Das, I. Rehman, B. B. Das, N. R. Jana, I. R. Laskar and S. Acharya, Induced Aggregation of AIE-active Mono-cyclometalated Ir(III) Complex into Supramolecular Branched Wires for Light Emitting Diodes, *Small*, 2017, 1-17.
33. L. Fageria, v. Pareek, R. Dilip, A. Bhargava, S. Pasha, I. R. Laskar, H. Saini, S. Dash, R. Chowdhury, J. Panwar, Biosynthesized protein-capped silver nanoparticles induce ROS-dependent pro-apoptotic signals and pro-survival autophagy in cancer cells, *ACS Omega* 2017, 2, 1489–1504.
34. Clàudia Climent, Parvej Alam, S. S. Pasha, G. Kaur, A. Roy Choudhury, I. R. Laskar, D. Casanova, P. Alemany, Dual emission and Multi-Stimuli-Response in Iridium(III) complexes with Aggregation-Induced Enhanced Emission: Application to Quantitative CO<sub>2</sub> Detection, *J. Mater. Chem. C*. 2017, 5, 7784.
35. S. S. Pasha, H. R. Yadav, A. R Choudhury, I. R Laskar, Strategic Design of 'Aggregation Induced Emission (AIE)' Active Salicylaldehyde based Schiff Base: Study of Mechanoluminescence and Sensitive Zn(II) Sensing, DOI: 10.1039/x0xx00000x.
36. Dinesh Kumar, Achintya Kumar Dutta, Prashant Uday Manohar, Resolution of the Identity and Cholesky Representation of EOM-MP2 Approximation: Implementation, Accuracy and Efficiency, *J. Chem. Sci.* 2017, 129(10), 1611-26.
37. Devesh S. Agarwal, Rajnish Prakash Singh, K. Lohitesh, Prabhat N. Jha, Rajdeep Chowdhury, Rajeev Sakhuja., Synthesis and evaluation of bile acid amides of  $\alpha$ -cyanostilbenes as anticancer agents., *Molecular Diversity*, 2017, in Press.
38. Shakoor, S. M.; Agarwal, D.; Khullar, S.; Mandal, S. K.; Sakhuja, Rajeev, Solvent-Driven Iodine-Mediated Oxidative Strategies for the Synthesis of Bis(imidazo[1,2-a]pyridin-3-yl)sulfanes and Disulfanes, *Chemistry An Asian Journal*, 2017, in press.
39. Joshi, S.; Kumari, S.; Sarmah, A.; Pant, D. D.; Sakhuja, Rajeev, Detection of Hg<sup>2+</sup> ions in aqueous medium using an indole-based fluorescent probe: Experimental and theoretical investigations, *Journal of Molecular Liquids*, 2017, 248, 668.
40. Gogoi, N.; Agarwal, D.; Sehgal, A.; Chowdhury, D.; Sakhuja, Rajeev, One-Pot Synthesis of Carbon Nanodots in an Organic Medium with Aggregation-Induced Emission Enhancement (AIEE): A Rationale for "Enzyme-Free" Detection of Cholesterol, *ACS Omega*, 2017, 2, 3816.
41. Fayaz Baig, Sadhika Khullar, Sanjay K. Mandal, and Madhushree Sarkar, Coordination Polymers Comprised of an Exo Bifunctional Schiff's Base Ligand and Succinate Dianion: Critical Analysis of Factors Affecting the Structures and Framework Dimensionality, *Chemistry Select*, 2017, 2, 11677-11685.
42. Roshan Nazir, Pragati Fageria, Mrinmoyee Basu, Subhashis Gangopadhyay and Surojit Pande, Decoration of Pd and Pt nanoparticles on a carbon nitride (C<sub>3</sub>N<sub>4</sub>) surface for nitro-compounds reduction and hydrogen evolution reaction, *New J. Chem.*, 2017, 41, 9658-9667.
43. Roshan Nazir, Pragati Fageria, Mrinmoyee Basu, and Surojit Pande, Decoration of Carbon Nitride Surface with Bimetallic Nanoparticles (Ag/Pt, Ag/Pd, and Ag/Au) via Galvanic Exchange for Hydrogen Evolution Reaction, *J. Phys. Chem. C*, 2017, 121 (36), 19548-19558.
44. Mrinmoyee Basu, Roshan Nazir, Chavi Mahala, Pragati Fageria, Sumita Chaudhary, Subhashis Gangopadhyay, and Surojit Pande, Ag<sub>2</sub>S/Ag Heterostructure: A Promising Electrocatalyst for the Hydrogen Evolution Reaction, *Langmuir*, 2017, 33 (13), 3178-3186.
45. Pragati Fageria, Sudharshan K.Y., Roshan Nazir, Mrinmoyee Basu and Surojit Pande, Decoration of MoS<sub>2</sub> on g-C<sub>3</sub>N<sub>4</sub> surface for efficient hydrogen evolution reaction,, *Electrochim. Acta*, 2017, 258, 1273-1283.
46. Sonam Sharma, Roshan Nazir, Surojit Pande and Bibhas R. Sarkar, Microwave-Assisted Efficient Suzuki-Miyaura Cross-Coupling Reactions in Water Catalyzed by Nano-Pd/gC<sub>3</sub>N<sub>4</sub> Composite, *ChemistrySelect*, 2017, 2, 8745-8750.
47. Chavi Mahala, Mrinmoyee Basu, Nanosheets of NiCo<sub>2</sub>O<sub>4</sub>/NiO as Efficient and Stable Electrocatalyst for Oxygen Evolution Reaction, *ACS Omega*, 2017, 2 (11), 7559–7567
48. Archana Choudhary, Susheela Kumari and Saumi Ray, Tuning of Catalytic Property Controlled by the Molecular Dimension of Palladium-Schiff Base Complexes Encapsulated in Zeolite Y, *ACS Omega*, 2017, 2 (10), 6636-6645.

49. P. O. Venkataramana Reddy, Shriprada Mishra, Mukund P. Tantak, Kumar Nikhil, Rachna Sadana, Kavita Shah, Dalip Kumar, Design, synthesis and in vitro cytotoxicity studies of novel  $\beta$ -carbolinium bromides, *Bioorganic & Medicinal Chemistry Letters* 27 (2017) 1379–1384
50. Mukund Jha, Shiv Dhiman, T. S. Cameron, Dalip Kumar, Anil Kumar, Au-Catalyzed Synthesis of Thiopyrano[2,3-*b*]indoles Featuring Tandem Rearrangement and Hydroarylation, *Org. Lett.*, 2017, 19, 2038–2041
51. Shiv Dhiman, Steve Rhode, Dalip Kumar, Mukund Jha, Anil Kumar, Copper-Catalyzed Tandem Imine Formation, Sonogashira Coupling and Intra-molecular Hydroamination: A Facile Synthesis of 3-Aryl- $\gamma$ -carbolines, *ChemistrySelect*, 2017, 2, 8922 – 8926
52. Shiv Dhiman, Nitesh Kumar Nanadwana, Shreemala Dayal, Hitesh Kumar sainsi, Dalip Kumar, Anil Kumar, A Facile Synthesis of Quinazolin-4(3H)-ones via Copper-Catalyzed One-Pot, Three-Component Tandem Reaction, *ChemistrySelect*, 2017, 2, 8016 – 8019
53. Bijoya Das, Amrita Chakraborty, and Shamik Chakraborty, Effect of ionic charge on O-H- -Se hydrogen bond: A computational study, *Computational and Theoretical Chemistry*, 1102, 127, 2017

### C. CONFERENCES ATTENDED/PAPERS PRESENTED

1. Susheela Kumari and Saumi Ray “The Effect of the Molecular Dimensions of the Guest Palladium Schiff base Complexes Encapsulated inside the Host Zeolite-Y” at NFM 2017, organized by department of Chemistry, Birla Institute of Technology and Science, Pilani, Rajasthan, 16–18 November 2017.
2. Chavi Mahala, Dr. Mrinmoyee Basu and Dr. Surojit Pande “Interconnected NiCo<sub>2</sub>O<sub>4</sub>/NiO Nanosheets for Oxygen Evolution Reaction” at NFM 2017, organized by department of Chemistry, Birla Institute of Technology and Science, Pilani, Rajasthan, 16–18 November 2017.
3. Rajinder Kaswan, S. C. Sivasubramanian, A. Dalvi “Synthesis and characterization of EMIM BF<sub>4</sub> confined Lithium Silicate glasses by different sol-gel route” at NCSSI-12 organised by Department of Physics, Birla Institute of Technology and Science, Pilani, Rajasthan, 21-23 December 2017.
4. Mamta devi Sharma, Dr. Mrinmoyee Basu and Dr. Surojit Pande “Decoration of Metal (Ag, Pd) and Bimetallic (Ag-Pd 1, Ag-Pd 2) nanoparticles on MoS<sub>2</sub> for Hydrogen Evolution Reaction” at NFM 2017, organized by department of Chemistry, Birla Institute of Technology and Science, Pilani, Rajasthan, 16–18 November 2017.
5. Roshan Nazir, and Suroit Pande, “RuO<sub>2</sub> Nanorod: An Efficient and Stable Electrocatalyst for Hydrogen and Oxygen Evolution Reaction” at NFM 2017, organised by department of Chemistry, Birla Institute of Technology and Science, Pilani, Rajasthan, 16–18 November 2017.
6. Aabid Hamid and Ram Kinkar Roy, “Profiles of the components of stabilization energy and their physical implications” at 20<sup>th</sup> CRSI National Symposium in Chemistry, organized by Guwahati University, Assam, February 3-5, 2017.
7. Saroj, Khima Pandey and Anil Kumar, “Synthesis of Novel Imidazolium Salt Supported N-Hydroxy Sulfonamide: A Soluble Support Synthesis of Hydroxamic Acids” at 23rd ISCB International Conference (ISCB-2017) Interface of Chemical Biology in Drug Research Organized by Indian Society of Chemists and Biologists SRM University, Chennai, India, February 8-10, 2017.
8. Dinesh Kumar, Aishwarya Ramesh and Dr. Prashant Uday Manohar, “Keto-enol tautomerism ground and excited state energy profiles - A computational study” at Asia Pacific Conference in Theoretical and Computational Chemistry (APCTCC-8) organized by Indian Institute of Technology, Bombay Dec. 15 - 17, 2017.
9. Dinesh Kumar, A. K. Dutta and Dr. Prashant Uday Manohar, “Resolution of the Identity and Cholesky Representation of EOM-MP2 Approximation” at North West Meeting On Spectroscopy, Structure and Dynamics (SSD)” organized by Birla Institute of Technology & Science, Pilani Mar. 18 - 19, 2017.
10. Aabid Hamid and Ram Kinkar Roy, Understanding the charge transfer limit of a chemical adduct, North West Meeting on Spectroscopy, Structure and Dynamics (SSD) , Birla Institute of Technology and Science, Pilani Rajasthan, 18th -19th March, 2017.
11. P. O. Venkataramana Reddy, Shriprada Mishra, Kavita Shah and Dalip Kumar, Synthesis and Identification of  $\beta$ -Carbolinium Salts as Novel Cytotoxic Agents, 23rd ISCB International Conference (ISCB-2017) Interface of Chemical Biology in Drug Research, SRM University, Chennai, India, 8-10 February, 2017.
12. P. O. Venkataramana Reddy, Shriprada Mishra, Kavita Shah and Dalip Kumar, Synthesis and Identification of  $\beta$ -Carbolinium Salts as Novel Cytotoxic Agents, International Conference on Challenges in Drug Discovery and Delivery” Department of Pharmacy, BITS Pilani, Pilani Campus, Rajasthan, India, March 2-4, 2017.
13. P. O. Venkataramana Reddy, K. P. Chandra Shekar, Kazuhito Tanabe and Dalip Kumar, Design and Synthesis of Water Soluble Cationic Porphyrin- $\beta$ -Carboline Conjugates as Potent Photocytotoxic Agents, International Conference on Frontiers at the Chemistry – Allied Sciences Interface Organized by Centre of Advanced Study, Department of Chemistry, University of Rajasthan, Jaipur (INDIA), 22-23 July 2017.

14. Bijoya Das, Shamik Chakraborty, Competitive proton transfer between five- and six- membered hydrogen bonding network National Symposium on Radiation and Photochemistry (NSRP-2017), Department of atomic and Molecular Physics, MIT, Manipal University, Manipal March 2-4, 2017.
15. Bijoya Das, Shamik Chakraborty, Competitive proton transfer between five- and six- membered hydrogen bonding network North West Meeting on Spectroscopy, Structure and Dynamics (SSD-2017), Department of Chemistry, BITS Pilani, Pilani Campus March 18-19, 2017.
16. Sunita Kumari, G. Sundar and Subit K. Saha, Interaction of cationic gemini surfactants with nanotubes of  $\beta$ -cyclodextrin: Effect of spacer chain length of gemini surfactants New Frontiers in Chemistry from Fundamentals to Applications II (NFCFA2017), Department of Chemistry, BITS Pilani, KK Birla Goa Campus, January 28-29, 2017.
17. Sunita Kumari, G. Sundar and Subit K. Saha, Study on interaction of cationic gemini surfactants with guest induced nanotubes of  $\beta$ -cyclodextrin and the role of spacer chain length of gemini surfactants to release the guest National Conference on Advanced Physical Methods in Chemical Sciences (NCAPMCS-2017), Department of Chemistry, Guru Jambheshwar University of Science and Technology, Hisar, Haryana, February 22-23, 2017.
18. Sunita Kumari, Sonu, G. Sundar and Subit K. Saha, Effect of organic and a Hofmeister series of inorganic counterions on the solvation dynamics and rotational relaxation in aqueous micelles of hexadecyltrimethylammonium surfactants North West Meeting on Spectroscopy, Structure and Dynamics (SSD-2017), Department of Chemistry, BITS Pilani, Pilani Campus, March 18-19, 2017.
19. Sunita Kumari, Rishika Aggrawal, Sonu, Sayantan Halder, G. Sundar and Subit K. Saha Effect of Hydrophobicity of Tails and Hydrophilicity of Spacer Group of Cationic Gemini Surfactants on Solvation Dynamics and Rotational Relaxation of Coumarin 480 in Aqueous Micelles, International conference on Frontiers at the Chemistry- allied Sciences Interface (FCASI-2017), University of Rajasthan, Jaipur, July 22-23, 2017.
20. Santosh B Khandagale and Dalip Kumar "Efficient Synthesis, Characterization and Photophysical Properties of meso-Heteroaryl-Substituted Porphyrins" at NFM 2017, organized by department of Chemistry, Birla Institute of Technology and Science, Pilani, Rajasthan, 16–18 November 2017.
21. Santosh B Khandagale and Dalip Kumar, Palladium-catalyzed formation of carbon-carbon bond: Rapid and convenient access to heteroaromatic appended porphyrins, National Conference on Advanced Physical Methods in Chemical Sciences (NCAPMCS-2017), Department of Chemistry, Guru Jambheshwar University of Science and Technology, Hisar, Haryana, February 22-23, 2017.
22. Santosh B Khandagale and Dalip Kumar, Efficient Synthesis of novel Heteroaryl appended porphyrin as fluorescent probes International conference on Frontiers at the Chemistry- allied Sciences Interface (FCASI-2017), University of Rajasthan, Jaipur, July 22-23, 2017.
23. Manish Kumar Mehra, Indresh Kumar and Dalip Kumar, Metal-free Regioselective Diaryliodonium Salts-Promoted C-N and C-O Bonds Formation in Water: Facile Synthesis of N-Arylquinolones and O-Aryloxyquinolines, National Conference on "New Vistas in Chemical Research" IIS University, Jaipur, India, January 18-19, 2017.
24. Manish Kumar Mehra, Mukund P. Tantak, Indresh Kumar, Dalip Kumar, Metal-free Regioselective C-N and CO Bonds Formation with the Utilization of Diaryliodonium Salts in Water, 23<sup>rd</sup> International ISCB conference on Interface of Chemical Biology in Drug Research, SRM University, Chennai, India, February 8-10, 2017.
25. Manish Kumar Mehra, Mukund P. Tantak, Indresh Kumar, Dalip Kumar, Metal-free Regioselective C-N and C-O Bonds Formation with the Utilization of Diaryliodonium Salts in Water, International Conference on Challenges in Drug Discovery and Delivery" Department of Pharmacy, BITS Pilani, Pilani Campus, Rajasthan, India, March 2-4, 2017.
26. Manish Kumar Mehra, Indresh Kumar, Dalip Kumar, Metal-free regioselective arylation of quinolones: Synthesis and characterization, National Conference on "Analytical Techniques and Their Applications" GJUS&T, Hisar, India, March 16-17, 2017.
27. Manish Kumar Mehra, Indresh Kumar and Dalip Kumar, Regioselective Diaryliodonium Salts-Promoted Arylation of Quinolones: Synthesis of Arylquinolones and Aryloxyquinolines in Water, International conference on Frontiers at the Chemistry- allied Sciences Interface (FCASI-2017), University of Rajasthan, Jaipur, July 22-23, 2017.
28. Vaishali Saini, Pankaj Nehra, Bharti Khungar, "Design of Schiff-base Functionalized Imidazolium Ionic Liquid Fluorescent Sensor for Al<sup>3+</sup> ion" at 23<sup>rd</sup> ISCB International Conference (ISCB-2017) Interface of Chemical Biology in Drug Research, organized by SRM University, Chennai, February 8-10, 2017.
29. Vaishali Saini, Pankaj Nehra, Bharti Khungar, Recyclable Ion Tagged Nickel Catalyst for Microwave Assisted Synthesis of Aryl sulfides Using Water as a Solvent Media at International Conference on Nano and Functional Materials (NFM-2017), Birla Institute of Technology and Science-Pilani, Rajasthan 333031, India, November 16-18, 2017.

30. Susheela Kumari, Archana Choudhary and Saumi Ray, The Effect of the Molecular Dimensions of the Guest Complexes Encapsulated inside the Host Zeolite -Y, International Conference on Recent Trends in Chemical Sciences, Govt. Engineering College, Bikaner January 12-13, 2017.
31. Nitesh Kumar Nandwana, Anil Kumar, Design and synthesis of fused conjugated heterocyclic compounds using C-C and C-N bond formation, 18th Tetrahedron Symposium, Budapest Hungary, June 26-30 2017.
32. Kiran Bajaj Solution Phase Peptide and peptide conjugates synthesis, 6<sup>th</sup> Indian peptide Symposium. HSCB, Mumbai. India, February 23-24, 2017.
33. Ajay K. Sah, Synthesis of N-glyconjugates and their applications in biological sciences, 23<sup>rd</sup> ISCB International Conference (ISCBC-2017) at SRM University, Tamil Nadu, February 08-10, 2017.
34. Aabid Hamid and Ram Kinkar Roy, Variation of stabilization energy with the solvent polarity: A density functional reactivity theory (DFRT) based approach, International Conference on Nano and Functional Materials (NFM-2017), Birla Institute of Technology and Science-Pilani, Rajasthan 333031, India, November 16-18, 2017.
35. Fayaz Baig, Kumari Suman and Madhushree Sarkar, "Structural transformations of Coordination Polymers on the counter anion exchange and metal metathesis" at 23<sup>rd</sup> International ISCB conference on Interface of Chemical Biology in Drug Research organized by SRM University, Chennai, India, February 8-10, 2017.
36. Fayaz Baig, and Madhushree Sarkar, "Influence of reaction conditions on changing structures of Coordination Polymers" at 24<sup>th</sup> Congress and General Assembly of the International Union of Crystallography, Hyderabad International Convention centre, Hyderabad, on 21-28th August 2017.
37. Fayaz Baig, and Madhushree Sarkar, "Influence of reaction conditions on changing structures of Coordination Polymers" at International Conference on Nano and Functional Materials (NFM-2017), Birla Institute of Technology and Science-Pilani, Rajasthan 333031, India, November 16-18, 2017.
38. Rishika Aggrawal, and Subit Kumar Saha, "Study on the effect of spacer chain length of gemini surfactants on the solvation dynamics in the reverse micelle of C<sub>12</sub>-s-C<sub>12</sub>2Br" at International Conference on Nano and Functional Materials (NFM-2017), Birla Institute of Technology and Science-Pilani, Rajasthan 333031, India, November 16-18, 2017.
39. Shiv Dhiman, Mukund Jha, Dalip Kumar, and Anil Kumar "Gold-Mediated Synthesis of Thiopyraro[2,3-b]indoles from Indoline-2-thione involving Tandem Rearrangement and Hydroarylation" CFOS-2017 IIT-Roorkee, Roorkee, uttrakand in Dec-2017.
40. Sachin Choudhary, and Indresh Kumar, "Organocatalytic one-pot approach towards the synthesis of tri substituted pyrrole ring systems sthrough [3+2] annulation/ I2 mediated oxidation" at 23rd ISCB International Conference (ISCBC-2017) Interface of Chemical Biology in Drug Research Organized by Indian Society of Chemists and Biologists SRM University, Chennai, India, February 8-10, 2017.
41. Sayantan Halder, Sonu, Sunita Kumari, Vinod Kumar Aswal and Subit K. Saha, Study on Interactions of Cationic Gemini Surfactants with Folded and Unfolded Bovine Serum Albumin: Effect of The Spacer Group of Surfactants, 20th CRSI-National Symposium in Chemistry 2017, Gauhati University, Assam, February 3-5, 2017.
42. Sayantan Halder, Sunita Kumari, Rishika Aggrawal, Sugam Kumar, Vinod Kumar Aswal and Subit K. Saha, Interactions of Gemini Surfactants Having Different Spacer Groups with Protein: A FRET and SANS study, 18th National Conference on Surfactants, Emulsions & Biocolloids (NATCOSEB 2017), School of Chemistry Sambalpur University Jyoti Vihar, Sambalpur, Odisha – 768 019, November 10-12, 2017.
43. Sayantan Halder, Sunita Kumari, Rishika Aggrawal, Sugam Kumar, Vinod Kumar Aswal and Subit K. Saha, A FRET, DLS and SANS study of Binding behavior of Gemini surfactants with Protein, International Conference on Nano and Functional Materials (NFM-2017), BITS Pilani, Pilani Campus, Rajasthan November 16-18, 2017.
44. Sonam Sharma and Bibhas R. Sarkar. Nano-Pd/g-C3N4 Composite as Efficient Catalyst for Aqueous Phase Suzuki-Miyaura Cross-coupling Reactions. National Conference in New Frontiers in Chemistry - From Fundamentals to Applications, January 28-29, 2017, K. K. Birla Goa Campus, BITS Pilani, India
45. Sonam Sharma and Bibhas R. Sarkar. Microwave assisted efficient Suzuki-Miyaura Cross-coupling Reactions in Water Catalyzed by Nano-Pd/gC3N4 Composite. International Conference in Nano- and Functional Materials (NFM-2017), BITS Pilani, Pilani Campus, Rajasthan, November 16-18, 2017.
46. Sonam Sharma and Bibhas R. Sarkar. Pd/gC3N4 nanocomposite as efficient catalyst for microwave assisted Suzuki-Miyaura Cross-coupling reactions in water. Short Invited Talk (SIT-03) at International Workshop on Advanced Materials (IWAM-2017), NIST Berhampur, Odisha, December 19-21, 2017.
47. Sachin Choudhary and Indresh Kumar. Organocatalytic enantioselective synthesis of fused 1,2-dihydropyridines via formal [4+2] cycloaddition between aqueous glutaraldehyde and dibenzo[b,f][1,4]oxazepine imines. International Conference in Nano- and Functional Materials (NFM-2017), BITS Pilani, Pilani Campus, Rajasthan, November 16-18, 2017.

48. Anoop singh, Indresh Kumar. Organocatalytic asymmetric synthesis of Indolyl-piperidines and related alkaloids. International Conference in Nano- and Functional Materials (NFM-2017), BITS Pilani, Pilani Campus, Rajasthan, November 16-18, 2017.
49. Pragati Fageria and Surojit Pande, Oral presentation on National Symposium on Global Environmental Challenges: Present Scenario (GECPS-2017) at Department of Botany, University of Rajasthan, Jaipur on 21st January, 2017.
50. Pragati Fageria and Surojit Pande, Poster presentation on 2nd National Conference on new Frontiers in Chemistry- from fundamentals to applications-II (NFCFA-2017), at Department of Chemistry BITS Pilani, K K Birla Goa Campus, Goa during 28-29 January, 2017.
51. Pragati Fageria and Surojit Pande Oral presentation on International Conference on Frontiers at the Chemistry - Allied Sciences Interface (FCASI-2017) at University of Rajasthan, Jaipur, organized by Center for Advanced Studies, Department of Chemistry, University of Rajasthan, Jaipur, during 22-23 July, 2017.
52. Pragati Fageria and Surojit Pande Oral presentation on National Conference on Nano-and Functional Materials (NFM-2017) at BITS Pilani, organized by Department of Chemistry, Birla Institute of Technology and Sciences, BITS Pilani, Rajasthan during 16-18 November, 2017.
53. Pragati Fageria, attended a One-day workshop on Soft Materials and Society at MNIT Jaipur organized by Soft Materials Research Society (SMRS) Jaipur and Dept. of Physics, Malaviya National Institute of Technology, MNIT Jaipur, on 15 Dec. 2017.
54. Roshan Nazir and Surojit Pande, Poster presentation on 2nd National Conference on new Frontiers in Chemistry- from fundamentals to applications-II (NFCFA-2017), at Department of Chemistry BITS Pilani, K K Birla Goa Campus, Goa during 28-29 January, 2017.
55. Roshan Nazir and Surojit Pande, Poster presentation on National Conference on Nano-and Functional Materials (NFM-2017) at BITS Pilani, organized by Department of Chemistry, Birla Institute of Technology and Sciences, BITS Pilani, Rajasthan during 16-18 November, 2017.

#### **D. BOOKS PUBLISHED/EDITED DURING THE YEAR: - NIL**

#### **E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED:**

Department of Chemistry, Pilani Campus organized an International Conference on Nano- and Functional Materials: Interface between Science and Engineering (NFM-2017) in association with Materials Research Society of India (MRSI) – Rajasthan Chapter. About 150 participants (5 from abroad) attended the three-day conference that witnessed 43 plenary & invited talks by scientists and faculty members from different university/ research institutes across the country, 15 oral presentations and about 102 poster presentations by young researchers (Ph.D. scholars) exploring variety of research fields bonding with nano- and material science. The Chemistry department took initiative to launch this interdisciplinary event back in 2014 with a small group of willing faculty members from several other departments in campus, including but not restricted to Physics, Biological sciences, Mechanical engineering, Civil engineering, Chemical engineering, Electrical and electronic engineering, Pharmacy etc., as a National conference as NFM-2014. This was the second event in line. NFM 2017 was conceptualized with ideas of getting associated with the MSRI-Rajasthan chapter and as an international event visualizing the broader, deeper impacts and wider visibility of BITS Pilani. The event also saw ambitious participation from post-graduate colleges in the town as an inspirational platform/ exposure opportunity towards growing interest in the theme areas of the conference amongst young learners in the society. There were three Best Poster presentation awards by Royal Society of Chemistry, India, one MRSI Best Oral Presentation Award, and six best poster and best oral presentation awards from the organizers to appreciate and inspire the young minds. The event successfully attracted plausible attention from research community, academicians and students and had generated a platform for mutual interaction amongst multiple disciplines which undoubtedly will help seed new ideas, collaboration and solving challenging problems.

#### **F. INVITED TALKS GIVEN BY BITS FACULTY**

Faculty members of the department delivered invited lectures at following conferences/symposia during the year.

- Ram Kinkar Roy, "On the Search of Stability of a Chemical Adduct" at National Conference on New Frontiers in Chemistry - from Fundamentals to Applications - II (NFCFA 2017), BITS-PILANI Goa Campus, January 28-29, 2017.
- Kiran Bajaj, "Solution Phase Syntheses of the Peptide conjugates and Peptidomimetics." at 6th Indian Peptide Symposium, Homi Bhabha Centre for Science Education, Mankhurd, Mumbai., February 23-24, 2017.
- Subit K. Saha, "Solvation dynamics and rotational relaxation in aqueous micelles of cationic gemini surfactants controlled by hydrophobicity of tails and hydrophilicity of spacer group of surfactants", at 18<sup>th</sup> National Conference on Surfactants, Emulsions & Biocolloids (NATCOSEB 2017) organized by School of Chemistry, Sambalpur University, Sambalpur, Odisha under the aegis of Indian Society for Surface Science and Technology, Jadavpur University, Kolkata during 10-12 November 2017.

- Indresh Kumar, Invited Lecture entitled "Amine catalyzed transformations of dicarbonyls: Synthesis of medium sized N-heterocycles" at Department of Organic chemistry, IISc., Bangalore for "Professor D. K. Banerjee memorial Lecture award-2016" on March 22, 2017 at IISc., Bangalore.
- Indresh Kumar, Invited Lecture entitled "Amine catalyzed transformations of dicarbonyls: Synthesis of medium sized N-heterocycles" on June 21, 2017 at CSMCRI Bhavnagar.
- Indresh Kumar, Invited Lecture entitled "Amine catalyzed transformations of dicarbonyls: Synthesis of medium sized N-heterocycles" on July 01, 2017 at Department of Chemistry, Faculty of Science, M.S. University of Baroda, Vadodara.
- Surojit Pande, Invited lecture entitled, "Advanced Topics on Nanoscience and Nanotechnology" on 01/11/2017 at Amity University, Jaipur.
- Surojit Pande, Invited talk entitled "Synthesis of Mono- (Au & Pd) and Bimetallic (AuPd) Nanoparticles Using Carbon Nitride (C<sub>3</sub>N<sub>4</sub>) Quantum Dots via the Photochemical Route for Nitrophenol Reduction" on National Conference on Advanced Functional Materials Processing & Manufacturing (NCAFMPM – 2017) during February 2- 3, 2017 at CSIR-CMERI, Durgapur.
- Bharti Khungar, "Green chemistry and its applications" in the Refresher Course on Chemical and Pharmaceutical Sciences, University of Rajasthan Jaipur, September 5, 2017.

#### G. INVITED TALKS ARRANGED IN THE DEPARTMENT:

1. Prof. Krishna Nand Singh, Department of Chemistry, Banaras Hindu University, Varanasi, India talk on the topic "Development of Some Practical Protocols in Organic Synthesis", 27/01/2017
2. Dr. Sundeep Dugar, President and CEO, Sphaera Pharma, Singapore; COO, Cardero Therapeutics, Los Altos, CA, talk on the topic "Drug Discovery and Development – A Collaborative Translational Effort", 28/02/2017.
3. Dr. Rajarshi Chakrabarti, Department of Chemistry, IIT Bombay talk on the topic "Nucleic acids, excess salt and carbon nanostructures 03/10/2017.
4. Prof. Partha Sarathi Mukherjee, IPC, IISc, Bangalore talk on the topic "Self-Assembled Molecular Vessels", 24/04/2017.
5. Prof. Namboothiri, Department of Chemistry, IIT Bombay talk on the topic "Carbon Nanotube-Metal Nanohybrid Based Heterogeneous Catalysts for Various Organic Transformations", 05/08/2017
6. Prof. T. Punniyamurthy, Department of Chemistry, IIT Guwahati talk on the topic "Regioselective C-H Functionalization and Carbon-Heteroatom", 13/05/2017.
7. Prof. G. Sekar, Department of Chemistry, IIT Madras talk on the topic "Synthesis of Chiral Alcohols by Enantioselective Oxidation and Reduction", 16/06/2017.
8. Prof. K. R. Prabhu, Department of Organic Chemistry, IISc, Bangalore talk on the topic "The C-H Activation: A new Language of Sustainable Chemistry for the Functionalization Organic Molecules", 01/09/2017.

#### H. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS

1. Prof Dalip Kumar received CRSI Bronze Medal-2017 awarded by Chemical Research Society of India
2. Dr. Indresh Kumar received "Professor D. K. Banerjee memorial Lecture award-2016" during March 22, 2017 from Department of Organic chemistry, IISc., Bangalore.
3. Susheela Kumari received Best Poster Presentation award in the International conference on Nano and Functional Materials (NFM 2017), Department of Chemistry, Birla Institute of Technology and Science, Pilani, Rajasthan, November 16–18, 2017.
4. Santosh B Khandagale received Best Poster Presentation award in the International conference on Frontiers at the Chemistry- allied Sciences Interface (FCASI-2017), University of Rajasthan, Jaipur, July 22-23, 2017
5. Shiv Dhiman received RSC-Org. Biomol. Chem. received Best Poster Presentation award in National symposium on "Contemporary Facets in Organic Synthesis (CFOS-2017), IIT-Roorkee, Roorkee, Uttarakhand December 22-24 ,2017.
6. Sayantan Halder received Best Poster Presentation award in 18<sup>th</sup> National Conference on Surfactants, Emulsions & Biocolloids (NATCOSEB 2017), School of Chemistry Sambalpur University Jyoti Vihar, Sambalpur, Odisha – 768 019, November 10-12, 2017.
7. Sayantan Halder received Best Poster Presentation award in International Conference on Nano and Functional Materials (NFM-2017), BITS Pilani, Pilani Campus, Rajasthan November 16-18, 2017.

8. Pragati Fageria received Best Oral Presentation award in National Conference on Nano-and Functional Materials (NFM-2017) organized by Department of Chemistry, Birla Institute of Technology and Sciences, BITS Pilani, Rajasthan during 16-18 November, 2017.
9. Manish Kumar Mehra received Best Oral Presentation award in the National Conference on "New Vistas in Chemical Research" IIS University, Jaipur, India. (Awarded), January 18-19, 2017

#### **I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION**

1. Dr. Indresh Kumar, Visiting Professor at Konkuk University, Seoul, Republic of Korea, (10 days, January 2017).

#### **J. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR**

Agilent Q-TOF/LC-MS High resolution Mass Spectrometer has been procured from the DST-FIST grant.

#### **K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES**

During the academic year 2017, the association has been involved in various activities. This report briefly summarizes the work done by the association during the year 2017.

**Talk on Computational Chemistry:** - A talk titled, "Interface and Frontiers in Computational Chemistry" was organized by the Association on 17<sup>th</sup> of February 2017. The Speaker of the event Dr. Ram Kinkar Roy highlighted the importance of computational power in the field of chemistry. The event witnessed immense participation from all on campus chemistry students including PHD. Scholars. This event proved to be an inspiration for students willing to integrate their knowledge of Computer Science with Chemistry discipline.

**Batch Snap:** - The batch snap for 2014 M.Sc Chemistry Students was held on 18<sup>th</sup> of February 2017. The students showed great enthusiasm.

**Cricket Match:** - An interdisciplinary cricket match was organized on 2<sup>nd</sup> of April 2017. It was played between Chemistry and Biological Science Department. The event was appreciated by both the students and the faculty members. Each team (Biological Science and Chemistry) consisted of both student and faculty. The event witnessed the participation of faculty member from both department of Chemistry and Biological Science.

The exhausting cricket match was followed by a refreshing student faculty dinner at Green Fields restaurants. The students enjoyed the informal interaction with the faculty.

**Pre-Apogee Talk:** - An inspiring lecture on the topic, "Why Science?" was delivered by Dr. Gautam Radhakrishnan Desiraju on 21<sup>st</sup> of March 2017. Professor Gautam Desiraju is a structural chemist who has been in the Solid State and Structural Chemistry Unit of the Indian Institute of Science, Bangalore, India since 2009. He was the President of the International Union of Crystallography. The talk was organized by the Physics, Chemistry and Biological Sciences department. The Association made an important contribution for the proper management and smooth functioning of the Lecture.

**Apogee 2017:** - During APOGEE 2017, two events, Who-Dunnit and Dexter's Lab (in collaboration with Biology and Chemical Engineering Associations), were conducted by the Chemistry Association. Who-Dunnit was solely organized by the Chemistry Association. It witnessed the highest number of participants of any event in APOGEE 2017 and was a huge success.

**Adieu to 2013 Batch:** - Farewell to the Batch of 2013 was held at Lecture Theatre Complex followed by student faculty dinner at Shankar Vyas Mess, the students of 2013 batch came and received the token of membership and a farewell present (Coffee mug with ID and name engraved on it) from various faculty members. Certificates were given to both the members as well as the post holders of the 2013 batch for their contribution to the Chemistry Association. All the students from various batches got an opportunity to informally interact with various faculty members. The faculty members gave valuable advice to students and wished them the best of luck,

**Informal Interactions:** - A Get together and interaction of fresher's with 2nd and 3rd year students was held on 12th August 2017 at Sky lawns. The juniors were informed about the educational and structural system of the institute and also about the activities of association.

**Formal Orientation:** - A formal meet for 1<sup>st</sup> Year Students with Association Seniors was held on September 2, 2017 in LTC 5101. The meeting was attended by Association Co-coordinator Dr. Bibhas Ranjan Sarkar and students across 1st, 2nd, 3rd year. The students were introduced to the association hierarchy and were told about different courses and research areas of the department. Students were also informed regarding Association Activities and relevance via audio & video mode by President, Secretary, and Apogee coordinator.

**Apogee Project Meets:** - 2 Apogee project/paper presentation meets were conducted so as to make the fresher's as well as the sophomores aware of the project ideas and how they could contribute to the ideas. The discussion about prototype presentation during Apogee-2018 happened on 6<sup>th</sup> November, 2017. Previous years' projects were shared with all present so they got the idea about how to choose project and work accordingly. The meet was appreciated by the first and second year students. Various doubts regarding review/ non-review paper were cleared. Overall the students expressed great enthusiasm in participating in Apogee 2018.

**B1.10.5 Department: Computer Science & Information Systems**Number of faculty members (as on 31<sup>st</sup> December 2017)

<b>Senior Professors, Professors</b>	<b>04</b>
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	<b>15</b>
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00
<b>Visiting Assistant Professors</b>	01

**Head of the Department: Professor J P Misra****Contact details:** jpm@pilani.bits-pilani.ac.in**Number of Ph.D. Scholars:****Full Time : 10****Part Time : 01****Aspirant Scheme : 01****A. SPONSORED RESEARCH ACTIVITIES & FUNDING****(i) Ongoing projects (Sanctioned Prior to 2017):**

1. Prof. Sudeept Mohan (PI), Prof. J P Misra (Co-PI), Dr. Avinash Gautam (Co-PI): a funded research project of Rs. 20 Lakhs (in value) from CAIR, DRDO entitled "Area Exploration using Miniature Robots" is in progress.

**(ii) Projects Sanctioned during the year 2017**

1. Dr. Yashvardhan Sharma (PI), Dr. Lavika Goel (Co-PI) received a sponsored project of Rs.40 Lakhs (in value) from DST-ICPS for a project titled "Design and implementation of Content Based Recommender System for effectively answering Web based ", for three years.
2. Dr. Virendra Singh Shekhawat (PI), Prof. Sudeept Mohan (Co-PI), Prof. J P Misra (Co-PI), Dr. Avinash Gautam (Co-PI) received a sponsored project of Rs. 40 Lakhs (in value) from DST-ICPS for a project titled "Design and implementation of coordinated multi-robot system for area coverage under constrained wireless communication" for a duration of three years.
3. Dr. Kamlesh Tiwari (Co-PI), Dr. Amit Dua (Co-PI) of the department have received a sponsored project of Rs. 70 Lakhs (in value) from DST-ICPS for a project titled "Development of a Cyber Physical System Based Smart Water Grid for Community Usage" for a duration of three years ".
4. Dr. Ashutosh Bhatia (PI), Dr. K. Haribabu (Co-PI), received the sanctioning of a sponsored project of Rs. 40 Lakhs (in value) from DST-ICPS for a project titled "Realization of Flexible and Scalable VANET with multi-tenancy support using Software Defined Networking and Network Virtualization (Ref. No. T855) for a duration of three years. However, officially the project has not been started yet.

**(iii) Projects completed in the year 2017**

1. Dr. Yashvardhan Sharma, "Design and Development of Opinion Mining Framework" (PI) Department of Science & Technology (DST) 3 and half Years (July 2013-Jan 2017) 13.26 lakhs

**(iv) Consultancy Projects completed this year: Nil****B. PUBLICATIONS**

**The faculty of the department published following papers in international refereed journals during the year.**

1. Anish Jindal, **Amit Dua**, Neeraj Kumar, Athanasios V. Vasilakos, Joel J.P.C. Rodrigues, "An Efficient Fuzzy Rule-Based Big Data Analytics Scheme for Providing Healthcare-as-a-Service," **IEEE Journal of Biomedical and Health Informatics**, In-Press, 2018, (IF. 3.451).
2. Sumedha Sharma, **Amit Dua**, Mukesh Singh, Neeraj Kumar, Surya Prakash, "Fuzzy rough set based energy management system for self-sustainable smart city," **Renewable and Sustainable Energy Reviews**, Vol. 82, Part 3, pp. 3633-3644, 2018. (IF. 8.050).
3. **Amit Dua**, Neeraj Kumar, Ashok Kumar Das, and Willy Susilo, "Secure Message Communication Protocol among Vehicles in Smart City," **IEEE Transactions on Vehicular Technology**, In Press, DOI: 10.1109/TVT.2017.2780183, 2017, (IF. 4.066)



4. R. Sharma, B. Adhikari, **A. Mishra**, Structural and Spectral Properties of Corona Graphs, *Discrete Applied Mathematics*, 228, 14--31 (2017). **IMPACT FACTOR: 0.956. (Citations: 2)**
5. **Ashutosh Bhatia**, Ranjeet Kumar. Patro, "A Delay and Energy Efficient Poll-Based MAC Protocol for Wireless Body Area Networks", *Wireless Personal Communications*, Springer Publications, December 2017, **IMPACT FACTOR: 0.951.**
6. **Gupta Neetika** and **Rohil Mukesh Kumar**. "Image feature detection using an improved implementation of maximally stable extremal regions for augmented reality applications." *International Journal of Image and Data Fusion* (Scopus Indexed, Emerging SCI Indexed, SJR 2016 Impact Factor: 0.81), Oct 2017. **DOI: 10.1080/19479832.2017.1391337.**
7. **N Mehala**, **Poonam Goyal**, **D Bhatia**, and **Navneet Goyal**, "Topical Document Clustering: Two Stage Post Processing Technique", In *International Journal of Data Mining, Modelling and Management (IJDMMM)*. (Accepted)
8. **Rupal Bhargava**, Shivangi Arora and **Yashvardhan Sharma**, "Neural Network based Architecture for Sentiment Analysis in Indian Languages", *Journal of Intelligent Systems (JISYS)*, 2017 (Accepted)
9. **Sandhya**, **Yash Sinha**, **K. Haribabu**, A survey: Hybrid SDN, *Journal of Network and Computer Applications*, Volume 100, 2017, Pages 35-55, ISSN 1084-8045, <https://doi.org/10.1016/j.jnca.2017.10.003>.
10. **Vandana Agarwal** and **Surekha Bhanot**, "Radial Basis Function Neural Network Based Face Recognition Using Firefly Algorithm", *Neural Computing and Applications*, 2017, Springer. doi:10.1007/s00521-017-2874-2 [SCI (Science Citation Index) Expanded, Impact Factor 2016: 2.505]
11. **Gupta, V.** (2018). Comparative Performance of Contradictory and Non-Contradictory Judgement Matrices in AHP under Qualitative and Quantitative Metrics. *International Journal of Decision Support System Technology (JDSST)*, 10(1), 21-38.

### C. CONFERENCES

The faculty of the department published following papers in international/national Conferences during the year.

#### (i) International Conferences papers (outside India):

1. Piyush Raghav, **Amit Dua**, "Enhancing flow security in RYU controller through set operations," in 3rd IEEE International Conference on Computer and Communications (ICCC) 2017, December 13-16, **Chengdu, China**
2. Anish Jindal, **Amit Dua**, Neeraj Kumar, Athanasios V. Vasilakos, Joel J.P.C. Rodrigues, "An Efficient Fuzzy Rule-Based Big Data Analytics Scheme for Providing Healthcare-as-a-Service", in IEEE International Conference on Communications, **ICC 2017**, May 21-25, **Paris, France**
3. A. Bhutani, Aditya A.S, and **Lavika Goel**, "Hybridization of Moth Flame Optimization and Gravitational Search Algorithm and its application on detection of Food Quality", *International Conference on Intelligent Systems (IntelliSys)*, **IEEE Publications**, London, United Kingdom, 2017.
4. **Ashutosh Bhatia**, Sudhanshu Singh, "Bandwidth Efficient Clock Skew Compensation in TDMA-Based Star Topology Wireless Networks", In proceedings of AINA 2017, Taipei, Taiwan
5. **Gupta Neetika** and **Rohil Mukesh Kumar**. "An Experimental Study of Markerless Image Registration Methods on Varying Quality of Images for Augmented Reality Applications." In Proceedings of Thematic Workshops'17 of ACM Multimedia 2017, Oct 23-27, 2017 Mountain View, CA, USA. DOI: 10.1145/3126686.3126759
6. **Poonam Goyal**, **Jagat Sesh Challa**, Shivin Srivastava, and **Navneet Goyal**, "AnyFI: An Anytime Frequent Itemset Mining Algorithm for Data Streams", In 2017 IEEE International Conference on Big Data (**IEEE Big Data 2017**), December 11-14, 2017 Boston, USA.
7. **Chandramani Chaudhary**, **Poonam Goyal**, and Yi-Ping Phoebe Chen, "Exploiting Visual and Textual Neighborhood Information to Improve Image-Tag Relevance", In 2017 IEEE International Conference on Big Data 2017 (**IEEE Big Data 2017**), Boston, USA.
8. **Rupal Bhargava**, Gargi Sharma and **Yashvardhan Sharma**, "Deep Paraphrase Detection in Indian Languages", In proceedings of Ninth International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2017), IEEE/ACM, 31 July – 3 August, 2017, Sydney, Australia, pp. 1152-1159.
9. Yash Shina, Siddharth Bhatia, G S S Chalapathi, **Virendra S Shekhawat**, "MPLS based Hybridization in SDN", Fourth International Conference on Software Defined Systems (SDS-2017), Valencia, Spain, 8-11 May, 2017

10. **Avinash Gautam**, S P Arjun Ram, **Virendra Singh Shekhawat**, **Sudeept Mohan**, "Balanced Partitioning of Workspace for Efficient Multi-Robot Coordination", IEEE International Conference on Robotics and Biomimetics, 5–8 Dec, Macao, China, 2017
11. Yash Sinha, Shikhar Vashishth, **K Haribabu**, Meticulous Measurement of Control Packets in SDN, in Proceedings of the Symposium on SDN Research[ACM SOSR 2017], Santa Clara, CA, USA, 03-04 April, 2017 pp. 187-188 ACM 2017.
12. **Kamlesh Tiwari**, Vandana Dixit Kaushik and Phalguni Gupta. "An Efficient Fingerprint Matching using Continuous Minutiae Template Learning", Accepted In: International Conference on Computer Communication and Computational Sciences (IC4S), Springer (in press) 2017

(ii) **Conferences papers presented in India (both, International and National):**

1. Shivesh Ganju, **Amit Dua**, "A survey on power aware protocols for Wireless AdHoc network," In IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), September 21,22, 2017, Chennai, India.
2. Mihir Saxena, **Amit Dua**, "Security Solutions against Attacks in Mobile Ad hoc networks and their verification using BAN logic," In International Conference on Energy, Communication, Data Analytics and Soft Computing (ICECDS). August 1, 2 2017, Poonamallee, India.
3. **Amit Dua**, "IRMDD: Intelligent Robust Multicast Data Dissemination in Vehicular Ad Hoc Networks," In 11<sup>th</sup> INDIACOM, March 1-3, 2017, New Delhi, India
4. Anuraj Singh, Chirag Chhablani, **Lavika Goel**, "Moth Flame Optimization for land cover feature extraction in remote sensing images", IEEE Publications, 8th International Conference on Computing, Communication and Networking Technologies (ICCCNT), IIT Delhi, pp.1-7, August 2017.
5. **Lavika Goel**, Mallikarjun Swamy, Raghav Mantri "Swarm and Artificial Immune System based Intelligence Techniques for Geo-Spatial Feature Extraction", International Conference on Computational Intelligence and Data Engineering (ICCIDE), Springer: Lecture Notes in on Data Engineering and Communications Technologies (LNDECT), Andhra Pradesh, vol. 9, pp. 65-84, 2017.
6. Amogh Sharma, **Lavika Goel**, "A Deep Learning Approach For Player Selection And Training Routine Design", International Conference on Sports Engineering, Elsevier Publications, 2017.
7. **Yashvardhan Sharma**, **Lavika Goel**, Shubhankar Srivastava, "Data Analytical Application for Cricket using Moneyball Techniques", International Conference on Sports Engineering, Elsevier Publications, 2017.
8. **Lavika Goel**, Charu Tak, Faizan Mushtaq, " Development Of A Hybrid Algorithm Using Swarm Algorithms And Implementing It On Images To Detect The Health Of An Apple", International Conference on Computational Intelligence: Theories, Applications and Future Directions, Springer Publications, Advances in Intelligent and Soft Computing, December 6<sup>th</sup> - 8<sup>th</sup>, 2017, IIT Kanpur, India.
9. Siddharth Bhatia, Yash Sinha, **Lavika Goel**, "Lung Cancer Detection: A Deep Learning Approach", 7<sup>th</sup> International Conference on Soft Computing for Problem Solving - SocProS 2017, Indian Institute of Technology Bhubaneswar, Bhubaneswar, Springer Publications, Advances in Intelligent and Soft Computing, December 23-24, 2017.
10. **Gupta Neetika** and **Rohil Mukesh Kumar**. "Exploring Possible Applications of Augmented Reality in Education. IEEE Fourth International Conference on Signal Processing and Integrated network (SPIN). Noida, Feb 2-3, 2017, DOI: 10.1109/SPIN.2017.8049989
11. Sonal Kumari, **Poonam Goyal**, Ankit Sood, Dhruv Kumar, **Navneet Goyal**, and **Sundar Balasubramaniam**, "Exact, Fast and Scalable Parallel DBSCAN for Commodity Platforms", In 18<sup>th</sup> International Conference on Distributing Computing and Networking (ICDCN 2017), January 4-7, 2017 Hyderabad, India.
12. Ines Khandelwal, **Sundaresan Raman**, Analysis of Transfer and Residual Learning for Detecting Plant Diseases Using Images of Leaves, International Conference on Computational Intelligence, IIT Kanpur, 2017
13. **Rupal Bhargava**, **Yashvardhan Sharma**, "MSATS: Multilingual Sentiment Analysis via Text Summarization", In proceedings of Seventh International Conference on Cloud Computing, Data Science & Engineering (CONFLUENCE-2017), IEEE, January 2017, pp.71-76.
14. Singh M., Varyani N., Singh J., **Haribabu K.** (2018) Estimation of End-to-End Available Bandwidth and Link Capacity in SDN. In: Kumar N., Thakre A. (eds) Ubiquitous Communications and Network Computing. UBICNET 2017. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 218. Springer, Cham
15. Sinha Y., Vashishth S., **Haribabu K.** (2018) Estimation of Raw Packets in SDN. In: Kumar N., Thakre A. (eds) Ubiquitous Communications and Network Computing. UBICNET 2017. Lecture Notes of the

Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 218. Springer, Cham

16. Sinha Y., Vashishth S., **Haribabu K.** (2018) Real Time Monitoring of Packet Loss in Software Defined Networks. In: Kumar N., Thakre A. (eds) Ubiquitous Communications and Network Computing. UBICNET 2017. Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, vol 218. Springer, Cham

#### D. BOOKS PUBLISHED/EDITED /CHAPTER WRITTEN DURING THE YEAR:

1. Piyush Raghav, and **Amit Dua**, "Security and Cryptography in Images and Video using Elliptic Curve Cryptography (ECC)," CRC Press, 2018. Taylor and Francis.
2. **Lavika Goel**, Lavanya B, Pallavi Panchal, "Hybridization of Biogeography-Based Optimization and Gravitational Search Algorithm for efficient Face Recognition", Advanced Metaheuristic Methods in Big Data Retrieval and Analytics, IGI Global publications, 2018. (Accepted)

#### E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED: NIL

#### F. INVITED TALKS GIVEN BY BITS FACULTY

1. **Lavika Goel** delivered invited talk on "Machine Learning & its applications in Image Understanding" at Google India Pvt. Ltd., Hyderabad on 21<sup>st</sup> April 2017.
2. **Kamlesh Tiwari** conducted an invited session on biometric recognition during short term training program (ISTE-STTP) on Computer Vision and Robotics at Vishwajyothi College of Engineering & Technology, Ernakulam, Kerala, on Dec., 12 2018.

#### G. INVITED TALKS ARRANGED IN THE DEPARTMENT

1. Ms. Rashmi Verma (Co-Founder & Executive Director, Technology Division) MapmyIndia on "Disruptive solutions to Leverage the Power of AI, Deep Learning, Advanced Analytics" on October 28, 2017
2. Dr. Sudhir Rawat (Microsoft, Hyderabad) presented advancements in cloud computing and AI during Microsoft Student Partners Summit on Sept 28, 2018

#### H. AWARDS AND RECOGNITIONS WON BY STUDENTS

1. Ms. Ananyashree Garg (2015A7PS0117P), a student pursuing Bachelor of Engineering in Computer Science, BITS Pilani had participated in Youth Money Olympiad 2017. After the 1<sup>st</sup> round, she was ranked as the YMO College Topper and was promoted to the 2<sup>nd</sup> round. After the 2<sup>nd</sup> round which was held on 21 May 2017, she was ranked 3<sup>rd</sup> at the national level. She received the prize for winning 3<sup>rd</sup> rank in May end at a ceremony to be held at National Stock Exchange (NSE) Mumbai.
2. Ms. Vidhi Jain (2014A7PS113) was declared as the Winner of the 'Citi Women Leader Award 2016-17' on 7<sup>th</sup> March, 2017 at Citi Group's First International Financial Center in BKC, Mumbai. Citi India provided her scholarship to support one year of her study at BITS Pilani.
3. Mr. Mohit Yadav (2014A7TS0074P) and Mr. Aashish Richariya (**2014A8TS0454P**) of the Robotics and Embedded Systems Laboratory of the CSIS department were selected to attend a prestigious Sakura Science Program (SSP-2017) from June 11, 2017 to July 2, 2017. The program was hosted by Robotics Laboratory, Hiroshima University and was supported by Japan Science and Technology Agency.

#### I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

Industry Immersion: Nil

Faculty Development :

1. **Avinash Gautam** and **Virendra Singh Shekhawat** successfully completed a Faculty Development Program on "Parallel Programming on HPC" from 11<sup>th</sup> to 16<sup>th</sup> Sept 2017 at IISc Bangalore, India.

#### J. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR

S.No.	Software/Equipment	No. of Licenses or Qty.
1.	EO Gige HE Power Supply 1.8m Universal, EO-5012C Color Gige He Camera, Intel PRO/1000 PT Gige Board PCI-E	01
2.	Xbee 6.3 mw Wire Antenna (05 Nos.), Raspberry Pi 3 - Model B - ARMv8 with 1G RAM (5 Nos.), Waveshare Raspberry Pi LCD Display Module 3.5inch 320*480 TFT Resistive Touch Screen Panel SPI Interface for Raspberry pi Model	01
3.	KitsGuru GY-NEO6MV2 new GPS module NEO6MV2 NEO-6M, MPU6050 HMC5883L BMP180 Gyroscope Accelerator Compass Module (02 Nos.)	01

S.No.	Software/Equipment	No. of Licenses or Qty.
4.	Strontium Nitro 16 GB class 10 uhs-1 Micro SDHC card, Sandisk Ultra Micro SDHC 16GB UHS-I Class 10 Memory Card, Samsung Evo mb + mC16 DA/EU 16 GB SDHC Memory Card, Samsung ng EVO Plus 16GB Micro SD Card, Samsung EVO Class 10 Micro SDHC Memory Card 16 GB without Adapter	01
5.	Syska X110 100mAH Power Bank	02
	Syska X110 11000 mAh Power Bank	01
	Intex IT-PB11K 11000mAH Power Bank	02
6.	Generic 6 in1 Electric Soldering Iron Stand Tool Wire Stripper Kit 25 Watt Welding Stick Set, Generic KG172 Kits Guru.com Dt830D Digital Multimeter	01
7.	Samsung Galaxy J2SM-J200G/DD, Moto G5 Plus, Hikvision DS-2CE 16COT-IRP CMOS IR Night Vision Camera, VEEROBOT Infrared Proximity/Obstacle Detecting Sensor Module, Arduino UNO Kit for Robotic Projects, D3D Wireless HD IP Wi-Fi CCTV Indoor Security Camera	01
8.	CASIO XJF210WN Projector	02

## K. DEPARTMENTAL ASSOCIATIONS ACTIVITIES

### K.1 List of events organized by the Computer Science Association:

Month	Name of the Event	Date	Venue
	ART signings	23 <sup>rd</sup>	Various Messes
	ART	28 <sup>th</sup> & 29 <sup>th</sup>	LTC 5103
February	Microsoft CodeFunDo	18 <sup>th</sup>	LTC 5105
March	Anticoding	19 <sup>th</sup>	IPC 6117, 6118
	Qurious	21 <sup>st</sup>	(online event)
	Math-e-magic	23 <sup>rd</sup>	(online event)
	ICL	26 <sup>th</sup> & 27 <sup>th</sup>	(online event)
April	Executive Com. Declaration	17 <sup>th</sup>	SAC
	Farewell and Grub	28 <sup>th</sup>	LTC 5102 & VKB Mess
	Apogee Review Meet	28 <sup>th</sup>	SAC Amphi
August	Recruitment Planning meet	14 <sup>th</sup>	SAC
	CSA Recruitments	18 <sup>th</sup>	LTC 5102
September	Competitive Coding Special Interest Group (CPSIG)	13 <sup>th</sup>	LTC 5101
	Mindturner	15 <sup>th</sup>	LTC 5102
	CPSIG	18 <sup>th</sup>	LTC 5101
	CPSIG	20 <sup>th</sup>	LTC 5101
	CPSIG	22 <sup>nd</sup>	LTC 5101
	CPSIG	25 <sup>th</sup>	LTC 5101
	CPSIG	27 <sup>th</sup>	LTC 5101
October	CPSIG	29 <sup>th</sup>	LTC 5101
	CPSIG	25 <sup>th</sup>	LTC 5101
	CPSIG	27 <sup>th</sup>	LTC 5101
November	CPSIG	30 <sup>th</sup>	LTC 5101
	Intra CSA Apogee Meet	23 <sup>rd</sup>	SAC
	Farewell and Grub	25 <sup>th</sup>	LTC 5102 & VKB Mess

### K.2 Industry-driven Student Workshops at the Department:

1. Azure Discovery Training Sessions-BITS Pilani a special training session on Microsoft Azure and ML platform organized by Microsoft India during Sept 11-16, 2017.

**B1.10.6 Department: Economics and Finance**Number of faculty members (as on 31<sup>st</sup> December, 2016)

<b>Professor</b>	02
<b>Associate Professor</b>	0
<b>Assistant Professor</b>	04
<b>Visiting faculty and lecturer</b>	01

**Head of the Department:** Dr. A K Vaish**Contact details:** akvaish@pilani.bits-pilani.ac.in**Number of PhD Scholars:** 09**Ph.D. Thesis Submitted during the year:** 02**A. SPONSORED RESEARCH ACTIVITIES & FUNDING****(i) Ongoing projects:** 2**(ii) Projects Sanctioned during the year :** 2**(iii) Projects completed in the year:** NIL**(iv) Consultancy Projects completed this year:** NIL**B. PUBLICATIONS**

S No	Title of paper	Authors	Name of Journal	Volume & page number
1	Does Caste Matter in Labour Markets	Krishna M.	Artha Vijnana	Vol 59, 55-76
2	What Determines the Performance of Small Business Units: Insights from a Jewelry Cluster	Krishna M., Bino Paul GD, Venkatesh Murthy	Journal of Workplace Learning	Vol 29, 4447-4472
3	The Structure of Collaboration Networks: An Illustration of Indian Economics	Krishna M, Bino Paul GD	Journal of Social Structure	Vol 18, 1-19
4	"Assessing the Triple Deficit Hypothesis for Major South Asian Countries : A Panel Data Analysis"	Shruti Shastri, A.K. Giri, Geetilaxmi Mohapatra	International Journal of Economics and Financial Issues	Vol 7, 292-299
5	Budget Deficit Sustainability and Revenue Expenditure Linkages in Major South Asian Economies	Shruti Shastri, A.K. Giri, Geetilaxmi Mohapatra	Eurasian Journal of Business and Economics	Vol 10, 37-59
6	An Empirical Investigation of Twin Deficit Hypothesis: Panel Evidence from Major South Asian Economies	Shruti Shastri, A.K. Giri, Geetilaxmi Mohapatra	Journal of Economic Research	Vol 22, 1-22
7	Determinants of Current Account Deficits: Panel Evidence from Major South Asian Economies	Shruti Shastri, A.K. Giri, Geetilaxmi Mohapatra	Asian African Journal of Economics and Econometrics	Vol 17, 127-140
8	An Empirical Assessment of Fiscal Sustainability for Selected South Asian Economies	Shruti Shastri, A.K. Giri, Geetilaxmi Mohapatra	Theoretical and Applied Economics (TAE)	Vol 24, 161-178
9	Modeling Persistence of Conditional Volatility of Asset Returns	Rajan Pandey, Arya Kumar	Afro- Asian Journal of Finance an Accounting	Vol 7(1), 16-34
10	The Role of Quality of Relations in Succession Planning of Family Businesses in India.	Parimal Merchant, Arya Kumar and Debasis Mallik	Journal of Asian Finance, Economics and Business	Vol 4, No 3 , 2017, pp. 45-56
11	Factors Influencing Family Business Continuity in Indian Small and Medium Enterprises (SMEs)	Parimal Merchant, Arya Kumar, Debasish Mallik,	Journal of Family and Economic Issues, © Springer Science+Business Media, LLC, part of Springer Nature 2017, Published online Dec 2017.	
12	Views covered on Sandbox for Research & Development	Arya Kumar	TBI BITS Pilani in the Times of India dated 26 <sup>th</sup> March 2017.	
13	"Management Education - Need for Innovation"	Arya Kumar	Higher Education Review	18th April 2017, pp 1-2.
14	Generator Estimation for Transition Matrices with Applications To Credit	N V M Rao and Chotia, V.	IUP Journal of Applied Finance	Vol. 23, Issue. 1, (Jan 2017):

S No	Title of paper	Authors	Name of Journal	Volume & page number
	Ratings			26-43.
15	Infrastructure financing and economic growth in India: An Empirical Investigation	N V M Rao and Chotia, V.	Journal of Financial Management of Property and Construction	Accepted for publication

**C. CONFERENCES/WORKSHOP/SEMINAR ATTENDED/ PAPERS PRESENTED:**

**a. INTERNATIONAL:** 04

**b. NATIONAL:** 04

SNo	Title of Seminar	Name of Department	Date
1	Contemporary Themes in India's Economic Development & the Economic Survey (Krishna M.)	Ministry of Finance, Government of India	11-17 June 2017
2	Kerala's Development Experience (Krishna M.)	University of Calicut	10-11 January 2017
3.	EcoMod Modeling School course on Energy and Environmental CGE Modeling with GAMS (Monika Gupta)	EcoMod Modeling School in cooperation with the Singapore Institute of Statistics c/o Dept of Statistics and Applied Probability, National University of Singapore (NUS)	15 <sup>th</sup> Jan to 19 <sup>th</sup> Jan 2018
4.	System Dynamics Summer School (Monika Gupta)	System Dynamic Society at Massachusetts Institute of Technology (MIT)	11 <sup>th</sup> to 14 <sup>th</sup> July, 2017
5.	Examining the Interlinkages of Energy Poverty, Income Poverty and Human Development for Indian States (Geetilaxmi Mohapatra, AK Giri)	Department of Economics, University of Malaya, Kuala Lumpur, Malaysia	August 21-22, 2017
6.	Examining the Relationship between Electricity Consumption, Economic Growth, Energy Prices and Technology Development in India (Geetilaxmi Mohapatra)	Organized by Nanyang Technical University but held at Hotel Mandarin Orchard	August 5-7, Singapore
7.	Factors Influencing Family Business Continuity in Indian Small and Medium Enterprises (SME) (Parimal Merchant, Arya Kumar and Debasis Mallik)	BITS Pilani	17th -18th March 2017
8.	Knowledge Management Framework for Decision Support System in Higher Education Institutes in India (Arya Kumar)	IIM Trichy	27 <sup>th</sup> -30 <sup>th</sup> dec , 2017
9.	A course on Energy and Environmental CGE Modeling with GAMS	organized by EcoMod Modeling School in cooperation with the Singapore Institute of Statistics c/o Dept of Statistics and Applied Probability, National University of Singapore (NUS).	15-19 Jan, 2018

**A. BOOKS PUBLISHED OR WRITTEN DURING THE YEAR :** NIL

**B. BOOKS CHAPTERS PUBLISHED OR WRITTEN DURING THE YEAR:** NIL

**C. INVITED TALKS GIVEN BY BITS FACULTY :** NIL

**D. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS:**

1. Parimal Merchant, Arya Kumar and Debasis Mallik, Factors Influencing Family Business Continuity in Indian Small and Medium Enterprises (SME) presented in the 2nd International Conference on Evidence Based Management (ICEBM 2017), BITS Pilani, held between 17th -18th March 2017. (Best paper award).
2. Arya Kumar, Chaired the panel discussion on "Talent Management Strategies in Banking and Financial Services" in the Annual HR Conclave – 2 on "Bridging the Talent Gap - Issues and Challenges" organized by Management Department, BITS Pilani on 20th January 2017 at India Habitat Center , New Delhi.
3. Arya Kumar Chaired a session on Banking & and New paradigm in Financial Policy and delivered key note valedictory address in the, 2nd International Conference on Evidence Based Management (ICEBM) 2017 organised by Management Department, BITS Pilani between 17th and 18th March , 2017.
4. Arya Kumar, Chaired a session on IT and Enterprise in the 11th ISDSI International Conference held at IIM Trichy, December 27th – 30th , 2017.

5. Arya Kumar, Panel member in a discussion on Policy Framing for enhancing entrepreneurial climate in educational institutes organized by MNIT Innovation and Incubation Centre on 29th July 2017 in Jaipur.
6. Ecomod Scholarship Award (\$1500) to attend EcoMod Modeling School course on Energy and Environmental CGE Modeling with GAMS organized by EcoMod Modeling School in cooperation with the Singapore Institute of Statistics c/o Dept of Statistics and Applied Probability, National University of Singapore (NUS).
7. Awarded with a scholarship (\$2000) from PwC and System Dynamic Society to attend System Dynamics Summer School at Massachusetts Institute of Technology (MIT) in July, 2017.
8. WIPRO-XUB best paper award at 2nd XUB Sustainability Summit organized by Xavier University Bhubaneswar at XIMB in 2016.

**DEPARTMENTAL ASSOCIATION / CLUB ACTIVITIES:**

NIL

**B1.10.7 Department: Electrical and Electronics Engineering & Instrumentation**

Number of faculty members (as on 31 December 2017)

<b>Emeritus Professors, Professors</b>	<b>05</b>
<b>Associate Professors</b>	<b>04</b>
<b>Assistant Professors</b>	<b>15</b>
<b>Lecturers</b>	<b>7</b>

**Head of the Department:****Dr. Navneet Gupta****Contact details:**

ngupta@pilani.bits-pilani.ac.in

**Number of PhD Scholars:****Full time 15, Part time 9****Ph.D. Thesis Submitted during the year: 03****A. Sponsored Research/ development activities:****(i) Ongoing projects:**

- (a) Dr. Arnab Hazra is working on his project on "Development of TiO<sub>2</sub> nanotube based highly selective capacitive type sensor device for the detection of methanol poisoning in alcoholic beverages, funded by DST-SERB during Sep 2016. The amount of project is Rs. 28 Lakhs.

**(ii) Projects sanctioned/Approved during the year 2017.**

- (a) Dr. Karunesh K Gupta received a project on "Soft Computing Framework based Integrated Multi Sensor Array for Water Quality Assessment: Targeting Fluoride as major parameter" worth Rs 38.7 Lakhs; DST under Water Technology Initiatives (WTI); Starting- Jan 2017.
- (b) Prof. Navneet Gupta received a Project on "Study on Electronic Transport Behaviour of Carbon Nanotube Based Field Effect Transistors (CNTFETs)" funded by DRDO of Rs 20.49 lakhs, Starting September, 2017.

**(iii) Projects completed**

- (a) Dr. Rajneesh Kumar completed a project funded by Ministry of New and renewable energy (MNRE), New Delhi on topic "Design and development of an efficient soft-switching converter with adaptive maximum power point tracking (MPPT) controller for a standalone photovoltaic power generation system" worth Rs. 29.39 Lakhs

**(iv) Consultancy Projects completed this year:**

- (a) Dr. H.D. Mathur, completed National Mission Project on Education through ICT: Developing suitable pedagogical methods for various classes intellectual calibers and research in e-learning - Anchored by IIT Kharagpur, Title of Course: Advanced Electrical Machines, Sponsoring Agency: MHRD, Amount: Rs. 7 Lakhs.

**B. Publications:****The faculty of the department published 25 papers in international/national refereed journals during the year. (Scopus and SCI indexed)**

1. Kavindra Kandpal and Navneet Gupta, "Study of structural and electrical properties of ZnO thin film for thin-film transistor(TFT) applications" Journal of Materials Science: Materials in Electronics, Springer, DOI 10.1007/s10854-017-7500-7, 2017, SCI

2. Prachi Sharma and Navneet Gupta, "Two dimensional simulation and analysis of density-of-states (DOS) in top-gated nanocrystalline silicon thin film transistor" *Int. J of Nanoelectronics and Materials*, vol. 10(2), 101-108, 2017, SCOPUS
3. Prachi Sharma, N. Tripathi and Navneet Gupta, "Nanocrystalline silicon thin film prepared by e-beam evaporation for display applications" *Journal of Materials Science: Materials in Electronics*, Springer, vol. 28 (4), 3891-3896, 2017, SCI
4. A Anurag and H O Bansal, "Internal Fall Protection Mechanism in Non-Compliant Humanoid Robot, *Energy Procedia (Elsevier)*, doi: 10.1016/j.egypro.2017.05.118, SCOPUS indexed.
5. Y. K. Bhateshvar, H. D. Mathur, H. Siguerdidjane and R.C. Bansal, "Ant Colony Optimized Fuzzy Control Solution for Frequency Oscillation Suppression", *Electric Power Components and Systems*, Volume 45, Issue 14, 2017, pp. 1573-1584 [SCI]
6. Y.K. Bhateshvar, H.D. Mathur and R.C. Bansal, " Power-frequency Balance in Multi-Generation System using Optimized Fuzzy Logic Controller", *Electric Power Components and Systems*, Volume 45, Issue 12, 2017, pp. 1275-1286. [SCI]
7. S. Mohanty, K. K. Gupta, Kota Solomon Raju, "Unitary Sample Shifted time Series FCF, FKS, and FE in Fault Identification of Bearing, " *IET - Science, Measurement & Technology*, vol-11, issue -4, pp. 516 - 524, July 2017, SCI
8. S. Mohanty, K. K. Gupta, Kota Solomon Raju, "Adaptive Fault Identification of Bearing using EMD-PCA based average Kurtosis technique," *IET - Science, Measurement & Technology*, vol-11, issue -1, pp. 30-40, Jan 2017, SCI
9. Upadhyay,P., Pulipaka,S. ,Sharma,M., Kumar,R. "A proposed maximum power point operating strategy for photovoltaic applications using monthly irradiance estimates", *Sol. Energy* 141, 266–277 (2017). SCI
10. S. Pulipaka, A Ramesh, R.Kumar, B.Bora, S.Kumar and S.K.Singh, "Non-intrusive real-time monitoring of PV generation at inverters using internet of photovoltaics" *Electronic Letters*, 53, 1137-1138, 2017. SCI
11. Sainath B, "Power-constrained, Spectral Efficiency-optimal, Green Cooperative Device-to-Device Communication Systems," *IET Communications*, Volume 11, Issue 13, Sep. 2017, pp. 2066–2073. SCI.
12. N. Chattaraj, R. Ganguli, "Multi-objective optimization of triple layer piezoelectric bender with a flexible extension using genetic algorithm ", *Journal of Mechanics of Advanced Materials and Structures*, Taylor & Francis, (Accepted, 2017) SCI
13. N. Chattaraj, R. Ganguli, "Effect of self-induced electric displacement field on the response of a piezo-bimorph actuator at high electric field", *International Journal of Mechanical Sciences*, Elsevier, vol. 120, pp: 341-348, 2017, SCI
14. N. Chattaraj, R. Ganguli, "Performance improvement of a piezoelectric bimorph actuator by tailoring geometry", *Journal of Mechanics of Advanced Materials and Structures*, Taylor & Francis, pp:1-7, 2017, SCI
15. Ankita Anand, Asutosh Kar, Sambit Bakshi and M.N.S. Swamy, "Convex combinations of adaptive filters for feedback cancellation in hearing aids", *Journal of Ambient Intelligence and Humanized Computing*, Springer, pp. 1-11, Sept. 2017. SCI
16. Trideba Padhi, Mahesh Chandra, Asutosh Kar and M.N.S. Swamy, "Design and analysis of improved hybrid active noise control system", *Applied Acoustics*, vol. 127, pp. 260-267, Dec. 2017. SCI
17. Asutosh Kar and M.N.S. Swamy, "Tap-length optimization of adaptive filter in stereophonic acoustic echo cancellation", *Signal Processing*, vol. 131, pp. 422-433, February 2017. SCI
18. Ankita Anand, Asutosh Kar and M.N.S. Swamy, "Design and analysis of a BLPC vocoder with probe noise for adaptive feedback cancellation", *Applied Acoustics*, vol. 115, pp. 196-208, 2017. SCI
19. Vineet Kumar, Abhijit Asati and Anu Gupta, "Low-Latency Median Filter Core for Hardware Implementation of 5-by-5 Median Filtering", *IET Image Processing*, Volume 11, Issue 10, October 2017, SCI
20. Vineet Kumar, Abhijit Asati and Anu Gupta, "Hardware Accelerators for Iris Localization", *Journal of Signal Processing Systems* (2017). Springer US, pp-1-17, Sept. 2017, SCI.
21. T Sen, N Pragallapati, V Agarwal, R Kumar, "Global maximum power point tracking of PV arrays under partial shading conditions using a modified particle velocity based PSO technique", *IET Renewable Power Generation*, Publication date-2017/12/22, DOI:10.1049/iet-rpg.2016.0838
22. S Pulipaka, R Kumar, "Analysis of soil distortion factor for photovoltaic modules using particle size composition", *Solar Energy*, Vol. 161, pp. 90-99, 2018
23. R Kumar, S Pulipaka, "Photovoltaics for Rural Electrification and Digital Sustainability- an integrated approach is the way ahead", *Energy Future*, Vol 5, no.2, pp. 22-28, 2017.



24. Smita Pareek, Nitin Chaturvedi, Ratna Dahiya, "Optimal Interconnections to address partial shading losses in solar photovoltaic arrays" Journal of Solar Energy, Elsevier, Volume 155, pp. 537-551, 2017. (SCI)

**C. CONFERENCES/WORKSHOP/SEMINAR ATTENDED/ PAPERS PRESENTED:**

**The faculty of the department presented 41 papers in international/national conferences during the year.**

1. Priyesh Shukla and Anu Gupta "Current-Mode PMOS Capacitance Multiplier", 2017 IEEE International Conference on Inventive Systems and Control (ICISC), Coimbatore, Jan 19- 20 2017
2. Priyesh Shukla and Anu Gupta , "Quad-NMOS Cross-coupling for Linearity Enhancement in High Frequency Continuous-time OTA-C Filters with IM3 Below -70 Db", International Journal of Information and Electronics Engineering (ICIEE 2017), February 22-24, 2017, Singapore
3. Anuj Kumar Ojha and A.V. Praveen Kumar, Excitation of Higher Order Modes of Cylindrical Dielectric Resonator Antenna using Dual-slot feed , presented at 3rd International conference on communication systems (ICCS17), 14-16 October, 2017, BKBIT, Pilani
4. Ritish Kumar, Piyush S and A.V. Praveen Kumar, Offset fed slot antenna for broadband operation, presented at 3rd International conference on communication systems (ICCS17), 14-16 October, 2017, BKBIT, Pilani
5. Jose Kurian John and A.V. Praveen Kumar, Trade-offs in Dielectric Spectroscopy using Cavity Perturbation at the X-Band, presented at International Conference on Emerging Areas in Material Engineering (ICEAME), 13-15 July, 2017, Amal Jyoti College of Engineering, Kanjirappally, Kerala
6. Anuj Kumar Ojha and A.V. Praveen Kumar, A Dielectric Resonator Inspired Displacement Sensor, presented at International Conference on Optical and Wireless Technologies (Springer), Jaipur, India, 18-19 March, 2017
7. A.V. Praveen Kumar and Graeme Burt, Hybrid electromagnetic modes - structures and characteristics, presented at IEEE Applied Electromagnetic Conference (AEMC17), MIT, Aurangabad, 19-22 December 2017
8. Rishabh Bhardwaj, Sagnik Majumder, Pawan K. Ajmera, "Temperature Compensation of ISFET Based pH Sensor Using Artificial Neural Networks" 11 th IEEE Regional Symposium on Micro and Nanoelectronics (RSM), Penang, Malaysia, 23-25 August 2017.
9. Harsh Sinha, Raunak Manekar, Yash Sinha, and Pawan K. Ajmera, "Convolutional Neural Network based Human Identification using Outer Ear Images" 7th International Conference on Soft Computing for Problem Solving (SocProS 2017), IIT Bhubaneswar, 23-24 December 2017.
10. Kavindra Kandpal, Jitendra Singh, Navneet Gupta and Chandra Shekhar, "Effect of Thickness on the Properties of ZnO Thin Films Prepared by RF Sputtering", 17<sup>th</sup> International Conference on Thin Films (ICTF-2017), NPL, New Delhi, November 13-17, 2017.
11. B. Sainath, Rahul Gupta, Pratik Devikar "Fading Averaged-Spectral Efficiency Analysis of Average Interference-Constrained, Cooperative Device-to-Device Communication System," IEEE INDICON, IIT Roorkee, India, Dec. 2017.
12. B. Mahesh, B. Sainath "A Probabilistic Model for Random Horizontal Ranges Of Projectile," International Conference on Sports Engineering (ICSE), Jaipur, Rajasthan, India, Oct. 2017.
13. B. Sainath, Santosh A and Jagadeesh K "Energy Harvesting Relay Outage Probability Analysis of Cooperative Communication System over Small and Large Scale Fading Channels," IEEE International Conference on Advances in Computing, Communications, and Informatics (ICACCI), Manipal, Karnataka, India, Sep. 2017.
14. B. Sainath, Satwik Prabhu K, and, Naman Gupta "Energy Efficient Sleep Period Optimization for Green Radio Communication," URSI Regional Conference on Radio Science, Tirupati, India, Mar. 2017.
15. Prakhar kumar, Srijan Rastogi, Anu Gupta, "Novel design of linear low power Gm-C based voltage controlled filter with programmable gain", International Conference Of Science Technology & Management (ICSTM-2017), 24 september 2017, Bengaluru.
16. Brahmabhatt Viralkumar Kishorkumar, Anu Gupta, "demonstration of CORDIC based Digitally assisted analog using 12 bit pipelined ADC ", International Conference Of Science Technology & Management (ICSTM-2017), 24 september 2017, Bengaluru.
17. Harshavardhan Settibhaktini and Anantha Krishna Chintanpalli, "Computational Model Predictions of Level-Dependent changes for Concurrent Vowel Identification, 40<sup>th</sup> Meeting of Association for Research in Otolaryngology, Baltimore, USA, Feb 11-15, 2017.
18. A. K. Kuna, K. Kandpal and K. B. R. Teja, "An investigation of FinFET based digital circuits for low power applications," 2017 International Conference on Circuit , Power and Computing Technologies (ICCPCT), Kollam, 2017, pp. 1-6.

19. Tushar Goyal and Ankush C. Jahagirdar, "A Comparative study of Control Algorithms for detumbling of an Active Magnetically Actuated Nanosatellite" 9<sup>th</sup> European CubeSat Symposium, Kursaal, Ostend, Belgium, Nov 29- Dec 1, 2017.
20. S Pulipaka, R Kumar, "Comparison of SOM and conventional neural network data division for PV reliability power prediction", IEEE EEEIC 2017, Milan, Italy, June 6-9, 2017, 1-5
21. S Pulipaka, R Kumar, "Performance Enhancement of Neural Network Training using Hybrid Data Division Technique for Photovoltaic Power Prediction", IEEE EEEIC 2017, Milan, Italy, June 6-9, 2017, 1-6
22. Pranshu, Shaishta, Nitin, S Gurunarayanan, "An Exploration of Neuromorphic Systems and Related Design Issues/Challenges in Dark Silicon Era" in 3rd International Conference on Communication Systems, ICCS-2017, 14-16 October 2017, BKBIET, Pilani, India.
23. Nitin Chaturvedi, Ajay Shekhawat, Bhavesh Verma, Sachin Belgamwar, Navneet Gupta, "Investigation & Design Challenges of Advance Sensor/Material Selection for IoT based Protective Gears for Training/Impact scoring in Taekwondo", in International Conference on Sports Engineering, ICSE-2017, 23-25 October 2017, Jaipur, India.
24. Suvi Jain, Nitin Chaturvedi, S Gurunarayanan, "Design and Analysis of 6T SRAM Cell with NBL Write Assist Technique Using FinFET" in International Conference on Computer, Communications and Electronics, COMPTLIX 2017, 1-2 July 2017, Jaipur. (IEEE-Xplore)
25. Divya Suneja, Nitin Chaturvedi, S Gurunarayanan, "A Comparative Analysis of Read/Write Assist Techniques on Performance & Margin in 6T SRAM Cell Design" in International Conference on Computer, Communications and Electronics, COMPTLIX 2017, 1-2 July 2017, Jaipur. (IEEE -Xplore)
26. N. Sharma, S. Dhakad, K. Singh, N. Chaturvedi, A. Chauhan, C. Periasamy, and N.Chaturvedi , "AlGaIn/GaN HEMT based pH sensor", in "The XIX International Workshop on The Physics of Semiconductor Devices (IWPSD 2017)", Dec. 11-15, 2017, Delhi, India
27. N. Chaturvedi, S. Mishra, S. Dhakad, N Sharma, K. Singh, N. Chaturvedi, R. Taliyan, A. Chauhan, P. Parjapat, D.K Kharbanda, and P.K Khanna "Development of GaN HEMTs based Biosensor", in "The XIX International Workshop on The Physics of Semiconductor Devices (IWPSD 2017)", Dec. 11-15, 2017, Delhi, India.
28. A. Hazra, P. Bindra, Resistive and Capacitive Sensing Performance of TiO<sub>2</sub> Nanotube-Based Vapor Sensor, International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2017), Dec.-18-21, IIT Guwahati, India
29. P. Bindra and A. Hazra, Controlled variation of structural parameters of electrochemically grown TiO<sub>2</sub> nanotube array, International Conference on Nano and Functional Materials (NFM-2017), Nov.16–18, 2017, BITS Pilani-Pilani Campus, Rajasthan, India
30. P. Bindra and A. Hazra, Impedance behavior of TiO<sub>2</sub> nanotube porous layer in reducing vapor ambient, International Conference on Thin Films (ICTF-17), Nov. 13-17, 2017, NPL, New Delhi
31. Roshan Jayswal, Rahul Gupta, and Karunesh K. Gupta, "Patient Health Monitoring System Based on Internet of Things," 4th IEEE International Conference on Image Information Processing (ICIIP-2017), JAYPEE, Solan, 2017.
32. Ankit Agarwal, Devesh Samaiya, and Karunesh K. Gupta, "A Comparative Study of SIFT and SURF Algorithms under Different Object and Background Conditions," 16th IEEE International Conference on Information Technology (ICIT-2017), Bhubaneswar, 2017.
33. Arnav Verma, Devesh Samaiya, Karunesh K. Gupta, "Nonlinear Motion Tracking by Deep Learning Architecture," 3rd International Conference on Communication Systems (ICCS-2017), BKBIET, Pilani, 2017.
34. Aditya Harit; Col J. C. Joshi; Karunesh K. Gupta, "Facial Emotions Recognition using Gabor Transform and Facial Animation Parameters with Neural Networks," 3rd International Conference on Communication Systems (ICCS-2017), BKBIET, Pilani, 2017.
35. Jyotirmoy Bhardwaj; Punit Khatri, Karunesh K. Gupta, "Real Time Assessment of Potable Water Quality in Distribution Network based on Low Cost Multi-Sensor Array," 3rd International Conference on Communication Systems (ICCS-2017), BKBIET, Pilani, 2017.
36. Jyotirmoy Bhardwaj, Karunesh K. Gupta, and R. Gupta, " Fuzzy based Real Time Assessment of Water Quality in Distribution Network: A Python Framework Approach," IEEE International Conference on Soft Computing and its Engineering Applications (icSoftComp-2017), Anand, Gujrat, 2017.
37. Ashish Patel, H.D. Mathur, Surekha Bhanot, "A new and simple SRF based power angle control for UPQCDG to integrate solar PV into grid.", 7th Int. Conf. on Power System (ICPS-2017), COEP, Pune, Dec. 21-23, 2017.

38. Dhananajay Kumar, Nandan B R, H. D. Mathur and S. Bhanot, "Robust Controller Synthesis for Frequency Regulation in Islanded Microgrid", In the proceedings of IEEE 14th IEEE India Council International Conference (INDICON 2017), December 15-17, 2017, Roorkee, India.
39. Ashish Patel, H. D. Mathur and S. Bhanot, "A New and Simple SRF based Power Angle Control for UPQCDG to Integrate Solar PV into Grid", In the proceedings of 7th International Conference on Power Systems, December 21-23rd, 2017, Pune, India
40. Ashish Patel, H. D. Mathur and S. Bhanot, "A Simple Approach to Improvement in Performance of UPQCDG in presence of Unbalanced Load", In the proceedings of IEEE Asia Pacific Power and Energy Engineering Conference, 08-09 November' 2017, Bengaluru, India
41. Dhananajay Kumar, Nandan B R, H. D. Mathur and S. Bhanot, "Robust Hybrid Controller Design Based on  $H_{\infty}$  Synthesis for Frequency Regulation in Micro-Grid", In the proceedings of IEEE Asia Pacific Power and Energy Engineering Conference, 08-09 November' 2017, Bengaluru, India

#### **D. Books Published/Edited /Chapter written/ reviewed articles during the year:**

1. Prof. Navneet Gupta co-authored a chapter of book "Nanomaterials and Their applications" published by Springer, Singapore. The title of chapter is "Electronic Behavior of Nanocrystalline Silicon Thin Film Transistor".

#### **E. Conferences, seminars & workshops conducted**

1. Department conducted one-day workshop on "Specifications to Silicon" on 28<sup>th</sup> Oct, 2017. Mr. H.S. Jatana, Scientist/Engineer 'G', Group Head – Design & Process Group, SCL, Mohali, Dept of Space, Govt. of India, was the resource person.
2. Department organized a seminar on CMOS Technology - Past, Present and Future, conducted by Prof. Souvik Mahapatra, Professor at IIT Bombay on 17th November 2017.

#### **F. Invited Talks / chairing session by EEE faculty:**

1. Prof. Anu Gupta chaired a session in International Journal of Information and Electronics Engineering (ICIEE 2017), February 22-24, 2017, Singapore.
2. Dr. Karunesh K. Gupta delivered Keynote presentation in Joint Indo-German Conference on Sustainable Engineering, "IOT Analytics for Structural Health Monitoring," BITS, Pilani, 2017.
3. Dr. Nitin Chaturvedi delivered a talk on "Energy Efficient Circuit Design for Energy Autonomous IoT Systems using Emerging Non-Volatile Memories" The 121st TAOYAKA Program Seminar/HiSENS Seminar, on December 22, 2017 at Hiroshima University, Japan.
4. Dr. Sainath B chaired a session during IEEE conference ICACCI 2017 held at Manipal, Karnataka, India.
5. H.D. Mathur conducted training programme for Grasim (Aditya Birla Group Company) Engineers on "Energy Conservation" at Nagda, M.P. 28-29 July, 2017.
6. H.D. Mathur, Delivered keynote address on "Role & Impact of Electric Vehicles : Smart City Perspective" in National Conference on Modern Approach In Energy, Science And Technology at Bikaner on 25th March, 2017.

#### **G. Invited talks / Visits / attended workshops of distinguished Guests arranged in the department:**

1. Dr. Pawan Ajmera attended 5 days Summer School on Speech Signal Processing (S4P 2017), organized by Dhirubhai Ambani, Institute of Information and Communication Technology (DA-IICT), Gandhinagar, India.

#### **H. Awards and recognitions won by faculty and students**

- (i) A team of Vaibhav Garg (2013A3PS587P) and Neha Agarwal (2013A3PS493P) guided by Mr. Kavindra Kandpal (EEE Dept.) won 12<sup>th</sup> edition of the Cadence Design Contest in U.G. category. The project title was "Design of DQPSK Demodulator for Implantable Bio-Medical Devices".
- (ii) A team of Harjap Singh Saini (2016H1230137P) and Abhinav Garg (2016H1400103P), guided by Prof. Anu Gupta, ( EEE Dept.) won 12<sup>th</sup> edition of the Cadence Design Contest in P.G. category. The project title was: Design and Implementation of Differential Power Analysis Attack Immune Encryption Circuit Based on Simon Block Cipher for Next Generation RFID Cards.

#### **I. Faculty Development, International Collaboration & Industry/ University Immersion**

- (i) International collaborators: Dr. Christian Sumner (MRC Institute of Hearing Research, University of Nottingham, UK) and Dr. Michael G. Heinz (Purdue University, USA).
- (ii) Dr. Nitin Chaturvedi attended International linkage development program (ILDLP) from 16 -25 December, 2017, Hiroshima University, Japan

- (iii) Mr. G S Sessa Chalapathi, Lecturer, visited Institute for Communications Engineering and RF-Systems (NTHFS), Johannes Kepler University (JKU), Linz, Austria from June 6 to July 9, 2017 to perform experiments for ongoing collaborative research on the topic "Integrated Cooperative Synchronization in wireless Sensor Networks".

**J. Significant new equipments/experimental facility added during the year**

S.NO.	Date of Inclusion	New Equipments Added	Amount (in INR)	Grant/Funding
1	13/1/17	High precision LCR Meter -LCR-6300	196515/-	Additional competitive Research grant of Dr. Arnab Hazra
2	8/2/17	Single- vessel Dip Coating System	105136/-	Additional competitive Research grant of Dr. Arnab Hazra
3	10/3/2017	True RMS 50000 Count hand held DMM OLED display	26500/-	Additional competitive Research grant of Dr. Arnab Hazra
4	15/9/17	DSO-50MHz Tektronix -Qty-2	43033/-	Capex .Equip .Lab Inst utility
5	13/1/17	Multiple output power supply -Qty-5	54860/-	Capex .Equip .Lab Inst utility
6	13/1/17	CommLAB-T SDR Based communication System Lab for analog & digital communication Techniques .-Qty-10	5,71428/-	Capex .Equip .Lab Inst utility
7	7/7/2017	Microprocessor based turn table for radiation pattern antenna	114500/-	
8	30/3/17	10MHz pulse generator -Qty-05	26978/-	Capex .Equip .Lab Inst utility
9	30/3/17	3MHz Function Generator -Qty-5	7637/-	Capex .Equip .Lab Inst utility
10	30/3/17	Magnetic stirrer 2LTR with hot plate	6930/-	Additional competitive Research grant of Dr. Arnab Hazra
11	6/1/2017	True RMS Digital multimeter -Qty-4	28920/-	Capex .Equip .Lab Inst utility
12	25/8/17	Wd 4Tb My passport Dsd Wd 2Tb My passport Dsd	15700/-	Opera Grant of Dr. Anantha K Chintanpali
13	8/9/2017	Adobe Creative Cloud for teams	94270/-	Opera Grant of Dr. Anantha K Chintanpali
14	1/11/2017	595--TMDX5535EZDSP Development boards & kits-TMS320 DEVELOP . 595-TMDSLCDK6748 Thick film resistor -SMD Thick film resistor .	53159/-	Opera of Dr. Anantha K Chintanpali
15	3/2/2017	Hydrothermal Autoclaave Capacity - 100ml	33508/-	RIG grant of Dr. Arnab Hazra
16	16/3/17	Gold wire ,0.25mm Dia ,99.95% 500cm	41040/-	RIG grant of Dr. Arnab Hazra
17	3/2/2017	Vacuum pump	14530/-	RIG grant of Dr. Arnab Hazra
18	30/3/17	Silicon wafer -type-N/ph. -Silicon wafer type-p/Bo. -Sio2 Coated wafer.	48790/-	RIG grant of Dr. Arnab Hazra
19	1/4/2017	DELL Precision tower 5810XCTO Base	188715/-	RIG / Addition competitive Research of Dr. Pawan Ajmera
20	4/5/2017	Laboratory hot air oven S.S304	35652/-	RIG grant of Dr. Arnab Hazra
21	7/6/2017	TBS1102B Oscilloscope 100MHz. -AFG1022 Arbitrary /function generator 25MHz .	92956/-	RIG grant of Dr. Nilanjan Chattaraj
22	11/10/2017	Sony extra base wire less head phone -JBL Xtreme portable blue tooth speaker	21998/-	RIG rant od Dr. Asutosh Kar
23	2/11/2017	Nikon DSLR Camera	144800/-	Additional competitive Research of Dr. Pawan Ajmera
24	10/5/2017	Mass flow controller -1000SCCM . -Mass flow controller -500 SCCM .	200,375/-	Early Carrier Research Award SEAB of Dr. Arnab Hazra
25	10/5/2017	DC Power Supply dual range	58025/-	Early Carrier Research Award SEAB of Dr. Arnab Hazra
26	10/5/2017	Masser MS77053217 Tornado 300 regulator , gas type -notrogen ,250M3/Hr , 20 Bar outlet	19,509/-	Early Carrier Research Award SEAB of Dr. Arnab Hazra

S.NO.	Date of Inclusion	New Equipments Added	Amount (in INR)	Grant/Funding
27	18/9/17	Synopsys EDA Tools consisting of 3902-0 Synopsys of AsiaPac full custom University bundle -05 Users	590000/-	RIG/ACRG grant of Dr. Nitin Chaturvedi
28	6/1/2017	Advanced Spartan 6 based controller. -Advanced power Quality analyser.	12495/-	ACG (Machine Lab)
29	10/3/2017	ETS600X17D-PVF . Standalone terrasas photovoltaic simulator.	12075/-	Capex .Equip .Lab Inst utility (Machine Lab)
30	7/4/2017	dc power supply Qty-10	18990/-	Capex .Equip .Lab Inst utility (Machine Lab)
31	6/6/2017	Resistive load 3KW SINGLE PHASE	10207/-	Capex .Equip .Lab Inst utility (Machine Lab)
32	11/1.2017	MTS310CB Sensor board with Magnetometer, accelerometer, Mic, Light sensor and temperature senso	88304/-	Capex .Equip .Lab Inst utility
33	11/1/2017	XM2110CB (IRIS Wireless Sensor Noodles)	47412/-	Capex .Equip .Lab Inst utility
34	11/4/2017	CM3300 Wireless Sensor Nodes	52871/-	Capex .Equip .Lab Inst utility

#### K. Departmental association/club activities:

##### (i) APOGEE 2017 Projects

APOGEE 2017 saw a lot of projects from the students with 17 projects getting selected for the pitching round. Out of the projects selected for presentation during APOGEE 2017, 4 projects had won prizes under different categories which are given as under-

- Automation:- Smart Car Device
- Energy:- Solar Powered LED Street light with motion sensor Intensity Control
- Signal Processing:- VIZAID
- Signal Processing:- Hand gesture recognition using Electromyography

##### (ii) APOGEE 2017 Events

Instrumentation Forum was involved in conducting the following events during APOGEE 2017:

- Robots At War (In association with EEE Association) – Robots At Wars is a major crowd pulling kernel event during APOGEE. Teams from various parts of the country participate in the event to prove their designs and strengths of their bots. The remote controlled bots compete in an arena to damage or render their opponents useless. This time there were 5 teams who had competed in the event. Prizes worth more than 25,000 were awarded to the winners.
- Track-O-Mania (In association with EEE Association) – Track-O-Mania is the event where participant design a bot to track complicated patterns on wooden board. The bot is judged based on their efficiency and speed. This event also saw a participation of 5 teams.
- Hackatronics - Hackatronics is a mind boggling electronics event where a problem statement is proposed and the participants have to solve a practical system designing problem with the given electronics component.
- Analog Design Challenge (ADC) - In ADC, a quizzing event, participants are judged in two rounds. First round checks the analog aptitude of a participant. Winners of the first round move on to solve a real life analog problem statement on Cadence.
- Circuit Design Challenge (CDC) – CDC, an event similar to ADC for the digital systems, participants are judged in two rounds. First round checks the digital aptitude of a participant. Winners of the first round move on to the next round and solve circuit design problem in the digital electronics lab.

There was participation from all over India in all the events, making the events successful.

##### (iii) APOGEE 2017 Paper Presentation

This year's APOGEE saw around 14 papers submitted from students for paper presentation on various topics such as application of particle swarm optimization, neural networks in improving different systems, microcontroller based systems, etc.

##### (iv) Other activities:

Instrumentation Forum had organized two talks in the first semester of the year 2017-18.

- 1) A talk in association with Embryo Club, by a BITS Alumni on the future in core electronics was organized. This talk though organized at the end of the semester saw a huge participation indicating that the students are interested in core sector given proper guidance.
- 2) A talk by Harjap Saini, a M.E. Microelectronics students of BITS Pilani on the topic of Protection against Hacking through Hardware, was also held. The speaker shared his knowledge on the subject and also his experience of the journey he had endeavored to win the Cadence India Design Competition. The session was highly informative.

Apart from Apogee events and talks, the forum was involved in activities throughout the year to increase the interest of students in the core sector of electronics. From having discussions with the professors in the SFC meets to having events organized on occasion of Engineer's Day, forum has done it all.

### B1.10.8 Department: Humanities and Social Sciences

Number of faculty members (as on 31 December 2017)

<b>Senior Professors, Professors</b>	00
<b>Associate Professors</b>	06
<b>Assistant Professors</b>	11
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**Head of the Department:** Prof. G.S. Chauhan

**Contact details:** gsc@pilani.bits-pilani.ac.in

**Number of PhD Scholars: FT : 13 PT: 5 Total : 18**

**Ph.D. Thesis Submitted during the year: 4**

#### A. SPONSORED RESEARCH ACTIVITIES:

##### (i) Projects Ongoing during the year 2017

1. Sangeeta Sharma. "Rural women empowerment and sustainable growth" in collaboration with MNIT , Jaipur , Monica Sharma, Amount 30 Lakhs, DST, 2015 (Ongoing).
2. Sangeeta Sharma. Bringing back peacocks to Pilani BITS Alumni Amount 10 lakhs (Ongoing).
3. Anupam Yadav, Epistemology Revisited:Postmodern Discourses, Alternative forms of Cognition and Interdisciplinarity of Knowledge Indian Council of Philosophical Research, New Delhi Amount 2 Lakhs (Ongoing).
4. Sailaja Nandigama, Sanjiv Kumar Choudhary, and Kumar Sankar Bhattacharya ICSSR Major Research Project titled, "Participatory Exclusions of women and the poor in community Forestry: A Comparative Study of Implementation of the ROFR Act Across 3 States of India". Indian Council of Social Science Research (ICSSR), New Delhi. Amount 7 Lakhs (Ongoing).

##### (ii) Projects completed during the year 2017

##### (iii) Project proposals approved during the year 2017

1. Sangeeta Sharma. Bringing back peacocks to Pilani BITS Alumni Amount 10 lakhs (Ongoing).
2. Anupam Yadav, Epistemology Revisited:Postmodern Discourses, Alternative forms of Cognition and Interdisciplinarity of Knowledge Indian Council of Philosophical Research, New Delhi Amount 2 Lakhs (Ongoing).
3. Sailaja Nandigama, Sanjiv Kumar Choudhary, and Kumar Sankar Bhattacharya ICSSR Major Research Project titled, "Participatory Exclusions of women and the poor in community Forestry: A Comparative Study of Implementation of the ROFR Act Across 3 States of India". Indian Council of Social Science Research (ICSSR), New Delhi. Amount 7 Lakhs (Ongoing).

#### B. Publications:

1. Madhusmita Das and Sangeeta Sharma, Perception of the young adults towards the portrayal of women in contemporary Indian television advertisements". Journal Of Communication Media Watch Volume VIII,

Number III. Pp 339-354. 2017. ISSN 0976-0911. 2017

2. Madhusmita Das and Sangeeta Sharma. "Objectification and Dismemberment of Women In Indian TV Advertisements" in S.S. Bhakar (Ed.) Strengthening Strategies, Shaping Policies and Empowering Personnel: Key to Organizational Competitiveness Vol-2, (pp.450-462). 2017, New Delhi : Bharti Publication.
3. Madhusmita Das and Sangeeta Sharma. "Women, Violence and Vulnerability" in Rashmi Jain (Ed.) Women Empowerment : The Global Scenario (pp. 132-150). 2017, New Delhi: Studium Press publication
4. Somdatta Bhattacharya and KP Nisha "The Geography of Taste and the Taste of Geography: Food in Amit Chaudhuri's Fiction" English Forum: Journal of the Department of English, Gauhati University, Vol 5, pp. 107-119. ISSN 2279-0446. National March, 2017
5. Anupam Yadav The Corporate Cognitive-Existential Delinking:An Ethical Appraisal Anveshak, International Journal of Management, Vol. 6 (1), pp.155-161, January, 2017
6. Sushila Shekhawat and Geetha B Teaching Soft skills to Engineering students:A case study of BITS,Pilani. IUP Journal of Soft Skills.IUP Publications(A Division of the ICFAI Society).March 2017.Vol.XI,No.1.pp-29-34. March 2017
7. Sushila Shekhawat and Neerja Vyas Revelation of real life Identities on Screen:An Exploratory Study of Biopics and Documentaries in Indian Cinema. (Book chapter)Ed.Rajshree Ranawat. New Delhi: Sarup Book Publishers(P) Ltd.191-199. February,2017
8. Shekhawat,Sushila. Portrayal of Women in Shashi Deshpande's The Binding Vine and Small Remedies. The International Journal of Culture, Literature and Criticism. Issue No.16.October 2017.ISSN:0976-1608.126-135
9. Sailaja Nandigama "Ecology of Teaching and Learning in Classrooms: Perspectives on Pedagogical Practices" in Sanjiv Kumar Choudhary, Virendra Singh Nirban, Sailaja Nandigama, (Eds.), 'Opportunities and Challenges in Classroom Teaching: A Few Reflections', Jain Brothers, New Delhi, ISBN: 978-81-8360-232-7.2016.
10. Rajni Singh and Sanjiv Kumar Choudhary An empirical study on the predictive role of SES on high school students' achievement in learning ESL International Journal of Learning and Change published by Inderscience Publishers International 2017 (Accepted)
11. Rajneesh Choubisa Millennials and the Workplace: Challenges for Architecting the Organizations of Tomorrow. by Pritam Singh, Asha Bhandarkar and Sumita Rai, Response Business (Sage Publications), South Asian Journal of Management, 24 (2), 209-212. ISSN: 0971-5428. 2017
12. Sonam Mansukhani and Rajneesh Choubisa Entrepreneurial Ventures as Learning Organizations: A Face Value Analysis of Chosen Indian "Start-ups" Book Proceedings on Evidence based Management. (pp-327-333). Excellent Publishing House, New Delhi (ISBN:978-93-86238-17-7) 2017
13. Mohit Sharma and Kumar Neeraj Sachdev A Conceptual Study of Ethical Values of Transparency and Accountability in Administration International Journal of Commerce, Business and Management (IJCBM), Vol. 6, No.4 July-August 2017, pp. 73-76 2017
14. Devika. "A Study on the Acquisition of Paralinguistic Features of Oral Presentation Skills: Challenges to the Rural Students." Journal of Indian Education August 2017. ISSN: 0377-0435.
15. Devika. "Effective Learning of the basics of second language: exposure of rural students to types of errors through listening skills." The Journal of English Language Teaching LIX (4) (July-Aug. 2017): 3-12. Print. ISSN 0973-5208 Impact factor – 4.756. I
16. Devika. "Velutha's Marginalized Sublimity in Arundhati Roy's The God of Small Things." Literary Voice: A Bi-Annual Peer-Reviewed Journal 6 (1) (March 2017) 37-46. ISSN 2277-4521. N
17. Somdatta Bhattacharya, "Rokeya's Dream: Feminist Intervention and Utopias." Influence of English on Indian Women Writers, edited by K Suneetha Rani, New Delhi: Sage Stree, 2017. pp 44-57. (BOOK CHAPTER)
18. Somdatta Bhattacharya, "Narrating Lives/Labour: Documenting Domestic Labour in Kolkata." Life Writing. Vol 14 No. 4, October 2017. pp 519-30. (JOURNAL ARTICLE)
19. Somdatta Bhattacharya, Swarupa Deb, Hari Nair, Tanu Shukla and Anupam Yadav. "Critical Perspectives on the National Policy on Education 2016." Higher Education for the Future. Vol 4 No. 2, August 2017. pp 129-146.(JOURNAL ARTICLE)
20. Somdatta Bhattacharya and KP Nisha. "The Geography of Taste and the Taste of Geography: Food in Amit Chaudhuri's Fiction." English Forum: Journal of the Department of English, Gauhati University. Vol 5, 2016-2017. pp 107-119.(JOURNAL ARTICLE)

21. Williams, G., Nandigama, S., (in press). "Managing Political Space: authority, marginalised people's agency and governance in West Bengal", International Development Planning Review.
22. Lata, Pushp, Culturally Responsive Pedagogy for Effective Teaching of Communication Skills, Innovation and Education, eds. J N Govil et al, New Delhi: Studium Press India. 2017 pp 71-85 ISBN 978-93-85046-04-9.
23. Mansukhani, S., & Choubisa, R. (2017). Entrepreneurial Ventures as Learning Organizations: A Face Value Analysis of Chosen Indian "Start-ups". Book Proceedings on Evidence based Management. (Pp-327-333). Excellent Publishing House, New Delhi (ISBN: 978-93-86238-17-7)
24. Choubisa, R. (2017). Millennials and the Workplace: Challenges for Architecting the Organizations of Tomorrow. Pritam Singh, Asha Bhandarkar and Sumita Rai (Authors), Response Business (Sage Publications), South Asian Journal of Management, 24 (2), 209-212. ISSN: 0971-5428.
25. Kameshwara, K. K., & Shukla, T. (2017). Towards Social Justice in Institutions of Higher Learning: Addressing Gender Inequality in Science & Technology through Capability Approach. Administrative Sciences, 7(3), 22.
26. Shukla, T., & Kanna, C. (2017). Information technology in relation to human resource management: an impact evaluation study on Indian banking sector. International Journal of Human Resources Development and Management, 17(3-4), 266-281.
27. Shukla, T. & Sanghvi, R. (2017). India's Fastest Growing FMCG Company: An Insight into Patanjali's Marketing Strategies, Excellent Publishing House, New Delhi. [ISBN 978-93-86238-17-7]
28. Shukla T. & Dosaya D. (2017). Inspecting Answerability in Engineering Education. International Journal of Engineering Technology Science and Research, 4(9), 1476-1480.
29. Anupam Yadav & Somdatta Bhattacharya, Swarupa Deb, Hari Nair, Tanu Shukla "Critical Perspectives on the National Policy on education 2016" in Higher Education for the Future 4(2), 129-146, 2017, The Kerala State Higher Education Council, Sage Publications.
30. Anupam Yadav, "Value Inculcation among Engineering Students" in IJETS (UGC approved) International Journal of Engineering, Technology, Science and Research Vol. 4, 11, 2017, pp. 463-465, ISSN 2394-3386.
31. Kumar Sankar Bhattacharya. "Writing the Periphery: Indira Goswami and the Economically Marginalized". Caste, Gender and Media: Significant Sociological trends in India – an Open Distance Paradigm. Ed. Chandan Basu and Srabanti Choudhuri. Kolkata: Netaji Subhas Open University Press, 2017.
32. Kumar Sankar Bhattacharya. "**Companionate Relationship' and Indira Goswami's Idea of Female Enfranchisement in The Man from Chinnamasta**". A View on Postmodern Feminist Writings. Ed. R.S. Regin Silvest and Sadaf Fareed. Kanyakumari, Tamilnadu: D. J. Publications, 2017. 88-102

### C. Conferences:

#### (i) Conferences attended/papers presented outside India:

1. Anupam Yadav Philosophy and the Discourse of Interdisciplinarity Comparative Philosophy at the Crossroad held at American University in Dubai, Dubai International April, 2017
2. Anupam Yadav "De-disciplining Philosophy and New Epistemology", at the International Conference on Revisiting Richard Rorty at the University of Minho, Braga, Portugal during September, 25-26, 2017.
3. Sailaja Nandigama "Community Development and Conservation: Status of the Implementation of Forest Rights Act in Two States of India" Development Studies Association Ireland Annual Conference (2016), on 'Beyond Aid? Innovative Models For Social Justice' held in Dublin, Ireland. International 2016
4. Rajneesh Choubisa Do Transgressions and Gratitude acts as Predictors of Well-Being among Indian Engineering Undergraduates? Paper Presented during the Round Table Discussion at the Fifth World Congress of Positive Psychology (IPPA) held at Montreal, Canada during 13-16 July 2017
5. Slezácková, A & Choubisa, R. (2017). The role of perceived hope and dispositional hope in life satisfaction across cultures: Comparison of Czech and Indian samples. Paper Presented in the symposium at the **Fifth World Congress of Positive Psychology (IPPA)** held at **Montreal, Canada** during 13-16 July 2017.
6. Kumar Neeraj Sachdev Education, Learning and Change: A Philosophical Analysis 4th International ELLTA Conference on "Perspectives on Leadership, Learning and Social Enterprise in Asia: Sharpening Focus on Research Collaborations and Publications" held at AIT Conference Center, Asian Institute of Technology, Bangkok, Thailand during 25 - 27 July 2017 International 2017.
7. Hari Nair Invited lecture titled "El papel de las mujeres en la asamblea constituyente de la India" as a resource person for the Diplomado en Estudios Sobre Asia at Seminario Universitario de Estudios Asiáticos, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de México 22 Aug 2017 (via video conference).



8. Nandigama, S., (2017) "Combining Qualitative and Quantitative Methods to Evaluate Community Forestry Interventions in South Asia: An Experiential Account", paper presented in the 3rd Annual FLARE Meeting, Sep 29th- Oct 2nd, Stockholm University, Sweden.
9. Nandigama, S., (2017) participated in the annual seminar on "Land rights – a prerequisite for combating climate change and advancing peace and gender equality", October 3rd-5th, at Swedish International Development Coordination Agency (SIDA), Stockholm, Sweden.
10. Sangeeta Sharma. "Women Empowerment through Advertising" in the third world conference on WOMEN'S STUDIES: Investing in New Generations: Women and Girls at Amity university, Noida organized in collaboration with World Center for Women's Studies (world-cws) and College of Arts & Sciences, University at Buffalo, Suny, U.S.A. during 12-13 October 2017.
11. Gajendra Singh Chauhan. "Technical Jargons in Promotion of Brand Messages: Is it a " Just Do It " Factor Without Consumer Sense? Presented at 24th International Conference on Psychology & Language Research, Nanyang Technological University, Singapore during 09-10 November, 2017.
12. Gajendra Singh Chauhan. "Teaching and Learning Media Literacy: An Unavoidable call for Secondary Education!" Presented at UICELL 2017 International Conference on ELT & CALL organized by English Education Graduate School, University of Muhammadiyah, Jakarta, Indonesia during 23-25 November, 2017.
13. Gajendra Singh Chauhan. "The Art of Rhetoric: Improving Writing Skills through Persuasive Advertisements". Presented at UICELL 2017 International Conference on ELT & CALL organized by English Education Graduate School, University of Muhammadiyah, Jakarta, Indonesia during 23-25 November, 2017.
14. Kumar Sankar Bhattacharya (co-author with Divyansh Goel): "Paid Social Ads, Retargeting and Conversion Tracking: A Revolution for Conversion Optimization in B2C E-commerce". Oxford University, UK. 7th International Conference on Trade, Economics and Law. 16-18 October, 2017.
15. Kumar Sankar Bhattacharya: "Reading from Below: "Ravanayana" as an Alternative to "Ramayana" in Neelakantan's Asura: The Tale of the Vanquished". Wisconsin, USA. 46th Annual Conference on South Asia organized by University of Wisconsin in Madison. 26-28 October, 2017.

**(ii) Conferences attended/papers presented in India:**

1. Sangeeta Sharma "Success stories of BITSian Women Entrepreneurs" Eighth International Conference on "Strengthening Strategies, Shaping Policies and Empowering Personnel: Key to Organizational Competitiveness" at Prestige Institute of Management, Gwalior International 2017
2. Sangeeta Sharma Invited as a panelist in **International Research Conference** on "Sustainable development of human capital; exploring perspectives from grassroots to global research and practice" held from Nov.8 to 10, 2017 at Indian Institute of Management (IIM), Ahmedabad. The topic of discussion was Industry Academia interface.
3. Kumar Sankar Bhattacharya "Reclaiming the Unheard Voices of History: Indira Goswami's Thengphakhri Tehsildar". 16th MELOW International Conference on Facts, Distortions and Erasures: Literature as History, History in Literature, Chandigarh International March, 2017
4. Somdatta Bhattacharya "Invisible Women, Visible Cities: Female Domestic Labour in Kolkata " Seminar on "Gendered Urban Spaces: Narratives of Self-Possession", organised by the Department of English, The IIS University, Jaipur, in collaboration with ICSSR, New Delhi National February, 2017.
5. Sushila Shekhawat Identity Formation through Food as a Metaphor in Popular Culture :A Study of Indian Films International Conference on Literature as Cartography of Emotions: Ways of Being and Belonging Organized by the Department of English, St. Xavier's College, Jaipur. International January, 2017.
6. Neerja Vyas and Sushila Shekhawat Creation of identity on Screen and its Impact: Biopics of the Living. International Conference on Literature as Cartography of Emotions: Ways of Being and Belonging Organized by the Department of English, St. Xavier's College, Jaipur International January, 2017
7. Sushila Shekhawat Revelation of real life Identities on Screen: An Exploratory Study of Biopics and Documentaries in Indian Cinema National Conference on History Reconstructed through Literature: Nation, Identity and Culture organized by Department of English, Jai Narain Vyas University, Jodhpur National February, 2017.
8. Shekhawat, Sushila. Contemporary Hindi Films: A Tool for Women Empowerment presented in the third world conference on WOMEN'S STUDIES: Investing in New Generations: Women and Girls at Amity university, Noida in collaboration with World Center for Women's Studies (world-cws) and College of Arts & Sciences, University at Buffalo, Suny, U.S.A. during 12-13 October 2017.
9. Swaha Das, Hari Nair, Yogendra Swaraj Sharma "Gita and its warring interpretations" Featured Session "Doing history of ideas in South Asia: Reflections from the text and context" 18 Feb 2017 at the National Seminar "Reimagining South Asia: An exploration into the history of ideas" under the auspices of ICSSR and organized by the University of Delhi and South Asian University. National 2017.

10. Sanjiv Kumar Choudhary Changing Protocols of Indian News Media: A Socio-Phonetic Perspective A Three Day International Conference on MEDIATIZATION, CULTURALIZATION AND LANGUAGE ALTERATION organized by Dept. of Linguistics, Aligarh Muslim University, Aligarh and ICSSR, Delhi International 5-7 January 2017.
11. Sailaja Nandigama and Sanjiv Kumar Choudhary "Striking a balance between sustainable livelihoods and sustainable use of natural resources: A case of PMGSY's impact in rural Rajasthan". INTERNATIONAL CONFERENCE on 'Environmental Impact on Biodiversity, Sustainability and Quality of Life' February 16-18, 2017, Organized under the aegis of UPE "Study of Ecology and Economy" University of Rajasthan, Jaipur-302004 (INDIA) International 16-18 February 2017.
12. Priyanka Kumari and V. S. Nirban "Identifying Dimensions and Competencies for Intercultural Communication: A literature Review" International Conference on Evidence Based Management, organized by Department of Management, BITS Pilani, Pilani Campus, 12-13 March 2017. International 2017.
13. Chasul and V. S. Nirban "Technology Acceptance among students in Engineering Education" International Conference on Communication and Media Studies, organized by Amity Institute of Mass Communication, Amity University, 2-4 March 2017. International 2017.
14. Priyanka Kumari and V S Nirban "Communication Competencies in Intercultural Workplace Context: Applying Delphi Method in Indian IT Industry" International Conference on Business Research & Policy, 2017, organized by Chandragupt Institute of Management Patna (CIMP), Patna, Bihar, India, 09-10 March, 2017. International2017.
15. Priyanka Kumari and V S Nirban "An Empirical Study of the Recent Trends in Web 2.0 Based Teaching and Learning Context in Higher Education" International Conference on Media and Communication Studies, organized by the Amity School of Communication, Amity University, Jaipur, Rajasthan, India, 02-04 March, 2017 International 2017.
16. Sailaja Nandigama "Ecology of Teaching and Learning in Classrooms: Perspectives on Pedagogical Practices" National Convention on Current Practices and Future of Classroom Teaching at Higher Education Level, held at BITS Pilani, Pilani Campus, Rajasthan, India. National 2016.
17. Rajneesh Choubisa Research Designs with(in) Online Behavioral Sciences: Experiencing "WEXTOR" as a Tool Paper presented at 52nd National and 21st International Conference of Indian Academy of Applied Psychology on "Psychology for Building Global Community" theme organized by IAAP at University of Rajasthan, Jaipur during 23rd-25th February 2017.
18. Sonam Mansukhani, and Rajneesh Choubisa Entrepreneurial Ventures as Learning Organizations: A Face Value Analysis of Chosen Indian "Start-ups". Paper presented at the 2nd International Conference on Evidence Based Management (ICEBM) organised by Department of Management, BITS Pilani, held during 17-18 March, 2017.
19. Kumar Neeraj Sachdev and Bandana Sachdev An Application of David Hume's Idea of Sympathy for Global Peace International Conference on Latest Concepts in Science, Technology and Management (ICLCSTM-2017) at National Institute of Technical Teachers Training and Research (NITTTR), MHRD, Govt. Of India, Chandigarh, India on February 5, 2017.
20. Swaha Das and Hari Nair presented a study titled "Martin Buber and Mohandas Gandhi on the question of the Jewish homeland in Palestine" at Gandhi Jayanti National Conference 2017 Revisiting Champaran: Challenges of Satyagraha in the 21<sup>st</sup> century 16-17 Oct 2017 at Zakir Husain Delhi College organized by Indialogue Foundation and Gandhi Smriti and Darshan Samiti.
21. Kumar Neeraj Sachdev, "A Value-Oriented Analysis of Changing Roles of Educators in Higher Educational Institutions," presented in a virtual session of 6th World Conference of Global Educational Research Association (GERA) on "Education: A Mirror of Society" held at University School of Education, Rayat-Bahra University, Mohali, Punjab, India during 24 - 25 November 2017.
22. Somdatta Bhattacharya and Shrija Srinivasan. "Scene of Crime: Exploring Kingsmarkham in Ruth Rendell" at the Theorising Space: Three Day National Conference on the Intersections of Space and Culture, organised by the Department of Humanities, Indian Institute of Space Science & Technology, Valiamala, in collaboration with the Centre for Cultural Studies, University of Kerala and Littcrit, 14-16 December 2017.
23. Nandigama, S., and S.K.Choudhary (2017). Paper presented on "Striking a balance between sustainable livelihoods and sustainable use of natural resources: A case of PMGSY's impact in rural Rajasthan." in the International Conference organized under the aegis of UPE, "Study of Ecology and Economy" EIBSQL-2017, during 16-18, February 2017 at the University of Rajasthan, Jaipur.
24. Pushp Lata attended and presented a paper entitled **Do Indian College Students Need Cross Cultural Training?** at International Conference on Language, Literature and Culture (ICLLC), Pune, Maharashtra, India during 15th to 17th December 2017 organized by Institute of Advanced Studies in English, Pune.

25. Pushp Lata attended and presented a paper entitled **Rethinking Muticulturalism and Maximizing Learning in Indian Classrooms** at ELT@I IV International Conference in association with RELO and British Council at Kanoria PG Mahila Mahavidyalya, Jaipur during 30-31 October 2017.
26. Pushp Lata attended and presented a co- authored paper entitled **Using Mutimodal Tools for Teaching Mutiliteracies in Indian ELT Classrooms** at ELT@I IV International Conference in association with RELO and British Council at Kanoria PG Mahila Mahavidyalya, Jaipur during 30-31 October 2017.
27. Pushp Lata attended and presented a co- authored paper entitled **Enhancing Written Communication Skills of College Students through Online Collaborative Tutorials in a Multicultural Classroom** at ELT@I IV International Conference in association with RELO and British Council at Kanoria PG Mahila Mahavidyalya, Jaipur during 30-31 October 2017.
28. Pushp Lata attended 2-day workshop on **Achieving High Quality in Education at the Tertiary Level** on 9th January 2017 organized by Teaching and Learning Centre, BITS Pilani, Pilani campus.
29. Ruparel, N., & Choubisa, R. (2017). Goal Orientation, Perceived Motivational Climate and Social Emotional Competence: Contextually Exploring the Explicable. Paper presented at the **27<sup>th</sup> Annual NAOP Conference** organized at **IIT Kharagpur** during 22-25 December 2017.
30. Mansukhani, S., & Choubisa, R. (2017). Entrepreneurial Ventures as Learning Organizations: A Face Value Analysis of Chosen Indian "Start-ups". Paper presented at the 2<sup>nd</sup> International Conference on Evidence Based Management (ICEBM) organized by **Department of Management, BITS Pilani**, held during 17-18 March, 2017.
31. Choubisa, R. (2017). Research Designs with (in) Online Behavioral Sciences: Experiencing "WEXTOR" as a Tool. Paper presented at 52<sup>nd</sup> National and 21<sup>st</sup> International Conference of Indian Academy of Applied Psychology on "Psychology for Building Global Community" theme organized by **IAAP at University of Rajasthan, Jaipur** during 23<sup>rd</sup>-25<sup>th</sup> February 2017.
32. Shukla T. Transparency in Engineering Education: A Challenge. International Conference on Science, Technology & Management (ICSTM-2017). Bangalore, 24<sup>th</sup> September 2017.
33. Shukla T. **Psychological Determinants of Educational Attainment, 27<sup>th</sup> Annual Conference of NAOP**, National Academy of Psychology, **IIT Kharagpur**, 22<sup>nd</sup> - 24<sup>th</sup> December 2017.
34. Shukla T. Female Entrepreneurs in the Urban Startup Scenario, International Conference on Peaceful and Prosperous South Asia, Jaypee Institute of Information & Technology, 27<sup>th</sup>- 28<sup>th</sup> March, 2017.
35. Shukla T. India's Fastest Growing FMCG Company: An Insight into Patanjali's Marketing Strategies, 2<sup>nd</sup> International Conference on Evidence-Based Management (ICEBM), **Department of Management, BITS Pilani**, 17-18 March 2017.
36. Anupam Yadav Value Inculcation among Engineering Students at the 5<sup>th</sup> International Conference on Advancement in Engineering, Applied Science and Management held at Institution of Electronics and Telecommunication Engineers, Bengaluru, Karnataka on November, 26<sup>th</sup>, 2017.
37. Kumar Sankar Bhattacharya "Reclaiming the Unheard Voices of History: Indira Goswami's Thengphakhri Tehsildar". 16th MELOW International Conference on Facts, Distortions and Erasures: Literature as History, History in Literature, Chandigarh, March 03-05, 2017.

#### **D. Books Published/Edited /Chapter written/ reviewed articles during the year:**

1. Meenakshi Raman and Sangeeta Sharma. 2017. Technical Communication-Principles and Practice For Gujarat technological University. 2nd Edition. OUP: New Delhi..
2. Sangwan, Devika et al. Eds. Aurora: Creative Short Stories. Delhi: Narendra Publishing House, 2017. ISBN: 978-93-86110-26-8.
3. Bhattacharya, Somdatta, Swarupa Deb, Hari Nair, Tanu Shukla, and Anupam Yadav. 2017. "Critical Perspectives on the National Policy on Education 2016". Higher Education for the Future. 4 (2): 129-146. <http://journals.sagepub.com/doi/10.1177/2347631117706261>
4. Nandigama, S., acted as Reviewer for the SCOPUS indexed international journal, World Development
5. Nandigama, S., is a member of the Editorial board of the Journal of International Women's Studies, Bridgewater, USA.
6. Choubisa, R. Reviewed Manuscript No: CHB-D-17-01278 entitled "'Selfie'-Objectification: The Role of Selfies in Self Objectification and Disordered Eating in Young Women" Submitted in Computers in Human Behavior (Elsevier Journal). (Recommendation: Accepted)
7. Choubisa, R. Reviewed Manuscript No: JOHS-D-17-00253 entitled- "Daily Gratitude can Buffer the Impact of Stressful Events and Can Enhance the Rewards of Weaker Positive Events" submitted to Journal of Happiness Studies (Springer Journal). (Recommendation- Major Revision)

8. Choubisa, R. Reviewed Manuscript ID: 1.2017.8 (JIAAP) entitled- "Turnover intention in Indian BPOs as consequence of Job involvement and Attitude of Employees" submitted to Journal of Indian Academy of Applied Psychology (SCOPUS Indexed). ((Recommendation- Reject)
9. Choubisa, R. Reviewed an International Project entitled "DEVELOPMENT OF FRENCH VERSION OF VALUES IN ACTION INVENTORY OF STRENGTHS (VIA-IS-F) AND TEST ITS PSYCHOMETRIC PROPERTIES FOR FRANCOPHONE WORKERS" submitted for a sabbatical study of one year to Loire Valley LE STUDIUM, Institute of Advanced Studies, New Orleans, France.
10. Gajendra Singh Chauhan. A Review Article in South Asian Journal of Management, Volume 24, No.1 on 'Intercultural Communication: The Indian Context" By Ramesh N Rao and Avinash Thombre, Sage Publication India Pvt. Ltd., New Delhi.

#### **E. Conferences, seminars & workshops conducted:**

1. Devika, Three-Day Workshop on Phonetics and Communication Skills by Department of English at Chaudhary Ranbir Singh University, Jind during 16-18 November 2017. Resource persons: Prof. Devika, Dr. SK Vasishta, Sh. RD Malik and Dr. Sumita Ashri.
2. Devika and Pushp Lata. A one day workshop on How to Crack Group Discussion and Job Interviews for Placement at BKBIET on 16 February 2017.
3. Pushp Lata conducted a one - day workshop on Personality Development and Communication Skills at BKBIET, Pilani on 24 November 2017.

#### **F. Invited Talks / chairing session :**

1. Sangeeta Sharma Chaired a technical session in the third world conference on WOMEN'S STUDIES: Investing in New Generations: Women and Girls at Amity University, Noida organized in collaboration with World Center for Women's Studies (world-cws) and College of Arts & Sciences, University at Buffalo, Suny, U.S.A. during 12-13 October 2017.
2. Sangeeta Sharma Invited as the chief guest during concluding ceremony of "The Vigilance Awareness Week-2017" at CSIR-CEERI, Pilani on 03.11.2017.
3. Pushp Lata chaired a workshop on **Teaching Pronunciation to Engineering Students with a User Friendly Approach** at ELT@I IV International Conference in association with RELO and British Council at Kanoria PG Mahila Mahavidyalaya, Jaipur during 30-31 October 2017
4. Shukla T. Invited as a Chair, International Conference on Science, Technology & Management (ICSTM-2017). Bangalore, 24<sup>th</sup> September 2017
5. Gajendra Singh Chauhan. Invited to deliver talks on Managerial Communication II for e-PGP students at IIM Rohtak during 24-29 April 2017.
6. Nandigama, S., (2017) "Social Mobilization and Community Forestry", session No.7 chaired in the 3rd Annual FLARE Meeting, Sep 29th- Oct 2nd, Stockholm University, Sweden.

#### **G. Invited talks / Visits / attended workshops of distinguished Guests arranged in the department:**

#### **H. Awards and recognitions won by faculty and students:**

1. Choubisa, R. (July 2017). Scientific Committee Member (and Reviewer) for the Fifth World Congress of Positive Psychology organized by International Positive Psychology Association in Montreal (Canada).
2. Choubisa, R. ( March 2017) Expert to EACEA (European Union).

#### **I. Faculty Development, International Collaboration & Industry/ University Immersion:**

1. Invited and Contracted by **European Commission (EACEA)** as an **Independent Expert** for Assessment of EACEA: Erasmus+ KA2 (CBHE) International Research Proposals (ID: EX2016D284963) from March - May, 2017.

#### **J. Significant new equipments/experimental facility added during the year:**

#### **K. Departmental association/club activities:**

1. Department of Humanities & Social Sciences associated with the annual event of TEDxBITSPilani. to organize the latest edition of TEDx talks from different experts on 22 January 2017.

#### **L. Students Activities, Achievements, Scholarships, Cultural And Academic Festivals:**

**B1.10.9 Department: Mathematics**

Number of faculty members (as on 31 December 2017)

<b>Professors</b>	03
<b>Associate Professors</b>	04
<b>Assistant Professors</b>	12
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**Head of the Department:** Prof. Balram Dubey**Contact details:** bdubey@pilani.bits-pilani.ac.in**Number of Ph. D. Scholars:** 18**Ph.D. Thesis Submitted during the year:** 01**Ph.D. Thesis Awarded during the year:** 01**A. SPONSORED RESEARCH ACTIVITIES:**Total number of Funds (Sponsored Projects, funds through various programs) in the department: **02****2. Projects funds sanctioned during the year : 02**

<b>Principal Investigator</b>	<b>Title of the Project</b>	<b>Funding Agency</b>	<b>Amount in lac rupees and Duration</b>
Dr. Krishnendra Shekhawat	Mathematics-aided Architectural Design Layouts	SERB-DST	Rs. 15,44,660, 2017-20
Dr. Rajesh Kumar	Numerical Approximations: Solution and Convergence Analysis for Non-linear Aggregation-Breakage Equations	BITS Pilani	Rs. 2,00,000, 2017-19

**Projects completed this year: 02**Principal Investigator: **Dr. Jitender Kumar****Research Initiation grant** entitled "A study of near-semiring generated from certain mappings" funded by BITS Pilani of the amount 1,00,000 INR for the Duration of August 2016-17.Principal Investigator: **Dr. Sumanta Pasari****Research Initiation grant** entitled "Earthquake Modelling from GPS Observations in Northwest Himalaya" funded by BITS Pilani of the amount 2,00,000 INR for the Duration of May 2016 to September 2017 .**C. PUBLICATIONS****C1. Publications in international/National refereed journals**

<b>S.No.</b>	<b>Authors</b>	<b>Title of the Publication</b>	<b>Details of the Journal</b>	<b>National/International</b>	<b>Year</b>
1.	Maiti A.P. and Dubey B.,	"Stability and bifurcation of a fishery model with Crowley-Martin type functional response",	International Journal of Bifurcation and Chaos, 27 (11), 1750174 (26 pages),	International	2017
2.	D K Maiti, S Sharma; M M Alam, BK Sharma,	"Nanofluid (H <sub>2</sub> O – Al <sub>2</sub> O <sub>3</sub> /CuO) flow over a heated square cylinder near a wall under the incident of Couette flow".	Journal of Mechanical Science and Technology (accepted),	International	2017
3.	Suresh Kumar and Rafael C. Nunes,	"Echo of interactions in the dark sector",	Physical Review D (accepted),	International	2017
4.	Shekhar, C., Jain, M., Raina, A.A. and Iqbal, J.,	"Reliability Prediction of Fault Tolerant Machining System with Reboot and Recovery Delay",	International Journal of Systems Assurance Engineering and Management (accepted),	International	2017
5.	Dubey Preeti, Dubey Uma S.	"Modeling the Role of Acquired Immune Response and	Mathematics and Computers in Simulation,	International	2017

S.No.	Authors	Title of the Publication	Details of the Journal	National/International	Year
	and Dubey B.,	Antiretroviral Therapy in the Dynamics of HIV Infection",	<a href="https://doi.org/10.1016/j.matcom.2017.07.006">https://doi.org/10.1016/j.matcom.2017.07.006</a> .,		
6.	Maiti A.P., Dubey B. and Tushar Jai,	"A delayed prey-predator model with Crowley-Martin type functional response including prey refuge",	Math. Meth. Appl. Sci., 40(16): 5792-5809. DOI: 10.1002/mma.4429,	International	2017
7.	Thakur N.K., Tiwari S.K., Dubey B. and Upadhyay R.K.,	"Diffusive three species plankton model in the presence of toxic prey: application to Sundarban mangrove wetland",	J. Biol. Systems, 25(2): 185-206. DOI: 10.1142/S0218339017500103 .,	International	2017
8.	Patra Atasi, Tushar Jai and Dubey B.,	"Modeling and simulation of a wetland park: An application to Keoladeo National Park, India".,	Mathematics and Computers in Simulation, 134: 54-78. DOI: 10.1016/j.matcom.2016.10.001,	International	2017
9.	Yun Chen, Suresh Kumar, Bharat Ratra,	"Determining the Hubble constant from Hubble parameter measurements",	Astrophysical Journal 835: 86.,	International	2017
10.	Pierre-Henri Chavanis, Suresh Kumar,	"Comparison between the Logotropic and $\Lambda$ CDM models at the cosmological scale",	Journal of Cosmology and Astroparticle Physics 05: 018,	International	2017
11.	Agarwal, Shivi,	"Scale Efficiency with Fuzzy Data",	International Journal of Business and System Research, 11 (1-2), 152-162.,	International	2017
12.	Jain, M., Shekhar, C. and Meena, R.K.,	"Admission control policy of maintenance for unreliable server machining system with working vacation".,	Arabian Journal for Science and Engineering, Vol. 42, No. 7., 2993-3005.,	International	2017
13.	Kumar, Jitender,	"Rank properties of the semigroup of endomorphisms over Brandt semigroup",	Semigroup Forum, 95 (3), 589-593,	International	2017
14.	Sharma B K, Tailor V and Goyal M,	"Role of slip velocity in magneto-micropolar fluid flow from a radiative surface with variable permeability: a numerical study",	International Journal of Applied Mechanics and Engineering, to appear in Vol. 22 (3): 637-651.,	International	2017
15.	Sharma, BK, Tailor V and Goyal M.,	"Heat source and Soret effects on magnetomicropolar fluid flow with variable permeability and chemical reaction".,	Global Journal of Pure and Applied Mathematics. Vol. 13 (9), 5195-5212.,	International	2017
16.	Shekhar, C., Jain, M., Raina, A.A. and Mishra, R.P.,	"Sensitivity analysis of repairable redundant system with switching failure and geometric renegeing".,	Decision Science Letters, Growing Science, Vol. 6, No. 4., 337-350.,	International,	2017
17.	Shekhar, C., Kumar, A., and Varshney, S.,	"Modified Bessel series solution of the single server queueing model with feedback".,	International Journal of Computing Science and Mathematics (accepted),	International,	2017
18.	Shekhar, C., Raina, A.A., Kumar, A. and Iqbal, J.,	"A survey on queues in machining systems: progress from 2010 to 2017",	Yugoslav Journal of Operations Research, DOI:10.2298/YJOR161117006R,	International,	2017
19.	Shekhawat, K.,	A computer-generated plus-shaped arrangement and its architectural applications.	Journal of Computational Design and Engineering (in press),	International,	2017
20.	Shekhar, C., Jain, M., Raina, A.A., Iqbal, J.,	Optimal (N,F) policy for queue-dependent and time-sharing machining redundant system",	International Journal of Quality and Reliability Management, Vol. 34, No. 6, 798-816.,	International,	2017
21.	Shekhar, C., Jain, M., Iqbal, J. and Raina, A.A.,	"Threshold control policy for maintainability of manufacturing system with unreliable workstations".,	Arabian Journal for Science and Engineering, 42: 4833-4851.,	International	2017

S.No.	Authors	Title of the Publication	Details of the Journal	National/International	Year
22.	Shekhar, C., Jain, M. and Raina, A.A. ,	"Transient analysis of machining system with spares provisioning and geometric renegeing",	International Journal of Mathematics in Operational Research, 11(3): 396-421.,	International,	2017
23.	Pasari, S., Arora, S.K.,	"Earthquake Probabilities in the Kumaun-Garhwal Himalaya from Stochastic Modeling of Moderate-to-Large Seismic Events",	International Journal of Applied and Natural Sciences, 6(5): 31-44.,	International,	2017
24.	Pierre-Henri Chavanis & Suresh Kumar,	"Comparison between the Logotropic and $\Lambda$ CDM models at the cosmological scale",	Journal of Cosmology and Astroparticle Physics 05 (018),	International,	2017
25.	Yun Chen, Suresh Kumar & Bharat Ratra,	"Determining the Hubble constant from Hubble parameter measurements",	Astrophysical Journal 835 (86),	International,	2017
26.	Pasari S, Dikshit O,	"Stochastic Earthquake Interevent Time Modeling from Exponentiated Weibull Distributions",	Accepted, Natural Hazards (Springer) (DOI 10.1007/s11069-017-3074-1).,	International,	2017
27.	Pasari S, Nandi NC,	"Modelling Tree Diameter Distribution with a Case Study from Garhbeta Sal Coppice Forest, Paschim Medinipur District, West Bengal,	Journal of Environment and Sociobiology 14(2):171-178	International,	2017
28.	Pramod Kumar Yadav, Ashish Tiwari and Priyanka Singh,	"Hydrodynamic permeability of a membrane built up by spheroidal particles covered by porous layer",	Acta Mech. (Springer), 2017, doi: 10.1007/s00707-017-2054-6,	International,	2017
29.	Ashish Tiwari, Pramod Kumar Yadav and Priyanka Singh,	"Stokes Flow Through Assemblage of Non-homogeneous Porous Cylindrical Particles Using Cell Model Technique",	Nat. Acad. Sci. Lett. (Springer), 2017, doi: 10.1007/s40009-017-0605-y,	International,	2017
30.	Vaibhav, Srikant Routray, Rakhee,	"State of the art literature review on Inventory Models for Perishable Products",	Journal of Advances in Management Research(Accepted),	International,	2017
31	Ram Singh, Madhu Jain, Rakhee, Shoket Ali,	"Epidemic Model of HIV/AIDS Transmission Dynamics with Different Latent Stages Based on Treatment",	Proceedings of the National Academy of Sciences, Indian Section A: Physical Sciences. (Accepted),	National,	2017
32	Shekhawat K.,	"Introduction to generic rectangular floor plans",	Artificial Intelligence for Engineering Design, Analysis and Manufacturing, (Accepted),	International,	2017
33	Shekhawat K.,	"A computer-generated plus-shaped arrangement and its architectural applications",	Journal of Computational Design and Engineering, Elsevier, 4(4): 318-329.,	International,	2017
34.	Siddharth Bhatiaa, Kunal Lad, Rajiv Kumar,	"Bend-optimal orthogonal drawings of tri connected plane graphs",	AKCE International Journal of Graphs and Combinatorics, doi.org/10.1016/j.akcej.2017.08.001,	International,	2017

## C2. Publications in the proceedings of international/national conferences:

1. **Pasari S**, Reliability of an Earthquake System: A Case Study from Eastern Himalaya, accepted for publication in conference proceedings of International Conference on Disaster Risk Mitigation, Dhaka, September 23-24, 2017.
2. **Pasari S**, Design of Earthquake Catastrophe Insurance Scheme in Northwest Himalaya: A Preliminary Study, accepted for publication in proceedings of 37<sup>th</sup> INCA International Congress, Dehradun, November 01-03, 2017.

3. **Shekhawat K. Duarte J.P.**, "Rectilinear Floor Plans" Communications in Computer and Information Science, Springer, 724: 395-411 in proceedings of the International Conference: CAAD Futures2017, held at Istanbul, Turkey, during 12-14 July, 2017.
4. Bhatia, Siddharth. and **Kumar, R.**, Review of Graph Processing Frameworks. In IEEE International Conference on Data Mining Workshops (ICDMW) 969-976, 2017. DOI:10.1109/ICDMW.2017.134

### **C3. CONFERENCES ATTENDED/PAPERS PRESENTED**

1. Shekhar, C. presented a paper on "FM/FM/1 queues with fuzzy catastrophe" in National Conference in Statistics and Optimization Techniques (NCSOT) in conjunction with 2<sup>nd</sup> convention of Indian Association for Reliability and Statistics (CIARS-2017) organized by Department of Mathematics, M.D. University, Rohtak on February 11-13, 2017.
2. Pasari, S. presented a paper on "Reliability of an Earthquake System: A Case Study from Eastern Himalaya" International Conference on Disaster Risk Mitigation (ICDRM), held in Dhaka during September 23-24, 2017.
3. Shekhawat K. presented a paper on "Rectilinear Floor Plans" at International Conference: CAAD Futures2017, held at Istanbul, Turkey, during 12-14 July, 2017.
4. Rakhee, presented a paper on "Performance Analysis of Discrete-Time Retrial G-Queue with Unreliable Server and Second Optional Service" at International Conference on Advancing Frontiers in Operational Research: Towards a Sustainable World (AFOR-2017) in Conjunction with the Diamond Jubilee as well as the 50th Annual Convention of Operational Research Society of India during Dec. 21-23, 2017 organized at Heritage Institute of Technology, Kolkata.
5. Rakhee, presented a paper on "Discrete-Time Queue with Two Type of Customer, Unreliable Server and Second Optional Service" at International Conference on Recent Trends in Operations Research and Statistics (RTOTS-2017) during Dec 28-30, 2017, organized by Department of Mathematics, IIT Roorkee.
6. Priyanka Kumari ( joint work with Dr. P. H. Keskar), presented a paper on "Algebraic Criterion for Difference Sets" at International Conference on Algebra and Analysis held at Center for Advanced study, Department of Mathematics, Savitribai Phule Pune University during December 19-22, 2017.

### **C3. WORKSHOPS ATTENDED**

1. Pasari, Sumanta, Attended a short term course "Statistical Methods in Data Analysis" at the Department of Mathematics, IIT Kharagpur from February 25 to March 1, 2017.
2. Rajiv Kumar participated in International workshop on operator semigroups at Delhi University during Dec 18 - Dec 21, 2017.

### **D. BOOKS PUBLISHED/EDITED DURING THE YEAR: NIL**

### **E. CONFERENCES, SYMPOSIUM, SEMINARS & WORKSHOPS CONDUCTED**

1. Department conducted a symposium on Operation Research and Pure Mathematics on February 26, 2017.

### **F. INVITED TALKS GIVEN BY BITS FACULTY**

1. B. Dubey, delivered an invited talk on "Mathematical Modelling of some real world problems" as a Chief Guest in a one day seminar organized at BKBIET, Pilani under "The Institute of Engineers (India)" on September 25, 2017.
2. B. K. Sharma, delivered an invited talk on "Mathematical Modelling of arterial blood flow in the human cardiovascular system" as a Guest of Honour in a one day seminar organized at BKBIET, Pilani under "The Institute of Engineers (India)" on September 25, 2017.
3. Pasari, Sumanta, delivered a talk entitled "GNSS-Based Real Time Earthquake Monitoring and Early Warning" as a resource person in 21-day (17 February to 09 March) 3<sup>rd</sup> Winter School "GEOMATICS-2017" in the Department of Geography, The University of Burdwan, West Bengal.
4. Pasari, Sumanta, delivered a talk entitled "Statistical Analysis for Engineers and Researchers" as a resource person in TEQIP-II sponsored faculty development program on "Probability and Random Processes" during 01-03 February, 2017 at Govt. College of Engineering, Cherthala, Kerala.
5. Pasari, Sumanta, delivered a talk entitled "Tectonics of the Northwest Himalaya as Inferred from a Regional GPS Array: First Results", Department of Geomatics, National Cheng Kung University, 28 June 2017.
6. Pasari, Sumanta, delivered a talk entitled "What is the Chance of an Earthquake in the Northwest Himalaya and its Surrounding Regions?", Center for Space and Remote Sensing Research, National Central University, Taiwan, 22 June 2017.
7. Rakhee, delivered a talk entitled "Analysis of an infinite capacity discrete time G-queue with unreliable server and second optional service" in International Conference on Computational Mathematics and Statistics, organized by Banasthali University and Universiti Putra Malaysia during Jan 24-26, 2017.



8. Dr. Devendra Kumar, delivered an invited talk at a third international conference on "Current trends in theoretical and computational differential equations with applications" during Dec. 01-05, 2017 organized by South Asian University, New Delhi.
9. Dr. Rajesh Kumar, delivered an invited talk entitled "Low Rank Tensor Decomposition for High Dimensional PDEs with Gaussian Loadings" at a third international conference on Current trends in theoretical and computational differential equations with applications" during Dec. 01-05, 2017 organized by South Asian University, New Delhi.
10. Dr. Sangita Yadav, delivered an invited talk on "Superconvergence of a class of expanded discontinuous Galerkin methods for fully nonlinear elliptic problems in divergence form" in the "International Conference on the Current Trends in Theoretical and Computational Differential Equations and Applications" organized by department of Mathematics, South Asian University during Dec. 01-05, 2017.
11. Dr. Rakhee, delivered an invited talk on "Modelling and Analysis of Fractional Guard Channel Schemes with Buffer for Cellular Mobile Network" at 20th Annual Conference of Vijnan Parishad of India on Mathematical Sciences and Scientific Computing for Industrial Development, during 24.11.2017–26.11.2017.

#### **G. INVITED TALKS ARRANGED IN THE DEPARTMENT**

1. **Prof. Madhu Jain**, Department of Mathematics, Indian Institute of Technology, Roorkee delivered a talk on the topic "Reliability growth modeling for software systems with imperfect debugging and change points" on 26.02.2017.
2. **Prof. S. Ponnusamy**, Indian Statistical Institute, Chennai Centre, delivered a talk on the topic "Recent Development on Bohr's Inequality on power series" on 26.02.2017.
3. **Prof. Pankaj Gupta**, Department of Operational Research, University of Delhi, Delhi, delivered a talk on the topic "Multicriteria Optimization" on 26.02.2017.
4. **Prof. Sugata Gangopadhyay**, Department of Computer Science and Engineering, Indian Institute of Technology, Roorkee delivered a talk on the topic "Construction of bent functions based on Z-bent functions" on 26.02.2017.

#### **H. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS: Nil**

#### **I. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION**

1. **Dr. Suresh Kumar** was selected as Visiting Associate of the Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune for three years (August 2017 to July 2020).
2. **Dr. Sumanta Pasari** visited the Department of Geomatics Engineering, National Cheng Kung University, Taiwan during 17-31 December, 2017.
3. **Dr. Ashish Tiwari** visited Gubkin Russian State University of Oil and Gas, Moscow during 12-15 November 2017 under joint Indo-Russian project.
4. **Dr. Jitender Kumar** elected as a reviewer for Mathematical reviews of MathSciNet (American Mathematical Society (AMS)).

#### **J. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR: NIL**

#### **K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES**

##### **Mathematics Association conducted the following activities during 2017:**

1. Volleyball match between Students and Department Faculty was organized to increase the faculty-student interaction.
2. Organized Mathematics Department Farewell.
3. Organized Teacher's Day Celebration.
4. Association realized annual magazine "To infinity and Beyond".

##### **Events in APOGEE 2017**

- i) **Gambling Mathematics:** Winners were - C Pranay Reddy (First prize)
- ii) **Zombie Mathematics:** Winners were - Rishabh Vijayvargiya (First prize)
- iii) **Join and Win:** Winners were -Achal Agarwal, Deepika Poonia (First prize)

**B1.10.10 Department of Mechanical Engineering**

Number of faculty members (as on 31 December 2017, on-campus (off-campus))

<b>Senior Professors, Professors</b>	04 (01)
<b>Associate Professors</b>	05
<b>Assistant Professors</b>	16
<b>Visiting Assistant Professors</b>	02
<b>Lecturer</b>	01

**Head of the Department:** Prof. P. Srinivasan

**Contact details:** psrinivasan@pilani.bits-pilani.ac.in

**Number of PhD Scholars:** 20(on-campus)

**Ph.D. Thesis Submitted during the year:** 03

**A. SPONSORED RESEARCH ACTIVITIES**

Total number of Sponsored Projects in the department: 09

Details are given below.

**(i) Ongoing projects:**

1. DAAD: JINGEL – Joint indo-German Experience Lab, PI: Prof. K. S. Sangwan, Euro 346954, 2016-19.
2. Department of Science and Technology (DST) Rajasthan: Design of healthcare supply chain for enhancing availability and reducing wastage of generic medicines for rural areas in Rajasthan, PI: Prof. SrikantaRoutroy, Co-PI: Dr. Sunil Dubey, Rs. 5.88 Lakhs, 2016-19.
3. Department of Science and Technology (DST): Modelling immune response to salmonella during typhoid, PI: Amol M. Marathe, Rs. 43.52 Lakhs, 2015-18.

**(ii) Projects sanctioned during the year**

1. DST-TIDE: Design and Development of a Power Assistive Hybrid e- Trike for Differently Abled Person in Rural and Urban Regions of India, PI: Sachin U. Belgamwar, CoPI: J S Rathore. ₹ 92.00 lakhs\*(Collaboration with CEERI).
2. ARDB: Development of a fault diagnosis scheme for Aero-Bearing with multiple localized defect using non-linear mathematical modeling and experimental analysis. PI: Arun Kumar Jalan, Co PI: Sachin U. Belgamwar ₹ 15.550 lakhs.
3. DBT: ReValue: Innovative technologies for improving resource utilization in the Indo-European fish value chains. PI: S. Bhattacharyya, Co PI: M S Dasgupta, S. Routroy. ₹ 120.00 lakhs.
4. TI India Ltd., Chennai. Study of Lubricant and application method for enhanced surface finish and reduced draw load on cold drawn steel tubes. ₹ 27.44 lakhs\*(Collaboration with BITS Goa and BITS Hyderabad).
5. BITS-CRG: An investigation of energy consumption of machine tools. PI: Girish Kant. ₹ 9.65 lakhs
6. BITS Pilani RIG: Development of PLA and ABS hybrid filaments for strength enhancement and biomedical applications. PI: Varun Sharma. ₹ 2.00 lakhs.

**(iii) Projects completed during the year.**

1. Department of Science and Technology (DST): Experimental Investigation on CO2 Based Refrigeration System in Trans-critical Cycle, Rs. 27.5 Lakhs, PI: Prof. M. S. Dasgupta, Co-Investigator: Dr. D. K. Gupta.
2. Department of Science and Technology (DST): Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST), 2012-17, Rs. 163 Lakhs.
3. Department of Science and Technology (DST): Studies in fluidized bed combustor with co firing rice husk and coal under oxy fired conditions, 30.13 Lakhs, Dr. Ravi Inder Singh, 2014-2017.
4. MHRD: Developing suitable pedagogical methods for various classes (Energy Technology) intellectual calibers and research in e-learning - Anchored by IIT Kharagpur, PI: Dr. ManojSoni, Rs. 7 Lakhs, 2015-17.

5. RIG: Development and validation of control oriented model for unbalanced rotating systems with soft suspensions, PI: Dr.Sandip Dhar, Rs. 2 Lakhs, 2016-17.
6. RIG: Development and validation of a Finite Volume Method based flow solver for the compressible two-phase flows with phase change, PI: Dr.Shyam S. Yadav, Rs. 1 Lakh, 2016-17.
7. RIG: A preliminary study on developing and investigating tungsten inert gas (TIG) welding process for producing free form metallic parts, PI: Dr.Prateek Kala, Rs. 2 Lakhs, 2016-17.
8. RIG: Design and fabrication of a test rig to experimentally investigate propulsive characterisation of a wiggling elastic flagella, PI: Dr. J. S. Rahore, Rs. 1 Lakh, 2016-17.
9. RIG: Electrical and thermal characterisation of nano-composites, PI: Dr. SachinU. B., Rs. 1 Lakh, 2016-17.

#### a) Research Related Seminar/ Workshop

S.No.	Workshop/ Invited talks	External Resource Persons
1.	Two day workshop on "Fracture, Fatigue and Creep related life prediction techniques". 18-19 February 2017.	Prof.K.Ramesh, IIT, Madras. Prof.Raghu Prakash, IIT, Madras.
2.	CSIR sponsored 2 day workshop on "Applications of Advanced Computational Methods in Engineering" 28-29 March 2017.	Prof. S. Vengadesan, IIT Madras Prof. M. P. Gururajan, IIT Bombay
3.	5 <sup>th</sup> Indo-German Workshop on "Skilling and shaping India Towards Smart Manufacturing Industry 4.0" 12 <sup>th</sup> September 2017 at Bangalore.	Prof. KS Sangwan, BITS Pilani. Prof. Christoph Herrmann, TU Braunschweig, Germany Prof. (Dr.) Reza Asghari, TU Braunschweig, Germany Dr. Reinhard Pittschellis, FESTO Didactic SE
4.	Two day Workshop on "Additive Manufacturing and Recent trends: ", 30-31 October 2017.	Prof.Pulak Pandey, IIT Delhi. Prof.Rakesh Mote, IIT, Mumbai' Prof. Rupinder Singh, Gurunanak Dev Engineering College.

#### b) Conference:

Joint Indo-German Conference on 'Sustainable Engineering' on September, 15-16, 2017.

#### c) Invited Lecture:

1.	" Sustainable supply chain management: current trends and future direction" on 1st Sept.2017	Prof. Kannan Govindan, SDU Denmark
2.	Sustainable Manufacturing in Machining, 12 November 2017	Prof.Manbir Sodiis, University of Rhodes Island, East Bay, US.

#### d) University Immersion:

1. Prof. Digalwar visited University of Southern Denmark (SDU) Odense, Denmark as a Visiting Researcher during May-July 2017 under University Immersion Programme of BITS Pilani.
2. T. C. Bera visited Purdue University, USA as a Visiting Researcher during Jun-July 2017 under University Immersion Programme of BITS Pilani.

#### e) Industry connect training programs conducted.

S.No.	Program	Faculty	Location	Duration	Number of Participants
1.	Fatigue, Fracture and Creep related life prediction techniques	P.Srinivasan, Sujith (Hyderabad)	Vishakapatnam Steel Plant, Vishakapatnam	24-25 February 2017	60
2.	Fatigue, Fracture and Creep related life prediction techniques	P.Srinivasan, Sujith (Hyderabad)	Vishakapatnam Steel Plant, Vishakapatnam	24-25 March 2017	60
3.	Power Plant Performance calculations	Manoj Soni, M Srinivas(Hyderabad)	Grasim Industries, Vilayat	24-25 March 2017	15
4.	Boiler Technology	P.Srinivasan, Manoj Soni	Grasim Industries, Nagda	29-30 May 2017	20
5.	Coal Chemistry and Metallurgy	P.Srinivasan Srinkanta Dinda	Birla Polyfibers, Kharach	6-7 July 2017	25

S.No.	Program	Faculty	Location	Duration	Number of Participants
6.	Material handling equipment: Design, safety and audit	Arun Jalan Sabaresh	Birla Polyfibers, Grasim Industries, Harihar	21-22 July 2017	20
7.	Steam and Power Balance	P.Srinivasan ManojSoni	Grasim Industries, Nagda	22-23 September 2017	20
8.	Damage Tolerant Design	Vishakapatniam Steel Plant (VSP) Vishakapatnam	P.Srinivasan Pavan Kumar Siva Prasad	11-14 October 2017	60

#### Research Publications in journals/books (Year2017)

S.No	Title of the Publications	Authors	Name of the Journal	Volume and Page Number
1.	Two-Stage Carbon Dioxide Refrigeration Cycles	NileshPurohit, Dileep Kumar Gupta, Mani SankarDasgupta	Full Book, Lap Lambert Academic Publishing,	ISBN-10: 3330322071
2.	Decision Sciences for Business Sustainability: A Cross-functional Perspective	Digalwar, A. K., Singh, Alok Kumar and Singh, Rajwinder	Full book, First Edition, Excel India Publishers, New Delhi India	ISBN: 978-93-86724-24- 3
3.	Energetic and economic analysis of trans-critical CO2 booster system for refrigeration in warm climatic condition	NileshPurohit, Dileep K Gupta, M S Dasgupta	International Journal of Refrigeration	Elsevier Volume 80, Pages 182-196
4.	CO2 heat pump for waste heat recovery and utilization in dairy industry with ammonia based refrigeration	Simarpreet Singh, M.S. Dasgupta,	International Journal of Refrigeration	Elsevier, Volume 78, Pages 108-120
5.	Comparative Assessment of Low-GWP Based Refrigerating Plants Operating in Hot Climates	NileshPurohit, ParideGullo, Mani SankarDasgupta	Energy Procedia	Elsevier, Volume 109, Pages 138-145
6.	Performance of CO2 Trans-Critical Refrigeration System with Work Recovery Turbine in Indian Context,	Dileep Kumar Gupta, Mani Shankar Dasgupta,	Energy Procedia,	Elsevier, Volume 109, Pages 102-112
7.	CFD Modeling of a Scroll Work Recovery Expander for Trans-critical CO2 Refrigeration System	Simarpreet Singh, Abhyuday Singh, M.S. Dasgupta	Energy Procedia,	Elsevier, Volume 109, Pages 146-152
8.	Energetic and Exergetic Investigation of a N2O Ejector Expansion Transcritical Refrigeration Cycle	KapilDevChoudhary, M.S. Dasgupta, Shyam Sunder	Energy Procedia	Elsevier, Volume 109, Pages 122-129
9.	Assessment of Alumina Nanofluid as a Coolant in Double Pipe Gas Cooler for Trans-critical CO2 Refrigeration Cycle	NileshPurohit, Balraj Singh Khangarot, ParideGullo, KamleshPurohit, Mani SankarDasgupta	Energy Procedia	Elsevier, Volume 109, Pages 219-226
10.	Evaluating Applicability of a Scroll Expander for CO2 Refrigeration System at Warm Climate	Simarpreet Singh and M. S. Dasgupta	Int. J. Air-Cond. Ref	World Scientific, onlune J. DOI: <a href="http://dx.doi.org/10.1142/S2010132517500122">http://dx.doi.org/10.1142/S2010132517500122</a>
11.	An integrated photovoltaic thermal solar (IPVTS) system with earth water heat exchanger cooling: Energy and exergy analysis	Jakhar, Sanjeev ; Soni, Manoj S. ; Gakkhar, Nikhil	Solar Energy	Elsevier Volume 157 Issue 1
12.	Exergy analysis of a photovoltaic thermal system with earth water heat exchanger cooling system based on experimental data	SanjeevJakhar; Manoj S. Soni; Nikhil Gakkhar	International Journal of Exergy (IJEX)	Inderscience Vol. 23, No. 4

S.No	Title of the Publications	Authors	Name of the Journal	Volume and Page Number
13.	Modelling and Simulation of Concentrating Photovoltaic System with Earth Water Heat Exchanger Cooling	Jakhar, S., Soni, M.S., Gakkhar, N.	Energy Procedia	Elsevier, Volume 109, Pages 78-85
14.	Numerical Heat Transfer Analysis of Wavy Micro Channels with Different Cross Sections	Karan Ghule, M.S. Soni	Energy Procedia	Elsevier, Volume 109, Pages 471-478
15.	Understanding Flexible Abrasive Brush Behaviour for Double Disk Magnetic Abrasive Finishing Based on Force Signature	Prateek Kala, Varun Sharma, Girish Verma and Pulak Pandey	Journal of manufacturing processes	doi:10.1016/j.jmapro.2017.04.010 , Available online 29 April 2017
16.	Comparison of finishing characteristics of two paramagnetic materials using double disc magnetic abrasive finishing	Prateek Kala , V Sharma, P.M. Pandey	Journal of manufacturing processes	Vol. 25, pp.37-48, January 2017
17.	Effect of electroless Ni plating on the properties of cold-sprayed Ni-Al <sub>2</sub> O <sub>3</sub> Coatings	R.Upadhyaya,S.Tailor, S.Shrivastava,A.A.Glalkova,S.C.Modi	Surface Innovations 5 (2), 97-105	Vol: 5 (2), pp: 97-105 2017
18.	High performance thermal-sprayed WC-10Co-4Cr coatings in narrow and complex areas	Rohit Upadhyaya, S. Tailor, Sharad Shrivastava, S.C. Modi	Surface Engineering, Taylor & Francis, Journal	• doi: <a href="https://doi.org/10.1080/02670844.2017.1375175">https://doi.org/10.1080/02670844.2017.1375175</a> .
19.	Performance Analysis of Agile manufacturing: A Case Study on Indian Auto Component Manufacturer	Pavan Kumar Potdar and Srikanta Routroy	Measuring Business Excellence.	Vol. 21 No.2, pp. 117-135
20.	An Approach to Address Principal Supplier Development Impediments	Sunil Kumar C V and Srikanta Routroy	Benchmarking: an International Journal,	Vol. 24 No.5, pp. 1190-1214.
21.	A benchmarking approach for enhancing agility in manufacturing environment	Pavan Kumar Potdar, Srikanta Routroy and Astajyoti Behera	International Journal of Productivity and Quality Management,	Vol. 20 No. 4, pp. 488-512
22.	Analysis of suppliers' preferences to a manufacturer using Kano model and performance value analysis	Sunil Kumar C V and Srikanta Routroy	International Journal of Business and Systems Research,.	Vol. 11 No.1-2, pp. 6-27
23.	Analyzing a manufacturer's returns from supplier development programs	Sunil Kumar C V and Srikanta Routroy	Materials Today: Proceeding.	Vol. 4, No. 2, 2255-2262
24.	Performance Analysis of Supplier Development Programs	Sunil Kumar C V and Srikanta Routroy	Benchmarking: an International Journal,	Vol. 24 No. 2, pp. 488-510.
25.	Addressing the Agile Manufacturing Impediments using Interpretive Structural Modeling	Pavan Kumar Potdar, Srikanta Routroy and Astajyoti Behera	Materials Today: Proceeding,.	Vol. 4, No. 2, 1744-1751
26.	Analyzing the Agile Manufacturing Barriers using fuzzy DEMATEL	Pavan Kumar Potdar, Srikanta Routroy and Astajyoti Behera	Benchmarking: an International Journal,.	Vol. 24 No. 7, pp. 912-1936
27.	Agile Manufacturing: A Systematic Review of Literature and Implications for Future Research	Pavan Kumar Potdar, Srikanta Routroy and Astajyoti Behera	Benchmarking: an International Journal.	Vol. 24 No. 7, pp. 2022-2048
28.	An investigation of Co-combustion municipal sewage sludge with biomass in a 20kW BFB combustor under oxygen-enriched condition	Rajesh Kumar and Ravi Inder Singh	Waste Management, Science direct, Elsevier	Vol.70, pp114-126, 2017

S.No	Title of the Publications	Authors	Name of the Journal	Volume and Page Number
29.	Review on CFD Modeling of Fluidized Bed Combustion Systems based on Biomass and Co – firing	Hemant Kumar, SK Mohapatra and Ravi Inder Singh	Journal of The Institution of Engineers-Part C, Springer	Doi: <a href="https://doi.org/10.1007/s40032-017-0361-2">https://doi.org/10.1007/s40032-017-0361-2</a>
30.	Roadmap for the implementation of green manufacturing practices in Indian manufacturing industries: An ISM approach	Digalwar, A.K., MundraNidhi, Tagalpallewar, A. R., Sunnapwar, V. K.	Benchmarking an International Journal	Vol. 24, Issue 5, pp.1386-1399
31.	Modelling the Critical Success Factors for Sustainable Growth of Mining Industry in India	Digalwar, A. K., Agrawal, Mohit and Shah, Harshal	IUP Journal of Operations Management,	Vol. 16, Issue-2, pp. 7-15.
32.	Development of Fuzzy PROMETHEE Algorithm for evaluation of Indian World Class Manufacturing Organizations	Digalwar, A. K. and Date, Prasanna	International Journal of Services and Operations Management,	Vol. 24, No.3, pp.308-330.
33.	Performance analysis of vehicle assembly line using discrete event simulation modelling	SardaAkshay and Digalwar, A. K.	International Journal of Business Excellence (In Press)	DOI: <a href="https://doi.org/10.1504/IJBEX.2018.089150">https://doi.org/10.1504/IJBEX.2018.089150</a>
34.	A method to determine cutting force coefficients in turning using mechanistic approach	T. C. Bera, H. Manikandan, A. Bansal, D. Nema,	International Journal of Materials, Mechanics and Manufacturing,	Vol 6(2), 2018, 99-103
35.	Waste Water Treatment Plant Life Cycle Assessment: Treatment Process to Reuse of Water	S Raghuvanshi, V Bhakar, C Sowmya, KS Sangwan	Procedia CIRP	Vol: 61, pp:761-766
36.	Optimization of Machining Parameters for Improving Energy Efficiency using Integrated Response Surface Methodology and Genetic Algorithm Approach	KS Sangwan, G Kant	Procedia CIRP	Vol: 61, pp:517-522
37.	Adoption of Integrated Lean-Green-Agile Strategies for Modern Manufacturing Systems	VK Mittal, R Sindhwani, V Kalsariya, F Salroo, KS Sangwan, PL Singh	Procedia CIRP	Vol: 61, pp:463-468
38.	Key Activities, Decision Variables and Performance Indicators of Reverse Logistics	K S Sangwan	Procedia CIRP	Vol 61, Pp. 257-262
39.	A study on environmental and economic impacts of using waste marble powder in concrete	M Singh, K Choudhary, A Srivastava, KS Sangwan, D Bhunia	Journal of Building Engineering	Vol: 13, pp: 87-95
40.	Bridging the qualification gap between academia and industry in India	LennartBüth, Vikrant Bhakar, NiteshSihag, GerritPosselt, Stefan Böhme, Kuldip Singh Sangwan, Christoph Herrmann	Procedia Manufacturing	Vol: 9, pp: 275-282
41.	Life cycle analysis of HDPE pipe manufacturing – a case study from an Indian industry	KSSangwan, V Bhakar	CIRP Procedia	Vol:61, pp: 738-743
42.	A fuzzy-based decision support framework for product recovery process selection in reverse logistics	A Jindal, KS Sangwan	International Journal of Services and Operations Management	Vol: 25 (4), pp: 413-439
43.	A framework for lean manufacturing implementation	J Bhamu, KS Sangwan	International Journal of Services and Operations Management	Vol: 25 (3), pp. 313-333
44.	Multi-objective fuzzy mathematical modelling of closed-loop supply chain considering economical and environmental factors	A Jindal, KS Sangwan	Annals of Operations Research,	Vol. 257, Issue 1–2, pp 95–120

S.No	Title of the Publications	Authors	Name of the Journal	Volume and Page Number
45.	Sensitivity analysis of repairable redundant system with switching failure and geometric reneing	Chandra Shekhar, Madhu Jain , Ather Aziz Raina and Rajesh Prasad Mishra	Decision Science Letters	6 (4), 337-350
46.	A Failure Mode Effect and Criticality Analysis of Conventional Milling Machine Using Fuzzy Logic: Case Study of RCM&quot	G. Gupta, R. P. Mishra	Quality and Reliability Engineering International	Vol. 33, No. 2, 347-356 DOI: 10.1002/qre.2011
47.	Crack propagation in staggered structures of biological and biomimetic composites	ArpitKhandelwal, Amitabh Kumar, Rajeev Ahluwalia, Palla Murali	Computational Materials Science	Vol 126, 238-243, 2017
48.	Experimental and theoretical analysis of glazed tube-and-sheet photovoltaic/thermal system with earth water heat exchanger cooling	Sanjeev Jakhar, Manoj S. Soni	Energy Conversion and Management	Vol. 153, 576-588

#### List of faculty members who presented papers in various conferences

S.No.	Title of the Publication	Authors	Name of Conference	Venue and Date of Conference
1.	Analysis of Surface Finish Improvement during Ultrasonic Assisted Magnetic Abrasive Finishing on Chemically treated Tungsten Substrate	N Sihag, Prateek Kala and P M Pandey	NAMRC-45	USC Los Angeles, USA 4-8 June 2017
2.	MCDM Analysis for maintenance strategy selection	G. Gupta, R. P. Mishra, H. Shah	IEEE International Conference on Quality, Productivity, Reliability, Optimization and Modelling	Faridabad, India Jan. 05-07, 2017
3.	Analysis of TPM Barriers using ISMMICMAC Approach	Anita Sharma, Rajesh P. Mishra, AyonChakraborty, Gajanand Gupta	Joint international conference on interdisciplinary research & 8th international conference on quality, reliability, infocom technology and business operations (JIRICQRIT - 2017)	Noida, india Feb 8-10th 2017
4.	Effect of secondary branching on Piezo based powering mechanism to actuate artificial nanoswimmer	Shivani Nain, Jitendra Singh Rathore, NitiNipun Sharma	8th ISSS International Conference on Smart Materials, Structures & Systems	Indian Institute of Science (IISc), Bengaluru, INDIA July 5-7, 2017
5.	Experimental study on helical propulsion system of artificial nanoswimmer: Low Reynolds Number	Paul Varghese, Shivani Nain, Jitendra Singh Rathore and N.N. Sharma	17th IEEE International Conference on Nanotechnology	Pittsburgh, USA July 25-28, 2017
6.	Government Supported Generic Drug Supply Chain in India: A Study on Critical Success Factors	Kush Gupta, Anuj Dixit, SrikantaRoutroy and Sunil Dubey	International Conference on Evidence Based Management 2017 (ICEBM2017), Department of Management	BITS Pilani, Pilani Campus 2017
7.	Co-Combustion of Municipal Sewage Sludge with caster seed shell in bubbling fluidized bed combustor under oxygen-enriched condition: Experimental Investigation	Ravi Inder Singh and Rajesh Kumar	15th International conference on environmental engineering, CSCE Annual Conference and Annual General Meeting (CSCE-2017)	Vancouver, Canada May 31 to June 03, 2017

S.No.	Title of the Publication	Authors	Name of Conference	Venue and Date of Conference
8.	Combustion Characteristics Of Municipal Sewage Sludge With Cotton Stalk In A Bubbling Fluidized Bed Under Air And Oxygen-Enriched Conditions	Rajesh Kumar and Ravi Inder Singh	Proceedings Of The International Conference On Sustainable Energy And Environmental Challenges (Seec-2017)	Mohali, India 26 – 28 February, 2017
9.	Investigation & Design Challenges of Advance Sensor/Material Selection for IoT based Protective Gears for Training/Impact scoring in Taekwondo	NitinChaturvedi, Ajay Shekhawat, BhaveshVerma, SachinBelgamwar, Navneet Gupta,	International Conference on Sports Engineering, ICSE-2017	Jaipur, 2017
10.	Application of Fuzzy TOPSIS for evaluating machining techniques using sustainability metrics	Digalwar, A. K.	Proceedings of International Conference on Recent Advances in Materials & Manufacturing Technologies (IMMT 2017)	BITS Pilani Dubai campus, Dubai, UAE during 28-29 November, 2017.
11.	Solving Identical Parallel Machine Scheduling problem using modified multi-objective particle swarm optimization	Bathrinath, S and Digalwar, A.K.	Proceedings of 11th ISDSI International Conference	IIM Trichy during 27-30 Dec. 2017.
12.	Application of a Hybrid Decision Making Approach for the Evaluation of Sustainable Supply Chain Practices	Digalwar, A. K. and Kannan Govindan	Proceedings of 11th ISDSI International Conference	IIM Trichy during 27-30 Dec. 2017.
13.	Theory of Constraints + Lean + Six Sigma: A Unified Framework to improve TLS Orientation	Goyal, Animesh, Digalwar, A. K. and Gupta Mahesh	Proceedings of 11th ISDSI International Conference	IIM Trichy during 27-30 Dec. 2017.
14.	A comparison of FMEA analysis using tradition RPN and TOPSIS method	Gupta G., Mishra R. P., Agrawal P.	Joint Indo-German Conference on Sustainable Engineering	September 15-16, 2017 BITS Pilani
15.	Analysis of TPM Barriers using ISMMICMAC Approach	Anita Sharma, Rajesh P. Mishra, Ayon Chakraborty, Gajanand Gupta	Joint international conference on interdisciplinary research & 8th international conference on quality, reliability, information technology and business operations (JIRICQRIT - 2017)	Feb 8-10th 2017, Amity centre for interdisciplinary research, Amity university, Noida, India
16.	Toyota principles and their applicability to the mining organization: some enablers and barriers	RP Mishra	37th annual day national seminar on Advanced technology & innovation mining Industry	Indian Institute of Metals, Khetri Nagar Rajasthan India
17.	Crack propagation in functionally graded materials using phase field approach	Kiran Raj, Murali Palla	Indian Conference on Applied Mechanics (INCAM) 2017 MNNIT Allahabad, 5-7 July 2017	Allahabad, 2017
18.	Phase Field Modelling of Crack Propagation in Bioinspired Composites	Kiran Raj, Murali Palla	International Conference on Composite Materials and Structures-ICCMS 2017, Hyderabad 27-29th December 2017	Hyderabad 2017
19.	Internalising the external cost of power generation from coal based power plants in India	P.Srinivasan, Anand Shekar	Second International conference on Energy, Environment and Economics, ICEEE2018 11-13 December 2017	Heirot -Watt University, Edinburgh, UK 2017.
20.	Creep life prediction of super heater coils used in coal based thermal power plants subjected to fly ash erosion and oxide scale formation	P.Srinivasan, Shashank Kushwaha	International Conference on Recent Advances in Materials & Manufacturing Technologies (IMMT 2017) ,29-29 November 2017	BITS-Dubai.



S.No.	Title of the Publication	Authors	Name of Conference	Venue and Date of Conference
21.	Simulation and Experimental Investigation of Melting Process in Spherical PCM Capsules Used for Low-Temperature Thermal Energy	Vivek Tiwari,, Kedar Patel P.Srinivasan	Second International Conference on Sustainable Energy and Environmental Challenges, SEEC2018, 31 December 2017 to 03 January 2018.	IISc, Bangalore.
22.	Investigations on Different Types of Fin Profiles by Simulation to Improve the Performance of PCM Materials Based Thermal Energy Storage System	Kedar Patel, Vivek Tiwari and P.Srinivasan	Second International Conference on Sustainable Energy and Environmental Challenges, SEEC2018, 31 December 2017 to 03 January 2018	IISc, Bangalore.
23.	An investigation on thermal aspect in peripheral milling of thin-walled geometries,	ManikandanHareendran, AshutoshMadhavara oBable, Tufan Chandra Bera,	Proceedings on International Conference on Recent Trends in Engineering, Science & Technology	Hyderabad, Telangana, India, 2016
24.	Design of Vertical Integrated Aloe vera Supply Chain for Enhancing Farmers' Profit	Rahul Priyadarshi and Srikanta Routroy	International Conference on Research and Business Sustainability	IIT Roorkee, INDIA, December 16-17, 2017
25.	A Analysis of Agility Performance of Supply Chain: A Case Study on Indian Automotive	Srikanta Routroy, Satyendra K Sharma and Bhardwaj,	International Conference on Recent Advances in Materials and Manufacturing Technologies (IMMT 2017),	BITS Pilani, Dubai Campus, 28th-29th, November, 2017,
26.	Strategy for Enhancing Farmers Profit in Aloe Vera Supply Chain: A Case Study on Rural Rajasthan	Rahul Priyadarshi and Srikanta Routroy	Joint Indo-German Conference on Sustainable Engineering	BITS Pilani, Pilani Campus, Rajasthan, 15th-17th September, 2017
27.	Government Supported Healthcare Supply Chain: Rajasthan's Journey towards Sustainability	Anuj Dixit, Srikanta Routroy and Sunil Dubey	Joint Indo-German Conference on Sustainable Engineering	BITS Pilani, Pilani Campus, Rajasthan, 15th-17th September, 2017
28.	Study the Performance of Green Suppliers using Fuzzy Data Envelopment Analysis	Shivi Agarwal, Trilok Mathur, Srikanta Routroy and Akshat Khandelwal	Joint Indo-German Conference on Sustainable Engineering	BITS Pilani, Pilani Campus, Rajasthan, 15th-17th September, 2017
29.	Measuring the impact of socially responsible supply chains on Firm performance	Shombit Dhar, Satyendra Kr. Sharma, Srikanta Routroy and Saurabh Chadha	Joint Indo-German Conference on Sustainable Engineering	BITS Pilani, Pilani Campus, Rajasthan, 15th-17th September, 2017
30.	Thermo-Economic Analysis of a Solar-Coal Hybrid Power Plant	Sunil, Manoj S Soni	Proceedings of the 24thNational and 2ndInternational ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017)	BITS Pilani, Hyderabad, India 2017
31.	Performance Improvement of Single Expander Transcritical CO2 Refrigeration Cycle Using an Earth Water Heat Exchanger	Sagnik Mukherjee, ManojSoni	Proceedings of the 24thNational and 2ndInternational ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017)	BITS Pilani, Hyderabad, India 2017

S.No.	Title of the Publication	Authors	Name of Conference	Venue and Date of Conference
32.	Study of Effects of Knurling on Heat Transfer of Rectangular Fins through Forced Convection	Manoj S Soni, Naga VeerendraGrandhi	ICAER 2017, 6th International Conference on Advances in Energy Research 2017	IIT Bombay, Mumbai, India 2017
33.	Integration of Solar Thermal Energy in Existing Subcritical Coal-Fired Power Plant for Fuel Saving	Sunil, Manoj S Soni	ICAER 2017, 6th International Conference on Advances in Energy Research 2017	IIT Bombay, Mumbai, India 2017
34.	Recent Advances of Hybrid Solar-Thermal Power Generation Systems for Sustainable Future	Sunil, Manoj S. Soni, Samyak Samar	Joint Indo-German Conference on Sustainable Engineering" (theme - Skilling India for Digital and Sustainable Future) 2017	BITS Pilani, Pilani Campus 2017
35.	Techno-environment analysis of a solar thermal repowered coal based power plant	Samyak Samar, Manoj S. Soni, Sunil	Joint Indo-German Conference on Sustainable Engineering" (theme - Skilling India for Digital and Sustainable Future) 2017	BITS Pilani, Pilani Campus 2017
36.	Applicability of Concentrated Solar Thermal based Distillation unit for Semi arid region	Nikhil Gakkhar, Manoj S. Soni, Sanjeev Jakhar	Joint Indo-German Conference on Sustainable Engineering" (theme - Skilling India for Digital and Sustainable Future) 2017	BITS Pilani, Pilani Campus 2017

#### Awards and honors for BITS faculty

1. Prof A K Digalwar, has been elected as a President Indian Subcontinent Region Decision Sciences Institute (ISDSI) and Chairman organized 11th ISDSI International conference during 27-30 Dec 2017 at IIMTrichy.
2. Prof.P. Srinivasan, First Recipient of Prof SSR Memorial Teaching Excellence Award 2017.
3. Shyam Sunder Yadav, Best Paper Award in the International Conference on Sports Engineering 23rd to 25th October 2017, Jaipur .
4. Rajesh P. Mishra. was session co-chair and organizing committee member in International Conference on Sports Engineering October 23-25, 2017 ,BITS Pilani, at Jaipur.
5. M. S. Dasgupta was invited as a Judge in SpaceX Hyperloop Pod Design Weekend, Texas A&M, USA.
6. Prof A. K. Digalwar delivered an expert lecture on Sustainable Manufacturing in International workshop on Advances in Mechanical Engineering organized by ZCOER Pune on 6th Jan. 2017.
7. Prof A K Digalwar chaired technical session in 2nd International Conference on Evidence Based Management (ICEBM-2017) held at BITS Pilani, Pilani Campus during 17-18 March 2017.
8. Prof A K Digalwar chaired technical session in International Conference on Recent Advances in Materials & Manufacturing Technologies (IMMT 2017) held at BITS Pilani Dubai campus, Dubai, UAE during 28-29 November, 2017.
9. Prof A K Digalwar chaired technical session in 11th ISDSI International Conference held at IIM Trichy during 27-30 Dec. 2017.
10. Prof P.Srinivasan, chaired technical session in 11th ISDSI International Conference held at IIM Trichy during 27-30 Dec. 2017.
11. Prof P.Srinivasan, chaired technical session in International Conference on Recent Advances in Materials & Manufacturing Technologies (IMMT 2017) held at BITS Pilani Dubai campus, Dubai, UAE during 28-29 November, 2017.
12. Prof P.Srinivasan, chaired technical session in International Conference on Energy, Environment and Economics (ICEEE2018) held at Heriot-Watt University, Edinburgh, UK during 11-13 December 2017.
13. Prof Srikanta Routroy, chaired technical session in International Conference on Recent Advances in Materials & Manufacturing Technologies (IMMT 2017) held at BITS Pilani Dubai campus, Dubai, UAE during 28-29 November, 2017.

**Faculty Research Area**

S.No.	Name of faculty	Research Area
1	Souvik Bhattacharyya	Thermal Science & Natural Circulation Loops
2	R.K.Mittal	Robotics
3	Mani SankarDasgupta	Design, Simulation
4	Kuldip Singh Sangwan	Manufacturing
5	P. Srinivasan	Production Engineering
6	ArunMaity*	Project Management, Manufacturing Excellence
7.	P. B.Venkatraman*	Decision analysis.
8	Bijay Kumar Rout	Quality, Reliability, Operations Research and Robotics
9	Abhijeet K Digalwar	Manufacturing Engineering and Management
10	SrikantaRoutroy	Supply Chain Management, Production Planning and Control, Optimization
11	Manoj Kumar S Soni	Solar Thermal and Thermal Engineering
12	SharadShrivastava	Biomedical Engg, Engineering Materials
13	Ravi ShrikrishnaReosekar*	Manufacturing Organization and Management
14	R P Mishra	Manufacturing Systems Engineering
15	Pavan Kumar Potdar*	Materials Management, Manufacturing Management
16	Naga Vamsi Krishna Jasti*	Lean Manufacturing
17	Jitendra Singh Rathore	Nano System and Fluidics
18	Sachin U Belgamwar	Materials Engineering and MEMS
19	Amol M. Marathe	Nonlinear vibrations
20	Sudeep Kumar Pradhan*	Supply chain Management, Operation Management
21	PallaMurali	Solid Mechanics, Materials Science
22	ArunJalan	Dynamics, Vibration
23	Srinivas Kota*	Product Design, Life Cycle Assessment
24	Tufan Chandra Bera	Manufacturing
25	Shyam Sunder Yadav	Computational Fluid Dynamics
26	Prateek Kala	Advanced Manufacturing Processes
27	Girish Kant	Manufacturing Engineering
28	Varun Sharma	Rapid Prototyping, Advanced Manufacturing Processes
29	Akash Rai	Air pollution: measurements, modeling, and control
30	Simanchal Kar	Surface coating and Manufacturing Technology
31	Arindam Das	Nano Materials
32	Venkatesh Kadbur Prabhakar Rao	MEMS, NEMS, Dynamics
33	Keyur B Joshi	Fluid structure interaction
34	Gajanand Gupta	Manufacturing, Reliability based Maintenance
35	Dinesh Wamanrao W.*	Thermal Engineering
36	Uma Maheswari N*	Thermal Engineering
37	Raghu Raman	Thermal Engineering

\* off-campus faculty

**DEPARTMENTAL ASSOCIATIONS /CLUB ACTIVITIES****(i) Society of Automotive (SAE) Collegiate Club**

SAE Collegiate Club, BITS Pilani is a group of budding engineers committed to the promotion of automotive knowledge and technologies. The club has been instrumental in providing students a link between practical and theoretical knowledge. With more than 150 student members, from various disciplines, the club encourages inter-disciplinary approach to finding automotive solutions. The club organizes various activities such as Guest Lectures, Workshops, Quizzes, Project presentation, and Design competitions based on Land and Air transport technologies throughout the academic year. Inspired Karters, the flagship group formed under SAE has been successfully participating in BAJA SAE India, an ATV design challenge and SUPRA SAE India since its inception.

**(ii) ASME**

ASME, BITS Pilani Chapter has conducted numerous activities in the past year. Like every year, ASME, BITS Pilani Chapter had organized and also sponsored a kernel event, Airborne, during APOGEE 2016, which saw an impressive participation from colleges all over India. Airborne is a hovercraft racing competition was organized in association with the Radio Control Club. An Interactive Session with Mr. ShishirJoshi, Managing Director of SKF India Ltd and also the Country Head for SKF group's subsidiaries in India on 'CAMPUS TO CORPORATE-Success Mantras for the Next Phase'. It has also conducted in association with Goa Campus an online talk by Dr. A.S Kiran Kumar, Chairman of the Indian Space Research Organisation (ISRO) on Future missions of ISRO in telepresence class room.

**(ii) Renewable Energy Club**

The Renewable Energy Club is an exclusively a student managed body that operates under CREED. The Club has undertaken active work in organizing competitions, quizzes, carbon footprint analysis and carbon credits. Commercial organizations in these areas have evolved out of this club, and are currently owned and operated by BITS alumni.

**(iv) CRIS**

The humanoid robot project sponsored by MIT is closed and final presentation was held in March 2016 at BITS Pilani. Prof. Ishii of Hiroshima University Japan visited CRIS to explore the possibility of collaboration. Student group of this center are engaged to develop Acyut -VI humanoid which is capable of walking in stair case, dribble and capable of doing acrobatics.

**(v) Manufacturing Engineering Association (MnA)**

1. Two Events in APOGEE 2018 – 'Reverse Engineering' (Kernel) and 'Innover'.
2. During APOGEE 2018, around 20 Projects and Papers funded by MNA were presented and shown in an exhibition stalls in the FD-3 Lawns.
3. Essay writing competition on the theme – 'India: the next prospective global manufacturing hub. Cash prizes and certificates were distributed to winners'.
4. Batch Snaps, Arrangement and Distribution.
5. Farewell and Grub.
6. Informal Interaction with newly admitted students of B.E. and M.E. Manufacturing.
7. Guest Lecture on Sustainable SCM conducted in collaboration with IPCD and Dept. of Mechanical Engineering.
8. Engineer's Day Poster and Presentation in front of the delegates of the Indo-German Conference on the Topic – "Role of Engineers in Developing India".
9. Contribution from MNA in the 2 Day Workshop on 'Additive Manufacturing: Advancements and Recent Trends'.
10. Project discussion meetings for APOGEE 2018 Projects/Papers..

**(vi) Mechanical Engineering Association (MEA)**

It was an eventful year for the Mechanical Engineering Association. MEA organized three events namely Full throttle grand prix (FTGP), Junk yard war and battle of waterloo during the Oasis 2016. Many participants took part in the event and benefitted and won prizes. Students of MEA took part in the poster presentation event during the Engineers day celebration and displayed their talent in the technology and it's impact on society. The formal interaction with the first year students and fare well for the graduating students were organized by the association. A seminar on "How to teach effectively" was organized by the association in which the students come up with the ideas of innovative class room teaching.

**(vii) Team BITS Shell Eco-Marathon**

Shell Eco-Marathon is an annual global event where student teams from all over the world compete to design, build, and drive specialised ultra-energy-efficient vehicles. Over several days, teams make many attempts to travel the furthest on the equivalent of one litre of fuel. The guiding motto of Team BITS is that sustainability isn't optional-it's essential. The competition aims to inspire budding engineers to bring their vision of sustainable mobility into reality, if only for a few days.

Team BITS has been a regular participant at the Shell Eco-Marathon, Asia since 2013 and has been actively innovating ever since. We are also the proud recipients of the prestigious Perseverance and Spirit of the Event award with a cash prize of \$2000 in 2016.

In the latest 33rd season of the event, held in Singapore, March 2017 the team presented The Tapas, with an ethanol based engine. It is the first that time any student team from India built an ethanol-based vehicle and fabricate an entire Carbon Fibre body. For these feats the team was felicitated with a Special Recognition Award and a cash Prize of INR 2,00,000 by Mr. Nitin Prasad, Chairman, Shell Companies India at the Shell Technology Centre Bangalore in March 2017. Also, the team got to present the vehicle and interact with Shri. Dharmendra

Pradhan, Hon'ble Minister for Petroleum and Natural Gas, Govt of India, Shri. R.V. Deshpande, Hon'ble Minister for Industries, Govt. of Karnataka and many experts from the energy and automotive industry

#### (viii) Radio Control club

Radio Control (RC) club was founded in 2011 and aims to bring together all the RC enthusiasts from all the four BITS campuses, share knowledge & research work and also work on various multi-disciplinary projects. The club comprised of students mainly from Mechanical, Manufacturing, Electrical and Electronics & Electronics & Instrumentation Engineering discipline. Currently, the club consists of a well-balanced mix of 15 people from the aforementioned disciplines.

RC club started as an aeromodelling club focused on understanding and developing model aeroplanes for manual flight. Now, the broader focus has shifted to automated flight. The most recent milestone of participating in the AUVSI SUAS international competition was a step into our new goal. Currently, work on three projects is going on viz: Dynamic Automated Flight with GPS guidance and FPV capabilities, Indigenous micro-quadcopter design and fabrication, Construction of an elliptical wing built by assembling a rib structure with 3D printed parts.

RC club has always been a place for students to discover and explore their interests without any restrictive goals set upon them. This freedom has helped develop multiple skills for the members.

### B1.10.11 Department: Management

Number of faculty members (as on 31<sup>st</sup> December, 2016)

<b>Professor</b>	01
<b>Associate Professor</b>	0
<b>Assistant Professor</b>	13
<b>Visiting faculty and lecturer</b>	03

**Head of the Department:** Dr. Leela Rani

**Contact details:** Email: leela\_r@pilani.bits-pilani.ac.in

Phone: +91-01596515493 (O)

+91-01596-245073 EXT-271 (Dept.)

**Number of PhD Scholars:** 12 (Full Time) + 07 (Part time) + 2 (Aspirant) - 21

**Ph.D. Thesis Submitted during the year:** 06

**Full Time:** 04 (Ms. Preeti Tiwari, Ms. Meenakshi Sharma, Ms. Arunima Rana, Mr. Nirankush Dutta)

**Aspirant:** 02 (Mr. Rajiv Agarwal, Dr. R.N. Bansal)

#### A. SPONSORED RESEARCH ACTIVITIES & FUNDING

(i) Ongoing projects: 4

(ii) Projects Sanctioned during the year : 1

(iii) Projects completed in the year:1

(iv) Consultancy Projects completed this year: 0

(i) Ongoing projects:

S.No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
1	Entrepreneurship Development Programs on campus	Prof. Arya Kumar	National Entrepreneurship Network	22,67,000
3	Development and validation of service quality index in Indian Telecom & Banking Sector	Dr. Arun Kumar & Dr. Jyoti	ICSSR	4,00,000

3	Modelling of Employee Performance and Human Capital, Assessment and Optimization of Productivity of Indian Manufacturing Industry	Dr. Udayan Chanda & Dr. Praveen Goyal	ICSSR	5,00,000
4	Empirical investigation of management practices in the Indian manufacturing sector	Dr. Jayashree Mahesh	BITS Pilani RIG grant	2,00,000

**(ii) Projects Completed**

S.No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
1.	Campus Sustainability in India: Issues and Challenges (A Study of Select Institutions of Higher Education)	Dr. Neetu Yadav	BITS Pilani RIG grant	2,00,000

**(iii) Projects sanctioned**

S. No	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount Sanctioned (Rs. In Lacs)
1.	Developing and Validating Customer Relationship Management Index for Indian Airline	Dr. Jyoti & Dr. Arun Kumar	ICSSR	1,50,000

**B. PUBLICATIONS****(a) International/National Journals**

1. Agariya, A. K. and Tikoria, J. (2017), "CRM scale development for enhancing business excellence in Indian airline sector", International Journal of Business Excellence, Vol. 12, No. 4, pp. 537-557 (Indexed in Scopus (Elsevier); ABDC Listing: C category).
2. Agarwal, A., Singh, D., & Agariya, A. K. (2017). What Really Leads to Partner Relationship Management? A Review of Literature. Journal of Relationship Marketing, 1-41.
3. Chanda, Udayan and Kumar, Alok (2017) "Optimisation of fuzzy EOQ model for advertising and price sensitive demand model under dynamic ceiling on potential adoption", International Journal of Systems Science: Operations & Logistics, 4(2), 145-165.
4. Chanda, Udayan, Kumar, Alok and Das, Jitendra Kumar. "Fuzzy EOQ model of a high technology product under trial-repeat purchase demand criterion", International Journal of Modelling and Simulation (<https://doi.org/10.1080/02286203.2017.1407991>).
5. Dadhich, A. and Singh, G. (2017) "Cross-Cultural Issues in IT/ITES Organization: A Pilot Study" published in International Journal for Science and Advanced Research in Technology, Volume 3, issue 3.
6. Dutta, N. and Bhat, A. 2017. Dangkal: Cinematic Representation of Competitive Marketing Strategy. Prabandhan: Indian Journal of Management, 10(8): 52-57. The journal is indexed in Scopus, Cabell's Directory, Index Copernicus etc. and is included in the list of UGC recommended journals. ISSN: 0975-2854.
7. Dutta, N. and Bhat, A. (Forthcoming), Effect of Perceived Relational Characteristics of Online Social Network on e-WOM and Purchase Intention: Exploring Mediating Role of Trust. International Journal of Web Based Community.
8. Goyal, Praveen and Chanda, Udayan (2017) "A Bayesian Network Model on the association between CSR, perceived service quality and customer loyalty in Indian Banking Industry", Sustainable Production and Consumption, 10, 50-65.
9. Goyal, Praveen and Kumar, Divesh (2017), Modeling the CSR barriers in manufacturing industries", Benchmarking: An International Journal, Vol. 24 Issue: 7, pp.1871-1890
10. Imlak Shaikh, Satyendra Kr. Sharma, Anil Kumar Bhat, (2017) Guest editorial", Journal of Modelling in Management , Vol. 12 Issue: 4, pp.578-582.
11. Kumar, Alok and Chanda, Udayan (2017) "Effect of Shape of the Demand Function and Permissible Delay in Payments on Economic Order Quantity of High Technology Products", International Journal of Services and Operations Management, 28(2), 243-263.
12. Mahesh, J., Bhat. A. (2017), 'Convergence of Management Practices in India's IT Sector with an a priori validation'. Journal of Asia Business Studies (in press) .[ABDC,Scopus]

13. Satyendra Sharma and Sajeev Jeorge (2017), "Modelling Resilience of Truckload Transportation", Benchmarking : An International Journal (Accepted).
14. Satyendra Sharma and Udayan Chanda (2017), " Developing a Bayesian Belief Network Model for prediction of R & D Project Success", Journal of Management Analytics, Vol. 4, No.2, pp. 50-72 Taylor & Fransis.
15. Satyendra Sharma, Srikanta Routroy and Rohan Desai (2017), " Retail Location Decision Using an Integrated DEMATEL-ANP method: Retail Location " International Journal of Operations Research and Information Systems, Vol.9, No.1 pp. 257-276.
16. Satyendra Sharma, Anil Bhat, Vinod Kumar and Aayushi Agarwal (2017), "Supply chain Risk Management: A Path Analysis Model", International Journal of Information Systems and Supply Chain Management, Vol.10, No.2, Accepted.[ABDC,Scopus].
17. Sharma, Satyendra, and Chanda, Udayan (2017). "Developing a Bayesian Belief Network Model for prediction of R & D Project Success", Journal of Management Analytics, 4(3), 321-344.
18. Tikoria, J. and Agariya, A. K. (2017), "ICT enabled classroom effectiveness scale development and validation: A case of multi-campus university", Knowledge Management & E-Learning, Vol.9, No.1, pp. 111-127 (Indexed in Scopus (Elsevier)).
19. Tiwari, P., Bhat, A. K. and Jyoti (2017) "Predictors of social entrepreneurial intention: an empirical study", South Asian Journal of Business Studies, Vol. 6, No. 1, pp. 53-79 (Indexed in Scopus (Elsevier)).
20. Tiwari, P., Bhat, A. K. and Tikoria, J. "An Empirical Analysis of the Factors Affecting Social Entrepreneurial Intentions", Journal of Global Entrepreneurship Research, (Springer: Indexed in ProQuest) (Accepted for publication).
21. Tiwari, P., Bhat, A. K. and Tikoria, J. "The Role of Higher Education and Personality traits in Predicting Social Entrepreneurial Intention", Education + Training (Indexed in Scopus) (Accepted for publication).
22. Yadav, N; Tikoria, J. and Dadhich, A. "Pathway towards Competitiveness through Sustainable Enterprise: A Case Study of Tata Group", International Journal of Global Business and Competitiveness (IJGBC) (Accepted for publication).

## C. CONFERENCES

### (i) Conference Presentation:

1. Banerjee, P. & Bhanu Teja, Y. (2017). A neural network based attrition prediction model for a manufacturing plant, at 5<sup>th</sup> International Conference on Business, Analytics and Intelligence, 11-13 December, IIM Bangalore.
2. Chadha S (2017), "Corporate Governance and Capital Structure: A Panel Data Study", paper presented at International Conference on Research and Business Sustainability organized by IIT, Roorkee in December 16-17, 2017.
3. Chanda, Udayan and Goyal, Praveen (2017), "Optimal pricing strategies for two successive generations of consumer durables", Conference Proceedings of the 5th International Conference on Contemporary Marketing Issues (ICCM) 2017, pp. 505 - 514.
4. Chanda, Udayan and Kumar, Alok (2017), " Dynamic Adoption Rate and its Impact on Inventory Policy, Effect of Dynamic Potential Adoption on Inventory Policy of New Products" Proceedings of 2<sup>nd</sup> International Conference on Evidence Based Management, pp. 215 – 219.
5. Dhar S, Sharma S, Routroy S and Chadha S (2017), "Measuring the impact of socially responsible supply chains on firm performance" at Joint Indo-German Conference on Sustainable Engineering, BITS Pilani.
6. Divatia, A., Lakdawala, S. and Tikoria, J. (2017) Analysis of Maturity Models for Business Intelligence and Analytics, published in conference proceedings of 2nd International Conference on Evidence Based Management (ICEBM 2017) organized at, BITS Pilani on 17th - 18th March 2017, pp. 195 - 201.
7. Dutta, N, & Bhat, A. 2017. "Lip Service or Real Concern: Testing the Claim to Pay Premium for Green Products through an Experimental Research" in the 2017 Summer Marketing Educators' Conference

- (Summer AMA) organized by American Marketing Association at San Francisco, California, United States from Aug 4, 2017 to Aug 6, 2017 (ISSN: 1054-0806; ISBN: 0-87757-366-2), pp. D28-D32
8. Dutta, N., & Bhat, A. 2017. "Influence of Relational Characteristics of Social Network Sites on Intention to Pass-along Electronic Word of Mouth: Exploring the Role of Trust" in the 2017 Summer Marketing Educators' Conference (Summer AMA) organized by American Marketing Association at San Francisco, California, United States from Aug 4, 2017 to Aug 6, 2017 (ISSN: 1054-0806; ISBN: 0-87757-366-2), pp. F65-F66
  9. Goyal Praveen (2017), "Sustainability Evidences from Hindu Philosophy", Proceedings of 2nd International Conference on Evidence Based Management, pp. 315-319
  10. Goyal, Praveen and Chanda, Udayan (2017), "Impact of CSR on customer satisfaction and trust: A study of Indian Hotel Industry", Conference Proceedings of the 5th International Conference on Contemporary Marketing Issues (ICCM) 2017, pp. 377 - 383.
  11. Goyal, Praveen and Kumar, Divesh Kumar (2017), "Fuzzy AHP model to prioritize barriers of CSR Implementation in Indian service industry", Joint Indo-German Conference on Sustainable Engineering, Sept. 15-16, 2017
  12. Kumar Vinod Kumar, Goyal Praveen, Vandana and Garg Ruchi Jain (2017), "Stakeholder Classification: A Sustainability Marketing Perspective", Proceedings of 2nd International Conference on Evidence Based Management, pp. 111-115
  13. Kumar, Alok and Chanda, Udayan (2017), "Effect of Dynamic Potential Adoption on Inventory Policy of New Products" Proceedings of 2<sup>nd</sup> International Conference on Evidence Based Management, pp. 210 - 214
  14. Kumar, Alok and Chanda, Udayan (2017). "Optimal inventory policy under credit financing for dynamic marketing strategy" accepted for presentation at the 11th ISDSI International Conference to be held at the Indian Institute of Management (IIM) Tiruchirappalli, Tiruchirappalli, Tamil Nadu, India during December 28- 30, 2017.
  15. Mahesh, J. & Bhat, Anil, ' Value Creation Framework for a Higher Educational Institution: A Case of a Reputed Technology University in India'. Paper presented at the 5th Biennial Conference of the Indian Academy of Management, held at Indian Institute of Management, Indore from December 18-20, 2017.
  16. Mahesh, J. & Bhat, Anil, 'Convergence of Management Practices in India's IT Sector - The Mirage and Myopia of Managerial Perception'. Paper presented at the Inaugural Conference of Aston India Centre for Applied Research (AICAR), held at Aston University, Birmingham from September 15 -16, 2017.
  17. Nagpal Gaurav, Matai Rajesh (2017). "Location of Trauma Centres in Haryana: A Crititcal Review of Current Landscape", Proceedings of the Second International Conference on Evidence Based Management (ICEBM 2017), March 17-18, BITS Pilani, India, pp. 274-279.
  18. Neetu Yadav "Disruptive innovation at the bottom of the pyramid: What role is India Inc playing?", In Conference proceedings of National Conference on Managing Change in Evolving Economic Scenario, MDI, pp. 289-299. ISBN: 978-93-86238-37-5 Excellent Publishing House (Dec. 5-6, 2017).
  19. Neetu Yadav, "Sustaining Competitive Edge of Indian Outsourcing IT-ITes Industry: A Systems Approach", In online Conference proceeding of 2nd Asia-Pacific Region System Dynamics Conference of the System Dynamics Society, National University of Singapore, Singapore, (19-22 Feb 2017).
  20. Neetu Yadav, Role of Digital India in achieving Sustainable Development Goals: An Exploratory Study", Conference presentation at 5<sup>th</sup> PAN IIM World Management Conference at IIM Lucknow, India (Dec. 14-16, 2017)
  21. Neetu Yadav, "Building Sustainable Enterprise: An Investigation of India's Top Conglomerate", In online Conference proceeding of International Conference on Strategies in Volatile and Uncertain Environment for Emerging Markets", Indian Institute of Technology Delhi, India, (14-15 Jul 2017).
  22. Nikita Sharda, Anil. K. Bhat, P.K. Sinha. "A Study of antecedents of luxury consumption among young Indian luxury consumers" accepted for presentation in 7th IIMA Conference on Marketing in Emerging Economies in IIM Ahmedabad from 11th - 13th January, 2017.



23. Rana ,Arunima, Anil Bhat,Rani, Leela "Interaction Effects of Sources of Online Brand Equity: An Investigation" has been selected to be presented at 7th IIM-A Conference on Marketing in Emerging Economies, 2017 to be held at IIM, Ahmedabad during 11th-13th January, 2017
24. Satyavageeswaran, P., Agariya, A. K. and Tikoria, J. (2017) Social Marketing and Engagement: A Systematic Review, published in conference proceedings of 2nd International Conference on Evidence Based Management (ICEBM 2017) organized at, BITS Pilani on 17th - 18th March 2017, pp. 99 - 104.
25. Sharma S and Chadha S (2017), "Risk Adjusted Landed Cost Model in Supply Chain" at International Conference on Research and Business Sustainability organized by IIT, Roorkee in December 16-17, 2017.
26. Sharma Satyendra Kumar, Singh Ravinder and Matai, Rajesh (2017). "Relationship between supply chain performance and firm performance", International Conference on Flexible System and Management organized by GLOGIFT and DTU, 11-13 Dec 2017.
27. Singh R, Sharma S, Matai R and Chadha S (2017), "Measuring Effect of Supply Chain Design on Firm Performance Using Bayesian Networks" at GLOGIFT 2017, DTU Delhi.
28. Singh Ravinder, Sharma Satyendra Kumar, Matai Rajesh (2017). "Barriers and Enablers of Strategic Sourcing Risk Management: A Perspective of Indian Automotive Industry", Proceedings of the Second International Conference on Evidence Based Management (ICEBM 2017), March 17-18, BITS Pilani, India, pp.236-244.
29. Singh, Munish Pal, Sharma, Satyendra Kumar and Chanda, Udayan (2017), " A Changing Scenario of Service Quality in Passenger Car Segment". Proceedings of 2nd International Conference on Evidence Based Management, pp. 132 - 136
30. Singh, S., Banerjee, P., David, R. & Mikkilineni, S. (2017). Moderating and mediating effect of psychological hardiness and perceived social support on the relationship between goal orientation and coping mechanism, at 4<sup>th</sup> International Conference on Human Resource Management, 11-12 November, IBS Hyderabad, IFHE University
31. Singhal, A., Agariya, A. K. and Tikoria, J. (2017) Service Quality Scales: Literature Review, published in conference proceedings of 2nd International Conference on Evidence Based Management (ICEBM 2017) organized at, BITS Pilani on 17th - 18th March 2017, pp. 84 - 90.
32. Tiwari, P.; Bhat, A. K. and Tikoria, J. (2017) "The effect of emotional intelligence, empathy and perceived social pressure on predicting social entrepreneurial intention" International Conference on Methodological Issues in Social Entrepreneurship Knowledge and Practice, on 18-20 January, 2017 at TISS Mumbai.
33. Tiwari, P.; Bhat, A. K. and Tikoria, J. (2017), "The Effect of Emotional Intelligence, Moral And Perceived Social Pressure On Predicting Social Entrepreneurial Intention: A Field Research", PAN IIM WMC 2017.
34. Unnikrishnan, P.M., Tikoria, J. and Agariya, A. K. (2017) A Review of Select Business Excellence Models, published in conference proceedings of 2nd International Conference on Evidence Based Management (ICEBM 2017) organized at, BITS Pilani on 17th - 18th March 2017, pp. 358 -365.
35. Yadav, N; Tikoria, J. and Dadhich, A. (2017) Building Sustainable Enterprise: An Investigation of India's Top Conglomerate, International Conference on Strategies in Volatile and Uncertain Environment for Emerging Markets, organized by IIT Delhi on 14th - 15th July, 2017.

#### **D. CONFERENCES/WORKSHOPS ATTENDED BY FACULTY**

1. Dr. Jayashree Mahesh participated in a Professional Development Workshop on Teaching effectiveness by Prof. Jyoti Bachani, Prof. Nagaraj Sivasubramaniam, Prof. Vasanthi Srinivasan, INDAM, Indian Institute of Management, Indore from December 19, 2017.
2. Dr. Jayashree Mahesh participated in a Professional Development Workshop Indian Insights: Integrating Individuals, Institutions & Innovations by Prof. Nagaraj Sivasubramaniam, Prof. Jyoti Bachani, INDAM, Indian Institute of Management, Indore from December 19, 2017, INDAM, Indian Institute of Management, Indore from December 20, 2017,

3. Dr. Jayashree Mahesh participated in the a Publication Workshop Prof. Pawan Budhwar (Editor-in-Chief, British Journal of Management) Prof. Peter Bamberger (Incoming Editor-in-Chief, Academy of Management Discoveries) Prof. Anoop Madhok (Schulich School of Business, Canada)
4. Dr. Jayashree Mahesh participated in the Workshop on Common Shortcomings in Manuscripts Submitted to Management Journals by Prof. Naresh Khatri, Prof. Arup Varma, Prof. Pawan Budhwar, INDAM, Indian Institute of Management, Indore from December 20, 2017.
5. Dr. Jayashree Mahesh participated in the Workshop on Management Research in India: Current State and Future Directions by Prof. Naresh Khatri, Prof. Arup Varma, Prof. Pawan Budhwar, INDAM, Indian Institute of Management, Indore from December 18, 2017.
6. Dr. Leela Rani, 1<sup>st</sup> Capability Building Workshop on Case Writing, organized by All Indian Management Association & in collaboration with The Case Centre, UK on 9th, 10th & 11th August 2017 at AIMA.
7. Dr. Neetu Yadav Participated in Workshop on “Agile Modeling with Sysdea”, Organized at National University of Singapore, Facilitator: Kim Warren. (22 Feb 2017).
8. Dr. Neetu Yadav Participated in Workshop on “Introduction to Business Strategy using Management Game and Systems Modeling: Fishbanks”, Organized at National University of Singapore, Organized by: Change Agent Inc. (22 Feb 2017).
9. Dr. Neetu Yadav Participated in 1<sup>st</sup> Capability building workshop on “Case Writing”, Organized at All Indian Management Association, New Delhi, Organized by: Case Center, UK. (9-11 Aug 2017).
10. Dr. Pratyush Banerjee completed Certification program on Human Resource Analytics from Aon-Hewitt Learning Center in September 2017.
11. Dr. Praveen Goyal participated in a Special session in Chalkidki (24 - 25 June 2017) of the 5th International Conference on Contemporary Marketing Issues (ICCM) 2017, Thessaloniki, Greece
12. Dr. Saurabh Chadha participated “Teaching with Simulations Workshop”, organized by SPJIMR Mumbai and Harvard Business Publishing, 27<sup>th</sup> October – 28<sup>th</sup> October 2017.
13. Dr. Udayan Chanda participated Special session in Chalkidki (24 - 25 June 2017) of the 5th International Conference on Contemporary Marketing Issues (ICCM) 2017, Thessaloniki, Greece
14. Surabhi Koul, Case teaching and writing workshop, conducted by IIM Lucknow (Noida Campus) and IVEY Publishing, Canada, on 5th September to 8th September, 2017.
15. Anubha Dadhich, Case teaching and writing workshop, conducted by IIM Lucknow (Noida Campus) and IVEY Publishing, Canada, on 5th September to 8th September, 2017.
16. Neetu Yadav, 1st Capability building workshop on “Case Writing”, Organized at: All Indian Management Association, New Delhi (9-11 Aug 2017), Organized by Case Center, UK

#### **E. Book Chapters Published**

1. Neetu Yadav “Higher Education and Sustainable Development: An Exploratory Study of Indian Management Courses”, In W. Leal Filho, U.M. Azeiteiro, F. Alves, P. Molthan-Hill (Eds.), Handbook of Theory and Practice of Sustainable Development in Higher Education, Volume 4, Springer, Berlin.
2. Bhat, A., and Dutta, N. 2018. Salient Role and Centrality of Trust in Social Media Marketing, in Bandyopadhyay, S. and Rishi, B. (Eds.), Contemporary Issues in Social Media Marketing, Routledge, 1st ed. ISBN: 978-11-38679-17-7
3. Tiwari, P.; Bhat, A. K. and Jyoti, Chapter entitled "Factors affecting Individual's Intention to Become a Social Entrepreneur", (accepted for publication) book titled Social Entrepreneurship and Sustainable Business Models in India edited by Anirudh Agarwal and Payal Kumar published by Palgrave Macmillan.
4. Yadav, N. and Tikoria, J. (2017), “Patanjali Ayurved Limited: A local player posing threat to multinationals”, In Sahay, V. and Sarma, P.R.S. (Eds.), Select Management Cases, ET Cases, Mumbai (pp. 215-228) (Selected for publication in ET Editorial).

## F. CONFERENCES/WORKSHOPS ORGANIZED BY THE DEPARTMENT

### (i) 2nd International Conference on Evidence Based Management 2017 (ICEBM2017), March 17-18, 2017

On March 17 and 18, second international conference on Evidence Based Management, organized by Department of Management, BITS Pilani, Pilani Campus concluded successfully. Nearly 80 scholars from India and abroad participated in the conference. These attendees listened to speakers from both the business world and academia. Overall, attendees had a strong positive reaction to the conference.

In recent decades, a great deal of scientific research has been carried out involving issues relevant to management practices. Evidence Based Management means making decisions based on best accessible facts, that is, scientific findings and unbiased organizational facts. This is an emerging area in management which is based on critical thinking and best available contemporary and optimal evidence to explicitly use them in management and decision making process. This field of study has emerged from empiricism with the aim of applying scientific method to improve managerial decision making process.

The Conference outcomes sought were:

- A deeper understanding of the challenges faced by an organization during the decision making process.
- To identify current best practices used in the strategic decision making and compare them with the challenges posed by these practices.
- To the extent that today's best practices do not fully address these challenges, the conference focused on the various techniques and methodologies along with their application to provide some concrete evidences for better managerial decision making. The ultimate aim is to assist growth and development of the science and application of Evidence Based Practices in all fields of Management.

The first day of the Conference included arrival of participants; registration, networking, research paper presentation and dinner. Conference Chair, Dr. Leela Rani, and Prof. A.K. Sarkar, Director, BITS Pilani, Pilani campus addressed the gathering and presented the task of improving, perhaps reinventing, the way business problems are dealt with. The keynote presentation was given by

- **Prof. Shailendra C. Jain Palvia**, College of Management, Long Island University Post, Brookville, NY 11801

All the speakers strongly emphasized the importance of the conference theme and mission. They articulated the magnitude of evidence based practices in the sound decision making process.

#### Theme Session: Practitioner and Academic Speakers

Two speakers from academia and one speaker from industry delivered keynote speeches in the first theme session on Evidence Based practices in Business & Management. The speakers were

- **Prof. Ambika Prasad Dash**, Power Management Institute of NTPC Ltd.
- **Dr. Sanjana, R Bhat**, MD, Birla Institute of Technology and Science
- **Prof. Sanjeevan Kapshe**, Officer-on-Special-Duty (OSD) - Securities and Exchange Board of India (SEBI), Professor - Railway Staff College Vadodara
- **Mr. Mukesh Jain**, Ex-Microsoft, Ex-Jio, Consultant and Executive Coach, Ex - Vice President/ Head - Technology (IT) at NICE Systems, Pune

### (ii) Annual HR Conclave: 'Bridging the Talent Gap - Issues and Challenges 20th of January 2017

The Department of Management in collaboration Work Integrated Learning Programmes Division (WILP) of BITS Pilani organized its first HR Conclave on 20<sup>th</sup> of January 2017 in India Habitat Centre, New Delhi. The objective of the conclave was to discuss the issues and challenges faced by the industry. The theme for the conclave was '**Bridging the Talent Gap - Issues and Challenges**'. Under the above theme there were three panel sessions that were channelized by discussing the 'White Paper' prepared by faculty of Department of Management pertaining to the following areas:

**Theme Session 1: MANUFACTURING** - Bridging the Competency Gap in Manufacturing.

**Theme Session 2: FINANCIAL Services** - 'Talent Management Strategies' at Banking and Financial Service.

**Theme Session 3: IT & ITES** – Human Resource Management Practices in the IT Sector.

This event brought together several eminent and senior level management professionals across the sectors who shared their years of expertise and knowledge in the field of human resources, relating the theme of the conclave.

Prof. A.K.Sarkar, Director BITS Pilani, Pilani campus delivered the inaugural address and highlighted BITS Pilani's model of education. He also suggested that industry and academia must collaborate to create win-win models to bridge the skill gap. The keynote speaker **Mr. Vineet Kaul (Advisor - Group HR, Aditya Birla Group and Ex CHRO Hindalco Industries Ltd.)** in his key note address elucidated on the importance of creating employee value proposition and the present day challenges of keeping oneself updated in terms of skills.

The panelists deliberated on the importance of imbuing fundamental values in employees, being adaptable to changes and facing the challenges of digitalization. The key understanding was that there can be no readymade solutions and hence organizations and academia must come up with innovative solutions for bridging the talent gap.

This conclave has opened avenues for research and opportunity to build meaningful partnership with the industry and bridge the talent gap. The HR Conclave was convened by Dr. Jayashree Mahesh and co-ordinated by Dr. Udayan Chanda and Dr. Praveen Goyal of the Department of Management.

#### G. INVITED TALKS GIVEN BY THE FACULTY:

Dr. Neetu Yadav Invited as a guest speaker for Brown Bag Seminar Series at BML Munjal University, Gurgaon (Nov. 2, 2017).

#### H. INVITED TALKS ARRANGED BY THE DEPARTMENT

S. No.	Resource Person	Designation	Topic	Department	Dates
1.	Mr. Taresh Bhatia,	Founder "Advantage FP" and Certified Financial Planner	Financial Planning	Management	18th Feb 2017
2.	Mr. Arjun Chakraborty,	President and GM – India Business, Trackinvest	Product & Strategy Management	Management	17th Feb 2017
3.	Mr. Satyajit Majumdar	Professor, TISS	Strategic Planning, Entrepreneurship	Management	19th Feb'2017
4.	Mr. Partho Dasgupta	CEO, Digicert Consulting	B2B Sales Methodology	Management	18th Feb' 2017
5.	Munish Suri,	Capegemini	Big Data Analytics	Management	17th Feb 2017
6.	Deepak Bharara,	CHRO Lanco Infratech Ltd.	Strategy & Talent planning	Management	19th Feb 2017
7.	Prof. Bhaskar Bose	Senior Prof. & Consultant	Creative Thinking & Decision Making	Management	1st & 2nd Mar' 2017
8.	Dr. Shailendra Palvia	Professor of MIS, Long Island University, USA	Management of Systems Development Process	Management	17th March 2017
9.	Prof. A.P. Dash	Professor, NTPC Ltd	Finance & Strategy	Management	17th Mar' 2017
10.	Mr. Sanjeevan Kapshe	Officer-on-Special-Duty (OSD) - Securities and Exchange Board of India (SEBI), Professor - Railway Staff College Vadodara	Investments & Portfolio Management	Management	17th-18th March
11.	Ms. Bindu Kulkarni	Prof. S. P. Jain Institute of Management and Research, Mumbai	Divergent Thinking	Management	19 <sup>th</sup> April 2017

**I. Workshops**

S. No.	Resource Person	Department	Designation	Topic	Dates
1	Mr. Karthik Rangappa,	Management	VP – Equity Research and Education Services, Zerodha	Innovative ideas to built Long term Portfolio	17th Feb' 2017
2	Prof. D S Broca	Management	Prof. at XLRI Jamshedpur	Business Process Simulations	2nd April 2017
3	Mr. Mukesh Jain	Management	Vice President/ Head - Technology (IT) at NICE Systems, Pune	HR Analytics	19th-20th Mar' 2017
4	Mr. Sachin Soni	Management	Trainer	SAS	26th -27th March 2017
5	Subhashish Roy	Management	Trainer	Interpersonal Skills - Mock interviews	4 – 6 September, 2017
6	Mr. Ramesh Dorairaj	Management	Consultant, Coach, Trainer	Leadership & Marketing – Story Selling	9 – 10 September, 2017
7	Abhishek Salecha	Management	Co Founder at ForeVision	Advance Excel, and Equity Research & Financial Modeling	16 – 18 September, 2017
8	Krishnamurthy Bindumadhavan	Management	Off- Campus Faculty BITS	Corporate Finance & Taxation	20 – 21 September, 2017

**J. FACULTY AND STUDENT ACHIEVEMENT****(i) Faculty Achievement/Awards**

1. Dr. Pratyush Banerjee - winner of best paper award at the 4<sup>th</sup> International Conference on Human Resource Management, 11-12 November, 2017, IBS Hyderabad
2. Dr. Udyan Chanda, AIMS International Outstanding Young Management Researcher Award 2017, AIMS International, Vadodara 390008, India.
3. Dr. Udyan Chanda , Member of the technical committee of 11th Annual International Conference on Computer Games Multimedia & Allied Technologies (CGAT 2018) will be held during 09-10 April, 2018 in the venue Hotel Fort Canning, 11 Canning Walk, Singapore 178881.
4. Dr Praveen Goyal Session Chair, 5th International Conference on Contemporary Marketing Issues (ICCM) 2017

**(ii) Student Achievement**

1. Vibhor, Gaurav, Himanshu and Manik participated in Netritva event, Tatva 2017 at LBSIM, Delhi
2. Smiti Saxena participated in Arthshastra at IIM Ranchi
3. Maanik Goel, Aakarshi Sharma and Rohtash S Rathore participated in Vittraj-Finance Case Study Competition at IIT Kanpur
4. Rohtash and Shagun participated in SpaceX Hyperloop Design competition at Hyperloop India

**(i) FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION AND INDUSTRY IMMERSION - NIL****(ii) SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR -**

Following software were purchased: @Risk, Smart PLS

**K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES****(i) All India Management Convention, Interface 2017**

The 40 year old annual management extravaganza was conducted from 17th to 19th February 2017. The theme for Interface 2017 was 'Set Your Sails'. The competitions ranged from intellectual forum discussions to debates,

fun filled events, brain teasers, workshops, and portfolio management among others. The fiesta started with a prof show- "TVF" that was held on 17th February 2017. A wide array of events were held to stimulate the young minds, challenge their intellect, and apply the classroom learning to real world scenarios. Some events organized were Op-time, COO challenge, Great Indian business challenges by Operations Club. Few guest lecturers organized during the event were Mr. Partho Das Gupta, CEO of BARC; Dr. Satyajit Majumdar: Professor at Centre for social entrepreneurship TISS; Mr. Arjun Chakraborti, President and GM of Track Invest; Mr. Monish Suri, Global Alliance Manager for SAS Alliance; Mr. Deepak Bharara, Chief Human Resource Officer at LANCO Infratech Ltd. Interface '17 saw participation from some of the top business schools and had great peer learning experience. The participants represented various top B-schools as IIM Indore, IIM Amritsar, IMI Delhi, NIT Kurukshtra, SRM University, MDI Gurgaon.

#### **(ii) Faculty activities**

The group discussion and personal interviews for the candidates were conducted by the faculty teams of Management Department at Delhi, Hyderabad, Bangalore and Pilani. The department organized several workshops in emerging areas related to different functional areas of management. Several projects in various functional areas of management were supervised by the Department faculty members under special oriented projects, study oriented projects, and computer oriented projects, reading courses and first degree thesis. Regular faculty and research scholar seminars were conducted in the department. The Department faculty members continued to teach many courses in WILP Programs of the institute including contact sessions of M Phil. (HHSM). Faculty and research scholars published papers in international journals, national journals and in conference proceedings. Many faculty members have submitted proposals for projects to funding organizations and 4 new research projects have taken off under 6 faculty members.

#### **(iii) Student activities**

Management association organized year-long activities through its clubs structured along four important functional areas of management viz. Marketing, Human Resource Management, Finance and Operations Management along with **Interface 2017**. Workshops were organized where students participated for learning and/or certifications.

**B1.10.12 Department: Pharmacy**

Number of faculty members (as on 31 December 2016)

<b>Senior Professors, Professors</b>	02
<b>Associate Professors</b>	01
<b>Assistant Professors</b>	11
<b>Lecturers</b>	01

**Head of the Department:** Dr. Gaikwad Anil Bhanudas.**Contact details:** anil.gaikwad@pilani.bits-pilani.ac.in**Number of PhD Scholars:** 17**Number of PhD Scholars being supported through Projects and External Funding:** 12**Ph.D. Thesis Submitted during the year:** 10**A. SPONSORED RESEARCH ACTIVITIES & FUNDING****(i) Ongoing projects:**

<b>S.No.</b>	<b>Project Title</b>	<b>Principal Investigator</b>	<b>Agency</b>	<b>Sanction (Rs. in Lakh)</b>
1.	Development of Novel Processes for Increasing the Content of Sennoside-B from Senna	Prof. R.N. Saha & Dr. Sunil Dubey	Shashi Phytochemicals Pvt. Ltd.	18.46
2.	Role of Histone Ubiquitination & ACE 2 in the Development of Renal Fibrosis under Type I Diabetic Condition	Dr. Anil Gaikwad	CSIR	32.85
3.	Exploring the synergism of PPAR $\gamma$ agonist and HDAC inhibitor or on reversal of Alzheimer's type of dementia and developing their brain targeted nano-carrier system for effective treatment	Dr. Rajeev Taliyan	DST-Nanomission	31.13
4.	In Vitro – IN Vivo-Study Design: Cardio-reno protective Effect of Herbal Extract in Hypertensive Rats: Role of NO/cGMP pathway	Dr. Rajeev Taliyan	Etica Clinpharm Pvt. Ltd	9.91
5.	Exploring The Antiobesity Potential of Selected Ayurvedic Medicinal Plants Using Pancreatic Lipase Inhibition Assay and Synergy Guided Fractionation Approach	Dr. Atish T. Paul	DST SERB	27.30
6.	Development of nanoemulsion based formulations of bioactives funded	Dr. Anil Jindal	Ananta Medicare	5.10
7.	Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer	Dr. Deepak Chitkara	DST-SERB	27.2
8.	Nanotechnology based pharmaceuticals, nutraceuticals and cosmetics: development of platform technology	Dr. Deepak Chitkara	Incisive Element LLC, USA	21.37
9.	Formulation Development and Determination of Repeated Dose Chronic Toxicity of Test Compound in Laboratory Rats	Dr. Sunil Kumar Dubey & Dr. Rajeev Taliyan	Etica Clin Pharm	2.45
10.	Development of a standardized formulation of Trigonellafoenum-graecumseeds for preventing or delaying the development of type-2 diabetes in subjects with pre-diabetes	Dr. Sunil Kumar Dubey	ICMR	16.73
11.	Nano-formulation of lysophylline-fatty acid conjugate for effective treatment of diabetes	Dr. Anupama Mittal	DST-SERB	26.90
12.	Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer	Dr. Anupama Mittal	DST-Rajasthan	12.53
13.	Evaluation of antitumor efficacy and pharmacokinetics of polymeric nanoparticle formulation targeted to cancer stem cells	Dr. Aniruddha Roy	DST-SERB	33.86

**Brief Write Up of Projects:****Development of Novel Processes for Increasing the Content of Sennoside-B from Senna**

The project is aimed to increase the Sennosides content basically Sennoside B from senna leaves through novel techniques. The project also aims to develop analytical methods for estimation of sennosides A and B through various analytical techniques. Apart from this residual solvent present in the sample need be estimated. The work is in progress

**Role of Histone Ubiquitination & Angiotensin Converting Enzyme 2 in the Development of Renal Fibrosis under Type I Diabetic Condition.**

Diabetic Nephropathy (DN) is the most leading cause of End Stage Renal Disease (ESRD). Up regulation of Renin Angiotensin System (RAS) is involved in the pathogenesis of DN. Although chronic treatment with angiotensin receptor blockers (ARBs) and angiotensin converting enzyme (ACE) inhibitors are effective in retarding the progression of DN but it is not a cure, indicating requirement for finding additional pathways in RAS as a potential drug targets. ACE2, a component of RAS is involved in the degradation of Angiotensin II (Ang II), is found to be down regulated in diabetic kidney. Hence, the present study is conceived to understand the molecular mechanisms and epigenetic changes involved by activating ACE2 in diabetic kidney.

**Exploring the synergism of PPAR $\gamma$  agonist and HDAC inhibitor or on reversal of Alzheimer's type of dementia and developing their brain targeted nano-carrier system for effective treatment**

Recently, insulin resistance syndrome has been reported to play crucial role in the pathogenesis of memory deficit and AD. However, the molecular and cellular basis that link insulin resistance with neurodegeneration is yet to be explored. Probable links between insulin resistance and neurodegeneration will give an insight into the mechanistic approaches to a quick acting neuroprotective therapeutic regimen in co-morbid condition. Evidences have indicated that PPAR $\gamma$  agonists and HDAC inhibitors could play a crucial role in memory deficit and AD, however, their combination have not been yet tested due to the challenges involved in their effective delivery such as low water solubility, poor penetration into the brain and associated toxicity. Thus, the current project aims at establishing the synergism in these two therapeutic modalities and assess their delivery to the brain using brain targeted peptide conjugated nano-carrier system that would possibly be taken up for clinical trials after appropriate investigations.

**In Vitro – IN Vivo-Study Design: Cardio-reno protective Effect of Herbal Extract in Hypertensive Rats: Role of NO/cGMP pathway**

Hypertension is a major risk factor for both cardiovascular and chronic kidney disease (CKD) morbidity and mortality. The presence of hypertension doubles the risk for coronary heart disease, including acute myocardial infarction and sudden death, and more than triples the risk of congestive heart failure as well as strokes.<sup>4,5,6</sup> Hypertensive patients frequently have abnormalities on cardiac function and structure such as left ventricular hypertrophy and systolic as well as diastolic dysfunction.<sup>7</sup> In India according to the estimates from 2006 the frequency of renal disease is 229 per million population and it is increasing more than 1 lakh cases per year.

The conventional allopathic antihypertensive drugs are associated with certain side effects. Diuretics can cause dizziness, muscle cramps, extreme tiredness, blurred vision, dehydration, skin rash, abnormal heart rate. ACE inhibitors may cause skin rash, cough, kidney failure, vomiting, fever, diarrhoea, sore throat, and others. Side effects with the use of calcium channel blockers include headache, fatigue, constipation, diarrhoea, edema and skin rash. Because of these serious side effects about 75 to 80% of the total world population use herbal medicines, especially in developing countries. In the last few decades, people are focusing mainly on to herbal drugs and its extracts for the relief from lifestyle diseases as it won't cause any side effects like drowsiness, tiredness, weakness, insomnia, depression, skin rash, dry mouth, head ache constipation and diarrhoea etc.

**Exploring The Antiobesity Potential of Selected Ayurvedic Medicinal Plants Using Pancreatic Lipase Inhibition Assay and Synergy Guided Fractionation Approach**

Obesity is one of the major metabolic disorder that is are a growing epidemic and by 2015, World Health Organization (WHO) estimates the number to increase upto 2.3 billion. Pancreatic lipase is the enzyme responsible for the hydrolysis of 50-70% of total dietary fats and is the most valid target to treat obesity. However, orlistat that is the only approved antiobesity drug available in market has been reported to exhibit severe liver injuries, demanding discovery of new drugs. Natural product research based on herbals mainly focuses on bioassay driven startegy, but it is well known fact that most herbals work via synergy. Hence NPs from herbals fail in clinical trials. The current project will explore a new synergy directed fractionation startegy to identify, isolate and evaluate the synergist natural products as pancreatic lipase inhibitor and further evaluate them in high fat diet model in rats.

**Development of nanoemulsion based formulations of bioactive**

While it might be easy for a formulator to develop a pharmaceutical form (tablets, powders, capsules, suppositories, etc.) containing food bioactives, it is quiet challenging to obtain a satisfactory bioavailability for such nutraceuticals. The bioavailability is often jeopardized by the low solubility, stability and/or permeability of the bioactive in the GIT. In case of curcumin, extremely low serum levels, limited tissue distribution, apparent rapid metabolism and short circulation half-life are the underlying causes of its low oral bioavailability. On the



other hand, the bioavailability of the lipophilic antioxidant coenzyme Q10 was challenged by its low aqueous solubility and slow dissolution rate in GI fluids furnished by its highly lipophilic character (log P=21). Moreover, permeability is limited by its large molecular weight (863), P-glycoprotein efflux and active transport by a number of transporters (including peptide transporters (PEPT1), cation/carnitine transporters (OCT1, OCTN1, OCTN2 and OCT3) and organic anion transporters (AE2 and MCT1). The project involves the development of nanoemulsion based formulations of nutraceuticals.

#### **Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer**

Many diagnosed breast cancers are HER2/ER<sup>+</sup>/PR<sup>+</sup>, or HER2<sup>-</sup> and ER<sup>-</sup>/PR<sup>-</sup>triple negative (TNBC) resulted in poor prognosis due to development of chemo-resistance and metastasis. miRNA-34a is a master tumor suppressor that can antagonize many oncogenic processes and could improve the efficacy of chemotherapeutic drugs such as docetaxel. The project aimed at simultaneous delivery of miR-34a and docetaxel using actively targeted polymeric system for locally advanced and metastatic breast cancer.

#### **Nanotechnology based pharmaceuticals, nutraceuticals and cosmetics: development of platform technology**

The project aims at development of novel platform technology for delivering the difficult to deliver molecules for several disease as well as nutraceutical and for cosmetic applications. A nano-carrier system will be designed that could efficiently encapsulate the molecules.

#### **Development of a standardized formulation of Trigonella foenum-graecum seeds for preventing or delaying the development of type-2 diabetes in subjects with pre-diabetes**

The objective of the study is to carry out pre-clinical pharmacological studies. Evaluation of hypoglycemic effect of standardized fraction of the extract of Trigonella foenum-graecum seeds in normal fasted rats. Standardized fraction on prevention or delay of diabetes in High Fat Diet (HFD) fed rats will be evaluated.

#### **Nano-formulation of lysophylline-fatty acid conjugate for effective treatment of diabetes**

The aim of the project is to prepare lysophylline (LSF)-fatty acid (LSF-FA) conjugate and deliver this conjugate using a micellar system and evaluate its efficacy in diabetic rats. We expect that LSF-FA conjugate will exhibit better encapsulation efficiency, slow metabolism and overall enhanced efficacy.

#### **Cyclic RGD modified lipopolymeric micelles for targeted delivery of Tamoxifen in ER+ breast cancer**

Tamoxifen represents a first-line anti-estrogen therapy for treatment of estrogen receptor positive (ER+) breast cancers. Although a potent molecule, it exhibits poor bioavailability and hepatotoxicity. To improve its therapeutic benefit and overcome the associated toxicity, the current project aims at designing a unique multifunctional self-assembling nano-carrier system for Tamoxifen. Lipo-polymer containing polycarbonate based hydrophobic core and cholesterol based lipid chains will be synthesized such that upon self-assembly it would yield nano-sized micelles. The micelles will be functionalized with cRGD to enable active targeting to  $\alpha_v\beta_3/\beta_5$  integrin receptors which are over expressed in the breast tumor tissue. This actively targeted nano-formulation of Tamoxifen will enable high drug payload, enhanced permeation and retention (EPR) effect, enhanced cellular uptake due to presence of cholesterol and prolonged mean residence time of the drug in the body. Overall the approach will decrease the dose of Tamoxifen along with decreasing the adverse effects, increasing the therapeutic efficacy and hence providing clinical benefit to breast cancer patients.

#### **Formulation Development and Determination of Repeated Dose Chronic Toxicity of Test Compound in Laboratory Rats**

The consultancy project is aimed to develop effective formulation for herbal drug and evaluation of toxicity in laboratory rats. Formulation studies and evaluation has been done

#### **Evaluation of antitumor efficacy and pharmacokinetics of polymeric nanoparticle formulation targeted to cancer stem cells**

Current anticancer therapeutic strategies frequently lead to treatment failure. Inability to kill cancer stem cells (CSC) is a major contributing factor for that. In the proposed project, we are planning to develop a tumor targeted, triggered release nanoparticle based system to co-deliver an anti-CSC agent and a chemotherapeutic drug for possible synergistic effect and better therapeutic efficacy.

#### **(ii) Projects sanctioned during the year**

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs.in Lakh)
1.	To study the role of hyperglycemia on the progression of acute kidney injury	Dr. Gaikwad Anil Bhanudas	DST-SERB	47.18
2.	Development of Novel Herbal Based Formulation for Skin Disorders	Dr. Sunil Kumar Dubey	EticaClin Pharm, India	9.00

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs.in Lakh)
3.	Peptide-decorated pH-sensitive nano-conjugate hybrid micelles for co-delivery of temozolamide and an autophagy inducer, rapamycin, for treatment of glioblastoma multiforme	Dr. Deepak Chitkara	DBT-Nanobiotechnology	38.32
4.	Umbilical cord mesenchymal stem cells derived exosomes as biogenic nanocarriers of miRNA and chemotherapeutic drug for reversal of chemoresistance in breast cancer	Dr. Anupama Mittal	DST-Nanomission	68.68
5.	Quality by design (qbd) based suspension product development and process optimization	Dr. Gautam Singhvi, Dr. Sunil K Dubey	Slayback Pharma	4.00

#### Brief write up of projects:

##### To study the role of hyperglycemia on the progression of acute kidney injury.

In clinical practice, acute kidney injury (AKI) is allied with high morbidity and mortality; in addition, diabetic individuals are more susceptible to AKI. Augmentation of renin-angiotensin system (RAS) has shown to be involved in the pathogenesis of AKI associated with diabetes. Hence, RAS blockers are one of the preferred treatments of AKI, but it's unable to control morbidity and mortality due to AKI. Interestingly, ACE2 activators and AT2R agonists have been reported to cause vasodilatation, and decreased hypertrophy, inflammation and fibrosis, thereby have cardiac and renal protective role in diabetic animals. On the other hand, regulation ACE2 and AT2R, and effects of its activators or agonists yet to be explore in AKI under type 1 diabetic condition. Therefore, the aim of this study is to understand the different molecular mechanisms responsible for development of AKI under normal and hyperglycaemic condition.

##### Development of Novel Herbal Based Formulation for Skin Disorders

Suitable selected herbal plants will be selected and active constituents will be screened. Herbal extract will be used for development of topical drug delivery systems. Various formulation compositions will be optimized. Developed topical formulations will be evaluated for in-vitro characterization. In addition, pharmacokinetics and bio-distribution of the designed topical formulations will be performed in animal model.

##### Umbilical cord mesenchymal stem cells derived exosomes as biogenic nanocarriers of miRNA and chemotherapeutic drug for reversal of chemoresistance in breast cancer

The project aims at investigating the naturally occurring nanovesicles called as exosomes as drug delivery vehicles to carry a chemotherapeutic drug to the tumor tissues. The exosomes are proposed to be isolated from the non-transfected and tumor-suppressor miRNA transfected human umbilical cord blood derived mesenchymal stem cells (hUCBMSCs). Use of hUCBMSCs derived exosomes would provide dual advantages of both cell-based drug delivery and nanotechnology for efficient drug transport capable of overcoming various biological barriers. It would also resolve two major issues, a) the inefficacy of presently used drug delivery systems owing to their synthetic/foreign body nature resulting in immunogenicity, rapid clearance from the blood and rejection by the host and, b) to exploit the advantage of stem cell based therapy in tumor treatment without confronting the problems of immunogenicity, tumorigenesis and maldifferentiation inherently associated with stem cells.

##### Peptide-decorated pH-sensitive nano-conjugate hybrid micelles for co-delivery of temozolamide and an autophagy inducer, rapamycin, for treatment of glioblastoma multiforme

Glioblastoma multiforme (GBM) is a highly aggressive and most common astrocytic tumor. In spite of advancements in treatment strategies, its prognosis is very poor due to heterogeneous cytogenetic nature, diffuse infiltrative growth and blood-brain barrier (BBB). Temozolamide (TMZ) is the first line of treatment for GBM however, it suffers from rapid hydrolysis, short half-life, dose-limiting toxicities and chemo-resistance. mTOR is highly upregulated in GBM and is associated with rate of cell growth, stem cell proliferation and disease relapse. Rapamycin, a strong inducer of autophagy, have shown promising results in overcoming the chemoresistance by targeting mTOR and cancer stem cells in GBM. In this project, TMZ and rapamycin will be delivered using a novel nano-carrier system.

##### Quality by design (qbd) based suspension product development and process optimization

The objective of the proposed work is to develop a robust and qualitative suspension product using quality by design approach. Various formulation and process parameters will be optimized and the effect of these parameters on quality of suspension will be studied.

**(iii) Projects completed this year**

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. In Lakh)
1.	To study the protective effects of Herbal formulation against Myocardial Ischemia-reperfusion injury in rats	Dr.Rajeev Taliyan & Dr. Sunil K Dubey	Etica-Clinpharm	4.0
2.	Development of Botanical Based Novel Formulation with Mosquito Larvicidal Action for Indian Population	Dr. Atish T. Paul	DST-SYST	12.19
3.	Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type 2 Diabetes.	Dr. Gaikwad Anil Bhanudas	DST-SERB	39.66
4.	Development of Nano-Carriers for Improved Drug Delivery	Dr. Deepak Chitkara	BITS, Pilani (Additional Competitive Research Grant)	9.90
5.	Leuoprolide Biostudy Clinical Trial Design	Dr. Sunil Kumar Dubey	Axis Clinicals	2.27

**Brief Write Up of Projects:****To study the protective effects of Herbal formulation against Myocardial Ischemia- reperfusion injury in rats**

The project is aimed to evaluate the protective activity potential of ANEL-Herbal Formulation against myocardial ischemia reperfusion injury in rats through ligation of left anterior descending coronary artery (LAD) in rats. The work is in progress.

**Development of Botanical Based Novel Formulation with Mosquito Larvicidal Action for Indian Population**

Mosquitoes affect millions of people throughout the world as they can transmit various diseases like malaria, yellow fever, dengue fever, chikungunya fever, and filariasis. Anopheles mosquitoes are the only species known to carry malaria and also transmit filariasis and encephalitis. Culex mosquitoes carry encephalitis, filariasis, and the West Nile virus. Aedes mosquitoes, carry yellow fever, dengue, and encephalitis. Mosquito borne diseases are prevalent in more than 100 countries across the world, infecting over 700,000,000 people every year globally and 40,000,000 of the Indian population. In 2012, malaria caused an estimated 627,000 deaths, mostly among African children. Mosquito control is essential to prevent propagation of mosquito borne diseases. The major means for mosquito control is the use of synthetic insecticides such as organochlorine and organophosphate. In recent years, use of many of the synthetic insecticides in mosquito control programme has been limited due to lack of novel insecticides, high cost, fear for environmental sustainability, harmful effect on human health, non biodegradable nature, and increasing resistance on a global scale. Keeping above facts in the view, the present study has been proposed for developing a botanical based novel formulation with mosquito larvicidal action against Anopheles, Culex and Aedes larvae.

**Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type 2 Diabetes.**

Diabetic nephropathy is a result of several metabolic and hemodynamic processes. It is increasingly apparent that individuals with chronic kidney disease are more likely to die of cardiovascular disease than to develop kidney failure. Chronic kidney disease promotes hypertension and dyslipidemia, which in turn can contribute to the progression of renal failure. Together, hypertension, dyslipidemia, and diabetes are major risk factors for the development of endothelial dysfunction and progression of atherosclerosis. Inflammatory mediators are often elevated and the renin-angiotensin system is frequently activated in chronic kidney disease, which likely contributes through enhanced production of reactive oxygen species to the accelerated atherosclerosis observed in chronic kidney disease. Hence, in the proposed study natural product like esculetin, which has been recognized as inhibitors of lipoxygenase, cyclooxygenase enzymatic pathways and neutrophil-dependent superoxide anion generation will be used as a therapeutic intervention for cardio-renal syndrome in type 2 diabetes.

**Development of Nano-Carriers for Improved Drug Delivery**

Nano-carriers have provided a means to deliver potent but "difficult to deliver" drugs. Reports have demonstrated its applicability in improving the therapeutic benefit of several drugs. A prerequisite for the making nano-carriers commercially viable is the availability of a scalable production method. The project aimed at development of processes for preparing nano-carriers (such as solid lipid nanoparticles, polymeric nanoparticles, liposomes) using high pressure homogenization (HPH) technology which could be industrially viable.

**Leuoprolide Biostudy Clinical Trial Design**

Clinical trial designing was proposed and statistical and pharmacokinetic studies were done for leuprolide.

**(iv) Financial Support Sanctioned to Department**

S.No.	Scheme	Agency	Sanction (Rs. in Lakh)
1	Fund for Improvement of S&T Infrastructure in Higher Educational Institutes (FIST)	DST	135.00

**Brief Write Up:****DST FIST**

Department has been sanctioned Rs. 135 lakhs under DST-FIST Phase II. From this fund UPLC-MS/MS facility has been created in a new industrial research laboratory at Department of Pharmacy. A highly advanced Waters Acquity UPLC /Triple Quadrupole (TQD) MS/MS has been purchased from Waters India Ltd and has been installed.

**B. PUBLICATIONS**

1. Kurhe Y, Mahesh R, Devadoss T., "Novel 5-HT<sub>3</sub> receptor antagonist QCM-4 attenuates depressive-like phenotype associated with obesity in high-fat-diet-fed mice", *Journals of Psychopharmacology*, Vol. 234, pp.1165-1179.
2. Mahaveer Singh, Hemant R. Jadhav., "Targeting non-small cell lung cancer with small-molecule EGFR tyrosine kinase inhibitors", *Journals of Drug Discovery Today*, In press
3. Mahaveer Singh, Hemant R. Jadhav., "Design, Synthesis and in-vitro evaluation of piperazine incorporated novel anticancer agents", *Journals of Letter in Drug Design and Discovery*, In press.
4. Mahaveer Singh, Hemant R. Jadhav, Tanya Bhatt., "Dynamins Functions and Ligands: Classical Mechanisms Behind", *Journals of Molecular Pharmacology*, Vol.91, pp.123-134.
5. Kunjiappan, Selvaraj; Theivendren, Panneerselvam; Somasundaram, Balasubramanian; Sankaranarayanan, Murugesan; Chowdhury, Rajdeep; Chowdhury, Anindita; Bhattacharjee, Chiranjib., "Design, in silico modeling, bio-distribution study of rutin and quercetin loaded-stable human hair keratin nanoparticles intended for anticancer drug delivery", *Journals of Biomedical Physics & Engineering Express*, In press
6. P Valentina, K Ilango, Subhash Chander Sankaranarayanan Murugesan., "Design, synthesis and  $\alpha$ -amylase inhibitory activity of novel chromone derivatives", *Journals of Bioorganic Chemistry*, Vol. 74, pp. 158-165.
7. Subhash Chander, Rajan Kumar Pandey, Ashok Penta, Bhanwar Singh Choudhary, Manish Sharma, Ruchi Malik, Vijay Kumar Prajapati Sankaranarayanan Murugesan., "Molecular docking and molecular dynamics simulation based approach to explore the dual inhibitor against HIV-1 reverse transcriptase and Integrase", *Journals of Combinatorial Chemistry & High Throughput Screening*, Vol. 20, pp. 1-13.
8. Liew Suk Ming, Joazaizulfazli Jamalis, Helmi Mohammed Al-Maqtari, Mohd Mustaqim Rosli, Murugesan Sankaranarayanan, Subhash Chander, Hoong-Kun Fun., "Synthesis, characterization, antifungal activities and crystal structure of thiophene-based heterocyclic chalcones", *Journals of Chemical Data Collections*, Vol. 9-10, pp. 104-113.
9. Subhash Chander, Cheng-Run Tang, Helmi Mohammed Al-Maqtari, Joazaizulfazli Jamalis, Ashok Penta, Taibi Ben Hadda, Hasnah Mohd Sirat, Yong-Tang Zheng, Murugesan Sankaranarayanan., "Synthesis and Study of Anti-HIV-1 RT Activity of 5-benzoyl-4-methyl-1,3,4,5-tetrahydro-2H-1,5-benzodiazepin-2-one derivatives", *Journals of Bioorganic Chemistry*, Vol. 72, pp. 74-79.
10. Penta Ashok, Subhash Chander, Larry M. C. Chow, Iris L. K. Wong, Rajnish Prakash Singh, Prabhat Nath Jha, Murugesan Sankaranarayanan., "Synthesis and in-vitro anti-leishmanial activity of (4-arylpiperazin-1-yl)(1-(thiophen-2-yl)-9H-pyrido[3,4-b]indol-3-yl)methanone derivatives", *Journals of Bioorganic Chemistry*, Vol. 70, pp. 100-106.
11. Subhash Chander, Ping Wang, Penta Ashok, Liu-Meng Yang, Yong-Tang Zheng, Murugesan Sankaranarayanan., "Design, synthesis and anti-HIV-1 RT evaluation of 2-(benzyl(4-chlorophenyl)amino)-1-(piperazin-1-yl)ethanone derivatives", *Journals of Bioorganic and Medicinal Chemistry Letters*, Vol. 27, pp. 61-65.
12. Amaroju Suresh, Kalaga M Naidu, Singireddi Srinivasarao, Nagnieszka, Augustynowicz-Kopeć Ewa, S Murugesan, Subhash C, Kondapalli Venkata Gowri Chandra Sekhar., "Identification and development of 1-((1-(substituted)-1H-1,2,3-triazol-4-pyrazolo[4,3-c]pyridine-5(4H)-carboxamides as Mycobacterium tuberculosis Pantothenate synthetase inhibitor", *New Journal of Chemistry*, Vol. 41, pp. 347-357.
13. Helmi Mohammed Al-Maqtari, Joazaizulfazli Jamalis, Taibi Ben Hadda, Murugesan Sankaranarayanan, Subhash Chander, Noor Aisyah Ahmad, Hasnah Mohd Sirat, Ismail I. Althagafi and Yahia Naseer Mabkhot., "Synthesis, Characterization, POM analysis and Antifungal Activity of Novel Heterocyclic Chalcone Derivatives Containing Acylated Pyrazole", *Journals of Research on Chemical Intermediates*, Vol. 43, pp. 1893-1907.

14. Kannadhasan R, Saravanan D, Subhash Chander and Murugesan S., "Novel 2-oxo-thiadiazole-1, 2, 3, 4-tetrahydropyrimidine derivatives synthesized by Biginelli reaction - Biological activity and docking studies", *Journals of Asian Journal of Science and Technology*, Vol. 08, pp. 6412-6420.
15. Ashok Sharma, Badvel Pallavi, Riddhidev Banerjee, Mariasoosai Ramya Chandar Charles, Mohane Selvaraj Coumar, Subhash Chander, Murugesan Paritosh Shukla., "De novo Design and In-silico Studies of Coumarin Derivatives as Inhibitors of Cyclin Dependent Kinase-2", *Journal of Pharmaceutical Chemistry*, Vol. 04, pp. 46-55.
16. Saravanan Dhandayutham, Rajamanickam Kannadhasan and S Murugesan., "ynthesis and antimicrobial evaluation of novel sulphur bridged 2-oxo -1,2,3,4-tetrahydropyrimidine derivatives", *Research Journal of Chemistry and Environment*, Vol. 21, pp. 1-7.
17. Sruthi Ramagiri. Rajeev Taliyan., "Remote limb ischemic post conditioning during early reperfusion alleviates cerebral ischemic reperfusion injury via GSK-3 $\beta$ /CREB/ BDNF pathway", *Journals of European Journal of Pharmacology*, Vol. 803, pp. 84-93.
18. Sruthi Ramagiri. Rajeev Taliyan., "Protective effect of remote limb post conditioning via upregulation of heme-oxygenase-1/BDNF pathway in rat model of cerebral ischemic reperfusion injury" *Journals of Brain Research*, Vol. 1669, pp. 44-54.
19. Sorabh Sharma, Rajeev Taliyan., "Histone deacetylase inhibitor, Valproic acid, ameliorates insulin resistance induced cognitive deficit in mice", *Journals of J neurological Science*, Vol. 381, pp. 778-779.
20. Goru SK, Kadakol A, Malek V, Pandey A, Sharma N, Gaikwad AB., "Diminazene aceturate prevents type 1 diabetic nephropathy through increasing glomerular ACE2 and AT2 receptor expression", *Journals of British Pharmacology*, Vol. 174, pp. 3118-3130.
21. Kadakol A, Goru SK, Malek V, Gaikwad AB., "Esculetin ameliorates vascular perturbation by intervening in the occupancy of H2BK120Ub at At1, At2, Tgf $\beta$ 1 and Mcp1 promoter gene in thoracic aorta of IR and T2D rats", *Journals of Biomedicine & Pharmacotherapy*, Vol. 95, pp. 1461-1468.
22. Kadakol A, Malek V, Goru SK, Pandey A, Sharma N, Gaikwad AB., "Esculetin ameliorates insulin resistance and type 2 diabetic nephropathy through reversal of H3 acetylation and H2A lysine 119 monoubiquitination", *Journal of Functional Foods*, Vol. 35, pp. 256-266.
23. Pandey A, Gaikwad AB., "Compound 21 and Telmisartan combination mitigates type 2 diabetic nephropathy through amelioration of caspase mediated apoptosis", *Journals of Biochemical and Biophysical Research Communications*, Vol. 487, pp. 827-833.
24. Pandey A, Priyank R, Goru SK, Kadakol A, Malek V, Sharma N, Gaikwad AB., "Esculetin ameliorates hepatic fibrosis in high fat diet induced non-alcoholic fatty liver disease by regulation of FoxO1 mediated pathway", *Journals of Pharmacological Reports*, Vol. 69, pp. 666-672.
25. Pandey A, Gaikwad AB., "AT 2 receptor agonist Compound 21: A silver lining for diabetic nephropathy", *Journals of European Journal of Pharmacology*, Vol. 815, pp. 251-257.
26. Malek V, Gaikwad AB., Neprilysin inhibitors: A new hope to halt the diabetic cardiovascular and renal complications? *Journals of Biomedicine Pharmacotherapy*, Vol. 90, pp. 752-759.
27. Goru SK, Kadakol A, Gaikwad AB., "Hidden targets of ubiquitin proteasome system: To prevent diabetic nephropathy", *Journals of Pharmacological Research*, Vol. 120, pp. 170-179.
28. Anil B Jindal., "The effect of particle shape on cellular interaction and drug delivery applications of micro- and nanoparticles", *International Journal of Pharmaceutics*, Vol. 532, pp. 450-465.
29. Diksha Mishra, Anil B Jindal "Lipid based nanocarriers for delivery of anti-HIV drugs: A mini review", *Journals of Nanoscience & Nanotechnology-Asia*, In press
30. Anil B. Jindal, Sagar S. Bachhav, Padma V. Devarajan., "In situ hybrid nano drug delivery system (IHN-DDS) of antiretroviral drug for simultaneous targeting to multiple viral reservoirs: an in vivo proof of concept", *International Journal of Pharmaceutics*, Vol. 521, pp. 196-203.
31. Harshita Raina, Simrandeep Kaur, Anil B Jindal., "Development of efavirenz loaded solid lipid nanoparticles: risk assessment, quality-by-design (QbD) based optimization and physicochemical characterization", *Journal of Drug Delivery Science and Technology*, Vol. 39, pp. 180-191.
32. T Date, Nimbalkar V, Jyostna K, A Mittal, R Mahato, Deepak Chitkara., "Lipid-polymer hybrid nanocarriers for delivering cancer therapeutics". *Journal of Controlled Release*, Vol. 271, pp. 60-73.
33. Kishan S. Italiya, Saurabh Sharma, Ishit Kothari, Deepak Chitkara, Anupama Mittal., "Simultaneous estimation of lisofylline and pentoxifylline in rat plasma by high performance liquid chromatography-photodiode array detector and its application to pharmacokinetics in rats", *Journal of Chromatography B*, Vol. 1061-1062, pp. 49-56.

34. Saurabh Sharma, Kishan Italiya, Anupama Mittal, Deepak Chitkara., "New strategies for cancer management: How can Temozolomide carrier modifications improve its delivery? ", Journals of Therapeutic delivery, Vol. 8, pp. 775-477.
35. Hasan Ali, PriyaRanjan Prasad Verma, Sunil Kumar Dubey, JayachandranVenkatesan, YoungwanSeo, Se-Kwon Kim and SK Singh., "In vitro-in vivo and Pharmacokinetic Evaluation of Solid Lipid Nanoparticles of Furosemide Using Gastroplus™", Journals of RSC Advances, Vol. 7, pp. 33314-33326.
36. Sunil K. Dubey, GautamSinghvi, AbhayTyagi, Himanshu Agarwal, K. V. Krishna., "Spectrophotometric Determination of pKa and Log P of Risperidone", Journal of Applied Pharmaceutical Science, Vol. 7(11), pp. 155-158.
37. Gautam Singhvi, Vipin Kumar, Ravi Ukawala and Ranendra Narayan Saha., "Development of Bioanalytical HPLC Method for Estimation of Milnacipran Hydrochloride in Rabbit Plasma Using Solid Phase Extraction Technique and its Application in Pharmacokinetic Investigation", Journals of Current Pharmaceutical Analysis, Vol. 13(5), pp. 574 - 580.
38. Gautam Singhvi, Vipin Kumar Shukla, Ravi Ukawala, Gautham Gampa, Ranendra N. Saha., "Development of a new, rapid and sensitive HPTLC method for estimation of Milnacipran in bulk, formulation and compatibility study"., Arabian Journal of Chemistry, Vol. 10, pp. S2417-S2423.
39. Saswata Banerjee, Gautam Singhvi, Archana Khosa, "In vitro lipolysis: an indispensable tool for the development of ivivc of lipid based drug delivery systems", Journals of Drug Delivery Letters, Vol. 7(3), pp. 151-156.
40. Gautam Singhvi., "In-vitro and in-vivo correlations [ivivcs] for lipid based nanoformulations", Journals of Drug Delivery Letters, Vol. 7(3), pp. 150.
41. Yang Yang, Aniruddha Roy, Yucheng Zhao, Elijus Undzys, and Shyh-Dar Li., "Comparison of Tumor Penetration of Podophyllotoxin-Carboxymethylcellulose Conjugates with Various Chemical Compositions in Tumor Spheroid Culture and In Vivo Solid Tumor.", Journals of Bioconjug Chem., Vol. 28(5), pp. 1505-1518.
42. Aniruddha Roy, Yucheng Zhao, Yang Yang, Andras Szeitz, Tara Klassen, Shyh-DarLi., "Selective targeting and therapy of metastatic and multidrug resistant tumors using a long circulating podophyllotoxin nanoparticle", Journals of Biomaterials., Vol. 137, pp. 11-22..
43. M. M. Pandey, Shrikant Y. Charde, Jaipal A., Prashant P. Raut, Puneet Goel, Love Kumar., "Development and Validation of a Simple High-Performance Liquid Chromatography Method for Estimation of Felodipine in Rabbit Plasma: Application to Pharmacokinetic Study", Journals of Current Pharmaceutical Analysis, Vol. 13, pp. 321-327.
44. Satish S.Reddi, Gautam Singhvi, Archana Khosa, Ranendra N Saha., "Determination of venlafaxine in bulk and pharmaceutical formulations using stability indicating RP-HPLC method with UV detector", Asian Journal of chemistry, Vol. 29, pp. 2623-2626.
45. Joseph E., Reddi S., Rinwa V., et al., "Design and in vivo evaluation of solid lipid nanoparticulate systems of Olanzapine for acute phase schizophrenia treatment: Investigations on antipsychotic potential and adverse effects", European Journal of Pharmaceutical Sciences, Vol. 104, pp. 315-325.
46. Reddi S, Singhvi G, Khosa A. et al., "Development and validation of cost effective UV-spectrophotometric method for estimation of domperidone in bulk and pharmaceutical formulations", Asian Journal of Chemistry, Vol. 29, pp. 2623-2626.
47. Singhvi G., Shukla V., Ukawala R., et al., "Development of a new, rapid and sensitive HPTLC method for estimation of Milnacipran in bulk, formulation and compatibility study", Arabian Journal of Chemistry, Vol. 10, pp. S2417-S2423.
48. Singhvi G., Kumar V., Ukawala R., et al., "Development of bioanalytical HPLC method for estimation of milnacipran hydrochloride in rabbit plasma using solid phase extraction technique and its application in pharmacokinetic investigation", Current Pharmaceutical Analysis, Vol. 13, pp. 574-580.
49. Joseph E., Saha R., "Investigations on pharmacokinetics and biodistribution of polymeric and solid lipid nanoparticulate systems of atypical antipsychotic drug: effect of material used and surface modification", Drug Development and Industrial Pharmacy, Vol. 43, pp. 678-686.

**C. CONFERENCES ATTENDED/PAPERS PRESENTED:**

S.No.	Authors	Title	Name of Conference	Place	Date
1.	Subhash Chander, Pankaj Bhateja, Sankaranarayanan Murugesan	Structure based virtual screening studies on drug database for search of potent HIV-1 RT inhibitors	69th IPC-2017	Chitkara University, Rajpura, Punjab	December 22-24
2.	Subhash C, Barkha Bhagwani, Jaju M, Valentina Parthiban, Ilango Kaliappan, Baburaj Bhaskar, S Murugesan	In-silico evaluation of 1-(5-(2-benzo(1,3)dioxol-5-yl)vinyl-4,5-dihydro-pyrazol-3-yl)piperidine derivatives as Arachidonate-12-lipoxygenase inhibitor	International Conference on Nano and Functional Materials: Interface between Science and Engineering	Department of Chemistry, BITS Pilani, Pilani Campus, Rajasthan	November 16-18
3.	Subhash Chander, Barkha Bhagwani, Jaju Mahesh, Sankaranarayanan Murugesan	Paper entitled "Design, synthesis and anti-HIV-1 RT evaluation of Benzopiperidine based carbamates" presented at International Conference on Nano and Functional Materials: Interface between Science and Engineering	International Conference on Nano and Functional Materials: Interface between Science and Engineering	Department of Chemistry, BITS Pilani, Pilani Campus, Pilani-333031. Rajasthan	November 16-18
4.	Subhash Chander, Ping Wang, Penta Ashok, Liu-MengYang, Yong-Tang Zheng and Murugesan Sankaranarayanan	Design, synthesis and anti-HIV-1 RT evaluation of 2-amino-1-(piperazin-1-yl)ethan-1-one based compounds	National Conference on Emerging Trends in Computer Aided Drug Design & Drug Delivery	School of Pharmacy & Emerging Sciences, Baddi University of Emerging Sciences & Technology, Baddi	May 11
5.	Subhash Chander, Ping Wang, Penta Ashok, Liu-Meng Yang, Yong-Tang Zheng and Murugesan Sankaranarayanan	Design, synthesis and anti-HIV-1 RT evaluation of 2-amino-1-(piperazin-1-yl)ethan-1-one derivatives	International Conference on Drug Design (ICDD-2017)	Convention Center, JNU, New Delhi	April 7-9
6.	Bhagwani B, Jaju MB, Chander S, Chandra Sekhar KVG and Murugesan S	In-silico evaluation of piperazin-1-yl(pyrazin-2-yl)methanone and (1,4-diazepan-1-yl)(pyrazin-2-yl)methanone based compounds as inhibitors of pantothenate synthetase	National conference on Impact of Pharmaceutical Biotechnology on the future of medicine	Geetanjali Institute of Pharmacy, Geetanjali University, Udaipur-313002. Rajasthan	March 24-25
7.	Chander S, Ashok P, Zheng Y T, Wang P and Murugesan S	Design, synthesis and in-vitro evaluation of novel benzopiperidine carbamates as HIV-1 RT inhibitor	International Conference on Challenges in Drug Discovery and Delivery (ICCD3-2017)	Department of Pharmacy, BITS Pilani, Pilani Campus, Pilani-333031. Rajasthan	March 2 - 4
8.	Jaju MB, Bhagwani B, Chander S and Murugesan S	Search of potent anti-HIV-1 RT inhibitors via in-silico based drug repositioning approach	International Conference on Challenges in Drug Discovery and Delivery (ICCD3-2017)	Department of Pharmacy, BITS Pilani, Pilani Campus, Pilani-333031. Rajasthan	March 2 - 4
9.	Penta Ashok, Subhash Chander, Rafael Balaña Fouce, Larry M. C. Chow, Iris L. K. Wong, Sankaranarayanan Murugesan	Synthesis and evaluation of $\beta$ -carbonyl piperazine analogues as anti-leishmanial agent	International Conference on Challenges in Drug Discovery and Delivery (ICCD3-2017)	Department of Pharmacy, BITS Pilani, Pilani Campus, Pilani-333031. Rajasthan	March 2 - 4
10.	Murugesan Sankaranarayanan	Workshop attended	3rd Workshop on Analytical Instruments for Chemical and Environmental Engineers (WAICEE-2017)"	Department of Chemical Engineering, BITS, Pilani-Pilani Campus	February 10-11

S.No.	Authors	Title	Name of Conference	Place	Date
11.	Subhash Chander, Penta Ashok, Bidart de Macedo Maira, Paul Cos, Davie Cappoen and Sankaranarayanan Murugesan	Design, synthesis and anti-tubercular activity of novel tetrahydroquinoline based hydrazides	23rd ISCB International Conference (ISCB-2017), Interface of Chemical Biology in Drug Research	Indian Society of Chemists and Biologists, SRM University, Chennai	February 8-10
12.	Murugesan Sankaranarayanan	Attended workshop	Achieving High Quality in Education at the Tertiary Level	BITS Pilani	January 9-10
13.	Sruthi Ramagiri, Rajeev Taliyan	Northern Regional conf of Indian Pharmacological Society-NRIPSCON-17:	Ifenprodil reduces brain injury induced by cerebral ischemic reperfusion injury: Potential role of N-methyl D-aspartate receptor subtype 2B (NR2B)	KIET group of Institution, Ghaziabad	September 1-2
14.	Sarathlal KC, Sruthi Ramagiri, Rajeev Taliyan	Northern Regional conf of Indian Pharmacological Society-NRIPSCON-17:	Protective role of sodium butyrate against brain damage induced by cerebral stroke: Modulation of HDAC activity	KIET group of Institution, Ghaziabad	September 1-2,
15.	Rajeev Taliyan	Attended workshop	Two Days workshop on Flow Cytometry	Dept of Biol. Science: BITS Pilani	January, 18-19
16.	Violina K, Sorabh Sharma, Rajeev Taliyan	69th Indian Pharmaceutical Congress, 2017	Implication of HDAC and GSK 3 beta in insulin resistance induced neurodegeneration	Chitkara University, Chandigarh	December, 22-24,
17.	Sarathlal, Deepak Chitkara, Rajeev Taliyan	69th Indian Pharmaceutical Congress, 2017	Evaluation of protective effect of rosiglitazone, PPAR $\gamma$ agonist, in HFD induced insulin resistance and Alzheimer's type of dementia	Chitkara University, Chandigarh	December, 22
18.	Rajeev Taliyan	69th Indian Pharmaceutical Congress, 2017	LOC-member, Poster Evaluation expert	Chitkara University, Chandigarh	December, 22
19.	Sorabh Sharma, Rajeev Taliyan	14th ISN Advanced School on Neurochemistry:	Histone deacetylases inhibitor, SAHA, ameliorated the toxic effects of high fat diet induced insulin resistance in hemiparkinson's	Paris, France.	August 16-20.
20.	Sorabh Sharma, Rajeev Taliyan	Alzheimer's Association International Conference	AR-A014418, a GSK-3 $\beta$ Inhibitor, Attenuates Alzheimer like Pathology in High Fat Diet Induced Cognitive Deficit in Mice	London, England.	July 16-20
21.	Sorabh Sharma, Rajeev Taliyan	International Conference on Challenges in drug discovery and delivery	Beneficial Effects of Co-administered Lithium Chloride and Valproate in Intracerebroventricular Streptozotocin Induced Behavioral and Biochemical Abnormalities in Rats.	BITS Pilani, Pilani Campus	March 2-4
22.	Sruthi Ramagiri, Rajeev Taliyan	International Conference on Challenges in drug discovery and delivery	Protective effects of remote limb ischemic postconditioning against cerebral ischemic reperfusion injury: Role of HO-1.	BITS Pilani, Pilani Campus	March 2-4



S.No.	Authors	Title	Name of Conference	Place	Date
23.	Vaishnavi Nimbalkar, Tushar Date, Anupama Mittal, Deepak Chitkara	Development And Evaluation Of Self-Assembling Amphiphilic Micelles Of Mpeg-Pla Loaded With Docetaxel For Cancer Treatment	International conference on Challenges in drug discovery and delivery (ICCD3-2017)	BITS Pilani, Pilani Campus	March 2-4
24.	Vinayak Mharugde, Saurabh sharma, Kishan Italiya, Samrat Mazumdar, Anupama Mittal, Deepak Chitkara,	RNAi THERAPEUTICS: Sojourn from Discovery to Delivery Challenges, Clinical Status & Global Delivery Market	International conference on Challenges in drug discovery and delivery (ICCD3-2017)	BITS Pilani, Pilani Campus	March 2-4
25.	Saurabh Sharma, Samrat Mazumdar, Kishan Italiya, Tushar Date, Anupama Mittal, Deepak Chitkara.	miRNA-34a Loaded micelleplexes for Treatment of Breast Cancer	International Conference on NANO- AND FUNCTIONAL MATERIALS: Interface between Science & Engineering (NFM-2017)	BITS Pilani, Pilani Campus	March 2-4
26.	Gautam Singhvi	Workshop on flow cytometry	Two days hands on workshop on Flow Cytometry	Department of biological sciences, BITS Pilani	June 18-19
27.	Gautam Singhvi	3rd Workshop on Analytical Instruments for Chemical and Environmental Engineers (WAICEE-2017)	3rd Workshop on Analytical Instruments for Chemical and Environmental Engineers (WAICEE-2017)	Department of Chemical Engineering, BITS Pilani, Pilani Campus	February 10-11
28.	Saswata Banerjee, Gautam Singhvi	Development and optimisation of solid lipid nanoparticles of ketoconazole with low surfactant concentration using factorial design	International conference on Challenges in drug discovery and delivery (ICCD3-2017)	BITS Pilani, Pilani Campus	March 2-4
29.	Vishal Girdhar, Shalini Patil, Saswata Banerjee, Gautam Singhvi	Study the influence of process parameters and formulation variables on particle size of lipid based liquid crystal nanoparticles	International conference on Challenges in drug discovery and delivery (ICCD3-2017)	BITS Pilani, Pilani Campus	March 2-4
30.	Shalini Patil, Vishal Girdhar, Saswata Banerjee, Gautam Singhvi	Cubosomes: A New Approach Towards Nano Drug Delivery	International conference on Challenges in drug discovery and delivery (ICCD3-2017)	BITS Pilani, Pilani Campus	March 2-4
31.	Gautam singhvi*, Saswata Banerjee, Archana Khosa.	Design of ketoconazole containing lipidic nanocarrier loaded topical delivery system using QBD approach for effective treatment of fungal infection.	NanoSciTech 2017, Expanding Horizons of Nanotechnology: Next Gen Challenges in Biomedical Sciences,	Panjab University, Chandigarh.	November 9-10
32.	C Saravan Krishna, Gautam Singhvi	In situ nano-formulation approaches for drug delivery system	International Conference on nano- and functional materials: Interface between Science & Engineering (NFM-2017).	BITS Pilani, Pilani Campus	November 9-10
33.	Kirti Singh, Aniruddha Roy	Role of nanotherapeutics in cancer immunotherapy	International Conference on Challenges in Drug Discovery and Delivery (ICCD3-2017)	BITS Pilani, Pilani Campus	March 2-4
34.	Nitita Hinge, Bismay Raje, Aniruddha Roy	Delivery of anti-malarial drug using RBC ghost: a prospective strategy for better prognosis of the disease	International Conference on Challenges in Drug Discovery and Delivery (ICCD3-2017)	BITS Pilani, Pilani Campus	March 2-4
35.	Nitin Chauhan, Parbhat Saini, M M Pandey	Formulation and Evaluation of Mucoadhesive Buccal Tablets of Felodipine	International Conference on Challenges in Drug Discovery and Delivery (ICCD3)	BITS Pilani, Rajasthan	March 2-4
36.	Krishna K V, Dubey S K, Saha R N.	Development and pharmacokinetic studies of donepezil loaded polymeric nano-micelles	Nano and Functional Materials- Interface between Science and Engineering	BITS Pilani, Pilani Campus	November 16-18

S.No.	Authors	Title	Name of Conference	Place	Date
37.	Dixit A, Routroy S, Dubey S K	Government Supported Healthcare Supply Chain: Rajasthan's Journey towards Sustainability	Joint Indo-German Conference on Sustainable Engineering	BITS Pilani, Pilani Campus	September 15-17
38.	Gupta K, Dixit A, Routroy S, Dubey S K	Government Supported Generic Drug Supply Chain in India: A Study on Critical Success Factors	International Conference on Evidence Based Management	BITS Pilani, Pilani Campus	March 17-18
39.	Krishna K V, Dubey S K, Saha R N.	Synthesis and Characterization of Amphiphilic Di-Block Polymer and Its Application as a Nanocarrier for Donepezil	International Conference on Challenges in Drug Discovery and Delivery	BITS Pilani, Pilani Campus	March 2-4
40.	Ganguly S, Gupta K, Dubey S K	Pharmaceutical Quality By Design: Evolution, Understanding and Incorporation In Industrial Perspective	International Conference on Challenges in Drug Discovery and Delivery	BITS Pilani, Pilani Campus	March 2-4
41.	Jetwani A, Jindal M, Dubey S K	A Simple, Sensitive, Economical Spectroscopic Method for Simultaneous Estimation of Norfloxacin and Tinidazole in Bulk and Formulation	International Conference on Challenges in Drug Discovery and Delivery	BITS Pilani, Pilani Campus	March 2-4
42.	Krishna K V, Agnihotri T, Dubey S K, Saha R N	Surface Modified Rivastigmine Loaded PCL Nanoparticles for Alzheimer's Disease	ICMR sponsored conference	Siksha 'O' Anusandhan University	February 17-18

#### D. BOOKS CHAPTER PUBLISHED/EDITED DURING THE YEAR

1. M.J. Oza, M.S. Garud, Gaikwad AB, Y.A. Kulkarni, "Fibromyalgia Syndrome: Role of Obesity and Nutrients, Nutrition and Functional Foods for Healthy Aging", Elsevier publication.
2. N.Sharma, Gaikwad AB, Y.A. Kulkarni, "Folic Acid in Pain: An Epigenetic Link. In: Nutritional Modulators of Pain in the Aging Population", Elsevier publication.
3. Y.A. Kulkarni, S.V. Suryavanshi, S.T. Auti, Gaikwad AB, "Capsicum: A Natural Pain Modulator. In: Nutritional Modulators of Pain in the Aging Population", Elsevier publication.
4. M.S. Garud, M.J. Oza, Gaikwad AB, Y.A. Kulkarni, "Natural Remedies for Treatment of Cancer Pain. In: Nutritional Modulators of Pain in the Aging Population", Elsevier publication.
5. Y.A. Kulkarni, M.S. Garud, M.J. Oza, Gaikwad AB, "Biomarkers of Multiple Sclerosis and Their Modulation by Natural Products. Nutrition and Lifestyle. In: Neurological Autoimmune Diseases: Multiple Sclerosis", Elsevier publication.
6. Gautam Singhvi, Saswata Banerjee, Archana Khosa, "Lyotropic Liquid Crystal Nanoparticles: A Novel Improved Lipidic Drug Delivery System", Elsevier publication.
7. Emil Joseph, Gautam Singhvi, Saswata Banerjee, "Nanoparticulate drug delivery systems for brain targeting", Apple Academic Press, Ontario, Canada.

#### E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED

Three days International Conference on Challenges in Drug Discovery and Delivery (ICCD3), March 2-4, 2017, BITS-Pilani, India

Two-day workshop on "Pharmacokinetic and Pharmacodynamic Studies, Modelling & Simulation" for scientists of Sun Pharmaceutical Industries Ltd. Gurugram, Haryana during September 8-9, 2017.

#### F. INVITED TALKS GIVEN BY BITS FACULTY

1. Prof. R N Saha delivered a talk on Role of materials in design of Nanoparticulate Systems for Selective Delivery of Drugs In International Conference on Nano- and Functional Materials At BITS Pilani, 17th November 2017
2. Prof. R N Saha delivered a talk on Design and studies of novel delivery systems for selective distribution and better efficacy In SciLife Lab, Karolinska Institute, Stockholm, Sweden At Stockholm, Sweden 18th January, 2017
3. Prof. R N Saha delivered a talk on Studies on Some Techniques and Approaches for Enhancement of Bioavailability of some Drugs In S P Process Development Institute, Stockholm, Sweden At Stockholm, Sweden 19th January, 2017

4. Prof. R N Saha delivered a talk on Modified/Selective Distribution of Drug: Nanoparticulate Systems, Characterization, Pharmacokinetic and Biodistribution Studies In GSK R & D Center, Hyderabad At Hyderabad 17th May 2017
5. Prof. R N Saha delivered a talk on Collaborative Learning in Globalized Environment and Importance of Education for Skill Fulfillment: Global Experiments- 21st Century Skills and Their Relation to Employability In Panel Member and Panel Moderation at World Education Summit- 2017, At Le Meridian, Dubai, UAE 26th November 2017
6. Prof. R N Saha delivered a talk on Skill Development: Leveraging Technology In Edutech 2017: Knowledge, Skill, Technology; organized by Indo-New Zealand Business Council At INZBC, Pulman Hotel, Auckland, NZ 4th August 2017
7. Dr. Rajeev Taliyan delivered a talk on "Epigenetic Modulation and Dementia: Potential of Class specific HDAC inhibitors in ameliorating insulin resistance induced cognitive deficit in mice" at Northern Regional conf of Indian Pharmacological Society NRIPSCON-17, KIET. Ghaziabad on September 1-2, 2017
8. Dr. Rajeev Taliyan delivered a talk on "Epigenetic Mechanisms in Neurodegenerative and Neurological Disorders" at, KIET group of pharmacy, Ghaziabad on July 10, 2017.
9. Dr. Sunil Dubey delivered a talk on "Pharmacokinetics-Pharmacodynamics Modelling and Simulation of Antimicrobial Agents. Methods for Estimation and Pharmacokinetic Pharmacodynamic Modelling of Endocrine Disrupting Chemicals: Key Environmental Hazards" at Recent Advances in Biofilms and Environmental Biotechnology, MNIT Allahabad on September 21-17, 2017
10. Dr. Sunil Dubey delivered a talk on "Pharmacy Clinic Bridging the Gap between Doctor and Patient." at National Level Seminar-cum- Workshop on Overview of Pharma Clinic Practice, CYP at Raipur Medical College on September 25, 2017
11. Dr. Sunil Dubey delivered a talk on "Pharmacokinetic-Pharmacodynamic Modelling and Simulation of Selected Drugs and Formulations. Biotherapeutics Drug Approval Process and Patent Dance for Biosimilars" at Biotechniques in Drug Delivery: Trends & Applications, BIT Mesra, Ranchi on June 16-29, 2017.
12. Dr. Sunil Dubey delivered a talk on "Enantioselective Separation; Simulation Studies of Selected Drug: Application to Pharmacokinetic Studies" at ICMR sponsored Recent Advances in Novel Drug Delivery System for Herbal Formulations against Neurodegenerative Diseases, Siksha 'O' Anusandhan University at Bhubaneswar on February 17-18, 2017.
13. Dr. Gautam Singhvi delivered a talk on "Industrial product development process and Preformulation study for formulation development" at Chandigarh University, Chandigarh on April 20, 2017
14. Dr. Gautam Singhvi delivered a talk on "In-vitro in-vivo correlation and BCS classification" at Barbariya Institute of Pharmacy, Vadodara, Gujrat, on June 24, 2017.
15. Dr. Gautam Singhvi delivered a talk on "BCS and In Vitro In Vivo Correlation (IVIVC)" at Workshop on "Pharmacokinetic & Pharmacodynamic Studies, Modelling and Simulation" for Scientist of Clinical Pharmacology and Pharmacokinetics Sun Pharmaceutical Industries Ltd., BITS Pilani on September 8-9, 2017
16. Dr. Gautam Singhvi delivered a talk on "Role of ICH guidelines in pharmaceutical product development" at Chandigarh University, Chandigarh on November 10, 2017

#### **G. INVITED TALKS ARRANGED IN THE DEPARTMENT**

1. Dr. Bruce A. Shapiro, Head, RNA Structure and Design Section, National Cancer Institute Frederick, MD, USA delivered a talk on Understanding RNA Structure and Function: Prediction, Analysis and Nanodesign.
2. Dr. Anu Puri, Staff Scientist, National Cancer Institute Frederick, MD, USA delivered a talk on Stimuli-Sensitive Nanoparticles for RNAi-based Cancer Therapy: An Update on Photosensitive Liposomes for siRNA Delivery.
3. Prof. Rafael Balana Fouce, Professor of Biomedical Sciences, University of Leon, Spain delivered a talk on A new phenotypic approach for Leishmaniasis drug discovery using infrared-transgenic cells.
4. Prof. Asit K. Chakraborty, Professor and Head, Department of Medicinal Chemistry, NIPER, SAS Nagar, Punjab. delivered a talk on Enrichment of Medicinal Chemists' Tool-Box: Search for Novel Antiinflammatory Scaffold.
5. Dr. Amulya K. Panda, Senior Scientist, National Institute of Immunology, New Delhi delivered a talk on New advances on polymer particle based vaccine delivery.
6. Dr. Raj K Shirumalla, Associate Director and Head, Group II, Department of Pharmacology, Diachi Sankyo, India delivered a talk on Current trends in drug discovery research in COPD.

7. Prof. Shinde Devanand Baburao, Vice Chancellor, Shivaji University, Kohlapur delivered a talk on Antibacterial Drug Discovery -Current Trends, Challenges and Future Perspective.
8. Mr. Arun Kumar Pandey, Sr. Vice-President, R&D, Alkem Labs Ltd Mumbai delivered a talk on Indian Pharmaceutical industry--perspective and Future.
9. Prof. Vinod Labhasetwar, Professor, Cleveland Clinic Lerner College of Medicine, Cleveland, Ohio, USA delivered a talk on Drug Transport Barrier in Cancer Drug Resistance.
10. Dr. Mathias Viard, National Cancer Institute Frederick, MD, USA delivered a talk on Liposomal formulation of a PDT agent for on-site drug release.
11. Prof. Shyh Dar Li, Associate professor, University of British Columbia, Canada delivered a talk on Nanoparticle Drug Delivery Overcomes Multidrug Resistance in Tumors.
12. Prof. Lakshmi Kotra, Associate Professor, University of Toronto, Canada delivered a talk on Drug discovery challenges in centrally acting, controlled drug substances.
13. Dr. Anil N. Gaikwad, Senior Scientist, CSIR-CDRI, Lucknow delivered a talk on Ornamental plant to omate body-Technology to treat obesity.
14. Prof. K Ruckmani, Professor and Head, Department of Pharmaceutical Technology, Anna University, Chennai delivered a talk on Studies on prunus cerasoides and albizia stipulata gums as versatile biocarriers for drug delivery applications.
15. Dr. Anurag Sood, Research Director, PRD & ARD, Zoetis delivered a talk on Formulation and drug product development for animal health: Drug delivery and technology innovations.
16. Mr. Ranga Chandrashekar, Deputy Drugs Controller (I), New Delhi delivered a talk on Investigational New Drug Applications.
17. Dr. Dinesh Kumar Bharadwaj, Deputy Director and group leader-PCT, National Institute of Nutrition, Hyderabad delivered a talk on Challenges for Pharmacists – Strengthening the Pharmacy Practices.
18. Dr. P. Chattopadhyay, Scientist-E and Deputy Director, Head of Pharmaceutical Technology and Medical Entomology, DRL, DRDO, Tezpur delivered a talk on Development of Green Non –lethal Riot Control agents.
19. Dr. Ashish Rastogi, Assistant Director- Clinical Operations, Excel Life Sciences Pvt Ltd., New Delhi delivered a talk on Clinical Studies- Challenges & Opportunities, Anecdotes from the real world.
20. Mr. Ranjan Narula, Founder and Managing Partner of IPR Law firm, RNA, IP Attorneys, Gurgaon delivered a talk on Pharma Patent Litigation in India.
21. Dr. Arvind Kinshikar, Laboratory Head, Novartis Institutes for Bio-Medical Research Cambridge, Massachusetts delivered a talk on Bioanalytical assay development and validation: Challenges.

#### **H. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS**

1. Prof. R N Saha Visited SciLife Lab at Karolinska Institute and SP Process Development Institute at Stockholm, Sweden, in January 2017, on invitation to discuss collaborations. He presented lectures at both the institutes and discussed possible areas of research collaboration. Already both sides agreed on research collaboration under which project sponsored by SciLife Lab on novel delivery systems will be carried out by R N Saha and his group at Pilani. Already Non-disclosure agreement and materials transfer agreement are signed. Project discussion is on.
2. Prof. R N Saha Visited Tel Aviv University, Israel, in November 2017, along two other BITS faculty to discuss and widen collaborations between two institutes. Already research collaborations started in few areas and likely to widen in other areas.
3. Prof. R N Saha Visited New Zealand during 27th July to 5th August 2017, as part of FICCI Education delegation team and invited by Indo-New Zealand Business Council to visit New Zealand Universities in Christchurch, Wellington and Auckland. Team visited several universities in these cities and exchanged information and discussed possible collaborations. Further, delivered lecture at International Summit, "Edutech 2017: Knowledge, Skill, Technology" organized by Indo-New Zealand Business Council held at Auckland on 4th August 2017.
4. Prof. R N Saha Visited GSK R & D Center, Hyderabad, on invitation, on 17th May 2017, to discussed collaborative sponsored projects and delivered lecture for the benefit of R & D staffs of GSK
5. Mr. K.V. Krishna has recently received UGC Rajiv Gandhi Fellowship for the project entitled, "Development and Evaluation of Polymeric or Lipidic Nanoparticulate Drug Delivery for the Treatment of Alzheimer's Disease".
6. Mr. Italiya Kishan S. has recently received DST INSPIRE fellowship for the project entitled, "Nano-formulation of Hydrophobic Conjugate of Lysofylline for Effective Treatment of Diabetes".
7. Ms. Mansi Deshpande and Ms. Siddhi Uday Ranade secured the runner-up position at Inter college national Debate Competition organized by Sentiss Pharma Pvt Ltd.

**I. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR:**

1. High sped Homogenizer
2. Rotary evaporator with accessories

**J. DEPARTMENTAL ASSOCIATION****Pharmacy**

In the year 2017, Department of Pharmacy, its students and faculty members, continued their untiring efforts for further betterment and had several achievements and activities during the year including:

Apogee 2017 This APOGEE, 8 project ideas had been submitted out of which 04 projects were selected for Round 2 of pitching. 03 of these were selected for final presentation during APOGEE. These projects were presented with working models which directly benefitted the students to explore various other fields where pharmacy can be applied. Students from the department also submitted 6 abstract for Paper presentation out of which 3 were qualified for final presentation during the Apogee.

Doper's quiz: Doper's Quiz was an online quizzing event to test students' logic relating to the field of Pharmacy. Most of the questions were related to the myriad world of narcotics. A total of 80 Teams participated with most of the teams having a maximum of two participants. Registration for the event was done through online form and was done beforehand. An online portal was constructed by members of Pharmacy Association to host the quiz. Once logged into the portal, students were given one-hour maximum to finish the quiz. Winner was decided based on maximum score from all entries.

ESPOIR 2017: A B-Plan Competition. ESPOIR is an initiative to encourage and reward innovative ideas by student community that have a well-rounded business plan and revenue model. The event was divided into 3 phases:

Phase 1: Submission of the Executive Summary.

Phase 2: Mentor-ship Phase and Submission of executive Summary.

Phase 3: Final Presentation of Complete Business Plan in front of a panel of two judges at BITS Pilani during Apogee.

**Exhibition: BPS** also organized its own stall for the exhibition during Apogee in which it showcased recent research work published by our faculty and PhD scholars. It was facilitated by volunteers of Pharmacy Apogee Team

A total of 5 teams registered for ESPOIR and among them 3 teams was selected for presentation in the final round. 2 teams were allowed to give the final presentation due to disqualification of one team

Apart from this, The Pharmaceutical Society also organized freshers welcome function for new students and farewell dinner twice during the year (in both semesters) for the graduating students.

Pharmacy Journal Club : A Journal Club was formed by Secretary of the Society Mr. Suyash Sharma under the guidance of Dr. Gaikwad Anil Bhanudas and Dr. Sunil Kumar Dubey with mentorship of Dr. Aniruddha Roy. A journal club is defined as an educational meeting in which a group of individuals discuss current articles, providing a forum for a collective effort to keep up with the literature. The general purpose of the journal club was to facilitate the review of a specific research, study and to discuss implications of the study. 4 meetings were held during the course of semester.

Campus Health Communique : BITS Pharmaceutical Society published its 6th edition of Healthcare Newsletter with active involvement of Editorial Team under the guidance of Dr. Atish Paul.

Research activities of Department increased further in terms of sponsored projects, departmental projects, number of publications and conference presentations and number of doctoral students. During the year faculty members of department completed research projects worth 55.83 lakhs. Currently research projects worth Rs. 317.64 lakh are being carried out by the department and additionally projects worth Rs 177.09 lakhs have been sanctioned. Financial support from the various government agencies and industries have boosted the research activities of the faculties and enabled procurement of hi-end equipments. The experiences acquainted by the Pharmacy Department Faculty Members and research scholars by visiting various conferences and workshops were shared with the staff and students of the department.

**B1.10.13 Department: Physics**

Number of faculty members (as on 31 December 2017)

<b>Senior Professors, Professors</b>	02
<b>Associate Professors</b>	07
<b>Assistant Professors</b>	11
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	01

**HOD:** Dr. Anshuman Dalvi**Contact details:** adalvi@pilani.bits-pilani.ac.in, 01596-515288**Number of PhD Scholars:** 24 (including 01 part-time student)**Thesis Submitted:** 02**Ph.D. Thesis Submitted during the year:** 02**A. SPONSORED RESEARCH ACTIVITIES & FUNDING****(i) Ongoing projects:****(ii) Projects Sanctioned during the year****(iii) Projects completed in the year****(iv) Consultancy Projects completed this year**

Projects: (ongoing projects, sanctioned/completed this year): 13

**Ongoing Projects**

PI	Co-PI	Title of the Project	Amount (Rs./ lacs)	Funding Agency	Submitted on	Current Status
Dr. Anshuman Dalvi		Investigations on Li <sup>+</sup> ion conducting glass-ceramics containing NASICON structured nano crystallites	37.65	SERB	2015	Started from 29th October, 2016
Dr. Anshuman Dalvi		EXAFS Investigations on Polymer nanocomposites (2016-2019)	10.35	DAE CRS		Sanctioned in November, 2016 started in March 2017
Dr. R. Choubisa		Theoretical Study of Electron impact double ionization of atoms and molecules	22.63	SERB	27-06-2016	Approved Nov 2016 started in March 2017
Dr. M. Mishra		Studies on Quarkonium Suppression in Asymmetric Nuclear Collision at LHC	16.03	SERB	27-06-2016	Approved Nov 2016 started in March 2017
Dr. J.N. Bandyopadhyay	Dr. T.G. Sarkar	Dynamical and Topological Properties of Floquet Systems: A comparative study of perturbative schemes	19.11	SERB	31-07-2016	Approved Nov 2016 started in March 2017
Dr. Amol R. Holkundkar	Dr. J.N. Bandyopadhyay	Generation and Characterization of Attosecond Pulses with Specific Polarization and its Applications	19.70	SERB	31-07-2016	Approved Nov 2016 started in March 2017
Dr. Raj Kumar Gupta	Dr. V. Manjuladevi	Surface Plasmon Resonance Instrument	56.15	DST/IDP	2015	sanctioned Dec 2016 started in March 2017

**Projects Sanctioned During 2017**

PI	Co-PI	Title of the Project	Amount (Rs./ lacs)	Funding Agency	Submitted on	Current Status
Dr V. Manjuladevi	-	Electro-optical response of Nematic Liquid Crystals doped with nanorods	38.5	SERB	2017	Approved June 2017

**Projects Completed in the year 2017**

S. No.	Name of the Investigator	Title of the Project and duration	Funding Agency	Amount (in lacs)
1	Amol Holkundkar	Study of laser interaction with atomic clusters and preformed plasma(2014-2017)	DST	15
2	Navin Singh	Thermodynamic studies on force induced transitions in DNA molecule in crowded environment (2014-17)	DST-SERB	18.648
3	RK Gupta	Detection of contaminants using functional ultrathin films (2014-2017)	BITS Pilani	9.32
4	D. D. Pant	Time-resolved Spectroscopy of Fluorescent Molecules in Micellar Systems (2014-2017)	DST	53.01
5	Tapomoy Guha Sarkar	The study of Post-reionization HI distribution using the red shifted 21 cm signal and Ly- $\alpha$ forest towards understanding cosmic acceleration. (2014 -2017)	DST	10.38

**B. PUBLICATIONS- RESEARCH ARTICLES, BOOKS, CHAPTERS, CONFERENCE PROCEEDINGS)****Book Edited and Research Articles****DEPARTMENTAL ACTIVITIES**

(Conferences, seminars and workshops, invited talks, significant new equipment/ experimental facility):

**Significant new equipment/experimental facility installed in the department****C. CONFERENCES/WORKSHOP/SEMINAR ATTENDED/ PAPERS PRESENTED:**

S.No.	Title of paper	Authors	Name of conference	Venue & Date of conference
1.	Stability of DNA molecule in crowded environment	Navin Singh	6th International Conference on Functional Electroceramics And Polymers	IIT Kharagapur, 20-22 February, 2017
2.	IRAS 10427-6032 - An Embedded Star Cluster in the outskirts of the Carina Nebula	Kaushar Vaidya, Souradeep Bhattacharya, Vatsal Panwar, Manash Samal, Wen-Ping Chen	35th Astronomical Society of India Meeting	Birla Auditorium, Jaipur, 6-10 March, 2017
3.	Star formation toward IRAS 10427-6032	Kaushar Vaidya, Souradeep Bhattacharya, Vatsal Panwar, Manash Samal, Wen-Ping Chen, Devendra Ojha	Francesco's Legacy: Star Formation in Space and Time	Istituto Degli Innocenti Firenze, Italy, 5-9 June, 2017
5	ZnO Nano-structures for Gas Sensor Application: From Nano-Walls to Nano-Rods Growth Morphology	S. Choudhary, A. Hazra, A Agarwal, and S. Gangopadhyay,	Internal workshop on Advanced Materials (IWAM 2017),	NIST, Orissa, India Dec 19-21, (2017).
6	Zinc Oxide Nano-structures: From Nano-Wall to Nano-Rod Growth Morphology	S. Choudhary, and S. Gangopadhyay,	ETMN 2017	Solapur University, Maharashtra, Oct 6-7, 2017
7	Thin Cu Film Resistivity using Four Probe Techniques: Effect of Film Thickness and Geometrical Shapes	S. Choudhary, and S. Gangopadhyay,	ICC 2017	Bikaner, Nov 24-25 (2017)
8	Ionization of atoms by twisted electron: A new terrain to be explored	R. Choubisa	21st National Conference on Atomic and Molecular Physics (NCAMP)	P.R.L., Ahmadabad during 3-6 January, 2017

S.No.	Title of paper	Authors	Name of conference	Venue & Date of conference
9.	Transport properties and sub-band modulation of the SWCNT Based Nano-Scale Transistors	Surender Pratap and Niladri Sarkar	International Workshop on Physics of Semiconductor Devices (IWPSD-2017)	11th-15th December 2017 held at IIT Delhi
10.	Effect of empty sphere on the multiple scattering calculations in a cluster	Aditi Mandal, Pawas S.Shukla ,Rakesh Choubisa and Didier Sébilleau	21st National Conference on Atomic and Molecular Physics (NCAMP)	P.R.L., Ahmadabad during 3-6 January, 2017
11	Unified description of p_T dependent Upsilon(1S) Suppression in hot QCD matter	C. R. Singh, S. Ganesh and M. Mishra	17th International Conference on Strangeness in Quark Matter 2017 (SQM 2017)	University of Utrecht, Netherlands during 10th -15th July, 2017
12.	Investigation of the Effect of Scattering Centers on Low Dimensional Nanowire Channel	Cariappa K S, Raja Shukla and Niladri Sarkar	2nd International Conference on Condensed Matter & Applied Physics	24-25 Nov 2017 Bikaner India
13.	On the effects of Orbital Angular Momentum (OAM) and impact parameters on (e, 2e) process on atoms by twisted electron	Aditi Mandal and R. Choubisa	XXX International Conference in Photonic, Electronic and Atomic Collision (ICPEAC)	Cairns Convention Center, Cairns during 26 July-1st August, 2017
14	Designing And Fabrication Of Electrochromic Pixels Displays Using Di-Isopropylbenzyl Derivative Of Poly (3,4-Propylenedioxythiophene)	S NAIR, Sindhu; N C, Shivaprakahs; L, Raja	9th International Conference on Materials for Advanced Technologies	18th to 23rd June 2017, Suntec, Singapore
15	Comprehensive study of bottomonium suppression under unified model of quarkonia suppression	C. R. Singh, S. Ganesh and M. Mishra	DAE - BRNS Symposium on Nuclear Physics 2017	Thapar University, Patiala during 20th - 24th Dec. 2017

#### Invited Talks given by BITS faculty

1. Dr. Rakesh Choubisa delivered an invited talk on "Ionization of atoms by twisted electron: A new terrain to be explored" in the 21 National Conference on Atomic and Molecular Physics (NCAMP) held at P.R.L., Ahmadabad during 3-6 January, 2017.
2. Dr. Rakesh Choubisa delivered a talk on "Tutorial on Atomic cross-section calculations" in the DST-SERB School on "Plasma Devices: Science & Technology" held at CEERI, Pilani during 4-22 Dec., 2017.
3. Prof Anshuman Dalvi delivered a keynote address, "**Exploring novel materials for all solid-state batteries**" in 5th Rajasthan Science congress Amity University Jaipur 14th October, 2017
4. Prof Anshuman Dalvi delivered an invited talk, "**NASICON based Novel Glass-Ceramics and Polymer Nanocomposite Hybrids for Solid Ionic Device**" in first world conference on advanced solid electrolytes: Garnets and competitors in Pondicherry University during 6th to 9th September, 2017.
5. Dr Subhashis Gangopadhyay delivered an invited talk "ZnO Nano-structures for Gas Sensor Application: From Nano-Walls to Nano-Rods Growth Morphology" in the International workshop on Advanced Materials (IWAM 2017), organised by NIST, Orissa, India Dec 19-21, (2017).

#### Invited talks arranged in the department

1. The department organized an invited talk by Prof. Deshdeep Sahdev (Quazar Research and IIT, Kanpur) on "Strengthening our Sci-tech Ecosystem: A Concrete Case-study" on 19<sup>th</sup> September 2017.

#### Workshop/Conference/Event organized in the department

1. 12th National conference on solid state ionics during December 21-23, 2017

#### National and International Collaborations

Department has several collaborations with different national and internally reputed institutes. Some of the institutes are listed as follows. A short notes on the selective collaborative work with the research outputs are also described.



1. Bengal Engineering and Science University, Shibpur, Howrah, West Bengal, India.
2. RRI, Bangalore
3. CEERI, Pilani
4. Physical Research Laboratory, Ahmedabad.
5. University Illinois at Urbana Champaign
6. Tata Institute of Fundamental Research
7. Aryabhata Research Institute of Observational Science, Nainital
8. Swiss Federal Institute of Technology Lausanne(EPFL), Switzerland
9. University of Bremen, Germany
10. University of Nottingham, UK
11. Bhabha Atomic Research Centre, Mumbai
12. Jain University, Bangalore
13. Missouri State university Springfield, USA
14. Universite de Rennes1 (France)
15. LNF, INFN, Frascati (Italy)
16. Institute of Physics, Academy of Sciences of the Czech Republik, Prague
17. Department of Physics, Banaras Hindu University, Varanasi
18. Institute of Physics, Bhubaneswar
19. National Central University, Taiwan
20. University of Illinois at Urbana-Champaign, USA
21. Warsaw University of Technology, Poland
22. Indian Institute of Technology, Roorkee
23. VECC, Kolkata
24. IISER, Pune
25. Chalmers University of Technology, Gothenburg, Sweden
26. Indian Institute of Technology Kharagpur
27. National Centre for Radio-Astrophysics Pune
28. Max-Planck Institute for the Physics of Complex Systems, Dresden, Germany
29. UGC-DAE-CSR Indore

## **DISCIPLINE ASSOCIATION WORK HIGHLIGHTS**

### **1. Astronomy Club**

The department houses an astronomical observatory that is equipped with two telescopes, a 6" refracting telescope, and an 11" Celestron's Schmidt-Cassegrain telescope which is a fully computerized telescope. The observatory has recently procured a CCD camera which can be used with the 11" telescope to obtain long-exposure, high quality images, of nebulae and star-clusters. These images are stored in computers, and later analyzed to obtain photometric magnitudes of stars. Students interested in observational astronomy become a part of a club known as the Astro-Club. At any point in time, there are 30-40 students in this club across different disciplines and years, and a faculty member of the physics department is appointed as the faculty-in-charge of the club. Currently, Dr. Kaushar Vaidya is the faculty-in-charge of the Astro-club. With the guidance of Dr. Kaushar Vaidya, the Astro-club makes a regular use of both the telescopes to observe celestial objects on a fortnightly basis. In addition, following are the activities of the Astro-club.

Public Observation Sessions - They conduct regular astronomical observation sessions (sky watch) for general public, i.e. entire BITS community of students and staff, twice during a semester.

Sky Watch for Faculty/Staff Families – In the second week of October, 2017, the club organized a sky-watch followed by a lecture exclusively meant for faculty and staff families. It saw a large participation of over 90 people. Such events will be organized on a regular basis to inspire young kids into the beautiful world of Astronomy.

Space Week Celebration – During the world space week, October 4-11, the club organizes several talks by BITS faculty, experts from other places in India, and sometimes abroad (online talks) in addition to sky watch sessions for the public.

APOGEE – During the technical festival of BITS Pilani, APOGEE, the club organizes telescope making workshop. The club purchases components of a telescope from a vendor in Delhi and participants work in teams to make 6” telescopes which participants take back home with themselves. The club also organizes sky-watch sessions for all participants from across the country during the APOGEE.

## 2. Physics Association

All students and faculty are default members of B5 (Physics) Association at BITS Pilani. A certain students are selected as post-holders to plan and carry out different activities of the association. A faculty member of the department is appointed to oversee the activities of the association. Currently, Dr. Kaushar Vaidya is the faculty-in-charge of the association. Some of the yearly activities of the association are as follows:

APOGEE Projects - The association invites entries for physics projects for participation in the BITS technical festival, APOGEE. It then requests a team of faculty from the department to select the good entries for the participation and then helps the individuals/teams in show-casing these projects during the festival.

Teacher's Day Celebration – Since last two years the association celebrates teacher's day for the physics faculty. A program including tributes to faculty, some games among the team consisting of faculty and students, are planned to felicitate the faculty.

### 3. In APOGEE 2017, Physics Society organized following events:

Physics Society organized "Physics of the Impossible" in APOGEE 2017: a quiz event to test student's fundamental concepts in physics where they had to explain the physics behind some phenomena (naturally/artificially occurring).

Around 35 teams, each team of 2 members, participated in the event. In addition to this, students prepared projects and participated in demonstration of those. Plus on an individual basis they presented their work in paper presentation event of the PEP team on campus.

## AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS

### Students who have opted for higher studies in the year 2016-2017

1. Souradeep Bhattacharya, Ph.D. in Astrophysics at European Southern Observatory, Germany
2. Vatsal Panwar, Ph.D. in Astrophysics at University of Amsterdam, Netherlands
3. Anamika Agrawal, Ph.D. in Particle Physics at Dutch National Institute of Subatomic Physics, Netherlands
4. Kunjesh Agashiwala, Ph.D. in Electrical Engineering at University of California at Santa Barbara, USA
5. Hitesh Agrawal, Ph.D. in The Institute of Photonic Sciences, Spain

## FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION

### International Collaborations

1. Dr. Jayendra Nath Bandyopadhyay visited Max-Planck Institute for the Physics of Complex Systems in Dresden, Germany, as a guest scientist during 1st June to 12th July, 2017

### CHAPTERS in Book:

1. "Cosmology and Astrophysics Using the Post-reionization HI" by Anjan Ananda Sen, Tapomoy Guha Sarkar in Science with the Square Kilometre Array: An Indian Perspective – A Special Issue of the Journal of Astrophysics and Astronomy
2. "The redshifted HI 21 cm signal from the post-reionization epoch: Cross-correlations with other cosmological probes" by Tapomoy Guha Sarkar et al. In Science with the Square Kilometre Array: An Indian Perspective – A Special Issue of the Journal of Astrophysics and Astronomy
3. "Sensing through Surface Plasmon Resonance Imaging" by Raj Kumar Gupta in Reviews in Pasmonics 2016, Editor: Chris D Geddes, ISBN: 978-3-319-48081-7, DOI:10.1007/978-3-319-48081-7\_3

### Papers Published in refereed journals:

1. High strain rate dynamic compressive behaviour of Al6061-T6 alloys, S. Acharya, RK Gupta, J. Ghosh, S. Bysakh, KS Ghosh, DK Mondal, AK Mukhopadhyay, **Material Characterization, Elsevier**, Vol 127, Pg 185-197, 2017.
2. Langmuir-Blodgett films of stearic acid deposited on substrates at different orientations relative to compression direction: Alignment layer for nematic liquid crystal, K. Choudhary, J. Kumar, P. Taneja, R K Gupta, V. Manjuladevi, **Liquid Crystals (Taylor & Francis)**, 2017. DOI:10.1080/02678292.2017.1306890.

3. Amar Singh and **Navin Singh**, Melting of DNA in crowded environment, *Physical Chemistry Chemical Physics*, **19**, 19452 (2017)
4. Disintegration of the Aged Open Cluster Berkeley 17 by Bhattacharya, Souradeep, Mishra, Ishan, **Vaidya, Kaushar**; Chen, Wen-Ping, *The Astrophysical Journal*, 847, 138 (2017)
5. "Li+-NASICON crystallites in PEO-LiCF<sub>3</sub>SO<sub>3</sub> matrix: Characterization of a novel hybrid electrolyte" M Dinachandra Singh, Biplab nayak, Basudev Chaudhury, Anand Sarit and Anshuman Dalvi **Solid State Ionics** 311 (2017) 20-15 (**Elsevier**)
6. "Understanding the Effect of Inelastic Electron-Phonon Scattering and Channel Inhomogeneities on a Nanowire FET", **Niladri Sarkar**, "Superlattices and Microstructures-Elsevier-U.K"<https://doi.org/10.1016/j.spmi.2017.12.032>
7. "Floquet topological phase transitions in a kicked Haldane-Chern insulator" *Physical Reviews B*, 2018, T . Mishra, A Pallaprolu, T Guha Sarkar, J N Bandyopadhyay
8. Solvent effects on absorption and emission spectra of novel benzyl-D- alaninate (Fmoc-al-az): Determination of dipole moment by experimental and theoretical study. Tej Varma Y, Devesh S. Agarwal, Amrit Sarmah, Lata Joshi, Rajeev Sakhuja and **D. D. Pant**, *Journal of Molecular Structure*, 1129 (2017) 248-255.
9. Detection of Hg<sup>2+</sup> ions in aqueous medium using an indole-based fluorescent probe: Experimental and theoretical investigations, Sunita Joshi, Santosh Kumari, Amrit Sarmah, **D. D. Pant**, Rajeev Sakhuja, *Journal of Molecular Liquids*, Volume 248, 2017, Pages 668-677.
10.  $\psi(2S)$  enhancement in p-Pb collision as an indication of QGP formation at the LHC, S. Ganesh, Captain R. Singh, and **M. Mishra**, *J. Phys. G* (2017): In Press. (IOPScience), <https://doi.org/10.1088/1361-6471/aaa46a>
11. Decoration of Pd and Pt Nanoparticles on Carbon Nitride (C<sub>3</sub>N<sub>4</sub>) Surface for Nitro- Compounds Reduction and Hydrogen Evolution Reaction, R. Nazir, P. Fageria, M. Basu, **S. Gangopadhyay, S. Pande**, *New Journal of Chemistry* **41**, 9658 (2017).
12. Switching from sky blue to deep green fluorescent Zn(II) complexes for OLEDs applications, Raja Lakshmanan, N C Shivaprakash, S Sindhu, *Journal of Luminescence*, Volume 196, April 2018, Pages 136-145
13. Orange Fluorescent Ru(III) Complexes Based on 4'-Aryl Substituted 2,2':6',2''-Terpyridine for OLEDs Application, Raja Lakshmanan, N. C. Shivaprakash, S. Sindhu, *Journal of Fluorescence*, PP1-10, 2017
14. Synthesis of solution-processable poly(3,4 propylenedioxythiophene) nanobelts for electrochromic device applications, ISiju CherikkattilRaghavanan. ChannegowdaShivaprakash, Sukumaran NairSindhu, *Optical Materials*, Volume 73, November 2017, Pages 56-63

## B1.11 DIVISION / UNIT / CENTER-WISE ACTIVITY HIGHLIGHTS

### Faculty Affairs Division (FAD)

Faculty Affairs Division (FAD) with its office in Pilani Campus is responsible for implementation of all Institutional policies related to faculty, across all BITS campuses at Pilani, Goa, Hyderabad, Dubai and Off-Campus. The division deals with functions related to recruitment, promotions, retirement, extensions, appraisals, terms and benefits of faculty. The activities of the Division for the year, in brief, are given below:

- Faculty Recruitment:** Faculty Recruitment has been the prime activity of the Division. It is a continuous process carried round the year, where departments are involved in decision making process, whereas recruitment related logistics are carried out by partnering with a HR outsourcing company, PeopleStrong. Details of the offers made towards faculty positions, joining and acceptance details for on campus and off campus, for the year, are given below.
- ON-CAMPUS RECRUITMENT IN 2017**

Position	Offered	Joined				Declined				Yet to Join			
	University	Pilani	Goa	Hyderabad	Dubai	Pilani	Goa	Hyderabad	Dubai	Pilani	Goa	Hyderabad	Dubai
Professor	2	-	-	-	-	-	-	-	-	-	1	1	-
Associate Professor	3	-	-	-	-	-	-	-	1	-	1	-	1
Assistant Professor	132(19*+107+6^)	4*+21	1*+18	2*+23	9	1*+4	2*+1	1*+3	5*+4	5	1*+6	2*+9	4
Lecturer	2*	-	-	-	1*	-	-	-	-	-	-	-	1*
Visiting Assistant Professor	3	-	2	-	-	-	-	-	1	-	-	-	-
<b>Total</b>	<b>142(21*+115+6^)</b>	<b>87 (8* + 73+6^)</b>				<b>23 (9* + 14)</b>				<b>32 (4* + 28)</b>			

\* Offered in 2016, Joined in 2017

^ Offered in 2017, Joined in 2018

### 3. OFF-CAMPUS RECRUITMENT

Position	Total (offered)	Offered (details)						Joined (Total)	Joining (details)						Total	Declined (details)								
		Delhi	Pune	Chennai	Hyd	Bangalore	Mumbai		Delhi	Pune	Chennai	Hyd	Bangalore	Mumbai		Delhi	Pune	Chennai	Hyd	Bangalore	Mumbai			
Professor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Associate Professor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Assistant Professor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lecturer	1*	-	-	-	-	-	-	-	-	-	1*	-	-	-	-	-	-	-	-	-	-	-	-	-
Instructors	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>1*</b>								<b>1*</b>															

\*offered in 2016, Joined in 2017

- Faculty Performance Appraisals:** Performance Appraisal for 2015-16 was completed for all four campuses. Contributions in three key performance areas, namely:- (i) teaching, (ii) research, and (iii) institutional contribution were assessed. The assessments included self-appraisal, appraisal by the Head of

the respective departments in consultation with the respective faculty, and/ or Divisional Dean, which was then followed by a cross campus committee assessment and then by university level committee.

5. **Promotions:** The process has been initiated in December 2017.
6. **Change of superannuation age from 60 to 65:** Total 2 faculty, across the BITS campuses applied for change in age of superannuation from 60 to 65. Superannuation age was extended for both faculty members (one each from Pilani & Goa Campus) from 60 to 65.
7. **Industry Immersion:** The scheme to provide exposure of faculty, who do not have prior industry experience, to an industry in their area of interest with a view to provide them with an opportunity to gain first-hand exposure to processes undertaken by industries in design, manufacturing, marketing, logistics; gain an understanding of how theory learnt in classrooms is translated into practice on the job floor; gain an understanding of technical challenges that industries face in respect of improved design, scaling up their operations, impact on environment, manpower, etc. The following Faculty from across four campuses visited the industries as per details below:

S.No	PSRN	Name of the Faculty Member	Campus	Department	Industry Visited	Duration of the Visit
1	G0023	Basavadatta Mitra	Goa	Hum. & Soc. Sci.	Piramal Foundation for Education Leadership, Mumbai	20 May – 15 June 2017
2	P3175	Rajdeep Chowdhury	Pilani	Biological Sciences	Genotypic Technology Pvt.Ltd, Bangaluru	19 June - 08 July 2017
3	H0161	Suresk K	Hyderabad	Mechanical	Tube Investments of India Ltd., Chennai	09 June – 09 July 2017
4	H0388	Vikrant K. Surasani	Hyderabad	Chemical	Schneider Electric, Hyderabad	01 June – 30 June 2017

8. **Exposure of Faculty to Universities Abroad:** Under this scheme, BITS supports faculty members to spend a few weeks at a University abroad (during vacation period). The scheme supports those faculty members who have not visited foreign universities earlier or in the near past. During such exposure, it is expected that faculty members will (among others): (i) gain first-hand exposure to current/latest advances in research, etc., (ii) gain an understanding of lab resources required to initiate research or to use (or to program) equipment, (iii) gain an understanding on how classroom- or lab-based instruction is organized or imparted, AND/OR, (iv) gain an understanding of research methodology, cross-disciplinary collaboration, or collaboration across institutions, etc. Seven faculty from four campuses- Pilani, Goa, Hyderabad and Dubai utilized this opportunity, as per details given below:

S.No	PSRN	Name of the Faculty Member	Campus	Department	University Visited	Duration of the Visit
1	G0541	Rayson Alex	Goa	Hum. & Soc. Sci.	University of California, Los Angeles	25 May - 10 July 2017
2	P2873	Tufan Chandra Bera	Pilani	Mechanical	Purdue University, USA	19 May - 17 July 2017
3	P1917	A.K. Digalwar	Pilani	Mechanical	University of Southern Denmark, Denmark	24 May - 30 June 2017
4	P2036	Suresh Gupta	Pilani	Chemical	Texas A&M University, USA	20 May -20 July 2017
5	H0354	Manish Kumar	Hyderabad	Mathematics	Central University of Florida, Oriando, Florida	27 June – 25 July 2017
6	H0125	Pradyumn Kumar Sahoo	Hyderabad	Mathematics	CERN, Geneva, Switzerland	22 May - 12 June 2017
7	H0378	Jagan Mohan J	Hyderabad	Mathematics	University of Dayton, Ohio, USA	22 May - 15 July 2017

9. Apart from attracting and selecting talented and competent people, the division is also intensely focused on retaining the talent. Several staff welfare measures, relook on compensation and benefits, policies related to career growth and related guidelines, health and family welfare, housing, rewards and recognitions are under discussion.
10. As many of these activities fall in line with core human resource management activities, it was proposed to create a human resource centre / office and appoint human resource manager in earlier years. In the year 2017, at Hyderabad Campus, one HR Manager has been appointed to support the HR related activities.
11. To understand the reasons for faculty attrition, exit interviews have been initiated in all the campuses. HR Team of respective campus has assisted FAD in this process.

## Practice School Division

### University-Industry Linkages

An important aspect of education at BITS is its institutionalized linkages with the world of work. The Institute attaches great importance to the University-Industry Linkages and gives mutually reinforcing thrust to it through various avenues like Practice School (PS), Work Integrated Learning Programmes (WILP), Technology Innovation Centre (TIC) and off-campus Ph.D.

### Practice School Programme

All integrated first degree and higher degree programmes of the Institute provide for a Practice School option. The past statistics show that almost all the students admitted, opt for this programme. During the calendar year 2017 the Practice School programme was operated at 517 stations, with 12 stations hosting both Practice School-I (PS-I) and Practice School-II (PS-II), accommodating 4503 students and 176 faculty members. Categorization of PS stations is given below:

Sr.No.	Categories of Organizations	No. of Organization in	
		PS-II & PS for Higher Degree	PS-I
1.	Banks and other Financial Institutions	32 (18)	2 (2)
2.	Design, Development, Consultancy and Software Organization.	220 (175)	48 (45)
3.	National Research Laboratories and other Research centers	21 (21)	37 (32)
4.	Production, Manufacturing and Public Work Units	42 (46)	106 (98)
5.	Publishing Houses, News Agencies and Museums	5 (1)	4 (5)
<b>Total</b>		<b>320 (261)</b>	<b>197 (182)</b>

In 2017, an integrated practice school allotment for 4503 students was carried out across Pilani, Goa and Hyderabad campuses. The statistical details of the centre-wise distribution of students and faculty at PS-I stations are given in **Annexure A-7** followed by the details of the Operational Statistics of PS-II and PS for higher degree in **Annexure A-8**. Growth statistics of PS-I, PS-II and PS for higher degree are given in **Annexure A-9**, while facilities available at various PS-II stations are given in **Annexure A-10**.

Following is the break up of students who were registered in PS-I, PS-II & PS for Higher Degree:

PS-I	Summer Term 2016-2017	(2184)	2189
PS-II	II Semester 2016-2017	(762)	845
	I Semester 2017-2018	(1072)	1175
<b>PS for Higher Degree</b>			
	II Semester 2015-2016	(237)	294
	I Semester 2016-201	(00)	00
<b>Total</b>		<b>(4255)</b>	<b>4503</b>

**Note:-**The figures shown in brackets relate to the year 2017.

### PS-II Assignments: Institute's Contribution to Industrial Development

Apart from developing skills in professional judgment, data-handling, documentation, decision making ability, etc., in students, the PS-II assignments also relate to real-life problems of the host organizations. PS-II assignments listed in **Annexure A-11** were completed by the final year students at their respective PS-II stations during the year 2017. These assignments directly.

Contribute to the requirements of industrial R & D by fulfilling the ongoing production, modernization, design, development and research needs of the participating industries.

During the year under review 2189 students of Pilani (859), Goa (623) & Hyderabad (707) campuses accompanied by 111 faculty members attended Practice School-I and 2314 students attended Practice School-II. The entire Practice School-II operations were supervised by 65 faculty members residing at the respective locations. For the year 2017, 204 dual degree students have exercised their option of Practice School for both the degrees.

In appreciation of the contribution made by our students towards the professional well-being of the organizations, a stipend/out-of-pocket allowance is paid to them by the organizations. The amount of stipend/out-of-pocket allowance has over the years increased, and today the maximum amount paid is Rs.90,000/- p.m. at Nutanix Technologies India Pvt.Ltd, Bangalore. The average stipend is around Rs.23,000/-

p.m. per student. In addition, other facilities like accommodation, subsidized lunch, to & fro travel, etc. are also provided by some of the organizations. Students are paid TA & DA as per the rules of the organization. All overseas organizations pay for to & fro air travel and health insurance in addition to stipend.

During the year under review, the PS activities grew further with the introduction of 187 new PS-II stations (Table 1) and out of pocket allowance was increased at 22 PS-II stations (Table 2).

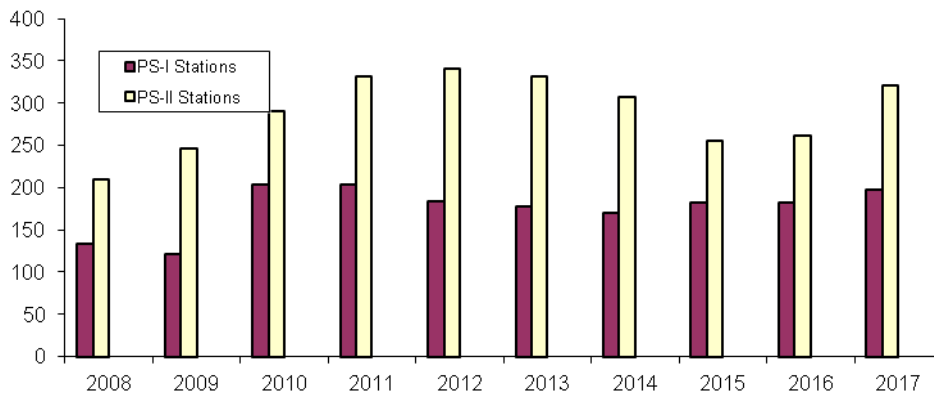


Table 1

## PS-II Stations Added during the Year 2017

S.No.	PS-II Station	Out of pocket Allowance (Rs. Per Month)
<b>AHMEDABAD</b>		
1.	Fairfield and Power Drive Technology Pvt Ltd	Rs.5,000/-p.m.
2.	SKF India Ltd.	Rs.6,000/-p.m.
<b>BANGALORE</b>		
3.	Altisource Business Solutions	Rs.35,000/-p.m.
4.	Amazon Fulfillment Center	Rs.40,000/-p.m.
5.	American Express India	Rs.30,000/-p.m.
6.	Analog Devices - Design and Simulation	Rs.25,000/-p.m.
7.	Analog Devices - Design Verification	Rs.25,000/-p.m.
8.	Apple India Private Limited	Rs.45,000/-p.m.
9.	Aranca	Rs.15,000/-p.m.
10.	Aruba Networks - Network Programming	Rs.25,000/-p.m.
11.	CA Technologies	Rs.30,000/-p.m.
12.	Capillary Technologies - Testing Automation	Rs.45,000/-p.m.
13.	Centre for Cellular And Molecular Platforms (C-CAMP)	Rs.12,000/-p.m.
14.	Cisco Systems (India) Pvt. Ltd - Embedded Systems	Rs.44,000/-p.m.
15.	Cisco Systems (India) Pvt. Ltd - Machine Learning	Rs.44,000/-p.m.
16.	Cisco Systems (India) Pvt. Ltd - Software Engineering	Rs.55,000/-p.m.
17.	Decision Resources Group	Rs.25,000/-p.m.
18.	Fiber Link	Rs.30,000/-p.m.
19.	GE Digital	Rs.30,000/-p.m.
20.	HSBC	Rs.25,000/-p.m.
21.	IMS Health	Rs.16,500/-p.m.
22.	Infinera - Embedded Software Testing	Rs.35,000/-p.m.
23.	Infinera - VLSI Testing	Rs.35,000/-p.m.
24.	Infiniti Research	Rs.20,000/-p.m.
25.	InMobi - Software Development	Rs.25,000/-p.m.
26.	InMobi - Supply Chain	Rs.25,000/-p.m.
27.	Intel - Computer and VLSI Architecture	Rs.22,000/-p.m.
28.	Intel - Embedded Software	Rs.22,000/-p.m.
29.	Intel - GPU and VLSI Design	Rs.22,000/-p.m.
30.	Intel - Machine Learning	Rs.22,000/-p.m.

S.No.	PS-II Station	Out of pocket Allowance (Rs. Per Month)
31.	Intel - Testing & Verification	Rs.22,000/-p.m.
32.	Intel India Technology Pvt. Ltd.- VLSI Design	Rs.28,000/-p.m.
33.	J. P MORGAN CIB - e trading	Rs.60,000/-p.m.
34.	JPMC CIB Operations	Rs.35,000/-p.m.
35.	JPMC CIB Operations - Robotics Automation	Rs.26,250/-p.m.
36.	KPIT Technologies	Rs.15,000/-p.m.
37.	Novozymes South Asia Pvt. Ltd.	Rs.15,000/-p.m.
38.	Nvidia Graphics - Hardware	Rs.35,000/-p.m.
39.	Petasense - Embedded Software	Rs.40,000/-p.m.
40.	Petasense - Machine Learning	Rs.40,000/-p.m.
41.	Petasense - Services & App Development	Rs.40,000/-p.m.
42.	Philips Research India	Rs.25,000/-p.m.
43.	Robert Bosch Center for Cyber Physical Systems	Rs.10,000/-p.m.
44.	S.R. BATLIBOI & CO. LLP	Rs.21,100/-p.m.
45.	Samsung R &D Institute - Image & Video Processing	Rs.35,000/-p.m.
46.	Samsung R &D Institute - Software Systems	Rs.35,000/-p.m.
47.	Sattva Media & Consulting Pvt Ltd	Rs.12,000/-p.m.
48.	Seagate Technology HDD (India) Pvt. Ltd.	Rs.30,000/-p.m.
49.	Siftery	Rs.35,000/-p.m.
50.	SKF India Ltd.	Rs.6,000/-p.m.
51.	StateStreet Global Advisors	Rs.40,000/-p.m.
52.	Symantec Software Solutions Pvt. Ltd – Data Analytics	Rs.40,000/-p.m.
53.	Symantec Software Solutions Pvt. Ltd. - App Development	Rs.40,000/-p.m.
54.	TapChief	Rs.10,000/-p.m.
55.	Tata Digital Health	Rs.45,000/-p.m.
56.	Texas Instruments (I) Pvt. Ltd. - RF Micro Electronics	Rs.30,000/-p.m.
57.	Texas Instruments (I) Pvt. Ltd. -VLSI Design	Rs.30,000/-p.m.
58.	TimeInc.(Time Analytic & Shared Services Private(Limited))	Rs.15,500/-p.m.
59.	Tonbo Imaging Pvt Ltd. - Embedded Systems	Rs.28,000/-p.m.
60.	Tonbo Imaging Pvt Ltd. - Image & Video Processing	Rs.28,000/-p.m.
61.	Toshiba Software (India) Pvt Ltd	Rs.30,000/-p.m.
62.	Viacom 18 Pvt Ltd	Rs.30,000/-p.m.
63.	Vizury Interactive Solutions	Rs.25,000/-p.m.
64.	Zendrive India Pvt Ltd	Rs.40,000/-p.m.
65.	Zeotap India Pvt. Ltd.	Rs.45,000/-p.m.
<b>BHOPA</b>		
66.	LHD INDIA	Rs.25,000/-p.m.
<b>CHENNAI</b>		
67.	Amazon Fulfillment Center	Rs.40,000/-p.m.
68.	HDFC Bank	Rs.20,000/-p.m.
69.	Qualcomm India Pvt Limited	Rs.20,000/-p.m.
70.	S.R. BATLIBOI & CO. LLP	Rs.21,100/-p.m.
<b>DELHI</b>		
71.	Edupristine	Rs.40,000/-p.m.
72.		
<b>FARIDABAD</b>		
73.	Rite Infotech Pvt Ltd	Rs.18,000/-p.m.
<b>GURGAON</b>		
74.	Amazon Fulfillment Center	Rs.40,000/-p.m.
75.	Ernst & Young Pvt Ltd.	Rs.15,100/-p.m.
76.	Futures First Info Services Pvt Ltd	Rs.40,000/-p.m.
77.	IMS Health	Rs.16,500/-p.m.



S.No.	PS-II Station	Out of pocket Allowance (Rs. Per Month)
78.	Of Business.com	Rs.30,000/-p.m.
79.	Orange Business Services	Rs.30,000/-p.m.
80.	PricewaterhouseCoopers (PWC)	Rs.40,000/-p.m.
81.	Rivigo Services Pvt Ltd	Rs.25,000/-p.m.
82.	S.R. BATLIBOI & CO. LLP	Rs.21,100/-p.m.
<b>HALOL</b>		
83.	Aditya Birla Insulators	Rs.15,000/-p.m.
<b>HARIHAR</b>		
84.	Grasim Polyfiber	Rs.5,000/-p.m.
<b>HYDERABAD</b>		
85.	Amazon Business Intelligence	Rs.40,000/-p.m.
86.	Amazon Fulfillment Center	Rs.40,000/-p.m.
87.	Autodesk	Rs.25,000/-p.m.
88.	AutoRABIT	Rs.27,000/-p.m.
89.	Biophore	Rs.8,000/-p.m.
90.	CA Technologies	Rs.40,000/-p.m.
91.	Cisco Systems (India) Pvt. Ltd - Software Engineering	Rs.44,000/-p.m.
92.	Dr. Reddys Laboratories	Rs.10,000/-p.m.
93.	GGK Technologies - Data Analytics	Rs.20,000/-p.m.
94.	GGK Technologies - Mobile App Development	Rs.20,000/-p.m.
95.	GGK Technologies - Mobile Services	Rs.20,000/-p.m.
96.	Jochebed Tech Solutions	Rs.20,000/-p.m.
97.	Market Data Forecast	Rs.8,000/-p.m.
98.	Merilytics	Rs.20,000/-p.m.
99.	Mol De Analytics	Rs.35,000/-p.m.
100.	Mytrah Energy (India) Private Limited	Rs.25,000/-p.m.
101.	Next Education India Pvt. Ltd.	Rs.30,000/-p.m.
102.	NR Equipments	Rs.12,000/-p.m.
103.	Nvidia Graphics - Hardware	Rs.35,000/-p.m.
104.	Nvidia Graphics - Software	Rs.35,000/-p.m.
105.	Red Pine Signals	Rs.20,000/-p.m.
106.	Synergiz Global	Rs.15,000/-p.m.
107.	Synopsys India Pvt. Ltd.	Rs.25,000/-p.m.
108.	Tau Films India Pvt. Ltd	Rs.30,000/-p.m.
109.	Thomson Reuters	Rs.16,600/-p.m.
110.	Xilinx India Technology Services Pvt. Ltd.	Rs.20,000/-p.m.
<b>JAIPUR</b>		
111.	Futures First Info Services Pvt. Ltd.	Rs.20,000/-p.m.
<b>KOLKATA</b>		
112.	IFB Engineering Division	Rs.15,000/-p.m.
<b>MUMBAI</b>		
113.	Aditya Birla Corporate World Class Manufacturing	Rs.22,000/-p.m.
114.	AlphaMD	Rs.17,000/-p.m.
115.	Amazon Operations	Rs.30,000/-p.m.
116.	Credit Suisse - Credit Analytics	Rs.40,000/-p.m.
117.	Credit Suisse - Global Markets Controls COO	Rs.40,000/-p.m.
118.	Credit Suisse - Market Risk Quant	Rs.40,000/-p.m.
119.	Credit Suisse - MLR Non-quant	Rs.40,000/-p.m.
120.	Credit Suisse - Model Risk Management	Rs.40,000/-p.m.
121.	Credit Suisse - Prime Services	Rs.40,000/-p.m.
122.	Credit Suisse - Risk & Finance Data Analytics Reporting	Rs.40,000/-p.m.
123.	Edelweiss Financial Services	Rs.30,000/-p.m.

S.No.	PS-II Station	Out of pocket Allowance (Rs. Per Month)
124.	EduPristine - Neev Knowledge Management Pvt. Ltd.	Rs.40,000/-p.m.
125.	Grasim Industries Pulp and Fibre Division	Rs.22,000/-p.m.
126.	Here Maps - Data Structures	Rs.30,000/-p.m.
127.	Here Maps - Distributed Data	Rs.30,000/-p.m.
128.	Here Maps - Software Testing	Rs.30,000/-p.m.
129.	Indus OS	Rs.30,000/-p.m.
130.	J P Morgan Services - Quant	Rs.40,000/-p.m.
131.	J P Morgan Services -Centralized Research Group(CRG)	Rs.40,000/-p.m.
132.	J P Morgan Services- Global Markets Group(GMG)	Rs.40,000/-p.m.
133.	J P Morgan services- Global research Centre(GRC)	Rs.40,000/-p.m.
134.	J. P MORGAN CIB - e trading	Rs.60,000/-p.m.
135.	JPMC CIB Operations	Rs.35,000/-p.m.
136.	JPMC CIB Operations- Robotics Automation	Rs.40,000/-p.m.
137.	MSCI	Rs.40,000/-p.m.
138.	MSCI (Global Implementation Services)	Rs.40,000/-p.m.
139.	MSCI (IMR)	Rs.40,000/-p.m.
140.	MSCI (NPD " Index Research)	Rs.40,000/-p.m.
141.	MSCI (Solution Management)	Rs.40,000/-p.m.
142.	Multi Commodity Exchange of India Ltd.	Rs.15,000/-p.m.
143.	My POS Technologies Pvt. Ltd.	Rs.50,000/-p.m.
144.	Nomura Global Finance	Rs.50,000/-p.m.
145.	Nomura Global Markets	Rs.50,000/-p.m.
146.	Nomura Global Risk	Rs.50,000/-p.m.
147.	S.R. BATLIBOI & CO. LLP	Rs.21,100/-p.m.
148.	Star TV	Rs.65,000/-p.m.
149.	Thornton Tomasetti	Rs.15,000/-p.m.
150.	UPGRAD	Rs.40,000/-p.m.
151.	Viacom18 Media Pvt. Ltd.	Rs.30,000/-p.m.
152.	Worley Parsons India	Rs.19,000/-p.m.
153.	Yrals Digital India Pvt.Ltd.	Rs.16,000/-p.m.
<b>NEW DELHI</b>		
154.	Ecom Express Pvt. Ltd.	Rs.30,000/-p.m.
155.	National Council of Applied Economic Research	Rs.6,500/-p.m.
<b>NOIDA</b>		
156.	Genpact	Rs.15,000/-p.m.
157.	Indiamart Intermesh Ltd.	Rs.20,000/-p.m.
158.	Mentor Graphics	Rs.30,000/-p.m.
159.	Pitney Bowes Software India Pvt. Ltd.	Rs.30,000/-p.m.
<b>PORVORIM</b>		
160.	Browntape Technologies Pvt. Ltd.	Rs.25,000/-p.m.
<b>PUNE</b>		
161.	Autodesk India Pvt. Ltd.	Rs.25,000/-p.m.
162.	Cadence Design Systems India Pvt Ltd. - CAD Software	Rs.18,000/-p.m.
163.	Cadence Design Systems India Pvt Ltd. - Processor Design	Rs.18,000/-p.m.
164.	Credit Suisse - Risk & Finance Data Analytics Reporting	Rs.40,000/-p.m.
165.	Credit Suisse- Finance Change	Rs.40,000/-p.m.
166.	Divgi TorqTransfer Systems Pvt. Ltd Shivare	Rs.12,500/-p.m.
167.	Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari	Rs.12,500/-p.m.
168.	EMC	Rs.25,000/-p.m.
169.	Geometric Limited	Rs.15,600/-p.m.
170.	IDeaS - SAS - Analytics	Rs.25,000/-p.m.
171.	IDeaS - SAS - Software Development	Rs.25,000/-p.m.

S.No.	PS-II Station	Out of pocket Allowance (Rs. Per Month)
172.	Johnson Controls	Rs.10,000/-p.m.
173.	Nvidia Graphics - Hardware	Rs.35,000/-p.m.
174.	Nvidia Graphics - Software Systems	Rs.35,000/-p.m.
175.	Searce	Rs.25,000/-p.m.
176.	SKF India Ltd.	Rs.6,000/-p.m.
177.	Spicer India Ltd.	Rs.8,000/-p.m.
178.	Symantec Software Solutions Pvt. Ltd - Data Analytics	Rs.40,000/-p.m.
179.	Symantec Software Solutions Pvt. Ltd. - Data Structures and Algorithms	Rs.40,000/-p.m.
180.	Veritas Software Technologies India	Rs.40,000/-p.m.
<b>RISHRA</b>		
181.	Aditya Birla Insulators	Rs.15,000/-p.m.
<b>SANAND</b>		
182.	Tata Motors Ltd.	Rs.18,000/-p.m.
<b>SECUNDERABAD</b>		
183.	Ducere Technologies - Embedded Systems	Rs.20,000/-p.m.
184.	Ducere Technologies - Pattern Recognition	Rs.20,000/-p.m.
<b>SIRSI</b>		
185.	Divgi TorqTransfer Systems Pvt. Ltd. - Bhosari	Rs.12,000/-p.m.
<b>Thailand</b>		
186.	Aditya Birla Chemicals(Thailand)Ltd-Sulphites	Rs.5,000/-p.m.
<b>TRIVANDRUM</b>		
187.	UST Global Infiniy Labs	Rs.10,000/-p.m.

Table 2

## Increase in Monthly Stipend at PS-II Stations during the Year 2017

S.No	PS-II Stations	Monthly Stipend / out of pocket allowance	
		During 2016	During 2017
1	Altair Engineering India Pvt. Ltd., Bangalore	Rs.15,000/-p.m.	Rs.21,500/-p.m.
2	ARM Embedded Technologies Private Limited, Bangalore	Rs.20,000/-p.m.	Rs.28,000/-p.m.
3	Bundl Technologies Private Limited (Swiggy), Bangalore	Rs.20,000/-p.m.	Rs.40,000/-p.m.
4	Capillary Technologies - Testing Automation, Bangalore	Rs.40,000/-p.m.	Rs.55,000/-p.m.
5	EnSci - A Unit of Weir Minerals India Pvt. Ltd., Bangalore	Rs.10,000/-p.m.	Rs.20,000/-p.m.
6	Goldman Sachs India Pvt. Ltd. - Operations, Bangalore	Rs.25,000/-p.m.	Rs.35,000/-p.m.
7	National Instruments Systems (India) Pvt. Ltd., Bangalore	Rs.20,000/-p.m.	Rs.30,000/-p.m.
8	Nvidia Graphics - Hardware, Bangalore	Rs.30,000/-p.m.	Rs.35,000/-p.m.
9	Nvidia Graphics –Software, Bangalore	Rs.30,000/-p.m.	Rs.35,000/-p.m.
10	Robert Bosch Center for Cyber Physical Systems, Bangalore	Rs.10,000/-p.m.	Rs.20,000/-p.m.
11	Sabre Holdings(Formely Sabre Travels), Bangalore	Rs.25,000/-p.m.	Rs.30,000/-p.m.
12	Sattva Media & Consulting Pvt Ltd, Bangalore	Rs.12,000/-p.m.	Rs.20,000/-p.m.
13	TESCO Hindustan Service Centre , Bangalore	Rs.20,000/-p.m.	Rs.30,000/-p.m.
14	Tonbo Imaging Pvt Ltd. - Image & Video Processing , Bangalore	Rs.15,000/-p.m.	Rs.28,000/-p.m.
15	Toshiba Software (India) Pvt Ltd , Bangalore	Rs.25,000/-p.m.	Rs.30,000/-p.m.
16	VMware Software India Pvt. Ltd. , Bangalore	Rs.30,000/-p.m.	Rs.35,000/-p.m.
17	CA Technologies , Hyderabad	Rs.25,000/-p.m.	Rs.30,000/-p.m.
18	Nvidia Graphics - Hardware , Hyderabad	Rs.30,000/-p.m.	Rs.35,000/-p.m.
19	Development Consultants Pvt. Ltd. (DCPL) , Mumbai	Rs.8,000/-p.m.	Rs.8,500/-p.m.
20	Hourglass Research , Mumbai	Rs.15,000/-p.m.	Rs.17,000/-p.m.
21	Grasim Industries Ltd. , Nagda	Rs.5,000/-p.m.	Rs.8,500/-p.m.
22	Reflexis Systems India Pvt Ltd., Pune	Rs.20,000/-p.m.	Rs.40,000/-p.m.

## PS Planning

The preparation for running Practice School courses starts almost one year in advance at the PS Division. The process of preparation of student profile, analysis of student preferences and the student allotment for Practice School courses is completely computerized.

## PS Instruction Monitoring

After successfully working with WEPSIMS for a number of years, PS Instruction Monitoring has now introduced PSMS (Practice School Management System). It is an online web enabled tool for an efficient and quick data entry, data retrieval and data management. It is efficiently used for automatic letter generation, evaluation and grading for PS I and PS II and student feedback. PS Division makes constant efforts to maintain and increase the efficiency of instruction monitoring.

## Students' Involvement in PS Division-based Projects

The PS Division of the Institute has continued to involve students in analysis, documentation, and educational research-based activities of the Division through projects based on Organizational Aspects, Computer Project, First Degree Thesis and Higher Degree Dissertation. In this regard PS Division has involved students in the following Division-based projects:

1. Development of software related to students and faculty allotment; maintenance of zonal and data analysis related to allotment of students at various stations; modification of the already developed allotment modules.
2. Computerization of PS accounts processing.
3. Development and maintenance of web based tools for instruction to PS II faculty; development and modification of software modules for grade and feedback analysis.
4. BITS Pilani offers scholarship of Rs. 66,000/- (for the entire duration of PS-II) to selected PS-II students with CGPA 7.00 and above at various research organizations.

## Academic Research

### First Degree Thesis

During the year, 352 First-Degree thesis projects have been completed at Pilani campus. The list of completed First-Degree thesis during Second Semester 2016-17 and First Semester 2017-18 is given in **Annexure 'B1-9'**.

### Higher Degree Dissertation

During the year, 64 Higher Degree dissertation projects have been completed in Pilani campus. The list of completed Higher Degree Dissertations **during Second Semester 2016-17 and First Semester 2017-18** is given in **Annexure 'B1-10'**.

### Ph.D. Programme

#### (a) Award of Ph.D. Degree (viva conducted)-Pilani camous

S.No	ID No	Name	Thesis Title	Department	Supervisor	Co-Supervisor
1	2009PHXF412P	Gagandeep Singh Saggi	Characterization of Apicoplast-targeted Isoprenoids Biosynthesis Pathway Enzymes from Plasmodium vivax and P. falciparum	Biological Sciences	Vishal Saxena	Nil
2	2007PHXF424P	PA Boopathi	In vivo transcriptome Profiling of Plasmodium vivax Clinical Isolates: New Insights into Severe Malaria	Biological Sciences	AK Das	Nil
3	2011PHXF420P	Rajnish Prakash Singh	Molecular Characterization of ACC Diaminase Producing Bacteria for Induced Systemic Tolerance in Wheat (Triticum aestivum L.)	Biological Sciences	PN Jha	Nil
4	2011PHXF0011P	Gurpreet Kaur Sidhu	Analyzing Structural and Functional Evolutionary links between RuBisCO and Carbo Concentrating Mechanism (CCM) Proteins	Biological Sciences	Sandhya Mehrotra	Nil

S.No	ID No	Name	Thesis Title	Department	Supervisor	Co-Supervisor
5	2011PHXF0010P	Zarna Rajeshkumar Pala	Characterization of SUF Pathway (Iron-Sulphur Cluster Biogenesis) Functional in the Apicoplast of Plasmodium vivax	Biological Sciences	Vishal Saxena	Nil
6	2011PHXF0404P	Rini Dhawan	Immune Responses of Anopheles stephensi and Anopheles culicifacies against Malaria Parasite development	Biological Sciences	Lalita Gupta	Nil
7	2011PHXF022P	Meenakshi Pilania	Organoiodines in the Sythesis and Functionalization of some Novel Bioactive Heterococles	Chemistry	Dalip Kumar	Nil
8	2011PHXF021P	Sunita Choudhary	Ionic Liquid-supported Sulfonyl Hydrazine and Iodine Reagents: Synthesis and Application in Selected Organic Transformations	Chemistry	Anil Kumar	Nil
9	2011PHXF018P	V.Arun	Organoiodine-Promoted Strategies for the Construction of Selected Bioactive Heterocycles.	Chemistry	Dalip Kumar	Nil
10	2010PHXF422P	Kumari Suman	Crystal Engineering of Co-ordination Polymers (CPs) Derived from Bis-pyridyl amides and Analyzing Their Structural Transformations Triggered by External Stimulus	Chemistry	Madhushree Sarkar	Nil
11	2010PHXF009P	Ashok Sharma	Nickel Catalyzed Coupling Reactions and Studies on Pyranopyrazole Heterocyclic Molecules	Chemistry	Paritosh Shukla	Nil
12	2012PHXF0026P	Pinku	Synthesis of Imiazol[1,2- $\alpha$ ]pyridines and their Functionalization via C-C and C-N Bond Formation using Transition Metal Catalysts	Chemistry	Anil Kumar	Nil
13	2010PHXF0426P	Archana Choudhary	Synthesis and Characterization of "Ship-in-a-Bottle" Complexes inside the Microporous and Mesoporous Matrials	Chemistry	Saumi Ray	Nil
14	2009PHXF436P	Avinash Gautam	Design and Implementation of Efficient Coordination Algorithms for Multi-Robot Systems	Comp Sci & Info System	Sudeept Mohan	Nil
15	2008PHXF0023P	Rajan Pandey	Empirical Investigation and Analysis of Volatility Forecasting Models for the Indian Stock Market	Economics & Finance	Arya Kumar	Nil
16	2009PHXF026P	Vinita Tiwari	Design and Performance Analysis of Hgh Spded Optical Communication Skills	Electrical & Electronics Engg	V.K.Chaubey	Nil
17	2004PHXF0021P	Swati D. Keskar	An Innovative Wearable Computing Framework for Erly Detection of Cardiac Anomalies	Electrical & Electronics Engg	Rahul Banerjee	Nil
18	2008PHXF0436P	Palanivel G.	Compression and error robustness performance	Electrical & Electronics	Biju K. Joseph	Nil

S.No	ID No	Name	Thesis Title	Department	Supervisor	Co-Supervisor
			improvement of a scalable multi view video coding frame work	Engg		
19	2009PHXF0041P	Lucky Sharan	Study and Analysis of Spectrally Efficient Modulation Formats in High Speed DWDM Optical Systems	Electrical & Electronics Engg	VK Chaubey	Nil
20	2011PHXF0406P	Rajni Singh	An Empirical Study on the Predictive Role of Socio-demographic and Socio-psychological Factors on Secondary School Students Achievements in Learning ESL	Hum Soc Sci	SK Choudhary	Nil
21	2012PHXF0002P	Neerja Vyas	Narrative Form of Selected Hindi Biopics: An Empirical Study of Style and Structure	Hum Soc Sci	Sushila Shekhawat	Nil
22	2011PHXF031P	Arun Kumar Poonia	Communication Strategies for Promoting Tourist: Discursive Analysis of Television Campaign: Khushboo Gujarat Ki	Hum Soc Sci	GS Chauhan	Nil
23	2008PHXF015P	Sanjeev Saxena	Impact of Service Orientation on Organizational Performance	Management	Prashant Mishra	Nil
24	2009PHXF0021P	RN Bansal	Investigating Impact of Perceived Leader's Behaviour on Employees' Motivation and Job Satisfaction in a Select Nonprofit Healthcare Organisation	Management	Meenakshi Malhotra	Nil
25	2011PHXF0422P	Nirankush Dutta	Role of Trust in Online Social Media Marketing: A Model Building Approach	Management	Anil K. Bhat	Nil
26	2011PHXF405P	Sachin Kumar	A Statistical Study of Demographic Models with Reference to Some Indian States	Mathematics	CB Gupta	Nil
27	2009PHXF431P	Pavan Kumar Potdar	Development of Agility Enhancement Strategies for Agile Manufacturing	Mechanical Engg	Srikanta Routroy	Nil
28	2013PHXF0001P	Simarpreet Singh	Trans-critical CO2 System for Warm Climate: An Evaluation of System Configurations and Scroll Expander	Mechanical Engg	MS Dasgupta	Nil
29	2011PH42115P	C.V.Sunil Kumar	Design of Supplier Development Programs for Indian Manufacturing Companies - A Supply Chain Perspective	Mechanical Engg	Srikanta Routroy	Nil
30	2009PHXF0032P	Mahaveer Singh	Design, Synthesis and Evaluation of Novel Anticancer Agents	Pharmacy	H.R. Jadhav	Nil
31	2008PH08411P	Deepali Gupta	Behavioral and Neuro-pharmacological Screening of Potential Serotonergic Ligands for the Management of Depression and Anxiety Co-morbid with Type-1 Diabetes Mellitus	Pharmacy	R. Mahesh	Nil
32	2010PHXF405P	Sourabh	Design, Synthesis and	Pharmacy	R. Mahesh	Nil

S.No	ID No	Name	Thesis Title	Department	Supervisor	Co-Supervisor
		Mundra	Screening of Potential Anti-malarial Agents			
33	2012PHXF0404P	Subhash Chander	Study of Novel NNRTIs as Potential Agents Against HIV-1 and Opportunistic Infections	Pharmacy	S. Murugesan	Nil
34	2011PHXF026P	Jitendra Kumar	Effect of Nanomaterial Dopants on the Physical Properties of Liquid Crystals	Physics	V. Manjuladevi	Nil
35	2011PHXF025P	Keerti Choudhary	Studies on Liquid Crystals and Nanocomposites at Interfaces	Physics	V. Manjuladevi	Nil
36	2011PHXF045P	Devanarayanan VP	Development of Surface Plasmon Resonance based Instrument with a Novel Opto-mechanical Scanning Mechanism	Physics	RK Gupta	Nil
37	2011PHXF030P	Surender Pratap	Study of Low Dimensional Systems with NEGF and RMT Approach	Physics	Niladri Sarkar	Nil
38	2009PHXF0023P	Ajit Kumar Vidarthi	Development of Integrated Environmental Pollution Index for Industrial Clusters	Civil Engg	AP Singh	-
39	2012PHXF403P	Varun Chotia	Public Infrastructure Investment, Economic Growth and Fiscal Sustainability in India: An Empirical study	Economics & Finance	NVM Rao	Nil
40	2009PHXF0038P	Ashish Misra	Framework for Translation of C/C++ Applications on Reconfigurable Computing Systems	Electrical & Electronics Engg	Kota Solomon Raju	Abhijit Rameshwar Asati
41	2010PHXF416P	Tantak Mukund P.	Design, Synthesis and Anticancer Activity Studies of Selected Indole-Based Heterocycles	Chemistry	Dalip Kumar	Anil Kumar
42	2008PHXF433P	Vineet Kumar	Iris Localization in Iris Recognition System : Algorithms and Hardware Implementation	Electrical & Electronics Engg	Abhijit Asati	Anu Gupta
43	2013PHXF307P	Rajiv Agarwal	An Empirical Study of Career Choices of Successors in Family Managed Businesses in Indian Context	Economics & Finance	Keith D'Souza	Arya Kumar
44	2009PHXF432FP	Mayuri A. Digalwar	Energy Efficient Multicore Scheduling Algorithms for Real Time Systems	Comp Sci & Info System	Sudeept Mohan	Biju K. R.
45	2010PHXF457P	Himanshu Kaushal	Studies on Immunological Responses to Parasite Surface Antigen as a Potential Vaccine Candidate against Human Leishmaniasis and Estimation of Asymptomatic Leishmania Infections in the Endemic areas	Biological Sciences	Poonam Salotra	Dr. Sanjeev Kumar
46	2012PHXF0418P	Kaushal Pathak	Contribution of Liver Fat and Visceral Fat to Cardiometabolic Risk In Diabetic Patients in India	Pharmacy	Anookh Mohanan	HR Jadhav
47	2011PHXF0037P	Preeti Tiwari	An Empirical Investigation into Determinants of Social Entrepreneurial Intentions	Management	AK Bhat	Jyoti Tikoria

S.No	ID No	Name	Thesis Title	Department	Supervisor	Co-Supervisor
48	2011PHXF0418P	Satish Mohanty	Vibro-Acoustic Health Monitoring of Bearings using Signal Processing Techniques	Electrical & Electronics Engg	KK Gupta	K Solomon Raju
49	2011PHXF0421P	Arunima Rana	Investigations into Modeling Online Brand Equity	Management	Anil Bhat	Leela Rani
50	2011PHXF015P	Ganesh M. Shelke	Development of Synthetic Methods for Selected Indole-Based Heterocyclic Compounds from Indole, Isatin and Indoline-2-thione	Chemistry	Anil Kumar	Mukund Jha
51	2009PHXF0028P	Ritu Arora	A Framework and Tool for Supporting Collaborative Work in Software Development	Comp Sci & Info System	Sanjay Goel	R.K. Mittal
52	2012PHXF0025P	Arun Nihal Singh	Investigation, Mapping and Treatment Techniques for Fluoride, Nitrate and TDS in Groundwater of Shekhawati Region (Rajasthan, India)	Civil Engg	Anupam Singhal	Rajiv Gupta
53	2012PHXF0423P	Neha Arora	Investigation on Transformation of Carbon Black to Carbon Nanotube using Arc Discharge Method	Mechanical Engg	NN Sharma	SS Islam
54	2011PHXF0007P	Somesh Mishra	Experimental Studies on Bio-mitigation of CO <sub>2</sub> and its Utilization for Product recovery and Process Development	Chemical Engg	Smita Raghuvanshi	Suresh Gupta
55	2013PHXP0107P	Kumar Avishek	Studies on Genration and Characterization of Live Attenuated Leishmania Parasites as Vaccine Candidates of Visceral Leishmaniasis	Biological Sciences	Poonam Salotra	Uma S. Dubey
56	2013PHXF0109P	Nitu Kumari	Identification and Characterization of Urinary Proteins as Post Surgery Surveillance Markers in Urothelial Carcinoma	Biological Sciences	Sunita Saxena	Usha Agarwal/ Uma S. Dubey
57	2013PHXF110P	Namita Singh	Studies on Immuno-molecular Pathways Triggered by Chlamydia trachomatis Infection in First Trimester Spontaneous Abortion	Biological Sciences	Sangita Rastogi	Vishal Saxena

**(b) Ph.D. Thesis Submitted and Under Process of Evaluation (Pilani campus)**

S.No	ID No	Name	Thesis Title	Dept	Supervisor	Co-Sup
1	2011PHXF0013P	Panchsheela Nogia	Targeting Cyanobacterial Bicarbonate Transporter BicA into Chloroplast of Model C3 Plants and Analyzing Transient Expressio and Localization	Biological Sciences	Sandhya Mehrotra	Nil
2	2010PHXF0413P	Isha Pandey	Comparative Genome Analysis and Localization of Hypothetical Conserved Plasmodial Proteins	Biological Sciences	A.K. Das	Nil



S.No	ID No	Name	Thesis Title	Dept	Supervisor	Co-Sup
3	2012PHXF0431P	Parik Kakani	The Role of Anopheles Heme Peroxidases in Mosquito Immunity against Blood-Borne Antinens and Divergent Expression of Anopheline Lineage-Specific Duplicated Genes	Biological Sciences	Sanjeev Kumar	Pankaj Kumar Sharma
4	2011PHXF0024P	Poonam Khedar	Click Chemistry Inspired Synthesis of Novel Triazolyl Conjugates and their Antimicrobial Activity	Chemistry	Anil Kumar	Nil
5	2012PHXF0018P	SM Abdul Shakoor	C-H Functionalization of Imidazo-Heterocycles and Exploration of Imidazolium-Supported Benzotriazole Reagent for Selective Organic Transformations	Chemistry	Rajeev Sakhuja	Nil
6	2012PHXF0006P	Anuradha Devi	Treatment of Spent Pickling Liquor and Applications of Pickling Sludge	Civil Engg	Anupam Singhal	Rajiv Gupta/ SK Verma
7	2013PHXF0421P	Shaik Hussain	A Study on the Effect of Carbonation on Properties of Concrete	Civil Engg	Dependu Bhunia	S.B. Singh
8	2011PHXF0044P	Sonal Kumari	Design and Implementation of Exact, Efficient, and Scalable Parallel Clustering Algorithms	Comp Sci & Information system	Naneet Goyal	Poonam Goyal
9	2011PHXF0416P	Priya Gupta	Design Exploration of low power arithmetic and SRAM circuits using subthreshold design techniques	Electrical & Electronics Engg	Anu Gupta	Abhijit Rameshwar Asati
10	2004PHXF0434P	Dinesh Kumar Tyagi	Survivable Routing Mechanisms in Optical WDM Networks	Electrical & Electronics Engg	V.K.Chauhan	Nil
11	2012PHXF0014P	Meenakshi Sharma	Understanding the Impact of Social Learning Forms on Environmentally sustainable Consumption Behavior among Children	Management	Leela Rani	Nil
12	2014PHXF0420P	Rajesh Kumar	An Investigation of Lab Scale Oxygen Enriched Bubbling Fluidized Bed Combustor for Cofiring Conditions	Mechanical Engg	Ravi Inder Singh	Nil
13	2013PHXF0002P	Sanjeev Jakhar	Design, Analysis and Development of Photovoltaic and Concentrating Photovoltaic Cooling Systems with Earth Water/Air Heat Exchanger	Mechanical Engg	Manoj Kumar Soni	Nil
14	2011PHXF0402P	CV Jayanthi	Perspectives on Some Aspects of Ethical Awareness in Corporate India - an Empirical Study	Management	U. Dhyani	Nil
15	2013PHXF0405P	R. Sruthi	Investigating the Molecular Mechanisms Involved in Neuroprotective Effect of Remote Limb Ischemic	Pharmacy	Rajeev Taliyan	Nil

S.No	ID No	Name	Thesis Title	Dept	Supervisor	Co-Sup
			Post Conditioning Against Cerebral Ischemic Reperfusion Injury and Associated Cognitive Deficits			
16	2012PHXF0406P	Pankaj Wadhwa	Design, Synthesis and Evaluation of Novel HIV-1 Integrase Inhibitors	Pharmacy	HR Jadhav	Nil
17	2011PHXF0425P	Jaya Abraham	Design and Evaluation of Novel Delivery Systems of Tapentadol for Enhanced Brain Delivery	Pharmacy	RN Saha	Nil
18	2012PHXF0405P	Almesh Kadakol	Role of Esculetin on Renin Angiotensin System and Epigenetics in the development of Cardiovascular and Renal Complications associated with Type 2 Diabetes	Pharmacy	Gaikwad Anil Bhanudas	Nil
19	2013PHXF0423P	Anuradha	Role of Epigenetics in Modulating Inflammatory Response Mediated by NF-kB through AT1 or AT2 receptors in the Development of Renal Failure under Type 2 Diabetic Condition	Pharmacy	Gaikwad Anil Bhanudas	Nil
20	2011PHXF0049P	L.Raja	Synthesis and Characterization of Organic Luminescent Materials (Zn(II) and Ru(III)) and Fabrication of Energy-Efficient Organic Light Emitting Diodes Using Alq3	Physics	S.Sindhu	Nil
21	2012PHXF0004P	Tridev A Mishra	Some Studies on Modifications of Low Dimensional Systems under the Application of Periodic Driving	Physics	Tapomoy G. Sarkar	JN Bandyopadhyay

#### Ph.D. Aspirant's & Part-Time Ph.D. Scheme

This scheme has attracted candidates from industry, R&D, education and entrepreneurial sectors towards the Ph.D. programme of the Institute. A number of candidates have been permitted in this year to appear in the Ph.D. qualifying examination. Topics of research identified by these candidates are of relevance to the organization and the society as a whole. Association of many such candidates and their supervisors has given the academic benefits to the ongoing students through special lectures delivered by them.

**Ph.D. Qualifying examination:** 194 Ph.D. candidates under aspirants, faculty development scheme and students category, were permitted to appear in the Ph.D. qualifying examination in the year 2017.

#### CSIR/UGC/DST Fellowship

Funding agencies such as Council of Scientific and Industrial Research (CSIR), University Grants Commission (UGC), DST, ICMR has provided 95 Junior and Senior Research Fellowships to Ph D students of the Institute. These research fellows are working for their Ph.D. degree across the campuses.

#### Fellowships under Externally Funded Projects

Apart from the above mentioned fellowship there are full time research scholars working on projects sponsored by various agencies like DST, DBT, CSIR, ICAR, NPMAS, Incozen, Inspire, BRNS, MNRE, UGC, ICMR, TCS etc. There are 109 research scholars at present in such position.

#### Sponsored Research Projects

Research projects sponsored by agencies such as UGC, CSIR, DST, DBT, ICMR, DRDO, ICAR and such other sponsoring agencies are in operation. A list of on-going research projects is given below:

**Sanctioned projects:**

S.No	Project Title	Principal Investigator	Sponsoring Agency	Amount Sanctioned
1	Hydrogen production from ethanol by low temperature reforming methods using modified Ni-Sn/Al <sub>2</sub> O <sub>3</sub> and Ni-Sn/CeO <sub>2</sub> Catalysts	Dr. Banasri Roy	DST	19.03
2	Introducing C <sub>3</sub> Bacterial bicarbonate transporters in enhanced photosynthetic performance	Dr. Sandhya Mehrotra -PI Dr. Rajesh Mehrotra -CO-PI	DST	37.72
3	EXAFS Investigations on ion conducting polymer nanocomposites for conductivity structure correlation	Dr. Anshuman Dalvi	UGC-DAE	2.30
4	Development of nutraceutical nanoemulsion based health drink of food bioactives	Dr Anil Jindal	Ananta Medicare Limited	5.10
5	Exploring the synergism of PPAR- $\gamma$ agonist and HDAC inhibitor for reversal of Alzheimers type of dementia and developing their brain targeted nano-carrier system for effective treatment	Dr. Rajeev Taliyan - PI Dr. Deepak Chitkara -CO-PI	DST- Nanomission	32.14
6	Evaluation of Antitumor efficacy and pharmacokinetics of polymeric nanoparticle formulation targeted to cancer stem cells	Dr. Aniruddha Roy	DST	32.20
7	Studies on Quarkonium suppression in Asymmetric Nuclear Collision at LHC	Dr. Madhukar Mishra	DST	15.85
8	"Investigating Dynamical and Topological Properties of Fioquet Systems: A Comparative study of perturbative Schemes	Dr. Jayendra Bandyopadhyay -PI Dr. Tapomoy Guha Sarkar -CO-Pi	DST	16.22
9	"Generation and Characterization of Attosecond Pulses with Specific Polarization and its Applications"	Dr. Amol Holkundkar -PI Dr. Jayendra Bandyopadhyaya -CO-PI	DST	16.54
10	"Theoretical Study of Electron impact double ionization of atoms and molecules"	Dr. Rakesh Choubisa	DST	20.44
11	"Probing the Nature of Intermolecular X-H...Se (X = O and N) Hydrogen Bonding Interactions using Matrix Isolation Infrared Spectroscopy"	Dr. Shamik Chakraborty	DST	73.55
12	Asymmetric synthesis of [2.2.2] azabicyclo-isoquinuclidine derivatives: Towards the synthesis of related alkaloids	Dr. Indresh Kumar	DST	43.30
13	Preparation of State of Art Report (SOAR) on Development of innovative non-destructive techniques for determination of in-situ strength and permeability of concrete	Dr. Amit Goel	Ministry of Road Transport & Highway	2.51
14	Study on Electronic Transport Behaviour of Carbon nanotube based field effect transistors (CNTFETs)	Dr. Navneet Gupta -PI Dr. Niladri Sarkar-CO-PI	DRDO	20.49
15	Participatory Exclusion of women and the poor in community Forestry: A Comparative Study of Implementation of the ROFR Act across 3 states of India	Dr. Sailaja Nandigama -PI Dr. Sanjeev Kr. Choudhary -CO-PI Dr. Kumar Sankar Bhattacharya -CO-PI	ICSSR	7.00
16	An Economic Appraisal of Renewables Versus Non-Renewables: A Case of Rajasthan	Dr. Krishna M	ICSSR	2.00
17	Developing and Validating Relationship Management Index for Indian Airline Industry	Dr. Jyoti -PI Dr. Arun Kumar -CO-PI	ICSSR	1.50
18	Preparation of State of Art Report (SOAR) on fog vision system of India	Dr. Rajiv Gupta	Ministry of Road Transport & Highway	4.35
19	Nanotechnology based pharmaceutical, nutraceuticals and cosmetics-development of platform technology	Dr. Deepak Chitkara	Incisive Elements USA	21.38

S.No	Project Title	Principal Investigator	Sponsoring Agency	Amount Sanctioned
20	Synthesis and tubulin inhibition activity studies of novel indolyl heterocycles	Dr. Dalip Kumar	CSIR	22.36
21	CR018-13 Leuprolide study	Dr. Sunil Kumar Dubey	Axis Clinpharma	2.07
22	Synthetic Probes for Staudinger Ligation: Synthesis and Application of Phosphane Based templates	Dr. Kiran Bajaj	DST-WoS	29.70
23	Electro-optical response of Nematic Liquid Crystals doped with nanorods	Dr. Manjula Devi-PI Dr. R. K. Gupta- Co-PI	DST	39.20
24	Mathematics aided Architectural Design layouts	Dr. Krishnendra Shekhawat	DST	15.45
25	Studying Catalytic carbonylation of polyols- Sustainable Route to Carboxylic Acids from Renewable Platforms	Dr. Bibhas Ranjan Sarkar	DST-SERB	32.29
26	In Vivo-In Vitro study design: cardio-reno protective effect of herbal extract (Red spinach extract) in hypertensive rats: Role of NO/cGMP Pathway	Dr. Rajeev Taliyan and Dr. Sunil Kumar Dubey	Etica Clinpharma Pvt. Ltd	8.00
27	Synthesis of D-glucose derived glycoconjugates and their application in molecular recognition and catalysis	Dr. Ajay Kumar Sah	SERB	30.10
28	To study the role of hyperglycemia on the progression of acute kidney injury	Dr. Gaikwad Anil Bhanudas	SERB	47.18
29	Development of a standardized formulation of Trigonella foenum-graecum seeds for preventing of delaying the development of Type-2 diabetes in subjects with Pre-diabetes	Dr. Sunil Kumar Dubey	ICMR	16.73
30	Transition-metal-catalysed synthesis of fused heterocycles via C-C/C-N bond forming strategies	Dr. Rajeev Sakhuja	DST	33.29
31	Development of bioinoculant based formulation for enhanced phytoremediation of poly chlorinated biphenyl (PCB) contaminated soil	Ms. Monika Sandhu	DST-WoS	20.80
32	Production and use of indigenous local strains of microbial pesticides through trainings, demonstrations and installation of cost effective production units for the farmers of Rajasthan	Dr. Jola Dubey	DST-WoS	26.33
33	Design and development of a power assistive hybrid e-trike (PAH e-Trike) for differently abled person in rural and urban regions of India	Dr. Sachin Belgamwar and CSIR-CEERI Pilani	DST-SEED	30.64
34	Peptide-decorated pH-sensitive nano-conjugate hybrid micelles for co-delivery of temozolamide and an autophagy inducer, rapamycin, for treatment of glioblastoma multiforme	Dr. Deepak Chitkara -PI Dr. Gaikwad Anil Bhanudas-CO-PI	DBT	38.33
35	IoT based energy management system of a Microgrid with V2G (Vehicle to Grid) feature	Dr. H. D. Mathur	DST-SEED	50.00
36	Realization of Flexible and Scalable VANET with multi-tenancy support using Software defined Networking and Network Virtualization	Dr. Ashutosh Bhatia	DST-SEED	40.00
37	Design and implementation of coordinated multi-robot system for area coverage under constrained wireless communication	Dr. Virendra Shekhwat	DST-SEED	40.00
38	Design and Implementation of content based Recommender System for answering web based user queries	Dr. Yashvardhan Sharma	DST-SEED	40.00
39	Structural Health Assessment and Rehabilitation Framework based Cyber Physical system	Dr. Kota Soloman Raju CEERI Pilani-PI Dr. S B Singh-CO-PI	DST-SEED	70.00
40	Drivers of Sustainability Practices in SMEs: An Exploratory Study of Small Manufacturing Firms in Rajasthan	Dr. Neetu Yadav	ICSSR	3.00
41	Measuring the Impact of Socially Responsible Supply Chains and	Dr. Satyendra Sharma-PI Dr. Saurabh Chaddha	ICSSR	5.50

S.No	Project Title	Principal Investigator	Sponsoring Agency	Amount Sanctioned
	Development of Framework for Implementing Socially Responsible Supply Chains	-CO-PI		
42	An investigation of energy consumption of machine tools	Dr. Girish Kant	BITS-ACRG	9.65
43	Design of Non asynchronous SRAM cell for hybrid cache architecture using CMOS-FDSOR/FinFET technology	Dr. Nitin Chaturvedi	BITS-ACRG	5.25
44	Investigation of ductile characteristics of high strength concrete beams reinforced with high strength steel and basalt fibre under elevated temperature conditions	Dr. G. Muthukumar	BITS-ACRG	9.75
45	Particle Image Velocimetry studies on a bench scale cold flow fluidized catalytic cracking (FCC) riser unit	Dr. Priya C. Sande	BITS-ACRG	10.00
46	Dual Catalytic monolith reactor for biogas reforming	Dr. Srinivas Appari	BITS-ACRG	8.25
47	Interseismic coupling and asperity distribution in Northwest Himalaya	Dr. Sumanta Pasari	BITS-ACRG	8.95

**Ongoing Projects:**

S.No	Project Title	Principal Investigator	Agency	Sanctioned Amount Rs. In Lakhs
1	Synthesis of novel N-fused polycyclic compounds through transition metal catalyzed cascade/C-H functionalization reactions	Dr Anil kumar	DST	32.46
2		Dr. Anil Kumar and Dr. Dalip Kumar	Ranbaxy	30
3	Design and Synthesis of Heavy metal based aggregation induced emission active complexes and their application in Bio-imaging	Dr. Inamur Rehman Iashkar	DST	34.9
4	Screening Decoration of Co-catalyst on the Ultrathin 2D Sheets of Metal Chalcogenides and their application in Photo electrochemical Water Splitting	Dr. Mrinmoyee Basu	DST-INSPIRE	35
5	Decoration of Plasmonic nanoparticles on Ultrathin 2D Nanostructure of Metal Chalcogenides and their application in photoelectrochemical water splitting and photocatalysis	Dr. Mrinmoyee Basu	DST-FT	19.82
6	Investigation of Unfolding and refolding of proteins by Gemini surfactants with varying spacer groups using fluorescence spectroscopy and small angle neutron scattering technique	Dr. Subit Kumar Saha	UGC-DAE	3.45
7	Effect of Chemical nature of spacer group, headgroups and counterions of gemini surfactants on solvation dynamics and rotational relaxation of coumatins in aqueous micelles	Dr. Subit Kumar Saha	CSIR	9.28
8	Development and application of density functional reactivity theory based modeling techniques to understand the energetics of reactive and non-reactive interactions	Dr. Ram Kinkar Roy	DST	31.55
9	Modeling of Employee performance and human capital Assessment and optimization of productivity of Indian Manufacturing Industry	Dr. Udayan Chanda -PI Dr. Praveen Goyal - CO-PI	ICSSR	5
10	Development and validation of Service Quality Index in Indian Telecom & Banking sector	Dr. Arun Kumar -PI Dr. Jyoti - Co-PI	ICSSR	4
11	Financial Inclusion	Dr. Arun Kumar Vaish	HCL	180

S.No	Project Title	Principal Investigator	Agency	Sanctioned Amount Rs. In Lakhs
12	Role of histone ubiquitination & angiotensin converting enzyme-2 in the development renal fibrosis under type 1 diabetic condition	Dr.Gaikwad Anil Bhanudas	CSIR	19.36
13	Nano-formulation of Lysofylline-fatty acid conjugate for effective treatment of diabetes	Dr. Anupama Mittal	DST	26.9
14	Cyclic RGD modified lipopolymeric micelles for targeted delivery of tamoxifen in ER+Breast cancer	Dr. Anupama Mittal	DST Rajasthan	12.54
15	Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer	Dr. Deepak Chitkara	DST	27.2
16	Exploring the Antiobesity potential of selected ayurvedic medicinal plants using pancreatic lipase inhibition assay and synergy guided fractionation	Dr. Paul Atish Tulshiram	DST	27.3
17	Development of Novel Processes for Increasing the Content of Sennoside-B from Senna	Dr. Sunil Kumar Dubey	Shashi Phytochemicals	18
18	Effect of partial replacement of cement with marble slurry on concrete	Dr. Anshuman	DST	28.38
19	Dynamic buckling analysis of composite structures	Dr. S. N. Patel	CSIR	9.33
20	Conjunctive use of Rainwater and Ground water to provide safe drinking water with intervention of advanced technology	Dr. Rajiv Gupta	DST	126.43
21	Costs and remediation of Groundwater contamination in India	Dr. Rajiv Gupta	University of Virginia	100
22	Padagogy Project	Dr. A. K. Sarkar	IIT Kanpur	49
23	Joint Indo-German Experience Lab	Dr. K. S. Sangwan	DAAD	341
24	Design of Health care supply chain for enhancing availability and reducing wastage of generic medicines for rural areas in Rajasthan	Dr. Srikanta Routroy -PI Dr. Sunil Kumar Dubey - Co-PI	DST Rajasthan	5.88
25	Modeling Immune Response to Salmonella during Typhoid	Dr. Amol Marathe -PI Dr. Sandhya Marathe - CO-PI	DST	34.06
26	Flow through a membrane modeled of Porous cylindrical particles using particle-in-cell approach	Dr. Ashish Tiwari	DST (Indo-Russia)	12.86
27	Mathematical modeling and analysis of the dynamics of diabetes mellitus in Indian population and control measures	Dr. Padma Murali	CSIR	8.78
28	Study of Observational Constraints on dark energy models of universe using COSMOMC in HPC systems	Dr. Suresh Kumar	DST-EMR	26.29
29	Soft Computing framework based Integrated Multi Sensor Array for Water Quality Assessment: Targeting fluoride as major parameter	Dr. K. K. Gupta - PI Dr. R. K. Gupta-Co-PI	DST	38.7
30	Development of TiO <sub>2</sub> nanotube based highly selective capacitive type sensor device for the detection of methanol poisoning in alcoholic beverage	Dr. Arnab Hazra	DST	27.76
31	Mutant-p53 gain-of-function: its role in regulating long non-coding RNA (lncRNA) Expression and associated chemo-resistance in human cancer cells	Dr. Rajdeep Chowdhury	DBT	25
32	Investigating the Role of Aryl Hydrocarbon Receptors in mediating the Anti-Cancer Properties associated to camel milk	Dr. Uma Dubey	DST-Rajasthan	7.43
33	Removal of toxic metal ions from industrial discharges using microalgae	Dr. Prakash	DST	38.9

S.No	Project Title	Principal Investigator	Agency	Sanctioned Amount Rs. In Lakhs
34	Development of Surface Plasmon Resonance Instrument with a novel optical design	Dr. R. K. Gupta-PI Dr. Manjula Devi -Co-PI	DST	56.15
35	Investigations on Li <sup>+</sup> ion conducting glass-ceramic containing NASICON structured nano crystallites	Dr. Anshuman Dalvi	DST	37.65
36	FIST Mechanical Engg Department	Department	DST	81.5
37	FIST Mathematics Department	Department	DST	50
38	FIST EEE Department	Department	DST	72.5
39	FIST Biological Sciences Department	Department	DST	27.5
40	FIST Chemistry Department	Department	DST	82.5
41	Development of p-TiO <sub>2</sub> nanoparticle decorated n-TiO <sub>2</sub> nanotube array based p-n homojunction sensor device for the efficient detection of methanol contamination in alcoholic beverages.	Dr. Arnab Hazra	BITS-ACRG	9
42	design and synthesis of a novel biomass stove for cooking applications	Dr. Pratik N. Sheth	BITS-ACRG	9
43	development of low carbon ternary cement for durable and sustainable concrete	Dr. Baharudeen A.	BITS-ACRG	9.25
44	multimodal biometric based person identification system	Dr. Pawan Ajmera	BITS-ACRG	9
45	Wireless network virtualization: IEEE 802.11 test-bed implementation and wireless NIC virtualization	Dr. Vishal Gupta	BITS-ACRG	8.5
46	Design and synthesis of multi-functional smart low molecular weight gelator	Dr. Rajeev Sakhuja	BITS-ACRG	4.5
47	sustainable catalytic route to C <sub>4</sub> -C <sub>6</sub> carboxylic acids/hydroxyacids by carbonylation of polyols	Dr. Bibhas Ranjan Sarkar	BITS-ACRG	5.5

**Projects completed**

S.No.	Project Title	Principal Investigator	Agency	Sanctioned Amount Rs. In Lakhs
1	Exploration of novel ionic liquid-supported sulfonyl reagents for organic synthesis	Dr. Anil kumar	CSIR	12.76
2	Study of native chemical ligation at tryptophan and asparagine sites and its application in peptide synthesis	Dr. Kiran Bajaj	DST	31.3
3	Competition between charge transfer and proton transfer processes in some newly designed schiff bases: spectroscopic and theoretical investigations in condensed phase	Dr. Shamik Chakraborty	DST	24.98
4	Design and Development of opinion mining framework	Dr. Yashvardhan Sharma	DST	13.26
5	Multi-agent based indoor exploration with miniature robots	Dr. Sudeep Mohan	CAIR (DRDO)	20
6	Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type-2 Diabetes	Dr. Gaikwad Anil Bhanudas	DST	39.66
7	Development of Botanical based Novel formulation with Mosquito Larvicidal action for indian population	Dr. Paul Atish Tulshiram	DST	12.19
8	Study of Structural Response and Strengths of Thin-Walled FRP Composite Girders	Dr. S.B. Singh	CSIR	14.32
9	Development of Copper Bio-Leaching Methodology/Technique from Low Grade Ore at Hindustan Copper Limited,	Dr. Anupam Singhal -PI Dr. S. K. Verma-Co-PI	Ministry of mines	30.38
10	Experimental Investigation on CO <sub>2</sub> based refrigeration system in Trans-critical cycle	Dr. M.S. Dasgupta	DST	27.5

S.No.	Project Title	Principal Investigator	Agency	Sanctioned Amount Rs. In Lakhs
11	Studies in Laboratory Scale oxygen fired fluidized bed based on co-firing rice husk with coal	Dr. Ravi Inder Singh	DST	31.13
12	Dark energy modeling of cosmic acceleration with observational constraint in Einstein gravity and modified theories	Dr. Suresh Kumar	DST	14.16
13	Modeling of cardio vascular flows and influence of magnetic field on circulation	Dr. Ashish Tiwari	DST	11.63
14	Design and Development of an Efficient Soft-switching converter with adaptive maximum power point tracking (MPPT) controller for a standalone photovoltaic power generation system	Dr. Rajneesh Kumar	MNRE	29.39
15	RNAi screening to study the role of Aedes ATP-binding cassette (ABC) transporters against blood-borne pathogens	Dr. Sanjeev Kumar	DBT	45.78
16	Studying the impact of anopheles Gut Microbial environment on immunity and plasmodium development	Dr. Lalita Gupta	ICMR	9.8
17	Molecular studies on extracellular biosynthesis of metal nanoparticles	Dr. Jitendra Panwar	DST	45.5
18	A Mechanistic analysis of the role of pro-inflammatory cytokines in induction of epithelial to mesenchymal transition in hepatocellular carcinoma	Dr. Sudeshna Mukherjee	DST	16.8
19	Characterization of major components of [Fe-S] cluster assembly pathway in Plasmodium vivax	Dr. Shilpi Garg	DST	25.56
20	Characterization of Isoprenoid biosynthetic pathway enzymes from Plasmodium vivax	Ms. Monika Sandhu	NASI	3.52
21	Preparation and characterization of thin films of electrochromic conducting polymer and fabrication of prototype smart pixel displays	Dr. S Sindhu	CSIR	14.1
22	Study of Laser interaction with atomic clusters and preformed plasma	Dr. Amol Holkundar	DST	15
23	Time-resolved Spectroscopy of Fluorescent Molecules in Micellar Systems	Dr. D.D. Pant	DST	53
24	Time-resolved Spectroscopy of Fluorescent Molecules in Micellar Systems	Dr. Navin Singh	DST	18.65
25	FIST CSIS Department	DST-FIST	DST	26.5
26	FIST Pharmacy Department	DST-FIST	DST	67.5
27	FIST Civil Engg Department	DST-FIST	DST	40
28	FSIT Chemical Engg Department	DST-FIST	DST	40.25
29	Graphitic Carbon nitride (g-C <sub>3</sub> N <sub>4</sub> ) based semiconductor heterostructures for photocatalysis and electrocatalysis	Dr. Surojit Pande	BITS-ACRG	6.95
30	Organocatalytic approach towards bioactive important six membered nitrogen heterocycles	Dr. Indresh Kumar	BITS-ACRG	8.2
31	Development of Nano-Carriers for Improved Drug Delivery	Dr. Deepak Chitkara	BITS-ACRG	9.9
32	Development of automated non-destructive test system for condition evaluation of pavements	Dr. Amit Geol	BITS-ACRG	9.45
33	Investigations into issues in deploying software defined networks on traditional network Infrastructure	Dr. K. Haribabu	BITS-ACRG	8.2
34	Design and Development of an effective power conditioning unit for photovoltaic Applications	Dr. Pradyumn Chaturvedi	BITS-ACRG	9.7



S.No.	Project Title	Principal Investigator	Agency	Sanctioned Amount Rs. In Lakhs
35	Zinc Recovery from Industrial Waste using Bioleaching	Dr. Suresh Gupta-PI Dr. S K Verma-CO-PI Dr. Anupam Singhal - CO-PI Dr. S. Ramachandran -CO-PI	BITS WWE-CORE	34.75
36	Roof top Rainwater harvesting for safe, potable and healthy drinking water and ground water replenishment for BITS Pilani, Pilani campus	Dr. Rajiv Gupta-PI Dr. Sunil Bhand-CO-PI Dr. R. K Gupta-Co-PI Dr. Hemant Jadhav - CO-PI Dr. Anshuman Dalvi -Co-PI Dr. Yashvardhan Sharma -CO-PI Dr. Arvind Sudarsan -Co-PI Dr. K K Gupta-Co-PI Dr. Utpal Roy-Co-PI Dr. Neeru Sood-CO-PI	BITS WWE-CORE	73.05

The details of these projects are given in individual department write-ups (B1.10.1 to B1.10.13).

### Software Development and Educational Technology Unit

The Software Development & Educational Technology Unit (SDET Unit) incorporates the Centre for Software Development (CSD) as well as the Centre for Educational Technology (CET). The Unit has a mandate to include identification, establishment, deployment and evolution of appropriate educational technology in order to support effective resource utilization of expertise (teaching / mentoring / collaboration) available at various campuses (both existing and upcoming) as well as enable students and faculty involved in various off-campus work-integrated learning programs of the Institute. Research, development and consultancy in those areas of computing where it has expertise and interest amongst its nucleus members remain the other important areas of the work for the SDET Unit.

The SDET Unit has four specific sets of activities handled by its two wings: CSD and CET. These wings focus on multimedia, E-learning, web-services, live and stored video streaming as current thrust areas. Its CET wing has its mandate to identify suitable educational technology solutions for on as well as off-campus operations of the Institute and helping in their deployment.

The SDET UNIT is involved in the Open-source Moodle LMS based deployment for requirements of the Institute in form of the Nalanda portal, apart from focusing on the design / development / deployment of the Internet-based distributed learning architecture and synchronous as well as asynchronous-delivery-based content development. In addition, it has complementary features of Digital Video delivery over the Internet. Three phases of this project have already been completed. For quite some time now, it has added the live interactive (bi-directional audio/video/text-based) classroom feature to value add its off-campus student population.

The SDET Unit has played the leading role in co-designing and establishing (along with alumni of the Institute) a University-wide, Integrated immersive Telepresence Infrastructure with seamless support for very high-quality eye-to-eye contact based meetings between people present in four telepresence rooms across all four campuses of the Institute along with integrated multi-campus interactive lecture delivery and recording support for four class rooms spread over all four campuses of the Institute which have been further integrated with the interactive-web-conferencing system capable of involving numerous live interactions amongst faculty and off-campus students along with recording and view-on-Demand capabilities. This has been done as part of the BITS-connect 2.0 initiative and has benefitted from significant contributions from BITS Pilani and BITS Alumni spread over the Globe.

In the past, the Unit had been involved in the Journal Server Project which is a freeware international virtual digital library project, being led by Oxford University and BITS, involves over fifteen major universities in UK, India, USA, Norway, Italy, South Africa, Germany, Pakistan, Taiwan and Bangladesh, BITS had contributed to the overall architecture and Search Engine aspects of this project..

The SDETU has played a major role nationally and internationally in several areas including the research, development and deployment specific to the next-generation internetworking technologies like IPv6. It has brought several firsts to BITS and has contributed to funded international research projects in this area.

Members of the team have also presented, the research and development work being done at BITS at several international fora apart from being actively involved in IEEE and IETF activities in the area of networking research and standardization. In addition, the SDET Unit is the official enabler for the BITS-BITSAA joint venture known as Project Embryo (<http://www.embryo.org>) that is aimed at joint efforts by current students, alumni and

faculty for delivery of live lectures by specialist alums as well as joint collaborative research guidance by alums and faculty to on-campus students.

### **Center for Biotechnology**

The Centre has in-house facilities of Genetic Engineering and Recombinant-DNA Technology. The objectives of the Centre are to take up research and development projects from various sponsoring organizations, establishments of University-Industry linkage through various R&D contract projects and conduct periodic Workshops and hands on training for faculty members, industry personnel and students in the area of advanced molecular biology/biotechnology and bioinformatics. The facilities available are Gel Documentation System, PCR Machines (Gradient and Real-Time), Hybridization oven, Gel electrophoresis equipments, UV-Cross linker, Temperature Controlled Water Bath Shaker, Refrigerated Centrifuges, Ultracentrifuge, FPLC, Nanodrop, Concentrator, Cold Room, Tissue Culture Room, Plant Biotechnology facility, Semi-automated Green House, Radioisotope handling facilities, Liquid Nitrogen Plant, Victor-3 Multichannel counter, Gene Gun, Inverted microscope with camera attachment, Fluorescence Microscope, Oxygraph, – 80°C Deep Freezer, etc. We developed Insectory to facilitate research on mosquito borne diseases. In the year 2015-16 approximately 75 students were trained in molecular biology techniques through various laboratory courses. Over 50 students completed their projects in the area of modern biology. A conference entitled “BITS conference on Gene and Genome Expression” was conducted during February 18-20, 2014 at BITS Pilani, Pilani Campus, India by the centre with the support from Biological sciences department, Department of Biotechnology, India, and Dept. of Science & Technology, Rajasthan.

### **Centre for Desert Development Technologies (CDDT)**

The Centre for Desert Development Technologies (CDDT) was established in April 2005 as an Alumni initiative at BITS-Pilani in collaboration with Jacob Blaustein Institutes for Desert Research (BIDR) of Ben Gurion University (BGU) – the acknowledged global leaders in making the desert bloom through their demonstrable success in the Negev Desert [[www.bgu.ac.il/bidr](http://www.bgu.ac.il/bidr)]. The C-DDT mission is to make the desert areas of Rajasthan bloom through demonstration, extension, and development of world class desert development technologies-water and energy conservation in irrigation systems, rain water harvesting and ground water management, conservation and propagation of plants suited for the desert environment, and optimizing human existence in the desert ecosystem. The C-DDT vision is to develop a multi-disciplinary center of excellence to demonstrate the role that various technologies play in desert development and to assess their socio-economic impact on the inhabitants. The key disciplines involved are Civil, Chemical, Electronics and Electrical Engineering; Plant Biotechnology, Solar Energy, and Humanistic studies. A water management system consisting of rainwater harvesting pipelines, tank, solar pump, drip irrigation system, biotechnology complex consisting of a plant tissue culture lab, and a greenhouse were constructed. A four rooms complex has been created to study the use of solar energy in passive architecture with support of UGC. The different studies are being carried out related to energy saving techniques. It implements the new energy efficient static sun-shade, cavity walls, wall with brick projections, roof with stoneware and vents to show case the energy efficient house to reduce the active load for comfort conditions. An extended roof top with hard sloping floor are constructed to harness more rainwater and drainages are connected to main tank, which is also covered to reduce the evaporation with the helping contribution of 79 batch. This year further extension is created by developing the concept of contour irrigation. It is expected that this summer we can have crop using only rainwater effectively. A good number of International publications are made and a Ph.D. along with number of projects are completed by students. It is expected that this summer the micro and macro irrigation system will be developed and implemented. A group of undergraduate students is working.

### **Centre for Educational Technology (CET)**

The Centre for Educational Technology (CET) is the second of the two major centres run by the Software Development and Educational Technology Unit (SDET Unit) at BITS-Pilani. It comprises of modern digital video studio and is equipped with the high-quality Video-conferencing facilities.

This is further complemented by the Internet-based, highly scalable distributed desktop video-conferencing facility allowing medium-quality but more interactive live classroom sessions where all students cannot come to on or off-campus classrooms and may be resident in different parts of country / world. The Centre is equipped with the IP-based Video-on-Demand and Scheduled Video Multicast facilities which can allow reuse / review / streaming of lectures delivered earlier for the benefit of students. Incidentally, the above referred Project Embryo makes effective use of this technology already and allows ALL campuses of BITS-Pilani to be benefitted simultaneously whenever an Alumnus expert delivers a scheduled lecture from elsewhere in the world.

Its focus is on E-learning delivery systems, related web-services, live and stored video streaming as current thrust areas. Its mandate is to identify suitable educational technology solutions for on as well as off-campus operations of the Institute and helping in their deployment.

The CET has played the leading role in co-designing and establishing (along with alumni of the Institute) a University-wide, Integrated immersive Telepresence Infrastructure with seamless support for very high-quality eye-to-eye contact based meetings between people present in three Telepresence rooms in three campuses along with integrated multi-campus interactive lecture delivery and recording support for three class rooms spread over all Indian campuses of the Institute which would be further integrated gradually with the interactive-

web-conferencing system capable of involving numerous live interactions amongst faculty and off-campus students along with recording and view-on-Demand capabilities. This has been done as part of the BITS-connect 2.0 initiative and has benefitted from significant contributions from BITS Pilani and BITS Alumni spread over the Globe.

CET has evolved a sustainable dual-purpose large-scale open or partly-closed global instruction delivery system for BITS Pilani built atop the Open edX™ Platform of our own known as 'Any-Learn™', accessible at the URL: <http://any-learn.bits-pilani.ac.in>.

Currently, the CET, in association with the Teaching-Learning Centre (TLC) of the BITS Pilani and the CET, IIT Kharagpur is in process of expanding its operations in Pedagogy-research-driven Educational Technologies and is also gearing up for significantly contributing towards creating technology-assisted, low-cost sustainable solutions aiming at helping rural and semi-urban school children as well as creating a focused skill-development framework for select high-priority skillsets for the nation.

### **Centre for Entrepreneurial Leadership (CEL)**

The major projects running under CEL at BITS Pilani - Pilani Campus are Conquest, E-Week, Rural Entrepreneurial Division, Summer in a Startup (SiS), Startup Sphere and Mantra awards. The entire CEL team has been working to their maximum potential to scale new heights with their projects.

Brief updates on the aforementioned projects during 2017 are as follows:

#### **E-Week 2017**

Entrepreneurship Week 2017 was organised by the CEL team from 12th February - 19th February 2017. E-Week 2017 comprised a plethora of activities that sought to make the participants think like an Entrepreneur would.

Keeping up with the spirit of the week, it was hosted by first year CEL students, so as to ensure a realistic learning environment for them. From sponsorship and marketing to operations and logistics, each aspect of the event was handled by this very team.

#### **Conquest 2017**

Conquest, BITS Pilani's international startup conclave, seeks to identify and award emerging entrepreneurs across the country. Keeping with its mission, it explores and caters every need of a startup: incubation opportunities, IP filing, expert mentoring and networking sessions with Industry stalwarts, angel investors and leading Venture Capitalists.

**The thirteenth edition of Conquest, BITS Pilani's International Startup Conclave was organized on 3rd of September at Hyatt Regency, Delhi. Recopro** bagged the winner's trophy along with 2.5 lakhs of equity less cash funding, while **Incredible Devices** received the second spot with 1.5 lakh of equity less cash funding.

**Dr. Bindu Dey, Secretary, Technology Development Board** graced the event as the Guest of Honour. In her address to the gathering, she emphasised on the importance of commercialising the results of research, and the role played by TDB in the same. **Prof. Ashoke Sarkar, Director of BITS Pilani, Pilani Campus**, inaugurated the event and encouraged the student community to continue pursuing their endeavours in entrepreneurship.

**Conquest 2017 witnessed applications from over 1000 startups across the country.** The long list of mentors associated with Conquest 2017 includes renowned entrepreneurs and industrialists such as Meera Iyer, CMO, Big Basket, Ashish Goel, Head of Product, Zomato and Suvonil Chatterjee, former CDO, Housing and Flipkart and many more. With DCB as its Title Sponsor, other prominent names associated with Conquest 2017 were Zoho, Accel, WNS and PayU.

Having organized the event with tremendous success, the CEL team is high spirited and ready to raise the bar even further with Conquest 2018.

#### **Rural Entrepreneurial Division**

CEL team continuously look for business opportunities for generating employment for people living in rural area near Pilani and mentors the youth to exploit those opportunities. In order to align with the Government's vision of a 'Digital India,' the CEL team travelled to the Raila Village, and organized a Demonetization Drive to aid the villagers with digital payments. Paytm was a partner for the event.

#### **Summer in a Startup (SiS) 2017**

SIS or Summer in a Startup aims to give the students at BITS Pilani an opportunity to intern in a startup during the summers. This helps develop and sharpen entrepreneurial acumen amongst undergraduates. The interns are virtual stakeholders of the startup, thereby replicating the total experience of operating in the startup ambiance.

Entering into its 9th edition this year, SiS had an outstanding turnout last year with 500+ applications from students. Students are shortlisted on the basis of their CV and final selections are made after a round of

Personal Interview (PI). The internship period varied from startup to startup, but it was close to around two months. Almost all the startups provided stipends that ranged from Rs. 5,000/- to Rs.15,000/-.

### **Startup Sphere**

Startup Sphere seeks to facilitate the startup culture in BITS Pilani and mould fresh ideas into successful ventures. Startup Sphere achieves this by conducting guest lectures delivered by industry experts and organizing workshops for the students.

Startup Sphere also publishes a newsletter released by CEL, for propagation of startup culture, within and outside BITS Pilani. Further, E-Summit was organized as part of APOGEE. As part of the summit, events like Startup Weekend were organized, where budding entrepreneurs were given a platform to fine tune their ideas and present them before leading industrialists and VCs.

### **Technology Innovation Centre (TIC)**

Technology Innovation Centre was instituted as a facility by which engineer/scientist entrepreneur could spend desired period at the campus and investigate problems brought by him along with a team of BITS facilities and students. These people are given associate faculty status so that they can use all the infrastructural facilities of the Institute and participate in the academic process. Moreover, these entrepreneurs are able to work for their Ph.D. degree of BITS and participate in teaching certain state of the art courses during their visits to the campus.

Past-experience shows that this facility mostly attracts knowledge – intensive small-scale entrepreneurs, who cannot afford the high cost of R & D in their establishment. The institute, in turn, has been able to train its students on entrepreneurial skills and has provided the rewarding experience of investigating real – life problems brought from the industry.

In the past year, 2 companies have applied under this scheme and selected students for their projects with stipend.

Company **Revel Films Pvt Ltd, Mumbai** selected 5 students to work on their project in the II sem 2015-16.

Company **Eurofit Sports Research Institute, Austria** has given 1 project in II sem 2015-16. 4 students worked on it.

In the present semester, a company **Acnowledge** has taken 5 student for its project under this scheme

### **Centre for Materials Science and Technology**

The objective of the Centre for Materials Science and Technology is to develop and implement projects related to modern materials such as smart materials, biomaterials, fibre-reinforced plastic composites and also related to conventional materials such as metals, ceramics and polymers. The Centre undertakes mechanical and non-destructive testing of various engineering materials and products for evaluating their mechanical properties and for evaluating defects such as cracks, voids, delamination, inclusions etc. Other activities include providing consultancy related to materials aspects and testing/development and analysis in the field of materials science and technology in general. The testing facilities available at the Centre include a conventional Universal Testing Machine of 50 Tons capacity, as well as, a fully computerized microprocessor based Electronic Universal Testing Machine of 100 kN capacity, Heating Chamber for UTM for High Temperature Testing, Hounsfield Tensometer, various hardness testing machines such as Brinell, Rockwell, and Vickers Hardness Testers, Rotating Bending Fatigue Testing Machine, Combined Bending and Torsion Fatigue Testing Machine, Strain-gauge testing facility, Izod Impact Testing Machines, Digital impact testing machine, Double disk polisher, Inverted Metallurgy Microscope, Erichsen cupping tester, Single Screw Extruder with Calendering and Pelletization Facilities Ultrasonic Flaw Detectors, Liquid Penetrant Test kit, Magnetic Crack Detector, Eddy Current Tester, Acoustic Emission Testing equipments, Acousto-ultrasonic pocket hand-held AU scanner etc. Wet-lab facility and fume hood for polymer fabrication section. Basic Mechanical fault simulator, Data acquisition system for vibration measurement.

### **Centre for Robotics and Intelligent System**

The objective of the Centre for Robotics and Intelligent Systems (CRIS) is to develop prototypes that provide greater intelligence and higher versatility for robotic tasks under ever-changing constraints of the environment. This objective is set forth to make Indian industry competitive by developing indigenous technical skills, manpower and innovative spirit.

Each prototype is developed in four different stages viz. (i) Conceptualization, (ii) Algorithmic development and verification in simulated environment, (iii) Real-time testing and (iv) Integration of automated system.

The Centre is well equipped with excellent computational facilities; advanced software packages for circuit design, image processing and mechanical design; micro controller and DSP based driver card for real-time experimentation; experimental bed, Pendubot (inverted pendulum), CRS-Plus robot manipulator, 4-DOF SCARA manipulator, 5-DOF articulated manipulator, ABB-1410 Industrial Robot, Hydra mobile base, Lab mate, mobile base, Allen Bradley PLC Micro Logix 1500, PLC based Hydraulic and Pneumatic Trainers and many other facilities.

The center is geared to provide research facilities in areas such as intelligent robotics and system design, intelligent control, neural and fuzzy neural based system modeling and control, evolutionary computation, robotic vision and virtual reality. Earlier BITSUMO, which is an autonomous assistant robot, was developed to work in restaurant/ library. In addition to these, an autonomous glider, an autonomous hovercraft, a 14-DOF robotic arm, an intelligent mechatronics ball, a micro-mouse platform and a micro-mouse testing base were developed at CRIS.

The center is engaged with the development of humanoid robots. The first breakthrough is in terms of Acyut-1 and Acyut-2 (humanoid). Acyut-1 is a dancing robot and which has won several laurels even at international competitive events (Rob games 2008 held at San Francisco, USA and INDEEN Expo, Germany etc.), Acyut-2 is much larger and far more capable. It has far better control and using remote command by way of hand movements etc, it can be moved synchronously. These models were demonstrated for their capabilities at Korea, USA, Germany and Japan. The students are currently working on further developments related to Acyut-2 robot with added features Acyut-3 had participated in FIRA-2010, Bangalore and created a world record in weight lifting (2.4Kg.) in year 2010.

In same year a mobile Robot (named SHAURYA) participated in Annual student contest organized by DRDO, India and received recognition. Team Acyut have showcased their technologies at in the Tech fest of BITS Pilani Dubai campus and IIT Kanpur, Robotics symposium of RDE Pune (DRDO) and Tech test of NIT Calicut. For their effort the team has been appreciated by scientists of BARC Mumbai and DIT New Delhi. The students working at CRIS has developed a number of models and working robots. Namely, humanoid Acyut-4 had been invited to participate in ROBOCUP-2013. AcYut was redesigned completely and a novel system of parallel links is introduced. It stood 2nd in Robocup Iran Open 2013 and stood 4th in Robocup Netherlands 2013. Based on the progress in the area of humanoid robotics, Department of Information Technology (2012-2014) has sponsored a project worth 45 Lacs to develop a humanoid which is capable of stable walking and navigate in a structured environment. The team has continually improved the software for the robot to incorporate artificial intelligence and computer vision. Acyut can now play autonomous soccer against another robot and score goals. In February 2015 team AcYut demonstrated humanoid walking and image processing technology in HiSens Workshop at IIT Delhi. In July 2015 the team participated in RoboCup China in Teen Size humanoid league. Continuing the good work from previous years, this year saw development in software modules with better algorithms for cognition. Other improvements include up gradation of the camera sensor to new Fish Eye lenses and implementation of feedback system for more stable gait. The CRIS research incorporates with all aspects of creating and controlling robots such as mechanical design, dynamics, perception, control and decision making. Current faculty researches includes projects in the following areas: Humanoid robot, computer vision, motion planning and control, Machine learning for robotics, sensors/actuators and robot design, Bio-robotics. Team AcYut, BITS Pilani's humanoid robotics team, participated in the RoboCup 2017 held at Nagoya, Japan. Team AcYut has been the only participant from India, both in this edition and in previous editions.. This year, they participated in the Humanoid Soccer League and the Humanoid Soccer Drop-in league, where they finished fifth and third, respectively, out of a total of 8 teams.

### **Centre for Renewable Energy & Environment Development (CREED)**

CREED is an interdisciplinary Centre that co-ordinates educational and research activities in the active areas of renewable energy and environment. The objectives of the Centre are (i) to conceive, develop and implement renewable energy applications and environment protection projects, (ii) to develop courses and organize awareness programmes, and (iii) to collaborate with external organizations in the areas of renewable energy education, training and technology development. Some of the existing facilities at CREED include an experimental set up for solar water heating, solar air-heating system, solar stills, and solar photovoltaic power pack with storage battery bank, SPV lighting systems, fluidized bed combustor with gasifier and various instruments related to energy audit and solar resource assessment.

Currently, active research areas of CREED include concentrated solar power and concentrated photovoltaic power based policy analysis, emissions and environmental impact of thermal power plants, planning and economics of renewable energy systems, real time operation and control of renewable systems, industrial cogeneration, integrated renewable systems, demand side management, clean development management integrated resource planning, CO<sub>2</sub> based refrigeration, biomass based fluidized bed combustion, biomass pyrolysis etc. The faculty members and research scholars of the center have also visited University of South Florida, USA and TU Braunschweig, Germany for the research purpose under institute's schemes.

The Renewable Energy Club is an exclusively a student managed body that operates under CREED. The Club has undertaken active work in organizing Green Week, Goodbye Earth, competitions, quizzes, invited talks, e-waste collection drives, carbon footprint analysis and carbon credits. The club has also participated in participated in the competition Wipro Earthian. Commercial organizations in these areas have evolved out of this club, and are currently owned and operated by BITS alumni.

## Centre for Software Development (CSD)

The Centre for Software Development (CSD) is first of the two major centres that comprise the newly formed Software Development and Educational Technology Unit (SDET Unit) at BITS-Pilani.

The CSD has two wings namely Media Laboratory and the Laboratory for Open Source Computing. Recently, as part of restructuring, the erstwhile Laboratory for Mobile Computing was made a constituent research laboratory of the Department of the Computer Science & Information Systems., under the new name of Wearable, Pervasive Computing Networking Research Laboratory.

The CSD, in the past, has played a major role nationally and internationally in several areas including the research, development and deployment specific to the next-generation internetworking technologies like IPv6. It has brought several firsts to BITS and has contributed to funded international research projects in this area.

In the recent past, CSD had also developed a software for biometric attendance system known as 'e-Attend' that also piloted across all campuses of the Institute.

Members of the team, in the past, have also presented, the research and development work being done at BITS at several international fora apart from being actively involved in IEEE and IETF activities in the area of networking research and standardization.

Currently, the CSD is envisioning creation of a new-age integrated, adaptive web-site for the university and hopes to complete the deployment by December 2017.

## CENTRES ESTABLISHED WITH STRONG INDUSTRIAL SUPPORT

### Embedded Controller Application Centre

Devesh Samaiya (Lab in-charge), Prof. S Gurunayanan, Dr. Vinay Chamola, Mr. G Sai Sesha Chalapathi.

This Centre was initially set up in Collaboration with Motorola India Ltd. The objective of the Centre is to impart detailed understanding of important features of embedded controller architectures and familiarization to advanced concepts in the field of embedded controllers through

- Students projects/Industrial projects
- Imparting training to the industry professionals and running short term courses in the field of Embedded System design
- Developing course modules

The infrastructure of the centre includes high performance general purpose computing machines, Microcontroller Modular Evaluation Systems, Microcontroller Development Systems, Single Board Computers, Emulators, Assemblers and Cross compilers for various microcontroller families (NXP, TI, ARM, ATMEL, Microchip, Cypress, ST Microelectronics) DSP processors and a plethora of discrete components.

Faculty members of the group are involves in research work in areas of Embedded System, Wearable Computing, Multimedia computing and Embedded Linux systems. Faculty has published research work, attended National and International seminars, conferences and invited talks.

Centre also provides space for operations of Team Anant, Student Nano Satellite project by BITS Pilani, Pilani Campus. We have received embedded systems development related tools and hardware kits from Texas Instruments India under an MoU signed with EEE Department, BITS Pilani.

The Centre provides support for FPGA based system design and has facility for Xilinx Atlys, Gensys, Zedboard boards and camera interface.

## CENTRE FOR INNOVATION, INCUBATION AND ENTREPRENEURSHIP (CIIE)

**The Center for Innovation, Incubation and Entrepreneurship (CIIE)** is continuously working for streamlining various processes to develop an ecosystem in the campus for promoting innovation and entrepreneurship. In this regard the following activities were completed under the aegis of CIIE in respective campuses of BITS Pilani in the year 2017 - 2018

### IPR RELATED ACTIVITIES

Faculty members are being encouraged through workshops and interactions to come out with patents from their research endeavours that can have commercial worth. During the year 7 patent applications were filed from Pilani Campus, 4 from Hyderabad and 2 from K K Birla Goa campus with support from the Aditya Birla Corporate legal Cell.

## TECHNOLOGY BUSINESS INCUBATOR (TBI) ACTIVITIES

### Pilani Campus

Birla Institute of technology and Science (BITS), Pilani in association with Department of Science and Technology (DST), Government of India has established a Technology Business incubator in the area of Embedded Systems and VLSI Design to promote entrepreneurial leadership across all disciplines. TBI facilitate entrepreneurial activity on campus and off- campus and commercialization of R&D efforts at BITS. In 2013, TBI was incorporated as separate society as Pilani Innovation and Entrepreneurship Development Society (PIED Society).

The incubatees presently working and funded by PIED Society are as under:

**Snapchai Productions Pvt. Ltd.** provides Photographers end to end support with your culling, editing, design and print requirements, with an easy and superior workflow. We aim to partner with Photographers to become their extended team, backing them up with a high quality output and faster turnaround times. This way, they free up time to do what you love most - Shoot, Expand Business and Enjoy Life.

**3D-IP Semiconductors Private Ltd.** is a semiconductor chip design company developing advance products such as Digital IC, Mixed Signal IC & Chip Software etc.

**Paxport web Services Pvt. Ltd.** provides a One Click Unified Platform for authenticating any physical product, which enables consumers to authenticate any product when they are trying to buy a product anywhere, addressing 1.7 trillion dollar Counterfeiting market.

**WeMakeScholars Edtech Pvt. Ltd.** has built the most reliable and transparent platform for International Education. The platform was inaugurated by Dr. Shashi Tharoor on 29th April, 2015, with the listing of more than 18,000 Scholarships and international internships for students globally. They have also been endorsed by Helen Clark, former Prime-Minister of New Zealand and current administrator of UNDP. Within 14 months of launch, they have helped more than 12 lac students from 225 countries in finding reliable information while planning to study abroad.

**Phyzok Learning Solutions LLP** develops technology to help teachers bring concepts alive in the classroom. The USP of the Company is creating virtual teacher customized to the real teacher of the student that also provides interactivity and assessment. The market served: Schools in tier 1 and tier 2 cities.

**I Dream Education** is a social impact startup founded with a vision of facilitating enjoyable learning to the underserved masses in the country via mobile and tablet devices. Have set up Tab Labs at rural government schools via CSR and government projects, and affordable private schools

Phyzok Learning Solutions LLP and I Dream Education were funded in March 2017 by PIED Society, BITS Pilani under the TIDE scheme of Ministry of Communications and Information Technology Department of Electronics and Information Technology.

### K K Birla Goa Campus

The campus is in process of expanding incubation infrastructure by setting up the BITS BIRAC BioNEST 3000 sq. ft. facility. The BioNEST will support startups in the area of health care and environment. Funding support of Rs. 296.64 lakhs is provided by BIRAC, Department of Biotechnology, Government of India for the three projects.

BITS BIRAC BioNEST, BITS Pilani, K K Birla Goa Campus celebrated the National Entrepreneurship Day on November 09, 2017. A start up pitch competition was held on the occasion. A one day workshop on "Problem Identification, Ideation and Conceptualization" was held on 30th November 2017 at BITS, Pilani K K Birla Goa Campus. The workshop was organized and conducted by Prof. Mridula Goel, Faculty In-charge, Centre for Innovation, Incubation and Entrepreneurship, BITS Pilani, K K Birla Goa Campus & BITS BIRAC BioNEST.

### Hyderabad campus

BITS-Pilani, Hyderabad Campus has promoted a Technology Business Incubator. This Incubator is supported by National Science and Technology Entrepreneurship Development Board, DST, Govt. of India. TBI-BITS Pilani Hyderabad Campus (TBI-BPHC) aims to promote and sustain startups with intimate private sector engagement. Funds are utilized for various purposes to facilitate the incubatee companies and creation of facilities for rapid growth and sustenance of start-up ventures.

Some highlights of TBI BITS Pilani – Hyderabad Campus this year are as follows,

- TBI-BITS Pilani Hyderabad Campus has been ranked 11th in 2nd Annual 100 Brilliant Startup Incubators Ranking - Entrepreneur Media India Magazine.
- WCB, our incubatee and their window cleaning robot won first prize of 2 lakhs in the business plan competition by TiE for graduates of colleges in Telangana

A few TBI startups have crossed the POC stage and graduated into the prototyping and testing. The products are ready to be released in the market, a few are mentioned below:

- **We Make Scholars**

Started in 2015 with a 2 member team the company now has 10 full time employees and 5 interns. They also raised seed funds of Rs. 25 lakhs and from BITS PIED Society and Rs. 5 lakhs from IIM-A. The website was officially launched on April 15, 2015 by Mr. Shashi Tharoor and has since gained lot of traction in the market with the current number of signups being 1,76,000 and 2 million + page views. The team has won many national and international challenges and is extensively covered by media. The target customers are students and professionals looking for scholarships abroad. The company is currently targeting India, China and South Korea with more 1 million students looking for international education.

- **PSPR Technologies**

Started in March 2015 with a 2 member team of BITS Faculty and University Southern California, the company now has 5 full time employees and 2 interns. They have acquired a funding of Rs. 48 Lakhs. The first Product was tested successfully on 4 below knee amputee patients. The company is collaborated with Medicity Institute of Medical Science – Hyderabad for clinical trials and Partnered with Bhagwan Mahaveer Viklank Sahayata Samiti (JAIPUR FOOT). Positive feedback from the patients currently using PSPR Prosthesis

- **XBITS**

The company has A point-of-care device for testing antibiotic sensitivity of pathogens found in human urinary tract: The developed device offers

- Ease of operation and analysis of results
- Rapid results at the bedside or in doctor's chambers/lab in less than two hours
- Reliability comparable to conventional disc assay for antibiotic sensitivity of pathogens
- Affordable low cost per test.

They have acquired funding of Rs. 45 Lakhs and the product is patent pending.

- **WCB**

TEAM WCB winning the TiE Grad B-plan Competition in December 2017. They will now participate at mega event of TiE in USA.

## **STUDENT ACTIVITIES**

### **Pilani Campus**

New Venture Creation course was delivered across three campuses simultaneously. There were around 22 teams constituting around 60 students that participated in fine tuning their ideas to come out with a business plan that can be taken to next stage of implementation. Creating and Leading an Entrepreneurial organization course delivered on experiential learning pedagogy is being offered regularly for the past more than 13 years.

### **K K Birla Goa Campus**

**Team Thinkerbells, a start-up by BITS Pilani K K Birla Goa Campus Alumni & NVC students comprising** Sanskriti Dawle, Dilip Ramesh, Aman Shrivastava and Saif Sheikh received Rs. 10 Lakh grant from the BITS-75 Trust. Their flagship product Annie, addresses the pain point of low braille literacy among the visually impaired by helping them learn how to Read, Write and Type in Braille

**Rathin Shah (BITS Pilani, K K Goa Campus Alumni NVC-2015)** Founder of Recopro was a Grand final winner of Conquest-2017, International startup conclave organized by BITS, Pilani at New Delhi. Recopro makes recyclable paper pallets to replace the traditional wooden pallets; they are cheaper, stronger & greener than the wood counterparts.

### **Hyderabad campus**

E-Cell is a consortium dedicated to find the entrepreneur in the students of BITS Pilani, Hyderabad Campus. E-Cell connects students with solid entrepreneurial skills to form a close knit network, working together to spread the word of entrepreneurship. In the process of identifying, nurturing, training and establishing start-ups, E-Cell conducted a wide array of activities this year, ranging from events related to management, entrepreneurial situations and B-Plan competitions to TEDx BITS Hyderabad and E-Summit (Launch Pad).

### **Dubai campus**

Dubai campus participated in a workshop on '**Cultivating the Start-up culture**' organized by BITS, Hyderabad through telepresence on 05 February, 2017. The workshop was an interactive session, where the students were asked to talk about their ideas and experts pitched in valuable inputs and notions on how they can craft their business model for a prospering venture.

On the 9th of February 2017, CIIED held a workshop in collaboration with **InternsME**. The response to the event was overwhelming, and it was attended by 72 students. Hosted by **Ms. Noor Irfan**- the Success Executive at InternsME- the workshop targeted the employability of students who graduate from BITS Pilani, Dubai.



Another InternsME one-on-one profile building session was organized by CIIE, which received an overwhelming response from students. The InternsME Brand Ambassadors conducted the session on 22 February 2017. The session helped applicants create an InternsME profile to showcase their personality and skill set so it forms an impact on employers. Similar sessions were held multiple times till 15<sup>th</sup> of March by CIIE Dubai & InternsME Brand Ambassadors to cater to more students interested in building their profiles.

CIIE organized an InternsME Video Resume Session by Mr. Supratik Mukherjee (Product Manager, InternsME) on 28<sup>th</sup> March 2017. In the talk he elucidated with examples how a proper Video CV can be prepared and answered questions by eager students who wanted to learn and apply that knowledge to take full advantage of the opportunity. The session was followed by a Video Recording session, where based on a few guidelines, students could prepare their own Video Resumes.

CIIE encouraged its members by updating them about the activities held outside college boundaries to network and grow. Some of the events that our students participated in are:

1. Startup Weekend, Sharjah (54hr weekend for developers, startup enthusiast to develop a working prototype/model/presentation within the weekend)
2. Step Conference 2017 (The largest interactive gathering in MENA tackling the latest trends in tech, digital, music and entertainment industries.)
3. Genesis 2017 (Manipal University Dubai – Annual Inter University Business Fest)
4. Startup School Program (Summer program run by IB Hubs)

CIIE once again collaborated with **Astrolabs**, the only Google TechHub in the MENA Region to introduce the Digital Marketing Track and Web Development Track Scholarship programs of \$3200 (each) for free to students of BITS Pilani, Dubai Campus.

CIIE in the new academic year again, collaborated with InternsME, to provide students on campus with opportunities to apply for either internships or jobs on the InternsME portal. After having an over-whelming response to the call for applications for InternsME Brand Ambassador Program, the following students were selected, Mukarram Ahmed, Rewant Verma, Steve Theol Lobo, Ahmed Kamlani, Tarang Shankarshetty, Vaibhav Arora.

CIIE Dubai campus organized the **Mantra Awards 2017** for BITSAA International, which received 19 applications to the 5 categories from the students. The jury comprising of 5 faculty members and 1 student member scrutinized the applications and interviewed the students on 12<sup>th</sup> December 2017.

**HULT Prize Regional Round, Dubai:** The HULT Prize Foundation is a world renowned non-profit initiative held every year with the aim of launching the world's next wave of determined, ambitious and futuristic social entrepreneurs. It encourages young, innovative minds to solve some big challenges with innovative ideas to foster sustainable start-up enterprises. The 2017 challenge was "Refugees – Reawakening Human Potential" and emphasized on restoring the basic rights and dignity of the people and sects who are victims of unjust war, discrimination, and economic pressures. The first round was held in BITS Pilani, Dubai Campus on December 8, 2016, with 27 teams in participation. The distinguished panel of judges included Rekha Satpal – Head of Community Services at Dubai Internet City, Mr. Jitendra Kapoor – Head of Enterprise at Alibaba Cloud ME, Mr. Ajay Bhandoola, Investor @Fintech and Impact Investments, and Mr. Anshul Srivastav, Digital Officer at Union Insurance. The participants had to pitch their business plans with strategic models and practical road maps, and were posed with series of grueling questions. Team Karamfal (Mihir Prabhudesai, Tarun Krishna, Adhitya Natarajan & Anand Maheshwari) along with Campus Director for HULT Prize, Rahul Jain (Vice President, CIIE) took the flag of BITS to the Regional Finals held in Dubai on 3-4 March 2017, which saw 52 teams from US, Canada, Pakistan, Australia, France and other nations. Their idea received immense appreciation from the judges and peers, and was evinced as a promising start-up pitch. It was indeed a privilege for the university to have participated in an event of such grandeur and scale.

The Hult Prize 2018 challenge was "**Harnessing the power of energy to transform the lives of 10 million people**", intriguing the minds of young budding engineers, to find alternative energy solutions for this fast-paced era. The first round was held in BITS Pilani, Dubai Campus on December 4, 2017, with 10 zealous and skilled teams in participation. The distinguished panel of judges included: **Sridhar Venkataraman**, Relationship Marketing Coach and Franchise Owner, Accelerate Asentive UAE, **Sultan Al Zaabi**, Act. Deputy Senior Manager, Demand Management & Tariff, DEWA, Dubai and **Ajith Kumar**, CEO, Square B&C Insulation, Dubai, UAE, who took time off their busy schedules, to give the participating teams constructive feedback and suggestions to transform their ideas into reality. Three teams, exhibited massive potential, and outperformed, the other participating teams with their prospective viewpoints and strategies: The first position was secured by **Team Metamorph** (Urvashi Satwani, Jaskanwar Singh, Tushar Agarwal and Somil Mathur). **Team Perpetual Motion Squad** (Jitesh Gurav, Rajdeep Ghosh, Sidharth Agarwal and Anuj Lihori) bagged the second position. The third place was won by **Team AKNT** (Nawaz Muallim, Tarun Krishna, Sohail Danish and Adhitya Natarajan).

**BPDC Case Challenge:** CIIE Dubai successfully held its latest edition of the BPDC Case Challenge from the 24th of March to the 4th of April 2017. This competition has always proven to be a great way of helping

participants learn how to analyze and present cases effectively. We've seen great teams being built, and talented public speakers emerge and this time was no different. The competition took place in two rounds. The first round held from the 24th- 31st March 2017 saw a participation of 30 teams. Prior to round 1, a workshop on analysing case studies was held by the guest faculty, Ms. Vidyalakshmi Padmaja. The first round involved the detailed analysis of a case study, and recommendations to the problem statement. Of the 30 teams that registered, 9 teams qualified for round 2 which was held on the 4th April 2017. In the second round, the teams were set a new case study and given time to prepare their analysis and formulate their recommendations. They then presented their findings in front of a panel of judges comprising of Ms Vidyalakshmi Padmaja and CIIE faculty in charge, Dr. Trupti Gokhale.

**The Wolf of Wall Street** – 'Stock Market and Market Simulation Competition', a flagship of BITS Pilani Dubai Campus was organized between 10<sup>th</sup> October to 23<sup>rd</sup> October 2017. We had a 66 teams participating from different universities such as Middlesex, Amity, Murdoch, Manipal, Wollongong, SP Jain. A guest speaker from Barjeel Geogit – Ms. Elizabeth (MBA, CFP), spoke on the issues faced while trading stocks and how to overcome them. Insights were also given to invest in the right markets. 66 teams from 8 universities participated in the online round which took place over 5 working days of the U.S.A stock market. (15<sup>th</sup> – 19<sup>th</sup> October). Top 15 teams at the end of 5 days were promoted to Round 2. The teams that made it to Round 2 were requested to come to BITS Dubai on 23<sup>rd</sup> October for a live floor trading atmosphere with investment marketing followed by a few quizzes covering an array of topics. 6 novel projects were launched along with 3 quiz sessions (hosted by BPDC's Quizzing club - Flummoxed). The scores achieved in the quizzes were added to the profits earned through trading. The teams that emerged victorious were Gurus of Dalal Street, The Lone Ranger and AlphaQ. The teams received cash awards of AED 400, 250 and 150 respectively, along with a memento.

### Teaching Learning Centre (TLC)

#### Activities of Teaching Learning Centre, BITS Pilani, Pilani Campus in the year 2017 (2<sup>nd</sup> Semester 2016-17 and 1<sup>st</sup> Semester 2017-18)

- ❖ A talk on "Bloom's Taxonomy" was delivered by Dr. Vishal Gupta from the Department of Computer Science and a member of the Teaching Learning Centre (TLC), BITS Pilani, Pilani campus on January 5, 2017. To an audience of BITS faculty members, he explained the concepts with the help of examples from their everyday teaching experiences.
- ❖ A two-day workshop on "Achieving High Quality in Education at the Tertiary Level" was conducted by Prof. K. P. Mohanan and Mr Sriram Naganathan during January 9-10, 2017. The visiting speakers are distinguished members of the organization 'ThinQ' (<http://www.schoolofthinq.com>), which helps institutions (primary, secondary and tertiary) to set up courses in inquiry and integration. The workshop emphasized the role of critical thinking, rational inquiry, integration and transdisciplinarity in teaching-learning at the higher education level. The speakers demonstrated inquiry based pedagogy, by taking several examples of Mathematical and Scientific inquiry. They also pointed out the crucial importance of aligning the curriculum/syllabus to the evaluation process. The workshop was attended by about 25 faculty members.
- ❖ TLC, BITS Pilani, Pilani Campus, in collaboration with the Department of Humanities and Social Sciences organized a two-day workshop on **Orienting Teaching towards Outcome Based Learning** during 18-19 February, 2017. Major (General) S.S. Nair, AVSM (Retd.), Director, BET, Pilani delivered the keynote address in which he highlighted the need to improve the teaching-learning scenario in the country and emphasised localized solutions for different nations. 28 teachers from 14 schools of Pilani and nearby places, 4 research scholars and 31 students from 13 schools of Pilani participated in this workshop. Dr Paritosh Shukla (Department of Chemistry), Prof S.K.Choudhary (Department of Humanities and Social Sciences) and 4 Teach India Fellows conducted sessions on "Why Outcome Based Learning?" and "Teaching of English and Science with Outcome Based Learning".
- ❖ "Together at BITS" was jointly organized by TLC, BITS Pilani, Pilani campus, the Staff Association and the Students' Union on 18 February, 2017 at the BITS auditorium. It was an evening of music and dance performances by faculty, their family members and BITS students. It was an attempt to bring faculty and student community closer through their involvement in the event. Classical music and dance performances by Gurukul and Raagmalika and a special chorus medley performance by the Department of Biological Sciences were some of the show's highlights.
- ❖ The second Open Forum Discussion (in a debate form) was organized on 27 March, 2017. The motion for the debate was "It's high time BITS Pilani implemented compulsory attendance policy". Two teams of five students each debated this motion in three rounds with audience reactions in between. The event also witnessed the presence of the Vice Chancellor, Prof Souvik Bhattacharya and the Director, Pilani campus, Prof AK Sarkar.
- ❖ An interactive session on Research in Teaching was held on 20<sup>th</sup> April 2017 where Prof. Sanjiv Kumar Choudhary, Faculty in charge, TLC, Pilani Campus shared his above mentioned ideas with faculty members.)

- ❖ A two day ITW Part I for newly inducted faculty members of the institute was held during 26-27 July 2017 where Director, Dean (admin) and Associate Deans of ARCD and ID and a few senior faculty members of the institute introduced the newly inducted faculties with BITS system and also delivered talks on various aspects of classroom teaching.
- ❖ ITW part II for newly inducted faculty members was held during 17 August-21 September 2017. 15 faculty members divided into 2 teams participated in this workshop. 12 Senior faculty members, also divided into two teams observed the presentations and gave valuable suggestions for further improvement.
- ❖ The 3<sup>rd</sup> Open Forum Discussion on “My expectations...” was held in the NAB auditorium on 22 August 2017 where students and faculty members shared their expectations from each other. Findings of the Empirical study on Effectiveness of Classroom Teaching at BITS Pilani, Pilani Campus from Students’ Perspective” were also shared with the audience. The function was graced by the campus Director and the Dean of administration apart from about 60 faculty members and 25 students.
- ❖ A one-day workshop on Teaching and Learning for Ph.D. scholars of the institute was held on 10 September 2017. 160 Ph.D. scholars across disciplines participated in this workshop. Prof. S. K. Choudhary, Faculty in-charge, TLC, Pilani campus started this workshop specifying the purpose of organizing this workshop. Prof. A. K. Sarkar, Director, BITS Pilani, Pilani campus talked about the rationale behind the establishment of TLC and also emphasized on the need for teachers to adapt to the changes which are happening due to new technology and also because of the changing aspirations of the young generation. Prof. P. Srinivasan, Prof. Rajesh Mehrotra, Dr. Rajeev Sakhuja, Dr. Paritosh Shukla and Prof. Sanjiv Kumar Choudhary conducted sessions on different aspects of Teaching and Learning during the workshop. Dr. Tapomay Guha Sarkar coordinated the feedback session at the end of the workshop.
- ❖ A 3-hour workshop on Maximising the Use of NALANDA (LMS) in Teaching and Evaluation was conducted on 2<sup>nd</sup> November 2017 where 31 faculty members from across disciplines of the institute participated. The workshop was conducted by Dr. Virendra Singh Shekhawat and Dr. Vishal Gupta, faculty members from Computer Science and Information System department. In the beginning of the workshop Prof. Raj Kumar Gupta from the Physics department shared his experiences in using NALANDA for conducting tests and quizzes in the courses he teaches. He also demonstrated how question papers could be designed using this LMS tools. Dr. V S Shekhawat and Dr. Vishal Gupta demonstrated in details the tools available in the LMS for conducting tests and quizzes and provided hands on experience in using all those tools to the participating faculty members. They also demonstrated how to upload marks which can be seen by the respective students only.
- ❖ TLC organized an interaction with Prof. Garrick E. Louis, Director of Graduate Studies, Systems & Information Engineering and Director, The Small Infrastructure and Development Center, University of Virginia Charlottesville, VA on 27 December, 2017 in Room no. 2147. During the interaction Prof. Garrick talked about the possibilities of collaboration between his University and BITS Pilani in the areas of teaching and research.

## B1.12 CENTRAL FACILITIES REPORT

### Central Library

Library collection is **242751** volumes and during the year, 1730 new books were added to the existing collection in various disciplines of Science, Engineering, Technology, Pharmacy, Management, Humanities and general reading materials.

**216** print journals and 34 online databases were subscribed. The online resources now cover more than **39315** e-journals for accessing full-text articles and databases related to company and industries. The Library received **80** Theses in soft-copy format submitted by the Researchers leading to PhD Degrees.

As part of University-wide service called **Inter-Library Document Request Service (ILDERS)** the library has retrieved, downloaded and sent **1997** articles/ book chapters from various databases and resources requested by faculty members and Research scholars of other campuses i.e Goa Dubai and Hyderabad. During the year total **32,073** books have been issued from the library by the students, researchers, staff and faculty members for their academic and research purpose. Online catalogue users in last two and half years are 4,77,931. Total number of hits on the library portal-infoBITS for last two years is 97,548.

Library has uploaded over 6800 news links on the library Portal's "**Daily News**" and has produced monthly **infoBITS Bulletins** covering 12 different subject areas. The new **Audio Visual cum Group Discussion Room** as attracted over 1500 students for various deliberations, Group Discussions, Brainstorming sessions and this facility was booked by the students 146 times in 2017.

As a part of MOU with UGC INFLIBNET, the library has provided URKUND anti-plagiarism software access to all faculty members and it is now the part of the library portal. More than 1000 project reports, theses plagiarism were checked by the Library staff on URKUND and Turnitin softwares as an additional support for the research and development.

The library has set up a new and renovated **GD Birla Rare Book Collection** where the rare books are being preserved for posterity. The library staff have been trained to preserve the rare books which are in a very bad shape with brittle and broken pages using German Tissue Paper. nearly 50 rare books have been so far preserved using this technology.

In addition to the above developments following are some of the events organised by the library to inculcate the reading habits and popularize library services among the library users:

- **Basant Book Festival** was held from 23-28 Feb 2017
- **Draw a Book Cover Competition** was conducted on 23rd April 2017
- **World Book and Copy Right Day** was celebrated by organizing display of books on William Shakespeare and others on 23rd April 2017
- **Peace of mind and meditation training** was conducted for library staff 23-25 May 2017
- **Teachers Day Celebration:** More than 500 Teachers day Cards were distributed to students to appreciate their teachers on 5th September 2017 and a book display on great teachers and eminent scientists was held 5-10 September 2017.
- **Readathon- a reading challenge** from 1st August to 30th September 2017 winners prize distribution ceremony was held on 7th October 2017
- **Web Training Session on Urkund Anti Plagiarism Services** from eGalactic to Library Staff on 20th December 2017.
- **Winter Reading Challenge 6-16 December 2017:** More than 1300 books were issued by the students for the winter vacation reading.

#### Facts about the library

The statistics indicate that the Library collection has grown steadily. Some of the significant statistical data about the Library are as follows.

1	Current library holdings	242751
2	Average number of books issued per month	3300
3	Average number of readers visiting the library per month	9140
4	Books added during the year	1730
5	Total number of Theses	1335
6	Number of print Journals subscribed	236
7	E journals made available on library site through online databases	39000+
8	CD-ROM collection (including VCDs)	2,397
9	Educational Video Cassettes collection	148
10	Total number of reading seats in the library	750
11	Total library area	65,000 sq.ft
12	Total number of Library users (members)	5072

#### Medical Centre (MedC)

Medical centre is providing quality healthcare services through its team of dedicated specialist doctors. Two doctors, Dr. Sanjana R Bhat, Gynaecologist & Medical Superintendent(o) and medical consultant Dr. R.P.Pareek are fulltime doctors available at the centre while other specialists visit on different weekdays. ENT specialist Dr. H.S.Sankhla visits the centre on every Monday and Thursday evenings, the paediatrician Dr. Karan Singh Beniwal on all Wednesday evenings, the Dentist Dr.Sanjay Katewa on all Saturday evenings and the homeopathic doctor Dr. Diwakar Pathak is available on all Tuesday evenings. Besides these specialist doctors, a General Duty Medical Officer from Birla Sarvajani Hospital visits MEDC for evening OPD's.

There is a computerized system for registration, investigations and procurement of medicines from MEDC pharmacy thereby making all records available in a digital format and making all transactions cashless. Medicines from the pharmacy are available on prescription only.

MEDC has a fully equipped 3 bed emergency observation room to take care of any medical emergency.

Medical centre has an excellent well equipped clinical laboratory. Besides having fully automated biochemistry and haematology analysers, there is an ELISA plate analyser for conducting Thyroid function tests, machines for performing glycosylated-haemoglobin test for diabetes, serum electrolytes and urine comprehensive examination tests. Computerized ECG machine, a spirometer and a digital dental X-Ray unit are also available at MEDC. In order to further improve the diagnostic facilities at MEDC, approval for the installation of a new multi-parametric automated immunoassay analyser has been sought and the process for procurement has already started.

From 1<sup>st</sup> January 2017-15<sup>th</sup> January 2018, medical centre recorded a total of 18,437 patient visits out of which 7778 were new registrations. 4319 patients underwent various haematology and biochemistry tests.

Besides curative services, the doctors at MEDC provide preventive services by conducting awareness lectures on various topics of public health importance. The topics covered range from adolescent health, anaemia, nutrition and health, obesity, osteoporosis, diabetes etc. Health camps related to BMD –bone mineral density-estimation and sponsored by various pharma companies, to create awareness about osteoporosis are held in MEDC from time to time.

Medical Centre has been chosen as a primary care centre for BITS employees covered under ESIC scheme. This scheme was rolled out successfully on 14<sup>th</sup> September 2017. Besides the routine outdoor services provided to these patients, special medical camps are being organized for these patients from time to time. The entire process is computerized, the details of which are provided to ESIC on a monthly basis.

The construction of a new separate washroom facility for all the female patients visiting the medical center has also begun.

### **BITS Coop**

The BITS Consumers Cooperative Stores Ltd. Continued to extend its services to the staff and students of the Institute. Its total membership as on 31st December 2017 was 3806 consisting of 809 staff members and 2997 students. They were holding 4045 major and 12398 minor shares of the stores. The scope of its activities covers the following:

1. Sale of groceries and vegetables to the staff members;
2. Supply of stationery and general merchandise;
3. Supply of consumables, stationery, equipment and other materials to the Institute and Books to Library;
4. Supply of books to the students;
5. Running a bookshop and organization of a permanent book exhibition;
6. Providing computer and mobile repair services; and Running a Medical Store in the Medical Centre of the Institute.

### **Blossom Kids-Zone (BKZ)**

The Blossom Kids-Zone (BKZ) is run voluntarily by faculty wives and it takes care of the pre-school training and education of the children in the age group of three to five years. The center primarily caters to the needs of staff children belonging to BITS and the sister organizations. During the year 2017, the center had 81 students. During this period the center had organized various activities such as sports competition, drawing competition, fancy dress competition, etc. The Annual day program of the center was held on 4<sup>th</sup> March 2017. Prof Souvik Bhattacharyya, Vice-chancellor, BITS-Pilani and Prof A K Sarkar, Director BITS-Pilani, Pilani Campus were invited as guest of honor and chief guest of the function, respectively. The children of the Centre also participated in the program held on Gandhi Jayanti, organized by BITS.

### **Institute Functions**

Institute functions have been the integral part of BITS as an organization/ institution. In year 2017, BITS Pilani, Pilani campus, as usual practiced in the past, saw the magnificent celebrations of its five institute functions throughout the year viz. (i) Republic Day (26th January), (ii) Founder's Day (Basant Panchami- 1st February), (iii) Ram Navmi- Birthday of Founder Chairman Shri G. D. Birla (5th April), (iv) Independence Day (15th August), and (v) Gandhi Jayanti (2nd October). Herein, students, staff and faculty enthusiastically attended all these functions and graced the occasions. Over all this, there had been the constant and unconditional direction and support of Vice Chancellor, Director, Dean (Administration) and other deans (divisions) and unit chiefs (units) behind all these institute functions.

### **BITS House Allotment Committee (BITSHAC)**

Estate Management Unit also looks at house allotments to staff members of BITS Pilani (BITS House Allotment committee (BITSHAC)). The Primary aim of the BITSHAC is to streamline regulatory guidelines for the allocation of accommodations to Staff members and implement a transparent and a fair policy in a consistent manner so that all applicants with similar eligibility characteristics are treated alike with openness while maintaining individual confidentiality to requesting Staff members, following 'Best Practices and Framework of Guidelines', keeping in mind the circumstantial variability and complexities.

BITSHAC acts in a manner to encourage equal opportunities and will seek to ensure that information on the Allocations Policy gets disseminated in a consistent manner. The BITSHAC invites applications against a circular / notice from Staff members on a monthly basis in a prescribed format or as and when vacancy arises and does the allotment as per guidelines framed. The document on guidelines has been framed and the same implemented in all campuses with slight variations based on local environment.

### **BITS Staff Housing Group**

The BITS Staff Housing Group constituted in the year 1989-90 by the Institute. For helping the BITS Staff members for having personal houses in the new campus, "Gyan Vihar". The Institute has provided Rs. One lac Fifty Thousand as soft loan to staff members for the construction of the houses. Forty staff members have constructed their houses and many other staff members are planning to start the construction work soon. Both the sectors have been provided with urban electric supply. Two new-cemented road of 300 feet long has been added in sector number one. Streetlight has also been provided. All activates of the Gyan Vihar are under Public Relations Unit.

### **Recreation Activiites Forum (RAF)**

The Executive Committee of RAF selected and screened Hindi & English movies, which were enjoyed by the members and their guests during the year. During the two semesters RAF membership for both Hindi and English sections together was as followings:

Second Semester 2016-2017 937

First Semester 2017-2018 1274

### **Loan facilities for Staff members**

#### **(i) Staff Furniture Loan**

Under this scheme the staff members get interest free loan re-payable in twenty four monthly installments. Institute provided Rs.8,00,000/- as loan to 80 staff members for the purchase of various furniture items.

#### **(ii) Computer Loan**

This facility was started in the year 1999 for the purchase of computer for personal use by staff members with a simple interest of 6% per annum. It is being utilized effectively by faculty. This year Rs. 46,000/- has been given to 1 staff member for this facility.

#### **(iii) Housing Loan**

The Institute provides the housing loan upto Rs. 1.50 lacs to staff members for the purchase/ construction/ renovation of houses. This year Rs. 1,50,000/- has been given to 1 staff member for this facility.

### **Publications and Media Relations**

Publications and Media Relations Unit brought out the following publications during the year: (i) Annual Report (ii) Annual Report – a quick glance (iii) BITS in the News (iv) Bulletin (v) BITSCAN magazine. Besides, the unit gave effective support for coverage of Institute events in the media which is evident from the large amount of media coverage BITS received (both in national and local press) during the year. PMRU regularly sent latest news to the web team of the Institute for updating on the Institute website. Also the PMRU team provided support to various departments and student bodies in branding matters while bringing out their publications, posters, brochures, invitations, etc.

#### **(i) Reprography**

The Reprography Section takes care of all the in-house printing, binding and photocopying work, (e.g. printing of institute bulletin, application forms, annual report, various information brochures, time table, academic regulation, educational development division notes, answer booklets and project reports for submission to various Government and other funding agencies). The printing and binding sections have been fully equipped with facilities like desktop printing, computer type setting, drafting, off-set printing, laser printer, cutting, laminating, stitching, spiral binding, etc. Reprography has separate question paper printing/copying facility where the scripts related to assignments, tutorials, quizzes, test and comprehensive examination for all courses offered in on-campus or off-campus programmes are printed.

Apart from Institute work, the reprography section also caters to the printing and publishing needs of staff and students. Services like, photocopying of journal articles, laser printing, binding and lamination of project reports are available round the clock. Reprography also support printing requirements of various student activities like, OASIS, APOGEE, BOSM and other activities undertaken by various clubs and associations. The printing and publication requirement of conferences and workshops organized in the Institute is also supported by reprography.

#### **(ii) Communication and allied facilities**

The following facilities are available for the benefit of students and staff.

1. Telephones

Each hostel has been provided with a receiving telephone facility placed near the common room.

2. Dispatch facility

All the Institute dispatch requirements are catered through reprography either through ordinary/speed post facility available at the Vidya Vihar Post Office, Pilani or through private courier and cargo carriers for both domestic and international destinations as per needs.

3. Color Photography Lab.

The lab has following facilities: Camera: Olympus Digital SLR Camera E 300, Cannon EOS 500N, Durst Color Enlarger (Model M-670), processing timer, temperature controlled paper processing tank, 35 mm SLR Camera (Pentax K 1000) with flash gun (mega 988 twin), temperature controlled film processing tank with 6 developer tanks, Cannon Zoom Lens EF 75-300 mm Pentax wide Zoom lens 35-80 mm and enlarger timer.

4. Photocopying and allied facilities

Photocopying, printing, word processing, binding and laminating facilities are available for students and staff on charge basis at Reprography section. Photocopying service is also available at the BITS Library.

### Central Workshop

The Central Workshop of the Institute imparts training to the students and caters to the maintenance and fabrication needs of the Institute. Students' training consists of training all integrated first degree students through the course 'Workshop Practice' by imparting skills in various manufacturing processes like machining, fitting, turning, carpentry, smithy, sheet metal, electroplating, welding, etc. In addition, students are imparted training for other courses like 'Production Techniques', 'Metal Forming and Machining', 'Casting and Welding', 'Computer Aided Manufacturing', and 'Flexible Manufacturing Systems'. Apart from routine maintenance, fabrication and training, the workshop also accepts jobs on precision fabrication of project work of students, staff and research scholars.

The workshop comprises the following sections: Machining, Welding, Electroplating, Fitting, Smithy and Sheet Metal, Carpentry, Foundry and Patterns, Tool Room, Metrology, Painting, Metal Processing and Metallurgy, Electrical, Automobile, CNC Training Centre and Store. The major equipments include industrial vertical machining center (LMW KODI 40 Klein), five CNC trainers (three turning centers and two vertical machining centers), industrial robot (pick and place), five universal milling machine tools, universal cylindrical, centreless, surface (hydraulic), and tool and cutter grinders, gear hobbing machine tool, NC machine tool (retrofitted at workshop), thirty one lathes (centre, turret, capstan, precision and dc supply heavy duty), seven shapers, planner, slotter, twelve drilling machines, ten wood working lathes, two wood working planers, band, circular and universal wood saws, TIG, gas and arc welding equipment, power press, pneumatic hammer, etc. The new building for the workshop is ready.

### Instrumentation

Instrumentation unit undertakes regular and annual maintenance of laboratory instruments across the Institute.

Instrumentation unit provides LCD projection facility for regular class-work in fifty plus classrooms, workshops, conferences, symposiums and other academic and cultural activities across the institute. The centre also performs preventive maintenance for these projectors.

The centre facilitates institute programs with high quality Public Address Systems, Digital Mixers and Hi-Fi loud speakers and Lighting equipment to make the events more effective and lively.

Tata Sky dishes have been installed in all hostels's common rooms.

All classes have been equipped with projection facility supported by UPS. Unit has procured some state of art equipment like Kramer switch, Logitech presentation remote, 4 Unit x LED par 64 LED stage par cans light 36x3W RGB DMX RGB Infinite color mixing with Control mode: Work Auto, Sound active, master/Slave, DMX512, LED control panel, Irradiant SRC-146 Lighting Controller, 24 Channel Lighting Controller and Panasonic memory card camera-recorder

### Information Processing Center

Information Processing Centre (IPC) provides computing facility for students and staff of the Institute. The Centre is responsible for planning, need forecasting and maintenance of computing resources across the Institute. The Center has signed campus agreement with Microsoft and MATLAB for licensing their product & tools. With a view to upgrade the computing resources, across the Institute, 200 desktop machines and a few printers & peripherals were purchased. During the year, Centre has been involved in setting up of Wi-fi based 600 node network in girls and boys hostel. Currently the center is involved in setting up of a 256 core cluster machine as part of augmenting the compute infrastructure.

With the augmentation of existing facilities, the Centre has been able to support conduct of online examinations, structured and unstructured labs for more than 30 courses offered by Computer Science and other departments. The center has also been involved in supporting the number of workshops and training programmes conducted in the Institute.

The IPC is open on all days throughout the academic session from 08:00 A.M. to midnight and it is closed only for 3 days in every semester. The details of existing facilities in the IPC are given below.

The Center has a Blade Servers and 10 numbers of Intel based SMP servers, supporting variety of operating systems and development tools. These systems operate under UNIX and Windows environment and support variety of compilers database and software tools such as C, C++, Lisp, Microsoft Visual tools, Matlab, PSPICE, Rational Rose etc. The Centre has 350 numbers of desktop machines, with Windows 7/ Linux and variety of software tools. The central computing facility specifically takes care of the bulk computing needs of students in their courses, which needs acquiring and use of computer programming skills. It also caters to large number of computer projects of First Degree, Higher Degree and Ph.D. Students.

Apart from the above mentioned centralized computing facility, the Institute has workstations and Pentium machines distributed at various other locations. These Centers are placed near to the locations requiring Computer Aided Modeling & Design, computer-based instrumentation and experiments as well as other activities. In addition to this the various departments have their own computing facility supporting specialized tools.

### **The BITS Intranet**

IntraBITS is a collaboration-category intranet portal deployed and supported by the Software Development and Educational Technology Unit (through its Centre for Software Development) since 1999. Its principal objective has been to enable the faculty and students to leverage appropriate software technologies in the On-Campus educational (teaching, learning, sharing) process. The followings are some of the highlights of the BITS Intranet. This portal has gradually expanded to multiple independent sites linked to it.

- Several learning materials, prepared by faculty members over a period, have been deployed on the Intranet. The courseware spans from simple lessons on HTML pages, online presentations, to fully interactive learning applets. 'Intrabits', in this sense, also acts as a Test-Bed for the BITS-VU project.
- In addition, faculty members can upload lecture slides, assignments, notices, lecture notes etc. through the in-house developed Course Management Tool. This tool allows them to carry out grading (Mid-Sem and End-Sem) for their courses. This facility is open only to the Instructor-in-charge of each course. Students can log into the IntraBITS portal and see the material, notices and grading information as published by the faculty member for their benefit.
- In addition, an On-line Learning Management System (Nalanda) built in 2010, atop LAMP and Moodle platforms provides a complementary globally accessible service that aims to serve the entire community, both on-campus and off-campus.
- Recently, an online Notice-Management System developed by the CSD has been integrated with this portal.

The BITS Intranet is serving as a vibrant medium for exchange of academic and other ideas among students and faculty.

### **Computer Assisted Housekeeping**

The Computer Assisted Housekeeping Unit (CAHU) is a central facility of the Institute, which provides centralized information management and processing for Computerized University Administration to all the sections of BITS.

In recent years the emphasis is on shifting the in-house developed computing operations to PeopleSoft ERP system; By August 2015 all the academic data and procedures except degree printing, have been shifted to ERP System and from 2015-16 first semester, student academic registration is done entirely in the ERP system. Similarly the legacy accounting and finance software will slowly be replaced by the ERP. As an intermediate step from FY 2015-16 Pilani campus accounts data has been shifted to Tally system, which will eventually move to PeopleSoft. By the beginning of next Financial Year i.e. April 2018 Pilani Campus Staff Pay Roll and personal data will be shifted to PeopleSoft ERP system and Alumni Data Base will be maintained by Dean Alumni Relations.

Degree processing and printing: 189 degrees (Pilani-78, Goa-46, Dubai-25, and Hyderabad-4-) for 80<sup>th</sup> award and 3253 degrees (Pilani-1294, Goa-746, Dubai-358, and Hyderabad-855) for the 81<sup>st</sup> award were printed. The degrees were made available on time for the convocations held at different campuses during 2017.



### Central Analytical Laboratory Facility

Central Analytical Laboratory (CAL) at BITS Pilani, Pilani campus houses many sophisticated instruments, catering to the needs of the various research Departments like Pharmacy, Biological Sciences, Physics, Chemistry and Chemical Engineering etc. The facility is used for training and teaching of the students as well as doctoral research. CAL has a spacious area of 2600 sq.ft and is equipped with latest instruments which include - Stability Cabinets (For stability testing of drugs and organic molecules), UV-Visible Spectrophotometers, UV-Visible-NIR Scanning Spectrophotometer, IR Spectrophotometer, FTIR Spectrophotometer, Scanning Spectrofluorimeter, High Voltage Electrophoresis, Digital Polarimeters, Ultra and Refrigerated Centrifuges, Differential Scanning Calorimeter, Gas Chromatography, High Performance Liquid Chromatography (with auto-sampler and various detectors), 400 MHz NMR spectrophotometer (Bruker AVANCE III) equipped with BBFO probe and auto-sampler and Elemental Analyser (vario MICRO cube) for estimating the elemental compositions of organic compounds. Recently the laboratory has been upgraded with three sophisticated equipments including HPLC (Thermo Fisher Scientific), Thermogravimetric Analyzer (Shimadzu), Centrifuge (Eppendorf). Currently the facility is capable of carrying out research work at all levels including the industrial projects. Apart from using the Central Analytical Laboratory facilities for teaching and training of the First Degree and Higher Degree students, it is extensively used for dissertation and doctoral research, faculty research and consultancy work. It is also used by scientists/faculty from other nearby organizations.

### Central Animal Facility

Central Animal Facility at BITS Pilani, Pilani campus is a CPCSEA approved facility with total floor area of 5330 sq. ft. The facility is also approved for in-house breeding of small animals. The facility maintains the animal species like Rats, Mice, Guinea Pigs, Rabbits and Hamsters. It was built up in accordance with guidelines issued by CPCSEA and other regulatory bodies. It is also equipped with incinerator (electrically operated) facility for disposal of the biological and other biomedical waste. The air conditioned facility is maintained by well trained personnel, with a full time veterinarian to take care of the various requirements of the animals. Central Animal Facility caters to the needs of the various research departments like Pharmacy, Biological Sciences and Chemistry, etc. The facility also incorporates Pharmacokinetics, Pharmacodynamics and Pharmacology research laboratory for carrying out advanced research in the areas of pre-clinical pharmacokinetics, bioavailability studies, pharmacological screening of various synthetic/natural origin drugs. The laboratory has sophisticated instruments such as two chamber automated organ bath, laser doppler, non invasive blood pressure recorder, semi dry transfer apparatus, microtome, RT-PCR, electroconvulsimeter, actophotometer, analgesiometer, light dark apparatus, rotarod etc. Equipments such as surgical anesthesia machine, electrical cautery, deep freezers (-20 and -80°C) and spare air-conditioners are also utilized. The laboratory is upgraded with video documentation system for various animal behavioral studies. Facility is geared to take up various industrial or governmental funded projects in various pre-clinical areas.

## B1.13 MAJOR MAINTENANCE, RENOVATIONS OR NEW CONSTRUCTION REPORTS

### Maintenance, Renovation and Construction

Apart from carrying out routine maintenance of the Institutional, Hostels & Staff Quarters buildings, Infrastructure facilities like STP, 33KV Sub Station, Roads, Footpath and Street Lights, the following works were taken up during the year either as new construction or as renovation:

#### Works Completed

1. Two wheelers & cycle parking was constructed using pavers in front of Building Store.
2. Non Destructive Test was got done at VFAST Hostel for Guest Room no. 1 to 15 for proposed renovation work.
3. Six guest rooms & one common toilet were renovated at VFAST Hostel.
4. Painting, plumbing, electrical & carpentry work was done as part of Summer vacation maintenance activity in Meera, Malviya, SV, RPA & VKB Students Messes.
5. Internal painting work was done as part of Summer vacation maintenance activity in MB-I, II, III, IV, V & IX, Mal-B & C, Shankar, Vyas, RP, Ashok and Bhagirath Bhawan.
6. 298 numbers of Over Head Tanks were cleaned in Hostels, Messes & Institute Buildings during Summer vacation.
7. A room in FD II was renovated for Matrix Lab of Chemistry Department, which included painting, plumbing, carpentry, electrical and air conditioning work.
8. A Cement Concrete platform was constructed for Kiosk at Malviya Bhawan.
9. A 250 feet long sewage line was diverted near KG Mess to facilitate construction of a building for housing electrical infrastructure like transformer & DG set.

10. Conversion of 05 IWC to EWC and replacement of 11 cast iron cistern tank with PVC in Block 9 at Meera Bhawan.
11. Summer vacation maintenance work including repainting and plumbing was done at All Night Canteen.
12. SE Paint up to 03 feet in height in Ram, CVR, Meera Old Block, Gandhi Bhawan and 23 Classrooms in NAB was done.
13. Provided door seal in Meera VII, VIII & Old Block, Mal-A and VK Bhawan.
14. Replacement of damaged chicken mesh for pigeon protection at VFAST Hostel New Building.
15. A room in NSB was renovated for Central Instrument Facility (CIF) Lab, which included civil, electrical & air conditioning work.
16. Taking over the renovated Hostel buildings of Meera VII & VIII, Mal-A & VK Bhawan and New Married PhD housing from Project Parivartan Team.
17. Quarters painting: Internal - 51 Nos. and External - 05 Nos.
18. Construction of Peacock protection area 380\*130 feet on south of S R Bhawan.
19. 400 Street light Poles were numbered.
20. Rain water harvesting points were constructed at 11 locations in the Campus.
21. Installed 08 Sanitary Napkin destroyer machine in 7<sup>th</sup> & 8<sup>th</sup> block of Meera Bhawan.
22. FD-1 lift was repaired and put under AMC with OEM.
23. Electrification work was done for C-n-C Lab at New Workshop Building.
24. Added on 14 numbers of Street Light Poles on Bhagirath, Malviya and Gandhi Marg to increase illumination on Roads.
25. Planted 750 numbers of tree saplings as part of Plantation Drive 2017.
26. Procured a diesel engine operated lawn Mowing Machine and one Brush Cutter for Sports Ground.
27. Re-constructed 150 feet long damaged Compound wall.
28. 4510 Sq. Ft. of road surface was repaired by laying 20 mm thick premix bituminous carpet.
29. Procurement & Installation of organic waste treatment plant of 02 Ton per day capacity, along with required infrastructure has been set up.
30. Installation of 110 numbers of M S litter bin stand in Malviya-A, Ram, Budh and Gandhi Bhawan have been installed for better litter management.
31. Ensured quality housekeeping standard in Institutional Buildings, Student Hostels and Roads.
32. Ensured well maintained green areas and Sports Ground.
33. Procured one 500Kg capacity E-Loader for material transportation within the Campus, which is a beginning towards reduction in carbon footprint.

#### **Works in Progress**

1. Installation of motion sensor for lights in Toilet of NAB and Meera Block VII & VIII, NSB and FD I.
2. Installation of 01 MW Roof Top Solar Power Plant, out of which 640 Kwp has been commissioned.
3. Commissioning of 2-Ton per day capacity Organic Waste Treatment Plant.
4. Procurement of 2 Nos. E- Garbage Loader for wet waste collection within in the Campus.
5. Construction of paved Footpath on South of Vyas Bhawan.
6. Taking over of renovated building of FD I from Project Parivartan Team.

#### **B1.14 MAJOR EQUIPMENTS ACQUIRED DURING THE YEAR**

Centralized purchase unit processes and monitors purchase of equipments and consumables of the institute & also looks after the repair requirements of the equipments. The purchase process includes request of quotations, preparation of comparative statements, indents, bill checking and status reports of purchase. The entire process is managed by computer database containing more than 5500 types of consumable, 1450 equipments, and 2500 suppliers. The whole process being computerized ensures efficient monitoring, timely acquisition of materials, keeping track of delayed or deferred supply and concurrent remedial action.

Purchase of consumables: The annual purchase list for consumables are finalized by considering the institute requirements and existing stock. The consumables are computer stationery, chemical and glassware, electrical and electronic spares, workshop items, reprography items and sports items. The category in-charges process the requirements of individual groups, units, and divisions, and compile them into a consolidated list. The consolidated list of consumables, along with the estimated budget, is presented before the purchase committee. The purchase committee gives approval to this list after scrutinizing it and suggesting necessary modifications.

Purchase of equipment: The equipment purchase of the institute is normally done under various government sponsored grants like CSIR, DBT project , , DST, DST FIST, DBT, etc. and also through the BITS non-recurring grant. The purchase of equipment essentially involves interaction with the user and approval from the purchase committee with regard to the type of equipment, cost, budget head, terms and conditions of purchase, import components etc. On approval, the normal process of purchase is undertaken and in cases of imported items, the required protocol is followed.

New equipments acquired: New equipments purchased in this calendar year include more than 1450 in various engineering and science disciplines for BITS-Pilani. Some of the equipments are also purchased for BITS-Pilani, Goa Campus and BITS, Pilani-Hyderabad Campus. Computational facilities have been substantially strengthened by addition of computer systems and networking hardware. The list of major equipment added during this year for various courses are included in the 'Annexure B1-11'

#### **Equipments and Accessories for BITS Admission Test (BITSAT)**

BITSAT is for admission to integrated admission program for all the three campuses of BITS-Pilani at Pilani, Goa and Hyderabad through a computer based online test conducted by BITS. CPU Procured items like servers, cables, firewalls, laptops, printers, scanners, etc. for this purpose.

### **B1.15 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS**

#### **Students Union**

The Students' Union elected the following executives for 2017-2018:

<b>President</b>	-	Puli Bharatha Ratna Deep
<b>General Secretary</b>	-	Shivam Jindal

#### **Hostel Representatives**

<b>Bhawan</b>	<b>Name</b>
Ashok Bhawan	Imiteshwar
Budh Bhawan	Satyansh Rai
Bhagirath Bhawan	Lohit Karlapudi
CVR	Harsha Vardhan A
Day Scholar	Pranav Singh Rathore
Vishwakarma Bhawan	Rithwik Mavuluri
Gandhi Bhawan	Arghae Singh
Malviya Bhawan (A&B)	Ayush Bothra
Vyas Bhawan	Anand Chordiya
Malviya Studio Apartments	Sandeep Dutta
Meera Bhawan 12378	Chitra Kadyan
Meera Bhawan	Kanupriya Sachdev
Ram Bhawan	Parth Goyal
Ranapratap Bhawan	Prateek Bhutani
Shankar Bhawan	Ansh Thakur
SR Bhawan A&B	Akhand Pratap
SR Bhawan C&D	Uday Raj

#### **Secretaries of Clubs**

The following were elected Secretaries for various Clubs and Societies:

Embryo Club	Aditya Rathi
Fashion Parade	Priya Rana

Film Making Club	Mridul Poddar
Gurukul	Ekansh Jain
Hindi Activities Society	Saurabh Jain
Matrix	Sankara Prasad
Mime Club	Raghav Sharma
Mountaineering Club	Pradyumn Singh
Music Club	Gokul Srinivasan
Nirmaan	Aman Kumar Anand
Nation Service Scheme	Shubham Ostwal
Oasis English Press	Sneha Kumari
Oasis Hindi Press	Jahnavi Rohil
Photography	Pulkit Agarwal
Poetry Club	Awaneesh Shukla
Punjab Cultural Association	Harjas
RadioAktiv	Manav Fakey
Raagamalika	Tania Nandi
Renewable Energy Club	Vaibhav Jade
World Record Society	Gaurav Mandlecha
Audi Force	Sai Appala Raju Indukuri
Dept. of Live Events	Rahul Chhabra
Dept. of Photography	Aditya
Dept. of Theatre	Divyansh Saini
Firewallz	Swaraj Budhavaram
Informalz	Satyaki Roy
Lights	Prayaag Katta
Sounds	Aradhya Khandelwal
Stage Controls	Jayant Jain
Dept. Art & Publicity	Gowtam Chandrasaha
Controls	Tirumalaraju Nisanth Verma
Dept. of Visual Media	Arjun Tyagi
Publication & Correspondence	Asim Shah
Reception & Accommodation	Arnav Kundra
Sponsorship & Marketing	Siddhant Narula

The Students' Union organized a host of events throughout the year.

### Sports Club

The office bearers of the Sports Club constituting the sports committee for the year 2017 were

<b>Secretary</b>	-	Jayshil Joshi
<b>Joint Secretaries</b>	-	1. Aman Kalra
	-	2. Siddharth Tripathi
	-	3. Shreshtha Dhankar

The names of the captains for various games/sports are given below:

S.No.	Games / Sports	Name
1	Athletics (boys)	Utkarsh Vashishtha
2	Athletics (Girls)	Harshita Verma
3	Badminton (Boys)	Aman Agrawal
4	Badminton (Girls)	M Mahitha
5	Basketball (Boys)	Vishal Verma

S.No.	Games / Sports	Name
6	Basketball (Girls)	Mitali Jain
7	Carrom	Sai Sourya
8	Chess	Simantini Huchche
9	Cricket	Sri Harsha Panda
10	Football	Siddharth Kaushal
11	Hockey	Prashant Kumar Rai
12	Lawn Tennis (Boys)	Surakshit Soni
13	Lawn Tennis (Girls)	Saniya Dasot
14	Squash	Shreyas Verma
15	Swimming (Boys)	Prayaag Katta
16	Swimming (Girls)	Mrudula Nageswaran
17	Table Tennis (Boys)	Neel Joshi
18	Table Tennis (Girls)	Saima Rashid
19	Volleyball (Boys)	Sahil Sharma
20	Volleyball (Girls)	Shreya Pathak
21	Taekwondo	Mitul Sharma
22	Football (Girls)	Prakriti Roy
23	Snooker	Annirudh Tandon
24	Powerlifting	Satrajit Nath

### Sports Events organized

#### BITS Open Sports Meet

The BITS Open Sports Meet (BOSM) was conducted successfully from 21<sup>st</sup> to 25<sup>th</sup> September 2017. As in the past the institute organized an intensive coaching camp from 2<sup>nd</sup> to 25<sup>th</sup> September 2015. Rajasthan State coaches were invited to prepare Institute's teams in various events. More than 1100 outstation students from all over the country participated in the meet. The meet was characterized as having displayed sportsmanship spirit and was full enthusiasm. The Chief Guest was Paralympic double Gold medalist Devendra Jhajharia. The guest of honor was Tanvie Hans (Women Footballer).

The results were as follows:

1.	Athletics (Boys)	Winner – BITS, PILANI Runner-up – BKBIET, PILANI
2.	Athletics (Girls)	Winner – BITS, PILANI Runner-up – BKBIET, PILANI
3.	Badminton (Boys)	Winner – Virat – Venky, DELHI Runner-up – GAJABHA, SRILANKA
4.	Badminton (Girls)	Winner – SRCC, DELHI Runner-up – VENKTESHWARA, DELHI
5.	Football (Boys)	Winner - JAMYA ISLAMIYA, DELHI Runner-up – VENKTESHWARA, DELHI
6.	Football (Girls)	Winner- BITS, PILANI Runner up- CET, Mody University, LAXMANGARH
7.	Power-lifting	Winner – BKBIET, PILANI Runner-up – BITS, PILANI
8.	Hockey (Boys)	Winner – BITS, PILANI Runner-up – IIT, DELHI
9.	Swimming (Boys)	Winner – VENKTESHWARA, DELHI Runner-up - MOTILAL NEHRU, DELHI
10.	Swimming (Girls)	Winner – VENKTESHWARA, DELHI Runner-up – JECRC, DELHI
11.	Table Tennis (Boys)	Winner – BITS, PILANI Runner-up – PGDAV, DELHI
12.	Table Tennis (Girls)	Winner – BITS, PILANI Runner-up – BITS, PILANI
13.	Volleyball (Boys)	Winner – BITS PILANI Runner-up – St. Wilfred, JAIPUR

14.	Volleyball (Girls)	Winner – JMC, NEW DELHI Runner-up – SRCC, DELHI
15.	Basketball (Boys)	Winner –JAMIA MILLIA, DELHI Runner-up – HANSRAJ, DELHI
16.	Basketball (Girls)	Winner –JMC, NEW DELHI Runner-up – SRCC, DELHI
17.	Cricket	Winner – JAMIA ISLAMIYA, DELHI Runner-up – BKBIET, PILANI
18.	Chess	Winner – SRCC, DELHI Runner-up – BITS PILANI
19.	Tennis (Boys)	Winner – LNIPE, GWALIOR Runner-up – VENKTESHWARA, DELHI
20.	Tennis (Girls)	Winner – VENKTESHWARA, DELHI Runner-up – BITS PILANI
21.	Carrom	Winner – RAIT, JAIPUR Runner-up – BITS, PILANI
22.	Squash	Winner – MANIPAL, JAIPUR Runner-up – IIT, DELHI
23.	Taekwondo (Boys)	Winner – NAV BHARAT, SIKAR Runner-up – BITS, PILANI
24.	Taekwondo (Girls)	Winner – BITS, PILANI Runner-up – SHRIDHAR UNIV, PILANI
25.	Snooker & Pool	Winner – BITS, PILANI Runner up – CHITKARA, CHANDIGARH

### The Intra-BITS Sports Tournaments

**i-BOSM 2017:** Pre-BOSM EVENT NAMED i-bosm 2017 was conducted from 9-04-2016 to 23.04.2016. Around 400 students participated in the event. Prize giving ceremony was conducted in the end of the semester

**League Competition:** Hockey league competition was conducted from 15-10-2016 to 20-10-2016. Around 72 students participated in the league. Football league competition was organized with 150 students.

### Outstation Participation

Various sports teams consisting 152 students were sent to participate in Sportech '17 a Sports Meet held at IIT Delhi, during 24<sup>th</sup> to 27<sup>th</sup> February 2017. 17 students of certain sports went to IIT Roorkee, to take part in Sangram 2017 from 1<sup>st</sup> to 3<sup>rd</sup> April 2017.

### Arsenal Football Camp

In association with India On Track (IOT), a football camp was organized from 21<sup>st</sup> August to 25<sup>th</sup> September 2017. Here, an Indian Coach and an International coach sent by Arsenal Soccer Schools trained the football teams and other enthusiastic Bitsians(100).

### Swimming Club

The Swimming team distinguished itself by its performance in BOSM 2017 by winning medals in various categories.

Swimming Camp was conducted from 19<sup>th</sup> May 2017 to 26<sup>th</sup> July 2017

### Health Club

The Health Club is equipped with various advanced machines for aerobic and anaerobic exercises. During II Semester 2016-2017, the Health Club had a membership of 750 while in I Semester 2017-2018 it was 847.

### Hockey Camp

A camp on learning basic skills of Field Hockey was conducted by Sports Club from 6<sup>th</sup> April 2017 to 11<sup>th</sup> April 2017 in which a total of 82 students were registered and 48 students regularly attended the same. The certificate-giving Ceremony was held at the end of the semester.

### Tennis Camp

A camp on learning basic skills in Tennis was conducted by Sports Club from 6<sup>th</sup> April 2017 to 11<sup>th</sup> April 2017 in which a total of 64 students were registered and 47 students regularly attended the same. The certificate-giving Ceremony was held at the end of the semester.

### Sports participation in Hostels

Various Sports facilities are also available in all hostels like Badminton, Table Tennis, Basketball, Chess and Carom. Good participation of students in hostels is observed as unorganized sports.

**Conference:**

India's first International Conference on Sports Engineering (ICSE)" was organized at Jaipur on 23-25 October 2017 in association with the International Sports Engineering Association (ISEA, UK), under the auspices of Ministry of Youth affairs and Sports, New Delhi, India.

The conference was aimed at bridging the gap between Engineering, Technology and Sports in order to provide a collaborative platform enabling share of domain knowledge for mutual benefit which is of utmost importance for sports development in India.

This conference has brought together leading experts and practitioners from England, USA, Germany, Japan, Taiwan, Bangladesh, Nepal, and Bhutan for direct interaction with Indian delegates. The conference has proved an excellent opportunity for networking and sharing experiences in the application of technology for professional development of sports.

We have enjoyed the support of International Sports Engineering Association, UK, Rajasthan Tourism department, ONGC, Shiv Naresh Sports Pvt. Ltd., New Delhi and of course the Ministry of Youth affairs and Sports, New Delhi, India.

**Martial Arts**

1. Martial Arts classes are conducted at Student Activity Centre in both morning and evening session. Around 60 students attended the class regularly, out of which 30 students were trained in competitive martial arts skills.
2. BITS Taekwondo team participated in 'SANGRAM" Sports festival organized by IIT Roorkee from 1<sup>st</sup> April to 3<sup>rd</sup> April 2016. BITS team won 1 gold and 3 silver in this tournament.
3. BITS taekwondo team ( 8 Boys and 5 Girls) took part in All India Inter University Taekwondo tournament organized by MDU Rohtak from 16 to 21 March 2017.

**OASIS 2017**

BITS Pilani celebrated the 47<sup>th</sup> edition OASIS. Its annual cultural festival from 31<sup>st</sup> October to 4<sup>th</sup> November 2017. This festival, managed entirely by the students, was mainly sponsored by OnePlus, Marshall. It attracted about 1600 outstation participants from about 70 colleges situated all over the country. The festival hosted as many as 80 events which were based on music, art, dance, photography, drama, literature and every other cultured aspect of the college life. The theme of the festival was "Realms of Fiction"

The music concerts by M.Vishal and Mr.Shekhar, EDM night by Christina Novelli & Canice Redding, Parwaaz, Submarine in Space and a comedy show were among the several highlights of the festival. The festival also witnessed various workshops of dance, music and pottery. Events like desert dull, start plays, fashion parade, Mr. and Ms Oasis debate, BLAB etc caught the limelight a students from all over the country were able to stage and showcase their talents.

The National service Scheme and NIRMAAN along with several NGO's set up an exhibition for the sale of village potteries, governments and others handcrafts. In the words of Mr Puli Bharatha Ratna, the President of the Students' Union. "OASIS is a 96 hour long cultural extravaganza entirely organized by students and is one of the best cultural festivals in Asia.

**APOGEE 2017**

APOGEE is the Annual international technical festival OF BITS Pilani. With over 8000 students, 100 colleges and 80 technical events, APOGEE 2017 was conducted from 23<sup>rd</sup> to 26<sup>th</sup> March 2017. The chief sponsors for the festival was MapMyIndia and others included Tata and Filtercopy. It provided opportunities to bright research-oriented minds fostering fruitful innovation through events that include Guest Lectures, Panel Discussions, Project, Paper Presentations, Hackathons, Programming Events, Workshops and Exhibitions extending over a period of five days. The Think Again Conclave was the major attraction of the festival with greats like Mr. Simon Taufel(Australian Cricket Umpire), Salman Khurshid(Politician ,Senior Advocate), Shriraz Minwalla(Theoretical Physicist) gracing the stage and making the event an astounding success. APOGEE 2017 surely took the standard of APOGEE as a festival a few notches higher.

**Ragamalika**

Ragamalika, the classical music and dance club of BITS Pilani, conducted a variety of events in the calendar year 2017. On Founder's day, February 1, the Thyagaraja Aradhana Program was organized in honour of the great composer St. Thyagaraja. In April, the club reverted to its traditions and conducted the semester production, Sangamam for two days. The first day was devoted solely to a music concert. Carnatic and Hindustani music blended seamlessly in a three hour long show which the audience enjoyed a lot.

The second day of Sangamam, was the depiction of the classic story - Churning of the cosmic ocean or Samudramanathan. Skilfully woven by the harmonies of music and dance, the hour long show enthralled the spectators. The month of April also saw two psenti concerts by the senior most of the club. The concert artists had dedicated years to their art, and ascended the podium one last time in their Bitsian life to bid adieu to its

stage and audience. The next highlight of the semester was Nriyaranjani wherein the evolution of dance through the centuries in India, Natyakatha, was showcased. During Oasis, the club held a classical dance Prof show, for the first time which also was a success. Apart from these events, the year was studded with chamber concerts, lecture demonstrations, and “jamming sessions” for the benefit of everyone.

### SPIC MACAY

SPICMACAY BITS Pilani chapter organized three concerts in the year 2017. The first concert held on 20<sup>th</sup> February was Hindustani Vocal Concert by Smt. Sunanda Sharma accompanied by Shri. Ashish Sengupta on Tabla and Ustad Zamir Ahmed Khan on Harmonium. The audience experienced a fine rendition of music from the Banaras Gharana. The concert included a typical “jhoola”, which was much appreciated. In the second semester, there was a Sarangi concert on 27<sup>th</sup> August, by Ustad Sabir Khan accompanied by Ustad Hanif Khan on Tabla. Ustadji rendered a traditional khyaal in the beginning and concluded with a composition of his own. He also told the audience about his instrument and its uniqueness. On 17<sup>th</sup> September, there was a Sufi Music Concert by Dr. G.C.D Bharti Bandhu, a recipient of the Padma Shri award. He was accompanied by four of his disciples. The concert was as philosophical as it was melodic, with Panditji delving deep into the philosophies of love, pain, morals, desires, etc. It was a memorable year overall.

### MATRIX

#### Second Semester 2016-2017

Members of the club attended the Jaipur Literature Festival in the third week of January. Matrix has been attending JLF since the year of its inception and plans to uphold this tradition in the coming years. It gives us the opportunity to attend talks, panel discussions, book introductions by eminent personalities. Talks by Alice Walker, Richard Flanagan, Swanand Kirkire, Tahmima Anam and many others were the major attractions in this particular edition.

This was followed by the first book introduction of the semester, “Being There”, on 31<sup>st</sup> January, which saw the following books being introduced:

- Leaves of Grass (Walt Whitman): Sanskriti Chitransh
- Roots : The Saga of an American Family (Alex Haley): Neel Shah
- Half A Yellow Sun (C. Adichie): Akankshya Mishra
- The High Mountains of Portugal (Yann Martel): Vedant Patil

Matrix also introduced books at the Basant Book Festival on 26<sup>th</sup> February.

- O Jerusalem (Larry Collins and Dominique Lapierre): Neel Shah
- Anton Chekhov’s Collected Stories: Shaista Husain
- Stalingrad (Antony Beevor): Avinash N Rao
- HP Lovecraft’s The Complete Fiction: Ankit Dube

In March, the club engaged itself in preparations for APOGEE 2017 (23-25<sup>th</sup> March), the annual technical festival of BITS Pilani. Matrix welcomed the authors invited for the fest with the members reviewing the books written by the authors themselves, among which was Manu Joseph’s ‘The Illicit Happiness of Other People’. Matrix conducted the Literature Quiz, hosted by Samksha Bharadwaj. The movie ‘Predestination’ was also screened. The APOGEE Coordinator was Srishti Jain.

The concept of Open Stage was introduced, wherein members and other interested students gathered for weekly discussions about the contemporary trends in literature, cinema and other culturally relevant products. This later evolved to be the most promising activity of the club with the most enthusiastic participation of non-members. Matrix also acquired final year students as members thanks to these stimulating and engaging discussions.

Catching on to the famous Last Lecture series, Matrix organized the first edition of ‘The Last Lecture’, with Prof. Rishikesh D. Vaidya’s talk “The Tyranny of Easy Answers” on 12<sup>th</sup> April. It was an inspiring talk and was extremely well attended, by students and faculty alike.

The outgoing members of the club introduced books for the last event of the semester, on 22<sup>nd</sup> April.

- The Jungle (Upton Sinclair): Avinash N Rao
- God is Not Great: How Religion Poisons Everything (Christopher Hitchens): Ankit Dube
- The Way of Kings (Brandon Sanderson): Manveer Singh
- A Suitable Boy (Vicar Seth): Aditya Vijaykumar

For the first time, post holders (President and Vice-President) were elected by majority vote, conducted by the outgoing post holders and the Prof-in-Charge.



### First Semester 2017-2018

The semester started with a unique recruitment process which was held in three stages with a one-month probation period for the new recruits. It saw a lot of enthusiastic participation from the freshers as well as the club members. The second years held a "first-of-its-kind" introduction, on 13<sup>th</sup> August, to create awareness about the club and its interests, primarily books, but also other forms of culture, namely movies and anime. The presenters were:

- Ishan Bhanuka, Dunkirk (2017 film)
- Prachi Agarwal, The Empire of the Moghul by Alex Rutherford (historical fiction)
- Neel Shah, Roots by Alex Haley
- Arth Abhinav Rohatagi, Cowboy Bebop (1998 anime series)

2 second years and 12 first years were recruited and the film "Lock, Stock and Two Smoking Barrels" was screened.

"Hearken", a unique introduction, with the fresh recruits presenting, was held on 7<sup>th</sup> September. The introductions were:

- The Cuckoo's Calling (Robert Galbraith): Aakanksha Kesarwani
- Ender's Game (Scott Orson Card): Abhinava Arasada
- The Dresden Files (Jim Butcher): Gaurav Sharma
- The Lobster (2015 film): Piyush Bhatt

The Open Stages were held every Sunday, with the members gathering to discuss literature, cinema and other varied intellectual sources.

Nearing Diwali, another book introduction, "Carnival" was held on 26<sup>th</sup> October. The books introduced were:

- Ready Player One (Ernest Cline): Maaz Mombassawala
- Origin (Dan Brown): Isha Bhorkar
- Wizard's First Rule (Terry Goodkind): Raj Shah
- Tuesdays with Morrie (Mitch Albom): Jaanvi Agrawal

For Oasis 2017, Matrix organized the Triathlon, a three-part-event and the Anime Quiz, hosted by Sri Raghucharan Kuchibotla. The films screened were "The Grave of the Fireflies" and "Shaun of the Dead". The Oasis coordinator was Sankara Prasad.

The second edition of the Last Lecture series was held on 8<sup>th</sup> November, with our esteemed director, Prof. A. K. Sarkar's talk "Reflections on the Journey of Life". The talk was extremely well attended by students, staff and faculty. It was a very moving, inspiring and humbling talk.

On 13<sup>th</sup> November, we bid adieu to our outgoing seniors, through the Psenti-semite Book Introduction panel, "Kouyou":

- Dune (Frank Herbert): Eshan Tyagi
- The Master Switch (Tim Wu): Maaz Mombassawala

The activities for the semester concluded with the Valedictory Ceremony, held on 22<sup>nd</sup> November. We thanked Prof. Sarkar for his lecture and support, Prof. Bhattacharya for his guidance and every member who had participated in an introduction during the semester by presenting them with books. The ceremony saw the members interacting freely and animatedly with the professors and discussing various contemporary and classic ideas of culture and literature.

### National Talent Search Scheme

The number of National Talent Search Scheme Scholarship holders studying in the Institute during the year in various programmes was as follows:

Admission year	No. of students
I Year	28
II Year	43
III Year	36
IV Year	09
V Year	01
<b>Total</b>	<b>117</b>

### Institute of International Education - Avery Dennison Foundation Scholarship Program

Sanctioned six scholarships worth \$ 1300 each to students. The six winners of the Avery Dennison Foundation ‘InvEnt’ Scholarship Program – 2017 are the following:

1. Mr. Nishad Sahu (ID No. 2016A3PS0215P)
2. Mr. Patil Ritutaj Mahendra (ID No.2016ABPS0583P)
3. Mr. Siddharth Mehta (ID No. 2016A8PS0329P)
4. Mr. Sombuddha Chakravarty (ID No. 2016A3PS0165P)

### Alumni Scholarships

BITS Alumni have instituted several merit-cum-means scholarships. For the First Semester 2016-2017 and Second Semester 2016-2017 the scholarships were awarded to the following students.

Scholarship	I Semester 2016-2017	II Semester 2016-2017
Vamsi Pendyala and Prasanna Kalahasthi Memorial Scholarship	Bartanwala Mustansir Aziz ID No.2015B3A7515P	Kondapi S Sanjay Srivastav ID No.2015A7PS102P
S.S. Seshadri Memorial Scholarship	Aditya Relhan ID No.2014A4PS378P	Rishabh Bhardwaj ID No.2014A3PS179P
BITS Alumni Class of 1966-71 Scholarship	Divya Rathore ID No.2015B5A4758P	Divya Rathore ID No.2015B5A4758P
Rakesh Chandra Scholarship	Mohit Jaiwani ID No.2015B3A3622P	Mohit Jaiwani ID No.2015B3A3622P
Shantha E. Iyer Scholarship	Neha Agarwal ID No. 2013A1PS493P	Neha Agarwal ID No. 2013A1PS493P
	Vrinda Poddar ID No. 2014B4A7802P	Vrinda Poddar ID No. 2014B4A7802P
	Ayushi Agarwal ID No. 2015A1PS712P	Ayushi Agarwal ID No. 2015A1PS712P
	Mansi Bansal ID No. 2016A2PS471P	Mansi Bansal ID No. 2016A2PS471P
Arun Agarwal Scholarship	Siddhant dwivedi ID No.2016B3PS315P	Shrajal Jain ID No. 2016B3PS557P
Dr. S.K. Agarwal Scholarship	-	Nandu Keval Deepak ID No.2016B3PS519P
M.R. Dalmitya Scholarship	Radhika Soni ID No.2015A5PS912P	-
	Ashutosh Agarwal ID No.2015B2A8766P	-
Divya-Dileepan Scholarship	Shivam Singh ID No. 2016A2PS579P	Prakhar Srivastava ID No.2015B1PS834

### National Service Scheme

#### Introduction

The Birla Institute of Technology & Sciences, BITS Pilani is an all India Institute for higher education. BITS Pilani, since its establishment has been striving to develop the community and with a mindset of instilling the thoughts of social awakening in its students as well, established National Service scheme as early as 1969. Over the past few decades, NSS has been working tirelessly in the surrounding villages to develop the community in the spirit of nation building. NSS also provides students the opportunity of developing leadership skills, and develop a sense of social and civic responsibility.

#### Faculty Body Structure

NSS Coordinator:

**Dr. AnupamSinghal**

NSS Program Officers:

1. Dr. Hitesh Dutt Mathur
2. Dr. Hari Om Bansal

3. Dr. R.P. Pareek
4. Dr. ShibasishChowdhury
5. Dr. Subhashis Gangopadhyay
6. Dr. Shivi Agarwal
7. Dr.Surojit Pande

#### Activities:

The following is the brief overview of the NSS BITS Pilani activities undertaken during the year 2017- 2018:

1. **Literacy Program: (Aim: To provide literacy and smart education to needy)** NSS School started on 5th of August of this academic session. With registering of over 270 students, which is itself a record students we selected 110 students from class 3<sup>rd</sup> to 12<sup>th</sup> based on financial condition and enthusiasm of students. Various workshops were conducted for kids which consisted of sketching, coloring, craft making, etc. Every alternate week these workshops were conducted and the other alternate week a test was conducted for every kid. A few changes were introduced in the system of the school to increase the efficiency one of which was Barcode based attendance system to keep a better track of the attendance of volunteers and the students as well. Volunteers also started "Word of the Day" during assembly in the beginning of school, where all the students learn 2 new words of Hindi & English each. In this way, volunteers kept it interesting coming to the school for children and not like monotonous school life. Children develop a strong bond with the volunteers and this bond is further enhanced by celebration of various festival in the school. For this semester it has been planned to organize an informative session by our teachers on career counselling and also we have planned to organize a cultural event for the students.
2. **Computer Literacy Programme (CLP):**The Computer Literacy Programme (CLP) which aims at providing computer literacy to adults and students living in Pilani and in nearby villages was carried out successfully by National Service Scheme, BITS Pilani, in neighboring areas, with the locations where the programme was carried out being as follows:
  - A. **CLP in Pilani Resource Centre, Harinagar:** Pilani Resource Centre (PRC), located in the vicinity of the campus, has a well-equipped computer lab with a total of 20 computers. Established jointly by BITSAA, the alumni association of BITS Pilani and Pratham, an NGO which functions at an all-India level, it is ideal for holding computer classes as the staff members provide support to carry out the programme there. RSCIT is a government certified programme which helps in employment of the people in computer based jobs. This programme was started last semester and over 25 people have successfully completed the course and have received the certification.
  - B. **CLP in Rayla village Govt. school:** A government school in Raila was well-equipped with 4 computers but a shortage of teachers forced the principal to shut down the lab. On being approached by NSS, the principal expressed his willingness to hold computer classes in the school for those interested in learning. Thus, the CLP was extended to this village. Classes are held from 3 PM to 4 PM, thrice a week (after school hours) in the computer lab for the students of class 7<sup>th</sup> and 8<sup>th</sup>. Around 20 students are given a good exposure to computers through this initiative. The topics covered include the basics of computers, typing, file-handling operations on an OS, MS-Paint, MS-Word, and MS-PowerPoint, to an extent. The content is taught by verbal means along with some visual aids in the form of demonstrations using a projector, showing tutorial videos on the volunteers' laptops, notes, etc.
3. **Health and Public Awareness (HPA)** Health and Public Awareness focuses on making the people aware about the government policies and how to get maximum benefit from them. It also tries to uplift their life by making them aware about diseases by conducting various camps and surveys like general health assessment survey and camp, sanitary health camp etc. Considering the objectives, a lot of activities were taken up, this semester, in Raila village which is located 2km from Pilani. Some of the activities were Cleanliness Drive, health survey, Raila school project, RTE seminar, health camp etc. A Cleanliness Drive was organized as a part of Swachh Bharat Week during which children were taught healthy hand wash techniques, motivated about keeping their surroundings clean, etc. Health survey was conducted before health camp in which a doctor from outside visited the village and medicines were distributed accordingly. The result that came out to be was much of a concern. Health survey indicated the need of increase the quality of drinking water rather than the checkup. A Vocational Training Center has been set up in Gharinda with basic focus on Sewing. A health camp was organized in Garinda on 12<sup>th</sup> November (110 patients had turned up for the treatment)
4. **Special Events:**
  - **Blood Donation Camp** ( 4th-5th February 2017 ) NSS BITS Pilani had organized 36th edition of Blood Donation Camp on 4th-5th February 2017 in collaboration with Indian Red Cross Society, Delhi. We received overwhelming response from faculty and student community. A total of 705 units of Blood was collected during the two days camp.

- **Junoon** (9<sup>th</sup>-10<sup>th</sup> September, 2017): The sixth edition of the sports fest for especially abled, Junoon was organized in BITS Pilani – Pilani Campus on 9th and 10th September. The fest saw a participation of over 120 specially abled children from 6 different NGOs. Akshay Pratishthan, a Delhi based school for specially challenged children; Deepalaya, a social service organization from Delhi; Disha, a Resource Centre for Multiple Disabilities from Jaipur; Manovikas, a Charitable Society from Delhi; Amla Birla Kendra (ABK) from Pilani, Pandit Chittarmal and Tapovan from Sriganganagar participated in this extravaganza. The two days event was graced by Mr. Anand Kumar, an acclaimed international para-shuttler. The event was inaugurated by the Director Prof. A. K. Sarkar. With a decent BITSian participation, the fest saw the fulfillment of its motive. At the end of the event, the NGOs were felicitated by the Director Prof. A. K. Sarkar.
- **NSS Oasis Stall** (1<sup>st</sup>– 4<sup>th</sup> November 2017) NSS BITS PILANI organizes NSS Oasis Stall during Oasis which is a four day cultural fest of BITS Pilani. It aims to promote NGOs and spread awareness about them by showcasing their products. NSS Oasis Stall 2017 exhibited products of 16 NGOs. NSS Stall was inaugurated by Dr. A. K. Sarkar, Director BITS Pilani. This year, the emphasis was to create awareness amongst people about the various aspects of poverty and its impacts and also urge people to donate blood in the upcoming blood donation camp.
- **Dhiti** (Last week of Feb., 2018) Last event of academic year 2017-18, Dhiti will be organized as a part of Technical Festival of BITS Pilani. It will take place in the form of competition where participants will be asked to submit technologically feasible solution to the existing social problem. Previous editions of Dhiti saw extensive and encouraging participation and are expected to continue this year as well.

## NIRMAAN

Nirmaan Organisation, started in 2005 by a group of 4 BITSians, has entered into its 10th year of operation to create social leaders in various corners of India. The oldest chapter of this organisation, Nirmaan BITS Pilani, a completely student-run chapter, conducted several events this year inside and outside the campus. Some of the major highlights are as follows:

- 1) **Apogee**: In Apogee, Nirmaan organised 2 events namely India Quiz and DHITI. India quiz was an event to test the participants on the basis of their general knowledge. DHITI on the other hand is a multi-stage event with an aim to provide a platform for the technical implementation for social ideas. The judging panel for DHITI 2015 was headed by Bindeshwar Pathak, founder of Sulabh International.
- 2) **Joy of Giving Week**: October 14-20 was celebrated as Joy of Giving Week in our campus. The inauguration ceremony was graced with the presence of Dr. Anshu Gupta, founder Goonj and winner of Raman Magsaysay Award. Rhythm for Life, a Delhi-based musical group, performed on the inauguration evening. Major attractions of the week were Day of Joy for kids of Courtbasti, Baas and Natbasti along with wish trees and Hour of Joy in various communities in Pilani. Some events were also conducted in Birla Senior secondary School thus expanding the season of happiness.
- 3) **Oasis**: In Oasis, Nirmaan hosted Nirmaan Stall. 3 NGO's namely Atijivan, MESH and Nayi Dishayein were invited to collaborate with Nirmaan in setting up of stall. Alongside with products made from women in Baas, we had Prayogshala setting up a separate stall for handmade google cardboards. The earnings from these directly went to the beneficiaries.

Apart from these events, the chapter has several projects working in sectors of education, employment, community development, government interfacing and technical innovations at grassroots. The current strength of over 100 volunteers has been working hard to light the lives of hundreds of beneficiaries living in four different communities namely Court-basti, Natbasti and at 2 different places in Baas of Pilani.

## INTERFACE 2017

**All India Management Convention, Interface 2017** - The 40 year old annual management extravaganza was conducted from 17<sup>th</sup> to 19<sup>th</sup> February 2017. The theme for Interface 2017 was '**Set Your Sails**'. The competitions ranged from intellectual forum discussions to debates, fun filled events, brain teasers, workshops, and portfolio management among others. The fiesta started with a prof show- "TVF" that was held on 17<sup>th</sup> February 2017. A wide array of events were held to stimulate the young minds, challenge their intellect, and apply the classroom learning to real world scenarios. Some events organized were Op-time, COO challenge, Great Indian business challenges by Operations Club. Few guest lectures organized during the event were Mr. Partho Das Gupta, CEO of BARC; Dr. Satyajit Majumdar: Professor at Centre for social entrepreneurship TISS; Mr. Arjun Chakraborti, President and GM of Track Invest; Mr. Monish Suri, Global Alliance Manager for SAS Alliance; Mr. Deepak Bharara, Chief Human Resource Officer at LANCO Infratech Ltd. Interface '17 saw participation from some of the top business schools and had great peer learning experience. The participants represented various top B-schools as IIM Indore, IIM Amritsar, IMI Delhi, NIT Kurukshtra, SRM University, MDI Gurgaon.

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**DETAILS OF ADMISSIONS MADE DURING THE YEAR 2017**

**(A) Second Semester 2016-2017**

**Doctoral Programmes**

Ph.D.	29 (13)
<b>Total</b>	<b>29 (13)</b>

**(B) First Semester 2017-2018**

PROGRAMMES	No. of students joined	BITSAT Cut-off scores	
		Highest	Lowest
<b>1. Integrated First Degree Programmes</b>			
<b><u>Group A</u></b>			
B.E.			
Chemical	81(15)	336	306
Civil	79(04)	334	294
EEE	119(10)	434	355
Mechanical	96(01)	394	334
B. Pharm.	42(22)	288	221
Computer Science	149(11)	442	382
Electronics & Instrumentation	72(13)	362	332
Manufacturing	36(07)	328	288
	<b>674(83)</b>		
<b><u>Group B</u></b>			
M.Sc.			
Biological Sciences	50(14)	326	237
Chemistry	76(15)	327	265
Economics	88(15)	365	323
Mathematics	91(13)	365	312
Physics	78(14)	342	304
	<b>383(71)</b>		
<b><u>Group C</u></b>			
M.Sc.			
Gen. Studies	7(3)		
	7(3)		
<b>Total :</b>	<b>1064(157)</b>		

**Note:**

- (i) The above list consists of 11 students who are First rank holders from different central/ state boards admitted under 'direct admission of board toppers' scheme.
- (iii) The above numbers also include 33 admissions of staff children(24) and of BET school students(9), made under special dispensation consisting of 1 in Bio Sciences, 4 in Chemistry, 7 in Economics, 8 in Mathematics, 6 in Physics and 7 in General Studies.

## 2. Higher Degree Programmes :

M.E.	
Biotechnology	18(17)
Chemical Engineering	24(05)
Civil (Structural Engineering)	16(03)
Civil (Transportation Engineering)	14(01)
Civil (Infrastructure Engineering)	8(01)
Computer Science	23(03)
Communication Engineering	19(06)
Design Engineering	12( 0)
Embedded Systems	18(06)
Manufacturing Systems Engineering	14( 0)
Mechanical Engineering	12( 0)
Microelectronics	24(07)
Software Systems	25(13)
MBA	80(21)
M.Pharm.	10(09)
M.Pharm. (Pharmaceutics)	9(04)
M.Pharm. (Pharmaceutical Chemistry)	10(06)
<b>Total</b>	<b>336(102)</b>

## 3. Doctoral Programmes :

Ph.D.	52(21)
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## SUMMARY

	II Semester 2016-2017	I Semester 2017-2018
<b>Programmes</b>		
Integrated First Degree Programmes	-	1064(157)
Higher Degree Programmes	-	336(102)
Ph.D.	29(13)	52 (21)
<b>Total</b>	<b>29(13)</b>	<b>1452 (280)</b>



**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN  
THE ACADEMIC YEAR 2017-2018 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES  
UNDER VARIOUS PRIORITIES**

**FIRST PRIORITY**

(i) **Pilani Campus:**

(From Group 'B' to Group 'A' Programmes)

<b>Programmes* From ↓ To →</b>	<b>A1</b>	<b>A2</b>	<b>A3</b>	<b>A4</b>	<b>A5</b>	<b>A7</b>	<b>A8</b>	<b>AB</b>	<b>Total</b>
B1	13	10	04	08	-	11	07	06	59
B2	09	07	16	13	-	09	09	03	66
B3	03	09	17	09	-	14	05	03	60
B4	08	04	12	08	-	21	06	03	62
B5	07	07	05	11	-	12	12	06	60
<b>Total</b>	<b>40</b>	<b>37</b>	<b>54</b>	<b>49</b>	<b>-</b>	<b>67</b>	<b>39</b>	<b>21</b>	<b>307</b>

**OTHER PRIORITIES :**

<b>Programmes* From ↓ To →</b>	<b>B5</b>	<b>Total</b>
A3	01	01
<b>Total</b>	<b>01</b>	<b>01</b>

(ii) **Transfer within same tier:**

<b>Programmes* From ↓ To →</b>	<b>A3</b>	<b>A4</b>	<b>A7</b>	<b>Total</b>
<b>A1</b>	<b>2</b>	<b>2</b>		<b>4</b>
<b>A2</b>		<b>1</b>		<b>1</b>
<b>A3</b>			<b>1</b>	<b>1</b>
<b>A4</b>	<b>1</b>		<b>1</b>	<b>2</b>
<b>A8</b>	<b>2</b>		<b>1</b>	<b>3</b>
<b>AB</b>		<b>1</b>		<b>1</b>
<b>B4</b>			<b>1</b>	<b>1</b>
<b>B5</b>			<b>1</b>	<b>1</b>
<b>Total</b>	<b>5</b>	<b>4</b>	<b>5</b>	<b>14</b>

(iii) Transfer within B to B

<b>Programmes* From ↓ To →</b>	<b>B1</b>	<b>B3</b>	<b>B4</b>	<b>B5</b>	<b>Total</b>
B1			3	1	4
B2		1	2		3
B4	1	1		1	3
B5		1	1		2
<b>Total</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>12</b>

(iv) Vertical Transfers:

<b>From</b>	<b>To</b>	<b>No. of Students</b>
B.E. (Hons.) Computer Science	M.E. Computer Science	1
B.E. (Hons.) Electronics & Communication	M.E. Embedded Systems	1
B.E. (Hons.) Manufacturing Engineering	M.E. Manufacturing Systems Engg.	2
B.E. (Hons.) Electrical & Electronics	M.E. Software Systems	1
M.E. Civil with Specialization in Transportation Engg	Ph.D. in Civil Engg.	1
M.E. Civil with Specialization in Infrastructure Engg. & Management	Ph.D. in Civil Engg.	1
	<b>Total</b>	<b>7</b>

**NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2017-2018**

Programme	Year of Admission						Total
	2012 and earlier	2013	2014	2015	2016	2017	

**I. On Campus Programmes**

A. Integrated First Degree Programmes

***B.E. (Hons.)***

Chemical	0(0)	2(0)	68(10)	71(12)	64(11)	79(14)	284(47)
Civil	0(0)	2(0)	62(3)	72(3)	67(3)	77(4)	280(13)
E.E.E.	1(0)	4(1)	99(7)	94(5)	101(13)	115(10)	414(36)
Mechanical	1(0)	2(0)	83(1)	89(0)	91(5)	95(1)	361(7)
Computer Science	0(0)	6(1)	127(12)	122(13)	126(13)	149(11)	530(50)
Electronics & Instrumentation	1(0)	3(1)	62(8)	67(9)	65(10)	71(13)	269(41)
Manufacturing Engg.	0(0)	0(0)	40(1)	33(1)	34(4)	33(6)	140(12)

<b><i>B.Pharm. (Hons.)</i></b>	1(1)	0(0)	41(19)	45(22)	50(22)	40(23)	177(87)
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***M.Sc. (Hons.)***

Bio. Sciences	2(0)	46(9)	55(13)	47(7)	55(7)	50(14)	255(50)
Chemistry	0(0)	43(4)	50(12)	54(13)	67(10)	75(15)	289(54)
Economics	1(0)	60(9)	68(10)	69(8)	70(10)	88(15)	356(52)
Mathematics	1(0)	49(9)	63(7)	60(8)	69(9)	90(13)	332(46)
Physics	2(0)	44(7)	63(10)	52(8)	69(10)	77(14)	307(49)

***M.Sc.(Tech.)***

Information Systems	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)
Gen. Studies	1(0)	2(1)	16(5)	9(3)	11(3)	7(3)	46(15)
Finance	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)

<b>Sub Total</b>	<b>11(1)</b>	<b>263(42)</b>	<b>897(118)</b>	<b>884(112)</b>	<b>939(130)</b>	<b>1046(156)</b>	<b>4040(559)</b>
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**Note:** The numbers in brackets indicate number of female students

Programme	Year of Admission						Total
	2012 and earlier	2013	2014	2015	2016	2017	
<b>B. Higher Degree Programmes</b>							
<b>M.E.</b>							
Chemical	0(0)	0(0)	0(0)	0(0)	13(3)	24(5)	37(8)
Computer Science	1(0)	1(0)	0(0)	0(0)	20(6)	21(3)	43(9)
Mechanical	0(0)	0(0)	0(0)	0(0)	15(1)	12(0)	27(1)
Software Systems	0(0)	0(0)	1(0)	0(0)	24(10)	24(13)	49(23)
Microelectronics	0(0)	0(0)	0(0)	0(0)	11(0)	24(7)	35(7)
Communication Engineering	1(0)	0(0)	0(0)	0(0)	11(3)	18(5)	30(8)
Biotechnology	0(0)	0(0)	0(0)	0(0)	11(10)	18(17)	29(27)
Embedded Systems	0(0)	1(0)	0(0)	0(0)	10(4)	18(6)	29(10)
Design Engineering	0(0)	0(0)	0(0)	0(0)	8(0)	12(0)	20(0)
Manufacturing Sys.Engg	0(0)	2(0)	0(0)	0(0)	10(1)	14(0)	26(1)
Civil with Specialisation in Transportation Engg.	0(0)	0(0)	0(0)	1(0)	10(3)	14(1)	25(4)
Civil with Specialisation in Structural Engg.	0(0)	0(0)	0(0)	2(0)	10(3)	16(3)	28(6)
Civil with Specialisation in Infrastructural Systems	0(0)	0(0)	0(0)	2(1)	6(2)	8(1)	16(4)
<b>Master of Business Administration</b>	0(0)	0(0)	0(0)	0(0)	63(19)	80(21)	143(40)
<b>M.Pharm</b>	0(0)	0(0)	0(0)	0(0)	6(4)	10(9)	16(13)
<b>M.Pharm.</b> (with Specializations in Pharmaceutics Chemistry)	0(0)	0(0)	0(0)	0(0)	6(2)	10(6)	16(8)
<b>M.Pharm.</b> (with Specializations in Pharmaceutics)	0(0)	0(0)	0(0)	0(0)	10(3)	9(4)	19(7)
<b>Sub Total</b>	2(0)	4(0)	1(0)	5(1)	244(74)	332(101)	588(176)
C. <i>Ph.D.</i>	74(32)	64(29)	38(15)	40(15)	54(21)	50(19)	320(131)
<b>Total (On-Campus)</b>	<b>87(33)</b>	<b>331(71)</b>	<b>936(133)</b>	<b>929(128)</b>	<b>1237(225)</b>	<b>1428(276)</b>	<b>4948(866)</b>

#### SUMMARY

	On-Campus			
	Engineering	Science	Humnities	Total
First Degree	2278(206)	1360(286)	402(67)	4040(559)
Higher Degree	394(108)	51(28)	143(40)	588(176)
<b>Total</b>	<b>2672(314)</b>	<b>1411(314)</b>	<b>545(107)</b>	<b>4628(735)</b>
Ph.D.				<b>320(131)</b>
<b>Grand Total</b>				<b>4948(866)</b>

**Note:** The numbers in brackets indicate number of female students.

### STATEMENT OF DEGREES AWARDED

Degrees	No. of degrees			
	80 <sup>th</sup> Award (20.03.2017)	81 <sup>st</sup> Award (13.07.2017)		
(i) On-campus Programmes				
A. Integrated First Degrees				
<b>B.E. (Hons.)</b>				
Chemical	3(0)	8(0)		
Chemical (with PS)	0(0)	85(16)		
Civil	0(0)	14(0)		
Civil (with PS)	3(1)	62(10)		
Computer Science	3(0)	24(3)		
Computer Science (with PS)	1(0)	145(19)		
EEE	2(0)	17(3)		
EEE (with PS)	1(0)	116(22)		
Electronics & Instrumentation	2(0)	14(5)		
Electronics & Instrumentation (with PS)	0(0)	78(18)		
Electronics & Communication Engineering	0(0)	0(0)		
Electronics & Communication Engineering (with PS)	0(0)	0(0)		
Mechanical	1(0)	28(0)		
Mechanical (with PS)	0(0)	92(4)		
Manufacturing Engg.	1(0)	7(1)		
Manufacturing Engg. (with PS)	1(0)	38(5)	<b>18(1)</b>	<b>728(106)</b>
<b>B.Pharm. (Hons.)</b>	2(0)	3(0)		
<b>B.Pharm. (Hons.) (with Practice School)</b>	0(0)	7(0)		
<b>M.Sc.(Hons)</b>				
Bio. Sciences	1(0)	44(13)		
Bio. Sciences (with PS)	0(0)	5(3)		
Chemistry	0(0)	30(6)		
Chemistry (with PS)	1(0)	8(3)		
Economics	2(0)	43(6)		
Economics (with PS)	0(0)	12(5)		
Mathematics	2(0)	42(8)		
Mathematics (with PS)	1(0)	5(4)		
Physics	1(0)	41(7)		
Physics (with PS)	1(1)	4(1)	<b>11(1)</b>	<b>244(56)</b>
<b>M.Sc. (Tech)</b>				
Engg. Tech	0(0)	0(0)		
Engg. Tech. (with PS)	0(0)	0(0)		
Finance	0(0)	0(0)		
Finance (with PS)	0(0)	10(5)		
General Studies	0(0)	1(1)		
General Studies(with PS)	0(0)	13(2)		
Information Systems	1(0)	0(0)		
Information Systems (with PS)	1(0)	1(1)	<b>2(0)</b>	<b>25(9)</b>
		<b>31(2)</b>	<b>997(171)</b>	

**Note:** The numbers in brackets indicate number of female students.

Degrees	No. of degrees	
	80 <sup>th</sup> Award (20.03.2017)	81 <sup>st</sup> Award (13.07.2017)
<b>B. Higher Degrees</b>		
<b>M.E.</b>		
Civil with specialisation in Structural Engg.	1(1)	6(0)
Civil with specialisation in I Structural Engg. (with PS)	0(0)	4(2)
Civil with specialisation in Infrastructure Engg & Mgmt.	0(0)	0(0)
Civil with specialisation in Infrastructure Engg & Mgmt. (with PS)	0(0)	4(2)
Civil with specialisation in Transportation Engg.	1(0)	7(0)
Civil with specialisation in Transportation Engg. (with PS)	0(0)	3(0)
Civil with specialisation in Infrastructure Systems	0(0)	0(0)
Chemical	0(0)	14(9)
Chemical (with PS)	0(0)	5(4)
Computer Science	0(0)	1(0)
Computer Science (with PS)	0(0)	22(5)
Communication Engineering (with PS)	0(0)	9(1)
Embedded Systems	0(0)	1(0)
Embedded Systems (with PS)	0(0)	10(2)
Master of Business Administration	0(0)	0(0)
Master of Business Administration (with PS)	0(0)	70(20)
Master of Public Health	0(0)	0(0)
Master of Public Health (with PS)	0(0)	0(0)
Mechanical	0(0)	6(1)
Mechanical (with PS)	0(0)	10(0)
Electrical with specialization in power Electronics & Drives	0(0)	0(0)
Electrical with specialization in power Electronics & Drives (with PS)	0(0)	0(0)
Software Systems	0(0)	1(0)
Software Systems (with PS)	0(0)	22(10)
Microelectronics	0(0)	1(0)
Microelectronics (with PS)	0(0)	12(3)
Biotechnology	0(0)	7(5)
Biotechnology (with PS)	0(0)	4(3)
Manufacturing Systems Engg.	0(0)	2(0)
Manufacturing Systems Engg. (with PS)	0(0)	9(0)
Design Engineering	0(0)	7(0)
Design Engineering (with PS)	0(0)	6(0)
<b>M.Pharm.</b>	0(0)	1(0)
<b>M.Pharm.(with PS)</b>	0(0)	8(6)
M.Pharm.(with specialization in Pharmaceutics)	0(0)	2(1)
M.Pharm.(with specialization in Pharmaceutics) (with PS)	0(0)	14(5)
M.Pharm.(with specialization in Pharmaceutics Chemistry)	0(0)	1(0)
M.Pharm.(with specialization in Pharmaceutics Chemistry) (with PS)	0(0)	3(2)
<b>Sub Total</b>	<b>2(1)</b>	<b>272(81)</b>
<b>C. Ph.D.</b>	45(12)	25(8)
<b>Total (On Campus)</b>	<b>78(15)</b>	<b>1294(260)</b>

**Note:** The numbers in brackets indicate number of female students.

## SUMMARY

### (i) On-Campus Programmes

Discipline	Engineering			Science			Humanities			Total		
	80 <sup>th</sup>	81 <sup>th</sup>	Total	80 <sup>th</sup>	81 <sup>th</sup>	Total	80 <sup>th</sup>	81 <sup>th</sup>	Total	80 <sup>th</sup>	81 <sup>th</sup>	Total
<b>Integrated First Degree</b>	20(2)	739(112)	759(114)	9(0)	189(45)	198(45)	2(0)	69(14)	71(14)	31(2)	997(171)	1028(173)
<b>Higher Degrees</b>	2(1)	173(47)	175(48)	-	29(14)	29(14)	-	70(20)	70(20)	2(1)	272(81)	274(82)
<b>Ph.D.</b>	-	-	-	-	-	-	-	-	-	45(12)	25(8)	70(20)
<i>Total</i>	<b>22(3)</b>	<b>912(159)</b>	<b>934(162)</b>	<b>9(0)</b>	<b>218(59)</b>	<b>227(59)</b>	<b>2(0)</b>	<b>139(34)</b>	<b>141(34)</b>	<b>78(15)</b>	<b>1294(260)</b>	<b>1372(275)</b>

**Note:** The numbers in brackets indicate number of female students.

### LIST OF ORGANIZATIONS WHICH CONDUCTED CAMPUS INTERVIEWS

S.No.	Company Name	Number of Students		Sector
		Interviewed	Offered	
1	ACE Academy	4	2	Civil
2	Adobe	5	3	CS/IT
3	Affine Analytics	6	3	All
4	Altimetrik	4	1	MBA
5	AMAZON	34	21	CS/Electronics
6	Anand Group	6	3	Mech
7	App Orbit	5	2	CS/Electronics
8	AppDynamics	4	2	CS/Electronics
9	Arcesium	8	5	CS/IT
10	ARM Embedded Technologies Pvt. Ltd.	3	2	CS/Electronics
11	Ashoka Buidcon	9	5	Civil
12	Atkins	8	4	Mech
13	Aurigo	8	4	CS/IT
14	Avanti	0	0	All
15	Axis Bank	7	4	All
16	Bain Capability Center Pvt. Ltd	4	2	All
17	Bajaj Auto	7	3	Mech
18	Bank Of America	8	5	All
19	Birla Century	5	2	Mech/Chem
20	Blue Jeans Network India Pvt. Ltd.	4	1	All
21	BNED	2	1	Electronics
22	Bosch	2	1	Mech
23	Boston Consulting Group	4	1	All
24	Brown Tape	2	1	All
25	Busigence	5	1	CS/Electronics
26	Cairn India	2	1	Mech/Chem
27	Capgemini	34	21	All
28	Capital One	3	1	CS/Electronics
29	CB&I	7	2	Chem
30	CDOT	8	3	Electronics
31	Cetas	4	1	All
32	CGI	22	13	All
33	Cisco	22	14	CS/Electronics
34	CITI	18	9	All
35	Cognizant	24	11	MBA
36	CommScope Networks India Pvt Ltd	2	1	CS/IT
37	Credit Suisse	19	11	All
38	Crowdfire	6	3	All
39	Cypress	18	8	Electronics
40	Daikin	4	1	Mech
41	DBS	4	2	CS/Electronics
42	DE Shaw	12	6	CS/IT



S.No.	Company Name	Number of Students		Sector
		Interviewed	Offered	
43	Dell	15	9	All
44	Dell	4	1	CS/IT
45	Deutsche Bank	5	1	CS/IT
46	DIRECT I	14	7	All
47	DoSelect	0	0	All
48	Dr. Reddy's	10	5	Chem
49	Decision Resource Group	3	1	Pharma
50	Eccela Consulting	6	3	All
51	Edgeverve	16	12	CS/IT
52	Ernst and Young	4	2	CS/Electronics
53	EXL Services	19	10	All
54	Exxon Mobil	7	3	Mech/Chem
55	Fair Isaac Consulting	8	5	All
56	Finisar	0	0	CS/Electronics
57	FLOW TRADERS	3	1	All
58	FN Mathlogic	3	1	All
59	Fractal Analytics	7	3	All
60	Freescale Semiconductor	4	1	Electronics
61	Futures First	9	5	All
62	Gartner	5	1	MBA
63	GDRC	8	4	MBA
64	GE Digital	4	1	CS/IT
65	General Electric Power	4	1	Electronics
66	GGK Technologies.	5	3	CS/Electronics
67	Goldman Sachs	5	1	All
68	Goldratt Consulting	3	1	All
69	Google	15	5	CS/IT
70	Grand View Research	4	2	All
71	Grey Orange	6	4	All
72	Gwynniebee	4	1	Electronics
73	HCL	3	2	Electronics
74	Here Maps	3	2	All
75	Hero Moto Corp	8	5	Mech
76	Hindalco	14	6	Mech/Chem
77	HPCL	6	4	Mech/Chem, Electronics
78	HPE	6	4	CS/IT
79	HSBC	15	5	All
80	HSCC	3	1	Mech/Chem
81	Hyundai Mobis	3	1	Electronics
82	Hyundai Motors	3	1	All
83	ICF	8	2	All
84	ICICI	6	5	All
85	IFB	4	2	Mech
86	IMS Health	6	4	Pharma
87	IMS Health	6	4	All
88	Indiamart	14	8	CS/IT

S.No.	Company Name	Number of Students		Sector
		Interviewed	Offered	
89	Indus Insights	3	1	All
90	Infinity Research	7	4	MBA
91	Infosys	20	10	CS/Electronics
92	Inmobi	6	4	All
93	Instart logic	5	1	CS/IT
94	Intel	8	6	Electronics
95	Interview Bit	5	2	Electronics
96	iRunway	3	2	All
97	Isgec	4	3	Mech
98	ITL	2	1	Chemical
99	J. P Morgan	34	28	All
100	Janlakshmi Finance	30	19	MBA
101	Johnson Controls	21	8	Mech/Electronics
102	Johnson Matthey	8	5	Electronics
103	JSW	3	1	Mech
104	JW Consultant	5	2	Civil
105	KPMG	6	4	MBA
106	L & T	22	10	Civil
107	L & W	3	1	Civil
108	Latent View	9	3	All
109	Lea Associates	8	5	Civil
110	Linkedin	4	2	CS/IT
111	Manthan Advisors	6	2	All
112	Maruti Suzuki	3	2	Mech
113	MATHWORKS INDIA PRIVATE LIMITED	2	1	CS/Electronics
114	Mckinsey	0	0	All
115	Media IQ Digital	12	6	All
116	Mediatek	5	3	Electronics
117	Medley Mad	2	1	CS/IT
118	Mentor Graphics	25	1	CS/IT
119	Microsoft IDC	21	12	CS/IT
120	Microsoft SMSG	7	4	CS/Electronics
121	Mond Technologies	5	4	All
122	Mordor Intelligence	21	11	All
123	Morgan Stanley	4	1	CS/IT
124	Msupply	3	2	MBA
125	Mu Sigma	7	6	All
126	Myntra	10	5	CS/IT
127	Mypat	0	0	Electronics
128	Nagarro	17	7	All
129	Nestle	5	2	Mech/Electronics
130	Netapp	3	2	Electronics
131	Neuland	2	1	Chem
132	New Age TechSci Research Pvt. Ltd.	0	0	All
133	Next Gen PMS	2	1	CS/IT
134	Nomura Global Markets	2	1	Mech

S.No.	Company Name	Number of Students		Sector
		Interviewed	Offered	
135	Novartis	15	9	Mech/Electronics
136	Nucleus Software Export Ltd	3	1	CS/IT
137	Nutanix	6	4	CS/IT
138	Nvidia Graphics	11	7	Electronics
139	O 9 Solutions	6	3	All
140	Open World Money	2	1	All
141	Oracle	34	23	CS/Electronics
142	Orbees	0	0	All
143	OTIS	9	5	Mech/Electronics
144	Panasonic	3	2	Electronics
145	Paypal	8	2	CS/Electronics
146	Paytm	5	3	All
147	Pfizer	5	2	Chem/Mech/Pharma
148	Pharma Ace	2	1	Pharma
149	Play Simple	2	1	Electronics
150	Price Waterhouse Cooper	12	6	Mech/Electronics
151	QUALCOMM	36	26	CS/Electronics
152	Qubole	9	3	CS/IT
153	Rao IIT	7	4	All
154	RAO IIT	24	10	All
155	Reflexis Systems India Pvt Ltd.	2	1	CS/IT
156	ReportGarden Technologies Pvt. LTd.	3	2	CS/IT
157	ROHM Semiconductors	5	2	Electronics
158	Rubique	5	1	All
159	Sai Sanj	3	1	All
160	Samsung Banglore	20	13	CS/Electronics
161	Samsung Delhi	7	6	CS/Electronics
162	Samsung NOIDA	11	6	CS/Electronics
163	SAP Labs	4	3	All
164	Schlumberger	7	5	Mech/Chem/Electronics
165	Schneider	8	4	All
166	Seagate	5	4	CS/IT
167	Searce	19	8	All
168	Shaadi.Com	3	2	CS/IT
169	Shriram Pistons	5	3	Mech
170	SKF	2	1	Mech
171	Skoda	4	2	Mech
172	Smart Cube	5	3	Pharma
173	Smartprix	0	0	All
174	Sokrati	2	1	All
175	Symantec Software Solutions Pvt. Ltd.	2	1	CS/IT
176	Synopsys	6	4	Mech/Electronics
177	Tata Communications Lim	2	1	Electronics
178	Tata Motors	18	9	Mech
179	Tata Steel	5	2	Mech
180	Tata Teleservices	3	2	MBA

S.No.	Company Name	Number of Students		Sector
		Interviewed	Offered	
181	Tata Trust	30	13	All
182	Tata Trust	5	3	All
183	TCG	6	3	All
184	TCS	18	14	All, All
185	Techture	0	0	Civil/Chem
186	Tesco	23	17	CS/Electronics
187	Thornton tomasetti	2	1	Civil
188	Tiger Analytics	5	3	All
189	Time Inc	7	4	All
190	Times Internet	3	2	CS/IT
191	Tolexo	5	3	MBA
192	United Health Group	9	4	All
193	UOP Honeywel	8	3	Chem
194	Value Edge	5	3	Chem
195	Vedanta	10	5	Mech/Chem/Electronics
196	Vidhya Sagar Classes	12	6	All
197	Visible Alpha	4	2	All
198	VM Ware	3	2	CS/Electronics
199	Walmart Global Technology Services	5	2	CS/IT
200	Weir En Sci	2	1	All
201	Wipro	30	17	All
202	WNS	2	1	MBA
203	Works App	8	6	CS/IT
204	Worley Parsons India	5	1	Civil
205	Xilinx	2	1	CS/Electronics
206	Zemoso	5	3	All
207	Zinnov	5	2	All
208	Zoomcar	4	2	All
209	ZS Associates	29	23	All

### Summary

Total No. of companies: 209

Total No. of students interviewed: 1651

Total No. of appointments offered: 881

### Legend

BT: Biotechnology, CE: Civil, CHE: Chemical, CM: Communication Engineering, CS: Computer Science, DE: Design Engineering, EEE: Electrical & Electronics, ET: Engineering Technology, E&I: Electronics & Instrumentation, ECON: Economics, FIN: Finance, GS: General Studies, IS: Information System, MANUF: Manufacturing Systems Engineering, MATH: Mathematics, MECH: Mechanical, MI: Microelectronics, MMS: Master of Management Studies, PHARM: Pharmacy, SS: Software Systems, MBA.

**LIST OF PROJECTS COMPLETED UNDER CERTAIN PROJECT-ORIENTED COURSES IN THE YEAR 2017**

**Second Semester 2016-2017 and First Semester 2017-2018**

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
1.	ISHITA SUBHASH KARBELKAR	Pushp Lata	A STUDY OF CINEMATIC AND APPROPRIATION OF SHAKEPEARES PLAYS
2.	YOGESH SINGH RATHORE	Gajendra S Chauhan	MARKET RESEARCH
3.	SUDARSHAN VIJAY	Bhupendra K Sharma	MODELLING FLOW OF NANOFUIDS IN HEAT EXCHANGE RELATED APPLICATIONS
4.	SUGAM GARG	Arun Kumar Vaish	TESTING THE YIELD ENHANCEMENT STRATEGY THROUGH COVERED CALL WRITING
5.	ANANYA DHAKA	Arun Kumar Vaish	STUDYING THE INVESTOR BEHAVIOUR THROUGH SCHEDULED ANNOUNCEMENT AND IMPACT ON STOCK PRICES USING EVENT STUDY METHODOLOGY
6.	NIKHIL VERMA	Arun Chauhan	FROM 2D X-RAYS TO 3D MODELS
7.	SAYAN KUMAR DAS	Banasri Roy	HYDROLYSIS OF WOOD TO SUGAR
8.	NEERAJ VARSHNEY	Satyam Srivastav	ANALYSIS OF MACHINE LEARNING ALGORITHMS ON CPU AND GPU
9.	RAHUL BANERJI	Satyam Srivastav	ANALYSIS OF MACHINE LEARNING ALGORITHMS ON CPU AND GPU
10.	RAHUL BANERJI	Amit Dua	ENERGY MINIMIZATION USING SDN
11.	PULI BHARATHA RATNA DEEP	K Solomon Raju	SHM (STRUCTURAL HEALTH MONITORING)
12.	KRISHNA ZANWAR	Neetu Yadav	TECHNOLOGY: THE CATALYST FOR REVOLUTIONISING INDIAN EDUCATION INDUSTRY
13.	ADITYA MANGLIK	Devesh Samaiya	NEURAL NETWORK IMPLEMENTATION FOR ARTIFACT DETECTION IN HEVC COMPRESSED VIDEO
14.	SIDDHARTH SHANKAR TRIPATHI	Dalip Kumar	SYNTHESIS AND PHOTOPHYSICAL PROPERTIES OF PORPHYRIN DERIVATIVES.
15.	MEGHANI IMRAN IQBAL	Bhagavatula Vani	TO STUDY THE VARIOUS ABIOTIC STRESS FACTORS ON THE PHOTOSYNTHESIS
16.	MEGHANI IMRAN IQBAL	Prabhat Nath Jha	CHARACTERIZATION OF BIOACTIVE COMPOUNDS PRODUCED BY ENDOPHYLIC BACTERIA
17.	SAMBHAV JAIN	Bhagavatula Vani	ENERGY GENERATION USING A MICROBIAL FUEL CELL
18.	DEEPTANSHU AGARWAL	Prabhat Nath Jha	CHARACTERIZATION OF BIOACTIVE COMPOUNDS PRODUCED BY ENDOPHYLIC BACTERIA
19.	VIPUL SINGHAL	Nilanjan Chattaraj	DIGITAL STORAGE OSCILLOSCOPE (DSO) DESIGN USING ARDUINO WITH MATLAB GUI
20.	SAMBHAV JAIN	Prabhat Nath Jha	CHARACTERIZATION OF BIOACTIVE COMPOUNDS PRODUCED BY ENDOPHYLIC BACTERIA
21.	NIKHIL BIYANI	Ashish Tiwari	DISPERSION IN FLOWS THROUGH CURVED TUBES
22.	NIKHIL BIYANI	Girish Kant	ANALYZING THE IMPEDIMENTS OF BUYER SUPPLIER RELATIONSHIPS
23.	AKSHAT MISHRA	Kamlesh Kumar	TO STUDY THE GEOHAZARDS CAUSED BY HUMAN ACTIVITY
24.	AKSHAT MISHRA	Uma S Dubey	TO STUDY THE RECENT ADVANCES IN CHEMOTHERAPY OF LUNG CANCER.
25.	SATYAM KUMAR SINGH	HK Mohanta	A STUDY ON EXTENDED KALMAN FILTER ESTIMATOR
26.	PULKIT GUPTA	Navneet Goyal	PARALLELIZATION OF DENSITY BASED CLUSTERING ALGORITHM FOR STREAMING DATA.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
27.	PRATYUSHA RAO	Anupama Mittal	NANO-FORMULATIONS OF TAMOXIFEN FOR TREATMENT OF BREAST CANCER.
28.	PRATIM PATHAK	Aniruddha Roy	ROLE OF MACROPHAGES IN CANCER IMMUN EVASION
29.	SRISHTI SHARMA	Gautam Singhvi	TO STUDY THE NANOEMULSION BASED TOPICAL DRUG DELIVERY SYSYTEMS
30.	BILWASIVA BASU MALLICK	Hari Om Bansal	MAXIMUM POWER POINT TRACKING ALGORITHM FOR OPTIMISATION OF WIND ENERGY AND SOLAR PV
31.	KRATIKA GUPTA	Vinod Kumar Chaubey	STUDY , DESIGN AND SIMULATION ,ANALYSIS OF OPTICAL / WIRELESS LINK/SYSTEMS
32.	RISHABH GAUR	Shibasish Chowdhury	MRNA & MIRNA INTERACTION IN CANCER USING MACHINE LEARNING
33.	NIRAJ KUMAR MISHRA	Kari Babu Ravi Teja	STUDY OF JUNCTIONLESS TRANSISTORS
34.	ANUBHAV SACHAN	Vinod Kumar Chaubey	STUDY, DESIGN AND SIMULATION ANALYSIS OF OPTICAL/ WIRELESS LINK/ SYSTEMS.
35.	MAYUR MAHAJAN	Surekha Bhanot	HANDWRITTEN TEXT ANALYSIS
36.	MAYANK PANDEY	Surekha Bhanot	HANDWRITTEN TEXT ANALYSIS
37.	ANAND MAURYA	Amit Dua	NEXT GENERATION POWER SAVING IN NETWORK DEVICES USING SDN
38.	NIPUN VASHISHTHA	Rajdeep Chowdhury	MIRNA AND MRNA INTERACTIONS ON DIFFERENT CANCER TYPES.
39.	BHATTAD MRUNAL SUNIL	Murali M Pandey	CHARACTERISTICS OF LAYER BY LAYER FILM OF SUITABLE DRUG FOR EXCISIONAL WOUND EALING.
40.	ARJUN DABRA	Abhishek Mishra	FFT AND ITS APPLICATIONS
41.	ANIMESH JAIN	Uma S Dubey	BIOFLUID MECHANICS (BIO-MECHANICS)
42.	HAROON FAISAL	Jahagirdar Ankush Chandrakant	IMPLEMENTATION OF MODEL PREDICTIVE CONTROL (MPC) ON FPGA
43.	ASHWIN SHIRBHATE	NV Muralidhar Rao	LONG RUN AND SHORT TERM EFFECTS OF MONETARY POILICY IN INDIA.
44.	RUDRAJ TARAKBHAI MEHTA	Chandra Shekhar	HARDWARE DESIGN OF THE ON-BOARD COMPUTER OF NANO-SATELLITE.
45.	KUCHIBHOTLA SRI RAGHU CHARAN	Inamur R Laskar	SYNTHESIS OF AGGREGATION INDUCED EMISSION ACTIVE MECHANOFORO LUMINESCENC E MATERIAL AND STUDY CORELLATION OF ITS STRUCTURE WITH FLORENCE PROPERTY
46.	DESHMUKH SHARVARI SATISH	Surekha Bhanot	APPLICATION OF DEEP LEARNING IN NLP (WITH FOCUS ON SENTIMENT ANALYSIS (SA))
47.	AYUSH GUPTA	Shilpi Garg	STUDY OF MOLECULAR TRANSPORTERS AND IONS/MOLECULAR CHANNELS FUNCTIONAL ON APICOPLAST MEMBRANE OF PLASMODIUM
48.	SARTHAK JAIN	Sainath Bitragunta	THE DESIGN OF ENERGY HARVESTING COMMUNICATION SYSTEMS WITH THE APPLICATION OF ADAPTIVE MODULATION ENCODING.
49.	SARTHAK JAIN	Vinod Kumar Chaubey	DESIGN OF ADAPTIVE EQUALIZERS.
50.	MOHIT YADAV	S Mohan	RGB-D MAPPING USING RTAB-MAP
51.	SHIVAM	S Mohan	STUDY MULTI-ROBOT LOCALIZATION TECHNIQUES AND IMPLEMENT SOME OF THEM ON A PHYSICAL TEST-BED
52.	SAHAJ SRIVASTAVA	Navneet Goyal	IDENTIFYING OUTLIERS IN SURVEILLANCE CAMS USING MACHINE LEARNING.
53.	DABHADKAR KAIVALYA MADAN	Sainath Bitragunta	PROBABILISTIC AND ANALYTIC MODELLING FOR A SPORT(EG BASKETBALL) USING SENSORS AND SIGNAL PROCESSING HENCE ITS MATLAB SIMULATION.
54.	SHRUTI SAMIRKANT SHAH	Rajdeep Chowdhury	GLIOBLASTOMA STEM CELLS
55.	AADI JAIN	S Mohan	STUDY MULTI-ROBOT LOCALIZATION TECHNIQUES AND IMPLEMENT SOME OF THEM ON A PHYSICAL TEST-BED
56.	ADEESH BHARGAVA	Sainath Bitragunta	PROBABILISTIC AND ANALYTIC MODELLING FOR ASPORT USING SENSORS AND SIGNAL

S.No	Name of the student	Faculty Name	Project title
			PROCESSING, HENCE ITS MATLAB SIMULATION.
57.	PRAKRITI ROY	Anupama Mittal	REGULATORY AND IPR LAWS ON THE USE OF STEM CELLS IN SKIN TISSUE ENGINEERING
58.	PRADHAN ROSHAN NITIN	Murali Palla	MICROSTRUCTURE MODELLING IN HAZ IN WELDING OPERATION
59.	SOURABH BANSAL	Amit Dua	NEXT GENERATION POWER SAVING IN NETWORK DEVICES USING SDN.
60.	RAHUL SAINI	Somdatta Bhattacharya	TRACING THE PAST AND PRESENT: THE EVOLUTION OF THE VIDYA VIHAR CAMPUS
61.	RITUPARNA PRAHARAJ	Srikanta Routroy	ANALYZING SUPPLY CHAIN OF MEDICINES IN RURAL AREAS
62.	PATWA SMIT MANISH	Poonam Goyal	HYBRID PARALLEL IMPLEMENTATION OF TOP-DOWN SUBSPACE CLUSTERING ALGORITHMS
63.	LAKSHIT BHUTANI	Shan Balasubramaniam	AUTOMATIC PARALLELIZATION OF DENSITY-BASED CLUSTERING ALGORITHMS.
64.	ANIRUDH KUMAR BANSAL	Poonam Goyal	DESIGN AND DEVELOPMENT OF PARALLEL DATA STRUCTURES FOR ASSOCIATION RULE MINING IN ANYTIME STREAMS.
65.	SWAPNIL BHATTACHARYA	Arvind Kumar Sharma	HYDRODYNAMIC ASPECTS OF LOOP REACTOR
66.	SALONI SINHA	Rajdeep Chowdhury	ANALYSIS OF MOLECULAR MARKERS ACROSS VARIOUS CANCERS UTILISING GCD DATABASE PORTAL
67.	RASHMI CHAUDHARY	Virendra Singh Nirban	STUDENT INDULGENCE IN SOCIAL MEDIA AND THE EFFECTS ON THEIR WELL-BEING
68.	RASHMI CHAUDHARY	Devika	INNOVATIVE MEANS OF FINANCING OF FILMS IN INDIA
69.	ADITYA MANGLIK	Shan Balasubramaniam	PARALLELIZATION OF MACHINE LEARNING ALGORITHMS
70.	ABHINAV SINGH DASOONDI	Amit Goel	TRAFFIC DESIGN
71.	ANAMYA AGARWAL	Krishnendra Shekhawat	CONNECTIVITY ALGORITHMS
72.	AISHWARYA NIGAM	Anil Jindal	DEVELOPMENT OF PEPTIDE CONJUGATED NANOPARTICLES FOR TARGETED DELIVERY OF DRUGS.
73.	SHUBHAM RAHUL NAGARIA	Satyam Srivastav	WATER QUALITY ANALYSIS USING MACHINE LEARNING TECHNIQUES.
74.	AAYUSH GUPTA	Jahagirdar Ankush Chandrakant	FPGA IMPLEMENTATION OF GENERAL PREDICTIVE CONTROL ALGORITHM
75.	VARUN MAHESH	Arun Kumar Jalan	FINITE ELEMENT ANALYSIS OF INDUCTION MOTOR
76.	YASHOVARDHAN SINGH	Arnab Hazra	APPLICATIONS OF TI/TIO <sub>2</sub> NANOTUBES/TI RRAM DEVICES
77.	HARMEET SINGH LAMBA	B.A. Botre	AI BASED CONTROL TECHNIQUES FOR PROCESS INDUSTRY
78.	MAYANK	Shibani K Jha	EXPERIMENTAL STUDY OF CONTAMINANT TRANSPORT THROUGH SOIL-WATER CHAMBER.
79.	SHUBHAM TRIPATHI	Shibani K Jha	STUDY OF SOIL RESISTIVITY AND ITS ONE-DIMENSION AND TWO-DIMENSIONAL MAPPING.
80.	SHRIYANSH SRIVASTAVA	Archana K K	NUTRACEUTICS AND ITS APPLICATIONS DELIVERY AND TOXICITY
81.	KESHAV JOSHI	Dipendu Bhunia	NUMERICAL MODELING OF EARTHQUAKE RESISTANT STRUCTURE USING FINITE ELEMENT METHOD
82.	AKSHAY SHARMA	Srinivas Appari	MONOLITH REACTORS FOR CATALYTIC REFORMING
83.	RICHA PRIYADARSHI	Shamsher B Singh	NON-LINEAR RESPONSE OF CFRP CONCRETE SCREWED BRIDGE GIRDERS
84.	SHAH AMAN BHAVIK	Sharad Srivastava	ANALYSIS & DESIGN OPTIMIZATION OF UNIVERSAL HOOKS JOINTS
85.	CHILUKURI RAJA VENKATA MANIKANTA VIHARI	Pankaj Kumar Sharma	STUDY OF ECO-FRIENDLY GREEN BUILDING DESIGN(INDIAN)
86.	ADITYA CHAUHAN	AK Das	IDENTIFY FIRST INTERACTING PARTNERS OF

S.No	Name of the student	Faculty Name	Project title
			CRITICAL HUB GENE FROM A P. FALCIPARUM WGCNA.
87.	SHIVAM CHAUBEY	Somdatta Bhattacharya	TRACING THE JOURNEY OF CHANGING IDEOLOGIES AND SOCIAL VALUES IN INDIA THROUGH T.V ADVERTISEMENTS.
88.	MOHINI PANDEY	Somdatta Bhattacharya	AN ANALYSIS OF SELECTED TEXT OF SADAAT HASAN MANTO AND ISMAT CHUGHTAI.
89.	TANYA BHATT	Atish T R Paul	STUDY OF ANTI-OBESITY PRODUCTS.
90.	SURBHIT JOHRI	AK Das	IDENTIFY FIRST INTERACTING PARTNERS OF CRITICAL HUB GENE FROM P FALCIPARUM WCGNA
91.	SUMAN S CHUKKI	Manoj Kumar	A STUDY ON NECESSITY OF MINIMUM REINFORCEMENT IN R.C FLEXURAL MEMBERS
92.	STUTI MAHESHWARI	Suresh Gupta	REMOVAL OF RADIOACTIVE MATERIALS FROM WASTEWATER USING NANOPARTICLES.
93.	MEHTA ADITYA MUKESH	Ravindra Mukhiya	DESIGN AND SIMULATION OF BULK MICROMACHINED DIFFERENTIAL ACCELEROMETER
94.	AKSHANSH RAI	Vishakha Sakhare	GREEN BUILDING PRACTISE AND ENERGY EFFICIENT BUILDING INFORMATION MODELLING
95.	BEDMUTHA SAHIL SUNIL	G Muthukumar	HIGH STRENGTH CONCRETE
96.	RAJAT P THAKUR	Arun Chauhan	FACIAL EXPRESSION RECOGNITION WITH DEEP CONVOLUTIONAL NEURAL NETWORKS
97.	JOSHI JAYSHIL KAMLESH	Surojit Pande	APPLICATIONS OF QUANTUM DOT IN WATER SPLITTING REACTION
98.	SHIVAM SINGHAL	Kamlesh Kumar	SELECTED TOPICS IN "ADVANCES IN GEOTECHNICAL EARTHQUAKE ENGINEERING"
99.	SHIVAM SINGHAL	NV Muralidhar Rao	LONG RUN AND SHORT RUN EFFECTS OF MONETARY POLICY ON GDP IN INDIA
100.	DHANANJAY NAHATA	Anshuman	ANALYSIS OF BUILDING FRAMES FOR HORIZONTAL AND VERTICAL LOADS
101.	PRIYANSHI P GUPTA	Anshuman	ANALYSIS OF BUILDING FRAME FOR HORIZONTAL AND VERTICAL LOADS
102.	HIMANSHU DEVENDRA ASWAL	Nirankush Dutta	DURABILITY OF CONCRETE AND PERFORMANCE BASED SPECIFICATIONS
103.	MEHTA SANSKAR MAHESH	Shibani K Jha	MODELLING AND SIMULATION OF CONTAMINANTS THROUGH GROUND WATER RESERVOIR
104.	BALANI JAIKUMAR RAJKUMAR	Jl Raheja	VIDEO SUPER RESOLUTION USING NEURAL NETWORKS
105.	SANYUKTA SINGHAL	Prasanta Kumar Sahu	EVALUATION OF BUS RAPID TRANSIT SYSTEM IN INDIA
106.	ADITYA AGARWAL	Nilanjan Chattaraj	ANALOG CIRCUIT OPTIMIZATION USING EVOLUTIONARY ALGORITHM
107.	SURBHIT JOHRI	G S Sessa Chalapathi	INTERFACING OF EMBEDDED BOARDS FOR LORA BASED COMMUNICATION
108.	SHUBHANGI JASORIYA	HK Mohanta	SEPARATION OF CO2 FROM FLUE GASES USING MEMBRANE TECHNOLOGY
109.	KAVISHA AGRAWAL	Amit Jain	CLOSED LOOP ANALYSIS OF SELECTED BIOREACTORS.
110.	RISHABH GUPTA	G Muthukumar	ANALYSIS OF SWAY AND NON SWAY FRAMES USING REVIT.
111.	ANKUR JAIN	Amit Goel	PAVEMENT DESIGN, ANALYSIS AND GEOMETRIC DESIGN
112.	AYUSH RAJ	G Muthukumar	ANALYSIS OF SWAY AND NON SWAY FRAMES USING STAAD.PRO
113.	SIDDHARTH NAGPAL	NV Muralidhar Rao	AN EMPIRICAL ANALYSIS OF FINANCIAL DATA USING CLUSTERING APPROACHES
114.	MORE SANIKET VIJAYKUMAR	Arun Chauhan	IMAGE CAPTIONING USING DEEP LEARNING
115.	ANMOL BHATIA	Arun Chauhan	IMAGE CAPTIONING USING DEEP LEARNING
116.	SHUBHAM SHANDILYA	Devika	STUDY OF HUMOR AND WIT IN CINEMA.
117.	BINDU PRIYA KALATHURU	Sailaja Nandigama	A COMPARATIVE STUDY OF WOMEN IN LEADERSHIP ROLES. AN ANALYSIS OF



S.No	Name of the student	Faculty Name	Project title
			MIDDLE AND HIGHER LEVELS
118.	BINDU PRIYA KALATHURU	Rajneesh Choubisa	RELATIONSHIP AMONG CONSUMER BRAND LOYALTY AND SATISFACTION.
119.	AYUSH SAWARNI	Devika	STUDY OF HUMOUR AND WIT IN LITERATURE.
120.	PALASH SETHI	Shibasish Chowdhury	BUILDING MICRORNA BINDING SITE SCORING MODEL
121.	KAMODIA DEVANSH NIRAJ	Srikanta Routroy	ANALYZING THE ANTECEDENTS OF BUYER SUPPLIER RELATIONSHIP
122.	LAKSHAY KUMAR	Dipendu Bhunia	NUMERICAL MODELLING OF COUPLING BEAM IN COUPLE SHEAR WALL
123.	SARANSH MOHANTY	Smita Raghuvanshi	APPLICATION OF CLO2 IN CONTROLLING BIO GROWTH OVER HEAT EXCHANGERS AND DEMONSTRATION OF EFFECTIVENESS OF CLO2 OVER CL2.
124.	KASIBHATLA GAUTAM	Sachin U Belgamwar	ENERGY HARVESTING FROM RAINDROPS FALLING ON PIEZO-ELECTRIC MATERIALS.
125.	KASIBHATLA GAUTAM	Arun Kumar Jalan	GU-INTERFACE WITH MATLAB FOR FINDING NATURAL FREQUENCIES AND SHAPE MODES FOR MECHANICAL SYSTEMS
126.	RISHABH JOSHI	Sangeeta Sharma	AD EFFECTIVENESS AND THEIR IMPACT ON SALES
127.	INDRAJEET MISHRA	Satyam Srivastav	HEALTH CARE ANALYSIS USING MACHINE LEARNING
128.	AMEY DIPAK AGRAWAL	Arun Chauhan	FROM 2D X-RAYS TO 3D MODELS
129.	AMEY DIPAK AGRAWAL	Yashvardhan Sharma	GENERATION OF CODE-SWITCHED SENTENCES
130.	JAY GADA	Rajesh P Mishra	DESIGNING A FEASIBLE PRODUCT FOR USE IN INDIAN RAILWAYS(PROBLEM STATEMENT ARE GIVEN ON THE INDIAN RAILWAYS WEBSITE)
131.	JAY GADA	Satyendra Kr Sharma	IMPROVING THE RETURN LOGISTICS OF E-COMMERCE VENTURES FOR BETTER PROFITS AND ALSO IMPROVING THEIRSUPPLY CHAIN EFFICIENCY
132.	PARTH SHARMA	Srikanta Routroy	ANALYZING THE ANTECEDENTS OF BUYERSUPPLIER RELATIONSHIP
133.	NALIN RAJEEV MITTAL	Abhishek Mishra	STRUCTURAL AND SPECTRAL PROPERTIES OF CORONA GRAPHS
134.	PUREKAR ANIRUDDHA SUNIL	Shilpi Garg	STUDY OF MICROBE POWERED SOLAR PANELS
135.	SANIYA DASOT	Virendra Singh Nirban	DISTINGUISHING BETWEEN GENDERS ON THE BASIS OF LANGUAGE USAGE IN ONLINE MEDIA.
136.	NEELANSH BHARTIYA	Amit Jain	MULTI-LOOP CONTROL ANALYSIS OF BIO-REACTORS.
137.	RAHUL ANIL KUMAR	Srinivas Appari	DETAILED KINETIC MODELLING OF SOME COMPLEX REACTIONS
138.	RAHUL ANIL KUMAR	Kumar S Bhattacharya	UNDERSTANDING SHAKESPEARE AND HIS CONTEMPORARIES THROUGH READINGS OF THEIR SELECTED WORKS
139.	RIYA SHARMA	Surojit Pande	SYNTHESIS OF GOLD METAL NANOPARTICLE USING CARBON QUANTUM DOTS AND ITS APPLICATION IN OXYGEN EVOLUTION REACTION.
140.	RIYA SHARMA	Kavindra Kandpal	DESIGN OF PIXEL DRIVING CIRCUITRY USING OXIDE THIN FLIM TRANSISTOR WITH AN INTRODUCTION TO SPICE LEVEL 3 MODELING AND THRESHOLD VOLTAGE SWIFT.
141.	SONALI RAJESH MEDANI	Surojit Pande	SYNTHESIS OF AG NANOPARTICLES USING CARBON QUANTUM DOTS AND ITS APPLICATION IN HYDROGEN EVOLUTION REACTION.
142.	SONALI RAJESH MEDANI	Kavindra Kandpal	PIXEL DESIGNING CIRCUITRY USING OXIDE TFT WITH AN INTRODUCTION TO SPICE LEVEL 3 AND

S.No	Name of the student	Faculty Name	Project title
			THRESHOLD VOLTAGE SHIFT
143.	TUSHAR DHALWANI	Bibhas Ranjan Sarkar	ELECTRONIC PROCESS IN ORGANIC SEMICONDUCTORS.
144.	TUSHAR DHALWANI	Kamlesh Tiwari	CONTINUOUS AUTHENTICATION ON MOBILE PHONE.
145.	YASH JOSHI	Neetu Yadav	TECHNOLOGY:THE CATALYST FOR REVOLUTIONISING INDIAN EDUCATION INDUSTRY
146.	DHIREN GOYAL	Arun Kumar Vaish	A CRITICAL ANALYSIS OF MICROFINANCE IN INDIA
147.	AMITJDEEP SINGH	Rajan Pandey	NEURAL NETWORKS FOR STOCK MARKET PREDICTION
148.	AMITJDEEP SINGH	Kamlesh Tiwari	ADAPTIVE FINGERPRINT RECOGNITION
149.	AYUSH JOSHI	Amit Goel	TRAFFIC AND ACCIDENT STUDIES
150.	VIBHAV ANAND	Rajesh P Mishra	STOCHASTIC MODELLING OF MANUFACTURING SYSTEMS.
151.	AJAY NATHAWAT	Sharad Srivastava	IN-SITU DAMAGE MONITORING OF A SIC/SIC CERAMIC MATRIX COMPOSITE USING ACOUSTIC EMISSION AND DIGITAL IMAGE CORRELATION
152.	AJAY NATHAWAT	Amol Holkundkar	STUDY OF PARTICLES (I.E ELECTRONS ,IONS) ACCELERATED BY LASER BASED PLASMA
153.	SHARMA AKASH ASHOK	Kaushar Vaidya	A STUDY OF EVOLUTIONARY EFFECTS ON OLD (EVOLVED) STAR CLUSTERS
154.	SUDHANSHU SINGH	Satyabrata Sahoo	THERMODYNAMIC ANALYSIS OF ORGANIC RANKINE CYCLE
155.	SUNITA BUGALIA	Rajan Pandey	ANALYSIS OF STOCK PRICE MOVEMENT OF INDIAN COMPANIES.
156.	SUNITA BUGALIA	D D Pant	UV VISIBLE SPECTROSCOPY OF MOLECULES.
157.	GARVIT BHOMIA	Arun Kumar	SOCIAL MARKETING - A LITERATURE REVIEW
158.	GARVIT BHOMIA	Rajneesh Choubisa	SOCIAL MEDIA, BRAND AWARENESS AND DIGITAL MARKETING
159.	NISHANT RATHORE	Rajan Pandey	ANALYSIS OF STOCK PRICE MOVEMENT OF INDIAN COMPANIES.
160.	NISHANT RATHORE	Sushila Shekhawat	TO LEARN ABOUT THE FORM, STRATEGY AND STRUCTURE OF TELEVISION ADVERTISEMENTS.
161.	ARUN KUMAR	Arun Kumar	SOCIAL MARKETING - A LITERATURE REVIEW
162.	ARUN KUMAR	Rajneesh Choubisa	SOCIAL MEDIA, BRAND AWARENESS AND DIGITAL MARKETING
163.	MOHANISH GOEL	Bijoy Kumar Raut	COMPUTATIONAL NEURAL MOTOR CONTROL DESIGN
164.	ABHAY MALPANI	Nirankush Dutta	ADVANCEMENT IN CONCRETE TECHNOLOGY
165.	AAYUSHMAAN JAIN	Yashvardhan Sharma	IDENTIFICATION OF CONTROVERSIAL STATEMENTS IN SOCIAL MEDIA TEXT.
166.	OSWAL ABHIN DILIP	Pankaj Kumar Sharma	DEVELOPMENT OF TOOLS FOR PEDAGOGY IMPROVEMENT IN GENERAL BIOLOGY.
167.	KUSHAGRA AGGARWAL	Jahagirdar Ankush Chandrakant	IMPLEMENTATION OF GENERALIZED PREDICTIVE CONTROL ALGORITHM ON FPGA.
168.	VARUN TRIPATHI	P Srinivasan	HEAT TRANSFER(AND FLOW SIMULATION-FURTHER EXTENSION) OF A LATENT HEAT COLLECTION AND TRANSPORT SYSTEM-MICROENCAPSULATED PCM SLURRY
169.	TANYA BHATT	Rajneesh Choubisa	TO STUDY THE PREVALENCE OF DISEASES IN THE CITY OF VIZAG.
170.	AKSHIT CHOPRA	Jl Raheja	VIDEO SUPERRESOLUTION USING NEURAL NETWORKS.
171.	PRATEEK JAIN	Kamlesh Tiwari	FACIAL EXPRESSION ANALYSIS UNDER THREAT IDENTIFICATION
172.	ABHINAV TIWARI	Satyam Srivastav	VIDEO SUPER RESOLUTION USING NEURAL NETWORKS
173.	ABHINAV TIWARI	Sundaresan Raman	VISUALIZATION OF VECTOR GRAPHICS AND THEIR APPLICATIONS

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
174.	DHANYA MAHALAKSHMI M	Anil Rai	STUDY OF MUSICAL FORMS AND STYLES OF CARNATIC MUSIC.
175.	BHARAT SONI	G Muthukumar	FIRE RESISTANT BEHAVIOUR OF CONCRETE STRUCTURE.
176.	SHAVAK AGRAWAL	Lavika Goel	NATURE INSPIRED TECHNIQUES FOR EFFICIENT INFORMATION MANAGEMENT IN VANETS
177.	SHAVAK AGRAWAL	Navneet Goyal	DESIGN OF ONLINE ALGORITHMS FOR MULTIMODAL EVENT VERIFICATION
178.	VIDHI JAIN	Navneet Goyal	VOICE BASED PROFILING OF A PERSON
179.	VIDHI JAIN	Rajneesh Choubisa	DIAGNOSING AND ENHANCING SIGNATURE STRENGTHS AND VIRTUES THROUGH PERSONAL GADGETS
180.	RISHABH MITTAR	Devika	MOSAIC POETRY WRITING
181.	JASPREET SINGH AHLUWALIA	Yashvardhan Sharma	TEXT SUMMARISATION USING DEEP LEARNING
182.	PRITHVI SANKAR	NV Muralidhar Rao	LASSO REGRESSION TECHNIQUES FOR STOCK MARKET VALUATION IN INDIAN CONTEXT
183.	AVIRAL GUPTA	Rajesh P Mishra	DESIGNING A FEASIBLE PRODUCT FOR USE IN INDIAN RAILWAYS(PROBLEM STATEMENTS ARE GIVEN ON INDIAN RAILWAYS WEBSITE)
184.	AVIRAL GUPTA	Satyendra Kr Sharma	IMPROVING THE RETURN LOGISTICS OF E COMMERCE VENTURES FOR BETTER PROFITS AND ALSO IMPROVING THEIR SUPPLY CHAIN EFFICIENCY.
185.	PUREKAR ANIRUDDHA SUNIL	Vishakha Sakhare	BIOMIMICRY FOR SUSTAINABLE CONSTRUCTION
186.	SHIVAM KUMAR	Sailaja Nandigama	INDIAN EDUCATION SYSTEM AND ITS CONTRAST WITH OTHER EDUCATION SYSTEMS IN THE WORLD
187.	BHAGYA LAKSHMI	Dalip Kumar	SYNTHESIS AND APPLICATION OF DIARYLIODONIUM SALTS IN THE PREPARATION OF HETEROCYCLIC COMPOUNDS.
188.	ABHIJEET PANDEY	Sailaja Nandigama	ATTITUDE OF SOCIETY TOWARDS SENIOR CITIZENS: THEN AND NOW
189.	BOPANA RAGHAVA CHOWDARY	Murali Palla	FATIGUE LIFE ASSESSMENT OF VALVES DUE TO INTERNAL PRESSURE LOADING
190.	AMAN KALRA	Kamlesh Tiwari	ANALYZING PITCH ACTIONS IN SOCCER FOR IMPROVED TEAM PERFORMANCE USING AI.
191.	BANDE CHANDRADITYA VENKATESH	Sharad Srivastava	DESIGN AND OPTIMIZATION OF RIM MADE OF LIGHT WEIGHT AND ECONOMICAL COMPOSITE USING FINITE ELEMENT ANALYSIS(FEA) FOR AN ALL-TERRAIN VEHICLE.
192.	SANKARA PRASAD R	Nitin Chaturvedi	DESIGN OF NON-VOLATILE SRAM CELL FOR STORING MULTIPLE BITS FOR RUN TIME CONTEXT SWITCHING FOR IOT.
193.	LAVKUSH UPADHYAY	Sunil Kumar Dubey	"R" PROGRAMMING IN PHARMACEUTICALS
194.	ANSHUL JAIN	Kavindra Kandpal	TRANSPORT MODELLING OF THIN FILM TRANSISTORS
195.	RUCHI CHOUDHARY	Rajdeep Chowdhury	IDENTIFICATION OF PATHWAYS AND ROLE OF DIFFERENTIALLY REGULATED MIRNA PATHWAYS ACROSS VARIOUS CANCERS
196.	ADITYA CHOUDHARY	Anupam Singhal	EFFECT OF OIL SPILLAGE ON MARINE LIFE
197.	PRANSHU AGARWAL	Pratik N Sheth	CFD STUDY OF THE NOVEL GAS FIRED AUGER PYROLYSIS UNIT.
198.	PARTHO SARTHI	Dhiraj Sangwan	VIDEO SUPER RESOLUTION USING DEEP LEARNING
199.	AKHILESH PAKHETRA	Lavika Goel	USE OF NATURE-INSPIRED ALGORITHMS IN SPORTS ENGINEERING.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
200.	SAKANSH MITTAL	Sharad Srivastava	STRESS SHIELDING IN PERIPROSTHETIC BONE FOLLOWING A TOTAL KNEE REPLACEMENT : EFFECTS OF IMPLANT MATERIALS AND DESIGNS
201.	VIVEK G NAYAK	Jitender Kumar	SYNTACTIC COMPLEXITY OF REGULAR LANGUAGES
202.	SAMBIT PANDA	Tapomoy G Sarkar	HOMOGENEOUS ISOTROPIC UNIVERSE TO CMB ANISOTROPY
203.	KHAN FAUZAN ZAID MOHAMMED SHAFIQR REHMAN	M Santosh Kumar	DEVELOPING MACHINE LEARNING BASED CONTROLLER FOR ROBOTIC VEHICLE (AUV).
204.	VIDISHA VIJAY	Shilpi Garg	GLYCEMIC INDEX AND ITS ROLE IN MODERN DAY DISEASES.
205.	DESHMUKH DEEPANKAR YESHWANT	Hari Om Bansal	DESIGN OF ENERGY OPTIMIZATION STRATEGIES FOR PHEVS
206.	HARSH GROVER	Tapomoy G Sarkar	COSMOLOGICAL STRUCTURE FORMATION AND THEIR EVOLUTION IN AN ACCELERATED EXPANDING UNIVERSE.
207.	DIVITA GUPTA	Sudeshna M Choudhury	ROLE OF CYTOKINES IN TUMOR METASTASIS.
208.	ABHISHEK ANAND	Shibani K Jha	STUDY OF RESISTIVITY OF EARTH THROUGH FIELD EXPERIMENT AND DATA ANALYSIS
209.	KURAPATI MURALI KRISHNA	Shyam Sundar Yadav	NUMERICAL SIMULATION OF TWO PHASE FLOWS WITH PHASE CHANGE.
210.	KHAKHAR NEEL DHARAMENDRA	Girish Kant	APPLICATION OF NEURAL NETWORKS IN SUPPLY CHAIN MANAGEMENT
211.	SIDDHARTH AGARWAL	Sushila Shekhawat	THE EVOLUTION OF SURREALISM AS AN ART FORM AND ITS INFLUENCE ON CINEMA: AN EXPLORATORY STUDY
212.	BHUVNESH JAIN	Rajiv Kumar	PLANAR GRAPHS AND APPLICATIONS
213.	SAKSHAM NAGAR	Sangeeta Sharma	EXPLORING THE RELATIONSHIP OF MUSIC AND LANGUAGE IN ADVERTISING
214.	SUBHASH KUMAR SAMOTA	Rajan Pandey	USE OF MACHINE LEARNING TECHNIQUES AND BEHAVIORAL FINANCE TO FORECAST STOCK MARKET RETURNS
215.	SUBHASH KUMAR SAMOTA	Vishal Gupta	BENEFITS OF SDN MULTICASTING
216.	EDUMUDI VARSHITH NAIDU	Pankaj Kumar Sharma	STUDY OF ECO-FRIENDLY GREEN BUILDING DESIGN (WESTERN COUNTRIES)
217.	PULKIT AGARWAL	Sundaresan Raman	MULTI MODAL VIZUALISATION OF 3D MEDICAL DATA SETS
218.	JAYESH SANJAY MASAND	Arya Kumar	GARCH MODEL AND THE FINANCIAL CRISIS: A STUDY OF THE INDIAN STOCK MARKET
219.	SHREYA PATHAK	Amit Jain	POOL FIRE AND VAPOUR CLOUD EXPLOSION
220.	JAYENDRA AGRAWAL	Aniruddha Roy	STUDY OF CURRENT TECHNIQUES IN MOLECULAR DOCKING FOR PROTEIN LIGAND INTERACTIONS
221.	AVINASH PATI	Smita Raghuvanshi	INTEGRATED BIOREFINERY APPROACH FOR TREATMENT OF FLUE GASES.
222.	GANGWAL RUSHABH PRAVIN	Sachin U Belgamwar	DESIGN AND DEVELOPMENT OF E-TRIKE
223.	AKSHIT JOHRY	Sangeeta Sharma	EXPLORING THE RELATIONSHIP BETWEEN MUSIC AND LANGUAGE IN ADVERTISING.
224.	ARPIT PANDA	Sushila Shekhawat	EVOLUTION OF SURREALISM AS AN ART FORM AND ITS INFLUENCE ON CINEMA: AN EXPLORATORY STUDY
225.	EKLAVYA SHARMA	Vishal Gupta	IMPLEMENTING MPLS IN SDN ENVIRONMENT
226.	SHUBHAM RAHUL NAGARIA	Vishal Gupta	APPLICATION DEVELOPMENT IN SOFTWARE DEFINED NETWORKING
227.	ANAND MOHAN YADAV	Sunita Raina	SOCIOLOGY OF SPORTS: A CASE STUDY OF INDIA
228.	CHIRAG BHARDWAJ	Girish Kant	PREDICTIVE MODELLING FOR ENERGY CONSUMPTION IN MACHINE TOOLS.
229.	MILIND	Abhijit K Digalwar	APPLICATION OF FLEXSIM TO INDUSTRIAL DESIGN AND LEAN MANUFACTURING
230.	GEET BEHERA	P Srinivasan	DESIGN AND ANALYSIS OF COOLING SYSTEM

S.No	Name of the student	Faculty Name	Project title
			FOR TURBINE BLADES
231.	GEET BEHERA	Abhijit K Digalwar	APPLICATION OF FLEXSIM TO INDUSTRIAL DESIGN AND LEAN MANUFACTURING
232.	RAJARAM ARUN	AK Das	HOST-PATHOGEN INTERACTION IN MALARIA
233.	DHRUVAL RANA	Kari Babu Ravi Teja	STUDY OF RESIDUE NUMBER SYSTEM FOR LOW POWER AND HIGH-SPEED DIGITAL APPLICATIONS
234.	DHRUVAL RANA	AK Das	THE ROLE OF HOX GENES IN CANCER DEVELOPMENT
235.	SHUBHAM CHOUDHARY	AK Das	GENETIC REGULATION OF DEVELOPMENT OF DROSOPHILA
236.	SATWIK BHATTAMISHRA	Poonam Goyal	GENOME ASSEMBLER
237.	ISHAN SHREYASH	AK Das	UNDERSTANDING STRUCTURES AND FUNCTIONS OF DIFFERENT GENES
238.	ABHINAV GUPTA	Vishal Gupta	DESIGNING MULTICAST NETWORKS OVER SDN WITH OPENFLOW
239.	ABHINAV GUPTA	S Mohan	CONFLICT RESOLUTION IN MULTI ROBOT SYSTEMS
240.	DESHMUKH MIHIR SANJAY	Rajesh Mehrotra	SIMULATION OF BIOLOGICAL EVOLUTION USING MACHINE LEARNING ALGORITHMS.
241.	MUSTUFA LOKHANDWALA	Ashutosh Bhatia	SIMULATION OF CLOCK SYNCHRONIZATION MECHANISM IN STAR TOPOLOGY BASED WIRELESS NETWORKS.
242.	MUSTUFA LOKHANDWALA	Subit Kumar Saha	DETECTION OF HEAVY METAL IONS IN WASTE WATER USING FLUORESCENCE METHOD.
243.	HIMANSHU MENDIRATTA	Ajay Kumar Sah	STUDY ON INDIAN COW MILK: COMPOSITION AND PROTEIN FUNCTION
244.	TOL VRUNDA MUKUND	Saumi Ray	STUDY OF OPTOELECTRONIC DEVICES IN SOLAR WATER-SPLITTING
245.	TOL VRUNDA MUKUND	Pawan K Ajmera	STUDY OF BIOMETRIC SYSTEMS, FACE RECOGNITION
246.	VIBHOR MITTAL	Inamur R Laskar	LUMINESCENT MEDIATED DETECTION OF AROMATIC NITRO BASED EXPLOSIVE MATERIALS AND EXPLORATION OF THEIR MECHANISM.
247.	VIBHOR MITTAL	Arnab Hazra	DEVELOPMENT OF REDUCED GRAPHENE OXIDE (RGO) THIN FILMS BY CONTROLLED ANNEALING METHOD
248.	AMAN GUPTA	Shamik Chakraborty	SIMULATIONS OF PROTEINS PRESENT IN OLFACTORY RECEPTORS OF ANIMALS
249.	ABHISHEK JAIN	Ajay Kumar Sah	STUDY ON INDIAN COW MILK : COMPOSITION AND PROTEIN FUNCTION
250.	SHRUTI JASORIA	Shamik Chakraborty	INVESTIGATE PERTURBATION INDUCED DYNAMICS IN MODEL SYSTEM
251.	RAGHAV MANTRI	Gajendra S Chauhan	SIGNIFICANCE OF DATA ANALYTICS IN SOCIAL CAUSE ADVERTISING CAMPAIGNS
252.	RAGHAV MANTRI	Anil Rai	MUSICAL AGES
253.	NIRABHI SHARMA	Smita Raghuvanshi	INTEGRATED BIOREFINERY APPROACH FOR TREATMENT OF FLUE GASES
254.	NIRABHI SHARMA	NV Muralidhar Rao	BEHAVIORAL ANALYSIS OF FOREX MARKET USING ELLIOTT WAVE PRINCIPLE AND OSCILLATORS
255.	RISHABH JAIN	Rajesh P Mishra	DEVELOPMENT OF KEY PERFORMANCE INDICATORS FOR LEAN MANUFACTURING
256.	RISHABH JAIN	NV Muralidhar Rao	ECONOMETRIC ESTIMATION OF THE DETERMINANTS OF EXPORTS IN THE MANUFACTURING SECTOR IN INDIA
257.	RAM SIMRAN GROVER	Arun Kumar Vaish	MICROFINANCE REVOLUTION
258.	ARNAV ANAND	Archana Kulkarni	EMPIRICAL ANALYSIS OF GRAVITY TRADE MODELS TO INTRA-BRICS TRADE.
259.	ARNAV ANAND	Ashish Patel	IOT: DESIGNING AN INDOOR QUALITY MANAGEMENT SYSTEM AND DETERMINING ITS OPTIMAL POWER CONDITIONS.
260.	VISHAL HANS	Ashish Patel	IOT: DESIGNING AN INDOOR QUALITY

S.No	Name of the student	Faculty Name	Project title
			MANAGEMENT SYSTEM AND DETERMINING ITS OPTIMAL POWER CONDITIONS.
261.	VISHAL HANS	Arun Kumar Vaish	BLOCK CHAINS AND SMART CONTRACTS IN DERIVATIVES MARKET.
262.	MISHRA ANJUL ANJANIKUMAR	Archana Kulkarni	ANALYSIS OF MILITARY EXPENDITURE IN INDIA
263.	GARGI GUPTA	Monika Gupta	DEVELOPMENT OF INDUSTRIAL WASTE MATERIAL CHART TO BE USED IN INDIAN HIGHWAY
264.	SAURABH SHANKAR SHETTY	Archana Kulkarni	EMPIRICAL ANALYSIS OF GRAVITY TRADE MODEL TO INTRA-BRICS TRADE
265.	NIHAR PORWAL	Ashish Patel	DEVELOPING A WIRELESS SENSOR NETWORK IN A BUILDING FOR DETECTION OF GREENHOUSE GASES AND PM 2.5.
266.	NIHAR PORWAL	NV Muralidhar Rao	SEGMENTATION AND CLUSTERING OF COUNTRIES FOR EXPANSION OF A FIRM IN FOREIGN MARKETS.
267.	ASHIMA AILAWADI	Dipendu Bhunia	NON LINEAR MODELLING OF A MULTISTOREY BUILDING SUBJECTED TO EARTHQUAKES.
268.	ASIM PATTNAIK	Geetilaxmi Mohapatra	THE ECONOMICS OF SOLAR ELECTRICITY IN INDIA
269.	ASIM PATTNAIK	NV Muralidhar Rao	EMPIRICAL ANALYSIS OF NATIONS GDP AND OLYMPIC PERFORMANCE
270.	GOVIND MITTAL	Pradeep Kr H Keskar	FUNDAMENTALS OF FINITE FIELDS.
271.	SRISHTI GOEL	Rakhee	TO STUDY THE RETRIAL PHENOMENA IN QUEUEING SYSTEM
272.	NISHANT ARORA	Devendra Kumar	APPLICATION OF FINITE ELEMENT METHODS FOR SOLVING PARTIAL DIFFERENTIAL EQUATIONS USING MATLAB
273.	SAURAV NARULA	Devendra Kumar	APPLICATIONS OF WAVELET METHODS IN SOLVING PARTIAL DIFFERENTIAL EQUATIONS USING MATLAB
274.	DIVYANSH MALHOTRA	Girish Kant	PREDICTIVE MODELLING FOR ENERGY CONSUMPTION IN MACHINE TOOLS.
275.	SMRITI SHARMA	Pawan K Ajmera	STUDY OF BIOMETRIC ALGORITHMS FOR FINGERPRINT RECOGNITION.
276.	SMRITI SHARMA	Biswanath Layek	BASIC COSMOLOGY
277.	CHOURASIA YASHWANT RAGHWENDRA	Subhashish Gangopadhyay	STUDY OF THE SURFACE CHARACTERISTICS OF SEMICONDUCTORS USING SCANNING TUNNELING SPECTROSCOPY
278.	KUMAR RISHABH	Madhukar Mishra	NUCLEAR ENERGY AND NUCLEAR REACTIONS
279.	CHINMAY SANJAY DESHMUKH	Amol Holkundkar	TIME DEPENDENT SCHRODINGER SOLVER IN SPHERICAL POLAR CO-ORDINATE IN VELOCITY AND LENGTH GAUGE.
280.	ADIT AGGARWAL	RR Mishra	SOME SPECIAL TOPICS IN QUANTUM MECHANICS
281.	ADITYA JOSHI	Navin Singh	MARKOV CHAIN MONTE CARLO METHODS AND APPLICATIONS TO THE GEOMETRIC BROWNIAN MOTION AND THE BLACK-SCHOLES EQUATION.
282.	PRATEEK BHUTANI	Madhukar Mishra	TO STUDY ABOUT FISSION BASED AND FUSION BASED NUCLEAR REACTORS.
283.	ANUBHAV GARG	Lavika Goel	A WEB BASED DASHBOARD FOR MOOC INSTRUCTORS
284.	ANUBHAV GARG	Madhukar Mishra	NUCLEAR COLLIDER AND ITS APPLICATIONS IN RESEARCH AND TECHNOLOGY
285.	VIHANG SNEHAL SHAH	Madhukar Mishra	DETECTION AND MEASUREMENT OF NUCLEAR RADIATION AND ITS APPLICATIONS.
286.	CHIRAG KHATRI	Amol Holkundkar	SIMULATION TOOL TO STUDY THE LASER PROPAGATION IN OVER DENSE PLASMA
287.	SUMIT GODARA	Nilanjan Chattaraj	DESIGN OF PIEZOELECTRIC DEVICES.
288.	SUMIT GODARA	Amol Holkundkar	SIMULATION TOOL TO STUDY THE LASER

S.No	Name of the student	Faculty Name	Project title
			PROPAGATION IN OVER DENSE PLASMA.
289.	SURANSHE ROUNAK SHRAWAN	Manjuladevi V	SYNTHESIS AND TRANSPORT PROPERTIES OF CARBON NANO TUBES
290.	PRANATI JAIN	Biswanath Layek	INTRODUCTORY COSMOLOGY
291.	UDYAN MAHAJAN	Madhukar Mishra	PEACEFUL USES OF NUCLEAR ENERGY
292.	NITIN MANKANI	D Bandyopadhyay	DESIGN AND PHYSICS OF SUITABLE COMPLEX FOR LOW LOSS COUPLING BETWEEN OPTICAL FIBERS AND 2ND UNIT
293.	ANOOP SAINI	Anil Rai	A COMPARATIVE STUDY OF INDIAN AND WESTERN MUSIC FORMS
294.	AAKANKSHA AGARWAL	D D Pant	FLUORESCENCE SPECTROSCOPY OF MOLECULES
295.	NAUSHEEN AKHTER	Dhiraj Sangwan	FACE DETECTION AND GENDER CLASSIFICATION USING GPU BASED IMPLEMENTATION
296.	MANDEEP	Chandra Shekhar	ADVANCED COMPUTING ARCHITECTURAL TECHNIQUES.
297.	MANDEEP	Kari Babu Ravi Teja	ASIC IMPLEMENTATION OF BLOCK MATCHING ALGORITHM.
298.	HIRESH GUPTA	Satyam Srivastav	WATER QUALITY ANALYSIS USING MACHINE LEARNING TECHNIQUES
299.	HIRESH GUPTA	Poonam Goyal	IMAGE CAPTIONING SYSTEM
300.	HEMA TEJA KRISHNA	Chandra Shekhar	DESIGN OF A FLOATING POINT ARITHMETIC PROCESSOR
301.	HEMA TEJA KRISHNA	Kari Babu Ravi Teja	IMPLEMENTATION OF ADC CHARACTERIZATION SETUP ON PCB.
302.	ANAND MAHADEVAN S S	Sainath Bitragunta	CO-OPERATIVE VISIBLE LIGHT COMMUNICATION SYSTEM MODELLING AND PROTOCOL DESIGN
303.	NIKHIL VERMA	Yashvardhan Sharma	CODE SWITCHED SENTENCE GENERATION
304.	VYAS DEEP DILIP	Vishal Gupta	WIRELESS SOFTWARE DEFINED NETWORK
305.	T DINESH RAM KUMAR	Ashutosh Bhatia	THREAT MODELING OF A CYBER PHYSICAL SYSTEM
306.	T DINESH RAM KUMAR	Sainath Bitragunta	COOPERATIVE VISIBLE LIGHT COMMUNICATION SYSTEM MODELING AND PROTOCOL DESIGN
307.	SANCHIT HIRA	Kamlesh Tiwari	ACQUISITION SYSTEM FOR MULTI-MODAL KNUCKLE, VEIN AND FINGERPRINT BIOMETRIC AUTHENTICATION
308.	ASEEM SINDWANI	Abhijit K Digalwar	APPLICATION OF FLEXIM SOFTWARE TO INDUSTRIAL DESIGN AND LEAN MANUFACTURING
309.	PRASHANT RANGARAJAN	Rajiv Kumar	STUDY OF HAMILTONIAN GRAPHS
310.	KAVVA RACHANA	Dhiraj Sangwan	FACE DETECTION AND GENDER CLASSIFICATION USING GPU BASED IMPLEMENTATION
311.	RAHUL UNNITHAN	Pawan K Ajmera	APPLICATION OF IMAGE PROCESSING IN BIOMEDICAL
312.	NEERAJ JANARDAN GADI	Ravi Inder Singh	CFD ANALYSIS OF A BADMINTON SHUTTLECOCK AND SUGGESTING MODIFICATIONS FOR OPTIMAL PERFORMANCE
313.	RAHUL SHIV CHAND	Avinash Gautam	MULTI-ROBOT SYSTEM FOR LEARNING FOOTBALL/TENNIS/PHYSICAL TASKS.
314.	TANMAY SINGH THAKUR	Ravi Inder Singh	CFD ANALYSIS OF A BADMINTON SHUTTLECOCK AND SUGGESTING MODIFICATIONS FOR OPTIMAL PERFORMANCE
315.	ADITYA SARASWAT	Ashish Patel	DEVELOPING A WIRELESS SENSOR NETWORK IN A BUILDING FOR DETECTION OF GREENHOUSE GASES EX PM 2.5 (2017FS3004)
316.	SAHIL GUPTA	Yashvardhan Sharma	QUESTION ANSWERING SYSTEM USING MACHINE LEARNING AND NATURAL LANGUAGE PROCESSING.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
317.	MOHAMMED ADNAN SHAFIQUE	Indresh Kumar	ORGANOCATALYSIS AND ITS APPLICATIONS IN SYNTHESIS
318.	ARPIT KUMAR TIWARI	Hitesh Dutt Mathur	APPLICATION OF SMART GRID IN INTEGRATION OF RENEWABLE SOURCES OF ENERGY.
319.	DHEERAJ GUPTA	Amol M R Marathe	FREQUENCY RESPONSE OF STRONGLY NON-LINEAR OSCILLATORS
320.	NEERAJ VARSHNEY	Poonam Goyal	DATA COLLECTION AND PREPROCESSING
321.	MANPRIT SINGH	Dhiraj Sangwan	FACE DETECTION AND GENDER CLASSIFICATION USING GPU BASED IMPLEMENTATION
322.	HIMANSHU AREAN	Monika Gupta	FATIGUE IN VISCOELASTIC MATERIALS
323.	AGARWAL VAIBHAV SUNILKUMAR	Ravi Inder Singh	CFD SIMULATION OF AIRBORNE PATHOGEN TRANSPORT DUE TO HUMAN ACTIVITIES.
324.	AMIT SHUKLA	Dheerendra Singh	MAXIMUM POWER POINT TRACKING ALGORITHM FOR DRIVING POWER BASED ELECTRONIC SYSTEMS.
325.	MASLEKAR SHRADDHA SHRIRAM	Kumar Neeraj Sachdev	EUTHANASIA: A MORAL DILEMMA
326.	VIDUSHI CHITRANSHI	Priya C Sande	EXPERIMENTATION USING PIV FOR A FLUIDISED BED
327.	ABHINAV SHARMA	Sunita Raina	FARMER SUICIDES:A SOCIOLOGICAL STUDY.
328.	PARIMAL S ATHALEY	Harikrishnan G Nair	DOCUMENTING THE HISTORY OF THE DEPARTMENTS OF PHARMACY, ELECTRICAL AND MECHANICAL ENGINEERING AT BITS PILANI
329.	VAIBHAV JAIN PRITHVIRAJ	Jitendra S Rathore	INVESTIGATION OF FLAP LIKE MOTION AT LOW REYNOLDS NUMBER.
330.	AAKASH BAJAJ	Dipendu Bhunia	NUMERICAL MODELLING OF EARTHQUAKE RESISTANT STRUCTURES USING FINITE ELEMENT METHOD
331.	ARGHAE SINGH	Manoj Soni	DESIGN OF A MECHANISM TO REDUCE STRAIN ON ANKLES
332.	RUDRAKH PANIGRAHI	Kamlesh Tiwari	ANALYZING PITCH ACTIONS IN SOCCER FOR IMPROVED TEAM PERFORMANCE USING AI
333.	MADIHA MANZOOR	Sailaja Nandigama	ATTITUDE OF SOCIETY TOWARDS SENIOR CITIZENS:THEN AND NOW.
334.	SUSHEEM KOUL	Hari Om Bansal	DESIGN OF ENERGY OPTIMIZATION STRATEGIES FOR HEVS USING ULTRA CAPACITORS AND BATTERY COMBINATION.
335.	ANSH THAKUR	Ajay Kumar Pani	STUDY OF BAYESIAN APPROACH FOR PROCESS MODELLING.
336.	DHRUV RASTOGI	Jl Raheja	DEVELOPMENT OF ALGORITHMS FOR DISTRIBUTED CONTROL USING DEEP REINFORCEMENT LEARNING
337.	NIPUN JAIN	Shan Balasubramaniam	PARALLELIZATION OF DYNAMIC PROGRAMMING ALGORITHMS
338.	SIDDHARTHA APOORVA	Hitesh Dutt Mathur	SMART INTEGRATION OF RENEWABLE SOURCES OF ENERGY FROM AN INDIAN PERSPECTIVE.
339.	HARSHIL CHOUDHRY	Sunita Raina	FARMERS SUICIDE STUDY
340.	BHAVANAM SRAVAN KUMAR REDDY	K Hari Babu	TRAFFIC MONITORING IN SDNS
341.	SURAJ BANSAL	Rajesh Mehrotra	ANALYSIS OF CIS ELEMENTS IN ARABIDOPSIS THALIANA.
342.	KONDAPI S SANJAY SRIVASTAV	K Hari Babu	TRAFFIC MONITORING IN SDN
343.	ISHAAN GHOSH	Arnab Hazra	SYNTHESIS OF TiO <sub>2</sub> NANOROD BY HYDROCHEMICAL METHOD
344.	SARANSH ARORA	Sangeeta Sharma	"A MOMENT IN LIFE" - A VISUAL ANTHROPOLOGY PROJECT
345.	PRATIK BANSAL	Smita Raghuvanshi	LIFE CYCLE ASSESSMENT OF PROCESS INDUSTRIES
346.	AAKASH NILESH SHAH	Hari Om Bansal	DEVELOPMENT OF MPPT ALGORITHMS FOR WIND ENERGY SYSTEMS



S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
347.	DEVASTHALE DHURVA DILIP	Nitin Chaturvedi	STUDY/DESIGN AND ANALYSIS OF HIGH SPEED ASYNCHRONOUS WRITE CIRCUITS FOR NON-VOLATILE MEMORY AND LOGIC
348.	JAYESH AGARWAL	Srikanta Routroy	ANALYSING THE ENABLERS OF BUYER-SUPPLIER RELATIONSHIP
349.	SHIVANKIT GAIND	Poonam Goyal	DESIGNING STREAM ALGORITHMS FOR EVENT DETECTION (FIRST STORY DETECTION) IN SOCIAL STREAM DATA
350.	GARV SHARMA	Avinash Gautam	IMPLEMENTING STEREO VISION BASED OBJECT-TRACKING ROTOR HEAD.
351.	KANDREGULA GYANDEEP	Murali Palla	FATIGUE LIFE ASSESSMENT OF VALVES DUE TO INTERNAL PRESSURE LOADING
352.	YAJAT DAWAR	Jitender Kumar	SYNTACTIC COMPLEXITY OF REGULAR LANGUAGES
353.	THONTEPU NAGA DATTA MADHU KIRAN	K Hari Babu	TRAFFIC MONITORING IN SDN
354.	ANKIT AHUJA	Shibani K Jha	RESERVOIR MODELLING FOR SALT WATER INTRUSION
355.	POTTURI SURYA TEJA VARMA	Murali Palla	ANALYSIS OF CAR CHASSIS BY FINITE ELEMENT MODELLING
356.	AYUSHI AGARWAL	Pratik N Sheth	CFD STUDY OF DOWNDRAFT GASIFIER WITH INTERNAL COMBUSTION CHAMBER
357.	PARIKH MEET DHAVAL	Navneet Gupta	DESIGN AND TESTING OF VOICE-CONTROLLED HOME AUTOMATION SYSTEM
358.	PRATEEK RAI	G S Sessa Chalapathi	TEXT MESSAGING APP DEVELOPMENT FOR COMMUNICATION BETWEEN "ANDROID AND NON ANDROID" BASED EMBEDDED PLATFORMS.
359.	STUTI MAHESHWARI	Jitendra Panwar	EVALUATION OF ANTIMICROBIAL ACTIVITY OF METAL/METAL OXIDE NANOPARTICLES.
360.	CHHAYANK KUMAR	Ashutosh Bhatia	SIMULATION AND ANALYSIS OF POLL BASED MAC PROTOCOL FOR WIRELESS BODY AREA NETWORK.
361.	CHHAYANK KUMAR	Madhukar Mishra	STUDIES ON HEAVY ION COLLIDERS AND FIXED TARGET EXPERIMENTS.
362.	RITESH YADAV	Bijoy Kumar Raut	STUDY AND DESIGN OF MATHEMATICAL MODEL FOR HYPER-REDUNDANT ROBOTS.
363.	SREE TEJA NANDURI	Ashutosh Bhatia	THEORETICAL PERFORMANCE ANALYSIS AND NETWORK SIMULATION OF CLOCK SYNCHRONISATION SCHEME FOR WIRELESS NETWORKS.
364.	PRADEEP KUMAR	Subhashish Gangopadhyay	DESIGN AND FABRICATION OF GAS SENSOR MODULE.
365.	PRADEEP KUMAR	Dipendu Bhunia	INVESTIGATION OF THE BEHAVIOR OF AN EARTHQUAKE RESISTANT STRUCTURE
366.	PALAK	Priya C Sande	MODELLING OF FLUIDISED CATALYTIC CRACKING (FCC) UNIT USING CFD (A REVIEW OVER PAST DECADE)
367.	PARIDHI GUPTA	Priya C Sande	MODELLING OF FCC BEDS USING CFD
368.	AJAY SHRINIVAS.M	Rajneesh Choubisa	AN EXPERIMENTAL STUDY OF HUMAN MORALITY AT BITS PILANI
369.	KAPIL SACHAR	Suresh Gupta	APPLICATION OF CFD IN BIOREACTOR
370.	DOLLY DHARI SINGH	Archana K K	ANTIMICROBIAL RESISTANCE
371.	PUNEET PAREEK	Aniruddha Roy	COLON TARGETED DRUG DELIVERY OF POORLY ABSORBABLE DRUGS : STRATEGIES AND PITFALLS.
372.	SABYASACHI DASH	Bijoy Kumar Raut	NAVIGATION OF MOBILE ROBOT IN A DYNAMIC ENVIRONMENT
373.	ABHISHEK MURTI	Amit Jain	MASS TRANSFER AND HYDRODYNAMIC STUDY ON A STIRRED TANK BIOREACTOR
374.	ANINDYA SEN	Banasri Roy	APPLICATION OF SOLID STATE CATALYSTS FOR H <sub>2</sub> PRODUCTION FROM UREA-WATER SOLUTION
375.	GAURAV VIRMANI	Devesh Samaiya	STUDY ON VIDEO ANALYSIS ALGORITHMS IN HEVC COMPRESSED DOMAIN
376.	PATIL SANKET ANANDRAO	Manoj Soni	DEVELOPMENT AND ANALYSIS OF SOLAR

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
			VAPOR ABSORPTION REFRIGERATION SYSTEM FOR THE AIR-CONDITIONING OF FACULTY DIVISION-2 (FD-2) COMPLEX.
377.	KRISHNA CHAITANYA MATURI	Gautam Singhvi	STUDY OF VARIOUS ASPECTS OF NANOPARTICLES DESIGN AND DELIVERY.
378.	RAUNAQ ARORA	M S Dasgupta	THEORETICAL & EXPERIMENTAL INVESTIGATION OF CO2 REFRIGERATION SYSTEMS
379.	RUNAL SHRIVASTAVA	Monika Gupta	UNDERSTANDING THE THEORY OF ELASTIC LAYER SYSTEM
380.	SHIVAM MAHESHWARI	Abhijit K Digalwar	APPLICATION OF IOT FOR LEAN PRACTICES
381.	VINAYAK PATHAK	Arvind Kumar Sharma	HYDRODYNAMIC ASPECTS OF LOOP REACTOR
382.	SHREYA TRIPATHY	Pratik N Sheth	EXPERIMENTAL STUDY ON FIXED BED PYROLYSIS SYSTEM
383.	HIMANSHU GUPTA	Srinivas Appari	DETAILED NUMERICAL SIMULATIONS OF CATALYTIC FIXED-BED REACTORS
384.	RAHUL AGRAWAL	K K Gupta	STUDY OF ANGULAR MODES IN HEVC INTRA PREDICTION AS A FEATURE FOR COMPRESSED DOMAIN ANALYSIS.
385.	NAMAN GUPTA	Kari Babu Ravi Teja	INVESTIGATION OF DESIGN STRATEGIES FOR MULTI-GATE TRANSISTORS.
386.	KESHAV JAIN	Srikanta Routroy	ANALYZING THE ENABLERS OF A BUYER SUPPLIER RELATIONSHIP
387.	PALAKOLANU MAHENDRA REDDY	Shamsher B Singh	UNIFIED APPROACH TO PREDICT THE DEPTH OF CARBONATION
388.	ARUN D PRABHU	Ashutosh Bhatia	THEORETICAL PERFORMANCE ANALYSIS AND NETWORK SIMULATION OF CLOCK SYNCHRONISATION SCHEME FOR WIRELESS NETWORKS.
389.	ABHYUDAY SHARMA	Rajesh Mehrotra	OPTIMISATION OF TRANS-ESTERIFICATION REACTION FOR PRODUCTION OF BIO-FUELS.
390.	AAKASH SHARMA	Tufan Chandra Bera	STUDY OF THIN-WALL PERIPHERAL MILLING WITH THE HELP OF COMPUTATIONAL AND PHYSICAL EXPERIMENTS AND MEASUREMENT OF SURFACE ERROR USING TOUCH-TRIGGER PROBE.
391.	AKSHIT KUMAR	Ajay Kumar Sah	PREPARATION OF LANTHANIDE COMPLEXES USING N-GLYCOCONJUGATES AND APPLICATION OF SYNTHESIZED MOLECULE IN CATALYSIS
392.	AAKASH AGRAWAL	Suresh Gupta	STUDY ON APPLICATION OF BIG DATA ANALYTICS IN CHEMICAL ENGINEERING
393.	ANAND RAJESH CHORDIYA	Mukesh Kr Rohil	OBJECT RECOGNITION BY SKELETON BASED MATCHING TECHNIQUES
394.	DIVYESAKSHI ROHIL	Saumi Ray	STUDIES ON HOST-GUEST HYBRID SYSTEMS: SYNTHESIS AND REACTIVITY STUDIES OF IRON(Fe) AND COPPER(Cu) COMPLEXES ENTRAPPED IN POROUS MATERIALS.
395.	RAVISH GOYAL	Kuldeep Kumar	DEVELOPING AN AUTOMATED E-TOLL SYSTEM (DIGITAL INDIA)
396.	MOLUGURI AKHIL	Vishakha Sakhare	STUDY OF GEOPOLYMERIC CONSTRUCTION MATERIAL
397.	MANPREET SINGH	Abhijit K Digalwar	APPLICATION OF IOT IN ELECTRIC VEHICLES AND FOSSIL FUEL VEHICLES. A COMPARITIVE STUDY.
398.	K. SURYA SIDHARTHA	Pratik N Sheth	DYNAMIC OPTIMIZATION OF SEMIBATCH GAS SOLID REACTOR SYSTEMS
399.	YADUL SETHI	Amit Jain	UTILIZATION OF MUNICIPAL SOLID WASTE
400.	VEDHANT KAUL	Archana K K	TO STUDY CONVENTIONAL DOSAGE FORMS LIKE PELLETS AND BEADS.
401.	SHREYAS VERMA	Anu Gupta	ANALYSIS OF DIGITALLY AIDED ANALOG CIRCUITS
402.	SAMAKSHI TIWARI	Sandhya Marathe	REHABILITATION OF BIRDS ON CAMPUS.
403.	SHIVANGI ARORA	Kamlesh Kumar	SOIL CONTAMINATION

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
404.	YASH SWAPNIL JAKHETE	Paritosh Shukla	BIOREMEDIATION IN LEAN MANUFACTURING
405.	SIDDHANT THAKURIA	Ashish Patel	MATHEMATICAL MODELLING OF SOLAR PV FOR POWER ELECTRONIC CIRCUIT SIMULATION
406.	SIDDHANT THAKURIA	Bhagavatula Vani	ROLE OF NANO MATERIALS IN WASTE WATER TREATMENT
407.	DESHMUKH MIHIR SANJAY	Nilanjan Chattaraj	DATA ANALYSIS OF BIOSENSOR SIGNALS USING MACHINE LEARNING TECHNIQUES.
408.	SAHIL SHARMA	Shilpi Garg	STUDY OF DIFFERENT PROPULSION SYSTEMS TO UNDERSTAND DESIGN OF NANO-ROBOTS FOR DIAGNOSTIC PURPOSES.
409.	ANUBHUTI MISHRA	G S Sessa Chalapathi	IMPLEMENTATION OF TWO LORA BASED COMMUNICATION BETWEEN TWO EMBEDDED BOARDS
410.	ANUBHUTI MISHRA	Shilpi Garg	STUDY OF HOW THE MOLECULAR OSCILLATIONS IN THE MASTER BRAIN CLOCK AFFECT HUMAN METABOLISM AND CONTRIBUTION IN CIRCADIAN RHYTHMS
411.	ABHISHEK GUPTA	Navin Singh	DNA FLEXIBILITY ON SHORT LENGTH SCALES
412.	ABHISHEK GUPTA	K Hari Babu	TOPOLOGY DISCOVERY IN HYBRIDIZED STATE
413.	KARTHIK SURESH	Saumi Ray	A NOVEL APPROACH TO THE SYNTHESIS OF CDS AND CDSE QUANTUM DOTS IN AQUEOUS SOLUTIONS.
414.	KARTHIK SURESH	Arnab Hazra	DEVELOPMENT OF REDUCED GRAPHENE OXIDE(RGO), THIN FILMS USING CHEMICAL METHODS.
415.	AMAN GUPTA	Bibhas Ranjan Sarkar	CATALYSIS USING NANO PARTICLES.
416.	ADITYA MUKHERJEE	Ashutosh Bhatia	DESIGNING A LIGHTWEIGHT TCP PROTOCOL
417.	ADITYA MUKHERJEE	Navin Singh	COARSE-GRAINING DNA FOR SIMULATION OF DNA NANOTECHNOLOGY
418.	HUCHCHE SIMANTINI AMBADAS	Saumi Ray	CARBON FIXATION: APPLICATION IN RENEWABLE ENERGY PRODUCTION.
419.	ADARSH SANGHAI	Saumi Ray	STUDY WATER SPLITTING IN NATURAL PHOTOSYNTHESIS AND ARTIFICIAL SYSTEM/REPLICATION OF WATER SPLITTING.
420.	ADARSH SANGHAI	M Santosh Kumar	BIG DATA ANALYTICS WITH MACHINE LEARNING.
421.	SINHA VAIBHAV SANJEEV	Smita Raghuvanshi	COMPARISON OF BIODIESEL PRODUCTION USING UMBERTO-LCA TOOL FROM JATROPHA AND ALGAE.
422.	SINHA VAIBHAV SANJEEV	Jyoti	ASSESSING THE UTILITY OF BLOCK CHAIN TECHNOLOGY IN E-COMMERCE SUPPLY CHAIN
423.	ASHIT SHRIVASTAVA	NV Muralidhar Rao	ECONOMETRIC ANALYSIS OF BITCOIN PRICE VOLATILITY
424.	SAMEER KUMAR SINGH	Jyoti	ASSESSING THE UTILITY OF BLOCK CHAIN TECHNOLOGY IN E-COMMERCE SUPPLY CHAINS
425.	JAI AGARWAL	Kamlesh Tiwari	CONTINUOUS AUTHENTICATION ON MOBILE DEVICES
426.	JAI AGARWAL	Rajiv Kumar	GRAPH CLUSTERING AND ITS APPLICATIONS
427.	ARJUN TYAGI	Nilanjan Chattaraj	ANALOG CIRCUIT OPTIMISATION USING EVOLUTIONARY ALGORITHM
428.	GAUTHAM VENKATASUBRAMANIAN	Pradeep Kr H Keskar	THEORY OF FINITE FIELDS
429.	DIVYANSHU GOYAL	Bhupendra K Sharma	STUDY OF HEAT TRANSFER AUGMENTATION IN HEATED SQUARE CAVITY WITH NANOFLUID.
430.	ARJUN KUMAR CHOUDHARY	Krishnendra Shekhawat	A STUDY OF BLOCK LAYOUT PROBLEMS
431.	C PRANAY REDDY	K K Gupta	ACOUSTIC AND VIBRATION BASED MACHINE HEALTH MONITORING
432.	ANURADHA BANSAL	M Santosh Kumar	DETECTION OF CANCER USING MACHINE LEARNING

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
433.	SHIVAM ANAND	Devendra Kumar	APPLICATION OF FINITE ELEMENT METHODS FOR SOLVING PARTIAL DIFFERENTIAL EQUATIONS USING MATLAB
434.	MORLAWAR ANAND SHASHIKANT	Bhupendra K Sharma	STUDY OF CUO-WATER NANOFLUID FLOW AND HEAT TRANSFER ACROSS A HEATED SQUARE CYLINDER.
435.	MORLAWAR ANAND SHASHIKANT	Anupam Singhal	A STUDY ON DIFFERENT TECHNIQUES OF DISINFECTION AND THEIR MODELLING.
436.	AMRIT KOCHAR	Avinash Gautam	IMPLEMENT MULTI-ROBOT COORDINATION ALGORITHMS FOR INDUSTRIAL PLANT INSPECTION
437.	SHUBHAM GUPTA	Navin Singh	MONTE CARLO SIMULATION OF SEMI-FLEXIBLE POLYMER CHAIN
438.	SANAA AGARWAL	Tapomoy G Sarkar	EARLY UNIVERSE AND COSMOLOGY
439.	SANAA AGARWAL	J N Bandopadhyay	COMPUTATIONAL STUDY OF ENTANGLEMENT IN COUPLED QUANTUM CHAOTIC SYSTEMS.
440.	CHIRAG KHATRI	Nilanjan Chattaraj	STUDY OF PIEZOELECTRIC DEVICES.
441.	AKSHAY GOLECHHA	J N Bandopadhyay	SIMULATION OF TWO-PHOTON IMAGING ALIAS GHOST IMAGING
442.	NAMAN JAIN	Navneet Goyal	STUDY OF SUITABILITY OF GRAPH DATABASES FOR STORING/QUERYING DATA PROVENANCE
443.	AKSHAY KATTA	Biswanath Layek	ADVANCED TOPICS IN STATISTICAL MECHANICS
444.	JAYANT JAIN	Navin Singh	RNA FOLDING-UNFOLDING TRANSITIONS
445.	L SAI SUHAS REDDY	Srinivas Appari	MONOLITHIC REACTORS FOR CATALYTIC REFORMING
446.	SNEHA MAHESH	Rajesh Mehrotra	UNDERSTANDING PROTEOME CHANGES IN ABIOTIC STRESS
447.	SNEHA MAHESH	Shibasish Chowdhury	IN SILICO IDENTIFICATION OF HUMAN OLFACTORY RECEPTOR GENES
448.	BHARTI SHIVRAN	Praveen Goyal	EFFECTIVE WASTE MANAGEMENT TECHNIQUES FOR GREENING OF AN INDIAN PRIVATE UNIVERSITY.
449.	SMITI YADAV	Praveen Goyal	EFFECTIVE WASTE MANAGEMENT TECHNIQUES FOR GREENING OF AN INDIAN PRIVATE UNIVERSITY.
450.	MOHIT JANGIR	Arun Kumar	IDENTIFYING VALUE DRIVERS FROM CUSTOMER PERSPECTIVE IN INDIAN AIRLINE SECTOR
451.	MOHIT JANGIR	Sushila Shekhawat	TO LEARN ABOUT THE FORM,STRATEGY AND STRUCTURE OF TELEVISION ADVERTISEMENTS.
452.	RAVI KANT SAINI	Arun Kumar	IDENTIFYING VALUE DRIVERS FROM CUSTOMER PERSPECTIVE IN INDIAN AIRLINE SECTOR
453.	RAVI KANT SAINI	Pushp Lata	CHALLENGES AND POSSIBILITIES AT PILANI MARKET WITH SPECIFIC REFERENCE TO COMMUNICATION.
454.	VIKASH	Somdatta Bhattacharya	DOCUMENTING THE PAST AND PRESENT OF PILANI AS A SITE OF EDUCATION AND CULTURE: TEMPLES
455.	VIKASH	Pushp Lata	CHALLENGES AND POSSIBILITIES AT PILANI MARKET WITH SPECIFIC REFERENCE TO COMMUNICATION.
456.	PRATEEK DUSAD	G Muthukumar	COMPUTER AIDED ANALYSIS OF MULTISTORY BUILDING USING MATLAB.
457.	DURJAI SETHI	Rajneesh Kumar	SOCIO-ECONOMIC ASPECTS OF RENEWABLE ENERGY INSTALLATION IN INDIA.
458.	SATYAM SINHA	Vinod Kumar Chaubey	DESIGN OF NEURAL SIGNAL CONDITIONING CIRCUIT FOR EPILEPSY SEIZURE DETECTION AND RESPONSIVE NEUROSTIMULATION
459.	AKHIL JAINI	Kaushar Vaidya	A STUDY OF PHYSICAL PROPERTIES OF IONIZED REGIONS IN GALACTIC H-II REGIONS
460.	AKHIL JAINI	Vinod Kumar Chaubey	UNFORMATTED DIGITAL FIBER OPTIC DATA TRANSMISSION FOR RADIO ASTRONOMY

S.No	Name of the student	Faculty Name	Project title
			FRONT-ENDS
461.	SANCHIT HIRA	Bijoy Kumar Raut	HUMAN INSPIRED LIFTING TRAJECTORY CONTROL FOR HUMANOID ROBOTS
462.	TARANPAL SINGH BEDI	Satyendra Kr Sharma	DESIGN OF AGILE SUPPLY CHAIN
463.	M ADITYA	P Srinivasan	EXPERIMENTAL STUDY OF FRICTION STIR WELDING
464.	PARIKSHIT AGRAWAL	Kuldip Singh Sangwan	TO DEVELOP RESOURCE AND ENERGY EFFICIENCY EXPERIMENTS ON EXPERIENCE LAB
465.	PARIKSHIT AGRAWAL	P Srinivasan	DESIGN AND ANALYSIS OF COOLING SYSTEM FOR TURBINE BLADES
466.	ROHIT SUBRAMANIAM	M S Dasgupta	STUDY OF EJECTOR EXPANDER IN REFRIGERATION SYSTEMS
467.	GUGGILAPU MOULI SAI RAM	Shamsher B Singh	UNIFIED APPROACH TO PREDICT THE DEPTH OF CARBONATION
468.	MOHIT CHUGH	Nitin Chaturvedi	STUDY/ DESIGN AND ANALYSIS OF HIGH SPEED ASYNCHRONOUS WRITE CIRCUITS FOR NON VOLATILE MEMORY AND LOGIC
469.	SUDHANSHU GROVER	Shibani K Jha	EXPERIMENTAL STUDY OF SOIL RESISTIVITY.
470.	GOUTHAM ADITHYA	S Murugesan	STUDY ABOUT CAUSES, SYMPTOMS AND TREATMENT OF TRYPANOSOMIASIS.
471.	ANSHUL JAIN	Kamlesh Tiwari	EAR BASED IDENTIFICATION SYSTEM USING TEXT MESSAGING OVER NETWORK
472.	UJJWAL ANAND	Ashish Patel	MATHEMATICAL MODELLING OF SOLAR PV FOR POWER ELECTRONICS CIRCUIT.
473.	SAI SHUBODH P	Jitendra S Rathore	EXPERIMENTAL INVESTIGATIONS OF ELASTIC TAIL PROPULSION AT LOW REYNOLDS NUMBER
474.	MANSI SHARMA	Dheerendra Singh	IMPLEMENTATION OF SLIDING MODE CONTROL OF INDUCTION MOTOR DRIVE.  SERIAL NO. OF PROJECT: 2017FS0902
475.	MADDIPATI NIKHIL	Manoj Kumar	TYPES OF DAMPERS AND THEIR PERFORMANCE DURING EARTHQUAKE
476.	VISHAL SURANA	Archana K K	PROTEOMICS AND ITS APPLICATION .
477.	ASHWANI CHHATRE	G Muthukumar	COMPUTER AIDED ANALYSIS OF MULTISTOREY BUILDING USING MATLAB.
478.	BHANSALI ABHINAV ARVIND	Anu Gupta	ENHANCING PERFORMANCE OF LINEAR ANALOG SYSTEMS USING DIGITAL POST-PROCESSORS
479.	SHIVAM KHETAN	Ajay Kumar Pani	STATISTICAL TECHNIQUES OF MODEL ANALYSIS
480.	BILLAKURTHI KANAKA VENIL REDDY	Murali Palla	ANALYSIS OF CAR CHASIS USING FINITE ELEMENT MODELLING
481.	SAHIL DESAI	Pratik N Sheth	DEVELOPMENT OF MACROSCOPIC MODEL FOR BIOMASS COOK-STOVE.
482.	AMIT SONI	Monika Gupta	UNDERSTANDING THE ROLE OF SURFACE ENERGY FOR QUANTIFYING THE MOISTURE SUSCEPTIBILITY OF ASPHALT MIXES
483.	SUBHAM CHOUDHURY	Archana K K	BONE TARGETED DRUG DELIVERY STRATEGY
484.	DESHMUKH PRASAD CHANDRASHEKHAR	Sushila Shekhawat	ANURAG KASHYAPS CONTRIBUTION TO NEO-REALIST INDIAN CINEMA: A GLOBAL PERSPECTIVE
485.	ANMOL NAUGARIA	Rajiv Kumar	STUDY OF MATCHING IN WEIGHTED GRAPHS AND HAMILTONIAN CYCLE IN PLANAR GRAPHS.
486.	GURAJAPU SRAVAN SRI HARSHA	Sai Krishna Yaddadi	TI STACK BASED BLE COMMUNICATION AND PROTOCOL IMPLEMENTATION IN ANDROID APP FOR DEVICE MONITORING APPLICATION
487.	ANCHIT BANSAL	Suresh Gupta	STUDY ON APPLICATION OF BIG DATA ANALYTICS IN CHEMICAL ENGINEERING
488.	VANCHANAGIRI RAHUL	Sai Krishna Yaddadi	TI STACK BASED BLE COMMUNICATION AND PROTOCOL IMPLEMENTATION IN ANDROID APP FOR DEVICE MONITORING APPLICATION
489.	DEBOLINA CHAKRABARTY	Suresh Gupta	REMOVAL OF RADIOACTIVE MATERIALS FROM

S.No	Name of the student	Faculty Name	Project title
			WASTEWATER USING NANOPARTICLES
490.	MUSKAN AGARWAL	HK Mohanta	EFFECT OF THE CONTAINER ON THE MICRO-NUTRIENTS PRESENT IN THE FOOD.
491.	BHUTADA ANUP ANIL	P Chattopadhyay	SYNTHESIS AND APPLICATION OF BIOSURFACTANT FOAMS
492.	PARTH DHINGRA	Srikanta Routroy	ANALYZING THE BUYER SUPPLIER RELATIONSHIP USING QFD
493.	KALE VEEROJI	Sai Krishna Yaddadi	IOT BASED DATA STORAGE ON CLOUD FOR AGRICULTURE *IBM *MICRO SOFT *ROBERT BOSCH
494.	ANSHUMAN	Rajneesh Kumar	STUDY OF THE SOCIO-ECONOMIC ASPECTS OF RENEWABLE ENERGY INSTALLATION IN INDIA
495.	MOHITANAND RAYAPUREDDI	Vishakha Sakhare	LIFE CYCLE ASSESMENT OF CONSTRUCTION MATERIALS
496.	SANCHIT BAJAJ	Rajesh Mehrotra	GENE REGULATION AND EVOLUTION OF CPG ISLAND
497.	GANGULA TIRUGULA PRAJAPATI	Ravi Inder Singh	AIR CONDITIONING INSIDE A BUS USING HYBRID VAPOUR COMPRESSION AND ABSORPTION REFRIGERATION CYCLE
498.	GANGULA TIRUGULA PRAJAPATI	P Srinivasan	DESIGN OF AN 800MW SOLAR HYBRID COAL BASED POWER PLANT AT PILANI
499.	ELAPROLU SIVA RAM GANESH	Satyabrata Sahoo	DESIGN AND STUDY OF CAPILLARY TUBE IN REFRIGERATION SYSTEMS USING CFD
500.	ELAPROLU SIVA RAM GANESH	P Srinivasan	DESIGN OF AN 800 MW SOLAR HYBRID COAL BASED POWER PLANT AT PILANI
501.	KONDAKINDHI BHARGAV REDDY	Satyabrata Sahoo	DESIGN AND STUDY OF CAPILLARY TUBE IN REFRIGERATION SYSTEMS USING CFD
502.	ANIKET AJAY LAD	Manoj Soni	DESIGN AND ANALYSIS OF A SOLAR COOKER.
503.	SHUKLA YASH SANDEEP	M S Dasgupta	STUDY OF EJECTOR EXPANDER IN REFRIGERATION SYSTEMS
504.	ADITYA RELHAN	Kuldip Singh Sangwan	TO DEVELOP RESOURCE AND ENERGY EFFICIENCY EXPERIMENTS ON EXPERIENCE LAB
505.	ADITYA RELHAN	P Srinivasan	DESIGN AND ANALYSIS OF COOLING SYSTEM FOR TURBINE BLADES
506.	BAJI MARTHI	Satyabrata Sahoo	DETERMINATION OF THE EMISSIVITY OF A HEATED COPPER SURFACE
507.	SUGUN TEJ INAMPUDI	Satyabrata Sahoo	DETERMINATION OF THE EMISSIVITY OF A HEATED COPPER SURFACE
508.	RITUPARNA PRAHARAJ	Murali M Pandey	CHARACTERISTICS OF LAYER BY LAYER FILM OF SUITABLE DRUG FOR EXCISIONAL WOUND HEALING.
509.	EESHA DINKAR	Aniruddha Roy	EVALUATION OF ANTITUMOUR EFFICACY OF POLYMERIC NANOPARTICLE FORMULATION TARGETTED TO CANCER STEM CELLS
510.	MALLIKARJUN SWAMY	Poonam Goyal	EXTRACTING VISUAL FEATURES USING CNN
511.	MALLIKARJUN SWAMY	K Hari Babu	SETTING UP A TEST BED FOR HYBRID SDN
512.	SANJOG YADAV	JI Raheja	VIDEO SUPER RESOLUTION USING NEURAL NETWORKS.
513.	M MAHITHA	Dheerendra Singh	IMPLEMENTATION OF SLIDING MODE CONTROL ON INDUCTION MOTOR PROJECT NUMBER: 2017FS0902
514.	BHAGAVATULA SRI SOURYA SAI	Murali M Pandey	DISSOLUTION ENHANCEMENT OF POORLY SOLUBLE DRUGS.
515.	DEVASHISH GIRISH BONDE	M S Dasgupta	TO CREATE A DESIGN GUIDEBOOK FOR MULTI-ROTOR MAVS
516.	UMMAY AIMAN HAIDRY	P Chattopadhyay	APPLICATIONS OF SURFACTANT FOAMS.
517.	WARADPANDE VIKRAM	Rajiv Kumar	SVD AND STUDY OF LOW RANK

S.No	Name of the student	Faculty Name	Project title
	AVINASH		APPROXIMATION OF MATRICES AND CLUSTERING OF GRAPHS.
518.	ACHAL B SHAH	Ashutosh Bhatia	THEORETICAL PERFORMANCE ANALYSIS AND NETWORK SIMULATION OF CLOCK SYNCHRONISATION SCHEME FOR WIRELESS NETWORKS.
519.	SAURABH VERMA	Suresh Gupta	MODELING AND SIMULATION OF SEQUENTIAL BATCH BIOREACTOR
520.	MANIK BHANDARI	Yashvardhan Sharma	ANALYSIS OF PROBLEMS ASSOCIATED WITH CODE MIXED DATA
521.	AMEESHA MITTAL	Kamlesh Tiwari	ADAPTIVE BIO-METRIC TEMPLATE FOR FINGERPRINT MATCHING.
522.	AMEESHA MITTAL	Rajneesh Choubisa	SENTIMENTAL ANALYSIS OF PEOPLE BELONGING TO DIFFERENT CULTURES USING TWEET FEEDS ON ISSUES OF GLOBAL CONCERN.
523.	MAYANK AGARWAL	Poonam Goyal	A FRAMEWORK FOR FEATURE SELECTION FOR IMAGES FOR BETTER REPRESENTATION OF IMAGES.
524.	SUBHAM KUMAR	Sundaresan Raman	APPLICATION OF DEEP LEARNING TECHNIQUES TO MEDICAL IMAGES
525.	VIJAY M GIRI	Poonam Goyal	DESIGN AND DEVELOPMENT PARALLEL DATA STRUCTURES FOR CLASSIFICATION IN ANYTIME STREAMS
526.	ATUL JALA	Girish Kant	OPTIMISATION OF PROCESS PARAMETER TO MINIMISE ENERGY CONSUMPTION IN MACHINING
527.	ATUL JALA	Shilpi Garg	3D PRINTING OF TISSUES AND ORGANS: A REVOLUTION
528.	KUSHAL TRIPATHI	Rajesh Mehrotra	OPTIMIZATION OF TRANSESTERIFICATION REACTION FOR PRODUCTION OF BIOFUELS.
529.	CHIRAG GYANI	Rajdeep Chowdhury	IN SILICO ANALYSIS OF DIFFERENT CANCER DATA SETS.
530.	SHIVANGI ARORA	Uma S Dubey	TELOMERASE-BASED ACTIVITY IN BREAST CANCERS.
531.	RISHAV UTKARSH	Kaushar Vaidya	A STUDY OF CORRELATION OF COLD DUST EMISSION WITH H-II REGIONS
532.	ROHAN SINGH BHANDARI	Hemant R Jadhav	ASTROGLIOSIS AND INFLAMMATION IN ALZHEIMERS DISEASE
533.	DHANANJAY MANTRI	Navneet Goyal	DEVELOPING MACHINE LEARNING MODELS FOR PROFILING CRIMINALS
534.	VIDHAN JOLLY	Arnab Hazra	STUDIES ON THE STRUCTURAL VARIATION OF TiO2 NANOTUBE FOR MEMRESISTIVE DEVICE (RRAM) APPLICATIONS
535.	ANVITA SRINIVAS	Vandana Agarwal	EXPRESSION RECOGNITION USING FACIAL IMAGES
536.	SHUBHENDU DWIVEDI	Shibani K Jha	EXPERIMENTAL STUDY OF CONTAMINANT TRANSPORT THROUGH SOIL WATER CHAMBER
537.	ROHAN SAXENA	Avinash Gautam	APPLYING DEEP LEARNING TO IMPROVE PERFORMANCE OF STANDARD ROBOTICS PROBLEMS
538.	SISHIR SURESH MOHAMMED	Jitendra S Rathore	KINEMATIC MODELLING OF STEWART-GOUGH PLATFORM (SGP)
539.	KULDEEP SINGH NARUKA	Nirankush Dutta	MODERN RIGID PAVEMENTS: MATERIALS, DESIGN SPECIFICATIONS
540.	TANMAY JAIN	Pratik N Sheth	EXPERIMENTAL STUDY ON BIOMASS COOK STOVE.
541.	ANIRUDH TANDON	Tapomoy G Sarkar	RELATIVITY AND COSMOLOGY
542.	RUTWIK NARENDRA JAIN	Praveen Kumar A V	NEAR-FIELD ANALYSIS OF ANTENNAS
543.	ANIRUDH TUSNIAL	Srikanta Routroy	ANALYZING THE BUYER SUPPLIER RELATIONSHIP USING QFD
544.	SRAJAN JAIN	Navin Singh	SIMULATING SHORT DNA CHAINS UNDER MECHANICAL STRESS IN CROWDED ENVIRONMENT
545.	SAAKSHI KHANDELWAL	NV Muralidhar Rao	BEHAVIORAL ANALYSIS OF FOREX MARKET USING ELLIOTT WAVE PRINCIPLE AND

S.No	Name of the student	Faculty Name	Project title
			OSCILLATORS.
546.	HARSH GOYNKA	NV Muralidhar Rao	PREDICTING STOCK PRICES USING DEEP LEARNING
547.	ANGAD LAMBA	NV Muralidhar Rao	PREDICTING STOCK PRICES USING DEEP LEARNING
548.	SOUMIL GUPTA	Archana Kulkarni	ANALYSIS OF MILITARY EXPENDITURE IN INDIA
549.	SOUMIL GUPTA	Anshuman	ANALYSIS OF BUILDING FRAMES UNDER HORIZONTAL LOADS AND VERTICAL LOADS
550.	LOVISH ARORA	A K Giri	IMPACT OF INVESTMENT IN TECHNOLOGY ON ECONOMIC GROWTH AND POVERTY REDUCTION IN INDIA.
551.	SHREYAS HEJIB	Arya Kumar	VALUATION OF INITIAL PUBLIC OFFERINGS AND ITS IMPLICATIONS TO STAKEHOLDERS
552.	MORE SANIKET VIJAYKUMAR	Rajiv Kumar	GRAPH CLUSTERING USING LOW RANK APPROXIMATION AND SOCIAL NETWORK ANALYSIS
553.	SAHIL KUMAR	Kuldip Singh Sangwan	A COMPARATIVE STUDY OF MULTI-OBJECTIVE EVOLUTIONARY ALGORITHMS
554.	SAHIL KUMAR	Trilok Mathur	GEOMETRIC METHOD FOR DIGITAL IMAGE PROCESSING
555.	YASH JAIN	Ashish Tiwari	APPLICATION OF NUMBER THEORY
556.	C PRANAY REDDY	Devendra Kumar	APPLICATIONS OF WAVELET METHODS IN SOLVING PARTIAL DIFFERENTIAL EQUATIONS USING MATLAB
557.	GADEKAR SACHIN APPASAHEB	Kamlesh Kumar	SELECTED TOPICS IN "ADVANCES IN GEOTECHNICAL EARTHQUAKE ENGINEERING"
558.	RASAL KUMAR	Balram Dubey	DYNAMICS OF BIOLOGICAL SPECIES: MODELLING APPROACH
559.	RASAL KUMAR	Surekha Bhanot	STUDY ON DYNAMIC ROBOT PATH PLANNING
560.	AAYUSHI AGRAWAL	G S Sessa Chalapathi	IMPLEMENTATION OF LORA BASED COMMUNICATION BETWEEN TWO EMBEDDED BOARDS.
561.	AAYUSHI AGRAWAL	Rakhee	FLUID FLOW MOBILITY MODEL FOR WIRELESS NETWORK.
562.	TANMAY VERMA	Kavindra Kandpal	MATERIAL SELECTION FOR OPTICAL INTERCONNECTS IN CMOS ICS.
563.	TANMAY VERMA	D Bandyopadhyay	DESIGN OF SUITABLE COUPLER FOR LOW-LOSS COUPLING BETWEEN OPTICAL FIBER AND A SECOND UNIT (LASER, OPTICAL FIBER, NANOTUBES, NANOWIRES)
564.	SHETGAONKAR HRISHIKESH DIGAMBAR	Kaushar Vaidya	A STUDY OF PHYSICAL PROPERTIES OF IONIZED REGIONS IN GALACTIC HII REGIONS
565.	VISHAL GOLCHA	Amol Holkundkar	ALGORITHM TO CONSTRUCT GROUND STATE WAVEFUNCTION BY IMAGINARY TIME PROPAGATION METHOD.
566.	KHANDELWAL SHRIKANT MAHESH	Subhashish Gangopadhyay	STUDY OF THIN FILM COATING FOR SOLID LUBRICATION AND CASE-HARDENING
567.	MAYANK GUPTA	A K Giri	IMPACT OF INVESTMENT IN TECHNOLOGY ON ECONOMIC GROWTH AND POVERTY REDUCTION IN INDIA.
568.	RAGHAV SHARMA	Kaushar Vaidya	YOUNG STELLAR POPULATION IN AND AROUND H-II REGIONS
569.	NAMAN JAIN	Amol Holkundkar	TIME DEPENDENT SCHRODINGER SOLVER IN SPHERICAL POLAR COORDINATES IN VELOCITY AND LENGTH GAUGE
570.	RAJA SHUKLA	Niladri Sarkar	MODELLING OF NANOSCALE DEVICES USING "NON EQUILIBRIUM GREENS FUNCTION"
571.	RAJA SHUKLA	Arnab Hazra	DEVELOPMENT OF MEMRISTIVE DEVICES BY USING TiO <sub>2</sub> NANOFIBRES
572.	SURANSHE ROUNAK SHRAWAN	Nirankush Dutta	PRACTICAL APPLICATION OF CONSTRUCTION MATERIALS AND THEIR RELEVANT THEORY
573.	KAPIL AGARWAL	Sandhya Marathe	UNDERSTANDING SOME ANIMAL BEHAVIORS LIKE SEXUAL BEHAVIORS.
574.	ABHINAV GUPTA	Hitesh Dutt Mathur	V2G-IMPLICATION OF VEHICLE TO GRID



S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
575.	ADITYA NARKHEDE	Shamsher B Singh	STUDY OF FLEXURAL RESPONSE OF FUNCTIONALLY GRADED THIN WALLED BEAMS
576.	DIGVIJAY BANSAL	Vinod Kumar Chaubey	QUANTUM DEVICES AND MODELLING
577.	SAYAN RUDRA PAL	Sainath Bitragunta	MODELING OF ENERGY HARVESTING TRANSMITTER USING ADAPTIVE MODULATION AND CODING TECHNIQUE.
578.	RISHABH BHARDWAJ	Arnab Hazra	FABRICATION OF REDUCED GRAPHENE OXIDE (RGO) BASED PLANAR TYPE VAPOR DEVICES
579.	SHASHANK SHEKHAR	Hitesh Dutt Mathur	IMPLEMENTING DYNAMIC ELECTRICAL PRICING & LOAD SCHEDULING PROTOCOL
580.	PRINCE GOYAL	Chandra Shekhar	VLSI ARCHITECTURES FOR HIGH PERFORMANCE REAL TIME APPLICATIONS
581.	PRINCE GOYAL	Kari Babu Ravi Teja	INVESTIGATION OF DESIGN STRATEGIES FOR MULTI-GATE TRANSISTORS.
582.	SIDHARTH TALWAR	Jl Raheja	BIG DATA ANALYTICS WITH MACHINE LEARNING
583.	RISHAB SEHRA	Amit Dua	UNDERSTANDING THE ARCHITECTURE AND ASPECTS OF SOFTWARE DEFINED NETWORKING.
584.	HARSHIT GUPTA	Chandra Shekhar	VLSI ARCHITECTURES FOR HIGH PERFORMANCE REAL-TIME APPLICATIONS
585.	SHUBHAM GUPTA	Amit Dua	UNDERSTANDING THE ARCHITECTURE AND ASPECTS OF SOFTWARE DEFINED NETWORKING(SDN).
586.	MIHIR SIROHI	Lavika Goel	CROP RECOMMENDATION SYSTEM USING NATURE INSPIRED TECHNIQUES
587.	JAYANT AGARWAL	Rajneesh Choubisa	DESIGNING A QUESTIONNAIRE FOR MEASUREMENT OF DEPRESSION.
588.	PENTA SRUJAN	Navneet Gupta	STUDY ON STABILITY ISSUES OF ZNO BASED THIN-FILM TRANSISTORS.
589.	ROHIT KUMAR	Jitendra S Rathore	TO STUDY THE KINEMATICS AND DYNAMICS OF AN UNDERWATER EEL LIKE ROBOT
590.	PURANJAY SINGH	Sunil Kumar Dubey	ISO 9001 VS FDA GOOD MANUFACTURING PRACTICES
591.	PIYOOSH SRIVASTAVA	Vishakha Sakhare	ANALYSIS OF BUILDING ENERGY PERFORMANCE
592.	ARINDAM KR BHATTACHARJEE	Hemant R Jadhav	ASTROGLIOSIS AND INFLAMMATION IN ALZHEIMERS DISEASE
593.	SNEHA KUMARI	Rajeev Sakhuja	SYNTHESIS AND PHOTO-PHYSICAL STUDIES OF COUMARIN DERIVATIVES
594.	RASHI SINGHAL	Hemant R Jadhav	ASTROGLIOSIS AND INFLAMMATION IN ALZHEIMERS DISEASE
595.	AKASH SONTH	Harshavardhan S	VEHICLE SPEED DETERMINATION FROM VIDEO STREAMS USING IMAGE PROCESSING
596.	NIKHAR MAHESHWARI	Yashvardhan Sharma	MULTIMEDIA SUMMARIZATION
597.	JAY VIRENDRA POKARNA	K Solomon Raju	IMPLEMENTATION OF PREDICTIVE HEALTH ALGORITHM FOR STRUCTURAL HEALTH MONITORING
598.	ARKA TALUKDAR	Shan Balasubramaniam	CONCURRENT DATA STRUCTURES
599.	PANDILLAPALLI BHARGAV	K Solomon Raju	STUDY AND IMPLEMENTATION OF DATA EXTRACTION ALGORITHM FROM NOISY GATE
600.	AMRITANSHU JAIN	Dhiraj Sangwan	VIDEO SUPER RESOLUTION USING DEEP LEARNING
601.	ANANYASHREE GARG	Vandana Agarwal	EXPRESSION RECOGNITION USING FACIAL IMAGES
602.	AMOGH SHARMA	Lavika Goel	USING NATURE INSPIRED TECHNIQUES IN SPORTS ENGINEERING
603.	DHRUV AGARWAL	Anil Kumar	DESIGN AND SYNTHESIS OF AZOLE-FUSED HETEROCYCLIC COMPOUNDS CIA TRANSITION METAL CATALYZED C-H ACTIVATION
604.	SAURABH MANISH RAJE	Shan Balasubramaniam	IMPLEMENTATION AND ANALYSIS OF SHARED MEMORY DATA STRUCTURES

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
605.	NAMRATA MOHANTY	Mukesh Kr Rohil	FEATURE DETECTION USING ORB(ORIENTED FAST AND ROTATED BRIEF)
606.	ARIHANT RANKA	Amit Jain	POOL FIRE AND VAPOR CLOUD EXPLOSION
607.	SHREEYA NASA	Surekha Bhanot	3-D IMAGE CAPTURE AND RECOGNITION
608.	SAMIRAN	Murali Palla	TO DESIGN AND UNDERSTAND THE COMPUTATIONAL ASPECTS OF MICRO STRUCTURE EVOLUTION USING PHASE FIELD MODELLING.
609.	DHAND UDIT MANOJ	M S Dasgupta	THEORETICAL AND EXPERIMENTAL STUDY OF CARBON DIOXIDE BASED REFRIGERATION SYSTEM.
610.	VAIBHAVI RASTOGI	Kaushar Vaidya	A STUDY OF CORRELATION OF COLD DUST EMISSION WITH H-II REGIONS
611.	JYOTI VISHNOI	Pankaj Vyas	EARLY RELIABILITY ESTIMATION OF UML SEQUENCE DIAGRAMS
612.	M AVADESH	Navneet Goyal	FINDING KINSHIP FROM A DATASET OF IMAGES USING DEEP LEARNING AND IMAGE PROCESSING
613.	ANKUSH P A	Nitin Chaturvedi	DESIGN AND ANALYSIS OF RECONFIGURABLE CACHE ARCHITECTURE AND CACHE COHERENCE PROTOCOLS.
614.	RAJAT JAIN	Shan Balasubramaniam	DISTRIBUTED DATA-STRUCTURES AND BLOOM-FILTERS
615.	ADITYA RAJ AGARWAL	Shan Balasubramaniam	VERIFYING THE CORRECTNESS OF A SYSTEM OF VIRTUAL MACHINES WITH RESPECT TO PROPERTIES SUCH AS SECURITY, FAIRNESS IN ALLOCATION OF SHARED RESOURCES, AND OF PROCESS MIGRATION
616.	JASKIRAT KAUR CHOHAN	Atish T R Paul	PREPARATION AND EVALUATION OF FOOD PRESERVATIVE FILM USING PLANTS.
617.	ABHISHEK VAIBHAV JOSHI	Navneet Goyal	DESIGN STREAMING ALGORITHMS FOR EVENT TRACKING IN SOCIAL STREAM DATA.
618.	GHIVDONDE ROHIT RADHESHYAM	Navneet Goyal	FINDING KINSHIP ON THE DATASET OF IMAGES USING DEEP LEARNING AND IMAGE PROCESSING.
619.	NISCHAY SINGH	Navneet Goyal	PARALLELIZATION OF TRANSITIVE CLOSURE CONSTRUCT IN DWARF COMPILER
620.	KABIR AHUJA	Ajay Kumar Pani	STUDY AND APPLICATION OF DYNAMIC PCA
621.	VIKRAM SINGH CHANDRAWAT	Shamsher B Singh	STRUCTURAL HEALTH ASSESSMENT USING DYNAMIC CHARACTERISTICS
622.	NIKHITA ANAND	Hemant R Jadhav	ASTROGLIOSIS AND INFLAMMATION IN ALZHEIMERS DISEASE
623.	VIKRAM NITIN	Shan Balasubramaniam	AUTOMATED CHECKING OF PROOFS IN NUMBER THEORY
624.	ANIRUDH AGGARWAL	Arnab Hazra	FABRICATION OF TIO <sub>2</sub> NANOROD BASED PLANAR TYPE VAPOUR SENSOR DEVICE
625.	ASHWIN TAYADE	Sundaresan Raman	VISUALIZATION OF VECTOR FIELDS IN 2-D AND 3-D AND THE IMPLEMENTATION OF THE SIMULATING SOFTWARE
626.	SIDDHARTH UPPAL	Anupama Mittal	NANO DRUG DELIVERY SYSTEMS FOR TREATMENT OF DIABETES.
627.	SUVAM GANGULY	Murali M Pandey	APPLICATION OF LAYER-BY-LAYER(LBL) ASSEMBLED SYSTEMS IN DRUG DELIVERY.
628.	HARSHITA VERMA	Jitendra Panwar	BIOLOGICAL PRODUCTION OF POLYESTER AND ITS APPLICATIONS.
629.	MRIGESH MADAN	Shan Balasubramaniam	DISTRIBUTED DATA STRUCTURES, HASH TABLES, BLOOM FILTERS.
630.	MOHIT GARG	Vinod Kumar Chaubey	QUANTUM DEVICES AND MODELLING
631.	NAVEEN VENKAT	Dhiraj Sangwan	VIDEO SUPER RESOLUTION USING DEEP LEARNING
632.	PARIDHI GUPTA	Rajeev Taliyan	TO STUDY CORONARY ARTERY DISEASE PATHOGENESIS AND ROLE OF STENT/PCTA TECHNIQUE.

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
633.	RAVINDRA ABHIJITH	M S Dasgupta	THEORITICAL AND EXPERIMENTAL STUDY OF CARBON DIOXIDE BASED REFRIGERATION SYSTEMS
634.	PARIKH CHIRAG HITESH	Jitendra Panwar	FUNGAL SECRETOME
635.	ROHAN SINGH	Jitendra S Rathore	DESIGN AND MANUFACTURE OF A UNDERWATER EEL-LIKE ROBOT
636.	HARSH SHARMA	Girish Kant	ANALYSING THE RISKS AND WASTAGES ASSOCIATED IN THE AGRICULTURE SUPPLY CHAIN.
637.	HARSH SHARMA	Arya Kumar	IS E-COMMERCE A SUSTAINABLE BUSINESS MODEL? UNDERSTANDING THE VALUATION OF E-COMMERCE COMPANIES.
638.	ABHISHEK SINGHVI	P Srinivasan	USE OF PHASE CHANGE MATERIAL AS A COOLANT IN CONFORMATIONAL COOLING CHANNELS
639.	UTKARSH BANSAL	Anil Kumar	SYNTHESIS OF PIE EXTENDED IMIDAZOLE COMPOUNDS VIA COPPER CATALYZED C-N BOND FORMATION AND STUDY OF THEIR PHOTOPHYSICAL PROPERTIES.
640.	HARSH BANSAL	Dhiraj Sangwan	VIDEO SUPER RESOLUTION USING DEEP LEARNING
641.	UTKARSH AGARWAL	Nitin Chaturvedi	DESIGN AND ANALYSIS OF RECONFIGURABLE CACHE ARCHITECTURE AND CACHE COHERENCE PROTOCOLS
642.	AYUSH DWIVEDI	Sunil Kumar Dubey	TO UNDERSTAND THE SUPPLY CHAIN MECHANISM FOR THE GOVERNMENT ORIENTED SUPPORTED VACCINATION PROGRAM.
643.	MUDIT CHANDALIYA	Nitin Chaturvedi	AN EXPLORATION OF NEUROMORPHIC SYSTEM AND RELATED DESIGN CHALLENGES IN DARK SILICON ERA
644.	MEGHA SAINI	Anil Kumar	DESIGN AND SYNTHESIS OF AZOLE-FUSED HETEROCYCLIC COMPOUNDS VIA TRANSITION METAL CATALYSED C-H ACTIVATION.
645.	K PAVITHRAN	J N Bandopadhyay	PT SYMMETRIC QUANTUM MECHANICS
646.	SUMEGH GARG	Amit Jain	THE PROJECT INVOLVES UNDERSTANDING OF MUNICIPAL SOLID WASTE FOR ITS RECYCLING OR DISPOSAL. IT ALSO INVOLVES REVIEW OF CASE STUDIES ON SUCCESSFUL DESIGNS OF MSW UTILIZATION.
647.	SHIVAM GUPTA	Satyam Srivastav	HEALTH CARE ANALYSIS USING MACHINE LEARNING
648.	SHIVAM GUPTA	Vishal Gupta	APPLICATION DESIGN IN SOFTWARE DEFINED NETWORKS
649.	ISHANT GUPTA	Mukesh Kr Rohil	GRAPHICAL MODELS IN MACHINE LEARNING
650.	RISHABH MITTAR	S Mohan	RGBD MAPPING USING RTAB MAP
651.	ADITYA UKARANDE	Chandra Shekhar	STUDY OF ADVANCED VLSI ARCHITECTURES FOR DEEP LEARNING.
652.	AASHISH RICHHARIYA	S Mohan	CONFLICT RESOLUTION OF CLUTTERED MULTI-ROBOT SYSTEMS.
653.	SAGNIK MAJUMDER	Surekha Bhanot	IMAGE CAPTIONING USING RECURRENT NEURAL NETWORKS (RNN)/ LONG SHORT-TERM MEMORY (LSTM)
654.	RISHABH GUPTA	Srikanta Routroy	FORECASTING SEASONAL, SEMI-SEASONAL AND NON-SEASONAL DEMANDS OF CAMPUS RETAIL STORE
655.	RAMANDEEP SINGH	Gajendra S Chauhan	VOGUES NEW WOMAN: A CASE STUDY OF SUPER-FEMINISM
656.	ANURAG	Dipendu Bhunia	STUDY ON PROPERTIES OF TEXTILE REINFORCED CONCRETE
657.	ANURAG	Pankaj Kumar Sharma	HISTORY OF EVOLUTIONARY THOUGHT
658.	MARAMREDDY RAHUL REDDY	Vishakha Sakhare	BIOCEMENTATION FOR CIVIL ENGINEERING
659.	MARAMREDDY RAHUL REDDY	Rajdeep Chowdhury	INSILICO ANALYSIS OF EXPRESSION DATA BETWEEN DIFFERENT CANCER SUBTYPES

S.No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
660.	HARSHVARDHAN MAHESHWARI	NV Muralidhar Rao	IMPACT OF JAM (JAN DHAN, AADHAAR, MOBILE) ON INDIAN ECONOMY.
661.	KEERTI P	Rajesh Mehrotra	COMPARITIVE GENOMICS
662.	KEERTI P	AK Das	COMPARATIVE STUDY OF BRAIN DEVELOPMENT IN VERTEBRATES.
663.	HARSHITA GOYAL	Tapomoy G Sarkar	GENERAL RELATIVITY AND COSMOLOGY
664.	TUSHAR MEHTANI	Abhijit R Asati	ANDROID BASED LIVE CAMERA APP FOR OBJECT DETECTION (USING DEEP LEARNING)
665.	KUNAL SHARMA	Bharti Khungar	PREDICTION OF PROPERTIES OF MOLECULES USING ML APPROACH AND CHEMINFORMATICS.
666.	ABHISHEK JAIN	Virendra S Shekhawat	NETWORK MONITORING IN OPENFLOW BASED SDN
667.	TUSHAR ARORA	Arya Kumar	THE IMPLICATIONS OF MACROECONOMIC FUNDAMENTALS AND CLIMATIC VARIABLES ON INDIAN STOCK MARKET
668.	TUSHAR ARORA	Virendra S Shekhawat	DELAY TOLERANT NETWORK(DTN) BASED APPLICATION DESIGN AND IMPLEMENTATION
669.	SUBHAM SWASTIK DORA	Lavika Goel	PROJECT FOOD SENSE
670.	ADITYA SHARMA	Shibani K Jha	GROUND WATER CONTAMINATION BY TOXIC SUBSTANCES
671.	NIRMIT GUPTA	Indresh Kumar	LITERATURE SCREENING AND SYNTHESIS OF FUSED NITROGEN HETEROCYCLES.
672.	ABHINAV MISHRA	NV Muralidhar Rao	PREDICTING STOCK PRICES USING DEEP LEARNING
673.	RAHUL SAXENA	Nilanjan Chattaraj	ANALYSIS AND DESIGN OF SELF- BALANCING ROBOT USING INVERTED PENDULUM MODEL.

### NEW COURSES INTRODUCED IN THE YEAR 2017

**New / Modified Courses:**

S.No.	Course No.	Course Title & Description	L	P	U
1.	BIO F216	Water, Sanitation and Solid Waste Management	3	0	3
2.	BIO F217	Laboratory for Water, Sanitation and Solid waste Management	1	2	3
3.	BIO F315	Applied Nutrition and Nutraceuticals	2	0	2
4.	BITS F314	Game Theory and Its Applications	3	0	3
5.	CHE F497	Atomic and Molecular Simulations	-	-	3
6.	CHE F498	Colloids and Interface Engineering	3	0	3
7.	CS F402	Computational Geometry	3	0	3
8.	FIN F414	Financial Risk Analytics and Management	3	0	3
9.	HSS F311	Introduction to Videogame Studies	3	0	3
10.	HSS F313	Introduction to Contemporary Arts	3	0	3
11.	HSS N203T	Basic Arabic	3	0	3
12.	MBA G534	Introduction to Business Sustainability	3	0	3
13.	MBA G535	Cross Cultural Management	3	0	3
14.	MBA G538	Marketing Models	3	0	3
15.	MBA G539	Six Sigma	3	1	4

## INVITED TALKS ARRANGED BY THE DEPARTMENT

### Department of Management

1. Mr. Arjun Chakraborty, President and GM – India Business, Trackinvest delivered a talk on Product & Strategy Management on February, 17, 2017.
2. Mr. Taresh Bhatia, Founder “Advantage FP” and Certified Financial Planner delivered a talk on Financial Planning on February 18, 2017.
3. Mr. Munish Suri, Capegemini delivered a talk on Big Data Analytics on February 17, 2017.
4. Mr. Partho Dasgupta, CEO, Digicert Consulting delivered a talk on B2B Sales Methodology on February 18, 2017.
5. Mr. Satyajit Majumdar, Professor, TISS delivered a talk on Strategic Planning, Entrepreneurship on February 19, 2017.
6. Mr. Deepak Bharara, CHRO Lanco Infratech Ltd. delivered a talk on Strategy & Talent planning on February 19, 2017.
7. Prof. Bhaskar Bose, Senior Prof. & Consultant delivered a talk on Creative Thinking & Decision Making during March 1-2, 2017.
8. Dr. Shailendra Palvia, Professor of MIS, Long Island University, USA delivered a talk on Management of Systems Development Process on March 17, 2017.
9. Prof. A.P. Dash, Professor, NTPC Ltd delivered a talk on Finance & Strategy on March 17, 2017.
10. Mr. Sanjeevan Kapshe, Officer-on-Special-Duty (OSD) - Securities and Exchange Board of India (SEBI), Professor - Railway Staff College Vadodara delivered a talk on Investments & Portfolio Management during March 17-18, 2017.
11. Ms. Bindu Kulkarni, Prof. S. P. Jain Institute of Management and Research, Mumbai delivered a talk on Divergent Thinking on April 19, 2017.
12. Mr. Karthik Rangappa, VP – Equity, Research and Education Services, Zerodha delivered a talk on Innovative ideas to built Long term Portfolio on February, 17, 2017.
13. Mr. Mukesh Jain, Vice President/ Head - Technology (IT) at NICE Systems, Pune delivered a talk on HR Analytics during March 19-20, 2017.
14. Mr. Sachin Soni, Trainer delivered a talk on SAS during March 26 -27, 2017.
15. Prof. D S Broca, Prof. at XLRI Jamshedpur delivered a talk on Business Process Simulations on April 2, 2017.
16. Subhashish Roy, Trainer delivered a talk on Interpersonal Skills - Mock interviews during September 4-6, 2017.
17. Mr. Ramesh Dorairaj, Consultant, Coach, Trainer delivered a talk on Leadership & Marketing – Story Selling during September 9-10, 2017.
18. Abhishek Salecha, Co Founder at ForeVision delivered a talk on Advance Excel, and Equity Research & Financial Modeling during September 16-18, 2017.
19. Krishnamurthy Bindumadhavan, Off- Campus Faculty BITS delivered a talk on Corporate Finance & Taxation during September 20-21, 2017.

### Department of Pharmacy

20. Dr. Bruce A. Shapiro, Head, RNA Structure and Design Section, National Cancer Institute Frederick, MD, USA delivered a talk on Understanding RNA Structure and Function: Prediction, Analysis and Nanodesign.
21. Dr. Anu Puri, Staff Scientist, National Cancer Institute Frederick, MD, USA delivered a talk on Stimuli-Sensitive Nanoparticles for RNAi-based Cancer Therapy: An Update on Photosensitive Liposomes for siRNA Delivery.
22. Prof. Rafael Balana Fouce, Professor of Biomedical Sciences, University of Leon, Spain delivered a talk on A new phenotypic approach for Leishmaniasis drug discovery using infrared-transgenic cells.
23. Prof. Asit K. Chakraborty, Professor and Head, Department of Medicinal Chemistry, NIPER, SAS Nagar, Punjab. delivered a talk on Enrichment of Medicinal Chemists' Tool-Box: Search for Novel Antiinflammatory Scaffold.
24. Dr. Amulya K. Panda, Senior Scientist, National Institute of Immunology, New Delhi delivered a talk on New advances on polymer particle based vaccine delivery.
25. Dr. Raj K Shirumalla, Associate Director and Head, Group II, Department of Pharmacology, Diachi Sankyo, India delivered a talk on Current trends in drug discovery research in COPD.

26. Prof. Shinde Devanand Baburao, Vice Chancellor, Shivaji University, Kohlapur delivered a talk on Antibacterial Drug Discovery -Current Trends, Challenges and Future Perspective.
27. Mr. Arun Kumar Pandey, Sr. Vice-President, R&D, Alkem Labs Ltd Mumbai delivered a talk on Indian Pharmaceutical industry--perspective and Future.
28. Prof. Vinod Labhasetwar, Professor, Cleveland Clinic Lerner College of Medicine, Cleveland, Ohio, USA delivered a talk on Drug Transport Barrier in Cancer Drug Resistance.
29. Dr. Mathias Viard, National Cancer Institute Frederick, MD, USA delivered a talk on Liposomal formulation of a PDT agent for on-site drug release.
30. Prof. Shyh Dar Li, Associate professor, University of British Columbia, Canada delivered a talk on Nanoparticle Drug Delivery Overcomes Multidrug Resistance in Tumors.
31. Prof. Lakshmi Kotra, Associate Professor, University of Toronto, Canada delivered a talk on Drug discovery challenges in centrally acting, controlled drug substances.
32. Dr. Anil N. Gaikwad, Senior Scientist, CSIR-CDRI, Lucknow delivered a talk on Ornamental plant to ornate body-Technology to treat obesity.
33. Prof. K Ruckmani, Professor and Head, Department of Pharmaceutical Technology, Anna University, Chennai delivered a talk on Studies on prunus cerasoides and albizia stipulata gums as versatile biocarriers for drug delivery applications.
34. Dr. Anurag Sood, Research Director, PRD & ARD, Zoetis delivered a talk on Formulation and drug product development for animal health: Drug delivery and technology innovations.
35. Mr. Ranga Chandrashekar, Deputy Drugs Controller (I), New Delhi delivered a talk on Investigational New Drug Applications.
36. Dr. Dinesh Kumar Bharadwaj, Deputy Director and group leader-PCT, National Institute of Nutrition, Hyderabad delivered a talk on Challenges for Pharmacists – Strengthening the Pharmacy Practices.
37. Dr. P. Chattopadhyay, Scientist-E and Deputy Director, Head of Pharmaceutical Technology and Medical Entomology, DRL, DRDO, Tezpur delivered a talk on Development of Green Non –lethal Riot Control agents.
38. Dr. Ashish Rastogi, Assistant Director- Clinical Operations, Excel Life Sciences Pvt Ltd., New Delhi delivered a talk on Clinical Studies- Challenges & Opportunities, Anecdotes from the real world.
39. Mr. Ranjan Narula, Founder and Managing Partner of IPR Law firm, RNA, IP Attorneys, Gurgaon delivered a talk on Pharma Patent Litigation in India.
40. Dr. Arvind Kinshikar, Laboratory Head, Novartis Institutes for Bio-Medical Research Cambridge, Massachusetts delivered a talk on Bioanalytical assay development and validation: Challenges.

#### **Department: Electrical and Electronics Engineering**

41. Dr. Pawan Ajmera attended 5 days Summer School on Speech Signal Processing (S4P 2017), organized by Dhirubhai Ambani, Institute of Information and Communication Technology (DA-IICT), Gandhinagar, India.

#### **Department of Biological Sciences**

42. Dr. Bhupendra Verma, Institute of Biotechnology, University of Helsinki, Finland, delivered a talk on 'Minor spliceosome mediated novel alternative splicing cascades: mechanisms and link to human diseases'.
43. Prof. Sanjay Kapoor, Dept. of Plant Molecular Biology, Delhi University delivered a talk on 'A Quest for the Regulators of Reproductive Development in Rice'. (August, 2017)
44. Prof. Sudhir Sopory, Padma Bibhushan, Ex Vice chancellor, JNU and Ex-Director ICGEB, delivered talk on Stress tolerance in plants"- role of glyoxalases.
45. Prof. Bani Mallick, Distinguished Professor and Fullbright Fellow, University of Texas A &M, USA delivered a talk on 'Big Data Genomics and Cancer. The talk was organized by United States-India Educational Foundation (USIEF).

#### **Department of Humanities and Social Sciences: NA**

#### **Department of Mathematics**

46. Prof. Madhu Jain, Department of Mathematics, Indian Institute of Technology, Roorkee delivered a talk on the topic "Reliability growth modeling for software systems with imperfect debugging and change points" on 26.02.2017.
47. Prof. S. Ponnusamy, Indian Statistical Institute, Chennai Centre, delivered a talk on the topic "Recent Development on Bohr's Inequality on power series" on 26.02. 2017.
48. Prof. Pankaj Gupta, Department of Operational Research, University of Delhi, Delhi , delivered a talk on the topic " Multicriteria Optimization" on 26.02.2017.

49. Prof. Sugata Gangopadhyay, Department of Computer Science and Engineering, Indian Institute of Technology, Roorkee delivered a talk on the topic " Construction of bent functions based on Z-bent functions" on 26.02.2017.

#### **Department of Computer Science and Informaiton Systems**

50. Ms. Rashmi Verma (Co-Founder & Executive Director, Technology Division) MapmyIndia on "Disruptive solutions to Leverage the Power of AI, Deep Learning, Advanced Analytics" on October 28, 2017.
51. Dr. Sudhir Rawat (Microsoft, Hyderabad) presented advancements in cloud computing and AI during Microsoft Student Partners Summit on Sept 28, 2018.

#### **Department of Chemistry**

52. Prof. Krishna Nand Singh, Department of Chemistry, Banaras Hindu University, Varanasi, India talk on the topic "Development of Some Practical Protocols in Organic Synthesis", 27/01/2017
53. Dr. Sundeep Dugar, President and CEO, Sphaera Pharma, Singapore; COO, Cardero Therapeutics, Los Altos, CA, talk on the topic "Drug Discovery and Development – A Collaborative Translational Effort", 28/02/2017.
54. Dr. Rajarshi Chakrabarti, Department of Chemistry, IIT Bombay talk on the topic "Nucleic acids, excess salt and carbon nanostructures 03/10/2017.
55. Prof. Partha Sarathi Mukherjee, IPC, IISc, Bangalore talk on the topic "Self-Assembled Molecular Vessels", 24/04/2017.
56. Prof. Namboothiri, Department of Chemistry, IIT Bombay talk on the topic "Carbon Nanotube-Metal Nanohybrid Based Heterogeneous Catalysts for Various Organic Transformations", 05/08/2017
57. Prof. T. Punniyamurthy, *Department of Chemistry*, IIT Guwahati talk on the topic "Regioselective C-H Functionalization and Carbon-Heteroatom", 13/05/2017.
58. Prof. G. Sekar, Department of Chemistry, IIT Madras talk on the topic "Synthesis of Chiral Alcohols by Enantioselective Oxidation and Reduction", 16/06/2017.
59. Prof. K. R. Prabhu, *Department of Organic Chemistry*, IISc, Bangalore talk on the topic "The C-H Activation: A new Language of Sustainable Chemistry for the Functionalization Organic Molecules", 01/09/2017.

#### **Department of Mechanical**

60. Prof. Kannan Govindan, SDU Denmark, " Sustainable supply chain management: current trends and future direction" on 1st Sept.2017 .
61. Prof.Manbir Sodiis, University of Rhodes Island, East Bay, US. "Sustainable Manufacturing in Machining", 12 November 2017.

#### **Department of Civil Engineering**

62. Dr. Velmurugan, (Scientist F, Traffic Engineering and Safety Division, CRRI, New Delhi) delivered expert lecture on Road Safety Issues and Case Studies on Road Safety and An overview of Highway Capacity Studies on April 24, 2017.
63. Mr. Sitaramanjaneyulu, Senior Principal Scientist, Pavement Evaluation Division, CRRI delivered a talk on "State of Art NDT Techniques of Pavement Evaluation and Innovative of Pavement Technologies for Construction and Maintenance" on 18<sup>th</sup> September 2017.

#### **Department of Chemical Engineering**

64. Dr Ajay Kumar, Associate Professor, Department of Biosystems and Agricultural Engineering, Oklahoma State University, Stillwater Campus, USA delivered a lecture entitled "Energy and Chemicals from Biomass and Wastes: Challenges and Opportunities" on 11th July 2017.
65. Mr Ganpati Kamble, Technical Head, Josts Engineering Com Ltd, delivered a talk entitled "Fluid Mechanics instrumentation used in research and industry" on 24th August 2017.
66. Mr. Divyesh Patel, Alumni 1977 Batch delivered talk on "green energy technologies in oil and gas industry and semiconductor manufacturing/ novel applications of graphene in electric car battery, semiconductor and marine industries"20/11/2017.
67. Dr. Siddharth Mukherjee, Director-Technology, Air Liquide Global E&C Solutions India Pvt., delivered talks on on-campus Course: Process Design Principles II on 19.8.17,09.09.17 and 18.11.17.

#### **Department of Physics**

68. The department organized an invited talk by Prof. Deshdeep Sahdev (Quazar Research and IIT, Kanpur) on "Strengthening our Sci-tech Ecosystem: A Concrete Case-study" on 19<sup>th</sup> September 2017.



**LIST OF FIRST DEGREE THESIS COMPLETED DURING THE YEAR 2017****Second Semester 2016-17**

S.No	BITS ID	Name	Title	Supervisor	Department
1	2012A3B1149P	Sonali Gupta	Study of stress and anxiety controlled by ventromedial hypothalamus	Prof. Cornelius Gross	Biology
2	2012A4TS301P	Afzal Ahmed Khan	Multi Echelon Inventory Management/Optimization	Dr. Satyendra kr. Sharma	Mechanical
3	2012A5TS514P	Shubham Gupta	Assesment of jan aushadhi yojana; state-of-the-art and what next ?	Dr.Gautam Singhvi	Pharmacy
4	2012B1A1673P	Subham Pravin rathi	To study the role of cr-RNA 1 in Salmonella pathogenesis	Dr. Sandhya Marathe	Biology
5	2012B1A1772P	Ashish Khanna Kanekanti	MITIGATION OF FLUE GASES FROM INDUSTRIAL WASTES THROUGH BIOREACTORS	Dr. Smita Raghuvanshi	Chemical
6	2012B1AB790P	Suryansh Rastogi	Developing a Framework for Bio-inspired Design	Dr. B.Vani	Biology
7	2012B1A1794P	Daksh Dutta	Control of bio-chemical process, and PID optimization using soft computing neuro-fuzzy algorithms.	Dr. AMIT JAIN	Chemical
8	2012B1A1800P	Sonali Kallani	Distribution of homologs of carboxysome lumen proteins across various phyla of Eubacteria	Sandhya Mehrotra	Biology
9	2012B1A1810P	Abhishek suresh	Genome wide Analysis of cis regulatory elements responsible for saline stress induction in wheat.	Dr. Rajesh Mehrotra	Biology
10	2012B1A1815P	Mansi Narang	Plant molecular biology and evolution in the area of plant productivity and photosynthesis	Sandhya Mehrotra	Biology
11	2012B1A2793P	TANMAY SHRIVASTAVA	ANALYSIS OF HYPOTHEICAL COUSERVED PLASMA PROTIENS	DR ASHISH DAS	Biology
12	2012B1A2802P	Shikhin Garg	Biochemical exploration of medicinal plants of Rajasthan	Dr. Pankaj Sharma	Biology
13	2012B1A2806P	Mayank Kumar	DESIGNING AN EFFICIENT SEWAGE TREATMENT PLANT	Dr.B. Vani	Biology
14	2012B1A2825P	Animesh kumar Maity	Role of CRISPR (crRNA2) in Salmonella pathogenesis	Dr. Sandhya Marathe	Biology
15	2012B1A2849P	Smarth Kakkar	Therapeutic Modalities of Herbal Drugs in Lung Cancer	Uma S Dubey	Biology
16	2012B1A3846P	Pajakta Joshi	To study the retinal responses using electrophysiological methods	Hiroki Asari	Biology
17	2012B1A4768P	Garima Gupta	Demand estimation of Scientific and Technological manpower for National priorities and Globalization	Dr. Satyendra kr. Sharma	Mechanical
18	2012B1A4786P	Rishabh Singh	Thermodynamic Analysis of	Dr. M.S.Soni	Mechanical

S.No	BITS ID	Name	Title	Supervisor	Department
			Solar Power Plant		
19	2012B1A4795P	Himanshu Gupta	Genomic analysis of cis element of Stress inducible promoter in wheat	Dr. Rajesh Mehrotra	Biology
20	2012B1A4797P	Anuj Agrawal	Genome Wide analysis of ACGT element in stress induced wheat plant.	Dr. Rajesh Mehrotra	Biology
21	2012B1A4812P	Harshit Mathur	Anti-Cancer Properties of TRAIL and Lactoferrin	Uma S. Dubey	Biology
22	2012B1A4814P	Harshit Shasnce	Study on Solar Air Heater	Dr. M.S.Soni	Mechanical
23	2012B1A4821P	Maninder Goyal	Use of Nanoparticles in Lung Cancer diagnosis and Treatment	Uma S Dubey	Biology
24	2012B1A4851P	Tanmay kulshrestha	Quantitative model of miRNA target prediction	Dr. Anders Martin Jaeobsen	Biology
25	2012B1A8787P	VASUNDHARA GUPTA	Design and optimization of Frateal antena using HFSS	DR NAVNEET GUPTA	EEE
26	2012B1A8796P	Kriti Jain	Study of mRNA-miRNA interaction	Shibasish Chowdhury	Biology
27	2012B1A8811P	KUNAL JINDAL	Multiplexed In Situ Protein Detection	Dr Rajdeep Choudhari	Biology
28	2012B1A8813P	SRABASTI NANDI	Green mobile health monitoring system	DR SAINATH B	EEE
29	2012B1A8824P	Ankit Agarwal	Location Recognition using Feature Matching	Dr. K K Gupta	EEE
30	2012B1A8834P	Mudda Swathi Sree Durga	Understanding the interactions between mRNA and miRNA	Shibasish Chowdhury	Biology
31	2012B1A8845P	Gourav Bansal	ANALYSIS OF CIS REGULATORY ELEMENT IN MILK	Dr. Rajesh Mehrotra	Biology
32	2012B1A8847P	Abhinav GandOtra	Designing IOT based arsenic sensor device	Dr. S.K. Verma	Biology
33	2012B1A8852P	Kushal Jasoria	INNOVATIONS AND BUSINESS OPPORTUNITIES IN THE BIOLOGICAL SCIENCE SECTOR	Dr.Pankaj Sharma	Biology
34	2012B1AB799P	Kumar Sashwat	Analysisi of Wheat Genome	Rajesh Mehrotra	Biology
35	2012B2A1315P	Kartavya Khanna	Photo Physical and Theoretical Investigation of Model Schiff Base	Dr. Shamik Chakraborty	Chemistry
36	2012B2A1507P	PINKY MOOLANI	To create some pedagogical visualisation software tools in Quantum Chemistry	DR PRASHANT MANOHAR	Chemistry
37	2012B2A1760P	Jyothir Ghosh	Synthesis of Bimetallic Au@Se nanoparticles and their applications	Dr. Surojit Pande	Chemistry
38	2012B2A1774P	Rrahul Bharadwaj	Computaional fluid dynamics study of downdraft gasifier with internal cyclonic combustion chamber	Dr.Pratik N. Sheth	Chemical
39	2012B2A2438P	ARCHIT AGGARWAL	Microstructure Characterization of Blended Cements	DR. BAHURUDEEN A	Civil
40	2012B2A2732P	Pratyksh Vijay	CATALYSIS OF COPPER AND PALLADIUM COMPLEXES	Dr. Saumi Ray	Chemistry
41	2012B2A2746P	Abhishek Sharma	Synthesis, Characterization and Catalytic application of metal nanoparticle decorated 2-D nanosheets of Fe <sub>2</sub> O <sub>3</sub> and OsO <sub>4</sub>	Dr. Surojit Pande	Chemistry

S.No	BITS ID	Name	Title	Supervisor	Department
42	2012B2A4262P	Soumya Upadhyay	FMECA ANALYSIS OF MECHANICAL COMPONENT	Prof. R.P.Mishra	Mechanical
43	2012B2A4722P	Salman Anjum	Nanoparticle based catalytic oxidation reactions	Dr. Bibhas R Sarkar	Chemistry
44	2012B2A4749P	Isukapalli Sai Vamsi K.	Synthesis of new Mechanofluorochromic materials; Investigation of their structure-property relationship.	Dr. Sachin U Belgamwar	Mechanical
45	2012B2A4753P	Anmol Pandey	Photo Physical and Theoretical Investigation of Model Schiff Base	Dr. Shamik Chakraborty	Chemistry
46	2012B2A7549P	Shambhavi Mehrotra	PHOTOPHYSICAL PROPERTIES OF SCHIFFS BASE AND OTHER AMIDE BASED COMPOUNDS	Dr. Madhushree Sarkar	Chemistry
47	2012B2A7767P	Mihir Biswal	Computational study of some cost-effective approximations to Fock-space coupled-cluster variants for energy and derivatives.	Dr. Prashant U Manohar	Chemistry
48	2012B2A8649P	Chinmayee Vijay Bhamburkar	SYNTHESIS CHARACTERIZATION AND CATALYTIC ACTIVITIES OF IRON COMPLEXES	Dr. Saumi Ray	Chemistry
49	2012B2A8778P	Shikhar Bhuddi	Internet of Things: Security and Privacy Challenges	Dr. Sainath Bitragunta	EEE
50	2012B2AB733P	Sarthak Mangla	COMPUTATIONAL STUDY OF HIGHLY CORRELATED ELECTRONIC STATES OF MOLECULED	Dr. Prashant U Manohar	Chemistry
51	2012B2AB769P	RAHUL KRISHNAN	Development of Catalysis for Carbonylation of Glycerol	DR BIBHAS R SARKAR	Chemistry
52	2012B3A1533P	ADITHYA S BHAT	Growth of Service Sector in India and Sustainability	DR RAJENDRA PRAMANIK	Eco. & Fin.
53	2012B3A1581P	Govinda Nathani	Life Cycle Analysis of a fertilizer Plant	Dr. Suresh Gupta	Chemical
54	2012B3A1591P	Chetan Raj Pandey	Implementation of Big data analytics in efficient monitoring and control of Chemical Processes	Dr. Harekrishna Mohanta	Chemical
55	2012B3A1605P	Akshay Morey	Modelling of desulphurisation unit by non linear statistical regression	Dr. Ajaya Kumar Pani	Chemical
56	2012B3A1607P	Dhiraj Kapgate	Life Cycle analysis of carbon capture and storage process	Dr. Raman Sharma	Chemical
57	2012B3A2414P	PANKAJ LAMBA	Dynamics of healthcare in India:A critical appraisal	Dr. Krishna M	Eco. & Fin.
58	2012B3A2582P	RAJAT JAIN	developing forecasting model for demand of a product	DR. SATYENDRA KUMR	Civil
59	2012B3A3519P	Aneesha Srivastava	Economic viability analysis of solar PV based distributed generation	ASHISH PATEL	EEE
60	2012B3A3537P	AMAN AGARWAL	Modelling the supply risk credit score	Satyendra Sharma	Eco. & Fin.
61	2012B3A3547P	NEHA TALESRA	MODELLING AND ANALYSIS OF MEMS PRESSURE SENSORS	DR NAVNEET GUPTA	EEE
62	2012B3A3602P	NAMAN GUPTA	Application of Game Theory in IoT	DR SAINATH B	EEE

S.No	BITS ID	Name	Title	Supervisor	Department
63	2012B3A4403P	Pranav Kulkarni	Reliability	Prof. R.P.Mishra	Mechanical
64	2012B3A4415P	Kushagra Vijayvargiya	SUPPLY CHAIN MANAGEMENT	Prof. Srikanta Routroy	Mechanical
65	2012B3A4464P	Aman Takiyar	Application of IoT in Agriculture	Dr. A.K.Digalwar	Mechanical
66	2012B3A4548P	Nishchay Nagpal	Development of a framework for application of Reliability Centered Management	DR GAJANAN GUPTA	Mechanical
67	2012B3A4603P	VISHAD BHALODIA	Supply Chain Risk Assessment	DR SATYENDRA KUMAR SHARMA	Eco. & Fin.
68	2012B3A7463P	KOKANDAKAR AJINKYA HEMANT	Effect of Unconventional Monetary Policies on the Indian Economy	Dr. A.K. Giri	Eco. & Fin.
69	2012B3A7479P	SALONI CHANDAK	Using mobile phones to improve healthcare across India using the system 99DOTS	Bill Thies	Csis
70	2012B3A7503P	VATSAL GUPTA	Analysis of the factors affecting the profitability of financial institutions	Prof N.V.M Rao	Eco. & Fin.
71	2012B3A8452P	SHRIYA JAIN	Impact of Macroeconomic variables and market anomalies on volatility of Indian Stock market.	Rajan Pandey	Eco. & Fin.
72	2012B3A8551P	ANIRUDH GAUTAM	DPC Multivariate GARCH model on Indian Market	Rajan Pandey	Eco. & Fin.
73	2012B3A8559P	ARPIT GUPTA	Techno-Economic aspect of PV power generation in India	DR RAJNEESH KUMAR	EEE
74	2012B3A8594P	SAMAY PANDAOKAR	Empirical analysis of volatility forecasting models in India & implication of Efficient Market hypothesis.	Rajan Pandey	Eco. & Fin.
75	2012B3AB488P	Anit Bhagat	ACHIEVING INCLUSIVE GROWTH	Dr. Srinivas Kota	Mechanical
76	2012B4A1634P	Yash Tambi	Big Data in Process Control	Dr. Harekrishna Mohanta	Chemical
77	2012B4A1652P	Varun Jain	Nonlinear modelling of sulphur recovery unit	Dr. Ajaya Kumar Pani	Chemical
78	2012B4A1677P	Divyam Jain	TO study the Modelling, Simulation and Analysis of Bioreactors using MATLAB as a tool	Dr. Amit Jain	Chemical
79	2012B4A2675P	RAAG KHANDELWAL	Dynamic classifier selection using meta learning	DR KAMLESH TIWARI	Maths
80	2012B4A2704P	RAHUL JAIN	TRANSPORT PLANNING AND TRAFFIC SUMILATION AT USING STSTISTICAL MODELLING	DR. AMIT GOEL	Civil
81	2012B4A3173P	SATWIK PRABHU K	GRAPH CLUSTRING ALGORITHMS	DR RAJEEV KUMAR	Maths
82	2012B4A3364P	AYUSH GOYAL	Asset Pricing in Over the Counter Markets	DR ARUN KUMAR VAISH	Maths
83	2012B4A3622P	RAJEEV DUTT MISHRA	stochastic modelling of wind power based microgrid	DR H D MATHUR	EEE
84	2012B4A3631P	AKSHAY	Comparative study of some nature-inspired optimization techniques	DR CHANDRA SHEKHAR	Maths
85	2012B4A3716P	AKSHIT GOEL	Performance Analysis of Spectrum Allocation Strategies in Cognitive Radio Network	DR RAKHEE	Maths
86	2012B4A4511P	PAVAN KUMAR	Numerical Simulation of two oppositely charged drops	DR SHYAM SUNDER YADAV	Maths

S.No	BITS ID	Name	Title	Supervisor	Department
87	2012B4A4587P	VAIBHAV	High temperature thermal energy storage system with phase change material	DR P SRINAVASAN	Mechanical
88	2012B4A4731P	GRANDHI NAGA	NUMERICAL SIMULATION OF COMPRESSIBLE FLOW OF CARBON DIOXIDE THROUGH AN EJECTOR	DR SHYAM SUNDER YADAV	Maths
89	2012B4A7138P	ILASHREE	Secure Multiparty Computing : Efficient Protocols and Voting	DR ASHUTOSH BHATIA	Maths
90	2012B4A7258P	SWARAJ DALMIA	Proof Complexity	ABHISHEK MISHRA	Csis
91	2012B4A7819P	AMITAYUSH THAKUR	PROgram Synthesis using Examples (PROSE) – automatic generation of programs from input-output examples at runtime	Naren Datha	Csis
92	2012B4A8624P	ARITRA DAS	Mathematical Modeling of AIGaN HEMTs	DR V K CHAUBEY	Maths
93	2012B4A8626P	Nikita Tanwani	EEG Signal processing	Dr. Pawan K. Ajmera	EEE
94	2012B4A8674P	BHAVYA VAID	Machine Condition Monitoring using Vibro-Acoustic Signal Processing	DR K K GUPTA	EEE
95	2012B4A8678P	KESHAV RAHEJA	Low Power Design Techniques : Dynamic Voltage and Frequency Scaling	Dr. Abhijit R. Asati	EEE
96	2012B4AB727P	Romanch Arya	Design and Development of Modular Production System in Learning Factory at BITS Pilani	Prof. K.S.Sangwan	Maths
97	2012B4AB728P	SAGAR CHOURASIA	SUPPLY CHAIN MANAGEMENT	DR SRIKANT ROUTROY	Mechanical
98	2012B5A1379P	Lavleen Bhati	Study of Ferroelectric compounds by Multiple Scattering modeled X-Ray Photoelectron diffraction.	Rakesh Choubisa	Physics
99	2012B5A1555P	Shefali Gupta	Quantum hall effect in graphene	Madhukar Mishra	Physics
100	2012B5A1656P	Vaibhav Singh	Neutrino physics and it's astrophysical implications	Madhukar Mishra	Physics
101	2012B5A1679P	NEIL DAVE	Study of hybrid semiconductors in the form of nanoclusters using density functional theory approach	Dr DEBASHIS BANDHOPADHY	Physics
102	2012B5A1705P	Premmasani Sri Krishna Prasad	Graphene layer on transition metals : Growth and Characteristics	Subhashis Gangopadhyay	Physics
103	2012B5A1711P	Ameey Pathak	Machine learning modelling of chaotic time series	Rakesh Choubisa	Physics
104	2012B5A1719P	Nandan Luthra	Properties and Characteristics of Semi Conductor Thin Films	Subhashis Gangopadhyay	Physics
105	2012B5A2604P	ARUN PILLAI	Analysis of Soil Resistivity	DR. SHIBANI K JHA	Civil
106	2012B5A2681P	Anchal Garg	STUDIES ON AN-ISOTROPIC HYDRODYNAMICS AND ITS APPLICATIONS	Madhukar Mishra	Physics
107	2012B5A2709P	NAMAN MUNOT	WATER QUALITY ANALYSIS ON RIVER GANGA	Dr R SRINIVAS	Civil

S.No	BITS ID	Name	Title	Supervisor	Department
108	2012B5A2712P	Yashvardan Chamoli	Study of Hydrogen Storage and Dissociation using Density Functional Theory	Debashis Bandyopadhyay	Physics
109	2012B5A3546P	Rohit Goel	Power management design techniques: Dynamic voltage and frequency scaling	Dr. Abhijit R Asati	EEE
110	2012B5A3554P	Saurjya Sarkar	Study of surroundings of YSOs near 30 Doradus using JUST data	Kaushar Vaidya	Physics
111	2012B5A3641P	Pawas Sandesh Shukla	Designing an algorithm to embed a nanoparticle within shells of empty cells for the strengthening of the multiple scattering calculations	Rakesh Choubisa	Physics
112	2012B5A3645P	Vatsal Panwar	Design and Development of UWB polygonal patch antenna	Dr. Rahul Singhal	EEE
113	2012B5A3651P	Mohit Bhardwaj	Epoch of Reionisation studies: Understanding Artefacts in the data due to shape of the Telescope Beam	DR RACHEL WEBSTER	EEE
114	2012B5A3663P	KUNJESH AGASHIWALA	Study of Transition Metal Di-Chalcogenide based optoelectronic devices	DR V K CHAUBEY	EEE
115	2012B5A3697P	Anamika Aggarwal	Upgrade of leavel -1 Trigger for CMS (compact muon Solenoid) detector.	Dr. Praveen Kumar AV	EEE
116	2012B5A4411P	Aditya Rakesh Kulkarni	THIN-WALL MACHINING	Dr. T.C.Bera	Mechanical
117	2012B5A4579P	Mukul	Graphene Layer on Transition Metals : Growth and Characterization	Subhashis Gangopadhyay	Physics
118	2012B5A4693P	Adit Makhijani	Condensed Matter Experimental Physics	Anshuman Dalvi	Physics
119	2012B5A7589P	RAJATH S	PARALLELIZATION OF SEARCH AND DATA REPRESENTATION ALGORITHMS	S. BALASUBRAMANIAM	Csis
120	2012B1A7801P	PRABODH AGARWAL	Incremental deployment of SDN in enterprise networks	K HARIBABU	Csis
121	2012B5A8529P	Ashutosh Tripathi	DFT study of silicon based Hybrid Semiconductor Clusters	Debashis Bandyopadhyay	Physics
122	2012B5A8565P	Shalini Mitra	Fabrication and Characterization of Solid Polymer Electrolyte	Anshuman Dalvi	Physics
123	2012B5A8567P	SUMANTRA SHARMA	Solvent effect on absorption and fluorescence spectra of cinchonidine	DR D D PANTH	Physics
124	2012B5A8644P	Mihir Sharma	DFT study of Ge based hybrid semiconductor clusters	Debashis Bandyopadhyay	Physics
125	2012B5A8684P	Vipul Vaidya	Optimization of Quantum Systems using Genetic Algorithm	Jayendra N Bandyopadhyay	Physics
126	2012B5AB469P	Tejas Anil Bugdani	Quantum Mechanical processes in Avian Magnetoreception	Jayendra N Bandyopadhyay	Physics
127	2012B5AB596P	Sai Venkata Reddy Anumula	DFT study of transition metal doped hybrid semiconductor nanoclusters	Debashis Bandyopadhyay	Physics
128	2012B5AB647P	Mudit Gandhi	Nassicon based Ceramic and glass conductivity testing	Anshuman Dalvi	Physics

S.No	BITS ID	Name	Title	Supervisor	Department
129	2012B5AB659P	Varun Iyer	Using physical models to analyse the stock market	Madhukar Mishra	Physics
130	2012B3A3468P	SHIKHAR KEJRIWAL	SPARE PARTS INVENTORY MANAGEMENT	Satyendra Sharma	Eco. & Fin.
131	2012C7A2850P	RAHUL BUDHADEV	ENVIRONMENTAL ENGINEERING	DR. ANUPAM SINGHAL	Civil
132	2012C7B3844P	SHRADDHA PANWAR	CoCo (Contingent Convertible) Bonds price Modeling using R programming	Dr. A.K Giri	Eco. & Fin.
133	2013A1TS747P	Suvesh Lalwani	Synthesis and Characterization of Aggregation Induced Emmission Pt complex encapsulated in mesoporous silica nanoparticles	Dr. Banasri Roy	Chemical
134	2013A2TS101P	LEELA MANAS BAYIREDDY	PATTERN RECOGNITION FROM TRANSPORTION DATA	DR PRASANTA KUMAR SAHU	Civil
135	2013A2TS008P	YIMKUM I OZUKUM	USING WT DISTRIBUTION BY FIELD EXPERIMENT RESISTIVITY TEST	DR SHIBANI JHA	Civil
136	2013A2TS657P	HIMANSHU SETIA	Behaviour of coupling beams.	DR DIPENDU BHUNIA	Civil
137	2013A3TS216P	Abhishek Shankar	Neuromorphic architectures and their simulation	Dr. Chandra Shekhar	EEE
138	2013A3PS315P	RAGHU RAMI REDDY BALLARY	#N/A	DR RAJNEESH KUMAR	EEE
139	2013A3TS070P	Dishant Sangani	Carbon Nanotube based Piezoresistive sensors	DR MARTIN CLAUS	EEE
140	2013A3TS250P	PRAJYOT GUPTA	Reconfigurable approximate computing systems	DR AKASH KUMAR	EEE
141	2013A3TS326P	ANUJ YADAV	Automatic Tuning of Probe Noise for Continuous Acoustic Feedback Cancellation in Hearing Aids	DR G M SUNDARAM	EEE
142	2013A4TS002P	Saurav Dwivedi	Analysis of bearing defects	Dr. Arun Kumar Jalan	Mechanical
143	2013A4TS048P	Sagnik Mukherjee	HEAT EXCHANGER DESIGN FOR REFRIGERATION SYSTEM	Dr. M.S.Soni	Mechanical
144	2013A4TS084P	Sayyed Mudassir Ali	Estimator design for sequential hybrid system.	Dr. Amol Marathe	Mechanical
145	2013A4TS143P	Yash Talwekar	Multiple Scales Analysis of Wind Turbine Blade Vibrations	Dr. Shyam Sunder	Mechanical
146	2013A4TS170P	Ritwok Subir Das	SUPERSONIC TWO PHASE FLOW OF CO2	Dr. Shyam Sunder	Mechanical
147	2013A4TS191P	Tejas Shivanand Mane	Heat transport in collisionless plasmas	Dr. Mari Chandra	Mechanical
148	2013A4TS221P	Nishant Elkunchwar	Study of kinematics of flow in deformable medium using Riemannian geometry	Dr. Tapomoy Guha Sarkar	Mechanical
149	2013A4TS227P	Sagar Shorey	Integration of Solar Thermal Systems with Thermal Power Plants	Dr. M.S.Soni	Mechanical
150	2013A4TS252P	Apoorv Vaish	Design, Prototyping and Testing of Soft Robots	Dr. Pablo Valdivia	Mechanical
151	2013A4TS266P	Akshat Jain	MECHANICAL BEHAVIOUR OF COMPOSIT MATERIAL	Dr. Mulali Palla	Mechanical
152	2013A4TS305P	Shyam Sundar Sankaran	Tranport processes in magnetized plasmas	Dr. Mani Chandra	Mechanical

S.No	BITS ID	Name	Title	Supervisor	Department
153	2013A4TS336P	Aranav kacker	APPLICATION OF NERUAL NETWORKS IN ROBOTICS	Prof. B.K.Rout	Mechanical
154	2013A4TS352P	Arun Sreyas Palle	Design of a Waste-to-Energy Reactor	Mr. Christian Stauble	Mechanical
155	2013A4TS373P	Chandan Stija	Motion Planning of Biped Robots	Prof. B.K.Rout	Mechanical
156	2013A4TS389P	Rohan Sanghvi	Thermal Management of MEMS Systems	Dr. M.S.Soni	Mechanical
157	2013A4TS402P	S.Rahul	Aeroelastic Flutter or large wind turbine blades	Dr. Sandeep Dhar	Mechanical
158	2013A4TS410P	Chandra Bhan Singh Ch.	Numerical Analysis of Ball Bearing	Dr. Arun Kumar Jalan	Mechanical
159	2013A4TS753P	Siddhant Pundir	Study of Energy and Efficiency of Machine Tools	Prof. K.S.Sangwan	Mechanical
160	2013A5TS929P	Amit Pratik Sinha	DESIGN SYNTHESIS AND EVALUATION OF ANTI-CANCER AGENTS	Dr. Hemant R Jadhav	Pharmacy
161	2013A5TS941P	Uday Joshi	Design, synthesis and in-vitro evaluation of anticancer agents	Dr. Hemant R Jadhav	Pharmacy
162	2013A7TS018P	Abhinav Baid	A DSL for automatic optimization of DSP pipelines	Uday Reddy B	CSIS
163	2013A7TS039P	BAPIRAJU V. TADIKONDA	Constructing Resources for Code-Mixed Text	YASHVARDHAN SHARMA	CSIS
164	2013A7TS073P	SHIVIN SHRIVASTAVA	Development and Design of a distributed data structure for anytime mining of data streams	POONAM GOYAL	CSIS
165	2013A7TS078P	YASHASVI GALAV	Firearms detection from video feed	NAVNEET GOYAL	CSIS
166	2013A7TS079P	ADITYA SHARMA A.S.	Parallel Clustering Algorithms	POONAM GOYAL	CSIS
167	2013A7TS083P	KSHITIJ BUDHANI	Medical Image Analysis using Deep learning techniques	SUNDARESAN RAMAN	CSIS
168	2013A7TS087P	GAYATRI H BHAT	Computational Modeling of Grammatical Constraints on Code-Switching	Monojit Choudhury	CSIS
169	2013A7TS100P	ANUJ BANSAL	SLAM FOR MULTI-ROBOT-SYSTEM	SUDEEPT MOHAN	CSIS
170	2013A7TS119P	SANKEET SHAH	Device-to-device file sharing as a network substrate	Bill Thies	CSIS
171	2013A7TS126P	GYANENDRA MISHRA	ADVANCING PROTECTION OF CYBER PHYSICAL SYSTEM	Aditya P Mathur	CSIS
172	2013A7TS129P	PURAV SHAH	Language Detection and its application to Machine Translation	Gopal Srinivasa	CSIS
173	2013A7TS149P	ATISHAY JAIN	PARALLEL FRAMEWORK FOR DENSITY BASED SUBSPACE CLUSTERING	POONAM GOYAL	CSIS
174	2013A7TS161P	GARGI SHARMA	Text Summarization using Paraphrase Detection in Indian languages	YASHVARDHAN SHARMA	CSIS
175	2013A7TS164P	NITESH VIJAY	End to end Encrypted Chats synced across multiple devices of user	Yatin Sarbalia	CSIS
176	2013A7TS179P	NILAY JAIN	CONFIGURATION AND PROGRAMMING OF HIGN PERFORMANCE COMPONENTS	Devashish Sharma	CSIS
177	2013A8TS186P	NANI VISHNU VARDHAN REDDY	Design and Optimization of Infrared based Free Space Optical Networks	DR RAHUL SINGHAL	EEE



S.No	BITS ID	Name	Title	Supervisor	Department
178	2013A8TS272P	Gsrvit Goel	Implementation of RCAC algorithm on FPGA	Dennis S . Rernstein	EEE
179	2013A8TS343P	ACHINT MITTAL	Harnessing Automobiles for Safety	GOPAL SRINIVASA	EEE
180	2013A8TS404P	GAURAV SHRIVASTAVA	Extraction of spatial entities from text and associated information	DR MATHIEU ROCHE	EEE
181	2013A8TS427P	R.S.Veerarraghavan	Quantum Transport using NEGF formalism	KARI BABU RAVI TEJA	EEE
182	2013ABTS573P	Aditya Pande	Gesture recognition based control for industrial robots	Prof. B.K.Rout	Mechanical
183	2013ABTS745P	Mridul Gupta	Understanding various aspects of post harvest supply chain of perishable and semi perishable agricultural products	Dr. Murali Palla	Mechanical
184	2013ABTS771P	Hemabh Trivedi	: Development of framework for estimation of manufacturing process reliability	Prof. R.P.Mishra	Mechanical
185	2013B1TS860P	Ritaik chakradhau	Understanding miRna-mRna interaction profile using network theory	Dr.Shibasish Chowdhury	Biology
186	2013B5TS448P	Namitha Suresh	Electroweak Baryogenesis in the Froggatt-Nielsen Mechanism with Varying Yukawas	Geraldine Servant	Physics
187	2013B5TS960P	Soma Mishra	Fabrication and low-temperature characterization of superconducting thin film microwave resonators of Aluminum and Niobium	Vibhor Singh	Physics
188	2013D2TS988P	YASHODHARA	Predicting energy efficient behaviour based on people's value systems, beliefs and attitudes: A comparative case study of India and Germany.	DR SAILAJI N	HSS

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S.No	BITS ID	Name	Topic	Supervisor	Department
1	2014A5PS843P	Anannya Sirkar	Effect of acute Kidney Injury and simultaneous hyperglycemia on liver functioning	Dr. Anil Gaikwad	Pharmacy
2	2011A5PS800P	R.Sanjula	Standardization of natural drugs	Dr.Atish Paul	Pharmacy
3	2013B5A3440P	PIYUSH SHARDA	Unifying star formation laws with alma	Dr. Christoph Federrath	EEE
4	2014A3PS212P	Nihal Murali	Deep learning and representation learning for sequential data	DR GRAHAM TAYLOR	EEE
5	2014A8PS367P	Akshay Mundra	Deep learning applied to autonomus driving task	DR ANTONIO LOPEZ	EEE
6	2014A3PS182P	Jetti Sai Gowtam Chandrahasa	Piezo electric bending actutors in high electric foeld system	Dr. Nilanjan Chattaraj	EEE
7	2014A8PS529P	Siddharth V. Iyer	Interactive coding schmes for noise resilient communication	DR RAN GELLES	EEE
8	2013B5A3680P	Shubhendra Singh	Design considerations for application specific VLSI processor	Dr. Chandra Shekar	EEE

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9	2014A3PS188P	Kunal Gupta	Adaptive learning control	DR Y U HAOYONG	EEE
10	2014A3PS288P	Abhishek Goel	Pose estimation for action recognition	DR FRANCOIS BERMOND	EEE
11	2014A3PS216P	Ayeha Vermani	application specific advanced computer architecture	Dr. Chandra Shekar	EEE
12	2014A3PS225P	Deepankar Jain	Biometric identification	Dr. K K Gupta	EEE
13	2013A3A7244P	A. Anjana	Implementation of light-weight cryptography protocols	Dr. Chandra Shekar	EEE
14	2014A3PS174P	Vishv Shrava Sharma	Computer Vision (nutrients from image)	DR RAMESH JAIN	EEE
15	2013B4A8103P	Subham Sharma	Design and analysis of aspects of physical layer of IOT communication system	Dr. Sainath Bitragunta	EEE
16	2013C2PS140P	Virinchi Ready Katthula	TUNNLED IOT PROTOCOL	Dr. Sailaja Nandigama	HSS
17	2013B2A2845P	Harsh Sharma	Amino Catalytic Synthesis of Oxazepine Related Scaffolds.	Dr. Indresh Kumar	Chemistry
18	2013B2A4224P	Abhishek Raj	Synthesis of new aggregation induced emission active polymers and study of its photophysical properties.	Dr. I R Laskar.	Chemistry
19	2013B2A4313P	Aditya Chauhan	Detailed catalytic study of properties of encapsulated metal complexes in Zeolite-Y and MCMY.	Dr. Saumi Ray	Chemistry
20	2013B2A4777P	Surayans Tiwari	Amine Catalysed Synthesis of Nitrogen Heterocycles.	Dr. Indresh Kumar	Chemistry
21	2013B2A4802P	Abhishek Kathuria	Studies in Carbonylation reactions.	Dr. Bibhas R Sarkar	Chemistry
22	2013B2A4830P	Karthik Maddipoti	Comparative Catalytic Studies of Hybrid Host-Guest Systems by Changing the Hosts.	Dr. Saumi Ray	Chemistry
23	2013B2A7803P	Anshul Chhabra	Study of host-guest hybrid systems as catalyst for dye degradations.	Dr. Saumi Ray	Chemistry
24	2013B2A7850P	Deepanshu Gupta	Computer Code Development in Electronic Structure Method.	Dr. Prashant U Manohar	Chemistry
25	2013B2A1825P	Devansh Agrawal	IR Dehydration of fruits & vegetables.	Dr. Bharti Khungar	Chemistry
26	2013B2A1844P	Anant Kumar Jain	Synthesis of Copper(II) Complexes using D-Glucose Derivatives and their Application in Oxid Reaction.	Dr. Ajay Kr. Sah	Chemistry
27	2013B2A3026P	Hardik Mittal	Study Epoxidation of FAME Biodiesel Molecules.	Dr. Bibhas R. Sarkar	Chemistry
28	2013B2A3824P	Sarthak Raheja	Synthesis of bimetallic nanoparticles via under potential deposition technique.	Dr. Surojit Pande	Chemistry
29	2013B2A3838P	Harsh Sinha	Emission properties of triplet harvesting materials in the reverse micelles of gemini surfactants: Effect of spacer chain length of the surfactants.	Dr. Subit Kr. Saha	Chemistry
30	2013B2A4416P	Aishwarya Sharma	Pyranopyrazolone Pyrimidine Synthesis and Molecular Docking.	Dr. Paritosh Shukla	Chemistry

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31	2013B2A7839P	Abhishek Sharma	Computer code development in electronic structure methods.	Dr. Prashant U Manohar	Chemistry
32	2013B2A8732P	Hridhay M	Synthesis of Novel Nitrogen based Heterocycles as Potential anti-cancer agents.	Dr. Dalip Kumar	Chemistry
33	2013A7TS197P	PRASOON TRIVEDI	Benchmarking of Scheduling Algorithms	ABHISHEK MISHRA	CSIS
34	2013B1A7542P	MANESH NARAYAN K	Parallelization of Machine Learning Algorithms	S.Balasubramaniam	CSIS
35	2013B4A7743P	AKUL SAREEN	Quantum Algebraic & Number Theoretic Algorithms	ABHISHEK MISHRA	CSIS
36	2013B5A7713P	RAHUL SHARMA	A framework for network monitoring in software Defined Networks	K HARIBABU	CSIS
37	2014A7PS018P	PARITOSH VERMA	A study of topics related of dynamic and distributed graph algorithms	S.Balasubramaniam	CSIS
38	2014A7PS070P	ANKIT SULTANA	Parallelization of graph clustering constructs in DWARF	S.Balasubramaniam	CSIS
39	2014A7PS128P	GAURANG BANSAL	A Framework for Analysis of Lung Cancer Images	SUNDARESAN RAMAN	CSIS
40	2013B2A7827P	SRAJIT SAKHUJA	Statistical Natural Language Processing and Machine Learning with Sentimental Analysis, Domain	Lu Wei	CSIS
41	2013B4A7588P	ANMOL KUMAR GUPTA	Generalization of Net Surface Problem for Precise Quantifications of constraint cell shape changes	Florian Jug	CSIS
42	2014A7PS093P	DIVAKAR VERMA	Improving the Scalability and Efficiency of the Systematic Paradigmatic Model	Simon Dennis	CSIS
43	2014A7PS096P	PRANAV MISRA	Understanding Mechanisms of High Level Vision, Combiing Behavioral Work and Computational Models	Gabriel Kreiman	CSIS
44	2014A7PS104P	AKANKSHA DARA	Building an Association Based Model of Sentence Processing for Information Extraction Using Neural Networks	Simon Dennis	CSIS
45	2014A7PS108P	M SHARAT CHANDRA	Real Time Telemetry of Streaming Video Traffic Using SDN	Vijay Sivaraman	CSIS
46	2014A7PS132P	DIVISH DAYAL	Investigating Instructor Intervention in MOOC discussion forums	Min-Yen Kan	CSIS
47	2014A7PS137P	A ESHWAR RAM	Matchings in Bipartitic Graphs	Prajakta Nimbhorkar	CSIS
48	2012B4A4199P	Aniruddha Ghosh	Design of Health Insurance Premiums	Sumanta Pasari	Mathematics
49	2013B4A1786P	Ankur Kumar	Fluid Dynamics	B K Sharma	Mathematics
50	2013B4A3744P	Lakshit Agarwal	Analysing market demand using multivariate statistical analytical tools for a solar products industry	Anil K Bhat	Mathematics
51	2013B4A3765P	Devraj Palit	Delay Tolerant Networking	V S Shekhawat	Mathematics

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			Test bed design and implementation		
52	2013B4A4768P	Akash Panigrahi	Supply Chain Management	Srikanta Routray	Mathematics
53	2013B4A7470P	Pranjal Gupta	Artificial Neural Networks	Rajiv Kumar	Mathematics
54	2013B4A7513P	Harmeet Singh Lamba	Numerical Methods for Partial Differential Equations involved in Financial Markets	Devendra Kumar	Mathematics
55	2013B4A7582P	Ketan Chandak	Graph Clustering	Rajiv Kumar	Mathematics
56	2013B4A7586P	Jaskamal Kainth	Numerical Solutions for Partial Differential equations in Option Pricing	Devendra Kumar	Mathematics
57	2013B4A7601P	Pryanshu Arora	Algorithmic Graph Theory	Rajiv Kumar	Mathematics
58	2013B4A7616P	Thakkar Vandit Arvindbhai	Comparative Study of Some Metaheuristics Optimization Algorithms	Chandra Shekhar	Mathematics
59	2013B4A7716P	Arjun Dabra	Character Sum and Their Applications	P.H.Keskar	Mathematics
60	2013B4A7725P	S Vivek	Partial Differential Equations in Hilbert Spaces	Rajiv Kumar	Mathematics
61	2013B4A7834P	Deepanshu Nagpal	Development of Efficient Methods for Face Recognition	Sumanta Pasari	Mathematics
62	2013B4A1211P	Tanuj Arora	Application of Block Chain enabled framework for supply chains in the public health arena	Shashank Garg	Mathematics
63	2013B4A3619P	Shivani Deepak Choudhary	Internet of Things	Jörg Henkel	Mathematics
64	2013B4A4726P	Varun Karulkar	Moving Boundary Problems and Application of Finite Element Methods in Fluid Structure Interactions	Ramsharan Rangarajan	Mathematics
65	2013B4A8738P	Neel Dipesh Choksi	Investigation and Modelling of Brillouin gain in span fiber	Li Qian	Mathematics
66	2013B1AB864P	ANIKET SINGH	Effect of hypothermia on cancer cells	UMA S. DUBEY	Bio
67	2013B1A4576P	AKSHAY GOYAL	Membrane protein simulation and docking	SHIBASHISH CHOWDHURY	Bio
68	2013B1A7856P	ANISH SHAH	Analysis of cis regulatory element in wheat genome	RAJESH MEHROTRA	Bio
69	2013B1A1852	PRIYANK KUMAR CHAUHAN	In silico characterization of a hypothetical protein from Plasmodium sp.	SHILPI GARG	Bio
70	2013B1A7421P	SOURABH BANSAL	Identification of bidirectional promoters in Plasmodium sp.	SHILPI GARG	Bio
71	2013B1A7377P	APURVA V. KULKARNI	Characterization of a hypothetical protein from Plasmodium sp.	SHILPI GARG	Bio
72	2013B1A3862P	GEETA BANSAL	Mathematical modeling of social interaction	SANDHYA AMOL MARATHE	Bio
73	2013B1A2370P	HIMANSHU SHRIVASTAVA	To study the immunological properties of milk	UMA S. DUBEY	Bio
74	2013B1A7865	HARSHIT OBEROI	Plant biotechnology/ Computational	SANDHYA MEHROTRA	Bio
75	2013B1A4263P	SIDDHANT DANG	Genomic analysis of Arabidopsis thaliana	RAJESH MEHROTRA	Bio
76	2013B1A2444P	SRIVALLI CHALLA	Environmental biotechnology	S. K. VERMA	Bio

S.No	BITS ID	Name	Topic	Supervisor	Department
77	2013B1A8846P	KUNAL PARNAMI	Understanding modular basis of recognition of mRNA by miRNA	SHIBASHISH CHOWDHURY	Bio
78	2013B1A7858P	KHITIJ GANDHI	Understanding modular basis of recognition of mRNA by miRNA	SHIBASHISH CHOWDHURY	Bio
79	2013B1A3848P	DEWANSHU SEWAKE	Field-Programmable Lab-on-a-Chip (FPLoC) for bio-medical tests	Prof. CHEN-YI LEE	Bio
80	2013B1A8817P	TARUN KUMAR VANGANI	Neural networks and machine learning for sequence classifications, summarization etc.	Dr. YUE ZHANG	Bio
81	2013B1A1854P	ABHIJEET CHOWDHURY	Identification of RNA binding proteins that regulate miRNA biogenesis	Prof. Dr. GUNTER MESITER	Bio
82	2013B1A7401P	SAMYADEEP BASU	Development of machine learning methods or RNA sequencing data analysis	Dr. DENIS THIEFFRY	Bio
83	2013B1A1238P	ARNAB CHAKRABORTY	Protein refolding from inclusion bodies of E. coli.	Dr. AMULYA K PANDA	Bio
84	2013B2A1782P	Devansh Agrawal	Development of soft sensor for hydrocracker product quality prediction.	Prof. Hare Krishna Mohanta	Chemical
85	2014A1PS541P	Lakshya Kr Sharma	Data driver process monitoring in polymer industry.	Dr. Ajaya Kr. Pani	Chemical
86	2014A1PS678P	Devang Falor	Improvement of the existing computational approach employed for grain resolving simulation of flows over sediment beds.	Prof. Eckart Meiburg	Chemical
87	2014A1PS716P	Shashank Bhardwaj	Modeling, simulation and sensitivity analysis of methyl acetate reactive distillation process.	Prof. Hare Krishna Mohanta	Chemical
88	2013B3A1549P	Aakash Juneja	Applications of control theoretic models for stock trading.	Dr. Ajaya Kr. Pani	Chemical
89	2013B2A2826P	Buddhavarapu Spandana	Study of residual life of functionally graded composite beams.	S.B. singh	Civil
90	2013B1A2235P	Akshay Jhamb	Investigation into the behaviors of medium high low Lang subjected to hath earthquake and wind load.	Dipendu Bhunia	Civil
91	2014A2PS631P	Pradyumn Awasthi	Variation iteration method (VIM) and its application in structural Analysis.	Manoj kumar	Civil
92	2014A2PS537P	Arun kumar Sharma	Effect on ductility of beams due to high strength concrete.	G. Muthu kumar	Civil
93	2014A2PS547P	Abhishek kumar Jha	Comparative analysis of codal provisions for RCC design.	G. Muthu kumar	Civil
94	2014A2PS524P	Anurag Agrawal	Analysis of bridges using FEM	Manoj kumar	Civil
95	2014A2PS528P	Divyanshu Shankar	Water quality assessment of river ganga using fuzzy logic.	R. srinivas	Civil
96	2014A2PS503P	Shubham Aggarwal	Structural health assessment and rehabilitation.	S.B. Singh	Civil
97	2014A2PS720P	Shreya Pranav	Structural health assessment and	S.B. Singh	Civil

S.No	BITS ID	Name	Topic	Supervisor	Department
			rehabilitation.		
98	2014A2PS622P	Salil Dubey	Use of plastic coated aggregate for porous pavements.	Amit Goel	Civil
99	2014A2PS769P	Harsh Srivastava	Design of different units of water treatment plant and polarization of its network.	Anupam Sighal	Civil
100	2014A2PS516P	Rajesh Beniwal	Bituminous usir design using plastic coated aggregate.	Amit Goel	Civil
101	2014A2P5791P	Kanishk Saxena	Design for waste water treatment with advanced oxidation process.	Anupam Singhal	Civil
102	2014A2PS685P	Airson	Non-linear push over analysis of RC structures.	G. Muthu Kumar	Civil
103	2014A2PS623P	Mayank Vikhona	Groundwater modeling.	Anupam Singhal	Civil
104	2013B1AB864P	Aniket Singh	Development of a model for assessment of mechanical Components reliability	R.P.Mishra	Mechanical
105	2014A4PS374P	Vasu Sharma	Airbone wind energy systems	Moritoz Diehl	Mechanical
106	2014A4PS357P	Priyanjal Joy	Optimizing Skus (Stock Keeping Units) for Better Supply Chain	Satyendra Sharma	Mechanical
107	2014A4PS415P	Abhinav Modi	Analysis of a biped humanoid for Reduction of Vibrations while walking	B.K.rout	Mechanical
108	2013B3AB565P	Nikhil R.	Design of flexible fixtures for manufacturing	R.P.Mishra	Mechanical
109	2013B1AB428P	Tanhia Chitle	Manufacturing + Biological Sciences	Girish Kant	Mechanical
110	2013B2A4825P	Yashitha Jaiswal	Supply Chain Management	Srikanta Routroy	Mechanical
111	2013B2AB835P	Prekshar Agrawal	Supply chain Management Risk analysis of agriculture supply chain	Girish Kant	Mechanical
112	2014A4PS059P	Doshi Ajinkya Ajaykumar	Homotopy Analysis method and galerkin projections to solve strongly nonlinear possibly non-smooth problems	Amol M. Marathe	Mechanical
113	2014A4PS389P	Divya Dhingra	Mathematical Immunology Modeling of salmonella Infection	Amol M. Marathe	Mechanical
114	2014ABPS786P	Shubham shukla	Supply Chain Management	Srikanta Routroy	Mechanical
115	2013B5A7810P	Srajan Jain	Surface Plasmon Resonance	R K Gupta	Physics
116	2013B5A7674P	Ravindra B Chaturvedi	Transition Metal Doped Cationic Al-P Nano-Clusters	D Bandyopadhyay	Physics
117	2013B5A3451P	Pawan Saran	Transition Metal Doped Cationic Aluminium Phosphorous Nano-Clusters	D Bandyopadhyay	Physics
118	2013B5A2618P	Apoorv Khanuja	Si-P Hybrid Semiconductor Cluster With Diffused Transition Metal Atom : A Density Functional Invetsigation	D Bandyopadhyay	Physics
119	2013B5A3780P	Rishabh Agarwal	Design, Modelling and FEM Similation of Capacitive Micromachined Ultrasonic Transducer	S Gangopadhyay	Physics

S.No	BITS ID	Name	Topic	Supervisor	Department
120	2013B5A4534P	Rishabh Subhash Chaure	Heat Transfer Simulation and Material Response in Nuclear Reactor Core	P Srinivasan	Physics
121	2013B5A3355P	Anirudh Venu	Quantum Complex Networks	S Gangopadhyay	Physics
122	2013B5A2572P	Rahul Narula	Rahul Narula	J N Bandyopadhyay	Physics
123	2013B5A7664P	Arjav Nag	Simulation Based Studies of the Folding of Biopolymers	Navin Singh	Physics
124	2013B5A7635P	Anand Maurya	Cosmological Structure Formation : Excursion Set Approach	T G Sarkar	Physics
125	2013B5A7488P	Ansh Shah	Molecular Dynamics Simulation of DNA Unfolding	Navin Singh	Physics
126	2013B5A7066P	Dhairya Mittal	Computation Studies of DNA Dynamics	Navin Singh	Physics
127	2013B5A8554P	Mohammad Siraj	Helicoidal Structure of DNA	Navin Singh	Physics
128	2013B5A8539P	Nityasa Mishra	Fundamental Issues in Neutrino Oscillations and their resolutions	Sudhakar Pande	Physics
129	2014B5TS958P	Aarushee Rangra	Design of reconfigurable RF antennas based on ionic electroactive polymers and carbon nanomaterials	Christian Bergaud	Physics
130	2013B5A4806P	Rajshikhar Gupta	Design of reconfigurable RF antennas based on ionic electroactive polymers and carbon nanomaterials	Ram Govindarajan	Physics
131	2013B5A4583P	S Sarath Sankar	Dynamics of Vortices In Vescoelastic Fluids	Sreenivas K R	Physics
132	2013B5AB462P	Balavasun Pedapudi	Design Of Beam Optics for Scanning Elect Micros	Mani Chandra	Physics
133	2013B5A4688P	Aditya Vijaykumar	Aspect of Complexity In Locality, Entanglement Qua Gravity	Chetan Krishnan	Physics
134	2013B3A3658P	VINAYAK AWASTHI	Qualitative and quantitative analysis for the efficiency of renewable sources of energy with a context to indian power generation environment	KRISHNA M	Eco. & Fin
135	2013B3A7722P	AKSHIT BHATIA	Agriculture supply chain analysis and use of big data	SATYENDRA KUMAR SHARMA	Eco. & Fin
136	2013B3A7304P	TANAYA JHA	Application for supply chain risk management through visualization and value at risk quantification	SATYENDRA KUMAR SHARMA	Eco. & Fin
137	2013B3A7751P	VAIBHAV AGARWAL	Application of markov chain stochastic model on stock market	NVM RAO	Eco. & Fin
138	2013B3A7603P	SURBHI DANG	Mergers and acquisitions	ARUN KUMAR VAISH	Eco. & Fin
139	2013B3A7755P	ADITI	Service quality, value drivers, identification and prioritisation in indian banking sector	ARUN KUMAR VAISH	Eco. & Fin.
140	2013B3A3530P	JAIN PRACHI	Customer relationship management value drivers identification and prioritization in indian airlines	ARUN KUMAR VAISH	Eco. & Fin.

S.No	BITS ID	Name	Topic	Supervisor	Department
141	2013B3AB621P	KETUL MATHURIA	Finances in advertisement industry	SANGEETA SHARMA	Eco. & Fin.
142	2013B3A7543P	AKSHAY R	Framework for creating and effective learning environment in higher educational institutes for millennial and post-millennial generation	JAYASHREE MAHESH	Eco. & Fin.
143	2013B3A7704P	VAIBHAV SHRIMAL	Assessing the moderating effect of customer engagement of the relationship of brand image-customer loyalty	PRAVEEN GOYAL	Eco. & Fin.
144	2013B3A7480P	KUNAL TODI	To assess and prioritize value drivers of service quality for telecom sector	DR JYOTI	Eco. & Fin.
145	2013B3A7496P	LOVEPERTEEK SINGH	Modelling and software design to dynamically predict credit worthiness of borrowers	DR ARUN KUMAR VAISH	Eco. & Fin.
146	2013B3A7702P	SIMRAN KAUR	Supply chain analytics	SATYENDRA SHARMA	Eco. & Fin.
147	2013B3A1611P	SUMANT S MULKALWAR	Green marketing: literature review	DR ARUN KUMAR	Eco. & Fin.
148	2013B3A8365P	TANYA SRIVASTAVA	Supply chain analytics	SATYENDRA SHARMA	Eco. & Fin.
149	2013B3A7608P	NIPUM JAIN	Analysis of food inflation in india through machine learning	KRISHNA M	Eco. & Fin.
150	2013B3A3435P	KARDIK GUPTA	Facility layout problem	RAJESH MATAI	Eco. & Fin.
151	2013B3A7705P	SHASHWAT RAWAT	Service quality value drivers identification and validation in indian banking sector	DR ARUN KUMAR	Eco. & Fin.
152	2013B3A7521P	SHUBHI RASTOGI	Impact of reliance jio's entry on telecom industry in india	JYOTI	Eco. & Fin.
153	2013B3AB565P	NIKHIL R	Empirical and economic analysis of data breaches and intrusions by industry	RAJENDRA NARAYAN PARAMANIK	Eco. & Fin.
154	2014B3TS963P	PARTH DOGRA	Some aspects of financial inclusion in india	NVM RAO	Eco. & Fin.
155	2013B3A7473P	RISHABH JAIN	Transforming agricultural	KRISHNA M	Eco. & Fin.
156	2013B5A8784P	AARZOO SHARMA	Self quenching an energy transfer	D D PANT	Physics
157	2013B5A2769P	PRADEEP KUMAR	Nuclear fusion and solar energy	Madhukar Mishra	Physics
158	2014A2TS739P	PAVAN V PILLAI	Traffic data analysis	Amit Goel	CIVIL
159	2014A4TS409P	VARUN TRIPATHI	Control of wind turbines	SEBASTIAN DICKLER	MECH
160	2017C2TS1208P	SAMUDRALA SANJAY AATREYASA		DR RAJNEESH CHOUISA	HSS
161	2013B3A7789P	ISHAN SHARMA	Applying deep learning to predictions of stock market	RAJAN PANDEY	ECO & FIN
162	2014B5TS711P	PRANAV DIWAKAR	Aspect of interchangeable system	SUJAY ASHOK	Physics
163	2014A2PS490P	ISHA NARSARIA	Self designing rental cars	DR PRASHANTA SAHU	CIVIL
164	2014A8TS324P	KHANDEDIYA CHERAL	Tunnled IOT protocol	DR NATALYA ROZHNNOVA	EEE



**LIST OF HIGHER DEGREE DISSERTATIONS COMPLETED DURING THE YEAR 2017**

**Second Semester 2016-17**

S.No.	BITS ID	Name	Topic	Supervisor	Department
1	2011HS06237P	TELANG SUJEET AJAY	HAND GESTURE CONTROL	DR B K ROUT	MECHANICAL
2	2011HS12191P	CHIRAG CHHABLANI	SYNTHESIS OF CLONE DETECTION AND CLUSTERING TECHNIQUES	KULDEEP KUMAR	CSIS
3	2011HS23162P	PRIYESH SHUKLA	Capacitive interface for MEMS Sensors	DR ANU GUPTA	EEE
4	2011HS40274P	RAUNAK MANEKAR	Design and implementation of Convolutional and Deep Neural Networks	DR CHANDRA SHEKHAR	EEE
5	2015H101016P	DHIVYA P	DEVELOPMENT OF SOFT SENSOR FOR METHYL ACETATE REACTIVE DISTILLATION SYSTEM	Prof. Hare Krishna Mohanta	CHEMICAL
6	2015H101017P	POORNIMA K	Targeted Oral Drug Delivery of Nano particles for Colon Cancer	Prof. Suresh Gupta	CHEMICAL
7	2015H101018P	PADARTHI KRISHNA YASHWANTH	Rietveld Analysis of BIMEVOX catalysts used for hydrogen production	Dr. Banasri Roy	CHEMICAL
8	2015H101019P	YUKTI	Design and Development of compact & economically viable metallic nano-particles fixed-bed for the treatment of Industrial Wastewater	Prof. Suresh Gupta	CHEMICAL
9	2015H101020P	PRATISHTHA RATHORE	Experimental and theoretical study on production of hydrogen rich gas from biomass	Dr. Pratik N Sheth	CHEMICAL
10	2015H101021P	LATA JOSHI	Flow Pattern in Loop Reactors	Prof. Arvind Kr. Sharma	CHEMICAL
11	2015H101025P	VIKASH KUMAR	Design and development of novel biomass cookstove	Dr. Pratik N Sheth	CHEMICAL
12	2015H101026P	CHAVA RAMA KRISHNA	LCA Biodiesel Production from microalgae using wastewater	Dr. Smita Raghuvanshi	CHEMICAL
13	2015H101027P	PATIL BHAGYESHA SUNIL	Metal based Nanocatalysts for Hydrogen Production by Low Temperature Steam Reforming of Ethanol	Dr. Banasri Roy	CHEMICAL
14	2015H101028P	DHAGE SUMIT BANSILAL	Bioremediation of soil contaminated with waste engine oil	Dr. Amit Jain	CHEMICAL
15	2015H101029P	ABHISHEK MISHRA	COLD MODEL STUDY OF RECIRCULATING FLUIDIZED BED FOR CHEMICAL LOOPING COMBUSTION	Dr. ARVIND Sharma	CHEMICAL
16	2015H101030P	SHRUTI GUPTA	Syngas Production by reforming of Biogas by using Ni-based Monolithic Catalysts	Dr. Srinivas Appari	CHEMICAL
17	2015H101032P	PRIYA	DKM of poisoning and regeneration of Ni catalyst during biogas steam reforming	Dr. Srinivas Appari	CHEMICAL
18	2015H101033P	DEEPIKA SHANMUKHA HEGDE	CFD Simulation and process refinement of fluid catalytic cracking	Dr. Priya C Sande	CHEMICAL
19	2015H103078P	VIVEK PANDYA	To implement the LLVM backend for Xilinx's MicroBlaze softprocessor	Vidhumouti Hunsigida	CSIS

S.No.	BITS ID	Name	Topic	Supervisor	Department
20	2015H106137P	Johan Paul	Non-linear Vibration in Rotordynamics	Dr. Murali Palla	MECHANICAL
21	2015H106148P	Behara Santosh Sagar	STUDY AND ANALYSIS OF LOOSENE OF THE ROTO SHAFT	Dr. A.K.Jalan	MECHANICAL
22	2015H106149P	KRATI	Nano-Robotics	DR J S RATHORE	MECHANICAL
23	2015H106151P	Karan Ghule	CFD analysis of boiling	Dr. Shyam Sunder	MECHANICAL
24	2015H108191P	Saswata Banerjee	Development of novel lipid based nanocarrier systems	Dr.Gautam Singhvi	PHARMACY
25	2015H129001P	Kumar Udit kumar	#N/A	Dr.Rajdeep choudhury	BIOLOGY
26	2015H129003P	Poorvi Raghavndra	IMMUNE SYSTEM DYNAMICS DURING SALMONELLA INFECTION	Prof.Dipshika chakravotty	BIOLOGY
27	2015H129004P	Surabhya Balasubramanian	Study of Potential ANTAR RNA transcription in Mycobacteria. (Temporary Title)	Dr.Arati Ramesh	BIOLOGY
28	2015H129008P	R. Sukanya	IL-27-ROLE IN TUBERCULOSIS IMMUNITY	Dr. Vani janakiraman	BIOLOGY
29	2015H129011P	K.Lohitesh	TO STUDY EPIGENETIC REGULATION IN GLIBLASTOM CELL ILNE	Dr. Rajdeep Choudhury	BIOLOGY
30	2015H129012P	Ramya R	ROLE OF SIRTUINS IN AUTOPHAGY	Prof.Dipshikha Chakravorty	BIOLOGY
31	2015H129013P	Diksha Agnihotri	BIOLOGY AND IMPLICATION FOR HUMAN DESESES	Dr. Shantanu sengupta	BIOLOGY
32	2015H130054P	RISHBH BAJPAI	ANALYSIS OF NATURALITIC DRIVING DATA TO DESIGN THE ROADWAY ELEMENT	DR PRASANTA KUMAR SAHU	CIVIL
33	2015H130055P	RITVIK D CHAUHAN	Effect of Side Friction on Urban Road Capacity	DR PRASANTA KUMAR SAHU	CIVIL
34	2015H130056P	ABHINAV YADAV	DETERMINING CAPICITY AND LEVEL OF SERVICE OF MULTILANE INTERURBAN HIGHWAY	DR DURGESH VIKARAM	CIVIL
35	2015H130057P	PATEL JAY A	Developing a capacity model for roundabout in heterogeneous traffic condition	DR DURGESH VIKARAM	CIVIL
36	2015H130058P	ABDUL MOIN GHANI	Strength evaluation of asphalt mix containing copper tailing	DR NIKHIL SABOO	CIVIL
37	2015H130060P	SHARMA GAJANAND SANTOSHKUMAR	Evaluation of crowding effect on Mumbai Suburban Rail system	DR PRASANTA KUMAR SAHU	CIVIL
38	2015H130062P	AJINKYA ASHOK INGALE	Investigating Indian Driver Decision Making Behavior at Intersections using questionnaire survey	DR PRASANTA KUMAR SAHU	CIVIL
39	2015H130063P	ANUJ BHAGWAN	EFFECT OF MARSHALL BLOWS ON THE PERFORMANCE OF BITUMEN	DR NIKHIL SABOO	CIVIL
40	2015H141103P	G.Vijayanand	Simulation of crack using Bourdin's model	Dr. Murali Palla	MECHANICAL
41	2015H141104P	Zanje Sumit Rajendra	NUMERICAL & COMPUTATIONAL ANALYSIS OF FLOW PAST CYLINDER	Dr. Amol Marathe	MECHANICAL
42	2015H141107P	Devanshu Rana	FAULT DIAGNOSIS OF ROTOR MIALIGNMENT	Dr. Arun Kumar Jalan	MECHANICAL
43	2015H141108P	Basuraj Shyam	Reduced order modelling of vortex shedding of oscillatory bluff body	Dr. Amol Marathe	MECHANICAL
44	2015H141111P	Aseem Shrivastava	STRESS AND DEFORMATION ANALYSIS	Dr. Prateek Kala	MECHANICAL

S.No.	BITS ID	Name	Topic	Supervisor	Department
			ON CIRCULAR RINGS UNDER THERMAL BONDING		
45	2015H141112P	Medida Sarath Chandra	Finite Element and Reduced order modelling of gear pair	Dr. Shyam Sunder	MECHANICAL
46	2015H141113P	Sunit Dewan	Thermal Management of Klystron	Prof. P.Srinivasan	MECHANICAL
47	2015H142130P	Aayush Bhardwaj	Evaluation and enhancement of agility index in a manufacturing supply chain	Dr. Srikanta Routroy	MECHANICAL
48	2015H142133P	Mohit Agrawal	Application of MCDM techniques in Supply Chain Management : A Review	Prof. A.K.Digalwal	MECHANICAL
49	2015H143047P	ANIRUDDHA TANGIRALA	Use of artificial intelligence in concrete mix design	DR. DIPENDU BHUNIA	CIVIL
50	2015H143048P	SANKET RAWAT	OPTIMIZATION OF ECCENTRICALLY LOADED PAD FOOTING	DR. RAVIKANT MITTAL	CIVIL
51	2015H143049P	SPANDAN BERA	SEISMIC ANALYSIS OF LATERALLY LOADED PILES	DR. RAVIKANT MITTAL	CIVIL
52	2015H143050P	ASHFAQ ANSHAD	Analysis of Functionally Graded Concrete Beams	DR S.B. SINGH	CIVIL
53	2015H143052P	AKSHAY D MALLAN	Effect of Openings on Static response of Core wall structures	DR . MANOJ KUMAR	CIVIL
54	2015H144040P	SOMYA AGARWAL	Soil Resistivity	DR. SHIBANI K JHA	CIVIL
55	2015H146206P	Hinge Nikita Subhash	Erythrocyte loaded chloroquine for malaria treatment	Dr.Aniruddha Roy	PHARMACY
56	2015H146211P	Tejas Girish Agnihotri	DEVELOPMENT OF PK-PD MODELS FOR CNS DISORDERS THROUGH NOVEL DRUG DELIVERY SYSTEM	Dr. Sunil K Dubey	PHARMACY
57	2015H147199P	Shashwat	Inhibition of melanization as a method for Vector control	Dr. Atish T Paul	PHARMACY
58	2015H106145P	KUSHAGRA DWIVEDI .	Design of Micro-Channel Heat Exchangers for CO2 refrigeration system	DR P SHRINIVASAN	MECHANICAL

#### First Semester 2017-18

S.No	BITS ID	Name	Topic	Supervisor	Department
1	2016H101014P	RAJAN SINGH	Nano catalyst system for H2 production	Dr. Banasri Roy	CHEMICAL
2	2016H101017P	JOSHI PARTH ASHISHBHAI	Experimental and Theoretical Investigation on steam gasification followed by catalytic conditionings.	Dr. Pratik N. Sheth	CHEMICAL
3	2016H101021P	PRITISH PRAYAG SAHOO	Design of soft-sensor for Reactive Distillation column	Prof. Hare Krishna Mohanta/	CHEMICAL
4	2016H101023P	PRASAD SUNIL SAHU	Novel catalyst for H2 production from renewable energy sources	Dr. Srinivas Appari	CHEMICAL
5	2016H101024P	RAJPUT ARTI AYODHYA PRASAD	Development of compact and eco-viable metallic nano-particle fixed bed for treatment of industrial wastewater	Prof. Suresh Gupta	CHEMICAL
6	2016H101025P	MOMIN XERXES MEHBOOB	Optimum Foam Quality for contaminated Soil Remediation and better detergent formulation	Dr. Pradipta Chattopadhyay	CHEMICAL

**LIST OF EQUIPMENTS PROCURED FOR 2017**

S.No	Indent No.	Particulars	Used for Courses/Thesis/Dissertation Computational/Administrative Work
<b>Biosciences Department</b>			
1.	948	Water Bath	
2.	959	Table Top Refrigerated Centrifuge, etc.	
3.	983	Weighing Balance Shimadzu	
4.	984	Horizontal Laminar Air Flow Cabinet	
5.	256	Plant Growth Chamber	
6.	361	PCB Main Board, etc.	
7.	579	Accessories for High Intensity white light source	
8.	580	Light Meter	
9.	648	Samsung Refrigerators(3)	
10.	983	Weighing Balance Shimadzu unibloc	
11.	984	20 Deep freezer ,Vestfrost	
12.	984	SDS page assembly &gel electrophoresis	
13.	256	JuLI FL,Fluorescence based live cell movie analyzer	
14.	256	Deep freezer Indian	
<b>Chemical Engineering Department</b>			
15.	405	High pressure liquid chromatography pump &accessories	
16.	429	Recirculating Fluidized Bed Set-up	
17.	431	Flowsense EO 2M Camera, etc.	
18.	554	Gas Chromatograph, etc.	
<b>Chemistry Department</b>			
19.	737	Replacement Laser Kit	
20.	699	Optiplex 3046 Mini Tower CTO	
21.	805	Forced Air oven, Capacity: 30L, Genetix	
22.	873	Magnetic Stirrer with Hot Plate	
23.	1033	Heidolph Rotary Evaporator	
24.	1034	JULABO F250 Recirculating cooler	
25.	1046	Labscape Select Annual for Bruker	
26.	1058	UPS 10 KVA	
27.	1090	Ice Faking Machine	
28.	70	843-R Power Meter Kit	
29.	80	Personal Organic Synthesizer Chemi Station & Rotary Evaporator System,water bath	
30.	155	Nitrogen Gas with Cylinder, etc.	
31.	158	FT-1R spectrometer TENSOR II, etc.	
32.	196	Compact, optical cryostat system, etc.	
33.	367	Turbomolecular Pump, etc.	
34.	381	IKA Magnetic Stirrers(2)	
35.	382	Microscope Body Stemi 508 doc, etc.	
36.	417	Computer System dell	
37.	426	Acid Digestion Vessel	
38.	441	HINDHIVAC Vacuum Pumping System	
39.	450	Dell Inspiron Laptop	
40.	535	Magnetic Stirrer with Hot Plate	
41.	584	Rotary Vacuum Evaporator & Chiller	
42.	588	Reaction rate activation energy	
43.	589	Fume Hood(4)	

S.No	Indent No.	Particulars	Used for Courses/Thesis/Dissertation Computational/Administrative Work
44.	617	pH Meter, etc.	
45.	1033	Vacuum pump	
46.	588	Viscosity measurement with falling ball	
47.	588	Osmosis-dependence of the osmotic pressure on concentration	
<b>Civil Engineering Department</b>			
48.	827	Regulated DC power supply	
49.	1023	All days Electronic Theodolite 2nos	
50.	1050	Turbidity Meter with make Labtronics, etc.	
51.	1075	Bentley Academic (Perpetual License)	
52.	801	Optimization module	
53.	827	Permeability measuring cell	
54.	284	Aewin USB-1ch	
55.	102	Permeability measuring cell	
56.	103	Manufacture of Oxygen Permeability Apparatus	
57.	284	One Channel USB AE node	
<b>CSIS</b>			
58.	852	Color Gige HE Camera	
59.	976	Dell Laptop 2 nos	
60.	1078	LED Projectors CASIO XJ F210WN	
61.	462	EstiNet V9 Simulator & Emulator	
<b>EEE Department</b>			
62.	661	Mass Flow controller, etc.	
63.	838	Aplab Multi Output Linear Power Supply	
64.	839	Digital Storage Oscilloscope	
65.	841	TnIT Trainer for rotational & air sensors:motion,sound,force:light&temp,signal training	
66.	850	Futronic FS10 PIV Fingerprint Scanner, etc.	
67.	917	Dell Workstation	
68.	135	Digital Storage Oscilloscope, etc.	
69.	372	Vernier Lab Quest	
70.	374	Quartz Crystal Microbalance OPEN QCM	
71.	434	Sony PTZ Camera	
72.	435	Nikon D750	
73.	549	EXOI Sonde	
74.	632	Virtual Nanolab with Quantum wise Toolkit	
75.	549	EXO Conductivity /temperature sensor	
76.	549	EXO Ph/orp sensor	
77.	549	EXO turbidity sensor	
78.	549	EXO Optical DO Sensor	
79.	577	Power supply for laser diode module	
80.	222	Water Cooler(5)	EMU
81.	222	GET SET RO(3)	EMU
82.	300	LED Projector make CASIO	I.U.
83.	301	Projector Hitachi Model: CP-X3042WN (10)	I.U.
84.	329	Ultra Short Throw Projector Make - Casio UT 311 WN	I.U.
<b>IPC Unit</b>			
85.	858	Passive Networking components (molex)	
86.	896	HPE Proliant DL 120 Gen9 Server	
87.	971	HP 400 G4 Desktops 50 nos	
88.	975	24U & 42U Racks 9nos	
89.	1019	Ruckus Zoneflex R610 smart 100nos	
90.	1132	HP 4000 G4 Desktops	

S.No	Indent No.	Particulars	Used for Courses/Thesis/Dissertation Computational/Administrative Work
91.	187	Trinzic 825 w/ Network Services One and Grid	
92.	212	Installation & commissioning for Infoblox	
93.	218	Online UPS 3 KVA(6)	
94.	1132	HP 4000 G4 Desktops	
95.	187	Infoblox ActivTrust Standard annual subscription	
96.	187	TR805 Reporting Appliance	
97.	218	Cell Battery (48)	
98.	1131	Desktop HP 280 MT 7 NOS	Librarian
99.	678	Book Storage cupboard for Library office	Library
100.	383	New Study platform	Library
101.	383	Modification and repair of existing study carrels	Library
102.	869	Master / Head Node	Maths
103.	523	GNSS Cors Receiver	Maths
104.	615	13-inch MacBook Pro	Maths
105.	1036	Extended surface heat transfer	Mech
106.	1036	Heat Transfer experiment base unit	Mech.
<b>Mechanical Engineering Department</b>			
107.	1119	Tec Equipment, UK, etc.	Mech. Engg
108.	1036	Free and forced convection experiment	Mech. Engg.
109.	280	Linear semi automatic weld bench	Mech. Engg.
110.	311	Melt Flow Index- Deluxe	Mech. Engg.
111.	619	Fluke Make Advance PQ & Amp; Energy Analyzer	Mech. Engg.
112.	707	X-Ray machine	Medical Centre
<b>Pharmacy Department</b>			
113.	743	IKA Homogenizer, etc.	
114.	760	Probe Adjuster Assembly	
115.	764	Rotary Evaporator Package	
116.	969	HPLC System	
117.	1104	Camera Nikon D-810	
118.	64	Apreo LoVac - The core instrument (Apreo LoVac), etc.	
119.	65	Aztec Standard EDS system	
120.	66	Critical Point Dryer, etc.	
121.	67	PT-PC, PC Controlled Ultra microtome	
122.	84	PENNING,PFEIF.REPAIR KIT	
123.	119	APC 10 KVA UPS SRC10KUXI	
124.	173	Sparcobb: Autoclavable Corn Cobs	
125.	270	PCB Converter 5430 R	
126.	355	Rotavapor R-100 System	
127.	413	Refrigerator	
128.	422	Passage Head, etc.	
129.	485	Measuring unit DSC 60 PLUS	
130.	581	6 KVA UPS System	
131.	582	Maleimide-PEG-OH 5000 Dalton	
132.	627	CH Instruments, Inc., USA	
133.	640	C1000 Touch Cycler	
134.	654	Samsung Refrigerators(4)	
135.	656	CO2 Chamber, etc.	
136.	270	Centrifuge motor	
137.	533	V Life Engine	
138.	533	Bio Predicta	

S.No	Indent No.	Particulars	Used for Courses/Thesis/Dissertation Computational/Administrative Work
<b>Physics Department</b>			
139.	692	Spectrometer osaw standard least count 1min	
140.	700	Electron Diffraction (P2511301)	
141.	918	Dell Workstation	
142.	921	Zeeman Effect Apparatus	
143.	939	AUW 220D, Analytical Weighing Balance	
144.	74	Apple Mac book Pro	
145.	95	Dell Laptop Z520083WIN9-XPS 13	
146.	112	Apple iMac 27 inch	
147.	180	Accessories for Fritsch Planetary Mono Mill P-6 Classic Line	
148.	348	Computer Node	
149.	453	NI USB-6211 multifunction I/O Device	
150.	483	Silicon Photodiode Detectors PINSPOT 9DMI	
151.	484	Rotary Piezo Motor, etc.	
152.	577	Laser Diode Module	
153.	614	Dell Desktop	
154.	652	Olympus BX53 Frame for Polarizing Reflected	
155.	921	Hall effect apparatus	
156.	921	Kunds tube apparatus	
157.	921	Youngs modulus apparatus	
158.	921	Detector based appartus for diffraction	
159.	314	HP Laserjet Pro 500 Color MFP M570dw Printer	SWD
160.	509	Material testing kit	WILPD
161.	793	Desktop HP 280 MT 3nos	Workshop
162.	1126	Universal strength machine	Workshop
163.	1128	Unimat CNC Lathe:UNI-DREH 5NOS	Workshop
164.	1130	NI Hardware & Software Solutions	Workshop
165.	1128	Unimat CNC COMPLETE 4 AXIS MILL 5NOS	Workshop
166.	1128	Unimat CNC COMPLETE 4 AXIS TURNING AND MILLING 5NOS	Workshop
167.	546	HP Printer 226 DN, etc.	Workshop (TSS)
<b>Software</b>			
168.	966	Parallel Studio XE Composer Edition fro C++/Fortran Linux	Chemistry
169.	1051	ChemDraw Professional 16 Windows Software	Chemistry
170.	801	CAD Import Module License	Civil
171.	1099	Abaqus Software	Civil
172.	331	EMO-EPO-BT9X-03-EMOTIV EPOC + 14 Channel Mobile EEG	CSIS
173.	631	Vensim Professional, Single User, academic use license	Economics Finance
174.	889	SP4 i7/16GB/256Gb/12.3"/Windows 10 Pro, etc.	EEE
175.	912	PSIM Pro Basic 11.0 Ver or Latest Software	EEE
176.	258	Adobe Creative Cloud	EEE
177.	259	Synopsys EDA Tools	EEE
178.	1012	Microsoft OVS-ES subscription renewal 510 nos	IPC
179.	1082	Ansys Academic Multiphysics Campus License	IPC
180.	233	EPS Total 1 year Renewal	IPC
181.	639	Pulse Secure Applicance 5000 Base System	IPC
182.	653	TAH Standard Configuration - Matlab, Simulink, etc.	IPC
183.	1060	Heat Transfer Module, Class Kit License	Mech. Engg.
184.	533	V Life Base	Pharmacy
185.	207	Photoshop CC, etc.	Repro
186.	736	Staff Attendance System Software	SWD
187.	509	Manufacturing Simulation Kit	WILPD

## CUMULATED LIST OF BOOKS PUBLISHED UNDER THE AUTHORSHIP OF BITS FACULTY

### A. Text Books

S.No.	Author	Title	Publisher	Year
<b>Bio Sciences</b>				
1.	Rastogi, S.C.	An outline of Developmental Physiology	Rajasthan Hindi Granth Academy, Jaipur	1973
2.	Rastogi, S.C.	Essentials of Animal Physiology	Wiley Eastern, New Delhi	1977
3.	Rastogi, S.C.	Experimental Physiology	Wiley Eastern, New Delhi	1982
4.	Mitra, Sandhya	Elements of Molecular Biology	MacMillan	1982
5.	Rastogi, S.C.	Cell Biology	Tata McGraw Hill, New Delhi	1988
6.	Rastogi, S.C.	Biochemistry	Tata McGraw Hill, New Delhi	1993
7.	Rastogi, S.C., Sharma, V.N., Tandon, A.	Concepts in Molecular Biology	Wiley Eastern, New Delhi	1993
8.	Mitra, Sandhya	Essentials of Genetics	Tata McGraw Hill, New Delhi	1994
9.	Mitra, Sandhya	Business of Living	Wiley Eastern, New Delhi	1994
10.	Roy, U., Saxena V.	A Handbook of Genetic Engineering	Kalyani Publications	2007
11.	Ashish Runthala	Hunting Drugs for Potent Antigens in the Silicon Valley	IGI GLOBAL	2010
<b>Chemical</b>				
12.	Khan, F.I., Abbasi, S.A.	Risk assessment of chemical process industries: advanced techniques	Discovery Pub. House	1998
13.	Abbasi, S.A., Krishnakumari, Khan, F.I.	Hot topics: Global warming, acid rain, ozone hole, industrial disasters, disinfection	Oxford India Pr.	1999
14.	Babu, B.V.	New Optimization Techniques in Engineering	Springer-Verlag, Heidelberg, Germany	2004
15.	Babu, B.V.	Process Plant Simulation	Oxford University Press, India	2004
16.	Babu, B.V.	One Chapter in the Book Advances in Computational Optimization and its Applications	Universities Press, Hyderabad	2007
17.	Babu, B.V., Angira, R.	One Chapter in the Book Soft Computing Applications in Industry	Springer Verlag	2007
18.	Babu, B.V., Angira, Rakesh	Optimization of Industrial Processes using Improved and Modified Differential Evolution	In Soft Computing Applications in Industry, Edited by Bhanu Prasad, Springer-Verlag, Heidelberg, Germany.	2008
19.	Babu, B.V., Ramakrishna, V.	Water Crisis: Origin Identification and Management	In India's Water Crisis, Edited by K R Gupta, Atlantic Publishers, New Delhi	2008
20.	Babu, B.V., Gupta. S.	Removal of Heavy Metal Pollutants from Wastewater Using Low Cost Absorbents	In India's Water Crisis, Edited by K R Gupta, Atlantic Publishers, New Delhi	2008
21.	Ashish M. Gujarathi and B. V. Babu (contributed a chapter in Advances in Chemistry and Chemical Engineering)	Advances in Optimization and Simulation of Low Density Polyethylene (LDPE) Tubular Reactor	Nova Science Publishers, USA	2010
22.	Ashish M. Gujarathi and B. V. Babu (contributed a chapter in Handbook of Optimization)	Multi-objective Optimization of Low Density Polyethylene (LDPE) Tubular Reactor using Strategies of Differential Evolution	Springer, Germany	2010
<b>Chemistry</b>				
23.	Choudhari, Roy T.	Basic Engineering Thermodynamics	Tata McGraw Hill, Bombay	1973
24.	Choudhari, Roy T.	Applied Engineering Thermodynamics	Tata McGraw Hill, Bombay	1973
25.	Gupta, S.P.	Quantum Biology	New Age, New Delhi	1997



S.No.	Author	Title	Publisher	Year
26.	Khan, F.I., Abbasi, S.A.	Risk assessment of chemical process industries: advanced techniques	Discovery Pub. House	1998
27.	Srivastava, R.C., Saha, S.K., Jain, A.K.	Thermodynamics- A Core Course	Prentice Hall, New Delhi	2004
28.	Gupta, S.P., Gupta, R.R.	QSAR & Molecular Modeling Studies in Heterocyclic Drugs II	Springer-Verlag, Berlin	2007
<b>Civil Engineering</b>				
29.	Gupta, Rajiv	Construction planning & technology Second Edition	CBS New Delhi	2014
30.	Ghoshal, S.	Microprocessor based system design	Macmillan	1996
31.	Ghoshal, S.	Computer-Aided analysis & design	PHI	1997
32.	Moondra, H.S. & Gupta, Rajiv	Laboratory manual for civil engineering	CBS, New Delhi	2000
33.	Kumar, Kamlesh	Basic Geotechnical Earthquake Engineering	New Age International Publishers, Limited, New Delhi.	2006
34.	Raju, K.S.	Prediction in Ungauged Basins for Sustainable Water Resources Planning and Management	Jain Brothers, New Delhi	2007
35.	Kulkarni, D.M. & A.K. Sarkar	Engineering graphics with AutoCAD	PHI, New Delhi	2009
36.	K. Srinivasa Raju & D. Nagesh Kumar	Multicriterion Analysis in Engineering and Management	PHI Learning Pvt. Ltd., New Delhi.	2010
37.	K. Srinivasa Raju & A. Vasani (Ed.)	Sustainable Water Resources Management and Impact of Climate Change	B.S. Publications, Hyderabad.	2010
38.	Singh, S. B.	Analysis and Design of FRP Reinforced Concrete Structures,	McGraw-Hill Education Pvt. Ltd., New Delhi	2014
<b>Computer Science</b>				
39.	Mathur, A.P., Arora K.S., Reddy U.S.	Introduction to Pascal	Tata McGraw Hill, New Delhi	1983
40.	Mathur, A.P.	Introduction to Microprocessors (Third Ed.)	Tata McGraw Hill, New Delhi	1989
41.	Sharan, S.N.	Fundamentals of Expert System	CBS, New Delhi	1993
42.	Banerjee, Rahul	Architecture and Conceptual Design of the Unix System	Khanna Publishers	1993
43.	Banerjee, Rahul	Internetworking Technologies: An Engineering Perspective	Prentice Hall of India	2003
44.	Ghosh, S.	Programming in C	Prentice Hall of India	2004
<b>Electrical &amp; Electronics Engineering</b>				
45.	Maheshwari, L.K., Anand, M.M.S.	Laboratory Manual for Introductory Electronics Experiments	New Age International Publisher	1979
46.	Jain, R.P.	Modern Digital Electronics	Tata McGraw Hill, New Delhi	1984
47.	Jain, R.P., Anand, M.M.S.	Digital Electronics	Tata McGraw Hill, New Delhi	1984
48.	Ramanan, K.V.	Functional Electronics	Tata McGraw Hill, New Delhi	1984
49.	Iyer, T.S.K.V.	Circuit Theory	Tata McGraw Hill, New Delhi	1985
50.	Nagrath, I.J., Kothari, D.P.	Modern Power System Analysis (Second Ed.)	Tata McGraw Hill, New Delhi	1989
51.	Nagrath, I.J.	Basic Electrical Engineering	Tata McGraw Hill, New Delhi	1991
52.	Maheshwari, L.K., Kapoor, A.	Digital Electronics	McMillan India, New Delhi	1992
53.	Khare, R.P.	Analysis Instrumentation	CBS, New Delhi	1993
54.	Nagrath, I.J., Kothari, D.P.	Power Systems Engg.	Tata McGraw Hill, New Delhi	1994
55.	Nagrath, I.J., Kothari, D.P.	Theory and Problems of Electrical Machines (TMH outline series)	Tata McGraw Hill, New Delhi	1996
56.	Nagrath I.J., Kothari, D.P.	Electric Machines (Second Ed.)	Tata McGraw Hill, New Delhi	1997
57.	Nagrath, I.J.	Electronics: Analog and Digital	Prentice-Hall of India, New Delhi	1998
58.	Nagrath, I.J. Kothari, D.P.	Theory and Problems & Basic Electrical Engineering	Prentice-Hall of India, New Delhi	1998
59.	Nagrath, I.J.	Signals and Systems	Tata McGraw Hill, New Delhi	2001

S.No.	Author	Title	Publisher	Year
	Sharan, S.N. Ranjan, R. Kumar, S.			
60.	Anand, M.M.S.	Electronics Instruments & Instrumentation Technology	PHI	2003
61.	Ghosh, S.	Fundamentals of Electrical and Electronics Engineering	Prentice Hall of India	2003
62.	Khare, R.P.	Fiber Optics and Optoelectronics	Oxford University Press	2004
63.	Bansal, R.C.	One Chapter in the Book Electric Vehicles	CRC Press	2005
64.	Ghosh, S.	Electrical Machines	Pearson Education	2005
65.	Maheshwari, L.K., Anand, M.M.S.	Analog Electronics	Prentice Hall of India, New Delhi	2005
66.	Maheshwari, L.K., Anand, M.M.S.	Laboratory experiments and PSPICE simulations analog electronic	Prentice-Hall of India	2006
67.	Bhattacharya, D.K., Sharma, Rajnish	Solid State Electronic Devices	Oxford University Press, New Delhi	2007
68.	Surekha Bhanot	Process Control-principles and applications	Oxford University Press	2008
69.	Khare, R.P., Dixit, R.K.	Rejuvenation without medicines [English translation of 'Bina Aushadhiyon ke Kayakalp' (in Hindi) by Pt Shriram Sharma Acharya]	Shri Vedmata Gayatri Trust, Shantikunj, Haridwar	2008
70.	Shambhudass, Khare, R.P.	Companions in Solitude [English translation of 'Sunsan ke Sahachar' (in Hindi) by Pt Shriram Sharma Acharya – Translation by V. A. Shivshankaran]	Shri Vedmata Gayatri Trust, Shantikunj, Haridwar	2008
71.	Navneet Gupta	Principles of Material Science and Engineering	Dhanpat Rai & Co., New Delhi	2001
72.	Navneet Gupta	Semiconductor Materials and Devices	Dhanpat Rai & Co., New Delhi	2006
73.	Navneet Gupta	Fundamentals of Electronic Devices	Dhanpat Rai & Co., New Delhi	2009
74.	L.S. Bobrow and Navneet Gupta	Foundation of Electrical Engineering: Asian Edition	Oxford University Press, New Delhi	2013
75.	William Stallings & V K Chaubey (adaptation)	Wireless Communications Networks	Pearson Education Second Edition Indian Subcontinent adaptation	2009
<b>English</b>				
76.	Krishna Mohan, Manerjee, Meera	Developing Communication Skills	MacMillan India Ltd., New Delhi	1990
77.	Sharma, R.C. Krishna Mohan	Business Correspondence and Report Writing (2nd Ed.)	Tata McGraw Hill, New Delhi	1994
78.	Krishna Mohan, Raman, Meenakshi	Effective English Communication	Tata McGraw-Hill, New Delhi	2000
79.	Raman, Meenakshi [Ed.]	English Language Teaching	Atlantic Publishers and Distributors Ltd, New Delhi	2004
80.	Raman, Meenakshi, Singh, Prakash	Business communication.	Oxford University Press	2006
81.	Lata, Pushp Sanjay Kumar	Communicate or Collapse	Prentice Hall of India, New Delhi	2007
82.	Krishna, M., Sharma Sangeeta	Frozen Ripple	Future Publishers, Howrah	2007
83.	Sarangi, J., Mishra Vinod	Explorations in Australian Literature	Sarup and Sons, New Delhi	2007
84.	Meenakshi Raman and Sangeeta Sharma.2017.	Technical Communication- Principles and Practice For Gujarat technological University. .	2nd Edition. OUP: New Delhi..	2017
85.	Raman, Meenakshi Sangeeta Sharma	Technical Communication: English Skills for Engineers	OUP, New Delhi.	2009
86.	Pushp Lata and Sanjay Kumar	Communicate to Conquer: A Handbook of Group Discussion and Job Interviews with DVD	New Delhi: Prentice Hall of India (PHI)	2010
87.	Chauhan Gajendra S. and Sharma Sangeeta	Soft Skills- An integrated approach to maximize personality (Coauthor)	Wiley: New Delhi.	2015

S.No.	Author	Title	Publisher	Year
88.	Chauhan Gajendra S.	Soft Skills- An integrated approach to maximize personality (Coauthor)	Wiley: New Delhi.	2015
89.	Sharma Sangeeta,	Technical Communication- Principles and Practice (Coauthor)	Third Edition. OUP: New Delhi.	2015
90.	PushpLata	Co-author, Communication Skills,	Second Edition, New Delhi: Oxford University Press (OUP),	2015
<b>Engineering</b>				
91.	Nagrath I.J., Madan Gopal	Systems : Modelling and Analysis	Tata McGraw Hill, New Delhi	1982
92.	Nagrath I.J., Madan Gopal	Control Systems Engineering (Second Ed.)	Wiley Eastern, New Delhi	1982
93.	Subramanian, K.R.V., Kadayam, S.R.	System Simulation: An Introduction to GPSS	CBS Publishers, New Delhi	1992
94.	Gupta, A.	Systems Analysis	CBS, New Delhi	1993
95.	Bansal, R.C., Bhatti, T.S., Kothari, D.P.	Small Hydro Power System	Dhanpat Rai and Company	2004
96.	Ghosh, S.	Control Systems: Theory and Applications	Pearson Education	2004
97.	Gupta, Rajiv, Nagrath, I.J.	Introduction to Systems	New Age International Publishers	2005
98.	Ghosh, S.	Network Theory: Analysis and Synthesis	Prentice Hall of India	2005
<b>Humanistic Studies</b>				
99.	Prakash, Nirupama, Dash, Motilal	Conflict Resolution: Peace Development	Jain Brother, New Delhi	2004
100.	Dash, Motilal, Dhyani, Umesh	Entrepreneurship Culture	Allied Publishers, New Delhi	2005
101.	Sachdev, K.N.	Ethics: A Virtue Theoretic Approach	Adhyayan Publishers & Distributors, Delhi	2005
102.	Sachdev, K.N., Maharana, S.K.	Perspectives on Indian Ethics	Icon Publishers, New Delhi	2007
103.	Maharana, Suryakant	Bhārtrhari on Word and Consciousness: The Advaita Perspective" in Dr. K.S.Prasad (ed.) Language and Mind The Classical Indian Perspective, Vol 2	Decent Books (D.K. Printworld Publishers), New Delhi, pp. 147-148	2008
104.	Prakash, Nirupama	Safe motherhood in globalized world	Routledge, London	2009
<b>Instrumentation</b>				
105.	Anand, M.M.S.	Electronic Instruments and Instrumentation Technology	Prentice Hall, New Delhi	2004
<b>Mathematics/Physics</b>				
106.	Bose, R.K., Joshi, M.C.	Methods of Mathematical Physics	Tata McGraw Hill, New Delhi	1984
<b>Mathematics</b>				
107.	Krishnamurthy, V., Mainra, V.P., Arora, J.L.	Introduction to Linear Algebra	Affiliated East-West Press Pvt. Ltd., New Delhi	1976
108.	Pant, J.C.	Project Management: CPM, PERT, PERT with Linear Programming (Third Ed.)	Jain Brothers, New Delhi	1994
109.	Patnaik, R.K.	Calculus - Differential and Integral	CBS Publishers, New Delhi	1994
110.	Pant, J.C.	Introduction to Optimization: Operations Research (Fifth Ed.)	Jain Bros., New Delhi	2000
111.	Prasad, Devi	Introduction to Numerical Analysis	Narosa, Publishing House	2005
112.	Johnson, R.A., Gupta, C.B.	Miller and Freund's Probability and Statistics For Engineers	Pearson Education, New Delhi	2005
113.	Prasad, Devi	Elementary linear algebra.	Narosa Publishing House	2006
114.	Ganesh, M.	Introduction to fuzzy sets and fuzzy logic.	Prentice-Hall of India	2006
115.	Mishra, B.N., Mishra, B.K.	Optimization: linear programming	Ane Books	2006
116.	Dubey, Balram	Introductory Linear Algebra	Asian Books, New Delhi	2007
117.	Gupta, C.B.	Quantitative Methods	Asian Books, New Delhi	2007

S.No.	Author	Title	Publisher	Year
118.	Sathpathi, D.K., Mishra, B.K.	Mathematical Modeling	Ane Books India, New Delhi	2007
119.	Ganesh, M.	Basics of Computer Aided Geometric Design : An Algorithmic Approach	IK International Publishing house Pvt. Ltd., New Delhi	2008
120.	Gupta, C.B., Mallik, K.	Engineering Mathematics-I	New Age Publications, New Delhi	2008
121.	Gupta, C.B., Mallik, K.	Engineering Mathematics-II	New Age Publications, New Delhi	2008
122.	Gupta, C.B.	Application of Optimization in Operations Research	IK International Publishing house Pvt. Ltd., New Delhi	2008
123.	Sharma, B.K.	A Text Book of Engineering Mathematics II	Asian Books Pvt. Ltd., New Delhi	2008
124.	Gupta, C.B.	Advanced Mathematics	NAIL, New Delhi	2009
125.	Krishnamurthy, V.	Combinatorics - Theory and Applications	East-West Press Pvt. Ltd., New Delhi. Also repub- lished by Ellis Horwood, U.K.	1985, 1986
126.	CB Gupta, SR Singh and Sandeep Kumar	Advanced Discrete Structure	IK International, New Delhi	2010
127.	DS Chauhan, KN Singh, Paresh Vyas, Rakesh Pandey, Subhash Yadav, Trilok Mathur	Beez Ganita (Algebra)	Vardhman Mahaveer Open University, Kota	2010
128.	SP Goyal, AK Goyal, Vimlesh Soni, Sunil Saxena, Trilok Mathur	Sammishra Vishleshan (Complex Analysis)	Vardhman Mahaveer Open University, Kota	2010
129.	Gupta, Kantesh, Garg, Atul, Shekhawat, K.S., Shekhar Chandra, and Goswamy, Pranay	Differential Equations, Calculus of Variations and Special Functions	Vardhaman Mahaveer Open University, Kota	2010
130.	Gupta, C.B., Singh S. R. and Kumar, Mukesh	Engineering Mathematics	Tata MCGraw Hill Education, New Delhi	2015
<b>Management Studies</b>				
131.	Dhyani, Umesh, Dash, Motilal, Kumar, Arya	Grass Roots Entrepreneurship- Strategy for Development	Jain Book Agency	2004
132.	Sharma, Sangeeta, Singh, Raghuveer	Advertising: Planning and Implementation.	Prentice-Hall of India	2006
133.	Anubhavananda Swami, Kumar, Arya	Management with Difference	Ane Books India, New Delhi	2007
134.	Bhat, Anil, Kumar, Arya	Management – Principles, Processes and Practices	OUP, New Delhi.	2008
135.	Chaudhary, Omvir & Singh, Prakash	Principals of Management	New Age International Publishers	2011
136.	Mechanical Engineering			
137.	Vaishwanar, R.S., Lakshmi-narayanan, V.	A Textbook of Practical Geometry (Ninth Ed.)	Jain Brothers, New Delhi	1992
138.	Mittal, R..K, Nagrath, I.J.	Robotics & Control	TMH	2003
139.	Parasar, B.S.N., Mittal, R.K.	Workshop Practice	Prentice Hall of India	2003
140.	Mittal, R.K., Sharma, N.N.	Emerging Mechanical Technology	RPS Press, Chennai	2007
141.	Prakash, Ravi	Nondestructive Testing Techniques	New Age Int. Publishers, New Delhi	2007
142.	Parashar, B.S.N.	Cellular manufacturing systems	PHI, New Delhi	2009
<b>Pharmacy</b>				
143.	Parimoo, P.	Textbook of Medicinal Chemistry	CBS, New Delhi	1995
144.	Mithal, B.M.	Textbook of Pharmaceutical Formulation (Sixth Ed.)	Vallabh Prakashan, New Delhi	1997
145.	Mithal, B.M.	Textbook of Forensic Pharmacy (Tenth Edition)	Vallabh Prakashan, New Delhi	1998
146.	Parimoo, P.	Pharmaceutical Analysis	CBS, New Delhi	1998
147.	Mithal, B.M., Saha, R.N.	Handbook of Cosmetics	Vallabh Prakashan, New Delhi	2000

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148.	Sriram, D. Yogeeswari, P.	Medicinal Chemistry	Pearson Education, New Delhi	2007
<b>Physics</b>				
149.	Srivastava, Rajesh & Choubisa, Rakesh	Atomic and Molecular Physics	Narosa Publishing House	2011
<b>Science &amp; Technology</b>				
150.	Mitra, C.R., Mandke, Parimal	S & T in Action	Prentice Hall, New Delhi	1988
151.	Mitra, C.R., Mandke, Parimal	Managing S&T – Conceptual Design of Management Tasks	Wiley Eastern Ltd, New Delhi	1989
<b>Economics &amp; Finance</b>				
152.	Machiraju, H.R.	Working of Stock Exchanges in India	Wiley Eastern, New Delhi	1994
153.	Machiraju, H.R.	Principles and Practice of Merchant Banking	Wiley Eastern, New Delhi	1994
154.	Arya Kumar and Anil Bhat	Principles of Management- Competencies/Processes/ Practices/ 2 <sup>nd</sup> edition of the book	Oxford University	2016
<b>B. Other Than Text Books</b>				
155.	Misra, S.D.	Amarakosh with Krishnamitra's Commentry in Sanskrit	Indira Prakashan, Patna	1972
156.	Sharma, R.C.	An approach to King Lear	McMillan, Madras	1975
157.	Mehta, H.C.	Science and Society in the University	Jain Bros., New Delhi	1976
158.	Prasad, S.N.	Studies in Gunedhya	Choukhamba Or-ientalia, Varanasi	1977
159.	Gaur, V.P.	Mahatma Gandhi : A study of his Message of Non- violence	Sterling, New Delhi	1977
160.	Krishna Mohan (Ed.)	Higher Education – A BITS Experiment	BITS, Pilani	1977
161.	Tewary, V.K.	Mechanics of Fibre Composites (International Edition)	Wiley Eastern, New Delhi John Wiley, New York	1978
162.	Prasad, S.N.	Katha Sarit Saagar Tatha Bhartiya Sanskriti	Choukhamba Or-ientalia, Varanasi	1978
163.	Krishna Mohan, Chatterjee, B.	A Practice Book of English Structure & Composition	Ram Prasad & Sons, Agra	1978
164.	Misra, S.D.	Advait Vedantamen Abhasavada	Indira Prakashan, Patna	1979
165.	Srivastava, G.P., Tiwari, S.Y.	Special Relativity (Hindi)	Rajasthan Hindi Granth Akadami, Jaipur	1979
166.	Mandke, V.V.	BITS Practice School, A case study in Industry- University Collaboration	BITS, Pilani	1980
167.	Krishna Mohan (Ed.)	Practice School: A New Concept in Higher Education	BITS, Pilani	1980
168.	Sharma, R.C. & others	Scientific Contexts	Tata McGraw Hill, New Delhi	1980
169.	Prasad, S.N.	Kalyanamalla's Anangaranga on Indian Erotics	Choukhamba Ori-entalia, Varanasi	1982
170.	Sharma, R.C. (Ed.)	Modern India, Shifting Perspectives, in honour of Dr. C.R. Mitra	S. Chand & Co., Delhi	1982
171.	Gulati, R.R.	Monochrome & Coloured Television	Wiley Eastern, New Delhi	1983
172.	Chaturvedi, P.D.	Language through Literature	Parshad Prakashan, Delhi	1986
173.	Mitra, C.R., Iyer, T.S.K.V., Krishnamurthy, V., Mandke, V.V., Subramanian, H., Venkateswaran, S., Arora, R.P., Maheshwari, L.K., Mandke, Parimal, Day, Smarit, Mitra, A.	'Challenge and Response' Towards New Education Policy and Beyond	Wiley Eastern, New Delhi	1986
174.	Misra, S.D.	Modern Researches in Sanskrit	Dr. Veermani Pd. Upadhyaya Felicitation Volume, Indira Prakashan, Patna	1987
175.	Gaur, V.P.	Studies on Nehru	Sterling Publishers, New Delhi	1987

S.No.	Author	Title	Publisher	Year
176.	Rai, R.S., Mehrotra, R.C.	Elements Old & New (in Hindi)	N.C.E.R.T.	
177.	Rai, R.S.	Elements – Old & New	NCERT, New Delhi	1990
178.	Rai, R.S.	Applications of Nuclear Radiations	NCERT, New Delhi	1990
179.	Chaturvedi, P.D., Krishna Mohan, Pathak, S.N. (Ed.)	An Improbable Achievement – BITS – A profile of Change	Wiley Eastern Ltd., New Delhi	1990
180.	Krishnamurthy, V.	Culture, Excitement and Relevance of Mathematics	Wiley Eastern Publications, New Delhi	1990
181.	Krishnamurthy, V.	Ten Commandments of Hinduism	Wiley Eastern	1994
182.	Misra, S.D.	Madhya-Siddhanta Kaumudiderpana	Krishnadas Academy, Varanasi	1996
183.	Gupta, S.P.	A practical guide to the construction of low cost Typhom Resistant Housing (Second Ed.)	Building & Social Housing Foundation. Coalville, UK	1997
184.	Gupta, S.P.	Disaster mitigation in Asia and the Pacific	Asian Development Bank, Manila Philippines	1997
185.	Srivastava, R.C., Saha, S.K., Jain, A.K.	Thermodynamics	Prentice Hall of India	2004
186.	Sharma, Sangeeta, Singh, Raghuvir (Guest Ed.)	International Journal of Communication (Vol. 14)	Bahri Publications, New Delhi	2004
187.	Raman, Meenakshi [Ed.]	Critical Perspective in American Literature	Atlantic Publishers and Distributors Ltd., New Delhi	2005
188.	Raman, Meenakshi, Sharma, Sangeeta, Mishra, Binod [Ed.]	Communicating at Work Shifting Paradigms and Emerging Trends	Jain Brothers, New Delhi	2005
189.	Mishra, Binod [Ed.]	Existential Concern in Novels of Mulk Raj Anand	Adhyayan Publishers & Distributors, Delhi	2005
190.	Ghosh, S.	Control Systems for the JNTU	Pearson Education	2005
191.	Sachdev, Kumar Neeraj	Ethics: A Virtue-theoretic Approach	Adhyayan Publishers & Distributors, Delhi	2005
192.	Dhyani, Umesh	Global corporate executives 63 mantras	Allied Publishers	2005
193.	Srivastava, R.C. Nagappa, A.N.	Surface Activity in Drug Design	Elsevier	2005
194.	Dash, S.S.	Pricing in the Telecommuni-cation Sector in India.	Academic Excellence, Delhi	2006
195.	Mishra, Binod, Kumar, Sanjay (Ed.)	Indian Writings in English.	Atlantic Publishers, New Delhi	2006
196.	Raman, Meenakshi	New Dimensions of English Poetry: Impact of Science and Technology.	Indus Valley Publishers, Jaipur	2006
197.	Mishra, Binod	Explorations in Australian literature.	Sarup & Sons Publishers, New Delhi	2006
198.	Mishra, Binod	Critical Response to Feminism.	Sarup & Sons Publishers, New Delhi	2006
199.	Mishra, Binod	Grammar in Use (A series of three books for Class VI, VII and VIII)	Arvind Publications, Meerut.	2006
200.	Ghosh, Smarajit	Signals and systems	Pearson Education	2006
201.	Fatmi, S.N.	Social Ecology and Agrarian Classes	Icon Publications, New Delhi	2006
202.	Modak, Pintu, Pareek, R.P.	Exercise and Diabetes Cardiovascular Disease and Obesity.	Jain Brothers, New Delhi	2006
203.	Gupta, S.P., Gupta, R.R. (Ed.)	QSAR and Molecular Modeling Studies in Heterocyclic Drugs I	Springer Verlag, Berlin	2006
204.	Parashar, B.S.N.	Elements of Manufacturing Processes	Prentice Hall of India	2006
205.	Modak, Pintu	Stretch and relax	Khel Sahitya Kendra, New Delhi	2009
206.	Krishna Mohan, Meenakshi Raman	Advanced Communicative English	TMH, New Delhi	2009
207.	Raman, Meenakshi	Soft Skills: Cornerstone of Professional Success	Jain Brothers, New Delhi	2009
208.	Raman, Meenakshi, Sangeeta Sharma	Communication skills for Mumbai University	OUP, New Delhi	2009

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209.	Raman, Meenakshi, Sangeeta Sharma	Professional Communication for UPTU	OUP, New Delhi	2009
210.	Raman, Meenakshi, Sangeeta Sharma	Communicative English for BPUT	OUP, New Delhi	2009
211.	Sharma, Sangeeta	Pester power effect of advertising on Children	CIPS, Jaipur	2009
212.	Sharma, Sangeeta & Binod Mishra	Communication Skills for engineers and scientists	PHI, New Delhi	2009
213.	Mishra, Binod & Gajendra S. Chauhan	Communication in a globalised world	Authors Press, New Delhi	2009
214.	Lata, Pushp & Sanjay Kumar	Communicate to conquer	PHI, New Delhi	2009
215.	Raman, Meenakshi & Sharma, Sangeeta	Technical Communication	Oxford Higher Education	2011
216.	Geetha, B. & Sarwal, Amit	Exploring Science Fiction	SSS Publications, New Delhi	2011
217.	Modad, Pintu & Debnath, KK	Science of Sports Training: A Comprehensive Approach	Sports Publications, New Delhi	2011
218.	Swami Anubhavananda & Arya Kumar	Ethics in Management - Insights from Ancient Indian Wisdom 2nd Edition	ANE Books Pvt Ltd	2014
219.	Leonard.S.Bobrow and Navneet Gupta	Foundation of Electrical Engineering: Asian Edition	Oxford University Press, New Delhi	2013
220.	Rajiv Gupta and David James	Edited the papers of International Conference on Sports Engineering (ICSE 2017), October 23-25, Jaipur	Excel Printing, New Delhi	2017
221.	Bahurudeen, A, Prasanta K. Sahu, and Nikhil Saboo	Construction materials and technology", National Mission Project on Pedagogy (Main Phase), outcome based technical notes, 2017	Sponsored by IIT Kharagpur.	2017
222.	Muthukumar, Manoj Kumar, and S. B. Singh	Structural Analysis-II, National Mission Project on Pedagogy (Main Phase), outcome based technical notes, 2017	Sponsored by IIT Kharagpur.	2017
<b>C. Books/Book chapter</b>				
223.	Jagadeesh Anmala	Mixing and Bimolecular Reactions in Heterogeneous Porous Media Flows: Transport, Mixing and Reactions	LAP Lambert Academic Publishing, Germany	2010
224.	Jagadeesh Anmala	Rainfall-Runoff Modeling Using Artificial Neural Networks and Physically-based Model: Theory, Simulation, and Results	LAP Lambert Academic Publishing, Germany	2010
225.	D. Sriram, P. Yogeewari	Medicinal Chemistry	Pearson Education, II edition	2010
226.	A. Sajeli Begum, A. B. Ray, M. Sahai	Non-conventional Lignans: Coumarinolignans, Falvonolignans and Stibenolignans" Progress in the Chemistry of Organic Natural Products	Springer Wien NewYork	2010
227.	Nagesh Kumar, D, K. Srinivasa Raju and Falguni Baliarsingh	Modeling for Flood Control and Management, in Natural and Anthropogenic Disasters: Vulnerability, Preparedness and Mitigation	M.K. Jha, Springer, The Netherlands and Capital Publishing Company, New Delhi,	2010
228.	H.D. Mathur, N.C. Hien, N. Mithulananthan, D. Joshi, R.C. Bansal	Distributed Generation: A Power System Perspective" Chapter 22 in Handbook on Renewable Energy Technology	World Scientific Publishing Co., Singapore	2011
229.	Ashish K. Sharma and Navneet Gupta	MEMS Switches for RFApplications - A Review," Sensors and Biosensors, MEMS Technologies and its Applications, Second volume	Sensors & Transducers, Canada	2013
230.	Vishal Saxena, Manoj Kannan, Shilpi Garg	Genetic Engineering Techniques, Course BIO C418		2013

S.No.	Author	Title	Publisher	Year
231.	R N Saha, Garima Balwani, Vibhu	Transmucosal Drug Delivery: Role of Nanoparticulate Systems	Studium Press LLC, USA	2014
232.	Pandey A, Kulkarni YA and Gaikwad AB	Curcumin: The epigenetic therapy (Chapter-6)	Elsevier	2016
233.	Yogesh A. Kulkarni, Mayuresh S. Garud, R S Gaud, Anil Bhanudas Gaikwad	Recent developments in using plant derived natural product as tubulin inhibitors for the management of cancer (Chapter-27)	Elsevier	2016
234.	Yogesh A. Kulkarni, Mayuresh S. Garud, Manisha J. Ozaa, Anil Bhanudas Gaikwad	Diabetes, diabetic complications and Flavonoids (Chapter-5)	Elsevier	2016
235.	Kalyani H. Barve, Yogesh A. Kulkarni, Anil Bhanudas Gaikwad	Nutraceuticals Therapeutic Agents for Inflammation (Chapter-7)	Elsevier	2016
236.	Mahaveer singh and H R Jadhv	Fast Dissolving oral Films, in Current Advances in fast Dissolving/ Disintegrating dosage form	Bentham Science	2016

#### Other Publications

1. Babu, B.A. "Learning ... .. an enjoyable experience", PHENOMENON, Annual Magazine of Chemical Engineering Association, BITS, Pilani, pp. 4-5, 2005
2. Babu, B.A. "Electronics, Instrumentation, and Control (E&IC) in Chemical Engineering", IMAGE-2005, Annual Magazine of Instrumentation Forum, BITS, Pilani, pp. 23-24, 2005
3. Banerjee, S. and Nozaki, S. Chapter V, Few-electron Memory: Fabrication, Operations and Challenges, Handbook of Semiconductor Nanostructures and Nanodevices, Edited by A.A. Balandin and K.L. Wang, American Scientific Publishers, Los Angeles, 2005.
4. Banerjee, S. and Nozaki, S. Chapter V, Few-electron Memory: Fabrication, Operations and Challenges, in Handbook of Semiconductor Nanostructures and Nanodevices, Edited by A.A. Balandin and K.L. Wang, American Scientific Publishers, Los Angeles 2005
5. Bansal, R.C. Electric Vehicles in Handbook of Automotive Power Electronics and Motor Drive", Edited by Dr. Ali Emadi, CRC Press, May 2005
6. Bhat A.K. Between the Lines, Vol. 1, Feb. 2005
7. Bhat, A.K. Creativity and Entrepreneurship in Knowledge Era, Phoenix- (Interface), pp.1-3, 2005
8. Bhat, A.K. India vs China- some lessons in economic development, Money Matters, pp. 18-20, 2005
9. Dixit, M., and Prakash, N. 'Conflicts of Two Generations' in Magazine 'The Smart Manager', Apr-May, Vol. 4, pp 70, 2005
10. Giri, A.K. Determinants of Demand for Money in India, Issues in Financial Developments, Edited by S.K Sham Bhat, pp. 259-318, Serials publication, Delhi, 2005
11. Giri, A.K. Search for Stable Money Demand Function for India: A Cointegration Approach Studies in Macroeconomics and Welfare, Ed. by BB Bhattacharya and Arup Mitra, Academic Foundation, New Delhi, pp.143-170, 2005
12. Kole, P.L., and Saha, R.N. Rifapentine – A New Edge to Tuberculosis Therapy, [www.pharmaarticles.net](http://www.pharmaarticles.net). 1<sup>st</sup> May 2005
13. Kumar, A. Reinventing Effective Leadership, In the book on HR Interventions in the Global Competitive Regime, Ed Charles Xavier, Adhikari C S, Murthy Ramana B V, Excels Books, 2005
14. Kumar, A. e- Banking - Emerging Challenges to Indian Banks, Economics and Finance Association Annual Issue on Money Matters 2005
15. Kumar, A. Entrepreneurial Opportunities in Knowledge Economy, Phoenix - Special Issue brought out by Management Association during INTERFACE 2005. Between the Lines, Monthly Newsletter of Management Group, April 2005
16. Kumar, A. Managing Change in the Financial Industry through Convergence, Between the Lines, Monthly Newsletter of Management Group, April, 2005
17. Kumar, A. Entrepreneurship Development for Employment of Youths, Between the Lines, Monthly Newsletter of Management Group, April 2005
18. Kumar, A., and Dhyani, U. Nurturing an Entrepreneurship Culture through Academia, University News, Vol. 42, 2004
19. Kumaran, V. and Chandran, S. Documentation as Tool to Improve Communication and Productivity in Pharmaceutical Manufacturing Industry; In, Communicating at Work: Shifting Paradigms and Emerging Trends, Eds. Raman M., Sharma S., Mishra B.; Jain Brothers, New Delhi, pp. 149-161, 2005
20. Manjunath, U. and Pareek, R.P. "Issues and Challenges in the Use of Internet and Telecommunication Technology by Medical Professionals" in Communicating at Work-Shifting Paradigms and Emerging Trends" Raman, Sharma and Mishra (Eds) Jain Brothers, New Delhi, pp. 135-148, 2005



21. Meenakshi, R. Securing Admission to Overseas Graduate Schools: Essentials of Standardized Tests, Phoneix-Interface 2005 Souvenir, BITS, Pilani, pp. 50-54, 2005
22. Meenakshi, R. Magnificent Machines in Masterly English Poetry, Image 2005, Instrumentation Forum Magazine, BITS, Pilani, pp.59-62, 2005
23. Meenakshi, R. Another New Year Resolution, Poem, Musings- Vol. IV, BITS, Pilani, pp.36, 2005
24. Mishra, B. Bahut Talkh Thi Tumhe--- a poem in Hindi, Vani, BITS, Pilani, 2005
25. Mishra, B. Divine Blessings –a poem in English, "Musings", 2005
26. Mishra, B. A Comparative Study of Death-wish in the poems of John Keats and Emily Dickinson. Studies in Literature in English, Vol.-X. APD Delhi 2005.pp. 59-69, 2005
27. Mishra, B. Significance of Silence and Pauses in Communication at work: Shifting Paradigms and Emerging Trends. Delhi. Jain Brothers, pp-239-246, 2005
28. Mishra, B. Unanswered Question –a poem in English, TISTA, Vol.1.Ed. Jaydeep Sarangi. Feb.2005
29. Nagappa, A.N. Future Prospects for Treatment of Pulmonary Fibrosis, PhramaBizCom, Oct 17,2004, Vol. 228, 2004
30. Nagappa, A.N. Future Prospects for Treatment of Pulmonary Fibrosis, Phrama Biz .Com, Oct 17,2004, Vol. 228, 2004
31. Prakash, N. Relevance of Social Science Concepts to Health Systems: Eualgesic State Management, In the book Pain Updated - Mechanisms and Effect, Edited by Rashmi Mathur, Anamaya Publishers, New Delhi, pp. 280-286, 2006
32. Rout, L. Overcoming Communication Barrier to resolve Team Conflict. Published in Book Titled: Communicating at Work: Shifting Paradigms and Emerging Trends. Edited by: M. Raman, S. Sharma & B. Mishra Publisher: M/S Jain Brothers, New Delhi, pp.75-94, 2005
33. Saha, R.N. Strong Industry – University Linkage: Necessity for Indian Pharma Industries to Exploit IPR in the book entitled Intellectual Property Rights: Issues and Challenges in Pharmaceutical Industries, Neeta Press, New Delhi, pp. 96-106, 2005
34. Sarkar, A.K. Integrated Rural Accessibility Planning: Application in Rajasthan (India); RATP No. 12, International Labour Organization, 2005
35. Sharma, S. Stark Reality in Musings Vol. IV, pp. 26, 2005
36. Sharma, S. Scaling the Inner Parnassus: Unlocking the Creativity, pp 21-22, Phoenix, Souvenir, 2005

## Book Chapters Published

### Department of Management

1. Neetu Yadav "Higher Education and Sustainable Development: An Exploratory Study of Indian Management Courses", In W. Leal Filho, U.M. Azeiteiro, F. Alves, P. Molthan-Hill (Eds.), Handbook of Theory and Practice of Sustainable Development in Higher Education, Volume 4, Springer, Berlin.
2. Bhat, A., and Dutta, N. 2018. Salient Role and Centrality of Trust in Social Media Marketing, in Bandyopadhyay, S. and Rishi, B. (Eds.), Contemporary Issues in Social Media Marketing, Routledge, 1st ed. ISBN: 978-11-38679-17-7
3. Tiwari, P.; Bhat, A. K. and Jyoti, Chapter entitled "Factors affecting Individual's Intention to Become a Social Entrepreneur", (accepted for publication) book titled Social Entrepreneurship and Sustainable Business Models in India edited by Anirudh Agarwal and Payal Kumar published by Palgrave Macmillan.
4. Yadav, N. and Tikoria, J. (2017), "Patanjali Ayurved Limited: A local player posing threat to multinationals", In Sahay, V. and Sarma, P.R.S. (Eds.), Select Management Cases, ET Cases, Mumbai (pp. 215-228) (Selected for publication in ET Editorial).

### Department of Pharmacy

5. M.J. Oza, M.S. Garud, Gaikwad AB, Y.A. Kulkarni, "Fibromyalgia Syndrome: Role of Obesity and Nutrients, Nutrition and Functional Foods for Healthy Aging", Elsevier publication.
6. N.Sharma, Gaikwad AB, Y.A. Kulkarni, "Folic Acid in Pain: An Epigenetic Link. In: Nutritional Modulators of Pain in the Aging Population", Elsevier publication.
7. Y.A. Kulkarni, S.V. Suryavanshi, S.T. Auti, Gaikwad AB, "Capsicum: A Natural Pain Modulator. In: Nutritional Modulators of Pain in the Aging Population", Elsevier publication.
8. M.S. Garud, M.J. Oza, Gaikwad AB, Y.A. Kulkarni, "Natural Remedies for Treatment of Cancer Pain. In: Nutritional Modulators of Pain in the Aging Population", Elsevier publication.

9. Y.A. Kulkarni, M.S. Garud, M.J. Oza, Gaikwad AB, "Biomarkers of Multiple Sclerosis and Their Modulation by Natural Products. Nutrition and Lifestyle. In: Neurological Autoimmune Diseases: Multiple Sclerosis", Elsevier publication.
10. Gautam Singhvi, Saswata Banerjee, Archana Khosa, "Lyotropic Liquid Crystal Nanoparticles: A Novel Improved Lipidic Drug Delivery System", Elsevier publication.
11. Emil Joseph, Gautam Singhvi, Saswata Banerjee, "Nanoparticulate drug delivery systems for brain targeting", Apple Academic Press, Ontario, Canada.

#### **Department of Electrical and Electronics Engineering**

12. Prof. Navneet Gupta co-authored a chapter of book "Nanomaterials and Their applications" published by Springer, Singapore. The title of chapter is "Electronic Behavior of Nanocrystalline Silicon Thin Film Transistor".

#### **Department of Biological Sciences**

13. Yadav, R.S., Mahatma, M.K. Thirumalaisamy, P.P., Meena, H.N., Arora, S. and Panwar, J. 2017. Arbuscular mycorrhizal fungi (AMF) for sustainable soil and plant health in salt-affected soils. In: Bioremediation of Salt Affected Soils: An Indian Perspective, Arora, S. Singh, A.K. and Singh, Y.P. (Eds.), Springer International Publishing, Switzerlandt, pp. 133-156.

#### **Department of Mathematics: NIL**

#### **Department of Mechanical Engineering: nil**

#### **Department of Civil Engineering**

14. Kumar K. (2017), "Basic Geotechnical Earthquake Engineering", 2nd Edition, New Age International Publishers.
15. Rajiv Gupta and David James, (2017) edited the papers of International Conference on Sports Engineering (ICSE 2017), October 23-25, Jaipur, India and published by Excel Printing, New Delhi.
16. Bahurudeen, A, Prasanta K. Sahu, and Nikhil Saboo, "Construction materials and technology", National Mission Project on Pedagogy (Main Phase), outcome based technical notes, 2017, Sponsored by IIT Kharagpur.
17. Muthukumar, Manoj Kumar, and S. B. Singh, "Structural Analysis-II, National Mission Project on Pedagogy (Main Phase), outcome based technical notes, 2017, Sponsored by IIT Kharagpur.

#### **Department of Chemical Engineering**

18. Sheth, P.N., S. Gupta and S. Kumar (2017). Energy Integration in Process Plants. In Sustainable Utilization of Natural Resources, Edited by Prasenjit Mondal and Ajay K. Dalai, CRC Press: 513-537.

#### **Department of Physics**

19. "Cosmology and Astrophysics Using the Post-reionization HI" by Anjan Ananda Sen, Tapomoy Guha Sarkar in Science with the Square Kilometre Array: An Indian Perspective — A Special Issue of the Journal of Astrophysics and Astronomy
20. "The redshifted HI 21 cm signal from the post-reionization epoch: Cross-correlations with other cosmological probes" by Tapomoy Guha Sarkar et al. In Science with the Square Kilometre Array: An Indian Perspective — A Special Issue of the Journal of Astrophysics and Astronomy
21. "Sensing through Surface Plasmon Resonance Imaging" by Raj Kumar Gupta in Reviews in Pasmonics 2016, Editor: Chris D Geddes, ISBN: 978-3-319-48081-7, DOI:10.1007/978-3-319-48081-7\_3

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Shri Satyen Sharma

BITS Pilani

# annual report 2017

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**Part B2: K.K. Birla Goa Campus**

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**BITS PILANI - KK BIRLA GOA CAMPUS****B2.1 SENIOR OFFICERS**

Prof. Raghurama G. (Director)

**New appointments**

During the year, the following new administrative appointments were made:

The names and designations of senior officers of Goa Campus are given in 'Annexure B2-1'.

**B2.2 ADMISSIONS**

The number of students admitted in each of the semester is given below.

	<b>Integrated First Degree Programmes</b>	<b>Higher Degree Programmes</b>	<b>Doctoral Programmes (PhD)</b>	<b>Total</b>
Second Semester 2016-17	-	-	19 (07)	19 (07)
First Semester 2017-2018	830 (14)	90 (39)	28 (11)	948 (64)

The programme-wise details are given in Annexure B2-2 (Part B2).

**B2.3 DUAL DEGREES AND TRANSFERS****(a) Dual Degree**

During the Academic year 2016-2017, 204 students were permitted to work concurrently for two first degrees under the Dual Degree scheme. See Annexure B2-3 (Part B2) for details

**(b) Transfer**

During the Academic year 2016-17, 6 students ((i) Within same tier :6; (ii) Integrated First Degree to Higher Degree : 00, (iii) Higher Degree to Ph.D.: 0 were permitted to transfer.

**B2.4 ACADEMIC CALENDAR**

The Academic year of the Institute is divided into two semesters and a summer term.

	<b>Starting Date</b>	<b>Ending date</b>	<b>Number of instruction days (excluding examination days)</b>
Second Semester 2016-2017	12 Jan 17	15 May 17	72
First Semester 2017-2018	1 Aug 17	14 Dec 17	84
Summer Term 2016-2017	22 May 17	15 July 17	48

**B2.5 COURSES OFFERED**

The number of courses, offered during the year 2017 is as follows:

	<b>Number of Courses offered</b>
Second Semester 2016-2017	285
First Semester 2017-2018	281
Summer Term 2016-2017	5



During the year, the following new courses were introduced.

S.No	Comp code	Course No	Course Title
1	1941	BIO F216	Water, Sanita & Solid Waste Mgm
2	1439	BIO F352	CELL & TISSUE CULTR TECH
3	1632	BITS F225	ENVIRONMENTAL STUDIES
4	2193	BITS F317	THEORETICAL NEUROSCIENCE
5	1207	CHE F412	PROCESS EQUIPMENT DESIGN
6	1205	CHE F421	BIOCHEMICAL ENGINEERING
7	49	CHE G551	ADVANCE SEPERATION TECH
8	1161	GS F244	REPORT & WRITE FOR MEDIA
9	1157	GS F343	SHORT FILM & VIDEO PROD
10	1152	HSS F227	CROSS CULTURAL SKILLS
11	2079	ME G535	ADV ENGG MATHEMATICS
12	2145	ME G612	PLASTICS ENGINEERING
13	2192	PHY F316	MUSICAL ACOUSTICS
14	2176	PHY F345	QUANTUM MECHANICS FOR ENGINEER
15	2177	PHY F512	ADVANCED QUANTUM FIELD THEORY

## B2.6 REGISTRATION OF STUDENTS

The registration processes for both the semesters was completed on the first day of each semester.

	Number of students registered
Second Semester 2016-2017	2854
First Semester 2017-2018	3196
Summer Term 2016-2017	630

Details of Registration of students for the Second Semester 2016-2017 are given in **Annexure B2-4**.

## B2.7 ACADEMIC AND PROFESSIONAL COUNSELING

During the year, the Academic Counseling Board (ACB), estimated the extent to which students under its purview fell short of the minimum academic performance, drew up a time-frame within which afflictions were to be removed, determined the package of courses for their registration in each semester and laid down the necessary stipulations for achieving intermediate targets. It further monitored their progress and applied necessary mid-course corrections, wherever required. The statistical summary of the number of On-campus students under its purview during the year is given below:

	II Semester 2016-2017	I Semester 2017-2018
Total number of students under the purview of ACB at the beginning of the semester	120	92
No. of students declared out of its purview at the end of the semester	79	49
No. of students who left the Institute during the semester	0	0
No. of new students who came under the purview of ACB at the end of the semester	51	42
Total No. of students under the purview of ACB during the next semester	92	85

Academic Counseling cell organized the counseling of students who were under the purview of ACB. It involved the involvement of faculty members as advisors and an external professional counselor whom the students could consult. The parents of students were also called to interact with the ACB.

**B2.8 AWARD OF DEGREES AND MEDALS**

## Award of Degrees

During the year, a total of 645 students graduated. The details on the award of degrees are given below.

	Number of degrees awarded
<b>81h Award (vide Board of Governors meeting)</b>	
81.01 held on 27.08.16	5(1)
81.02 held on 27.08.16	5(3)
81.03 held on 08.10.16	733(139)
81.04 held on 24.11.16	1(0)
81.05 held on 13.07.17	2(0)
<b>82nd Award (vide Board of Governors meeting)</b>	
82.01 held on 21.8.17	4(3)
82.02 held on 21.8.17	2(0)
<b>82nd Award</b>	
82.03 held on 16.10.17	5(2)
82.04	3(1)
82.05	53(3)
82.06	1(1)
82.01, 82.02, 82.03, 82.04, 82.05, 82.06 (subject to approval from vide Board of Governors meeting in its next meeting)	
<b>Total:</b>	<b>814(153)</b>

Statistical details of these degrees are given in 'Annexure B2-5, Annexure B2-6'

## Award of Medals

For Academic Year 2016-2017

The list of students who were awarded various medals, for the students graduated at the end of First Semester, Second Semester and Summer Term of the academic year 2016-2017 in the following table:

S.N.	ID.No.	Name	Sex	CGPA Obtained	Position Obtained	Type of Medal to be Awarded
<b>Integrated First Degree Programmes (No. of students: 565)</b>						
1	2013A7PS045G	TALLURI VARSHEETH	M	9.92	FIRST	GOLD
2	2013A7PS083G	AYUSH SHARMA	M	9.68	SECOND	SILVER
3	2013A3PS626G	SUDEEP MISHRA	M	9.5	THIRD	BRONZE

**B2.9 CAMPUS INTERVIEWS AND PLACEMENT FOR THE AY 2016-17**

Number of companies which conducted campus interviews	153
No of Students interviewed	4504
No of offers made	502

The statistics (discipline-wise) and the list of organizations which conducted campus interviews during the year is given in Annexure B2-7 (Part B2).

## B2.10 DEPARTMENT-WISE REPORT

In the following pages, a brief summary of the main activities and achievements of different departments of the campus is highlighted.

### B2.10.1 Department: Biological Sciences

Number of faculty members (as on 31 December 2016):16

Senior Professors, Professors	00
Associate Professors	07
Assistant Professors	09
Lecturers	00
Visiting Faculty	00

Head of the Department : Dr. Srikanth Mutnuri

Contact details (email): srikanth@goa.bits-pilani.ac.in

Number of PhD Scholars: 41

Number of Project Fellows: 20

Ph.D. Degree awarded during the year:07

1. **Ms. Pallavee Srivastava (ID.No.2011PHXF002G)**, defended her Ph.D thesis titled “*Biological Synthesis of Metallic and Metal Sulfide Nanoparticles using Halophilic Archaea and Bacteria*” She worked under the supervision of Prof. MeenalKowshik
2. **Ms. Ketaki R Deshmukh (ID. No – 2010PH29011G)**, defended her Ph.D thesis titled “*Synthesis and Characterization of Fluorescent Hydroxyapatite Nanoparticles and their Applications in Bioimaging and Plasmid Delivery*” She worked under the supervision of Prof. MeenalKowshik.
3. **Ms. Geethanjali Ravindran (ID No. -2011PHXPF007G)** defended her Ph. D. thesis titled “*Study the effect of cadmium toxicity on regulation of smallGTPases, HSP70 and apoptosis in human alveolar cells*”. She worked under the supervision of Prof. A. Sarkar.
4. **Shruti Balaji** (Nehru-Fulbright Fellow), PhD thesis title: “*Functional predictions of the transcription factor, RFX6, during human pancreatic development*” She worked under the supervision of Anasuya Ganguly.
5. **Ms. Priyadarshini Pai (ID No. 2012PHXF0007G)** defended her Ph.D thesis titled “*Analysis and Identification of Protein-Ligand Interacting Residues Using Computational Approaches*”. She worked under the supervision of Dr. Sukanta Mondal
6. **Priyanka Dwivedi** PhD thesis title “*Development of novel strategies for cartilage tissue engineering*”.She worked under the supervision of Dr. Vijayashree Nayak
7. **Kabilan Mani (ID No 2008PH29009G, Raman Charpak Fellow, CSIR SRF)**, PhD thesis title: “*Microbial Diversity of Halophilic Archaea and Bacteria in Solar Salterns and Studies on their Production of Antiarchaeal Substances*”. He worked under the supervision of **Prof Judith Bragança**.

Ph.D. Thesis Submitted during the year: 05

1. **Mr.Ajay Ghosh Chalasani (ID NO.2011PHXF015G )** Submitted his Ph.D thesis titled “*Exploration of a narrow-spectrum and strong antimicrobial compound from a wild-type Bacillus sp.*” under the supervision of Dr. Utpal Roy.
2. **Ms. Ramya R (ID No. 2011PHXF0005G)** Submitted her PhD thesis titled “*Purification, Biochemical and Functional Characterization of Bacillomycin-type Lipopeptides of Bacillus subtilis RLID 12.1 and Optimization for the Selective Production of the Most Potent Antifungal variant*” under the supervision of Dr. Utpal Roy.
3. **Ms. Akriti Rastogi (2009PH29004G)** submitted her thesis entitled *Studies on Anticoagulant Potential of Moon Jellyfish (Aurelia aurita) and Barrell Jellyfish (Rhizostoma pulmo) Tentacle Extracts*. She worked under the joint supervision of Dr. Dibakar Chakrabarty and Dr. Angshuman Sarkar.
4. **Ms. Jigni Pathan (2001PHXF006G)** submitted her thesis entitled *Studies on Effects of Russell’s Viper Venom on Human Alveolar Cancer Cells and Involvement of Small GTPases*. She worked under the joint supervision of Dr. Dibakar Chakrabarty and Dr. Angshuman Sarkar.

5. **Ms. Bandekar Divya Ramesh (ID No. 2012PHXF008G)** submitted her Ph.D thesis titled Structural and Functional Studies on VC0395\_0300 Protein from *Vibrio cholerae*. She worked under the supervision of Prof. Sumit Biswas.

**A. Sponsored Research activities:17**

**(i) Ongoing projects:**

1. Utpal Roy: "Exploration of Antifungal Lead Molecules from the Wild-type *Bacillus subtilis* RLID 12.1–purification and molecular characterization along with optimizing production" DBT, INR 48.69 Lacs, 3 years
2. Kundan Kumar, Co-PI: Utpal Roy, Screening, Isolation and Identification of Novel Antimicrobial Compounds from Potential Mangroves of Goa, CSIR, 20 lakhs, 3 years.
3. Malabika Biswas, Studies on the gene regulation involved in the lytic-lysogenic switch in *Staphylococcus aureus* temperate bacteriophage Phi11, DST-SERB, 21 Lakhs. 3years.
4. Malabika Biswas as Co-PI; Development of PCDA-liposome based detection kit for Alzheimer's disease biomarker"; b.DST-SERB;c.3yrs(2017-2020);d.Rs.26,63,200. Srikanth Mutnuri "Developing Bioactive Compound-Enriched Functional Food Ingredients from *Dillenia indica* and valorization of its pomace", DBT under North East Twinning Program in collaboration with Assam Agricultural University, 3 years
5. Srikanth Mutnuri "Pilot study, testing the use and production of Terra Preta and other soil improving products like Struvite / PROM", German Technical Cooperation (GIZ), 1.4 years
6. Srikanth Mutnuri "Onsite electrochemical wastewater treatment and recycling technology", Bill & Melinda Gates foundation project in collaboration with Caltech, USA, 1 years
7. Srikanth Mutnuri "Analytics Sensor Test-Kit for Advanced Process Control", Bill & Melinda Gates foundation project in collaboration with Cranfield University, UK, 1.5 years
8. Srikanth Mutnuri "Demonstration of River Sal cleaning by Vertical wetlands and river bed filtration", DBT, 2017-2019
9. Srikanth Mutnuri "Demonstration of a waste to energy by anaerobic digestion of food waste and septage", DBT, 2017-2019
10. Srikanth Mutnuri "Hybrid Electrochemical-MFC Waste Processing: Functional blocks for low energy disinfection and denitrification of human waste streams", Bill & Melinda Gates foundation project sub contracted by RTI international, 2017-2018

**(ii) Projects sanctioned during the year: 01**

1. PI: Kundan Kumar, Study on the role of TIP family members in arsenite accumulation and their transport in rice. BRNS, 29.40 lakhs, 3 years

**2. Projects completed this year: 05**

1. Utpal Roy (Mentor) Microbial Diversity & Biotechnological Potentials of some Polar [MENTOR & Supervisor], 20.79 Lakhs, DST-WOS, Completed in 2017.
2. SERB Young Scientist project entitled "Regulation of hypothalamic gonadotropin releasing hormone expression by putrescine in female rats" sanctioned money: Rs. "Regulation of hypothalamic gonadotropin releasing hormone expression by putrescine in female rats" /-(Rs. Twenty Two Lakh Twenty Four Thousand Only).
3. Kundan Kumar Identification and characterization of abiotic stress responsive With No Lysine (WNK) kinase in rice (*Oryza sativa* L.), SERB Rs.22.65 Lakhs, 3 years
4. Indrani Talukdar, Alternative splicing in signal transduction and diseases; a genome wide approach DST SERB, 20lakhs, 3years.
5. Indrani Talukdar, Role of alternate splicing modulators in differentiation of embryonic stem cells into specific lineages, BITS- "additional competitive grant for new faculty, 8 Lakhs, 2 Years

**B. Publications in 2017: 32**

1. Chalasani Ajay., S. Nema, and Utpal Roy (2017). Purification and Characterization of a Novel Anti-Staphylococcal Peptide (ASP-1) from *Bacillus* sp. URID 12.1. *International Journal of Antimicrobial Agents.*, doi.org/10.1016/j.ijantimicag.2017.08.030.
2. Purnima Singh, Shiv Mohan Singh, S. Naik, Utpal Roy, A Srivastava, Manfred Bötter (2017) Bacterial community in ancient Svalbard permafrost as characterized by culturable approach. *Journal of Basic Microbiology*.57(12):1018-1036. doi: 10.1002/jobm.201700061.
3. Ramya R, Manjari S, Namitha NN, Thakur RL, Chakrabarti A, Roy Utpal. (2017) Evaluation of antifungal efficacy of three new cyclic lipopeptides of the class Bacillomycin from *Bacillus subtilis* RLID 12.1. *Antimicrobial Agents and Chemotherapy*.doi: 10.1128/AAC.01457-17 AAC.01457-17

4. Srivastava, Pallavee, and Meenal Kowshik. "Fluorescent Lead (IV) Sulfide Nanoparticles Synthesized by *Idiomarina* sp. Strain PR58-8 for Bioimaging Applications." *Applied and Environmental Microbiology* 83.7 (2017): e03091-16.
5. Naik, K. and Kowshik, M. (), The silver lining: Towards the responsible and limited usage of silver. *J Appl Microbiol*. Accepted Author Manuscript. doi:10.1111/jam.13525
6. Joseph RD Fernandes, Sammit Jain and Arnab Banerjee. 2017. Expression of ODC1, SPD, SPM and AZIN1 in the hypothalamus, ovary and uterus during rat estrous cycle. *General and Comparative Endocrinology*. 246:9-22.
7. Naha N, Desai R, Fernandez JRD, Banerjee A. 2017. Globalization, obesity and polycystic ovary syndrome: What we pay? *Austin Endocrinol Diab Case Rep* 2017; 2: 1010.
8. Subhadeep Banerjee, Anjan Chattopadhyay, Joseph R.D.Fernandes, Arnab Banerjee, Apeksha Ashok Phadte, Akanksha Vinod Savardekar, Keisham Sarjit Singh. 2017. Synthesis and electronic properties of ester substituted 1,4-dicyanodibenzodioxins and evaluation of anti-proliferative activity of all isomeric 1,2-, 2,3- and 1,4-dicyanodibenzodioxins against HeLa cell line. *Bioorganic & Medicinal Chemistry Letters*. 27 (18): 4280-4284
9. Joseph R D Fernandes and Arnab Banerjee. *Obesity, Spermatogenesis and Male Infertility*. Male Infertility. Springer, 2017
10. Starlaine Mascarenhas, Srikanth Mutnuri, Anasuya Ganguly (2017) Deleterious role of trace elements – Silica and Lead in the development of chronic kidney disease. *Chemosphere*. Volume 177, June 2017, Pages 239–249
11. Anant Yadav, Florent Chazarenc, Srikanth Mutnuri (2018). Development of the "French system" Vertical flow Constructed Wetland to treat raw domestic wastewater in India, *Ecological Engineering*, Accepted for Publication.
12. Saddhe, A.A. Jamdade, R. and Kumar, K. (2017) Evaluation of multilocus marker efficacy for delineating mangrove species of West Coast India. *Plos One* 12, e0183245.
13. Ansie Martin and Angshuman Sarkar, Overview on biological implications of metal oxide nanoparticle exposure to human alveolar A549 cell line. *Nanotoxicology*, 11(6):713-724, 2017.
14. Akriti Rastogi, Angshuman Sarkar, Dibakar Chakrabarty, Partial purification and identification of a metalloproteinase with anticoagulant activity from *Rhizostoma pulmo* (Barrel Jellyfish), *Toxicon*, 132, 29-39, 2017.
15. Jigni Pathan, Sukanta Mondal, Angshuman Sarkar, Dibakar Chakrabarty, Daboialectin, a C-type lectin from Russell's viper venom induces cytoskeletal damage and apoptosis in human lung cancer cells in vitro *Toxicon*, 127, 11-21 2017.
16. Changes in the Functional Activity of Phi11 Cro Protein is Mediated by Various Ions. Das A, Biswas M. *Protein J*. 2016 Dec;35(6):407-415.
17. A Facile, Catalyst-Free Mechano-Synthesis of Quinoxalines and their In-Vitro Antibacterial Activity Study ;Article in *ChemistrySelect* 2(3):1183-1187 · January 2017; DOI: 10.1002/slct.201601672 ; Zigmee T. Bhutia, Geethika Prasannakumar, Avijit Das, Dr. Malabika Biswas, Dr. Amrita Chatterjee, Dr. Mainak Banerjee
18. Mechanochemical synthesis of 7-oxa-4-thia-1-aza-bicyclo [3.2.1] octane-4,4-dioxides via tandem Michael addition-1,3-dipolar cycloaddition and their antibacterial properties *European Journal of Organic Chemistry* (IF 2.834 ) Pub Date: 2017-11-27 , DOI: 10.1002 / ejoc.201701511 Zigmee T. Bhutia, Avijit Das, Malabika Biswas, Amrita Chatterjee, Mainak Banerjee
19. BANDEKAR D, CHOUHAN OP, MOHAPATRA S, HAZRA M, HAZRA S, BISWAS S\*. Putative Protein VC0395\_0300 from *Vibrio cholerae* is a Diguanylate Cyclase with a Role in Biofilm Formation. *Microbiol Res*. 2017 Sep;202:61-70. doi: 10.1016/j.micres.2017.05.003.
20. Manjuri K. Koley, Om Prakash Chouhan, Sumit Biswas, Joseph Fernandes, Arnab Banerjee, Anjan Chattopadhyay, Babu Varghese, Periakaruppan T. Manoharan and Aditya P. Koley. Spectroscopic, electrochemical and DNA binding studies of some monomeric copper(II) complexes containing N2S(thiolate)Cu core and N4S(disulfide)Cu core. *Inorganica Chimica Acta*, Elsevier. 2017; 456:179-198.
21. An AIE-based Chemodosimeter Approach for Selective Sensing and Imaging of Hg(II) and Methylmercury Species; *Analytical Chemistry*- November 2017; Amrita Chatterjee Mainak Banerjee, Dipratn G. Khandare, Ram U Gawas, Starlaine Mascarenhas, Anasuya Ganguly, Rishabh Gupta and Hrishikesh Joshi: DOI: 10.1021/acs.analchem.7b02663 IF: 6.3
22. Biocompatible agarose-chitosan coated silver nanoparticle composite for soft tissue engineering applications: Nupur Kumar, Dayananda Desagani, Girish Chandran, Narendra Nath Ghosh, Ganesh Karthikeyan, Sachin Waigaonkar and Anasuya Ganguly: *Artificial Cells, Nanomedicine, And Biotechnology*, 2017 <https://doi.org/10.1080/21691401.2017.1337021>. IF:5.6

23. Biodiversity of Penha-de-Franca, Goa, India: Anasuya Ganguly, Pradip Vithal Sarmokadam, Kundan Kumar and Srikanth Mutnuri: *Journal of Agroecology and Natural Resource Management (JANRM)* p-ISSN: 2394-0786, e-ISSN: 2394-0794, Volume4, Issue2; April-June,2017, pp.105-111: Krishi Sanskriti Publications: <http://www.krishisanskriti.org/Publications.html>
24. Deleterious role of trace elements -Silica and lead in the development of chronic kidney disease:Starlaine Mascarenhas, Srikanth Mutnuri, Anasuya Ganguly: *Chemosphere* 177 (2017) 239-249 IF: 3.1
25. Pai PP, Dattatreya RK, Mondal S. (2017) Ensemble architecture for prediction of enzyme-ligand binding residues using evolutionary information. *Mol Inform.* Nov;36(11). doi: 10.1002/minf.201700021.
26. Pai PP, Mondal S. (2017) Applying knowledge of enzyme biochemistry in prediction of functional sites for aiding drug discovery. *Curr Top Med Chem.* doi: 10.2174/1568026617666170329153858. (Review)
27. Pai PP, Dash T, Mondal S. (2017) Sequence-based discrimination of protein-RNA interacting residues using a probabilistic approach. *J Theor Biol.* 418:77-83. doi: 10.1016/j.jtbi.2017.01.040.
28. Pathan J, Mondal S, Sarkar A, Chakrabarty D. (2017) Daboialectin, a C-type lectin from Russell's viper venom induces cytoskeletal damage and apoptosis in human lung cancer cells in vitro. *Toxicol* 127:11-21.
29. AdvaitBalaji, AparajitaHaldar, KeshavPatil, T Sai Ruthvik, Valliappan CA, MayurJartarkar, and Veeky Baths: EEG-based Classification of Bilingual Unspoken Speech using ANN, (1154) has been accepted for presentation at the 39th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC'17) to be held at the International Convention Center, JeJu Island, S. Korea, from 11-15 July 2017.
30. C A, Valliappan, Thandayam, Sai Ruthvik, Balaji, Advait ,Dhingra, Piyush ,Baths, Veeky. A Portable Real Time ECG Device for Arrhythmia Detection Using Raspberry Pi", Lecture Notes in Computer Science, Volume 192 of the Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering series: MOBIHEALTH 2016. LNICST 192, pp. 1–8, 2017. DOI: 10.1007/978-3-319-58877-3 24
31. Bhakti B. Salgaonkar and **Judith M. Bragança** (2017) Utilization of Sugarcane Bagasse by *Halogeometricum borinquense* Strain E3 for Biosynthesis of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate). *Bioengineering*, 4, 50. (DOI: 10.3390/bioengineering4020050).
32. Antunes, André, Marta F. Simões, Stefan W. Grötzinger, Jörg Eppinger, **Judith Bragança**, and Vladimir B. Bajic (2017). Bioprospecting Archaea: Focus on Extreme Halophiles. In *Bioprospecting* (pp. 81-112). Springer International Publishing.

#### C. Conferences attended/papers presented : 13

1. Ankush Ashok Saddhe, Kundan Kumar (2017) Evaluation of Multilocus Marker Efficacy for Delineating Mangrove Species of West Coast India. 7<sup>th</sup> International Barcode of Life, Nov 20-24, 2017 South Africa.
2. Rakesh Manua and Kundan Kumar (2017) Identification and expression analysis of *OsWNK9* gene in *Arabidopsis thaliana* and rice. InterDrought-V, Hyderabad from 21-25 February 2017.
3. Dr. Dibakar Chakrabarty presented a paper entitled ANTICOAGULANT AND WOUND HEALING PROPERTIES OF SEA-STAR (*Astropecten indicus*) COELOMIC FLUID co-authored by Mansi Baveja and Angshuman Sarkar at 19<sup>th</sup> World Congress of the International Society on Toxinology held at Haikou, Hainan, P.R. China in 24<sup>th</sup> to 31 October, 2017
4. Presented a poster at the International conference "Microbiology in the new Millennium : from Molecules to Communities" (MNM 2017) , held from 27th to 29th of October, 2017 at the new Unified Campus of Bose Institute, Kolkata. Title of Poster: The ORF7 of Phi11 and its bacteriostatic effect on *E. coli* cells
5. Conference attended for oral presentation from Dr. Indrani Talukdar's lab by her PhD student, Ms. Jiss Maria Louis in RNA meet, 2017, conducted from 26<sup>th</sup>-28<sup>th</sup> Oct, at Benaras Hindu University.
6. INVITED AND INAUGURAL TALK AT 9TH YOUNG INVESTIGATORS MEETING 2017, on 6th MARCH, 2017, GOA Structural changes in the binding site of a diguanylate cyclase induced by site directed mutagenesis. Sumit Biswas, Om Prakash Chouhan NSC 45, 2017, BHU Leaf Extracts from *Moringa oleifera*: A multidimensional prodigy? Sumit Biswas. 2<sup>nd</sup> International Conference on Nutraceuticals and Chronic Diseases 2017
7. Functional changes in a diguanylate cyclase from *Vibrio cholerae* induced by site-directed mutagenesis. Sumit Biswas<sup>1</sup>, Om Prakash Chouhan<sup>1</sup> and Divya Bandekar<sup>1</sup>. 23<sup>rd</sup> meeting of the International Network of Protein Engineering Centers (*INPEC*) held at Bose Institute, Kolkata.
8. Raviprasad Aduri's lab presented a poster "RNA secondary structure analysis of the 5' UTR of the Flavivirus genomic RNA" at Computational Chemistry and Computational Biology, an Indo-German workshop, conducted at IIIT Hyderabad, Hyderabad during November 29-30, 2017.

9. Raviprasad Aduri's lab presented a poster "Elucidating intrinsic disease specific markers for Dengue fever and severe Dengue" at a one day symposium on "New Perspectives in Biosciences" at Goa University, Goa on 7th December 2017.
10. Invited talk "A Online based Certificate Course between EAWAG and BITS Pilani"
11. Oral Presentation "Empowered septic tank as decentralized treatment system" and poster presentation "Pilot study of testing the use and production of Terra Preta and Phosphate Rich Organic Manure (PROM) for improving agricultural productivity" at The IWA S2Small2017 Conference on Small Water & Wastewater Systems and Resources Oriented Sanitation, Nantes, France, October 22 -26, 2017.
12. Vijayashree Nayak & Priyanka Dwivedi: Bioactive molecules incorporated gelatine spheres as a mode of sustained drug release for therapeutic application, university of California, USA, 2017
13. Priyanka Dwivedi, Ashok Kumar and Vijayashree Nayak: A study on nutritional supplement retinoic acid micro encapsulation induced sustained drug release for the treatment of arthritis International conference on challenges in drug discovery and delivery (ICCD3), March 2017

#### **D. Books Published/Edited during the year: 02**

1. Mechanisms of bacterial heavy metal resistance and homeostasis: an overview, In *Heavy Metals in the Environment: Microorganisms and Bioremediation*, Ed: Edgardo Donati, CRC Press, Taylor and Francis Group. (Accepted for Publication)
2. Saddhe, AAS, Kumar, K. and Dwivedi, P. (2017). Mechanism of ABA signaling in response to abiotic stress in plants. In Girdhar Pandey edit: Mechanism of plant hormone signaling under stress: A functional genomic frontier. ISBN-13:978-1118888926. Chapter 8.

#### **D. Conferences, Seminars & Workshops conducted:02**

1. Veeky Baths , The 4<sup>th</sup> International workshop on multi-modal cognition was organized by the Cognitive Neuroscience Lab, Department of Biological Sciences, BITS Pilani K K Birla Goa Campus from 3<sup>rd</sup> – 4<sup>th</sup> of March, 2017.
2. National workshop on "Experimental Methods in Cognitive Neuroscience" was organized by the Cognitive Neuroscience Lab, Department of Biological Sciences, BITS Pilani, K K Birla Goa Campus from 15 th – 16 th December, 2017

#### **F. Invited Talks given by BITS faculty: 02**

1. Invited lecture delivered for the International Conference on Reproductive Biology and Comparative Endocrinology & The 35<sup>th</sup> Annual Meeting of The Society for Reproductive Biology and Comparative Endocrinology 9<sup>th</sup> - 11<sup>th</sup> February, 2017, Department of Animal Biology, University of Hyderabad, Hyderabad, on 'Liraglutide, a glucagon like peptide1 analog, modulates adipokines expression during adipogenesis and ameliorates obesity as well polycystic ovary syndrome in mice.'
2. INVITED AND INAUGURAL TALK AT 9TH YOUNG INVESTIGATORS MEETING 2017, on 6th MARCH, 2017, GOA Leaf Extracts from Moringa oleifera: A multidimensional prodigy? Sumit Biswas. 2<sup>nd</sup> International Conference on Nutraceuticals and Chronic Diseases 2017

#### **G. Invited talks arranged in the department: 06**

1. Dr. Pradeep Kumar Agarwal, Principal Scientist and Head, Plant Omics Division of Central Salt and Marine Chemical Research Institute (CSIR) Bhavnagar, Genetic Engineering Techniques for Plant Stress Tolerance. 10 November 2017.
2. Prof. Ashok Kumar, Professor, IIT Kanpur ,Bio Inspired Scaffolds For Tissue Engineering and Regenerative Medicine, 1st September, 2017
3. Prof. Gautam Basu, Senior Professor, Dept. of Biophysics, Bose Institute, Kolkata. The legacy of J.C. Bose. 18/8/17
4. Dr. Suman Thakur, Senior Scientist, Proteomics and Cell Signaling, CCMB, Hyderabad. Biomarker to Drug Discovery using Quantitative high throughput Proteomics. 8th November, 2017
5. Talk on "Progenitor Cells in the Developing Kidney - Balancing Renewal and Differentiation" by BITSGian, Dr. Harini Ramalingam. Date: 10/10/2017
6. Prof. Ashok Kumar from IIT Kanpur on aspects of tissue engineering in clinical applications 2017

#### **H. Awards and recognitions won by faculty and students:08**

1. "INSA Visiting Scientist Fellowship" awarded to Dr. Utpal Roy by Indian National Science Academy.
2. Purnima Singh, completed Ph.D under the supervision of Dr. Utpal Roy was awarded SERB Indo-U.S. Postdoctoral Fellowship for the year 2017, supported by the Science and Engineering Research Board (SERB) and Indo-U.S. Science and Technology Forum (IUSSTF).

3. Ankush Saddhe was awarded SERB Travel Grant under Young Scientist Category in November 2017.
4. Kundan Kumar was awarded Outstanding Scientist in Plant Biotechnology in 3<sup>rd</sup> Venus International Research Awards-VIRA 2017.
5. Ms. Jigni Pathan and team won the 2<sup>nd</sup> position in BonjourIndia 24H Non-Stop Indo-French Entrepreneurship Challenge and contributed to the creation of an innovative start-up project on 1st and 2nd December 2017 at IISER Pune India.
6. Jiss Maria Louis (2015PHXF401G), a PhD student from Dr. Indrani Talukdar's lab, won the Best Oral Award (First Position) at National Conference of Young Researchers 2017 conducted at Goa university from 16th-17th March for the talk entitled "TNF alpha mediated alternative splicing in type 2 diabetes: a genome wide approach".
7. Dr. Bhakti Salgaonkar (CSIR RA), student from Prof. Judith Bragança's group, attended thirteen days South East Asia - India Thematic School on Aquatic Microbial Ecology (ASIAME 2), at Andaman and Nicobar Centre for Ocean Science and Technology (ANCOST), National Institute of Ocean Technology (NIOT), Dollygunj, Port Blair, India in association with Centre National de la Recherche Scientifique (CNRS), France, from 6<sup>th</sup>-18<sup>th</sup>, November, 2017.
8. Dr. Bhakti Salgaonkar (CSIR RA), student from Prof. Judith Bragança's group, attended four days Workshop on Science Administration and Management for Women, by Prof. Elena Gaura (Director of Cogent Computing Applied Research Centre, Coventry University, United Kingdom) at Indian Institute of Science Education and Research (IISER), Pune, from 18<sup>th</sup>-21<sup>st</sup> September, 2017.

**Post Doctoral Researchers of the Department : 02**

1. Dr. Gauri A. Achari joined Science and Engineering Research Board (SERB) National as Postdoctoral Research Fellowship on 04.05.2017 under Prof. Meenal Kowshik Title of Project: Novel sustained release biodegradable polymer coated urea and zinc nanofertilizers for synchronizing fertilizer uptake, improving productivity and prevention of bacterial wilt disease in chilli (*Capsicum annum* L.)
2. Dr. Bhakti B. Salgaonkar joined as CSIR Research Associate (CSIR-RA) on 4<sup>th</sup> May, 2017 under Prof. Judith Bragança's lab on project entitle: 'Application of Polyhydroxyalkanoates obtained from Halophilic Archaea as potential Biomaterial in Tissue Engineering'.

**I. Faculty Development, International Collaboration & Industry Immersion: Nil**

**J. Significant new equipments/experimental facility added during the year: Nil**

**K. Departmental association/club activities: Nil**



**B2.10.2 Department: Chemistry**

Number of faculty members (as on 31 December 2017): 16

<b>Senior Professors, Professors</b>	02
<b>Associate Professors</b>	09
<b>Assistant Professors</b>	4 + 1 (DST-INSPIRE Faculty)
<b>Lecturers</b>	-
<b>Visiting Faculty</b>	-

**Head of the Department:** Dr. Anjan Chattopadhyay, Associate Professor**Contact details (email):** anjan@goa.bits-pilani.ac.in**Number of PhD Scholars:** 20(Full Time) +1 (Part Time)**Number of Project Fellows:** 10**No. of Post Doctoral Scientists& Researchers:** 01**Ph.D. Thesis awarded during the year:** 03**Ph.D. Thesis Submitted during the year:** 06**A. Sponsored Research activities:****(i) Ongoing projects:**

<b>Name of Investigator</b>	<b>Title of Project and duration</b>	<b>Amount sanctioned (Rs)</b>	<b>Funding Agency</b>
Prof. Sunil Bhand (PI) Dr. Gautam Bacher (Co-PI) Consortium of CDAC Kolkata, BITS Pilani K.K.Birla Goa Campus, Jadavpur University Kolkata	Development of sensing system for residual pesticide and harmful chemical detection in fruits and vegetables "VegFruitSens" .2 years	2,12,00,000 (BITS funding- 53,50,000.00)	R.D. Tata Trust Mumbai
Prof. Sunil Bhand (PI) Co-investigators: Prof A P Koley, Dr. Gautam Bacher PCs: Dr. R. Balasubramaniam Precision Engineering division, BARC, Mumbai	Development of a field portable devise for the analysis of environmental contaminants in water  36(2)/14/25/2014-BRNS-445 3 years	24,13,800	DAE, BRNS Mumbai
Prof. Sunil Bhand (PI) Co-investigator: Dr.. Gautam Bacher, Principal Collaborator: Dr. Vishal Dhamgaye (RRCAT, Indore)	Novel micro biosensor device for heavy metal analysis in vegetables  CSR-IC-BL-40/CRS-137-2014-15/1233 2 years	1,00,000	UGC DAE – CRS, Indore  Synchrotron Lithography Beam line
Dr. P. Bhavana	Steric and Conformational Influences on the Performance of Nonplanar and Highly Functionalized Phenyl- And Heteroaryl- Porphyrins in the Sensing of Anions and Heavy Metal Ions , 3 years	28,22,820	SERB
Dr. Mainak Banerjee	A comprehensive study on mechanochemicals <sup>2</sup> C-H bond activation in five-membered heteroaromatics in a Ball-Mill: Can first row transition elements be a potential replacement of late transitional elements—a question to investigate; 3 years	30,57,560	SERB
Dr. Amrita Chatterjee	"Design and synthesis of Graphene oxide based AIE-sensor for selective detection of Hg(II) and organic mercury in aqueous medium"3 years	7,03,000	UGC DAE (CSR)
Dr. Amrita Chatterjee	Development of PCDA-liposome based detection kitfor Alzheimer's disease biomarker	26,63,200	SERB
Dr. Tanmoy Mondal	Nonadiabatic molecular processes on threefold electronic degeneracies. 5 years	35,00,000	DST, New Delhi

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Dr. Raghu Nath Behera (PI)	Computational Study of the Catalytic Mechanism of some Diaryldiselenide-based Glutathione Peroxidase Mimetics, 2017 - 20	16,42,280	DST-SERB
Dr. K. P. Jayadevan (PI) Dr. Raghu Nath Behera (co-PI)	Experimental and Computational Study of Boron Doped TiO <sub>2</sub> and ZnONanocrystals, 2017-20	23,32,515	DST-SERB

## (ii) Projects sanctioned during the year\*:

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Consortium Project among BITS Goa, Amity University and IARI, ICAR N Delhi BITS Goa CCPI: Prof. Sunil Bhand	Nano-based detection of organophosphate pesticides using metal-organic framework conjugates 3 years	Total funding Rs. 1, 77, 00,000 BITS Goa share 43, 20, 000	National Agricultural Science Fund, ICAR Govt. of India.

\*Mention if the sanctioned project is already under the ongoing projects.

## (iii) Projects approved during the year:

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Dr. Mainak Banerjee	Design and synthesis of smart supramolecular dyes based on TPE modified PDIcucurbituril conjugates, 3 years	27,92,500	BRNS

## (iv) Projects completed this year:

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Prof Rajiv Gupta (Pilani) Prof. Sunil Bhand (Goa) Prof Utpal Roy (Goa) Prof Neeru Sood, (Dubai)	Centre of Research Excellence in Water, Waste water and Energy Management (CORE WWEM) Subproject title: "Development of Field Deployable biosensor for analysis of bacterial contaminant in potable water"	91,00,000 Goa share (41,00,000)	BITS, Pilani
Dr. N N Ghosh	"Development of Polymer-Ferrite (and/ or Graphene Nanocomposites having High Thermal Stability and Microwave Absorption Property for Radar Absorbing Coating Applications (ERIP/ER/1305004/01/1523) Duration: 3 years	14,59,000	Defence Research and Development Organization (DRDO), India
Dr. N N Ghosh	Title: "Investigation on microstructures of hard-soft ferrite nanocomposites and influence of microstructure on their properties" (Ref: CSR-KN/CRS-68/2014-15/ 508) Duration: 3 years	7,00,000	University Grant Commission- Dept. of Atomic Energy Consortium for Scientific Research, India
Dr. Subhadeep Banerjee	Development of $\beta$ , $\beta'$ -Edge Fused $\pi$ -Elongated Donor-Acceptor Porphyrins Possessing Near-IR Optical Spectra" Duration: 3 years	22,60,000	DST-SERB

**B. Publications of 2017 (Jan-Dec):**

1. Amrita Chatterjee, Mainak Banerjee, Diprati G. Khandare, Ram U. Gawas, Starlaine C. Mascarenhas, Anasuya Ganguly, Rishabh Gupta, and Hrishikesh Joshi, "Aggregation-Induced Emission-Based Chemodosimeter Approach for Selective Sensing and Imaging of Hg(II) and Methylmercury Species", *Anal. Chem.* 2017, 89, 12698–12704.
2. Zigmee T. Bhutia, Geethika Prasannakumar, Avijit Das, Malabika Biswas, Amrita Chatterjee, and Mainak Banerjee, "A Facile, Catalyst-Free Mechano-Synthesis of Quinoxalines and their In-Vitro Antibacterial Activity Study", *ChemistrySelect*, 2017, 2, 1183– 1187.
3. Vikash Kumar, Amrita Chatterjee, Biswajit Gopal Roy and Mainak Banerjee, "Synthesis of novel d-glucose based anionic bolaamphiphiles and their catalytic application in 1,3-dipolar nitrene cycloaddition reactions", *Catalysis Communications*, 2017, 94, 77–81.
4. Zigmee T. Bhutia, Avijit Das, Malabika Biswas, Amrita Chatterjee and Mainak Banerjee, "Mechanochemical synthesis of 7-oxa-4-thia-1-azabicyclo[3.2.1]octane-4,4-dioxides via tandem Michael addition-1,3-dipolar cycloaddition of aldoximes and evaluation of their antibacterial activities", *E. J. Org. Chem.*, 2017, DOI: 10.1002/ejoc.201701511.
5. Deoghare C., Nadkarni V. S., Behera R. N and Chauhan R., "Synthesis and Characterization of Copolymers of Methyl methacrylate with N-arylitaconimides via AGET-ATRP" *Journal of Polymeric Materials -An International Journal*, 2017, 455-456.
6. Srimanta Halder, Purushothaman Bhavana, "Role of conformational and electronic effects on various thienylporphyrinic ionophores in the detection of metal ions – A potentiometric investigation", *J. Mol. Struct.*, 2017, 1150, 206-213.
7. Arun Kumar Prusty, Sunil Bhand, "PoPD Modified ITO Based Capacitive Immunosensor for Sulphathiazole", *Electroanalysis* 2017, 29, 1867-1875. DOI:10.1002/elan.201700070 (Wiley) <http://onlinelibrary.wiley.com/doi/10.1002/elan.201700070/full>
8. Arun Kumar Prusty, Sunil Bhand, "A capacitive sensor for 2,4-D determination in water based on 2,4-D imprinted polypyrrole coated pencil electrode". *Mater. Res. Express*, 2017, 4, 035306 (IOP) <https://doi.org/10.1088/2053-1591/aa6386>
9. Aruna Chandra Singh, Gautam Bacher, Sunil Bhand, A label free immunosensor for ultrasensitive detection of 17 $\beta$ -Estradiol in water *Electrochimica Acta*, 2017, 232, 30-37, <https://authors.elsevier.com/a/1UKYU33-e9cUn>
10. Atul Sharma, Georges Istamboulie, Akhtar Hayat, Gaëlle Catanante, Sunil Bhand, Jean Louis Marty, "Disposable and portable aptamer functionalized impedimetric sensor for detection of kanamycin residue in milk sample" *Sensors and Actuators B: Chemical*, 2017, 245,507-515 <http://dx.doi.org/10.1016/j.snb.2017.02.002>
11. Atul Sharma, Kotagiri Yugender Goud, Akhtar Hayat, Sunil Bhand and Jean Louis Marty, "Recent Advances in Electrochemical-Based Sensing Platforms for Aflatoxins Detection" (review) *Chemosensors*, 2017, 5(1), 1; [10.3390/chemosensors5010001](https://doi.org/10.3390/chemosensors5010001).
12. Atul Sharma, Aruna Chandra Singh, Gautam Bacher, Sunil Bhand, "Recent advances in aptamer-based biosensors for detection of antibiotic residues". *Aptamers and Synthetic Antibodies*, 2 (2), 2017, 43-54. [Invited Review]
13. J. Srinivasu, K. Narendra, Ranjan Dey, G Srinivas Rao and B Subba Rao, Molecular Interactions in binary mixtures of 1,4-butanediol + picolines : Viscometric approach, *Indian Journal of Chemistry*, 2017, 56A, 1154-1160.
14. Akanksha Saini, Aditya Harshavardhan and Ranjan Dey, Thermophysical, Excess and transport properties of Organic solvents with imidazolium based Ionic Liquids, *Indian Journal of Chemistry-A*, 2017, 56, 21-35.
15. Pragnya P. Mishra, Rabi N. Panda, "Novel synthesis, characterization and magnetic properties of nano-structured  $\gamma$ -Mo<sub>2</sub>N and  $\gamma$ -Co<sub>0.25</sub>Mo<sub>1.75</sub>N nitrides", *Materials Research Bulletin* 2017, 86, 241–247.
16. Shankar B. Dalavi, Rabi N. Panda, "Observation of high coercive fields in chemically synthesized coated Fe-Pt nanostructures" *Journal of Magnetism and Magnetic Materials*, 2017, 428, 306-312.
17. Shankar B. Dalavi, Rabi N. Panda, "Investigations of Magnetic Properties of Oleic Acid and Oleyl Amine Capped Nanostructured Co x Ni1-x (0.2  $\leq$  x  $\leq$  0.8) Alloys" *Journal of Nanoscience and Nanotechnology* 2017, 17, 2589-2595
18. Uday Kumar Padidela, Tarun Khanna & Raghu Nath Behera, Structure, thermodynamics and diffusion in asymmetric binary mixtures: a molecular dynamics simulation study, *Physics and Chemistry of Liquids*, 2017, DOI: 10.1080/00319104.2017.1407932
19. Praseetha E. Kesavan, Raghu Nath Behera, Shigeki Mori, Itri Gupta, "Carbazole Substituted BODIPYs: Synthesis, Computational, Electrochemical and DSSC Studies", *Journal of Fluorescence*, 2017, 27(6), 2131-44, DOI: 10.1007/s10895-017-2152-9

20. Uday Kumar Padidela and Raghu Nath Behera, Interactions in charged colloidal suspensions: A molecular dynamics simulation study, *AIP Conference Proceedings*, 2017, 1859, 020111; doi: 10.1063/1.4990264.
21. Manjuri K. Koley, N. Duraipandy, M.S. Kiran, B. Varghese, P.T. Manoharan, Aditya P. Koley, "DNA binding and cytotoxicity of some Cu(II)/Zn(II) complexes containing a carbohydrazone Schiff base ligand along with 1,10-phenanthroline as a coligand" *Inorg. Chim. Acta* 2017, 466, 538–550.
22. Manjuri K. Koley, Om Prakash Chouhan, Sumit Biswas, Joseph Fernandes, Arnab Banerjee, Anjan Chattopadhyay, Babu Varghese, Periakaruppan T. Manoharan and Aditya P. Koley, "Spectroscopic, electrochemical and DNA binding studies of some monomeric copper(II) complexes containing N<sub>2</sub>S(thiolate)Cu core and N<sub>4</sub>S (disulfide)Cu core" *Inorg. Chim. Acta*, 2017, 456, 179.
23. Anjan Chattopadhyay, Praveen Saini, Raymond Hakim, Adrian Komanda, Horst Köppel, "A computational investigation on the photo-isomerization of 2,4,6-octatriene and its UV-visible spectrum" *Chem. Phys.* (accepted 2017, in press) <https://doi.org/10.1016/j.chemphys.2017.12.006>
24. Subhadeep Banerjee, Anjan Chattopadhyay, Joseph R. D. Fernandes, Arnab Banerjee, Apeksha A Phadte, Akanksha V Savardekar, Keisham S Singh, "Synthesis and electronic properties of ester substituted 1,4-dicyanodibenzodioxins and evaluation of anti-proliferative activity of all isomeric 1,2-, 2,3- and 1,4-dicyanodibenzodioxins against HeLa cell line" *Bioorg. Med. Chem. Lett.* 2017, 27, 4280.
25. Ciara Byrne, Gokulakrishnan Subramanian, Suresh C. Pillai, Recent advances in photocatalysis for environmental applications. 2017, In press, <https://doi.org/10.1016/j.jece.2017.07.080>
26. Harsha Narayani, Rimesh Augustine, Sumi Manu Jose, K. Deepa Nair, M. Samsuddin, Halan Prakash Satyajit Shukla, Removal of basic and industrial azo reactive dyes from aqueous solutions via Fenton-like reactions using catalytic non-magnetic Pd-flyash and magnetic Pd-Fe<sub>3</sub>O<sub>4</sub>-flyash composite particles. *Separation and Purification Technology*, 2017, 172, 338-349
27. Halan Prakash, Editorial Note: Advanced Oxidation Processes JECE 6/1 for the AOP special issue and with the cover date of April 2018 (accepted, to be published)
28. Debabrata Moitra, Samyak Dhole, Barun Kumar Ghosh, Madhurya Chandel, Raj Kumar Jani, Manoj Kumar Patra, Sampat Raj Vadera, and Narendra Nath Ghosh, 'Synthesis and Microwave Absorption Properties of BiFeO<sub>3</sub> Nanowire-RGO Nanocomposite and First-Principles Calculations for Insight of Electromagnetic Properties and Electronic Structures.' *The Journal of Physical Chemistry C* 2017, 121, 21290-21304.
29. BK Ghosh, D Moitra, M Chandel, H Lulla, NN Ghosh, Ag nanoparticle immobilized mesoporous TiO<sub>2</sub>-cobalt ferrite nanocatalyst: A highly active, versatile, magnetically separable and reusable catalyst *Materials Research Bulletin* 2017, 94, 361-370
30. BK Ghosh, D Moitra, M Chandel, RK Jani, MK Patra, SR Vadera, NN Ghosh, CuO nanoparticle immobilised mesoporous TiO<sub>2</sub>-Cobalt Ferrite nanocatalyst: A versatile, magnetically separable and reusable catalyst, *Catalysis Letters* 2017, 147 (4), 1061-1076.
31. Mayank Pandey, Girish M. Joshi, Narendra Nath Ghosh, 'Ionic Conductivity and Diffusion Coefficient of Barium Chloride Based Polymer Electrolyte with Poly (vinyl alcohol)/ Poly (4-styrenesulfonic acid) Polymer Complex' *Bulletin of Materials Science* 2017, 40 [4], 655–666.
32. Subhenjit Hazra, Hrishikesh Joshi, Barun Kumar Ghosh, Asif Ahmed, Timothy Gibson, Paul Millner, Narendra Nath Ghosh, 'Development of a Ru nanoparticle loaded thiol functionalized meso porous silica modified screen printed Au electrode for electrochemical detection and estimation of glucose' *Journal of Nanoscience and Nanotechnology* 2017, 17 (2), 1163-1170.
33. Barun Kumar Ghosh, Debabrata Moitra, Madhurya Chandel and Narendra Nath Ghosh, 'Preparation of TiO<sub>2</sub>/Cobalt Ferrite/Reduced Graphene Oxide Nanocomposite based magnetically separable catalyst with improved photocatalytic activity, *Journal of Nanoscience and Nanotechnology* 2017, 17 (7), 4694-4703.

#### Patents:

1. A joint patent application among CDAC Kolkata, BITS Pilani Goa Campus and Tea Research Association **TEMP/E-1/4049/2017-KOL. Prof Sunil Bhand and Dr Souvik Pal are the inventors from BITS among others.**
2. Parakh Priyadarshini, Subramanian Gokulakrishnan, Halan Prakash, Panzade Prasad A Bactericidal Composition for Disinfecting Water, Patent No. 201711009974, 20th March 2017. Status: filed

#### C. Conferences attended/papers presented & Invited Talks given:

1. Sunil Bhand, "Molecularly imprinted polymer decorated nanoparticles for selective determination of Tetracycline in milk" authored by Sunil Bhand and Atul Sharma at 12<sup>th</sup> Workshop on Biosensors and Bioanalytical Microtechniques in Environmental and Clinical Analysis, International Biosensor Conference organized by National Research Council Rome at Rome, ITALY 25-29 Sept. 2017. Prof Bhand also Chaired a session during the conference.
2. Aruna Chandra Singh and Sunil Bhand "Flow injection electrochemical quartz crystal nano-balance based immunosensing platform for detection of 17 $\beta$ -estradiol in water" oral presentation at 12<sup>th</sup> Workshop on

- Biosensors and Bioanalytical Microtechniques in Environmental and Clinical Analysis, International Biosensor Conference organized by National Research Council Rome at Rome, ITALY 25-29 Sept. 2017.
3. Arun Kumar Prusty and Sunil Bhand, "Preparation and characterization of poly ortho Phenylenediamine nanofilm on Indium Tin (ITO) coated glass", has been presented at 4<sup>th</sup> International Conference on Nanoscience and Nanotechnology (ICONN 2017) jointly organized by SRM University, Chennai, India and Schizuka University, Japan during 09-11 August 2017. (Poster No. 748).
  4. Aruna Chandra Singh and Sunil Bhand, "Quartz Crystal Nano-balance based Immunosensor for Detection of 17 $\beta$ -Estradiol in Water" has been presented at 4<sup>th</sup> International Conference on Nanoscience and Nanotechnology (ICONN 2017) jointly organized by SRM University, Chennai, India and Schizuka University, Japan during 09-11 August 2017. (Poster No. 750).
  5. Atul Sharma and Sunil Bhand, "Molecularly Imprinted Polymeric Nanoparticles for Selective Determination of Antibiotic Residue in Milk Sample", Poster presentation in ICONN 2017 (4<sup>th</sup> INTERNATIONAL CONFERENCE ON NANOSCIENCE AND NANOTECHNOLOGY, 9-11<sup>th</sup> August, 2017, SRM University, Chennai, INDIA) (Poster No. 749).
  6. Amrita Chatterjee, "Aggregation-Induced Emission active probes for heavy metal ions, anions and neutral molecules" 2<sup>nd</sup> National Conference on New Frontiers in Chemistry from Fundamental to Applications-II (NFCFA 2017), 28-29 January, 2017, BITS Goa.
  7. Amrita Chatterjee, "Aggregation-Induced Emission active probes for heavy metal ions, anions and gases", 9<sup>th</sup> International Conference on Materials for Advanced Technologies" (ICMAT2017), 18<sup>th</sup>- 23<sup>rd</sup>, June 2017, Santec, Singapore.
  8. Ram Uttam Gawas, Mainak Banerjee and Amrita Chatterjee "Mesoporous Silica based "turn-on" Type Fluorescent Chemodosimeter for the Detection of Perborate ion in water", 2<sup>1st</sup> CRSI National Symposium in chemistry CRSI NSC-21, July 14-16, 2017, ICT, Hyderabad.
  9. Vikash Kumar, Amrita Chatterjee, and Mainak Banerjee "Water Soluble Cationic Tetraphenylethene: an Aggregation Induced Emission (AIE) active auto-fluorescent probe for the selective detection of *E. coli* , 9<sup>th</sup> International Conference on Materials for Advanced Technologies" (ICMAT2017), 18<sup>th</sup>- 23<sup>rd</sup>, June 2017, Santec, Singapore.
  10. Zigme T. Bhutia, Amrita Chatterjee and Mainak Banerjee "A facile hand-grinding route for the synthesis of 8-Aryl-7-oxa-4-thia-1-aza-bicyclo[3.2.1]octane 4,4-dioxides via nitrene formation followed by dipolar cycloaddition", 21<sup>st</sup> CRSI National Symposium in chemistry CRSI NSC-21, July 14-16, 2017, ICT, Hyderabad.
  11. Zigme T. Bhutia, Amrita Chatterjee and Mainak Banerjee, "C-H bond activation in aqueous micellar media: Alkylation of 3-position of indole using L-Proline" in NFCFA2017, Chemistry BITS Pilani K K Birla Goa Campus on 28-29 February 2017.
  12. Mondal, T. "Jahn-Teller effect and subfemtosecond photodynamics at threefold electronic degeneracies" at DST-INSPIRE Faculty Monitoring-cum-Interaction Meet (Chemical & Material Sciences) 16-17 January, 2017, at KIIT University, Bhubaneswar, Odisha, India.
  13. Mondal, T. "Role of Jahn-Teller effect in structural chemistry: The distinct structures of two similar systems" at 2nd National conference on New Frontiers in Chemistry – From Fundamentals to Applications-II (NFCFA2017) 28-29 January, 2017 at Department of Chemistry, BITS Pilani, K K Birla Goa Campus, India.
  14. Ranjan Dey and Piyashi Biswas, "Novel approaches for viscometric prediction of binary and higher order liquid mixtures" at 6<sup>TH</sup> ROSTOCKER INTERNATIONAL CONFERENCE: "THERMOPHYSICAL PROPERTIES FOR TECHNICAL THERMODYNAMIC (THERMAM 2017,) 17<sup>TH</sup>-18<sup>TH</sup> JULY, 2017, at Department of Technical Thermodynamics, University of Rostock, Rostock, Germany.
  15. Panda, R. N. "Tuning of Magnetic Properties of nanostructured materials developed by novel synthetic strategies", 'International Conference on Magnetic Materials and Applications, (ICMAGMA-2017) Feb. 1-3, 2017 at Defence Metallurgical Research Laboratory, Hyderabad, INDIA
  16. Banerjee, S. "Synthesis and spectral studies of push-pull dibenzodioxins and phenazines – efforts towards heteroacenes with long wavelength properties" at "International Conference on Nano- and Functional Materials: Interface between Science and Engineering (NFM-2017)" hosted by Department of Chemistry, BITS Pilani, Rajasthan, 16-18th Nov 2017.
  17. Jayadevan, K. P. "Computational Study of trends in Solvation Energy and Donor-Acceptor interactions of Benzoxaborole-based Neutral Molecules" at National Symposium on Convergence of Chemistry & Materials (CCM-2017) 21-22 December 2017, at Department of Chemistry, BITS-Pilani, Hyderabad campus.
  18. Ghosh, NN. Moitra, D. Chandel, M. Ghosh, BK. Jani, RJ. Patra, MK and Vadera SR. "Development of Novel Synthetic Methodologies for Preparation of Graphene based Multifunctional Nanocomposites"(Oral Presentation) at 2<sup>nd</sup> National Conference on New Frontiers in Chemistry From Fundamental to Applications (NFCFA 2017) 28-29 January, 2017 at Department of Chemistry, BITS Pilani, KK Birla Goa Campus.
  19. Ghosh, BK. Hazra, S. and Ghosh, NN. 'Synthesis of Cu@CF@SBA15: A Versatile catalysts for (i) reduction of dyes, trifluralin, Synthesis of (ii) DHPMs by Biginelli reaction and (iii) 1,2,3-triazole derivatives

- by 'Click reaction'. at 2<sup>nd</sup> National Conference on New Frontiers in Chemistry From Fundamental to Applications (NFCFA 2017) 28-29 January, 2017 at Department of Chemistry, BITS Pilani, KK Birla Goa Campus.
20. Moitra, D. and Ghosh, NN. 'Synthesis of BiFeO<sub>3</sub> nanowire-Reduced Graphene Oxide based Magnetically Separable nanocatalyst and its Versatile Catalytic Activity towards Multiple Organic Reactions.' at 2<sup>nd</sup> National Conference on New Frontiers in Chemistry From Fundamental to Applications (NFCFA 2017) 28-29 January, 2017 at Department of Chemistry, BITS Pilani, KK Birla Goa Campus.
  21. Chandel, M. and Ghosh, NN. 'CoFe<sub>2</sub>O<sub>4</sub>-reduced graphene oxide nanocomposites: a highly efficient magnetically separable recyclable photocatalyst for dye degradation. at 2<sup>nd</sup> National Conference on New Frontiers in Chemistry From Fundamental to Applications (NFCFA 2017) 28-29 January, 2017 at Department of Chemistry, BITS Pilani, KK Birla Goa Campus
  22. Anjan Chattopadhyay, "A computational investigation of the photochemical oxaziridine conversion process of some experimentally analyzed small-chain conjugated nitrones" at the 4<sup>th</sup> International Conference on Physical and Theoretical Chemistry during September 18-19, 2017 at Dublin, Ireland.
  23. Anjan Chattopadhyay, "Isomerization channels of donor-acceptor hexatrienes through conical intersections" at the NFCFA 2017, BITS-Pilani, K.K.Birla Goa Campus during January 28-29, 2017
  24. Vikash Kumar, Viraj Naik, Amrita Chatterjee, and Mainak Banerjee "Water Soluble Tetraphenylethenes: an Aggregation Induced Emission (AIE) active auto-fluorescent probe for detection and imaging" at International Conference on NANO- AND FUNCTIONAL MATERIALS: Interface between Science & Engineering (NFM-2017) 16 – 18 November 2017, Pilani, Rajasthan.
  25. Sunil Bhand, "Nanomaterials integrated biosensing platform: Application in ultrasensitive chemical and biological analysis". Session -Biocompatible systems for medical applications, theranostics and devices for drug delivery at 6<sup>th</sup> International Symposium on Integrated Functionalities **ISIF 2017** organized under aegis of Material Research Society of India (**MRSI**), Dec 10-13, 2017 N. Delhi India. <http://isif2017.com/home.aspx>
  26. Ranjan Dey, "New simple and effective methods for viscosity prediction of binary and higher order liquid mixtures", at Theoretical Chemistry Group, Heidelberg University, Heidelberg, Germany, 13<sup>th</sup> July, 2017.
  27. Ranjan Dey, "Novel pathways for viscometric prediction of binary and multicomponent liquid mixtures", at Department of Chemistry, University of Allahabad, Allahabad, 13<sup>th</sup> April, 2017.
  28. Halan Prakash, "Activation of Peroxo compounds using metal complexes for oxidative degradation of organic compounds and inactivation of bacteria in water", at NIREAS, NIREAS Speaker Series, when ideas flow. Cyprus, 30 June, 2017.
  29. NN Ghosh, "New Synthesis Strategies for Multi-functional Nanomaterials: Microwave Absorber, Catalysts, Fluoride Adsorbent", Sensor at University Of Tennessee, Knoxville, USA 12th July 2017.
  30. A.P.Koley, "Study of DNA Binding and Cytotoxicity of Some Copper(II) and Mixed Ligand Cu(II)/Zn(II) Complexes containing Heterocyclic Bases using Spectroscopic Techniques" in Session 2-5: Molecular Spectroscopy and Dynamics & Advanced Vibrational Spectroscopy and Applications at AnalytiX-2017 (5<sup>th</sup> Annual Conference of AnalytiX-2017) during 22<sup>nd</sup>-24<sup>th</sup> March 2017 at Hotel Hilton Fukuoka Sea Hawk, Fukuoka, Japan.

#### D. Books Published/Edited during the year:

**Chapter 18:** Electrochemical Quartz Crystal Nanobalance (EQCN) Based Biosensor for Sensitive Detection of Antibiotic Residues in Milk:

Sunil Bhand and Geetesh K Mishra

**Book Title:** Biosensors and Biodetection

Book Subtitle: Methods and Protocols, Volume 2: Electrochemical, Bioelectronic, Piezoelectric, Cellular and Molecular Biosensors.

Editors: Rasooly, Avraham, Prickril, Ben

ISBN: 978-1-4939-6910-4, Springer Vienna

[https://link.springer.com/protocol/10.1007/978-1-4939-6911-1\\_18](https://link.springer.com/protocol/10.1007/978-1-4939-6911-1_18)

#### E. Conferences, seminars & workshops conducted: 02

1. New Frontiers in Chemistry From Fundamental to Applications-II (NFCFA 2017), BITS-Pilani, K.K.Birla Goa Campus during January 28-29, 2017.
2. Recent Trends in Chemistry: Students' Meet-2017 on 26th February, 2017

One-day event (Oral and poster competitions) of M.Sc. Chemistry students participating from the Universities & Colleges of Goa

**F. Invited talks arranged in the department: 05**

1. "Thermodynamics in understanding protein folding and rational drug design" by Prof. Nand Kishore (on 24th JULY, 2017), DEPT. OF CHEMISTRY, IIT- BOMBAY.
2. "Solvent, Time, Step and Cost Economy for Chemical Reactions - An Emerging Concept " by Prof. Brindaban Chandra Ranu, IACS Kolkata Date : 22nd February.
3. "On potentials and reaction dynamics" by Prof. Antonio J.C. Varandas Universidade de Coimbra, Portugal on 9th February.
4. "Chemical Micro and Nanomachines", by Prof. David Gracias, Johns Hopkins University in Baltimore, USA, 16<sup>th</sup> Jan.
5. "Neutron Activation Analysis: A potential nuclear analytical technique for trace element determination and speciation studies in environmental and food samples", Dr. Raghunath Acharya, Associate Professor in Chemistry, HBNI, Head, NAAC Section, Radiochemistry Division, BARC, Mumbai, 14<sup>th</sup> October 2017.

**G. Awards and recognitions won by faculty and student**

1. NN Ghosh has been Elected as Fellow of Royal Society of Chemistry, UK
2. Aruna Chandra Singh and Sunil Bhand, "Quartz Crystal Nano-balance based Immunosensor for Detection of 17 $\beta$ -Estradiol in Water" has been presented at 4<sup>th</sup> International Conference on Nanoscience and Nanotechnology (ICONN 2017) jointly organized by SRM University, Chennai, India and Schizuka University, Japan during 09-11 August 2017. (Received Best Paper Presentation award)
3. Aruna Chandra Singh received international travel grant to attend BBMEC12th Conference in Rome, Italy from Department of Biotechnology, India.
4. Amrita Chatterjee was awarded SERB international travel grant (SERB-ITS scheme)
5. Amrita Chatterjee was awarded CSIR Foreign Partial Financial Assistance
6. Tanmoy Mondal was awarded International Travel Grant by the Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy to present a paper on Joint ICTP-IAEA School and Workshop on Fundamental Methods for Atomic, Molecular and Materials Properties in Plasma Environments at ICTP, in Trieste, Italy from April 16-20, 2018.
7. Mainak Banerjee received CSIR travel grant for Singapore visit to attend ICMAT2017
8. Shashwat Verma (M.Sc. student) won the BITSAA scholarship for two papers published in RSC advances and Journal of Molecular Liquids.
9. Praveen P Rangnath (M.Sc. student) won the silver medal for the poster presentation in the Chemistry Department Day held on 26<sup>th</sup> February 2017.
10. Halan Prakash, Visiting Faculty at International Water Research Centre, NIREAS, University of Cyprus, 2017.

**H. Faculty Development, International Collaboration & Industry Immersion**

1. Prof. Sunil Bhand was appointed as Technical Director, BIST, BIRAC BIONEST, a Bioincubator to nurture startups in the area of Health and Environmental Engineering funded by BIRAC, N Delhi
2. Prof. Sunil Bhand was the member of the organizing committee 6<sup>th</sup> International Symposium on Integrated Functionalities **ISIF 2017** organized under aegis of Material Research Society of India (**MRSI**), Dec 10-13, 2017 N. Delhi India. <http://isif2017.com/home.aspx>
3. Prof. Sunil Bhand was the Convener of Exhibition Committee and Core team Member 55<sup>th</sup> National metallurgists day and 71<sup>st</sup> Annual Technical meeting NMD-ATM 2017 organized at BITS Pilani KK Birla Goa Campus during Nov. 11-14, 2017 with about 1000+ participants.
4. Prof. Sunil Bhand has been chosen a Life Member, Indian Institute of Metals, Kolkata and founding honorary secretary IIM Goa Chapter.
5. Prof. Sunil Bhand acted as reviewer of proposal for various funding agencies like DBT, DST, Indo French etc., and acted as reviewer for several journals in ACS, Elsevier, RSC etc.
6. Prof. Sunil Bhand has become a Life Membership of Association of Environmental Analytical Chemistry of India.
7. Dr. Amrita Chatterjee was the Viva-voce examiner of Ms Sinthiya Gawandi Of DM college Goa for upgradation from JRF to SRF.
8. Dr. Amrita Chatterjee delivered guest lecture for TYBSc of DM college Goa.
9. Dr. Mainak Banerjee was invited by the VC, Goa University to be a part of Screening/Selection Committee as VC's nominee.
10. Dr. Ranjan Dey was the Resource Person in the NAVAL EDUCATION SOCIETY WORKSHOP FOR SCIENCE FACULTY , held from 4th - 6th May, 2017 in Navy Children School, Dabolim Goa.

11. As Visiting Research Professor Dr. **NN Ghosh has visited** Department of Chemistry of **University of Tennessee**, Knoxville, USA. during 20<sup>th</sup> May -30<sup>th</sup> July 2017 to conduct collaborative research with Professor C E Barnes.

**I. Significant new equipments/experimental facility added during the year**

Low-end Benchtop NMR (60 MHz), Viscometer

**K. Departmental association/club activities: Department seminars delivered by students and faculty :**  
Nil

**B2.10.3 Department: Chemical Engineering**

Number of faculty members (as on 6 January 2018): 18

<b>Professors</b>	02
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	11
<b>Lecturers</b>	01
<b>Non-tenure track</b>	
<b>Adjunct Professor</b>	01
<b>Honorary Visiting Professor</b>	01

**Head of the Department: Prof. S. S. Baral**

**Contact details (email):** ssbaral@goa.bits-pilani.ac.in

**Number of PhD Scholars:** 09(full time), 07 (part time)

**Number of Project Fellows:** 05

**No. of Post-Doctoral Scientists:** 00

**Ph.D. Thesis awarded during the year:** 03

**A. Sponsored Research activities:**

**(i) Ongoing projects: 13**

<b>Name of the Investigator</b>	<b>Title of the project and duration</b>	<b>Amount sanctioned (Lakhs)</b>	<b>Funding Agency</b>
Srinivas Krishnaswamy K.N. Ponnani (Co-PI)	Seawater desalination using refrigeration (3 years)	382.21	GAIL (India) Limited
Srinivas Krishnaswamy K.N. Ponnani (Co-PI)	Experimental and Simulation Studies on Coke Mitigation in Petroleum Refinery Systems (3 years)	<b>Total outlay</b> Rs. 3,23,20,000/- <b>BITS share:</b> 1,68,17,700/-	Centre for High Technology (CHT)
S D Manjare	“Performance assessment studies on the production process of MTB (a herbicide)”	Rs. 2, 44,850/-	Deccan Fine Chemicals (India) Pvt Ltd. Hyderabad
S D Manjare	Performance assessment studies on the production process of CPTAP”	Rs. 2, 56,650/-	Deccan Fine Chemicals (India) Pvt Ltd. Hyderabad
Asima Shaukat	Rheological dynamics of polymer – layered silicate/ graphene nano-composites (3 years)	35	INSA INSPIRE, DST
Asima Shaukat	Viscoelastic, viscoplastic and thixotropic behavior of biogreases and its influence on lubrication (tribological) behavior	54 lakhs	Early Career Research Award, DST-SERB
Jegatha Nambi Krishnan	Ion selective sensors for heavy metal ion detection in water medium	15 (5 years) (After Review of Opera Award Assessment, on 3rd year, it has been extended for the remaining period upto	BITS Pilani (OPERA Award)



Name of the Investigator	Title of the project and duration	Amount sanctioned (Lakhs)	Funding Agency
		10/9/2018 and the grant has been revised to Rs.3.60 lakhs per year	
Sutapa Roy Ramanan (PI) Dr. Meenal Kowshik (Co-I)	Synthesis of hydroxyapatite based biocompatible functional magnetic nanoparticles and investigation of its interaction with biomolecules	Rs.45000	UGC-DAE-CSR and BARC Mumbai
Dr. Meenal Kowshik (PI) Sutapa Roy Ramanan (Co-PI)	Lanthanide doped hydroxyapatite based nano-materials for theranostics applications: Sensing, Imaging, and Therapeutics	Rs.3964771	DST
Dr. S. S. Baral	Development of efficient bioleaching process for the metal recovery from spent catalysts,	Rs. 29,56,600/	Department of Biotechnology, Government of India.
Dr. S. S. Baral	Investigating the effect of co-digestion and advanced sludge pre-treatment methods on the anaerobic conversion potential of the organic wastes (As Co-Investigator)	Rs.27,48,860/-	Department of Biotechnology, Government of India
Jegatha Nambi Krishnan	Chlorine resistant Nano Enhanced Polymer Blend Membranes, 3 years	3174281	DST - SERB
Jegatha Nambi Krishnan	Ion Selective Sensor for Arsenic Detection in Water medium, 2 years	2 lakhs	DSTE, Govt. Of Goa

**(ii) Projects sanctioned during the year: 2**

Name of the Investigator	Title of the project and duration	Amount sanctioned (Rs.)	Funding Agency
Srinivas Krishnaswamy	Unmixed Reforming (UMR) of Methane for Hydrogen Production	56,11,100/- + 6,00,000/-	DST – SERB / BPCL Corporate R&D
Dr. S. S. Baral	Development of suitable material for visible light induced photocatalytic hydrogen production from industrial wastewater	Total cost Rs. 53,32,000/-	Department of Science and Technology, Government of India

**(ii) Projects approved during the year (new): 1**

Name of the Investigator	Title of the project and duration	Amount sanctioned (Rs.)	Funding Agency
S D Manjare (Principal Investigator)	“Process improvements in Urrakh and Feni production in Goa”	Total grant Rs. 7,50,000/-	department of Science, Technology & Environment, Govt of Goa

**(iv) Projects completed this year: 2**

Name of the Investigator	Title of the project and duration	Amount sanctioned (Rs.)	Funding Agency
S D Manjare	Environmental Impact assessment studies on increased production of Pretilachlor”	Rs. 172500	Deccan Fine Chemicals (India) Pvt Ltd. Hyderabad
Asima Shaukat	Rheology and tribology of lubricants	8 lakhs	Additional Competitive Grant, BITS Pilani

**B. Publications: 17**

1. S. S. Baral, K. Raja Shekar, V. Viswanathan, G surendran, Dissolution Kinetics of Cerium from red mud, Separation Science and Technology, 52 (2017) 883-891 Taylor Francies (IF 1.083)

2. Amol Deshpande, Srinivas Krishnaswamy & K. N. Ponnani, "Pulsed Micro-reactor: An alternative to estimating kinetic parameters of non-catalytic gas-solid reactions", *Chemical Engineering Research & Design*, 117, (2017), 382 – 393
3. Amol Deshpande, Srinivas Krishnaswamy & K. N. Ponnani, "Experimental Investigations on Unmixed Combustion for Heat Transfer Applications", *Chemical Engineering Science*, 164, (2017), 122 – 132
4. Srinivas Krishnaswamy, Amol Deshpande, Krishnaswamy Ponnani, Modelling of Unmixed Combustion based packed bed reactor system for heat transfer applications, Accepted (In Press, Available online since 9 Dec 2017), *Chemical Engineering Science*
5. Manjuri K. Koley, Om Prakash Chouhan, Sumit Biswas, Joseph Fernandes, Arnab Banerjee, Anjan Chattopadhyay, Babu Varghese, Periakaruppan T. Manoharan and Aditya P. Koley: Spectroscopic, electrochemical and DNA binding studies of some monomeric copper(II) complexes containing N<sub>2</sub>S(thiolate)Cu core and N<sub>4</sub>S(disulfide)Cu core. *Inorganica Chimica Acta*, Elsevier, vol. 456, 179-198, (2017)
6. Manjuri K. Koley, Natarajan Duraipandy, Manikantan Syamala Kiran, Babu Varghese, Periakaruppan T. Manoharan and Aditya P. Koley: DNA binding and cytotoxicity of some Cu(II)/Zn(II) complexes containing a carbohydrazone Schiff base ligand along with 1,10-phenanthroline as a coligand. *Inorganica Chimica Acta*, Elsevier, 466, 538-550, (2017).
7. V. Dhanya Ram, M. Chidambaram, 'SSGM Based Multivariable Control of Unstable Non-Square Systems, published online in *Chemical Product and Process Modeling* (2017).
8. Rangarajan V and Narayanan M. Biosurfactants in soil bioremediation. *Advances in Soil Microbiology: Recent Trends and Future Prospects*. Springer, (Book Chapter) In press
9. Dey P and Ranvarajan V. Improved fed-batch production of high-purity PHB (poly-3 hydroxy butyrate) by *Cupriavidus necator* (MTCC 1472) from sucrose-based cheap substrates under responsesurface optimized conditions. *3 Biotech*, 7 (2017)
10. Rangarajan V., W. J. Herbst, S. Mazibuko and K. G. Clarke. In press. *Bacillus lipopeptides for a novel postharvest disease control technology*. 4th international Symposium on Postharvest Pathology (2017), Mpumalanga, South Africa.
11. Dhanarajan G, Rangarajan V, Bandi C, Dixit A, Das S, Ale K and Sen R. Evaluation of application potential of bacterially derived biosurfactant and biopolymer for enhanced oil recovery—an ann-ga approach for maximal oil recovery. *Journal of biotechnology*, (2017) (Equal contribution by first two authors)
12. Tanmay Singhal and Manjare S. D., "Modeling Studies on Reactive Absorption of Carbon Dioxide in Monoethanolamine Solution from Flue Gas in Coal Based Thermal Power Plants", " accepted for publication in *Journal of Sustainable Development of Energy, Water and Environment Systems* (SNIP 0.438, SJR 0.368, Cite Score 1.03).
13. A Book chapter (No. 4) on, "Environmental Management Tools for Sustainable Development" Published in the book titled *Decision Sciences for Business Sustainability a Cross-Functional Perspective* Excel India Publishers New Delhi", ISBN Number: 978-93-86724-24-3, September 2017, PP 41-62.
14. Mohd. Mubashshir and Asima Shaukat, "Rheological dynamics of layered silicate clay based greases and its influence on tribological performance", 9th International Conference on Industrial Tribology, ICIT-2017, December 6-9, 2017, Kolkata, India
15. Jegatha Nambi Krishnan, Sang-Hwi Park and Sang Kyung Kim, "Aptamer-Based Single-Step Assay by the Fluorescence Enhancement on Electroless Plated Nano Au Substrate", *Sensors*, 17(9), 2017, 2044.
16. Kabir Dhingra, Somya Gupta, Manan Sarupria, Jegatha Nambi Krishnan\* and Siddharth Kumar, "A Study on the Role of Additives in Non-Cyanide Baths for the Fabrication of Anisotropic Metallic Nanostructures", *ECS Trans.* 2017 volume 80 (10), 2017, 777-788.
17. Arijit Chakraborty, Ridhish Kumar & Anirban Roy, "Water Management Using Membranes: Forward Osmosis and Pressure Retarded Osmosis as Technologies of Future", *Chemical ENgineering World Magazine*, pgs. 44-48, Dec 2017.

**Patents: 00**

**B. Conferences attended/papers presented: 13**

1. Surendran Ganesan, S. S. Baral, Selection of suitable adsorbent for the removal of Cr(VI) by using objective based multiple attribute decision making (MADM) method, 12th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES-2017) Conference, 4th - 8th October, 2017, Dubrovnik, Croatia.

2. Saroj Sundar Baral\*, Akash Gandhi, Ankit K Othari, Gourav Gupta, Parag Jain, Potential of Biofuel production from microalgae through Municipal wastewater treatment, 12th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES-2017) Conference 4th - 8th October, 2017, Dubrovnik, Croatia.
3. Ridhish Kumar, Sudeep Nandukkandy & Anirban Roy "Developing a Prototype: "Portable" Solution for "Potable" Water", Universal Academic Cluster, Bangkok, Thailand, Jan 16 2018
4. Tanmay Singhal and Manjare S. D., "Dynamic Modelling Studies on Reactive Absorption of SO<sub>2</sub> from Flue Gas in Coal Based Thermal Power Plant", published in the proceedings of International Conference on Sustainable Development of Energy, Water and Environment System, held at Dubrovnik, Croatia, October 4-7, 2017.
5. Amit Shanbag and Manjare S.D., "Life Cycle Assessment of Tyre Manufacturing Process", published in the proceedings of International Conference on Sustainable Development of Energy, Water and Environment System, held at Dubrovnik, Croatia, October 4-7, 2017.
6. Khantil Buch, S. D. Manjare, "Environmental Impact Assessment Methodologies: A Review and a New Approach for Assessment", presented and published in the proceedings of 11th ISDSI (Indian Subcontinent Decision Sciences institute) International Conference e held at IIM Trichy , during December 27-30, 2017.
7. Ketaki Deshmukh, Sutapa Roy Ramanan and Meenal Kowshik, "Hydroxyapatite nanoparticles as fluorescence probes for bio-imaging and gene delivery applications", Advances in Functional Materials, UCLA, Aug 14-17, 2017, USA.
8. Krupa Balakrishnan and Sutapa Roy Ramanan, "Graphene based solutions for corrosion protection on low alloy steel", Advances in Functional Materials, UCLA, Aug 14-17, 2017, USA.
9. Pranjita G. Zantye, M. Monsoor Shaik, Fiona Fernandes, Meenal Kowshik and Sutapa Roy Ramanan, "Biocompatible Hydroxyapatite nanoparticles for bioimaging applications", 33rd National Convention of Chemical Engineers on "Nanotechnology and its applications for sustainable development in chemical industries" 09-10th September 2017, Pune.
10. Kavita Kadu, Vinay Kaushik, Meenal Kowshik and Sutapa Roy Ramanan, "Doping induced quenching of self-activated fluorescent hydroxyapatite nanoparticles", 33rd National Convention of Chemical Engineers on "Nanotechnology and its applications for sustainable development in chemical industries"; 2017, Sept 09-10; Pune.
11. Mohd. Mubashshir and Asima Shaukat, "Strain-induced yielding in a colloidal suspension under influences of external stress and temperature", Comflu 2017, IIT Madras, Dec 16 – 18, 2017, Chennai, India
12. S. Grover, A. Deshpande, T. Ravindran and J. Nambi Krishnan\*, "Design and Development of a Microfluidic Platform for Water Analysis", 2017 TechConnect World Innovation Conference and Expo (NanoTech-2017), Gaylord National Resort and Convention Center, National Harbor, Washington D. C., U. S. A.
13. K. Dhingra, S. Gupta, M. Sarupriya, S. Kumar and J. Nambi Krishnan, "Study on the Role of Additives in Non-cyanide Baths for the Fabrication of Anisotropic Metallic Nanostructures", 232nd ElectroChemical Society Meeting, 2017 Gaylord National Resort and Convention Center, National Harbor, Washington D. C., U. S. A.

**D. Books Published/Edited during the year: Nil**

**E. Conferences, seminars & workshops conducted: 2**

1. S D Manjare and S S Baral : Conducted (as the coordinator) two days' workshop on Process Modeling and Simulation for Industries & academicians during 21st-22nd December 2017 at KK Birla Goa Campus. Around 25 participants from various industries and universities participated in the workshop
2. S D Manjare : Track Chair for the theme on Environmental Management Systems in 11th ISDSI (Indian Subcontinent Decision Sciences institute) International Conference held at IIM Trichy, during December 27-30, 2017.

**F. Invited Talks given by BITS faculty: 6**

1. **Dr S S Baral**: Topic: Adsorption: Fundamental, kinetics, isotherm, mechanism and application to wastewater treatment on 9th Dec 2017, at Goa University
2. **Anirban Roy**, "How can we tune the biological response of a membrane surface: an investigative study" Biological Engineering Society Conference (BESCON) 2017
3. **Manjuri K. Koley** : Invited Speech entitled: Study of DNA Binding and Catechol Oxidase Activity of Some Copper (II) Complexes Containing N-S Donor Ligand Using Spectroscopic Techniques in Session 2-5: Molecular Spectroscopy and Dynamics & Advanced Vibrational Spectroscopy and Applications at 5th International Conference of **AnalytiX-2017** (AnalytiX-2017) held on March 22-24, 2017 in Fukuoka, Japan.

4. **Srinivas Krishnaswamy**, "Unmixed Combustion for heat transfer applications", Invited talk / Department Seminar, 9th March 2017 at Department of Chemical Engineering, IIT Bombay
5. **V. Dhanya Ram** : Delivered an invited talk in the National Workshop on "Trends in Process Control' on the topic "Multivariable control of unstable systems based on SSGM" at IIT Madras on 21st April, 2017.
6. **S D Manjare** : Talk on "Environmental Management Tools for Sustainable Development" at Department of Chemical Engineering, *KLE DR.M S Sheshgiri College of Engineering and Technology, Belgaum*, 15th November 2017.

**G. Invited talks arranged in the department: Nil**

**H. Awards and recognitions won by faculty and student: 5**

1. Anirban Roy- National award - Indian National Academy of Engineering (INAE) Innovative Project Award and Membership of INAE for 5 years
2. Asima Shaukat - Awarded grade "Very good" performance at INSPIRE Faculty Monitoring-cum-Interaction Meet (grades awarded at the meet: poor, satisfactory, good, very good and excellent)
3. S D Manjare : Chaired the SDEWES2017 conference session: Sustainability comparisons and measurements 2 " that was held on Saturday, October 7th , 2017 from 9.00 am during International Conference on Sustainable Development of Energy, Water and Environment System, held at Dubrovnik, Croatia During 4th – 8th October 2017.
4. S D Manjare : Appointed as the distinguished scientist, to be a member the Scientific Advisory Board of the 1st Latin American SDEWES Conference on Sustainable Development of Energy, Water and Environment Systems (<http://www.rio2018.sdewes.org>), to be held during January 28-31 , 2018, at Rio de Janeiro, Brazil.
5. S S Baral : Appointed as the distinguished scientist, to be a member the Scientific Advisory Board of the 1st Latin American SDEWES Conference on Sustainable Development of Energy, Water and Environment Systems (<http://www.rio2018.sdewes.org>), to be held during January 28-31 , 2018, at Rio de Janeiro, Brazil

**I. Faculty Development, International Collaboration & Industry Immersion : None**

**D. Significant new equipments/experimental facility added during the year: 8**

1. Forward Osmosis Membrane Set up for experimentation
2. Stack Sampling kit
3. Respirable Dust Sampler
4. Fine Particulate Sampler
5. Total Kjeldahl nitrogen
6. Rheometer (rotational and oscillatory)
7. Planetary Ball Mill
8. High Temperature Vacuum Oven

**K. Departmental association/club activities: Nil**

**Other activities:** NA

**B2.10. 4 Department: Computer Science & Information Systems****Number of faculty members (as on 31 December 2017): 20**

<b>Senior Professors, Professors</b>	2
<b>Associate Professors</b>	2
<b>Assistant Professors</b>	6
<b>Lecturers</b>	5
<b>Visiting Faculty</b>	5

**Head of the Department: Prof. Ashwin Srinivasan****Contact details:** ashwin@goa.bits-pilani.ac.in**Number of PhD Scholars: 23** [ 05 (Full Time) + 05 (lecturers) + 13 (Part Time)]**Ph.D. Thesis Submitted during the year: 04**

Gawas A Mahadev submitted on 30th June 2017

Shubhangi K. Gawali submitted on 29th June 2017

Geeta Patil submitted on 29th December 2017

Ashu Sharma submitted on 23rd November 2017

**A. Sponsored Research activities:**Total number of Sponsored Projects in the department: **04**. Details are given below.**(i) Ongoing projects: \_\_\_**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Secure Vehicular Communication And Routing In Future Intelligent Transportation Systems (ITS)	Dr. Debasis Das	SERB, DST	19.81	3 Years
2	Implementation of Wireless Sensor Network for Process Monitoring of GAIL's Pipeline	Dr Anupama CO-PI Neena Goveas	GAIL	95.87	1.5 years
3	Addressing Challenges in Application development for Heterogeneous computing platform for speedup and power efficiency	Prof. Santonu Sarkar, CO-PI Dr. Biju Ravindran	SERB	37.55	3 Years (extended till March 2018)
4.	Home automation and smart wheel chair based on Electroencephalography (EEG) signals produced in brain	Dr. Veeky Baths (with Prof. Bharat Deshpande as co-PI)	Cognitive Science Research Initiative (CSRI) of DST	39	July 2015 - July 2018

**(ii) Projects sanctioned during the year: 04**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Development of Remotely Configurable Arbitrary Ramp Generator for FMCW Reflectometry	Neena Goveas	BRNS	28	2 years
2	Knowledge-Rich Deep Models for Optimisation	Ashwin Srinivasan	SERB	27	3 years
3	INSA Ramalinga Swamy Distinguished Visiting Professor Award	Ashwin Srinivasan	INSA	7	3 months
4	TCS Research Advisory Agreement	Ashwin Srinivasan	TCS	7.5	1 years

(iii) **Projects completed this year:** Nil

**B. Publications:(Journals). 16**

1. Ashwin Srinivasan, Michael Bain: An empirical study of on-line models for relational data streams. *Machine Learning* 106(2): 243-276 (2017)
2. Haimonti Dutta, Ashwin Srinivasan. Consensus-Based Modelling using Distributed Feature Construction with ILP. *Machine Learning*. DOI 10.10007/s10994-017-5672-2
3. Rama Kaalia, Ashwin Srinivasan, Amit Kumar, Indira Ghosh (2016): ILP-assisted de novo drug design. *Machine Learning* 103(3): 309-341
4. Pai, Priyadarshini P., Tirtharaj Dash, and Sukanta Mondal. "Sequence-based discrimination of protein-RNA interacting residues using a probabilistic approach." *Journal of Theoretical Biology* 418 (2017): 77-83.
5. Swain, Rakesh Ranjan, Tirtharaj Dash, and Pabitra Mohan Khilar. "An effective graph-theoretic approach towards simultaneous detection of fault (s) and cut (s) in wireless sensor networks." *International Journal of Communication Systems* 30(13) (2017).
6. Gawas Mahadev A., Lucy J. Gudino, K.R. Anupama, "AMCCR: Adaptive Multi QoS Cross-Layer Cooperative Routing in Ad hoc Networks" *Journal of Computer Networks and Communications*. 2017.
7. Rahul Thakur, Vijeth J. Kotagi, C. Siva Ram Murthy, "Resource allocation and cell selection framework for LTE-Unlicensed femtocell networks," in Elsevier *Computer Networks*, vol. 129, Part 1, pp. 273-283, Oct. 2017.
8. Rahul Thakur, Sudeepta Mishra, C. Siva Ram Murthy, "An Energy and Cost Aware Framework for Cell Selection and Energy Cooperation in Rural and Remote Femtocell Networks," in *IEEE Transactions on Green Communications and Networking*, vol. 1, no. 4, pp. 423-433, Dec. 2017.
9. Shubhangi K. Gawali, Biju K. Raveendran, "DPVFS: A Dynamic Procrastination cum DVFS Scheduler for Multicore Hard Real Time Systems", in *Inderscience Journal of Embedded Systems*, 2017.
10. C.D. Martino, Santonu Sarkar, R. Ganesan, Z. T. Kalbarczyk, R. K Iyer, "Analysis and Diagnosis of SLA Violations in a Production SAAS Cloud" - *IEEE Transactions on Reliability*, vol 66, no 1, 2017.
11. Santonu Sarkar, Gargi Alavani, "How Easy it is to Write Software for Heterogeneous Systems?" - *ACM Software Engineering Notes* Oct 2017
12. Geeta Patil, Neethu Bal Mallya and Biju Raveendran, "MOESIF: A MC/MP Cache Coherence Protocol with Improved Bandwidth Utilization," *International Journal of Embedded Systems* (In Press).
13. R.K. Roul and S.K. Sahay, "Cluster labelling using chi-square-based keyword ranking and mutual information score: A hybrid approach", *Inderscience, Int. J. Intelligent Systems Design and Computing*, Vol. 1, No. 1/2, pp. 145 - 167, 2017.
14. Debasis Das and Rajiv Misra, IntersectionCast: Approximation Algorithm for MultiDirectional Broadcast Storm in VANETs, *International Journal of Communication Networks and Distributed Systems (IJCNDS)*, Inderscience Publishers /ACM , Vol. 20, No. 1, pp. 16-35, 2017[Scopus Index, DBLP].
15. Debasis Das and Amrithesh Kumar, 'Learning Automata Based Multi-flow Opportunistic Routing Algorithm in Wireless Mesh Networks', *International Journal of Wireless and Mobile Computing-2017*, Inderscience /ACM , Vol. 13, No. 2, pp. 106-113, 2017 [Scopus Index, DBLP].
16. Trupil Limbasiya and Debasis Das, Vehicle-to-Vehicle Secured Connectivity Awareness Verification System in VANETs, *International Journal of Communication Networks and Distributed Systems (IJCNDS)*, Inderscience/ACM Publishers Switzerland, 2017(Accepted)[Scopus Index, DBLP].

**C. Conferences attended/Papers presented/Papers published: 30**

1. Prerna Khurana, Puneet Agarwal, Gautam Shroff, Lovekesh Vig, Ashwin Srinivasan: Hybrid BiLSTM-Siamese network for FAQ Assistance. *CIKM 2017*: 537-545
2. Lovekesh Vig, Ashwin Srinivasan, Michael Bain and Ankit Verma. An investigation into the role of domain-knowledge on the use of embeddings. 27<sup>th</sup> International Conference on Inductive Logic Programming. To appear in *Lecture Notes in Computer Science (LNCS)*, Springer.
3. Deepika Vatsa, Sumeet Agarwal, Ashwin Srinivasan. Learning transition models of biological regulatory and signaling networks from noisy data. *CODS 2016*: 9:1-9:6
4. Ashwin Srinivasan, Gautam Shroff, Lovekesh Vig, Sarmimala Saikia: Generation of Near-Optimal Solutions Using ILP-Guided Sampling. 26<sup>th</sup> International Conference on Inductive Logic Programming, 120-131
5. Sarmimala Saikia, Lovekesh Vig, Ashwin Srinivasan, Gautam Shroff, Puneet Agarwal, Richa Rawat: Neuro-Symbolic EDA-Based Optimization Using ILP-Enhanced DBNs. *CoCo@NIPS2016*

6. Ashutosh Saboo, Anant Sharma, Tirtharaj Dash: GASOM: Genetic Algorithm Assisted Architecture Learning in Self Organizing Maps. *ICONIP* (1) 2017: 230-239 [CORE A]
7. Preetham N. Reddy, Sahith N. Dambekodi, Tirtharaj Dash, "Towards Continuous Monitoring of Environment under Uncertainty: A Fuzzy Granular Decision Tree Approach", In proc: *Development aspects of Intelligent Adaptive Systems (DIAS); Innovations in Software Engineering Conference (ISEC-2017)*, Jaipur, India (Feb 5-7, 2017).
8. Gawas Mahadev .A.; Lucy J. Gudino.; Anupama, K.R., "Cross Layer Approach for Effective Multi Hop Broadcast in VANET" 9th International Conference on COMMunication Systems & NETWORKS COMSNET 17, (IEEE) Bangalore, India.
9. Gawas, Mahadev .A.; Palash H, Lucy J. Gudino." Cross Layer Design for Efficient Dissemination of Emergency Messages in VANETs" 2017 Ninth International Conference on Ubiquitous and Future Networks (ICUFN). Milan Italy.
10. Gawas Mahadev A, Modi k., Palash H., Lucy J. Gudino, " QoS Based Multipath Routing in MANET: A Cross Layer Approach" International Conference on Communication and Signal Processing – ICCSP 17, (IEEE), India.
11. Soumyadip Bandyopadhyay, Santonu Sarkar, D. Sarkar, C R Mondal, "SamaTulyata: An Efficient Path Based Equivalence Checking Tool"- 15th International Symposium on. Automated Technology for Verification and Analysis, ATVA, Pune 2017
12. Soumyadip Bandyopadhyay, Kunal Banerjee, Santonu Sarkar, "An End to End Formal Verifier for Parallel Programs", 12th International Conference on Software Technologies, Spain 2017
13. Santonu Sarkar, Rumana Lakdawala, Subhajit Datta, "Predicting the Impact of Software Engineering Topics: An Empirical Study", BIGSCHOLAR@ 26th Intl. World Wide Web Conference, Australia 2017
14. A. V. George, S. Manoj, S. R. Gupte, Santonu Sarkar, "An Empirical Evaluation of Design Abstraction and Performance of Thrust Framework", PSTI@The 46th IEEE International Conference on Parallel Processing, UK 2017
15. S. Venkateshwaran, Santonu Sarkar, "Uptime Optimized Cloud Architecture as a Brokered Service"- 47th Annual IEEE/IFIP International Conference on Dependable Systems and Networks, DSN 2017, USA.
16. A. V. George, S. Manoj, S. R. Gupte, S. Mitra, Santonu Sarkar, "Thrust++: Extending Thrust Framework for Better Abstraction and Performance", 24th IEEE International Conference on High Performance Computing Jaipur 2017
17. Agarwal S., Mittal N., Sureka A., "Potholes and Bad Road Conditions- Mining Twitter to Extract Information on Killer Roads", The ACM India Joint International Conference on Data Science & Management of Data (CoDS-COMAD), India. 2018
18. R.K. Roul and S.K. Sahay, "Categorizing Text Data using Deep Learning: A Novel Approach" ICCIDM, 11-12th Nov. 2017, Proceedings in Springer Advances in Intelligent Systems and Computing.
19. Sanjay Sharma, Rama Krishna and S.K. Sahay, "Detection of Advanced Malware by Machine Learning Techniques" International Conference on Soft Computing: Theories and Applications, 22-24 Dec. 2017, Proceedings in Springer, Advances in Intelligent Systems and Computing.
20. Debasis Das and P. Sharma, Algorithm for Prediction of Negative Links using Sentimental Analysis in Social Networks, IEEE 13th International Wireless Communications and Mobile Computing Conference (IWCMC) 2017, June 26-30, 2017, Valencia, Spain [ Core Ranking: Core B]
21. Debasis Das, Distributed Algorithm for Geographic Opportunistic Routing in VANETs at Road Intersection, DASC/PiCom/DataCom/CyberSciTech 2017, 6-10 November 2017, Florida, USA [Core Ranking: Core C]
22. Naresh Peshwe and Debasis Das, Algorithm for Trust Based Policy Hidden Communication in the Internet of Things, The 42nd IEEE Conference on Local Computer Networks (LCN), October 9-12, 2017, Singapore [ Core Ranking: Core A]
23. Akshita Bhandari, Ashutosh Gupta and Debasis Das, "Betweenness Centrality Updation and Community Detection in Streaming Graphs using Incremental Algorithm", 6th ACM International Conference on Software and Computer Applications (ICSCA 2017), Bangkok, Thailand, Feb 26-28, 2017 [Scopus Index].
24. Debasis Das and Amrithesh Kumar, Algorithm for Multicast Opportunistic Routing in Wireless Mesh Networks, 6th ACM International Conference on Software and Computer Applications (ICSCA 2017), Bangkok, Thailand, Feb 26-28, 2017 [Scopus Index].

25. Debasis Das and Harsha V., "Secure Opportunistic Routing for Vehicular Ad Hoc Networks", Springer International Conference on Information and Communication Technology for Intelligent Systems (ICTIS) 2017, 25-26, March, 2017, Ahmedabad, India [Scopus Index].
26. Debasis Das and Harsha V., Connectivity Models for Wireless Sensor Networks: Algorithms, Classifications and Applications, IEEE International Conference on Inventive Computing and Informatics (ICICI 2017), November 23-24, 2017, Coimbatore, India [Scopus Index].
27. Rajib Bag, Debasis Das and Rajiv Kumar, "An Architecture of Smart Transportation System using modified RR algorithm and VANET, 8th ICCCNT 2017 : 8th International Conference on Computing Communication and Networking Technologies 2017, 3-5 July, 2017, IIT Delhi, India [Scopus Index, DBLP].
28. Debasis Das and Harsha V., "Design and Safety Verification for Vehicle Networks", Springer International Conference on Ubiquitous Communications and Network Computing (UBICNET) 2017, 3-5 August 2017, Bangalore, India [Scopus Index, DBLP].
29. Trupil Limbasiya, Debasis Das and Ram Narayan Yadav, A Reputation-Based Trust Management Model in Multi-hop Cognitive Radio Networks, 5th International Conference on Advanced Computing, Networking, and Informatics [ ICACNI - 2017 ], 01 - 03 June 2017, Goa, India [Scopus Index, DBLP].
30. Prasad Talasila, Aparajita Haldar, Suhas S. Pai, Neena Goveas, and Bharat M. Deshpande, , Multimodal Transit Scheduler: An Actor-based Concurrent Approach, 20th IEEE International Conference on Intelligent Transportation Systems, Yokohama, JAPAN. October 16 - 19, 2017.

**Posters: 01**

1. Gargi Alavani and Bharat Arora, "Microbenchmarking Tesla K20 GPU for estimating execution time of a CUDA program", Student Research Symp. 24th IEEE HiPC 2017

**Patents: 01**

1. 7 applications in 2016-2017 period.

**D. Books Published/Edited during the year:02**

**Book Chapters**

1. Triple Limbasiya and Debasis Das, Secure Smart Vehicle Cloud Computing System for Smart Cities, Cloud Computing for Optimization: Foundations, Applications, and Challenges, Studies in Big Data 39, DOI: doi.org/10.1007/978-3-319-73676-1\_15, Chapter 15, pp. 1-24, 2017.
2. Harsha V and Debasis Das, Secure Opportunistic Routing for Vehicular Adhoc Networks, "Pattern Engineering System Development for Big Data Analytics", under the series of Advances in Data Mining & Database Management (ADMMDM), ISSN: 2327-1981, IGI Global, US, Chapter 3, pp. 1-19, 2017.

**E. Conferences, seminars & workshops conducted**

1. Tirtharaj Dash: Member of Organizing Committee for International Conf. on Computational Intelligence (ICCI 2017) at IIT Kanpur, India (December 6-8, 2017)
2. Santonu Sarkar: Organizer, 2nd International Workshop on Software Engineering Methods for Parallel and High Performance Applications (<http://periscope.in.tum.de/sem4hpc/>) at Washington DC USA, colocated with 26th HPDC 2017.
3. Santonu Sarkar and Nenad Medvidovic (USC)- Program chairs of 10th Innovations in Software Engineering Conference (ACM India)

**F. Invited Talks given by BITS faculty**

1. Santonu Sarkar: "Mining Operational logs for Anomaly Detection" - Univ. of Illinois at Urbana Champaign, June 2017
2. Santonu Sarkar: "Mining Operational logs for Anomaly Detection of Software Systems" - Singapore Tech University and Design (SUTD) and Singapore Management University (SMU), Nov 2017
3. Santonu Sarkar: "Mining Operational logs for Anomaly Detection" - Univ. of Illinois at Urbana Champaign, June 2017
4. Santonu Sarkar: "Making Today's Software System Resilient" - Tutorial at Ashoka University, Nov 2017
5. Santonu Sarkar: "Software Development Challenges in Heterogeneous Computing Platforms" - Tutorial at LMNIIT Jaipur Dec 2017
6. Swati Agarwal: "Investigating the Role of Twitter in E-Governance by Extracting Information on Citizen Complaints and Grievances Reports", The Fifth International Conference on Big Data Analytics (BDA 2017), Hyderabad, India



**G. Invited talks arranged in the department: NIL****H. Awards and recognitions won by faculty and students**

1. **Dr. Debasis Das** is selected for the “**International Travel Support (ITS) Award**”, (Young Scientists Scheme)” from Science & Engineering Research Board (SERB), Department of Science & Technology(DST), Govt. of India, New Delhi, India, 2017.
2. **Dr. Debasis Das** is selected for the “Session Chair” (E2: Vehicular Networks Session ) in the IEEE 32nd International Conference on Information Networking (ICOIN 2018) January 10-12, 2018, Chiang Mai, Thailand(Core Ranking: Core B).

**I. Faculty Development, International Collaboration & Industry Immersion**

1. Research collaboration (papers and projects) with University of New South Wales, Sydney; and the University of Manchester.
2. Visiting Professor, Department of Computer Science, University of Oxford.
3. Visiting Professorial Fellow, School of Computer Science and Engineering, UNSW, Sydney.

**J. Significant new equipments/experimental facility added during the year:****Research lab with the following facilities was setup:**

- Department bought Augment and Virtual reality modules such as google cardboard and oculus rift.

**K. Departmental association/club activities:**

- Department conducted two open showcases in the year 2017 (dated 27th April 2017 and 25th Nov 2017). Students who were doing course projects (SDPD, SES and Pervasive) demonstrated their work.

**B2.10. 5 Department: Economics**

Number of faculty members (as on 31 December 2017): **08**

Senior Professors, Professors	None
Associate Professors	1
Assistant Professors	4
Visiting Assistant Professors	1
Guest Faculty	2

**Head of the Department:** Dr. Aswini Kumar Mishra

**Contact details:** 0832-2580-258

aswini@goa.bits-pilani.ac.in

**Number of PhD Scholars:** 16

**Ph.D. Thesis Awarded during the year:** One

**A. Sponsored Research/Consultancy activities:**

(i) Ongoing projects:0

(ii) Projects completed this year:0

(iii) Projects approved during the year:1

Name of Investigator/Co-PI	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Dr. Aswini Kumar Mishra (Co-PI)	India & Neighbourhood Sea Ports Comparative Vessel, Traffic & Pattern Analysis Using Real Time Ship Tracking Traffic Intelligence Tool for Commodity Movement & GDP Correlation Mapping	40 lakhs	DST

(iv) Consultancy:1

Patnaik Debasis-Conducted as Convenor, Workshop (4<sup>th</sup> in series) for pnb-MetLife Officials on Insurance Sector for 110 Delegates in LC 101 on 25<sup>th</sup> Nov 2017.

**B.1. Publications in Journals (No. 13)**

1. 1.A.K. Mishra & Anil Kumar (2017) 'What Lies behind Income Inequality and Income Mobility in India? Implications and the Way Forward' accepted for publication in *International Journal of Social Economics* (An Emerging Sources Citation Index (ESCI) & SCOPUS Indexed Journal).
2. A.K.Mishra and Viral M Paramar (2017) 'Changing Contours of Income Stratification and Decomposition of Income Inequality: Evidence from Recent Longitudinal Survey in India' in *Journal of Quantitative Economics* ("B" rank in ABDC Journal List) Volume 15(2), pp. 395–422. doi:10.1007/s40953-016-0057-0.
3. A.K.Mishra and A. Kar (2017) 'Are Targeted Unconditional Cash Transfers Effective? Evidence from a Poor Region in India', in *Social Indicators Research-An International and Interdisciplinary Journal for Quality-of-Life Measurement* (A Social Science Citation Index & SCOPUS-Indexed Journal & "A" rank in ABDC Journal List) Vol.130(2),pp.819-843. doi:10.1007/s11205-015-1187-z
4. Sen Gupta, Rajorshi, *Risk Management and Intellectual Property Protection in Outsourcing* Global Business Review, 19(2), 2018, Sage Publication, Scopus Indexed.
5. Sen Gupta, Rajorshi, *Knowledge Management and Quality Control in Software Outsourcing Projects*, International Journal of Knowledge Management, 13(4), 31-56, 2017, Scopus Indexed.
6. Sen Gupta, Rajorshi, *Intellectual Property Protection and Technology Management in Outsourcing Projects*, International Journal of Manufacturing Technology and Management, (article in press). Inderscience, Scopus Indexed.
7. Debasis Patnaik and Abhijit Selvi (2017). Valuation Testing Post- Mergers and Acquisition scenario in Indian companies-Journal of Commerce and Social science.
8. Debasis Patnaik and Utkarsh Tiwari (2017) Portfolio Optimization Using Value at Risk: Assessment using Historical Simulation Method for Energy Stocks-*Conference Journal on Maths, Computation and Stas Sciences and Engineering*-ISBN:978-1-60595- page 115-118.
9. Bhand, Ujjwala, Mridula Goel, (2017) Understanding Innovation by Analyzing the Pillars of the Global Competitiveness Index", *International Journal of Social, behavioral, educational, economic, business & industrial engineering*. Vol.11, No.8.
10. Prabhdesai, R., & Prasad, Ch.V.V.S.N.V, (2017): "Antecedents of SME alliance performance: A multilevel review" *Management Research Review*, Vol.40:12, 1261-1279.
11. Prabhdesai, R., Prasad, Ch.V.V.S.N.V, & Boon Chuan Ang . (2017): Exploring Emerging Latin America: Implications for German Companies Using Spain as a Springboard Country", *Global Business Review*, Vol. 18:4, 993-1009.
12. Vellakkal S, Gupta A, Khan Z, Stuckler D, Reeves A, Ebrahim S, Bowling A, Doyle P (2017): Has India's National Rural Health Mission reduced inequities in maternal health services? A pre-post repeated cross sectional study. *Health Policy and Planning* (Oxford Journals). 32 (1). Pp: 79-90. DOI: 10.1093/heapol/czw100. (Scopus indexed & SCI Journal Impact Factor 2.513)'.  
13. Vellakkal S, Reddy, H., Gupta, A., Chandran, A., Flederjohann, J., Stuckler, D. (2017). A qualitative study of factors impacting accessing of institutional delivery care in the context of India's cash incentive program. *Social Science & Medicine* (Elsevier). Vol.178 (4), Pp 55-65. doi: 10.1016/j.socscimed.2017.01.059. (Scopus indexed & SCI Journal Impact Factor 2.814)

**B.2. Books Published/Edited/Chapters in Books (No.2):**

1. Debasis Patnaik and Aalap Tripathy (2017). Developing a Dynamic Framework to test the relationships among Stock Market Returns, Production and Consumption in Finite Time- Ch13-pp144-165 in Book ed by V V N Somayajulu titled 'Developments and Contributions to Economic Theoretical Issues and to Inter Industry Economics Frameworks' pub by Himalaya Publishing House.
2. Published First Chapter 'Indigenous Knowledge Systems for Pro Poor Agriculture' in the Book 'Seeing Through the Spectacles of Sustainability' edited by Prof Kailas Bhavale and pub by Gokhale Institute Publishers.

**B.3. Conference Proceedings (Full-length Paper only) (No.2):**

1. Mishra, Aswini & Kar, Atasi. (2017). *Examining Changes in the Level and Shape of Income Distributions in India*, 2005-2012 in the conference proceedings of International Conference on Economics and Development, Colombo, Sri Lanka. 34-47. DOI: <https://doi.org/10.17501/iced.2017.1104>.
2. Prabhudesai, R., Prasad, Ch.V.V.S.N.V, Walwadkar, S., & Agrawal, S., (2017): "Analyzing the Impact of Perceived Environmental Uncertainty on SME Alliance Formation: An Indian Perspective", Proceedings of International Conference on Strategies in Volatile and Uncertain Environment for Emerging Markets July 14-15, 2017 Indian Institute of Technology Delhi, New Delhi pp.550-556.

**C. Presentations in Seminar/Conference/Workshop (No. 6):**

1. *Examining Changes in the Level and Shape of Income Distributions in India, 2005-2012* (with A Kar) at International Conference on Economics and Development (ICED 2017) organised by University of Sri Jayewardenepura, Sri Lanka in association with Warmadewa University, Indonesia at Colombo, Sri Lanka, during June 15-16, 2017.
2. Sen Gupta, Rajorshi and Mark Musumba, "Implications of land and human capital endowment on labor allocation decisions among staple producers in Tanzania, CIMMYT-Columbia University Webinar: Mapping Sustainable Development Goals and Data Needs for Maize Intensification Plans, 2017.
3. Sen Gupta, Rajorshi, Cost of Implementing "Purchase for Progress" Contracts in Conflict prone regions, International Conference on Entrepreneurship, E Commerce, Management, Law, Gender Studies, Humanities, & Social Sciences, Goa, March 2017.
4. Debasis Patnaik 'Measuring Efficiency and Trust in a Corporatized Education Model after Diversity Assessment' Presented in 'Conference on Diversity in Organizations: An Economic Approach' held in 26<sup>th</sup> July 2017 in University of Toronto, Canada.
5. Invited by Deptt of Economics, Yogi Vemana University, Kadappa, Andhra Rayalaseema to speak on 1- Industrialization Processes in India ; 2- Research trends and approaches in Social Sciences and its Holistic Interfaces in 22-23 Dec 2017.
6. Vellakkal S (2017). Effects of program design and implementation aspects on program outcomes: An equity-wise impact assessment of National Health Mission, using a quasi-experimental study design. 12th World Congress of the International Health Economics Association, Boston University, July 7-11, 2017.

**D. Talks/Seminar/Conference Organized by the Department (No. 8):**

1. BITS Goa Economics Conclave (20<sup>th</sup>-21<sup>st</sup> March 2017).
2. Seminar on Technical Analysis on Nov 14-2017.
3. 25 Nov 2017: MDP for PNB Executives on Insurance issues.
4. 27 Nov 2017: Invited talk by Prof. Arun Kumar (Malcolm S Adishesiah Chair Prof, Inst. of Social Sciences) - Demonitization, GST and Black Economy: Marginalizing the marginal
5. 3rd - 4th, Nov 2017: Workshop on Use of Statistical Package for the Social Sciences (SPSS)
6. October 2017 Invited Lecture, Speaker: Prof. Babu Nahata, Professor of Economics, University of Louisville, Kentucky, USA, Title of the talk: Pay-What-You-Want Pricing under Competition: Breaking the Bertrand Trap.
7. 14 Sept 2017, Training on ProwessIQ, Resource Person: Premish Gangadhar Dekate, CMIE.
8. 24th March 2017, Guest Seminar- "Information & Environment". Speaker: Padma Bhusan Recipient Prof. Madhav Gadgil (Center for Ecological Sciences, Indian Institute of Science, Bangalore)

**E. Significant new equipment / experimental facility added during the year:**

Subscription of new databases like EPWRFITS, CMIE, Arc-GIS, etc.

**F. Awards and recognitions won by faculty and student:**

1. Debasis Patnaik felicitated for Integrating Academic Work with Religious Pursuits by Kadapa university (Economics Department) , Andhra Pradesh, on 23rd Dec 2017.
2. Aswini Kumar Mishra received "Dewang Mehta National Education Awards (Regional Rounds)" in the "Best Professor in Economics" category held at Panjim, Goa on 16th August, 2017.
3. Aswini Kumar Mishra received STATA (Data Analysis and Statistical Software) "Speakers Award 2017" in the 2nd Stata Users Group Meeting held at Mumbai on 10th May, 2017.
4. Vellakkal, Sukumar. Scientific Committee member for the 12th World Congress of the International Health Economics Association, Boston University, July 7-11, 2017.

**B2.10.6 Department: EEE****Department: Electrical & Electronics Engineering**

Number of faculty members (as on December 2017): 25

<b>Senior Professors, Professors</b>	04
<b>Associate Professors</b>	00
<b>Assistant Professors</b>	15
<b>Lecturers</b>	06
<b>Professor Emeritus</b>	00

**Head of the Department:** Dr. A. Amalin Prince**Contact details:** hod.eee@goa.bits-pilani.ac.in**Number of PhD Scholars:** 19 (05 Lecturers +09 Full time students + 05 Part Time)**Ph.D. Thesis Submitted during the year: 2**

Name	ID No	Thesis Title
Meetha V. Shenoy	2012PHXF0002G	Design and Development of Time Synchronization, Localization and Task Allocation Schemes for Swarm and Multi- Robot Systems
Ch. S. Sankhar Reddy	2012PHXF0001G	Modular Self-Reconfigurable Robot for Implementation of Biomimetic Structures

**A. Sponsored Research activities: 10**

1. FPGA Based Fuzzy Logic Picomotor Controller for Laser Beam Pointing Stability Correction, BRNS, DAE Govt. of India:: 2 Years, April 2016- March 2018, and 24.46 Lakh.
2. Design and Analysis of MEMS Switches for the Arc-less Operation and Control of Electric Energy Processing Systems, Additional Competitive Research Grant (BITS-Pilani):: 2 Years, August 2015 – August 2017, and 7.50 Lakh.
3. Development of Remotely Configurable Arbitrary Ramp Generator for FMCW Reflectometry, PFRC- BRNS, DAE Govt. of India :: 2 Years, April 2017- March 2019, and 28.025 Lakh (collaboration with CSIS Department)
4. Opp1164132- Cloud Based Analytics Sensor Test Kit for Advanced Process Control, Bill & Melinda Gates foundation: 18 Months, Jan 2017 to Sept 2018. 85 Lakhs + 25.82 Lakhs (collaboration with Biological Sciences Department)
5. 11/401/UWR (G)/110(p) Indigenous Development of Automated Correlation System. Consultancy Work for UWR, DRDO Goa, March 2017 to Sept 2017, 3.97 Lakhs.
6. ISRO/RES/3/720/2016-17 Development of Software Defined Radio (SDR) Based GNSS (GLONASS + IRNSS) Receiver, IRSO, Aug 2017 to Aug 2019, 33 Lakhs.
7. Development of PCDA –Liposome based detection kit for Alzheimer's disease biomarker , SERB, Rs. 2663200=00, Date of Implementation:22-03-2017 (3 years) (collaboration with Chemistry Department)
8. Sanctioned- A comprehensive IoT based Geriatric Health care system for routine health monitoring and postoperative care- DST- 50 Lakhs. (collaboration with CSIS Department)
9. Development of field portable device for the analysis of contaminant in water, BRNS, DAE Govt. of India No. Ref No: (36)/14/25/2014-BRNS-445, Rs. 24.138 lakh: June 2015-2018. (collaboration with Chemistry Department)
10. Development of sensing system for residual pesticide and harmful chemical detection in fruits and vegetables, R.D Tata Trust, Rs. 53.5 lakh , Aug. 2016-Jul 2018. (collaboration with Chemistry Department, Consortium of CDAC Kolkata and Jadavpur University Kolkata)

**B. Publications: 16**

1. Nalband, Saif, Amalin Prince, and Anita Agrawal. "An entropy based feature extraction and classification of vibroarthrographic signal using improved complete ensemble empirical mode decomposition with adaptive noise." IET Science, Measurement & Technology [accepted].
2. Kishore, Rajalekshmi, C. K. Ramesha, Sanjeev Gurugopinath, and K. R. Anupama. "Performance analysis of superior selective reporting-based energy efficient cooperative spectrum sensing in cognitive radio networks." Ad Hoc Networks 65 (2017): 99-116.

3. Mane, Pravin, Nishil Talati, Ameya Riswadkar, Ramesh Raghu, and C. K. Ramesha. "Reconfiguration on nanocrossbar using material implication." *Sadhana* 42, no. 1 (2017): 33-44.
4. Shenoy, Meetha V, and K. R. Anupama, "Swarm-Sync: A distributed global time synchronization framework for swarm robotic systems- Pervasive & Mobile Computing. [Accepted].
5. Shenoy, Meetha V., and K. R. Anupama. "DTTA-Distributed, Time-division Multiple Access based Task Allocation Framework for Swarm Robots." *Defense Science Journal*, 67, no. 3 (2017).
6. Singh, Aruna Chandra, Gautam Bacher, and Sunil Bhand. "A label free immunosensor for ultrasensitive detection of 17 $\beta$ -Estradiol in water." *Electrochimica Acta* 232 (2017): 30-37.
7. Dhongdi, Sarang C., Pritish Nahar, Rishabh Sethunathan, Lucy J. Gudino, and K. R. Anupama. "Cross-layer protocol stack development for three-dimensional underwater Acoustic Sensor Network." *Journal of Network and Computer Applications* 92 (2017): 3-19.
8. Joshi, Abhishek, Sarang Dhongdi, Rishabh Sethunathan, Pritish Nahar, and K. R. Anupama. "Energy Efficient Clustering Based Network Protocol Stack for 3D Airborne Monitoring System." *Journal of Computer Networks and Communications* 2017 (2017).
9. Reddy, CH Sasanka Sankhar, Sharath Patlolla, Anita Agrawal, and Anupama KR. "HexaMob - A Hybrid Modular Robotic Design for Implementing Biomimetic Structures." *Robotics* 6, no. 4 (2017): 27.
10. Chennareddy, S., Anita Agrawal, and Anupama Karuppiyah. "Modular Self-Reconfigurable Robotic Systems: A Survey on Hardware Architectures." *Journal of Robotics* 2017 (2017).
11. Sarada, Musala, Avireni Srinivasulu, and Dipankar Pal. "Novel, low-supply, differential XOR/XNOR with rail-to-rail swing, for hamming-code generation." *International Journal of Electronics Letters* (2017): 1-16.
12. Srinivasulu, Avireni, G. Sravanthi, M. Sarada, and Dipankar Pal. "FinFET-based Miller encoder for UHF and SHF RFID application." *International Journal of Electronics* 105, no. 1 (2018): 104-115.
13. Saha, Alope, Dipankar Pal, and Mahesh Chandra. "Benchmarking of DPL-based 8bx 8b novel wave-pipelined multiplier." *International Journal of Electronics Letters* 5, no. 1 (2017): 115-128
14. Dhakad, Shailendra Kumar, Umesh Dwivedi, Sudeep Baudha, and Tapes Bhandari. "Performance Improvement of Fractal Antenna with Electromagnetic Band Gap (EBG) and Defected Ground Structure for Wireless Communication." In *Optical and Microwave Technologies*, pp. 9-19. Springer, Singapore, 2018.
15. Sharma, Nitin, and Souryendu Das. "Social fairness and channel loading effects in peer-to-peer connected networks." *Peer-to-Peer Networking and Applications* (2017): 1-12.
16. Sharma, Nitin, Divyakumar Badheka, and Alagan Anpalagan. "Simultaneous Power and Subchannel Allocation in Interference Limited OFDM-Based Cognitive Radio Network with Quality of Service Considerations." *Wireless Personal Communications* 96, no. 2 (2017): 1691-1710.

### C. Conferences attended/papers presented: 11

1. M. V. Shenoy , K R Anupama, N.Manjrekar , M. Shamsi Indoor localization in NLOS conditions using Asynchronous WSN and Neural Network--6th International conference on communication and Signal Processing- April 2017
2. Rahul Singh, Akshay Chaturvedi and C K Ramesha Smart Health-care Monitoring System - Optical Heart Rate Monitor. 4th IEEE International Conference on Recent Advances In Information Technology Indian Institute of Technology (ISM), 15th - 17th March'18 | Dhanbad, INDIA (Accepted)
3. Rajalekshmi Kishore, Ramesha C. K., Sanjeev Gurugopinath, and Eshaan Sangodkar, Energy Efficiency Optimization for Superior Selective Reporting-based Spectrum Sensing," 2017 IEEE 28th Annual International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC), Montreal,Canada, 2017, pp. 1-6.
4. Pravin Mane , Sudeep Mishra, Ravish Deliwala, Ramesha C. K., "Adder Implementation in Reconfigurable Resistive Switching Crossbar", 18th International Symposium on Quality Electronic Design (ISQED 2017), 14-15 March, 2017, Santa Clara (USA), (ISBN:978-1-5090-5404-6, pp. 403-408)
5. Nalband S., Valliappan CA., Gupta R., Prince, A. A., and Agarwal, A.'Feature Extraction and Classification of Knee Joint Disorders Using Hilbert Huang Transform'. 14th Annual IEEE Conference of ECTI Society, (ECTI-CON 2017), pp. 266-269, June 27-30, 2017 Phuket, Thailand, IEEE.
6. A.Srinivasulu & D. Pal, "CCII+ based dual square-and-triangular waveform generator", 9th IEEE International Conference on Electronics, Computers and Artificial Intelligence (ECAI-2017), University of Valahia of Targoviste, Romania, 29 June – 01 July 2017.
7. S. K. Dhakad and T. Bhandari, "A hexagonal broadband compact microstrip monopole antenna for C band, X band and Ku band applications," 2017 International Conference on Computing, Communication and Automation (ICCCA), Greater Noida, India, 2017, pp. 1532-1536. IEEE doi: 10.1109/CCAA.2017.8230045

8. S. Baudha and S. K. Dhakad, "Miniaturized compact super broadband printed monopole antenna," 2017 International Conference on Nextgen Electronic Technologies: Silicon to Software (ICNETS2), Chennai, 2017, pp. 30-33. IEEE doi: 10.1109/ICNETS2.2017.8067891
9. A Ravichandran, A Alnoman, N Sharma, A Anpalagan, Traffic offloading problem in two-tier HetNets with D2D support for emergency communications. Humanitarian Technology Conference (IHTC), 2017 IEEE Canada International
10. Mandar Pradhan, Nitin Sharma, Adaptive Orthogonal Frequency Division Multiplexing Simulation for Under Water Communication, Accepted for Publication in IEEE WISPNET 2017
11. Patil Siddhant Vitthal, Sundaresan Balasubramanian, Pravin S. Mane, "Color Analysis and Classification Based on Machine Learning Technique Using RGB Camera", 2017 IEEE International Conference on Computational Intelligence and Computing Research (2017 IEEE ICCIC)

**D Books Published/Edited during the year: book chapter published:1**

- 1 Bhand S., Bacher G. (2018) Impedimetric Sensors in Environmental Analysis: An Overview. Environmental, Chemical and Medical Sensors, Springer. doi.org/10.1007/978-981-10-7751-7\_4Published online on 23 Dec. 2017.

**E. Patents: None**

**F. Conferences, seminars & workshops conducted: None**

**G. Invited Talks given by BITS faculty: 6**

1. Invited talk by Prof. M. K. Deshmukh entitled "Innovative Technologies for Sustainable Development", at UGC-Human Resource Development Centre, Goa University, Goa, on 01 April, 2017
2. Prof. M. K. Deshmukh - Invited for Keynote address and Chairing Technical Session on Smart Grid Technologies for Energy management", in i-PACT-17, International Conference on Innovations in Power and Advanced Computing Technologies, -PACT-2017, at School of Electrical Engineering, VIT, Vellore, India, 21-22, April, 2017
3. Prof. M. K. Deshmukh , Invited as Advisor (R&D) for Small Wind Turbines, at Archimedes Green Energys (P), Ltd., Hyderabad, 05-07, June, 2017, for collaborative project for setting up small wind turbine manufacturing facility.
4. Invited-talk by D. Pal, titled, "Effort Delay and Appropriate Optimization Techniques", delivered by Dipankar Pal in the 30th IEEE (Technically Sponsored) Symposium on Integrated Circuits and Systems Design (SBCCI 2017) held from 28 August to 01 September 2017, at Hotel Seara Praia, in Fortaleza, Brazil.
5. Invited talk by Nitin Sharma in Defense Electronics Conclave DEFCON-2017 titles "Industry Academia partnership for indianisation for Defense Sector", held on April 28th, 2017 at Hyderabad International Convention Centre (HICC).
6. Technical session by Pravin Mane in Short Term Training Program (STTP) on "Research and Analytical Approach beyond CMOS (RAAC-2017)", held from 12th June, 2017, at Sinhgad Institute of Technology, Lonavala (Pune University).

**H. Invited talks arranged in the department: 3**

1. Invited-Talk title, "Future of TCAD", by Prof. Dinesh Sharma, Professor of Microelectronics, Dept. of EE, IIT Bombay, (25 August 2017).
2. Seminar on the Google Summer of Code (05 August 2017) Tech-Talk
3. The IEEE Students Chapter of BITS Pilani, K. K. Birla, organized the following events in the calendar year 2017
  - Lumini 2017 (24 September 2017) - fully sponsored by IEEE Bombay Section

List of Speakers:

  - I. Prajyot Mainkar, Google Developers, Lead, known as Android Man, he is the only Indian to visit the Google IO Conference (last year). Topic of Talk: "Developing Apps for India"
  - II. Sumedha Limaye, Engineering Director at Intel. She specializes in Circuit Design, CAD and Methodology. Topic of Talk: Talk - "Research And Development in Technology"
  - III. Subodh Gajare, Senior Solutions, Architect in Cisco. Highly experienced in the fields of Cloud Computing, Internet of Things, Big Data and Analytics. Topic of Talk - "IoT and it's applications"
  - IV. Srilakshmi Subramaniam, Senior Technical Leader at Ericsson, Topic of Talk: "IoT in Automobiles"
  - V. Rakesh Hariharan, Senior Solutions Architect, Texas Instruments. Topic of Talk - "Future Technology Landscape: The TI Influence"

VI. Anand Gharpure, President of IEEE Young Professionals, Topic of Talk - "How to read Data Sheets"

**I. "Awards and recognitions won by faculty and students: 2**

1. D. Pal (Senior Member, IEEE) got elected, Executive Member of IEEE Bombay Section in November 2017
2. Recipient of Suresh Ramaswamy award for 2017 (20 April 2017): Sanket Deshpande (2014B5A3599G), Lucky Kapoor, (2014B5A3449G), Pankaj Tiple (2013B4A7381G), Vibhav Joshi (2013B1A1935G) for their project titled, "Cosmic Ray Flux Measurement and Analysis".

**J. Faculty Development, International Collaboration & Industry Immersion: None**

**K. Significant new equipment's/experimental facility added during the year: 10**

- Logic analyzer – TLA 6400, Tektronix
- AWG – ww1074, Tabor
- Synopsys TCAD (3D & 2D university bundle) EDA tools
- Z7 ZC7046-G Development Kit
- AES CAM on P1300C-G
- AES ALI3-ZED G7 Inch ZED
- LabView software Upgradation (version- 2017)
- NI myRio Hardware
- LightSim Simulation software.
- IRNSS antenna and accessories

**L. Departmental association/club activities/workshop attended: 3**

1. Ramesha C K attended a "One week national training programme on Wireless Sensor Networks", Organized by the Faculty Development Center of IIT (ISM) Dhanbad, from 18 -22 December 2017.
2. Sarang C. Dhongdi attended a "One week national training programme on Wireless Sensor Networks", Organized by the Faculty Development Center of IIT (ISM) Dhanbad, from 18 -22 December 2017.
3. Design oriented Project titled. "Cosmic Data Acquisition System using Discrimination and Coincidence" has been nominated for field testing in TIFR, Hyderabad with complete funding from TIFR Bombay. This is the first time a students' project has been nominated for such testing. Participants: Sanket Deshpande (2014B5A3599G), Lucky Kapoor, (2014B5A3449G & Shivagi Kamat (2013B5A3726G)

**B2.10.7 .Department of Humanities and Social Sciences**

Number of faculty members (as on 31 December 2017): 13

<b>Professor</b>	0
<b>Associate Professors</b>	3
<b>Assistant Professors</b>	7
<b>Lecturers</b>	2
<b>Visiting Assistant Professor)</b>	1

**Head of the Department: Reena Cheruvalath**

**Contact details (email): reena@goa.bits-pilani.ac.in**

**Number of PhD Scholars: 18 (lecturers 2) + Full time 7+ Part time 11)**

**Ph.D. Thesis Submitted during the year: 1**

**A. Sponsored Research activities:**

Total number of Sponsored Projects in the department: 02 Details are given below.

**Ongoing Projects**

Fieldwork in Rio de Janeiro, Brazil from 2nd June to 10th June to research 'Hybridity in Rio De Janeiro, Brazil'. Fieldwork report submitted as part of research project on 'The Language of the Becoming City' initiated by the Royal Institute of Art, Stockholm.		Solano Da Silva		
Development and Demonstration of Two Decentralized Wastewater Treatment Systems (Ongoing)  Principal Investigator: Dr. Srikanth Mutnuri, Department of Biological Sciences, BITS Pilani, K K Birla Goa Campus		Rayson K Alex		
ICSSR Project " Agenda 2020: India's Maritime Infrastructure, Governance & Naval Diplomacy", Rs.15Lacs/ Duration 2 Years	ICSSR Project	R. P. Pradhan	Rs.15Lacs	Duration 2Years
DST ICPS Project Sanctioned "India & Neighbourhood Sea Ports Comparative Vessel Traffic & Pattern Analysis Using Real Time Ship Tracking Traffic Intelligence Tool for Commodity Movement & GDP Correlation Mapping". Project Value Rs. 40 Lacs / Duration 3years;	DST ICPS Project	R. P. Pradhan	Rs. 40 Lacs	Duration 3years

**B. Publications: Journals**

S.No.	Faculty	Title	Journal Details
1	Cheruvallath, R.	Does studying 'ethics' improve engineering students' Meta-moral Cognitive skill?	Science and Engineering Ethics (JSEE), Springer (Indexed in SCOPUS), 2017
	Cheruvallath, R.	Internet Neutrality: A battle between Law and Ethics	International Journal for the Semiotics of Law (SELA), Springer (Indexed in SCOPUS), 2017
2	Cheruvallath, R.	Need for a shift from philanthropic to humanistic approach to Corporate Social Responsibility: With special reference to the New Act 2013 of CSR in India	Annals of Public and Cooperative Economics, 88(1): 121- 136. John Wiley & Sons (Indexed in SCOPUS), 2017
3	Cheruvallath, R.	Does attending classes help foster human values in college students?	Active Learning in Higher Education, 18(2): 143-155. Sage Publication. (Indexed in SCOPUS), 2017
4	Cheruvallath, R.	Engineering, technology and science disciplines and gender difference: A case study among Indian students	European Journal of Engineering Education, Routledge publication (Indexed in SCOPUS), 2017
5	Amitendu Bhattacharya	"Shah Abdul Karim: The Ecstasy of Unfulfilment" in Lokaratna: Journal of the Folklore Foundation (Vol. X, 2017). 361-67. [ISSN: 2347-6427]	
6	R. P. Pradhan	Pradhan RP and Jajati K. Pattnaik, "Terrorism, Qatar Siege and Global Strategic Undercurrents", Mainstream, VOL LV No 32 New Delhi July 29, 2017. <a href="https://www.mainstreamweekly.net/article7342.html">https://www.mainstreamweekly.net/article7342.html</a>	
7	R. P. Pradhan	Pradhan RP; Pushpendu Ghosh; "Factory Asia & India's Regional Terms of Trade: Case of India's Trade Creation or Trade Diversion?"; Institutions And Economies, Malaysia, Scopus. Accepted.	
8	Sreejith K. K.	"A Virtue-theoretic Turn in Epistemology", Guahati University Journal of Philosophy, ISSN: 2456-3285 Volume 2, No. 1, 2017 (forthcoming)	



S.No.	Faculty	Title	Journal Details
9	K. A. Geetha	"Stripping Illusions Mirroring Realities : Ed Bullins the Absurdist" IUP Journal of English Studies Volume 12, No.4 (Forthcoming)	
10	Solano Da Silva	(2017) with Kenneth Bo Nielson & Heather P Bedi 'Enabling the Great Goan Land Grab' in Economic & Political Weekly, LII (41) 14 October, pp. 14-16	
11	Parichay Patra	"In Defence of A River Called Titas (Ritwik Ghatak, 1973)." Senses of Cinema 82 (March 2017): Web. MLA and APAIS indexed. ISSN 1443-4059	
12	Nilak Datta	"Resisting Paradise: Tourism, Diaspora, and Sexuality in Caribbean Culture by Angelique Nixon" . Callaloo: A Journal of African Diaspora Arts and Letters. Vol. 39. No. 4. 2017. Pp. 942-945. "Stereotype Print and Contemporary Affective Nationalism: Making India in the Age of Globalization". (Forthcoming as Conference Proceedings Publication 2017.) (2017 Final Review Underway)" The Museum as West and West as Museum: The Micro-Politics of Museum Display in George Catlin's Vanishing American Indians". Under Final Review in Western American Literature. A Journal of Literary, Cultural, and Place Studies, University of Nebraska-Lincoln	

**Books Published/Edited during the year**

S.No.	Faculty	Title	Book details
1	Alex, Rayson, S. Susan Deborah, Reena Cheruvalath and Gyan Prakash.	Eds. Ecocultural Ethics: Critical Essays.	USA: Lexington, 2017. (ISBN 978-1-4985-3247-1).
2	Amitendu Bhattacharya	<i>Ecology and Nationalism: Western Impact,</i>	<i>Indian Response. New Delhi: Asia Book Club, 2017. [ISBN: 81-7851-096-0]</i>

**Chapters in Books**

SI.No.	Faculty	Title of the chapter	Book details	ISBN
1	Solano Da Silva	(2017) with Kenneth Bo Nielson 'Golden or Green? Growth Infrastructures and Resistance in Goa', in Tereza Kuldova & Mathew Varghese, Urban Utopias: Excess and Expulsion in Neoliberal South Asia, Palgrave Macmillan,		pgs. 53-73.
2	Alex, Rayson K	"Kaveri." Encyclopedia of Indian Religions. Ed. Sharma A. Dordrecht: Springer. (in Press) - Accepted for publication in 2017		
3	Alex, Rayson K	"Appar." Encyclopedia of Indian Religions. Ed. Sharma A. Dordrecht: Springer. (in Press) - Accepted for publication in 2017		
4	Alex, Rayson K	"Cilappatikaram." Encyclopedia of Indian Religions. Ed. Sharma A. Dordrecht: Springer. (in Press) - Accepted for publication in 2017		
5	Alex, Rayson K	"Kutiyattam." Encyclopedia of Indian Religions. Ed. Sharma A. Dordrecht: Springer. (in Press) - Accepted for publication in 2017		

6	Parichay Patra	"Escaping the DVD Dispositif: Abraham and the Historical Exhibition." Wondrous Screens: Indian Cinema and Exhibition Spaces. Ed. Madhuja Mukherjee and Kaushik Bhaumik. New Delhi: Routledge. Accepted for publication in 2017. Forthcoming.		
7	Parichay Patra	"Raped, Mutilated and Murdered: Gendered Bodies from the Diaz Universe." Gendered Ways of Trans-national Un-belonging from a Comparative Literature Perspective. Ed. Indrani Mukherjee. Newcastle upon Tyne: Cambridge Scholars Publishing. Accepted for publication in 2017. Forthcoming.		
8	R. P. Pradhan	"Asian; ASEAN & Indo-Japan Economic Engagement: A Neoclassicism Perspective", edited, Jamia Milia, New Delhi, forthcoming		
9	R. P. Pradhan	Role of BRICS in World Politics, Kunal Books, Calcutta, forthcoming		
10	R. P. Pradhan	Ghost Cities & China's Urban to Rural Migration: Interrogating ES Lee's Push-Pull Approach", Kunal Books, Calcutta, forthcoming		

#### D. Conferences Abroad

SI.No	Faculty	Title of the Paper	Details	Dates
1	Rayson K Alex	"Voices of Eco-resistance in India: A Critique of Neoliberal Natures"	International Conference on Rust/Resistance: Works of Recovery held at Wayne State University, Detroit MI, USA	20-24 June, 2017
2	Parichay Patra	"Jesus, Magdalene and the Filipino Judas: Lav Diaz and his 'Artless' Epics": Paper presented at the symposium 'Lav Diaz: Journeys',	Westminster School of Media, Art and Design, University of Westminster, UK,	March 4, 2017.
3	Basavadatta Mitra & Debasis Patnaik	"Integrating Corporate Model of Evaluating Organisational Behaviour in Indian Educational Institutions: The BITS Goa Case study"	presented at the 17th international Conference on Diversity in Organisations, Communities and Nations, University of Toronto-Chestnut Conference Centre, Toronto, Canada,	26-28 July, 2017
3	Nilak Datta	"Manufacturing the Marvels and Wonders of Hindoostan in the Gilded Age: The 1893 Chicago Exposition and the Parliament of Religions".	South Asian Literary Association.. Philadelphia, PA, USA.	2-4 Jan, 2017
4	Amitendu Bhattacharya	"Accounting for Taste: Culinary and Alimentary ReConfigurations in Colonial Bengal" at the International Conference "Writing/Righting Wrongs/ Agravious del pasado, re-creaciones del presente",	organized by the Spanish Association for Interdisciplinary India Studies and the Departament de Filologia Anglesa i de Germanistica, Universitat Autònoma de Barcelona, Spain	29 Nov-1 Dec, 2017.
5	R. P. Pradhan & Pushpendu Ghosh	"Factory Asia & India's Regional Terms of Trade: Case of India's Trade Creation or Trade Diversion?", International Conference on Applied Economics & Policy,	University of Malay, Kuala Lumpur, Malaysia	21-22 Aug, 2017
6	K. A. Geetha	"Reading Srilankan Tamil Literature as Dalit Literature"	Presented at the International Conference on Humanities and Social Sciences organized by University of Humboldt,	18- 21 May, 2017.

Sl.No	Faculty	Title of the Paper	Details	Dates
			Berlin, Germany	
7	K. A. Geetha	" Fiction and Reality : The Politics of Panchamar Lands" Presented at the International Conference on Multidisciplinary Research	Organised by Singapore Tamil language Centre and American College, Madurai at Singapore	27-30 Dec, 2017

#### Conferences in India

S.No.	Faculty	Title of the Paper	Details of conference	Dates
1	Solano Da Silva	2017. 'The Political-Economy of Land in Goa and the Distortion of Planning and Democracy'	presented at National Conference on State Politics in India: Perspectives from the Western Region organised by the Department of Political Science, Goa University at Dhempe College of Arts & Science, Miramar, Goa.	21-Nov-2017
2	Rayson K. Alex	"Making Sense of People's Voices:' Ecocultural Justice and the Construction of Mopa Airport in Goa"	International Conference on Environmental Justice: Culture Resistance and Ethics at Dr. K. N. Modi University, Rajasthan, on. The conference was co-sponsored by Indian Council of Philosophical Research, New Delhi.	24th and 25th March, 2017
3	Nilak Datta	"Stereotype Print and Contemporary Affective Nationalism: Making India in the Age of Globalization".	International Conference on Media, Culture and Ethics. BITS Pilani. Pilani Campus.	9-10 February 2017 (Forth coming).
4	Nilak Datta	"The Call of the Wilderness: The Linnaean Classification of Spectacular Cityscapes in Dave Prager's Delirious Delhi and Sarah MacDonald's Holy Cow"	17th MELOW International Conference on Space, Place, and Landscape in Literatures of the World. Central University of Himachal Pradesh. Dharamsala.	9-11 March 2017 (Forth coming).
5	Amitendu Bhattacharya	"The Poet and the Princes: Cultural and Historical Connections between Tagore and Tripura" at the Annual Conference of the Indian Association for Commonwealth Literature and Language Studies on "Location, Identity, Solidarity: Hegemonic Formations and Contestations (With a Special Focus on the Northeast)",	collaboration with the Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati,	15-17 Feb, 2017.
6	Amitendu Bhattacharya	"Humanities Education and the Search for 'Self'" at the International Conference on "De-centring English Studies: Studying Literature in the Global South"	organized by the Postgraduate Department of English, Utkal University, Bhubaneswar	19-21 Jan, 2017.

#### Invited talks:

1. Reena Cheruvalath was invited as a **Resource Person** in a Two-day **National Seminar** on 'Kant, Hegel, Marx: Revolutions in Philosophising,' organized by Dept. of Philosophy, Government College for Women, Thiruvananthapuram, Kerala on 16th-17th, November, 2017.

#### H. Awards and recognitions won by faculty and students: Nil

I. Faculty Development, International Collaboration & Industry Immersion: Nil

J. Significant new equipments/experimental facility added during the year: Nil.

K. Departmental association/club activities: NA

**B2.10.8 Department: Mathematics**

Number of faculty members (as on 31 December 2017): 16

<b>Senior Professors, Professors</b>	00
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	13
<b>Lecturers</b>	01
<b>Adjunct Faculty</b>	00

**Head of the Department:** Dr Prasanna Kumar N

**Number of PhD Scholars:** 15 (10 FT+4PT+1L)

**Ph.D. Thesis Submitted during the year:** 1

**A. Sponsored Research activities:****(i) Ongoing projects:**

- (ii)** Title of the Project: DST-FIST, Level 1 Program for establishing Scientific Computing Lab.  
Funding Agency: DST  
Duration: 5 years (2015-20120)  
Total Amount: 37.5 Lakhs (50 DST:50 BITS)  
Coordinator: Dr. P. Dhanumjaya
- (iii)** Title of the Project: Predictive Mathematical Modeling and Analysis for Effective Diagnosis and Control of Diabetes Mellitus with associated Co- infections and Diseases among Indians  
Funding Agency: DST-SERB  
Duration: 3 years (2017-2020)  
Total Amount: 15.7 Lakh  
PI: Dr. Dhanumjaya P
- (iv)** Title of the Project: Theoretical and Numerical Study of Elliptic and Parabolic Partial Differential Equations with Interfaces  
Funding Agency: NBHM (DAE)  
Duration: 3 years (2017-2020)  
Total Amount: 13.5 Lakh  
PI: Dr. P. Dhanumjaya
- (v)** Title of the Project: Promoting Mathematical Sciences in Goa  
Funding Agency: Elsevier Mathematical Sciences Sponsorship Fund (E-MSSF)  
Total Amount: \$2000/( Two thousand American Dollars )  
Duration: 1-year (January-2017 to December-2017)  
PI: Dr. Prasanna Kumar  
Co-PI: Dr. Amit Setia and Dr. Manoj Kumar Pandey
- (vi)** Title of the Project: A Study on the Inequalities Involving Complex Polynomials  
Funding Agency: National Board for Higher Mathematics  
Duration: 3-years (February-2017 to January-2020)  
Total Amount: Rs. 13 .041 lacs  
PI: Dr. Prasanna Kumar
- (vii)** Title of the Project: Bernstein Type Inequalities for the Polar Derivative of a Polynomial  
Funding Agency: Council of Scientific & Industrial Research (CSIR), Govt of India  
Duration: 3-years (May-2017 to April-2020)

Total Amount: Rs 16.46 lac

PI: Dr. Prasanna Kumar

- (viii)** Title of the Project: Study on Dark Energy, Dark Matter and Cosmic Acceleration of the Universe in Modified Gravity

Funding Agency: Council of Scientific & Industrial Research (CSIR), Govt of India

Duration: 3-years (May-2017 to April-2020)

Total Amount: Rs 16.96 lac

PI: Dr. G. C Samanta

- (ix)** Title of the Project: A study of homotopy invariants of a model category.

Funding Agency: Science and Engineering Research Board (SERB).

Scheme: Mathematical Research Impact Centric Support (MATRICS).

Duration: 3-years (2017-2020)

Total Amount: Rs. 6,60,000/-

PI: Dr. Shilpa Gondhali

**(ii) Projects sanctioned during the year: 6**

- 1)** Title of the Project: Predictive Mathematical Modeling and Analysis for Effective Diagnosis and Control of Diabetes Mellitus with associated Co- infections and Diseases among Indians

Funding Agency: DST-SERB

Duration: 3 years

Total Amount: 15.7 Lakh

- 2)** Title of the Project: Theoretical and Numerical Study of Elliptic and Parabolic Partial Differential Equations with Interfaces

Funding Agency: NBHM (DAE)

Duration: 3 years

Total Amount: 13.5 Lakh

PI: Dr. P. Dhanumjaya

- 3)** Title of the Project: Promoting Mathematical Sciences in Goa

Funding Agency: Elsevier Mathematical Sciences Sponsorship Fund (E-MSSF)

Total Amount: \$2000/( Two thousand American Dollars )

Duration: 1-year

PI: Dr. Prasanna Kumar

Co-PI: Dr. Amit Setia and Dr. Manoj Kumar Pandey

- 4)** Title of the Project: A Study on the Inequalities Involving Complex Polynomials

Funding Agency: National Board for Higher Mathematics

Duration: 3-years

Total Amount: Rs. 13 .041 lacs

PI: Dr. Prasanna Kumar

- 5)** Title of the Project: Bernstein Type Inequalities for the Polar Derivative of a Polynomial

Funding Agency: Council of Scientific & Industrial Research (CSIR), Govt of India

Duration: 3-years

Total Amount: Rs 16.46 lac

PI: Dr. Prasanna Kumar

- 6)** Title of the Project: Study on Dark Energy, Dark Matter and Cosmic Acceleration of the Universe in Modified Gravity

Funding Agency: Council of Scientific & Industrial Research (CSIR), Govt of India

Duration: 3-years (May-2017 to April-2020)

Total Amount: Rs 16.96 lac

PI: Dr. G. C Samanta

**7) Title of the Project: A study of homotopy invariants of a model category.**

Funding Agency: Science and Engineering Research Board (SERB).

Scheme: Mathematical Research Impact Centric Support (MATRICS).

Duration: 3-years

Total Amount: Rs. 6,60,000/-

PI: Dr. Shilpa Gondhali

**B. Books Published/Edited during the year: nil**

**Faculty Members joined: 1**

**Invited lectures/talks delivered by faculty members:**

- (1) Dr. Akshay Sakharam Rane delivered a lecture in the department of Mathematics, ICT Mumbai, on the "The Galerkin Method for integral equations of second Kind and eigenvalue problems" on 26th December 2017.
- (2) Dr. Akshay Sakharam Rane delivered seminar on "Asymptotic expansions of approximate solutions of operator equations and eigenvalue problems" at Center for Excellence in Basic Sciences Mumbai on 3rd November 2017.
- (3) Dr Anil Kumar delivered an invited talk on "*Approximate Controllability of a Class of Parabolic Differential Equations with Memory Term*" in International Conference on "*Advances in Computational Mathematics*" held at University of Dhaka, Bangladesh during May 27 to May 28, 2017.
- (4) Dr Anil Kumar delivered an invited talk on "*Optimal control of the velocity term in plate equation with multiplicative control*" in the International Conference on "*Recent Advances in PDEs: Theory, Computations and Applications*" held at IIT Bombay during June 8 to June 10, 2017.
- (5) Dr Anil Kumar delivered an invited talk on "*A Computational Study of Orthogonal Spline Collocation Methods for fourth-order Boundary Value Problems*" in the International Conference on "Nonlinear Differential Equations-Theory, Modeling and Computations" held at SRM University, Kattankulathur, Chennai during December 8 to December 9, 2017.
- (6) Dr. P. Dhanumjaya delivered an invited talk on "Mixed Discontinuous Galerkin Finite Element Methods (DGFEM) for the Rosenau Equation" in "International Conference on Recent Advances in PDE: Theory, Computation and Applications" at IIT Bombay during 8-10, June 2017.
- (7) Dr. P. Dhanumjaya delivered an invited talk on "Modeling of Glucose-Insulin Regulatory Systems and Diabetes" in "An International Conference on Computational Modelling & Simulation (ICCMS 2017)" held at University of Colombo, Colombo, Sri Lanka, during May 17-19, 2017
- (8) Dr. P. Dhanumjaya delivered an invited talk on "Discontinuous Galerkin Finite Element Methods for the One Dimensional Rosenau Equation" in "An International Conference on Computational Modelling & Simulation (ICCMS 2017)" held at University of Colombo, Colombo, Sri Lanka, during May 17-19, 2017
- (9) Dr. P. Dhanumjaya delivered an invited talk on "Nonconforming Finite Element Methods for the Fourth-Order Nonlinear Parabolic Problem" in "International Conference on Nonlinear Differential Equations-Theory Modeling and Computations" held at SRM University during 8-9, December 2017.
- (10) Dr. P. Dhanumjaya delivered an invited talk on "FreeFem++" in "CIMPA: Summer School on Multiscale Computational Methods and Error Control" for 9 days held at IIT Kanpur during June 26, 2017 to July 21, 2017.
- (11) Mayank Goel delivered an invited talk on "Simulation with R and application to finance", for four and half hours, at Department of Mathematics, IIT Madras, 16<sup>th</sup> Jan 2017 to 21<sup>st</sup> Jan 2017.
- (12) Dr. Tarkeshwar Singh delivered five invited talks *Graph Labeling and its Variations* in *Two Weeks Faculty Development Program on Graph Theory: Algorithms & Applications*, organized by Department of Mathematics, BMS College of Engineering, Bangaluru (Sponsored by Technical Education Quality Improvement Program TEQIP-II) during Dec. 26, 2016-Jan 07, 2017.

- (13) Dr. Tarkeshwar Singh delivered an invited talk on *S-magicness and Integer Partitioning*, in UGC sponsored National Conference on Recent Advances in Mathematical Sciences (RAIMS-2017) at Govt. Science College, Bangaluru, during Feb.09-10, 2017.

### C. Research Publications:

#### • Journals (International)

1. Bijil Prakash, Amit Setia, , Shourya Bose, Numerical Solution for a System of Fractional Differential Equations with Applications in Fluid Dynamics and Chemical Engineering. *International Journal of Chemical Reactor Engineering*. 2017 (15) ID No.: 20170093 (Scopus and SCIE)
2. Bijil Prakash, Amit Setia, Deepak Alapatt, Numerical solution of nonlinear fractional SEIR epidemic model by using Haar wavelets. *Journal of Computational Science* 22 (2017) 109-118. (Scopus and SCIE)
3. G. C. Samanta and R. Myrzakulov: Cosmological models constructed by van der Waals fluid approximation and volumetric expansion, *International Journal of Geometric Methods in Modern Physics*, 14 (12) (2017) 1750183, (Scopus & SCIE)
4. G. C. Samanta and R. Myrzakulov: Imperfect fluid cosmological model in modified gravity, *Chinese Journal of Physics*, 55 (3) (2017) 1044-1054, (Scopus & SCI)
5. G. C. Samanta, R. Myrzakulov and Parth Shah: Kaluza-Klein bulk viscous fluid cosmological models and the validity of the second law of thermodynamics in  $f(R, T)$  gravity, *Zeitschrift für Naturforschung A*, 74 (2017) 365. (Scopus & SCI)
6. A. Bansal, R. Budhiraja and Manoj Pandey, Group Invariant Solutions of Nonlinear Time-Fractional Hyperbolic Partial Differential Equation, *World Academy of Science, Engineering and Technology*, Vol. 11, 2017.
7. B. Pradeep and S. Thangavelu, "On the chaotic behavior of the Dunkl heat semigroup on weighted  $L^p$  spaces", *Isr. J. Math.* 217 (2017), 57-92.
8. B. Pradeep, Luz Roncal and S. Thangavelu, "Mixed norm estimates for the Cesàro means associated with Dunkl-Hermite expansions", *Trans. Amer. Math. Soc.* 369 (2017), 7021-7047. (Scopus and SCIE)
9. Prasanna Kumar and Anil Kumar, Annuli Containing All the Zeros of a Polynomial, *Alabama Journal of Mathematics*, 41 (2017) 1-6.
10. N. K. Govil and Prasanna Kumar, On  $L^p$  Inequalities Involving Polar Derivative of a Polynomial, *Acta Mathematica Hungarica*, 152(1), (2017) 130-139.
11. T. Singh, A.K. Handa, Aloysius Godinho and S. Arumugam, *Distance Antimagic Labeling of Join of two Graphs*, *AKCE International Journal of Graph and Combinatorics*, 14(2017), 172-177.
12. T. Singh, , Manoj Kumar Singh and Dharm Raj Singh, *Genetic Algorithm for Solving Multiple Travelling Salesmen Problem using a new Crossover and Population Generation*, (to appear in *Computacion Y Sistemas: International Journal of Computing Science and Applications* 2017).
13. T. Singh, Aloysius Godinho and S. Arumugam, *The Distance Magic Index of a Graph*, *Discussiones Mathematicae Graph*, 38 (2018) 135–142 doi:10.7151/dmgt.1998.
14. Alpesh M Dhorajia, Euler Class Group Of Certain Overrings of a Polynomial Ring, *Journal Of Commutative Algebra*, 9(3), (2017), 1-25.
15. N. K. Govil and P. Kumar, On the Bernstein-type Inequalities for the Polar Derivative of a Complex Polynomial, Chapter 2, in the book entitled *Progress in Approximation Theory and Applicable Complex Analysis* (Editors: Govil, N. K., Mohapatra, R., Quazi, M., Schmeisser, G.), Springer International, 41-74, 2017.
16. M. N. Chintamani, Prabal Paul, and B. Thangadurai, On Short Zero-Sum Sequences Over Abelian P-Groups, *Integers*, 17, (2017), 1-10.
17. Mohan N. Chintamani and Prabal Paul, On some weighted zero-sum constants, *International Journal of Number Theory*, 13(2), (2017) 301-308.
18. Akshay S. Rane, A note on improvement by iteration of approximate solutions of operator equations, *The Journal of Analysis*, Volume 25, issue 2, (2017) 177-187.

#### • Journals (National): nil

#### • Proceedings in Conferences

1. Sonawane, R.B. and Kumar Anil "Optimal control of the velocity term in a Kirchoff plate equation with multiplicative control", *Proceedings of International Conference on Computational Modelling and*

- Simulation (ICCMS), May 17-19, 2017, Faculty of Science, University of Colombo, 248-251, ISBN: 978-955-703011-1.
2. Amit Setia, Bijil Prakash, A.S. Vatsala "Haar Based Numerical Solution Of Fredholm-Volterra Fractional Integro-Differential Equation With Nonlocal Boundary Conditions "AIP Conference Proceedings. Vol. 1798. No. 1. AIP Publishing, 2017. {Scopus}
  3. Roul, R.K., Sahoo, J.K., Classification of Research Articles Hierarchically: A New Technique, *Advances in Intelligence System and Computing*, vol 556, page 347-361, 2017, Springer (Scopus)
  4. Sahoo J.K., Balaji A. Optimizing Support Vector Machines for Multi-class Classification, *Communications in Computer and Information Science*, vol 721, page 393-398, 2017, Springer. (Scopus)
  5. Roul R.K., Sahoo J.K., Goel R., Deep Learning in the Domain of Multi-Document Text Summarization, *Lecture Notes in Computer Science*, vol 10597, page 575-581, 2017. Springer. (Scopus)
  6. T. Singh and Aloysius Godinho, *Group Distance Magic Labeling of  $C_{nr}$*  Proc. Algorithms and Discrete Applied Mathematics (CALDAM 2016)(Eds. Daya Gaur and N.S. Narayanaswamy), *Lecture Notes in Computer Science (LNCS) Vol. 10156 (2017)*, 187-192, (SCI Listed Conference Proceedings).
  7. T. Singh and Aloysius Godinho and S. Arumugam, *Nearly Distance Magic Graphs*, S. Arumugam et al. (Eds.): ICTCSDM 2016, LNCS 10398, pp. 76–82, 2017. DOI: 10.1007/978-3-319-64419-6 10.

#### D. Paper presentations in International/National Conferences:

1. Anil Kumar "Optimal control of the velocity term in a Kirchhoff plate equation with multiplicative control" in the International Conference on "Computational Modeling & Simulation (ICCMS-2017)" held at University of Colombo, Sri Lanka during May 17 to May 19, 2017.
2. P. Danumjaya and K. Balaje, Mixed Discontinuous Galerkin Finite Element Methods (DGFEM) for the Rosenau Equation, International Conference on Recent Advances in PDE: Theory, Computation and Applications, IIT Bombay during 8-10, June 2017.
3. P. Danumjaya, K. Balaje and Sanath Keshav, Virtual Element Methods for the Benjamin Bona Mahony (BBM) Equation, International Conference on Recent Advances in PDE: Theory, Computation and Applications, IIT Bombay during 8-10, June 2017.
4. P. Danumjaya and Santosh Kumar Bhal, Orthogonal spline collocation methods for the two dimensional parabolic interface problem, International Conference on Recent Advances in PDE: Theory, Computation and Applications, IIT Bombay during 8-10, June 2017.
5. P. Danumjaya, Sanath Keshav and K. Balaje, Mixed Virtual Element Methods for the Two-Dimensional Rosenau Equation, International Conference on Recent Advances in PDE: Theory, Computation and Applications, IIT Bombay during 8-10, June 2017.
6. P. Danumjaya and V Sree Hari Rao, Modeling of Glucose-Insulin Regulatory Systems and Diabetes, An International Conference on Computational Modelling & Simulation (ICCMS 2017), University of Colombo, Colombo, Sri Lanka, during May 17-19, 2017.
7. P. Danumjaya and K. Balaje, Discontinuous Galerkin Finite Element Methods for the One Dimensional Rosenau Equation An International Conference on Computational Modelling & Simulation (ICCMS 2017), University of Colombo, Colombo, Sri Lanka, during May 17-19, 2017.
8. P. Danumjaya and Amiya K. Pani, Nonconforming Finite Element Methods for the Fourth-Order Nonlinear Parabolic Problem, International Conference on Nonlinear Differential Equations-Theory Modeling and Computations, SRM University during 8-9, December 2017.
9. G. C. Samanta, presented a paper entitled "The qualitative behavior of the cosmological models in Friedman Robertson Walker space time" in Ninth Australasian Conference on General Relativity and Gravitation at Gravity Discovery Center, The University of Western Australia, Perth during 27th - 30th November 2017.
10. Sahoo, J.K., Convergence Analysis of Preconditioned Iterative Scheme for Singular Matrices, International Statistics Conference 2017 – IASSL, Colombo, Srilanka, Dec 28-29, 2017.
11. Roul R.K., Sahoo J.K., Goel R., Deep Learning in the Domain of Multi-Document Text Summarization, 07<sup>th</sup> international conference on Pattern Recognition & machine Learning, ISI Kolkata, India Dec 6-8, 2017.
12. Roul R.K., Sahoo J.K, Document Labeling using Source-LDA Combined with Correlation Matrix, 04<sup>th</sup> international conference on Computational Intelligence in Data Mining, VSSUT, Sambalpur, Orissa, India Nov 11-12, 2017.



13. Roul R.K., Sahoo J.K., Query-Optimized Page Rank: A Novel Approach, 04<sup>th</sup> international conference on Computational Intelligence in Data Mining, VSSUT, Sambalpur, Orissa, India Nov 11-12, 2017.
14. Roul R.K., Sahoo J.K., Text Categorization using a Novel Feature Selection Technique Combined with ELM, 05<sup>th</sup> international conference on Advanced Computing, Networking, and Informatics, NIT Goa, India June 11-12, 2017.
15. Prasanna Kumar N., On the Inequalities Involving Complex Polynomials, Paper presented in *International Conference in Approximation Theory* held at Department of Mathematics, Georgia Southern University, Georgia, USA during May 8-11, 2017.

**E. Workshops Attended:**

1. Mr. Bijil Prakash has attended the Workshop on Teaching Strategies in Mathematics, held at BITS Pilani K K Birla Goa Campus on 28<sup>th</sup> & 29<sup>th</sup> April 2017.
2. Dr. Manoj Kumar Pandey has attended the Workshop "Regional Workshop on Outcome Based Learning Using Pedagogy Frame Work Model" held at BITS Pilani K K Birla Goa Campus during Feb. 10-11, 2017.
3. Dr. Pradeep Boggarapu attended "International Conference on Fourier Analysis and Wavelets" held at RIASM Chennai, March 21-25, 2017.
4. Dr. Pradeep Boggarapu attended "15<sup>th</sup> Disussion Meeting in Harmonic Analysis" held at IISc Bangalore, during December 18-21, 2017.
5. Dr. T. Singh chaired a session on Graph Algorithms in *International Conference on Algorithms and Discrete Applied Mathematics (CALDAM 2017)*, organized by the Department of Mathematics, BITS Pilani K K Birla Goa Campus, during Feb. 16-18, 2017.
6. Dr. T. Singh attended a workshop on *TEACHING STRATEGIES IN MATHEMATICS* organized by the Department of Mathematics, BITS Pilani K K Birla Goa Campus, during April 28-29, 2017.

**F. Books Published/Edited during the year: Nil.**

**G. Conferences, seminars & workshops conducted in the department:**

1. One day workshop on "Introduction to MATHEMATICA" on March 3, 2017.
2. "Indo-German Pre-Conference School on Algorithms and Combinatorics" and 3<sup>rd</sup> International Conference on "Algorithms and Discrete Applied Mathematics (CALDAM-2017)" from February 13 to February 18, 2017 held at Department of Mathematics, BITS Pilani KK Birla Goa Campus, Goa.
3. Workshop for College/University Teachers: Teaching Strategies in Mathematics, during April 28-29, 2017

**H. Invited talks arranged in the BITS:**

**I. Invited talks arranged in the department:**

1. November 30, 2017, Prof. Rekha P. Kulkarni, Department of Mathematics, Indian Institute of Technology Bombay delivered a lecture on "Approximate Solution of Integral Equations: Improvement by Iteration".
2. November 17-19, 2017, Prof. G. D. Veerappa Gowda, TIFR-Centre for Applicable Mathematics, Bangalore delivered a lecture series on "Finite Difference Schemes for Approximating Hyperbolic Conservation Laws".
3. September 28, 2017, Dr. Samik Basu, Assistant Professor, Department of Mathematics, Ramkrishna mission, Vivekanand University, Calcutta, delivered a lecture on "Equivariant cell complexes and freeness theorems".
4. September 19, 2017, Prof. V. Sree Hari Rao, Director, International Center for Interdisciplinary Research & Innovation, Hyderabad, delivered a lecture on "Perspectives of Predictive Modeling for Real World Problems".
5. August 29, 2017, Dr. Sachindranath Jayaraman, Assistant Professor, School of Mathematics, IISER Trivandrum, delivered a lecture on "Semipositivity of matrices and their preservers".
6. August 24, 2017, Dr. Shameek Paul, Visiting Fellow, Homi Bhabha Center for Science Education, Mumbai delivered a lecture on "Dealing with Quotients".
7. April 25, 2017, Prof. Shanta Laishram, Stat. Math Unit, Indian Statistical Institute (ISID), New Delhi delivered a lecture on "Prime Numbers and Cryptography".
8. April 13, 2017, Prof. S. Thangavelu, Department of Mathematics, IISc Bangalore delivered a lecture on "Hardy's Inequality".

9. April 11, 2017, Dr. Luz Roncal (BCAM Researcher), Basque Center for Applied Mathematics (BCAM), Bilbao, Spain delivered a lecture on "A generalized spherical mean Radon transform acting on radial functions".
10. March 23, 2017, Dr. Amiya Ranjan Bhowmick, Assistant Professor, Department of Mathematics, ICT Mumbai delivered a lecture on "Evolution of Model Specific Growth Rate: Theoretical Analysis and Application to Real Data".
11. February 17, 2017, Mr. Deepak Garud and his team from Binary Semantics Ltd. Mumbai gave a talk on 'Introduction to Maple' .
12. January 27, 2017, Prof. Anant R. Shastri, Emeritus Fellow, Department of Mathematics, IIT Bombay delivered a lecture on "Linear Algebra Proof of Fundamental Theorem of Algebra".

**J. Achievements/Awards by the Faculty members:**

1. Dr. Gauranga Charan Samanta received Ahlfors award for the best seminar presentation in the Department of Mathematics, BITS Pilani K K Birla Goa.
2. Dr. T. Singh appointed as Nominee of Visvesvaraya Technological University to the Board of Studies in Mathematics of Siddaganga Institute of Technology, Tumkuru, for two years (07/07/2017 to 06/07/2019).

**K. Faculty Development, National/International Collaboration & Industry/ University immersion:**

**Collaborations:**

**Prasanna Kumar**

- Prof. N. K. Govil, Department of Mathematics and Statistics, Auburn University USA.
- Prof. Gerhard Schmeisser Department Mathematik, FAU Erlangen-Nürnberg, Germany.

**P. Dhanumjaya**

- Prof. Graeme Fairweather (Senior Editor in AMS, USA).
- Prof. Veerappa Gowda (TIFR-CAM, Bangalore).
- Prof. Amiya Kumar Pani (IIT Bombay).

**Prabal Paul:**

- Dr. Mohan Namdev Chintamani (Department of Mathematics and Statistics, University of Hyderabad, has visited our department several times for possible research collaboration).
- Dr Prabal Paul has also visited University of Hyderabad, Harish Chandra Research Institute, Allahabad, Indian Statistical Institute, Kolkata, on research collaboration.

**L. Significant new equipments/experimental facility added during the year: Nil**

**M. Departmental association/club activities:**

1. Weekly Seminars were held in the Department of Mathematics.
2. September 19, 2017, The orientation for first year M.Sc. Mathematics students was held by seniors of all years to explain about scholarships, projects, the application of mathematical concepts learned in other branches, and more about their experiences with mathematics. This event was organized by MATHLETES.
3. September 9, 2017, Mathletes, The Mathematics Association, conducted two hour long special study session in Mathematics-I. Senior students helped the first year students in understanding concepts and solving problems.
4. January 16-21, 2017, Mathletes, The Mathematics Association, celebrated Department Week by conducting various mathematical aptitude test to the students .
5. January 26, 2017, Organized a workshop on Introduction to Graph Theory for students and teachers of Parvatibai Chowgule College of Arts & Science, Madgao. As many as 48 students and three teachers participated in it.

**N. Any other information: nil**

**B2.10.09 Department: Mechanical Engineering**

Number of faculty members (as on 31 December 2017) :16

<b>Senior Professors, Professors</b>	1
<b>Associate Professors</b>	2
<b>Assistant Professors</b>	10
<b>Lecturers</b>	3
<b>Visiting Faculty</b>	0

**Head of the Department:** Dr. Ranjit S Patil**Contact details:** *ranjitp@goa.bits-pilani.ac.in***Number of PhD Scholars:** 9 Full time + 3 Lecturers + 7 Part-time = 19**Ph.D. Thesis Submitted during the year: 0****A. Sponsored Research activities:**

Total number of Sponsored Projects in the department. Details are given below.

**(i) Ongoing projects: 5**

Sr.No.	Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
1	<b>Ranjit S Patil</b>	Study and Analysis of Fluid Dynamics and Heat Transfer Characteristics in Circulating Fluidized Bed Heat Exchanger with Novel Designs of Heat Exchanger	27.66 Lakhs	SERB-DST
2	<b>P M Singru</b>	An acoustic study, characterization and standardization of the Sarasvati Veena, 3 years	36.96 lakhs	DST-SERB
3	<b>Gaurav Singh (PI)</b> XuHai Tang, Wuhan Universtiy, China (Co-PI)	Simulation of simultaneous rock fractures at multiple scales, 2016-2019	30.00 lakhs	Ministry of Mines
4	<b>Gaurav Singh (PI)</b> Subhas Ghosal, BITS Pilani (Hyd) (Co-PI)	Crack growth direction in amorphous silica under extreme temperature using molecular mechanics, 2017-2019	16.08 lakhs	ISRO
5	<b>Gaurav Singh (PI)</b>	Higher overall stiffness of triangular shaped ductile/brittle lattice composite structure compared to square and hexagonal shaped structure, 2017-2020	44.63 lakhs	SERB
6	<b>Dr. Kiran D. Mali</b>	Experimental and Computational Study of the Free Transverse Vibration Behaviour of Perforated Cantilever Steel Beam.	200000/-	BITS Goa (RIG)

**(ii) Projects sanctioned during the year: 4**

Sr. No.	Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
1	<b>Dr. Varinder Singh(Goa Campus) PI</b> Prof. Amit Kumar Gupta (Hyd Campus) Co PI Prof S P Regalla (Hyd campus) Co PI Dr. TC Bera (Pilani campus) Co PI	Study of Lubricant and Application Method for enhanced surface finish and reduced draw load on cold drawn steel tubes (Duration: 3 years)	27,43,500/-	Tube Investments of India Ltd (TIIL), Chennai
2	<b>Gaurav Singh (PI)</b>	Crack growth direction in amorphous silica under extreme temperature using molecular	16.08 lakhs	ISRO

Sr. No.	Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
	Subhas Ghosal, BITS Pilani (Hyd) (Co-PI)	mechanics, 2017-2019		
3	<b>Gaurav Singh (PI)</b>	Higher overall stiffness of triangular shaped ductile/brittle lattice composite structure compared to square and hexagonal shaped structure, 2017-2020	44.63 lakhs	SERB
4	<b>Sandeep Singh (PI)</b>	Multiscale modelling for the dynamic characteristics of initially strained graphene sheets and carbon nanotubes, Duration: 2017-2018	2 Lacs	Birla Institute of Technology and Science, Pilani,

(iii) **Projects completed this year: Nil**

**B. Publications: 12**

Sl. No.	Authors	Title of the Publication	Journal	Vol	Issue	Page	Month of Publication	Year of Publication	National/ International
1	<b>Pravin Singru</b> , Raizada Ayush, Krishnakumar Vishnuvardhan, Garg Akhil, Tai K., Raj Varun	Development of an experimental model for a Magneto-Rheological (MR) Damper using Genetic Programming	Journal of Vibro Engineering	19	5	3169-3177	August	2017	International
2	Nupur Kumar, Dayananda Desagani, Girish Chandran, Narendra Nath Ghosh, Ganesh Karthikeyan, <b>Sachin Waigaonkar</b> & Anasuya Ganguly	Biocompatible agarose-chitosan coated silver nanoparticle composite for soft tissue engineering applications	Artificial Cells, Nanomedicine, and Biotechnology, Taylor and Francis			<a href="http://dx.doi.org/10.1080/21691401.2017.1337021">http://dx.doi.org/10.1080/21691401.2017.1337021</a>	June	2017	International
3	Girish Chandran V and <b>Sachin Waigaonkar</b>	Mechanical Properties and Creep Behavior of Rotationally Moldable Linear Low Density Polyethylene- Fumed Silica Nano Composites	Polymer Composites	38	3	421-430	March	2017	International
4	Girish Chandran and <b>Sachin Waigaonkar</b>	Rotational Moulding of LLDPE Fumed Silica Nanocomposites	International Polymer Processing	32	1	50-57	March	2017	International
5	Satish Mullya and <b>G.Karthikeyan</b>	CFD Simulation of Dielectric Fluid Flow in Micro Electro Discharge Milling Process	Materials Today Proceedings, Elsevier	--	Accepted	--		2017	International
6	Nupur Kumar and <b>G.Karthikeyan</b> et al.	Biocompatible agarose-chitosan coated silver nanoparticle composite for soft tissue engineering applications	Artificial Cells, Nanomedicine and Biotechnology, Taylor & Francis	--	Accepted	--		2017	International
7	<b>Vikas Chaudhari</b> , Harichandra Chandekar, Jayesh Saboo	Effect of chemical treatment on thermo-mechanical properties of jute-polyester composite	Journal of Physics: Conference Series, IOP Science				Accepted	2007	International

Sl. No.	Authors	Title of the Publication	Journal	Vol	Issue	Page	Month of Publication	Year of Publication	National/International
	and Adlete Mascarenhas								
8	<b>Singh, V.</b> and Singru, P. M.	Graph Theoretic Structural Modeling based new measures for analysis of lean initiatives	Journal of Manufacturing Technology Management				Dec.	2017	Intl journal listed in ESCI, SCOPUS, ABDC, ABS 2017 Cite Score 2.25
9	<b>Harshit Garg &amp; Gaurav Singh</b>	Solution of two-parameter cohesive law using Chebyshev polynomials for singular integral equation	Theoretical and Applied Fracture Mechanics	88	-	117-129	-	2017	International
10	<b>Gaurav Singh</b>	Under-estimation of crack growth rate due to negligence of timescale distinction during hydrogen assisted cracking through diffusion	Engineering Fracture Mechanics	172	-	117-125	-	2017	International
11	Rushikesh Shine, <b>Kiran Mali</b>	An Overview on Impact Behaviour and Energy Absorption of Collapsible Metallic and Non-Metallic Energy Absorbers used in	IOP Conference Series: Materials Science and Engineering	Accepted					International
12	<b>Kiran Mali</b> Pravin Singru	Study on the Effect of the Impact Location and the Type of Hammer Tip on the Frequency Response Function (FRF) in Experimental Modal Analysis of Rectangular Plates	Journal of Physics: Conference Series	Accepted					International
13	Vishal V. Patil, <b>Ranjit S. Patil,</b>	Investigations on Partial Addition of N-Butanol in Sunflower Oil Methyl Ester Powered Diesel Engine	ASME Journal of Energy Resources Technology						International
14	Vishal V. Patil, <b>Ranjit S. Patil,</b>	"Effects of Partial Addition of N-Butanol in Rubber seed Oil Methyl Ester Powered Diesel Engine",	IMEchE Journal of Power and Energy,						International

### C. Conferences attended/papers presented: 34

S. No.	Authors	Title of Paper	Conference Name	Location	Date, Month and Year	National/International
1	Iniyam N. <b>Kulkarni D M</b> and Savio D.S.A Lourenço	Mechanical performance of dental implants: comparison of Titanium vs. Zirconia"	3rd International Conference on BioTribology (ICoBT 2016).	Imperial College of London (UK), 11-	15-Sep-2016.	International
2	A.C. Kulkarni, <b>Kulkarni D. M.</b> and Dube A.	Experimental investigation of wear for hip implant material using designed and developed screening	3rd International Conference on BioTribology (ICoBT 2016).	Imperial College of London (UK), 11-	15-Sep-2016.	International

S. No.	Authors	Title of Paper	Conference Name	Location	Date, Month and Year	National /International
		devices.				
3	Chandrshekar Chavan, <b>P.M. Singru</b> , Radhika Vathsan	Acoustic analysis of timbre of Sarasvati veena in comparison to simple sonometer	National Symposium on Acoustics	AMU, Aligarh	October 28-30, 2017	National
4	Kiran Mali & <b>P.M. Singru</b>	Effect of Fit of the Clamping Bolts in the Plate-Fixture Assembly, on the Natural Frequency of Clamped Rectangular Plate	IMECE2017	Tampa, Florida,	November 3-9, 2017	International
5	Sreedhar Babu, Vishal Garg, <b>Shibu Clement</b> , NKS Rajan	An experimental study on combustion dynamics of a producer gas fuelled IC engine”, Paper No: 25NCICEC001	25th NATIONAL CONFERENCE ON INTERNAL COMBUSTION ENGINES AND COMBUSTION	National Institute of Technology Karnataka (NITK), Surathkal, India	DECEMBER 15-17, 2017	National
6	Sri Bhaswath Akella, <b>Shibu Clement</b> , Siddhant Rathore, Shreyash Kumar, Chetan Gour, R B Paul	An Experimental Study On Various Decision Tree Algorithms For Misfire Detection Using Crankshaft Instantaneous Angular Velocity For The Gasoline Fuelled Internal Combustion Engine”, Paper No: 25NCICEC051	25th NATIONAL CONFERENCE ON INTERNAL COMBUSTION ENGINES AND COMBUSTION	National Institute of Technology Karnataka (NITK), Surathkal, India	DECEMBER 15-17, 2017	National
7	Mukund Harugade, <b>Sachin Waigaonkar</b>	Effect of Different Electrolytes on Material Removal Rate, Diameter of Hole and Spark in Electrochemical Discharge Machining	MANUFACTURING 2017	Poznan University of Technology, Poland	Oct. 24-26, 2017	International
8	Mukund L. Harugade, <b>Sachin D. Waigaonkar</b> , Nikhil S. Mane and Narayan V. Hargude	Effect of High-Speed Tool Rotation on Electrochemical Discharge Engraving	International Conference on Precision, Meso, Micro and Nano Engineering (COPEN-10)	IIT Madras, Chennai	Dec. 7-9, 2017	International ( In India)
9	Mukund Harugade, <b>Sachin Waigaonkar</b> , Nikhil Mane	Effect of High Speed Tool Rotation on the Performance of Electrochemical Discharge Machining (ECDM) for Composite Material	International Conference on Advances in Materials & Processing: Challenges & Opportunities (AMPCO-2017)	IIT Roorkee	Nov.30-Dec.2, 2017	International ( In India)
10	Mukund L. Harugade, <b>Sachin D. Waigaonkar</b> , Nikhil S. Mane and Narayan V. Hargude	Experimental Investigation of High speed tool rotation on Heat affected zone and over cut in ECDM	International Conference on Nano Technology: Ideas, Innovations & Initiatives-2017	IIT Roorkee	Dec. 6-8, 2017	International ( In India)
11	Satish Mullya and <b>G. Karthikeyan</b>	CFD Analysis of Dielectric and Debris flow using Slotted tools in Micro Electrical Discharge Milling	International Conference on Nanotechnology: Ideas, Innovations and Initiatives (ICN:3I-2017)	IIT Roorkee	Dec 2017	International
12	Satish Mullya and <b>G.</b>	Study of molten metal flow and debris	10 <sup>th</sup> International Conference on	IIT Madras	Dec 2017	International

S. No.	Authors	Title of Paper	Conference Name	Location	Date, Month and Year	National /International
	<b>Karthikeyan</b>	movement at inter electrode gap in micro electric discharge process using CFD	Precision, Meso, Micro and Nano Engineering (COPEN 2017)			
13	Satish Mullya and <b>G. Karthikeyan</b>	Study of dielectric flow and debris movement in micro electro discharge milling process	International Conference on Manufacturing and Industrial Engineering -2017 (IIIE)	Jawaharlal Nehru Engineering College, Aurangabad	Sep 2017	International
14	Nikhil Kadam and <b>G. Karthikeyan</b>	An Overview on Emerging Processes for Thermal Barrier Coatings	4 th International Conference on Computational Methods in Engineering and Health Sciences	Manipal University	Dec 2017	International
15	<b>Vikas Chaudhari</b> , Akshay Sancheti, Shivam Rathi, D. M. Kulkarni and Swadesh Dixit	Investigation of Cohesive Zone Model Parameters for Steel Used in Shipbuilding Structure	International Mechanical Engineering Congress & Exposition (IMECE-2017), ASME 2017 conference	Tampa, Florida, USA	3- 9 November 2017	International
16	<b>Vikas Chaudhari</b> , Harichandra Chandekar, Jayesh Saboo and Adlete Mascarenhas	Effect of chemical treatment on thermo-mechanical properties of jute-polyester composite	International Conference on Recent Advances in Materials, Mechanical and Civil Engineering (ICRAMMCE-2017)	Hyderabad, India	1- 2 June 2017	International
17	Ravindra Singh Saluja and <b>Varinder Singh</b>	Decision making in selection of welding processes for tube manufacturing	11 <sup>th</sup> ISDSI (Indian Subcontinent Decision Sciences Institute) International conference,	IIM, Trichy	Dec 27-30, 2017	International
18	Yash Vartak & <b>Gaurav Singh</b>	Higher overall stiffness of triangular shaped ductile/brittle lattice composite structure compared to square shaped structure	14 <sup>th</sup> International Conference on Fracture	Rhodes, Greece	18-23 June, 2017	International
19	Aditya Patil & <b>Gaurav Singh</b>	Influence of friction between crack faces in compressive wood fracture	14 <sup>th</sup> International Conference on Fracture	Rhodes, Greece	18-23 June, 2017	International
20	<b>Gaurav Singh</b>	Error in crack growth rate estimation when distinct timescaling is considered in hydrogen cracking	14 <sup>th</sup> International Conference on Fracture	Rhodes, Greece	18-23 June, 2017	International
21	Yash Vartak & <b>Gaurav Singh</b>	Stiffness comparison of triangular and square lattice composites for given statistical strength	ASME International Mechanical Engineering Conference and Exposition	Tampa, Florida, USA	3-9, November, 2017	International
22	Ameya Deshpande & <b>Gaurav Singh</b>	Dependence of peak stress on crack inclination and friction coefficient during compressive fracture	ASME International Mechanical Engineering Conference and Exposition	Tampa, Florida, USA	3-9, November, 2017	International
23	<b>Gaurav Singh</b>	Error in predicting crack growth rate due to negligence of timescale distinction during hydrogen cracking for time-varying diffusivity	ASME International Mechanical Engineering Conference and Exposition	Tampa, Florida, USA	3-9, November, 2017	International

S. No.	Authors	Title of Paper	Conference Name	Location	Date, Month and Year	National /International
24	<b>Gaurav Singh</b>	Integral equation approach to cohesive crack problem: solution and (current) limitation	ASME International Mechanical Engineering Conference and Exposition	Tampa, Florida, USA	3-9, November, 2017	International
25	Simanta Lahkar, Subhas Ghosal & <b>Gaurav Singh</b>	Atomistic simulation of mixed mode fracture in vitreous silica	ASME International Mechanical Engineering Conference and Exposition	Tampa, Florida, USA	3-9, November, 2017	International
26	<b>Kiran Mali</b> Pravin Singru	Study on the Effect of the Impact Location and the Type of Hammer Tip on the Frequency Response Function (FRF) in Experimental Modal Analysis of Rectangular Plates	International Conference on Recent Advances in Materials, Mechanical and Civil Engineering ICRAMMCE-2017	MLRITM, Hyderabad, Telangana	1-2 June, 2017,	International
27	<b>Kiran Mali</b> Pravin Singru	Effect of Fit of the Clamping Bolts in the Plate-Fixture Assembly on the Natural Frequency of Clamped Rectangular Plate doi:10.1115/IMECE2017-71260	ASME 2017 International Mechanical Engineering Congress and Exposition (IMECE2017)	Tampa, Florida, USA	November 3–9, 2017,	International
28	Sangle Sourabh; Verma Shesha; <b>Mali Kiran</b>	Formulation of Problem of Free Vibration Analysis of Isotropic Homogeneous Rectangular Mindlin Plates Having Variable Thickness With General Elastic Boundary Conditions	ASME 2017 International Mechanical Engineering Congress and Exposition (IMECE2017)	Tampa, Florida, USA	November 3–9, 2017,	International
29	Eaga Akhil, Sanjyot Bhosale, <b>Kiran Mali</b>	Determination of the Natural Frequencies of The Cantilever Beam for Linear Variation of Circular Perforations	13th International Conference on Vibration Problems (ICVOP 2017) - IIT Guwahati	IIT Guwahati	29thNovember - 2ndDecember, 2017	International
30	Akshay Chugh, Yash Haritwal, <b>Kiran Mali</b>	Free Vibration Analysis of Multi-Perforated Rectangular Plate Made of Functionally Graded Material	13th International Conference on Vibration Problems (ICVOP 2017) - IIT Guwahati	IIT Guwahati	29thNovember - 2ndDecember, 2017	International
31	Kedar M. Hendre, <b>Kiran D. Mali</b> , Dhananjay M. Kulkarni	An Overview of Upper Extremity Injuries for Occupants in Automotive Accidents	International Conference on Computational Methods in Engineering and Health Sciences (ICMEH2017)	Manipal Institute of Technology, Manipal	December 19-20, 2017	International
32	Rushikesh Shine, <b>Kiran Mali</b>	An Overview on Impact Behaviour and Energy Absorption of Collapsible Metallic and Non-Metallic Energy Absorbers used in Automotive Applications	International Conference on Recent Advances in Materials & Manufacturing Technologies (IMMT 2017)	BITS Pilani, Dubai Campus, Dubai, UAE	28-29, November, 2017	International



S. No.	Authors	Title of Paper	Conference Name	Location	Date, Month and Year	National /International
33	<b>Sandeep Jose, C Lakshmana Rao, S. A. Krishnan</b>	Numerical simulation of interfacial crack propagation in bimetallic welded joints using XFEM	Indian Conference on Applied Mechanics (INCAM) 2017	MNNIT Allahabad	5– 7 July 2017	National
34	<b>S. Singh and B. P. Patel</b>	Postbuckling response of graphene sheets using atomistic–continuum couple multiscale modelling, Proc. 3rd Indian	Conference on Applied Mechanics, pp. 59–60	Motilal Nehru National Institute of Technology, Allahabad, Indian	July 05–07, 2017	National
35	<b>Mahesh Dasar, Ujash Shah, PraharshPaiR aikar, RanjitPatil,</b>	“Computational Studies on Effect of Novel Accelerating Perforated Distributor on Fluid Dynamic Characteristics of Circulating Fluidized Bed Riser”,	Proceedings of 12 <sup>th</sup> International Conference on Fluidized Bed Technology (CFB-12), 325-332.	<b>Krakow - Poland,</b>	23-26 <sup>th</sup> May 2017.	International
36	<b>Vishal V. Patil, Ranjit S. Patil,</b>	“Effect of Exhaust Gas Recirculation on Various Characteristics Of Diesel Engine Powered By Rubber Seed Oil Methyl Ester-Butanol Blend”,	24 <sup>th</sup> National and 2 <sup>nd</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMT-2017),	<b>BITS Pilani and IIT – Hyderabad,</b>	27-30 <sup>th</sup> December 2017,	International

#### D. Books Published/Edited during the year: 5

S. no.	Name of publication/Name of the book	Details
1	<b>Sachin D. Waigaonkar:</b> Improvement of Acceptance Sampling Inspection for the Operation of Sealing Packages/	Advances in Manufacturing, Lecture Notes in Mechanical Engineering. Springer, Cham <a href="https://doi.org/10.1007/978-3-319-68619-6_81">https://doi.org/10.1007/978-3-319-68619-6_81</a>
2	<b>Sachin D. Waigaonkar:</b> Organization of Visual Inspection and Its Impact on the Effectiveness of Inspection	Advances in Manufacturing, Lecture Notes in Mechanical Engineering. Springer, Cham <a href="https://doi.org/10.1007/978-3-319-68619-6_87">https://doi.org/10.1007/978-3-319-68619-6_87</a>
3	Book Chapter: Harichandra Chandekar, <b>Vikas Chauhdari</b> Sachine Waigoankar and N N Ghosh, “Thermal and dynamic mechanical analysis of jute polypropylene composites” in book entitled Advanced Polymeric materials for Sustainability and Innovations published by Apple Academic Press, CRC press.	Accepted: Published in forthcoming edition, 15th February 2018.
4	Book Chapter published in Edited Book entitled “Decision Sciences for Business Sustainability”	Palash Dhir and <b>Varinder Singh</b> ,(2017) “Implementing Analytics in a Case of e-business”, In: Digalwar A.K., Singh, A.K. and Singh R. (Eds) <i>Decision Sciences for Business Sustainability</i> , pp.303-310 . ISBN 978-93-86724-24-3
5	International Journal of Vibroengineering	<b>Dr. Kiran Mali</b> Reviewed paper

#### E. Conferences, seminars & workshops conducted: 1

S. No.	Title	Date	Description
1	<b>D M KULKARNI :</b> 55th National Metallurgist Day and 71st Annual Technical Meeting (Annual Mega Event of Indian Institute of Metals (IIM))	11-14-Nov, 2017	Annual mega event of Indian Institute of metals, Under the aegis of Ministry of Steel (Govt of India).

**F. Invited Talks given by BITS faculty: 5**

Sl. No.	Authors	Host	Title	Date
1	Sachin Waigaonkar	Society of Asian Rotomoulders (StAR) in 13th Annual Technical Conference	Service Capabilities of BITS for Rotational Moulding Industry	January 28-31, 2017
2	Sachin Waigaonkar	AICTE Sponsored FDP on Scope of metallurgical Process and Material Testing of Advanced Materials	Polymeric Materials and Rotational Moulding of Plastics	December 20, 2017
3	Gaurav Singh	IIT Hyderabad	Topics in Fracture Mechanics	23/01/2017
4	Gaurav Singh	Tongji University, Shanghai, China	Fundamental issues in contemporary fracture mechanics	20/07/2017
5	Dr. Kiran D. Mali	Marri Laxman Reddy Institute of Technology and Management. HYD-TELANGANA	"Study on the Effect of the Impact Location and the Type of Hammer Tip on the Frequency Response Function (FRF) in Experimental Modal Analysis of Rectangular Plates",	1-2 JUNE 2018

**G. Invited talks arranged in the department: Nil****H. Awards and recognitions won by faculty and students: 9**

Sl. No.	Name	Association/Society member
1	<b>Dr. Vikas Chaudhari</b> serve as a session chair at International Mechanical Engineering Congress & Exposition (IMECE- 2017), ASME 2017 conference held on 3- 9 November 2017 at Tampa Convention Center, Tampa, Florida, USA.	ASME
2	<b>Dr. Vikas Chaudhari</b> serve as a session chair International Conference on Recent Advances in Materials, Mechanical and Civil Engineering (ICRAMMCE-2017), 1- 2 June 2017 at Marri Laxman Reddy Institute of Technology and Management, Hyderabad, India.	
3	<b>Varinder Singh</b> Program Committee Member, 11 <sup>th</sup> ISDSI Conference, IIM Trichy	Indian Subcontinent Decision Sciences Institute (A regional division of Decision Sciences Institute, USA)
4	<b>Varinder Singh</b> Technical Review Committee Member	Workshop on Intelligent and Collaborative Decision Support Systems for Improving Manufacturing Processes under World CIST Conference 2018 at Naples, Italy, 27 - 29 March 2018. Italy
5	<b>Varinder Singh</b> Served as Reviewer for Journal of Manufacturing Technology Management, Emerald, UK	Journal of Manufacturing Technology Management, Emerald, UK
6	<b>Varinder Singh</b> Core committee member for organizing National Metallurgist Day and Annual Technical Meet 2017	Indian institute of Metals
7	Miheer Joshi (2015A4PS354G) Yash Agarwal (2015A4PS383G)	Two second year students under the mentorship of <b>Dr. Kiran D. Mali</b> participated in National level "Student mechanism design competition (SMDC 2017)". They won THIRD PRIZE. This competition was held during 18th National and 3rd International conferences on Machines and Mechanisms (INaCoMM 2017) at Bhabha Atomic Research Centre, Mumbai.
8	<b>Dr. Kiran Mali</b> became member of societies	ASME and IIM
9	<b>Dr. Kiran D. Mali</b> Chaired session at International Conference on Recent Advances in Materials, Mechanical and Civil Engineering (ICRAMMCE-2017)	Organised at Marri Laxman Reddy Institute of Technology and Management, 1-2 JUNE 2018 HYD-TELANGANA

**I. Faculty Development, International Collaboration & Industry Immersion: 1**

Sr. No.	Name of Faculty	Name of the programme	Collobrator	Duration date and month
1	Dr. Kiran Mali	Attended two-day Regional Workshop on Outcome Based Learning Using Pedagogy Framework Model during 10th-11th February, 2017 with the support from Centre for Educational Technology, Indian Institute of Technology (IIT), Kharagpur under a funded project by the MHRD, Govt. of India.		10th-11th February, 2017

**J. Significant new equipments/experimental facility added during the year:2017**

Significant equipment added during this year is as follows:

S.No.	Particulars
1	Universal Testing Machine (100kN capacity) with static and dynamics load capabilities to conduct Tensile, Compression, 3point bend, Fracture and Fatigue tests
2	Random Vibration Control module for EDM Software
3	Pin on Disc (up to 200N) Base Unit TR-20 with lubrication module and Environmental Chamber
4	PVD Deposition Systems
5	CFB Boiler Research set up (Renewable Energy Lab)
6	Micro channel Test Rig (Renewable Energy Lab)
7	Oxidation Induction Test Apparatus by Differential Thermal Analyser Method.
8	Constant Temperature Bath CALSYS – 15/110 (RTD Master Sensor, Thermocouple Element etc.)
9	Density resolution:0.001 g/cm <sup>3</sup> Maximum weight:300g Weight resolution:0.005g Model: DH-300 with Thermal Printer Model: DE-40
10	Academic TAH Licence for MATLAB
11	Software - Maple 2017 Multi User Floating License (20 Users)
12	Water Chiller, Capacity: 0.5TR (1500Kcal/hr)
13	Software - Tecplot Academic Suite Modules Included - Tecplot 360 + Techio Library + Tecplot Focus + Tecplot Rs (Licence Type: Floating, Duration: Perpetual) 1
14	Screw Type Air Compressor, 13 Bar

**K. Departmental association/club activities:**

The following students association has arranged different activities under following categories.

**(i) MESA:**

- Organized the Department Week for Mechanical Engineering Department in last week of Jan, 2017
- Total of 3 events were organized for students on Department Day. Events included Design Challenge, 3 minuite thesis Coding Challenge
- A two day workshop for ansys was done to know about the basics of the software.
- An orientation with all the junior students to be familiar with their seniors.
- Encouraged fellow students to participate in Students mechanism design contest BARC mumbai Dec 2017 and IATA for solution of vehicle designing during the year.
- Also planned a workshop for use of software for casting from MAGMASOFT but was cancelled due to less registration
- A talk by Harshal an alumni of Bits Pilani about use of machine learning in CFD currently pursuing PHD at Melbourne,Australia.
- A session for juniors and fellow students for job and study prospects about IT, Consulting, Core Job, Masters, Ms, Gate other civil services etc.

**(ii) Society of Automotive Engineering (SAE):**

1. Team Grease Monkeys participated in the main event of SAE BAJA India 2017 at Indore, and cleared the technical inspection and participated in the endurance race for the first time.
2. Achieved 23<sup>rd</sup> rank in Sales and 26<sup>th</sup> rank in cost presentation out of 150 Teams
3. Team Grease Monkeys successfully completed the manufacturing of their third Formula Vehicle and participated in the main event of the SAE SUPRA held at the Formula – 1 track of India, Buddh International Circuit in Noida in the month of July, 2017.
4. Team designed and manufactured custom-made single speed gearbox for the vehicle.
5. Team used the concepts from Shigley's Mechanical Engineering Design for designing the Gearbox, wheel assembly and other custom-made parts in the vehicle.
6. Weight reduction was given an importance for this year. Reduction of weight to 160 kg from the previous 218.5 kg.
7. Unveiling and showcase session of the third BAJA Vehicle outside B-dome was organized. Inauguration was done by the Director of the campus.
8. Unveiling and showcase of the third Formula Vehicle was done at the B-Dome during Department Orientation by the Director of the campus.
9. SAE Club in association with Centre for Technical Education organized a course on 'Design and Assembly using Solidworks' and 'Vehicle Design and Dynamics' from Feb 2017 to April 2017 and August to December, 2016 and received a turnout of 50 students.
10. Team Grease Monkeys – BAJA have completed the manufacturing of their 4<sup>th</sup> BAJA vehicle and is participating in BAJA SAE India 2017.

**(iii) Team Robocon:**

1. The Asia-Pacific Robot Competition (ABU Robocon) is a Pan Asia-Oceania University robotics competition. Students compete to design and build robots to complete a specialized task within a set period of time.
2. A 25 member team of undergraduate students from disciplines such as Mechanical, EEE, ENI was formed to participate in National round of ROBOCON held at Pune in March 2017.
3. Problem statement for ROBOCON 2017 was "The landing Disc". The team had to build a three tier bot consisting of independent launcher which can throw up a soft saucer up to a distance of 8m. The team began working from August 2016 in ERC room.
4. The team used design thinking methodology with emphasis on making and testing lots of prototypes before finalizing designs and lot of testing with keeping the actual conditions in mind.
5. The team made efficient use of Machining tools in workshop such as lathe, mill, VMC and 3D printer for their manufacturing needs.
6. The team is making use of Omni-directional wheeled motion, BLDC motors, rotary encoder, and various sensors like gyro etc. to build and test robots.
7. The team secured 38<sup>th</sup> rank out of 120 participating teams in ROBOCON 2017.
8. Currently the team is working on 6 different projects named: Bipedal Robot, Modular Robotics, Human Arm, Swarm Robotics, Baby Incubator and NRI App " and not participating in Robocon'18.

**B2.10.10 Department: Physics****Number of faculty members (as on 31 December 2017): 15**

<b>Senior Professors, Professors</b>	<b>01</b>
<b>Associate Professors</b>	<b>05</b>
<b>Assistant Professors</b>	<b>09</b>
<b>Lecturers</b>	<b>00</b>
<b>Visiting Faculty</b>	<b>00</b>

**Head of the Department: Dr. P. N. Deepak****Contact details:** deepakpn@goa.bits-pilani.ac.in**Number of PhD Scholars: 17****Ph.D. Thesis Submitted during the year: 01****A. Sponsored Research activities:****Total number of Sponsored Projects in the department: 07****(i) Ongoing projects:**

- Project Title:** OBSERVATIONAL SIGNALS OF QUANTUM GRAVITY IN CMB

**Principle Investigator PI:** Kinjal Banerjee**Co-PI:** None**Funding Agency:** SERB**Amount:** Rs. 3.18 Lakhs**Duration:** March 2016 to March 2018**(ii) Projects sanctioned during the year:05**

- Project Title:** Room Temperature Hydrogen Sensing and Storage using Reduced Graphene Oxide and MoS<sub>2</sub> Nanocompos

**PI:** E. S .Kannan**Co-PI:** None**Funding Agency:** SERB**Funding Amount:** Rs. 30 Lakhs**Project Duration:** March 2017 to March 2020

- Project Title:** Studies on biomolecular transport through nuclear pore complexes using a dual fluorescence channel confocal microscope

**PI:** P. Nandakumar**Co-PI:** Meenal Kowshik**Funding Agency:** SERB**Funding Amount:** Rs. 44.04104 Lakhs**Project Duration:** March 2017 to March 2020

- Project Title:** Spin Seebeck Effect in novel heterostructures

**PI:** R S Patel**Co-PI:** Dr. Pratap Kumar Sahoo and Dr. Kartik Senapati (NISER Bhubaneswar)**Funding Agency:** SERB, DST Govt. of India**Funding Amount:** Rs.51 Lakhs**Project Duration:** March 2017 to March 2020

- Project Title:** Ecofriendly Flexible CZTS Solar Cells

**PI:** Teny Theresa John**Co-PI:** Prof. MK Jayaraj, CUSAT, Kochi**Funding Agency:** SERB**Funding Amount:** 29.25560 lakhs**Project Duration:** August 2017-August 2020

5. **Project Title:** An acoustic study, characterization and standardization of the Sarasvati Veena (EMR/2016/002338)

**PI:** Pravin M Singru

**Co-PI:** Radhika Vathsan

**Funding Agency:** DST-SERB

**Funding Amount:** Rs. 3695560/

**Project Duration:** March 2017- February 2020

6. **Project Title:** To look for the signatures of space-time noncommutativity at high energy colliders

**PI:** PRASANTA KUMAR DAS

**Funding Agency:** SERB, GOVT. OF INDIA

**Funding Amount:** 18.85515 lakhs

**Project Duration:** 21st March 2017 - 20th March 2020

(iii) **Projects completed this year:** NIL

#### **B. Publications:13**

##### **Journals / Publications (National / International)**

- 1) Nuclear symmetry energy with mesonic cross-couplings in the effective chiral model, by Tuhin Malik, Kinjal Banerjee, T.K. Jha, B.K. Agrawal. Published in Phys.Rev. C96 (2017) no.3, 035803.
- 2) A. Venkatesan, In-Yeal Lee, Servin, Rathi, Gil-Ho Kim, and E. S. Kannan, Nanotechnology, 28, 365501 (2017). Title: Molybdenum disulfide nanoparticles decorated reduced graphene oxide: Highly sensitive and selective hydrogen sensor
- 3) A. Venkatesan, and E. S. Kannan, Current Applied Physics 17, 806 (2017) Title: Highly ordered copper oxide (Cu<sub>2</sub>O) nanopillar arrays using template assisted electrodeposition technique and their temperature dependent electrical characteristics
- 4) Confocal imaging of single BaTiO<sub>3</sub> nanoparticles by two-photon photothermal microscopy, M.M. Bijeesh, P.K. Shakhi, S. Arunkarthick, G.K. Varier and P. Nandakumar, Confocal imaging of single BaTiO<sub>3</sub> nanoparticles by two-photon photothermal microscopy, Scientific Reports. 7 (2017) 1643.
- 5) Tuning the nonlinear optical absorption in Au/BaTiO<sub>3</sub> nanocomposites with gold nanoparticle concentration, M.M. Bijeesh, P.K. Shakhi, Geetha K. Varier and P. Nandakumar, Optics and Laser Technology 102 (2018) 207–212.
- 6) A study of electron and thermal transport in layered Titanium Disulphide single crystals Dhavala Suri, S. Vantari, S. Joshi, K. Senapati, P. K. Sahoo, S. Varma and R. S. Patel Journal of Physics: Condensed Matter 29, 485708 (2017).
- 7) Electron and thermal transport transport via variable range hopping in MoSe<sub>2</sub> single crystals Dhavala Suri and R. S. Patel, Applied Physics Letters 110, 233108 (2017).
- 8) Spin polarized tunneling through chemical vapor deposited multilayer Molybdenum disulfide Andre Dankert, M. Venkata Kamalakar, R. S. Patel, S. P. Dash et al ACS Nano 11, 6389 (2017).
- 9) Plunges in the Bombay stock exchange: Characteristics and indicators, Kinjal Banerjee, Chandradew Sharma, N Bittu, International Journal of Modern Physics B 31, 1750160 (2017).
- 10) Towards a dS/MERA correspondence, Raj Sinai Kunkolienkar, Kinjal Ba, International Journal of Modern Physics D 26, 1750143 (2017).
- 11) The influence of vacuum and annealing on the visible luminescence in ZnO nanoparticles, Chithira P R, Teny Theresa John. Journal of Luminescence 185 (2017) 212-218.
- 12) Feasibility study for the measurement of NTDAs at PANDA in  $p^- p \rightarrow J/\psi \pi^0$ , The PANDA Collaboration (A V Kulkarni and P N Deepak are involved), Physical Review D, 95 032003 (2017).
- 13) q-deformed statistics and the role of a light fermionic dark matter in SN1987A cooling, Atanu Guha, Selvaganapathy J and Prasanta Kr. Das, Phys.Rev.D 95:015001, 2017.

**D. Books Published / Edited during the year:** Nil

**E. Conferences, seminars & workshops conducted:** NIL

**F. Invited Talks given by BITS faculty: Nil****Papers presented/ Invited Talks in conferences/ Workshop/ School:05**

1. Electron and thermal transport studies in large MoSe<sub>2</sub> single crystals, Dhavala Suri and R. S. Patel  
SpinTECH IX International School and Conference, June 4-8, 2017, Fukuoka, Japan.
2. Structural, Optical and Magnetic Properties of Co-Doped ZnO Nanoparticles, Chithira P. R & Teny Theresa John, International Conference on Nanotechnology: Ideas, Innovations & Initiative – 2017, IIT Roorkee, Dec 6 - 8, 2017, Proceedings p-115.
3. Minimal Modelling of Primary Auditory Neuron Behavior Synapsing to Inner Hair Cell ,Akshay Sasikumar, Siddharth Paliwal, Soumil Moullick, Sachita Nishal & Toby Joseph, 5th International Complex Dynamical Systems and Applications (2017), IIT Guwahati, Dec 4 - 6 2017
4. The economy as a complex system IV: Can economics be a physical science, Chandradew Sharma ,International workshop on the economy as a complex system IV , Non 13-14 2017.
5. Firing Coherence in a network of Integrate-and-fire neurons, Gaurav Dar, 5th International Complex Dynamical Systems and Applications (2017), IIT Guwahati, Dec 4 - 6 2017.
6. P K Das Participated in the International workshop on the High Energy Physics Phenomenology(WHEPP) that was held in IISER Bhopal during the period 15th - 23rd December 2017.
7. P K Das delivered a talk at the Department of Physics, University of Kalyani, West Bengal on 16-Oct-2017 on Dark matter and SN1987A cooling.
8. P K Das delivered a talk at the Department of Physics, IIT Indore, on 24 March 2017 on q-deformed statistics and the role of a light fermionic dark matter in SN1987A cooling.
9. P K Das delivered a talk at the Physical Research Laboratory, Ahmedabad, on 21 March 2017 on q-deformed statistics and the role of a light fermionic dark matter in SN1987A cooling.

**G. Invited talks arranged in the department:04**

1. Prof. Hiranmaya Mishra, PRL Ahmedabad, visited the Institute on 25<sup>th</sup> -Nov-2017, He delivered Lecture on  
“ Estimating transport Coefficients of Quark Matter.”
2. Dr. Moitri Maiti [ Postdoctoral Fellow, Dept. of Physics Institute of Nuclear Research, Dubna, Russia] visited the institute on 19<sup>th</sup> -Jan- 2017 He delivered Lecture on” Dynamical Response of Unconventional Josephson junctions.
3. Prof. Tirthankar Roy Choudhury [National Centre for Radio Physics Tata Institute of Fundamental Research] visited the institute on 19<sup>th</sup> - Jan – 2017, he delivered to lecture on COSMIC “NEUTRAL HYDROGEN AS A PROBE OF THE FIRST STARS IN THE UNIVERSE”.
4. Dr. Vivek [ University of Utah, Salt Lake City] visited the institute on 9<sup>th</sup> to 15<sup>th</sup> April 2017, he delivered to lecture on “The Sdss-iv extended baryon oscillation spectroscopy survey- overview”
5. Date: March 17th and 18th  
Speaker: Kushagara Nigam  
Title: Introduction to Plasma Research  
Title: Quantum Dynamics of casimir forces.
6. Date: April 8th and 9th  
Speaker: Tirthankar Roy Choudhury  
Title: Early Structure Formation in the Universe  
Title :Cosmic neutral Hydrogen as a probe of first starts in the Universe.
7. Date: August 16th  
Speaker: Tim Bedding (by telepresence)  
Title: Asteroseismology using NASA Kepler mission.
8. Date: September 9th and 10th  
Speaker: H. M Antia

- Title: Solar Physics and Numerical methods
9. Date: October 20th  
Speaker: Rafael F. Lang (by telepresence)  
Title: The Dark matter mystery Exploring a cosmic secret.
10. Date: November 11th  
Speaker: Ranjan Gupta  
Title: Artificial Neural networks and applications in astronomy.
11. Date: November 12th  
Speaker: Marcel Agueros (by telepresence)  
Title: PTF(+) Open Cluster

**Physics Department Seminar Series (Faculties and Students) :07**

**Topic: Simple Application of Electromagnetic Theory**

Speaker: Dr. E. S. Kannan [Physics Department – BITS Goa]

Date: 2/2/2017

**Topic: ARE WE ALONE IN THE UNIVERSE?**

Speaker: Dr. Tarun Kumar Jha [Physics Department – BITS Goa]

Date: 9/2/2017.

**Topic: Defect Induced Optical and Magnetic Effects in Dilute Magnetic Semiconductors**

Speaker: Ms. P. Chithira [Research Scholar – BITS Goa]

Date: 16/2/2017.

**Topic: On deformed algebras as symmetry algebras in quantum mechanical systems**

Speaker: Dr. V. Sunil Kumar [ Physics Department, BITS- Goa]

Date: 2/3/2017.

**Topic: SYNTHESIS AND CHARACTERISATION OF LANTHANUM DOPED MANGANESE ZINC FERRITE NANOPARTICLES**

Speaker: Mr. Deepak Kumar [Research Scholar, BITS-Goa]

Date: 9/3/2017.

**Topic: Modelling Auditory Neuron Response Using Integrate and Fire Mode**

Speaker: Dr. Toby Joseph [Physics Department, BITS-Goa]

Date: 18/3/2017.

**Topic: Recent developments on non-extensive statistical mechanics and applications of the generalized statistics in complex systems**

Speaker: Mr. Atanu Guha [Research Scholar, BITS-Goa]

Date: 8/4/2017.



**H. Awards and recognitions won by faculty and students**

- 1 P K Das is a Reviewer for the International Journal, European Physical Journal C
2. Arun V Kulkarni has been selected as Associate of IUCAA- Pune for work in Gravitational Wave detection and the LIGO- India Project. The duration of the project is Aug-2017 - Aug-2020.
3. Arun V Kulkarni is a continuing member of the Board of Studies (BOS) in Physics Goa University. [Duration 4-06-2015 to 3-06-2018]
- 4 Arun V Kulkarni is a continuing member of the Board of Studies (BOS) in Physics Chowgule College, Margao, Goa [Duration July 2014 to July 2017]

**I. Faculty Development, International Collaboration & Industry Immersion:****J. Significant new equipment's / experimental facility added during the year:****K. Departmental association / club activities:**

This year SEDS Celestia associated with Quark to organize a few events and display the ongoing and completed projects of the club. The list of tasks undertaken by the club during Quark is mentioned below:

Display of Telescopes

Display of Barn Door Tracker

Brief introduction to the N-Body Simulation Project

Model of Double-Pendulum displaying chaotic motion

Solar observation sessions

Celesticon 6.0- A Quiz on astrophysics and astronomy

Display of informative banners and posters

**B2.11 DIVISION / UNIT/ CENTRE-WISE ACTIVITY****Alumni Affairs Division:****Distinguished Alumnus Award 2017:**

“BITS Pilani Distinguished Alumnus Award” in 2017 to the following alumni:

	Prof. GOVINDAN RANGARAJAN	Professor at the Department of Mathematics, Indian Institute of Science Adjunct Professor, Centre for Neuroscience, Indian Institute of Science Honorary Professor, Jawaharlal Nehru Centre for Advanced Scientific Research Adjunct Professor, International Centre for Theoretical Sciences, Tata Institute of Fundamental Research - for <b>Academic Teaching and/or Research</b>
	Prof. NARAYANA R. ALURU	Director, Computational Science and Engineering Richard W. Kritzer Distinguished Professor, Department of Mechanical Science and Engineering, Affiliate, Department of Electrical & Computer Engineering Affiliate, Department of Bioengineering at University of Illinois at Urbana-Champaign, USA and Full-time Faculty, Beckman Institute, USA - for <b>Academic Teaching and/or Research</b>
	Mr. HARI MENON	Co-founder, CEO and Head of Merchandising, BigBasket.com -for <b>Entrepreneurship</b>
	Mr. HARISH BHAT	Chairman, Tata Global Beverages & Tata Coffee Limited, India and Brand Custodian, Tata Sons, India- for <b>Professional Management of Businesses</b>
	Mr. Raghu Rajagopal	CEO/Co-Founder, DATRI - for <b>Public Life / Social Entrepreneurship</b>

This is in recognition of their significant and outstanding contributions to entrepreneurship or academic teaching and/or research or Professional Management of Businesses.

**BITSians Day:**

The fourth edition of 'BITSians Day' was celebrated on 4<sup>th</sup> of August, 2017. A BITS – RUN (Marathon) was organized on the same day to celebrate the spirit of “Once a BITSian, Always a BITSian”.

**Embryo & On-campus Lectures:**

Alumni Affairs, BITS Pilani K K Birla Goa Campus has organized the following 15 Embryo & On-campus talks from January – December, 2017. Details are as follows:

S. No	Date	Title Of The Talk	Speaker's Name
1	7th Jan, 2017	The purpose of life: Modern day Existentialism	Mr. Ojas Mehta
2	31 <sup>st</sup> Jan, 2017	A Talk by Debarghya Das	Mr. Debarghya Das
3	15 <sup>th</sup> Mar, 2017	Financing your Master's abroad	Mr. Rishabh Goel
4	18 <sup>th</sup> Mar, 2017	BITS2Business School	Mr. Apoorv Bappat Mr. Anand Ramachandran Mr. Rishabh Goel

S. No	Date	Title Of The Talk	Speaker's Name
5	18 <sup>th</sup> Mar, 2017	CAT Champs	Mr. Mohit Menon Mr. Avidipto Chakraborty Mr. Rishabh Mehra
6	31 <sup>st</sup> Mar, 2017	Artificial Intelligence	Mr. Shobhit Agarwal
7	31 <sup>st</sup> Mar, 2017	What to do in BITS to be a Successful Entrepreneur?	Mr. Raghu Rajagopal
8	6 <sup>th</sup> Apr, 2016	The purpose of Life and pursuing your passion	Mr. Ojas Mehta
9	12 <sup>th</sup> Aug, 2017	A talk by Distinguished Alumnus Award 2017 winner	Mr. Hari Menon
10	26 <sup>th</sup> Aug, 2017	Metanoia – 3 <sup>rd</sup> Annual BITS Alumni Summit	Shreyas Habbu Bandan Jot Singh Padmini Chettur, Shashi Warriar Nishith Rastogi B Sandhya
11	27 <sup>th</sup> Sept, 2017	BITS2MSPHD	Ketan Pant Gauri Jagtap Paritosh Raman
12	4 <sup>th</sup> Oct, 2017	Life at BITS	Sajal Chakravarty
13	10 <sup>th</sup> Oct, 2017	Progenitor Cells in the developing kidney – Balancing Renewal and Differentiation	Harini Ramalingam
14	15 <sup>th</sup> Nov, 2017	BITS2Civil Services	Hari Krishna Reddy Sanskriti Jain Ankur Aggarwal
15	18 <sup>th</sup> Nov, 2017	Future in core domain of EEE/Enl	Siddharth Malhotra

#### **Batch Reunion:**

Alumni Affairs of BITS Pilani K. K. Birla Goa Campus organized the first ever reunion of our campus from 11-12 February 2017. Alumni of the batch 2004, 2005 and 2006 are invited along with their spouse. The event involved talks by some of the alumni about their days in BITS and there was an introduction to Alumni Mentorship Programme (AMP), a pilot project set-up with the help of the alumni mentoring few on-campus students on different areas as selected. Following this, there was a dinner at Royal Orchid Resort & Spa with one of our campus alumni, Mr. Nishant Suri, a well-known stand-up comedian's performance.

#### **Metanoia:**

Keeping in mind its resolute mission to keep the alumni of BITS connected to their Alma mater and to maintain the integrity and strength of the vast alumni community, Alumni Affairs Division – Student Team Goa conducted the second edition of Alumni Summit on 26<sup>th</sup> of August, 2017. The speakers reminisced about their life back at BITS campuses and their journey thereafter.

Six speakers who were invited are:

1. Shreyas Habbu, Chief Minister's Fellow, Government of Maharashtra
2. Bandan Jot Singh, Expeditioner - First Indian Sikh to raise the Indian Flag on Antarctica.
3. Padmini Chettur, Dancer & Founder, Padmini Chettur Dance Company
4. Shashi Warriar, Author
5. Nishith Rastogi, Founder, Locus.sh
6. B Sandhya, Additional Director General of Kerala Police in India

#### **Research Scholarship:**

One of our alumni Mr. Satish Sankaralingam initiated a research scholarship for BE students and an amount of Rs. 15,000/- was awarded to Hardik Hingorani, Shashwat Verma and Sukirt Thakur as recognition to their research work.

#### **Prof. Suresh Ramasamy Memorial Award 2017-18:**

The project idea 'Imitato Robotics' done by the students: Vadaga Ananyo Rao, Shardul Walwadkar and Chakshu Moar was selected for Prof. Suresh Ramaswamy Memorial Award 2017-18.

**Regular Activities:**

Other regular activities like bi-annual Director's Tea Party, batch snap sessions, Alumni Affairs Division registrations, souvenir distributions, bringing out the yearbook 'Melange' for out-going students, hosting visiting alumni on campus, etc.

**ACADEMICS AND RESOURCE PLANNING**

The Academics and Resource Planning (ARP) Division at the BITS Pilani, K K Birla Goa Campus looks after the introduction of new courses, change and addition to the pool of discipline electives, change in pre requisites, change in the course description, formulation of new minor programs, curriculum redesign and running of edX courses. Ever since its inception in the campus at the beginning of the year 2014, a number of activities have been carried out. An office for the same has been established with recruitment of a Non-Teaching Staff as an Office Assistant.

The Division has also been involved in the creation of the Departmental Committee on Academics (DCA) and the ccDCA members for the Goa Campus. The division also helped enlighten the faculty members about edX courses and the mode of delivery and various aspects related to this teaching platform and pedagogy. Various actions related to introduction of a number of the courses in the edX platform including MOOCs, curriculum appraisal, new minor programmes etc. were taken up in the past year and several more are going to be taken up in the present year as part of Departmental activities.

No of Courses from various depts were sent for Approval in the Year 2017-18

**Biological Science**

- **Laboratory for** Water, Sanitation and Solid waste Management
- Capstone project on Sanitation, Water and Solid Waste for Development
- Introduction to Cognitive Neuroscience

**Humanities & Soc. Science**

- **Introduction to Videogame Studies**
- Introduction to Contemporary Arts
- Maritime Governance and Naval Diplomacy
- Philosophy of Economics

**CURRICULUM REVIEWS HELD AT GOA CAMPUS:**

The following Curriculum Reviews were conducted for the academic year 2017-18.

- Curriculum Review for Biological Science Department was conducted on 22<sup>nd</sup> of March, 2017.

**ACADEMIC RESEARCH DIVISION**

- **First Degree Thesis off Campus list Second Semester 2016-2017**

S.No	Name of the student	ID No	Place of thesis work
1	Vijit Maithel	2012B5A4716G	Indian Institute of Science, mathikere, Bangalore
2	Akshay Binwale	2012A4B5299G	Department of Mechanical Engineering, Faculty of Engineering, Singapore
3	Karthik Srinivasan	2012B1A4652G	California Institute of Technology
4	Ameya Riswadkar	2012A3B5042G	TIFR, Mumbai,
5	Patel Pratyush	2013A7PS012G	Carnegie Mellon University, USA
6	Rahil Parekh	2012B1A3696G	Department of Electronics and Telecommunication Politecnico DI Torino, Torino -Italy
7	Naman Gupta	2012B3A8498G	University of California 9500 Gilman Drive, La Jolla, San Diego, CA 92093
8	Varun Chopra	2012B4A4517G	klagenfurter Strabe 2 D-28359 Bremen
9	Shreyas Rajapol	2012B4A4726G	Department of Mechanical Engineering, Indian Institute of Technology Bombay

S.No	Name of the student	ID No	Place of thesis work
10	Sahil Tapiawala	2012B2A3495G	8 somapath Road, #02-101 Building 1, Level 2 Singapore 487372
11	P Bharath Srinivas	2012B1A3700G	Technische Universitat Dersden,Georg Schumann-Strasse 7A, Room 107A, TU Dresden Germany
12	Anmol Sahoo	2013A4PS294G	304A, Indian institute of technology bombay, powai Mumbai
13	Taaresh Sanjeev Taneja	2013A4PS369G	IIT, Bombay
14	Shubham Basavaraj Karpe	2013A4PS170G	IIT, Bombay
15	Salil Pai	2013A4PS015G	IIT, Bombay ,Kharagpur
16	Shantanu Yachhani	2013A4PS235G	Solar energy systems group Solar energy research institute of singapore (SERIS)
17	Shashwat Verma	2012B2A4638G	National institute of Singapore, 9 Engineering Dr. 1, Singapore 117575
18	Riddhish Pandharkar	2012B2A3579G	Freie universitat Berlin, Takustrabe 3, 14195 Berlin, Germany
19	Abhay Sarda	2012B2A3547G	Solar energy institute of singapore NUS, 7 Engineering drive, #01 block E3A, 1177574
20	Yash Shirish kasture	2012B4A7571G	Aalto University Department of Computer Science Finland
21	kshirsagar Rutuja milind	2012B4A3711G	office 446, Academic Building IISER pune
22	Janvi Palan	2012B4A3712G	24, Corso Duca degli Abruzzi, 10129, Torino, Italy
23	Aashima Garg	2012B3A8464G	Icecream labs INC 3D52, Sobha Ivory, St. johns Road, Bangalore-560042
24	Apoorva Savant	2012B5A8419G	IDC, IIT Bombay, Powai, Mumbai-400076
25	More Sanmit Mukund	2012B5A4717G	Department of mechanical engineering, IIT bombay powai, Mumbai -400076, India
26	Samyukta Ramnath	2012A3B5038G	The institute of Mathematical sciences, CIT Campus, Taramani, chennai-600113
27	Mohit W. Patil	2011B5A4362G	HCP H 21.2, Leopold-Ruzicka-Weg 4, 8093 Zurich, Switzerland
28	Achint Kumar	2012B5A3325G	Department of physics, 3302, Herzberg laboratories, carleton University, 1125 Colonel by drive Ottawa, Ortario, K155B6, Canada
29	Siddhant Baweja	2012B5A4548G	Research lab for energy systems Department of physics Netaji Subhas Inst. If Technology Dearka, Sec-III N Delhi
30	Radhika Nikam	2012B5A3427G	E4-05-32, Dept of ECE National University of Singapore, 4 Engineering Drive 3, Singapore 117583
31	Siddhi Shyam Ozarkar	2012B1A3656G	130 Science Drive, 139 Bio.Sci, Durham, NC 27708
32	Devansh Raj	2012B1A3662G	Max Planck Institute for Developmental Biology Department of Evolutionary Biology spemannstr.35 72076 Tuebingen Germany
33	Radha Vaidya	2012B1A8701G	Nrurobiology, PO Box 3209, Durham NC 27715, USA

S.No	Name of the student	ID No	Place of thesis work
34	Prabhav Mehra	2012B1A3670G	Department of Electronic Engineering, The Chinese University of Hong Kong, Shatin, N.T. hong Kong
35	Ram Alias Gaurav Girish Tamba	2012B1A7327G	K U Leuven (Catholic University of Leuven) Laboratorium voor Neuro- & psychofysiologie, Faculteit Geneeskunde (Medical School) Campus , Gasthuisberg, onderwijs en Navorsing 2, PO Box 1021, Herestraat 49, B-3000 Leuven, Belgium
36	Rohit H Nararathna	2013B5TS364G	Department of physics, Indian Institute of Science Bangalore, C V Raman Ave, Devasandra Layout, Bengaluru, Karnataka 560012
37	Pranav Pal Lekhi	2013A3PS348G	Department of Signals and systems, chalmers, University of technology, SE-41296, Gothenberg, sweden
38	Bittu N	2012B5A3514G	5, Sarna Priya Vihar Market Sarna priya vihar, New Delhi
39	Akshar Gupta	2012B4A3737G	Absentia VR, 1302, G-25, Awho, Kadukodi, Bangalore
40	Bhavya Aggarwal	2012B3A8411G	Indian institute of Management Bangalore, Bannerghatta, Road, Bangalore 560076
41	Yash Choudhary	2013A8PS678G	Singapore University of Technology and Design 8 Somapah Road, Singapore 487372
42	Garima Yadav	2012B2A3601G	Department of Micro and Nano systems, Aalto University Micronova PL 13500, 00076 AALTO Finland
43	Addanki VLSS Vamsi Krishna	2013A8PS790G	Telecom Paristech 23 av Italie, 75013 paris
44	Pranav Rai	2013A8PS715G	Nanyang Technological University 50 Nanyang Drive, Research Techno, Plaza, BorderX Block, 8th & 9th Storey Singapore 637553
45	Kevin Abraham	2012B5A7530G	Absentia VR PVT, Kadugodi, Bangalore,
46	Rumana Lakdawala	2013A7PS113G	TAO, INRIA Bat. 660 Claude Shannon, Universite Paris Sud, 91405 Orsay Cedex France
47	Janani Durairaj	2012B1A7735G	Wageningen Univesity, 6708 PB Wageningen, Netherlands
48	Sudhindra Sajjalguddam	2013A7PS065G	Media Net B4-15, Pritech Park Annex, Vellandur Village, Bangalore 5600103
49	Vishnu C. R	2013A7PS076G	IIITB, 26/C, electronic city, Hosur Road, Bangalore-560100
50	Siddharth Sankaran Dinesh	2012B3A7519G	O'Reily Institute, Trinity College Dublin, Dublin Ireland
51	Priyanka M. P.	2012B5A7483G	INRIA saclay, u-de france
52	Raghau Passi	2013A7PS055G	Micorsoft Research India No.9, Vigyan, Lavelle Road Bangalore-1
53	Abhishek Mohta	2012B3A7371G	Microsoft Research Lab India Pvt. Ltd Vigyan, #9, Lavelle Road Bangalore 560001
54	Chirag Shekhar	2012B4A3545G	Westfalische Wilhelms Universitat Munster
55	Ananya Girraj Garg	2013A7PS067G	Department of computer science and Engineering, IITB, Mumbai 400076 India

S.No	Name of the student	ID No	Place of thesis work
56	Kandregula S.S. Priyanka	2012B4A7616G	Harish Chandra Research Institute Cnnatnag Road, Jhunsi, Allahabad, UP
57	Akshat Kohli	2012A1PS672G	AECOM India Private Limited 5/F, Tower B, Building no. 10, DLF Cyber City, DLF phase II, Gurgaon-122002, Haryana
58	Devdutt Sharma	2012B5A1727G	International Centre for Theoretical sciences (ICTS) Tata Institute of Fundamental Research (TIFR), Survey no. 151, Shivakote, Hesaraghatta Hubli, Bengalure -560089
59	Hardik Hingorani	2012B2A1636G	Singapore university of technology and Design. 8, Somapah Road, Building 1, Room 202.31, Singapore, 487372
60	Tanmay Netke	2012B2A1610G	University of Duisburg -Essen Forsthauweg 2, 47057 Duisburg, Germany
61	Abhijay Giri	2013A1PS454G	Indian Institute of Technology Bombay Room No. 317, Transjt Building, IIT Bombay Powai, Mumbai, Maharashtra 400076
62	Sagnik Bhattacharya	2012B5A4329G	DRDO-Bangalore C V Raman Nagar, Bangalore 560093
63	Ashwin Krishnan	2012B5B4247G	Radboud University Netherlands

• **First Degree Thesis on Campus list Second Semester 2016-2017**

S.No	Student Name	ID No	Faculty Name	Organization
1	Abhinav Mittal	2012B3A7479G	Prof. Bharat M Deshpande	Bits Pilani K.K Birla Campus
2	Rajat Gupta	2013A7PS464G	Dr. Veeky Baths	Bits Pilani K.K Birla Campus
3	Shrey Pareek	2012B5A8276G	Dr. Kinjal Banerjee	Bits Pilani K.K Birla Campus
4	Narayani Kelkar	2013A1PS521G	Dr. Dhanya Ram V	Bits Pilani K.K Birla Campus
5	Shashank Gupta	2012B5A8538G	Dr. Prasanta Kumar Das	Bits Pilani K.K Birla Campus
6	Ayush Pandey	2012B4A7714G	Dr. Alpesh M. Dhoiraja	Bits Pilani K.K Birla Campus
7	Sagar Verma	2012B2A7629G	Dr. Raghu Nath Behra	Bits Pilani K.K Birla Campus
8	Vipul Goyal	2012B2A16114	Dr. Jegatha N Krishnan	Bits Pilani K.K Birla Campus
9	Atishay Jain	2012B3A3385G	Dr. Anoop S Kumar	Bits Pilani K.K Birla Campus
10	Dhaval Milind Mohandas	2013A4PS856G	Dr. P Dhanumaya	Bits Pilani K.K Birla Campus
11	Sri Bhaswath Akella	2013A4PS394G	Dr. Shibu Clement	Bits Pilani K.K Birla Campus
12	Ahuja Jiten Amar	2013B4PS543G	Dr. Pradeep Boggarapu	Bits Pilani K.K Birla Campus
13	Ambareesh Rathi	2012B4A4412G	Dr. G. Karthikeyan	Bits Pilani K.K Birla Campus
14	K. Balaje	2012B4A4443G	Dr. P. Dhanumjaya	Bits Pilani K.K Birla Campus
15	Swapnil milind Mhatre	2012B5A8366G	Dr. Dipankar Pal	Bits Pilani K.K Birla Campus
16	C. A . Valliappan	2013A8PS478G	Dr. A. Amalin Prince	Bits Pilani K.K Birla Campus
17	Ankur Madiyan	2012B3A8440G	Dr. Sudeep Baudha	Bits Pilani K.K Birla Campus
18	Kabir Dingra	2013A1PS423G	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
19	Luv Sharma	2013A1PS648G	Dr. Jegatha N Krishnan	Bits Pilani K.K Birla Campus
20	Priyanshi H Vadaliala	2013A1PS107G	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
21	Anuraag Gupta	2012B1A4594G	Dr. Sukanta Mondal Dr. G Karthikeyan	Bits Pilani K.K Birla Campus



22	Akshay Anandrao Sonandkar	2013A4PS361G	Dr. Mridula Goel	Bits Pilani K.K Birla Campus
23	Harshit Garg	2013A4PS332G	Dr.Gaurav Singh	Bits Pilani K.K Birla Campus
24	N. Adithiya	2013A4PS387F	Dr. Sachin Waigaonkar	Bits Pilani K.K Birla Campus
25	Varun Raj	2013A4PS288G	Dr. P.M. Singru	Bits Pilani K.K Birla Campus
26	Prateek Kachoria	2012B1A4649G	Dr. M. Srikanth	Bits Pilani K.K Birla Campus
27	Abhinav Setia	2013B3PS499G	Dr. Debasis Patnaik	Bits Pilani K.K Birla Campus
28	Chindhade Aditya Girish	2013A1PS223G	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
29	Anuj Gupta	2012B5A8428G	K. R. Anupama	Bits Pilani K.K Birla Campus
30	Tanmay Anil Patil	2013A3TS175G	Dr. A Amalin Prince	Bits Pilani K.K Birla Campus
31	Divya	2012B3A8536G	Dr. Aswini Kumar Mishra	Bits Pilani K.K Birla Campus

• **First Degree Thesis on Campus list Fiest Semester 2017-2018**

S.No	Student Name	ID No	Faculty Name
1	Krutarth Nakade	2013B3A7574G	Dr. Rajorshi Sen Gupta
2	Sonali Vasant Arole	2014A3PS223G	Dr. Radhika Vathsan
3	Vichar Shroff	2013B4A8590G	Dr. Gautam Bacher
4	Eega Avinash	2013B1A3900G	Dr.Nitin Sharma
5	Aashray Bhandari	2013B2A3864G	Dr.Sarang C Dhongdi
6	Adheep Das	2014A1PS826G	Dr. Jegatha Nambi Krishnan
7	Vishal Suriyanarayanan	2013B5A4840G	Dr.Kinjal Banerjee
8	Shubhan Parag Patni	2014A4PS154G	Dr. G. Karthikeyan
9	Eaga Akhil	2013B1A4901G	Dr. Sachin Waigonkar
10	Ishan Mishra	2013B4A4644G	Dr. Varinder Singh
11	Chayan Anand	2013A1PS601G	Dr. N N Ghosh
12	Sethuratheinam Iyer S	2013B4A7720G	Dr. J K Shao
13	Desai Abhishek Deepak	2012A7B4065G	Dr. Prabal Paul
14	J. Teja Sai Ram	2014B4PS565G	Dr.Anasuya Ganguly
15	Siddharth Paliwal	2013B5A4285G	Dr. Kinjal Banerjee
16	Vishwa Prakash	2014A1PS635G	Dr. Srikanth Mutnuri
17	Kushagr Arora	2014A7PS096G	Dr.. Santonu Sarkar
18	Kanumuri Sesha Sushant	2013B3PS502G	Dr. Debasis Patniak

• **First Degree Thesis Off Campus list First Semester 2017-2018**

S.No	Name of the student	ID No	Place of thesis work
1	K Achyudh Ram	2013B3A7439G	Delft University of Technology (TU Delft, Room HB08.050, Mekelweg 4, 2628 CD Delft, The Netherlands
2	Advait	2013B1A7656G	Icahn School of Medicine, room 12-70C(office), 12-52(Lab), Pharmacological Sciences, 1425 Madison Avenue, New york, NY, USA
3	Srijani Biswas	2013B1A4749G	The John Curtin School of Medical Research, The Australian National University,
4	Tanaya Unhale	2013B1A1704G	University of Toronto Canada
5	Vibhav Joshi	2013B1A1935G	TIFR- Bangalore
6	Sudhamshu M Hosamane	2014A8PS855G	Indian Institute of Sciences (IISc), Bangalore
7	Vikas Mishra	2013B3A3497G	Max Planck Institute for Software Systems ,Germany
8	Abhyuday Puri	2014A3PS233G	Indian Institute of Sciences , CV Raman Ave, Devasaudra Layout, Bengaluru,
9	Devgeet K Patel	2014A3PS221G	Delft Institute for Applied mathematics, Netherlands.



S.No	Name of the student	ID No	Place of thesis work
10	Vedangi Bhadresh Pathak	2013A3B5179G	Max Planck Institute for Gravitational Physics, Leibniz University Hannover Gottfried Wilhelm Leibniz Universität Hannover, Institut für Gravitationsphysik, Callinstr. 38, 30167 Hannover, Germany
11	Sanjeev Sripadraj Murthy	2014A3PS335G	Technische Universität Dresden, Germany
12	Aman Gadia	2014A3PS167G	The Graduate Center, CUNY, 365. Fifth Avenue New York,
13	Shahnawaz Ahmed	2013B5A3466G	RIKEN Quantum Condensed Matter Research Group, Center for Emergent Matter Science, 2-1, Hirosawa Wako-shi, Saitama, Japan
14	Sankar Manoj	2014A8PS164G	Siemens Tech and Services Pvt. Bangalore
15	Ajai V George	2014A3PS218G	Siemens Tech and Services Pvt. Bangalore
16	Parva Patel	2014A3PS334G	Carnegie Mellon University Biorobotics Lab, Robotics Institute, University, Robotics Pittsburgh,
17	Kartik Aggarwal	2014A3PS333G	Singapore University of Technology and Design (SUTD), Singapore
18	Dhananjai Sharma	2014A3PS197G	National University of Singapore Singapore
19	Shivangi Kamat	2013B5A3726G	Tata Institute of Fundamental Research Mumbai DHEP, TIFR, Mumbai
20	Dishant Banwari	2013A3B2186G	National University of Singapore, Singapore
21	Veena Vijai	2014A3PS215G	Indian Institute of Science C.V. Raman Avenue Bangalore
22	Advait Koparkar	2014A3PS170G	Indian Institute of Science, Science (IISc), Bangalore
23	Arunav Konwar	2013B1A8905G	International Institute of Information Technology (IIIT), Hyderabad
24	Edwin Mascarenhas	2013A3A7198G	INRIA Rennes Bretagne Atlantique Cairn Research Group Campus de Beaulieu
25	Chirag Dinesh Ranawat	2014A3PS759G	EPFL (Ecole Polytechnique Fédérale de Lausanne) EPFL STI Switzerland
26	Aman Dalal	2014A4PS346G	National Institute of Design, Ahmedabad
27	Ameya Mangesh Deshpande	2014A4PS286G	National University of Singapore (NUS)
28	Sumit Arya	2013B2A4882G	Bharat Heavy Electricals Limited Haridwar
29	Harsh Malaiya	2013B4A4652G	Indian Institute of Information Technology, Madhya Pradesh,
30	Sooraj S Kamath	2014A4PS125G	PES University, Bangalore
31	Shreyas Rajesh	2014A4PS296G	National University of Singapore Singapore
32	Aabir Abubaker Kar	2013A4B5280G	New England Complex Systems Institute, Cambridge
33	Varun Uday Nayak	2014A4PS086G	University of Nevada, USA
34	Sharath Patlolla	2014A4PS344G	University of Utah, (1495E 1005) Salt Lake City, UT, 84112
35	Mohit Uddhav Patil	2011B5A4362G	ETH Zurich, Switzerland
36	Aditya Shirodkar	2012B1A4655G	National Institute of Wind Energy, Chennai
37	Simanta Lahkar	2013B5A4913G	Shanghai Jiao Tong University, China
38	Kshitij Mathur	2013B5A4559G	University of Delhi
39	Sharvari Kshirsagar	2013B3A4498G	IIM- Bangalore
40	Ramchandran Muthukumar	2013B4A7541G	Cornell University Rhodes Hall, USA
41	Somya Shubhangi	2014A7PS124G	Chennai Mathematical Institute,
42	Amit Kiran Rege	2014A7PS081G	Chennai Mathematical Institute,
43	Sanjana Sekhar	2013B5A7589G	TIFR, Mumbai

S.No	Name of the student	ID No	Place of thesis work
44	Ananya Kshatrapati Shivaditya	2013B1A7792G	Solar Energy Research Institute of Singapore
45	Dhruv Mahajan	2014A7PS022G	Indian institute of Science, Bangalore
46	Aparajita Halder	2013B4A7776G	Imperial College London, England
47	Rohan Goel	2014A7PS014G	Campus ST. Priest-Batiment 5 Montpellier Cedex 5- France
48	Shobhik Bhadraray	2013B5A7665G	Singapore university of Singapore,
49	George Joseph	2013B5A7112G	Carnegie Mellon University, USA
50	Rhett Noah D'Souza	2014A7PS126G	University of Pittsburgh, USA
51	Samyak Dhole	2013B2A8877G	IIT Bombay
52	Srinath Ramkumar	2013B1A1907G	Max Planck Institute for Heart and Lung Research, Germany
53	Siddharth Kumar	2014A1PS545G	Brigham and Women's Hospital, a Harvad Medical School, USA
54	Shivendu Shivam	2014A1PS834G	Central Coalfield Limited, Ramgarh, Jharkhand
55	Sarvajot Singh	2014A1PS654G	S.Singh & Associates, Delhi
56	Mrunal A Nasery	2014A1PS626G	IIT Madras, Chennai
57	Narayan Bhutada	2012B1A1621G	Ace Manufacturing Systems Ltd, Karnataka
58	Velidanda Srinivasa Tanmay	2014A1PS252G	IIT Kanpur
59	Shimona Narang	2014A1PS582G	IIT Madras, Chennai,
60	Igin Benny Ignatius	2014A1PS816G	IIT Madras, chennai
61	Shambhu A	2014A1PS504G	IIT Madras, chennai
62	Tulasi Ravindran	2013B2A1689G	University of Conecticut 191 Auditorium road Unit 3222, storrs, CT 06269
63	Varad Deshpande	2013B4A7829G	University of Hyderabad
64	Amal Vighnesh I	2013B5A3432G	IISER thiruvananthapuram School of physics, IISER TVM, CET campus, Trivandrum, Kerala
65	Shardool Kulkarni	2013B5A4563G	IIT Bombay,
66	Tanuja Sawant	2013B5A7658G	Telecom parisTech-Universite Paris France
67	Akhil John	2013B5A4472G	School of computer Science University of Lincoln, LCAS, Brayford Pool, Lincoln
68	Sangeeth S Varma	2013B5A3470G	Indian institute of Science Education and Research Thriuvananthapuram, Kerala
69	Kapil Sawant	2013B5A4604G	Inria Nancy- Grand Est 615 rue du Jardin Botanique 54600 Villers-les-Nancy France
70	Manas Jha	2014B5TS904G	NTPC ltd Noida.
71	Mridul Seth	2013B4A8662G	University of Namur, Belgium Rempart de La Vierge 8, 5000 Namur, Belgium
72	Tushar Kusnur	2014A3PS205G	Robot Perception lab, Robotics Institute, Carnegie Mellon University,

• **Second Semester 2016-20167 M.E. (BITS G629T) "DESSERTATION**

S.No.	ID No.	Name of student	Topic	Supervisor	Place
1.	2015H101010G	Rushabh Ketan Mevawaka	Microwave Assisted beneficiation of Iron-ore	Dr. S.S. Baral	Bits Pilani K.K Birla Campus
2.	2015H101011G	Shaifali Tyagi	Rheological dyanmics exhibited by biogross	Dr. Asima Shaukat	Bits Pilani K.K Birla Campus

S.No.	ID No.	Name of student	Topic	Supervisor	Place
3.	2015H101006G	Krupa Balakrishnan	Graphene Composite Coatings for Anti-Corrosion Behaviour	Dr. Sutappa Roy ramanan	Bits Pilani K.K Birla Campus
4.	2015H101008G	Shubhangi Singh	Hybrid desulphurisation of high sulphur indian coals	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
5.	2015H101014G	Subrejha J	Multilevel Inferential control of a reactor	Dr. Dhanya Ram V	Bits Pilani K.K Birla Campus
6.	2015H101009G	Shah Manovi Talap	Molten Salt Gasification of Carbonaceous Materials	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
7.	2015H101007G	Vinay Kaushik	Effect of shape & Size of Magnetic Hydroxyapatite nano particles on biological application	Dr. Sutapa Roy Ramanan	Bits Pilani K.K Birla Campus
8.	2015H101013G	Bhati M Khavir	Study of tribological behaviour of greases with varying Composition	Dr. Asima Shaukat	Bits Pilani K.K Birla Campus
9.	2015H103017G	Ayushi Goel	Investigation of Malicious android Apps	Dr.Sanjay Kumar Sahay	Bits Pilani K.K Birla Campus
10.	2015H103016G	Samriti Gupta	Design of Scheduling Algorithm for mixed Criticality Real time Systems	Dr. Biju K Raveendran	Bits Pilani K.K Birla Campus
11.	2015H103018G	Sidharth Iyer	Application of data mining techniques and visualisation in air warfare simulation systems	Dr.Bharat Deshpande	Bits Pilani K.K Birla Campus

• **First Semester 2017-2018 M.E. (BITS G629T) "DESSERTATION**

S.No.	ID No.	Name of student	Topic	Supervisor	Place
1.	2016H101012G	Shuchi	Development of material for visible light photocatalytic hydrogen production from industrial waste water	Dr. Saroj Sundar Baral	Bits Pilani K.K Birla Campus
2.	2016H101009G	Soham Surendra Kale	Influence of base oil consistency on rheological and tribological behaviour of biogreases	Dr. Asima Shaukat	Bits Pilani K.K Birla Campus
3.	2016H101011G	Nikhil Sasidharan	Phase Equilibria	D. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
4.	2011HD01588G	Alwin Micheal Tomy	Modelling Multilayered fluid flows over structured substrates	Dr. Rajagopal Vellingiri	Bits Pilani K.K Birla Campus
5.	2016H101013G	Ambika Parab	Air quality monitoring, emission inventory & source apportionment study for vasco	Dr. S.D. Manjare	Bits Pilani K.K Birla Campus
6.	2016H101008G	Malladi Mann Bhaskara Rao	Investigations on Corrosion protection behaviour of graphene polymer Nanocomposites	Dr. Sutapa Roy Ramanan	Bits Pilani K.K Birla Campus

• **CATEGORY-WISE DISTRIBUTION OF Ph.D. STUDENTS ON ROLLS DURING THE YEAR 2017**

S.No.	CATEGORY	NO. OF STUDENTS ON ROLL	
		II Sem 2016-2017	I Sem 2017-18
1.	Staff	17	16
2.	Staff (Pre-Ph.D course work)	0	0

3.	Research Scholars	168	177
<b>GRAND TOTAL</b>		<b>185</b>	<b>193</b>

**I. Statistical Information for Ph.D. Programme**

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2016-17	10	10	10	0
I Sem. 2017-18	20	20	19	01
<b>Total</b>	<b>30</b>	<b>30</b>	<b>29</b>	<b>01</b>

**II. Statistical Information for Faculty Development Scheme**

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2016-17	03	03	03	0
I Sem. 2017-18	01	01	01	0
<b>Total</b>	<b>04</b>	<b>04</b>	<b>04</b>	<b>0</b>

**III. Analysis of candidates permitted to appear in Ph.D. qualifying examination**

(i)	BITS Faculty (Total)	(ii)	Aspirants(Part Time) of High Standing and proven competence (Total)	(iii)	Full time Students (Total)
	04		08		18

**Discipline wise Break-up**

Biosciences	03
Chemistry	03
Chemical	05
EEE	01
Mathematics	02
Mechanical	07
CSIS	06
Lang. & Hum.	01
Management & Eco &Fin.	02
Pharmacy	00
Physics	00
Civil	00

**COMMUNITY WELFARE****Faculty in charge: Prof. Radhika Vathsan, Department of Physics.**

The Community Welfare Unit facilitated the following activities during the calendar year 2017

The Medical Centre has been providing OPD services as well as 24 x 7 emergency medical services to all the campus residents. A 24x7 ambulance service is also available. An in-house pharmacy is available at the medical centre and a lab collection point to provide diagnostic facilities has been functional with a tie-up with a local diagnostic laboratory, Ranbaxy and Thyrocare. The Medical Centre has state-of-the-art equipment such as Dental Chair, Digital X-ray machines, Tread mill (TMT), ECG machine, Lung function test, X-ray, Multiparameter monitors, Defibrillator, Syringe pumps.etc.

A new center for mental health and rehabilitation has been set up under the aegis of M Power.

Cashless Medical Reimbursement Scheme has been operational to provide easily accessible medical care to the residents of the campus. The Scheme can be accessed through a health card, which can also be used to receive treatment for various medical and surgical ailments from the Specialists from Goa. Following are the specialties available for routine and on call basis for out-patient care – Gen. Medicine / Gen Surgery / Orthopaedics / Dermatology.

Drinking water hygiene on campus is maintained by periodic testing of water at all the water coolers installed in food outlets, hostels and administrative buildings. Water testing from a few crucial points for the campus supply is also being implemented.

The Child Care Centre on campus is operating as a playschool for infant children in the morning and a Day Care in the afternoon for providing invaluable support and care to the children of BITS faculty and staff. The center is run by 4 dedicated staff assisted by 3 maids. It is provided with all necessary facilities (toys, activities, educational material, infrastructure with outdoor play area, etc.). In addition, campus children are exposed to a variety of activities such as drawing, dance, karate, violin, drawing and mental arithmetic, for which classes by professionals are being conducted.

The Student Activity Center, apart from providing sports and wellness facilities to the students and campus residents, also has a designated Music/Yoga/prayer hall that is being well utilized by the whole campus community. Various activities such as yoga and meditation, chanting of Vishnu Sahasranama, Sunderkand Path, Conducting of Holy Mass and choir practice. Classes for Hindustani music, Carnatic music, Western classical music, violin and guitar, as well as Bharatanatyam, Zumba etc are also being conducted.

The SAC also houses musical instruments including violins, sitars, tanpuras, veenas, tablas, harmoniums, electronic tanpura and tabla, and keyboards. Many books on music are kept there for reference of the students, taken on lien from the Central Library. The unit also facilitated procurement of new instruments and repair of old ones for the students' Music Club.

National and religious festivals like Republic day, Independence day, Lohri, Basant Panchami (which is also BITS Pilani Founder's Day), Holi, Ram Navami, Janmashtami, Ganesh Chaturthi, Onam, Durga Pooja, and Deepavali were celebrated with active participation of all the campus residents and students. During these festivals cultural performances of campus children, faculty and staff and students were organized.

The Socio-Cultural Association of teaching and non-teaching staff has now been active for over a year. It provides an appropriate forum to inform and promote faculty, NT staff and their family members' involvement in various activities, initiatives and efforts at the campus, regional, national and international levels. The Association released the first edition of its E-Magazine "Moments" on Thursday, 16th February. The magazine provided a platform for artistic and literary expression for members of the community. A colourful and joyful "Holli Milan" was organized on 13 March., with enthusiastic participation from all members of the community. An end-semester dinner-cum-cultural event "Sangam" was organized on 30<sup>th</sup> April. It received enthusiastic participation in the form of cultural shows by staff, faculty and children. Some members of the community were recognized by awards.

Srutilaya, the Indian Classical Music and Dance Society of the campus, also organized a variety of events. On 12 March they organized Thyagaraja Aradhana in which students, alumni and club members render Saint Thyagaraja's compositions as a tribute to him. On 23 September, Srutialaya organized their annual programme Sursangam, homage to late Prof Suresh Ramaswamy. Renowned artists perform in these events many of who are alumni. In this year's event we had Pandita Anupama Bhagwat on the Sitar with Mayank Bedekar on the Tabla. It was preceded by performances by alumni: Bharatanatyam by Mr. Anand Satheendran, Mr. Balakrishnan's Carnatic vocal accompanied by Sreecharan on mridangam and Mr. Pranav Palande on harmonium. On 24 September as is customary post Sursangam, we had a morning baithak in which all members of Srutilaya showcased their individual music.

International Yoga Day was observed on 21 June with a lecture demonstration and live yoga session in the SAC.

Students proudly organized the 8<sup>th</sup> edition of TEDx on Sunday, January 22, 2017. BITSGoA holds the honour of being the oldest running TEDx event in the country. This year's conference, themed 'Rewired', featured inspiring talks by some of the country's brightest minds from diverse fields. The Minister of Railways, Shri Suresh Prabhu addressed the attendees via video link with a short message about innovation and why the country needs to be 'Rewired' by the youth. The conference saw speeches by Sonam Wangchuk : Engineer, innovator, and an education reformist, Piyush Mishra : Actor, poet and lyricist , Pranav Lal : A cybersecurity analyst and photographer, Malaika Vaz : A 19-year-old athlete, social entrepreneur, explorer, enviroand filmmaker from Goa, Raul Rodriguez : A neuroscientist, entreprene & private psychotherapist, Suvrat Raju : A well renowned theoretical physicist, Sumeet Vyas , actor and writer and Ulrike Reinhard: Author, futurist and community activist

Quark 2017, the 3-day annual techno-management festival, was held in February between 2<sup>nd</sup> and 5<sup>th</sup>. Students from all over country competed in an array of events in varying fields such as Corporate Management, Robotics, Electronics, Design, Computing and Programming. Exhibitions and Workshops educated and entertained the participants and students alike with informative Guest Lectures by eminent personalities who are at the top of their field, including Joel Spolsky, the CEO and StackOverflow and the founder of Trello, Subramanian Swamy, ex-Minister of Law and Justice, Balaji Vishwanathan, the most followed Indian on Quora and several others. Quark also featured performances of various artists who have all not just excelled but also innovated and carved a niche for themselves in their respective fields including Snake Charmer, Illuminati, Sonic Snares and Allison Gabrielle.

In March from 3<sup>rd</sup> to 5<sup>th</sup>, SPREE, the annual inter-college sports festival, was held. Competitions in basketball team, football, tennis and squash on day 1 was followed by an inspiring talk by Kapil Dev. There were fun competitions like Hogathon and artistic decorations made by the students. Day 2 broke the seriousness with stand up performances by Abish Mathew and Sahil Shah. The home tennis team won the doubles competition and brought laurels to our campus. The three day carnival of extreme

competitiveness which left everyone breathless(in literal terms) concluded with performances by the music band THE LOCAL TRAIN.

Waves 2017 the annual students' intercollege cultural festival was celebrated during 27<sup>th</sup>-29<sup>th</sup> October, inaugurated by chief guest Dr. Meenakshi Martins, a renowned actress and psychiatrist and performances by student clubs: Kala, the fine arts Club, the Dance Club and Mime Club. Various competitions like Rangmanch, Dancing Duo and Sizzle, Artathon and the much celebrated BITS debate league – also took place. The second day saw competitions like Natyanjali, poetry slam and many other music and art event. Professional performances like Comedy Central, Indie Night, Vishal – Shekhar, Diego Miranda's EDM Night, and Coffee Cats, the jazz band, set examples of the high standards in the entertainment world.

Student volunteers under the banner of Abhigyaan have been regularly holding classes in basic subjects for the underprivileged: children from Birla slums, of the security guards, gardeners and mess workers of the campus, and some special children. They organized a “Joy of Giving” (JoGW) week and a collection drive for donating used clothes and other articles to orphanages and old age homes. They also organized “no food wastage” campaigns in the student messes.

A newly constituted students film club organized viewings of 6 films distributed through the year, including Bollywood latest releases as well as socially relevant films by independent producers.

### **INTERNATIONAL PROGRAMMES AND COLLABORATION DIVISION**

#### **MoU Signed**

Memorandum of Understanding (MoU) was signed with University of Tartu, Estonia on 18th of November, 2017

#### **Significant Events Organized**

- **Dr. Vijay Kumar**, Director, International Academic Program, SCE, Computer Science Electrical Engineering, University of Missouri-Kansas City, USA visited BITS Pilani K K Birla Goa Campus on 9th-10th Jan 2017 towards discussion on Degree collaboration models, Faculty visit program, Online class possibilities, Possible involvement of PhD and M.Tech degree programs.
- **Prof Folrent Chazarenc**, Ecole des Mines de Nantes, France, **Dr. Hoysala N Chanakya** - IISC Bangaluru, **Dr L N Rao**, IISC Bangaluru, **Dr M M Ghangrekar**, IIT Karagpur, **SERDOBBEL Vincent & Valerie Hequet**, Ecole des Mines de Nantes, France visited K K Birla Goa Campus towards **Indo French CEFIPRA Meeting Network on Decentralized Grey / Waste water treatment** during 15th to 18th May 2017.
- Delegations from various Indian and International Institutes & Organizations including delegations from **The European Union to India, Göttingen International, UGOE (NAMASTE), Education, Audiovisual and Culture Executive Agency (EACEA), KU Leuven, Belgium** and Faculty members from **Lund University, Sweden and Universidade De Santiago de Compostela, Spain, Dr Babasaheb Ambedkar Marathwada University, Aurangabad, Tata Institute of Social Sciences, Mumbai and IISER Pune** visited K K Birla Goa campus towards **Joint Workshop on Mobility, Employability and Internationalization of Indian Higher**. The workshop was held between 4th July 2017 to 6th July 2017.
- **Prof Korneel Rabaey**, Dept. of Biological Science, Ghent University, Belgium visited K K Birla Goa Campus on 11th - 12th Nov 2017 towards Research Collaboration with Dept. of Biological Science, BITS Pilani, K K Birla Goa Campus.
- **Prof Hadas Mamane Steindel**, Environmental Engineering Program, Faculty of Engineering visited K K Birla Goa Campus between 26th to 28th Nov 2017 towards Research Collaboration with Dept of Biological Science, BITS Pilani, K K Birla Goa Campus.
- **Prof Paul Koola & Dr John 'Curry' O'Day** along with a group of 17 International students from Texas A & M University, USA visited K K Birla Goa Campus under Study India Program during 28th Dec 2017 to 14th Jan 2018.

#### **Invited Talks**

- **Prof. Sukeshi Kamra**, Carleton University, Canada, Academic Director-Ontario India (OIN) visited BITS Pilani K K Birla Goa Campus on 15th Feb 2017 and 11th Aug 2017 towards Interaction with Students on Students Exchange Programme with Canadian Universities.
- **Prof Hans Hermann Richnow**, Head of Dept of Isotope Biogeochemistry, Helmholtz Centre of Environmental Research -UFZ, Germany gave talks on '**Chemical Microscopy using NanoSIM and Helium ion Microscopy**' and '**Isotope Fractionation and Assessment of Degradation Processes**' to the students during his on 22nd and 23rd Feb 2017 at K K Birla Goa Campus.
- **Prof Ulo Mander**, Professor of Physical Geography and Landscape Ecology, Head of Department of Geography, Institute of Ecology and Earth Sciences, University of Tartu, Estonia gave talks on following topics during his visit to KK Birla Goa Campus between 28th March 2017 to 31st March 2017

- Constructed wetlands for waste water treatment - An Overview
  - Microbiological aspects of Nitrogen removal in treatment wetlands
  - Alternative filter materials for Phosphorus removal in constructed wetlands and
  - Constructed wetlands for treatment polluted agricultural runoff
- **Ms Tanushka Bali**, Senior Advisor, Education USA visited K K Birla Goa Campus on 13th Sept 2017 towards Interaction with Students on Higher Studies in USA.

#### Travel Grants

- Partial Travel grants were provided to selected students in both the semesters for their thesis abroad.

#### PRACTICE SCHOOL:

During SEM II, 2016-17 and SEM I, 2017-18 582 first degree students and 27 higher degree students went for PS-II from Goa campus. The faculty members who were involved as PSII Instructor for the stations in Goa were Dr. Narayan Suresh Manjarekar.

During summer term 2017, total of 626 students went to 160 PS-1 stations from the Goa campus. A total number of 23 faculty members & 11 student co-instructors accompanied the students for PS-1. Total no. of stations opened by Goa campus students are 11.

#### PS 1-2017 Faculty Members

Sr.No	PSRN	Faculty
1	33	Meenal Kowshik
2	114	Sanjay Kumar Sahay
3	334	Pravin Mane
4	343	Amit Setia
5	372	Manoj Kumar Pandey
6	376	Sarang C Dhongdi
7	416	Jajati Keshari Sahoo
8	420	K. A. Geetha
9	432	Narayan S Manjarekar
10	506	G Kartikayan
11	507	Shailendra Kumar Dhakad
12	511	Alpesh M Dhorajia
13	587	Amitendu Bhattacharya
14	633	Sasidharan Mecha Kotian
15	642	Tirtharaj Dash
16	663	Sudeep Baudha
17	666	Ruma Ghosh
18	667	Debasis Das
19	671	Shilpa Gondhali
20	672	Akshay Sakharam Rane
21	674	Vivek R
22	676	Ashish Chittora
23	681	Pradeep Kumar Sow

#### PS-1-2017 Student Co-Instructors

Sr No	ID NO	Student Name
1	2014B4A4559G	Anmol Khandelwal
2	2013B1A8774G	Vishal Lavania
3	2011PHXF405G	Shamanth N
4	2014A4PS189G	Harshwardhan Lodha
5	2014A1PS916G	Pranav Garg



Sr No	ID NO	Student Name
6	2014B4A3578G	Himanshu Agarwal
7	2013PHXF010G	Kadam Bhushan Vinayak
8	2013PHXF410G	Abhishek Joshi
9	2015PHXF014G	Joseph R.D Fernandes
10	2011PHXF404G	Mohammed Monsoor Shaikh
11	2012PHXF011G	Ashu Sharma

#### **PUBLICATIONS DIVISION:**

The Publications and Media Relations Division published the BITScan Semester Newsletter Issue 14 and 15 and the Convocation Proceedings 2017 in this year. The division also regularly sent Press Releases to National and local media after every Campus event. The website Banner News and Latest News were also updated regularly with current events. Various student achievements, campus events and significant research projects were published in Local and National media.

#### **PUBLIC RELATIONS:**

Public Relations office coordinated following events:

### **B2.12 CENTRAL FACILITIES REPORT**

#### **(I) CENTRAL LIBRARY**

The Library complex of BITS, Pilani – K K Birla Goa Campus comprises of a spacious building covering an area of 3512 m<sup>2</sup>. It is designed to provide several reading halls and a digital library with 11 public access internet terminals for convenient internet reference, apart from a large area earmarked for books storage. The Library has been provided with a wireless network whereby users can access the internet using their laptops. The Library is equipped with modern furniture well designed taking into consideration the future growth of the Library collection and the needs of the users. Presently, it has a seating capacity of 500+ which is likely to be expanded in the coming years.

The Library remains open throughout the year (except on 5 public holidays) from 09.00 am to 11.00 pm on all working days, from 9.00 am to 8.00 pm on Saturdays and from 10.00 am to 8.00 pm on Sundays and other holidays when the academic session is on. And during exams the timings are further extended from 09.00 am to 02.00 am. During recess and vacations, it is open from 09.00 am to 05.00 pm.

The Library web-site has been linked with the Institute home page for easy access. The home page was designed and developed by students. The Library had been using LIBSYS Library Management Software to automate all its housekeeping activities; from July 2014 a switch to LibLime Koha software system has been made. The Library Koha Web OPAC includes advanced search options for books and journals. The Library also hosts an online repository of publications of the students and faculty members of the Campus. As of now, these services (Koha OPAC and the repository) are accessible only while connected to the Campus intranet. In future, Internet connectivity will be offered.

#### **The Online Portal**

We have our catalogue and transactions management on the Koha server which is a FLOSS. We also are developing a repository of our own (campus-level) research output like theses and publications. Together, using FLOSS tools, we are in the process of organizing a library portal that we hope will become an academic social networking platform for the Campus. Sooner or later, this will become a component in the University-level library portal in the offing for some time. We have taken the opportunity created after the exit of a staff member to recruit a person with a technical profile instead of non-tech library professionals, in order to drive this development forward. This is a new beginning.

#### **Acquisition and circulation**

The Library collection has reached 37880 volumes, growing by 3%. The average growth in the last decade had been around 10%. The decline in this year had been foretold, during the budgeting exercise for the current FY: unfavorable exchange rate rise and aggressive price rise by journal publishers is putting pressure on the share of journals and online resources in the budget. In order to continue subscriptions to all the important content, the Library has been forced to cut down on the budget for books.

#### **Reference Section**

The Library has a good collection of reference materials, like encyclopedias and handbooks. However, a clear trend among users has emerged that is making the print versions obsolete: the rise in the use of online databases and search engines. The Library, through deliberations in the Library Committee, is planning to shift to this mode in future. Just as many journal and online content publishers are raising subscription rates, there is also a mitigating trend of free online access and shared resources. The Library is gearing up to become an efficient facilitator for accessing this online treasure trove through Koha.



### Journals and Online Resources

The Library subscribes to 73 Indian Journals and 13 Foreign Journals in print, 18 online journals, 6 digital library packages for researchers of different disciplines. Digital library packages include IEL Online, ASME, ScienceDirect, AEA Journals, ProQuest, ACM Digital library. Apart from these, online access to more than 3000 journals through INFLIBNET is available to the Campus. The Library home page gives links to the resources available, for easy location and access. Useful articles, news, newspaper clippings are displayed from time to time on the notice board for the information of readers.

### Other services

The Library has a collection of 35 educational video cassettes and 1460 CDs. The Library keeps the readers informed of all the books added to the Library through a regular display of new arrivals as well as updates on email. From time to time book exhibitions by publishers are arranged to facilitate faculty members selecting books for the library.

### New Reading Lounge

As a part of an effort to make library a happening place on campus, a new lounge area has been designed in the library. Created with the purpose of encouraging reading, it brings a welcome splash of color to the library. A plush room boasts of comfortable couches and carpet flooring meant to dampen sound and allow discussion between students without disturbing those outside the room. These spaces play host to book discussions; in future we want to organize author talks and more. We have earmarked exhibition spaces on the walls for displaying artwork, encouraging our Campus community's creativity. Some new installation for this purpose, including a glass-board for brainstorming and collaboration, is happening now. Reading area that welcomes younger children is also developed with couches. Our Library is an alcove of reading, collaborating and thinking.

## (II) COMPUTER CENTRE

### (A) Computer Hardware

No.	Make	Configuration	Number	Area of utilization
01	DELL 7010	Intel Core i7 Processor,8GB RAM,1TB HDD	22	Central Computing Labs, Various Department Labs, Faculty members and Staff members for carrying out their academic teaching and research work.
02	Dell Optiplex 9020 MT	Intel Core i7, 4th Generation, 8GB RAM, 1TB HDD	50	
03	Lenovo Edge73	Intel Core i7 Processor,8GB RAM,500GB HDD	56	
04	Dell Optiplex 3010	Intel Core i3 / i5 Processor, 8GB RAM,500GB/1TB HDD	100	
05	Dell Optiplex 990	Intel Core i3 Processor,4GB RAM,500GB HDD	39	
06	Dell Optiplex 390	Intel Core i3 Processor,8GB RAM,500GB HDD	70	
07	Dell Optiplex 380	Intel Core 2 Duo Processor,2GB RAM,320GB HDD	27	
08	Dell Optiplex 360	Intel Core 2 Duo Processor, 2GB RAM,160GB HDD	37	
09	Dell Optiplex 330	Intel Core 2 Duo Processor,2GB RAM,160GB HDD	73	
10	Dell Optiplex 755	Intel Core 2 Duo Processor,2GB RAM,160GB HDD	66	
11	HP ProDesk 400	Intel Core 7i Processor,16GB RAM, TB HDD	40	
12	Lenovo G510	Intel Core i5 Processor,4GB RAM,500GB HDD	22	Faculty members and Staff members for carrying out their academic teaching and research work
13	Lenovo ThinkPad Edge E430	Intel Core i3 Processor,4GB RAM,500GB HDD	5	
14	Dell Latitude E5430	Intel Core i3 Processor,4GB RAM,500GB HDD	18	
15	Dell Vostro 1550	Intel Core i3 Processor,4GB RAM,500GB HDD	17	
16	Dell Vostro 2420	Intel Core i3 Processor,4GB RAM,500GB HDD	9	
17	Dell Vostro 3550	Intel Core i3 Processor,4GB RAM,500GB HDD	56	
18	Dell Vostro 3500	Intel Core i3 Processor,4GB RAM,500GB HDD	25	
19	HP Tablet PC	Intel Core i3 Processor, 2GB RAM, 500GB HDD	4	

No.	Make	Configuration	Number	Area of utilization
20	HP Elite Book Tablet 2730P	Intel Core i3 Processor, 2GB RAM, 500GB HDD	1	

**(B) Servers**

Sl. No.	Server	Make	Qty	Configuration	OS
<b>Network servers</b>					
1	DNS	IBM	2	[IBM x3650 M4 Dual Processors(6 Core),16GB RAM, 500GB Hard Disk]	Windows 2016
2	DHCP	IBM	2	[IBM x3650 M4 Dual Processors(6 Core),16GB RAM, 500GB Hard Disk]	Windows 2016
3	LDAP	IBM	1	[IBM x3650 M4 Dual Processors(6 Core),128GB RAM, 3GB Hard Disk]	Cent OS
<b>Communication Servers</b>					
1	Web Server	IBM	3	[IBM x3650 M4 Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Windows 2016
2	Call Manager	Cisco	1	[Cisco BE6000, 2.4 GHz,10MB Cache, 8GB DDR3 RAM Dual Rank, 500GB SATA_ 7.2K RPM SFF Hot Plug/Drive Sled Mounted]	Cisco Business Edition 6000 - Software App Version 10.X
3	SWD Server	DELL	1	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2003
4	Cyberoam Report	IBM	1	[IBM x3650 M4 Single Processors(6 Core),32GB RAM, 500GB Hard Disk]	Fedora
<b>Academic Servers</b>					
1	Academic FTP	IBM	1	[IBM x3650 M4 Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Fedora
2	Staff/ Faculty FTP	IBM	1	[IBM x3650 M4 Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Fedora
3	Mech (Ansys, MATLAB, ....)	IBM	2	[IBM x3650 M4 Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Windows 2016
5	Course Management (Moodle)	IBM	1	[IBM x3650 M4 Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	CentOS
6	BITSAT	DELL	3	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2003
<b>(C) COMPUTER CENTER (Central Facility)</b>					
Central Computing Lab, Zone I	DELL 7010 [Intel Core i7 Processor,8GB RAM,1TB HDD]		12	Windows 8 and Linux Office 2010, AutoCAD Modelsim, Xilinx	
	Dell Optilex 9020 [Intel Corei7, 4th Gen, 8GB RAM, 1TB HDD]		46		
	DELL 3040 [Intel Core i7 Processor,8GB RAM,1TB HDD]		42		
Central Computing Lab, Zone II	Dell Optilex 3010 [Intel Core i3 / i5, 8GB RAM,500GB/1TB HDD]		67	Windows 8 and Linux, Office 2010, AutoCAD Modelsim, Xilinx	
	Lenovo Edge73 [Intel Core i7,8GB RAM,500GB HDD]		21		
	Dell Optilex 990 [Intel Core i3,4GB RAM,500GB HDD]		12		

Sl. No.	Server	Make	Qty	Configuration	OS
Central Computing Lab, Zone III		HP ProDesk 400 [Intel Core 7i Processor, 16GB RAM, TB HDD]	40		Windows 8 and Linux, Office 2010, AutoCAD Modelsim, Xilinx
		Lenovo Edge73 [Intel Core i7, 8GB RAM, 500GB HDD]	22		
		Dell Optiplex 7010 & 9020 [Intel Core 2 Duo, 2GB RAM, 320GB HDD]	9		
<b>(D) Operating System and Software Licenses</b>					
	Windows	Windows 8	250		
	Windows	Windows Server Standard 2012 / 2016	20		
	Seqrite	Seqrite End point Security	830		
	Microsoft Office	Office 2007 and Office 2010	250		

## Network Facilities

### Campus Local Area Network

The Campus LAN Project of BITS Pilani – K K BIRLA Goa Campus is a state of the art, completely switched, voice enabled LAN infrastructure. LAN is able to provide 100 Mbps fibre channel network connectivity to all faculty cubicles, offices, library, Labs, lecture theatres, workshop, auditorium all hostel rooms, staff quarters, visitors' guest house, shopping complex, student activity center & other public facility locations in the campus. There are 4000+ nodes across the campus.

The network is a three-layer network, namely core, distribution and access. The core & distribution layer is connected through gigabit fibre optic backbone, while the access layer is using enhanced CAT5 / CAT6 cabling. The network is designed to provide link level and device level redundancy.

### Wi-Fi Network

The Institute building, Visitors' Guest House, Student Activity Center and Medical Center are provided with secured Wi-Fi network facility. The Wi-Fi solution used for this is from RUCKUS. All hostels have WiFi connectivity. This Wi-Fi solution is using CISCO access points.

### Cloud Based Services (e-mail and File Storage)

University e-mail solution is supported by Google for 30,000 users of BITS campuses and WILP students. This solution is an integrated solution covering e-mail with 30 GB space, file storage with 5 GB space, collaboration tool, file sharing, personal web-pages, calendaring system, etc.

### LAN Security

The LAN security is provided by Cyberoam firewall with high availability and redundancy. The facility also supports high availability of internet lines and support on-demand bandwidth at any location with load balancing.

### Voice Communication

All faculty members have been provided with a laptop / desktop and VoIP telephone facility in their chambers. The VoIP facility facilitates receiving of incoming call directly on the individual telephone.

### Video Communication

Multi-point video conferencing facility is made available using POLYCOM HDX machine. This facility is utilized for online meetings of research groups in India as well as across the world apart from the administrative meetings.

### Internet Bandwidth

No.	Area	Bandwidth Allocated	Service Provider
01	Hostels, Guest House	500 Mps	GWave (300) Vodafone (200)
02	Institute Building, Staff Quarters	200 Mbps	Vodafone (100) Gwave(100)
03	Cross Campus Teaching and Lectures/talks from BITS Alumni using web-based technology	45Mbps	Tata Tele Services

**Cross Campus Connectivity**

No.	Area	Bandwidth Allocated	Service Provider
01	MPLS Connectivity connecting Pilani, Hyderabad, Goa campus with the Data center co-hosted at Mumbai for the ERP applications.	5 Mbps	Tata Tele Services
02	MPLS Connectivity connecting Pilani, Hyderabad, Goa campus with the Data center co-hosted at Mumbai for the BITS Connect 2.0 applications.	75 Mbps	Tata Tele Services

**Virtual Class Room (BITS Connect 2.0)**

Virtual classroom is set up at K K BIRLA Goa campus. This facility will enable faculty to deliver lectures to all four BITS campuses simultaneously; alumni and experts to remotely deliver lectures and conduct workshops or panel discussions to multiple BITS campuses simultaneously, with recording and streaming of lectures.

**Telepresence Conferencing Room (BITS Connect 2.0)**

Telepresence Director and Placement Office.conference room of 18 capacity have been set up at K K BIRLA Goa campus to facilitate virtual meetings for academic and administrative decisions at University level. Licenses for webex (web conferencing software) have been provided to all the faculty to facilitate discussions related to course work and research. This facility will also open up avenues of multimedia collaboration with anybody outside the campus. High end (CISCO EX 90) desktop systems are set up on the desk of.

**Workshop**

The central workshop is equipped with following equipments purchased during the year 2017 are as follows:

S.No.	Particulars
1	Injection Moulding Machine - 50T
2	Auto Injection Family Mould For Test Specimens
3	Software - SolidWorks EDU Edition 2015-16NETWORK – BUNDLE
4	Grips Accessories for 100 kN Median Test System for UTM
5	Desktop System - Optiplex 7040 mini Tower XCTO (DELL) – Qty – 08 Nos.

**(iv) Central Facilities & Monitoring:**

The central facilities on campus include central water receiving and distribution facility, central electric power receiving distribution center, Sewage Treatment plant, Diesel Generator, and central Air-conditioning plant. The details of these facilities are as follows:

Central Facilities	Installed Size/Capacity
PWD Water Connection	500cumec
Water Storage Sump	1800 cumec . Three tanks of 600 cumec each
Overhead Water Tank	150 cumec. Water pumped from the main sump to over head tank and distributed to campus residences through gravity.
No. of Bore Wells	6 Nos. / 55 cumec
GEB Electricity Supply	3000KVA and 2000 KVA transformers at 33 KV substations is energized with distribution of load by completing loop. A separate 11 KV line connected at PCC2 for AC plant with 1000 KVA transformer
Transformer	500/1500/750/750 KVA at PCC1,2,3 and 4 respectively. 3000KVA and 2000 KVA transformers installed at 33 KV substation step down power from 33 KV to 11 KV
Diesel Generator	2X500 connected to main building lighting, 750 KVA DG connected to air condition plant. One 62.5 installed for pump house for to pump water in case of power failure another 62.5 installed at VGH and 35 KVA DG connected to medical centre.
AC Plant	660 TR load connected to main building includes class rooms, cubicles, computer centre, Library and Auditorium etc.
Sewage Treatment Plant	Capacity 600 cumec and treated water is used for campus garden watering
Hybrid Power	Installed one of 3.7 KW each and power generated from solar and wind is fed to street light.

Central Facilities	Installed Size/Capacity
Solar Power	6.5 KV solar panel placed over roof and is connected to street lights.
Solar Water Heater	57 nos of solar water heater in hostels
Tele presence class room	200 capacity class room has been built for across three campus live class with the help of latest technology.

### B2.13 MAJOR MAINTENANCE, RENOVATIONS OR NEW CONSTRUCTION REPORTS

#### Hostels

Two new hostels are added to existing hostels with a capacity of 150 and 214 respectively

### B2.14 MAJOR EQUIPMENTS ACQUIRED DURING THE YEAR

S No.	Asset Description	Location	Rate	Qty	Purch.Value
1	Portble Lab Cabin 20x10x8x6	SCEO Lab	399200	1	399200
2	Portble Lab Cabin 20x10x8x6	SCEO Lab	379905	1	379905
3	Racold Solar Water Heater 500LPD FPC	AH-3 to AH6 Hostel	126500	4	506000
4	Racold Solar Water Heater 500LPD FPC	qtr-4 CH -07	96022	4	384088
5	IBM SPSS statistics base software	Economics Dept	368750	1	368,750
6	Solidworks EDU edition 2015-16 network bundle	Workshop kept in CC server room	340000	1	340,000
7	EXACQ professional IP camera License EVIP-1	Computer Centre	7637	90	687,312
8	Meteodyn WT academic software	EEE Dept	323618	1	323,618
9	Aspen One for Universities r12 media ver.9 mSC Token USB Kit AOLM Dongle USB	Chemcial Engg Dept/	169690	1	169,690
10	Minitab 17 academic single user	A-107 chemical engg. Dept	53322	2	106,643
11	Synopsis TCADD	Microelectronic Lab CC-123	944000	1	944,000
12	Maple 2017 multi user Software	Mechanical Eng Dept-kept CC server	700000	1	700,000
13	IBM SPSS software	Economics	570515	1	570,515
14	Origin lab professional version 2017 (academiv use concurrent network floating perpetual life time license)	Chemical Engg. Dept.	47200	5	236,000
15	Tecplot Academic Suite software	Mechanical eng dept	490820	1	490,820
16	Movie Chair 4leg base PC black without arms	Hostel Common Room CH-1,3 AH-6	3293	100	329,300
17	Movie Chair 4leg base PC black without arms	BH-09 & CH-07 Qty-48 each	3294	96	316,244
18	one Side bench Desk 1500mm*750mmw*900mmh	LT-2 for Sandbox	40976.3	3	122,929
19	Top Open cabin with doors along with work station sype table system shutter lock sides partitioned bottom shelf side pvc	Auditorium	160237	1	160,237
20	Sliding partition	CC-219	273314	3	819,942
21	42U server rack 800*100 black	server room CC-119	56678	2	113,355
22	Syona Venus B Blended Nylon chair black	Admn. Office & Cafeteria	3961	48	190,137
23	Medium mesh back chair	Admn. Office & Cafeteria	8000	25	200,000
24	Tavle 1250L*600D TOP 25MMTHK BOTTOM FIXED PEDESTAL SHARING 1 NOS 400L*500D725H	New Project Office -in SAC for expansion	20382	5	101,912
25	Keysight Digital Multimeter	RIG Ruma Ghosh	109713	1	109,713
26	Dell precision tower 3620 xcto base	RIG Mechanical Engg.	155722	1	155,722
27	Optiplex 3046 Mini Tower CTO	A-203 qty-5,A-307 qty-9,A-201 qty.1	72519	15	1,087,782
28	Optiplex 3046 Mini Tower CTO	A-104(Chemical Engg.)	61147	10	611,465
29	Optiplex 7040 Mini Tower XCTO	Workshop Metrology Lab	73238	8	585,900

S No.	Asset Description	Location	Rate	Qty	Purch.Value
30	Power edge R530 Server with components	System lab A-200 CS&IS dept.	324651	1	324,651
31	Optiplex 7040 Mini Tower XCTO	Sand Lab -EEE	90275	2	180,549
32	Optiplex 3046 Mini Tower CTO	System lab A-200 CS&IS dept.	57881	6	347,288
33	Power edge R430 Server	Chemistry lab	165812	1	165,812
34	Power edge R730 Server	Server Room CC-119	531979	2	1,063,958
35	Power edge R730 Server	Server Room CC-119	621565	1	621,565
36	Power edge R730 Server	Server Room CC-119	531979	1	531,979
37	960901 NI myrIO autonomous embedded system design hardware	A-203 Instrumentation lab	54615	4	218,460
38	Optiplex 7040 Mini Tower XCTO	A-304 Humanities & Social Science office ty-1 each	59235	2	118,470
39	Dell Rowling 1550 XGA Projector	A-601,A-605 LC-101,C-401 & C-405	43625	5	218,123
40	Power Edge R530 Server	CC-119 server room	324652	2	649,303
41	Power edge T630 Server	C-107	397194	1	397,194
42	power edge R530 server	server room for Library	248063	1	248,063
43	K2Q36A HPE 3 PAR store serv 8200 2ND	CS&IC Dept	1412250	1	1,412,250
44	Computer software for Server	CS&IC Dept	168590	1	168,590
45	Air AP28021-D K9 Indoor access point	Computer Centre	24150	42	1,014,300
46	Cisco UC Phone 7841	CC store	18025	20	360,491
47	Handset Cisco 7800,8800 DX600 series	CC store	11292	20	225,843
48	Cisco Catalyst 3650 24 port Data 4*1G uplink IAN Base	CC store	78121	10	781,212
49	Cisco Catalyst 3650 24 port poe 4*1G uplink IAN Base	CC store	93962	15	1,409,433
50	Cisco catalyst 3650 48 port data 2*10G Uplink Lan Base	server Room	161286	2	322,573
51	Catalyst4500E 7 slot chassis for 48 Gbps	server Room	2940195	1	2,940,195
52	Catalyst 6500 enchancest 6 slot chasis	server Room	2880086	1	2,880,086
53	On line UPS System 10KVA/240VDC online UPS 3in/1out with exide make batteries	Sand Lab -EEE	134850	1	134,850
54	APC UPS 6KVA	IMA Chemistry Lab C-207	119074	1	119,074
55	Samvad Quick PRO15	teleprompter WILPD studio-CC118	165760	1	165,760
56	3TR cassette unit blue star AC with accessories	Director's Conference Hall	117225	2	234,450
57	Vertcool 4.5 ton 3 phase split AC with scrool compressor	Library Lounge room	129170	2	258,340
58	Aquaguard Green Pure chill 80 SS water coller	BH-09	67500.0	6	405,000
59	Aquaguard Green Pure chill 80 SS water coller	CH-07	67500.0	4	270,000
60	Orient Fan 120mm white without reulator	Hotel	1550.4	466	722,491
61	8 Channel sound power measurement system along with vibration sensors & accessories	Dynamics & simulation Lab	2782500	1	2,782,500
62	Being accounted towards purchase of Kirloskar 12.5 HP Pump set - qty 02 for STP . Ref no :PO/6306 DT 31.01.17	Mainteanac Dept	70560	2	141,120
63	4.5ft.heavy duty wood turing lathe machine complete with all standard accessories	Workshop	168500	1	168,500
64	Samsung professional display -model DB48B	CC Lobby,B Dome,SAC	61763	3	185,288
65	Panasonic PV-100 Video camera	LC-104 Studio Room	135250	1	135,250
66	Sound System NEXO GEO S1230	Auditorium	161506	2	323,012

S No.	Asset Description	Location	Rate	Qty	Purch.Value
67	Sound System NEXO GEO S1210	Auditorium	178756	1	178,756
68	Sound System NEXO GPT EBOW	Auditorium	43450	3	130,351
69	Cisco Cayalyst 3640 24 port data 1*1G Uplink lan base	CC store	89250	10	892,500
70	Yamaha stage pass 400l	A-501 & C-502 C-301 & 308	66305	4	265,220
71	AG Green pure chill 80SS UV aquaguard water storage coller	CH-1,4 & AH-4,6	69000	4	276,000
72	BPL Automated external Defibrillator	Medical Centre	130000	1	130,000
73	NST Batch type vacuum degassing cum nitrogen gas extracting unit	Workshop	170528	1	170,528
74	Air Blower with accessories	STP Mainteneace	240579	1	240,579
75	Riso Digital Duplicator SF-5130	ID Office CC-117	288734	1	288,734
76	BPL Automated external Defibrillator	Medical Centre	127400	12	1,528,800
77	Single Wheel One Ton Pitch Roller	Cricket Ground	284550	1	284,550
78	qty-10 2MP IR bullet with 2.8-12 mm varifocal motorized lens and STD compact mini bullet WDR qty-90 (CCTV camera) budget LED wall and NXAMP4X4)installed on 11th Aug.17	Computer Centre	17788	90	1,600,898
79	Vapor Generator Model HVG-1 & Hollow Cathode Lamps	Bio Lab Near Cafeteria	612000	1	612,000
80	Plastic Injunction Moulding machine	Workshop	215509	1	215,509
81	Pressure sensor having the current output 4 to 20mA process conn	Workshop	16396	8	131,166
82	Thermocouple J type temperature measurement rage 32 deg F to 900deg F	Workshop	6339	24	152,127
83	Respirable dust sampler PM10	prefab Lab-I	102263	1	102,263
84	Fine particulate monitor PM2.5	prefab Lab-I	123525	1	123,525
85	Trace GC1110 MPC split splitless injector	BIO Lab	202500	1	202,500
86	100KN median test system for fatigue test facility	W/S-108	2290000	1	2,290,000
87	Feedhru Kit with liner reinfiltreated graphite	solid state physic B-108	171247	1	171,247
88	TIC Turbe & Inst controller 200w	solid state physic B-108	267844	1	267,844
89	Mass flow constroller SEC E40	solid state physic B-108	105041	1	105,041
90	2 Component laser Doppler velocimetry LDV system with mounting Accessories	IC Engg. Lab	7452141	1	7,452,141
91	Orbital Shanking Inucbator	C-114	225632	1	225,632
92	PVD Deposition system	Workshop -108	2977150	1	2,977,150
93	Injection Moulding machine	Workshop	1634260	1	1,634,260
94	Dual Chamber E Beam evaporation and plasma oxidization system	Physic B-108	393750	1	393,750
95	Esco Airstream Class II Type A2 safety cabinet	BIO Lab C-105	383940	1	383,940
96	Biostat AMO Univessel 5L 230V with accessories	C-106	1359830	1	1,359,830
97	Semi Automatic wire bonder WB	B-113	1563446	1	1,563,446
98	Laser Engraver 3*2	Sandbox	344150	1	344,150
99	Tempsens make calsys	Workshop	146405	1	146,405
100	Total Kjeldahl Nitrogen Analyzer	prefab Lab-I	399937	1	399,937
101	Oculus Rifi Headset	Computer science A-418	79999	2	159,998
102	8 Channel time to digital converter	B-109 Optics Physic Lab	540074	1	540,074
103	Oxford Instrument Magnetic Resonaner	C-207	3257965	1	3,257,965
104	DV 1 MLV C/P brookfield well etc	Chemistry Lab	335486	1	335,486
105	Pin on Disc Tester TR 20 LE (Lubrication module & environmental chamber	MT-2 WA-101	581889	1	581,889
106	Digital Storge Oscilloscope	A-201 Digitl Communication Lab	37182	18	669,284
107	Air Spaced	B-113	558705	1	558,705

S No.	Asset Description	Location	Rate	Qty	Purch.Value
108	OIMMOIL F30CC,IMMER Oil	B-113	308021	1	308,021
109	Ice flaking machine make labman scientific	BIO c-105	108800	1	108,800
110	Printed circuit board milling machine	Sand Box	500000	1	500,000
111	Oxidation Induction test apparatus by differential thermal method	Workshop	211910	1	211,910
112	Olympus Inverted Trinocular Microscope new Model CKX53 installed in C-101 on 27th Sept-2017	C-101	1137566	1	1,137,566
113	pressure vessel 60 ltr capacity for lab experiments purpose	Mechanical Engg. Dept	108560	1	108,560
114	water chiller capacity 0.5 TR	Mechanical Engineering Lab	121920	1	121,920
115	Smith Machine SM Aerofit	SAC GYM Room	112640	1	112,640
					<b>70110797.24</b>

## **B2.15 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVAL**

SAC promotes the student activities, games and sports like Cricket, Football, Tennis, Squash, Volleyball, Basketball, Badminton, Chess, Carom, Pool, and Table Tennis. SAC also promotes extra-curricular activities for students, faculty and their dependents in the campus. Daily training in football and cricket is conducted for the institute team. New Squash court has been constructed. The cricket and football ground out field has been re-laid and been developed to higher standard. Up gradation of gymnasium has been done by installing Air conditioner, latest machines and other modern equipment's. The gymnasium functions strictly under the guidance of a trainer for safety measures. The table tennis hall has been up-graded with standard LED flood lights.

In addition to this, SAC also organise sports events like Inter department/ hostel competitions/tournaments for students, and co-ordinates with students in organizing All India Inter engineering sports festival SPREE, inter staff Cricket Premier League, badminton league and other sports.

### **Sports Achievements SPREE – 2017**

- Institute Tennis – Winners First place in Annual Sports meet of BITS Pilani K.K.Birla Goa Campus “Spree” March 2017
- Chess team won the finals first place in BITS Pilani K.K.Birla Goa campus annual sports festival “SPREE” March 2017
- Siddhartha Mohan and Chirag Ramdas won the Doubles Badminton Championship at BITS Pilani K.K.Birla Goa campus annual sports festival “SPREE” March 2017
- Neil Thanawala won the single Tennis championship at Annual Sports festival of BITS Goa Spree 2017

### **Open tournaments – 2017**

- Rachit Aiyappa won the all Goa Tennis Tournament Organized by Goa Tennis Association at Cidade Goa, Panjim April 2017
- Tennis team Runner's Up – ARENA 2017, BITS Hyderabad Sports Fest(Tennis Event)
- Neil Thanawala won the single Tennis championship at Annual Sports festival of BITS Hyderabad Arena 2017

### **Badminton October- 2017**

- Ishaan Verma won the All Goa Major Ranking Badminton Tournament. the Men's singles title in All Goa Major Ranking "4th Rasik Painguinkar Memorial Badminton Tournament" From 11<sup>th</sup> to 15<sup>th</sup> August 2017, held at Madgaon, Goa.

### **Chess – October 2017**

- Siddharth Shenoy 8th Place in All Goa Major Ranking chess Championship September 2017

### **Tennis – October 2017**

- Neil Thanawala was the runner up at the annual Sports festival of BITS Pilani campus BOSOM 2017 in Tennis event

### **Basketball – November 2017**

- Institute Basketball (Boys) Team won the all goa open basketball championship November - 2017 at Pamjim, Organized by Don Bosco oratory.
- Akhilesh Ram and Vivek Arya got selected for the Goa state senior basketball team for the senior national championship 2018



**Football**

Institute Football team retained in IInd division league of Goa Football Association

**Award of Scholarship to Students**

SCHOLARSHIP	NO. OF STUDENTS (figures indicates no. of awards in 2017)	AMOUNT
INSTITUTE'S MERIT & MCN SCHOLARSHIP	1136	51973825
STUDENT AID FUND FINANCIAL ASSISTANCE	23	1200000
Scholarship from Aditya Birla Group	1	65000
Scholarship from Bhushan Bhatia	4	171040
Scholarship from Reliance Infratel Ltd	4	72000
TOTAL :	1168	53481865

**Note :**

- 1) Students are also in receipt of INSPIRE, KVPY, NTS and other National Scholarships
- 2) Students get financial assistance from different Trusts, parent's work place etc.

**Teaching Learning Centre**

During the year 2017, Teaching Learning Centre at KK Birla Goa Campus evolved its programs further and worked on its vision, which is to provide a foster a thriving culture for excellence in teaching-learning processes. It provided a forum to discuss and evolve new ideas in education to address current challenges. The following activities were carried out by Teaching Learning Centre during the year 2017.

1. TLC organized seminars. Following faculty members within the campus spoke
  - a. Dr. Gaurav Singh, Dep of Mech Engg. Title "Fronts on which the BITS teaching-learning process may be improved".
  - b. Prof. Dipankar Pal, Dep of EEE and E & I, Title "Engineering Education in India: Past, Present and Future"
  - c. Dr. Radhika Vathsan, Dept of Physics spoke on her "Experiments with active learning" on 17-Nov-2017
  - d. Dr. Pravin Singru, Dep of Mech Engg. Title "Experiments with active learning" on 17-Nov-2017.
2. TLC also invited "Prof. Arvind Kudchadker" , Professor Emeritus at IIT Bombay. Title " Superior approaches for 21st century education & learning"
3. Regional Workshop on Outcome Based Learning Using Pedagogy Framework Model on Feb 10-11,2017 in collaboration with CET, IIT, Kharagpur under MHRD, Govt. of india Project.
4. Initiated an effort on "Excavating & sharing valuable teaching-learning resources" in the form of videos, research papers, etc.

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Annexure `B2-1'  
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**NAME AND DESIGNATION OF SENIOR OFFICE BEARERS OF GOA CAMPUS**

S.No.	GPSRN	Name	Department/ Facility	Activity	Designation
1.	0631	Prof. Raghurama G.	EEE / Director	Director	Sr. Professor
2.	0095	Prof. Sunil Bhand	Chemistry / Sponsored Research and Consulting Division	Dean	Professor
3.	0006	Prof. D.M. Kulkarni	Mechanical Engineering / General Administration	Dean	Professor
4.	0080	Prof. Srikanth Mutnuri	Biological Sciences	HOD	Associate Professor
5.	0310	Prof. Saroj Sundar Baral	Chemical Engineering	HOD	Associate Professor
6.	0085	Prof. Anjan Chattopadhyay	Chemistry	HOD	Associate Professor
7.	0620	Prof. Ashwin Srinivasan	Computer Science & Information Systems	HOD	Senior Professor
8.	0338	Dr. Aswini Kumar Mishra	Economics	HOD	Assistant Professor
9.	0107	Dr. Amalin Prince A.	Electrical & Electronics Engineering	HOD	Assistant Professor
10.	0123	Dr. Reena Cheruvalath	Humanities and Social Sciences	HOD	Assistant Professor
11.	0077	Prof. Prasanna Kumar N.	Mathematics	HOD	Associate Professor
12.	0482	Dr. Ranjit Shankarrao Patil	Mechanical Engineering	HOD	Assistant Professor
13.	0073	Dr. Deepak Narayana Murthy Pachattu	Physics	HOD	Assistant Professor
14.	0003	Prof. Aditya P. Koley	Chemistry / Instruction Division	Associate Dean	Professor
15.	0010	Prof. Neena Goveas	Computer Science & Information Systems / Academic Registration & Counseling Division	Associate Dean	Associate Professor
16.	0058	Prof. Narendra Nath Ghosh	Chemistry / International Programmes and Collaboration	Associate Dean	Associate Professor
17.	0094	Prof. Sutapa Roy Ramanan	Chemical Engineering / Faculty Affairs	Associate Dean	Professor
18.	0104	Prof. Raghunath A. Ratabole	Physics / Work Integrated Learning Programmes	Associate Dean	Associate Professor
19.	0108	Prof. K.R. Anupama	EEE / PS Division	Associate Dean	Professor
20.	0122	Prof. Ranjan Dey	Chemistry / Academic Resource Planning	Associate Dean	Associate Professor
21.	0185	Prof. Sampatrao Dagu Manjare	Chemical Engineering / Admissions	Associate Dean	Associate Professor
22.	0237	Prof. Prasanta Kumar Das	Physics / Academic Research Division	Associate Dean	Associate Professor
23.	0333	Dr. C.K. Ramesha	EEE / SWD	Associate Dean	Assistant Professor
24.	0068	Srinivas Krishnaswamy	Chemical Engineering / Centre for Innovation, Incubation & Entrepreneurship (CIIE)	PIC	Professor

S.No.	GPSRN	Name	Department/ Facility	Activity	Designation
25.	0033	Prof. Meenal Kowshik	Biological Sciences / Media & Publicity	FIC	Associate Professor
26.	0062	Prof. Radhika Vathsan	Physics / Community Welfare	FIC	Associate Professor
27.	0089	Prof. Gaurav Dar	Physics / Teaching Learning Centre	FIC	Associate Professor
28.	0082	Dr. Veeky Baths	Biological Sciences / Alumni Affairs	FIC	Assistant Professor
29.	0107	Dr. A. Amalin Prince	EEE / Placement	FIC	Assistant Professor
30.	0328	Prof. Mridula Goel	Economics / Centre for Innovation, Incubation & Entrepreneurship (CIIE)	FIC	Associate Professor
31.	0371	Dr. K.R. Biju	Computer Science & Information Systems / Computer Centre	FIC	Assistant Professor
32.	0414	Prof. Angshuman Sarkar	Biological Sciences / Student Welfare Division	Chief Warden	Associate Professor
33.	0009	Mr. Anand K. Patil	Purchase & Stores & Estate	IC	Estate Manager
34.	0050	Dr. Anuradha Voolapalli	Library	IC	Deputy Librarian
35.	0230	Dr. Raghavendra K.M.	Medical Centre	IC	Chief Medical Officer
36.	0612	Mr. S. Baskar	Finance	IC	Head - Accounts
37.	0658	Mr. Sailesh Narayan Mohanty	General Administration	IC	Deputy Registrar
38.	0668	Mr. Arjun C. Halarankar	Public Relations	IC	Public Relations Officer

**NAMES OF WARDENS OF GOA CAMPUS**

S. No.	GPSRN	Name	Hostel	Activity
1	0414	Prof. Angshuman Sarkar	CH-2	Chief Warden Cum Warden
2	0343	Dr. Amit Sethia	CH-1	Warden
3	0363	Prof. Mainak Banerjee	CH-3	Warden
4	0211	Prof. P. Bhavana	CH-4	Warden
5	0114	Dr. Sanjay Kumar Sahay	CH-5 & CH-6	Warden
6	0420	Dr. K.A.Geetha	CH-7	Warden
7	0556	Dr. Arnab Banerjee	AH-1	Warden
8	0016	Prof. Raghu Nath Behera	AH-2	Warden
9	0021	Dr. Vikas V. Chaudhari	AH-3	Warden
10	0072	Dr. Ch.V.V.S.N.V. Prasad	AH-4	Warden
11	0228	Dr. Mali Kiran Dinakar	AH-5	Warden
12	0604	Dr. Rajoshri Sen Gupta	AH-6	Warden
13	0565	Dr. Ravi Prasad Aduri	AH-7	Warden
14	0124	Dr. Sunil Kumar V.	AH-8	Warden
15	0506	Dr. Karthikeyan G.	AH-9	Warden

**DETAILS OF ADMISSIONS MADE DURING THE YEAR 2017****(a) Second Semester 2016-17****Doctoral Programmes:**

Ph.D.	19(07)
	<hr/>
	19(07)

**(b) First Semester 2017-18****Doctoral Programmes:**

Ph.D.	28(11)
	<hr/>
	28(11)

**1. Integrated First Degree Programmes**

	No. of students joined	BITSAT Cut-off scores	
		Highest	Lowest
<b>Group A</b>			
B.E.			
Chemical	79(13)	323	276
Computer Science	160(13)	403	350
Electrical & Electronics	82(08)	348	320
Electronics & Instrumentation	78(09)	327	301
Electronics & Communication	82(15)	355	322
Mechanical	97(02)	355	304
	<hr/> <b>580(60)</b>		
<b>Group B</b>			
M.Sc.			
Biological Sciences	23(09)	317	202
Chemistry	36(10)	317	235
Economics	68(16)	306	290
Mathematics	72(12)	347	273
Physics	51(07)	344	270
	<hr/> <b>250(54)</b>		
<b>Group C</b>			
M.Sc.			
Information Systems			
<b>Total :</b>	<hr/> <b>830(114)</b>		

**2. Higher Degree Programmes :**

M.E.	
Biotechnology	15(10)
Embedded Systems	15(07)
Computer Science	17(08)
MicroElectronics	14(05)
Chemical Engineering	13(08)
Design Engineering	16(01)
<b>Total</b>	<hr/> <b>90(39)</b>

**3. Doctoral Programmes :**

Ph.D. – Full Time	21(09)
Ph.D. – Part Time	02(01)

**SUMMARY**

	II Semester 2016-17	I Semester 2017-18
<b>On-Campus Programmes</b>		
Integrated First Degree Programmes	-	830(114)
Higher Degree Programmes	-	90(39)
Doctoral Programmes	19(07)	28(11)
<b>Total</b>	<hr/> <b>19(07)</b>	<hr/> <b>948(164)</b>

Annexure 'B2-3'

(1 Pages)

Ref. AR 2017, Page No. B2-1

**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR  
2017-2018 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES UNDER VARIOUS PRIORITIES**

(ii) K.K. Birla Goa Campus:

**FIRST PRIORITY (Dual Degree)**

(From Group 'B' to Group 'A' Programmes)

Programmes* From ↓ To →	A1	A3	A4	A7	A8	AA	Total
B1	5	8	11	2	10	4	<b>40</b>
B2	8	5	6	10	9	5	<b>43</b>
B3	2	6	6	14	8	6	<b>42</b>
B4	2	6	2	16	6	8	<b>40</b>
B5	3	12	4	10	5	5	<b>39</b>
<b>Total</b>	<b>20</b>	<b>37</b>	<b>29</b>	<b>52</b>	<b>38</b>	<b>28</b>	<b>204</b>

**OTHER PRIORITY**

Programmes* From ↓ To →	A1	A3	A4	A7	A8	AA	B1	B2	B3	B4	B5	Total
A1												
A3									1			<b>1</b>
A4										1	1	<b>2</b>
A7										1		<b>1</b>
A8									1			<b>1</b>
AA												
<b>Total</b>									<b>2</b>	<b>2</b>	<b>1</b>	<b>5</b>

**B-B Transfer**

Programmes* From ↓ To →	B1	B2	B3	B4	B5	Total
B1				1		<b>1</b>
B2			2	1	1	<b>4</b>
B3						
B4			1			<b>1</b>
B5				2		<b>2</b>
<b>Total</b>			<b>3</b>	<b>4</b>	<b>1</b>	<b>8</b>

**Transfer**

	A1	A3	A4	A7	A8	Total
A1						
A3						
A4						
A7						
A8		1				<b>1</b>
B1				1	1	<b>2</b>
B2						
B3				1		<b>1</b>
B4				1		<b>1</b>
B5				1		<b>1</b>
<b>Total</b>		<b>1</b>		<b>4</b>	<b>1</b>	<b>6</b>

**\*Legend:**

A1: B.E. Chemical,

A2: B.E. Civil,

A3: B.E. Electrical &amp; Electronics,

A4: B.E. Mechanical,

A5: B.Pharm.),

A7: B.E. Computer Science,

A8: B.E. Electronics and Instrumentation,

AA: B.E. Electronics &amp; Communication,

AB: B.E. Manufacturing,

B1: M.Sc. Bio. Sciences

B2: M.Sc. Chemistry

B3: M.Sc. Economics,

B4: M.Sc. Mathematics,

B5: M.Sc. Physics,

C2: M.Sc. General Studies,

C6: M.Sc. Information Systems

C7: M.Sc. Finance.

**NUMBER OF STUDENTS REGISTERED****Second Semester 2016-2017**

Programme	2009	2010	2011	2012	2013	2014	2015	2016	Total
Chemical				1(0)	62(11)	51(6)	75(5)	55(9)	244(31)
EEE				4(1)	77(11)	97(12)	81(9)	83(9)	342(42)
Mechanical				2(0)	76(2)	72(4)	73(1)	69(3)	292(10)
Computer Science				3(0)	86(10)	99(14)	104(11)	101(9)	393(44)
Electronics & Instrumentation				2(0)	81(15)	61(6)	84(8)	79(10)	307(39)
<b>M.Sc.(Hons)</b>									
Biological Science				35(13)	30(5)	29(4)	44(5)	43(6)	181(33)
Chemistry			1(0)	31(8)	32(5)	31(5)	39(4)	43(2)	177(24)
Economics	1(0)			33(7)	47(4)	60(7)	48(4)	44(8)	233(30)
Mathematics				36(6)	43(4)	56(10)	47(10)	42(5)	224(35)
Physics			4(0)	28(3)	35(4)	51(3)	42(4)	42(3)	202(17)
<b>Total</b>	<b>1(0)</b>		<b>5(0)</b>	<b>175(38)</b>	<b>569(71)</b>	<b>607(71)</b>	<b>637(61)</b>	<b>601(64)</b>	<b>2595(305)</b>

**B. Higher Degree Programmes**

Programme	2014	2015	2016	Total
Biotechnology		5(3)	7(7)	12(10)
Design Engg.				0(0)
Embedded System		8(0)	7(4)	15(4)
Software Systems				0(0)
Chemical Engg.		8(5)	6(2)	14(7)
Microelectronics		7(1)	12(3)	19(4)
Computer Science		8(4)	8(0)	16(4)
<b>Total</b>		<b>36(13)</b>	<b>39(16)</b>	<b>75(29)</b>
<b>Grand Total</b>				<b>2671(334)</b>



## First Semester 2017-2018

Programme	Year of Admission									Total
	2009	2010	2011	2012	2013	2014	2015	2016	2017	
<b>A. Integrated First Degree Programmes</b>										
<b>B.E.(Hons.)</b>										
Chemical					6(0)	49(6)	74(5)	55(10)	77(12)	261(33)
EEE					6(1)	98(12)	81(9)	84(9)	82(8)	351(39)
Mechanical					3(0)	72(4)	72(1)	67(3)	98(2)	312(10)
Computer Science				1(0)	4(0)	98(14)	104(11)	104(11)	159(13)	470(49)
Electronics & Instrumentation				1(0)	4(0)	62(6)	84(8)	78(10)	78(9)	307(33)
Electronics & Communication									81(15)	81(15)
Biological Science				2(0)	30(5)	29(4)	44(5)	39(5)	23(9)	167(28)
Chemistry					31(5)	30(5)	39(4)	39(2)	36(10)	175(26)
Economics	1(0)			2(0)	44(3)	60(7)	48(4)	46(9)	65(14)	266(37)
Mathematics				2(0)	42(4)	56(10)	47(10)	44(3)	72(12)	263(39)
Physics			2(0)		32(3)	53(3)	42(4)	40(3)	51(7)	220(20)
<b>Total</b>	<b>1(0)</b>	<b>0(0)</b>	<b>2(0)</b>	<b>8(0)</b>	<b>202(21)</b>	<b>607(71)</b>	<b>635(61)</b>	<b>596(65)</b>	<b>822(111)</b>	<b>2873(329)</b>

## B. Higher Degree Programmes

Programme	Year of Admission		
	2016	2017	Total
<b>M.E.</b>			
Biotechnology	7(7)	15(10)	22(17)
Design Engg.	-	16(1)	16(1)
Embedded System	7(4)	15(7)	22(11)
Chemical Engg.	6(2)	12(7)	18(9)
MicroElectronics	12(3)	14(5)	26(8)
Computer Science	8(0)	17(8)	25(8)
<b>Total</b>	<b>40(16)</b>	<b>89(38)</b>	<b>129(54)</b>

**C. PhD Programmes**

	Year of Admission										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
Semester II 2016-2017		1(1)	8(4)	10(6)	16(9)	48(18)	19(3)	36(14)	47(15)		185(70)
Semester I 2017-2018			7(4)	5(2)	13(7)	46(17)	19(3)	34(13)	44(12)	27(11)	195(69)
Summer term 2016-2017			1(0)	2(1)	1(0)				1(0)		5(1)
<b>Grand Total</b>		1(1)	16(8)	17(9)	30(16)	94(35)	37(6)	70(27)	91(27)	27(11)	385(140)

**Summer Term 2016-2017**

Programme	2012	2013	2014	2015	Total
	Chemical				73(5)
EEE			1(0)	80(9)	81(9)
Mechanical		2(0)		69(1)	71(1)
Computer Science				101(11)	101(11)
Electronics & Instrumentation				82(8)	82(8)
<b>M.Sc.(Hons)</b>					
Biological Science				44(5)	44(5)
Chemistry		1(0)		39(4)	40(4)
Economics				48(4)	48(4)
Mathematics			1(0)	45(10)	46(10)
Physics			1(0)	38(2)	39(2)
<b>Total</b>		<b>3(0)</b>	<b>3(0)</b>	<b>619(59)</b>	<b>625(59)</b>

Annexure `B2-5'  
(2 Pages)  
Ref. AR 2017, Page No.B2-3

### STATEMENT OF DEGREES AWARDED

Degrees	No. of degrees	No. of degrees
	81th Award 27.8.16, 27.8.16, 8.10.16, 24.11.16, 13.7.17	82th Award 21.8.17, 21.8.17, 16.10.17
<b>(i) Integrated First Degree</b>		
<b>B.E.(Hons.)</b>		
Chemical	13(2)	2(0)
Chemical (with Practice School)	66(11)	6(1)
Electrical and Electronics	23(5)	
Electrical and Electronics (with Practice School)	87(18)	4(0)
Mechanical	34(1)	5(0)
Mechanical (with Practice School)	73(2)	8(0)
Computer Science	14(4)	4(1)
Computer Science (with Practice School)	106(18)	6(1)
Electronics and Instrumentation	20(5)	2(0)
Electronics and Instrumentation (with Practice School)	90(20)	<b>6(0)</b>
Biological Sciences	13(3)	<b>1(0)</b>
Biological Sciences (with Practice School)	20(10)	
Chemistry	11(3)	
Chemistry (with Practice School)	22(5)	
Economics	11(3)	1(0)
Economics (with Practice School)	23(5)	5(0)
Mathematics	17(3)	1(0)
Mathematics (with Practice School)	19(3)	2(0)
Physics	21(4)	1(0)
Physics (with Practice School)	14(1)	1(0)
<b>Sub Total</b>	<b>697(126)</b>	<b>55(3)</b>

Degrees	No. of degrees	No. of degrees
	81th Award 27.8.16, 27.8.16, 8.10.16, 24.11.16, 13.7.17	82th Award 21.8.17, 21.8.17, 16.10.17
<b>(ii) Higher Degree</b>		
<b>M.E.</b>		
Chemical Engineering	8(5)	
Computer Science	3(2)	
Microelectronics	-	
Biotechnology	-	
Embedded Systems	-	
Computer Science (with Practice School)	5(2)	
Microelectronics(with Practice School)	7 (1)	
Biotechnology (with Practice School)	5(3)	
Embedded Systems (with Practice School)	8(0)	
<b>Sub Total</b>	36 (13)	0(0)
<b>Ph.D</b>	13 (4)	13(7)
<b>Total</b>	<b>746(143)</b>	<b>68(10)</b>

**SUMMARY**

Award	81 <sup>th</sup> Award	82 <sup>nd</sup> Award	Total
Integrated First Degree	697(126)	55(3)	752(129)
Higher Degree	36 (13)	0(0)	36(13)
<b>Ph.D</b>	13 (4)	13(7)	26(11)
<b>Total</b>	<b>746(143)</b>	<b>68(10)</b>	<b>814(153)</b>

**Note:** The numbers in brackets indicate number of female students.

Annexure `B2-6'  
(1 Pages)  
Ref. AR 2017, Page No.B2-3

**82<sup>nd</sup> AWARD OF DEGREES TO BE APPROVED BY THE 65<sup>th</sup> MEETING OF  
THE BOARD OF GOVERNORS**

(No. in brackets indicates no. of female students)

<b>Programme</b>	<b>Dist</b>	<b>I</b>	<b>II</b>	<b>Total</b>
B.E.(Hons.)(Chemical)(with Practice School)	1	1	4	6(1)
B.E.(Hons.)(Chemical)	0	1	1	2(0)
B.E.(Hons.)(Electrical and Electronics)(with Practice School)	1	3	0	4(0)
B.E.(Hons.)(Electrical and Electronics)				
B.E.(Hons.)(Mechanical)( with Practice School)	0	4	4	8(0)
B.E.(Hons.)(Mechanical)	2	3	0	5(0)
B.E.(Hons.)(Computer Science)	0	3	1	4(1)
B.E.(Hons.)(Computer Science)(with Practice School)	1	2	3	6(1)
B.E.(Hons.)(Electronics and Instrumentation)	0	2	0	2(0)
B.E.(Hons.)(Electronics and Instrumentation) (with Practice School)	0	3	3	6(0)
M.Sc.(Hons.)(Biological Sciences)	0	0	1	1(0)
M.Sc.(Hons.)(Economics) (with Practice School)	0	1	4	5(0)
M.Sc.(Hons.)(Economics)	0	0	1	1(0)
M.Sc.(Hons.)(Physics) (with Practice School)	0	0	1	1(0)
M.Sc.(Hons.)(Physics)	0	1	0	1(0)
M.Sc.(Hons.)(Chemistry)				
M.Sc.(Hons.)(Maths) (with Practice School)	0	0	2	2(0)
M.Sc.(Hons.)(Maths)	0	1	0	1(0)
<b>Sub - Total</b>	<b>5</b>	<b>25</b>	<b>25</b>	<b>55(3)</b>
M.E				<b>0</b>
Ph.D.				<b>13(7)</b>
<b>TOTAL</b>				<b>68(10)</b>

**Note:** Numbers in brackets indicate total females

Annexure `B2-7'  
(4 Pages)  
Ref. AR 2017, Page No.B2-3

**LIST OF THE ORGANISATIONS WHICH CONDUCTED CAMPUS INTERVIEWS**

**LIST OF THE COMPANIES VISITED / RECRUITED FOR THE AY 2016-17**

SR.#	COMPANY VISITED / RECRUITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
1	159 SOLUTIONS	86	6	CO & AN
2	ADEASQUARE	1	1	IT
3	ADM AGRO	12	2	CH
4	AFFINE ANALYTICS	25	4	CO & AN
5	ALTISOURCE BUSINESS SOLUTIONS	1	1	IT
6	AMAZON	87	23	IT
7	AMAZON- AREA MANAGER	87	3	OT
8	AMERICAN EXPRESS	1	1	IT
9	ANAND GROUP (MAHLE FILTERS	1	1	MF
10	ARCESIUM	45	3	IT
11	ARISTA NETWORKS	19	2	ET
12	ARM EMBEDDED TECHNOLOGIES PRIVATE LIMITED	1	1	ET
13	AUROBINDO PHARMACETUCIALS	15	2	CH
14	AVANTI LEARNING CENTRE	10	0	OT
15	BAIN & CO	1	1	CO & AN
16	BARCLAYS	50	11	BF
17	BELONG TECHNOLOGIES	1	1	IT
18	BLUE JEANS NETWORK INDIA PVT. LTD.	2	2	IT
19	BNED LOUD CLOUD	25	1	IT
20	BROWNTAPE	30	2	IT
21	CA TECHNOLOGIES	57	4	IT
22	CADENCE DESIGN SYSTEMS.	1	1	IT
23	CAIRN INDIA	20	1	MF
24	CAPGEMINI	40	14	CO & AN
25	CAPILLARY	50	0	CO& AN
26	CAPITAL ONE	1	1	IT
27	CASAAMORE INTERNATIONAL	15	1	CO & AN
28	CENTURY TEXTILE	21	0	MF
29	CETAS HEALTHCARE	30	2	CO & AN
30	CGI INFORMATION SYSTEM	71	13	IT
31	CREDIT SUISSE	4	4	BF
32	CRISIL	1	1	IT
33	CYPRESS SEMICONDUCTORS	8	1	ET
34	D E SHAW	54	5	IT
35	DECCAN FINE CHEMICALS	36	4	CH
36	DELOITTE	1	1	CO& AN
37	DEVELOPMENT BANK OF SINGAPORE	34	0	BF
38	DIRECT I	82	4	IT
39	DUNHUMBY	62	3	IT
40	ERNST & YOUNG	2	2	CO & AN

SR.#	COMPANY VISITED / RECRUITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
41	EDUPRISTINE	1	1	OT
42	EMC2	2	2	IT
43	ERICSSON	2	2	ET
44	EXL SERVICES	30	3	CO & AN
45	FIORANO	47	2	IT
46	FRACTAL ANALYTICS	67	4	CO & AN
47	FRESHDESK	25	0	IT
48	FUTURE'S FIRST	119	5	BF
49	GENERAL ELECTRIC	1	1	MF
50	GOOGLE	65	0	IT
51	GOLDMAN SACHS	1	1	BF
52	GRAM POWER	26	1	ET
53	GRAND VIEW RESEARCH	15	0	CO & AN
54	GREATWEST GLOBAL BUSINESS SERVICES	35	4	IT
55	GREY ORANGE ROBOTICS	60	5	ET
56	HEDGE QUANT	1	1	BF
57	HERE MAPS	3	3	IT
58	HFCL (HIMACHAL FUTURISTIC COMMUNICATIONS LTD)	41	4	ET
59	HSBC	55	4	BF
60	HYUNDAI MOBIS	20	0	ET
61	HYUNDAI MOTORS	30	0	MF
62	IFB	50	2	MF
63	IMI MOBILE	2	2	IT
64	INDUS VALLEY PARTNERS	103	3	IT
65	INFOSYS	25	5	IT
66	INFOWORKS	62	3	IT
67	INMOBI	2	2	IT
68	INTEL	1	1	ET
69	INTELLECT DESIGN	20	4	ET
70	INTERCON	12	0	IT
71	INTUIT	3	3	IT
72	I-RUNWAY	10	0	CO & AN
73	JDA SOFTWARE SOLUTIONS	5	5	IT
74	JIVOX	64	4	IT
75	JOHNSON'S CONTROLS	60	12	MF
76	JP MORGAN SERVICES	1	1	BF
77	JP MORGAN & CHASE	4	4	BF
78	KLIENTAS	1	1	CO& AN
79	KNOLSCAPE	60	3	IT
80	KPIT	5	0	IT
81	KPMG	2	2	BF
82	L & T CONSTRUCTION	32	3	MF
83	LEXINNOVA	2	2	IT
84	LITHIUM TECHNOLOGIES	71	2	IT
85	MATHWORKS INDIA PRIVATE LIMITED	64	2	ET

SR.#	COMPANY VISITED / RECRUITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
86	MCKINSEY & CO	45	1	CO & AN
87	MEDIA IQ DIGITAL	8	8	IT
88	MEDIATEK	20	0	ET
89	MERCEDES BENZ	1	1	MF
90	MICROSOFT -IDC	4	4	IT
91	MODOR INTELLIGENCE	1	1	IT
92	MORGAN STANLEY	75	10	BF
93	MORNING STAR	2	2	IT
94	MU SIGMA	83	4	CO & AN
95	MY POS TECHNOLOGIES PVT. LTD.	1	1	IT
96	NATIONAL INSTRUMENTS	35	1	ET
97	NETAPP	15	2	IT
98	NEULAND LABORATORIES	12	1	CH
99	NEXTGEN PMS PVT. LTD	3	3	IT
100	NOMURA GLOBAL MARKETS , MUMBAI	1	1	BF
101	NSE-IT	15	1	IT
102	NUCLEUS SOFTWARE	25	3	IT
103	NUMADICS	10	1	ET
104	NUTANIX	4	4	IT
105	NVIDIA GRAPHICS	4	4	ET
106	OLA	1	1	OT
107	OPEN WORLD MONEY	30	3	IT
108	OFSS	40	6	IT
109	ORACLE	110	13	IT
110	ORBEES	45	3	CO & AN
111	PARALLELDOTS	1	1	IT
112	PAYPAL	49	2	IT
113	PFIZER	15	3	CH
114	PRAJ INDUSTRIES	30	2	MF
115	PRICEWATERHOUSECOOPERS (PWC)	2	2	CO & AN
116	QUALCOMM	55	16	ET
117	RAO IIT ACADEMY	40	15	OT
118	REDPINE SIGNALS	35	4	ET
119	REFLEXIS	30	5	IT
120	RELIANCE POLYMERS	18	4	CH
121	ROHM SEMICONDUCTORS	66	4	ET
122	RUBIQUE	5	0	IT
123	SABRE TECHNOLOGIES	50	8	IT
124	SEAGATE	55	3	ET
125	SEARCE	70	8	CO& AN
126	SKF	18	1	MF
127	SOCIETE GENERALE	25	5	BF
128	SOKRATI	1	1	IT
129	SPI	25	0	IT
130	SYSTEMANTICS	15	0	IT



SR.#	COMPANY VISITED / RECRUITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
131	TARGET	80	11	CO & AN
132	TATA ADVANCED SYSTEMS	30	4	MF
133	TATA MOTORS	14	10	MF
134	TATA TRUST	25	5	OT
135	TAVISCA	20	1	IT
136	TECH RACER	45	5	IT
137	TEJAS NETWORKS	40	3	ET
138	TEXAS INSTRUMENTS	52	4	ET
139	THERMAX	15	2	MF
140	THOROGOOD ASSOCIATES	151	2	CO&AN
141	TIVO	101	3	IT
142	TONBO IMAGING	2	2	ET
143	TRESVISTA	74	3	BF
144	UNITED HEALTH GROUP	36	4	IT
145	VIA.COM	40	3	IT
146	VIACOM18 MEDIA PVT. LTD.	1	1	IT
147	VIDYASAGAR CLASSES	25	4	OT
148	VMWARE SOFTWARE INDIA PVT. LTD.	2	2	IT
149	WORKS APPLICATION	30	1	IT
150	WORLEY PARSON	2	2	MF
151	XILINX	40	1	ET
152	ZINNOV MANAGEMENT CONSULTING	2	2	CO & AN
153	ZS ASSOCIATES	85	25	CO & AN

**Summary**

<b>Total No. of Companies:</b>	153
<b>Total No. of Students Interviewed:</b>	4504
<b>Total No. Appointments offered including multiple offers:</b>	502

**Legend:**

IT: Information Technology, CH: Chemical, MF: Manufacturing, CO & AN: Consulting and Analytics, ET: Electronics, BF: Banking Finance, EL: Electrical, S & M - Sales & Marketing, OT - Others

BITS Pilani

# annual report 2017

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**Part B3: Hyderabad Campus**



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### B3.1 SENIOR OFFICERS AND APPOINTMENTS

#### (a) Senior Officers

- Prof. G Sundar, Senior Professor and Director, BITS Pilani Hyderabad Campus
- Prof. Niranjan Swain, Professor and Dean, Practice School Division; (University Wide) & Dean - Administration (Officiating)
- Prof. Suman Kapur, Senior Professor and Dean, International Programmes and Collaboration Division (University Wide)

#### (b) New appointments

- Dr. Rajiv Kamra, Chief Medical Officer
- Mr. Seerapu Venkata Suresh Kumar, Manager - MEP
- Mr. Muthukrishnan B, Estate Manager
- Mr. Yedlapalli Lavaraju, Manager – ERP
- Dr. Merlin Noelin, Medical Officer

The names and designations of senior officers of Hyderabad Campus are given in Annexure 1 (part B3)

### B3.2 ADMISSIONS

The number of students admitted in each of the semesters is given below.

	&Integrated First Degree Programmes		Higher Degree Programmes		Integrated Higher Degree Programmes		*Doctoral Programmes (PhD Full-time)		\$Doctoral Programmes (PhD Part-time)		Total
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female	
<b>Second Semester 2016-17</b>	-	-	-	-	-	-	26	11	10	4	<b>36 (15)</b>
<b>First Semester 2017-17</b>	1084	207	146	56	-	-	26	8	10	4	<b>1266 (275)</b>
<b>Grand Total</b>											<b>1302(290)</b>

& Incl. of both – BITSAT category & International Students category

\* Incl. of both – Full time & Faculty input

\$ Incl. of both – Part time & Aspirants

### B3.3 DUAL DEGREE AND TRANSFERS

During the Year 2017, a total no of 144 students (out of 147 offers : Priority 1 – 146, Other Priorities - 1) were permitted to pursue concurrently two first degrees under the Dual Degree scheme as per details given Annexure2 (Part B1).

#### TRANSFERS:

During the Year 2017, a total no of **19** students (7 transfers + 12 B-B transfers) were permitted to transfer from the initial allotment of First Degree programme to the other programmes of First Degree to pursue under the Transfers scheme as per details given Annexure2 (Part B1).

#### VERTICAL TRANSFERS:

During the year 2017, Two (2) students were permitted to transfer from First Degree to Higher degree and 2 students was permitted to transfer from Higher Degree to Ph.D. Programme at Hyderabad Campus.

### B3.4 ACADEMIC CALENDAR

The Academic year of the Institute is divided into two semesters and a summer term.

	Starting Date	Ending Date	No of Instruction Days (Excluding Examination Days)
Second semester 2016-2017	13.01.2017	02.05.2017	88
First Semester 2017-2018	02.08.2017	29.11.2017	96
Summer Term 2016-2017	22.05.2017	11.07.2017	44

### B3.5 COURSES OFFERED

The number of courses, offered during the year 2017 are as follows:

	Number of Courses Offered
Second semester 2016-2017	336
First Semester 2017-2018	339
Summer Term 2016-2017	15

During the year the following new courses are added

Second semester 2016-2017	16
First Semester 2017-2018	15

The list of new courses added is attached as a separate **Annexure 3 (Part B3)**.

### B3.6 REGISTRATION OF STUDENTS

The registration processes for both the semesters was completed on the first day of each semester.

	Number of students registered
SECOND SEMESTER 2016 – 2017	3312
SUMMER TERM 2016 – 2017	858
FIRST SEMESTER 2017 – 2018	3820

Details of Registration of students for the First Semester 2016-2017 are given in Annexure 4 (Part B3)

### B3.7 ACADEMIC AND PROFESSIONAL COUNSELLING

#### II Semester 2016-2017

There were **67** students under the purview of the Academic Counselling Board (ACB) at the beginning of the First Semester 2016 – 2017. At the end of First Semester 2016 – 2017, **29** students who have fulfilled the minimum academic requirements as per the Academic Regulations and the stipulations laid down by the ACB were declared outside the purview of ACB. **84** new cases came under the purview of ACB at the end of First Semester 2016 - 2017. The total number of students who are under the purview of ACB at the beginning of Second Semester 2016-2017 is **122**.

The details are given below:	No. of Students
Under the purview of ACB at the beginning of First Semester 2016 – 2017	67
Declared outside the purview of ACB at the end of First Semester 2016 – 2017	29
Continue to be under the purview of ACB	38
New cases referred to ACB at the end of First Semester 2016 – 2017	84
Under the purview of ACB during Second Semester 2016-2017	122

#### I Semester 2017-2018

There were **122** students under the purview of the Academic Counselling Board (ACB) at the beginning of the Second Semester 2016 – 2017. At the end of Second Semester 2016 – 2017, **58** students who have fulfilled the minimum academic requirements as per the Academic Regulations and the stipulations laid down by the ACB were declared outside the purview of ACB. **3** students left the institute. **51** new cases came under the purview of ACB at the end of Second Semester 2016 - 2017. The total number of students who are under the purview of ACB at the beginning of First Semester 2017-2018 is **112**.

The details are given below:	No. of Students
Under the purview of ACB at the beginning of Second Semester 2016 – 2017	122
Discontinued during Second Semester 2016-2017	3
Declared outside the purview of ACB at the end of Second Semester 2016 – 2017	58
Continue to be under the purview of ACB	61
New cases referred to ACB at the end of Second Semester 2016 – 2017	51
Under the purview of ACB during First Semester 2017-2018	112

**B3.8 AWARD OF DEGREES**

Convocation was conducted on Sunday 06<sup>th</sup> August, 2017, Chief Guest Dr. Rajendra Singh, Chairman, Tarun Bharat Sangh and the Vice Chancellor Prof. Souvik Bhattacharyya have participated in the Convocation of the campus for award of various degrees (First Degree, Higher Degree and Ph.D) to 744 students

**LIST OF INTEGRATED FIRST DEGREE PROGRAMMES FOR AWARD OF MEDALS**

S. NO.	NAME and ID NO	CGPA Obtained	Position Obtained	Type of Medal to be Awarded
1	ADITHYA MURALI 2012B4A7498H	9.72	FIRST	GOLD
2	DEVENDRA SINGH SHEKHAWAT (2013A7PS204H)	9.70	SECOND	SILVER
3	KINJAL JAIN (2013A7PS162H)	9.69	THIRD	BRONZE

During the year, a total of 744 students graduated and the details are as follows:

S. No	Programmes	B.E. (Hons.)	M.Sc. (Hons.)	M.Sc. (Tech.)	H.D.	Ph. D	Total
<b>First Degree</b>							
1.	Chemical Engineering	45					45
2.	Civil Engineering	47					47
3.	Electrical & Electronics Engineering	72					72
4.	Mechanical Engineering	62					62
5.	B. Pharmacy	1					1
6.	Computer Science Engineering	117					117
7.	Electronics and Instrumentation	37					37
8.	Electronics and Communication	80					80
9.	Manufacturing Engineering	38					38
10.	Biological Sciences		22				22
11.	Chemistry		25				25
12.	Economics		38				38
13.	Mathematics		36				36
14.	Physics		32				32
15.	Information Systems			4			4
		499	153	4			656
<b>Sub-Total</b>							<b>656</b>
<b>Higher Degree</b>							
16.	M.E. Computer Science				7		7
17.	M.E. Chemical				8		8
18.	M.E. Biotechnology				8		8
19.	M.E. Communication				9		9
20.	M.E. Embedded System				4		4
21.	M.E. Design Engineering				6		6
22.	M.E. Structural Engineering				8		8
23.	M.E. (Mechanical with specialization in Thermal Engineering)				5		5
24.	M.Pharm (with specialization in Pharmaceuticals)				5		5
25.	M.E. Information Security				8		8
<b>Sub-Total</b>							<b>68</b>
26.	<b>Ph.D</b>					20	20
<b>Grand Total</b>							<b>744</b>



**B3.9 CAMPUS INTERVIEWS AND PLACEMENT**

Number of companies which conducted campus interviews	185
No of interviews	7624
No of offers made	618

The discipline-wise statistics and the list of organizations which conducted campus interviews during the year are given in **Annexure 5 (Part B3)**.

**B3.10 Department-wise report****B3.10.1 Biological Sciences****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>01</b>
<b>Associate Professors</b>	<b>06</b>
<b>Assistant Professors</b>	<b>08</b>
<b>Lecturers</b>	<b>0</b>
<b>Visiting Faculty</b>	<b>0</b>

**Head of the Department:** Prof K. Naga Mohan

**Contact details:** **Email:** [kommumohan@gmail.com](mailto:kommumohan@gmail.com)  
[mohankn@hyderabad.bits-pilani.ac.in](mailto:mohankn@hyderabad.bits-pilani.ac.in)

**Number of PhD Scholars:** 23

**i. Sponsored Research activities:****Ongoing projects**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Co-treatment of domestic septage and municipal solid waste landfill leachate using dry-thermophilic anaerobic digestion for the production of bioenergy and biofertilizer	P. Sankar Ganesh	BIRAC	28	2 Years
2	Characterization of a mouse embryonic stem cell model to study the effects of increased levels of DNA methyltransferase 1 (DNMT1) on abnormal neurogenesis	Dr Kommu NagaMohan	DST	40.38	2014-2017
3	Transgenic Embryonic stem cell models for studying the role of elevated levels of DNMT1, and DNMT3A in neuropsychiatric disorders.	Dr Kommu NagaMohan	DBT	25.0	2014-2017
4	Mechanistic basis of abnormal neurogenesis due to HSN1E-associated DNA methyltransferase 1 (Dnmt1) mutation and pharmacological intervention for phenotypic correction	Dr. Kommu Naga Mohan	DBT	68.40	2017-2020

**Projects sanctioned during the year**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1.	Polymorphism Studies and Molecular Characterization of the Plasmodial Rhoptry Neck Protein 2 (RON 2) from Indian Field Isolates	Prof. Vidya Rajesh	DST - SERB	34,92,000	3 years
2.	Harnessing mucosal immunity towards improved resistance against tuberculosis.	Ruchi Jain Dey	Ramalingaswamy Fellowship, DBT	32.50 Lakhs (Approved in Nov 2017, Awaiting sanction letter)	5 years (2018-2023)

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
3.	Epigenetics of megabase-scale rRNA gene regulation and genomic instability of rDNA and telomeres	Dr. Gireesha T. Mohannath	DST-SERB (Ramanujan Fellowship)	38 Lakhs (Approved in July 2017, Awaiting sanction letter)	5 years (2018-2023)
4	Mechanistic basis of abnormal neurogenesis due to HSN1E-associated DNA methyltransferase 1 (Dnmt1) mutation and pharmacological intervention for phenotypic correction	Prof. Kommu Naga Mohan	DBT	68.40	3 years

## ii. Publications:

1. U.Sita Ramyasree, Mahesh Akula, Anupam Bhattacharya and Jayati Ray Dutta, "Immobilized Lipase from *Lactobacillus plantarum* in meat degradation and synthesis of flavor esters" in *Journal of Genetic Engineering and Biotechnology*, 15, 2017, 331–334.
2. Imran Khan, Jayati Ray Dutta and Ramakrishnan Ganesan, *Lactobacillus* sps. Lipase mediated poly ( $\gamma$ -caprolactone) degradation, *International Journal of Biological Macromolecules*, Elsevier, 95, 2017, pp. 126-131.
3. Imran Khan, Sandeep K Vishwakarma, Aleem Ahmed Khan, Ramakrishnan Ganesan and Jayati Ray Dutta, In vitro hemocompatibility evaluation of gold nanoparticles capped with *Lactobacillus plantarum* derived lipase" in *Clinical Haemorrhology and microcirculation*, 2017 (Accepted).
4. Bhatnagar, A and Bandyopadhyay, D. "Characterization of cysteine thiol modifications based on protein microenvironments and local secondary structures", *Proteins: Structure, Function and Bioinformatics*, 2017, DOI: 10.1002/prot.25424
5. Evaluation of antioxidant enzyme responses in earthworms exposed to polystyrene nanoparticles and PAMAN dendrimers, *Pollution Research*, Vol 36(2), 312-318, EM International, 2017.
6. Environmental Impact on diversity and distribution of tintinnid (Ciliata: Protozoa) along Hooghly Estuary, India: a multivariate analysis, *Regional Studies in Marine Sciences*, Vol 12, 1-10, Elsevier, 2017.
7. Detection of TiO<sub>2</sub> Nanoparticles in Municipal Sewage Treatment Plant and their Characterization using Single Particle ICP-MS, *Bulletin of Environmental Contamination and Toxicology*, Vol 98(5), 595-600, Springer, 2017.
8. Manasi, Sridev Mohapatra, N. Rajesh and Vidya Rajesh, "Impact of heavy metal lead stress on polyamine levels in *Halomonas* BVR1 isolated from an industry effluent", *Scientific Reports - Nature* (2017), | 7: 13447 | DOI:10.1038/s41598-017-13893-0.
9. Mahesh Kumar Kalikiri, Madhu Poornima Mamidala, Ananth.N. Rao, Vidya Rajesh "Analysis and Functional characterization of sequence variations in ligand binding domain of thyroid hormone receptors in Autism Spectrum Disorder (ASD) patients", *Autism Research*, 4, (2017).
10. Inhibition of innate immune cytosolic surveillance by an *M. tuberculosis* phosphodiesterase. **Dey RJ**, Dey B, Zheng Y, Cheung LS, Zhou J, Sayre D, Kumar P, Guo H, Lamichhane G, Sintim HO, Bishai WR. *Nat Chem Biol*. 2017 Feb;13(2):210-217. doi: 10.1038/nchembio.2254.
11. Daipayan Ghosh, Sunetra Sen, Sridev Mohapatra. 2017. Modulation of proline metabolic gene expression in *Arabidopsis thaliana* under water-stressed conditions by a drought mitigating *Pseudomonas putida* strain. *Annals of Microbiology*. 67 (10): 655-668
12. Diti Shah, Sunetra Sen, A. Shalini, Daipayan Ghosh, Minakshi Grover, Sridev Mohapatra. An auxin secreting *Pseudomonas putida* rhizobacterial strain that negatively impacts water-stress tolerance in *Arabidopsis thaliana*. 2017. *Rhizosphere*. 3: 16-19

## iii. Conferences attended/papers presented:

1. Imran Khan, Raj Kumar Maguluri, Ravikiran, Jayati Ray Dutta and Ramakrishnan Ganesan: "Lactobacillus sps. Lipase capped Gold nanoparticles cytotoxic evaluation" in International Conference on Nanotechnology: Ideas, Innovations and Initiatives, 2017, Dec 06 - 08, IIT Roorkee.
2. Imran Khan, Ravikiran Nagarjuna, Almas Shamaila, Ramakrishnan Ganesan\* and Jayati Ray Dutta: "Highly monodisperse gold nanoparticles capped with probiotic *Lactobacillus plantarum* derived lipase" in National Symposium on Convergence of Chemistry and Materials, BITS-Pilani, Hyderabad, 2017, Dec, 21-22, India.
3. "Characterization of cysteine thiol modifications based on protein microenvironments and local secondary structures", Bhatnagar, A and Bandyopadhyay, D. Indian Biophysical Society, 2017, IISER Mohali, March 2017

4. Characterization of cysteine thiol modifications based on protein microenvironments and local secondary structures", Bhatnagar, A and Bandyopadhyay, D. Computational Chemistry, Biology and Medicine, 2017, IIIT Hyderabad, 29th and 30th November 2017
5. Characterization of protein microenvironment and evolutionary rates of active site residues in RubisCo with an aim to enhance fixation of CO<sub>2</sub>", Kiranmayi V and Bandyopadhyay, D, Convergence of Chemistry and Material" 2017, BITS Pilani, Hyderabad Campus, 21st and 22nd of December 2017
6. Anaerobic co-digestion of municipal solid waste landfill leachate and domestic septage in mesophilic and thermophilic conditions using novel continuously stirred tank reactors, International Conference on Emerging Trends in Biotechnology for Waste Conversion (ETBWC – 2017), Nagpur, October 2017.
7. Anaerobic digestion technology for treatment of organic waste and concurrent production of value added products: A case study of BITS Pilani, Hyderabad Campus, National Seminar on Design for sustainability using principles of Environment Management Hyderabad, October 2017
8. Gireesha T. Mohannath. Chromosomal position determines activity status of Ribosomal RNA genes on a multi-megabase scale in Arabidopsis. In: International Conference on Plant Developmental Biology and 3<sup>rd</sup> National Arabidopsis Meeting, December 2017 at NISER, Bhubaneswar-India.
9. Daipayan Ghosh, Sunetra Sen, Sridev Mohapatra. Modulation of proline metabolic gene expression in Arabidopsis thaliana under water-stressed conditions by a drought mitigating Pseudomonas putida strain. International conference in plant developmental biology, NISER, Bhubaneswar Dec 12-16, 2017.
10. Sunetra Sen, Daipayan Ghosh, Sridev Mohapatra. Modulation of polyamine metabolism in Arabidopsis thaliana by a drought mitigating Pseudomonas putida strain. International conference in plant developmental biology, NISER, Bhubaneswar Dec 12-16, 2017.
11. K. Naga Mohan, Sonal Saxena and Poonam Naik. Stem cell models for studying the role of epigenetic machinery in abnormal neurogenesis. October 17-21, 2017.

**iv. Invited Talks given by BITS faculty:**

1. International Conference on NANO- AND FUNCTIONAL MATERIALS: Interface between Science & Engineering (NFM-2017), BITS PILANI, PILANI Campus, 16 – 18 November 2017, "How computational studies can complement experimental studies on Functional Materials?"
2. Dr. Vivek Sharma, Role of lncRNA DDSR1 in DNA Repair: Implications for breast cancer, 9<sup>th</sup> RNA Group meeting, BHU Varanasi, October 26-28, 2017
3. P. Sankar Ganesh, Contemporary approaches in toxicology in the era of nanotechnology, Center for Environmental Science (CES), College of Natural Sciences of Addis Ababa University, Ethiopia, September, 2017.
4. K. Naga Mohan, A search for epimutations in Autism. Institute of Genetics and Hospital for Genetic Diseases, Osmania University, National conference on "Global Trends in Genetic Diagnosis and Therapeutics" February 22-33, 2017.

**v. Invited talks arranged in the department:**

Dr. Vikram Saini (University of Alabama); Sep1, 2017, arranged by Dr. Ruchi Jain Dey

1. Professor and Dean, JNU, Delhi, 10th February, 2017, invited by Dr. Debashree Bandyopadhyay

**vi. Awards and recognitions won by faculty and students**

- A. OPERA Award (August, 2017): Dr. TRINATH JAMMA, Vivek Sharma
- B. Ramalingaswami Fellowship (November, 2017): Dr. Ruchi Jain Dey
- C. Ramanujan Fellowship (July 2017): Dr. Gireesha T. Mohannath
- D. Ramalingaswami Fellowship (November, 2017): Dr. Gireesha T. Mohannath

**vii. Faculty Development, International Collaboration & Industry Immersion**

1. Collaboration with Marcin I. Apostol, ADRx. Inc, California, 91360, USA
2. Initiated MoU with Center for Environmental Science (CES), College of Natural Sciences of Addis Ababa University, Ethiopia, for student and faculty exchange.
3. Dr. Gireesha T. Mohannath is establishing Collaboration with Dr. Sarath Chandra Janga, Assistant Professor, affiliated with:  
School of Informatics and Computing, Indiana University & Purdue University Indianapolis (IUPUI),

Department of Medical & Molecular Genetics, Center for Computational Biology & Bioinformatics, Division of Gastroenterology/Hepatology, Department of Medicine, Indiana University School of Medicine

**Objective:** To analyze human genomes and RNA sequencing data to understand patterns and mechanisms of 45S rRNA gene regulation and rDNA genome instability in healthy and cancerous tissues.

**viii. Significant new equipments/experimental facility added during the year:**

**ix. Departmental association/club activities:**

**P. Sankar Ganesh**

1. Served as president/Faculty Coordinator to Biological Sciences Association, Synapsis
2. Students of Synapsis and the course Ecology & Environmental Science, visited the Nehru Zoological Park for a session on biodiversity conservation in Feb, 2017

**Ruchi Jain Dey**

1. Serving as member of DCA

**Gireesha T. Mohannath**

1. Synapsis. Under synapsis several activities have been initiated to benefit both the faculty members and the students of the department.

**x. Major maintenance, renovations or new construction reports:**

Stem cell laboratory is relocated and expanded to include state of the art facilities for culturing embryonic and adult stem cells in the department.

**xi. Major equipments acquired during the year:**

### B3.10.2 Chemical Engineering

**Number of faculty members**

<b>Senior Professors, Professors</b>	<b>0</b>
<b>Associate Professors</b>	<b>2</b>
<b>Assistant Professors</b>	<b>7</b>
<b>Lecturers</b>	<b>1</b>
<b>Visiting Faculty</b>	<b>0</b>

**Head of the Department:** Prof. Srikanta Dinda

**Contact details:** 040 - 66303-586; **E-mail:** srikantadinda@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 12

**i. Sponsored Research activities:**

**(a) Ongoing projects**

<b>S.No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount (Lakhs)</b>	<b>Duration</b>
1	Treatment of Nitrogenous Waste using Microalgae and its Utilization for Production of Biofuels and Other Value Added Products	Dr. Asma Ahmed	BITS-Pilani	45	Feb. 2014 (36 months)
2	Biofuels from lignocellulosic biomass waste: Biosolubilization and biomethanation of Lignin	Dr. Asma Ahmed	DST	27.2	July 2014 (36 months)
3	Nano-scale Characterization of Human Hair Fibres by using Indentation Technique	Dr. Ramesh Babu Adusumalli	DST	29.9	Aug. 2014 (36 months)
4	Studies on CO <sub>2</sub> Capture from Flue Gases using Regenerable Solid Adsorbents	Prof. Srikanta Dinda	CSIR	23.8	Oct. 2015 (36 months)

**(b) Projects sanctioned during the year: None****ii. Journal Publications:**

1. I.Sreedhar, Sneha Khaitan, Rajat Gupta, B. M. Reddy, A. Venugopal, "A tryst with Process and Engineering Trends in Forward Osmosis", *Environmental Science: Water Research and Technology*, 2017, Accepted.
2. V. Krishna, V. Vijay Kumar, G. Naresh, S. Naveen, A. Hari Padmasri, I. Sreedhar, A. Venugopal, "Zn modified  $\text{CuCr}_2\text{O}_4$  as stable and active catalyst for the synthesis of 2,6 dimethylpyrazine: Valorization of crude glycerol obtained from biodiesel plant", *Industrial and Engineering Chemistry Research*, 56(41), 2017, 11664-11671.
3. P. Suresh, I. Sreedhar, R. Vaidhiswaran, A. Venugopal, "A comprehensive review on process and engineering aspects of pharmaceutical wet granulation", *Chemical Engineering Journal*, 328, 2017, 785-815.
4. B. Sreenivasulu, I. Sreedhar, A. Venugopal, B. M. Reddy, K. V. Raghavan, "Thermo-kinetic investigations of high temperature carbon capture using Coal-flyash doped sorbent", *Energy & Fuels*, 31(6), 6320-6328, 2017.
5. Sreedhar, Tanisha Nahar, B. Srinivas, A. Venugopal, "Carbon capture by Absorption-Path Covered and Ahead", *Renewable and Sustainable Energy Reviews*, 76, 2017, 1080-1107.
6. P. Suresh, V. K. Surasani, I. Sreedhar, "Investigations at Industrial Scale on Granule and Tablet Attributes in High Shear Granulator", *Particulate Science and Technology*, 2017,
7. B. Sreenivasulu, I. Sreedhar, B. M. Reddy, K. V. Raghavan, "Stability and Carbon Capture Enhancement by Coal Fly -ash Doped Sorbents at a High Temperature", *Energy and Fuels*, 31 (1), 2017, 785-794.
8. Sreedhar, R. Vaidhiswaran, Bansi M. Kamani, A. Venugopal, "Process and Engineering Trends in Membrane based Carbon Capture", *Renewable and Sustainable Energy Reviews*, 68, 2017, 659-684.
9. Bhaskar Soman, Swapna Challagulla, Soumitra Payra, **Srikanta Dinda**, Sounak Roy, A probe on surface morphology and active sites of  $\text{TiO}_2$  towards photo assisted catalysis, *Research on Chemical Intermediates*, 2017, Accepted.
10. Appala Naidu U., **Srikanta Dinda**, Kinetics of thermal decomposition of ketonic resins, *Materials today communications*, 12, 2017, 88-94.
11. S. Aparna, **D. Purnima**, and R. B. Adusumalli, "A Review on Various Compatibilizers and its Effect on Mechanical Properties of Compatibilized Nylon Blends", *Journal of Polymer-Plastic Technology and Engineering*, 56(6), 2017, 617-634.
12. Soham Jariwala, Saksham Phul, Rohit Nagpal, Sanket Goel, Balaji Krishnamurthy, "Modeling the performance of an enzymatic glucose fuel cell", *Journal of Electroanalytical Society*, 801, 2017, 354-359.
13. Screening Pencil leads coated with MWCNT and PANI as enzymatic bio fuel cell (EBFC) cathode, Madhavi Bandapati, Prabhat K. Dwivedi, Balaji Krishnamurthy, Young Ho Kim, Gyu Man Kim, Sanket Goel, *International Journal of Hydrogen Energy*, 42 (2017) 27220-27229.
14. Ahmed, J. Nimmakayala, A. Ramesh, "Improved Ammonium Removal from Industrial Wastewater through systematic adaptation of wild type *Chlorella pyrenoidosa*", *Water Science and Technology* 75 (1), 2017, 182-188.
15. Trishikhi Raychoudhary, **Vikranth Kumar Surasani**, "Implication of Surface Modified NZVI Particle Retention in the Porous Media with the Help of 1-D Transport Model". *Journal of Earth System Science*, 2017,

**iii. Book Chapter**

1. S. Dinda, Nikhil S. Reddy V., Appala Naidu U., S. Girish, *Materials, Energy and Environment Engineering*, Springer nature, 2017, ISBN: 978-981-10-2674-4.

**iv. Patent published/issued**

1. S. Dinda, P. K. Chinthala, A. Gohel, A. Yadav, S. Mandal, G. Ravichandran and A. K. Das, Process and composition of catalyst/additive for reducing fuel gas yield in fluid catalytic cracking (FCC) process. 2017, Pat. No: US 9783743B2.

**v. Conferences attended/papers presented:**

1. I Sreedhar, Md Shoebuddin Habeeb, B Sreenivasulu, "Friedel Crafts Acylation of Anisole with Modified Zeolites", ACBES, Dubai, Oct 2017.
2. P.Suresh, I.Sreedhar, V.K Surasani, "Novel Design of Continuous Granulator for Pharmaceutical Industrial Applications", IHMTC 2017, BITS Pilani Hyderabad, Dec 2017.
3. B.Sreenivasulu, I.Sreedhar, K V Raghavan, "Favorable thermodynamics in High temperature carbon capture using coal fly ash doped sorbents", IHMTC 2017, BITS Pilani Hyderabad, Dec 2017.

4. Premanath Murge, Bipin Chakravarthy, **Srikanta Dinda**, Material development from rice husk for CO<sub>2</sub> capture, 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMT-2017), Hyderabad, 27-30 December, **2017**.
  5. Appala Naidu Uttaravalli, **Srikanta Dinda**, Self-Polymerization Kinetics of Cyclo ketone, **CHEMCON-2017**, HIT, West Bengal, India, 27-30 December, **2017**.
  6. Sundaraiah Konda, **Srikanta Dinda**, Senapathy Krishnamachary, Cracking and heat sink characteristics of H-carene fuel for spaceship application, **CHEMCON-2017**, HIT, West Bengal, India, 27-30 December, **2017**.
  7. **Srikanta Dinda**, Premanath Murge, Bipin Chakravarthy, Sounak Roy, Zeolite supported amine-based sorbent for CO<sub>2</sub> Capture, **CHEMCON-2017**, HIT, West Bengal, India, 27-30 December, **2017**.
  8. Appala Naidu Uttaravalli, **Srikanta Dinda**, Thermal Stability and Degradation Characteristics of In-house Developed Polymeric Material, 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMT-2017), Hyderabad, 27-30 December, **2017**.
  9. "Effect of PP and PP-g-MA on mechanical properties of PA6/PP blends". S. Aparna, **D. Purnima** and Ramesh Babu Adusumalli. International Conference on Advances in Polymer Science & Technology APA-2017, New Delhi, 23-25 November, 2017.
  10. **V. K. Surasani**, Bithunshal U.B., Reactive Transport Modelling of Geological CO<sub>2</sub> Sequestration in Deccan Volcanic Province, 24<sup>th</sup> National and 2<sup>nd</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMT-2017), BITS, Pilani-Hyderabad Campus, 27-30 December 2017.
  11. Ramesh Babu Adusumalli, Chandrakala Kunchi, Karthik Venkateshan; Hardness and Modulus Measurement of Single Scalp Hair Fibers; 10th World Congress for Hair Research; Kyoto-Japan, 174, 31.10-03.11.2017.
  12. Karthik Venkateshan, Chandrakala Kunchi, Ramesh Babu Adusumalli; Thermal and Mechanical behaviour of Human Hair Fibers; 10th World Congress for Hair Research; Kyoto-Japan, 174, 31.10-03.11.2017.
  13. Chandrakala K, Lokesh Anaparthi and Ramesh Babu Adusumalli; Application of Optical, SEM and Confocal Laser Scanning Microscopy in Hair Research; Electron Microscopy Society of India (EMSI) Proceedings, Mahabalipuram; ISBN No.: 978-81-933428-1-7; 386-388, 17-19 July 2017
  14. P. Pavan Kumar, Ramesh Adusumalli. Finite element analysis of short beam shear test of CFRP Laminates; INTERNATIONAL CONFERENCE ON COMPOSITE MATERIALS AND STRUCTURES, 27-29th December 2017, HYDERABAD (ABSTRACT ID: 412)
- vi. Invited Talks given by BITS faculty:**
1. Prof. I, Sreedhar, keynote speech at ACBES, Dubai UAE, (International Conference on Agricultural, Chemical, Biological and Environmental Sciences) on 18th Oct 2017 on "Kinetics and Engineering of High Temperature Carbon Capture using Coal flyash Doped Sorbents".
  2. Dr. Asma Ahmed, invited talk at Analytix 2017, March 2017, Fukuoka, Japan, on Analytical Methods to Evaluate Fungal Degradation of Lignocellulosic Biomass".
  3. *Dr. Ramesh babu, invited talk on the occasion of Engineers Day; Significance of Cellulose and Carbon Fiber technologies, CVSR Engineering College, Hyderabad (autonomous); 15th Sept. 2017;*
- vii. Invited talks arranged in the department: None**
- viii. Awards and recognitions won by faculty and students: None**
- ix. Faculty Development, International Collaboration & Industry Immersion**
- Dr. Vikranth K. Surasani participated in Industry Immersion program with Schneider Electric company.
- x. Significant new equipment/experimental facility added during the year:**
1. Automated Distillation apparatus, Orbital shaking Incubator, Conradson carbon and smoke point apparatus, Muffel furnace, Optical microscope, chiller, vacuum oven, Granulator air lock valve
- xi. Departmental association/club activities:**
1. The association released the magazine 'Equilibria' in April 2017. Association of Chemical Engineers (ACE) was involved in ATMOS – Annual Technical Fest of BITS Pilani Hyderabad Campus, October 2017. As part of the ATMOS, students and faculty were actively involved in conducting Quiz, Paper presentation, technical games, Workshops etc.
- xii. Major maintenance, renovations or new construction reports:**
- One room for hosting experimental facilities.
- xiii. Major equipment acquired during the year:**
- Automated Distillation apparatus,

**B3.10.3 Chemistry****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>02</b>
<b>Associate Professors</b>	<b>06</b>
<b>Assistant Professors</b>	<b>06</b>
<b>Lecturers</b>	
<b>Visiting Faculty</b>	

**Head of the Department:** Prof. Manab Chakravarty

**Contact details:** Email: [manab@hyderabad.bits-pilani.ac.in](mailto:manab@hyderabad.bits-pilani.ac.in)

**Number of PhD Scholars:** Full Time 21; Part-time 10

**I. Sponsored Research activities:****(a) Ongoing projects**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Synthesis, Study of optical properties and Anti-cancer activity of di-substituted tetracyanoquinodimethane	Prof.Jayanty Subbalakshmi	DST	25.74605	3 years
2.	Synthesis of Iron Oxide Nanoparticles for Propellant Applications	Dr Balaji Gopalan	Premier Explosives Ltd	12.15	1 year
3.	Finding aggregation-induced emission active materials	Prof.Manab Chakravarty	SERB	38.38	3years (till 2/1/2018)
5.	Crack growth direction in amorphous silica under extreme temperature using molecular mechanics	Dr Gaurav Singh (BITS Pilani, Goa campus)	ISRO	16.08	Aug 2017 - July 2019
6.	Photocatalytic reduction of CO <sub>2</sub> to biofuels	Dr Sounak Roy	CSIR	4	2017-2020
7.	CO <sub>2</sub> capture from flue gases using regenerable solid adsorbents	Prof.Srikanta Dinda/Sounak Roy (Co-PI)	CSIR	24.5	2015-2018
8.	Investigation of the folding of Cysteine-rich Neurotoxins in Ionic Liquid by Molecular Dynamics Simulation and Quantum Mechanical Calculations.	Dr Durba Roy	DST-SERB	25.228	2015-2018

**(b) Projects sanctioned during the year**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1.	Efficacy of appropriately tailored biopolymer and carbonaceous adsorbents for the separation and recovery of Europium.	Prof. N Rajesh	DST	29	3 years (2017-2020)
2.	Synthesis, Study of optical properties and Anti-cancer activity of di-substituted tetracyanoquinodimethane	Prof.Jayanty Subbalakshmi	DST	25.74605	3 years
3.	Investigations on naphthalene and anthracene-based phosphonates/phosphates: Important sources for alkene based new AIEgens and polyaryllalkanes	Prof. Manab Chakravarty	CSIR	18	3 years (2017-2020)
5.	Photocatalytic reduction of CO <sub>2</sub> to biofuels	Dr Sounak Roy	CSIR	4	2017-2020

**II. Publications:**

1. R. Nagarjuna, Shivani Sharma, N.Rajesh and R.Ganesan, Effective Adsorption of Precious Metal Palladium over Polyethyleneimine-Functionalized Alumina Nanopowder and Its Reusability as a Catalyst for Energy and Environmental Applications, ACS Omega, Volume 2, Page No. 4494-4504
2. Shivani Sharma and N.Rajesh, Expedient preparation of  $\beta$ -cyclodextrin grafted chitosan using microwave radiation for the enhanced palladium adsorption from aqueous waste and an industrial catalyst, J.Environ.Chem.Eng, Volume 2, Page No. 1927-1935
3. Shivani Sharma, A.S.K.Kumar and N.Rajesh, A perspective on diverse adsorbent materials to recover precious palladium and way forward, Volume 7, Page No. 52133-52142
4. M.Barathi, A.S.K.Kumar, J.Kodali, S.Miital, D.Samhith and N.Rajesh, Probing the interaction between fluoride and polysaccharides in Al(III)-Zr(IV) modified tea waste using diverse analytical characterisation techniques, Chemistry select, Volume 2, 10123-10135
5. Manasi, S.Mohapatra, V.Rajesh and N.Rajesh, Impact of heavy metal lead stress on polyamine levels in *Halomonas BVR1* isolated from an electronic industry effluent, Scientific reports, Volume 7, Page No. 13447
6. Y.Thigulla, S. Ranga, S. Ghosal, J. Subbalakshmi and Anupam Bhattacharya, One pot Two step Nazarov-Schmidt Rearrangement for the synthesis of D-lactam systems, Chemistry Select, Volume 2, Page No. 9744-9750
7. S.V. Pawar, T. Uday Kumar, P. Trivedi, B. Ghosh, Anupam Bhattacharya and Amit Nag, FRET-Mediated Zn<sup>2+</sup> Sensing in Aqueous Micellar Solution: Application in Cellular Imaging and Molecular Logic Gate, Chemistry Select, Volume 2, Page No. 8731-8737.
8. Y.Thigulla, T. Uday Kumar, P. Trivedi, B. Ghosh and Anupam Bhattacharya, One step synthesis of fused chromeno[4,3-b]pyrrolo[3,2-h]quinolin-7(1H)-One Compounds and their Anticancer Activity Evaluation, Chemistry Select, Volume 2, Page No. 2718-2721
9. T.R. Penjarla, M. Kandarapu, S. Baquer and Anupam Bhattacharya, A straight forward and first total synthesis of Penilumamides B-D, Tetrahedron Letters, Volume 58, Page No. 3347-3349
10. S. R. Uppada, M. Akula, Anupam Bhattacharya and Jayati Ray Dutta, Immobilized lipase from *Lactobacillus plantarum* in meat degradation and synthesis of flavor esters, Journal of Genetic engineering and Biotechnology, Volume 15, Page No. 331-334
11. Suresh, A.,Srinivasarao, S.,Agnieszka, Ewa, AK., Mallika, A., Christian, L., K.V.G. Chandra Sekhar; Design and synthesis of 9H-fluorenone, Chemical Biology and Drug Design, DOI: 10.1111/cbdd.13127,
12. Suresh, N, Chitti S, Suresh, A, Bhattacharjee D, Rao BB, Jain N, Alvala M, Chandra Sekhar, K.V.G.; Design and synthesis of 4-morpholino-6-(1,2,3,6-tetrahydropyridin-4-yl)-N-(3,4,5-trimethoxyphenyl)-1,3,5-triazin-2-amine analogues as tubulin polymerization inhibitors, Bioorganic & Medicinal Chemistry Letters, Volume 27, Page No. 3794-3801
13. Lindemann, M., Deuther-Conrad, W., Moldovan, R., Chandra Sekhar, K.V.G., Brust, P., Wenzel, B; Do spiroindolines have the potential to replace vesamicol as lead compound for the development of radioligands targeting the vesicular acetylcholine transporter?, Bioorganic & Medicinal Chemistry, Volume 25, Page No. 5107-5113.
14. Suresh, A.,MahalakshmiNaidu.K.,Srinivasarao, S.,Agnieszka, Ewa, AK., Misra, S., Murugesan, S., Chander, S., Krishnan, R., K.V.G. Chandra Sekhar; Identification and development of pyrazolo[4,3-c]-pyridine carboxamides as *Mycobacterium tuberculosis* pantothenate synthetase inhibitors, New Journal of Chemistry, Volume 41, Page No. 347-357.
15. J. Subbalakshmi, G. Dhruvasamhith, S. M. Hussain., Polyvinyl Alcohol processed Templated Polyaniline Films: Preparation, Characterization and Assessment of Tensile Strength", International Journal of Chemical, Molecular, Nuclear, Materials and Metallurgical Engineering, Volume 11(1), Page No. 60-64
16. Y.Thigulla, S. Ranga, S. Ghosal, J. Subbalakshmi, Anupam Bhattacharya, One pot Two step Nazarov-Schmidt Rearrangement for the synthesis of D-lactam systems, Chemistry Select, Volume 2, Page No. 9744-9750
17. Hitesh Kumar Saini, Nitesh Kumar Nandwana, Shiv Dhiman and Krishnan Rangan, Anil Kumar, Sequential Copper-Catalyzed Sonogashira Coupling, Hydroamination and Palladium-Catalyzed Intramolecular Direct Arylation: Synthesis of Azepino-fused Isoindolinones, European Journal of Organic Chemistry, Volume: Organic Chemistry, Page No. 7277-7282,
18. P.V. Sri Ramya, Srinivas Angapelly, Bathini Nagendra Babu, Chander Singh Digwal, Atulya Nagarsenkar, Gannaju Srinivasulu, B Prasanth, Mohammed Arifuddin, Kumar Kanneboina, Krishnan Rangan, and Ahmed Kamal; Metal-Free C-C Bond Cleavage: One-Pot Access to 1,4-Benzoquinone linked N-Formyl Amides/Sulfonamides/Carbamates using Oxone; Asian Journal of Organic Chemistry, Volume 6, Page No. 1008-1013



19. Suresh Amaroju, Mahalakshmi Naidu Kalaga Singireddi Srinivasarao, Agnieszka Napiórkowska, Ewa Augustynowicz-Kopec, Sankaranarayanan Murugesan, Subhash Chander, Rangan Krishnan and Kondapalli Venkata Gowri Chandra Sekhar; Identification and development of pyrazolo[4,3-c]pyridine carboxamides as Mycobacterium tuberculosis pantothenate synthetase inhibitors; *New Journal of Chemistry*, Volume 41, Page No. 347-357
20. M. Zubair Khalid Baig, Prabhat Kumar Sahu, Moloy Sarkar, and Manab Chakravarty\*; Haloarene-Linked Unsymmetrically Substituted Triarylethenes: Small AIEgens To Detect Nitroaromatics and Volatile Organic Compounds; *J. Org. Chem.*; DOI : 10.1021/acs.joc.7b02438
21. M. Zubair Khalid Baig, R. N. Prasad Tulichala, Shweta Pawar, Amit Nag\* and Manab Chakravarty\*; A single fluorescent probe as systematic sensor for multiple metal ions: focus on detection and bio imaging of Pd<sup>2+</sup>; *Sensors and Actuators B: Chemical*, Volume 243, Page No: 226
22. K. C. Kumara Swamy,\* Manab Chakravarty, Shubham Debnath and M. Nagarjuna Reddy; REACTION OF ALLENYLPHOSPHONATES/ALLENYLPHOSPHINE OXIDES WITH Thiocyanates ISOTHIOCYANATES OR OXALYL CHLORIDE/ AgNO<sub>3</sub>; Phosphorus, Sulfur and Silicon, Volume 192; Page No.763
23. M. Zubair Khalid Baig,<sup>a</sup> Debashis Majhi,<sup>b</sup> R. N. Prasad Tulichala,<sup>c</sup> Moloy Sarkar<sup>b</sup> and Manab Chakravarty\*; Easy access to new anthracenyl  $\pi$ -conjugates: Generation of distinct AIE-active materials, *J. Mater. Chem. C*, Volume 5, Page No.2380
24. S. Challagulla, K. Tarafder, Ramakrishnan Ganesan, Sounak Roy; All that glitters is not gold: A probe into photocatalytic nitrate reduction mechanism over noble metal doped and undoped TiO<sub>2</sub>.; *Journal of Physical Chemistry C*; DOI: 10.1021/acs.jpcc.7b07973,
25. S. Challagulla, R. Nagarjuna, Ramakrishnan Ganesan, Sounak Roy; TiO<sub>2</sub> synthesized by various routes and its role on environmental remediation and alternate energy production; *Nano-Structures & Nano-Objects*, Volume 12, Page No. 147
26. R. Nagarjuna, S. Challagulla, P. Sahu, Sounak Roy, Ramakrishnan Ganesan; Polymerizable sol-gel synthesis of nano-crystalline WO<sub>3</sub> and its photocatalytic Cr(VI) reduction under visible light, *Advanced Powder Technology*, Volume 28, Page No. 3265
27. S. Challagulla, K. Tarafder, Ramakrishnan Ganesan, Sounak Roy; Structure sensitive photocatalytic reduction of nitroarenes over TiO<sub>2</sub>., *Scientific Reports*, Volume 7, Page No. 8783
28. S. Challagulla, R. Nagarjuna, Sounak Roy, Ramakrishnan Ganesan; Scalable free-radical polymerization based sol-gel synthesis of SrTiO<sub>3</sub> and its photocatalytic activity, *Chemistry Select*, Volume 48, Page No. 4836.
29. R. Nagarjuna, S. Challagulla, Ramakrishnan Ganesan, Sounak Roy; High rates of Cr(VI) photoreduction with magnetically recoverable nano-Fe<sub>3</sub>O<sub>4</sub>@Fe<sub>2</sub>O<sub>3</sub>/Al<sub>2</sub>O<sub>3</sub> catalyst under visible light, *Chemical Engineering Journal*, Volume 59, Page No. 308
30. I Khan, JR Dutta, R Ganesan; Lactobacillus sps. lipase mediated poly ( $\epsilon$ -caprolactone) degradation, *International journal of biological macromolecules*, Volume 95, Page No. 126
31. R Nagarjuna, S Sharma, N Rajesh, R Ganesan; Effective Adsorption of Precious Metal Palladium over Polyethyleneimine-Functionalized Alumina Nanopowder and Its Reusability as a Catalyst for Energy and Environmental Applications, *ACS Omega*, Volume 2, Page No. 4494
32. Mohammad SM Saifullah, Mohamed Asbahi, Maryam Binti-Kamran Kiyani, Sudhiranjan Tripathy, Esther AH Ong, Asadullah Ibn Saifullah, Hui Ru Tan, Tanmay Dutta, Ramakrishnan Ganesan, Suresh Valiyaveetil, Karen SL Chong; Direct Patterning of Zinc Sulfide on a Sub-10 Nanometer Scale via Electron Beam Lithography, *ACS Nano*, Volume 11, Page 9290
33. Ranga Santosh and Subhas Ghosal; Accurate quantum mechanical rate coefficients for D+ H<sub>2</sub> (v, j) reaction: From ultracold to thermal temperature limit, *Computational and Theoretical Chemistry*, Volume 1102, Page No. 69-73
34. Yadagiri T, Santosh R, Subhas Ghosal, J Subbalakshmi, and A Bhattacharya; One-Pot Two Step Nazarov-Schmidt Rearrangement for the Synthesis of Fused d-Lactam Systems, *Chemistry Select*, Volume 2, Page No. 9744-50
35. Pawar, S.; Uday Kumar, T.; Trivedi, P.; Ghosh, B.; Bhattacharya, A. and Nag, A.\*; FRET Mediated Zn<sup>2+</sup> Sensing in Aqueous Micellar Solution: Application in Cellular Imaging and Molecular Logic Gate, *ChemistrySelect*, Volume 2, Page No. 8731
36. B. Soman, S. Challagulla, S. Payra, Srikanta Dinda, Sounak Roy; A probe on surface morphology and active sites of TiO<sub>2</sub> towards photo assisted catalysis, *Research on Chemical Intermediates*, DOI: 10.1007/s11164-017-3227-6
37. S. Challagulla, K. Tarafder, Ramakrishnan Ganesan, Sounak Roy; All that glitters is not gold: A probe into photocatalytic nitrate reduction mechanism over noble metal doped and undoped TiO<sub>2</sub>.; *Journal of Physical Chemistry C*; DOI: 10.1021/acs.jpcc.7b07973,

38. S. Challagulla, R. Nagarjuna, Ramakrishnan Ganesan, Sounak Roy; TiO<sub>2</sub> synthesized by various routes and its role on environmental remediation and alternate energy production; Nano-Structures & Nano-Objects, Volume 12, Page No. 147
39. R. Nagarjuna, S. Challagulla, P. Sahu, Sounak Roy, Ramakrishnan Ganesan; Polymerizable sol-gel synthesis of nano-crystalline WO<sub>3</sub> and its photocatalytic Cr(VI) reduction under visible light, Advanced Powder Technology, Volume 28, Page No. 3265
40. S. Challagulla, K. Tarafder, Ramakrishnan Ganesan, Sounak Roy; Structure sensitive photocatalytic reduction of nitroarenes over TiO<sub>2</sub>, Scientific Reports, Volume 7, Page No. 8783
41. Shraavan. S, S. Challagulla, S. Banerjee, Sounak Roy; Unusual photoluminescence of Cu/ZnO and its correlation with photocatalytic reduction of Cr(VI), Bulletin of Materials Science, Volume 40, Page No. 1415.
42. S. Challagulla, R. Nagarjuna, Sounak Roy, Ramakrishnan Ganesan; Scalable free-radical polymerization based sol-gel synthesis of SrTiO<sub>3</sub> and its photocatalytic activity, Chemistry Select, Volume 48, Page No. 4836.
43. S. Challagulla, Sounak Roy; The role of fuel to oxidizer ratio in solution combustion synthesis of TiO<sub>2</sub> and its influence on photocatalysis, Journal of Materials Research, Volume 32, Page No. 2765.
44. R. Nagarjuna, S. Challagulla, Ramakrishnan Ganesan, Sounak Roy; High rates of Cr(VI) photoreduction with magnetically recoverable nano-Fe<sub>3</sub>O<sub>4</sub>@Fe<sub>2</sub>O<sub>3</sub>/Al<sub>2</sub>O<sub>3</sub> catalyst under visible light, Chemical Engineering Journal, Volume 59, Page No.308.
45. Sounak Roy, Madras, G; Photocatalytic NO<sub>x</sub> Abatement: A Short Review, Current Organic Chemistry, Volume 19, Page No. 2022.
46. Karuna Anna Sajeevan and Durba Roy; Temperature dependent molecular dynamics study reveals an ionic liquid induced 310 to  $\alpha$ -helical switch in a neurotoxin, Peptide Science, Volume 180, Page No. e23009.
47. Karuna Anna Sajeevan and Durba Roy; Aqueous ionic liquids influence the disulfide bond isoform equilibrium in conotoxin AulB: a consequence of the Hofmeister effect?, Biophysical Reviews, DOI: 0.1007/s12551-017-0391-2.

### III. Conferences attended/papers presented:

- T.Sathvika, Manasi, V.Rajesh, N.Rajesh, Synergistic effect of nitrogen fixing bacteria immobilized in a carbonaceous material (MWCNT) for the sequestration of hexavalent chromium, 5th Symposium on Advanced Biological Chemistry, Kolkata Jan 7-11,2017
- T.Sathvika, Manasi, V.Rajesh, N.Rajesh, An endomycorrhizal (fungal) spores-clay combination for the removal of hexavalent chromium from aqueous medium, 21st CRSI conference, IICT Hyderabad, July 14-16,2017.
- Kodali Jagadeesh, N.Rajesh, Adsorption of monocrotophos from water, 21st CRSI conference, IICT Hyderabad July 14-16,2017.
- T. Yadagiri and Anupam Bhattacharya, One pot two step synthesis of fused delta lactam systems by systematic application of Nazarov-Schmidt rearrangement, 21st CRSI conference, IICT Hyderabad, July 14-16, 2017
- T. Uday Kumar, Amit Nag and Anupam Bhattacharya, Selective Fe<sup>3+</sup> detection by using 2-(3H-pyrrolo[2,3-c]quinolin-4-yl)aniline, 21st CRSI conference, IICT Hyderabad, July 14-16, 2017.
- S. Srinivas Rao, A. Suresh, K. Mahalakshmi Naidu, Napiórkowska Agnieszka, Augustynowicz-Kopec Ewa, Sankaranarayanan Murugesan, Subhash Chander, Rangan Krishnan and K.V.G. Chandra Sekhar, Identification and development of 1,2,3-triazole derivatives of fused pyrazole-dihydropyridine as Mycobacterium tuberculosis Pantothenate synthetase inhibitors, 21st National Symposium in Chemistry, organized by CRSI at Indian Institute of Chemical Technology, Hyderabad, July 13-16, 2017.
- S. Srinivas Rao, A. Suresh and K.V.G. Chandra Sekhar, Design and synthesis of 1,2,3-triazolyl 9H-fluorenone analogues as anti-tubercular agents, National Symposium on Convergence of Chemistry & Materials (CCM-2017) in chemistry, organized by BITS-Pilani, Hyderabad campus, December 21-22, 2017. (Poster presentation)
- C. Surendar, A. Suresh and K.V.G. Chandra Sekhar, Design and synthesis of novel triazole analogues as antiproliferative agents, National Symposium on Convergence of Chemistry & Materials (CCM-2017) in chemistry, organized by BITS-Pilani, Hyderabad campus, December 21-22, 2017. (Poster presentation).
- P. Ravikiran, R. Punna Rao, B. Mayank, K.V.G. Chandra Sekhar, Analysis of formaldehyde – a human carcinogen in drug substance using ultra-high performance liquid chromatograph., National Symposium on Convergence of Chemistry & Materials (CCM-2017) in chemistry, organized by BITS-Pilani, Hyderabad campus, December 21-22, 2017. (Poster presentation).

- J. Subbalakshmi, ICSSC -2017, London, Jan 19-20, 2017, Conference proceedings, London United Kingdom .
- J. Subbalakshmi, Poster presented on Synthesis and Characterization of 7,7-bis(N,N-Dimethylethylenediamino)- 8,8-Dicyanoquinodimethane-Picrate Complex ,
- Krishnan Rangan, Synthesis, characterization, crystal structure of bis(phenanthroline)oxalatonickel(II) pentahydrate, 24th Congress International Union of Crystallography, IUCr 2017.
- Moghal Zubair Khalid Baig, Durba Roy and Manab Chakravarty, Anthracenyl  $\pi$ -conjugates with weak donor/nitro acceptor as highly solvatochromic fluorophore: Contrast with cyano analogue, CRSI-2017, IICT, Hyderabad, July 2017.
- Moghal Zubair Khalid Baig, Durba Roy and Manab Chakravarty, Anthracenyl  $\pi$ -conjugates with weak donor/nitro acceptor as highly solvatochromic fluorophore: Contrast with cyano analogue, CCM-2017, BITS-Pilani Hyderabad, December 2017.
- Ashish Saxenaa, Ragamadhuri Nallam, Jalaiah Nandanavanam, and Ramakrishnan Ganesan, Polyethylene glycol (PEG) Functionalization Strategy for Stable Al<sub>2</sub>O<sub>3</sub> Nanofluids towards Heat Exchange Applications, 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (ISHMT-2017),
- Simanta Lahkar, Subhas Ghosal and Gaurav Singh, ATOMISITC SIMULATION OF MIXED MODE FRACTURE IN VITREOUS SILICA, ASME 2017 IMECE2017, November 3-9, 2017, Tampa, Florida, USA.
- S. Pawar, Banda Ravi Teja, Nagarjuna Ravikiran, Ramakrishnan Ganesan & Amit Nag\*, Probing the surface composition effect of silver-gold alloy in SERS efficiency, CRSI-2017, IICT, Hyderabad, July 2017.
- Deepthi Priyanka Damera and Amit Nag\*, Deciphering the role of bi-layer towards entrapment of dyes in niosome via Raman spectroscopy, CRSI-2017, IICT, Hyderabad, July 2017.
- Shweta Pawar, Uday Kumar Togiti, Anupam Bhattacharyya and Amit Nag\*, 4-pyridine-2-yl)-3H-pyrrole [2,3c] quinolone (PPQ)-functionalized carbon dots: A fluorescent probe for detecting water in organic solvent, CCM 2017, BITS Hyderabad, December 2017.
- Deepthi Priyanka Damera and Amit Nag\*, Three layered self-assembled ceramic drug carrier dually loaded with Bovine Serum Albumin and Curcumin, CCM 2017, BITS Hyderabad, December 2017.
- Zeolite supported amine-based sorbent for CO<sub>2</sub> Capture, S. Dinda, P. Murge, Bipin Chakravarthy, Sounak Roy, CHEMCON, 2017, Haldia , PAPER ID : AS00201.
- Oral Presentation on "Molecular dynamics study of conformational switch and disulfide bond isoform equilibrium in a conopeptide" at the 6th Indian Peptide Symposium at HBCSE, Mumbai, Feb 23-24, 2017.
- Chaired a session in the international conference in collaboration with DFG (German Research Foundation) entitled 'Computing in Chemistry, Biology and Medicine' on 29th and 30th of November 2017 at IIIT Hyderabad.

#### IV. Invited Talks given by BITS faculty:

- N. Rajesh, Defluoridation of water- A Perspective, Presented at National conference on Sustainable clean water technology at Crescent University, Chennai, Sep 21-22 ,2017,
- N. Rajesh, Fluoride remedation and prototype development, Presented at theme meeting on fluoride, arsenic remediation at BARC, Mumbai, July 14, 2017.
- N. Rajesh, A perspective on methods to sequester chromium, Presented at UGC sponsored National conference on Recent developments in Catalysis, at Dibrugarh University, Assam, March 10-11 2017..
- K.V.G. Chandra Sekhar, S. Srinivas Rao, K. Mahalakshmi Naidu, Shashidhar Nizalapur, Naresh Kuma, Design and Synthesis of Indole, Oxindole and Isoxazole Derivatives as Quorum Sensing Inhibitors against P.aeruginosa, at 5th International Conference on Current Concepts in Chemistry, organised by Indian Council of Chemists at Bali, Indonesia, June 07-09th, 2017.
- Zubair Khalid Baig and Manab Chakravarty, Organo-phosphonates/phosphates: Useful Precursors for extensive  $\pi$ -conjugates and polyarylalkanes, NMSTC, School of Chemistry, University of Hyderabad, 13th -14th October, 2017.
- Ramakrishnan Ganesan, Invited talk in APCTCC8 (8th Asia Pacific conference on theoretical and computational chemistry) IIT Bombay, 15-17 Dec, 2017
- Sounak Roy, Invited Speaker and Session Chair in ICNM 2017, 10-12 Feb, 2017, IIUCNN, Kerala.
- Sounak Roy, Invited Speaker in NFM 2017, 16 - 18 Nov, 2017, BITS Pilani, Pilani Campus
- Durba Roy, Oral Presentation on "Molecular dynamics study of conformational switch and disulfide bond isoform equilibrium in a conopeptide" at the 6th Indian Peptide Symposium at HBCSE, Mumbai, Feb 23-24, 2017.

**V. Invited talks arranged in the department:**

- Dr. D Srinivas, University of Idaho, Moscow, Idaho, USA on 19 Aug 2017.
- Dr. Sudarshan Mahapatra, Dr. Reddy's Lab on 10 Feb 2017.
- Dr. Sriram Kanvah, Dept of Chemistry, IIT Gandhinagar on 21 Feb 2017.
- Dr. Angshuman Roy Choudhury, IISER Mohali, 22 Aug 2017.

**VI. Awards and recognitions won by faculty and students:**

- S. Srinivas Rao, A. Suresh and K.V.G. Chandra Sekhar, Design and synthesis of 1,2,3-triazolyl 9H-fluorenone analogues as anti-tubercular agents, National Symposium on Emerging Trends and Innovations in Pharmaceutical Science (ETIPS-2017) in chemistry, organized by JNTU Hyderabad, October 12-13, 2017 (Oral Presentation) (Awarded as best oral presentation).
- J. Subbalakshmi, DST-EMR funded project.

**VII. Faculty Development, International Collaboration & Industry Immersion:**

- J. Subbalakshmi, Reviewer for the article " Self-Assembly of near-unity helical Ce<sub>1-x</sub>M<sub>x</sub>O<sub>2</sub> (x=0.1, M=Ni, Bi) solid solutions with tuneable optical activity) in New Journal of Chemistry, Dec 2017.
- J. Subbalakshmi, reviewed thesis of "A. Tony Elizabeth" as External examiner titled " Removal of Some Metal ions, Dyes and Phenols from Aqueous solutions by Adsorption" Bharatidasan University, June 2017.

**VIII. Significant new equipment/experimental facility added during the year: Current Source, Uv-spectrophotomer (Ocean optics)****IX. Departmental association/club activities:****(a) CHEMAZINE**

Chemazine is the only fortnightly newsletter of this campus providing regular information on latest advances in chemistry. This semester we published 5 chemazines which focused on spreading more knowledge about the varied spectrum of chemistry.

**(b) PRE ATMOS EVENTS**

Gearing up for the Technical fest of the year "Atmos", Alchemy organised some pre-atmos events like Comestible Chemistry and Ionic Sudoku to give everyone a flavour of what Alchemy has in store for them this Atmos.

Comestible Chemistry targeted the foodies out here to pour out their chemistry knowledge regarding what goes into those lipsmacking food products which they enjoy.

Ionic Suduko was another fun-filled event where the students tried out the fun filled ionic chemistry version of sudoku.

**ATMOS EVENTS****(i) CHEM HUNT (ii) PAPER PRESENTATION****ELIXIR -26TH NOVEMBER**

We published the first volume of Elixir, our Association's magazine, on 26th November, 2017. It consisted of articles on the latest advancements in chemistry, and a few games and puzzles as well.

**National Symposium on Convergence of Chemistry and Materials 2017**

Department of Chemistry hosted one of its kind of conference wherein renowned professors and researchers came to showcase and talk about their latest works. The conference also encouraged budding researchers as there was also a poster presentation event.

**xiv. Major maintenance, renovations or new construction reports:****xv. Major equipment acquired during the year:**

**B3.10.4 Civil Engineering****Number of faculty members**

Senior Professors, Professors	2
Associate Professors	4
Assistant Professors	6
Lecturers	1
Visiting Faculty	None

Head of the Department: Prof. Sridhar Raju

Contact details: 040-66303682 Email: sridhar.raju@hyderabad.bits-pilani.ac.in

Number of PhD Scholars: 19

**I. Sponsored Research activities:****(a) Ongoing projects**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Performance Evaluation of backfill soils partially replaced with building derived materials	Dr. Anasua Guharay and Dr. Arkamitra Kar from BITS Pilani-Hyderabad Campus, Dr. Naveen James from IIT Ropar	DST SERB Early Career Research Grant	INR 24.43 Lakhs	3 Years (August 2016-July 2019)
2	<i>"Multiobjective Evolutionary Approach for Solving Water Distribution Network Design Optimization"</i>	Prof. A. Vasan, PI & Dr. <b>Murari R. R. Varma</b> , Co-Investigator.	Council of Scientific and Industrial Research (CSIR), New Delhi, India. (Grant No. 22(0723)/17/EMR-II dated 16.05.2017)	INR 18.46 Lakhs	May 2017- April 2020
3	Integrated Urban Flood Management in India: Technology-Driven Solutions	Prof. K Srinivasa Raju Prof. P.P.Mujumdar (IISc, Bangalore) Dr. Rominus Valsalam S (CDAC, Thiruvananthapuram) Prof NV Umamahesh, (NIT Warangal)	ITRA	INR 27.97 Lakhs	(November 2013 – July 2017)

**(b) Projects sanctioned during the year**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	Improving the seismic performance of dynamically similar buildings using damper connected control technique	Dr. S. C. Mohan	DST	INR 43.2 Lakhs	July 2017 - July 2020
2	Coastal wetland Characterization using L and S bands of Polarimetric SAR data	Dr Rajitha K	ISRO-SAC	INR 13.58 Lakhs	Dec-2017- Dec-2020
3	State of the art on the utilization of higher percentage of reclaimed asphalt pavement (rap) in hot asphalt mixes (ham) with warm mix additives - laboratory and field evaluation	Prof. Sridhar Raju	MoRTH	INR 6.255 Lakhs	Aug 2017- Mar 2018
4	Preparation of State of the Art Report (SOAR) on Effect of	Prof. V VinayakaRam	MoRTH	INR 6.44 Lakhs	Aug 2017- Mar 2018

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
	Temperature Stresses in Concrete Pavement.				
5	Preparation of State of Art Report (SOAR) on Use of Polymer Fibers and Steel Fibers for improvement in concrete properties”	Prof. P N Rao	MoRTH	INR 6.587 Lakhs	Aug 2017- Mar 2018

## II. Publications:

1. **K.Srinivasa Raju** and A.Vasan (Editors), Sustainable Holistic Water Resources Management in a Changing Climate, Jain Brothers, New Delhi, 2017.
2. **K.Srinivasa Raju**, D.Nagesh Kumar and Anmol J (2017) Prioritization of Sub-catchments of a River Basin using DEM and Fuzzy VIKOR, **Open Water Journal**, IWA Publishing, UK, DOI: 10.2166/h2oj.2017.001
3. **K.Srinivasa Raju**, Sonali P and D.Nagesh Kumar (2017) Ranking of CMIP5 based Global Climate Models for India using Compromise Programming, **Theoretical and Applied Climatology**, Springer, Vol. 128, No.3, pp. 563-574, DOI: 10.1007/s00704-015.1721-6,
4. **K.Srinivasa Raju**, D.Nagesh Kumar and Nagababu Immadi (2017) Ranking of Global Climate Models for Godavari and Krishna River Basins, India using Compromise Programming, Sustainable Water Resources Planning and Management under Climate Change, Edited by Elpida Kolokytha, Satoru Oishi, Ramesh SV Teegavarapu, Springer, pp. 87-100.
5. Kalyana Rama JS, MVN Sivakumar, **A Vasan**, Sai Kubair K, Ramachandra Murthy A, “Plastic Viscosity based Mix Design of SCC with Crushed Rock Fines”, Computers and Concrete, 20(4), 461-468, 2017.
6. Kalyana Rama JS, Chauhan DR, MVN Sivakumar, **A Vasan**, , Ramachandra Murthy A, “Fracture Properties of Concrete using Damaged Plasticity Model – A Parametric Study”, Structural Engineering and Mechanics, 64(1), 59-69, 2017.
7. Jobin George, Kalyana Rama JS, MVN Sivakumar, **A Vasan**, “Behavior of Plain Concrete Beam subjected to Three Point Bending using Concrete Damaged Plasticity (CDP) Model”, Materials Today: Proceedings, Elsevier, 4 (9), 9742-9746, 2017.
8. K.Srinivasa Raju and **A.Vasan** (Editors), “Sustainable Holistic Water Resources Management in a Changing Climate”, Jain Brothers, New Delhi, ISBN: 978-81-8360-253-2, 2017.
9. **A Vasan** and Darshan Chauhan, “Natured Inspired Optimization Algorithms: Applications and Challenges”, Book Chapter 7 in the Book entitled “Sustainable Holistic Water Resources Management in a Changing Climate”, edited by K Srinivasa Raju and A Vasan, pp: 7.1-7.16, Jain Brothers, ISBN: 978-81-8360-253-2, 2017.
10. **S.C Mohan**, D. K. Maiti, and D. Maity, Frequency response function based damage assessment in cantilever beam using unified particle swarm optimization: an experimental study, Journal of Aerospace Engineering ASCE, 2017 (Communicated).
11. K. Sai Kuber and **S. C. Mohan**, Numerical Model Updating Technique for Structures Using Firefly Algorithm, Journal of Physics, IOP conference series (Accepted) 2017
12. A Naringe, **S. C. Mohan** and S. Agarwal, Structural Health Monitoring using Feature Extraction from Dynamic Response of the Structure, Journal of Physics, IOP conference series (Accepted) 2017
13. Gupta, S., **GuhaRay, A., Kar, A.** and Komaravolu, V.P. (2017), “Alkali Activated Binder treated Jute Reinforced Soil: A Preliminary Study”, IGC Geotechnical Special Publication – Springer, IGC-2017, IIT Guwahati, December 2017 (accepted for Special Publication in Springer Series).
14. Jayatheja, M., Suluguru, A.K., **GuhaRay, A., Kar, A.** and Anand A. (2017), “Laboratory Shear Strength Studies of Sand admixed with Building Derived Materials”, IGC Geotechnical Special Publication – Springer, IGC-2017, IIT Guwahati, December 2017 (accepted for Special Publication in Springer Series).
15. Suluguru, A.K., Jayatheja, M. **Kar, A., GuhaRay, A.,** Surana, S.R. and James, N. (2017), “Experimental Studies on the Microstructural, Physical and Chemical Characteristics of Building Derived Materials to Assess their Suitability in Ground Improvement”, Construction and Building Materials, Elsevier, 156, 921-932.
16. **GuhaRay, A.** and Baidya, D.K. (2017) “Reliability based Pseudo-Dynamic Analysis of Gravity Retaining Walls”, *Indian Geotechnical Journal*, Springer doi: 10.1007/s40098-017-0271-5 (accepted).

17. **GuhaRay, A.**, Mondal, S. and Mohiuddin, H. H. (2017), "Reliability Analysis of Retaining Walls subjected to Blast Loading by Finite Element Approach", *Journal of the Institution of Engineer (India): Series A, Springer* (accepted).
18. **GuhaRay, A.**, Mohammed, Y., Suresh, H. and Manookare, G. (2017), "Effect of Micropiles on Liquefaction of Cohesionless Soil using Shake Table Tests", *Innovative Infrastructure Solutions, Springer*, Vol. 2 (13) pp. 1-6, DOI: 10.1007/s41062-017-0064-9.
19. Mondal, S., **Kar, A., GuhaRay, A.**, and James, N., 2017, "Characterization of Building Derived Materials for Ground Improvement of Contaminated Soils", In Proceedings of 71st RILEM Annual Week & ICACMS 2017, Sept 3 - 8, IIT Madras, TN, India, pp. 65 - 72.
20. Deepika, G. Anand, A. **Bahurudeen A** and Manu Santhanam. "Construction products with sugarcane bagasse ash based binder". ASCE Journal of Materials in Civil Engineering. Vol 29 (10), 2017.
21. Murugesan T, **Bahurudeen A**, Sakthivel M, Vijay R, Sakthivel "Performance evaluation of Burnt Clay-Fly Ash Unburnt Bricks and precast paver blocks" Elsevier Materials Today: Proceedings, 9673–79, 2017
22. Athira Gopinath, **Bahurudeen A.**, Akilesh Ramesh and Naveen Kumar (2017) "Need of an efficient particle size analysis and its influence on properties of concrete" ICJ Journal. Vol 91, 51-68. December 2017.

### III. Conferences attended/papers presented:

1. Aravind Bairi, A.Vasan, **K.Srinivasa Raju**, D.V.Morankar, Application of Cuckoo Search Algorithm in Water Resources Planning and Management, 22nd International Conference on Hydraulics, Water Resources and Coastal Engineering, HYDRO 2017, December 21-23, 2017, Ahmedabad, India, pp. 1387- 1392.
2. **K.Srinivasa Raju**, Multicriterion Analysis and Decision Making: An Overview, Proceedings of International Conference on Technological Advances in Climate-Smart Agriculture and Sustainability (TACSAS-2017), January 16-18, 2017, Nanded, India, pp. 9-10 (Delivered as Keynote Lecture on January 18, 2017).
3. **K.Srinivasa Raju** and A.Vasan, Optimal Reservoir Operation using Multiobjective Genetic Algorithms, Proceedings of International Conference on Technological Advances in Climate-Smart Agriculture and Sustainability (TACSAS-2017), January 16-18, 2017, Nanded, India, pp.321-324.
4. Aravind Bairi, A.Vasan, **K.Srinivasa Raju**, D.V.Morankar, "Application of Cuckoo Search Algorithm in Water Resources Planning and Management", 22nd International Conference on Hydraulics, Water Resources and Coastal Engineering, HYDRO 2017, Ahmedabad, December 21-23, 2017.
5. Raja Sekhar Mamillapalli and **Prof. P. N. Rao**, "COMPARATIVE STUDY ON INFILL WALLS", International Conference on Recent Advances in Materials, Mechanical and Civil Engineering (ICRAMMCE-2017), 1-2 June, 2017, organized by MLRITM, Hyderabad.
6. Raja Sekhar Mamillapalli, **Prof. P. N. Rao**, Srinivas Angadi " Experimental Studies on behavior of Concrete Filled Steel Tubular Short Columns (CFSTC)", International Conference on composite Materials and Structures (ICCMS 2017), 27-29<sup>th</sup> Decemebr, 2017, Hyderabad, organized by IIT, Hyderabad, India.
7. Gowre Manookare, **A. Vasan**, "Topology Optimization of Diagrid Structures Using Differential Evolution", ASCE India Conference 2017 – Urbanization Challenges in Emerging Economies, IIT Delhi, December 12-14, 2017.
8. **Kalyana Rama J S**, Sai Krishna P, MVN Sivakumar, **A. Vasan**, Ramachandra Murthy. "Parametric study on the influence of cement replacement materials on the rheology of cement paste using Brookfield Viscometer", RILEM 71st Week, International Conference on Advances in Construction Materials and Systems (ICACMS-2017) at IIT Madras & Hotel Leela Palace, Chennai, India during September 03-08, 2017.
9. K. Srinivasa Raju and **Vasan A.** "Optimal Reservoir Operation Using Multiobjective Genetic Algorithms", Proceedings of International Conference on Technological Advances in Climate-Smart Agriculture and Sustainability (TACSAS2017) at Shri Guru Gobind Singhji Institute of Engineering & Technology, Nanded, Maharashtra, India during January 16-18, 2017.
10. Sai Kubair K., Shreyans R Surana, M Venkata Sai Krishna, **Sridhar Raju.**, and **V Vinayaka Ram.**, "Rutting Potential of Gap Graded Warm Mix Asphalt with Higher Percentage of Crumb Rubber", Urbanization challenges in emerging economies, ASCE India Conference 2017, New Delhi, 12-14 Dec 2017.
11. Prateek Agarwal, Katla Bhanuprasad, **Sridhar Raju** and **V Vinayaka Ram**, "Rutting Potential of Half Warm Mix Asphalt using Polymer Modified Bitumen Emulsion", Urbanization Challenges in Emerging Economies, ASCE India Conference 2017, New Delhi, 12-14 Dec 2017.
12. Sai Kubair K., Shreyans R Surana, and **Sridhar Raju**, "Characterization of Gap Graded Asphalt Mixture with High Rubber Content," 83<sup>rd</sup> Transportation Research Board Annual Meeting 2018, Transportation Research Board (TRB), Washington, D.C., 7-11 Jan 2018.

13. S Gireesh Kumar, J Satya, Kratagya Mittal, **Sridhar Raju** (2018) "Design of a bituminous mixture for perpetual pavement" International Conference on Recent Advances in Materials, Mechanical and Civil Engineering (ICRAMMCE -2017), 1-2<sup>nd</sup> June 2017 at Marri Laxman Reddy Institute of Technology and Management, Hyderabad, India.
14. **Chandu Parimi**, Venkateshwaran R., Sanketh V Sai, Ajinkya Gavane, Vishal B Athreya, Prakash Srivastava, and Tathagata Ray, "MS Kinect a potential gait analysis system: Clothing effect on the gait kinematics" Poster presentation at XXVI Congress of the International society of Biomechanics, 23-27th July 2017, Brisbane, Australia.
15. **S.C Mohan**, N. Ajinkya, A. Shubi, Structural Health Monitoring using Feature Extraction from Dynamic Response of the Structure, International Conference on Recent Advances in Materials, Mechanical and Civil Engineering, June 1-2, 2017, Hyderabad, India.
16. **S.C Mohan**, K. Sai Kuber, Numerical Model Updating Technique for Structures Using Firefly Algorithm, International Conference on Recent Advances in Materials, Mechanical and Civil Engineering, June 1-2, 2017, Hyderabad, India.
17. S. R. Surana, A. Kar, A. **GuhaRay, A.**, K. Suluguru, Jayatheja, M., (2017) "Experimental Investigations on Building Derived Materials in Chemically Aggressive Environment as a Partial Replacement for Sandy Soil in Ground Improvement", Urbanisation Challenges in Emerging Economies, Moving Towards Resilient Sustainable Cities and Infrastructure" ASCE India Section, New Delhi, India, December, 2017.
18. **GuhaRay, A.**, Kiranmayi CVSP and Rudraraju, S. (2017) "Reliability Based Performance Evaluation of Stone Column Improved Soft Ground", ICGEG 2017: 19th International Conference on Geotechnical Engineering and Geomechanics, Rome, Italy, September 18-19, 2017, Vol. 11 No. 9, pg. 699 - 703.
19. S. Mondal , **A. Kar** , **A. Guharay** and N. James (2017) "Characterization of Building Derived Materials for Ground Improvement of Contaminated Soils", 71st Annual RILEM Week and ICACMS 2017 Conference, IIT Madras, Chennai, September.
20. Gupta S., **GuhaRay, A. and Kar, A.** (2017) "Effect of alkali activated binder treated jute reinforcement on permeability of cohesionless soil", 6th Indian Young Geotechnical Engineers Conference (6IYGEC), NIT Trichy, 10-11 March, 2017.
21. Jayatheja, M., Suluguru, A.K., Anand A., **GuhaRay, A. and Kar, A.** (2017) "Performance of sand partially replaced with building derived materials under static loading conditions", International Conference on Geotechniques for Infrastructure Projects, Thiruvananthapuram, February 27-28, 2017.
22. Baidya, D.K. and **GuhaRay, A.** (2017) "Geotechnical Engineering: Reliability Aspects", Conference on Numerical Modelling in Geomechanics, IIT Roorkee, March 3-4, 2017.
23. S. Gupta, **A. GuhaRay, A. Kar**, and V. P. Komaravolu, 2017, "Alkali Activated Binder treated Jute Reinforced Soil: A Preliminary Study", **IGC 2017 – GeoNEst**, IIT Guwahati, Dec 14 - 16, 2017.
24. M. Jayatheja, A.K. Suluguru, **A. GuhaRay, A. Kar**, and A. Anand, 2017, "Laboratory Shear Strength Studies of Sand admixed with Building Derived Materials", **IGC 2017 – GeoNEst**, IIT Guwahati, Dec 14 - 16, 2017.
25. Raut, K. D., **Guharay, A.**, James, N., and **Kar, A.**, 2017, "Experimental Studies on Responses of Building Derived Materials after Exposure to Aggressive Chemicals", **National conference on Urban Environmental Management in India**, MNIT, Jaipur, Rajasthan, India, Jan 20-21, 2017.
26. H. R. Tewani, **Kalyana Rama J S**, "Parametric Study On the effect of the friction coefficients between laminae on the behavior of a laminated composite plate" Computational Science.
27. Anand Kumar R, Pardeep K, Moorthi P V P, **Bahurudeen A**, Subair M and Nikhil S "Influence of aggregate modelling on ultrasonic wave propagation in concrete, In *Proceedings of 71st RILEM Annual Wek & ICACMS*, Pages 587-596, 2017, Sept 3 - 8, IIT Madras
28. Nivedha P, Athira G, **Bahurudeen A** and Prasanta K S. Identification of suitable ready mix concrete suppliers using geographic information system, In *Proceedings of 71st RILEM Annual Wek & ICACMS 2017*, Pages 675-682, Sept 3 - 8, IIT Madras

#### IV. Invited Talks given by BITS faculty:

##### Prof. P N Rao has:

Delivered Key Note address "Research Trends in Concrete Technology" on 15<sup>th</sup> December, 2017 for one week FDP on "Emerging Concepts in Civil engineering Fields"- EC2EF-2017, organized by CMR college of Engineering & Technology, Medchal, Hyderabad.



**Prof. Komaragiri Srinivasa Raju has:**

- Best Management Practices in Urban Flood Scenario, Faculty Development Programme on Applications of Geomatics for Disaster Management (AGDM-2017), Jawaharlal Nehru Technological University (JNTU), Hyderabad, November 18, 2017.
- Urban Floods under Changing Climate- A Case Study of Hyderabad, Indian Institute of Technology, Hyderabad, November 15, 2017.
- Artificial Neural Networks in Civil Engineering and Optimization Techniques in Civil Engineering, Institute of Aeronautical Engineering, Hyderabad, November 1, 2017.
- Optimization in Civil Engineering, Department of Civil Engineering, Vardhaman College of Engineering, Hyderabad, September 21, 2017 (Delivered as part of Students Festival Varadhi).
- Artificial Neural Networks in Water Resources Engineering and Career Guidance in Civil Engineering, Department of Civil Engineering, Nalla Narasimha Reddy School of Engineering, Hyderabad, August 30, 2017.
- Advanced Aspects of Civil Engineering and Career Guidance in Civil Engineering, Department of Civil Engineering, KKR and KSR Institute of Technology and Sciences, Guntur, July 25, 2017. Optimization Applications in Civil Engineering, A One Day Workshop on Applications of Optimization in Civil Engineering, Chaitanya Bharathi Institute of Technology, Hyderabad, March 30, 2017.
- Novel Engineering in Water Strategies (NEWS-17) on the Occasion of World Water Day 2017, CMR College of Engineering and Technology, Hyderabad, March 22, 2017.
- Career Guidance Talk on GATE and Engineering Services, Birla Institute of Technology and Science-Pilani Hyderabad Campus, March 6, 2017 (Conducted as part of Civil Engineering Association Activities).
- Urban Flood Modeling and Management-Case Study of Hyderabad, Workshop-cum-Training Program on Urban Flooding: Technology Driven Solutions, Birla Institute of Technology and Science - Pilani Hyderabad Campus, March 4, 2017.
- Multicriterion Analysis and Decision Making: An Overview, International Conference on Technological Advances in Climate -Smart Agriculture and Sustainability (TACSAS-2017), SGGS Institute of Engineering and Technology, Nanded, January 18, 2017.

**Prof. Vasan has:**

- Delivered an invited lecture on "Writing a Manuscript" during the One Week AICTE sponsored Short Term Course under 'Quality Improvement Program' on "Research Avenues in Geoenvironmental Engineering", organized by TKM College of Engineering, Kollam, Kerala, December 05, 2017.
- Delivered an invited lecture on "Engineering Optimization Using Firefly & Cuckoo Search Algorithm" during the One week TEQIP – Short Term Training Program on "Soft Computing Techniques in Engineering Applications" organized by Department of Civil Engineering, Government College of Engineering Aurangabad, February 17, 2017.

**Prof. Sridhar Raju has:**

- Delivered a talk on Structural Evaluation and Strengthening of Flexible Road Pavements using Falling Weight Deflectometer (FWD) Technique (IRC:115-2014), *Organized by Indian Academy for Highway Engineers at Noida, 01-05 Apr 2017.*
- Delivered a talk on Design of Flexible Pavements, Preparation of Detailed Project Reports (DPR) Including Economic Evaluation for Highway Projects, *Organized by Indian Academy for Highway Engineers at Tiruvananthapuram, 22-26 May 2017.*
- Delivered a talk on Design of Flexible Pavements, *Organized by Indian Academy for Highway Engineers at Noida, 12-17 Jun 2017.*
- Invited speaker for training L&T Field Engineers on the topic "Flexible Pavement Construction Techniques", Gulbarga, Bijapur, Homnabad Road, 19<sup>th</sup> September, 2017.
- Delivered a lecture on "Technical Competency Building Program for our Graduate Engineer Trainees (GETs)", L&T engineers at Mumbai., 20<sup>th</sup> and 21<sup>st</sup> November 2017.
- Delivered a lecture on at a workshop on Design of Flexible and Rigid Pavement including new materials and technologies and Preparation of DPRs (Cost Estimates) for Rural Roads at Agartala, Tripura for the PWD Engineers, 24<sup>th</sup> and 25<sup>th</sup> November 2017.

**Dr. Anusua.G has:**

- Delivered an Invited Talk on "Performance of Building Derived Materials for Subgrade Stabilisation" organised by Indian Geotechnical Society, Hyderabad Chapter, at JNTU Hyderabad, on 14th October, 2017.

-Delivered an Invited Talk on "Evaluating the Performance of Building Derived Materials for Sustainable Environment" organised by Greater Hyderabad Municipal Corporation (GHMC) along with Building Materials and Technology Promotion Council (BMTPC), Ministry of Housing and Urban Affairs, Government of India, at GHMC Hyderabad, on 8th November, 2017.

**Dr. Kalyana Rama J S has:**

-Delivered an invited talk on "*Repair and Rehabilitation of Structures*" and "*Concepts of Earthquake Resistant Design*" during a one day workshop on "*Recent Trends in Civil Engineering*" organized by Dhanekula Institute of Engineering and Technology, Vijayawada, 18th February, 2017.

**Dr. Bahurudeen has:**

-Invited talk on "Characterization of supplementary cementitious materials: Indian and international Perspectives", *Aditya Birla Science and Technology (ABSTCPL) R&D Centre*, Mumbai, November, 2017.

-Invited talk on "Scientific Insight in concrete using modern tools" *TEQIP sponsored workshop*, Government Engineering College Salem, Feb 2017.

-Invited talk on "Outcome based Education and competitive exam preparation in Civil Engineering" *Builder Engineering College*, Erode, July 2017.

**V. Invited talks arranged in the department:**

**1) A Talk by Padma Vibhushan Dr. E Sreedharan:**

Jointly organized by the Civil Engineering Department and the Civil Engineering Association, this event was definitely the crowd puller. Held in the auditorium on 27<sup>th</sup> October 2017, the event witnessed immense participation from both the students and the teaching faculty. Dr. E Sreedharan, one of the best civil engineers in the country, spoke about the challenges he faced in his six-decade long engineering career. He narrated how he successfully completed the construction of Konkan Railway, one of the most daring civil engineering projects taken up in the country. Delhi Metro, the state of the art metro rail system was designed and constructed under his leadership and earned him the title 'The Metro Man'.

Dr. E Sreedharan also stressed the fact that having moral values is as important as technical knowledge for an engineer. He listed punctuality, integrity, professional competence and social responsibility as the qualities expected from a good engineer. After his talk, he happily entertained questions from the audience. His dynamic personality despite his age proved to be a source of inspiration for future engineers.

**2) Engineers' Day Celebrations:**

15<sup>th</sup> September is celebrated as Engineers' Day all over the country in memory of Bharat Ratna Sri Mokshagundam Visvesvaraya, distinguished engineer and scholar. This year, the Engineers' Day celebrations on campus were hosted by CEA in collaboration with other Engineering Associations (MEA, ACE, CSA, PHoEnix), with a footfall of about 550 people.

The theme of this year's celebrations was 'The role of Engineers in the development of society'. The celebrations were inaugurated by Prof. Shreepad Karmalkar, Professor of Electrical Engineering, IIT Madras

In his speech, the Chief Guest stressed on the importance of developing engineering problem solving skills. This was followed by a highly interactive question-answer session. The chief guest was felicitated by the Director Prof. G Sundar. Heads of various Departments were also present.

The inaugural ceremony was followed by a wide array of workshops conducted by the various Engineering Associations in the LTC. There were also various talks to ignite the students' minds. Stalls were put up for the display of innovative student projects. The active participation of both the students and the teaching faculty made the event a grand success.

A general knowledge quiz was conducted to celebrate the occasion. There was an enthusiastic participation by students and the winners were awarded mementos and certificates.

**3) An Invited Lecture by Mr.Kiran Kumar R., technical manager of Tencate geosynthetics India pvt. Ltd.on 09<sup>th</sup> Nov'2017, Venue: F-109 Time: 10:00 AM- 10:50 AM.**

The talk was given by Mr Kiran Kumar R., who had pursued his Masters in IIT Kharagpur. He is currently the Technical and Marketing Head of Tencate Geosynthetics India Pvt. Ltd. The topic of the talk was "**Applications of Geosynthetics and experiences in Asia**".

He gave an informative description of history and industrial usage of textiles, particularly geotextiles to solve various civil engineering problems. Mr. Kiran elaborated on the numerous advantages of the highly versatile geo-polymers and presented specialized solutions to a multitude of real life case studies.

Samples were shown to the audience piquing their interesting and curiosity. The talk was followed by an interesting discussion and question-answer session. It was a highly interactive and enlightening talk.

#### 4.) SEMINAR BY PROF. A.K. SARKAR on 14<sup>th</sup> November 2017.

BITS Pilani Hyderabad Campus was graced by the presence of Prof. A.K. Sarkar, the Director of BITS Pilani, Pilani campus. He talked about various topics both academic and non-academic during the one-hour interactive session.

He first talked about how lives of students change upon coming to campus, and the influence of their seniors. Especially for students taking up non-IT subjects are targets of the misconception that there are no jobs in core divisions. For individuals who do not know what they are interested in, sir suggested; that he/she may take up job as an apprentice, and learn about various jobs and responsibilities in the field, while acquiring more experience in his initial days.

He gave an insight into the various opportunities and avenues in the transportation field. He also talked about the deciding factors when it comes to choosing between higher studies abroad and in India.

As a whole the seminar was very informative, refreshing and opened up new ways and ideas for the attendees to think about. The seminar was handled and executed by the Civil Engineer's Association of BITS Pilani Hyderabad Campus.

#### 5.) An Invited Lecture by Prof. Indrajit Ray

Professor of Civil Engineering from the University of the West Indies, St Augustine visited BITS Hyderabad campus on August 19, 2017. He interacted with the students mainly to motivate the first-degree students for higher studies abroad. He also provided valuable suggestions to our faculty members for motivating the students in general about the field of Civil Engineering.

#### VI. Awards and recognitions won by faculty and students:

##### 1) Faculty's:

**Prof. Komaragiri Srinivasa Raju has receives following Awards:**

- **Associate Editor, ISH Journal of Hydraulic Engineering, Taylor & Francis**
- **h-index: 18** and Citations **1547** as on 31.12.2017 [Set of the Researcher's Most Cited Papers and the Number of Citations That They Have Received in Other Publications; Source: Google Scholar]
- Researchgate Score **26.74** and Publications Reached **5007** Reads (as on 31.12.2017) (Source: ResearchGate).

##### **Subject Expert:**

- Evaluated Question Papers for five subjects, Basic Engineering Mechanics, Fluid Mechanics-II, Water Resources Engineering-II, Environmental Engineering, Environmental Science as part of Question Paper Audit, Department of Civil Engineering, Vasavi College of Engineering, Hyderabad (Detailed report was submitted on December 29, 2017).
- Conducted Academic Audit for the Second Year B.Tech First Semester Courses of Department of Civil Engineering, MIT Academy of Engineering, Alandi, Pune. This includes Evaluating the Faculty, Interaction with Students for Improving Quality. Audit was conducted on November 11, 2017 at MIT Academy of Engineering, Alandi, Pune.
- Evaluated Three Faculty Members for Assessing their Research Ability, Department of Civil Engineering, Vasavi College of Engineering, Hyderabad. (Presentations were held on September 13, 2017).
- Evaluated Three Research Scholars of Centre for Water Resources, Jawaharlal Nehru Technological University, Hyderabad as part of Research Review Meeting, July 7, 2017.
- Evaluated Teaching Ability of Applicants for the Post of Assistant Professor, Department of Civil Engineering, Vasavi College of Engineering, Hyderabad (Meeting held on July 3, 2017 and Number of Applicants Evaluated are 13).
- Nominated by Vice Chancellor, Jawaharlal Nehru Technological University (JNTU), Hyderabad as Subject Expert (Water Resources Engineering) for Faculty Recruitment at JNTU Hyderabad (Interviews were Conducted on May 3, 2017).
- Program Committee, The Fifth International Conference on Mining Intelligence and Knowledge Exploration (MIKE 2017), Institute for Development and Research in Banking Technology (IDRBT), Hyderabad, December 13-15, 2017.

**A Member, Technical, Advisory and Organizing Committees of Conferences/Workshops:**

- Organizing Committee, Workshop on Bitumen Rheology-2017 (BITURHEO-2017), Department of Civil Engineering, BITS Pilani Hyderabad Campus, Hyderabad, September 22, 2017.
- Scientific and Advisory Committee, National Conference on Sustainable Water and Environmental Management (SWEM-17), Centre for Water Resources, Jawaharlal Nehru Technological University, Hyderabad, December 21-23, 2017.
- Scientific Committee, SWAT 2018: International Workshops and Conference, Indian Institute of Technology, Madras, Chennai, India, January 8-12, 2018. (Home Page of the Conference)
- Technical Committee, International Conference on Sports Engineering (ICSE-2017), Birla Institute of Technology and Science Pilani, Pilani Campus, October 23-25, 2017 (Venue: Birla Auditorium, Jaipur).
- Scientific and Advisory Committee, 4th National Conference on Water, Environment & Society (NCWES-2017), Centre for Water Resources, Institute of Science and Technology, Jawaharlal Nehru Technological University, Hyderabad, March 16-18, 2017.

**Session Chair /Co-Chair/Panel Member:**

- Panel Member, Societal Impact and Capacity Building, ITRA Closure Meeting, Indian Institute of Technology, Hyderabad, July 10, 2017.
- Session Chair and Panel Member, International Conference on Technological Advances in Climate-Smart Agriculture and Sustainability (TACSAS-2017), Nanded, India, January 18, 2017.

**Chief Guest/Guest of Honour:**

- Chief Guest, Inaugural Function, VARADHI Department of Civil Engineering Fest, Vardhaman College of Engineering, Hyderabad, September 21, 2017. (Inaugural Function Photo 1 Photo 2 Photo 3 Photo 4 )
- Chief Guest, Inaugural Function, A One Day Workshop on Applications of Optimization in Civil Engineering, Chaitanya Bharathi Institute of Technology, Hyderabad, March 30, 2017. (Inaugural Function Photo)

**Participation in Conferences/ Meetings/Workshops**

- Brain Storming on Hyderabad Storm Water Drainage, Greater Hyderabad Municipal Corporation (GHMC), November 7, 2017. (Paper Coverage in Eenadu, November 8, 2017)
- Technology Partner Workshop, Hyderabad Metro Water Supply Sewerage Board (HMWSSB), March 18, 2017. (Invited Participation. Part of the Panel on Data Analytics and Decision Making System Deliberations) (Photo)
- Sixth Meeting of Confederation of Indian Industry (CII) Southern Region (SR) Water Task Force & Interaction with Stakeholders, February 23, 2017. (Invited Participation and meeting held at CII Telangana State Office, Hyderabad) (Photo)
- International Conference on Water Challenges in India, February 8-9, 2017, New Delhi. Event was Organised by DHI.

**Dr. A. GuhaRay, Dr. A. Kar submitted Patents**

Filed a patent on 18<sup>th</sup> September 2017 and the Indian Patent Application No: 201711033016 on the Title: Treatment process for cellulose based geotextile and geotextile obtained therefrom by A. GuhaRay, A. Kar and S. Gupta.

**2) Student:**

-**Mr. Darshan chauham, Miss Reeti Sarkar, & Mr. Kaushal Raut** have been admitted to doctoral programmes at Portland State University, TU Delft, & Georgia tech respectively. **Miss C. Leela Sushitha** from the present final year first degree batch was awarded the prestigious IASc-INSA-NASI Summer Research Fellowship at IISC., Bangalore.

**VII. Faculty Development, International Collaboration & Industry Immersion: NIL****VIII. Significant new equipment's/experimental facility added during the year:**

- BOD Analyzer incubator purchased for Environmental Engineering Lab, during Oct-Nov'2017.
- Electronic Large shear Box Test purchased for Geotechnical/Soil Mechanics Lab, during March'2017.
- Hamburg Wheel Tracking Device was purchased for Highway Material Testing Laboratory to simulate the field condition, March 2017.

**IX. Departmental association/club activities:****1. Workshop-cum-Training Program on Urban Flood Management: Technology Driven Solutions, March 3-4, 2017**

**Prof. K Srinivasa Raju and Prof. A Vasan** from the Centre of Excellence in Water Resources Management (CEWRM), Department of Civil Engineering, Birla Institute of Technology and Science Pilani, Hyderabad campus organized **Workshop-cum-Training Program on Urban Flood Management: Technology Driven Solutions** during March 3-4, 2017 with the objective to create a platform for academicians, scientists, research scholars and officials to share their views and have improved understanding as well as knowledge on urban flood management. A total of 65 participated in the event. Workshop-cum-Training program is part of sponsored project entitled "Integrated Urban Flood Management: Technology driven solutions, sponsored by IT Research Academy (ITRA) is a National Programme initiated by Ministry of Electronics and Information Technology (MeitY), Government of India" with an aim to promote research that helps society. Several expert talks from Prof. PP Mujumdar (IISc Bangalore), Prof Dev Niyogi (Purdue University USA), Prof. AK Sarkar (BITS Pilani, Pilani Campus), Prof. MS Mohan Kumar (IISc Bangalore) and Prof. NV Umamahesh (NIT Warangal) were organized. Ms V.Swathi (BITS Pilani, Hyderabad Campus) along with her team conducted a hands on session on Storm Water Management Model (SWMM) software where all participants experienced the intricacies of SWMM. A Panel Discussion on the theme "Urban Flood Resilience Management in India" was also organized. Interactive and thought provoking discussion were made between esteemed panel members and most interesting part of the panel discussion is enthusiasm of the participants in the form of interactions and exchange of ideas. It was felt by panel that unified action is necessary for implementation at the field level.

**2. BITURHEO-2017**

The Civil Engineering Department conducted the Bitumen Rheology Workshop (**BITURHEO 2017**), on **22<sup>nd</sup> Sep'2017**. It was jointly organized by the Civil Engineering Department, Civil Engineering Association and Anton Paar India. It was very useful for those who are planning to work in the domain of material science in general and bitumen in particular. The workshop saw enthusiastic participation from the students.

**3. ATMOS 2017**

ATMOS, the national technical fest hosted by BITS Pilani, Hyderabad campus was conducted from 27<sup>th</sup> to 29<sup>th</sup> of October, 2017. Similar to the previous editions, the Civil Engineering Association had a share of eye-catching events this year as well.

**a) Beam It**

Beam It, the headliner event of CEA was arguably one of the most fiercely competed events of ATMOS 2017. The three-day competition saw a record participation of over 30 teams and generated much interest in the fest. The teams had to cast a certain concrete structure with the provided materials and subject it to load bearing tests. Special importance was given to the economic and judicious usage of materials.

**b) STAAD.Pro Workshop:**

With the growing influence of engineering application software's in civil engineering, proficiency in one of them is always an asset for any civil engineer. With this vision in mind, STAAD.Pro workshop was conducted on 27<sup>th</sup> and 28<sup>th</sup>. The two-day workshop aimed to give an insight into STAAD.Pro, modern software that aids structural analysis and designing.

**c) Tall Buildings Workshop:**

Tall Buildings Workshop was conducted in association with RoboKart on 28<sup>th</sup> and 29<sup>th</sup>. This fun filled workshop not only presented an opportunity for budding civil engineers to design and analyse skyscrapers but also provided a hands on experience in using ETABS, popular structural planning software

**X. Major maintenance, renovations or new construction reports: NIL****XI. Major equipment's acquired during the year:**

- BOD Analyzer incubator purchased for Environmental Engineering Lab, during Oct-Nov'2017.
- Electronic Large shear Box Test purchased for Geotechnical/Soil Mechanics Lab, during March'2017.
- Hamburg Wheel Tracking Device was purchased for Highway Material Testing Laboratory to simulate the field condition, March 2017.

### B3.10.5 Computer Science and Information Systems

#### Number of faculty members

Senior Professors, Professors	1
Associate Professors	4
Assistant Professors	7
Lecturers	2
Visiting Faculty	1

#### Head of the Department:

Contact details: Phone: 040 – 6630-3596 Email: rayt@hyderabad.bits-pilani.ac.in

#### Number of PhD Scholars:

Full-time : 8

Part-time: 6

Aspirants: 1

Faculty: 4                      **Total: 19**

#### I. Sponsored Research activities:

##### (a) Ongoing projects

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	<u>Lightweight Code Self-verification for Internet of Things (IoT) Devices</u>	Prof. Chittaranjan Hota	DeitY-NWO	48.00	2015-19

Projects sanctioned during the year:        **NIL**

#### II. Publications:

##### (a) Journal Publications

1. **S. Panda** and D. P. Mohapatra, "Regression Test Suite Minimization using Integer Linear Programming Model", Software Practice and Experience, Wiley Online Library, 47(11), 2017, pp. 1539-1560.
2. **Agrima Srivastava and G Geethakumari**, "Privacy Preserving solution to prevent Inference Attacks in Online Social Networks", International Journal of Data Sciences, Inderscience Publishers, 2017, in press. Indexed in :- cnpLINKer (CNPIEC); Google Scholar; RePEc.
3. **Prafulla Kalapatapu, Tejas N.N, Siddharth Dalmia, Prakhar Gupta, Bhaswant Inguva, and Aruna Malapati**, A novel similarity measure: Voronoi Audio Similarity for Genre classification, International Journal of Intelligent Systems Technologies and Applications (IJISTA), 16(4), 2017, pp 309-318.
4. **Gokul Kannan Sadasivam, Chittaranjan Hota**, and Anand Bhojan, Detection of Severe SSH Attacks using Honey-pot Servers and Machine Learning Techniques, Software Networking, 2017(1), pp. 79-100.
5. **A. Vijayalakshmi, and Chittaranjan Hota**, Task assignment in Crowdsourcing using vector space model, International Journal of Pure and Applied Mathematics, 116(23), 2017, pp. 605-609.
6. **Barsha Mitra**, Shamik Sural, Jaideep Vaidya, Vijayalakshmi Atluri, Migrating from RBAC to temporal RBAC, IET Information Security, 11(5), 2017, pp. 294 - 300.
7. **C K Shriram, K Muthukumaran, N L Bhanu Murthy** "Empirical Study on the Distribution of Bugs in Software Systems". International Journal of Software Engineering and Knowledge Engineering. World Scientific Publishing.(to appear)..
8. **Swapnil Shukla, T Radhakrishnan, K Muthukumaran, N L Bhanu Murthy** "Multiobjective cross-version defect prediction". Soft computing. Springer-Verlag Berlin Heidelberg 2016. (<https://doi.org/10.1007/s00500-016-2456-8>).

##### b. Conference Publications

1. BKSP Kumar Raju, Nikhil Bharadwaj Gosala and G Geethakumari, "CLOSER: Applying Aggregation for Effective Event Reconstruction of Cloud Service Logs", 11th ACM International Conference on Ubiquitous Information Management and Communication, (ACM IMCOM 2017), January 5 - 7, 2017, Beppu, Japan.

2. Sameer Dharur, K Swaminathan, and Chittaranjan Hota, "Energy efficient IoT framework for smart buildings", IEEE International Conference on IoT in Social, Analytics and Cloud (I-SMAC 2017), Feb 2017.
3. Surendra Singh, Sachin Tripathi, and Suvadip Batabyal, "Utilization based Secured Dynamic Scheduling Algorithm for Real-Time Applications on Grid (u-SDSA)," 31st IEEE International Conference on Advanced Information Networking and Applications (AINA), pp. 606-613, 27 - 29 March, 2017, Taiwan.
4. Rajesh Kumar Shrivastava, Chittaranjan Hota, and Prashast Srivastava, "Protection against code exploitation using ROP and check-summing in IoT environment", 5th International Conference on Information and Communication Technology (ICoICT), pp. 7 - 12, May 2017, Multimedia University, Malaysia.
5. Chittaranjan Hota, Rajesh Kumar Shrivastava, and Shivangi Shipra, "Tamper-Resistant Code Using Optimal ROP Gadgets for IoT Devices", 13th International Wireless Communications and Mobile Computing Conference (IWCMC 2017), pp.570-575, June 2017, University of Valencia, Spain.
6. Surender Singh Samant, N.L. Bhanu Murthy and Aruna Malapati, "BIGRAM-BASED FEATURES FOR REAL-WORLD EVENT IDENTIFICATION FROM MICROBLOGS", 8th International Conference on Computing, Communication and Networking Technologies (ICCCNT 2017), 3 - 5 July 2017, IIT Delhi, India.
7. Soumyadeep Dey, Barsha mitra, Jayanta Mukhopadhyay, Shamik Sural, "A Comparative Study of Margin Noise Removal Algorithms on MarNR: A Margin Noise Dataset of Document Images", ICDAR-OST workshop of 14th IAPR International Conference on Document Analysis and Recognition (ICDAR 2017), September 2017, Kyoto, Japan.
8. Rajesh Kumar Shrivastava, Sanket Mishra, Srimanta Barua, and Chittaranjan Hota, "Resilient Complex Event Processing in IoT using Side-channel Information", 10th ACM International Conference on Security of Information and Networks (SIN'17), ACM ICPS, 13 -15 October 2017, India.
9. SaiKiranmai Gorla, Aditya Chandrashekhar, N L Bhanu Murthy, and Aruna M "TelNEClus:Telugu Named Entity Clustering using Semantic Similarity." International conference on Computational Intelligence 2017 (ICCI 2017) 6 - 8 December 2017, Indian Institute of Technology Kanpur, India.
10. SaiKiranmai G and Aruna M, "A Comparative Study of Named Entity Recognition for Telugu", Forum for Information Retrieval Evaluation 2017 (FIRE 2017), 8 -10 December 2017, Indian Institute of Science, Bangalore, India.
11. Surender Singh Samant, N.L. Bhanu Murthy and Aruna Malapati, "A Novel Method for Summarization and Evaluation of Messages from Twitter", 9th International Conference on Advances in Pattern Recognition (ICAPR 2017), 28 - 30 December 2017, ISI Bangalore, India.
12. Tanmaya Shekhar Dabral, Amala Sanjay Deshmukh and Aruna Malapati, "A Multi Scale Convolutional Neural Network Architecture For Music Auto-Tagging" Soft Computing for Problem Solving - SocProS 2017, December 2017, Indian Institute of Technology Bhubaneswar, India.
13. Vivek Yadav and Anand Narasimhamurthy, "A heuristics based approach for optimizing delivery schedule of an Unmanned Aerial Vehicle (Drone) based delivery system", 9th International Conference on Advances in Pattern Recognition (ICAPR 2017), Indian Statistical Institute, Bengaluru, December 2017.
14. Surender Singh Samant, N.L. Bhanu Murthy and Aruna Malapati, "CapAct: A Wordnet-Based Summarizer for Real-World Events from Microblogs", Accepted at 14th International Conference on Distributed Computing and Internet Technology (ICDCIT 2018), 11 - 13 January 2018, KIIT Bhubaneswar, Orissa, India.
15. Rashmi Sahay, G Geethakumari and Koushik Modugu, "Attack Graph-Based Vulnerability Assessment of Rank Property in RPL-6LOWPAN in IoT", Accepted at the 4th World Forum on Internet of Things (WF-IoT 2018), pp. 05-08, February 2018, Singapore.

**c. Conferences attended/papers presented:**

Faculty Name	Name of Conference	Dates of Conference	Venue
Dr. G Geethakumari	11th ACM International Conference on Ubiquitous Information Management and Communication, (ACM IMCOM 2017)	January 5-7, 2017	Beppu, Japan
Prof. Chittaranjan Hota	13th IEEE International Wireless Communications and Mobile Computing Conference (IEEE IWCMC 2017).	June 25-30, 2017	University of Valencia, Valencia, SPAIN.
Mr. Surender Singh Samant	8th International Conference on Computing, Communication and Networking Technologies (ICCCNT-2017)	July 4-5, 2017	IIT Delhi

Faculty Name	Name of Conference	Dates of Conference	Venue
Dr. Anand Narasimhamurthy	IEEE Symposium on Drone Computing	October 6, 2017	Sterlings Mac Hotel, Bengaluru
Prof. Chittaranjan Hota	Indo-Dutch R&D Workshop	October 25-26, 2017	IIT, Bangalore
Dr. Subhrakanta Panda	Embedded Software Safety & Security	November 10, 2017	Taj Deccan, Banjara Hills, Hyderabad
Dr. Barsha Mitra	14 <sup>th</sup> IAPR International Conference on Document Analysis and Recognition (ICDAR 2017)	November 9 - 15, 2017	Kyoto, Japan
Dr. Aruna Malapati	International Conference on Computational Intelligence: Theories, Applications and Future Directions	December 6 - 8, 2017	IIT Kanpur
Dr. Subhrakanta Panda	Microsoft Intelligent Cloud.	December 14, 2017	Taj Krishna, Banjara Hills, Hyderabad
Dr. Anand Narasimhamurthy	9th International Conference on Advances in Pattern Recognition (ICAPR 2017)	December 27-30, 2017	ISI Bengaluru
Mr. Surender Singh Samant	9th International Conference on Advances in Pattern Recognition (ICAPR-2017)	December 29-30, 2017	ISI Bangalore

### III. Invited Talks given by BITS faculty:

Name of the Faculty Member	Title of the Lecture(L) / Workshop(W) and Occasion (if any)	Institution in which it was delivered / conducted	Duration / Date (DD-MMM-YYYY)
Dr. G Geethakumari	Cloud Based Malware Mitigation Techniques for Securing Internet of Things Environment	11th IEEE International Conference on Advanced Networks and Telecommunications Systems (IEEE ANTS) 2017, Odisha, India.	1.5 hours, 17-12-2017
Dr. Suvadip Batabyal	Mobility Models and Impact of Mobility on Dynamic Networks	11th IEEE International Conference on Advanced Networks and Telecommunications Systems (IEEE ANTS) 2017, at C.V. Raman College of Engineering, Odisha, India.	1.5 hours, 17-12-2017
Dr. Subhrakanta Panda	Software Validation and Change Control	Guest Lecture in CEP Course on Checkout System for Strategic Missile organized by Directorate of SINT-Checkout, ASL, DRDO, Hyderabad	1 hour, 13-12-2017
Dr. Subhrakanta Panda	Data Analysis and Statistics for Research Practices	1st International Conference on Stress Free Dentistry organized by IDA Millenium City Branch at Bangkok, Thailand.	1.5 hours, 4-11-2017
Prof. Chittaranjan Hota	Future of Cyber Security	Cyber Security Conclave 3.0, Organized by Society for Cyberabad Security Council (SCSC), Cyberabad Police Commissionerate, Hyderabad.	1 hour, 23-10-2017.
Dr. Subhrakanta Panda	Mobile Application Testing: An Introduction	10th Workshop on Recent Trends in Software Testing (RTST-2017) organized by Dept. of CSE, NIT Rourkela.	1 hour, 22-07-2017
Prof. Chittaranjan Hota	IoT Security and Network threat monitoring	ACM-India Summer School on Information and Systems Security conducted at Vellore Institute of Technology (VIT), Vellore	4 hours, 12-06-2017 and 13-06-2017
Dr. Suvadip Batabyal	Delay-Tolerant Network: A new networking paradigm for heterogeneous networks with dynamic connectivity.	IEEE International Conf. on Big Data Analytics and Computational Intelligence (ICBDACI 2017) at Chirala Engineering College, A.P.	2 hours, 24-03-2017
Prof. Chittaranjan Hota	Indian Higher Education Landscape: A Perspective	India Education Fair, Organized by High commission of India, and Srilanka at Colombo.	2 hours, 07-02-2017 and 08-02-2017



**IV. Invited talks arranged in the department:**

1. Dr. Harsha Vardhan Simhadri of Microsoft Research India gave a talk on his current research work and internship and job opportunities in Microsoft Research on 21<sup>st</sup> August 2017.
2. BITS Hyderabad Alumni, Sujeath Paredy from Microsoft Research India delivered a talk on "AI and AR: Rethinking accessibility for the visually impaired" on the occasion of Engineers' day, 15th September 2017.

**V. Awards and recognitions won by faculty and students**

Sl. No.	Name of the Faculty/Student	Details of the Award/Recognition
1	Dr. Aruna Malapati	"WOMEN IN EDUCATION" Award from The Dewang Mehta National Education Awards on 15th April 2017.
2	Prof. Chittaranjan Hota	Became Senior Member, IEEE
3	Dr. Aruna Malapati	"Prof. Indira Parikh 50 Women in Education Leaders" citation at 6th World Education Congress on 23 Nov 2017.
4.	Gourish Goudar and Dr. Suvadip Batabyal	Best Paper award in PhD Forum in 11th IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS 2017).
5	Dr. G Geethakumari	Received a Letter of Appreciation from IB, Ministry of Home Affairs, Govt of India, April 2017.
6	Dr. G Geethakumari	Selected as Treasurer, Computer Society Chapter, IEEE Hyderabad Section, for the year 2018.
7.	Sanket Mishra	Sanket Mishra, research scholar of the department received TCS PhD fellowship for four years July 2016-June 2020. He works in the area of Internet of Things.

**VI. Faculty Development, International Collaboration & Industry Immersion: NIL****VII. Significant new equipments/experimental facility added during the year: NIL****VIII. Departmental association/club activities:**

The CS/IS Department has the three student run bodies which work throughout the year to organize various talks and workshops for the students. This report lists down all the activities carried out by the following bodies in 2017.

1. Computer Science Association
2. Embryo
3. CRUx

**Computer Science Association Activities**

1. Dual Boot Session – 19th January – A dual booting session was held on the request of the students.
2. InterBITS Coding League – 8th February - In continuation with our efforts to improve the coding culture a second inter BITS coding competition was held. This competition had a very good participation of 437
3. Lecture Series on Ethical Hacking – 1st to 7th March - To introduce the opportunities that are available in this field, we organized a series of talks spanning 6 days. (during the evenings).
4. Googled – 2nd & 3rd March – One of the most popular events on campus. Held as a part of Tech Week. Participants are allowed to use a search engine for finding answers.
5. Algomanaic – 6th & 7th March – A competition where participants are asked to write down algorithms to solve challenging problems.
6. Introductory CS Talk – 11th August – A talk was organized by CSA to introduce the field of CS to the incoming batch of freshers and how to organize and plan their study.
7. Microsoft Research Talk – 21st August – A talk was organized by the CS Department to tell students about various research opportunities at Microsoft.
8. NTU Internship – 22nd August – A session was held to discuss internship opportunities at NTU, Singapore which was followed by shortlisting students for the same.
9. CS Student Faculty Interaction – 23rd August – The entire CS Department was invited to interact with the new batch of 2017. Teachers introduced themselves to the students and answered all their queries.
10. MSR Project Avare Talk – 15th September – As part of Engineers' Day Celebrations we called a researcher and fellow BITSian from Microsoft to give a talk on the advent of new technologies and discuss his work.

11. Mock Algomaniac – 19th September – A mock competition was held as a practice round for ATMOS'17.
12. Mock CodeGolf – 23rd October – CSA introduced a new competition called CodeGolf where participants have to write the shortest code.(# of chars)
13. ATMOS'17
  1. Ethical Hacking Workshop
  2. Data Science Workshop
  3. Paper Presentation
  4. Session with Google Developers Hyderabad
  5. Talk by Microsoft Researchers on Deep Learning
  6. Algomaniac – Prize Money 20k
  7. CodeGolf – Prize Money 15k
  8. Googled – Prize Money 10k
14. GSoC Orientation – 19th November – A session was held by students who got selected for Google Summer Of Code. They shared various tips and tricks on how to prepare for the same and shared their experiences.

#### **Embryo activities**

1. PEARL'17
  1. One on one conversation between Sriram Karri and Dr.Shashi Tharoor on 'India in the 21st century'. It was widely covered in Local newspapers and news channels and was attended by an astounding 2700 people.
  2. Offbeat session where India's youngest female stunt biker, a street play artist, a web series hero and a harbinger of hope for artists; came together to tell us what makes them and what they do truly offbeat.
  3. A storytelling workshop conducted by the famous Kommune group by Tess joseph, Shamir Reuben and Anshu Mor.
  4. A standup/storytelling session by Anshu Mor where he talks about his journey from being the head of XBOX India to being a fulltime standup comedian in the auditorium.
  5. BITSian's Day - 4th August – The first talk of the semester that was held in the auditorium. Four BITSian alumni from different walks of life were part of a panel and enlightened the freshers with some sound advice and things which they learnt from when they were students here.
  6. Placement Talk - 5th August – Talk by students who bagged the highest packages in their respective branch, they shared with us tips on how to crack the interview, preparation for group discussion etc.
  7. Foreign Internship Talk - 28th August – Talk by students who went to different countries for their internships (MITACS, DAAD etc), they explained the application procedure for the internship, shortlisting criteria, SOP writing hacks etc.
  8. LGBT Awareness Talk - 6th Sept 2018 – In one of the first kind of talks in BITS Hyderabad, representatives from the LGBT community spoke about the challenges the community faces and how such issues can be addressed in a student community.
  9. Deloitte Talk – 7th Sept 2018 - An insightful look into the life of a business analyst and the kind of jobs offered in the consulting world.
  10. UPSC Toppers Talk – 22nd Sept 2018 –Study tips shared by the toppers of UPSC, really helpful to the students looking to pursue civils.

#### **ATMOS'17**

1. Talk by Abhas Mitra, one of the most accomplished indian astrophysicists best known for his distinct views on black holes and Big Bang cosmology involving the black hole information cosmology.
2. Talk by Dilip Chabbria, India's leading car designers who was also responsible for making India's first Sports Car, Avanti.
3. Talk by AS Kiran Kumar Rao, ISRO's chairman, an enlightening and interactive session with students about the future of Indian space programs.

4. A tech panel with a former product designer from Apple and an AI specialist from Ola cabs about the future of Machine Learning and Artificial Intelligence.

### **CRUx Activities**

1. Competitive programming contests
2. Machine Learning workshops - Taught students the basics of machine learning.
3. Reverse Engineering workshop and competition - Taught students basics of debugging and reverse engineering binary files. Conducted a 4 day long capture-the-flag competition on the same.
4. DIY workshop - Taught students how they can keep PC performance optimized and provided useful tools for the same.
5. Exhibited multiple projects done under Crux viz. "Shoutboxx Calendar", "CMS app", "Download manager", "Markdown editor" during project exhibition.
6. Summer vacations 2017
  1. Crux saw the summer vacations as an opportunity to learn something new and to enhance one's knowledge and skills.
  2. Members created Facebook groups dedicated to each of the following - Web Development, Competitive coding, Python programming, Android development. Regular tutorials and practice materials were posted for the students to learn from. Members were active throughout the vacations to help people out and resolve their queries.
7. Mozilla Firefox Add-on Hackathon - Hackathon conducted in association with Mozilla foundation.
8. Chat-bot hackathon - Hackathon conducted in association with IMImobile.
9. Python Workshops - Taught students basics of Python programming.
10. Web Development Workshops - Taught basic HTML/CSS and Javascript for web programming.
11. Android Development Workshops - Basic and advanced workshops on android development.
12. Competitive Programming Workshops
13. Git Workshop - Workshop on Git and the importance of VCS.
14. ATMOS'17
  1. Reverse Coding - Competition based on reverse engineering
  2. Codejam - Competitive programming competition.
  3. PyBITS - Python conference conducted in association with Python Software Foundation. Additionally, multiple workshops in Python ranging from basic to advanced level were also held.
15. Winter vacations 2017-18
  1. Crux Winter of Code - To improve the open source development culture across the college, the club organized this student-mentor program. Participants contributed to different open source projects (of Crux or otherwise) under the mentorship of experienced open source developers from the club.
  2. Facebook groups were (and continue to be) active throughout the vacations.

**IX. Major maintenance, renovations or new construction reports: NIL**

**X. Major equipments acquired during the year: NIL**

**B3.10.6 Electrical and Electronics Engineering****Number of faculty members**

<b>Professors</b>	<b>1 (on sabbatical until May 2019)</b>
<b>Associate Professors</b>	<b>3</b>
<b>Assistant Professors</b>	<b>13</b>
<b>Lecturers</b>	<b>4</b>
<b>Visiting Faculty</b>	<b>2</b>
<b>Professor Emeritus</b>	<b>0</b>

**Head of the Department:** Prof. Sanket Goel

**Contact details:** 040-66303686 **Email:** sgoel@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 44(Full Time: 24, Part Time: 14, Submitted: 6)

**I. Sponsored Research activities:****(a) Ongoing projects**

<b>S.No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount (Lakhs)</b>	<b>Start Date</b>	<b>Duration</b>
1	Metal-oxide and nanocomposite based low-power non-volatile switching device: a novel approach	Souvik Kundu	BRNS, DAE	35		3 years
2	Strategies for Fault-Tolerant Network-on-Chip Design	Soumya J	SERB	25.93		3 years
3	Development of Microfluidic Diffusivity Meter	Sanket Goel	SERB	23		
4		Saroj Mondal	BITS OPERA	3.6 per year		5 years
5		Surya Shankar Dan	BITS OPERA	3.6 per year		5 years
6		Prasant Kumar Pattnaik	BITS OPERA	3.6/year	Jan 2015	5 Year
7	High performance and cost-effective lead free ferroelectric/semiconductor heterojunction solar cells	Souvik Kundu	BITS RIG	2		3 years
8	Strategies for Thermal aware Application-Specific and Reconfigurable Network-on-Chip Design	Soumya J	BITS RIG	2		2 years
9	Development of low power motion estimation architecture for HEVC applications	S K Chatterjee	BITS RIG	2	1 Jan 2015	3 years
10	Development of Microfluidic Enzymatic Biofuel Cell	Sanket Goel	BITS RIG	2	24 May 2017	2 years
11	Modeling and control of fault tolerant control systems with state-dependent failures	Shaikshavali C	BITS RIG	2	4 July 2017	2 years
12	Nanoscale power management interface circuits for IOT node	Saroj Mondal	BITS RIG	2	7 Nov 2017	2 years
13	Condition monitoring and diagnosis of high voltage transmission line insulators under the influence of extreme environmental	Mithun Mondal	BITS RIG	2	7 Nov 2017	2 years

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Start Date	Duration
	conditions					
14	Reconfigurable Dielectric Resonator Antenna for wireless applications.	Runa Kumari	RIG , BITS Pilani	2.0	Mar 2016	2 years

#### External Projects sanctioned during the year

SL No	Project Name	PI & co-PI	Funding Agency	Sanctioned Amount (Lakhs)	Start Date	Duration
1	Metal-oxide and nanocomposite based low-power non-volatile switching device: a novel approach	Souvik Kundu	BRNS, DAE	35	1-Aug-17	3 years
2	Strategies for Fault-Tolerant Network-on-Chip Design	Soumya J and S K Sahoo	SERB	26	6-March-17	3 years
3	Modelling and Simulation of Quartz Accelerometer for Navigation System	S K Dubey and Sanket Goel	DRDO	5.3	1-Jul-17	1 year
4	Investigations of the effects of photon up-conversion materials on the electrical performance of ferroelectric/semiconductor heterojunction photovoltaic devices	Souvik Kundu, Kannan R and B. Hari	SERB	35	1-Oct-17	3 years

#### II. Publications:

S No	Authors	Title of the Publications	Details of the Journal	Year
1	Rajagopalan V, Zhiguo Jiang, Jelena Stojanovic-Radic, Guang H Yue, Erik P Pioro, Glenn R Wylie, and Abhijit Das	A Basic Introduction to Diffusion Tensor Imaging Mathematics and Image Processing Steps	Brain Disord Ther 2017, 6:229)	2017
2	Rajagopalan V , Erik P. Pioro	Differential involvement of corticospinal tract fibers in ALS phenotypes: A diffusion tensor tractography and imaging study	Neuroimage Clinical, Volume 14, 2017, Pages 574–579	2017
3	Manu Gupta, Venkateswaran Rajagopalan, Erik P. Pioro, B. V. V. S. N. Prabhakar Rao	Volumetric analysis of MR images for glioma classification and their effect on brain tissues	Signal, Image and Video Processing 2017 pp 1–9 (eprint) Springer	2017
4	S. Chitraganti, R. Toth, N. Meskin, J. Mohammadpour	Stochastic model predictive tracking of piecewise constant references for LPV Systems	IET Control Theory & Applications, in press	2017
5	A. V. Pavan Kumar, Aivelu M. Parimi, K. Uma Rao	Performance analysis of FLC controlled PV-Wind hybrid power system for dc load with real-time data in Matlab, Simulink	Journal of Electrical and Electronics Engineering	2017
6	Venkateswaran PS, Santosh Dubey, Abhishek Sharma, Ajay Agarwal and Sanket Goel	Stereolithographic 3D Printed Microfluidic viscometer for Rapid Detection of Automobile Fuel Adulteration	Accepted for Publication with Sensor Letters	2017
7	Madhavi Bandapati, Prabhat K. Dwivedi, Balaji Krishnamurthy, Young Ho Kim, Gyu Man Kim and Sanket Goel	Screening various pencil leads coated with MWCNT and PANI as Enzymatic Biofuel Cell Biocathode	Accepted for Publication with International Journal of Hydrogen Energy	2017
8	Soham Jariwala, Rohit Nagpal, Saksham Phul, Sanket Goel and Balaji Krishnamurthy	Modeling the performance of an enzymatic glucose fuel cell	Vol. 801, pp. 354–359, Journal of Electroanalytical Chemistry	2017

S No	Authors	Title of the Publications	Details of the Journal	Year
9	Soumya J, Niranjan Babu K, Santanu Chattopadhyay	Multi-Application Mapping onto a Switch based Reconfigurable Network-on-Chip Architecture,	Journal of Circuits, Systems and Computers (JCSC), Accepted (2017)	2017
10	S. K. Sahoo, A. Gangishetty, R. Sahoo and M. Muglikar	High Performance Ternary Adder using CNTFET	IEEE Transactions on Nanotechnology, Vol. 99, pp.1-1	2017
11	Young Ho Kim, Jeong-Woo Sohn, Yeon Kyung Lee, Jaehoon Jung, Minyeong Jeong, Sanket Goel, Hee Jin Kim, Sang-June Choi	Preparation of pH Sensitive MMT/PEGMEA Nanocomposite Micropatterns by Rapid and Simple UV Curing Procedures	Journal of Nanoelectronics and Optoelectronics, Vol 12(6), pp. 550-556.	2017
12	Ganesh Kumar Ganjikunta and Subhendu Kumar Sahoo	An area-efficient and low-power 64-point pipeline Fast Fourier Transform for OFDM applications	Integration, the VLSI Journal, Vol. 57, pp. 125-131.	2017
13	Kotha Srinivasa Reddy and Subhendu Kumar Sahoo	An approach for fixed coefficient RNS-based FIR filter	International Journal of Electronics, Vol. 104 (8)	2017
14	Sudarsana Reddy Kadiri and B. Yegnanarayana	Epoch extraction from emotional speech using single frequency filtering approach	Speech Communication 86, 52–63	2017
15	Makkena, Goutham, and M. B. Srinivas	Nonlinear Sequence Transformation-Based Continuous-Time Wavelet Filter Approximation.	Circuits, Systems, and Signal Processing e-copy available at <a href="https://doi.org/10.1007/s00034-017-0591-9">https://doi.org/10.1007/s00034-017-0591-9</a>	2017
16	Sheela kumari R, Venkateswaran Rajagopalan, Anuvitha C, Tinu Varghese, Luduan Zhang, Guang H Yue, P.S. Mathuranath, C.Kesavadas	Quantitative analysis of grey matter degeneration in FTD patients using fractal dimension analysis	Brain Imaging Behav. 2017 Oct 30. doi: 10.1007/s11682-017-9784-x. [Epub ahead of print]	2017
17	M. A. Meeker, S. Kundu, D. Maurya, M-G. Kang, A. Sosa, R.H. Rathsara, S. Priya, G. Khodaparast	The permittivity and refractive index measurements of doped barium titanate (BT-BCN)	Optical Materials, Vol. 73, pp. 793-798	2017
18	Mithun Mondal, and G.B. Kumbhar	Generalized Analytical Formulae to Compute Electrical Characteristics of a Homogenous Ladder Network of the Transformer Winding	International Journal of Circuit Theory and Applications	2017
19	Ramchandra Nittala, Alivelu M.Parimi, K. Uma Rao	Experimental Prototype Model of IDVR for Bidirectional Voltage Compensation	International Journal of Power Electronics and Drive Systems.	2017
20	A. V. Pavan Kumar, Alivelu M. Parimi, K. Uma Rao	Tie-Line Frequency Bias Control of Two-Area PV-Wind hybrid power system	UPB Scientific Bulletin, Series C: ELECTRICAL ENGINEERING AND COMPUTER SCIENCE, ISSN 2286-3540	2017
21	Ramchandra Nittala, Alivelu M.Parimi, K. Uma Rao	A Real Time Implementation Of Interline Dynamic Voltage Restorer For Improvement Of Power Quality	Accepted in International Journal of Power Electronics, Inderscience	2017

S No	Authors	Title of the Publications	Details of the Journal	Year
			Publishers Ltd	
22	M. T. L. Gayatri, Alivelu M. Parimi	A Review of Reactive Power Compensation Techniques in Microgrids	Renewable & Sustainable Energy Reviews, Elsevier, V. 81	2017
23	Ramchandra Nittala , Alivelu M.Parimi , K. Uma Rao	Application of PST Source based DC Link Restoration for IDVR	International Journal of Electrical and Computer Engineering, Vol. 7, No. 3, 2017, ISSN: 2088-8708, a SCOPUS indexed Journal, UGC Listed 2928	2017
24	A. V. Pavan Kumar, Alivelu M. Parimi, K. Uma Rao	Digital Simulation of Voltage Regulated Inverter for FLC Controlled Autonomous PV-Wind Hybrid Power System	Journal of Electrical Engineering, ISSN: 1582-4594. (accepted for publication)	2017
25	A. V. Pavan Kumar, Alivelu M. Parimi, K. Uma Rao	Solar Illumination And Wind Speed Prediction: The Relative Prospects and Potential outcomes	Journal of Electrical Engineering, ISSN: 1582-4594 Vol. 17, issue.1, no.35, pp 1-8, 2017	2017

### III. Conferences attended/papers presented:

S No	Name of the Faculty	Name of The conference	Title of the paper	Conference date	Venue
1	Soumya J	VLSI Design Conference-2017	Application-specific and reconfigurable network-on-chip design	7-11 Jan 2017	HICC, Hyderabad
2	Sanket Goel	Photonics West 2017	Rapid Prototyped Microfluidic PCR platform to detect mutations associated with multiple drug resistance tuberculosis & 3D printed microfluidic diffusivity meter: A tool to optimize CO2 driven enhanced oil recovery	28 Jan- 2 Feb 2017	San Francisco, USA
3	P K Pattnaik	4 <sup>th</sup> International conference on signal processing and integrated networks SPIN 2017	A Novel algorithm to optimize cost of coherent long-haul DWDM network	02-03 Feb 2017	Amity University, Noida, India
4	Soumya J	IEEE Computer Society India symposium 2017	-	17-19 Mar 2017	IIIT Allahabad, UP
5	Prasant Kumar Pattnaik	WiSPNET 2017	Robust DCN Design for Optical Transport Network Resilience	20-22 March 2017	Chennai, India
6	S K Sahoo	4 <sup>th</sup> International conference on Asynchronous counter	An efficient serial-serial multiplier using parallel asynchronous counter	3-4 Jun 2017	Darjeeling, West Bengal
7	Sandeep Kumar	Indian Antenna Week 2017	-	5-9 June 2017	DIAT, Geiringer, Pune
8	Soumya J	54 <sup>th</sup> Design	Flexible spare core placement	18-22 Jun,	Austin, TX

S No	Name of the Faculty	Name of The conference	Title of the paper	Conference date	Venue
		Automation Conference-2017(DAC-2017)	for fault-tolerant network on chip design	2017	
9	Balasubramanian M	12 <sup>th</sup> conference on lasers and electro-optics pacific rim CLEO-PR 2017, 22 <sup>nd</sup> optoelectronics and communication conference OECC 2017 and 5 <sup>th</sup> Global photonics conference 2017 PGC 2017	MOEMS Accelerometer based on grating coupler integrated with embossed	31 Jul-4 Aug 2017	IEEE photonics society, optical society of America and SPIE
10	S K Chatterjee	ICCES 2017	A New one bit transform for low complexity block based motion estimation for HEVC	19-20 Oct 2017	Arcadia, Coimbatore
11	Runa Kumari	ICCES 2017, International Conference on Computational and Experimental Engineering and Sciences	Bandwidth enhanced high efficiency compact CPW fed Metamaterial antenna based on ENG -TL structure	26-30 Jun. 2017.	Madeira, Portugal
12	Runa Kumari	iAIM 2017, IEEE International Conference on Antenna Innovations and Modern Technologies	Aperture coupled frequency reconfigurable dielectric resonator antenna for wireless applications	24-26 Nov 2017	Bangalore, India
13	Shaikshavali C	54th IEEE conference on decision and control 2017	Nonlinear event-based state estimation using sequential Monte Carlo Techniques	12-15 Dec 2017	Melbourne, Australia
14	Ramakant	IWPSD 2017	Optimization of the tunnel FET Device structure for achieving circuit performance better than the current standard 45 nm CMOS technology	11-15 Dec 2017	IIT Delhi
15	S K Sahoo	IEEE iNIS 2017	Lookup table-based low-power implementation of Multi-channel filters for software defined radio	18-20 Dec 2017	Oriental group of Institutes, Bhopal
17	Soumya J	IEEE iNIS 2017	Routing Algorithm for Application-Specific Network-on-Chip with Irregular Core Sizes	18-20 Dec 2017	Oriental group of Institutes, Bhopal
18	Souvik Kundu	ICAMR 2017	BaTiO <sub>3</sub> -BiFeO <sub>3</sub> /Nb:SrTiO <sub>3</sub> Based Resistive Switching Memory and its Potential Application in Analog Signal Processing	20-22 Jan, 2017	Hong-Kong
19	Prasant Kumar Pattnaik	WRAP-2017	Variable Optical Attenuator for DWDM Networks based on Metal Proximity to Waveguide Bragg Grating	18-19 December 2017	Hyderabad, India.

#### IV. Invited Talks given by BITS faculty:

S No.	Name of the Faculty Member	Institution in which it was delivered / conducted	Duration / Date (DD-MMM-YYYY)
1	Sanket Goel	Biotechnology Conference, Keynote Lecture, PJTSA University, Hyderabad	27-Oct-17
2	Sanket Goel	Special Guest Lecture BITS-Pilani, Hyderabad Campus; Phoenix Students Group	12-Sep-17
3	Sanket Goel	Invited Talk (IC-MEET 2017)BVRIT, Hyderabad	10-Sep-17



S No.	Name of the Faculty Member	Institution in which it was delivered / conducted	Duration / Date (DD-MMM-YYYY)
4	Sanket Goel	School of Biomedical Engineering, IIT(BHU), Varanasi	8-May-1
5	Sanket Goel	Role of Practical knowledge in Engineering, Geethanjali College of Engineering and Technology, Hyderabad	7-Apr-17
6	Sanket Goel	Towards Microfluidic Enzymatic Biofuel Cell: Recent developments and pathways, CSIR-Indian Institute for Chemical Technology (IICT), Hyderabad	28-Feb-17
7	Sanket Goel	BioMEMS Micro-devices for Biomedical Applications, K L University, Vijaywada, AP,	31-Mar-17
8	Sanket Goel	Evolution of Microfluidic / Lab-on-a-chip Devices for Energy and Biomedical Applications, Indian Institute of Information Technology, Hyderabad	1-Apr-17
9	Runa Kumari	Delivered invited Talk on "Bandwidth enhanced techniques for Metamaterial antennas" at the Symposium on Metamaterial Science and Technology in ICCES (International Conference on Computational and Experimental Engineering and Sciences) 2017, at Madeira, Portugal.	June 2017
10	Runa Kumari	Delivered invited Talk on " Modern Antennas and its applications" in a Faculty Development Program (FDP) organized by the Department of Electronics and Communication Engineering, Vignans Institute of Management and Technology for Women, Hyderabad.	July 17
11	Runa Kumari	Delivered invited Talk on " Latest Research & Applications in FRACTAL Antennas" at Military College of Electronics and Mechanical Engineering (MCEME), Secunderabad	August 17
12	Soumya J	Delivered an invited talk on Embedded Systems and empowerment of women at Sidhartha Engineering College, Vijayawada	Feb 2017
13	kcs murti	Role of GIS in information management and eGovernance at APHRDI	Jul 17
14	kcs murti	Factors contributing to the success of MIS projects	Jul 17
15	Alivelu M Parimi	Invited as Guest Lecture, "Application of FACTS in Power Systems" in National level Workshop on Application of Power Electronics to Power Systems and Renewable energy Sources" at Narayanama Engineering College (GNITS) Hyderabad	March 14th – 18th 2017

#### V. Invited talks arranged in the department:

S No	Guest Name	Date	Topic	Guest from
1	Dr. Harish Barshilia & Dr. Balamati Choudhury	18-19 Dec 2017	<b>Multiscale Simulation of Advanced Materials</b>	CSIR–NAL, Bangalore, India
2	Prof. Gulamabas G. Sivjee	22 Nov 2017.	Technological Challenges arising from Space Disturbances	Space Physics Research Laboratory, Embry Riddle Aeronautical University, USA
3	Prof. Sanjeev Shroff	18 Nov 2017		University of Pittsburgh
4	Dr. Prashant Shingare	17 Nov 2017	Wind turbine control systems theory and practices	Vertiv Co - formerly Emerson Network Power
5	Prof. Aurobinda Routray	<b>10 Nov 2017</b>	Portable Embedded System for Human Monitoring	IIT Kharagpur
6	Prof. R. Karmalkar	15 Sept 2017	An Interactive Session on the Recent Research Trends in Physics of Nanoelectronic Devices, Modeling and Fabrication.	IIT Madras
7	Prof. Varun Jeoti	24 Aug 2017	Beyond line of Sight communication: Some Developments	University Technology Petronas, Malaysia
8	Prof. Linga Reddy & Prof. Daniel Romero	5 Aug 2017	WISENET/UiA (Norway) Research Activities and Self-powered IoT Devices	University of Agder, Norway
9	Prof. Daman Saluja	31 July 2017	Motivation for Engineering Solutions to Biomedical Problems	Delhi University

**VI. Awards and recognitions won by faculty and students:**

S.No	Name of the Awardee	Award	Details
1	Sanket Goel	SERB Travel Grant	Prof. Sanket Goel received SERB Travel grant to present two oral papers at Photonics West to be held in San Francisco during 28 Jan - 2 Feb 2017.
2	Soumya J	SERB Travel Grant	Dr. Soumya J received SERB Travel grant to present a poster at Design Automation Conference held at Austin, Texas during 18 June to 22 June 2017.
3	Soumya J	Nominated for Best PhD thesis award	Dr. Soumya J's PhD thesis has been nominated for Best Thesis Award at VLSI Design Conference held at Hyderabad during 11 Jan 2017

**VII. Faculty Development, International Collaboration & Industry Immersion:**

- Prof. Sanket Goel has been invited as External PhD examiner, Department of Bioscience and Bioengineering, IIT Guwahati.
- Prof. Sanket Goel has been nominated as Member, Technical Evaluation Committee (TEC), National Institute of Nutrition (ICMR-NIN), Hyderabad
- Dr. Alivelu Manga Parimi served in the Faculty selection committee, BOS member of EEE department, Vasavi College of Engineering and Technology, Hyderabad

**VIII. Significant new equipment/experimental facility added during the year:****IX. Departmental association/club activities:**

- **Faculty Interaction:** An interaction with the faculty members and the freshers was organized for the first time ever in 2017. All ECE, EEE and ENI students were allowed to meet and interact with the esteemed faculty of the institution so that they could convey their expectations and aspirations to their mentors first-hand.
- **Engineer's Day:** With the CEA as an ally, Phoenix organised Engineer's day in collaboration with MEA, CSA and ACE at 15th September. This year's theme was 'Role of Engineers in Developing Society'. Dr. Mokshagundam Visveswaraiya, Electrical Department, IIT Madras, was the chief guest. Event organised by Phoenix exclusively following that day was the Home Automation Workshop. Also, projects done by the students in the institution were displayed for others to view in the LTC.
- **Home Automation Workshop:** This workshop aimed at teaching home automation using arduino nano microcontroller. It taught students to interact with devices using facebook messages for their easy usage. The workshop also emphasized on security measures that could be triggered remotely.
- **I-Navigate Workshop:** Phoenix organised the I-Navigate Workshop in 17th and 19th September. Its purpose was to teach students to navigate their bots using hand gestures. It built upon the line follower workshop organised by ARC on robotics.
- **Ethical hacking workshop:** Speaker Talked about terminology related to internet security.
  - Told about Google dorks.
  - Revealed Loopholes in website security by live demonstration.
  - Remote Accessed the security cams of airport and zoo.
  - Talked about mobile Hacking.
- **Atmos Events:** One of the major flagship events, robowars, managed to exceed expectations this year in terms of competition and crowd. Trapped inside reinforced polymer glass, the mechanical gladiators managed to pull a vast fraction of the fest attendees. Almost all matches were knockouts, and the teams gave the competition their every effort for the win. Another anticipated event, the quadcopter race. It was organised with considerable success by the team, amongst enthusiastic cheers by both the on and off campus students who visited the fest. In the line follower competition organised exclusively by Phoenix, contestants had to make sure their bits adhered to the lines as instructed. Although being a comparatively easy-seeming event, the competitors had the bits pre-prepared, which added to the competition.
- **PCB Workshop:** The Printed Circuit Board workshop that taught participants to print their circuit boards themselves was organised by Phoenix during atmos. It too had decent participation, due to the importance and weight of the concepts taught in that event.
- **Paper presentation:** The paper presentation this year had more than a hundred participants from various colleges all over the country, sharing their own ideas and gaining from other's. It was judged by

our own faculty, and organised by the students of Phoenix. Papers related to various undergrad and graduate research projects were displayed.

- **Internet Of Things:** IOT is one of the fastest growing fields in the tech industry. To emphasize on the fact, Phoenix in association with Robokart, organised the IOT training session. Along with the rest of the events, the IOT workshop also had major attendance. It was a certified workshop, taught by professionals and organised by the campus.

#### X. Major maintenance, renovations or new construction reports:

#### XI. Major equipment acquired during the year:

S No	Name of the Equipment/Software	Lab Name	Cost of the Equipment/Software (in lakhs)
1.	Induction motor	Power Electronics	1.07
2.	CEL Robox Dual, Think3D 3D PLA 1075mm Spools	MEMS Lab	1.09
3.	Adv. Microstrip trainer kits, Microwave power meter, Microprocessor based tripod stand with computer interface & software	Microwave lab	6.55
4.	100kV AC/100kVDC test set 2. 150mm sphere hap assembly(Motorised)	Electrical machines	5.58

### B3.10.7 Department Name: Economics and Finance

#### Number of faculty members

Senior Professors, Professors	2
Associate Professors	0
Assistant Professors	12
Lecturers	0
Visiting Faculty	0

Head of the Department: Sudatta Banerjee

Contact details: Email: sudatta@hyderabad.bits-pilani.ac.in

Number of PhD Scholars: 16

#### I. Sponsored Research activities:

##### (a) Ongoing projects

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Career Persistence of Indian Women Professionals in Information Technology (IT) Sector: Brakes, Accelerators, Challenges and Opportunities	Swati Alok (and Sudatta Banerjee)	ICSSR	200000/-	1 year

##### (b) Projects sanctioned during the year

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	Career Persistence of Indian Women Professionals in Information Technology (IT) Sector: Brakes, Accelerators, Challenges and Opportunities	Swati Alok (and Sudatta Banerjee)	ICSSR	200000/-	1 year

**II. Publications:**

1. C H Yaganti, December 2017, The development of different Agriculture Produce Marketing Facilities Strategies and Issues in the state of Andhra Pradesh, The Indian Economic Journal, Special issue.
2. Mini Thomas P., 2017, Empirics of Service Taxation in India: A Macroeconomic Perspective, Journal of Social and Economic Development, Springer Publications, Vol. 19, no. 4, pp.143-160.
3. Rishi Kumar, Housing, Water and Related Amenities in Telangana, Chapter 8, in Telangana Social Development Report, 2017 (ed: Kalpana Kannabiran, J. Jayaranjan and Padmini Swaminathan), Council for Social Development, Hyderabad, pp. 215-238.
4. Rishi Kumar, Different Approaches to Identify the Poor: Do They converge?, Social Indicators Research, Forthcoming.
5. Swati Alok, Nithya Kocherlakota, Satwik Beernelly, Dec 2017, Gender and Entrepreneurial Intentions: A Study Among BITS-Pilani Students, IUP journal of Entrepreneurship Development , Vol XIV, no.4.

**III. Conferences attended/papers presented:**

1. C H Yaganti, The development of Derivatives Markets and Risk minimization & volatility Dynamics in International Conference on 25 Years of Economic Reforms in India, held at Department of Economics, Kakatiya University, Warangal, January 28 - 29, 2017.
2. Nagaraju Thota, An Analysis of Cost of Cultivation and Production: A Case study of United Andhra Pradesh in International Conference on 25 Years of Economic Reforms in India” held at Kakatiya University, Warangal-Telangana, January 28 - 29, 2017.
3. Swati Alok, Consumer perceptions towards frozen foods: A study of Hyderabad-Secunderabad twin cities, in National conference sponsored by ICCSR in IPE on: Modern Retailing- Social & Economic Perspectives, January 30-31, 2017 (Awarded “the Best paper” of the conference)
4. Sri Hari Nayudu & C H Yaganti, Long Run Determinants of Sovereign Bond Yields: The Case of Emerging Economies in National Conference on Globalizing the Finance held at Department of Economics, Pondicherry Central University, April 9-11, 2017.
5. Sudatta Banerjee, Determinants of Schooling Quality: A Case Study of the Schools of Burdwan, India, in XXVI Meeting of the Economics of Education Association, Murcia, Spain, June 29-30, 2017.
6. Swati Alok, Application of Theory of Planned Behavior Model during Task Conflict: An Empirical Study among Indian Software employees in 30th International conference, at International Association for Conflict Management (IACM) Conference in Berlin, Germany organized by ROSS school of Business, University of Michigan, July 8-13, 2017.
7. Durgesh C Pathak, Effect of Education of Household Head on Income from Agricultural Farm, in National Conference on Agriculture & Rural Management: Prospects & Emerging Issues, Organized by Department of Economics, St. Xavier’s College, Jaipur in collaboration with The Econometric Society of India, November 3-4, 2017.
8. Swati Alok, Impact of selling skill and demographic variables on sales performance in 4th international conference on human resource management in ICFAI business school (IBS) Hyderabad, November 10, 2017.
9. Swati Alok, A household-based survey of knowledge, attitudes, and practices (KAP) towards dengue fever among four villages of Shameerpet Mandal of Ranga Reddy District of Telangana in IASSH - 15th annual conference NIRDPR, November 16-18, 2017.
10. Sudatta Banerjee, Determinants of Schooling Quality in XXVIIth Annual General Conference on Contemporary Issues in Development Economics, Jadavpur University, Kolkata, December 21-22, 2017.

**IV. Invited Talks given by BITS faculty:**

1. Bheemeshwar Reddy A- “Analysis of National Sample Survey Unit-level Data” – Organized by Kerala State Planning Board Office, Thiruvananthapuram, March 16-17, 2017
2. Nagaraju Thota “Financial Derivatives” at “Madanapalle Institute of Technology & Science” Madanapalle, December 19, 2017.

**V. Invited talks arranged in the department:****VI. Awards and recognitions won by faculty and students****VII. Faculty Development, International Collaboration & Industry Immersion**

1. Mini Thomas and Abdul Quadir- Participated in Faculty Development Programme in Economics organised by Bloomberg, held at Mumbai from May 18-19, 2017.
2. Swati Alok, Case study writing workshop, ICFAI Business School, Hyderabad, October 5-6, 2017.

**VIII. Significant new equipments/experimental facility added during the year: Bloomberg Subscription****IX. Departmental association/club activities:**

- 27 January –Session on “Use of ProwessIQ data base by CMIE” – Janardhan Reddy

- 12 February – Quant Alpha Model Workshop – Vivek Tirunagiri : Vice President Research, World Quant
- 04 and 05 February – Finnovate 2017 Speakers :-
  1. Shreenivas Kunte  
Designation: Content Director for CFA Institute  
Topic: How to make Career in Finance
  2. Ravi Kiran  
Designation: Private Consultant (Investment Banking)  
Former Director – Corporate & Investment Banking, Bank of America.  
Topic Technology trends in Finance
  3. A V Vedpuriswar  
Designation: Director of Learning and Development at Cognizant  
Topic: Strategic Insight on How FinTech is disrupting Banking Industry?
  4. V Ravi  
Designation: Professor at IDBRT  
Head, Centre of Excellence in Analytics  
Topic: Role of Analytics in Commercial Banking
- 12 February– Workshop by Nomura Executives
  1. Nishant Sharma – Executive Director (Global Markets)
  2. Pramodini Mallampati – Analyst (Global Markets)
  3. Gaurav Phukan – Associate/Manager (Human Resources)
- 11 April – Interactive Session with Prof Aswath Damodaran
- 08 August – MOU Signing with Credit Suisse and launch of FRAM course.
- 24 August – Shigemi Lean Six Sigma Green Belt Programme Orientation - Cognizant Technology Solutions
- 30 August – Business Quiz in association with Rajagiri National Business Quiz 2017 – conducted Rajagiri Centre for Business Studies
- 02 September – Equity Research Initiative Programme conducted by Mentored Research
- 20 September – Panel Discussion on “The What, Why and How of GST” - moderated by CA Sudhir V S: Partner, Hiregange and Associates
- 27 and 28 October – ATMOS 2017 Events
  1. Talk by Mr. Venu Palaparathi  
Co-founder/founding trustee of BITSAA International  
Senior Vice President of Compliance, Regulatory and Government Affairs at Virtu Financial Inc.  
Former Chief executive at Nasdaq Execution services  
Former Director Audit in Reuters, USA.  
TOPIC : “Emerging Market Trends and Planning a Career in Finance”
  2. Value Investing Workshop – Mr. Mallikarjun Gaddam
  3. The Courtroom – Case Studies based interactive event.
  4. Economics Paper Presentation – judged by Dr. Mini Thomas and Dr. Dushyant Kumar

**X. Major maintenance, renovations or new construction reports:**

**XI. Major equipments acquired during the year:**

**B3.10.8 Humanities and Social Sciences**

Number of faculty members: 9

Senior Professors, Professors	0
Associate Professors	2
Assistant Professors	7
Lecturers	0
Visiting Faculty	0

Head of the Department: Prof. Sunny Jose

Contact details: Email: sunny@hyderabad.bits-pilani.ac.in

Number of PhD Scholars: 8

i. Sponsored Research activities:

(a) Ongoing projects

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lacs)	Duration
1	Political Ecology of Urban Afforestation: A Study of the Implementation of Haritha Haram Programme in Hyderabad, Telangana.	Dr. Lavanya Suresh	OPERA	Rs.3.60 Lacs per year	5 years
2	Measuring Segregation in Hyderabad: Introspecting Multiple Indexes and Multiple Patterns	Dr. Suchismita Satpathy	RIG	Rs.2 lacs	2 years
3	A Study of Disaster Management Plans in India	Dr Biswanath Dash	RIG	Rs.2 Lacs	1 year
4	An Evaluative Study of ESP Programmes in India	Dr. Santosh Mahapatra	RIG	Rs.1.7 Lacs	2 Years
5	Aptis Action Research Mentoring Scheme	Dr. Santosh Mahapatra	British Council	Rs.1,71,990	1 Year

(b) Projects sanctioned during the year : NIL

ii. Publications:

Book

- Nadkarni, M. V., Sivanna, N., & Suresh, Lavanya., (2018). *Decentralised Democracy: Gandhi's Vision and Indian Reality*. New York: Routledge.

Papers Published

- Suresh, Lavanya., (2017). Decentralized and Effective Forest Resource Governance in India. *South Asia Research*, 37(1), 78-92.
- Lolla, Aruna.,(March, 2017)"Mantras Help the General Psychological Well-Being of College Students: A Pilot Study. "Journal of Religion and Health. Springer Publishers ISSN 0022-4197 J Relig Health DOI 10.1007/s10943-017-0371-7
- Maya Vinai & Vinai Sankunni. Negotiating Faith and Culture: De-Orientalizing hegemonic representations of the Ancient city of Banaras. *The Rupkatha Journal of Interdisciplinary Studies in Humanities*. 9.3 (2017):199- 209.
- Maya Vinai & M. G Prasuna. Circumscribed by Space and Time: An Assessment of the Popularity and Impact of Traditional Dance-drama Krishnattam in the 21st C. *Asiatic: IIUM Journal of English Language and Literature* 11.2 (2017):22-32.
- Maya Vinai. From Kitchen to Boardrooms: Changing thematic terrains in the works of 21st century Women Writers. *The Quest*. 31.2.(2017): 36-47.

Book review

- Suresh, Lavanya. (2017). Book Review of 'The great derangement: climate change and the unthinkable by Amitav Ghosh'. *Environmental Politics*, 26(6),1158-1160. (Taylor & Francis) Available at: <http://dx.doi.org/10.1080/09644016.2017.1365808>

- Mahapatra, Santosh. (2017). Book Review of “Learn English Teach English: English Skills for Teachers”, FORTELL, Issue No. 34, January 2017.

### iii. Conferences attended/papers presented:

- Dr. Lavanya Suresh- Presented a paper titled “Perspectives on Gender Equality in the Context of Environmental Sustainability” at the Ninth Biennial Conference of Indian Society for Ecological Economics (INSEE) (International) held at the Kerala Institute of Local Administration (KILA), Thrissur from the 8th to 10th of Nov, 2017
- Dr. Lavanya Suresh- Presented a paper titled “Decentralized Democracy in India: Gandhi's Vision and Reality” at the National Seminar on Decentralization and Alternative Development: Exploring the Ideas of Gandhi & Kumarappa held at the Institute for Social and Economic Change (ISEC), Bangalore from 29th and 30th, November 2017.
- Dr. Suchismita Satpathy - Presented a paper. Smart ways of land grabbing in smart city Bhubaneswar at Indian Sociological Society Conference 10-12th November 2017, Lucknow University, Lucknow.
- Conversations On Contemporary Struggles Towards The Realization Of Socio-Economic Rights (2- 5th November 2017), at NALSAR Law University, Hyderabad, Attended by Prof. Sunny Jose, Dr. Lavanya Suresh, Mr. Shamu Tharu, Dr. Suchismita Satpathy, Miss Kopal Khare, Miss Suchismita Ghosh, Miss Jahnavi Lakshmi.
- Dr. Lavanya Suresh and Dr. Suchismita Satpathy- Data Workshop, November 18-19, 2017 at CESS Begumpet, Hyderabad, organized by Hyderabad Urban Lab.
- Dr Biswanath Dash delivered talk on “Incident Response System” in a training workshop 3 - 6th July, 2017 organized by UNDP and Govt. of Himachal Pradesh at Shimla.
- Dr. Santosh Mahapatra presented a paper titled “Enhancing Teacher Reflection on Classroom Teaching through Audio Recording” at AINET International Teacher Research Conference held in Nagpur from 14th to 15th September, 2017.
- Dr. Santosh Mahapatra participated in a two-day workshop titled “AARMS Induction Workshop” organized by British Council in New Delhi (March 2017).
- Dr. Maya Vinai attended and presented a paper titled “*Unravelling the spice politics & Cosmopolitanism of Kochi: Emerging alternate representations in N. S Madhavan's Litanies of Dutch Battery*” at national conference on Comparative Humanities: Re-Configuring Humanities across cultures at EFL University Hyderabad from 5th to 7th April, 2017.
- Dr. Maya Vinai attended and presented a paper titled “*Beyond Spice trade and temple conquests: Palimpsest memories of colonial regimes along the Malabar coastline in the native imagination*” at a conference organized by South Asian Literary Association (SALA) in Philadelphia, Pennsylvania U.S.A from 2nd to 4th January 2017.

### iv. Invited Talks given by BITS faculty:

- Dr. Lavanya Suresh - Delivered a lecture on *Eco-feminism* at the department of Liberal Arts, IIT Hyderabad on 22nd November, 2017.
- Dr. Lavanya Suresh - Delivered a lecture on *Mixed Methods for Social Science Research* at the workshop on Basic Quantitative and Qualitative Methods for Conducting Social Science Research at the Tata Institute of Social Sciences, Hyderabad on 7th September, 2017
- Dr. Lavanya Suresh - Delivered a lecture on *Climate Change: Rural Livelihoods* during the Late Shri. Smarajit Ray Memorial Event on 8th Aug, 2017 organized by Mahila Abhivruddhi Society (formerly APMAS), Hyderabad.
- Dr. Suchismita Satpathy- Ideas conclave - Ideas for better Hyderabad - By Awareness in Action December 16th-17th 2017, at CESS Hyderabad
- Dr. Biswanath Dash presented a talk on “Disaster Management in India: Policy Perspective” at TISS, Mumbai on 5th April 2017 as part of DST Sponsored program “Geospatial Technology and its Application”.
- Dr. Biswanath Dash gave a seminar presentation on “Disaster Management: From a Science Technology Studies (STS) Perspective” on 16th August 2017 at Central University, Gandhinagar
- Dr. Santosh Mahapatra conducted a workshop on “Integrating Technology into ESL Classroom Teaching” for English teachers at Aurora’s Technological and Research Institute, Hyderabad, on 11th December, 2017
- Dr. Santosh Mahapatra conducted a session on “Classroom Evaluation” at UGC-HRDC (Academic Staff College), Osmania University on 31st July, 2017

- Prof Sunny Jose conducted a training workshop on “Violence against adolescent girls” for NGO staffs at Chengalpattu on September 15<sup>th</sup> 2017.
- v. Invited talks arranged in the department:**
- The Department of Humanities and Social Sciences organized a talk by Dr. Adam Dasari, Associate Professor, West Virginia University. He spoke on "The Process of Americanization" on the 31st of October, 2017 at 10:00 am.
  - The Department of Humanities and Social Sciences organized a talk by Jessica Lynn, a post-op, transgender activist from Los Angeles, California. She spoke on “Beyond Gender Binary: Her Transgender Journey” on 21st September, 2017 at 10:00 am.
- vi. Awards and recognitions won by faculty and students**
- Dr. Lavanya Suresh - OPERA award (Outstanding Potential for Excellence in Research and Academics), BITS Pilani, 2017
  - Dr. Pranesh Bhargava - OPERA award (Outstanding Potential for Excellence in Research and Academics), BITS Pilani, 2017
  - Dr. Santosh Mahapatra was awarded Trinity College London Language Examination Fellowship for IATEFL 2018
  - Dr. Santosh Mahapatra was awarded AARMS grant by British Council for a teacher mentoring project (February, 2017)
- vii. Faculty Development, International Collaboration & Industry Immersion**
- viii. Significant new equipment/experimental facility added during the year:**
- ix. Departmental association/club activities:**
- Dr. Biswanath Dash served as external Ph.D Thesis reviewer for 2 students - one from JNU New Delhi, and the other from Central University, Gandhinagar.
  - Maya Vinai & M.G Prasuna (Eds). On Translations and Beyond: Interview with Mini Krishnan. *Indian Literature. (Sahitya Akademy Publication)* 50.299.3(2017): 93-98. Interview Team: Srimanth Chowdary, Hemantha Chowdary, Hema Venusha, Sri Latha Sunkara, Abhignan Reddy, Sai Kubair, Chandrahas Tirumalasetty.
  - Maya Vinai (Ed.) Cascading Beyond the Crisp Fetters of Patriarchy and Gender: In Conversation with Chitra Banerjee Divakarunni. *Atlantic Literary Review* 16.3(2017): 80-89. Interview Team: Aditya Vidhate, Smruthi Balaji, Ashwin Vadlamannati, Ayush Yadav, Sukanya Khan, Achyuth Reddy, Siddharth Reddy, Siddharth Singh, Parthasarthi Kumar.
- x. Major maintenance, renovations or new construction reports:**
- xi. Major equipment acquired during the year:**
- Prof. M.G. Prasuna has been the Member, Faculty Grievance Redressal Committee.
  - She has also been the Chairperson and Presiding Officer, Internal Complaints Committee for Prevention of Sexual Harassment of Women at Workplace.
  - Extending the department’s goodwill outside, she has been the member of the Board of Studies, Anurag Group of Institutions, Hyderabad, since 2014; and the member of the Board of Studies, Gayatri Vidya Parishad, College of Engineering, Vishakhapatnam.
  - Mr. Shamuel Tharu was the faculty mentor to the BITS Pilani, Hyderabad chapter of INACTUS Worldwide, a Social Entrepreneurship, for five years till 2017.



**B3.10.9 Mechanical Engineering Department****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>1</b>
<b>Associate Professors</b>	<b>6</b>
<b>Assistant Professors</b>	<b>15</b>
<b>Lecturers</b>	<b>1</b>
<b>Visiting Faculty</b>	<b>0</b>

**Head of the Department:** Prof. Amit Kumar Gupta

**Contact details:** +91 40 66303518 **Email:** akgupta@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 41

**I. Sponsored Research activities:****(a) Ongoing projects**

<b>S No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount (Lakhs)</b>	<b>Duration</b>
1	Formability Study of Inconel 625 alloy at Elevated Temperatures for Aerospace Applications	Dr. Nitin Kotkunde	DST	30	2017-2020
2	Application of topology optimization to enhance energy efficiency and performance of industrial manipulator	Dr. Arshad Javed	DST	29.00	2017-2020
3	Study of lubrication method for enhanced surface finish and reduced draw load on cold draw steel tubes	Prof. A. K. Gupta (Co PI), Prof. S. P. Regalla (Co PI)	Tubes Investment India Ltd.	27.5	2017-2020
4	Modelling and Simulation of Quartz Accelerometer for Navigation System	Dr. Satish K Dubey	RCI, DRDO	5.3	2017-2018
5	"Development of Metamaterial Base Support" for isolating vibrations	Dr. Sabareesh	DRDO	13.80	Sanctioned
6	Cryogenically-Conditioned Micro and Nanoencapsulated Phase Change Material Slurries for Cool Thermal Energy Storage Applications	Dr. Parameshwaran R	DST	30.00	Sanctioned
7	Novel casting approach to improve quality of aluminum alloy casting	Prof. N. S. K. Reddy	DRDL	9.85	2017-2020
8	Simulation and Modelling to Minimize Porosity Level in Aluminium Castings by using Ultrasonic Stir Casting	Prof. N. S. K. Reddy	L & N Structural Engineers (P) LTD	8.03	2016-2019
9	Studies on remaining useful life prediction considering multi-component failures in a wind turbine using prognostic health monitoring techniques	Dr. Sabareesh G. R	DST	26.04	2016-2019
10	Hydrogen Storage in Mesoporous Polymer Derived Ceramics for Automotive Application	Dr. Sujith R	DST	42.38	2016-2019
11	Enhancement of Mechanical Properties of Ti-6Al-4V using Constrained Groove Pressing and Heat Treatment	Prof. A. K. Gupta	DRDO (ARMREB)	45.6	2016-2019
12	Characteristics and modeling of Tornado-Induced Wind Loading on Low-Rise Buildings	Dr. Sabareesh G. R	NSFC, China	*	2015-2018
13	Develop and Test Certain 3D Printing Technologies to Produce Innovative Limbs at Affordable Costs for the Disabled in India.	Prof. S. P. Regalla	BIRAC, DBT	47.65	2015-2017

S No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
14	Development of an integrated approach for modeling and management of micro grid operations	Prof. S .S. Deshmukh	Additional Competitive Research Grant, BITS	9	2015-2017
15	Structural health monitoring of wind turbines using a comprehensive condition monitoring scheme.	Dr. Sabareesh G. R	Additional Competitive Research Grant, BITS	8.5	2015-2017
16	Heat Transfer modeling of cold water mist at the cutting zone using FSI model in machining of turbine blade materials	Dr. Phaneendra Kiran C	Additional Competitive Research Grant, BITS	9	2015-2017
17	Understanding forming behaviour of Ti6AL-4V material between 400-850 C in deep drawing set up	Prof. A. K. Gupta (Co PI)	DRDO	9.85	2015-2017
18	Anaerobic co-digestion of food waste and organic fraction of municipal solid waste for the production of biogas and concomitant use of biogas as fuel for Cooking and spent slurry as fertilizer	Prof. S .S. Deshmukh (Co PI)	BITS Pilani	62	2014-2017
19	Novel Minimal-Solid Lubricant Mixture Application Method For Performance Improvement in Turning	Prof. N. S. K. Reddy	SERC, DST	40.88	2013-2017

\* Financial support for laboratory experiments, international travel, and overseas stay in china to conduct experiments

**(b) Projects sanctioned during the year**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Cryogenically-conditioned micro and nanoencapsulated phase change material slurries for cool thermal energy storage applications	Dr. R. Parameshwaran	DST-SERB ECR	27.76	2017-2020
2	Formability study of inconel 625 alloy at elevated temperatures for aerospace applications	Dr. Nitin Kotkunde	DST-SERB ECR	31.43	2017-2020
3	Application of topology optimization to enhance energy efficiency and performance of industrial manipulator	Dr. Arshad Javed	DST-SERB ECR	29	2017-2020
4	Development of meta material base support for isolating vibration	Dr. Sabareesh GR	DMDE, DRDO	13.8	2017-2018
5	Novel casting approach to improve quality of aluminum alloy casting	Prof. NSK Reddy	DRDL, DRDO	9.85	2017-2020
6	Modelling and simulation of quartz accelerometer for navigation system	Dr. Satisk K. Dubey	RCI, DRDO	5.3	2017-2018
7	Heat Transfer Enhancement Study of Li-ion Battery Pack (Phase-1)	Prof. Jeevan Jaidi	HBL Power Systems Ltd., Hyderabad	5.31	Dec. 2017-March 2018

**II. Publications:**

1. K.R. Suresh Kumar, R. Parameshwaran, S. Kalaiselvam, Preparation and characterization of hybrid nanocomposite embedded organic methyl ester as phase change material, Solar Energy Materials & Solar Cells, 171:148-160, 2017.
2. Sravan Kumar Josyula and Suresh Kumar Reddy Narala. Performance enhancement of cryogenic machining and its effect on tool wear during turning of Al-TiCp composites. Machining Science and Technology, 0(0):1-24, 2017.

3. Rakesh Kumar Gunda and Suresh Kumar Reddy Narala. Electrostatic high-velocity solid lubricant machining system for performance improvement of turning Ti6Al4V alloy. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 0(0):0954405417703432, 2017.
4. Sravan Kumar Josyula and Suresh Kumar Reddy Narala. Machinability enhancement of stir cast Al-TiCp composites under cryogenic condition. Materials and Manufacturing Processes, 32(15):1764-1774, 2017.
5. Bader Al-Aifan, R. Parameshwaran, Kushagra Mehta, and R. Karunakaran. Performance evaluation of a combined variable refrigerant volume and cool thermal energy storage system for air conditioning applications. International Journal of Refrigeration, 76(Supplement C):271-295, 2017.
6. S.P. Datta and P.K. Das. Performance of an automotive air conditioning system with the variation of state-of-charge of the storage battery. International Journal of Refrigeration, 75(Supplement C):104-116, 2017.
7. Nitin Kotkunde, Geetha Krishna, Shyam Krishna Shenoy, Amit Kumar Gupta, and Swadesh Kumar Singh. Experimental and theoretical investigation of forming limit diagram for Ti-6Al-4V alloy at warm condition. International Journal of Material Forming, 10(2):255-266, Apr 2017.
8. A Marques, Suresh Kumar Reddy Narala, AR Machado, Rakesh Kumar Gunda, Sravan Kumar Josyula, RB Da Silva, and MB Da Silva. Performance assessment of MQSL: Minimum quantity solid lubricant during turning of inconel 718. Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 231(7):1144-1159, 2017.
9. Rakesh Kumar Gunda and Suresh Kumar Reddy Narala. Evaluation of friction and wear characteristics of electrostatic solid lubricant at different sliding conditions. Surface and Coatings Technology, 332(Supplement C):341-350, 2017. The 44th International Conference on Metallurgical Coatings and Thin Films (ICMCTF).
10. Nadimpalli Raghukiran, Ravindran Sujith, Harshal Agrawal, Rajashekhara Shabadi, and Ravi Kumar. In situ age hardening and grain refinement in as-sprayed Al-Sc binary alloy deposits. Journal of Alloys and Compounds, 2017.
11. Suresh Kurra, N Swetha, Ch Vinodh Reddy & SP Regalla. Experimental and finite element studies of single stage incremental forming process: effect of process parameters on maximum wall angle and thickness distribution. Advances in Materials and Processing Technologies, 2017,
12. Naga Vamsi Kishna Jasti, Suresh Kurra. An empirical investigation on lean supply chain management frameworks in Indian manufacturing industry. International Journal of Productivity and Performance Management, Vol. 66 Issue: 6, pp.699-723 2017,
13. P Vivekh, M Sudhakar, M Srinivas, V Vishwanthkumar. Desalination technology selection using Multi-Criteria Evaluation: TOPSIS and PROMETHEE-2. International journal of low carbon technologies. Volume 12, 2017, PP 24-35.
14. Madhavi, B., and Jeevan Jaidi, "Influence of Strain Hardening Behaviour in Friction Stir Welded Joints of Aluminium-alloy Plates", Materials Today: Proceedings (MATPR4253; PII: S2214-7853(17) 32912-7)
15. Chadaram Srinivasu, Swadesh Kumar Singh, Gangadhar Jella, Lade Jayahari, Nitin Kotkunde, Study of Limiting Dome Height and Temperature Distribution in Warm Forming of ASS304 Using Finite Element Analysis, Materials Today Proceeding, Volume 4, Issue 2, Part A, 2017, Pages 957-965).
16. K. C. Gantasala, Nitin Kotkunde, Theoretical and finite element investigation of inter-laminar stresses for laminated composite beam, International Conference on Advancements in Aeromechanical Materials for Manufacturing (ICAAMM-2016), Materials Today Proceeding, Volume 4, Issue 8, 2017, Pages 7731-7740.
17. Krishna Toshniwal, Sujeeth Pareddy, Nitin Kotkunde, Amit Kumar Gupta, Numerical Investigation on Stress based Forming Limit Diagram for Ti-6Al-4V Alloy, Materials Today: Proceedings, Volume 4, Issue 8, 2017, Pages 8096-8103

### III. Conferences attended/papers presented:

1. Siva Prasad A V S, Numerical study of dynamic crack propagation in brittle solids using Peridynamics, Indian Conference on Applied Mechanics (INCAM) 2017, MNNIT Allahabad 5 - 7 July 2017
2. Sandip Deshmukh & Khalid Anwar, Prediction and mapping of solar energy potential in Andhra Pradesh, India using artificial neural networks and ArcGIS, World Renewable Energy Congress held at Murdoch University, Western Australia
3. G. Naveen Kumar, R. Parameshwaran, V. Vinayaka Ram, Development of hybrid nano based PCM embedded cement mortar for building cooling applications – an Experimental Investigation, Proceedings of International Conference on Nanotechnology: Ideas, Innovations & Initiatives-2017 (ICN:3I-2017), Energy & Nano. Elect.\_1058-ICN3I, pp. 345, December 06-08, 2017, IIT Roorkee, India
4. Pawan K C, R. Sujith and R. Parameshwaran, Synthesis of Hierarchical Mesoporous Silicon Oxycarbide Ceramics via Polymer Precursor Route, 55th National Metallurgists' Day International Symposium (NMD-ATM 2017), Nov 12-13, 2017, BITS Pilani Goa (India).
5. Manan, N. Gokul and R. Sujith, Processing and Characterization of Stir Casted Al 2024 and Mg AZ91 – Graphene Nanocomposites, , 55th National Metallurgists' Day International Symposium (NMD-ATM 2017), Nov 12-13, 2017, BITS Pilani Goa (India).
6. Sumit Chamling Rai, Jayesh Sanwal, K. Ram Chandra Murthy, Simulation of Rarefied Gas Flow in a Rectangular Enclosure, Proceedings of the 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), Dec 2017, BITS-Pilani, Hyderabad, India

7. VN Balavignesh and Supradeepan K, Adjoint shape optimization of internal and external flow geometries in OpenFOAM environment, 44th National conference on Fluid Mechanics and Fluid Power
8. Hemanth Mithun Praveen, G R Sabareesh, A Study on multicomponent failure interaction within a planetary gear box of a wind turbine, 13th International Conference on Vibration Problems, IIT Guwahati
9. VN Balavignesh, Supradeepan K and Arnab Roy, POD Analysis of Flow past two cylinders in Tandem arrangement, 7th international conference on Theoretical, Applied, Computational and experimental Mechanics
10. KaustavBhadra, G.R. Sabareesh, K. Ram chandra murthy, “, Cross-Wind Load Effects on different Vehicle Body Geometries, 7th European African Conference on Wind Engineering, , Belgium
11. Inturi Vamsi, Sabareesh G R, Penumkala P K, Shsesha Bhuvan Karthik, A comparative study on efficacy of condition monitoring techniques in a wind turbine under stationary and non-stationary loading conditions, 13th International Conference on Vibration Problems, IIT Guwahati
12. K.Singh, N Bojja, S Das, G.R.Sabareesh, Y.V.D Rao, Investigations on vibration characteristics of a meta material beam, 13th International Conference on Vibration Problems, IIT Guwahati
13. Ashish Saxena, Ng Yin K. Eddie, D. Jaya Krishna, Jalaiah Nandanavanam, R. Parameshwaran, Numerical Investigation of Mixed Convection in a Lid-Driven Square Cavity With and Without Fin, 1st International and 18th ISME Conference (ISME18), NIT Warangal
14. Ashish Saxena, Raga Madhuri Nallam, Jalaiah Nandanavanam, Ramakrishnan Ganesan, PEG Functionalization Strategy for Stable Al<sub>2</sub>O<sub>3</sub> Nanofluids towards Heat Exchange Applications, 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), BITS-Pilani, Hyderabad Campus
15. Kurra Suresha, Srinivasa Prakash Regalla, Nitin Kotkunda, Finite element simulations of multi stage incremental forming process, 7th international conference on Materials and Processing Technologies, Hyderabad
16. Suresh Kurra , Srivatsan , Simhachalam Bade, Praveen Kumar G, Analysis of fine blanking process through finite element simulations , 20th International Conference on Advances in materials and Processing Technologies, Chennai
17. G. Praveen, Ram Tarun Reddy, Kurra Suresh, Experimental studies on incremental hole flanging of steel sheets, 20th International Conference on Advances in materials and Processing Technologies, Chennai
18. P. V. S. Divya, P. K. Penumakala, J. Jaidi, Thermal stress analysis in direct chill casting of magnesium alloys, Proceedings of the 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), Dec 2017, BITS-Pilani, Hyderabad, India
19. P. K. Penumakala, G. Nanda, R. Sujith, K. Suresh, Microstructure evolution during the stir casting of a Graphene-Magnesium alloy composite, Liquid Metal Processing Symposium, USA
20. R. Shah, K. Singh, P. K. Penumakala, A. Ramesh Babu, Finite element analysis of short beam shear test of CFRP Laminates, International Conference on Composite Materials and Structures, Hyderabad, India
21. Pavandatta M Jadhav, Suresh Kumar Reddy Narala, Wear Behavior of carbide tool coated with Ytria-Stabilized Zirconia nano particles, International Conference on Recent advances in Material and Manufacturing Technologies , International Conference on Recent advances in Material and Manufacturing Technologies (IMMT 2017),
22. Amar Sheelwant, Suresh Kumar Reddy Narala, Palaparty Shailesh,, Synthesis and Characterization of Stir Cast Aluminium-Titanium Diboride (Al-TiB<sub>2</sub>) MMC, International Conference on Recent advances in Material and Manufacturing Technologies (IMMT 2017),
23. Srinivasa Prakash Regalla, V. Krishnan Anirudh, N. Suresh Kumar Reddy, Tribological Performance Of Zinc Soft Metal Coatings In Solid Lubrication, International Conference on Recent advances in Material and Manufacturing Technologies (IMMT 2017),
24. Uma Maheshwera Reddy Paturi, Harish Devarasetti, David Abimbola Fadare and Suresh Kumar Reddy Narala, Application of Artificial Neural Network and Regression Analysis in Modeling of Surface Roughness in WS<sub>2</sub> Solid Lubricant Assisted MQL Turning of Inconel 718, International Conference on Recent advances in Material and Manufacturing Technologies (IMMT 2017),
25. Uma Maheshwera Reddy Paturi and Suresh Kumar Reddy Narala, Electrostatic Solid Lubricant Coatings: Optimization of Process Parameters and Performance in Tribological Tests, 8th International Conference on Materials and Manufacturing Technology(ICMMT 2017)

26. Amar Sheelwant, Suresh Kumar Reddy Narala, Palaparty Shailesh, Investigation of Tribological Properties of Aluminium-Titanium Diboride (Al/TiB<sub>2</sub>) MMC under Dry Sliding Condition, 44th International Conference on Metallurgical Coatings and Thin Films, April 24-28, 2017, San Diego, California, USA
27. Venkatesh Mundada, Narala Suresh Kumar Reddy, Optimization of Milling Operations Using Artificial Neural Networks (ANN) and Simulated Annealing Algorithm (SAA), International Conference on Materials Processing and characterization, 17th to 19th March 2017, Hyderabad, Telangana, India.
28. Dileep, M. Paul, Rinu Thomas, Sreesankaran M, Jeevan Jaidi, and Jithin P, "Experimental Investigation of the Effect of Wire-coil Inserts on the Performance of a Three-Pass Fin", 24<sup>th</sup> National and 2<sup>nd</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), BITS Pilani, Hyderabad Campus, 27-30 December 2017.
29. Nitin Mythreya Yadlapalli Venkata, and Jeevan Jaidi, "Model Development and Analysis of Feedwell Flow Dynamics in Thickeners", 24<sup>th</sup> National and 2<sup>nd</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), BITS Pilani, Hyderabad Campus, 27-30 December 2017.
30. Suryadevara Pruthvi and Jeevan Jaidi, "Design, Development and Analysis of Airborne Wind Turbine using CFD and FEA Tools", 24<sup>th</sup> National and 2<sup>nd</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), BITS Pilani, Hyderabad Campus, 27-30 December 2017.
31. P. V. Sai Divya, Pavan Kumar Penumakala, and Jeevan Jaidi, "Thermal Stress Analysis in Direct Chill Casting of Magnesium-alloys", 24<sup>th</sup> National and 2<sup>nd</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), BITS Pilani, Hyderabad Campus, 27-30 December 2017.
32. Alok Deshpande, and Jeevan Jaidi, "The Numerical Study of Flameless Combustion", 24<sup>th</sup> National and 2<sup>nd</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), BITS Pilani, Hyderabad Campus, 27-30 December 2017.
33. Sagar Singhal, Abhishek Gaikwad and Jeevan Jaidi, "2CFD Analysis of a Wickless Heat Pipe", 24<sup>th</sup> National and 2<sup>nd</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), BITS Pilani, Hyderabad Campus, 27-30 December 2017.
34. Madhavi, B., and Jeevan Jaidi, "Influence of Strain Hardening Behaviour in Friction Stir Welded Joints of Aluminium-alloy Plates", 7<sup>th</sup> International Conference on Materials Processing and Characterization (ICMPC 2017), GRIET, March 17-19 2017, Hyderabad, Telangana.
35. Nitin Kotkunde, S. Sreedhar, AK Gupta, SK Singh, Optimization of Process Parameters for Springback Evaluation in V-Bending Process for ASS 316 Steel using Finite Element Analysis, Presented in International Conference on Tube Hydroforming, 14–17 November 2017, Bangkok, Thailand.
36. Nitin Kotkunde, Hansoge Nitin Krishnamurthy, AK Gupta, SK Singh, Study of Hot Deformation Behavior Using Phenomenological Based Constitutive Model for Austenitic Stainless Steel 316, 7th International Conference on Materials Processing and Characterization (ICMPC), GRIET-Hyderabad, March, 2017.

#### IV. Invited Talks given by BITS faculty:

Faculty	Title of the Invited Speech	Institute/Location Details
Sujith R	Materials Characterization	GRIET Hyderabad
Sabareesh G R	Current status of laboratory tornado simulation studies and investigations on their interaction with structures	International Workshop on Gusty Wind, Thermal Environment and Energy Saving, Tokyo, Japan, March 2017
Kurra Suresh	Applications of CAE in Manufacturing	Defence Electronics Research Laboratory (DLRL) - DRDO, Hyderabad
Kurra Suresh	Fundamental on Mechanics of Sheet Metal Forming	Tube investments of India Ltd., Chennai
Kurra Suresh	Recent developments in high temperature forming and incremental forming	Tube investments of India Ltd., Chennai
Kurra Suresh	Advances in forming and micro forming	GRIET Hyderabad
Sabareesh G R	Machinery Condition Monitoring	Geethanjali College of Engineering, Hyderabad
Arshad Javed	Kinematic and Dynamic modelling of Industrial Manipulator	Two Week AICTE sponsored Faculty Development Programme on "Recent Advances in Design and Development of Mechatronics and Robotic Systems.", at Mahatma Gandhi Institute of Technology, Hyderabad
Arshad Javed	Mechatronics and Industrial Automation	NSAKCET, New Malakpet, Hyderabad
M. Srinivas	Hybrid Electric Vehicles: Conceptualization to Commercialization	All India Seminar on Fuel cells and hybrid vehicle technology", conducted by "The Institution of Engineers (India)", Telangana State Center

#### V. Invited talks arranged in the department:

**VI. Awards and recognitions won by faculty and students:**

Faculty	Awards
R. Parameshwaran	Editorial Board Member, International Journal of Hydromechanics, 2017

**(ii) Faculty Development, International Collaboration & Industry Immersion**

Name	University / Industry	Period
Kurra Suresh	Tube investments of India Ltd., Chennai	9th June 2017 to 9th July 2017

**VII. Significant new equipments/experimental facility added during the year:**

Sl. No.	Name of the Lab	Equipment Added	Amount (Rs.)
1.	Dynamics Lab	D-link microstrain indicator and receiver	1,40,000
2.	IC Lab	Cleveland and Flash Point	32,025
3.	Robotics Lab	Torque sensor	2,11,260
4.		Vertical mounting Machine	1,18,617
5.		Proximity Switch	26,827
6.	Hydraulics Lab	Viscometer (Brookfield Rheometer DV3TLV+ Cone/Plate Model)	4,01,404
7.		Laser sheet for flow visualization	2,76,000
8.		David SLS-2-3D Scanner	2,82,082
9.	CPDR Lab	Sense 3D Scanner	44,100
10.	RACE – Lab	IAQ probe for indoor air quality test	65,964
11.		Digital Multimeter	52,500
12.		Serial to RS 485 convertor 12V ,26 AH smf battery with fit to data logger	38,400
13.	Workshop	3D Printers	4,50,000
14.		Sand Muller (Capacity-75kg)	2,00,000
15.		CIMCO CNC Simulation software (20 Licenses)	1,50,000
16.		MASTER CAM Software (15 Licenses)	1,77,000

**VIII. Departmental association/club activities:**

- Two day Workshop on engineering graphics for PhD Scholars of mechanical and civil engg. Dept, 2<sup>nd</sup> 3<sup>rd</sup>, Jan 2017.
- Workshop on structuring a science paper and using reference manager, 18<sup>th</sup> November.
- 24<sup>th</sup> National and 2<sup>nd</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017), Dec 2017.

**IX. Major maintenance, renovations or new construction reports: Nil****(i) K. Major equipments acquired during the year:**

(Created based on the expenditures of more than 5 lakh)

S.No.	Machine	Amount (Rs.)
1.	Flame propagation and stability unit.	5,76,279
2.	Fluidisation and Fluid Bed Heat Transfer Unit-Computer linked.	11,26,422
3.	Micro Vickers Hardness Tester	9,54,045
4.	Pultrusion Machine	7,57,890
5.	Wind Emulator	6,91,800
6.	Wind Energy Training System	5,54,400
7.	Hydraulic Training Kit with Accessories	10,23,383
8.	General bearing	6,50,000

S.No.	Machine	Amount (Rs.)
9.	Hotwire Anemometer (Mini CTA for Single channel)	5,96,000
10.	Wind Emulator	6,91,800
11.	Wind Energy Training System	5,54,400
12.	Flame propagation and stability unit	5,76,279
13.	Fluidisation and fluid bed heat transfer unit	11,26,422
14.	Hot Disk(Constant Thermal Analyzer)	33,500 (EURO)
15.	General bearing	6,50,000
16.	Hotwire Anemometer (Mini CTA for Single channel)	5,96,000
17.	HMT make High Speed Precision Machine, Model: NH26/1500	17,50,000
18.	Panther make lathe machines, Model: 1350/1	8,00,000

### B3.10.10 Mathematics

#### Number of Faculty Members:

Senior Professors, Professors	1
Associate Professors	4
Assistant Professors	10
Lecturers	0
Visiting Faculty	0

**Head of the Department:** Dr. Dipak Kumar Satpathi

**Contact Details:** Tel: 040 - 6630 3507

**Email:** dipak@hyderabad.bits-pilani.ac.in

**Number of Ph.D. Scholars:** 12

#### I. Sponsored Research Activities:

##### (a) Ongoing Projects:

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Bianchi type cosmological models in modified theories of gravitation	Bivudutta Mishra	SERB-DST	11.088	2014-2017
2.	Construction of arbitrary tensor networks using cross approximation	N. Kishore Kumar	NBHM	2.895	2015-2018
3.	Construction of arbitrary tensor networks using cross approximation	N. Kishore Kumar	NBHM	13.591	2015-2018
4.	Development of an encryption algorithm for secure transmission of color images	Manish Kumar	SERB-DST	15.08	2016-2019

##### (b) Projects Sanctioned During the Year:

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	Development of an accurate and robust unstructured grid-based adjoint approach for compressible turbulent flows	Anil Nemili	SERB-DST	15.906	2017-2020
2	Development of an accurate adjoint method for 2D Euler equations in mesh free framework	Anil Nemili	Aeronautical Research & Development Board (ARDB)	15.77	2017-2019 (Approved)

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
3	Comparison of phase velocities of Rayleigh waves, Love waves and Torsional waves in various anisotropic geo-media	Sumit Kumar Vishwakarma	SERB-DST	13.668	2017-2020
4	Characterizing the sets of periodic points of automorphisms on a solenoid	Sharan Gopal	SERB-DST	20.8932	2017-2020

## II. Publications:

1. B. Mishra, Samhita Vadrevu: "Cylindrically symmetric cosmological model of the universe in modified gravity", *Astrophysics and Space Science*, 362:26, 2017.
2. B. Mishra, P.K. Sahoo, Pratik P. Ray: "Accelerating dark energy cosmological model in two-fluid with hybrid scale factor", *International Journal of Geometrical Methods in Modern Physics*, 14, 1750124, 2017.
3. G.C. Samanta, B. Mishra: "Anisotropic cosmological model in presence of holographic dark energy and quintessence", *Iranian Journal of Science and Technology, Transactions A: Science*, 41(2), 535-541, 2017.
4. S.K. Tripathy, B. Mishra, P.K. Sahoo: "Two fluid anisotropic dark energy models in a scale invariant theory", *The European Journal of Physics Plus*, 132:388, 2017.
5. B. Mishra, Pratik P. Ray, S.K.J. Pacif: "Dark energy cosmological models with general forms of scale factor", *The European Journal of Physics Plus*, 132:388, 2017.
6. P.H.R.S. Moraes, P.K. Sahoo: "Modelling wormholes in  $f(R, T)$  gravity", *Physical Review D*, 96(4), 044038, 2017.
7. P.H.R.S. Moraes, P.K. Sahoo: "The simplest non-minimal matter-geometry coupling in the  $f(R, T)$  cosmology", *The European Physical Journal C*, 77, 480, 2017.
8. B. K. Bishi, S.K.J. Pacif, P.K. Sahoo, G.P. Singh: "LRS Bianchi type-I cosmological model with constant deceleration parameter in  $f(R, T)$  gravity", *International Journal of Geometric Methods in Modern Physics*, 14, 1750158, 2017.
9. P.K. Sahoo: "Kaluza-Klein universe filled with wet dark fluid in  $f(R, T)$  theory of gravity", *Acta Physica Polonica B Proceeding Supplement*, 10(2), 369-372, 2017.
10. P.K. Sahoo, Parbati Sahoo, B.K. Bishi, S. Aygun: "Magnetized strange quark model with Big Rip singularity in  $f(R, T)$  gravity", *Modern Physics Letters A*, 32, 1750105, 2017.
11. P.K. Sahoo, Parbati Sahoo, B.K. Bishi: "Anisotropic cosmological models in  $f(R, T)$  gravity with variable deceleration parameter", *International Journal of Geometric Methods in Modern Physics*, 14, 1750097, 2017.
12. S.K. Sahu, S.K. Tripathy, P.K. Sahoo, A. Nath: "Cosmic transit and anisotropic models in  $f(R, T)$  gravity", *Chinese Journal of Physics*, 55(3), 962-969, 2017.
13. P.K. Sahoo, A. Nath, S.K. Sahu: "Bianchi type-III string cosmological model with bulk viscous fluid in Lyra geometry", *Iranian Journal of Science and Technology, Transaction A: Science*, 41(1), 243-248, 2017.
14. P. Raja Sekhara Rao, K. Venkata Ratnam, P. Lalitha, D.K. Satpathi: "Global dynamics of a cooperative and supportive network system with subnetwork deactivation", *Nonlinear Dynamics and Systems Theory*, 17(2), 205-216, 2017.
15. T.S.L. Radhika, T. Raja Rani, Brindha S.: "Application of the differential transformation method in the study of blood flow in human arteries", *Bulletin of Pure and Applied Sciences, Section E – Math. and Stat.*, 36(2), 227-233, 2017.
16. T. Raja Rani, T.S.L. Radhika, J.M. Blackledge: "The effects of viscous dissipation on convection in a porous medium", *Mathematica Aeterna*, 7(2), 131-145, 2017.
17. Jagan Mohan Jonnalagadda: "Quasi-periodic solutions of fractional nabla differences systems", *Fractional Differential Calculus*, 7(2), 339-355, 2017.
18. Jagan Mohan Jonnalagadda: "Asymptotic behaviour of linear fractional nabla difference equations", *International Journal of Difference Equations*, 12(2), 255-265, 2017.
19. Jagan Mohan Jonnalagadda: "Matrix exponential functions of fractional nabla calculus", *Communications in Applied Analysis*, 21(4), 499-512, 2017.
20. Daphne Lopez, Gunasekaran Manogaran and Jagan Mohan J.: "Modelling the H1N1 influenza using mathematical and neural network Approaches", *Biomedical Research*, 28(8), 3711-3715, 2017.



21. N. Kishore Kumar and Jan Schneider: "Literature survey on low rank approximation of matrices", Linear and Multilinear Algebra, 65(11), 2017.
22. Sharan Gopal and C.R.E. Raja: "Periodic points of solenoidal automorphisms", Topology Proceedings, 50, 49-57, 2017.
23. Anil Nemili, Emre Özkaya, Nicolas R. Gauger, Felix Kramer and Frank Thiele: "An accurate discrete adjoint approach for optimal active separation control", AIAA Journal, 55(9), 3016-3026, 2017.

### III. Conferences attended/papers presented:

1. Prof. B. Mishra presented a paper on "An accelerating dark energy model with hybrid scale factor" in International Conference on Physical Interpretation of Relativity Theory held at Bauman Moscow State Technical University, Moscow, Russia during 3<sup>rd</sup> - 6<sup>th</sup> July, 2017.
2. Prof. B. Mishra has presented a paper on "Cosmological model with dark energy anisotropy" in 9<sup>th</sup> Australasian Conference on General Relativity and Gravitation held at University of Western Australia, Perth, Australia, during 27<sup>th</sup> - 30<sup>th</sup> November, 2017.
3. Dr. Manish Kumar presented a paper on "An optimal method in image encryption" in Advances in Dirac Equations, Variational Inequalities, Sequence Spaces and Optimization, II held at University of Central Florida, Orlando, USA during 23<sup>rd</sup> - 24<sup>th</sup> September, 2017
4. Dr. Sumit Kumar Vishwakarma presented a paper on "Propagation behavior of Love waves in an orthotropic crustal layer lying over anisotropic mantle" in Recent Advances in Mathematical Science and its Applications (RAMSA-2017) held at JIIT, Noida during 12<sup>th</sup> - 14<sup>th</sup> December, 2017.
5. Dr. Sumit Kumar Vishwakarma presented a paper on "On Love frequency under the influence of shear moduli, initial stress and density of orthotropic half space" in SIAM Conference on Mathematical and Computational Issues in Geosciences held at Erlangen, Germany during 11<sup>th</sup> - 14<sup>th</sup> September, 2017.
6. Dr. N. Kishore Kumar presented a paper on "Spectral element methods for elliptic problems" in NDETMC held at SRM University, Chennai during 8<sup>th</sup> - 9<sup>th</sup> December, 2017.
7. Dr. N. Kishore Kumar has presented a paper on "Canonical ranks of a function generated data on a uniform mesh in an interval" in HDA 2017 held at Sydney, Australia during 13<sup>th</sup> - 17<sup>th</sup> February, 2017.

### IV. Invited Talks given by BITS faculty:

1. Prof. B. Mishra delivered a talk entitled "Anisotropy in dark energy hi type VIh cosmological models in modified gravity" in National Workshop on Applications of Advanced Mathematics in Engineering and Sciences" held at AU College of Engineering, Andhra University during 28<sup>th</sup> February - 1<sup>st</sup> March, 2017.
2. Prof. B. Mishra delivered a talk entitled "Cosmological model, dark energy, anisotropy" at Department of Mathematics, Berhampur University, Odisha on 3<sup>rd</sup> December, 2017.
3. Prof. P.K. Sahoo delivered a talk entitled "Wormhole geometry in modified gravity" in National Conference on Differential Geometry and General Relativity at Department of Mathematics, Sardar Patel University, Vallabh Vidyanagar, Gujarat, India during 28<sup>th</sup> - 29<sup>th</sup> November, 2017.
4. Prof. P.K. Sahoo delivered a talk entitled "Big Rip singularity in  $f(R, T)$  gravity" in International Conference on Mathematical Analysis and its Applications (ICMAA-2017) at Dayanand Science College, Latur, Maharashtra, India during 5<sup>th</sup> - 9<sup>th</sup> March, 2017.
5. Dr. T.S.L. Radhika delivered a guest lecture on Applications of Mathematics to Class XI students at VEDA 6.0 at BITS Pilani- Hyderabad campus on 10<sup>th</sup> September, 2017.
6. Dr. Manish Kumar delivered two hours invited tutorial on "An overview of RGB image encryption techniques" in 3<sup>rd</sup> International Conference on Mathematics and Computing (ICMC 2017) at Haldia Institute of Technology, Haldia, India during 17<sup>th</sup> - 21<sup>st</sup> January, 2017.
7. Dr. Manish Kumar delivered one hour invited talk on "Image encryption using generalized heat equation associated in extended Vigenère cipher domain" in 3<sup>rd</sup> International Conference on Mathematics and Computing (ICMC 2017) at Haldia Institute of Technology, Haldia, India during 17<sup>th</sup> - 21<sup>st</sup> January, 2017.
8. Dr. Sumit Kumar Vishwakarma delivered a talk on "Application of MATLAB in Science and Engineering" at AMITY University, Ranchi on 30<sup>th</sup> May, 2017.
9. Dr. N. Kishore Kumar delivered a talk on "Finite element methods (4.5 Hrs Lecture and 1.5 Hrs Lab)" in National Workshop on Numerical Partial Differential Equations at VNIT Nagpur, India in July, 2017.
10. Dr. N. Kishore Kumar delivered a talk on "Numerical techniques for partial differential equations" at Westsächsische Hochschule Zwickau, Germany in June, 2017.
11. Dr. N. Kishore Kumar delivered a talk on "Applications of linear algebra" at Geetanjali Collge of Engineering, Cheryal, Hyderabad on 17<sup>th</sup> November, 2017. .
12. Dr. Sharan Gopal delivered a talk on "Topological dynamics and significance of periodic points" at Ashoka University, Haryana on 4<sup>th</sup> April, 2017.

13. Dr. Anil. N. delivered a talk in Workshop on Numerical Techniques for Partial Differential Equations (NTPDE-17) at Department of Mathematics, VNIT Nagpur, Nagpur, India during 10<sup>th</sup> – 14<sup>th</sup> July, 2017.
14. Dr. Anil. N. delivered a talk on “A robust adjoint approach for optimal flow control’ in International Conference on Nonlinear Differential Equations: Theory, Modeling and Computations” at SRM University, Chennai during 8<sup>th</sup> – 9<sup>th</sup> December, 2017.

**V. Invited talks arranged in the department:**

1. Prof. Dario Darji, University of Louisville delivered talk on ‘Dynamics on Cantor Set’.
2. Prof. V. Raghavendra, IIT Tirupati, delivered a talk on ‘Peano Axioms’ on September 14, 2017.

**VI. Awards and recognitions won by faculty and students:**

**VII. Faculty Development, International Collaboration & Industry Immersion:**

1. Prof. P.K. Sahoo visited Department of Mathematics, CERN, Geneva, Switzerland as visiting Scientist from 22<sup>nd</sup> May – 11<sup>th</sup> June 2017. This visit was funded by BITS Pilani, Hyderabad Campus under University Exposure Abroad Scheme.
2. Dr. T.S.L. Radhika visited the STEM (Science Technology Engineering and Mathematics) Workshop on Research Based Pedagogical Tools (RBPTs) Teacher's Workshop at IISER Pune in February 2017.
3. Dr. Manish Kumar visited Department of Mathematics, University of Central Florida, Orlando, Florida, USA for collaborative work on “Approximation Properties of Wavelet Packets and Applications” during 27<sup>th</sup> June – 25<sup>th</sup> July, 2017. This visit was funded by BITS Pilani, Hyderabad Campus under University Exposure Abroad Scheme.
4. Dr. J. Jagan Mohan visited Department of Mathematics, University of Dayton, Ohio, USA for collaborative work on “Boundary Value Problems at Resonance” from May 22<sup>nd</sup> – 15<sup>th</sup> July, 2017. This visit was funded by BITS Pilani, Hyderabad Campus under University Exposure Abroad Scheme.
5. Dr. N. Kishore Kumar visited Westsächsische Hochschule Zwickau, Germany for collaborative work during 1<sup>st</sup> – 20<sup>th</sup> June, 2017. He has been invited to MPI Leipzig on 12<sup>th</sup> and 19<sup>th</sup> June, 2017.

**VIII. Significant new equipment's /experimental facility added during the year:**

Installation of New Projector in Discussion Room (E202) for the purpose of display of project presentations, Ph.D. students and first degree thesis students seminars, mid semester grading, end semester grading, course modules presentations, department discussions and department seminars.

**IX. Departmental association/club activities:**

**ATMOS'17 Events:**

1. ‘Cubing Atmosphere’ sponsored by Cubelelo.
2. Ncrypton
3. Paper Presentation

**SCIATHON Events**

1. Sciathon Opening Talks
  - a. Talk on ‘Molecular link to API Development’ by Dr. Sudarshan Mahapatra (Senior Scientist, Dr. Reddy’s Lab).
  - b. Talk on ‘Application of Science in Engineering’ by Dr. S.S. Dan (Faculty, EEE Department).
2. Code Science
3. Scientific Calculator Workshop
4. Science Python Workshop

**Pre-ATMOS Events**

1. Rubik’s Cube Workshop

**X. Major maintenance, renovations or new construction reports:**

Renovation of cubicles for Ph.D. students in E219 with DST-FIST fund in January, 2017.

**XI. Major equipment's acquired during the year:**

Installation of New Projector in Discussion Room (E202) for the purpose of display of project presentations, Ph.D. students and first degree thesis students seminars, mid semester grading, end semester grading, course modules presentations, department discussions and department seminars.

**B3.10.11 Pharmacy****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>02</b>
<b>Associate Professors</b>	<b>02</b>
<b>Assistant Professors</b>	<b>05</b>
<b>Lecturers</b>	<b>-</b>
<b>Visiting Faculty</b>	<b>-</b>

**Head of the Department:** Prof. D. Sriram

**Contact details:** Email: dsriram@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:****I. Sponsored Research activities:****(a) Ongoing projects**

<b>S.No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount (Lakhs)</b>	<b>Duration</b>
1	Pharmacological evaluation of novel double stranded RNA dependent rotein kinase (PKR) inhibitors for diabetic cardiomyopathy	Dr. Arti Dhar	CSIR	2300000	3 YEARS
2	Cell Penetrating Peptide Octa-Arginine anchored, Multifunctional poly(amidoamine)Dendrimer to Promote delivery of chemotherapeutics in cancer	Dr. Swati Biswas	DBT	3703695	3 YEARS
3	Design and snthesis & biological evaluation of Mycobacterium tuberculosis serine/threonine protein kinase (BPknB) inhibitors	Prof. D. Sriram	DST-2015	2761000	3 YEARS
4	Role of double stranded RNA dependent protein kinase (PKR) in hypertension: Mechanism and prevention	Dr. Arti Dhar	DST	2604000	3 YEARS
5	Non -Invasive Delivery of siRNA to treat Melanoma	Dr.Vamsi krishna venuganti	DBT-RGYI	2284800	3 YEARS
6	D - a-Tocopherol conjugated co-polymer based micelles for improved delivery of chemotherapeutics with reversal of multiple drug resistance	Dr.Swati Biswas	DST	2240000	3 YEARS
7	Role of interleukin-22 in diabetic wound healing band regeneration	Dr. Onkar Kulkarni	DST	2726000	3 YEARS
8	Advancing host-directed therapy for tuberculosis/MDR-TB: Development of novel PKB/AKT1 and Protein Kinase R inhibitors as an adjunctive treatment for tuberculosis	Prof. D. Sriram	DBT-Tata Innovation	2700000	3 YEARS
9	Functional role of histone deacetylase 5 (HDAC5) in the pathogenesis of chronic kidney diseases and renal fibrosis	Dr. Onkar Kulkarni	DBT-IYBA	7016800	3 YEARS
10	Investigations on pro-inflammatory cytokine inhibitory low molecular weight metabolites of Pseudomonas sp. ABS -36 for the treatment of renal injury	Prof. A Sajeli Begum	DST	2439363	3 YEARS
11	Development for sustained release injectable formulations	Dr.Swati Biswas	Daewoong Pharmaceutic	2200000	3 YEARS

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
			al Co.,Ltd		
12	"Analytical development studies for pharmaceutical products"	Dr. Vamsi Krishna Venuganti	Intera Healthcare Pvt Ltd	1830855	3 YEARS
13	Technical and knowledge support for preparation and filing of drugs master file (DMF) as per common technical documents (CTD) for sennosides USP including the analytical requirements	Prof. Punna Rao	Shashi Phytochemical Industries	574560	3 YEARS
14	Development of epigenomes-targeted liposomes for the cancer specific delivery of chemotherapeutic drug, Doxorubicin	Dr. Balaram Ghosh	SUN Pharma Advanced Research Company Ltd.	2900000	3 YEARS
15	Mycobacterium tuberculosis acetyl coenzymes a carbonylase inhibitors: structure based drug design, synthesis and biological evaluation	Prof. D. Sriram	DST Indo-Poland	1189000	3 YEARS
16	Tumor targeted nanomedicines for Photodynamic therapy	Dr. Swati Biswas	DST-Indo Belarus	958000	3 YEARS
17	Structured-based Design of Orphan nuclear Receptor Modulators to treat Diabetes and its complications by targeting RORalpha and Rev-erbalpha	Prof. P. Yogeeswari	ICMR Indo-France	2161600	3 YEARS
18	Development of Novel Compounds for the Treatment of Neural Complications of Diabetes	Prof. P. Yogeeswari	DST-Indo-Portugal	604000	2 YEARS
19	Enzymes from Purine and Pyrimidine Biosynthetic pathway as targets for the development of Mycobacterium tuberculosis drugs	Prof. P. Yogeeswari	DBT-Indo-Brazil	4822990	3 YEARS
20	UK-India Centre for Advanced Technology for Minimization of indiscriminate use of Antibiotics (UKICAT-MA)	Dr. Vamsi Krishna venuganti	DBT-MRC	3500000	3 YEARS
21	Strategies against antibiotic resistance in Mycobacterium tuberculosis and Pseudomonas aeruginosa : new drugs for old targets and old drugs for new targets	Prof. D.Sriram	DBT-Indo-swedon2	6192000	3 YEARS

**(b) Projects sanctioned during the year**

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	Development of a Non-invasive biodegradable polymeric microprojection ocular patch for effective corneal delivery of antimicrobial agents to treat fungal infections of eye	Dr. Vamsi Krishna Venuganti	ICMR	4225150	
2	Investigations of knowledge on Dengue fever followed by education and post impact behavioural changes among the rural communities of shameerpet mandal of rangareddy district of Telangana state	Prof. Sajeli Begum	ICMR-ICSSR	418387	
3	Understanding the Role of Antimicrobial S100A12 (Calgranulin C) Mediated Host Defense in Pseudomonas Keratitis	Dr. Swati Biswas	DST	5500600	

	and Developing Nano-tools for Efficient Delivery of S100A12				
4	Design, Synthesis and Biological Evaluation of HDAC3 Selective Inhibitors as Long Term Memory Enhancers	Dr. Balam Ghosh	DST	2987800	
5	Preparations and Characterization of a topical gel formulation of IS107	Dr. V Vamsi Krishna Venuganti	ISSAR	563500	
6	Transcutaneous delivery of liraglutide using zein microneedle array	Dr. V Vamsi Krishna Venuganti	NACTO	2242500	
7	Development and characterization of a topical gel formulation of a candidate drug	Dr. Vamsi Krishna Venuganti	Sarudbhava Formulations Pvt. Ltd.	300000	
8	Development of pH-responsive smart capsule containing targeted multilayer film for drug delivery: The proof-of-concept study in colorectal cancer model	Dr. Vamsi Krishna Venuganti	DST	2476400	
9	Strategies against antibiotic resistance in Mycobacterium tuberculosis and ESKAPE pathogens; new drugs and new targets	Prof. D Sriram	DBT Indo Sweden-3	6700068	
10	Development and characterization of a topical formulations	Dr. Vamsi Krishna Venuganti	ISSAR-2	979400	

## II. Publications:

1. Mycobacterium tuberculosis lysine- $\epsilon$ -aminotransferase a potential target in dormancy: Benzothiazole based inhibitors. R.S. Reshma, V.U. Jeankumar, N. Kapoor, S. Saxena, K.A. Bobesh, A.R. Vachaspathy, P.E. Kolattukudy, D. Sriram. *Bioorg Med Chem.* 25, 2761-2771, 2017.
2. Synthesis and anti-mycobacterial activity of 4-(4-phenyl-1H-1,2,3-triazol-1-yl)salicylhydrazones: revitalizing an old drug. H.H. Abdu-Allah, B.G. Youssif, M.H. Abdelrahman, M.K. Abdel-Hamid, R.S. Reshma, P. Yogeeswari, T. Aboul-Fadl, D. Sriram. *Arch. Pharmacol Res.* 40, 168-179, 2017.
3. Synthesis, molecular docking, antimycobacterial and antimicrobial evaluation of new pyrrolo[3,2-c]pyridine Mannich bases. G. Jose, T.H.S. Kumara, H.B. Sowmya, D. Sriram, T.N.G. Row, A.A. Hosamani, S.S. More, B. Janardhan, B.G. Harish, S. Telkar, Y.S. Ravikumar. *Eur J Med Chem.* 131, 275-288, 2017.
4. Three-component, one-pot synthesis of anthranilamide Schiff bases bearing 4-aminoquinoline moiety as Mycobacterium tuberculosis gyrase inhibitors. P.S. Salve, S.G. Alegaon, D. Sriram. *Bioorg Med Chem Lett.* 27, 1859-1866, 2017.
5. A robust synthesis of functionalized 2H-indazoles via solid state melt reaction (SSMR) and their anti-tubercular activity. S. Vidyacharan, C. Adhikari, V.S. Krishna, R.S. Reshma, D. Sriram, D.S. Sharada. *Bioorg Med Chem Lett.* 27, 1593-1597, 2017.
6. Design, synthesis, molecular-docking and antimycobacterial evaluation of some novel 1,2,3-triazolyl xanthenones. G. L. Goud, S. Ramesh, D. Ashok, V. P. Reddy, P. Yogeeswari, D. Sriram, B. Saikrishna, V. Manga. *Med. Chem. Commun.*, 8, 559-570, 2017.
7. A Facile Synthesis and Antituberculosis Properties of Almazole D and Its Enantiomer, D.M. Lade, V.S. Krishna, D. Sriram, H.B. Rode. *CHEMISTRYSELECT*, 2, 1250-1252, 2017.
8. Novel Zebrafish EAE model: A quick in vivo screen for multiple sclerosis. P. Kulkarni, S. Yellanki, R. Medishetti, D. Sriram, U. Saxena, P. Yogeeswari. *Mult. Scler. Relat. Disord.* 11, 32-39, 2017.
9. Profiling of in vitro activities of urea-based inhibitors against cysteine synthases from Mycobacterium tuberculosis. K. Brunner, E.M. Steiner, R.S. Reshma, D. Sriram, R. Schnell, G. Schneider. *Bioorg Med Chem Lett.* 27, 4582-4587, 2017.
10. Design, synthesis and in vitro anti-tuberculosis activity of benzo[6,7]cyclohepta[1,2-b]pyridine-1,2,3-triazole derivatives. Y. Sajja, S. Vanguru, H.R. Vulupala, R. Bantu, P. Yogeeswari, D. Sriram, L. Nagarapu. *Bioorg Med Chem Lett.* 27, 5119-5121, 2017.

11. Correlation of pharmacokinetics and brain penetration data of adult zebrafish with higher mammals including humans. P. Kulkarni, R. Medishetti, N. Nune, S. Yellanki, V. Sripruram, P. Rao, D. Sriram, U. Saxena, S. Oruganti, P. Yogeeswari. *J Pharmacol Toxicol Methods*. 88, 147-152, 2017.
12. Design and synthesis of novel triazole linked pyrrole derivatives as potent Mycobacterium tuberculosis inhibitors. M.L. Devi, P.L. Reddy, P. Yogeeswari, D. Sriram, T.V. Reddy, B.V.S. Reddy, R. Narender. *Medicinal Chemistry Research*, 26, 2985-2999, 2017.
13. Bis-spirochromanones as potent inhibitors of Mycobacterium tuberculosis: synthesis and biological evaluation. A. Dongamanti, V.K. Aamate, M.G. Devulapally, S. Gundu, S. Balabadra, V. Manga, P. Yogeeswari, D. Sriram, S. Balasubramanian. *Mol Divers*. 21, 999-1010, 2017.
14. Synthesis, Crystal Structure and Antimycobacterial Activities of 4-Indolyl-1,4-Dihydropyridine Derivatives Possessing Various Ester Groups., E. Baydar, M.G. Gunduz, V. S. Krishna, R. Simsek, D. Sriram, S. O. Yildirim, R.J. Butcher, C. Safak. *Research on Chemical Intermediates*. 43, 7471-7489, 2017.
15. Identification and development of benzoxazole derivatives as novel bacterial glutamate racemase inhibitors. P. Malapati, V.S. Krishna, R. Nallangi, R.R. Srilakshmi, D. Sriram. *Eur J Med Chem*. 145, 23-34, 2018.
16. Lead identification and optimization of bacterial glutamate racemase inhibitors. P. Malapati, V.S. Krishna, R. Nallangi, N. Meda, R.R. Srilakshmi, D. Sriram. *Bioorg Med Chem*. 26, 177-190, 2018.
17. Design, synthesis, and in vitro antituberculosis activity of benzo[6,7]cyclohepta[1,2-b]pyridine-1,3,4-oxadiazole derivatives. Y. Sajja, S. Vanguru, H.R. Vulupala, L. Nagarapu, Y. Perumal, D. Sriram, J.B. Nanubolu. *Chem Biol Drug Des*. 90, 496-500, 2017.
18. Poorna Rao, Sajeli Begum, Mahendra Sahai, Saketh Sriram, "Coptisine, a tetraoxygenated protoberberine alkaloid induces cell cycle arrest at G2/M phase and ROS-dependent mitochondria mediated apoptosis in Non-small cell lung cancer A549 cells" *Tumor Biology*, 2017, 39 (3), DOI: <https://doi.org/10.1177/1010428317694565>.
19. Kirti Hira, Ameer Basha, Santosh Kumar, Sajeli Begum Ahil. "Pseudomonas – a potential source for drug lead discovery" *Current Trends in Biomedical Engineering and Biosciences*, 2017, 5(5), 555674. DOI: 10.19080/CTBEB.2017.05.555674.
20. Praveen K. Mandapalli, Suman Labala, Sumeet Chawla, Renuka Janupally, Dharmarajan Sriram, Venkata Vamsi K. Venuganti. *Polymer - gold nanoparticle composite films for topical application: evaluation of physical properties and antibacterial activity*. *Polymer Composites* 38 (12), 2829-2840 (2017).
21. Kaushalkumar Dave, Venkata Vamsi Krishna Venuganti. *Dendritic polymers for dermal drug delivery*. *Therapeutic Delivery* 8 (12), 1077-1096 (2017).
22. Shubhmita Bhatnagar, Kaushalkumar Dave, Venkata Vamsi Krishna Venuganti. *Microneedles in the clinic*. *Journal of Controlled Release* 260, 164-182 (2017).
23. Suman Labala, Anup Jose, Sumeet R. Chawla, Mohammed Shareef Khan, Shubhmita Bhatnagar, Onkar P. Kulkarni, Venkata Vamsi Krishna Venuganti. *Effective melanoma cancer suppression by iontophoretic co-delivery of STAT3 siRNA and imatinib using gold nanoparticles*. *International Journal of Pharmaceutics* 525 (2), 407-417 (2017).
24. Praveen K. Mandapalli, Suman Labala, Anup Jose, Shubhmita Bhatnagar, Renuka Janupally, Dharmarajan Sriram, Venkata Vamsi K. Venuganti. *Layer-by-layer thin films for codelivery of TGF-beta siRNA and epidermal growth factor to improve excisional wound healing*. *AAPS PharmSciTech* 18(3), 809-820 (2017).
25. Anup Jose, Suman Labala, Venkata Vamsi K. Venuganti. *Co-delivery of curcumin and STAT3 siRNA using deformable cationic liposomes to treat skin cancer*. *Journal of Drug Targeting* 25(4), 330-341 (2017).
26. Shubhmita Bhatnagar, Sumeet R. Chawla, Onkar P. Kulkarni, Venkata Vamsi Krishna Venuganti. *Zein microneedles for transcutaneous vaccine delivery: fabrication, characterization and in-vivo evaluation using ovalbumin as model antigen*. *ACS Omega* 2, 1321-1332 (2017).
27. Preeti Kumari, Shreya Jain, Balaram Ghosh, Vladimir Zorin, Swati Biswas; *Poly lactide-based block copolymeric micelles loaded with chlorin e6 for photodynamic therapy: In vitro evaluation in monolayer and 3D spheroid models*, *Molecular Pharmaceutics (ACS)*. 2017. 14(11), 3789-3800
28. Sri Vishnu Kiran Rompicharla, Bhatt Himanshu, Aashma Shah, Neeraja Komanduri, Dhanya Vijayasathy, Balaram Ghosh, Swati Biswas; *Formulation optimization, characterization, and evaluation of in vitro cytotoxic potential of curcumin loaded solid lipid nanoparticles for improved anticancer activity*, *Chemistry and Physics of Lipids*.

29. Kiran Rompicharla SV, Trivedi P, Kumari P, Ghanta P, Ghosh B, Biswas S; Polymeric micelles of suberoylanilide hydroxamic acid to enhance the anticancer potential in vitro and in vivo, *Nanomedicine (London)*. 2017 Jan;12(1):43-58.
30. Muddineti Omkara Swami, Kumari, Preeti, Ghosh, Balaram, Torchilin, Vladimir, Biswas, Swati; D- $\alpha$ -Tocopheryl succinate/phosphatidyl ethanolamine conjugated amphiphilic polymer based nano-micellar system for the efficient delivery of curcumin and to overcome multiple drug resistance in cancer, *ACS Applied Materials and Interfaces*. 2017 May 24; 9(20):16778-16792.
31. Omkara Swami Muddineti, Preeti Kumari, Eupa Ray, Balaram Ghosh, Swati Biswas; Curcumin-loaded chitosan-cholesterol micelles: Evaluation in monolayers and 3-D cancer spheroid model, *Nanomedicine (London)*. 2017. doi: 10.2217/nnm-2017-0036.
32. Preeti Kumari, Omkara Swami Muddineti, Sri Vishnu Kiran Rompicharla, Pratyusha Ghanta, Balaram Ghosh, Swati Biswas; Cholesterol-conjugated poly(D, L-Lactide)-based micelles as a nanocarrier system for effective delivery of curcumin in cancer therapy, *Drug Delivery*. 2017, 24(1), 209-223.
33. Omkara Swami Muddineti, Balaram Ghosh, Swati Biswas; Vitamin E-based micellar nanocarriers for anticancer drug delivery, *Expert Opinion Drug Delivery*, 2017 Jun;14(6):715-726.
34. Udumula MP, Babu MS, Bhat A, Dhar I, Sriram D, Dhar A. High glucose impairs insulin signaling via activation of PKR pathway in L6 muscle cells. *Biochem Biophys Res Commun*. 2017 May 6;486(3):645-651. (corresponding author, impact factor-2.9)
35. Kalra J, Dhar A. Double-stranded RNA-dependent protein kinase signalling and paradigms of cardiometabolic syndrome. *Fundam Clin Pharmacol*. 2017 Jun;31(3):265-279.
36. Dhar A. The role of PKR as a potential target for treating cardiovascular diseases. *Curr Cardiol Rev*. 2017;13(1):28-31.
37. Shedding light on designing potential meprin  $\beta$  inhibitors through ligand-based robust validated computational approaches: A proposal to chemists! Nilanjan Adhikari,a, Sk. Abdul Amin, Balaram Ghosh\*, Tarun Jha\*. *Journal of Biomolecular Structure and Dynamics*. 2017 Sep 20:1-20. doi: 10.1080/07391102.2017.1374210.
38. FRET Mediated Zn<sup>2+</sup> Sensing in Aqueous Micellar Solution and its Application in Cellular Imaging: Shweta Pawar, T. Uday Kumar, Prakruti Trivedi, Balaram Ghosh, Anupam Bhattacharya, Amit Nag. *ChemistrySelect* 2017, 2, 8731– 8737.
39. p-TSA promoted syntheses of 5H-benzo[h]thiazolo[2,3-b]quinazoline and indeno[1,2-d]thiazolo[3,2-a]pyrimidine analogues: Molecular modeling, in-vitro antitumor activity against hepatocellular carcinoma: Amit K Keshari, Ashok K Singh, Vinit Raj, Amit Rai, Prakruti Trivedi, Balaram Ghosh, Umesh Kumar, Atul Rawat, Dinesh Kumar, Sudipta Saha: *Drug Des Devel Ther*. 2017 May 29;11:1623-1642. doi: 10.2147/DDDT.S136692.
40. Discovery of Novel 2-Amino-5-(Substituted)-1,3,4-Thiadiazole Derivatives: New Utilities for Colon Cancer Treatment: Raj V, Rai A, Singh AK, Keshari AK, Trivedi PH, Ghosh B, Kumar U, Kumar D, Saha S. *Anticancer Agents Med Chem*. 2017 Apr 19. doi: 10.2174/1871520617666170419122916
41. One-Step Synthesis of Fused Chromeno[4,3-b]pyrrolo [3,2-h]quinolin-7(1H)-One Compounds and their Anticancer Activity Evaluation: Yadagiri Thigulla, T. Uday Kumar, Prakruti Trivedi, Balaram Ghosh, Anupam Bhattacharya: *ChemistrySelect* 2017, 2, 2721 – 2724.

### III. Conferences attended/papers presented:

1. A. Sajeli Begum, MTT assay-guided isolation of a cytotoxic lead from Hedyotis umbellata and its mechanism of action against non-small cell lung cancer A549 cells. International Conference on Drug Development Technology (Dubai), Oct 16-17, 2017, 19(10) Part VIII, 891.
2. A. Sajeli Begum, Microscopic analysis of Oldenlandia umbellata and Liquid chromatography-Mass Spectroscopy (LC-MS) Fingerprint of its constituents for species identification and characterization. International Conference on Drug Development Technology (Dubai), Oct 16-17, 2017, 19(10) Part VIII, 892
3. A. Sajeli Begum, Bioactive cyclic dipeptides of microbial origin in discovery of cytokine inhibitors (Keynote Talk). International Conference on Drug Development Technology (Dubai), Oct 16-17, 2017, 19(10) Part VIII, 888.
4. A. Sajeli Begum, A household-based survey of knowledge, attitudes and practices (KAP) towards dengue fever among four villages of Shameerpet Mandal of Ranga Reddy District of Telangana. 15th Annual Conference of Indian Association for Social Sciences and Health (IASSH) and National Institute of Rural Development and Panchayati Raj (NIRDPR), Hyderabad. Nov 16-18, 2017.
5. Swati Biswas, "Nanomedicines as photodynamic therapy in cancer". Podium presentation in a conference "Applied Nanotechnology and nanoscience International Conference" in Rome, Italy on October 18-20, 2017.

6. Swati Biswas, "Poly(lactide)-based polymeric micelles-mediated delivery of chlorin e6: An effective photodynamic therapy in cancer", Authors: Swati Biswas, Preeti Kumari, Shreya Jain, Balaram Ghosh. Presented in Kolkata healthcare Summit-2017 in Kolkata, West Bengal during 20-22 September.
7. Mary Priyanka Udumula , Mangali Suresh Babu , Audesh Bhat , Indu Dhar , Dharmarajan Sriram, Arti Dhar. Activation of double-stranded rna-dependent protein kinase pathway impairs insulin signaling in I6 muscle cells. Conference on Drug Discovery & Development focus on cancer and diabetes. March 16-17, 2017, NIPER, Hyderabad.
8. Suresh Babu Mangali, Mary Priyanka Udumula, Jaspreet Kalra, Arti Dhar. Activation of double-stranded rna-dependent protein kinase mediates palmitic acid mediated oxidative stress and apoptosis in cultured h9c2 cardiomyocyte. "International Conference on Challenges in Drug Discovery and Delivery (ICCD3 - 2017)". March 2 – 4, 2017 at BITS Pilani (Pilani Campus), Pilani, Rajasthan (India).
9. Jaspreet kalra, Mary Priyanka Udumula, Mangali Suresh Babu, Audesh Bhat, Indu Dhar, Arti Dhar. High fructose induces oxidative stress and apoptosis in cultured renal NRK-52 cells via activation of PKR pathway. International Conference on Challenges in Drug Discovery and Delivery (ICCD3 - 2017)". March 2 – 4, 2017 at BITS Pilani (Pilani Campus), Pilani, Rajasthan (India).
10. Mary Priyanka Udumula, Mangali Suresh Babu, Audesh Bhat, Indu Dhar, Dharmarajan Sriram, Arti Dhar. Activation of PKR impairs insulin signalling in skeletal muscle cells. Presented at Ramanbhai Foundation 8th International Symposium on current trends in health care on Feb 2-4, 2017, Gujrat, India.

#### IV. Invited Talks given by BITS faculty:

1. Sajeli Begum, Bioactive cyclic dipeptides of microbial origin in discovery of cytokine inhibitors (Keynote Talk). International Conference on Drug Development Technology (Dubai), Oct 16-17, 2017, 19(10) Part VIII, 888.
2. V. Vamsi Krishna Venuganti, Breaching the membrane barriers for effective drug delivery. Workshop II, UK-India Centre for Advanced Technology for Minimizing Indiscriminate Use of Antibiotics. January 16th 2017, Hyderabad.
3. Swati Biswas, "Lipid-conjugated nanomicellar system for the delivery of curcumin in cancer": Resource Person in a 'Two Days National Seminar on Lipid Drug Conjugates in Drug Delivery' on 14th and 15th July, 2017 in JSS College of Pharmacy, Ooty, Tamilnadu.
4. Swati Biswas, "Polymeric micelles as nano-drug carriers for cancer therapy": an invited speaker in 'Pharmaceutical Education-Academia Relation to Industry-Current scenario (PEAR-2017)' on 18.03.2017 in JNTU, Hyderabad.
5. Arti Dhar, presented a talk on High carbohydrate diet, stress and Hypertension at winter Institute of GLObal Health (WIGH), BITS Pilani-Hyderabad Campus on January 5th, 2017.

#### V. Invited talks arranged in the department:

#### VI. Awards and recognitions won by faculty and students:

- Paper titled "Activation of double-stranded rna-dependent protein kinase pathway impairs insulin signaling in I6 muscle cells by 1. Mary Priyanka Udumula , Mangali Suresh Babu , Audesh Bhat , Indu Dhar , Dharmarajan Sriram and Arti Dhar won first prize at Drug Discovery & Development conference focus on cancer and diabetes" held at NIPER Hyderabad on March 16-17, 2017.
- Poster titled "Activation of Palmitic acid and high glucose mediate oxidative stress and apoptosis in H9C2 cardiac myocytes by Suresh Babu Mangali, Mary Priyanka Udumula, Jaspreet Kalra, Audesh Bhat, Indu Dhar, Arti Dhar won second prize at CTPS, BITS Pilani-Hyderabad campus on 28th October, 2017.

#### VII. Faculty Development, International Collaboration & Industry Immersion: NIL

#### VIII. Significant new equipment/experimental facility added during the year:

#### IX. Departmental association/club activities: Students arranged one day conference on drug discovery and delivery with 4 invited talk and 50 poster presentation and conducted one day workshop on molecular modeling.

#### X. Major maintenance, renovations or new construction reports:

#### XI. Major equipment acquired during the year: Individual ventilated cages for animal house

Tablet punching machine; Coating machine



**B3.10.12 Physics****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>02</b>
<b>Associate Professors</b>	<b>04</b>
<b>Assistant Professors</b>	<b>09</b>
<b>Lecturers</b>	<b>-</b>
<b>Visiting Faculty</b>	<b>-</b>

**Head of the Department:** Prof. P.K.Thiruvikraman

**Contact details:**

**Email:** thiru@hyderabad.bits-pilani.ac.in

**Phone:** 040-66303508

**Number of PhD Scholars:**

**Full Time:** 08

**Part-Time:** 05

**I. Sponsored Research activities:**

Department has one ongoing project worth Rs. 14.76 lakhs INR funded by DST.

**Ongoing projects**

<b>S No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount (Lakhs)</b>	<b>Duration</b>
1	Gravitational waves from oscillations and instabilities in neutron stars	Dr. Sarmistha Banik	DST-Young Scientist	14.76	2014-2017

**Projects sanctioned during the year:** None

**II. Publications:**

- Investigating solvent effects on aggregation behaviour, linear and nonlinear optical properties of silver nanoclusters, K.B. Bhavitha, Anju K.Nair, Sreekanth Perumbilavil, Saju Joseph, M.S.Kala, Abhijit Saha, R. Aravinda Narayanan, Nishar Hameed, SabuThomas, Oluwatobi S.Oluwafemi, Nandakumar Kalaraikkal, Optical Materials vol. 73, p. 695 (2017).
- Multiwalled carbon nanotube promotes crystallisation while preserving co-continuous phase morphology of polycarbonate/polypropylene blend, Mohammed Arif, Sarathchandran, R. Aravinda Narayanan, Allisson Saiter, Roberto Terzano, Ignazio Allegretta, Carlo Porfido, Nandakumar Kalarikkal, Sabu Thomas, Polymer Testing, vol. 64, p.1 (2017).

**II. Conferences attended/papers presented:**

- Dielectric and ferroelectric characteristics of rare earth doped strontium bismuth tantalate ceramics for ferroelectric memory capacitor devices, (Contributory Talk) B. Rajesh Kannan, N. Jahangeer and B. HariharaVenkataraman, 12<sup>th</sup> National Conference on Solid State Ionics, BITS - PILANI, Pilani, India, December 21 - 23, 2017.
- Synthesis and structural characterization of a promising multiferroic (BiFeO<sub>3</sub>) material for photovoltaic application, Waseem Ahmad, N. Jahangeer, Kannan Ramaswamy, Souvik Kundu and B. HariharaVenkataraman, National Symposium on Convergence of Chemistry and Materials, BITS - PILANI, Hyderabad, India, December 21 - 22, 2017.

**III. Invited Talks given by BITS faculty:**

- Dr. K.V.S.Shiv Chaitanya gave an invited lecture on "stieltjes electrostatic model of quantum mechanics" at "Energy Materials and Nanotechnology meeting on Quantum" held in Vienna, Austria from 18<sup>th</sup> to 21<sup>st</sup> June, 2017
- Dr. Sarmistha Banik gave an invited lecture on "Properties of rapidly rotating PNS with antikaon condensates at constant entropy" at CNRS, Paris. France in June 2017

3. Dr. Sarmistha Banik gave an invited lecture titled “ Critical mass, moment of inertia & universal relations of rapidly rotating neutron stars with exotic matter” at European Center for theoretical studies in Nuclear Physics and related areas in Trento, Italy in June 2017.
4. Prof. P.K.Thiruvikraman gave an invited lecture on “How do we know what we know about stars and planets” at K.V.Rao Scientific Society, Hyderabad on 18<sup>th</sup> November, 2017.

**IV. Invited talks arranged in the department:**

1. "Physics of the big and the small" – Prof. Bindu Bambah, Dean, School of Physics, University of Hyderabad, 28<sup>th</sup> February, 2017
2. “On unitary dilation of open quantum system dynamics” – Prof. Sibashish Ghosh, Institute of Mathematical Sciences, Chennai, 23<sup>rd</sup> February, 2017
3. “Full Potential Multiple Scattering Theory with space-filling scattering sites for X-ray absorption spectroscopy,” Prof. Keisuke Hatada, Department of Physics, Faculty of Science, University of Japan, 23<sup>rd</sup> August, 2017
4. “The Electron Fluid in Solid State Devices”, Dr. Mani Chandra, Research Division, Quazar Technologies, New Delhi, 25<sup>th</sup> October, 2017
5. “Random Walks in Physics”, Padma Sri. Prof. Mustansir Barma, TIFR Centre for Interdisciplinary Sciences, Hyderabad, 2<sup>nd</sup> November, 2017

**V. Awards and recognitions won by faculty and students:**

1. Prof. Kannan Ramaswamy and Prof. Aravinda Raghavan have been selected by IISER-Pune to train STEM teachers in India on Research-based Pedagogical Tools as part of Newton-Bhabha programme sponsored by DBT, MHRD, IISER-Pune, and British Council.

**VI. Faculty Development, International Collaboration & Industry Immersion:**

1. Prof. Kannan Ramaswamy and Prof. Aravinda Raghavan participated in the Level 1 STEM Teacher Training Workshop on Research-based Pedagogical Tools, organized by DBT, MHRD, IISER-Pune, and British Council in collaboration with Sheffield Hallam University, UK, between October 11-14, at Sacred Heart College, Kochi, Kerala.
2. Prof. Kannan Ramaswamy and Prof. Aravinda Raghavan participated in the Level 2 STEM Teacher Training Workshop on Research-based Pedagogical Tools, organized by DBT, MHRD, IISER-Pune, and British Council, in collaboration with Sheffield Hallam University, UK, between December 6-8, at INSA, Delhi.

**VII. Significant new equipment/experimental facility added during the year:****VIII. Departmental association/club activities:****IX. Major maintenance, renovations or new construction reports: Nil****X. K. Major equipment acquired during the year:**

## B3.11 DIVISION/UNIT/CENTER-WISE ACTIVITY HIGHLIGHTS

### RESEARCH AND DEVELOPMENT

The education system offers several opportunities to members of faculty to pursue research and involve students at all different levels through specialized projects, in the chosen research area. Research is promoted in the institution through the faculty development scheme and by encouraging faculty members to obtain funding from national and international agencies for sponsored research projects and to provide consultancy services. Presently, there are **14** faculty members and **250** research scholars, pursuing Ph. D. programs in identified thrust areas.

#### Ph.D. Qualifying Examination

There are 39 research projects funded by various National and International funding agencies for about Rs.86691780. Details of approved research projects are enclosed in **Annexure 6** (Part B3).

Ph.D. qualifying examination was conducted at Hyderabad campus during the two semesters of 2017. 67 candidates were declared successful in this examination.

### Central Facilities Report:

#### LIBRARY

The library is very spacious with 45000 sqft area in two floors, fully air-conditioned, with modern and comfortable furniture for the users. Library has a seating capacity of 485 readers. It remains open from 0900 to 2300 hrs. on all working days (except National Holidays) and from 0900 to 1700 hrs. during weekends and other holidays.

The library is using KOHA Library Management Software for all its housekeeping activities. The library internet site has got the Web OPAC (Web enabled Online Public Access Catalogue). A facility on KOHA Web OPAC includes advance search options for books, journals, theses, CDs etc. The library site has been linked with the institute home page for external access. Students can access the library catalogue and the e-resources from their hostel rooms through LAN.

**RFID Technology:** The Radio Frequency Identification (RFID) Technology for the books and self check-in / check-out facility is available. The key benefits of RFID Technology are:

- Quick & Efficient Circulation Operations
- Enhanced Security for Library Items
- Seamless Inventory Management
- Emerging Technology Experience for Library users

The library renders standard services like issuing of books; attending to reference queries, providing photocopies, inter library loans, etc. for the faculty and students of the institute. The following are the highlights.

**The Library Committee:** The Library committee is appointed by the senate comprising faculty representatives from each department. There are 12 members are there in the committee. The committee meets periodically and works very closely with the library in resources selection and co-ordinate the requirements of the department. The Librarian is the chairman of the committee.

#### Acquisition Section

The Library has a collection of 340000 volumes and 1025 Springer engineering e books. 3400 new volumes were added to the existing collection this year in different disciplines. These include emerging areas like Lean Technology, Leadership, Digital Libraries, Earthquake Engineering, Wireless Communication, Signal Processing, Robotics, Nano-technology, Micro-electromechanical Systems (MEMS), Bio-informatics, Biotechnology, Geographical Information Systems, Network Security, Embedded Systems, Grid Computing, Pervasive Computing, Software Testing and Data Warehousing/ Mining. A good number of fiction, general reading books, and case studies in Management, latest editions of handbooks, encyclopedias, yearbooks and books which are useful for campus recruitment were also added this year.

#### E-resources

Access to over 5281 e-journals and other important websites have been provided on the library site. E-journals of the following publishers were made available:

- American society of civil Engineers (ASCE)
- American Society of Mechanical Engineers (ASME)
- American Journal of Physics
- IEEE Explore
- Science Direct

- ACM
- SciFinder
- Scopus
- JSTORE
- IOP (Institute of Physics)
- Nature

**Journals:** Presently the Library subscribes to 80 printed journals/magazines including foreign journals. Useful articles, news, newspaper clippings are displayed on the notice board for the information of the readers. Besides, articles authored by institute faculty are displayed in a prominent place in the library.

#### Other Services

1. The library continues to keep the readers informed every week through regular display of all the books added to the library. A list of weekly/monthly additions is also made available to readers on the library site and also through e-mail to the entire faculty. Special topical displays are also organized periodically.
2. The library facilitates in the Earn While You Learn Programme of the Institute wherein students assist in the library jobs like book data entry, spine labeling of books, bar-coding of books etc.
3. Organized a Book Festival in association with Book Syndicate, our campus book store in October 2017. During the Book Festival faculty members were encouraged to suggest books for the library.
4. Free wireless internet (WIFI) access is available in the library
5. During the examinations the library working hours has been extended till 2 am (midnight)

#### Library Statistics

The Library collection is growing steadily. The following table shows some of the significant statistical data:

1	Current library holdings	34000
2	Average number of books issued per day	180
3	Average number of readers visiting the library per day	1260
4	Books added during the year	3400
6	Number of print Journals subscribed	80
7	E journals made available on library site	5281
8	CD-ROM Collection	1255
9	Educational Video/DVD Collection	102
10	Total number of reading seats in the library	485
11	Library membership	4550

#### WORKSHOP

The Central Workshop imparts training to students and caters to the maintenance & fabrication needs of the Institute. Students' training involves training all first degree students through the course "Workshop Practice" by imparting skills in various manufacturing processes like machining, fitting, carpentry, smithy, foundry, sheet metal, electroplating, welding, etc. and two computer oriented exercises, CNC Programming using Pro-E and Manufacturing Simulation using FlexSim software. For B.E. (Mechanical Engineering) and B.E. (Manufacturing Engineering) degree courses, students are also imparted in-depth training in various other courses such as "Production Techniques-I and II", "Manufacturing Processes" and "Computer Aided Manufacturing". Apart from routine maintenance and training, the workshop also accepts fabrication jobs concerning the project works of students and also technical support for TBI works.

The workshop comprises the following sections: Machine shop, Welding, Electroplating, Fitting, Smithy, Sheet Metal, Carpentry, Foundry and Metrology. Major equipments include 1 Vertical Machining Center (Bridgeport VMC GX600), 1 EDM Wire cut (Model: SPRINT CUT), 1 CNC Lathe(Model PTC- 200), 1 Hydraulic press with computer control(40T), 9 Lathes, 2 Shapers, 1 Radial Drilling Machine, 1 Universal Milling Machine(Batlibai make) with indexing attachment, 1 Cylindrical Grinding Machine with internal grinding attachment, 1 Surface Grinding Machine, 1 Tool and Cutter Grinder, 1 Pedestal Grinder, 1 Slotting Machine, 1 Power Shearing Machine(Vivek Brand), 1 Portable Drilling Machine, 1 Injection Moulding Machine, 1 TIG Welding Machine, 1 MIG Welding Machine, 1 Spot Welding Machine, 1 Universal Milling Machine (BFW make), 1 Shaper (Sagar make), 1 Surface Roughness Tester (Mitutoyo make) and 1 Hydraulic Bulge Test Rig, 1 ECM setup (Electro Chemical Machining), 1 Lathe Tool Dynamometer, and 1 Rotational Moulding Machine, 1 M TAB CNC Lathe Trainer, 1 3-D Coordinate Measuring Machine (CMM) "Spectra", 1 HMT-PRAGA Universal Tool & Cutter Grinding Machine, 1 FRITSCH Vibratory Sieve Shaker, Magnesium metal stir casting Furnace, 1 Milling tool

dynamometer, 1 Drilling tool dynamometer, 1 Lathe tool dynamometer, 1 200TON capacity Compression testing machine, Mold Testing Equipment ,1 Open-hearth furnace for smithy, 1 Gas-fired furnace for foundry, 5 Wood-working Lathes, 2 Arc-welding equipments, 1 Oxy-Acetylene gas welding equipment, 1 Gauge planner for wood works, Electroplating equipment (zinc coating), 1 Power Hacksaw and metrology instruments.

### **MEMS Cleanroom**

On 6 August 2017, a state-of-art micro-electro mechanical systems (MEMS) cleanroom, which is a joint contribution of the BITS, Hemair Systems and Department of Science and Technology, Government of India was inaugurated at BITS Pilani, Hyderabad campus by Prof. Sauvik Bhattacharya, Vice-chancellor and Prof. G. Sundar, Director, Hyderabad campus and Industry Engagement & Off-campus Programmes. The cleanroom design, construction of structure including materials, cleanliness machinery and sensors, maintenance accessories and operational know-how have been provided, as part of an MOU for joint research and academic collaboration with the BITS, by an BITS Alumnus, Mr. Vutla Srinivasa Rao's company, Hemair Systems, a forty-year old global company engaged in providing MEMS and Biotechnology cleanroom solutions and radar cooling systems.

### **COMMUNITY WELFARE UNIT**

The community welfare unit (CWU) coordinates the welfare and recreational activities of the staff members of the institute and also the functioning of medical center. Clinic management software has been installed in the medical center to streamline patient information and records. A lady doctor and a male nurse have joined the medical center last year. The medical center also has a nurse on duty present 24 x 7 to attend to patients. A dentist visits once a week and a gynecologist visits twice a week to the medical center.

**The community celebrated a week long Ganesh Puja and New Year. The celebrations ended with cultural performance from kids and adults in the community in the auditorium. Professionals visit the campus to teach musical instruments, classical dance and classical music. Community Sports competition were organized for the third time for community members. Various schools from the city visited the campus to make presentations regarding their curriculum and extracurricular activities and also had an interaction session with parents to answer their concerns and queries.**

### **B3.12 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS**

#### **No. of Honours and Awards to Students**

##### Institute & Other Scholarships

	MERIT	MERIT cum NEED	INSPIRE	KVPY	NTSE	PM Scholarship	BSNL	RAIL WAY	BITSAA (Ashok Agarwal)	FIIT JEE	OTHE RS
2012-13	154	1337							0		
2013-14	159	1247							2		
2014-15	159	1123							2		
2015-16	237	1463	20	1	20	2		2	2		16
2016-17	226	1421	33	4	35	5	3	6	2	1	18
2017-18			9	1	9	3		4			11

### **HONOURS**

#### Cambridge India Ramanujan Scholarship

Sai Darshan, 2012A1PS487H

Chemical Engg. Student for receiving a fully funded PhD admission in Cambridge University.

#### DAAD WISE

##### 2015-16

SHALINI ASIMENDRA CHAUDHURI 2013A7PS331H

SHIRIN FATHIMA 2013AAPS212H

KINJAL JAIN 2013A7PS162H

##### 2016-17

ANIKETH JANARDHAN REDDY 2014A7PS096H

BHARGAV KANUPARTHI 2014A7PS527H

PIYUSH CHAWLA 2014A7PS120H

CHARPAK

2015-16

CHANDRAJA D 2013AAPS233H

2016-17

RENIGUNTA VINAY DATTA 2014A7PS509H

NTU

2015-16

SIMRAN KAPUR 2013A7PS152H

2016-17

DUSI ADITYA 2014AAPS598H

VARUN UDAY NATU 2014A7PS841H

TANMAYA SHEKHAR DABRAL 2014A7PS138H

MITACS

2016-17

ADITI GHOSH 2014A7PS055H

YALE

2016-17

SREE MANJARI K 2014A5PS813H

HEC, PARIS (Summer School)

2016-17

NIMISHA AGRAWAL 2014A8PS0437H

Details of extension services/activities, societal engagements, continuing education programmes, sports and games, cultural activities etc. undertaken by the Institution.

Extension Activities and Institutional Social Responsibility (ISR)

Enactus, BITS-Pilani, Hyderabad campus

ENTREPRENEURIAL

ACTION FOR OTHERS

CREATES A BETTER WORLD FOR

US ALL.

Enactus is an **entrepreneurial NGO** that takes entrepreneurial action for others, with a view of improving their standards of living.

**2016-17**

Enactus worked to expand our target community and included women from the Upparpally village under the same project. To widen the product base we set up a cold drinks stall during the batch snaps event on our campus. The stall received a great response and this boosted the confidence of our new target community and motivated them to become entrepreneurs.

**NSS, BITS-Pilani, Hyderabad Campus**

**NATIONAL SERVICE SCHEME:** The Institute has a National Service Scheme (NSS) which enrolls about 200 students every year. NSS aims at developing amongst students a sense of participation in nation building through social work.

**2016-17**

Date	Event	Highlights
15 <sup>th</sup> August	Independence day	Events like quiz, rallies, Infocus etc.,
24 <sup>th</sup> September	NSS day	Debates, Home for disabled visit
02 <sup>nd</sup> October	Introductory meet NSS	
11 <sup>th</sup> October	Tree plantation	

14-16 <sup>th</sup> October	Blood donation	
30 <sup>th</sup> October	Diwali celebrations	Diyas for a cause
26 <sup>th</sup> January	Republic day	Visited devnar blind school, invited paraasain player
11 <sup>th</sup> February	Survey	In malkaram health survey
12 <sup>th</sup> March	Holi	Organic colours
15-18 <sup>th</sup> March	Blood donation drive	

### **NIRMAAN, BITS-Pilani, Hyderabad Campus**

**NIRMAAN:** Nirmaan Organization is a constructive citizen movement for an empowered India. This social Organization founded on 12th February, 2005 by a group of BITS Pilani University Students is now spread over all the BITS campuses Pilani, Hyderabad and Goa and also with full time chapters in Bengaluru and Hyderabad. Nirmaan has been phenomenal in creating greater impact in areas of educational initiatives, livelihood opportunities and socio-technological sectors. Currently the Nirmaan workforce stands at 1200 across India and corporate chapters at US, UK and Singapore.

Nirmaan BITS Hyderabad Chapter successfully organized its 6<sup>th</sup> edition of Ignite, annual social fest. In its five editions Ignite has touched close to 2000 kids and this sixth edition added 300 more kids to the Ignition of Spirits. 300 kids from 8 orphanages in Hyderabad took part in Ignite that took place in between 10-12<sup>th</sup> February, 2017. The inauguration ceremony held on 10<sup>th</sup> February has seen the encouraging speeches of Prof. G Sundar, Director of BITS Hyderabad Campus; Mr. M Sudheer Babu, CSR Head of Tech Mahindra; Mr. Ravi Teja, Movie Editor of Pellichoopulu and Prof. Vijaya Bhaskar Marisetty, Department of Economics at BITS Hyderabad.

The event spanned two full days consisted of science fair as the headliner event and sports, story-telling, craft making, drawing, math, Vedic math, English, Health and Hygiene workshops followed by Career Guidance and with fun events such as laser show, 3D screening and Paper Dressing. Later takeaway gifts and prizes to winners of sports are distributed and the kids were sent back safely to their homes.

We had a strong volunteer base of close to 50 first and second years with 24 Organizers (3<sup>rd</sup> years) that lead to the smooth flow of events during the fest. The event was successful with the collaboration with Scio Foundation and the everlasting support and bonding with faculty, staff and students at BITS Pilani Hyderabad Campus.

Nirmaan Organisation made an idea to start from the ground, clay modelling workshop has been conducted at the schools in Pothaipally and Upparpalli villages by the volunteers of SAP (School Adoption Program), BITS Pilani, Hyderabad campus. The little, school going kids at the school were provided clay and a mentor to guide them through the molding of idols. Though not so sophisticated as of the experts' idols, those made by the children were good and strong enough for the celebration of the festival at low cost and even being more Eco-friendly.

Manthan, NGO conference organized by Nirmaan Bits Pilani Hyderabad chapter, is a key forum of meeting and dialogue among NGOs. It intends to facilitate a common platform for the NGOs to have an open discussion about their projects and problems. It mutually helps both the NGOs and the corporate by bringing them together, so that the corporate can find the cause in their lines to support and the NGOs can get their cause supported.

### **2016-2017**

Date	Event Name	Event Description
15 <sup>th</sup> August	Independence day	Celebrated Independence day in SAPs
4 <sup>th</sup> September	Clay Ganesha Workshop	Awareness regarding the ill effects of chemicals used in making idols has been spread.
2 <sup>nd</sup> October	Zoo park trip	Excursion for students of USAP
16 <sup>th</sup> October	Manthan	NGO Conference
14 <sup>th</sup> November	Children's day	Celebrated Children's day in SAPs
26 <sup>th</sup> January	Republic day	Celebrated Republic day in SAPs
10 <sup>th</sup> -12 <sup>th</sup> February	Ignite	Children from different orphanages are brought to our campus and various events are conducted.
April & May	Azolla Cultivation	Azolla has been used as a bio- fertilizer in paddy fields and as a feed for buffaloes in the village Pothaipally.

### **ENGINEERS WITHOUT BORDERS**

EWB works towards accelerating sustainable rural development, assisting in capacity building in backward rural and urban communities of India, protecting the country's natural resource base and working across national boundaries for social and economic justice and responsible use of technology. EWB has a strong network of professional and student chapters across the city. Some of the projects during 2016-17 are: Liter of Light Project, Subsidized Biogas plants, Low cost sanitary napkins for rural women, etc.

**EVENTS****Mudford Basti Project:**

There is a slum called Mudfort basti located near to Secunderabad in the city of Hyderabad. Basically, the slum is in a central government land. They have been living there for decades illegally. So, they don't have access to electricity or other basic amenities. So, we made a proposal for lightening solutions and got the funding of 2 lakhs from Dupoint. We tied up with a solar vendor and distributed solar lights in the slum.

**Biogas Plant Project**

Subsidized Biogas plant was constructed by Panchayat in Anthaipally village. A total of 3 biogas plants were constructed serving 25 families but were abandoned lately due to operational failures and settlement issues. We have spoken to the people and resolved their issues like the distribution methods and maintenance.

**ROOTCAUSE Event during ATMOS'2016:**

Social entrepreneurship event were conducted during ATMOS'16 (technical festival) of BITS- HYD.

**Coolers from Scrap bottles:**

We have developed non-complex and cost-effective cooling model, made of some simple usable materials like cardboard and plastic bottles that have worked well in some rural areas, (temperature drop of approx. 6-7 degrees Celsius).

**Device to prevent mosquito's growth on stagnant water:**

Currently (Oct 2017) we are working on this project and we are in prototype development stage. In this project, we are developing a device which will prevent growth of mosquitoes in stagnant water by disturbing their normal growth cycle.

**SCIO BENEVOLENT FOUNDATION**

Scio is a non-profit organization that aims at forming a support structure for the current education system. In view of the current choices that students make, succumbing to peer and parental pressure, the need for an unbiased voice is really felt. They intend to reach out to students and counsel them to so that they can choose their career paths wisely.

SCIO, the brainchild of a few students of BITS-Pilani, Hyderabad Campus is a section-25 non-profit organization aimed at forming a support structure to the current education system. SCIO Means "I Know" in Latin and "Knowledge" in Esperanto.

It has been registered under the Ministry of Corporate Affairs on October 30, 2012 and has been very active since its inception.

SCIO aims at giving Counseling to students of secondary, higher schools and also for undergraduate colleges. This will serve as a portal through which they have access to information about opportunities in every field of education. Guidance of those who have already experienced situations will be provided.

The revenue generated is used for social causes. Improving the educational conditions in areas of need will be the primary focus. We also plan to provide self-sustenance systems for orphanages, old age homes etc.

SCIO is thus an endeavor to bring about a lasting change in the society, to enlighten the youth and thereby shape the future of India. We aim to provide services that help students and the society.

We have reached out to around 22,500 students, faculty and parents. We have also organized events in Vellore and Manipal in association with the students of Vellore Institute of Technology and Manipal Institute of Technology respectively.

**EVENTS**

Some of the major activities that SCIO has conducted are:

**VAIDYA- Medical Camp:-**

Vaidya is a free health camp organized by Scio Foundation. Scio Foundation regularly organizes free health camps in various rural villages to improve the healthcare facilities in rural areas. The medical camps are organized in association with reputed hospitals like Apollo Hospitals, Hyderabad, Kasturba Medical College, Manipal and School of Allied Health Sciences, Manipal. Various specialist services such as General Physician, Cardiologist, Orthopedic, Gynecologist, Dermatologist, Ophthalmologist, Pediatrician and Oncologist are provided to the patients. The medicines prescribed are distributed free of cost to all the patients.

**VIGNAN-Educational Tour:**

An educational trip is conducted for the students of different schools and organizations in Hyderabad, wherein the students visit BITS – Pilani, Hyderabad Campus. The day long visit around the picturesque campus with state-of-the-art facilities, labs, library and the educational departments proves to be inspirational and enlightened young minds. A one on one interaction about the different branches available and the future prospects is held



with the students. Students from Slate – The School, Aga Khan Foundation and Silver Oaks Schools have participated in Vignan till date.

**Lotus Lap Public School:**

Date: March 14<sup>th</sup>, 2017

Students benefitted: 100

**VIDYA- School Outreach:**

Vidya involves visiting schools in rural and urban areas in and around Hyderabad and organizing counseling sessions for the students of classes 8 – 12 of various high schools. The students are made aware of the various career options they can pursue after they complete their schooling and the different entrance exams for premier institutes. They are also informed about the scholarships provided by the government and other organizations. The volunteers interact with the highly enthusiastic students and clarify their queries about various careers. The events in Hyderabad are organized by the volunteers of SCIO-BPHC Chapter, in Manipal by the volunteers of SCIO-Manipal Chapter and in Bengaluru by SCIO-Vellore Chapter.

**Government High School, Kashibugga, Warangal:**

Date: January 04<sup>th</sup> and 07<sup>th</sup>, 2017

Venue: Government High School, Kashibugga, Warangal

Students benefitted: 300

**GM Vidyaniketan Public School, Brahmavar:**

Date: May 19<sup>th</sup>, 2017

Venue: GM Vidyaniketan Public School, Brahmavar

Students benefitted: 300

**Girl Child Education Awareness at Zilla Parishad High School**

A girl child education camp was organized at Zilla Parishad High School at Shameerpet, Hyderabad. The camp comprehensively explained the girl students of the school about the advantages a girl can have on completing her education. They were told about the various government schemes aimed at promoting education for girls in the country.

**Aptitude tests:**

Scio Foundation has conducted aptitude workshops and tests for high school students of Shantinkethan Vidyalaya, as aptitude is an integral part of many competitive examinations and is an assessment of student's logical reasoning abilities. We had an overwhelming response from the students and faculty of Shantinikethan Vidyalaya for the aptitude workshop and test.

**Counseling events at orphanages in Vellore:**

The volunteers of Scio Foundation interact with the children in orphanages and provide a platform for the children to show case their talent in arts and sports. The volunteers motivate the children to achieve their dreams by enlightening them on the various opportunities that are available for them. They also teach soft skills and English to the children. Scio Foundation has also provided basic sports equipments to the orphanages to enhance the physical education of the children. The children of Wheel Rehoboth Home for Children, Vellore and Bless-Madhapur, Hyderabad were benefitted by the activities of Scio Foundation.

**E Cell**

Operation Launchpad: Speakers invited to teach concepts on the basis of their experiences. (Ideation, BMC, Marketing).

Coffee with CEL: Interview program to connect with more and more people in startup world and know their journey in starting-up.

Skill Development Workshop: Certification program to teach technical skills (eg: Graphic Designing, Web Dev, Finance etc), which might reduce the effort of hiring an intern and save the added expense.

Peer Learning: Using skills (like Data Analytics, Python etc) to solve on-campus problems or optimize the processes.

Entrepreneurship Community: People with similar interests meet and discuss their ideas, and get the views/suggestions on the same from others in the community.

Start-up Support: An amount (Rs. 4000 for now due to less funds) funded to start-ups to help in their basic operational activities, and also, connect them with mentors and investors as and when needed.

E-Summit (LaunchPad)

**BITSMUN**

BITSMUN (BITS Model United Nations) Society was established in 2011 with an aim of providing quality guidance and a feel of the functioning of the United Nations to the aspiring MUNners of BITS Pilani Hyderabad Campus. Since then the Society has grown leaps and bounds. Some of the functions the society carries out are:

Organizing the BITSMUN Hyderabad conference annually which is one of the best MUN conferences in India, attended by over 400 delegates from all across the world. The first edition, in 2011, was organised in collaboration with BITS Pilani Pilani Campus. However, since 2012, the BITSMUN Society has been organising BITSMUN Hyderabad annually and to great success. The applicants and participants have been increasing year by year. Some of the Chief Guests of the previous editions of BITSMUN Hyderabad are Justice Markandey Katju, the former Chairman of the Press Council of India and Capt. Raghu Raman, the founding CEO of the National Intelligence Grid (NATGRID).

Training the students of BITS Pilani Hyderabad Campus to achieve quality MUNning and debating skills by organizing Mock MUNs and debate sessions. Additionally, training and information sessions are organised as well, which help increase the awareness and knowledge of students, with respect to current affairs and international relations.

Sending delegations to other prestigious MUNs of India, like those organised by CBIT, BITS Pilani Goa Campus, BITS Pilani Pilani Campus, IIM Bangalore, IIT Madras and so on. The delegations have bagged several awards and recognition for our college by winning the Best Delegation prize, in addition to individual awards for our students.

Writing, editing and publishing an on-line magazine, BITSMUN Chronicle, which releases frequent articles about pressing and relevant international issues, in order to educate the student community about the most important diplomatic and significant conflicts of our times.

**Grandh Foundation**

Grandh Foundation is a Social Organization that works on solving important Social problems by coming up with Solutions that leverage power of technology, design thinking and business model innovation at the core.

**Objective:**

Eradicate Social Problems Faster and Forever.

**Vision:**

To constantly push the world and our human society towards more happy, equitable and sustainable future and improve the lives of millions in the process.

**Activities of Grandh:****Prabhaav**

Social Problem Awareness and Advocacy through social media , blogs and video/documentary creation, Culture Promotion ,Fundraisers, Social Impact Events , Conferences , Exhibitions , Talks and Panel Discussions, Social Right Campaign Design and Support

**Udhbhaav:** Creating a holistic and supportive social entrepreneurship ecosystem . Impact Investing and funding of social enterprises and projects. College connect and incubator collaborations for budding social entrepreneurs and technologists

**Book Bank:**

Grandh established an Organized Book Bank on our campus which helps students borrow textbooks and educational resources at absolutely minimal prices. Grandh went on to help hundreds of students borrow books for the past 6 years.

**Vikas Soch:**

Grandh Foundation has partnered with E-Cell for social events. One such event is Vikas Soch which aims to find talented minds in social entrepreneurship.

Grandh Targets in the following year:

Apply education

Rural knowledge access center

**CULTURAL EVENTS****PEARL**

Pearl is the annual national cultural fest of BITS Pilani, Hyderabad Campus. Incepted in 2009 as an intra-college festival, a year after the foundation of BITS Pilani, Hyderabad campus, the fest grew into a national level college cultural fest with participation from more than 50 colleges across India with footfall usually touching 5000. Pearl

hosts a variety of cultural events and competitions which include music, dance, literary, photography and quizzing. The fest also hosts talks and pro-shows with celebrities and bands of national and international renown appearing and/or performing during the fest in the 9 years since its inception.

### **PEARL '17 (17-19 March 2017)**

BITS Pilani, Hyderabad campus is organizing the ninth edition of its annual cultural fest, Pearl '17 between 17 and 19 March 2017. The theme for this year's 3 day extravaganza is 'A Carnavalesque episode'. There are many events in store for attendees being organized by the various clubs on campus, with lakhs of rupees in prize money up for grabs.

The fest kicked off with a well-organized Inauguration ceremony on 16<sup>th</sup> March. Mr Madhusudhana Chary – Hon'ble Speaker of the Telangana Legislative Assembly was the chief Guest. Mr. Manish Gupta – Film Maker and Activist and Mr. Sudhir Reddy, MLA from Medchal district were the Guest of Honor. Prof. G Sundar, Director of Hyderabad campus presided over the inaugural function. After the formal proceedings which included speeches from all the dignitaries and the President and General Secretary of the Students Union, Pearl'17 was officially declared open. After the inaugural function, the various clubs showcased their talent.

Some of the headliner events are QuBITS – the Quiz fest, Glitterati – the Fashion Parade, Catharsis- the film festival, Fraglore – a LAN gaming competition, Crimson Curtain- the dramatics fest, Terpsichore- the group dance competition and many more.

A concert by renowned playback singer Sonu Nigam on 19<sup>th</sup> March was organised. Apart from this, there were shows by Zakir Khan, a popular stand-up comedian, Lagori, an Indian folk/fusion rock band known for their rustic style, and Marnik, an electronic dance music DJ duo from Italy. There are also talks by former Army chief Bikram Singh and senior politician and MP Shashi Tharoor.

### **RENAISSANCE**

Renaissance conducts Intra college events to promote art and culture within the college through fun, events and workshops. It lasts for 1 week where different clubs and associations in the campus help students develop cultural skills that include dancing, writing, singing and acting.

### **SANSKRITI**

Annual Inter College event -Sanskriti , Medley of events which promote the vibrancy and culture of different regions of India. The different regional associations in the campus come together to highlight the beauty and regional specialties through performances which include dance, music, poetry and drama (in their regional languages) . Grubs (stalls of regional food cuisines) are set up.

### **CAZA DE TALENTOS**

Online events introduced before Pearl which includes slam poetry, monologue, music, minute arts contests etc .

### **TECHNICAL EVENTS**

#### **Innovation challenges, Hackathon, make-athons, Competitions etc**

The University Physics Competition (International)	Bronze medal
E-Yantra Robotics Competition (IIT Bombay)	Pre-final round
ACM ICPC (Kolkata/Kanpur Regionals)	5 <sup>th</sup>
ACM ICPC (Gwalior Regionals)	10 <sup>th</sup>
ACM ICPC (Kharagpur Regionals)	17 <sup>th</sup>
ACM ICPC (Amritapuri Regionals)	20 <sup>th</sup>
ACM ICPC (Amritapuri Regionals)	22 <sup>nd</sup>
Think A Ton By HPE	3 <sup>rd</sup>
MIT Battle Code	Pre Final Round
India Stack-Open Innovation	1 <sup>st</sup>
TRAI Hackathon	4 <sup>th</sup>
India Hacks	Top 20
Make My Trip Hackathon	Top 8
Microsoft Build The Shield	9 <sup>th</sup>
Google Summer of Code	
Zulip Summer of Code	

### **SPORTS EVENT**

#### **ARENA '17: 26-29 January 2017**

ARENA, the annual sports festival of BITS-Pilani Hyderabad campus was formally inaugurated on 25 January 2017 by Ms. Harika Dronavalli, Chess Grandmaster and Arjuna Awardee was the chief guest and graced the inauguration and motivated every person with her inspiring story. Prof. G Sundar, Director presided over the function. Over 3000 students from all across the nation showed their mettle and proved to be at their absolute best with a true spirit of sportsmanship. The most deserving won and the ones lost still walked away with their

head held high. Arena was a giant success leaving every player, sports enthusiast and even a spectator with lots of memories to cherish. The fest had offered a comprehensive entertainment and sportive atmosphere in the campus during ARENA'17.

### **LITERARY EVENT**

#### **VERBA MAXIMUS**

Verba Maximus (abbreviated VM) is the annual literary festival of BITS Pilani, Hyderabad Campus. It is a two-day national event, held around the end of January or first week of February every year. Usually, there is a preliminary regional round preceding the national round which happens in a few major metropolitan cities. Four editions of the festival have been conducted over the past four years. There are events in multiple languages. The entire fest is managed by the literary associations of BITS- namely ELAS and Hindi Tarang. The regional rounds contain Spell bee and debate.

The sixth edition of Verba Maximus, the annual literary fest of BITS Pilani, Hyderabad Campus was organized over 4<sup>th</sup> & 5<sup>th</sup> February, 2017. Taglined "Timeless Tales", this year's edition gave literature enthusiasts all over the city a plethora of events such as debates, diary writing, group discussion, picture perspective and more to celebrate their passion for literature. The events were hotly contested, as the organizers flew in the regional round winners from various cities. "Sherlocked", the headliner event, kept the academic block buzzing with activity all afternoon. The participants were also treated to talks by authors Ashwin Sanghi, Indu Balachandran and Balaji Vishwanathan, the most viewed Quora writer. From food trucks to the good old bookstall, a "Scrabble Corner" to a "Candid Corner", there was always something interesting happening in every alley. Overall, it was just the platform that literature enthusiasts of the city were waiting for all year!

### **CLUBS**

#### **Automation and Robotics Club**

Automation and Robotics Club was reformed in 2014 with a 6-member club to 22 technically motivated group. The induction into the club is evolved with a project which requires developing an automated bot which is an utmost basic skill. Numerous small projects such as, Luminosity Detecting Bot, Walking Bot, and other basic projects like Beat Detectors etc were organised. Projects involves Image Processing, CAD designing, PCB fabrication, RasPi projects, more complicated interfacing modules etc which includes a Robotic arm that was 3D printed ad can play rock paper scissors via image processing. Chess bot that can play chess with you autonomously also via image next project includes of processing Quadcopters built from scratch including design and coding it. Micro quad copters 3D printed. SIMS (Smart Inventory Management System) which is an IoT based project which keeps a track of our entire inventory and allows to access only via finger print. Robotics projects which were funded by the director includes the indoor autonomous navigation robot, which uses a Kinect interface with ROS to map out a room and figure out the best path to reach its destination.

Notable achievements include finalists of TI-IICDC a competition by TI and IIMB funded by DST, which fetched a grant of 5 lakh grant for the project Aqua Mapper, a device to detect ground water. This funding inventory grew by a massive amount and developed 2 state of the art 3D printers. ARC IS A constant participants in e-yantra and robocon.

Workshops are organized on campus every year like Bot-Shot, bot which is controlled with mobile phone to pick and throw balls with a robotic arm. Maze Perilous, bot which can navigate a colour coded maze via image processing. Bomb Squad, bot which can read RFID tags and communicate with a server wirelessly to turn bombs on or off.

#### **Dramatics**

The Dramatics Club is a group of theater enthusiasts. It is known for its undying legacy of remarkable performances with collaborative enthusiasm to do something new every time, and for pushing its boundaries to get bigger and better every year. We perform all year and feature multiple types of performances including Mimes, Stage Plays and Street Plays. We perform English, Hindi and Telugu plays. During our Cultural Fest, Pearl, we host The Crimson Curtain, a theatre competition.

#### **Dance**

The Dance Club BPHC, is one big family who lives and breathes dance. The club practices and performs all year round with performances on various themes and dance forms such as Classical, Hip Hop, Contemporary, Bollywood, Salsa, etc with the aim being to becoming better at expressing our ideas, our emotions through dance and bringing something new every time we are on the stage. The Dance Club also organizes fun-filled workshops and flash mobs over course of the year.

#### **Music**

Music club is a group of people interested and passionate about music who perform and compose music. The club activities involve performing in all major events inaugurations, keeping JAMs for people to enjoy, music night, a competition for classical solo singing, western solo singing ,an acoustic band jam, Road to till deaf.

**Shades**

SHADES is the fine arts and crafts' club who undertakes some of the most creative activities on campus and aims to develop and promote the arts culture among students in the campus.

The myriad of activities include the competitive inter-hostel events, yearly workshops, interactive sessions, competitions. Club's presence can be inescapably felt during all the fests on the campus, wherein we decorate the walls and hold exhibitions for people to showcase their personal works of art. We give live performances on stage during fests.

In addition, we have adorned the library with a graceful image of Saraswati Maa, and are adding more effort to make the campus a much more beautiful place.

**VFX**

VFX club brings together people who are passionate to learn and experiment with visual and special effects, 3D modeling and animation. The club activities consist of taking up projects, collaborating with various clubs, conducting workshops for the masses and hosting various events during fest.

**ELAS**

ELAS is a club that caters to those on campus who have a passion for all things oratory and literary- from debating to poetry. We have consistently won great accolades for the campus in various events like Parliamentary Debates. We conduct regular events to help improve the English literary culture on campus and improve students' writing skills.

**Hindi Tarang**

Hindi Tarang is the Hindi literary club of BPHC. It's a group of budding poets and writers who share same passion for the language and writing.

**SAFL**

SAFL or the Sanskrit and Foreign Languages Club, is a congregation of people interested in learning Sanskrit or Foreign Languages (French, German, Spanish, Japanese). The activities of the club involve having events/meet-ups both online as well as offline. Offline activities involve ice-breaker sessions, spell bee, crossword, 7up, and foreign language movie screenings. Online activities involve meme translator, game translator, word of the day.

**Cooking Club**

Cooking Club's motive is to provide a platform for all the enthusiasts to pursue and exhibit their culinary skills, and to promote cooking as an art or a passion, to enlighten people in the field of cooking and bring awareness to people about healthy food and easy methods of cooking. We learn, practice and deliver our knowledge and hard work to people in the form of food and events, where people cannot only showcase their talents, but we also help foodies satisfy their quest for something new, and more.

**Journal Club**

JC is the journalism club on campus. It's a group of people who love writing, are curious about what's happening around them, and express their findings in articles, videos, and cartoons. We started off with illustrious magazines during fests and now also do newsletters, investigative journalism on campus issues, interviews with guest speakers, satirical videos on current campus affairs and video interviews. In addition to this, we organize journalism events during Pearl, Verba Maximus and Renaissance and the popular football manager event during Pearl and Arena.

**Quiz Club**

Quiz Club brings together people who are passionate about quizzing. It's an assembly of people who are naturally curious and find it irritating to be uninformed. The Quiz Club acts as a platform for BPHCians to experience the sheer joy of jogging one's grey cells, exercising one's curiosity, connecting the dots, thinking out-of-the-box, arriving at an answer and expressing it creatively within split seconds while working in teams to win competitions. We conduct quizzes every week apart from hosting flagship events during fests.

**Bhangra Club**

Most Enthusiastic bhangra dance is kept alive through this club. Power packed performances are given during various inaugurations and are well appreciated.

**Movie Club**

Through its activities, the movie club is trying to improve the film culture in our campus.

**Photog**

Photog club tries to inculcate the feeling of photography in everybody.

**Designers Anonymous**

Designers Anonymous is the Graphic design club of BITS Pilani, Hyderabad. Here, creativity is treated as deity as we embark on a daily expedition to create something new, something different, something which can bring about some change and most importantly, something which is pleasing to the eye and loved by others. We befriend colors, fall for fonts and cry over lack of arrangement in a design. Being a club which begun its journey just over a year and a half, we have participated and won the 1st and 2nd prize at IIT Madras design competition, and also organized various workshops for others to learn and apply Graphic designing and conduct events related to Graphic designing during Pearl and Renaissance. We indulge ourselves in various types and branches of graphic designing, for instance, Minimalist, Digital Art, Typography, UI/UX and so on.

**Swaranjali**

Swaranjali is the classical music and dance club of BITS Pilani Hyderabad Campus. Our goal is to widen the appreciation of the ancient forms of music and dance through performances. The art is dying since there aren't enough people propagating the culture, so we put together enrapturing performances to educate the masses of BPHC, to show that anyone can enjoy the classical arts. Our performances are a culmination of Carnatic and Hindustani songs, and dance pieces in Bharatanatyam and Kuchipudi. We perform during formal inaugurations and auspicious events such as Ganesh Chaturthi and Krishna Jayanti.

**SOCIETIES****Stand Up Comedy**

SUC is a society that encourages students to tickle the funny bone. Its a newly formed society that conducts open mics and takes a light hearted stand on issues.

**Fashion Society**

Fashion society encourages the art of fashion, designing and modelling. Gliterrati is annual fashion Event which is conducted during Pearl and has the maximum participation from various colleges across India.

**B3.13 MAJOR MAINTENANCE, RENOVATIONS OR NEW CONSTRUCTION REPORTS****1. New Construction :**

SI No	Description of Activity
1	Terrace and Floor Expansion joint treatment works in Academic block
2	File Storage unit for Finance department
3	Strengthening of False ceiling in Auditorium at Stage area
4	Storage Shelves for Biological Department
5	Chain link Mesh with MS frames at Girls Hostels
6	Hockey Goal post work
7	Construction of toilets in SBH bank premises
8	Construction of new Sand Box
9	Providing Work stations for PHD scholars of Mathematics Department
10	Providing Work stations for PHD scholars of Mechanical engineering Department
11	Providing Work stations for PHD scholars of Civil engineering Department
12	Providing Work stations for PHD scholars of Civil engineering Department
13	Construction of Material Storage shed for Civil engineering department
14	Providing sealant to Windows
15	Construction of new storm water drain near Ram Bhavan & Mess 1
16	Construction of MS Canopy and staircase for B & C type quarters
17	Construction of additional 8 cabins for Faculty in B block
18	Construction of New Compressor room for Pharmacy Department
19	Construction of additional 150 KLD capacity collection tank for STP plant
20	Civil & MEP works done for Commissioning of MEMS laboratory
21	Construction of 4 number of yard lights in playground area with LED fixtures
22	Construction of Aluminum partition works in SAC, Library & at E block cellar
23	Construction of Gas bank for Cafeteria
24	Civil & MEP works in SEM laboratory
25	Construction of Additional earth pits in sub stations
26	Providing LED lights in corridors in 3 Hostels

**2. Renovation and Maintenance**

<b>SI No</b>	<b>Description of Activity</b>
1	Mirrors replacement in Hostels
2	Repairs to Compound at STP and at West side of campus
3	Water proofing works in Hostels in rest areas
4	Replacement of marble partitions in rest rooms
5	Repairs to doors & windows in Hostels
6	Toilet water proofing and Cellar A water proofing
7	Replacement of damaged IWCs in Hostels
8	Painting to Hostel rooms and SAC
9	Raising of existing drain wall
10	Terrace Water proofing treatment in Academic block
11	Relocation of Stem cell lab from A block basement to upper floor
12	Repairs to Children's playground equipment
13	Repairs to Valve chambers
14	Modification works in discussion room for Electrical engineering Department
15	Repairs to Cafeteria
16	Auto Synchronization of DG

**B3.14 MAJOR EQUIPMENT'S ACQUIRED DURING THE YEAR:**

During 2017 a lot of new equipment has been added to support academics, research and development. Details as per **Annexure 7** (Part B3).

## LIST OF ANNEXURES

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### ADMINISTRATIVE BODIES

#### The names and designations of senior officers of Hyderabad campus

<b>Director</b>		
1.	Prof. G Sundar	Director
<b>Dean(s)</b>		
1.	Prof. Niranjana Swain	Dean, Practice School Division (University wide) & Dean, Administration (Officiating)
2.	Prof. Suman Kapur	Dean, International Programmes and Collaborations Division (University Wide)
<b>Associate Dean(s)</b>		
1	Prof. Soura Banerjee	Faculty Affairs
2	Prof. Vidya Rajesh	Academic Research
3.	Prof. P Yogeeswari	Sponsored Research and Consulting
4	Prof. P K Thiruvikraman	Academic and Resource Planning
5	Prof. P Sankar Ganesh	International Programmes and Collaboration
6	Prof. KVG Chandrasekhar	Practice School
7	Prof. Srinivas Prakash Regalla	WILP
8	Prof. Chittaranjan Hota	Admissions
9	Prof. A Vasana	Instruction
10	Prof. Morapakala Srinivas	Academic Registration and Counselling
11	Prof. Sandip Shridharrao Deshmukh	Student Welfare
<b>Head of Departments</b>		
1.	Prof. Srikanta Dinda	Chemical Engineering
2.	Prof. Sridhar Raju	Civil Engineering
3.	Prof. Sanket Goel	EEE
4.	Prof. Amit Kumar Gupta	Mechanical Engineering
5.	Prof. D Sriram	Pharmacy
6.	Prof. Tathagata Ray	C S & I S
7.	Prof. Nagamohan Kommu	Biological Sciences
8.	Prof. Manab Chakravarty	Chemistry
9.	Prof. Sunny Jose G	Humanities & Social Sciences
10.	Dr. Sudatta Banerjee	Economics & Finance
11.	Prof. Dipak Kumar Satpathi	Mathematics
12.	Prof. P K Thiruvikraman	Physics

<b>Faculty-in-Charges</b>		
1.	Prof. Chittaranjan Hota	Information Processing Centre
2.	Prof. Y V Daseswara Rao	Engineering Services
3.	Dr. V Vamsikrishna Venuganti	Centralized Purchases Unit
4.	Dr. Chandu Parimi	Centre for Innovation, Incubation and Entrepreneurship (CIIE)
5.	Dr. Balaji Krishnamurthy	Placements
6.	Prof. Meenakshi Vishwanathan	Community Welfare
7.	Prof. Aravinda N Raghavan	Teaching Learning Centre (TLC)
<b>Other In-charges</b>		
1	Prof. R. Krishnan	Central Analytical Laboratory
2	Dr. Vikranth Kumar Surasani	Central CAD Laboratory
3	Prof. N. Suresh Kumar Reddy	Workshop
4	Dr. Raja Raja Varma Murari	Student Activity Center
5	Prof. P. N. Rao	Alumni Affairs
6	Prof. Chittaranjan Hota	Website
7	Prof. Srikanta Dinda	Occupational Safety & Health Administration (OSHA)
8	Prof. Meenakshi Vishwanathan	SPICMACAY
9	Mr. M S UdayaKumar	Library and Publications & Media Relations
<b>Coordinators</b>		
1	Dr. N Kishore Kumar	National Service Scheme
2	Prof. K S Raju	Centre of Excellence in Water Resources Management
<b>Hostel Resident Wardens</b>		
1	Prof. Kumar Pranav Narayan	Chief Warden & Warden, Valmiki Bhawan
2	Dr. Phaneendra Kiran Chaganti	Budh Bhawan
3	Prof. Sanket Goel	Gandhi Bhawan
4	Dr. Sounak Roy	Vyas Bhawan
5	Dr. Swati Biswas	Meera Bhawan
6	Mr. Syed Ershad Ahmed	Ram Bhawan
7	Dr. Naga Mohan Kommu	Shankar Bhawan
8	Prof. Manab Chakravarty	Malaviya Bhawan (Boys)
9	Dr. D. Purnima	Malaviya Bhawan (Girls)
10	Dr. Subhash Goshal	Warden (Krishna Bhawan)
<b>Hostel Non-Resident Wardens</b>		
1	Dr. Mohan S C	Gandhi Bhawan
2	Dr. Arkamitra Kar	Krishna Bhawan
3	Dr. Shashideep Gutti	Buddh Bhawan

4	Dr. Kurra Suresh	Vyas Bhawan
5	Dr. T S L Radhika	Meera Bhawan (Girls)
6	Dr. Alivelu Manga Parimi	Malaviya Bhawan(Girls)
7	Dr. Thota Nagaraju	Gautam Bhawan
8	Dr. Satish Kumar Dubey	Ram Bhawan
9	Dr. Vivek Sharma	Shankar Bhawan
10	Dr. Nitin Ramesh Kotkunde	Valmiki Bhawan
<b>Hostel Superintendent</b>		
1	Mr. Haridas	Krishna Bhawan, Shanker & Ram Bhawan
<b>Asst. Hostel Superintendents</b>		
1	Mr. Santosh Pillai	Gandhi Bhawan, Buddh Bhawan & Vyas Bhawan
2	Mr. Shaik Areef Basha	Malaviya Bhawan (Boys)
3	Ms. M Anitha Santhosh	Malaviya Bhawan (Girls)
4	Mr. Kahaja Moiduddin	Valmiki & Gautam
5	Ms. L. Vijitha (Office Assistant)	Meera Bhawan
<b>Professor(s) In-Charge:</b>		
1	Prof. Chittaranjan Hota	BITS Entrance Examinations

'Annexure B3-2'

(3 Pages)

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**DETAILS OF ADMISSIONS MADE DURING THE YEAR 2017****(A) Integrated First Degree Programmes at Hyderabad Campus:**

<b>First degree – 2017-18</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>
B.E.: Chemical (A1)	70	48	22
B.E.: Civil (A2)	62	50	12
B.E.: Electrical and Electronics (A3)	100	87	13
B.E.: Mechanical (A4)	117	112	5
B. Pharm. (A5)	35	10	25
B.E.: Computer Science (A7)	220	195	25
B.E.: Electronics & Instrumentation (A8)	52	38	14
B.E.: Electronics and Communications (AA)	113	89	24
B.E.: Manufacturing (AB)	35	28	7
M.Sc.: Biological Sciences (B1)	22	18	4
M.Sc.: Chemistry (B2)	43	26	17
M.Sc.: Economics (B3)	81	68	13
M.Sc.: Mathematics (B4)	72	59	13
M.Sc.: Physics (B5)	62	49	13
<b>Totals</b>	<b>1084</b>	<b>877</b>	<b>207</b>
This list includes; 27 International Students, 3 Board Toppers (A7 - 2, AA - 1) & 3 Staff Children (B2 - 1, B3 - 1, B5 - 1)			

**(B) Higher Degree Programmes:**

<b>Higher Degree Programmes - 2017-'18</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>
M.E Biotechnology	17	3	14
M.E Chemical	9	4	5
M.E Civil with specialization in Structural Engineering	11	10	1
M.E Civil with specialization in Transportation Engineering	7	6	1
M.E Communication Engineering	14	7	7
M.E Computer Science	18	11	7
M.E Design Engineering	14	14	0
M.E Mechanical	14	11	3
M.E Microelectronics	15	11	4
M.E. Mechanical with specialization in Thermal Engineering	9	7	2
M.Pharm with specialization in Pharmaceutics	18	6	12
<b>Totals</b>	<b>146</b>	<b>90</b>	<b>56</b>

**(C) Higher Degree (3 Year Integrated) Programme:**

	<b>Total</b>	<b>Male</b>	<b>Female</b>
M.E. in Computer Science (with specialization in Information Security)	0	0	0

**(D) Ph.D. Programmes:**

Ph.D. Admissions: II Semester - 2016-17	Full Time			Part Time			Faculty Input		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Biological Sciences	2	0	2	0	0	0	0	0	0
Chemical Engg.	0	0	0	0	0	0	0	0	0
Chemistry	1	1	0	1	0	1	0	0	0
Civil	2	2	0	1	0	1	0	0	0
Computer Science	2	1	1	1	1	0	0	0	0
EEE	1	1	0	0	0	0	2	2	0
Humanities & S Sci.	2	0	2	0	0	0	0	0	0
Eco., & Fin, Mgmt	0	0	0	4	3	1	0	0	0
Mathematics	3	2	1	0	0	0	0	0	0
Mechanical	8	4	4	0	0	0	0	0	0
Pharmacy	2	1	1	2	1	1	0	0	0
Physics	1	1	0	1	1	0	0	0	0
<b>Totals</b>	<b>24</b>	<b>13</b>	<b>11</b>	<b>10</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>0</b>

Ph.D. Admissions: I Semester 2017-18	Full Time			Part Time			Faculty Input			Aspirants		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Biological Sciences	4	1	3	0	0	0	0	0	0	0	0	0
Chemical Engg.	0	0	0	0	0	0	0	0	0	0	0	0
Chemistry	3	3	0	0	0	0	0	0	0	0	0	0
Civil	3	2	1	0	0	0	0	0	0	0	0	0
Computer Science	0	0	0	1	1	0	0	0	0	0	0	0
EEE	5	4	1	0	0	0	0	0	0	0	0	0
Humanities & S Sci.	1	0	1	1	0	1	0	0	0	0	0	0
Eco., & Fin, Mgmt	2	1	1	3	1	2	0	0	0	0	0	0
Mathematics	1	1	0	1	1	0	0	0	0	0	0	0
Mechanical	4	4	0	0	0	0	0	0	0	1	1	0
Pharmacy	2	1	1	2	1	1	0	0	0	1	1	0
Physics	1	1	0	0	0	0	0	0	0	0	0	0
<b>Totals</b>	<b>26</b>	<b>18</b>	<b>8</b>	<b>8</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>

**DUAL DEGREEs :**

During the Year 2017, a total no of 144 students (out of 147 offers : Priority 1 – 146, Other Priorities - 1) were permitted to pursue concurrently two first degrees under the Dual Degree scheme as per details given below.

Dual Degree - First Priority										
	A1	A2	A3	A4	A5	A7	A8	AA	AB	Total
<b>B1</b>	2	4	3	4	0	2	2	5	2	<b>24</b>
<b>B2</b>	2	2	3	1	0	7	3	8	1	<b>27</b>
<b>B3</b>	2	3	6	4	0	9	2	5	2	<b>33</b>
<b>B4</b>	3	2	1	6	0	12	1	3	2	<b>30</b>
<b>B5</b>	1	4	7	3	0	7	4	3	0	<b>29</b>
<b>Total</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>18</b>	<b>0</b>	<b>37</b>	<b>12</b>	<b>24</b>	<b>7</b>	<b>143</b>
B2A4 : Offers given – 2, Offers taken – 1, Offers rejected – 1 B4A3 : Offers given – 2, Offers taken – 1, Offers rejected – 1 B5A3 : Offers given – 8, Offers taken – 7, Offers rejected – 1										

Dual Degree - Other Priorities															
	A1	A2	A3	A4	A5	A7	A8	AA	AB	B1	B2	B3	B4	B5	Total
A1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
A2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
A3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
A4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
A5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
A7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
A8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
AA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
AB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
B1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
B2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
B3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
B4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
B5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

**TRANSFERS:**

During the Year 2017, a total no of **19** students (7 transfers + 12 B-B transfers) were permitted to transfer from the initial allotment of First Degree programme to the other programmes of First Degree to pursue under the Transfers scheme as per details given below.

Transfers											
	A1	A2	A3	A4	A5	A7	A8	AA	AB	Total	
A1	-	-	1	-	-	-	-	-	-	1	
A2	-	-	-	-	-	-	-	1	-	1	
A3	-	-	-	-	-	1	-	-	-	1	
A4	-	-	1	-	-	1	-	-	-	2	
A5	-	-	-	-	-	-	-	-	-	0	
A7	-	-	-	-	-	-	-	-	-	0	
A8	-	-	-	-	-	-	-	1	-	1	
AA	-	-	-	-	-	-	-	-	-	0	
AB	-	-	-	-	-	1	-	-	-	1	
B1	-	-	-	-	-	-	-	-	-	0	
B2	-	-	-	-	-	-	-	-	-	0	
B3	-	-	-	-	-	-	-	-	-	0	
B4	-	-	-	-	-	-	-	-	-	0	
B5	-	-	-	-	-	-	-	-	-	0	
<b>Total</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>7</b>	

B-B Transfers						
	B1	B2	B3	B4	B5	Total
B1	-	-	-	1	2	3
B2	-	-	2	2	1	5
B3	-	-	-	-	-	0
B4	-	-	-	-	1	1
B5	-	-	2	1	-	3
<b>Total</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>12</b>

**VERTICAL TRANSFERS:**

During the year 2017, Two (2) students were permitted to transfer from First Degree to Higher degree and 2 students were permitted to transfer from Higher Degree to Ph.D. Programme at Hyderabad Campus.

Annexure B3-3'  
(1 Page)  
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**LIST OF NEW COURSES INTRODUCED THE YEAR 2017**

<b>Second semester 2016-2017</b>		
<b>S.No.</b>	<b>COURSE NO.</b>	<b>COURSE NAME</b>
1	BENG G532	BIOMEDICAL IMAGING
2	BITS F417	MICRO-FLUIDICS & ITS APP
3	CE F420	INTRO TO BRIDGE ENGG
4	CHE F412	PROCESS EQUIPMENT DESIGN
5	CHEM F333	CHEMISTRY OF MATERIALS
6	CS F441	SEL TOPICS FROM COMP SC
7	CS F446	DATA STORAGE TECH & NETW
9	HSS F332	CINEMATIC ART
9	HSS F335	LITERARY CRITICISM
10	HSS F344	HERITAGE OF INDIA
11	MATH F422	NUM MTHD FOR PARTIAL DIFF EQ
12	ME F423	MICRO-FLUIDICS & ITS APP
13	ME F452	COMPOSITE MATERIAL & DES
14	MF F413	MECH VIBRAT & ACOUSTICS
15	MF F473	PRODUCT DESIGN & DEVELOP
16	MF F485	SUSTAINABLE MANUFACTURING
<b>First semester 2017-2018</b>		
<b>S.No.</b>	<b>COURSE NO.</b>	<b>COURSE NAME</b>
1	BIO G570	RECENT DEVELOPMENTS IN BIOLOGY
2	BITS F225	ENVIRONMENTAL STUDIES
3	BITS F316	NONLINEAR DYNA & CHAOS
4	CE F426	GEOSYN & REIN SOIL STR
5	CE G523	TRAN SYST PLAN & MANAGE
6	CE G534	PAVEMENT MATERIAL CHARAC
7	CE G535	HIGHWAY GEOMERTIC DESIGN
8	CE G536	TRAFFIC ENGG & SAFTY
9	CE G562	ADVANCED CONCRETE TECHNOLOGY
10	ECON F345	BEHAVIORAL ECONOMICS
11	ECON F417	RISK MANAGEMENT AND INSURANCE
12	FIN F414	FINANCIAL RISK ANALYTICS AND MANG
13	GS F212	ENVIRON DEV & CLIMATE CH
14	HSS F222	LINGUISTICS
15	ME F418	ROCKET & SPACECRAFT PROP



'Annexure B3-4'

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**BITS, PILANI - HYDERABAD CAMPUS****ACADEMIC REGISTRATION AND COUNSELLING DIVISION (SECOND SEMESTER 2016 - 2017)**

<b>DISCIPLINE</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Sub Total</b>
Research Scholars	6	7	21	25	56	17	41	78	251
A1 - B.E. (Hons.) Chemical					48	41	52	45	186
A2 - B.E. (Hons.) Civil					47	52	49	49	197
A3 - B.E. (Hons.) Electrical & Electronics				2	74	72	72	70	290
A4 - B.E. (Hons.) Mechanical					62	64	70	59	255
A5 - B. Pharm (Hons.)					2	9	21	18	50
A7 - B.E. (Hons.) Computer Science				1	119	146	147	122	535
A8 - B.E. (Hons.) Electronics & Instrumentation				1	38	29	35	39	142
AA - B.E. (Hons.) Electronics & Communication					82	85	82	78	327
AB - B.E. (Hons.) Manufacturing				1	39	33	31	25	129
B1 - M.Sc. (Hons.) Biology				22	30	23	21	25	121
B2 - M.Sc. (Hons.) Chemistry				24	27	28	25	28	132
B3 - M.Sc. (Hons.) Economics				38	42	53	36	34	203
B4 - M.Sc. (Hons.) Mathematics				35	46	40	35	31	187
B5 - M.Sc. (Hons.) Physics				28	31	34	29	29	151
C6 - M.Sc. (Tech) Information Systems									0
<b>Sub-total (FD)</b>		<b>0</b>	<b>0</b>	<b>152</b>	<b>687</b>	<b>709</b>	<b>705</b>	<b>652</b>	<b>2905</b>
H 101 - M.E. (Chemical Engineering)			2				6	6	14
H 103 - M.E. (Computer Science)							7	9	16
H 124 - M.E. (Communication Engineering)			2				8	7	17
H 129 - M.E. (Biotechnology)							8	7	15
H 140 - M.E. (Embedded System)							4	0	4
H 141 - M.E. (Design)							7	8	15
H 143 - M.E. (Structural)							8	8	16
H 146 - M.Pharm (Pharmaceutics)							5	11	16
H 148 - M.E. (Thermal)			1				7	9	17
H 313 - M.E. (Information Security)						9	6	11	26
<b>Sub-total (HD)</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>66</b>	<b>76</b>	<b>156</b>
<b>TOTAL</b>	<b>6</b>	<b>7</b>	<b>26</b>	<b>177</b>	<b>743</b>	<b>735</b>	<b>812</b>	<b>806</b>	<b>3312</b>

**SUMMER TERM 2016 - 2017**

<b>DISCIPLINE</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>Sub Total</b>
Research Scholars	1	3		3	0	0		7
A1 - BE (Hons.) Chemical				1	2	51		54
A2 - BE (Hons.) Civil				0	5	48		53
A3 - BE (Hons.) EEE				0	4	72		76
A4 - BE (Hons.) Mechanical				0	9	70		79
A5 - B. Pharm (Hons.)				0	0	21		21
A7 - BE (Hons.) Computer Science				1	4	146		151

DISCIPLINE	2010	2011	2012	2013	2014	2015	2016	Sub Total
A8 - BE (Hons.) Electronics & Instrumentation				0	2	35		37
AA - BE (Hons.) ECE				2	6	82		90
AB - BE (Hons.) Manufacturing				0	6	31		37
B1 - M.Sc. (Hons.) Biology			1	2	17	21	1	42
B2 - M.Sc. (Hons.) Chemistry				1	8	25		34
B3 - M.Sc. (Hons.) Economics				1	33	36		70
B4 - M.Sc. (Hons.) Mathematics				0	9	34		43
B5 - M.Sc. (Hons.) Physics				0	18	29		47
C6 - M.Sc. (Tech) Information Systems				0	0	0		0
H 313 - ME (Information Security)				0	0	6	11	17
<b>GRAND TOTAL</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>11</b>	<b>123</b>	<b>707</b>	<b>12</b>	<b>858</b>

**FIRST SEMESTER 2017 - 2018**

DISCIPLINE	2009	2010	2011	2012	2013	2014	2015	2016	2017	Sub Total
Research Scholars	5	4	15	21	48	17	38	74	34	256
A1 - B.E. (Hons.) Chemical					5	41	52	43	67	208
A2 - B.E. (Hons) Civil						51	49	48	60	208
A3 - B.E. (Hons.) Electrical & Electronics					6	72	72	71	100	321
A4 - B.E. (Hons.) Mechanical					3	62	70	57	115	307
A5 - B. Pharm (Hons.)					1	9	21	18	34	83
A7 - B.E. (Hons.) Computer Science					7	146	147	125	220	645
A8 - B.E. (Hons.) Electronics & Instrumentation					2	29	35	38	52	156
AA - B.E. (Hons.) Electronics & Communication					4	85	82	80	113	364
AB - B.E. (Hons.) Manufacturing						33	32	24	34	123
B1 - M.Sc. (Hons.) Biology				2	30	23	21	22	22	120
B2 - M.Sc. (Hons.) Chemistry				1	26	28	25	22	42	144
B3 - M.Sc. (Hons.) Economics					41	53	36	38	81	249
B4 - M.Sc. (Hons.) Mathematics				2	44	40	35	33	72	226
B5 - M.Sc. (Hons.) Physics					27	34	29	29	62	181
<b>Sub-total (FD)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>196</b>	<b>706</b>	<b>706</b>	<b>648</b>	<b>1074</b>	<b>3335</b>
H 101 - M.E. (Chemical Engineering)								6	8	14
H 103 - M.E. (Computer Science)								9	18	27
H 106 - M.E. (Mechanical)									14	14
H 123 - M.E. (Microelectronics)									15	15
H 124 - M.E. (Communication Engineering)			1					7	14	22
H 129 - M.E. (Biotechnology)								7	17	24
H 130 - M.E. (Transportation)									7	7
H 141 - M.E. (Design)								8	14	22
H 143 - M.E. (Structural)					1			8	11	20
H 146 - M.Pharm (Pharmaceutics)								11	18	29
H 148 - M.E. (Thermal)								9	9	18
H 313 - M.E. (Information Security)						1	6	10		17
<b>Sub-total (HD)</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>75</b>	<b>145</b>	<b>229</b>
<b>TOTAL</b>	<b>5</b>	<b>4</b>	<b>16</b>	<b>26</b>	<b>245</b>	<b>724</b>	<b>750</b>	<b>797</b>	<b>1253</b>	<b>3820</b>

'Annexure B3-5'

(5 Pages)

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**LIST OF ORGANIZATIONS WHICH CONDUCTED CAMPUS INTERVIEWS JAN-DEC 2017**

S.No	Name of Company	Total Offers Made	CTC(INR)	No of Interviews
1	Accolite	2	1000000	41
2	Ace Academy	4	1200000	16
3	ADM Agro Industries	3	525000	53
4	Aizant	3	387000	15
5	Altisource Business Solutions	2	1100000	1
6	Amazon	18	2700000	153
7	Amazon Area Manager	1	1600000	59
8	Arcesium	2	2950000	102
9	ARM Embedded Technologies	3	1000000	1
10	Ashoka Buildcon	3	500000	16
11	Atkins	0	706373	16
12	Aurobindo Pharma	1	360000	14
13	Auto RABIT Software	0	500000	15
14	Balaxi Overseas	2	345000	5
15	BES Consultants	1	300000	5
16	Birla Century	1	600000	26
17	BNED loud cloud	1	850000	33
18	Brown tape	1	600000	2
19	CA Technologies	5	900000	121
20	Cactus Communication	0	500000	64
21	Cadfem	1	450000	1
22	Cairn	1	725500	5
23	Capgemini	39	600000	102
24	Capillary	3	600000	24
25	Cassamore	2	450000	24
26	Cerner	5	810000	14
27	Cetas Health Care	2	450000	24
28	CGI	6	711000	27
29	CH2M	0	420000	5
30	Cipla	1	253680	1
31	Cisco	8	1437333	75
32	Commscope	0	600000	10
33	Core compete	2	600000	29
34	Credit Suisse	15	1100000	7
35	Credit Vidya	4	700000	18
36	Crowd Chat	5	1000000	108
37	DBOI	2	904000	2
38	DBS	2	1000000	47
39	DE Shaw	3	2850000	109
40	Direct i	6	2697880	120

S.No	Name of Company	Total Offers Made	CTC(INR)	No of Interviews
41	Doodle blue	1	700000	11
42	Doselect	0	800000	13
43	Dr Reddy's Laboratory	2	450000	5
44	Ernst &Young	2	800000	2
45	Edelweiss	1	857000	1
46	EMC	4	1354233	153
47	EXL Services	6	592000	143
48	EZE Software	4	800000	28
49	Fiorano	3	1200000	56
50	Fractal Analytics	4	600000	16
51	Fresh desk	3	700000	98
52	Future First	5	920000	286
53	Gamooga Softech	1	500000	1
54	GAP	4	825000	15
55	General Electric	1	975000	1
56	Geny Medium	2	450000	31
57	GGK Technology	18	800000	144
58	Google	0	1000000	20
59	Goldman Sachs	3	780000	1
60	Grand View Research	2	511000	2
61	Grey Orange	2	1000000	113
62	HCL	1	700000	1
63	HDFC Bank	2	600000	2
64	Headstart	1	600000	12
65	Hedge loop	0	500000	7
66	Here Maps	3	1200000	1
67	Hitachi Consulting	4	900000	107
68	Hullo Inc	0	1000000	30
69	Hyundai Mobis	8	650000	48
70	Hyundai Motors	0	600000	94
71	i3Labs India	2	504000	11
72	IFB	2	505012	18
73	IMI Mobile	1	650000	1
74	IMS Health	0	550000	5
75	Indus Valley Partners	1	1160000	82
76	Industry Arc	1	600000	1
77	Infiniti Research	1	557692	4
78	Infostrech	0	550000	12
79	Inmobi	1	7800000	1
80	Intellect Design(Polaris)	5	500000	15
81	iRunway	5	800000	32
82	JDA Software	5	475000	5
83	Jivox	7	1500000	43
84	Johnson Controls	11	750000	79

S.No	Name of Company	Total Offers Made	CTC(INR)	No of Interviews
85	Joveo	0	1000000	56
86	JP Morgan & Chase	11	650000	11
87	JP Morgan Services	11	1100000	11
88	KPIT	0	575000	16
89	L&T Construction	12	538000	63
90	L&T Metro	2	450000	15
91	Latent View	4	450000	39
92	Logistics now	0	420000	14
93	Mahle Behr	1	500000	1
94	Mathworks	2	1200000	24
95	Media IQ	1	700000	1
96	MediaTek	2	2201436	36
97	Medleymed	1	600000	1
98	Meritus Intelytics	9	600000	2
99	Microsoft IDC	10	2100000	151
100	Microsoft Research Lab	1	1350000	1
101	Mordor Intelligence	8	450000	63
102	Morgan Stanley	5	1617000	259
103	Musigma	6	830000	267
104	MySmartPrice	1	1370000	1
105	National Stock Exchange	1	600000	45
106	NetApp	0	1846309	8
107	Netcracker	2	700000	2
108	Neuland labs	0	400000	18
109	New Age TechSci Research Pvt. Ltd.	0	600000	55
110	Next Education	6	700000	90
111	Next Gen PMS	1	1050000	1
112	NowFloats	0	2500000	83
113	Nucleus Software	1	1000000	54
114	Nutanix	6	3500000	80
115	NVIDIA	11	1140000	3
116	NXP Semiconductors	2	1119308	57
117	Open World Money	2	848000	240
118	Optum	0	858200	35
119	Oracle India	30	2200000	250
120	Orbees	2	600000	172
121	PayPal	3	2510000	85
122	Perceptive Analytics	3	600000	19
123	Pfizer	1	350000	5
124	Phenom people	6	800000	16
125	Play Simple	0	1500000	22
126	Plus Advance Technologies	2	600000	2
127	Purple talk	2	600000	13
128	Qualcomm	36	1400000	124

S.No	Name of Company	Total Offers Made	CTC(INR)	No of Interviews
129	Qubole	2	1815000	2
130	Quolt	1	550000	1
131	Rao IIT	15	700000	18
132	Redpine Signals	2	680258	33
133	Reflexis	4	525000	4
134	Report Garden Technologies	8	450000	4
135	Rivigo	1	800000	1
136	Rubique	0	900000	16
137	Sailife science	0	400000	4
138	Saisanj	1	500000	9
139	Samsung	2	900000	2
140	Seagate	0	1000000	6
141	Securifi	2	700000	31
142	Service Now	2	1467240	49
143	Shaadi.com	0	700000	17
144	SKF	1	472000	17
145	Skoda	1	550000	1
146	Smartprix	0	2200000	144
147	Sokrati	0	450000	48
148	Stellarix	0	400000	12
149	Strand Life Science	2	375000	8
150	Streamingo	0	900000	12
151	Swiggy	6	1000000	65
152	Symantec	1	1498400	1
153	Synergiz	2	383800	2
154	Takshashila	3	600000	40
155	Tata Advanced Systems	3	393000	33
156	Tata Trust	7	600000	17
157	TCL	2	1000000	25
158	TCS	0	630000	43
159	Techolution	2	700000	23
160	Techsophy	2	450000	49
161	Tejas Networks	3	800000	67
162	Teletext	1	900000	20
163	Teradata	1	1100000	50
164	Texas Instruments	2	1524500	106
165	Thirumalai Chemicals	2	400000	3
166	Thornton tomasetti	1	575000	5
167	Tonbo Imaging	2	800000	2
168	Trendtiger	4	1200000	111
169	UHG Analytics	5	1198000	48
170	United Health Group	4	1198000	98
171	Vestas	2	853512	2
172	via.com	3	1000000	69

S.No	Name of Company	Total Offers Made	CTC(INR)	No of Interviews
173	VidyaSagar Classes	4	600000	8
174	Visa	1	1400000	12
175	VMS Consultants	2	500000	2
176	Walmart	1	1857700	201
177	Weir Minerals	1	550000	1
178	Works Application	1	3536187	48
179	Xilinx	2	1400000	32
180	Xion Multiventures	4	720000	51
181	Zenoti	4	945815	60
182	Zinnov Consulting	1	690000	1
183	Zomato	1	2600000	121
184	ZS Associates	1	1218000	1
185	Zuti	0	600000	16
Total		618		7624

### Discipline Wise Break Up:-

Code	Department / Program	AY 2016-17			
		Registered	Placed	Unplaced	% Placed
A1	B.E CHEMICAL	47	39	8	82.98
A2	B.E CIVIL	36	30	6	83.33
A3	B.E EEE	83	76	7	91.57
A4	B.E MECHANICAL	63	44	19	69.84
A5	B.PHARMACY	1	1	0	100.00
A7	B.E COMPUTER SCIENCE	137	133	4	97.08
A8	B.E ELECTRONICS AND INSTRUMENTATION	42	39	3	92.86
AA	B.E ECE	87	76	11	87.36
AB	B.E MANUFACTURING	47	35	12	74.47
B2	M.SC. CHEMISTRY	1	0	1	0.00
B3	M.SC. ECONOMICS	1	1	0	100.00
B5	M.SC. PHYSICS	2	2	0	100.00
H101 & HS01	M.E CHEMICAL ENGINEERING	6	6	0	100.00
H103	M.E. COMPUTER SCIENCE	7	6	1	85.71
H124 & HS24	M.E COMMUNICATION ENGINEERING	9	9	0	100.00
H129	M.E. BIO TECHNOLOGY	8	5	3	62.50
H140	M.E. EMBEDDED SYSTEMS	4	4	0	100.00
H141	M.E. DESIGN	7	7	0	100.00
H143	M.E. STRUCTURAL	8	8	0	100.00
H146	M. PHARM	5	5	0	100.00
H148	M.E. THERMAL	7	3	4	42.86
H313	M.E. INFORMATION SECURITY	8	8	0	100.00
<b>Total</b>		<b>616</b>	<b>537</b>	<b>79</b>	<b>87.18</b>

'Annexure B3-6'  
(15 Pages)  
Ref. AR 2017

### RESEARCH PROJECT GRANTS

S.No	Title of the Project	Principal Investigator	Department	Amount Sanction (Rs.)	Funding Agency	Duration	Sanctioned date
1	Synthesis, study of optical properties and Anticancer activity of unique di-substituted tetracyanoquinodimethanes	Prof. Jayanti Subbalakshmi	Chemistry	2574605	DST	3years	04.01.2017
2	Development of a Non-invasive biodegradable polymeric micro projection ocular patch for effective corneal delivery of anti-microbial agents to treat fungal infections of eye	Dr. V Vamsi Krishna Venuganti	Pharmacy	4225150	ICMR	3years	01.02.2017
3	Polymorphism studies and molecular characterization of plasmodial Rhoptry neck protein 2 (RON-2) from Indian fields isolates	Prof. Vidya Rajesh	Biological Sciences	3492000	DST-SERB	3years	24.03.2017
4	Development of an accurate and robust unstructured grid-based adjoint approach for compressible turbulent flows	Dr. Anil Nemili	Mathematics	1590600	DST	3years	01.10.2016
5	Developing a web portal for power curve guarantee test	Dr. Sabareesh G Rajasekharan	Mechanical Engineering	148995	Mytrah Energy India	3months	23.03.2017
6	Web portal for downloading the reanalysis data & long term correlation with measured data	Dr. Aruna Malapati	Computer Science and Information System	148995	Mytrah Energy India	3months	23.03.2017
7	STRATEGIES FOR FAULT-TOLERANT NETWORK-ON-CHIP DESIGN "	Dr. Soumya J	EEE	2593140	DST	3years	06.03.2017
8	Development of pulse position modulation modemm	Prof. Yoganandam	EEE	402500	DPPMM	1year	01.03.2017
9	Protein structure and stability modulation due to In-Cell and In-Vitro Crowding: Molecular insights on the origin of the effects of crowding	Prof. Ramakrishna Vadrevu	Biological Sciences	5436000	DST	3years	21.03.2017
10	Mechanistic basis of abnormal neurogenesis due to HSN1E-associated DNA methyltransferase1 (Dnmt1) mutation and pharmacological intervention for phenotypic correction	Dr. Naga Mohan K	Biological Sciences	6845800	DBT	3years	01.03.2017
11	Investigations of knowledge on Dengue fever followed by education and post impact behavioural changes among the rural communities of shameerpet mandal of Rangareddy district of Telangana state	Prof. Sajeli Begum	Pharmacy	1089792	ICMR-ICSSR	3years	30.03.2017



S.No	Title of the Project	Principal Investigator	Department	Amount Sanction (Rs.)	Funding Agency	Duration	Sanctioned date
12	Novel Casting approach to improve quality of aluminum alloy casting : Hybrid ultrasonic assisted bottom pour stir casting process	Prof. N. Suresh Kumar Reddy	Mechanical Engineering	984500	DRDL	3years	08.06.2017
13	Career Persistence of Indian Women Professionals in Information Technology sector: Brakes , Accelerators, Challenges and Opportunities	Dr. Swati Alok	Economics and Fianance	200000	ICSSR	1year	01.06.2017
14	Understanding the Role of Antimicrobial S100A12 ( Calgranulin C) Mediated Host Defense in Pseudomonas Keratitis and Developing Nano-tools for Efficient Delivery of S100A12	Dr. Sanhita Roy/Dr. Swati Biswas	Pharmacy	5500600	DST(LVPEI)	3years	05.06.2017
15	Improving the seismic performance of dynamically similar buildings using damper connected control technique	Dr. S C Mohan	Civil Engineering	4314540	DST	3years	23.06.2017
16	Multiobjective evolutionary approach for solving water distribution network design optimization	Prof. A Vasani	Civil Engineering	2235400	CSIR	3years	16.05.2017
17	Formability Study of Inconel 625 alloy at Elevated Temperatures for Aerospace Applications	Dr. Nitin R. Kotkunde	Mechanical Engineering	3143250	DST	3years	10.07.2017
18	Comparison of phase velocities of Rayleigh waves, love waves and Torsional waves in various anisotropic geo-media	Dr. Sumith Kumar Vishwakarma	Mathematics	1366800	DST	3years	27.06.2017
19	Cryogenically-Conditioned Micro and Nanoencapsulated Phase Change Material Slurries for Cool Thermal Energy Storage Applications	Dr. R. Parameshwaran	Mechanical Engineering	2776340	DST	3years	17.07.2017
20	Efficacy of Appropriately Tailored Biopolymer and Carbonaceous Adsorbents for the separation and Recovery of Europium	Prof. N. Rajesh	Chemistry	2959370	DST	3years	04.08.2017
21	Application of topology optimization to enhance energy efficiency and performance of industrial manipulator	Dr. Arshad Javed	Mechanical Engineering	2943600	DST	3years	17.07.2017
22	Design, Synthesis and Biological Evaluation of HDAC3 Selective Inhibitors as Long Term Memory Enhancers	Dr. Balam Ghosh	Pharmacy	2987800	DST	3years	07.08.2017
23	Metal-Oxide and nano composite based low-power non-volatile switching device : a novel approach	Dr. Souvik Kundu	EEE	3490650	DAE-BRNS	3years	01.08.2017
24	Development of metamaterial base support	Dr. Sabareesh G R	Mechanical Engineering	1380000	DMDE DRDO	3years	27.04.2017
25	Investigations on naphthalene and anthracene based phosphosates/phosphates: important sources for	Prof. Manab Chakravarty	Chemistry	1700000	CSIR	3years	05.05.2017

S.No	Title of the Project	Principal Investigator	Department	Amount Sanction (Rs.)	Funding Agency	Duration	Sanctioned date
	alkene based new algegers and polyaryllalkanes						
26	Photocatalytic reduction of CO2 to biofuels	Dr. Sounak Roy	Chemistry	400000	CSIR	3years	02.05.2017
27	Preparations and Characterization of a topical gel formulation of topical gel formulation of IS107	Dr. V Vamsi Krishna Venuganti	Pharmacy	563500	ISSAR	6months	01.05.2017
28	Transcutaneous delivery of liraglutide using zein microneedle array	Dr. V Vamsi Krishna Venuganti	Pharmacy	2242500	NACTO	1year	09.05.2017
29	Development and characterization of a topical gel formulation of a candidate drug	Dr. V. Vamsi Krishna Venuganti	Pharmacy	600000	Sarudbhava Formulations Pvt. Ltd.	2years	23.06.2017
30	Development of pH-responsive smart capsule containing targeted multilayer film for drug delivery: The proof-of-concept study in colorectal cancer model	Dr. V. Vamsi Krishna Venuganti	Pharmacy	5554225	DST	3years	16.08.2017
31	Implementation of Digital Beam forming for Radar	Dr. S K Sahoo	EEE	332760	HBL	1year	13.09.2017
32	Strategies against antibiotic resistance in Mycobacterium tuberculosis and ESKAPE pathogens; new drugs and new targets	Prof. D Sriram	Pharmacy	6700068	DBT Indo Sweden-3	3years	15.11.2017
33	Development and characterization of a topical formulations	Dr. V. Vamsi Krishna Venuganti	Pharmacy	979400	ISSAR-2	1year	01.05.2017
34	Use of Polymer fibers and steel fibers for improvements in concrete properties	Prof. P.N. Rao	Civil Engineering	657800	MoRTH	1year	31.03.2017
35	State of the art on effect of temperature stresses in concentrate pavements	Prof. Vinayak Ram	Civil Engineering	644000	MoRTH	1year	31.03.2017
36	Preparation of State of the Art Report (SOAR) on Utilization of Higher percentage of Reclaimed Asphalt Pavement (RAP) in Hot Asphalt Mixes (HAM) with Warm Mix Additives - Laboratory and field evaluation	Prof. Sridhar Raju	Civil Engineering	625500	MoRTH	1year	21.07.2017
37	Coastal wetlands characterization using L and S bands of polarimetric SAR data	Dr. Rajitha	Civil Engineering	1358000	ISRO	3years	13.11.2017
38	Modelling and Simulation of quartz Accelerometer for navigation system	Dr. Satish Kumar Dubey	Mechanical Engineering	524400	DRDO-cars	1year	13.06.2017
39	Comparison of Phenolic Resin from two sources for their properties	Dr. Karthik Chetan V	Chemical Engineering	979200	DRDO-cars	1year	04.12.2017

**APPROVED PROJECTS DURING JANUARY - DECEMBER 2017**

## Details of the Sponsored Projects

**Dr. Jayanti Subbalakshmi:**

1. Title of the Project: Synthesis, study of optical properties and Anticancer activity of unique di-substituted tetracyanoquinodimethanes
2. Funding Agency: DST
3. Total Sanctioned amount: 2574605/-
4. Duration: 3years
5. Status: ongoing
6. Area of research : Organic – Physical chemistry
7. Key words :Synthesis, Characterization, Fluorescence, Anti-cancer activity
8. Objectives:
  - Design, Synthesis and characterization of mono and di-substituted TCNQ's,
  - Study of optical properties
  - Investigation on anticancer potential of library of compounds synthesized
9. Deliverables: Over 12 molecules have been synthesized and Characterized. Fluorescence and Anti-cancer activity studies are under progress.

**Dr. V. Vamsi Krishna Venuganti :**

1. Title of the Project: Development of a Non-invasive biodegradable polymeric micro projection ocular patch for effective corneal delivery of anti-microbial agents to treat fungal infections of eye
2. Funding Agency: ICMR
3. Total Sanctioned amount: 4225150/-
4. Duration: 3years
5. Status: ongoing
6. Area of research : Drug Delivery
7. Key words : Ocular infections, corneal drug delivery
8. Objectives: To design, fabricate and develop a drug delivery device suitable for ocular drug delivery
9. Deliverables: Development of new drug delivery system

**Dr. Vidya Rajesh:**

1. Title of the Project: Polymorphism Studies and Molecular Characterization of the Plasmodial Rhoptry Neck Protein (RON 2) from Indian field Isolates.
2. Funding Agency: DST-SERB
3. Total Sanctioned amount: 3492000/-
4. Duration: 3years
5. Status: ongoing
6. Area of research : Molecular Parasitology
7. Key words : RON 2, Polymorphism, Plasmodium, Malaria.
8. Objectives:
  - To investigate polymorphisms in Rhoptry neck protein 2 (RON-2) of Plasmodium from field isolates from different parts of India.
  - To compare the polymorphism, if found, with reported data from non-Indian strains.
  - Classification and identification of alleles and haplotypes found in different geographic locations in India.
  - To investigate the impact of polymorphism on the structure, function and immunogenicity of RON 2. This proposal aims to characterize the sequence diversity and mechanism of selection of RON 2 gene in both Plasmodium falciparum and Plasmodium vivax from different parts of India and establish the antigenic repertoire of this protein and characterizing its implications in terms of its structural, functional and immunological significance. Insights obtained through this study on RON-2 would help in achieving a more comprehensive knowledge about the vaccine candidates of Plasmodium from India.
9. Deliverables: Knowledge addition to the field leading to Publications and conference presentations.

**Dr. N Anil**

1. Title of the project: Development of an accurate and robust unstructured grid-based adjoint approach for compressible turbulent flows.
2. Funding agency: DST-SERB
3. Total Sanctioned amount: 15, 90, 600/-
4. Duration: 3 years
5. Status: Ongoing
6. Area of research : Mathematical Sciences
7. Key words (3-4 max): Compressible turbulent flows, RANS equations, Discrete ad-joint method, Algorithmic Differentiation
8. Objectives:–
  - Development of a finite volume compressible Reynolds-averaged Navier-Stokes (RANS) scheme and solver on unstructured grids. Validation of the primal RANS solver on standard test cases.
  - Development of a tangent linear RANS solver based on Algorithmic Differentiation.
  - Development of a discrete adjoint RANS solver based on hand-discrete and Algorithmic Differentiation techniques.
  - Demonstrating the accuracy of the adjoint solver by comparing the adjoint sensitivities with the values obtained from finite differences and tangent linear solver.
9. Deliverables: – Compressible RANS code on unstructured grids.
  - Tangent linear and discrete adjoint derivative RANS codes.
  - Demonstrating the performance of the above codes on standard test cases.

**Dr. Sabareesh G R**

1. Title of the project: Developing a web portal for power curve guarantee test
2. Funding agency: MYTRAH Energy India
3. Total Sanctioned amount: 148995/-
4. Duration: 1year
5. Status: completed
6. Area of research : Wind Energy
7. Key words (3-4 max): Wind Energy, Power Curve Guarantee Test, Wind Turbine Performance
8. Objectives:
  - Developing a Web Portal for Power curve Guarantee Test.
  - The purpose is to provide a uniform methodology that will ensure consistency, accuracy and reproducibility in the measurement and analysis of power performance by wind turbines.
9. Deliverables:

**Web portal for power curve guarantee test****Dr. Aruna Malapati**

1. Title of the project: Web portal for downloading the reanalysis data & long term correlation with measured data
2. Funding agency: MYTRAH Energy India
3. Total Sanctioned amount: 148995/-
4. Duration: 1year
5. Status: completed
6. Area of research : Software Develeopment
7. Key words (3-4 max):
8. Objectives:
 

To be able to download MERRA-2 and ERA data specific to a particular latitude and longitude.
9. Deliverables:
 

A web portal for the same that would have the following -

  1. A Google Map with coordinate markers of all the MERRA-2 and ERA nodes for the respective maps.
  2. Check boxes to check the desired parameters.
  3. The ability to specify the latitude and longitude of the windmill.
  4. The ability to specify the required time duration.

5. The final data has to be downloaded in the form of an excel file.
6. If the data was downloaded previously and a similar query is fired in the future then the excel sheet is generated without additional data getting downloaded.

#### **Dr. Soumya J**

1. Title of the Project: STRATEGIES FOR FAULT-TOLERANT NETWORK-ON-CHIP DESIGN
2. Funding Agency: DST-SERB under ECR scheme
3. Total Sanctioned amount: Rs. 2593140/-
4. Duration: 3years
5. Status: ongoing
6. Area of research : Engineering Sciences (Embedded Systems)
7. Key words (3-4 max): System-on-Chip, Network-on-Chip, Fault-Tolerance, Application Mapping, Application Specific NoC, FPGA
8. Objectives:
  - A methodology to gather fault behavior of different NoC topologies
  - Fault-tolerant mapping of applications onto regular NoC topologies like Mesh, Mesh-of-Tree and Butterfly-Fat-Tree
  - Fault-tolerant application-specific NoC synthesis
  - Implementation of the proposed methodologies on FPGA platform and validation with state-of-art methodologies
9. Deliverables: In this study, methodologies and Techniques for fault-tolerant mapping and synthesis will be developed and implementations of the same on FPGA will also be explored. The interesting findings will be published in top most peer reviewed journals in the field. Due to the nature of the problem, it is very much likely that several industries will be interested. Once the project reaches some level of maturity, relevant companies will be contacted for possible participation/collaboration in the project. Since there are no standard techniques for designing fault-tolerant NoC, the results obtained from the proposed methods can be used as the basis for designing practical systems where the fault occurrences are likely to be more. The FPGA implementation methods can be used as the basis in advanced courses such as Interconnection Networks for developing laboratory experiments. The research results will also be used for demonstration purposes to the interested undergraduate and postgraduate students to explore further.

#### **Prof. Yoganandam**

1. Title of the Project: Development of pulse position modulation modemm
2. Funding Agency: DPPMM
3. Total Sanctioned amount: Rs. 402500/-
4. Duration: 1year
5. Status: completed

#### **Dr. Ramakrishna Vadrevu**

1. Title of the Project: Protein structure and stability modulation due to In-Cell and InVitro Crowding: Molecular insights on the origin of the effects of crowding
2. Funding Agency: DST-SERB
3. Total Sanctioned amount: 5436000/-
4. Duration: 3years
5. Status: ongoing
6. Area of research : Life Sciences: Molecular Biolgy/Biophysics
7. Key words : Protein Stability, cellular crowding; NMR
8. Objectives:
  - To evaluate the structural changes in the presence of two most commonly used crowding agents, Ficoll-70, a 70 kDa a spherical polysaccharide and Dextran, an elongated olsaccharide.
  - To interrogate the effect on the stability in the presence of the crowding agents (in-vitro approach)and compare with data from dilute buffer conditions
  - To obtain residue specific information on the changes in structure and stability under dilute bufferand (in-vitro) crowding conditions (Ficoll & Dextran)
  - To derive and compare the structural and stability changes under in-cell conditions

## 9. Deliverables: Deliverables:

The proposed project is targeted towards achieving a detailed understanding of consequences of crowding in altering the structure, stability and folding. At this juncture of contrasting observations and new hypotheses, the proposal is well timed at gaining insights not only on the role of in-vitro crowding but also on in-cell crowding. The observations obtained from our model system will be extended to representative proteins varying in topology and size to draw generalizations.

**Prof. Naga Mohan K**

1. Title of the Project: Mechanistic basis of abnormal neurogenesis due to HSN1E-associated DNA methyltransferase1 (Dnmt1) mutation and pharmacological intervention for phenotypic correction
2. Funding Agency: DBT
3. Total Sanctioned amount: 6845800
4. Duration: 3 years
5. Status: ongoing

**Prof. N Suresh Kumar Reddy**

1. Title of the Project: Novel Casting approach to improve quality of aluminum alloy casting : Hybrid ultrasonic assisted bottom pour stir casting process
2. Funding Agency: DRDL
3. Total Sanctioned amount: 984500
4. Duration: 3 years
5. Status: ongoing

**Prof. Sajeli Begum A:**

1. Title of the Project:  
Investigation of Knowledge on Dengue Fever Followed by Education and its Post Impact Behavioral Changes Among the Rural Communities of Shameerpet Mandal of Ranga Reddy District of Telangana State
2. Funding Agency: ICMR-ICSSR
3. Total Sanctioned amount: 1089792/-
4. Duration: 2017-2019
5. Status: ongoing
6. Area of research: Pharmacy, Economics & Social science
7. Key words (3-4 max): Dengue fever, KAP, rural community, prevention and control
8. Objectives:
  - To investigate the current knowledge level on dengue fever related to its cause, symptoms, mode of transmission, preventive measures, treatments, etc.
  - To design and conduct community-based health education interventions for control of dengue fever
  - To study the post behavioral changes among the community and evaluate the effectiveness of the community-based education

## 9. Deliverables:

The existing knowledge and life practices of selected (8 villages) population towards prevention and control of Dengue fever will be upgraded

**Dr. Swati Alok**

1. Title of the Project: Career Persistence of Indian Women Professionals in Information Technology (IT) Sector: Brakes Accelerators, Challenges and Opportunities
2. Funding Agency: ICSSR
3. Total Sanctioned amount: Rs. 200000 /-
4. Duration: 1 year
5. Status: ongoing
6. Area of research: Management and Economics (Strategy, behavior, policies, development)
7. Key words: Career, Women Professionals, Persistence, Antecedents
8. Objectives:
  - To study how the social factor like family support system acts as inhibitors, enablers to career persistence of working women professionals.

- To explore the role of their internal factors in pursuing career goals.
- To correlate antecedent's factors (social, internal, structural, socio-demographic) on career attitude and career persistence.
- To design a framework to create a gender inclusive working environment at the workplace.

9. Deliverables:

- Know the enablers and barriers that contribute to career persistence among technical women professionals.
- To propose a multi-dimensional framework for stakeholders – individuals, organizations, society and the government for retaining women talent pipeline.

**Dr. Swati Biswas**

1. Title of the Project: "Understanding the Role of Antimicrobial peptide S100A12 (Calgranulin C) Mediated Host Defense in Pseudomonas Keratitis and Developing Nano-tools for Efficient Delivery of S100A12

2. Funding Agency: DST

3. Total Sanctioned amount: Rs. 5500600 /-

4. Duration: 3 years

5. Status: ongoing

6. Area of research : Drug Delivery to the Eye

7. Key words: ocular, bacterial keratitis, drug delivery, anti-microbial peptide

8. Objectives:

The role is to deliver an antimicrobial peptide to the ocular surface following a strategy that would improve the drug retention time in cornea, improve tissue penetration, and result in enhanced therapeutic efficacy

9. Deliverables:

- Development of formulation strategies to deliver an antimicrobial peptide in cornea
- Development of peptide nano-formulations for the treatment of bacterial keratitis

**Dr. Mohan SC**

1. Title of the Project: Improving the seismic performance of dynamically similar buildings using damper connected control technique

2. Funding Agency: DST-SERB

3. Total Sanctioned amount: Rs.4314540

4. Duration: 36 months

5. Status: ongoing

6. Area of research : Earthquake Engineering

7. Key words (3-4 max): Seismic performance, dynamically similar buildings, coupling technique, optimal damper configuration

8. Objectives:

- To find an economically efficient way of connecting the dampers between the dynamically similar buildings to improve their seismic performance.
- To numerically compute and compare the seismic response of two dynamically similar adjacent buildings connected through dampers with different configurations.
- To identify the optimum number of dampers and optimal damper locations for each of its configurations, that can make the system more efficient to resist earthquake.
- To verify the effectiveness of the proposed technique through experimental study and correlating with numerical results.

9. Deliverables:

- A connected control technique for improving the seismic performance of similar adjacent buildings using damper connection.
- Methodology to find the optimal damper connection location for effective reduction of seismic response.
- Experimental verification of the proposed technique on prototype structures tested using shake table and comparative report with numerical results.

**Prof. A Vasan**

1. Title of the Project: Multiobjective evolutionary approach for solving water distribution network design optimization
2. Funding Agency: CSIR
3. Total Sanctioned amount: Rs. 2235400
4. Duration: 36 months
5. Status: ongoing

**Dr. Nithin R Kotkunde**

1. Title of the Project: Formability Study of Inconel 625 alloy at Elevated Temperatures for Aerospace Applications
2. Funding Agency: DST
3. Total Sanctioned amount: Rs. 3143250/-
4. Duration: 36 months
5. Status: ongoing

**Dr. Sumit Kumar Vishwakarma**

1. Title of the Project: Comparison of Phase velocities of Rayleigh waves, Love waves and Torsional waves in various anisotropic geo-media
2. Funding Agency: SERB-DST
3. Total Sanctioned amount: 1366800
4. Duration: 3 years (2017-2020)
5. Status: ongoing
6. Area of research : Seismic Wave Propagation/ Seismology
7. Key words (3-4 max): Rayleigh waves, Love waves, Torsional waves, phase velocity, dispersion equation, anisotropic medium
8. Objectives:
  - To find the dispersion equation of Love wave, torsional wave, Rayleigh waves, P and S wave in fluid saturated porous medium, monoclinic medium, orthotropic medium and reinforced medium.
  - To evaluate the effect of initial stress (tensile and compressive), corrugated boundary planes, rigid surfaces and gravity on the seismic wave propagation.
  - To investigate the reflection and refraction of seismic waves in different medium especially when medium exhibits inhomogeneity in various forms.
    - (d) Stoneley wave and G-type seismic wave will be attempted to investigate.
    - (e) Propagation of cracks due to seismic waves in various medium will also be investigated.
9. Deliverables:
  1. Frequency equations involving inhomogeneous parameters and their mutual relationship with the rigidity, density and phase velocity of the waves.
  2. Impact of Initial stress, corrugated boundary planes and gravity on the Group velocity and phase velocity of the waves.
  3. Graphical user Interface based on the outcomes of the derived results.
  4. Effect of rigid boundary plane on the propagation of Seismic wave through various geo-media. Propagation characteristic of Stoneley & G-type wave.
  5. Movement of cracks and punches due to seismic waves in various medium
  6. Important information about the layered earth structure and boundary surfaces.
  7. Help in information about the configuration of rocks for exploration of petroleum, earthquake disaster prevention and signal processing.

**Dr. R .Parameshwaran**

1. Title of the Project: Cryogenically-conditioned micro and nanoencapsulated phase change material slurries for cool thermal energy storage applications
2. Funding Agency: DST-SERB ECR
3. Total Sanctioned amount: 2776340 /-
4. Duration: 3years
5. Status: ongoing
6. Area of research : Thermal Energy Storage, Nano and Micro encapsulation, Energy Efficiency in Buildings



7. Key words (3-4 max): Phase change material slurries, cryogenically conditioned, Microencapsulation, nanoencapsulation, Thermal and thermophysical properties

8. Objectives:

- To develop cryogenically conditioned micro and nanoencapsulated phase change materials as slurries for cool thermal energy storage.
- To address the challenges related to the wide operating temperature ranges of the (Cryo-PCMS) from cryogenic temperatures (~77 K) to the room temperature (~283 K).
- To study, characterize and demonstrate the properties of thermal storage, thermo-kinetic, heat transfer enhancements and rheology of the Cryo-PCMS for CTES applications through optimal design, simulations and experimentation.

9. Deliverables: Research publications, Ph.D./M.Tech Dissertation, Technical documents, Process Improvement, Efficiency improvement

#### **Prof. N. Rajesh**

1. Title of the Project: Efficacy of Appropriately Tailored Biopolymer and Carbonaceous Adsorbents for the Separation and Recovery of Europium

2. Principal Investigator: Prof.N.Rajesh

3. Funding Agency: Department of Science and Technology (DST), India

4. Total Sanctioned amount: 29059370/-

5. Duration: 3 years (2017-2020)

6. Status: Ongoing

7. Area of research: Inorganic chemistry

8. Key words (3-4 max): Europium, Extraction, Recovery

9 Objectives:

- Isolation / Selection of few representative microbial strains
- Immobilization of the above microorganisms / biomasses in typical biopolymers (e.g., chitosan, cellulose/cyclodextrin etc.), and graphene oxide.
- Regeneration of the adsorbents through selective recovery of europium
- Application studies to recover europium from phosphor powder as well as from fluorescent lamps and a simulated radioactive waste.

10. Deliverables:

- This directed application oriented research to emerge as a viable alternative to conventional solvent extraction in the technological recovery and recycling of precious rare earths.
- The methods would be applied to recover Europium selectively from phosphor powder and from a simulated radioactive waste.
- The research outcome is expected to lead to the award of PhD for the selected project fellow. The results of the research work would be presented in national and international conferences and also published in peer reviewed high impact international journals.

#### **Dr. Arshad Javed**

1. Title of the Project: Application of topology optimization to enhance energy efficiency and performance of industrial manipulator

2. Funding Agency: DST

3. Total Sanctioned amount: Rs. 29,43,600/-

4. Duration: 3 years (03-Aug-2017 to 03-Aug-2020)

5. Status: ongoing

6. Area of research: Topology Optimization, Industrial Robotics

7. Key words : Industrial robot, Energy efficiency, Topology optimization, Lightweight robot arm

8. Objectives:

- Develop a methodology for topology optimization of robotic-links.
- Design lightweight robotic-links using the developed methodology.
- Develop a relation between topology optimization parameters, robot performance and energy consumption.
- Develop a methodology (or guideline) for material reduction from moving mass of a readymade industrial robot.

- Develop an experimental setup for topologically optimized 3-degree of freedom TRR-manipulator to validate the methodology.

#### 9. Deliverables:

- Obtain a generic methodology to develop light weight robotic-links for less energy consumption and higher accuracy
- Achieving a methodology or guideline to reduce the weight of an existing (readymade) industrial robot.
- With the help of lightweight industrial robot the energy consumption will be reduce by at least 10-20%.
- Development of online sensing system for link-parameter.
- Peer reviewed Journal Publication – 1 to 2
- Conference Publications – 2
- Ph.D.-1
- UG & PG projects – 2

#### **Dr. Balaram Ghosh**

1. Title of the Project: Development of HDAC3 selective inhibitor for enhancement of learning and memory
2. Funding Agency: SERB (DST)
3. Total Sanctioned amount: Rs. 29.87 Lakhs
4. Duration: August 2017 to July 2020
5. Status: ongoing
6. Area of research : Medicinal Chemistry
7. Key words HDAC3 inhibitor, learning and memory, epigenetics
8. Objectives: Development of learning and memory enhancing molecules
9. Deliverables: therapeutics for the patients with learning and memory deficits.

#### **Dr. Souvik Kundu**

1. Title of the Project: Metal-Oxide and Nanocomposite Based Low-Power Non-Volatile Switching Device: A Novel Approach
2. Funding Agency: Board Of Research In Nuclear Sciences (BRNS), Government Of India, Department Of Atomic Energy (DAE)
3. Total Sanctioned amount: 34,90,650/- Rs.
4. Duration: 3 Years (2017 to 2020)
5. Status: ongoing
6. Area of research: Electronic Devices
7. Key words (3-4 max): Non-volatile memory, Resistive Switching, Electronic Materials
8. Objectives: The main objective of this project proposal is to develop a resistive non-volatile switching memory both on rigid as well as flexible substrates which can retain the electronic charges for long time, operate at very high-speed and offer low-voltages of operation and also to understand key design rules during fabrication process through modelling/simulation routes to evaluate the electronic materials and device performances.
9. Deliverables:
  - A. Technical: Research agenda: The most important parameters which are required in NVM devices are the improvement in resistive switching, retention time, endurance, on/off ratio, and crossbar issues. However, simple and low cost processing technology is required towards fabrication of low power NVM devices. Thus, these competing factors of performance, economics, and reliability have to be addressed in the optimum manner to provide further advancement of NVMs.
    - Task I: Development of the optimum fabrication process
    - Task II: Fundamental understanding of the NVM working mechanism
    - Task III: Understanding the structure-property relationships
  - B. Knowledge Dissemination  
International Journal publications: 3; Conference publications: 3; Research Fellow: 1; UG/PG Thesis: 2

#### **Dr. Sabareesh G R**

1. Title of the Project: Development of meta-material base support
2. Funding Agency: Defense Machinery Development Establishment (DMDE), DRDO
3. Total Sanctioned amount: Rs 13,80,000
4. Duration: 15 months

5. Status: ongoing

6. Area of research : Mechanical Engineering- Vibrations

7. Key words Vibration Isolation, Meta-material Structures, Visco-elastic materials, Rotating Machinery

8. Objectives:

(a) Develop an experimental test piece of the meta-material beam, characterise it by obtaining FRF of beams tip deflection for different base excitation, compare the amplitude of vibration attenuation with that of a normal identical beam

(b) Examine the damping characteristics and wave propagation characteristics and develop a 1-D mathematical model of the same and validate with experimental results

(c) Extend the 1-D model to 2-D model and then compare the results with the experimental case

(d) Manufacture a base isolation system using the meta-material beam, test it by mounting the same below a rotating machinery and examine its damping and wave propagation characteristics

9. Deliverables:

A meta-material base isolation system capable of attenuating vibrations from structure

### **Prof. Manab Chakravarty**

1. Title of the Project: Investigations on naphthalene and anthracene based phosphonates/ phosphates: important sources for alkene based new AIEgens and polyaryllkanes

2. Funding Agency: CSIR

3. Total Sanctioned amount: 1700000/-

4. Duration: 3 years

5. Status: ongoing

6. Area of research :Organo-physical chemistry

7. Key words (3-4 max): Fluorescence, phosphonates, anthracene, naphthalene

8. Objectives:

- To synthesize few additional naphthyl or anthracenyl phosphonates by using our recently developed acid-mediated arylation approach
- To apply these phosphonates in reacting with a base to produce phosphonate carbanion that is conveniently oxidized to produce aldehydes or ketones by oxygenation (oxy-Wittig) reactions. Thus, we will produce the corresponding new naphthalene or anthracene linked ketones which will satisfy the demand in the diversity of ketones
- These ketones will be used in low valent Ti(0) based McMurry coupling, Corey-Fuchs, and the two-step reaction sequence to produce a variety of bulkier alkenes. The synthesized alkenes will be studied for AIE activity and the probable reason will be explored by single crystal X-ray analysis, fluorescence lifetime measurement etc.
- Completely new tetra-anthracenylalkene and anthracenyl heteroaryl tri/tetraalkenes will be synthesized using McMurry homo coupling reactions using the dianthracenylketones and the photophysical studies will be conducted for these new alkenes
- Being an important core, pyrene will be introduced to these alkene systems as a new substituents and study the fluorescence properties. In fact, one alkene can be substituted with all three (anthracene, pyrene and also naphthalene) polyaromatic hydrocarbons (PAH) and that could be an important PAH material
- All these compounds will be screened for selective metal ions (mainly hetero atom linked compounds), explosive and nonpolar volatile organic compound sensing and possibly for biological imaging applications
- The naphthyl and anthracene based carbonyl compounds will be utilized in phospho-Brook rearrangement to generate phosphates and the same will be utilized in Friedel-Crafts arylation reactions to produce polyaryllkanes conveniently.
- The polyaryllkanes will be studied to verify its AIE activity as a new entity although there is no extended conjugation; however, these compounds will probably show interesting photophysical properties due to the presence of fluorophore in the system and will also be screened as anticancer agents. The diaryllkanes can also be utilized to generate the corresponding alkenes by two-step reaction sequence as mentioned above.

9. Deliverables:

- The organic functional materials are expected to come out at the end of this project. Some of these anthracene/ naphthalene based compounds would be useful for the industry related to organic light emitting diode applications. In fact, the light emitting materials in the solid state will be interesting for most of the organic electronics related companies such as GE. In addition, the polyaryllkanes will draw the attention to the pharmaceutical industry.

**Dr. Sounak Roy**

1. Title of the Project: Photocatalytic reduction of CO<sub>2</sub> to biofuels
2. Funding Agency: CSIR
3. Total Sanctioned amount: 400000/-
4. Duration: 3 years
5. Status: ongoing
6. Area of research : Catalysis, Materials Chemistry
7. Key words): CO<sub>2</sub> valorization, Photocatalysts, Biofuel, Alternative energy

**Dr. V. Vamsi Krishna Venuganti**

1. Title of the Project: Preparations and Characterization of a topical gel formulation of topical gel formulation of IS107
2. Funding Agency: ISSAR Pharmaceuticals
3. Total Sanctioned amount: 563500 /-
4. Duration: 6months
5. Status: ongoing
6. Area of research : Formulations development
7. Key words: Topical application, hydrogel formulations peptide drugs
8. Objectives: To prepare a stable hydrogel formulations for topical application of peptide drug
9. Deliverables: Formulations development

**Dr. V. Vamsi Krishna Venuganti :**

1. Title of the Project: Development and characterization of a topical formulations
2. Funding Agency: ISSAR Pharmaceuticals
3. Total Sanctioned amount: 979400 /-
4. Duration: 12months
5. Status: ongoing
6. Area of research : Formulations development
7. Key words: Topical application, hydrogel formulations peptide drugs
8. Objectives: To prepare a stable hydrogel formulations for topical application of peptide drug
9. Deliverables: Formulations development

**Dr. V. Vamsi Krishna Venuganti :**

1. Title of the Project: Transcutaneous delivery of liraglutide using zein microneedle array
2. Funding Agency: Natco Pharma
3. Total Sanctioned amount: 2242500 /-
4. Duration: 12months
5. Status: ongoing
6. Area of research : Drug delivery
7. Key words: Transdermal drug delivery peptide drugs
8. Objectives: To design, fabricate and develop delivery device to transport peptide drug through skin
9. Deliverables: Development of new drug delivery device

**Dr. V. Vamsi Krishna Venuganti :**

1. Title of the Project: Development of pH-responsive smart capsule containing targeted multilayer film for drug delivery: The proof-of-concept study in colorectal cancer model
2. Funding Agency: DST-SERB
3. Total Sanctioned amount: 5554225/-
4. Duration: 36months
5. Status: ongoing
6. Area of research : Drug delivery
7. Key words: Cancer, drug delivery, targeting
8. Objectives: To prepare capsule-based system to delivery chemotherapeutics to colorectal cancer effectively

9. Deliverables: Development of new drug delivery system

**Dr. S K Sahoo**

1. Title of the Project: Strategies against antibiotic resistance in Mycobacterium tuberculosis and ESKAPE pathogens; new drugs and new targets
2. Funding Agency: HBL
3. Total Sanctioned amount: 332760/-
4. Duration: 1 Years
5. Status: ongoing

**Prof. D. Sriram**

1. Title of the Project: Strategies against antibiotic resistance in Mycobacterium tuberculosis and ESKAPE pathogens; new drugs and new targets
2. Funding Agency: DBT-Indo-Sweden
3. Total Sanctioned amount: 6700068/-
4. Duration: 3 Years
5. Status: ongoing

**Prof. P N Rao:**

1. Title of the Project: Use of Polymer fibres and steel fibres for improvements in concrete properties
2. Funding Agency: MoRTH
3. Total Sanctioned amount: 657800/-
4. Duration: 1 Year
5. Status: ongoing

**Prof. Vinayak Ram**

1. Title of the Project: State of the art on effect of temperature stresses in concrete pavements
2. Funding Agency: MoRTH
3. Total Sanctioned amount: 644000/-
4. Duration: 1 Year
5. Status: ongoing

**Prof. Sridhar Raju**

1. Title of the Project: Preparation of State of the Art Report (SOAR) on Utilization of Higher percentage of Reclaimed Asphalt Pavement (RAP) in Hot Asphalt Mixes (HAM) with Warm Mix Additives - Laboratory and field evaluation
2. Funding Agency: MoRTH
3. Total Sanctioned amount: 625500/-
4. Duration: 1 Year
5. Status: ongoing

**Dr. K Rajitha**

1. Title of the Project: Coastal wetland characterization using L and S band polarimetric SAR data
2. Funding Agency: Department of Space, Space Application Center
3. Total Sanctioned amount: 1358000/-
4. Duration: 3 Years
5. Status: ongoing
6. Area of research : Microwave remote sensing of coastal wetland identification using airborne data
7. Key words (3-4 max): SAR, wetlands, L and S band
8. Objectives:

To devise a vertical system based classification scheme using hierarchy approach for coastal wetlands by combining the optimal SAR parameters derived from the current study and existing spectrally derived classes by adopting the decision tree classification method

9. Deliverables:

The project targets to modify the existing classification scheme of coastal wetlands by adding more parameters related to hydrology and vegetation characteristics of coastal wetland which are vital for understanding the bio-geo-chemical cycle of the wetland eco-system.

**Dr. Karthik Chethan V**

1. Title of the Project: Comparison of phenolic resin from two sources for their properties
2. Funding Agency: Advanced Systems Laboratory, DRDO-cars, Hyderabad
3. Total Sanctioned amount: Rs. 979200/-
4. Duration: 12 months
5. Status: ongoing (in the process of hiring research fellow, contract has been signed and submitted)
6. Area of research : Advanced Composites (Materials Science)
7. Key words : Phenolic Composites, polymerization, Porosity and Materials Characterization
8. Objectives:
  - i. To evaluate neat uncured resin obtained from two sources for physical and chemical properties.
  - ii. To study and compare the cure behavior and pore evolution of resins obtained from two sources.
  - iii. To study and compare the physical and thermal properties of cured samples of resins obtained from two sources.
9. Deliverables:
  - i. Physical and chemical characterization of resins obtained from two sources (viscosity, solid resin content, point of trouble, free phenol and formaldehyde content, hydroxyl value, sodium content and molecular structure will be conducted and studied).
  - ii. Cure behavior and pore evolution of resins obtained from two sources (gel times, cure kinetics, degree of cure and pore evolution will be conducted and studied for different time-temperature profiles).
  - iii. Physical and chemical characterization of cured resins obtained from two sources (density, molecular structure, heat capacity, glass transition temperature, thermal conductivity and thermal

**Dr. Satish Kumar Dubey:**

1. Title of the Project: Modelling and Simulation of quartz Accelerometer for navigation system
2. Funding Agency: DRDO-cars
3. Total Sanctioned amount: 524400/-
4. Duration: 1 Year
5. Status: ongoing

'Annexure B3-7'

(4 Pages)

Ref. AR 2017, Page No. B3-74

**List of Equipment procured in the year 2017**

S.No	Item Description	Qty	Amt	End User/Dept	Ledger Folder
1	A-011224/Small Volume Electrochemical Cell, A-002012/GCE Classy Carbon Electrode & Dell Laptop (i5,4GB Ram, 500GB HDD, Win8)	1	540000	EEE	Equipment
2	Aspire Laboratory Aspirator V002 Optional Single Channel V1002-1SL Sea Star Digital Orbital Shaker HS4010A	1	147155	Pharmacy	Equipment
3	Vibratory Sieve Shaker(Analysette 3 Pro)	1	438705	Central Workshop	Equipment
4	Mini CTA , Stream Ware Basic Application Software, USB A/D Unit 4Ch, Miniature wire probe	1	541172	Mechanical Engg	Equipment
5	Digital Viscometer VTDV, Adapter	1	128879	EEE	Equipment
6	R53200-TL6 LDM 532nm 200m W TEC	1	207000	Mechanical Engg	Equipment
7	Shimadzu Ufms-Triple Quadropole-Model MS/MS-8040	1	9178293	CAL	Equipment
8	Electronic Direct Shear Apparatus Large Montrorised IS: 2720	1	484234	Dr A Guharay	Equipment
9	Brookfield Rheometer DV3TLV+cone/plate model	1	380000	Mechanical Engg	Equipment
10	Workstation Make: Tyrone Model: Camarero SS300TR-34 Intel C612 Chipset, 64Gb DDR4, 1TB SATA3, DVD R/W, Nvidia Quadro K420 2GB DDR3,	1	158577	Chemistry	Equipment
11	High Sensitivity Ceramic Shear ICP Low Noise Caxial Cables Triaxial Mini High Sensitivity ICP	1	329721	Dr Sabereesh GR	Equipment
12	ZVL Vector Network Analyzer	1	1434300	EEE	Equipment
13	Precision interferometer	1	271017	Physics	Equipment
14	Journal Bearing	1	650000	Mechanical Engg	Equipment
15	Strain Gauge Accessories	1	499800	Civil Engg	Equipment
16	EMONA Instruments	1	714800	EEE	Equipment
17	3D Scanner SLS-2	1	326182	Mechanical Engg	Equipment
18	Orbital Shaking Incubator	1	189525	Chemical Engg	Equipment
19	Microscope	1	246960	Chemical Engg	Equipment
20	Refrigerated Circlation bath	1	183200	Chemical Engg	Equipment
21	Photosensor Module, Fiber adapters	1	111926	EEE	Equipment
22	Shunt Motors (equipement 21 items	1	176215	EEE	Equipment
23	Single Wheel rutting device	1	668800	Civil Engg	Equipment
24	Muffle Furnace	1	131355	Chemical Engg	Equipment
25	Basic Plasma Cleaner	1	283228	EEE	Equipment
26	MD TLDNC	1	174900	EEE	Equipment
27	Franck Hertz Experiment setup	1	104780	Physics	Equipment
28	SMCT hydraulic Trainer Kit	1	929833	Mechanical Engg	Equipment
29	Vertical Mounting Plate & Proximity switch for kit	1	134419	Mechanical Engg	Equipment
30	experiment apparatus	1	137202	Physics	Equipment
31	Vacuum Oven	1	157795	Chemical Engg	Equipment
32	Topcon Electronic	1	1034250	Civil Engg	Equipment
33	TPD Unit for Catalyst	1	188925	CSIR Project	Equipment

S.No	Item Description	Qty	Amt	End User/Dept	Ledger Folder
34	Rotary Air Lock Value	1	129385	Chemical Engg	Equipment
35	Wind Emulator Wind Energy Training System	1	1246200	Mechanical Engg	Equipment
36	Generator NG 5000A UK	1	597832	CAL	Equipment
37	Ocen Optics MAYA 2000 Pro	1	754091	Chemistry	Equipment
38	IAQ Probe for Indoor Air Quality	1	118464	Mechanical Engg	Equipment
39	Reactive Mass, Verticle Table, Accessories	1	467847	Civil Engg	Equipment
40	Hand Lay Up Tool	1	757890	Mechanical Engg	Equipment
41	3 Phase Watt Meter & Power Factor	1	176215	EEE	Equipment
42	Digital Storage Oscilloscope	1	351698	EEE	Equipment
43	Electrically Heatd Lab Hi-Temp Tube Furnace System	1	984700	Dr Sujit	Equipment
44	Sieverta Apparatus	1	1202250	Dr Sujit	Equipment
45	Semi Automatic Microtome, Tissue Processor	2	786897	Dr Onkar Kulkarni	Equipment
46	Thermal Evaporation Coating Unit	1	350370	EEE	Equipment
47	Hydraulic Floor Crane Electricalley Operated Chain Pulley	2	218054	Civil Engg	Equipment
48	Baby Lathe	1	130355	Sanbox CIIE	Equipment
49	Upgraded to Triple Quad System)	1	8742500	CAL	Equipment
50	IMAC 27" 5K Retina	1	139966	Dr N Anil	Equipment
51	Hollow Cathode Lamp coper, and Hollow cathode Lamp Ruthenium	2	126206	CAL	Equipment
52	093037-50022 PCB L&T Rotary & 090900-3163	2	207035	Mechanical Engg	Equipment
53	3 Phase induction motor	1	106975	EEE	Equipment
54	Vapometer	1	449056	Dr Vamsi Krishna Venuganti	Equipment
55	Innova 42 stackable on-or-under-bench incubator shaker 3/4"	1	799500	Prof Ramakrishna Vadrevu	Equipment
56	Digital Storage Oscilloscope, Curent Probe	2	850000	EEE	Equipment
57	Software CST Studio	1	1229043	EEE	Software
58	BET Surface Analyzer	2	2079229	CAL	Equipment
59	Software	1	570129	CAD Lab	Software
60	Heidolph Rotary Evaporator	1	523290	Dr J Subbalakshimi	Equipment
61	Mdry Therms unit	1	285905	Dr A Sajali begum	Equipment
62	Humidity Chamber	2	640000	Pharmacy	Equipment
63	TAH Standard Configuration software	1	995627	CAD Lab	Software
64	Cold Chamber	1	268800	Dr Vamsi Krishna Venuganti	Equipment
65	Microscope (Magnus Indlined Monocular)	5	120750	Pharmacy	Equipment
66	Spectra Max iD3 Standard Multi mode Microplate Reader with Software	1	1336403	Prof Vidya Rajesh	Equipment
67	Flame Propagation & Stability unit	1	1687022	Mechanical Engg	Equipment
68	Haage Estanit Automation Distalliation Apparatus	1	1171010	Chemical Engg	Equipment
69	CP AIR Compressor Model: CPB-20 TMD	1	426275	Pharmacy	Equipment
70	Leica Ultra Microtome EM UC7 Upgradable to CRYO M80 Stereo Microscope Complete Leica EM MP Hot Plate EM KMR3- Glassknife maker Super Coater Critical Point Dryer Tissue Processor	1	5962827	CAL	Equipment



S.No	Item Description	Qty	Amt	End User/Dept	Ledger Folder
	& Accessories				
71	Computer Controlled Servo Hydraulic Compression Testing Machine Load Frame Hydraulic Power Pack PCB & Software	1	1500000	Central Workshop	Equipment
72	Software	1	619500	Dr Nitin Ramesh Kotkunde	software
73	Radleys Carousel 12 Plus	1	579751	Chemistry	Equipment
74	Magnetic Stirrer, Model:RCT Basic, Make: IKA Germany	3	159324	Pharmacy	Equipment
75	Split Furnace	1	700000	Prof Amit Kumar Gupta	Equipment
76	Microscope (AMEX1000) Legend Micro 17 Centrifuge	1	410000	Prof K Nagamohan	Equipment
77	Ground Roller with Diesel Engine Tiger Brand 1ton	1	453600	SWD	Equipment
78	High Speed Precision Lathe Machine NH26/1500 with accessories	1	1710880	Central Workshop	Equipment
79	Cel Robox Dual 3D Printer Think3D PLA 1.75 mm spools	1	108560	EEE	Equipment
80	LXI Data Acquisition Switch unit Armature Multiplexer Module Dell Optiplex 7050Mt Desktop	1	335851	Dr R Parameshwaran	Equipment
81	Frenck Hertz Experiment	1	117473	Physics	Equipment
82	David Automatic Turn Table	1	100300	Mechanical Engg	Equipment
83	Millikans Oil Drop Apparatus Detector Based apparatus for Diffraction experiments	2	202856	Physics	Equipment
84	IVC VENTILATOR Model V-7E IVC CAGE RACK MODEL CRB-40-SS IVC CAGE ASSEMBLY SIZE B, IN POLYSULPHONE CONST ANIMAL CHANGE WORK STATION, MODEL NO. ACS-5	1	1213753	Pharmacy	Equipment
85	Sand Muller M/c Cap: 75Kg	1	196257.6	Central Workshop	Equipment
86	server, Intel Xeon E5-1620V4/3.5Ghz/64GB DDR4/1TB Sata HDD with GB network Port/DVD R/W /18.5" Led Acer monitor/ Dell 3years/Win10 pro	1	159600	Dr sabareesh	Equipment
87	Wacom DTH 2242 21.5" IPS Monitor	1	123900	ESD	Equipment
88	Acid Digestion Vessel 45ml Hook Spinner Wrench Holding Fixture	1	124579	Dr Sounak Roy	Equipment
89	AC & DC Current Source	1	637200	Chemistry	Equipment
90	Cisco Switches WS-C29601-48TS-AP	5	513300	IPC	Equipment
91	advanced TCAD	1	368403	EEE	software
92	Plasma Cleaner	1	761962	Chemistry	Equipment
93	High Resolution FEG Scanning Electron	1	25295408	CAL	Equipment
94	BOD Measurement System, BD 600 HSN	1	217244	Civil Engg	Equipment

S.No	Item Description	Qty	Amt	End User/Dept	Ledger Folder
95	Hall Effect Apparatus, Apparatus for the Study of Polarization by Wave Plates,	1	234395.2	Physics	Equipment
96	Lath Machine	2	642561	Central Workshop	Equipment
97	Dynate RM Induction Heating	1	420000	Dr Nitin Ramesh K	Equipment
98	Supply & Commissioning of Dynatherm Induction Heater	1	153400	Dr K Suresh	Equipment
99	Water HPLC System with Accessories	1	2477423	CAL	Equipment
100	Microsoft windows Prof 10 sng OLP 1 Licence	13	167359	Central Workshop	software
101	Siemens make V90 Servo PN Set & PLC	2	117922	Dr Arshad Javed	Equipment
102	LXI Data Acquisition Inst	1	335851	Dr R Parameshwaran	Equipment
103	Keysight	9	1318836	Dr Souvik Kundu	Equipment

Annexure 'B3-8  
(10 Pages)  
Ref: AR 2017

**LIST OF FIRST DEGREE THESIS COMPLETED DURING THE YEAR 2017 IN HYDERABAD CAMPUS**

**First Semester 2017-2018**

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
1	2013B4A7669H	Chavi Gupta	Automation of remote sensors scheduling for satellites	Prof. D K Satpathi/ Dr. Aruna Malapati	Mathematics
2	2013B4A7733H	Suraj A	Application of augmented and virtual reality in gait analysis	Prof. D K Satpathi/Prof. Tathagata Ray	Mathematics
3	2013B4A7847H	Sriharshitha Velivelli	Named entity recognition	Prof. D K Satpathi/Prof. N L Bhanu Murthy	Mathematics
4	2014A2TS569H	R Mukesh	Experimental investigations on aging of bituminous concrete	Prof. Vinayaka Ram/Prof. Sridhar Raju	Civil Engineering
5	2014A2TS627H	C Leela Sushitha	Evaluation of rutting performance of RAP added bituminous surface layer	Prof. Sridhar Raju	Civil Engineering
6	2014A2TS562H	Anurag Anand	Utilization of 50-100% reclaimed asphalt pavement (RAP) in dense bituminous macadam layer	Prof. Sridhar Raju	Civil Engineering
7	2013B2A2594H	Shreyans R Surana	Life cycle assessment and life cycle cost assessment of structures and pavements	Mr. Kalyana Rama J S/Prof. Sridhar Raju	Civil Engineering
8	2014A2TS584H	Shashank Gupta	Ground improvement by alkali activated binder treated jute geotextile	Dr. Anasua Guha Ray/Dr. Arkamitrakar	Civil Engineering
9	2014A2TS563H	Swaraj Patil	Determination of suitable mixing procedure for partial replacement of Portland cement concrete with alkali activated binder concrete	Dr. Arkamitrakar	Civil Engineering
10	2014A2TS583H	Rohan Sirupa	Fluid-structure interaction of floating objects using finite elements	Dr. Chandu Parimi	Civil Engineering
11	2014A2TS574H	Rishabh Agarwal	Development of K-means clustering ANN model for water quality	Prof. A. Jagdeesh Anmala	Civil Engineering
12	2014A2TS557H	Harsh Mundra	Evaluation of the behavior of concrete with alkali-activated binders to aggressive chemical environments	Dr. Arkamitrakar	Civil Engineering
13	2014A2TS580H	Vikram Reddys	Optimal operation of multi reservoir system in lower Krishna basin	Prof. K Srinivasa Raju	Civil Engineering
14	2014A2TS587H	Dhruvik Vadadoriya	Evaluating the fracture properties of concrete and its size effect related issues using modified damage plasticity model	Mr. Kalyana Rama J S	Civil Engineering
15	2014A2TS567H	Praneeth Penuganti	Optimization of water distribution networks using cuckoo search and water cycle algorithm	Prof. A Vasana	Civil Engineering
16	2013B3A7657H	Bhavya Mishra	Nutritional Inequality in India	Dr. Rishi Kumar	Economics
17	2013A4B3322H	Meghana Yerabati	Herding behavior institutional investors in the	Prof. Padmanabhan Balasubramanian/Prof.	Economics

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
			Indian day-trading market	Vijaya Bhaskar Marisetty	
18	2014A1TS529H	Vaidhiswaran Ramesh	Study of emerging spatial and signaling behavior upon moving from single cells to population	Dr. Krishnan/Dr. Vikranth Kumar Surasani	Chemical Engineering
19	2014A1TS623H	Shivani Lodha	Study of PP- based composites	Dr. Purnima	Chemical Engineering
20	2013B2AB363H	Gokul T Anandan	Vibrational dynamics of photo induced charge transfer in P3HT:PC BM blends	Dr. Jyotishman Das Gupta/Prof. Manab Chakravarty	Chemistry
21	2013B2A7865H	Krunal K Patel	Computational study of some important van der waals heterojunctions	Prof.Sumithra K	Chemistry
22	2013B2A4858H	Ranganathan Pooja	Synthesis and characterization of nano particles for nano fluid applications	Dr. Ramakrishna Ganesan/Dr. N Jalaiah	Chemistry
23	2014A7TS157H	Jaisurya Nanduri	Named entity recognition in telugu using content based semantic vectors	Dr. Aruna Malapati	Computer Science and Information system
24	2013B1A7909H	Burra Prakruthi	Methods for the analysis of large-scale metabolic networks	Dr. Areejit Samal/Prof. Tathagata Ray	Computer Science and Information system
25	2013B4A7423H	Jinu M Sunil	Logistic regression for software defect prediction	Prof. N L Bhanu Murthy	Computer Science and Information system
26	2013A7TS083H	V.N. Sri Harshitha Vutukuru	Measuring instructional methodologies in engineering classrooms	Prof. Tathagata Ray/Dr. Aruna Malapati	Computer Science and Information system
27	2013A7TS243H	Phalguna Bandi	Video analysis	Prof. Anand Narasimha Murthy	Computer Science and Information system
28	2013B1A3783H	Abhisek.P	ECG signal generation using analog circuit design	Prof. Prabhakar Rao	EEE
29	2013B5AA567H	Rahul Srinivasan	Gravitational waves and black hole modelling	Prof. Ashtekar/Dr. S K Chatterjee	EEE
30	2014A3TS348H	Srinivasan Rajagopalan	Optimal location of inter-line power flow controller	Dr. Alivelu Manga Parimi	EEE
31	2014A3TS352H	Rushabh Gandhi	Deep learning for speech animation in mixed reality	Dr. Mithun Das Gupta/Dr. S K Chatterjee and Prof. Anand Narasimhamurthy	EEE
32	2014A3TS825H	Ansh Rupani	Physical synthesis and design for reconfigurable transistors	Prof. Akash Kumar/Mr. Chetan Kumar	EEE
33	2014AATS217H	Divya Jain	Emulation platform for wildly heterogeneous chips	Prof. Akash Kumar/Prof. S K Sahoo	EEE
34	2014AATS238H	Pranav Kulkarni	Fault-tolerant network-on-chip	Dr. Soumya J	EEE
35	2014AATS322H	Harshit Soni	Application of Fibre optics in cancer detection	Prof. Yogeeswari/Prof. Prabhakar Rao	EEE
36	2014AATS493H	Ksitij Shrivastava	Built- In- Self- Test for FPGA design	Prof. Akash Kumar/Mr. Chetan Kumar	EEE
37	2014AATS339H	Shaik Wasef	Resistance curves of configurational anisotropy based nano magnets using spin orbit torque current switching	Dr. Hossein Fariborzi/Dr. Surya Shankar Dan	EEE

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
38	2014A3TS827H	Richa Choudhary	Philosophy of electronics	Prof. Sanket Goel	EEE
39	2013B5A1727H	Vignesh Sitaraman	Digital signal processing for the charged particle array at INGA	Dr. Rudrajyoti Palit/Dr. Sarmistha Banik	Physics
40	2013B5A4842H	Vaibhav Jain	Core estimation of the lower energy cosmic ray showers	Prof. Sunil K Gupta/Dr. Rahul Nigam	Physics
41	2013B5A8536H	T Madhav Narayan Bhat	Micro magnetic simulations & experimental investigations in rare earth transition metal thin films	Dr. J AroutChalvane/Dr. Satyanarayan Murthy	Physics
42	2013B5AA869H	Rohan Banerjee	Accelerator for molecular dynamics	Prof. S K Nandy/Prof. Thiruvikraman	Physics
43	2013B5AA559H	Akshaya Agarwal	Development of imaging system for hand and foot photography	Dr. Chien Chun Lu/Prof. Kannanramaswamy	Physics
44	2013B5A7841H	Ridam Jain	GPU based meshfree parallel solver for 2D euler equations	Dr. N Anil/Prof. Thiruvikraman	Physics
45	2012B1A2745H	Aviral Singhal	Medicinal use of saponin extract	Prof. Kumar Pranav Narayan	Biological Sciences
46	2013B1A8839H	Vikram Venkatesh	Cloning and expression of N-terminal domain of plasmodium sera gene	Prof. Vidya Rajesh	Biological Sciences
47	2013B1A2641H	Vedantham Kiranmayi	Increase of carbon fixation by enzyme Rubis Co: a study to monitor the protein microenvironment changes in RubisCo	Dr. Debashree Bhandopadhyay	Biological Sciences
48	2013B1A3476H	Karthik Rattan	Electromechanical characterization of red blood cells in diabetics	Dr. Prosenjit Sen/Prof. Suman Kapur	Biological Sciences
49	2013B1A4691H	Lakshay Sethi	Modeling the flow of nanoparticles/drugs from a network of irregular blood vessel network to the nearby tissue and compare it with the existing Krogh Cylinder Model	Prof. Fan Yuan/Prof. Y V D Rao	Mechanical Engineering
50	2013B3A4619H	M. Dheeraj Varma	Dynamics analysis of wind turbine gear box	Dr. Sabareesh G R	Mechanical Engineering
51	2013B5A4479H	A Sai Kiran Reddy	Investigating the accuracy of the vertical wall formation using multi-storage single point incremental forming	Dr. Kurra Suresh	Mechanical Engineering
52	2014ABTS558H	C V Kameshwar Sarma	Material characterization of (Si-Ti)N coated tools	Prof. N S K Reddy	Mechanical Engineering
53	2014A4TS035H	G Pritheesh	Development of 3D navier stokes solver using 6 <sup>th</sup> order compact scheme	Dr. Supradeepan K	Mechanical Engineering
54	2014A4TS183H	Sridhar R	Characteristics and analysis of 3-dimensional flow past square cylinders in side-by-side arrangement	Dr. Supradeepan K	Mechanical Engineering
55	2014A4TS207H	Ashwin Vadlamannati	Role of flow turbulence on life science organisms	Dr. N. Jalaiah/Dr. Parameshwaran	Mechanical Engineering
56	2014A4TS260H	Karnati Venkata Kartheek	Implementation of the modified KFVS(m-KFVS) method in to the Stanford	Dr. K Ram Chandra Murthy/Dr. N. Anil	Mechanical Engineering

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
			University unstructured(SU2) CFD code		
57	2014A4TS317H	V Bairav Sabarish	Characteristics and analysis of 3-D past square cylinders in tandem arrangement	Dr. Supradeepan K	Mechanical Engineering
58	2014A4TS452H	G Arvind	Heat transfer in Magneto hydrodynamics of core	Dr. Binod Sreenivasan/Prof. Jeevan Jaidi	Mechanical Engineering
59	2014A4TS833H	Sai Ranjeet Narayan	Characteristic and analysis of 3-D flow past staggered square cylinders	Dr. Supradeepan K	Mechanical Engineering
60	2013B5A2671H	Ajinkya Naringe	Numerical study of fluid structure interaction	Dr. Chandu Parimi/Prof. Thiruvikraman	Civil Engineering
61	2013B1A2880H	Tummala Mithilesh	Prediction of fecal coliform using feedback neural networks	Prof. A. Jagdeesh Anmala	Civil Engineering
62	2013B3A7487H	Karthik Menon	Predicting price movement of crypto currency based on twitter sentiment analysis	Prof. Vijaya Bhaskar Marisetty/ Dr. Aruna Malapati	Economics
63	2013B3A7601H	Prashanth Kumar lalwani	Predicting the stock movement based on various microeconomic and macroeconomic factor	Dr. Thota Nagaraju/Dr. Aruna Malapati	Economics
64	2013B3A7660H	Sai Ram Anoop Chandu	Predicting post earnings stock price movement	Prof. Vijaya Bhaskar Marisetty	Economics
65	2013B4A1492H	Barkha Mahendra Kumar Taori	CFD-DEM coupled simulations for jet mill & cyclone separator	Dr. Vikranth Kumar Surasani	Chemical Engineering
66	2013B2A4901H	Ruth Selena	Effect of nanoparticle additives in diesel on the performance and exhaust emissions of engine	Dr. Sounak Roy/Prof. Sandip Deshmukh	Chemistry
67	2013B3A7393H	Bhat Akshay Subhash	Profile guided technologies for security hotspot identification	Prof. C Hota	Computer Science Information System
68	2013B3A7675H	Mohit Jain	Formulation & implementation of a robust proactive model for complex event processing engine in IOT frame work	Prof. C Hota	Computer Science Information System
69	2013B3A7612H	Akash Singh	Sentiment analysis to predict price movement of crypto currencies	Dr. Aruna Malapati/Prof. Vijaya Bhaskar Marisetty	Computer Science Information System
70	2014A8TS471H	Aditya Vijay Bhandare	Power-efficient sum of absolute difference hardware architecture using adder compressors for integer motion estimation design	Dr. S. K Chatterjee	EEE
71	2013B5A7064H	V.Vasudha	Exploring FDTD based methods to understand control of light in Nano plasmonic structures	Prof. Kannanramaswamy	Physics
72	2013B5A7653H	Anuroop Gireesan	Effects of disorders on 3D ISING model	Prof. Thiruvikraman	Physics
73	2013B5A7655H	Hariram S	Classification of satellite images based on land use	Prof. Thiruvikraman	Physics
74	2013B5A7748H	Juhi Garg	Creating a diversified portfolio aided by stock market prediction using	Dr. Aruna Malapati/Dr. K V S Shiv Chaitanya	Physics

S.No.	ID Number	Name	Title	Supervisor	Monitoring Dept.
			machine learning techniques		
75	2013B1A1756H	Sushanto Mukherjee	Developing pricing model for right biotic and valuation of the same	Prof. Suman Kapur/Prof. Niranjana Swain	Biological Sciences
76	2013B1A1482H	Anshul Mishra	Biofuel from lignocellulosic agro residues	Dr. Jayati Ray Dutta	Biological Sciences
77	2013B1A1821H	Sai Sumanth Reddy	Study of protein microenvironment in S-Glutathionylation	Dr. Debashree Bhandopadhyay	Biological Sciences
78	2013B1A1662H	Swagath Kumar Reddy	Study of microenvironment of selenylated cysteine for various biochemical process	Dr. Debashree Bhandopadhyay	Biological Sciences
79	2013B1AB844H	Abhishek Dave	Prediction of composite material properties using wavelet neural networks	Dr. Phaneendra Kiran/Prof. K S Raju	Mechanical Engineering
80	2013B5A4832H	B. Bharath Kumar	Development of Novel AMC alloy	Prof. N S K Reddy	Mechanical Engineering
81	2014A4TS456H	Dvivedi Rohan Vipul Kumar	Flexible architecture process design	Prof. Jeevan Jaidi/Dr. Soumay J	Mechanical Engineering
82	2014A4TS842H	Siddharth Chaturvedi	Implementation of learn from demonstration on a tale robot	Dr. Arshad Javed	Mechanical Engineering
83	2013B5AB752H	Praneeth Bheema	Investigation on surface integrity novel alloy (AMC)	Prof. N. Suresh Kumar Reddy	Mechanical Engineering

### Second Semester 2016-2017

s.no.	ID Number	Name	Title	Supervisor	Monitoring Dept.
1	2012B2A1851H	SUDDHAPALLI S S SHARAT KUMAR .	A Comprehensive three dimensional CFD modeling of planar solid oxide fuel cell	Dr. Subhas Ghosal	Chemistry
2	2012B2A3833H	MANE ANIKET CHANDRAKAN T .	Design and analysis and modelling of graphene and other metal oxide semiconductors in electronic devices	Dr. Durba Roy	Chemistry
3	2012B2AA608H	RANADE OMKAR VIVEK	Calculation of electronic band structure of semi conducting materials	Dr. Subhas Ghosal	Chemistry
4	2012B2AA674H	ADAVENI SAI CHARAN KUMAR .	Synthesis and characterization of nanomaterials and their catalytic applications	Dr. Ramakrishna Ganesan/Dr. Balaji Gopalan	Chemistry
5	2012B2AA708H	JAYANT .	Structural properties of solid through molecules dynamic simulations	Dr. Subhas Ghosal	Chemistry
6	2012B4A2699H	ROUTHU POOJITH GOUD .	Stochastic models for decision making in different alternatives using cross entropy & fuzzy sets	Dr. P T V Praveen Kumar	Mathematics
7	2012B4A3922H	ABHISHEK VARMA ALLURI .	A mesh free solver for inviscid compressible flows	Dr. Anil	Mathematics
8	2012B4A4665H	VANKADARA VENKATA RAMA MAHENDRA	Transport phenomena non-cartesian orthogonal curvilinear co-ordinates	Dr. T S L Radhika	Mathematics
9	2012B4AA593H	NUJARLA SAI AVINASH .	Mathematical modeling of transport phenomena in	Dr. T S L Radhika	Mathematics

s.no.	ID Number	Name	Title	Supervisor	Monitoring Dept.
			non cartesian orthogonal co-ordinates		
10	2013B4TS428H	KOMAL PREMESHANKA R AGRAWAL .	Topics in categorical commutative algebra & algebraic geometry	Dr. Abhishek Banerjee/Dr. Jagan Mohan J	Mathematics
11	2012B5A1444H	AVASARALA SATYA TEJA .	Fabrication of microfluidic channels for guiding and tracking of cancer cells for hyper thermal applications	Prof. Kannan Ramaswamy/Prof. Sanket Goel	Physics
12	2012B5A3544H	SUHRUDH REDDY SANNAPA REDDY	Air showers analysis using CORSIKA (A detailed software for extensive airshower	Dr. Rahul Nigam	Physics
13	2012B5A3601H	CHANDEKAR PRANAY DIPAK .	Optimization of CRM and PWA modules for ALICE board and monitoring of cosmic rays data	Dr. Rahul Nigam	Physics
14	2012B5A4605H	NELANUTHAL A V S ASHWIN .	Synthesis and characterization of silica based magneto-plasmonic Nano beads and investigations of its suitability for hyperthermia applications	Prof. Kannan Ramaswamy/Dr. Sashideep Gutti	Physics
15	2012B5A4667H	KUSUMANCHI SURYA VAMSI .	Study and simulation of soft magnetic structures	Dr. Satya Narayana Murthy	Physics
16	2012B5A8662H	SANNE UJWAL SRIHARSHA .	Determination of curvature of cornea from digital images	Prof. P K Thiruvikraman	Physics
17	2012B5AA261H	KOPPARTHI VENKATA RATNAM BHARADWAJ	Renormalization of charge in Quantum electrodynamics	Dr. Rahul Nigam	Physics
18	2012B5AB581H	SRI AMARNATH MUTYALA .	Statistical Mechanics of Money	Prof. P K Thiruvikraman	Physics
19	2013B5TS450H	MANWATKAR CHARUDATTA RAVINDRA .	Phase sensitive electromagnetically induced transparency	Prof. Andal Narayanan/Dr. K V S Chaitanya	Physics
20	2013B5TS503H	JULIUS .	The expected characteristics polynomial of one dimensional random band matrices	Prof. Yan Fyodorov/Prof. P K Thiruvikraman	Physics
21	2013A1TS411H	AISHWARYA NAIR .	Computational fluid dynamics simulation of multiphase flow using VOF method in axisymmetric geometry	Dr. Ratul Das Gupta/Dr. Vikranth Kumar Surasani	Chemical Engineering
22	2013A1TS511H	BHASKAR PURUSHOTTA M SOMAN .	Developing 3D printer filaments that are biomaterial based and eco-friendly	Dr. Sounak Roy/Prof. Srikanta Dinda	Chemical Engineering
23	2013A1TS701H	NIMMAKAYAL A VENKATANAG ADEEKSHA .	Characterization of resole type reins	Dr. Ramesh Babu A/ C Sharada Prabhakaran	Chemical Engineering
24	2013A2TS392H	KOTASAIKUB AIR .	Assessing the seismic failure of hybrid structures using coupled damage plasticity theory- A Fracture mechanics approach	Mr. Kalyana Rama J S	Civil Engineering
25	2013A2TS554H	HRIDYESH	Finite element mechanics	Dr. Chandu Parimi/Dr.	Civil



s.no.	ID Number	Name	Title	Supervisor	Monitoring Dept.
		RAJ TEWANI .	of bio-films	Amrita Priyadarshini	Engineering
26	2013A2TS581H	REETI SARKAR .	A new approach to wind analysis of building	Prof. P N Rao/Dr. Sabareesh G R	Civil Engineering
27	2013A2TS897H	PATIL RANJIT RAJIV .	Strengthening a Tubular Structure with Irregular Plan Configuration Subjected to Seismic Load	Mr.Kalyana Rama J S/Dr. Mohan SC	Civil Engineering
28	2013A4TS047H	FURQAN .	Development of surface Plasmon resonance sensor for detection of oral cancer	Prof. Yogeewari/Dr. Arshad Javed	Mechanical Engineering
29	2013A4TS061H	SURYADEVAR A PRUTHVI .	Design a workable airborne wind turbine using CFD and FEA simulations	Prof. Jeevan Jaidi	Mechanical Engineering
30	2013A4TS105H	PARVATHY K K .	Numerical simulation of particle motion in stress driven cavity	Dr. Henbrik/Dr. Supradeepan K	Mechanical Engineering
31	2013A4TS303H	B V SAMEER KUMAR .	Parallelization of 2D Nas solver using MPI	Dr. Supradeepan K	Mechanical Engineering
32	2013A4TS447H	SMRITI SHAH .	Design, analysis and control of bio-inspired actuators	Dr. Pablo Valdivia Y/Dr. Sabareesh G R	Mechanical Engineering
33	2013A4TS461H	BHARADWAJ G V .	Development of 3D unstructured solver for solving N-S equation of incompressible flows using CFR scheme	Dr. Supradeepan	Mechanical Engineering
34	2012B4AB864H	THOMMANDR A SAI KAUSHIK .	Understanding the material characteristics and machining behavior of tungsten heavy alloys using finite elemental analysis	Dr. Amrita Priyadarshini	Mechanical Engineering
35	2013A4TS469H	C JOSHUA AMRITH RAJ .	Topology optimization of a robotic manipulator	Dr. Arshad Javed	Mechanical Engineering
36	2013A7TS015H	SAGAR SRIVASTAVA .	Developing detectors based on vision techniques for Harnessing automobile safety	Dr. Akshay Narashiman/Prof. Anand Narasimha Murthy	Computer Science and Information system
37	2013A7TS042H	DHERAM PRANAV .	Dynamic portfolio optimization	Dr. Anukur Sinha/Dr. Aruna Malapati	Computer Science and Information system
38	2013A7TS044H	SAI PRATHIK S B .	Analyze and extend capacity estimation schemes for multimedia flows in DTN	Mr. Abhishek Thakur	Computer Science and Information system
39	2013A7TS066H	B VENKATESH .	Crowd powered meida delivery facilitating ubiquitous device to device file transfer	Dr. Colin Scott/Mr. Abhishek Thakur	Computer Science and Information system
40	2013A7TS095H	EPURI SAI ESWAR .	Big data software engineering	Prof. N L Bhanu Murthy	Computer Science and Information system
41	2013A7TS181H	SINGAPURAM SANJAY SRIVALLABH .	GPGPU optimizations using the polyhedral model	Dr. Ramakrishna Upadrasta/Dr. Aruna Malapati	Computer Science and Information system
42	2013A7TS243H	PHALGUNA BANDI R .	NC	Prof. Tathagata Ray	Computer Science and Information

s.no.	ID Number	Name	Title	Supervisor	Monitoring Dept.
					system
43	2013A7TS387H	CHIVUKULA SATYA ADITYAKRISHNA .	Speech segmentations and speaker diarization using neural networks and language models	Dr. Joachim Kohler/Prof. N L Bhanu Murthy	Computer Science and Information system
44	2013A8TS467H	T NITHIN KUMAR SINGH .	Mesh generation for 3D point cloud data	Prof. Tathagata Ray/Mr. Chetan Kumar	EEE
45	2013AATS207H	SHREYAS NANDI .	Calibration of simulation model for P-type mono crystalline Si solar cells	Dr. Abhishek Imar/Dr. Prasant Kumar Pattnaik	EEE
46	2013AATS233H	CHANDRAJAD .	Develop of fusion framework to combine activity and action recognition for video event detection	Dr. Francois Bremond/Dr. S K Sahoo	EEE
47	2013AATS268H	GANGISHETTY AKHILESH .	State of the art fully-depleted semiconductor on insulator double gate tunnel field effected transistor devices & circuits research	Dr. Surya Sankar Dan	EEE
48	2013AATS318H	PATTAPU CHINMAYEE .	A simple geometric derivation of classical mechanics and an extension of this method to classical and quantum fields	Dr. Sashideep Gutti/Prof. Prabhakar Rao	EEE
49	2012B4AA698H	PINNIKA PRASNA .	Classification of power quality disturbances using wavelet transformations and artificial neural networks	Dr. M Sushama/Dr. Alivelu Manga	EEE
50	2012A7A4022H	SUJEATH PAREDDY .	Computational synthesis and additive manufacturing of voronor foams	Dr. Swaminathan Manohar/Prof. A K Gupta	Mechanical Engineering
51	2012ABA4431H	ADITYA KUMAR .	Modelling of specific cutting energy during machining of Ni-based super alloys under nano-minimum quantity lubrication environment	Dr. Surdarshan Ghosh/Prof. Sandip S Deshmukh	Mechanical Engineering
52	2012B1AB961H	V V S GARGEYA .	Environmental life cycle analysis of wind energy as an energy source in Indian contest	Dr. Shweta Singh/Dr. Sabareesh G R	Mechanical Engineering
53	2012B2A3854H	R RANGANATHAN .	Design and implementation of a L - TAGE branch predictor	Dr. V Ramakoti/Dr. Soumya J	EEE
54	2012A3B5308H	SRUTHI V .	Graphene Opto Electronics	Dr. Ambarish Ghosh/Dr. Souvik Kundu	EEE
55	2012B5A3604H	SHAH MANAV KAMLESH .	Plasmon exciting coupling in quantum dots	Dr. Achanta Venu Gopal/Dr. Souvik Kundu	EEE
56	2012B5AA382H	S SHRAAVAN .	Study of polar codes and their performance	Mr. P Navinnath/Prof. Yoganadam	EEE
57	2012B5AA628H	ARKADIP BASAK .	High resolution cadmium zinc detector uniformities on spatial scales of 0.1mm	Prof. Jonathan E/Dr. Souvik Kundu	EEE
58	2012B5AA921H	VIKAS A G .	Development of code for the FPGA in the control module of the LIDAR	Prof. I L Hung park/Dr. Souvik Kundu	EEE
59	2012B4A7498H	ADITHYA MURALI .	Algebraic structures for prefix languages	Dr. Geraud Senizergues/Prof.	Computer Science and

s.no.	ID Number	Name	Title	Supervisor	Monitoring Dept.
				Tathagata ray	Information system
60	2012B1A3724H	SANCHIT MISHRA .	Biomedical Imaging - hardware & software design for hand held purposes	Dr. Bhuvaneswari/Dr. Debashree Bandyopadhyay	Biological Sciences
61	2012B5A4909H	ANIRUDH RAMESH .	Study of Graphene Based high mobility transistors and their optical properties	Dr. Mandar Deshmukh/Prof. Souri Banerjee	Physics
62	2012B2AB709H	BODABALLA SIMHACHAL KUMAR .	Organic reaction mechanism through DFT calculations	Dr. Subhas Ghosal	Chemistry
63	2012B3A1556H	DANDAMUDI CHANDRAHAS .	Estimating daily volatility in Indian equity derivatives markets	Dr. Nagaraju Thota	Economics and Finance
64	2012B3A1623H	PRANJAL BARANWAL .	Development dynamics in India	Dr. Durgesh Pathak	Economics and Finance
65	2012B3A4590H	LAKSHYA SHARMA .	A combined study of conditioned based maintenance activities for wind turbine systems. Conducting cost-benefit analysis by taking in to consideration down-time costs for each CMB activity	Dr. Sudutta Banerjee/Dr. Sabareesh G R	Economics and Finance
66	2012B3A7596H	DARIPINENI PHANI TEJA .	Impact analysis of development policies	Dr. Rishi Kumar	Economics and Finance
67	2012B3A4569H	SUMIT KARVADE .	Estimation of energy demand and analysis of consumer choice of fuel	Prof. Sandip S Deshmukh	Mechanical Engineering
68	2012B3AB936H	MEELA NIKHITHA .	Study of materials characteristics of parts produced using metal additive manufacturing	Dr. C P Kiran	Mechanical Engineering
69	2012B4AB683H	ABHIRAM CHILUKURI .	Determination of IC model contains using optimization techniques	Dr. Amrita Priyadarshini	Mechanical Engineering
70	2012B4A4676H	CHITTURI V G S S VEERABHADR AVIKAS	Multi-class optimization using Topsis method	Prof. N Suresh Kumar Reddy	Mechanical Engineering
71	2012B4A3688H	AMANDEEP GUPTA .	Radar signal analysis implementation using python and python-based libraries	Dr. Srinivasa Rao Zinka	EEE
72	2012B4A3818H	ADITYA JINDAL .	Cosmological models with dark energy and modified gravity	Prof. Bivudutta Mishra	Mathematics
73	2012B4A7691H	KONA DHIRANE SATVIK .	Parallelization of Graphs	Dr. Michel A/Dr. Anand Narasimha Murthy	Mathematics
74	2012B4A8897H	ANANYA ANURAG .	Microfluidic PCR for DNA Amplification	Prof. Sanket Goel/Dr. Anil	Mathematics
75	2012B4AA543H	CHINTAPARTI MANOJ KUMAR .	Stability analysis of dynamical systems disease dynamics	Dr. K Venkat Ratnam	Mathematics
76	2012B4AA703H	SAI KRISHNA VINNAKOTA .	Discrete fractional order state space systems	Dr. Jagan Mohan J	Mathematics
77	2012B5A8941H	TANYA SHRIVASTAVA .	Extraordinary optical transmission through plasmonic nano-hole array in Ag* A4 alloys : simulation studies	Prof. Kannan Ramaswamy	Physics

<b>s.no.</b>	<b>ID Number</b>	<b>Name</b>	<b>Title</b>	<b>Supervisor</b>	<b>Monitoring Dept.</b>
78	2013A2TS592H	BOYAPATI KOMAL SREE TEJA .	An investigation on engineered cementitious concrete	Prof. P N Rao	Civil Engineering
79	2013A2TS593H	J VINAY .	Utilization of rubber in RAP mixture to improve the performance	Prof. Sridhar Raju	Civil Engineering
80	2012B3A2379H	PRANAV MISHRA .	Water quality modeling using artificial neural Network	Prof. Jagadeesh Anmala	Civil Engineering
81	2012B3A1645H	SOURAV AGRAWAL .	Studies on fly ash based polymer composites	Dr. D. Purnima	Chemical Engineering

Annexure 'B3-9  
(3 Pages)  
Ref: AR 2017

**LIST OF HIGHER DEGREE DISSERTATION COMPLETED DURING THE YEAR 2017**

**Second Semester 2016-2017**

s.no.	ID Number	Name	Title	Supervisor	Monitoring Dept.
1	2015H148052H	V VENKATESWARA RAO .	Experimental investigations on hybrid nano-composite PCM-mortar for sustainable buildings	Dr. Parameshwaran / Prof. V Vinayaka Ram	Mechanical Engineering
2	2011HS48275H	SYED RAZI UDDIN .	Materials characterization for use in thermochemical thermal energy storage	Dr. N. Jalaiah / Dr. Ramakrishnan Ganeshan	Mechanical Engineering
3	2015H124026H	DESHMUKH VAISHALI SAMBHAJIRAO	Optimization difference pattern for planar arrays	Dr. Srinivasa Rao Zinka	EEE
4	2015H124030H	ANKIT KUMAR .	Proposing a new routing protocol based on spatiotemporal data analysis for opportunistic network and comparing the rapid results with other existing routing protocol	Mr. Abhishek Thakur / Mr. Ananth Saradhi	EEE
5	2015H124031H	SATHIYANARAYAN AN R .	To study and implementation of energy efficient device discovery protocol for opportunistic networking	Mr. Abhishek Thakur / Mr. Ananth Saradhi	EEE
6	2011HS24132H	SUNKARA VENKATA PRASANTH .	Transmit in beam pattern in frequency diverse array	Prof. Yoganadam	EEE
7	2015H129009H	ANITHA R .	Consequences of molecular crowding on the structure and stability of the proteins	Prof. Ramakrishna Vadrevu	Biological Sciences
8	2015H143017H	AKHIL S .	Effect of friction of non structural elements on dynamic response of the structure	Dr. Chandu Parimi	Civil Engineering
9	2015H143018H	STUTI MONDAL .	Experimental characterization and numerical investigations of seismic base isolators and base-isolated structures	Dr. Vasant Matsagar / Dr. Mohan SC	Civil Engineering
10	2015H143019H	HISHAM HASAN MOHIUDDIN .	Topology optimization of cross-sections for structural design using level sets	Dr. Chandu Parimi / Dr. A. Vasan	Civil Engineering
11	2015H143020H	GOWRE MANOOKARE. S .	Using topology optimization for diagrid structure	Prof. A Vasan	Civil Engineering
12	2015H143021H	RAJASUGANTHA A .	Non-Linear seismic analysis of the 2 similar coupled with dampers	Mohan S C	Civil Engineering
13	2015H143023H	VARUN KONERU .	Assessing failure of dams and bridges using damage plasticity model a numerical approach	Kalyana Rama J S	Civil Engineering
14	2015H146061H	KUNAL MANOJ NINAVE .	Preparation & characterization of temperature sensitive liposomes for topical co delivery of tamoxifen & imatinib for treatment of	Dr. V Vamsi Krishna Venuganti	Pharmacy

s.no.	ID Number	Name	Title	Supervisor	Monitoring Dept.
			breast cancer		
15	2015H146062H	SAWALE ASHWINI SANJIVKUMAR RUKMINI	Development of formulation of shikonin for elective inhibition of inflammatory pathway in diabetic tissue injury	Dr. Onkar Kulkarni / Dr. V Vamsi Krishna Venuganti	Pharmacy
16	2015H146063H	SHAH AASHMA PRASHANT HEENA	Formulation and evaluation of topical dosage form	Dr. Trupti Chitre / Dr. Swati Biswas	Pharmacy
17	2015H146064H	MOHAMMED SHAREEF KHAN .	Formulation and characterization of cilnidipine nanocrystals	Prof. Punna Rao	Pharmacy
18	2015H146065H	KOMANDURI NEERAJA .	Powder Rheology evaluation for granulation	Dr. Ananad Rup Datta / Dr.Swati Biswas	Pharmacy
19	2011HS01497H	JASRAJ PADHI .	Crude oil characterization and correlation Development	Prof. Srikanta Dinda	Chemical Engineering
20	2011HS01504H	PARUCHURI BIPIN CHAKRAVARTHY .	Studies of Co2 capture from simulated flue gas	Prof. Srikanta Dinda	Chemical Engineering
21	2015H101010H	POORNIMA K .	Development of Synthetic resin	Prof. Srikanta Dinda	Chemical Engineering
22	2015H101012H	RAMADURGAM ANIRUDDHA .	Biomaterials in carbon capture synthesis characterization and performance studies	Dr. I Sreedhar	Chemical Engineering
23	2015H101013H	BITHUNSHAL U B .	Coupling of gas- solid flow of complex geometry	Dr. Vikranth Kumar Sursani	Chemical Engineering
24	2015H101014H	PATIL NEHA SANJAY .	Crude cracking and product analysis	Prof. Srikanta Dinda	Chemical Engineering
25	2015H101015H	SHIVANI MALIK .	Synthesis, Physic chemical , carbon caputre and performance studies of Biomass derived porous carbon	Dr. I Sreedhar	Chemical Engineering
26	2015H101016H	MEGHA GUPTA .	Removal of heavy metals from waste water by using green catalyst	Dr. I Sreedhar	Chemical Engineering
27	2015H129003H	NIVETHA SIVASANKARAN .	Antimicrobial activity of lipase Immobilized Sliver nanoparticle on microbial strains	Dr. Jayati Ray Dutta/Dr. Ramakrishnan Ganesan	Biological Sciences
28	2015H129006H	ROSHINI B .	Screening of steroid hormones for targeted therapeutics against cancer	Prof. K Pranav Narayan / Prof. Naga Mohan	Biological Sciences
29	2015H129008H	DIVYATA MANVATI .	Role of Phosphorylation at the 445, Ser 448 o DMA P1 I in nuclear localization and cell cycle regulation	Prof. Naga Mohan	Biological Sciences

**First Semester 2017-2018**

s.no.	ID Number	Name	Title	Supervisor	Monitoring Dept.
1	2016H1010009H	AJJARAPU SWARNA LALITHA .	Studies on CO <sub>2</sub> capture from gases using regenerable solid adsorbents	Prof. Srikanth Dinda	Chemical Engineering
2	2016H1010010H	SHAURYA MOHAN .	Bio sorption of heavy metals from the industrial effluent batch and column studies	Dr. Vikranth Kumar Sursani / Prof. N Rajesh & Prof. Vidya Rajesh	Chemical Engineering
3	2016H1010011H	NAMRATA UPRETI .	Thermal cracking of kerosene using lumped kinetic model(modeling and simulations )	Dr. Vikranth Kumar Sursani / Prof. Srikanth Dinda	Chemical Engineering
4	2016H1010012H	ABINAYA VENI R .	Growth and characterization of fungal biofilms: effects of process parameters	Dr. Asma Ahmed / Prof. Arvind N Raghavan	Chemical Engineering
5	2016H1010014H	MOHD RIZWAN KAREEMI .	Mathematical modeling of fuel cells	Dr. Balaji Krishnamurthy	Chemical Engineering
6	2016H1010013H	IYANGAR ANUSHA RAJA .	Coir based applications	Dr. D Poornima	Chemical Engineering
7	2016H1430017H	ANJU HANNA ALEX .	Determination of shrinkage strain of alkali activated binder concrete	Dr. Arkamitra Kar	Civil Engineering
8	2016H1430018H	AMIT KUMAR MAITI .	Pavement HIR interaction using Finite Element Method	Dr. Chandu Parimi / Prof. Sridhar Raju	Civil Engineering
9	2016H1480053H	KOLLI SRAVANI	Study on PCM based cladding for heating /cooling applications in building	Dr. Paremashwaran / Prof. Vinayaka Ram	Mechanical Engineering

## LIST OF ANNEXURES

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Annexure B4-1  
(1 page)

### SENIOR OFFICERS OF THE INSTITUTE

#### DIRECTOR

Senior Prof. Dr. R. N. Saha

#### DEANS

<u>DIVISION</u>	<u>NAME</u>
1. Admissions	Dr. T. G. Thomas
2. Faculty Affairs	Dr. R. Roop Kumar
3. Practice School	Dr. B. Muralidharan
4. Student Welfare	Dr. Priti Bajpayee

#### ASSOCIATE DEANS

1. Academic Registration & Counseling Somasundaram	Dr. A.
2. Academic Research	Dr. Neeru Sood
3. Academic Resource Planning	Dr. Anand Kumar
4. Instructions	Dr. K. Kumar

#### ASSISTANT REGISTRAR

Mr. Akshay Chutani

#### HEAD OF THE DEPARTMENTS

<u>DEPARTMENT</u>	<u>NAME</u>
1. Chemical	Dr. Nishant Harishbhai Pandya
2. Civil (Acting)	Dr. M.V.N. Sankaram
3. Electrical and Electronics	Dr. A.R. Abdul Razak
4. Mechanical	Dr. M.V.N. Sankaram
5. Computer Science	Dr. V. Santhosh Kumar
6. Biotechnology	Dr. S. Ramachandran
7. General Sciences	Dr. T.K.Datta
8. Humanities and Social Sciences	Dr. Shazi Shah Jabeen

#### HOSTEL WARDENS

Chief Warden Dr. V. Santhosh Kumar

<u>BLOCK</u>	
A	Mr. N. A. Venkatesh
B	Mr. Harold Franklin
C	Dr. V. Santhosh
Kumar	
D	Mr. Anuj Kumar
G	Dr. S. Karthiyayini

Annexure B4-2  
(2 pages)**DETAILS OF THE ADMISSIONS MADE DURING THE YEAR 2017****I. First Semester 2017-2018****Admission to Integrated First Degree Programmes****B. E.**

Biotechnology	: 33 (23)
Chemical Engineering	: 12 (04)
Civil	: 12 (04)
Electrical and Electronics Engineering	: 22 (08)
Mechanical Engineering	: 60 (04)
Electronics and Instrumentation Engineering	: 05 (03)
Computer Science	: 132 (55)
Electronics and Communication Engineering	: 24 (11)

**Admission to Higher Degree Programmes****M. E.**

Microelectronics	: 02 (02)
Design Engineering	: 04 (00)
Software Systems	: 04 (04)
Biotechnology	: 00 (00)
M.B.A	: 07 (02)
Ph.D	: 04 (01)

<b>TOTAL</b>	<b>: 321(121)</b>
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**II. Second Semester 2016-2017****Admission to Integrated First Degree Programmes****B. E. (Hons.)**

Biotechnology	: 00(00)
Chemical Engineering	: 01 (01)
Electrical and Electronics Engineering	: 00 (00)
Mechanical Engineering	: 01 (00)
Electronics and Instrumentation Engineering	: 00 (00)
Computer Science	: 05 (01)
Electronics and Communication Engineering	: 01 (01)

**Admission to Higher Degree Programmes****M. E.**

Microelectronics	: 04 (01)
Design Engineering	: 02 (00)
Software Systems	: 03 (03)
Biotechnology	: 00 (00)
M.B.A	: 04 (01)
Ph.D	: 01 (00)

<b>TOTAL</b>	<b>: 22 (08)</b>
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**SUMMARY**

	<b>II Semester 2016-2017</b>	<b>I Semester 2017-2018</b>
Integrated First Degree Programmes	08 (03)	300 (112)
Higher Degree Programmes	13 (05)	17 (08)
Ph.D	01 (00)	04 (01)
<b>Total</b>	<b>22(08)</b>	<b>321 (121)</b>

Annexure B4-3  
(1 page)**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR 2016-2017 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES UNDER VARIOUS PRIORITIES**

No candidate.

**LIST OF CANDIDATES WHO HAVE BEEN PERMITTED TO TRANSFER WITHIN THE FIRST DEGREE IN II SEMESTER 2016-2017**

S.NO.	ID NO	NAME	PERMITTED TO TRANSFER	
			FROM	TO
1	2016A9PS0348U	JEMIMA GRACE FRANCIS	CHE	BIOT
2	2016A4PS0283U	K MAHATHI	EEE	MECH
3	2016A2PS0124U	ANAGHANANDA SANTHOSH KUMAR	MECH	CIVIL
4	2016A3PS0015U	SAMEEKSHA SAMIR AMIN	CS	EEE
5	2016AAPS0037U	ISMATH HAAKIFA ILLIYAS MOHAMED	CS	ECE
6	2016AAPS0079U	PATIL VRUSHALI BHAUSAHEB	CS	ECE
7	2016A2PS0230U	MOHAMMED SAMEER MOHAMMED	CS	CIVIL
8	2016A4PS0252U	SAAD SHEIKH MOHAMMAD SHAMIM	CS	MECH
9	2016A4PS0272U	SAMAKSH JHALANI	CS	MECH
10	2016AAPS0282U	AVANI MISHRA	CS	ECE
11	2016A2PS0275U	SUMERA SULAIMAN S	BIOT	CIVIL

Annexure B4-4  
(2 Pages)

## NUMBER OF STUDENTS REGISTERED IN SECOND SEMESTER 2016 - 2017

PROGRAMME	Year of Admission						Total
	2011 and earlier	2012	2013	2014	2015	2016	
<b>A. Integrated First Degree Programmes</b>							
<b>B.E. (Hons.)</b>							
CHE		1(0)	26(13)	45(18)	42(24)	29(16)	143(71)
CIVIL	-	-	-	-	-	14(3)	14(3)
EEE	-	1(0)	46(19)	40(11)	38(16)	18(8)	143(54)
MECH	1 (0)	4(0)	97(5)	132(8)	132(10)	70(8)	436(31)
CS	2 (0)	3(0)	102(35)	131(51)	141(65)	141(62)	520(213)
EIE	-	-	12(2)	12(9)	5 (2)	2(0)	31(13)
BIO	-	1(1)	12(10)	20(12)	32(26)	16(14)	81(63)
ECE		3(0)	63(29)	55(28)	33(18)	30(13)	184(88)
<b>Sub Total</b>	<b>3(0)</b>	<b>13(1)</b>	<b>358(113)</b>	<b>435(137)</b>	<b>423(161)</b>	<b>320(124)</b>	<b>1552(536)</b>
<b>B. Higher Degree Programmes</b>							
<b>M.E.</b>							
Software Systems	-	-	-	-	4 (2)	8(5)	12(7)
Microelectronics		-	-	-	2 (0)	6(1)	8(1)
Design Engineering	-	-	-	-	10(0)	9(0)	19(0)
Master of Business Administration	-	-	-	-	11(4)	16(3)	27(7)
<b>Ph.D.</b>	2 (1)	2(2)	8(4)	6(3)	5(2)	3(0)	26(12)
<b>Sub Total</b>	2(1)	2(2)	8(4)	6(3)	32(8)	42(9)	92(27)
<b>Total (On Campus)</b>	<b>5 (1)</b>	<b>15(3)</b>	<b>366(117)</b>	<b>441(140)</b>	<b>455(169)</b>	<b>362(133)</b>	<b>1644(563)</b>

Number of female students is given in brackets.

## NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2017 - 2018

PROGRAMME	Year of Admission							Total
	2011 and earlier	2012	2013	2014	2015	2016	2017	
<b>A. Integrated First Degree Programmes B.E. (Hons.)</b>								
CHE		1(0)	5(0)	44(18)	41(23)	28(15)	12(4)	131(60)
CIVIL	-	-	-	-	-	17(4)	12(4)	29(8)
EEE	-	-	4(0)	39(11)	38(16)	17(8)	22(8)	120(43)
MECH	-	1(0)	8(0)	131(8)	128(10)	72(8)	60(4)	400(30)
CS	2 (0)	2(0)	7(1)	131(50)	140(64)	126(57)	132(56)	540(228)
EIE	-	-	2(0)	12(9)	5 (2)	2(0)	5(3)	26(14)
BIO	-	-	1(0)	21(13)	31(25)	15(13)	33(23)	101(74)
ECE	-	1(0)	1(0)	54(27)	33(18)	32(15)	24(11)	145(71)
<b>Sub Total</b>	2(0)	5(0)	28(1)	432(136)	416(158)	309(120)	300(113)	1492(528)
<b>B. Higher Degree Programmes</b>								
<b>M.E.</b>								
Software Systems	-	-	-	-	-	7(4)	4(4)	11(8)
Microelectronics		-	-	-	-	6(1)	2(2)	8(3)
Design Engineering	-	-	-	-	3(0)	9(0)	4(0)	16(0)
Master of Business Administration	-	-	-	-	4(2)	16(3)	7(2)	27(7)
<b>Ph.D.</b>	2 (1)	1(1)	8(4)	5(1)	4(2)	3(0)	4(1)	27(10)
<b>Sub Total</b>	2(1)	1(1)	8(4)	5(1)	11(4)	41(8)	21(9)	89(28)
<b>Total (On Campus)</b>	<b>4 (1)</b>	<b>6(1)</b>	<b>36(5)</b>	<b>437(137)</b>	<b>427(162)</b>	<b>350(128)</b>	<b>321(122)</b>	<b>1581(556)</b>

Number of female students is given in brackets.

Annexure B4-5  
(1 Page)**STATEMENT OF DEGREES AWARDED**

Degrees	No. of degrees	
	80 <sup>th</sup> Award (01 <sup>st</sup> March 2017)	81 <sup>th</sup> Award (04 <sup>th</sup> July 2017)
<b><i>B.E. (Hons.)</i></b>		
Chemical	1(1)	3(2)
Chemical (with PS)	1(0)	21(12)
Electrical & Electronics	1(0)	4(1)
Electrical & Electronics (with PS)	1(0)	39(18)
Computer Science	1(0)	17(3)
Computer Science (with PS)	1(0)	78(31)
Electronics & Instrumentation	0	0
Electronics & Instrumentation (with PS)	0	10(2)
Mechanical	1(0)	2(0)
Mechanical (with PS)	3(0)	88(5)
Biotechnology	0	2(1)
Biotechnology (with PS)	0	10(10)
Electronics & Communication	0	6(2)
Electronics & Communication (with PS)	5(2)	59(28)
<b>Sub Total</b>	<b>15(3)</b>	<b>339(115)</b>
<b><i>Higher Degree</i></b>		
M.E. (Software Systems)	2(1)	1(1)
M.E. (Software Systems) (with PS)	0	3(1)
M.E. (Microelectronics)	0	2(0)
M.E. (Microelectronics) (with PS)	0	0
M.E. (Design Engineering)	2(0)	7(0)
Master of Business Administration	5(1)	5(2)
Master of Business Administration (with PS)	0	1(0)
<b>Sub Total</b>	<b>9(2)</b>	<b>19(4)</b>
<b>Ph. D.</b>	<b>1(1)</b>	<b>0</b>
<b>Total</b>	<b>25(6)</b>	<b>358(119)</b>

**SUMMARY**

	80 <sup>th</sup> Award (01 <sup>st</sup> March 2017)	81 <sup>th</sup> Award (04 <sup>th</sup> July 2017)	Total
<b>Integrated First Degrees</b>	<b>15(3)</b>	<b>339(115)</b>	<b>354(118)</b>
<b>Higher Degree</b>	<b>9(2)</b>	<b>19(4)</b>	<b>28(6)</b>
<b>Ph. D.</b>	<b>1(1)</b>	<b>0</b>	<b>1(1)</b>
<b>Total</b>	<b>25(6)</b>	<b>358(119)</b>	<b>383(125)</b>



**80<sup>th</sup> AWARD OF DEGREES APPROVED BY THE BOARD OF GOVERNORS**

<b>Programme</b>	<b>Dist.</b>	<b>I</b>	<b>II</b>	<b>Total</b>
B.E. (Hons.) (Chemical)	0	0	1	1
B.E. (Hons.) (Chemical) (with Practice School)	0	0	1	1
B.E. (Hons.) (Mechanical)	0	0	1	1
B.E. (Hons.) (Mechanical) (with Practice School)	0	0	3	3
B.E. (Hons.) (Computer Science)	0	0	1	1
B.E. (Hons.) (Computer Science) (with Practice School)	1	0	0	1
B.E. (Hons.) (Biotechnology)	0	0	0	0
B.E. (Hons.) (Biotechnology)(with Practice School)	0	0	0	0
B.E. (Hons.) (Electronics and Instrumentation)	0	0	0	0
B.E. (Hons.) (Electronics and Instrumentation) (with Practice School)	0	0	0	0
B.E. (Hons.) (Electrical and Electronics)	0	1	0	1
B.E. (Hons.) (Electrical and Electronics) (with Practice School)	0	0	1	1
B.E. (Hons.) (Electronics & Communication Engineering)	0	0	0	0
B.E. (Hons.) (Electronics & Communication Engineering) (with Practice School)	0	1	4	5
<b>Sub Total</b>	<b>1</b>	<b>2</b>	<b>12</b>	<b>15</b>
M.E. (Software Systems)				2
M.E. (Microelectronics)				0
M.E. (Biotechnology)				0
M.E. (Design Engineering)				2
Master of Business Administration				5
<b>Sub Total</b>				<b>9</b>
<b>Ph.D. Degree</b>				1
<b>Total</b>				<b>25</b>

**81<sup>th</sup> AWARD OF DEGREES APPROVED BY THE BOARD OF GOVERNORS**

<b>Programme</b>	<b>Dist.</b>	<b>I</b>	<b>II</b>	<b>Total</b>
B.E. (Hons.) (Chemical)	1	2	0	3
B.E. (Hons.) (Chemical) (with Practice School)	3	10	8	21
B.E. (Hons.) (Mechanical)	0	1	1	2
B.E. (Hons.) (Mechanical) (with Practice School)	11	37	40	88
B.E. (Hons.) (Computer Science)	6	7	4	17
B.E. (Hons.) (Computer Science) (with Practice School)	12	44	22	78
B.E. (Hons.) (Biotechnology)	1	0	1	2
B.E. (Hons.) (Biotechnology)(with Practice School)	1	5	4	10
B.E. (Hons.) (Electronics and Instrumentation)	0	0	0	0
B.E. (Hons.) (Electronics and Instrumentation) (with Practice School)	0	5	5	10
B.E. (Hons.) (Electrical and Electronics)	0	3	1	4
B.E. (Hons.) (Electrical and Electronics) (with Practice School)	7	20	12	39
B.E. (Hons.) (Electronics & Communication Engineering)	1	3	2	6
B.E. (Hons.) (Electronics & Communication Engineering) (with Practice School)	5	23	31	59
<b>Sub Total</b>	<b>48</b>	<b>160</b>	<b>131</b>	<b>339</b>
M.E. (Software Systems)				1
M.E. (Software Systems) (with Practice School)				3
M.E. (Microelectronics)				2
M.E. (Biotechnology)				0
M.E. (Design Engineering)				7
Master of Business Administration				5
Master of Business Administration (with Practice School)				1
<b>Sub Total</b>				<b>19</b>
<b>Ph.D. Degree</b>				<b>0</b>
<b>Total</b>				<b>358</b>

**LIST OF ORGANISATIONS WHICH CONDUCTED CAMPUS INTERVIEWS AT  
BITS PILANI, DUBAI CAMPUS**

No.	NAME OF ORGANISATION	NUMBER OF STUDENTS INTERVIEWED	SELECTED	DISCIPLINE
1.	Abbott	Core	1	CHEM
2.	Ador	Core	1	MECH/EEE/ECE/EIE
3.	Affle	Non Core	0	CS / ME(Software Systems)
4.	Airicom	Core	1	ECE/EEE/EIE
5.	Anglogulf	Non Core	0	All Streams
6.	Arecont Vision Dubai	Core	0	All Streams
7.	Bayt.com	Non Core	0	All Streams
8.	BICC Components	Core	3	EEE/ECE/EIE
9.	BNC Dubai	Non Core	0	All Streams
10.	Bosch	Core	1	MECH/EEE/EIE/ECE
11.	Century Mechanical Systems Factory LLC Dubai	Core	0	MECH
12.	Cerebra Middle East	Core	0	CS/ M.E(Software Systems)
13.	Corodex	Non Core	1	All Streams
14.	Daiichi Digital	Non Core	3	All Streams
15.	Daikin	Core	2	MECH/ECE/EEE
16.	Dar Al Mas	Core	2	MECH/ECE/EIE/EEE
17.	Directi	Core	0	CS/ ME (Software Systems)
18.	Eagle Industries	Core	2	MECH / ECE/EEE
19.	ECSME	Non Core	2	All Streams
20.	ENDEL WEIGH SYSTEMS LLC Dubai	Core	0	All Streams
21.	ESRI	Core	3	CS
22.	Exclusive Networks Dubai	Non Core	0	All Streams
23.	Fast Track Hydraulics	Core	1	MECH
24.	Fastech	Non Core	4	All Streams
25.	Ferco Shutters and Seating Systems (M.E.) Manufacture LLC Dubai	Core	0	MECH
26.	Frog Ideas	Non Core	1	All Streams
27.	Frontline Information Technology LLC Dubai	Non Core	0	All Streams
28.	Gate Capital	Non Core	0	All Streams
29.	German Imaging Technology Dubai	Non Core	0	All Streams
30.	Grand View Research	Non Core	0	All Streams
31.	Gulf Petrochem	Core	1	MECH/ECE/EEE/EIE/CHEM
32.	IBM	Core	1	CS/ECE
33.	ICC Loyalty	Non Core	0	All Streams
34.	itcan Digital Marketing Dubai	Non Core	0	CS/ECE
35.	Johnson Controls, Dubai	Core	0	MECH/EEE/ECE/EIE
36.	L & T	Core	3	MECH/EEE/ECE/EIE

No.	NAME OF ORGANISATION	NUMBER OF STUDENTS INTERVIEWED	SELECTED	DISCIPLINE
37.	Liberty Building Solutions Dubai	Core	0	MECH/ECE/EEE/EIE
38.	Lucy Switchgear	Core	1	MECH/ECE/EIE/EEE/CS
39.	Manlift	Non Core	1	MECH/ECE/EIE/EEE
40.	MAQ Software	Non Core	0	CS/ECE
41.	Mediatek	Non Core	1	All Streams
42.	Merint Glass (Saint Gobain)	Core	2	MECH
43.	MES	Core	3	CHEM / MECH
44.	Metadata	Non Core	2	CS/ECE
45.	Microhard infotech Dubai	Non Core	0	All Streams
46.	Mitsubishi Elevators (ETA Melco)	Core	15	MECH/ECE/EIE/EEE
47.	Napier Healthcare	Core	0	BIO/CHEM
48.	Natronic Dubai	Core	0	ECE/EEE/EIE
49.	ND & Associates Dubai	Non Core	0	All Streams
50.	Network Hub	Non Core	1	All Streams
51.	Newtec MENA Branch office of Newtec CY N.V. Dubai	Non Core	0	All Streams
52.	NSI - PwC Company	Core	2	CS
53.	Optym	Non Core	0	All Streams
54.	Oriental Dynamic Solutions	Core	1	MECH/ECE/EIE/EEE
55.	Playsimple	Core	0	CS / ME (Software Systems)
56.	Praxis	Core	1	CS / ME (Software Systems)
57.	Provis Consulting	Non Core	1	All Streams
58.	Pulsus/Omics international Pvt. Ltd (Recruitment)	Non Core	2	All Streams
59.	Qualcomm	Core	1	CS/ECE
60.	Quant Technologies INC	Core	0	CS/ECE
61.	Reda Chemicals	Core	0	CHEM
62.	RNS Technologies	Core	1	CS/ECE
63.	Roamworks	Core	1	CS/ECE
64.	Rubique	Core	0	CS/ECE/ME (Software Syst)
65.	SCAN TECHNOLOGY LLC	Non Core	0	All Streams
66.	Schindler	Core	1	MECH/ECE/EEE/EIE
67.	Screen Interaction Dubai	Non Core	0	All Streams
68.	Seguro Private Wealth Fund	Non Core	1	All Streams
69.	Star B2B	Non Core	1	All Streams
70.	Taghleef Industries Dubai	Core	0	All Streams
71.	Tannush Electronics	Non Core	1	All Streams
72.	Tatweer Dubai	Core	0	CS/ ME (Software Systems)
73.	Taurani Holding	Core	0	All Streams
74.	Tawazon Chemical Company LLC	Core	0	Chem
75.	Techmart Dubai	Non Core	0	All Streams
76.	Teknoware	Non Core	2	ECE/EEE/EIE
77.	Tetrapak	Core	1	ECE/EEE/EIE/MECH
78.	Torrecid	Core	1	CHEM/MECH/EEE/ECE/EIE
79.	TPG Media	Non Core	0	All Streams

No.	NAME OF ORGANISATION	NUMBER OF STUDENTS INTERVIEWED	SELECTED	DISCIPLINE
80.	Transworld	Non Core	1	All Streams
81.	uberGov	Core	0	CS / ECE
82.	Unilever	Core	2	MECH/EEE/ECE/EIE
83.	Waypoint	Non Core	1	All Streams
84.	Zomato	Non Core	1	All Streams
85.	ZS Associates	Core	0	All Streams

#### Summary

Total No. of Companies:	85
Total No. of students interviewed:	172
Total No. of appointments offered:	86
Total No. Of PPO Companies:	5
Total No. of PPO:	9

#### \*Legend

CHE: Chemical, CS: Computer Science, EEE: Electrical & Electronics, EIE: Electronics & Instrumentation, MECH: Mechanical, BIOT: Biotechnology, ECE: Electronics & Communication, PPO: Pre Placement Offer

Annexure B4-9  
(11 Pages)

**List of First Degree Projects  
First Semester 2017-2018 (August 2017 to January 2018)**

S.No	Name	Topic	Instructor	Type
1	Steve Theol Lobo	Simulation And Performance Analysis Of Photo Voltaic System	Gomathi Bhavani .R	DP
2	Desai Vivek Jayesh	Analysis And Prediction Of Stock Market Trends And Behaviour	Gomathi Bhavani .R	DP
3	Gowri Pradeep	Design And Simulation Of Amplifier Circuits For Eeg Recording System	Mary Lourde .R	DP
4	Harini Venkataramanan	Design And Simulation Of Filters For Eeg Recording System	Mary Lourde .R	DP
5	Usaid Saud Changan	Analysis Of Power Quality Issues In A Cement Industry	Mary Lourde .R	DP
6	Nishtha Lalit Shah	Predictive Modelling In Business Analytics	Sujala Deepak Shetty	DP
7	Tanya Kalwani	Smart Assistant Using AI	Sujala Deepak Shetty	DP
8	Ishita Sujit Tavkar	Artificial Intelligence	Sujala Deepak Shetty	DP
9	Madhubala Vijayakumar	Descriptive Modelling In Business Analytics Using R	Sujala Deepak Shetty	DP
10	Viren Premnath Salian	Ardino Gps Tracker	Sujala Deepak Shetty	DP
11	Gayathri Beena Sudheeshkumar	Big Data	Sujala Deepak Shetty	DP
12	Rohan Mittal	Movie Rating System Using Text Mining	Sujala Deepak Shetty	DP
13	Evendo Sean D Mello	Design Implementation Of Software Defined Network For Switch	Vadivel .S	DP
14	Vedant Bajaj	Machine Learning For Cancer Detection	Vadivel .S	DP
15	Laveen Bhatia	Design Implementation Of Software-Defined Network For Routers	Vadivel .S	DP
16	Alina Zaidi	Wireless Lan For High Density Client Environments In Higher Education	Vadivel .S	DP
17	Pranjal Pandey	Design And Implementation Of Deep Learning Applied To Gis	Vadivel .S	DP
18	Sarthak Bhooshan Devjani	Implementation Of Deep Learning In Geo-Navigation	Vadivel .S	DP
19	Shaleen Bengani	Object Identification Using Deep Learning	Vadivel .S	DP
20	Siddarth Balasubramanian	Design And Implementation Of Sdn For Gateways	Vadivel .S	DP
21	Ritu Susan Sanjay	Soa And Reflection For Dynamic Aspects - Generate Architectural Specification Abd Comparison With Existing Adls	Vijayakumar .B	DP
22	Fayiz Asad	Representation, Storage, Metadata And Content Based Retrieval For Video Query Over Distributed Multimedia Data Using Mongoddb And Ubuntu Linux	Vijayakumar .B	DP
23	Navisha Daga	Document Database Representation,Storage And Retrieval In A Distributed Multimedia Data Under Ubuntu Linux	Vijayakumar .B	DP
24	Woorood Mohamed Dakhel	Study Of Organic Farming And Its Modalities In And Around Uae	Dawood Jalaluddin Shariff .D	DP
25	Bachchhav Aditya Swapnil	Designing And Solving Equations Using Vedic Mathematics	Maneesha	DP
26	Adira Nurani Vaidyanathan	Human Power Generator And Its Applications	Vijaya Ilango	DP
27	Varsha Venkatesh	Telemonitoring Of Parkinson's Disease Severity Symptom Using Non-Linear	Swarnalatha .R	DP

S.No	Name	Topic	Instructor	Type
		Speech Analysis Mapped To The Updrs Scale		
28	Anne Joshy	Advanced Video Surveillance System For Moving Object Detection Using Pca And Background Subtraction Algorithm	Swarnalatha .R	DP
29	Monika Verma	Investigation Of Properties Of Graphene	Krishna Kumar Singh	DP
30	A Sharon	Pristine Graphene As A Gas Sensor	Krishna Kumar Singh	DP
31	Nelli Sukumar Sonavi	Functionalized Graphene As A Gas Sensor	Krishna Kumar Singh	DP
32	Fareeha Yaseen	Digit Recognition Using Neural Network	Tapan Kumar Datta	DP
33	Husnaa Shareef Shahid	Credit Card Fraud Detection Using Data Mining	Tapan Kumar Datta	DP
34	Steffi Sarah Babu	Computer Based Hearing Test Administration System	Thoppil George Thomas	DP
35	Parth Himanshu Desai	Improvement Of Pistonless Rotary Engine Design (Wankel Engine)	Udayakumar	DP
36	Arshed Ahmed Punathil	Electricity Generation From Footsteps.	Udayakumar	DP
37	Reeghesh T R	Effect Of Roughness On Airfoil Using Ansys	Udayakumar	DP
38	Nikitha Rajendran	Analysis Of Dynamic Characteristics Of Three Phase Induction Motor Under Different Conditions	Adhir Baran Chattopadhyay	DP
39	Shubhankan Mukherjee	Application Of Electromagnetic Field Theory To Predict Or Analyse The Damage Of Insulator Under The Proximity Of High Voltage Sources	Adhir Baran Chattopadhyay	DP
40	Tarang Kotresh Shankarshetty	Analysis Of Speed Dynamics & Current Dynamics Of A Chopper-Fed D.C. Series Motor	Adhir Baran Chattopadhyay	DP
41	Neha Stephen Chacko	Analysis Of Equivalent Circuit And Dynamics Of Single Phase Induction Motor Under Different Conditions	Adhir Baran Chattopadhyay	DP
42	Anju Syam	Analysis Of Control And Dynamics Of A Control System Involving 2-Phase A.C Servomotor	Adhir Baran Chattopadhyay	DP
43	Darwin Khwairakpam	Conversion Of Orange Peels To Solid Fuel	Bharat Bhushan Gulyani	DP
44	Bachchhav Aditya Swapnil	Conversion Of Vegetable Waste To Solid Fuel	Bharat Bhushan Gulyani	DP
45	Jasjeev Singh Chadha	Fsae Car Design And Aerodynamics	Venkatanaga Sankaram .M	DP
46	Gundasi Saradananda	Study And Design Of A Summer Air Conditioner	Venkatanaga Sankaram .M	DP
47	Ansari Aadil Shahzad	Design Of Blades Of Pelton Turbine For Increasing Efficiency	Venkatanaga Sankaram .M	DP
48	R Goutham	Design For Fpga Implementation Of Image Processing	Abdul Razak .A.R	DP
49	Madhurya Kodialbail Divakara	Jitter Analysis For Reactive Protocols In Mobile Ad Hoc Networks (Manets) Using Opsim Software Through Designing	Abdul Razak .A.R	DP
50	Amrithaa Seshadri	Design Of Interleaver For Forward Error Correction (Fec) Schemes	Abdul Razak .A.R	DP
51	Adhitya Durai Rajan Natarajan	Study & Design Of The Crumple Zone Of A Vehicle During Collision	Periasamy .C	DP
52	Arulkumaran Ajay	Vertical Axis Wind Turbine Evaluation And Design	Periasamy .C	DP
53	Tarun Krishna Jayachandran	Speed Reduction In Automobiles' Using Rfid/ Positioning Technology Integrated	Periasamy .C	DP

S.No	Name	Topic	Instructor	Type
		With Hydraulic Braking		
54	Adam Abraham	Finite Element Simulation Of Incremental Sheet Forming.	Karthikeyan .R	DP
55	Ved Shankar	Forward And Inverse Kinematic Analysis Of Robotic Arm	Karthikeyan .R	DP
56	Rewant Rakesh Verma	Prediction Of Video Game Strategies Using Convolutional Neural Network And Reinforcement Learning	Kalaichelvi	DP
57	Gopika Karanayil Anil	Experimental Analysis And Matlab Based Control Of Ac Servo Motor	Kalaichelvi	DP
58	Neeraja Padman	Modeling And Control Of Dc Servo Motor Using Matlab Software	Kalaichelvi	DP
59	Karan Viraj Singh	Numerical Solution And Algorithm Of Real Life Lpp Problems	Suhel Ahmad Khan	DP
60	Akshai A	Studies On Produced Waste Water Treatment And Material Selection In An Oil And Gas Industry	Rusal Raj Francis	DP
61	Adarsh Shridhara Metgal	Website Portal For Students	Santhosh Kumar Vasudevan	DP
62	Syeda Safoora	Web Application Development	Santhosh Kumar Vasudevan	DP
63	Mishra Akash Bhuleshwarnath	Data Analytics In Machine Learning	Santhosh Kumar Vasudevan	DP
64	Divya Daswani	Steganography	Santhosh Kumar Vasudevan	DP
65	Aniket Gupta	Factors Affecting Decision Making & Tools Used For Decision Analysis	Baskaran .S	DP
66	Gaurav Madnani	A Structural Equation Analysis Of The Relationship Of Personal Values, Attitudes, And Belief About Recycling, And The Recycling Of E-Waste.	Baskaran .S	DP
67	Anas Mohammed Abdul Khader	Eco Housing	Karthiyayini .S	DP
68	Siddharth Sridhar	Weather Prediction Application Based On A Fuzzy Logic Inference System	Anand Kumar	DP
69	Kiran Bhaskaran	Digital Image Processing Using Matlab	Anand Kumar	DP
70	Rahul Sudheer Babu	Face Recognition Using Principal Component Analysis	Anand Kumar	DP
71	Ankita Jayprakash Rane	Twitter Sentiment Analysis	Anand Kumar	DP
72	Srishti	Upper Body Gesture Recognition	Jagadish Nayak	DP
73	Kaustubh Singh	Telemedicine Service	Nand Kumar	DP
74	Parth Nyati	Creating An Application Using Cloud To Store Small Documents	Nand Kumar	DP
75	Yash Sinha	Cloud Computing - Cloud Security	Nand Kumar	DP
76	Anjaney Singh	Application Of Data Analytics In Different Assessment Methodologies	Nand Kumar	DP
77	Anurag Jalagam	Design Of Hall Effect Sensor And Its Application In Thickness Measurement	Vilas Haridas Gaidhane	DP
78	Joel Louis	Design Of Automated Robot	Vilas Haridas Gaidhane	DP
79	Mohamed Uzair Adil	Deep Drawing Analysis Using Explicit Dynamics In Ansys Workbench	Vishal Gangadhar Naranje	DP
80	Shravan Amar	Design And Manufacturing Of Rolling Mill	Vishal Gangadhar Naranje	DP
81	Shomik Kanjilal	Structural And Thermal Analysis Of Single Point Cutting Tool	Vishal Gangadhar Naranje	DP
82	Shamith Louis Saldanha	Harmonic Analysis And Mitigation Techniques In Industrial Environment	Sazia Hasan	DP



S.No	Name	Topic	Instructor	Type
83	Keerthana Vijaya Kumar	Gsm Based Monitoring And Control Of Process Parameters In Oil And Gas Industries	Sazia Hasan	DP
84	Gulamaliwala Juzar Hatim	Adaptive Mobile Robot Platform Design	Sazia Hasan	DP
85	Fiza Mohamed	Text Mining Using Machine Learning	Siddhaling Urolagin	DP
86	Aayusha Mohanty	Data Analysis Of A Particular Data Set Using Ai Techniques	Siddhaling Urolagin	DP
87	Rida Khan	Summarisation & Sentiment Analysis Of User Health Posts	Siddhaling Urolagin	DP
88	Aaushi Gupta	Photo Classification	Siddhaling Urolagin	DP
89	Solanki Akshar Deepakkumar	Text Analysis Using Machine Learning	Siddhaling Urolagin	DP
90	Raksha Lal	Revenue Prediction	Siddhaling Urolagin	DP
91	Ambika Jain	Sentiment Analysis Using Data Mining	Siddhaling Urolagin	DP
92	Leesha Chaurasia	Application Of Solar Powered Vars In Commercial Vehicles	Vincent Shantha Kumar	DP
93	Mukarram Ahmed	Electrical Design Of Atv With Drone Enhancement Module	Vincent Shantha Kumar	DP
94	Rebin Anvar	Corrosion Behaviour Of Zirconium Based Bulk Metallic Glasses	Vincent Shantha Kumar	DP
95	Anuj Lilhori	Mechanical Design Of An Atv With Drone Enhancement Module	Vincent Shantha Kumar	DP
96	Kaustubh Singh	Drive Mode	Shilpee Srivastava Saxena	DP
97	Aayusha Mohanty	Applications Of Linear Algebra In Data Science	Shilpee Srivastava Saxena	DP
98	Jayesh Devji Kanzariya	Smart College App	Shilpee Srivastava Saxena	DP
99	Rishu Ravi	Online Canteen - Android Application	Shilpee Srivastava Saxena	DP
100	Rohen Bhandari	Simulation Of Molecular Systems Using Graphical Processing Units (Gpu)	Eldhose Iype	DP
101	Aparna Rajendra Kumar	Molecular Study Of Rotaxane Molecular Switch	Eldhose Iype	DP
102	Krishna Rajesh Nair	Molecular Simulations Of Hydrophilic Polymeric Coatings	Eldhose Iype	DP
103	Narendra Kumar R P	Design Of Engine Block Using Composites	Priyank Upadhyaya	DP
104	Yash Manghnani	Homogenization Of Thermoelectric Composites For Green Buildings	Priyank Upadhyaya	DP
105	Sameer Harshad Rathod	Mechanical Meta Materials At The Theoretical Limit Of Isotropic Elastic Stiffness	Priyank Upadhyaya	DP
106	Linton Philip Thomas	Design Study Of Lightning Strike Aircraft Protection Using Composite Materials	Priyank Upadhyaya	DP
107	George Manoj George	Designing And Analyzing The Engineering Elements And Aspects For Formula 1 Competition Car	Shashank Khurana	DP
108	Srishti Gupta	Characteristic Design Of Halo Protection Device For F1 Cars	Shashank Khurana	DP
109	N V Karthik Bharadwaj Chelluri	Design And Analysis Of Delta Wings In Fighter Aircraft And Supersonic Vehicles	Shashank Khurana	DP
110	Vaishak Thiruvenkitam	In-Depth Study Of The Aerodynamic Behavior Of Sports Equipment	Shashank Khurana	DP
111	Zoheb S Razak	Thermal And Structural Analysis For Turbine Engine Blades At Maximum	Shashank Khurana	DP

S.No	Name	Topic	Instructor	Type
		Temperature.		
112	Maniza Jalal	Ipo - Initial Public Offering	Natesa Prasad	DP
113	Dhruv Puri	Working On Cnc And Espirit Software	Gudipadu Venkatesh	DP
114	Jenkin Samraj	Designing And Fabrication Of An Diesel Tank-Model	Gudipadu Venkatesh	DP
115	Kartik Sultania	Effect Of Design Parameters On Direct Liquid Fuel Cell	Naveen Kumar Shrivatsava	DP
116	Firas Ahmed Sada	Future Energy Harvesting Technique	Naveen Kumar Shrivatsava	DP
117	Swetha Sivakumar	Home Security System Automation Using Iot	Gomathi Bhavani .R	DP
118	Saptadeep Debnath	Non Linear Modelling And Simulation Of A Quadrotor Type Uav	Mary Lourde .R	DP
119	Jeevan Sandhu	Smart Assistant Using Ai	Sujala Deepak Shetty	DP
120	Yandamuri Pavithra	Image Recognition Using Convolutional Neural Networks	Sujala Deepak Shetty	DP
121	Gaurav Madhani	Recommender Systems For Movies	Vadivel .S	DP
122	Jayesh Devji Kanzariya	Recommender System For Movie User's	Vadivel .S	DP
123	Belinda Sharon Bright	Two Degree Of Freedom Pid Controller Using Smith Principle For Processes With Dead Time	Swarnalatha .R	DP
124	Arsheen Mir	Modelling Of Industrial Automation Systems	Swarnalatha .R	DP
125	Upasana Chakraborty	Designing A Mobile Speed Radar As An Innovative Tool To Help Reduce Road Fatalities	Abdul Razak .A.R	DP
126	Shivani Chelliah	Smart Dustbin	Abdul Razak .A.R	DP
127	Srishtie Haripriya	Development Of Hearing Aid With Bluetooth	Abdul Razak .A.R	DP
128	Abhisheik.N	Charging Battery Using Waste Heat Recovery From Ic Engine	Periasamy .C	DP
129	Aditya Khandelwal	Tool Path Planning For Incremental Sheet Forming	Karthikeyan .R	DP
130	Swetha Sivakumar	Soft Computing Techniques For Health Care Analysis	Kalaichelvi	DP
131	Rishu Ravi	Flooding Attack Detection Using Anomaly Techniques With Wireshark	Santhosh Kumar Vasudevan	DP
132	Husnaa Shareef Shahid	Statistical Analysis Of Influence Of Body Image On Self-Esteem	Baskaran .S	DP
133	Mohammed Ashar Riyan Khan	Gsm Patient Health Monitoring	Jagadish Nayak	DP
134	Kunal Malhotra	Cloud Based Ai Chatbot	Nand Kumar	DP
135	Dcosta Aaron Cajetan Andrew	Enhancement Of Gain Bandwidth Product Of A Two Stage Amplifier	Vilas Haridas Gaidhane	DP
136	Prabhudesai Mihir Pralhad	Automation Of Teaching Feedback System For Bpdc	Vishal Gangadhar Naranje	DP
137	Anne Joshy	On Topology Of Sensor Network Deployed For Multitarget Tracking	Raja Muthalagu	DP
138	Poorva Gururaj Parande	Encryption And Decryption In Network Security	Raja Muthalagu	DP
139	R Goutham	Design Of Obstacle Detection For A Robot	Sazia Hasan	DP
140	Prarup Rajesh Chhapparwal	Data Analysis Using Machine Learning	Siddhaling Urolagin	DP
141	Parth Rakeshkumar Shah	Study Of Complex Fluids Using Simulations	Eldhose Iype	DP
142	Tarun Sitaraman	C3n4 Sheets For Component Component Separation	Eldhose Iype	DP

S.No	Name	Topic	Instructor	Type
143	Amardeep Singh	Simulation Of Coffee Stain Effects Using Ansys Fluent	Eldhose Iype	DP
144	Shobhit Deva	Optimisation Of A Fsa Brake Rotor	Priyank Upadhyaya	DP
145	Rahul Srivastava	Design And Analysis Of Morphed Wing Structures Using Computational Tools	Priyank Upadhyaya	DP
146	Aishwarya Krishnan	Design And Analysis Of A Camber Morphing Aerofoil	Priyank Upadhyaya	DP
147	Divyank Sood	Study Of Different Types Of Suspensions And Their Effects On Off-Road Vehicals	Priyank Upadhyaya	DP
148	Aravind Prasanth	Design Of Vortex Generators On Wing Towards Improving The Efficiency Of Flaps	Shashank Khurana	DP
149	Mohammed Suhail Ahmed	To Design And Construct An Ecdm	Gudipadu Venkatesh	DP
150	Karan Madan	Design And Development Of Direct Liquid Fuel Cell	Naveen Kumar Shrivatsava	DP
151	Dana Mohamed Ashraf	Determination Of Micelle Formation In Egg Albumin Obtained From Conventional And Omega-3 Eggs Under Various Parameters	Dawood Jalaluddin Shariff .D	LP
152	Gupta Dev Shahbhudayal	Analyzing A Pid Controller For Various Industrial Applications Using Different Tuning Techniques.	Swarnalatha .R	LP
153	Taqdees Imtiaz Wadekar	Experimental Investigation And Simulation Of Convective And Radiative Heat Transfer In A Solar Still	Kumar .K	LP
154	Fayeza Samee	Studies On Effects Of Growth Regulators For Callus Induction In Salicornia	Neeru Sood	LP
155	Akshayaa Sridhar	Isolation And Characterization Of Rhizobia From Acacia Plant.	Neeru Sood	LP
156	Cleo Murali	To Study The Effect Of Salinity And Heavy Metals On Microbial Isolates From Acacia Sp	Neeru Sood	LP
157	Debashish Sachin Chitnis	Synthesis Of Fe Nanoparticles Using <i>Stenotrophomonas maltophilia</i>	Neeru Sood	LP
158	Manali Parag Phawde	Secondary Metabolites Production From Salicornia Sps	Neeru Sood	LP
159	Namisha R Bohara	Synthesis Of Magnesium Nanoparticles Using <i>Stenotrophomonas maltophilia</i>	Neeru Sood	LP
160	Nitya Bhardwaj	Synthesis Of Mn Nano-Particles Using <i>Stenotrophomonas maltophilia</i>	Neeru Sood	LP
161	Shivani Bipul Kumar Das	Analysis Of Drugs And Derivatives Using Hplc	Neeru Sood	LP
162	Rohan Luthra	Emission Measurement And Control Of Si Engines	Udayakumar	LP
163	Abdul Wasee	Development And Research Based On Solid Fuel	Bharat Bhushan Gulyani	LP
164	Yash Patni	Practical Implementation Of The Repurcussion Of Current On Weld Bead Radius In Arc Welding.	Venkatanaga Sankaram .M	LP
165	Shobhit Deva	Destructive Strength Analysis Of Different Metals On A Hydraulic Press	Venkatanaga Sankaram .M	LP
166	Dcosta Aaron Cajetan Andrew	Implementation Of A Highspeed Vedic Multiplier	Abdul Razak .A.R	LP
167	Shazin Pallikkadan	Pneumatic Testing For Piping Spools	Periasamy .C	LP
168	Jiss Jose	Leak Detection On Burried Pipe Using Ultrasonic Testing	Periasamy .C	LP
169	Shamith Louis Saldanha	Development Of Control Strategies For Robots Using Neuro-Fuzzy And Other	Karthikeyan .R	LP

S.No	Name	Topic	Instructor	Type
		Techniques		
170	Arshed Ahmed Punathil	Wear Mechanism Maps For Tool Steel	Karthikeyan .R	LP
171	Deepak Bhatia	Digital Image Correlation For Dissimilar Metal Joints	Karthikeyan .R	LP
172	Prateek Pramod Kadkol	Mechanical Properties Of Ni/Ss Welded Joints	Karthikeyan .R	LP
173	Navneeth B L	Synthesis Of Liposome Nanoparticles For Drug Entrapment And Biological Applications	Ramachandran .S	LP
174	Rudra Suresh	Secondary Metabolites	Ramachandran .S	LP
175	Sharon Elsa Oommen	Nano-Sized Liposome Synthesis For Medicinal Applications	Ramachandran .S	LP
176	Srinath Hanumantha Rao	Vision Based Control System Aspects For Robotic Applications	Kalaichelvi	LP
177	Jasjeev Singh Chadha	Emission And Noise Control For Two Stroke Engine	Kavita Sunil Jerath	LP
178	Fiza Mohamed	Sms Spam Detection Using Machine Learning	Santhosh Kumar Vasudevan	LP
179	Mukarram	Mechanical Analysis And Simulation Of Atv With Drone Enhancement Module	Karthiyayini .S	LP
180	Darwin Khwairakpam	Biochar Production From Napier Grass For Soil Supplements	Geetha	LP
181	Potdar Shaunak Vikram	Comparison And Study Of Redox Potential Of Various Microorganisms And Its Applications	Geetha	LP
182	Aneesah	Smart Solar Powered Led Street Light	Jagadish Nayak	LP
183	Aaqib Hassan	Designing And Manufacturing An Embedded Circuit On A Printed Circuit Board (Pcb)	Jagadish Nayak	LP
184	Gladys N	Spectrophotometric Analysis Of Enzyme Activity-Mos Kinase	Gokhale Trupti Swarup	LP
185	Rubitha Souresh	Spectrophotometric Analysis Enzyme Activity-Raf Kinase	Gokhale Trupti Swarup	LP
186	Angel Mathew	Synthesis Of Molybdenum Nanoparticles Using <i>Stenotrophomonas maltophilia</i>	Gokhale Trupti Swarup	LP
187	Sidra Raihan	Preparation And Characterisation Of Nanoparticles For Bioactive Substances	R N Saha	LP
188	Abhishek.N	Designing Of Die For Injection Moulding	Vishal Gangadhar Naranje	LP
189	Parth Himanshu Desai	Optimized Milling Strategies For Freeform Surface Machining For A Cnc	Vishal Gangadhar Naranje	LP
190	Aman Gupta	Design And Development Of Tubular Headrest Inserts	Vishal Gangadhar Naranje	LP
191	Sameer Harshad Rathod	Optimizing Cnc Cycle Times With Cam	Vishal Gangadhar Naranje	LP
192	Linton Philip Thomas	Cnc Software-Based Tool Path Evaluation For Environmental Sustainability	Vishal Gangadhar Naranje	LP
193	Khamarudheen. K.A	Fabrication Of 3-D Pen	Vishal Gangadhar Naranje	LP
194	Shresh Kumar Mathur	Bio-Corrosion Studies On Bulk Metallic Glass	Vincent Shantha Kumar	LP
195	Yashodhan Nitin Naik	Super Capacitors	Vincent Shantha Kumar	LP
196	Akshai A	Wettability Studies Of Hydrophobic Surface	Rajib Ghosh Chaudhuri	LP
197	Karan Viraj Singh	Simulation Of Ultrasonic Assisted Abrasive Flow Machining	Gudipadu Venkatesh	LP
198	Donald Francis	Microwave Materials And Manufacturing	Gudipadu Venkatesh	LP

S.No	Name	Topic	Instructor	Type
	Poothokaren			
199	Divyank Sood	Abrasive Flow Machining	Gudipadu Venkatesh	LP
200	Akshaye Pradeep Kumar	Study On In-Situ Microwave Casting Of Metallic Materials	Gudipadu Venkatesh	LP
201	Abel Anil Baby	Recent Advances In Alternate Energy Technologies	Naveen Kumar Shrivatsava	LP
202	Arshak Puthussery Kuzhiyil	Design And Fabrication Of A Heat Exchanger.	Naveen Kumar Shrivatsava	LP
203	Maurell Alex Dsouza	Characterization Of Micelle Formation Of Egg Yolk Obtained From Omega-3 Egg And Normal Chicken Egg Under Various External Parameters Using Ultrasonicator	Dawood Jalaluddin Shariff .D	LP
204	Samarth Agarwal	Tribological Behavior Of Cryogenically Treated Tool Steel	Karthikeyan .R	LP
205	Arpita Shajil Das	Studies On Effect Of Metal Nanoparticles On Plant Growth	Ramachandran .S	LP
206	Vedant Bajaj	Mobile Application For Solving Industrial Problems	Kalaichelvi	LP
207	Mohamed Shazin	Comparison And Study Of Redox Potential Of Various Microorganisms	Geetha	LP
208	Shreya Hemant Mapuskar	Antifungal Activity Of Metal Nanoparticles	Gokhale Trupti Swarup	LP
209	Amita Shajil Das	Studies On Effect Of Molybdenum Nanoparticles On Plant Growth	Gokhale Trupti Swarup	LP
210	Manav Pillai	Quorum Quenching Characteristic In Bacteria	Gokhale Trupti Swarup	LP
211	Jenkin Samraj	Testing Methods Used In Industries	Vincent Shantha Kumar	LP
212	Sandeep Gupta	Ecdm	Gudipadu Venkatesh	LP
213	Shresth Maloo	Energy Audit Processes And Systems For A Commercial Building	Gomathi Bhavani .R	SOP
214	Adam Abraham	Solving Equations A Comparative Study	Priti Bajpai	SOP
215	Reeghesh T R	Solving Differential Equations Using Ancient Indian Mathematical Methods	Priti Bajpai	SOP
216	Tanya Kalwani	Applications Of Combinatorics And Number Theory	Priti Bajpai	SOP
217	Harshal Mittal	Number Theory In Cryptology	Priti Bajpai	SOP
218	Saugaat Allabadi	Number Theory & Cryptology	Priti Bajpai	SOP
219	Monika Verma	Statistical Quality Control In Cable Industry	Priti Bajpai	SOP
220	Shezaan Ahmad Kar	Opportunities And Challenges Faced By An Entrepreneur (A Case Study Of The Uae)	Shazi Shah Jabeen	SOP
221	Tanvi Chadha	The Significance Of Uae Government's Happiness And Generosity Initiatives	Shazi Shah Jabeen	SOP
222	Mohamed Uzair Adil	Study Of Cultural And Heritage Sites In The United Arab Emirates	Shazi Shah Jabeen	SOP
223	Patel Dhruvil Kanubhai	Human Resource Management	Shazi Shah Jabeen	SOP
224	Akshaya Kalyanaraman	Study Of Registers In English, Hindi And Tamil	Shazi Shah Jabeen	SOP
225	Abbinaya Kalyanaraman	Language Socialization Across Cultures	Shazi Shah Jabeen	SOP
226	Prarup Rajesh Chhapparwal	Importance Of Innovation And Creativity In Entrepreneurship	Shazi Shah Jabeen	SOP
227	Woorood Mohamed Dakhel	Study Of Gender Inequality In Workplace	Shazi Shah Jabeen	SOP
228	Namratha R Dath	Comparison Of Deixis Between Kannada And English	Shazi Shah Jabeen	SOP
229	Areeba Fatima	Cancer: A General Outline And Its Reference To Human Conduct	Dawood Jalaluddin Shariff .D	SOP

S.No	Name	Topic	Instructor	Type
230	Disha Prakash Shahani	Significance And Implication Of Transgenic Organisms On The Society And Environment.	Dawood Jalaluddin Shariff .D	SOP
231	Maliha Wajahat	Study Of The Impact Of Gene Manipulation On Human Welfare.	Dawood Jalaluddin Shariff .D	SOP
232	Syed Razaa Ali	Current Advancements In Detection Of Substances In Body Fluids And Biological Samples For Forensic Analysis.	Dawood Jalaluddin Shariff .D	SOP
233	Ayush Kabra	Analysis Of The Uae Banking Sector	Maneesha	SOP
234	Vaidya Satyarth Samir	Clustering Of Text Using Semantic Word Embeddings	Maneesha	SOP
235	Mayank Minda	Quantification Of Effects Of Enso Cycles Of South West Monsoons Over Andhra Pradesh	Maneesha	SOP
236	Chandhini Muthukumar	Microplastics Pollution In The Marine Environment	Vijaya Ilango	SOP
237	Albin Raju	A Study On Quality Audit For Oil And Gas Industry Equipments	Muralidharan .B	SOP
238	Sripriya Reddy N S Reddy	A Study On Chemical Imbalance In The Human Brain	Muralidharan .B	SOP
239	Arpita Vaghela	An Insight Into Visual Listening And Semantic Analysis -The Future Of Real Time Data Mining.	Tapan Kumar Datta	SOP
240	Jitesh Prasad Gurav	An Economic Analysis Of Cloud Computing	Tapan Kumar Datta	SOP
241	Shreyansh Dwivedi	Validity Of Okun's Law In Indian Economy	Tapan Kumar Datta	SOP
242	Yuvraj Borkhade	Applications And Implications Of The Various Branches Of Chanakya's Arthashastra In The 21 St Cent.	Tapan Kumar Datta	SOP
243	Angajala Sravya	Photonic Structured Solar Cells	Ramadoss Roop Kumar	SOP
244	Kiran Bhaskaran	Proximity Sensors And Its Applications	Ramadoss Roop Kumar	SOP
245	Sahid Irfan	Vulnerabilities Of Electronic Control Unit (Ecu) And Automotive Security	Udayakumar	SOP
246	Tanvi Chadha	Integration Of Art And Design In Mechanical Engineering	Venkatanaga Sankaram .M	SOP
247	Subramanian Balasubramanian	Study Of Control Systems In Automobiles	Venkatanaga Sankaram .M	SOP
248	Gaurav Manna	Stone Crushers And Quarry Sites	Venkatanaga Sankaram .M	SOP
249	T Navaneeth Reddy	Effect Of Brake Rotor Under Severe Breaking Conditions And Analysis	Venkatanaga Sankaram .M	SOP
250	Theresa Paul	Current Advances In Forage Crops For Animal Feed Development	Ramachandran .S	SOP
251	Abdullah Saif Qureshi	Study On Anti Fouling Paints And Their Effect On Marine Life	Rajan Ramaswamy	SOP
252	Mridul Mohan Mathur	Engineering Optimization Using Mathematical Techniques	Suhel Ahmad Khan	SOP
253	Samarth Agarwal	Analysis Of Aircraft Wing Using Finite Element Method	Suhel Ahmad Khan	SOP
254	Manpreet Singh	Applications Of Second Order Differential Equations In Vibration Analysis	Suhel Ahmad Khan	SOP
255	Mohammed Ashar Riyan Khan	Windmill Power Generation	Sunil Thomas	SOP
256	Anoushka Pirta	Flexible Ac Transmission Systems	Sunil Thomas	SOP
257	Nikshita Ranganathan	Energy Harvesting	Sunil Thomas	SOP
258	Shivani Venkatesh Rao	Big Data - Security Issues	Santhosh Kumar Vasudevan	SOP

S.No	Name	Topic	Instructor	Type
259	Yash Swarup Mathur	Intelligent Traffic System Using Big Data	Santhosh Kumar Vasudevan	SOP
260	Rohit Beriwal	Quantum Computing	Santhosh Kumar Vasudevan	SOP
261	Shyamil Gopinathan Nair	Materials Of Fuel Cell Catalyst	Karthiyayini .S	SOP
262	Shabeeb Razak Thekkathuvalappil	Nanotechnology In Sustainable Energy	Karthiyayini .S	SOP
263	Srishtie Haripriya	Steganography And Image Feature Detection	Jagadish Nayak	SOP
264	Anjana Vasudevan S	Future Memory Devices- Storage, Capabilities And Feasibility	Jagadish Nayak	SOP
265	Anandi Sekar Gounder	Security Concerns Of Cloud Computing	Nand Kumar	SOP
266	Tanishq Rupaal	Enhancing Cloud Security Using Cryptography	Nand Kumar	SOP
267	George Manoj George	An Insight Into Modern Marketing Practices With An In-Depth Analysis On Influencer Marketing And Its Effect On Its Targeted Audience.	Srinivasa Rao	SOP
268	Yash Patni	Effect Of Sports Globalisation On Economy	Srinivasa Rao	SOP
269	Tehmeem Taseen	Strategic Sports Event Management	Srinivasa Rao	SOP
270	Rahul Jain	Setting Up A Business In Dubai	Srinivasa Rao	SOP
271	Sritama Banerjee Gourdas	Management Practices In Middle And Small Scale Companies In Dubai	Srinivasa Rao	SOP
272	Nourin Nawshad	Automation Of Robot Using Fpga And Processor.	Vilas Haridas Gaidhane	SOP
273	Naved Moinuddin Shaikh	Transmission In Automobiles	Vishal Gangadhar Naranje	SOP
274	Gauri Khanna	Simulation Of Sheet Metal Deep Drawing Process	Vishal Gangadhar Naranje	SOP
275	Sohail Danish	Study Of Sensors In Automobiles	Vishal Gangadhar Naranje	SOP
276	Anju Syam	Controllers In Waste Water Treatment Plant	Raja Muthalagu	SOP
277	Ruchi Harish Gandhi	Predictive Modelling Using Data Mining	Siddhaling Urolagin	SOP
278	Siddharth Ram T V	Comparison Of Solar Powered Vars And Vcrs Application In Commercial Vehicles	Vincent Shantha Kumar	SOP
279	Samarth Singh	Patterns And Fractals	Shilpee Srivastava Saxena	SOP
280	Jasmitha Johnson Mendonca	Study On Intake And Exhaust Mechanisms In S.I And C.I Engines	Shashank Khurana	SOP
281	Prakhar Sainath Iyer	Study On Aerodynamics Of Commercial Airlines From Airbus Family	Shashank Khurana	SOP
282	Steffi Sarah Babu	Study On E-Waste Management : Case Study On Disposal Of Mobile Phones In Uae	Ms. Sreelakshmi Babu	SOP
283	Neha Stephen Chacko	Study On Life Cycle Assessment:Case Study On Electrical Generation System	Ms. Sreelakshmi Babu	SOP
284	Arshak Puthussery Kuzhiyil	Feasibility Study For End-Of-Life Tyre Recycling: Case Study In Uae	Ms. Sreelakshmi Babu	SOP
285	Siddharth Sridhar	Study On Life Cycle Assessment: Case Study On Pet Bottle	Ms. Sreelakshmi Babu	SOP
286	Nikitha Rajendran	Smart Technology Implementation For A Sustainable Environment	Dr. Meghana Charde	SOP
287	Aakarsh Aneesh	Hyperloop Mode Of Transportation	Dr. Meghana Charde	SOP
288	Musthaq Moidu S P	Life Cycle Analysis With Energy Efficient Retrofit Building In Dubai	Dr. Meghana Charde	SOP

S.No	Name	Topic	Instructor	Type
289	Muhammed Shanoq Thattarakkal	Alternate Energy Sources For Portable Applications.	Naveen Kumar Shrivatsava	SOP
290	Mahesh Rajesh Nathani	Effect Of Society & Culture On The Implementation Of Language	Dr. Mrutujanaya Sahu	SOP
291	Maniza Jalal	Effects Of Social Media On Society	Dr. Mrutujanaya Sahu	SOP
292	Abhinav Chaudhary	Language As A Medium Of Cultural Alienation	Sartaj Rasool Rather	SOP
293	Asad Ali Khan	Effect Of Economic Status On Language Development	Sartaj Rasool Rather	SOP
294	Saugat Allabadi	Blockchain Technology	Sujala Deepak Shetty	SP
295	Avani Kirit Mehta	Two Degree Of Freedom Control For An Integrating Process With Long Delay Time	Swarnalatha .R	SP
296	Kunal Malhotra	Building A Recommendation System Using Mathematical Algorithms	Suhel Ahmad Khan	SP
298	Aman Gupta	Recent Projects Undertaken By Masdar	Kavita Sunil Jerath	SP
299	Siddhanth Deepak Shetty	Deep Learning	Santhosh Kumar Vasudevan	SP
300	Srinath Hanumantha Rao	Segmentation Of Brain Tumors Using Image Processing	Jagadish Nayak	SP
301	Rahul Sudheer Babu	Fpga Implementation Of Digital Modulation Schemes: Bpsk And Qpsk Using Vhdl	Raja Muthalagu	SP
302	Patel Dhruvil Kanubhai	Design Of Solar Panel Roadways In Uae	Naveen Kumar Shrivatsava	SP
303	Barodawala Azan Akhtar	Feasibility Of Solar Panel Roadways In Uae	Naveen Kumar Shrivatsava	SP



Annexure B4-10  
(3 pages)**Special Lectures by Invited Scholars – 2017**

S.No	Name	Topic	Date
1	Professor Purusottam Bhattacharya, , Calcutta, India	"Rising India's Quest for a Global Role	February 13, 2017
2	Professor Bhaskar Bose, Adjunct Faculty BITS Pilani, Pilani Campus	Decision Making	February 14, 2017
3	Dr. Sunil Manjarekar, CEO / MD, Sanbook quality Consultancy, Dubai, UAE.	"Occupational Health and Management Systems"	February 19,2017
4	Mr. N G Shankar, Senior President- Corporate Audit Aditya Birla Management Corporation Pvt. Ltd.	"Internal Audit and Risk Management"	February 22, 2017
5	Professor Bhaskar Bose, Adjunct Faculty BITS Pilani, Pilani Campus	Thinking and Creativity	February 26, 2017
6	Prof. Venkiteswaran, Associate Professor, Dept. of Mathematics & Associate Dean, Work Integrated Learning Programmes Division, BITS Pilani.	Monte Carlo Simulation and MATLAB	March 5,2017
7	Mr. Ravishankar B, Global Head of Talent Management,HCL Technologies	"Introduction to Behavioral Science"	March 6, 2017
8	Mr. Ravishankar B, Global Head of Talent Management,HCL Technologies	"Introduction to the worldof analytics and careers in analytics"	March 6,2017
9	Ms. Ruchira Chatterjee, CEO at Auxesis Infotech Pvt. Ltd., New Delhi, India.	Alumni Experiences	March 8,2017
10	Dr. Ashraf Ahmed, Assistant Professor , Jordon	Nanobiotechnology	March 15,2017
11	Mr. Arshad Khan, Director, Trading Campus, Dubai	"Trading Campus – Upgrade to the Next Level"	March 28,2017
12	Mr. Dil Sukh Jain, Former Dy Director & Project Director, NRSC, ISRO, Hyderabad	"Satellite Remote Sensing Program in India"	April 5, 2017
13	Prof.S.D.Manjare, Associate Professor, Chemical Engineering, BITS Pilani, Goa Campus.	"Environmental Management Systems for Sustainable Development"	April 16,2017
14	Mr. Pradeep Joshi, CEO, AL Green Circle Environment Consultants, Sharjah, UAE	Learning from Accidents	April 16,2017
15	Dr Aly Tiab, Design & Engineering Manager, B K Gulf LLC, Dubai.	"Efficiency in Building Services Engineering"	April 25,2017
16	Mr. Chandra P. Srivastava, MD & Principal Consultant, CP Consultancy Services, Hon. Professor, Dept. of Chem. Engg., IIT, BHU, Varanasi, India.	Manufacturing processes in Fertilizer industries	April 25-27,2017
17	Dr. Bhoomendra Bhongade, Assoc. Professor , RAK College of pharmaceutical Sciences, Raselkhema	Drug Design and discovery: 3D QSAR CoMFA approach	April 26, 2017
18	Mr Namith Najeeb, Ex-Asst. Professor at MES College of Engineering, Kuttippuram,India	"Cyber Security as a Career option"	May 7, 2017
19	Mr. Dharmesh Sawant, Senior Manager - HVAC Engineering team at LG ELECTRONICS LLC, UAE	"ESTIDAMA - a building design methodology for constructing and operating buildings more efficiently and sustain-ably."	May 11, 2017

20	Dr. Hemwati Nandan Gurukula Kangri Vishwavidyalaya Haridwar, India.	"Our Universe"	June 5, 2017
21	Mr.k. Gautam Verma, experienced Data Science practitioner, trainer and speaker	"Big Data Analytics"	September 3, 2017
22	Mr Sarthak Sawarkar , Student (MS in Biomedical Sciences), Penn State, USA	CRISPIR Technology	September 10, 2017
23	Mr. Hemant Gor, Sr. Engineer – Civil & Structural, PETROFAC Intl LLC, Sharjah	Tall Building Engineering	September 14,2017
24	Prof. Giovanni Schiuma, Chief Editor, Chair of IFKAD	" How to Publish in SCOPUS Journals"	September 17, 2017
25	Zubair Ahmed , Graduate researcher , University of Nottingham, UK	Stem cell research	September 17, 2017
26	Prof. Carlos Edward Juarez, Fulbright-Nehru Scholar and Visiting Professor of Development Studies at BITS Pilani, K.K. Birla Goa Campus	" Skills and Competencies Needed for 21st Century"	September 28, 2017
27	Dr.Gowrishankar.N, Director of Group Materials Research in India Pistons Ltd	"Materials & Processes for cylinder components for IC engines"	October 1, 2017
28	Dr. Ganesh, Professor , IIT Kanpur	Lafora Disease: From genetics to treatment	October 1, 2017
29	Prof. Moinuddin, Dean, School of Engineering Science and Technology, Hamdard University, Former Pro Chancellor, Delhi Technological University, Shahbad Daultapur	"Surgical Robots : The tool for today and tomorrow"	October 5, 2017
30	Mr. Prakash Rao, Senior Manager, Landmark Group, UAE and Ph.D Scholar (part-time), HSS Department, BITS Pilani, Dubai Campus	"Retail e-commerce	October 5, 2017
31	Prof. Hoda Al Khzaimi, Director of Center of Cyber Security, New York University, Abu Dhabi and Prof. Nasir Memon, Computer Science & Engineering, New York University Abu Dhabi & NYU Tandon School of Engineering, USA.	"Cyber Security"	October 8, 2017
32	Tom Leedham, Talent & Performance Specialist	"Acing The Interview - Following Your Strengths and Skills to get the Job"	October 8, 2017
33	Prof. Nidhal Guessoum, Professor of Physics and Astronomy at American University of Sharjah, UAE	"Latest Cosmic Discoveries	October 8, 2017
34	Tamim Emad Youssef, Technical Sales Manager/Applications Services, JK CEMENT WORKS (FZC).	The process of manufacturing of white cement, quality control, logistics and packaging facilities	October 12, 2017
35	Prof. John Jose, Department of CSE, IIT, Guwahati, India	"Future of Modern Multicore Processors"	October 18, 2017
36	Mr. Vivek Shankar, Managing Director, Morrowind Consultancy Services, UAE.	"How to Set up Business in UAE"	October 24, 2017
37	Prof. Ashok Arora, Ex-Professor, MDI, Gurgaon, India	" Positioning Strategy : Branding	October 31, 2017
38	Dr. Lakshmi P Kotra, Professor at University of Toronto.	"Drug Discovery and Commercialization"	November 5, 2017
39	Mr. Yasir, HR Manager, RAK Ceramic, UAE.	"Employability Skills - Organizational Expectations"	November 7, 2017
40	Mr. Ramnath Venkatraman, Head of Business Learning, Noor Bank, UAE	Islamic Economy	November 7, 2017
41	Dr. Himanshu Dev, Assistant Manager - Admissions Consulting, Emirates Score Plus	Advice on higher education to B.Tech third and fourth year students	November 19, 2017

42	Prof. Hasan Al-Nashash, Director of the Biomedical Engineering Graduate Program, American University of Sharjah, UAE.	"Vigilance Assessment and Enhancement Using Multi-Sensory Interactive Physiological Inputs"	November 21, 2017
43	Dr. Sunil Manjrekar, CEO, SQC Consultancy, UAE	"How Quality Management help Graduate and Undergraduate students	November 22, 2017
44	Mr. Albert Kobus, Operations Manager and Mr. Sak Chowdhury, Senior Risk, Reliability & Safety Engineer, Monaco Engineering Solutions, Dubai, UAE	Safety Engineering Services at Monaco Engineering Solutions	November 22, 2017
45	Dr Thuppil Venkatesh Principal Advisor Quality Council of India (QCI) & National Referral Centre for Lead Projects in India (NRCLPI) Professor-Emeritus Department of Biochemistry & Biophysics St. John's Medical College, Bangalore, India	Creativity and Innovation	November 22, 2017
46	Dr Aiysha Siddiqua, Assistant Professor (Rtd.), Al Ain University of Science and Technology, Dubai, UAE	Structural Polymorphism In Tau Filaments:An Implication For Neurodegenerative Diseases	November 23, 2017
47	Prof. Sonjay Gaur, Professor (Marketing), Sunway Business School, Sunway University, Malaysia	Marketing - Brand Management	November 25, 2017
48	Dr. Brajesh Kumar Kaushik, Associate Professor, Department of Electronics & Communication Engineering, Indian Institute of Technology, Roorkee, India.	"Modeling and Applications of FinFET"	November 26, 2017
49	Dr Essam E. Khalil. ASHRAE Director at Large Imperial College London.	'Energy Efficient Designs of Low Carbon Buildings in Urban Development'	November 28, 2017

Annexure B4-11  
(5 Pages)

**LIST OF FACULTY MEMBERS WHO ATTENDED VARIOUS CONFERENCES  
AND PRESENTED PAPERS – 2017**

**Conference Proceedings**

S. No.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
1	Arvind Desikan and V.Kalaichelvi	"ANFIS Modeling of Photovoltaic Systems to mitigate Partially Shaded Conditions"	IEEE International Conference on Innovations in Electrical, Electronics, Instrumentation and Media Technology	pp.181-186	Feb 3-4 2017 Karunya University of Technology and Science, Tamil Nadu, India
2	Mohammed Shamroukh., Ihtisham Qasim Kalimullah., Alan Chacko., Shreya Sharad Barlingay V.Kalaichelvi and Adhir Baran Chattopadhyay.	Evaluation of Control Strategies in Semi-Active Orthosis for Suppression of Upper Limb Pathological Tremors"	IEEE International Conference on Innovations in Electrical, Electronics, Instrumentation and Media Technology	75-80	Feb 3-4 2017 Karunya University of Technology and Science, Tamil Nadu, India
3	Varsha Venkatesh and R Swarnalatha	Review and Simulation of Memristors using MATLAB and PSpice	IEEE International Conference on Electrical, Computer and Communication Technologies (IEEE ICECCT 2017)	Conference Proceedings IEEE explorer	Feb 22 – 24, 2017, Tamil Nadu, India.
4	Neetika Singhal., Nishank Singhal., V.Kalaichelvi	" Image Classification Using Bag Of Visual Words Model With FAST And FREAK"	International Conference on Electrical, Computer and Communication Technologies (IEEE ICECCT 2017), SVS College of Engineering	pp.1144-1148	Feb 22 - 24 ,2017, SVS College of Engineering Coimbatore, Tamil Nadu, India
5	Swati Sinha, T V Chandrasekhar, Mary Lourde R	"Classification of Wind Profiler Power Spectra by Signature matching using Wavelet Transform"	International Union of Radio Science URSI – RCRS 2017 3rd Regional Conference on Radio Science organized by National Atmospheric Research Laboratory (NARL)	PC-11, pp. 44	March 2017, NARL, Department of Spao GOI, Department of Space, Government of India, Tirupati
6	Swati Sinha, T V Chandrasekhar, Mary Lourde R	"Doppler Profile Estimation using Gaussian Wavelets"	International Union of Radio Science URSI – RCRS 2017 3rd Regional Conference on Radio Science, organized by National Atmospheric Research Laboratory (NARL),	PC-12, pp. 45.	March 2017, NARL, Department of Spao GOI, Tirupati
7	S Rajeswari, Sood, N, Gokhale T , Ramchandran, S	Screening for sensitive and tolerance Barley Accessions to Salinity	A case study with 12 Accessions, Current Trends in Biotechnology- CTBT 2017	Manipal University Dubai (oral presentation)	April 12-13, 2017
8	Ihtisham Qasim Kalimullah., Arvind Desikan and V.Kalaichelvi.	"Analysis of A Proposed Algorithm for Point to Point Control of A 3 DOF Robot Manipulator"	Control, Automation Robotics (ICCAR 2017) Nagoya., Japan	pp.289-292	April 22- 24, 2017, Nagoya , Japan
9	Lauren Alisha Fernandes., Aaditya Saraiya., V.Kalaichelvi and R. Karthikeyan	"Performance Evaluation of Digital Image Processing and Artificial Neural Networks for Weld Line Detection of Robotic	9th IEEE-GCC Conference and Exhibition 2017	pp.933-938	May 7-10, 2017, Bahrain

S. No.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
		Manipulator"			
10	Seba Sara Varghese Sundaram Swaminathan Krishna Kumar Singh, Vikas Mittal	DFT Based Simulation of H <sub>2</sub> S Gas Sensing Properties of Doped Graphene	Proceedings of the 3rd World Congress on New Technologies (NewTech'17)	Paper No. ICNFA 103 ISSN: 2369-8128 DOI: 10.11159/icnfa17.103	June 6 – 8,2017 Rome, Italy
11	Bibina V C, Upasana Chakraborty, Mary Lourde R., Ajit Kumar	"Time-Frequency Methods for Diagnosing Alzheimer's Disease Using EEG – A Technical Review"	Proceedings of International Conference on Bioinformatics and Biomedical sciences- ICBBS 2017	ACM USA, pp.49-53doi>10.1145/3121138.3121183	June 2017,NUS, Singapore
12	R.Udayakumar, Sadjot Biswal , Aravind prasanth and Sankaram MVN	"Design of steering system for a small Formula type vehicle using tire data and slip angles"	3rd International Conference on Vehicle Engineering and Design (ICVED 2017)	MATAC WEB Conf. Proceeding Vol.124, 07007	July 1-3, 2017 Hongkong
13	Sadjot Biswal , Aravind prasanth, R.Udayakumar, Shobhit Dev, Aman Gupta	Design of suspension system and determining suspension parameters of a medium small formula type car	3rd International Conference on Vehicle Engineering and Design (ICVED 2017)	MATAC WEB Conf. Proceeding Vol.124, 07006	July 1-3, 2017 Hongkong
14	Ayush Ashish Shirsat and Jagadish Nayak	Visible Light Communication Using Mimo Channel To Achieve Better Snr At High Bit Rate"	the 8th international Conference on Computing, Communications and Networking Technologies, (8th ICCCNT 2017)	Conference Proceedings	July 3 - 5, 2017IIT Delhi, India
15	Leonardo Micheli, Eduardo F. Fernández, Greg P. Smestad, Hameed Alrashidi, Nabin Sarmah, Nazmi Sellami, Ibrahim A. I. Hassan, Amal Kasry, Gustavo Nofuentes, Neeru Sood, Bala Pesala, S. Senthilarasu, Florencia Almonacid, K.S. Reddy, Matthew Muller, Tapas Mallick, Dr Ramachandran	A unified global investigation on the spectral effects of soiling losses of PV glass substrates: preliminary results	IEEE 44th Photovoltaic Specialists Conference (PVSC)	Conference Proceedings	June 25-30,2017 ,Washington DC
16	Vilas H Gaidhane	An improved edge detection approach and its application in defect detection	2017 International Conference on Materials and Intelligent Manufacturing (ICMIM 2017)	IOP: Materials Science and Engineering, vol. 244 (1), pp. 1-7	Aug 21-23, 2017, National University of Singapore
17	Siddhaling Urolagin, Jagadish Nayak, Likitha Satish	A Method to Generate Text Summary by Accounting Pronoun Frequency for Keywords Weightage"	International Conference on Engineering & Technology (ICET'2017)	Conference Proceedings IEEE explorer	August 21-23, 2017,Akdeniz University, Antalya, Turkey,
18	Saraiya Aaditya Asit and V.Kalaichelvi	Vision Based Forward Kinematics Using ANN for Weld-Line Detection with a 5-DOF Robot Manipulator	Advanced Computational and Communication Paradigms (ICACCP)	Volume1: <a href="http://www.springer.com/in/book/9789811082399">http://www.springer.com/in/book/9789811082399</a> (under Processing)	Sep 8-10.,2017Sikkim Manipal Institute of Technology (SMIT), Sikkim, India
19	Saptadeep Debnath , Jagadish Nayak	Visual Odometry Data Fusion for Indoor Localization of an Unmanned Aerial	International Conference on Power, Control, Signals and Instrumentation	Conference Proceedings IEEE explorer	September 21-22 2017,Saveetha College of

S. No.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
		Vehicle”	Engineering (ICPCSI-2017)		Engineering, Thandalam, Chennai, Tamil Nadu India,
20	Ramakrishnan Raman, Dr. S. Vadivel and Dr. Benson	A Framework for Cost-Effective Distributed Data Mining in academic institutions using Intelligent Agents	IEEE Conference on Information Technology Trends, 2017	B189	Oct. 25-26, 2017, Higher Colleges of Technology, Al Ain, UAE.
21	Nishank singhal., Srishti and V. Kalaichelvi	Application of Convolutional Neural Network to Classify Sitting and Standing Postures	World Congress on Engineering and Computer Science WCECS 2017	2017 Vol I WCECS 2017 (published online)	October 25-27, 2017 - San Francisco
22	Praveen Kumar Reddy Yelampalli, Jagadish Nayak, Member, and Vilas H Gaidhane	Blood Vessel Segmentation and Classification of Diabetic Retinopathy Images using Gradient Operator and Statistical Analysis	World Congress on Engineering and Computer Science 2017 (IAENG WCECS)	Conference Proceedings and Springer Book	October 25-27 2017 San Francisco, USA.
23	Raja Muthalagu	Design of MIMO System with Individual Transmit Power Constraint and Improper Constellation	12-th International Conference on Broadband and Wireless Computing, Communication and Applications, 2017	Lecture Notes on Data Engineering and Communications Technologies, Springer. Vol. 12., 2018.	November 8-10, 2017, Open University of Catalonia, Barcelona, Spain,
24	Sheetal Desai, Rao, A.S., Shazi Shah Jabeen and Waheed A.	A Comprehensive Examination of Antecedents of Cultural Intelligence (CQ): A Comparison Between Third Culture Kids (TCKs) vs. Monoculture Kids	3 <sup>rd</sup> International Conference on Organization and Management	ICOM2017_096	Nov 19-20, 2017, Abu Dhabi
25	Arsheen Mir & Vilas H Gaidhane	Deriving Energy from Far Field RF Signal	The International Conference on Electrical and Computing Technologies and Applications, 2017 (ICECTA'2017)	Conference Proceedings IEEE explorer	Nov 21-23, 2017 American University of Ras Al Khaimah, UAE
26	Varsha Venkatesh and R Swarnalatha	Review and assessment of the rating scales of Parkinson's Disease	3 <sup>rd</sup> International Conference on Science, Engineering, Law & Management (ICSELM 2017)	International Journal of Applied Science	Nov 25-26, 2017 Dubai, UAE
27	Subramanian S C A, Akshai A, Ramachandran S, Prakash Kumar B G	Optimization of macronutrient kinetics for biomass production in Nostoc calcicola	International Conference on Recent Advances in Material & Manufacturing Technologies (IMMT 2017)	IMMT3048	Nov 28-29, 2017, BPDC, Dubai
28	Nandakumar Pillai, R Karthikeyan	Effect Of Deep Cryogenic Treatment On Aisi A8 Tool Steel And Development Of Wear Mechanism Maps Using Fuzzy Clustering	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29, 2017, BPDC, Dubai
29	Nandakumar Pillai, R Karthikeyan	Prediction Of Ttt Curves Of Cold Working Tool Steels Using Artificial Neural Network Model	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29, 2017, BPDC, Dubai
30	D. Purushothaman, Krishna Kaushik Yanamundra, Gokul Krishnan, C. Perisamy	Finite element simulation and experimental verification of Cutting force in machining for 6068 Aluminum alloy	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29, 2017, BPDC, Dubai

S. No.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
31	Krishna Kaushik Yanamundra, R Karthikeyan, Vishal Naranje	Finite element simulation and Experimental verification of Incremental Sheet metal Forming	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
32	Akshay Gidwani and Siddanth James, R. Karthikeyan, S. Vincent	Effect of Entropy Generation on Wear Mechanics and System Reliability	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
33	M Tomar and S Khurana	Road tunnel fires and tunnel lining material	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
34	Kesar Mal Kothari , Vishweshwar Samba, R. Udayakumar and Ram Karthikeyan	Modeling and Computational Simulation of Cable Pulling Winch Machine	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
35	Cherish Mani, R. Karthikeyan, S. Vincent	A study on corrosion resistance carried out on welding 316L stainless steel with Monel 400 by GTAW process	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
36	Shresh Kumar, Rebin Anwar, Wookha Ryu, E. S. Park, and S. Vincent	Biocorrosion Evaluation on a Zr-Cu-Ag-Ti Metallic Glass	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
37	G. Venkatesh, Divyank Sood, Apurbba Kumar Sharma	A Fuzzy Logic Approach On Ultrasonic Assisted Abrasive Flow Machining	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
38	Kiran Thomas, S. Vincent , Dipika Barbadikar, Rebin Anwar, Nevil Fernandes, Shresh Kumar,	Corrosion Characterisation In Incoloy 925 And 110 Ksi Low Alloy Steel	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
39	M.C. Subin, Jason Savio Lourencia, Ram Karthikeyan , C.Periasamy	Analysis of materials used for Greenhouse roof covering structure using CFD	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
40	Sathish Kannan , Salman Pervaiz , S. Vincent , R. Karthikeyan	Tool life and surface integrity aspects when drilling nickel alloy	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
41	Waleed Qureshi, S. Vincent, Sathish Kannan R. Karthikeyan , Manoj Gupta, Vyasraj Manakari	Influence of Silica Nanospheres on Corrosion Behavior of Magnesium Matrix Syntactic Foams	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
42	Dipika R. Barbadikar, S. Vincent, A.R. Ballal, D.R. Peshwe, and M.D. Mathew	Optimization of BI test parameters to investigate mechanical properties of P92 steel	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
43	P Raja S Bojanampati R Karthikeyan	Effect of rotation speed and welding speed on Friction Stir Welding of AA1100 Aluminium alloy	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
44	S Bojanampati S Venugopal R Karthikeyan	A Case study for comparing the feasibility of manufacturing implant using 3D printing and CNC machine	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
45	D.S. Robinson Smart, Joses Jenish Smart , C.Periasamy	Investigation Of Effect Of Rotary EDM Electrode On Machining Performance	International Conference on Materials and Manufacturing (IMMT 2017)	Conference Series: Materials Science &	Nov 28-29,2017, BPDC, Dubai

S. No.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
		Of Al6061 Alloy	2017)	Engineering	
46	Shamith L Saldanha, V.Kalaichelvi and R Karthikeyan	Prediction Analysis of Weld-Bead and Heat Affected Zone in TIG welding using Artificial Neural Networks	International Conference on Materials and Manufacturing IMMT 2017	Conference Series: Materials Science & Engineering	Nov 28-29,2017, BPDC, Dubai
47	Rohen Bhandhari and V.Kalaichelvi.	Analysis and Control Techniques for Two-Link Underactuated Manipulator	IEEE International Conference on Engineering Technologies and Applied Sciences.	IEEE digital Explorer(under processing)	Nov 29-Dec 1.,2017.,AMA International University.,Bahrain
48	S. Kasid , S. Kumar, Vishal .Naranje	Modelling and prediction of life of knockout bar of compound die	20th International Conference on Advances in Materials and Processing Technologies	Accepted for Publication in Advances in Materials and Processing Technologies journal Taylor & Francis publishers	Dec 11-14, 2017, India
49	Zaidali Khoja and Dr. Sujala D Shetty	Hybrid Recommender System for College Courses	International Conference on Computational Science and Computational Intelligence (CSCI'17)	ISBN # 1-60132-469-3; American Council on Science & Education	Dec 14-16,2017, Las Vegas, USA.
50	Raunaq Saraf and R.Gomathi Bhavani	Assessment of Daylight Performance of a Commercial Office Space in Hot, Arid Climate for Enhanced Visual Comfort Conditions	2017 IEEE International Conference on Technological Advancements in Power and Energy ( TAP Energy 2017)	Conference Proceedings IEEE explorer	Dec 21-23, 2017, IEEE Power and Energy Society, Kerala Section



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## LIST OF RESEARCH PUBLICATIONS – 2017

## Journal Publications

S. No.	Author(s)*	Title of the Publication	Journal	Vol.	Pages
1	V. Gerbaud, M. Teles Dos Santos, N. Pandya, J. M. Aubry	Computer aided framework for designing bio-based commodity molecules with enhanced properties	Chemical Engineering Science	159	177–193
2	B B Gulyani, BGP Kumar, A Fathima	Bagging Ensemble Model for Prediction of Dead Oil Viscosity	International Journal of Chemical Engineering and Applications	8 (2)	102-105
3	B B Gulyani, A Fathima	Introducing Ensemble Methods to Predict the Performance of Waste Water Treatment Plants (WWTP)	International Journal of Environmental Science and Development	8 (7)	501-506
4	Ramachandra Raja, R. Kesava Moorthi, R. Roop Kumar	Synthesis and Characterization of Sol-Gel Auto combustion derived Ce/Zr substituted Strontium Hexaferrite Nanoparticles	Journal of Superconductivity and Novel Magnetism (JOSC)	Sep 2017	DOI 10.1007/s10948-017-4320-1, Sep 2017
5	G. Saravana Kumar, R. Roop Kumar, P. Murugakoothan	A combined experimental and theoretical investigations on N, N' - Diphenylguanidine based single crystals for nonlinear optical applications	Mechanics, Materials Science and Engineering	April 2017	ISSN 2412-5954
6	S. Muniyappan, V.M.Arivunithi, T. Solaiammal, K. Sudhakar, R. Roop Kumar and P. Murugakoothan	Synthesis, Structural, Optical, Morphological and Elemental Characterization of CTAB capped CdS Quantum Dots by facile chemical precipitation Technique	Recent Trends in Materials Science and Applications, Springer Proceedings in Physics	189, 2017	341-348
7	Tapan Kumar Datta	Effect of green technology investment on a production-inventory system with carbon tax	Advances in Operations Research(Scopus-indexed)	Volume 2017, Article ID 48348,	1-12
8	Rao, A.S.	Perceived Outcomes of Action Learning Programs : Study from a Large Public Sector Organization in U.A.E	Measuring Business Excellence (Scopus Indexed)	21 Issue 4	1-18
9	Srinivas, R., Singh, A. P, and Sharma, R.	A scenario based impact assessment of trace metals on ecosystem of river Ganges using multivariate analysis coupled with fuzzy decision-making approach	International Journal of Water Resources Management, Springer	DOI: 10.1007/s11269-017-1738-y (I.F. 2.437).	4165-85
10	Srinivas, R. and Singh, A. P.	'Impact assessment of industrial wastewater discharge in a river	International Journal of Environment, Development and	DOI: 10.1007/s10668-	1-25

S. No.	Author(s)*	Title of the Publication	Journal	Vol.	Pages
		basin using interval-valued fuzzy group decision-making and spatial approach'	Sustainability, Springer	017-9994-9	
11	Singh, A. P. Chakrabarti S., and Kumar, S. and Singh, A.	'Assessment of air quality in Haora river basin using fuzzy multiple-attribute decision making techniques'	Environmental Monitoring and Assessment.	10.1007/s10661-017-6075-3 (I.F. 1.687)	189-373
12	Dr..R.Udayakumar and Nijhil Regi Thomas	"Theoretical design for a zero energy house in the middle east "	International Journal of Scientific and Engineering Research	Volume 8 Issue 6	274-282
13	Vivek J.Shah and Dr..R.Udayakumar	Thermal analysis of a ceramic coated piston	International Journal of Engineering Technology, Management and Applied science	Volume 5, Issue 6	224-227
14	Vishal G Naranje,H M A Hussein and S Kumar	Computer aided system for parametric design of combination die	IOP Conf. Series: Materials Science and Engineering	244 (2017) 012022 doi:10.1088/1757-899X/244/1/012022	01-22
15	Vishal G Naranje, Ram Karthikeyan and Vipin Nair	Study of wear performance of deep drawing tooling	IOP Conf. Series: Materials Science and Engineering	244 (2017) 012005 doi:10.1088/1757-899X/244/1/012005	01-04
17	Joysurya Basu, S. Vincent, B. S. Murty, M. J. Kramer, Jatin Bhatt	"Role of polyhedral order in glass to crystal/quasicrystal transition dynamics"	Journal of Non-Crystalline Solids	471 (2017)	256-263
18	Ketul Patel, Ganesh R Karthikeyan, S. Vincent	"Determining stress strain behavior for Zr60Cu10Al15Ni15 bulk metallic glass using object oriented finite element"	Journal of Metastable and Nano crystalline Materials	29 (2017)	1-8
19	Shashank Khurana, Kojiro Suzuki and Ethirajan Rathakrishnan	"Visualisation of Vortex at Aerospike Root using Hydraulic Analogy"	International Review of Aerospace Engineering Journal	Vol. 10 No. 4, 2017	189-195
20	R.V.Rao, K.C.More, L.S.Coelho and V.C.Mariani.	Multi-objective optimization of the Stirling heat engine through self-adaptive Jaya algorithm	Journal of Renewable and Sustainable Energy	9(3), 2017,0337 03	0337031-18
21	R.V.Rao, K.C.More, P.Oclon, J. Taler and D.Taler	Single- and multi-objective design optimization of plate-fin heat exchangers using Jaya algorithm	Heat Transfer Engineering,	2017.(online available https://doi.org/10.1080/01457632.2017.1363629	1-16

S. No.	Author(s)*	Title of the Publication	Journal	Vol.	Pages
22	P.Oclon, P.Cisek, M.Rerak, D.Taler, R.V.Rao, A.Vallati, M.Pilarczyk	Thermal performance optimization of the underground power cable system by using a modified Jaya algorithm	International Journal of Thermal Sciences	123, 2018	162-180
23	R.V.Rao and K.C.More	Optimal design and analysis of mechanical draft cooling tower using improved Jaya algorithm	International Journal of Refrigeration	82, 2017	312-324
24	Vishank Bhatia, V.Kalaichelvi R. Karthikeyan	"Comparison of GA tuned fuzzy logic and NARMA-L2 controllers for motion control in 5-DOF robot(Scopus Indexed)	International Journal of Computers and Applications	Vol.39, Issue 2, 2017	69-78
25	Vilas H Gaidhane Navdeep, A Rani & V Singh	An improved edge detection approach and its applications in defect detection	IOP: Materials Science and Engineering	Vol.244, Issue 1 2017	1-7
26	Vilas H Gaidhane V Hote V Singh	An efficient similarity measure approach for PCB surface defect detection	Pattern Analysis And Applications	<a href="https://doi.org/10.1007/s10044-017-0640-9">https://doi.org/10.1007/s10044-017-0640-9</a>	1-13
27	A Syed Vilas Gaidhane	Implementation of digital neuron using system Verilog	Journal of Engineering Technology	Vol. 6 2017	100-105
28	Praveen Kumar Reddy Yelampalli, Jagadish Nayak, Vilas H Gaidhane	Medical image rigid registration using a novel binary feature descriptor and modified affine transform	IET Image Processing	DOI: 10.1049/iet-ipr.2017.0526	1-15
29	Reshma Babu and R. Swarnalatha	Comparison of Different Tuning Methods for pH Neutralization in Textile Industry	Journal of Applied Sciences	17 (3)	142-147
30	Arjun Raja and R Swarnalatha	Signal by Digital Image Processing using PCA Algorithm and Edge Detection Techniques	Journal of Engineering and Applied Sciences	12 (22)	6076-6082
31	Raja Muthalagu	Application of cognitive radio and interference cancellation in L-Band based future air-to-ground communication system	Digital Communications and Networks, Elsevier.	Online First (DOI: <a href="https://doi.org/10.1016/j.dcan.2017.09.011">https://doi.org/10.1016/j.dcan.2017.09.011</a> ).	1-25
32	Raja Muthalagu and Subeen Jain	Modifying LFSR of ZUC to Reduce Time for Key-Stream Generation	Journal of Cyber Security and Mobility	Vol. 5- 4, Aug. 2017.	257-268
33	Raja Muthalagu	Design of MIMO System with Individual Transmit Power Constraint and Improper Constellation	Advances on Broad-Band Wireless Computing, Communication and Applications. Springer.	Vol. 12. , 2018.	363--375
34	Mohammed Azeem Gafoor and A R Abdul Rajak	Design of Adders with Less number of Transistor	International Journal of Applied Engineering Research	Volume 12, Number 18 (2017)	7700-7704

S. No.	Author(s)*	Title of the Publication	Journal	Vol.	Pages
35	Swati Sinha, T V Chandrasekhar, Mary Lourde R,	Estimation of Doppler Profile Using Multi-Parameter Cost Function,	IEEE Trans. on Geoscience and Remote sensing,	Vol. 55, issue 2 , 2017 , DOI : 10.1109 / TGRS.201 6.2616918	932-942
36	Swati Sinha and T.V. C. Sarma and Mary Lourde R.,	"Doppler Feature Based Classification of Wind Profiler Data",	Journal of Physics: Conference Series, IOP press,	Vol.787(1) , 2017	012-28
37	S. Sinha, Mary Lourde R., T. V. C. Sarma, J. S. Pillai and K. R. Tuckley	"Spectral Feature-Based Classification of Wind Profiler Power Spectra,"	IEEE Transactions on Geoscience and Remote Sensing,	Vol.PP no. 99 2017 doi: 10.1109 /TGRS.20 17.277565 4 available online as Early access	(1-9)
38	Milu Mary Philip, Rahul Varma, Vijayakumar B, Department of Computer Science, Birla Institute of Technology and Science, Pilani, Dubai Campus, UAE.	Requirement Traceability Model Generation for Evolving Software Systems	Journal of Software Engineering, Publisher: Science Alert, USA.	Vol. 11, No. 3, (2017)	282-289.
39	Milu Mary Philip, Vijayakumar B, Department of Computer Science, Birla Institute of Technology and Science, Pilani, Dubai Campus, UAE.	Design and Implementation of Combinational Software Architecture for Batch Image Processing System	International Journal of Software Engineering and Its Application, Publisher: Science and Engineering Research Support Society, South Korea.	Vol.11, No.6 (2017)	79-88.
40	Nandakumar Pillai R. Karthikeyan and J. Paulo Davim	A review on effects of cryogenic treatment of AISI 'D' series cold working tool steels	Rev.Adv. Mater. Sci	51 (2017)	149-159
41	Rahul Dahiya, Baalaganapathy Manohar, C. Perisamy	Analyzing the Effect and Efficiency of Wind Tower on Fresh Air Handling Unit (FAHU) for Medical Buildings	Journal of Research in Mechanical Engineering and Technology,	Vol.7, 2017,	106-112
42	Joseph E Reddi S Rinwa V <i>et al.</i>	Design and in vivo evaluation of solid lipid nanoparticulate systems of Olanzapine for acute phase schizophrenia treatment: Investigations on antipsychotic potential and adverse effects	European Journal of Pharmaceutical Sciences,	104 (2017)	315 - 325
43	Reddi S Singhvi G Khosa A <i>et al.</i>	Development and validation of cost effective UV-spectrophotometric method for estimation of domperidone in bulk and	Asian Journal of Chemistry,	29, 12 (2017)	2623- 2626

S. No.	Author(s)*	Title of the Publication	Journal	Vol.	Pages
		pharmaceutical formulations			
44	Singhvi G Shukla V Ukawala Ret al.	Development of a new, rapid and sensitive HPTLC method for estimation of Milnacipran in bulk, formulation and compatibility study	Arabian Journal of Chemistry,	10 (2017), Vol 10 (2) S	S2417 – S2423
45	Singhvi G Kumar V Ukawala R, et al.	Development of bioanalytical HPLC method for estimation of milnacipran hydrochloride in rabbit plasma using solid phase extraction technique and its application in pharmacokinetic investigation	Current Pharmaceutical Analysis,	13, 6 (2017)	574-580
46	Joseph E & Saha R N	Investigations on pharmacokinetics and biodistribution of polymeric and solid lipid nanoparticulate systems of atypical antipsychotic drug: effect of material used and surface modification	Drug Development and Industrial Pharmacy	43, 4 (2017)	678 - 686
47	Sunil K. Dubey, Amit Anand, and Ranendra N. Saha	Enantioselective disposition of venlafaxine and its metabolite o-desmethylvenlafaxine in rats	International Journal Of Pharmacokinetics	2017, 2(1),	39-45

#### Books Chapter Publications

S. No.	Author(s)*	Title of the Publication	Journal	Vol.	Pages
1	Natesa Prasad	Energy Security as a subset of National Goals	International conference in Delhi on Emerging Global Economic Scenario.	Book chapter by Bloombury Publishers Page 144	11-Nov 2017 New Delhi
2	Rajib Ghosh Chaudhuri	Chapter 4 - Metal/semiconductor core/shell nanostructures for environmental remediation in Book Metal Semiconductor Core-Shell Nanostructures for Energy and Environmental Applications - A volume in Micro and Nano Technologies, edited by Raju Kumar Gupta and Mrinmoy Mishra	Elsevier	May 2017	79-98

S. No.	Author(s)*	Title of the Publication	Journal	Vol.	Pages
3	V. Naranje, S. Kumar	Knowledge based system for design of deep drawing die for axisymmetric parts, In AI Application in sheet metal forming	Springer Singapore	Chapter <a href="https://link.springer.com/chapter/10.1007/978-981-10-2251-7_5">https://link.springer.com/chapter/10.1007/978-981-10-2251-7_5</a>	93-119
4	Adhir Baran Chattopadhyay, and Sunil Thomas	"Investigations on Modeling Of Renewable Energy Phenomena Taking the Effect Of Non- Linearities into Account", Book (Chapter-4)	Chapter in edited Book: Renewable Energy and Smart Grid Technology, Edited by V K Jain and S Y Kumar.	Bloomsbury Publishing India Pvt Limited, February, 2017	ISBN: 978-93-86432-07-0.
5	Swati Varshney, Trayambak Basak, Mainak Dutta and Shantanu Sengupta	Chapter 4: Proteomics: Mass Spectrometry in Chemical Biology: Evolving Applications	Royal Society of Chemistry	<a href="http://dx.doi.org/10.1039/9781788010399-00082">http://dx.doi.org/10.1039/9781788010399-00082</a> (2017)	82-143
6	SV. Divyarashmi, A.Somasundaram and S. Arumugam	Global Secure Domination in Graphs	Springer Lecture Notes in Computer Science	Springer Lecture Notes in Computer Science	50-54
7	S.Rajeswari, M.Indhumathy,A. Somasundaram, Neeru Sood and S. Arumugam	Identification of Salinity stress tolerant Proteins in Sorghum Bicolor - Computational Approach	Springer Lecture Notes in Computer Science	10398	318-325

Annexure B4-13  
(1 pages)

### List of Higher Degree Dissertations

#### Second Semester 2016-2017 (January 2017 to June 2017)

During the **Second Semester 2016-2017**, 15 Higher Degree dissertation projects have been completed. The list of completed Higher Degree dissertations during Second Semester 2016-2017 is given in below

S. No	Name	Topic	Supervisor
1	Arvind Nageswaran	Study Of Structural Integrity Of Cranes Using Experimental Stress Analysis By Strain Gauging	Dr. Ram Karthikeyan
2	D Satheesh Kumar	Automation of Winch Machine	Dr. R. Udaya Kumar
3	M Azeem Gafoor	Design And Analysis of High Speed Phase Locked Loop In 180nm Technology	Dr. A R Abdul Rajak
4	N.P. Pramod	Newly Designed Explosion Proof Enclosure With Cycom 5254-4 Material And Its Analysis	Dr. Priyank Upadhyaya
5	Ranjeet Kumar	Interpretation of Heat Load Analysis of A Commercial Greenhouse Using Conventional And Numerical Methods	Dr.Perirsamy
6	Smitha S	A Cloud Technology Application For Emergency And Disaster Management Using Android Devices	Mr. Nand Kumar
7	Syed Azhar Khalid Aisha	Radiation Hardened Advanced Encryption Standard Core	Dr. Vilas H Gaidhane
8	Vijay Joe Oommen	Design of Fixures For Incremental Sheet Metal Forming	Dr. Vishal Gangadhar Naranje
9	Fernandes,Prakash Nevil	Study And Cost Comparision of An Incoloy 925 Material With That of A Nickel Plated 110 Ksi Alloy Steel	Dr. Vincent Shantha Kumar
10	Suresh Abhishek,Mantripragada	Aerothermodynamics of Hypersonic Vehicles	Dr. Shashank Khurana
11	Nishanthi Hajis	Human Resources Management Selection Process And Exit Interview	Dr. A Srinivas Rao
12	Palash Saxena	Supply Chain Analysis of Souq.Com	Dr. Sujala D Shetty
13	T M Mahyar	Human Resources Management Recuritment Practices And Performance Appraisals In Uae	Dr. A Srinivas Rao
14	Vemuri Sowmya	Issues And Challenges Faced By Micro Level Entrepreneurs In Uae	Dr. A Srinivas Rao
15	Rahim,Sarosh Rahil	Supply Chain Management In A Fmcg Company	Dr. Sujala D Shetty

During the **first semester 2017-2018**, 6 higher degree dissertation projects were completed. The list of completed higher degree dissertations during first semester 2017-2018 is given below:

#### First Semester 2017-2018 (August 2017 to January 2018)

S. No.	Name	Topic	Supervisor
1	Kiran Joseph Thomas	Corrosion Charaterization Incoloy 925 And Nickel Plated Low Alloy Steel	Dr. Vincent Shantha Kumar
2	Nithin Nelson	Effect Of Lubrication On Tribological Properties of Cold Working Tool Steel	Dr. Ram Karthikeyan
3	Ashiq Mohammed Ashraf	Study Of Supply Chain Management In Fresh Food Insustry & Its Analysis In Dubai Market	Dr. S. Baskaran
4	Govindolla Sree Geethi	Analysis of Consumer Behaviour in UAE Retail Markets	Dr. Natesa Prasad
5	Medha Ravindranath	Human Resource Practices In Uae	Dr. Srinivasa Rao
6	Ram Kaushik Venkatnarayanan	Assessing the Implementation and Business Impact of Erp In SMEs - UAE	Dr. Sujala D Shetty

Annexure B4-14  
(2 pages)

**List of First Degree Thesis**

**Second Semester 2016-2017 (January 2017 to June 2017)**

<b>S. No</b>	<b>Name</b>	<b>Topic</b>	<b>Supervisor</b>
1	Aashraya Kumar Yogi	Improvements In Human Computer Interaction Along With Advancement In Computer Technologies	Dr. Siddhaling Urolagin
2	Aastha Bhardwaj	Stress Measurement In Thin Films	Dr. Anand Kumar
3	Abhishek Mahajan	Target And Manage Motor Symptom Of Parkinson's Disease By Developing Wearable Technology	Dr. Swarnalatha
4	Akash Mundra	Satellite Image Processing Using Neural Networks	Dr. V.Santhosh Kumar
5	Alok Rajiv	Techniques For Data-Access By Javascript In Runtime Environments	Dr. V.Santhosh Kumar
6	Ameya Nitin Kulkarni	Machine Learning Based Mathematical Modelling For Classification Of Eeg	Dr. Shazia Hasan
7	Anantha Krishnan	Design, Analysis And Implementation Of An Algorithm For Automated Text Summarization For Big Data	Dr B Vijaya Kumar
8	Ayanava Sarkar	A Study On Incremental Machine Learning Using Tensorflow	Dr. Sujala D Shetty
9	Ayush Garg	Erp Medical System	Dr. Sujala D Shetty
10	Don Joe Martin	Robotic Manipulator Modeling In Matlab-Simmechanics With Control Strategies	Dr.V. Kalaivhelvi
11	Mahidhara Utsav	Analytical Feasibility Study Of The Electrification Of A Public Bus Route In India	Dr. Shazia Hasan
12	Namitha Sathish	Modeling Of Polysilicon Based Piezoresistor Structural Layer On Cantilever For Biomems Applications	Dr. Anand Kumar
13	Nikhil Reji Thomas	A Theoretical Design For A Zero Energy House In The Middle East	Dr. R. Udaya Kumar
14	Rekha Palli Sri Shreya	A Comparative Study On The Removal Technologies Of Acetylsalicylic Acid From Water	Dr. Geetha Kannan
15	Rishav Jalan	Design Of A Smart Chatbot Interface Using Neural Networks	Mr. Nand Kumar
16	Sahil Mulchandani	Comparison Of Different Modulation Techniques And Various Detection Algorithms In Mimo Systems	Dr. M. Raja
17	Sankalp Sethi	Software Tool Implementing The Bsim-Cmg Model For Double Gate Finfets	Dr. Anand Kumar
18	Shah Maurya Mukeshbhai	Photocatalysis: Degradation Of Methylene Blue Under Visible Light Using Doped Photocatalyst	Dr. Rajib Ghosh Choudhury
19	Shaikh Faisal Zaman	Characterization Of Biomass And Optimization Of Its Growth Conditions For Bioenergy Applications	Dr.S Ramachandran
20	Shrey Iyengar	Water Detection And Structure Detection On Satellite Aerial Images	Dr. Vadivel Sangil
21	Subeen Jain	Modification In Kasumi And Zuc To Improve Encryption Of Mobile Data Communication	Dr. M. Raja
22	Singh, Shikhar Sanjaykumar	Design And Implementation Of Smart Water Management System	Prof. Rahul Banerjee
23	Radhika Narain	Developing Enzymatic And Antibody -Based Tools For Decoding Complex Drugs And Diseases	Dr. Nishant Pandya
24	Jerin Jacob	Doubly Fed Induction Generator Driven By A Wind Turbine (Modelling Of Vawt In Electrical Domain)	Dr. A.B. Chattopadhyay
25	Sandeep Paleri	Tig Welding Of Ss/Ni Dissimilar Metal Welding	Dr. Ram Karthikeyan



**First Semester 2017-2018 (August 2017 to January 2018)**

S. No.	Name	Topic	Supervisor
1	A Karthik Vasudev	Understanding Transcriptional Regulation Of Disease Response (Dr) Genes In Rice	Dr. Neeru Sood
2	Gowtham S	An IoT Solution To The Problem Of Parking	Dr. Priti Bajpai
3	Harini M	Synthesis Of Copper, Lead, Aluminium And Nickel Nanoparticles And Studying Their Effect On Desmanthus And Sorghum	Dr. Neeru Sood
4	Harsh Hirani	Designing And Implementing A Software Robotic Framework For Risk Control And Probabilistic Outcome Enhancement On Heterogeneous Financial Market Instruments	Mr. Nandkumar
5	Kartik Krishna	Reduce Order Modulating And Active Control Of Unsteady Fluid Flows	Dr. Shashank Khurana
6	Madhav Mukul Kothari	To find and study the hydrogen production pathway in Enterobacter Cloacae IIT-BT 08 using computational Biology	Dr. Ramchanderan
7	Naman Kamra	Study Of Natural Language Processing Algorithms By Building A Text Summarization Service	Dr. Santhosh Kumar
8	Nishank Singhal	Automated Judgement Of Video Interview Based On Facial Gestures, Eye Contact And Hand Gestures Using Cnn-Rnn	Dr. Jagadish Nayak
9	Phadke Gautam Sanjay	Design And Implementaion Of Path Identification For Satellite Images	Dr. S. Vadivel
10	Piyush Ajay Batra	Machine Learning Application In Big Data	Dr. Siddhaling Urologin
11	Sangani Varun Jayesh	Virtual Reality Suit Implementation: Vr Tour Of Bpdc	Dr. Sujala D. Shetty
12	Saraiya Aaditya Asit	Intelligent Interface For Navigation And Robotic Manipulation Of A Mobile Robot	Dr. V. Kalaichelvi
13	Shaurya Sood	Design Of A Machine Learning Based Framework For Storage Anf Retrieval Of Distributed Audio Data	Dr. B. Vijayakaumer
14	Shirsat Ayush Ashish	Simulation Of An Autonomous Pay & Park Car Parking System	Dr. Mary Lourde R
15	Siddhant Farwaha	Experimental Study On Direc Liquide Fuel Cell	Dr. Priyank Upadhyaya
16	Tummala Vudaya Sankar	Dis-Similar Metal Welding Of 316lss/Monel 400 Alloy	Dr. R. Karthikeyan
17	Prabakaran,Rubeena Crystal	Screening Of Opiate Class Of Drugs In Equine Urine And Plasma –A Comparative Study On Extraction Methods And Instrumental Analysis	Dr. Rajib Ghosh
18	Aishwarya Singh	Predicting The Complexity Of Cellular Automata	Mr. Gaurav Saxena

Annexure B4-15  
(3 pages)

**DETAILS OF DISTRIBUTION OF PS I STUDENTS AND FACULTY OVER PRACTICE SCHOOL- I STATIONS  
DURING THE SUMMER TERM 2016-2017**

(04.06.2017 – 03.07.2017)

S. No.	Station	No. of Students	No. of Faculty
<b>I. Stations in United Arab Emirates (UAE)</b>			
<b>la. Stations at Abu Dhabi</b>			
1.	Garnet Management Consulting	7	1
2.	Global Technologies Trading Co. LLC	5	1
3.	Gulf & Safa Dairy Co. LLC	3	1
4.	Standard Global Quality Certification*	3	1
5.	Super Cement Manufacturing Co. LLC	4	1
6.	TUV Nord*	4	1
7.	Universal Voltas	2	1
<b>lb. Stations at Ajman</b>			
8.	Elfit Arabia*	4	1
9.	Moalajah FZC	3	1
<b>lc. Stations at Dubai</b>			
10.	Abhath Weights and Measuring Labs	3	1
11.	Al Ashwaq Building Materials Trading LLC	8	1
12.	Al Faizan Electrical Installation LLC	4	1
13.	Al Ghandi Electronics	5	1
14.	Al Noble EHS Consulting	8	1
15.	Al Tamimi Engineering Services LLC	4	1
16.	Automation and Power Solution Project FZE(APSPE)	6	1
17.	Consilium ME FZC	2	1
18.	Delphi Consulting*	4	1
19.	Eastern Biotech and Life Sciences	6	1
20.	ECS ME LLC*	3	1
21.	ehAPI Technologies LLC	7	1
22.	Elements WJD LLC	3	1
23.	Elji International	4	1
24.	Emaar Properties	5	1
25.	Emerson Rosemout*	2	1
26.	Emirates Transformer & Switchgear Limited	3	1
27.	Energy Automation*	3	1
28.	ESMA Industrial Enterprises*	5	1
29.	ETA Engineering	5	1
30.	Evanssion FZCO	4	1
31.	Fedex Express	4	1
32.	Fractal Systems	3	1
33.	Granteq General Trading LLC*	4	1
34.	Grundfos Gulf Distribution FZE	4	1
35.	HIMA ME FZE	4	1

S. No.	Station	No. of Students	No. of Faculty
36.	Intercoil International Co. LLC*	8	1
37.	Kingsmen ME*	3	1
38.	KPTAC Technologies*	4	1
39.	L&T Electrical & Automation*	8	1
40.	Mashreq Bank	6	1
41.	Nuplas Industries	3	1
42.	Oasis Investments Co. LLC	3	1
43.	Ocean Corner Water Equipment & Chemical Ltd. *	4	1
44.	Paramount Computer Systems	4	1
45.	Photon Technologies	4	1
46.	Prime Global Tech LLC	4	1
47.	Procal Measuring & Control Equipment*	6	1
48.	Protiviti ME	4	1
49.	RAS Infotech	6	1
50.	Reliance Facilities Management	3	1
51.	ROTO Packing Materials Industry Co. LLC	2	1
52.	Safe Data ME	3	1
53.	Sanbook Quality Consultancy*	8	1
54.	Scan Technology LLC	4	1
55.	Scientechnic	5	1
56.	Spira Power Gasket Manufacturing LLC	4	1
57.	StarB2B Consulting Services*	5	1
58.	Steinweg Sharaf FZCO	5	1
59.	Tech Robotix FZCO	4	1
60.	Topnet Distribution FZCO	3	1
61.	TUV Nord*	4	1
62.	Universal Voltas	4	1
<b>Id. Stations at Ras Al-Khaimah</b>			
63.	Dimah Hygiene Industries	5	1
<b>Ie. Stations at Sharjah</b>			
64.	Ace Auto Maintenance Workshop*	3	1
65.	AI Green circle Env. Consultants	6	1
66.	AI RAS Refrigeratory Devices LLC	6	1
67.	Burj Eiffel Lubrications Ind. LLC	7	1
68.	Catania ref. & Kitchen Equipment LLC	3	1
69.	Consilium ME FZC	3	1
70.	L&T Power Transmission and Distribution	4	1
71.	Sanbook Environmental Consultants*	4	1
72.	Verger et Delporte UAE Ltd.	4	1
<b>II. Stations in India</b>			
<b>Ila. Stations at Bangalore</b>			
73.	BHEL	4	1
74.	FlyNava Technologies	3	1
75.	Kanhatech	5	1
76.	Orange Semiconductors	5	1

S. No.	Station	No. of Students	No. of Faculty
77.	Robert BOSCH	3	1
78.	Sonata Software	5	1
<b>IIb. Stations at Hyderabad</b>			
79.	Cyient	6	1
80.	Huhtamaki	4	1
81.	Naina Power	5	1
82.	Organo	5	1
83.	Pervacio	5	1
<b>IIc. Stations at Mumbai</b>			
84.	Fractal Analytics	3	1
85.	IG Petrochemicals	5	1
86.	L&T Infotech	5	1
87.	Nirmal Industries	4	1
88.	RB Onesource	5	1
89.	TeamGlobal Logistics	3	1
<b>IId Stations at New Delhi</b>			
90.	Clues Network	4	1
91.	Espire Infolabs	5	1
92.	ETA Engineering	6	1
93.	Intellect Design Arena	5	1
94.	Kusum Enterprises	4	1
95.	NTPC	6	1
96.	Web Shuttle	4	1

**Summary:**

Total number of students	423
Total number of Stations	96
Total number of Faculty	33**

**Note:**

\* - also PS II station

\*\* - Each PS I Faculty was allotted more than one station to monitor.

Annexure B4-16  
(2 pages)**SOME PRACTICE SCHOOL- II STATISTICS**

Statistical Details of the Distribution of Students &amp; Faculty over Practice School-II during the year 2017:

S. No.	Name of the PS Station	Second Semester 2016-17 22.01.2017 – 03.07.2017		First Semester 2017-18 01.08.2016 – 04.01.2017		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>A. Stations at Abu Dhabi</b>						
1	Analytical Instrumentation & Maintenance Systems	4	1	-	-	4
2	ATECO	-	-	2	1	2
3	Monacco Engineering Solutions	-	-	1	1	1
4	Standard Global Quality Certificate*	-	-	3	1	3
5	Tiger Industries	1	1	-	-	2
6	TUV Nord*	2	1	-	-	2
<b>B. Stations at Ajman</b>						
7	Elfit Arabia*	-	-	3	1	3
<b>C. Stations at RAK</b>						
8	RAK Ceramics	2	1	2	1	4
<b>D. Stations at Dubai</b>						
9	Airicom ME	1	1	-	-	1
10	ATECO	3	1	-	-	3
11	Atlas Copco Services ME	2	1	-	-	2
12	Aver Solutions	2	1	2	1	4
13	Azbil Corporation	4	1	2	1	6
14	BICC Components	2	1	-	-	2
15	CRODA ME	1	1	-	-	1
16	Daikin ME	4	1	-	-	4
17	Delphi Consulting	-	-	5	1	5
18	EAGLE Industries	6	1	4	1	10
19	ECS ME*	-	-	3	1	3
20	ehAPI Technologies LLC*	10	1	-	-	10
21	ELJI International*	-	-	3	1	3
22	Emerson Final Control	-	-	11	1	11
23	Emerson Fischer	7	1	-	-	7
24	Emerson Rosemount*	10	1	12	1	22
25	Energy Automation*	-	-	3	1	3
26	ESMA Industrial Enterprises*	-	-	3	1	3
27	EPOS International	3	1	-	-	3
28	Fractal Systems*	5	1	-	-	5
29	Granteq LLC*	2	1	4	1	6
30	ICBA	2	1	3	1	5
31	Intercoil International Co. LLC*	10	1	5	1	15
32	Johnson Controls	2	1	2	1	4
33	Kingsmen ME	-	-	2	1	2
34	KPTAC Technologies*	3	1	4	1	7
35	L&T Electrical and Automation*	4	1	13	1	17
36	Larsa Scientific	-	-	2	1	2
37	Levtech Consulting	-	-	2	1	2
38	Lucy Switchgear FZE	3	1	3	1	6
39	Manlift ME	5	1	-	-	5
40	Masafi Co. LLC	-	-	3	1	3

S. No.	Name of the PS Station	Second Semester 2016-17 22.01.2017 – 03.07.2017		First Semester 2017-18 01.08.2016 – 04.01.2017		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
41	Merint LLC	1	1	-	-	1
42	Monaco Engineering Solutions	3	1	2	1	5
43	MSD, DHC	7	1	4	1	11
44	MSD, DIC	3	1	2	1	5
45	PwC Digital Services(NSI Gulf)	2	1	-	-	2
46	Ocean Corner*	-	-	4	1	4
47	Oriental Dynamics Solutions	5	1	-	-	5
48	Procal ME*	-	-	3	1	3
49	Prime Global Technologies*	3	1	-	-	3
50	Provisie Consulting	3	1	-	-	3
51	Quickbytz ME	4	1	-	-	4
52	Quintiles IMS	-	-	1	1	1
53	RNS Technologies	3	1	3	1	6
54	Sanbook Quality Consulting*	8	1	9	1	17
55	Schindler Pars International	2	1	-	-	2
56	Screencheck ME	-	-	3	1	3
57	Siemens	7	1	7	1	14
58	StarB2B Consultancy Services*	3	1	2	1	5
59	Techrobotix FZCO*	4	1	-	-	4
60	Tendercare	3	1	4	1	7
61	Thyssenkrupp Elevators	3	1	2	1	5
62	Tiger Industries	2	1	-	-	2
63	Topnet Distribution*	2	1	-	-	2
64	Triway World	-	-	4	1	4
65	TUV Nord*	1	1	-	-	1
<b>E. Sharjah</b>						
66	Ace Auto Maintenance workshop*	-	-	2	1	2
67	Al Green Circle Env. Consultants*	-	-	7	1	7
68	Al Ras Ref. Devices spare parts*	-	-	2	1	2
69	Central Motors & Equipment (BOSCH)	3	1	3	1	6
70	Cluttons, Sharjah	2	1	2	1	4
71	Dar Al mas Tools	-	-	2	1	2
72	ESRI	2	1	2	1	4
73	Multi Industries	-	-	4	1	4
74	Petrofac International Ltd	4	1	-	-	4
75	Sanbook Enviromental Consultants*	-	-	2	1	2

**Summary:**

Total No. of PS II stations in Semester II – 51

Total No. of PS II stations in Semester I – 50

Total No. of students in Semester II – 180

Total No. of students in Semester I – 180

Common Stations in Both Semesters – 25

\* Also PS I stations

**PRACTICE SCHOOL STATISTICS****PRACTICE SCHOOL- I**

Session	No. of students who attended PS- I	No. of faculty who supervised PS- I	No. of PS- I Stations
Summer 2002	53	04	07
Summer 2003	102	10	24
Summer 2004	94	14	26
Summer 2005	155	21	49
Summer 2006	260	28	81
Summer 2007	256	32	91
Summer 2008	357	40	117
Summer 2009	357	40	126
Summer 2010	457	49	139
Summer 2011	343	32	89
Summer 2012	294	28	76
Summer 2013	325	23	89
Summer 2014	369	26	99
Summer 2015	324	29	86
Summer 2016	404	33	97
Summer 2017	423	27	96

**PRACTICE SCHOOL II**

Year	Semester	Period (Duration)	No. of Stations	No. of Students	No. of Faculty
2003-04	I	July 2003 to January 2004 (09.07.2003 to 18.01.2004)	17	27	16
	II	February 2004 to July 2004 (09.02.2004 to 22.07.2004)	16	26	13
2004-05	I	August 2004 to January 2005 (02.08.2004 to 10.01.2005)	27	43	17
	II	February 2005 to July 2005 (01.02.2005 to 14.07.2005)	28	39	26
2005-06	I	July 2005 to January 2006 (24.07.2005 to 05.01.2006)	30	47	30
	II	February 2006 to July 2006 (02.02.2006 to 16.07.2006)	31	43	27
2006-07	I	July 2006 to January 2007 (31.07.2006 to 12.01.2007)	40	76	40
	II	February 2007 to July 2007 (01.02.2007 to 15.07.2007)	45	75	38
2007-08	I	August 2007 to January 2008 (1.08.2007 to 15.01.2008)	59	116	50
	II	February 2008 to July 2008 (3.02.2008 to 17.07.2008)	57	115	50
2008-09	I	August 2008 to January 2009 (3.08.2008 to 15.01.2009)	67	140	52
	II	February 2009 to July 2009 (01.02.2009 to 15.07.2009)	61	133	51
2009-10	I	August 2009 – January 2010 (02.08.2009 to 14.01.2010)	73	155	60

<b>PRACTICE SCHOOL II</b>					
<b>Year</b>	<b>Semester</b>	<b>Period (Duration)</b>	<b>No. of Stations</b>	<b>No. of Students</b>	<b>No. of Faculty</b>
	II	January 2010 to July 2010 (31.01.2010 to 14.07.2010)	59	163	52
2010-11	I	August 2010 to January 2011 (1.08.2010 to 13.01.2011)	71	170	65
	II	February 2011 – July 2011 (30.01.2011 to 14.07.2011)	66	199	59
2011-12	I	August 2011 – January 2012 (1.08.2011 to 12.01.2012)	71	204	62
	II	February 2012 – July 2012 (1.02.2012 to 12.07.2012)	76	242	60
2012-13	I	August 2012 – January 2013 ( 1.08.2012 to 10.01.2013)	40	144	38
	II	February 2013 – July 2013 ( 3.02.2013 to 15.07.2013)	42	152	40
2013-14	I	August 2013 – January 2014 (4.08.2013 to 9.01.2014)	41	134	39
	II	February 2014 – July 2014 (2.02.2014 to 3.07.2014)	42	141	41
2014-15	I	August 2014 – January 2015 (5.08.2014 to 8.01.2015)	47	152	43
	II	February 2015 – July 2015 (1.02.2015 to 2.07.2015)	44	148	43
2015-16	I	August 2015 – January 2016 (6.08.2015 to 13.01.2016)	52	160 FD 08 HD	35
	II	Feb 2016- July 2016 (1.02.2016 to 10.07.2016)	52	182	34
2016-17	I	August 2016 – January 2017 (01.08.2016 to 04.01.2017)	38	140	28
	II	January 2017-July 2017 (22.01.2017-03.07.2017)	51	176 FD 04 HD	35
2017-18	I	August 2017-January 2018 (01.08.2017-01.01.2018)	50	180	29



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**FACILITIES AVAILABLE AT PSI STATIONS DURING THE YEAR 2017-2018**

S.No.	STATION	Out of Pocket allowance in AED & other facilities
<b>I. Stations in United Arab Emirates (UAE)</b>		
<b>la. Stations at Dubai</b>		
1	Automation and Power Solution Project FZE (APSPE)	500
2	ECS ME LLC	1000
3	Emaar Properties	1500
4	Emerson Rosemout	2000
5	Energy Automation	1325
6	ETA Engineering	1000
7	Fedex Express	1850
8	Fractal Systems	1000
9	Granteq General Trading LLC	1000
10	Grundfos Gulf Distribution FZE	1000
11	Intercoil International Co. LLC	1000
12	L&T Electrical & Automation	1500
13	Mashreq Bank	1000
14	Nuplas Industries	1000
15	Ocean Corner Water Equipment & Chemical Ltd	500
16	Protiviti ME	1000
17	ROTO Packing Materials Industry Co. LLC	1000
18	Steinweg Sharaf FZCO	1600
19	Topnet Distribution FZCO	800
<b>lb. Stations at Sharjah</b>		
1	L&T Power Transmission and Distribution	1000
<b>I. Stations in India</b>		
<b>la. Stations at Hyderabad</b>		
1.	Cyient	10000 INR
2.	Organo	5000INR
3.	Pervacio	7000INR
<b>lb. Stations at Mumbai</b>		
1.	Fractal Analytics	15000INR
2.	L&T Infotech	10000INR
3.	Nirmal Industries	12000INR
4.	TeamGlobal Logistics	10000INR

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**LIST OF PROJECT ASSIGNMENTS FOR PS II - SECOND SEMESTER 2016-17**

1	Airicom ME, Dubai	
	1	Origination to Innovation on Internet of Things (IoTs)
2	Analytical Instrumentation & Maintenance Systems, Abu Dhabi	
	2	Introduction to The Sulphur Recovery Process
	3	Introduction to Analysers at AIMS
	4	A Report on Air Quality Monitoring Systems
	5	A Report on the Overview of Sulphur Recovery Unit
3	ATECO, Dubai	
	6	Implementation of Security Systems in Aloft Hotel, DWC
	7	CCTV and Access Control System
	8	IP Video Surveillance System in Sahara Center
4	Atlas Copco Services ME- Dubai/ Abu Dhabi	
	9	Compressor Manufacturing and Local Market Revolving Around Compressor
	10	Oil Injected Rotary Screw Compressors
5	Aver Solutions, Dubai	
	11	Integrated System Solutions at Aver Solutions
	12	Designing Remote Terminal Unit to Control the Flow of Water Across Emirates.
6	Azbil Corporation, Dubai	
	13	Building Management in a Green Building
	14	Solar Energy : The Ultimate Energy Resource for the Future
	15	Project Management in the Building Automation Sector
	16	Human Centered Automation
7	BICC Components, Dubai	
	17	Analysis of Air Terminals Used in Lightning Protection
	18	Analysis of Devices Used for Jointing Cables
8	Central Motors (BOSCH), Sharjah	
	19	Working of Workshop Test Equipment Division in Central Motors and Equipment (BOSCH)
	20	Practical Study on Sales and Business Development in BOSCH
	21	Market Research for Business Development of BOSCH Power Tools in Trade Market.
9	Cluttons, Sharjah	
	22	Property and Systems Management
	23	Client Services Management - Software Implementation (TRAMPS)
10	CRODA ME, Dubai	
	24	CRODA- PTIC Activities and Market Studies for Different Sectors
11	Daikin ME, Dubai	
	25	Applications and Product Support on AHU/FCU Operations
	26	Applications Support for Service Operations

	27	Departments and their various utilities at DAME
	28	Life Cycle Costing of Chillers
12	EAGLE Industries DWC-LLC, Dubai	
	29	Design and Brand Development
	30	Production Planning
	31	Mechanical Design Engineering
	32	Design, Drafting and Sheet Estimation
	33	WEB Development
	34	Electrical Diagnosis and Logging System for Tractor Load Faults
13	ehAPI Technologies LLC, Dubai	
	35	Functional and Design Testing of Mobile (IOS and Android) and WEB Applications
	36	Creation and Deployment of the Microsoft Cloud Service : Azure
	37	Designing of Website and Mobile Application
	38	ODOO Open Source Platform and ERP Software Development for Transtech
	39	Sales Process, Client Management and Cloud Products
	40	Organization Sale Strategy and Client Procurement for New Venture
	41	ERP for Garage Management System Using Open Source RAD Platform(ODOO v8)
	42	Website Evaluation Using Opinion Mining
	43	Open Source Rapid Application Development for ERP Solutions
	44	Organization Sale Strategy and Client Procurement for ehAPI Technologies
14	Emerson Fischer FZE, Dubai	
	45	Implementation of 5S Lean Manufacturing System at Emerson Quickship
	46	The Fisher-Certified Valve Repair Procedure in Fisher Lifecycle Services
	47	Documentation in Quality Assurance/Quality Control
	48	Health, Safety and Environment Under Process Management
	49	Maximization of Supplier Price Lists on RFQ Stage
	50	Company Forms and Nintex Workflows
	51	Designing E-forms On InfoPath Using SharePoint
15	Emerson Rosemount, Dubai	
	52	Direct Sourcing of Goods Procured in FY 2017 at Emerson
	53	Execution of Five Phases in Project Management at Emerson
	54	Steps Involved in Shipping Procedures at Emerson
	55	Developing Specification Directory for Equipment Requiring Recalibration
	56	Applications of VBA, T-SQL and Power BI at Emerson
	57	Wellhead Surveillance in Oil Fields
	58	Analysis of Level Measurement Products Used at Emerson
	59	Automation of Releasing Work Orders Using AUTO HOT KEY at Emerson
	60	Supply Chain Process at Emerson
	61	Supply Chain Process at Emerson
16	EPOS International, Dubai	
	62	Strengthening e-banking Security Using Keystroke Dynamics

	63	An Intelligent Paid Car Parking System Based on Dynamic Pricing With Passive RFID Tags
	64	Point of Sale Integration With Video Surveillance
17	ESRI Global, Sharjah	
	65	Software Development for ARCMAP and ARCGIS PRO
	66	Implementation of GIS Workflows
18	Fractal Systems, Dubai	
	67	Creating Autonomous Swarm of Nano-Drones
	68	Design and Development of Spherical Robots
	69	Design and Development of Kinetic Sphere
	70	System Integrators and Development of Matrix Ring
	71	System Integrators and Development of DSLR Gimbal
19	Granteq LLC, Dubai	
	72	Sales and Marketing Strategy at Granteq.
	73	Research on Energy Consumption Optimisation.
20	ICBA, Dubai	
	74	Studies of Selected High Yield Grasses Under Saline Water Irrigation for Bioenergy Production in UAE
	75	Strategies for Bioenergy Crop Production with Saline Water Resources
21	Intercoil Intl. Co. LLC, Dubai	
	76	New Vendor Development and Creation of Purchase Database
	77	Risk Assessment
	78	Process Flow, Machinery, Storage and Quality Control in Furniture Production
	79	Cost Benefit Analysis and Optimization of Outbound Deliveries
	80	Increasing Productivity in Furniture Manufacturing Industry Using Kaizen Method
	81	Cost Reduction and New Vendor Development for Fabrics
	82	Cost Reduction Analysis for Different Furniture Products
	83	Process Specific Manufacturing Using E.R.P. Software
	84	Businesses Processes and Functions of E.R.P.
	85	Formal Employee Training Programs and The Development of Material
22	Johnson Controls, Dubai	
	86	Purchase Requisition Request Portal on a WEB Application Using Angular JS and MVC Architecture
	87	IT Administration at Johnson Controls
23	KPTAC Technologies, Dubai	
	88	e-Menu Application and WEB Development Using Wordpress and Wampserver
	89	Social Media Marketing
	90	Marketing and Exercise – Some Motivation Required
24	L&T Electrical and Automation, Dubai	
	91	Industrial Automation using PLC and SCADA
	92	Optical Networking
	93	Design and Documentation of Telecom Systems

	94	Integration of Communication and Security Systems
25	Lucy Switchgear, Dubai	
	95	Product Improvement and Developments at Lucy Switchgear
	96	Dubai IT Inventory and BIOS Dpdate
	97	Ongoing Production LINE Mgmt. Projects at Lucy Switchgear FZE in Dubai
26	Manlift ME, Dubai	
	98	Review of AWP Industry in GCC Using BNC Network
	99	Study of Processes for AWP Rental Company
	100	Review and Analysis of Hire Desk Management in the AWP Industry
	101	Study and Overview of the Yard/Workshop Process Flow and Implementation of KANBAN and service kaizen
	102	Design and Supervision of Yard/Workshop in Compliance with OHS and 5S Methodology
27	Merint LLC, Dubai	
	103	Glass Bonding Tapes and Abrasives
28	Monaco Engineering Solutions, Dubai	
	104	Technical Safety Assessment in Chemical Industries
	105	3D Fire and Gas Mapping Study
	106	Technical Safety Consultancy
29	MSD, DHC, Dubai	
	107	Customer Relationship Management (CRM) Tool
	108	Work Completed with the Finance Department (Customer Services) at MSD
	109	Database Management at Merck Sharp & Dohme
	110	Mock-up design for App Development
	111	Accounting and Vendor Addition
	112	CGI Illustration and Animation
	113	Preparation and Analysis of Sales reports and day to day tasks on CRM
30	MSD, DIC, Dubai	
	114	Spot fire Application - Data Visualization and Analysis Software
	115	Demand and Chain Management and Operations
	116	Design and Testing of Macros for Complete Automation of Dashboards and Reports
31	NSI Gulf, Dubai	
	117	Building an Integrated Customer Business Platform with Salesforce
	118	Web and Cloud Development using Salesforce
32	Oriental Dynamics Solutions, Dubai	
	119	HVAC systems and lighting control
	120	Central battery system
	121	Building Management systems
	122	HVAC systems and lighting control
	123	Building Management systems
33	Petrofac, Sharjah	
	124	Design of Electrical System Based Power System Studies Using ETAP

	125	Design Analysis of Centrifugal Pumps and Compressors
	126	Analysers - Selection and Application
	127	Control Valve Sizing and Design Aspects
34	Prime Global Technologies, Dubai	
	128	Construction Management in Prime Global
	129	Building Technologies and Recent Developments
	130	Feasibility Analysis for Green Buildings in the Gulf Region
35	Provis Consulting, Dubai	
	131	Internet of Things and Security Issues
	132	Cyber Security Monitoring and Operations
	133	A Study on ERP Implementation Process and It's Maintenance
36	Quickbytz ME, Dubai	
	134	Financial Modelling of Startups Using Discounted Cash Flow Methods
	135	Minimum Viable Product and Beta Product Development
	136	Use of Market Survey in Consumer Research
	137	Financial Evaluation of Startups
37	RAK Ceramics, Ras Al Khaimah	
	138	Process Optimization in Logistics and Warehousing
	139	Supply Chain Management
38	RNS Technologies, Dubai	
	140	File Integrity Monitoring Using Tripwire
	141	Data Leakage Prevention (DLP) Technology
	142	Market Study on Firewall
39	Sanbook Quality Consulting, Dubai	
	143	Analysis of Transition from ISO 9001: 2008 to 9001:2015
	144	Energy Management Systems with Its Standardization and Applications
	145	Corporate Social Responsibility
	146	Assessment of Occupational Health and Safety Management Systems Status and Effectiveness in Manufacturing Industry
	147	Implementation of ISO 14001 (EMS) and ISO 22000 (FSMS) in Organizations
	148	ISO Certifications in Food Industry
	149	ISO 22716 Goods Manufacturing Practices Certification
	150	Insight into ELV Systems: CCTV
40	Schindler Pars International, Dubai	
	151	Main Components of Elevators and Escalator System
	152	Tender Engineering Process and Application in Vertical Transport Industry with Special Emphasis on Schindler Middle East
41	Siemens, Dubai	
	153	Formulation of BMS and HVAC Material Submittal
	154	Design of Direct Digital Control Panels Using Desigo Xworks Plus
	155	Designing of Documents for Project Execution
	156	Design of Technical Submittal

	157	Effective Energy Management
	158	Design of Controllers in Building Automation System
	159	Building Management and Access Control System Submittal
42	Star B2B, Dubai	
	160	Analysis of Spend Management Solutions and Savings using SAP Ariba
	161	Analysis of strategic sourcing using SAP Ariba
	162	Analysis of achieving bottom line results through SAP Ariba
43	Techrobotix FZCO, Dubai	
	163	The Development of Interactive Multi Touch Applications and The Designing of 2D and 3D Applications
	164	Game Development on Unity and Development of AR Using Vuforia on Unity
	165	Designing a Multi-Touch Application as well as Marked and Markerless based Augmented Reality Application for Android
	166	Development and Deployment of Touch Screen Application using Intuface and Creating Marked AR Animation
44	Tendercare FZE, Dubai	
	167	Design and Development of Cloud Clinic Manual, SRLC with QA and Implementation of The Patient Portal
	168	Implementation of Database Recovery and Backup Strategies after Case Studies and Development of Online Security Techniques for Tendercare
	169	Implementation of Patient Portal Features to Enhance Medical Software Management in Healthcare Services
45	Thyssenkrupp Elevator, Dubai	
	170	A Study on Elevator and Escalator Market in GCC and European Elevators
	171	Material Safety Data Sheet and Elevator QC Inspections
	172	Modernization of Elevators
46	Tiger Industries, Abu Dhabi	
	173	Productivity Metrics and Analysis
47	Tiger Industries, Dubai	
	174	Testing Methods and Quality Inspection
	175	Parametric Analysis of ERW Pipes and Tubes at TSI
48	Topnet Distribution, Dubai	
	176	Trends in Modern Data Center Technology in Environmental Monitoring System
	177	Potential Growth of IIOT in Mena Region
49	TUV Nord, Abu Dhabi	
	178	A Report on Certification and Auditing
	179	A Report on the Overview of World Wide Vendor Inspections
50	TUV Nord, Dubai	
	180	A Report on Audit on Coordination at TUV Nord

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## COMPUTING FACILITIES ACROSS THE CAMPUS

S. No.	Location	Hardware	QTY	Software
		Equipment		
1	Server Room (Data Center)	HP ProLiant DL380 Gen9 Intel Xeon E5-2620v3 6-Core (2.40GHz 15MB) ,16GB (1 x 16GB) PC4-17000P-R 2133MHz RDIMM ,3 x 300GB (10k rpm) Hot Plug 2.5in Small Form Factor Smart Carrier ,SAS Smart Array P440ar/2G HP Embedded 1Gb Ethernet 4-port 331i Adapter ,HP 2U SFF - Easy Install Rail Kit w/CMA, DVD-RW 2 x 500W ,3/3/3	2	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2-Enterprise x64 edition, CentOS, REDHAT Linux Enterprise, Domain Controller, Web Server
		HP DL 380 G7 Single Processor / Base Server, 32 GB Memory / 300 GB x 2 Hard drives & 600 GB x 6 Hard Drives	1	ESXI 5.5 update 2,Hypervisor,VMware,Replication server
		HP DL 380 G7 Dual Processor / Base Server, 32 GB Memory / 300 GB x 2 Hard drives	3	ESXI 5.5 update 2,Hypervisor, Windows Server 2003/2012 R2-Enterprise x64 edition/Linux, Vcenter
		HP MSA 2040 FC 6x900 SAS SFF Bnd/TVlite, HP MSA 900GB 6G SAS 10K 2.5in DP ENT HDD,	1	HP Storage server
		12-Bay TurboNAS, Xeon E3-1200 v3 family, 4GB ECC RAM(max. 32GB RAM), 4-LAN, 10G-ready, iSCSI, RAID 0,1, 5, 6, 10, 5+spare, 6+spare, 10+spare, global hot spare, max 8-LAN, PCIe expansion slot x2, redundant power supply, Seagate NAS 4TBx12	1	NAS Backup Server
		DELL PE M1000e Blade Enclosure Chasis (includes 1xCMC and 9x12V High Efficiency Fans) + 3 x 300W redundant Power supply and Fans + 3 x C19 / C20 power cords, Front Media Tray DVD + SD card for CMC + Integrated Analog KVM Switch, Select Brocade M5424 FC8 Switch Redundant (FI) 12 Ports with 2x 8Gb SFPs.	1	
		PowerEdge M630 Blade Server for M 1000 with 2 x Intel Xeon E5-2640 v3 2.6GHz,20M Cache,8.00GT/s QPI,Turbo,HT,8C/16T (90W) Max Mem 1866MHz (135W) Max Mem 2133MHz, 128GB RAM \ (8 x 16GB RDIMM), 2133 MT/s, Dual Rank, x4 Data Width, 2 x 600GB 15K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive. QLogic 57840S 10Gb Quad Port KR Blade Network Daughter Card, Emulex LPE1205-M 8Gbps Fibre Channel I/O Card for M-Series Blades	2	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2-Enterprise x64 edition,CentOS, Ubuntu,Debian
		PowerEdge M630 Blade Server for M1000, 2 x Intel Xeon E5-2698 v3 2.3GHz,40M Cache,9.60GT/s QPI,Turbo,HT,16C/32T (135W) Max Mem 2133MHz, 2 x 600GB 15K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive, 64GB RAM (4 x 16GB RDIMM), 2133 MT/s, Dual Rank, x4 Data Width, QLogic 57840S 10Gb Quad Port KR Blade Network Daughter Card, Emulex LPE1205-M 8Gbps Fibre Channel I/O Card for M-Series Blades	1	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2-Enterprise x64 edition, CentOS
		CISCO IDENTITY SERVICES ENGINE, SNS-3415-K9 (ISE Server)	1	Cisco IOS
		Cisco Prime Server, PRIME-NCS-APL-K9	1	Cisco IOS
Cisco ASA Firewall, ASA5585-S20-K9	2	Cisco IOS		



S. No.	Location	Hardware	QTY	Software
		Equipment		
		Cisco Edge switches- WS-C2960X-48FPD-L	3	Cisco IOS
		Sonicwall NSA 5600 Series	2	Wan optimization
		Cisco AIR-CT5760, AIR-CT5760 (H/A)	2	Cisco IOS
		Cisco Unified Communication System,UCS-BE-6000	1	Vcenter
		Cisco Voice Gateway ,CISCO2901/K9	1	Cisco IOS
2	Computer Programming Lab (332 & 333)	IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz,1.99Ghz, 1GB RAM, 160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	1	Windows 7
		Dell OptiPlex Intel Core I7-4790 (Quad Core, 3.60 GHz 8 GB RAM DDR1TB GB SATA HDD <b>(Total = 127)</b> Intel Core I5 4590 (Quad Core 3.30 Ghz) 4 GB RAM DDR500TB GB SATA HDD <b>(Total = 29)</b> 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	80+76 =156	Windows 8.1 and Windows 10
3	Microprocessor Lab (108)	Dell OptiPlex 9020 MT Intel Core I7-4790 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	30	Windows 8.1, Windows 10, MS Office 2007 and Red Hat Linux 5.0 , Ubuntu advanced platform
		IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz,1.99Ghz, 1GB RAM, 160GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	5	Windows 7, MS Office 2013
4	Physics Lab (309)	HP 280 G2, Intel Core I3,6100, 3.70 GHz, 8GB RAM, 500 GB HDD	5	Windows 7 64 bit, MS Office 2013
		Acer M2 series intel Core 2 Duo E 7400, 2.80 GHz, 2GH RAM, 320 GB HDD	2	Windows 7 32 bit and MS office 2007
5	Instrumentation Lab (329)	Acer 5600,3.0Ghz,1GB,80 GB	6	Windows 7 32 bit and MS office 2007
		Dell OptiPlex 9020 MT Intel Core I7-4770Quad Core 3.40 GHz 8 GB RAM DDR 1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	10	Windows 8.1
6	Digital Electronics Lab and Analog Electronics lab (304)	HP prodesk 400G3MT, Intel Core I7 6700, 3.4Ghz, 8GB RAM, 1TB HDD,	2	Windows 8.1
7	Signal Processing and Simulation Lab (303)	ACER:Intel® Pentium 4 - 3.0 GHzACPI uniprocessor PC, 1GB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	14	Windows 7, MS Office 2003
		Dell OptiPlex 7020 MT Intel Core I7-4770 (Quad Core, 3.40 GHz 8 GB RAM DDR 1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	20	Windows 7 64 bit
		Compaq D510, 2.40Ghz\Intel	1	
8	Communication Lab (330)	ACER:Intel Core 2 CPU 2.0GHz, 1 GB RAM, 150GB Hard Disk, DVD Writer	2	Windows 7, MS Office 2007 and Matlab 7 SIMULINK-R2010a
		Inter Core i5 CPU 650 @ 3.20 Ghz 2 Gb RAM 500 HDD	1	
9	Power Electronics Lab (302)	Lenovo:Intel® Core to Due - 2.8 GHz uniprocessor PC, 1GB RAM, 80GB Hard Disk, 3COM Ether Link 10/100	5	Windows XP, MS Office 2007

S. No.	Location	Hardware	QTY	Software
		Equipment		
10	Electrical Machine (313)	Dell Optiplex 9020, Intel Core I7-4790 (Quad Core, 3.60 GHz 8 GB RAM DDR1TB GB SATA	2	Windows 8.1
11	CNC LAB (MF3)	Assembled System Intel Core I3 3.20GHz, 2 GB RAM,500GB HDD	1	Windows 7, MS office 2007
		Lenovo think center intel Core 2 Duo, 2 GB RAM, 160 GB HDD	2	Windows 7, MS office 2007
12	Heat Transformation lab (MG3)	IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99Ghz, 1GB RAM,150GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	1	Windows 7, MS Office 2007
13	PMFM Lab (MG2)	ACER:Intel® Pentium 4 - 2.8GHzACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	1	Windows 7, MS Office 2007
		Compaq D510	1	
14	Chemistry Lab (306)	ACER:Intel® Pentium 4 - 2.8GHzACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	1	Windows 7, MS Office 2007
15	Class Rooms	Dell Optiplex 3070 Micro form factor,I5,8GB,500GB	21	Windows 10, MS Office 2013/2016
		Lenovo Think center M 700, Intel Core I5, 4GB RAM, 500GB HDD	10	Windows 7
16	Divisions(Grading, PSP, PCP, AAR,SW,I&E)	IBM -LENOVO-ThinkCentre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99Ghz, 1GB RAM,150GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	8	Windows 7, MS Office 2007
		Dell Optiplex 9020,Core I5, 4590, 3.30GHz, 4GB RAM, 500GB HDD	1	Windows 8.1 MS office 2007
		Dell Optiplex 9020,Core I7, 4770, 3.30GHz, 8GB RAM, 1TB HDD	5	Windows 8.1 MS office 2007
17	Library (BPDC)	LENOVO-ThinkCentreEdge :Inter® Core I3 4170@ 3.70 GHz, 3.70Ghz, 8GB RAM,500GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	50	Windows 7, MS Office 2007
		Dell OptiPlex 9020 MT Intel Core I7-4790 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	3	Windows 8.1 MS Office 2013
18	Faculty (Academic)	Dell OptiPlex 9020 MT Intel Core I7-4770 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	37	Windows 8.1/Windows 10, MS Office 2013
		Lenovo M73 Tower Intel Core i7 3.6Ghz, RAM 8 GB, 1TB HDD	3	
		HP Notebook Laptop	48	
19	Administration (Academic)	IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz,1.99Ghz, 1GB RAM,150GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	16	Windows 7, MS Office 2013
		Lenovo M73 Tower Intel Core i7 3.6Ghz, RAM 8 GB, 1TB HDD	1	Windows 10, MS Office 2016
		Dell OptiPlex 9020 MT Intel Core I7-4770 (Quad Core, 3.60 GHz 4 GB RAM DDR1TB GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	13	Windows 8.1 , MS office 2013
		HP Pavilion laptop	16	Windows 8.1, MS office 2013
		Acer Veriton M265 / Intel Core 2 Duo E7400 2.8 GHz / 2 GB RAM / DVD R / Mouse / Key	6	Windows 7, MS Office 2007

S. No.	Location	Hardware	QTY	Software
		Equipment		
		Board		
		iMac,21.5",i5,8GB,SSD 500	1	MAC IOS 10
20	Engineering Graphics Lab (MS5)	Dell OptiPlex 7020 MT Intel Core I5-4590 (Quad Core, 3.30 GHz 4 GB RAM DDR 500 GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	80	Windows 8.1 AutoCAD 2015 CATIA V5 R6 ANSYS 2015 EASY5 2015 ESPRIT DFX Digimat VASP My Lammps OOF2 Franc & Casca
21	Engineering Graphics Lab	Acer Veriton M265 / Intel Core 2 Duo E7400 2.8 GHz / 2 GB RAM / DVD R/W/Windows Server 2008 / Mouse / Key Board	1	Mechanical Software Server
22	CAD LAB -1 (MS6)	IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99GHz, 1GB RAM,150GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	21	Windows 7, MS Office 2007 ADAMS 2015 Aspen Automation Studio
23	CAD LAB -2	Dell OptiPlex 9020 MT Intel Core I5-4590Quad Core 3.60 GHz 8 GB RAM DDR 1 TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	10	Windows 8.1
24	Chemical Lab 1 (340)	Dell OptiPlex 9020 MT Intel Core I5-4790Quad Core 3.60 GHz 8 GB RAM DDR 1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	4	Windows 8.1 Aspen, Mat lab
25	Genetic Eng Lab	Dell OptiPlex 9020 MT Intel Core I7-4590Quad Core 3.30 GHz 8 GB RAM DDR 1TB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse	1	Windows 8.1,Office 2016
		IBM -LENOVO-Think Centre:Inter® Core 2 CPU 4400@ 2.00 GHz, 1.99GHz, 1GB RAM,150GB Hard Disk, Broadcom NetLink Gigabit Ethernet Network Card, DVD Combo	1	Windows 7,Office 2013
26	Chemical Lab2 (331)	Dell OptiPlex 9020 MT Intel Core I5-4590Quad Core 3.30 GHz 4 GB RAM DDR 500GB SATA HDD 16X DVD/RW Drive Dell MS 111 USB Optical Mouse Dell KB212-B Quiet Key USB Keyboard	2	Windows 8.1
27	CCTV Control room	HP elite Desk+ HP Compaq8100+Dell Optiplex 9020(2+3+2)	7	Windows 7 and Windows 8.1
28	Creative Lab (MS7)	Dell Optiplex 9020, Intel Core I7, 3.60 GHz, 8GB RAM, 1TB HDD	2	Windows 8.1
		HP Think station,Intel Xeon E5 1620, 3.50GHz,8GB RAM, 1TB HDD.	2	Windows 8.1
29	IT Stock	Lenovo M73 Tower Intel Core i7 3.6Ghz, RAM 8 GB, 1TB HDD	4	Windows 10
		Dell Optiplex 7050 MT Intel Core i7-7700,RAM 8GB, HDD 1TB 3 Yr NBD	4	Windows 10
		HP Notebook, BS012NE,i7,6GB,1TB	5	Windows 10

Annexure B4-21  
(2 Pages)**LIST OF EQUIPMENTS PROCURED DURING THE YEAR 2017**

<b>S.No</b>	<b>Name of Equipment</b>	<b>Used for Courses/Thesis/Dissertation Computational/Administrative Work</b>
1.	Tensiometer (Dynamic Contact Angle), Conductivity+TDS online meter, Abbe Refractometer, Hot Oil Bath, Jacketed glass reactor, Visible spectrophotometer, Vortex mixer, Gas flow meters for N <sub>2</sub> and CO <sub>2</sub> , Precision Digital weighing balances, Calorimeter cell, Bath Sonicator, Xenon lamp, Tube furnace, Centrifuge, COD measurement device, Hot plate with magnetic stirrer and with external temperature probe, Refrigerant air Dryer for compressor with Pre Filter 3M, Jar test apparatus.	Chemical Engineering Lab
2.	Software AspenONE® for Universities r3	Chemical Engineering Courses
3.	Bomb Calorimeter	Industrial Microbiol & Bioproc Engg
4.	Microwave Digestion & Synthesizer	Instrumental Methods of Analysis
5.	High Speed Centrifuge	Experiments in Biotechnology
6.	Viscometer	Downstream Processing
7.	Serial Soxhlet Extraction apparatus	Downstream Processing
8.	Zetasizer	Instrumental Methods of Analysis
9.	Chlorophyll Meter	Biotechnology Laboratory
10.	CBR Testing Machine with accessories	To be Used for Course - Soil Mechanics
11.	Motorised Sieve Shaker	To be Used for Course - Soil Mechanics
12.	Shear Testing Machine	To be Used for Course - Soil Mechanics
13.	Ductilometer	To be Used for Course - Highway Engineering
14.	Specific Gravity Frame	To be Used for Courses - Highway Engineering and Soil Mechanics
15.	Water Bath	To be Used for Courses - Highway Engineering and Soil Mechanics
16.	IC design software from Mentor graphics with following packages with 10 user licenses HEP IC nanometer package and HEP Design verification package	II YEAR -BE(EEE/ECE/EIE/CS)-Digital Design Course ME (Microelectronic)-CAD for IC design Thesis/Dissertation/LOP/SOP/DP
17.	Hardware simulation software PROTEOUS with 50 user licenses	II YEAR -BE(EEE/ECE/EIE/CS)-Microprocessor Programming and Interfacing
18.	Digital Trainer Kits	II YEAR -BE(EEE/ECE/EIE/CS)-Digital Design Course
19.	Multisim software from National Instrument with 25 user licenses	III YEAR -BE(EEE/ECE/EIE)-Analog Electronics
20.	Bench Top Digital Multimeters	II YEAR -BE(EEE/ECE/EIE/CS)-Digital Design Course
21.	Software defined radio from AMITEC, Hong Kong	SOP/LOP/DP
22.	Dell Optiplex 7040 Mini tower InterCore 17-6700 Processor with E- series 18.5" LED monitor Black UK(1)	Physics lab (PHYF110)
23.	Photogate Heads	Physics lab(PHYF110)
24.	550 Universal Interface	Physics lab(PHYF110)
25.	Flame Photometer	Chemistry Lab

<b>S.No</b>	<b>Name of Equipment</b>	<b>Used for Courses/Thesis/Dissertation Computational/Administrative Work</b>
26	Ph Meter	Chemistry Lab
27	Conductivity Meter	Chemistry Lab
28	Matlab Licenses & Toolboxes	EG Lab
29	Electrical Air Compressor	Cnc
30	Mechatronics Kit	Mechatronic Lab
31	Emission Tester	P.M.F.M Lab
32	Potentiostat	Meterial Testing Lab
33	Microwave Furnance	Meterial Testing Lab
34	Micro Hardness	Meterial Testing Lab
35	Automation Studio	Cad Lab
36	Ansys Academic Renewal	EG Lab
37	Adams Software	Cad Lab
38	Matlab Interface Card	Seed Grant
39	Ultrasonic Flow Detector, Electronic Bal	Meterial Testing Lab
40	Cnc Kit ( Cnc Lathe, Cnc Mill And Cnc Turn Mill)	Workshop
41	Modular Servo Control System	Mechatronic Lab
42	Milling Tool Dynamometer With Microcontroller Indicator	Workshop
43	Video Distribution Switcher	Tp Classroom
44	Projectors With Mount Kit	Classroom/ Eg Lab/ Meeting Room
45	Cctv Camera & Nvr For Parking	Parking
46	Vmware VSPHERE LICENSE	Data Center
47	Veenam Backup & Replication	Data Center
48	Microsoft Office License	Faculty / Staff
49	Mics	Auditorium
50	Hp Server Memory Upgradation	Data Center
51	Tiny Pc For Class Room	Classrooms
52	Wireless Lan Controllers & Accessories	Hostel
53	Desktop & Monitor	Library/Staff/Faculty
54	Ups 2 Kva	Idf Academic Block / Library / Mechanical /Hostel Blocks
55	Laptops – 5 Nos	Faculty / Staff

BITS Pilani

# annual report 2017

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## Part B4: Dubai Campus



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**BITS PILANI, DUBAI CAMPUS****B4. HIGHLIGHTS FOR THE YEAR 2017**

1. In Jan 2017, BITS Pilani, Dubai Campus hosted the BITSAA Global Meet 2017 organized by BITSAA and officially inaugurated by Dr. Eesa M. Bastaki, President of University of Dubai.
2. In January 2017, Dr. Mary Lourde in association with CETA, UAE organized a national level quiz competition in the UAE-CETA KnowledgeQuest 2017 for high school children at BPDC campus. Around 800 people participated in the event and it was a big success.
3. In Jan 2017, Dr. Vincent Shantha Kumar delivered a guest lecture on Bio-corrosion of Metallic Glasses at Seoul National University, Seoul, South Korea. He visited Prof. E.S. Park, Materials Science lab in Seoul National University, and successfully carried out experiments during his visit and jointly co-authored a research paper.
4. In February 2017, IORTA, a 14 member robotics team from BITS Pilani, Dubai Campus finished 6th in the National Category for their idea Smart Oil Spill Solution using Drones in the third edition of The UAE Drones for Good Award.
5. In February 2017, Dr. Ramchandran S (Biotechnology), Dr. Trupti Gokhale (Biotechnology), Dr. Neeru Sood (Biotechnology) and Dr. BG Prakash Kumar (Chemical Engineering), Prof. C. Babu, Department of Forage Crops, Tamil Nadu Agricultural University (TNAU) and Mr Khalil.Ur.Rahman (ICBA) received seed grant of AED 120000 from BITS Pilani, Dubai Campus for their research project entitled "Optimization of Selected High Yield Grass Species for Biomass and Bioenergy Applications using Saline and Recycled Wastewater".
6. In February 2017, Dr.R.Karthikeyan (Mechanical Engineering), Dr.Vishal Gangadhar Naranje (Mechanical Engineering), Dr.V.Kalaichelvi (EEE) and Dr.Vilas H Gaidhane (EEE) received seed grant of AED 90000 from BITS Pilani, Dubai Campus for their research project entitled "Design and Development of Closed Loop Control System to improve the Process Capability of Incremental Sheet Metal Form".
7. In February 2017, Dr. Vincent Shantha Kumar (Mechanical Engineering) Dr.R.Karthikeyan (Mechanical Engineering), Prof. D.M. Kulkarni (BITS Pilani, KK Birla, Goa Campus) received seed grant of AED 90000 from BITS Pilani, Dubai Campus for their research project entitled "Bio-Tribocorrosion Studies on Bulk Metallic Glasses".
8. On 9 February 2017, CIIED held a workshop in collaboration with InternsME which was attended by 72 students. Hosted by Ms. Noor Irfan- the Success Executive at InternsME- the workshop targeted the employability of students who graduate from BITS Pilani, Dubai.
9. On 22 February 2017, Mr. N G Shankar, Senior President- Corporate Audit Aditya Birla Management Corporation Pvt. Ltd conducted an interactive session on Internal Audit and Risk Management.
10. On 24-25 February 2017, Dr. A.B.Chattopadhyay delivered Key-note address in the International Conference on "Recent Trends in Renewable Energy and Smart Grids(ICRRESG-17)", organized by College of Engineering and Technology, MODY University ,Laxmangarh ,Rajasthan ,India.
11. BITS Pilani, Dubai Campus received Indywood Education Excellence Award 2017 – UAE Chapter.
12. On 3-4 March 2017, the HULT Prize Regional Finals on the topic "Refugees – Reawakening Human Potential" were held in Dubai, which saw 52 teams from US, Canada, Pakistan, Australia, France and other nations.. BITS Team Karamfal (Mihir Prabhudesai, Tarun Krishna, Adhitya Natarajan & Anand Maheshwari) along with Campus Director for HULT Prize, Rahul Jain (Vice President, CIIE) took the flag of BITS to the Regional Finals. Their idea received immense appreciation from the judges and peers, and was evinced as a promising start-up pitch.
13. On 11 March 2017, Dr A R Abdul Razak of EEE Dept. organized a workshop on "PSPICE".
14. On 14 March 2017, Shresh Kumar Mathur and Jitesh Gurav secured The Mavericks! Business Quiz Prize during the ITL World Magnate, an inter-university business festival held at the SP Jain School of Global Management, Dubai.
15. During 22-23 March 2017, Amartya Das Sharma, Arun S, Shikhar Singh participated in the 17<sup>th</sup> Gulf Programming Contest, held at Gulf University for Science and Technology, Kuwait. They won the Fifth Prize in this prestigious and highly competitive Programming Contest by solving 6 problems (out of 11).
16. During 24 March to 4 April 2017, CIIED successfully held its latest edition of the BPDC Case Challenge. The winners were Tejas Kulkarni and Athul Krishnan, and the runner-up was Shradha Shetty.
17. On 25 March 2017, AIChE Students' chapter BPDC and ChESA has organized a workshop on MATLAB for beginners.
18. On 28 March 2017, CIIE organized an InternsME Video Resume Session by Mr. Supratik Mukherjee (Product Manager, InternsME) to elucidate with examples how a proper Video CV can be prepared. The

session was followed by a Video Recording session, where based on a few guidelines, students could prepare their own Video Resumes.

19. On 2 and 3 April 2017, a Design and 3D printing workshop was organized by IEEE, PES and IORTA.
20. During 12-13 April 2017, Zaman SF, Khalil-Ur-Rahman, Ismail S, Prakash Kumar BG, Neeru Sood, Trupti Gokhale and Subramanian R received second prize for poster presentation on Optimization of Growth Conditions for Biomass Production and Characterization for Bioenergy Applications, in the conference Current Trends in Biotechnology-CTBT 2017 held at Manipal University Dubai.
21. During 17- 20 April 2017, Jashn '17 - the students' most awaited inter-collegiate cultural event of the year was held at BITS Pilani, Dubai Campus.
22. During 21-22 April 2017, two teams of Chemical Engineering students (out of three teams) ranked 2<sup>nd</sup> and 3<sup>rd</sup> in the Case Study competition at two-day Inter-collegiate seminar on Energy Reserves and Resources (ERR) organized by American University of Sharjah.
23. On 29 April 2017, Rohit Vasu secured third position in Microelectronics Olympiad held at American University of Sharjah.
24. On 29 April 2017, Dr Vilas Gaidhane of EEE Dept. organized a workshop on "Multisim".
25. On 30 April 2017, a Hands-on Experience Workshop was organized by the department on a process safety modelling software ALOHA (Area Locations of Hazardous Atmosphere).
26. On 30 April 2017, Tarun Krishna and Adhitya Natarayan won the the ASME Innovation challenge held at BITS Pilani, Dubai Campus which urged students from various universities to bring forth their innovations in the fields of manufacturing units, smart cities, infrastructure and cyber security.
27. In May 2017, two teams of Chemical Engineering students were selected for the final round of the Abu Dhabi Undergraduate Research Competition (URC).
28. On 2 May 2017, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) at BITS Pilani, Dubai Campus conducted an informative and insightful symposium on energy efficient buildings from an international perspective. Sponsored by Team Testa, the symposium included several Keynote speakers including Dr. Tiberiu Catalina from the Technical University of Civil Engineering, Bucharest. Other speakers included Ms. Sandhya Prakash, Founder of Beacon Energy Solutions and Mr. Abdul Razak Malik, CEO of Royal City Contracting.
29. On 3 & 4 May 2017M Dr B G Prakash Kumar acted as a session Chair in 2<sup>nd</sup> Student Research Colloquium on "Advances in Engineering & IT" (AEIT-2017), Manipal Univ., Dubai Campus
30. On 5 May 2017, the winning teams of BITS Pilani Dubai Campus in the Hackathon Challenge 2017 were honoured by Dubai Electricity and Water Authority (DEWA).
31. On 20 May 2017, Alina Zaidi, Sabiha Shaik and Rewant Verma - students of BITS Pilani, Dubai Campus triumphed in the Microsoft Office Specialist Championship 2017 conducted by FAME (Financial Accounting & Management Education) Training Institute, Dubai. The BITS team winners Alina Zaidi and Sabiha Shaik represented UAE in the world championship held in July in Anaheim, California where Alina Zaidi was among the top ten winners in MS EXCEL 2013 Category.
32. In July 2017, Team IFOR participated in the International Aerial Robotics Competition 2017 held at the American Venue in Atlanta, Georgia, USA and presented a paper on Unmanned Aerial Vehicle.
33. On 15 July 2017, Dr. A.B.Chattopadhyay delivered a special lecture as a Guest of honor in the International workshop on "MATLAB Application in Electrical Engineering" in Millia Institute of Technology, Purnea, Bihar, India.
34. In July 2017, Dr. R. UdayaKumar (Mechanical Engineering) and Dr. Shashank Khurana (Mechanical Engineering) received a grant of AED 12000 from Star Cements Ltd., Ras al-Khaimah (U.A.E.) for their consultancy project entitled "Energy Auditing and Energy Conservation".
35. In July 2017, Dr.Vishal Gangadhar Naranje (Mechanical Engineering), Dr.R.Karthikeyan (Mechanical Engineering), Dr.V.Kalaichelvi (EEE) and Mr.Nandakumar (Computer Science) received a grant of AED 10000 from Star Cements Ltd., Ajman Cement Plant (U.A.E.) for their consultancy project entitled "Development of Computer Application for Prediction of Cement Strength".
36. In July 2017, Dr.Vishal Gangadhar Naranje (Mechanical Engineering), Dr.R.Karthikeyan (Mechanical Engineering), Dr.V.Kalaichelvi (EEE) and Mr.Nandakumar (Computer Science) received a grant of AED 10000 from Star Cements Ltd., Ras al-Khaimah (U.A.E.) for their consultancy project entitled " Development of Mobile Application for Raw Mix Cost Optimization".
37. In July 2017, Dr.Vishal Gangadhar Naranje (Mechanical Engineering), Dr.R.Karthikeyan (Mechanical Engineering), Dr.V.Kalaichelvi (EEE) and Mr.Nandakumar (Computer Science) received a grant of AED 10000 from Star Cements Ltd., Ras al-Khaimah (U.A.E.) for their consultancy project entitled " Development of Mobile Application for Raw Mix Cost Optimization".

38. In July 2017, Dr. Shazi Hasan (EEE), and Dr. Mary Lourde (EEE) received a grant of AED 18000 from Star Cements Ltd., Ras al-Khaimah (U.A.E.) for their consultancy project entitled " Harmonic Mitigation Techniques for Cement Industry".
39. During 19-23 July 2017, Formula 6 car team (Captain-Mr Jasjeev Singh, III yr Mechanical) under the guidance of Prof R. Karthikeyan and Team Gear Shifters (Captain-Mr Sadjyot Biswal, IV yr Mechanical) under the guidance of Prof R. Udaya Kumar participated in the 13th edition of prestigious Formula SAE Italy & Formula Electric Italy Competition held in the Riccardo Paletti Circuit - Varano de' Melagari (PR), Italy.
40. CIIE once again collaborated with Astrolabs, the only Google TechHub in the MENA Region to introduce the Digital Marketing Track and Web Development Track Scholarship programs of \$3200 (each) for free to students of BITS Pilani, Dubai Campus.
41. During 18 -21 August 2017, Dr. Vincent Shantha Kumar delivered an invited talk on Bio-corrosion Studies on Zr Based Metallic Glasses in International Symposium for Advanced Materials Research (ISAMR 2017), at Sun Moon Lake, Taiwan.
42. On 28 August 2017, a workshop on Teaching Effectiveness was organized by the Dept of HSS in collaboration with Teaching Learning Centre and was conducted by Dr Tamali Bhattacharyya, Project Manager, IIT Kharagpur.
43. On 14 September 2017, AIChE Students' chapter BPDC promoted the Virtual Career Fair 2017 organized by AIChE.
44. On 14 September 2017, BPDC Civil Engineering Student Association (SKYLINE) was inaugurated. The Department of Civil Engineering in collaboration with Practice School Division organized an inaugural talk by Mr. Hemant Gor, Sr. Engineer – Civil & Structural, PETROFAC Intl LLC, Sharjah.
45. On 16 September 2017, AIChE Students' chapter BPDC organized an Introductory Workshop on the software MATLAB.
46. During 16-17 September 2017, Dr. Nishant Pandya was invited as member of International Advisory Committee of International Conference on "Paradigm shift in Chemical engineering education, processes and technology", IEI, Ahmedabad, Gujarat, India.
47. On 4 October 2017, a delegate from Hong Kong University of Science and Technology, Hong Kong, visited Dubai Campus and interacted with faculty and students.
48. During 8-12 October 2017, Sarthak Sethi of ECE, a first year student of BITS Pilani, Dubai Campus won First Prize at Gitex Technology Week 2017, in the final round of this year's Student Lab Competition sponsored by Accenture. Sarthak Sethi clinched the top prize for his unique concept 'ThumbFi: A Smart Biometric', that uses fingerprint technology to enable people with disabilities to operate their devices. He won the cash-prize of Dh50,000 (INR 9 lakh) in addition to an all-expenses paid trip to witness the launch of the satellite AL Yah 3 in French Guinea. Sarthak was also awarded an internship with Accenture to further his passion for developing innovative technology solutions.
49. On 12 October 2017, ChESA Organized a Six Sigma Workshop.
50. On 12 October 2017, SKYLINE arranged a guest lecture by Tamim Emad Youssef, Technical Sales Manager/Applications Services handling the regions of GCC, Africa, South America and South East Asia with JK CEMENT WORKS (FZC).
51. During 12-14 October 2017, Team Trepit including Tarun Krishna, Adhitya Natarajan, Harsith Rani, Mohamed Nawaz, and Pranay Addepalli won the Runners-up - Startup Weekend, Elevation- Best Marketing Plan Award, and Guidoo- Superstars of Startup Weekend Award held in Ras Al-Khaimah.
52. During 15-18 October 2017, BITS Pilani, Dubai Campus Team of students Mr. Rewant Verma (4th Year CSE), Ms. Alina Zaidi (4th Year CSE) and Mohamed Nawaz (3rd Year MECH) were declared as 2nd runner-up at BSE Financial Trading Contest held at the Abu Dhabi National Exhibition Center.
53. During 10 -23 October 2017, The Wolf of Wall Street – 'Stock Market and Market Simulation Competition', a flagship of BITS Pilani Dubai Campus was organized in which 66 teams participated from different universities. The teams that emerged victorious were Gurus of Dalal Street, The Lone Ranger and AlphaQ.
54. During 23-25 October 2017, Vaishak Thiruvankitam, Shivanarain Ravichandran and Mahathi Kishorekumar under the guidance of Dr Shashank Khurana won a Consolation Prize in Pan-India Student Design Contest held as a part of inaugural International Conference on Sports Engineering 2017 in Jaipur, India.
55. During 25-26 October 2017, Technofest 2017 was organized at BITS Pilani, Dubai Campus.
56. On 29 and 30 October 2017, Team Jisr consisting of students, namely Jaskanwar Singh, Jayant Panwar, Kelvin DeCosta, Somil Mathur and Tushar Agarwal from BITS Pilani, Dubai Campus won the 2nd position in ATXHackathon organized by Al Noor Training Center for persons with disabilities powered by Microsoft. The team presented their working prototype Jisr which can translate sign language to text and vice versa, therefore, enabling a two-way communication between the hearing impaired and hearing communities. Another team IIMAY consisting of Sarthak Sethi, Satyarth Vaidya, Jeevan Sandhu and Mihir Prabhudesai

from BITS Pilani, Dubai Campus won the 3rd position in this event. The team presented their application IIMAY which can convert a whole conversation between multiple people into sign language so it is much more convenient for a deaf person to interact in meetings.

57. On 30 October 2017, a mental health awareness workshop was organized at the Institute.
58. On 7 November 2017, Mr. Ramnath Venkatraman, Head of Business Learning, Noor Bank, UAE conducted an interactive session on Islamic Economy.
59. On 11 and 12 November 2017, Vedant Bajaj, Ritwick Dsouza, Aditya Popat, Shaurya Sood, Saugaat Allabadi from BITS Pilani, Dubai Campus won the second prize of ₹300 each in Accenture Digital Global Hackathon for their project "HealthMe", a mobile application using blockchain, providing peer-to-peer, community-driven medical insurance and health records. Another team of students Sarthak Sethi and Chirag Ghag won the third prize of ₹200 each in the same event for their project "FeedUs" a web platform for connecting charity organizations to institutions which have left over/waste food like Restaurants, Hotels, Supermarkets etc so it can be used for the poor. The web portal provided real time statistics of leftover / waste food left with kitchens.
60. During 16-18 November 2017, Team Avenue Inc., co-founded by Karthik Bharadwaj, a Mechanical Engineering student of BITS Pilani, Dubai Campus clinched the top Prize at Startup Weekend Dubai Edition. The team received a cash prize of USD 12,000 IBM Credit in addition to one year working space and mentor-ship from The Bureau Dubai, and qualified for Global Startup Weekend.
61. On 17 and 18 November 2017, Department of Mechanical Engineering organized a Two-Day Workshop on "Industrial Applications of Decision Making Methods and Optimization Techniques". Prof R V Rao coordinated this workshop which had participants from various local Industries and universities.
62. Another BITS Pilani, Dubai Campus team 'ProfileUp' consisting of Rachit Mishra, Shehab Abdul, Abhishek Das, Padma Priya, Sultan Morbiwala, Burhanuddin won the Consolation Prize and free mentorship at Startup Weekend Dubai Edition.
63. On 22 November 2017, Dr Thuppil Venkatesh, Principal Advisor Quality Council of India (QCI) & National Referral Centre for Lead Projects in India (NRCLPI), Professor-Emeritus Department of Biochemistry & Biophysics, St. John's Medical College, Bangalore, India conducted an interactive session on Creativity and Innovation.
64. During 19-23 November 2017, the much-awaited Coca Cola presents 15th BITS Sports Festival (BSF) was held with Padma Bhushan Awardee and renowned Tennis Champion, Sania Mirza gracing the closing ceremony as the Chief Guest.
65. BITS Pilani Dubai students emerged as the overall champions for the 6th consecutive year in BSF 2017, winning Gold in Badminton (Girls), Cricket (Boys) Cricket (Girls), Throwball (Girls) and winning Silver in Badminton (Boys), Basketball (Girls), Chess (Boys), Table Tennis (Boys) Table Tennis (Girls) and Lawn Tennis (Girls).
66. During 23 - 25 November 2017, BITS Pilani Dubai Campus students Sarthak Sethi, Nilanchal Nilamadhab, Shivam Mishra, Mridul Bhandari, Rishabh Kaushik, Hrishikesh Uralath won second prize at RTA Dubai Taxi Hackathon. The Institute team won a cash prize of AED 15,000 for their project 'ClickRavel', which is a smart taxi order button POS, which can be used to instantly order a taxi by just a tap. There's no need of a mobile phone with the customer. It has smart authentication via the 3 line "MRZ" code on Passport and Emirates ID of the customer. It can be installed in places like hotels, restaurants, bus stops, metro stations etc.
67. On 26 November 2017, BITS Pilani, Dubai Campus received an award for Strongest Faculty Engagement in EXPO Live University Innovation Program for an impassioned participation from its faculty as academic evaluators.
68. On 26 November 2017, BITS Pilani, Dubai Campus celebrated a number of victories clinching 4 awards at the very prestigious EXPO Live University Innovation Programme. The event EXPO Live University Innovation Program-finale pitch, as part of Dubai Expo 2020 had 4 participating teams from BITS Pilani, Dubai Campus amongst the 21 teams from several other universities. All 4 participating teams from the Institute emerged victorious in this final round to qualify for the grant. Over 280 proposals were submitted to the EXPO Live University Innovation Program by students from 33 universities in the UAE. It is noteworthy that BITS Pilani, Dubai Campus had the maximum number of teams for the finale pitch of EXPO Live University Innovation Program. The winning teams from the Institute were: IORTA, Aurora, BITS EEE1 and Vim Pulveres.
69. On 28 and 29 November 2017, Department of Mechanical Engineering organized an International Conference on Recent Advances in Materials & Manufacturing Technologies (IMMT) 2017. Over 130 participants from academics and research background from over 40 universities including the IITs, all campuses of BITS Pilani in India, NUS Singapore, Masdar UAE and many more prestigious universities participated and presented their research papers.

70. In December 2017, BITS Pilani Dubai Team won the overall Trophy in the Skyline Carnival a cultural Festival organized by Skyline University College Dubai. The BITS Pilani team took part in Fashion Show, Music, Dance and Photography winning first prize in Fashion Show and Photography.
71. On 4 December 2017, Hult Prize 2018 challenge was held on the topic “Harnessing the power of energy to transform the lives of 10 million people”, intriguing the minds of young budding engineers, to find alternative energy solutions for this fast-paced era. The event was held in BITS Pilani, Dubai Campus, with 10 zealous and skilled teams in participation. Three teams, exhibited massive potential, and outperformed, the other participating teams with their prospective viewpoints and strategies: The first position was secured by Team Metamorph (Urvashi Satwani, Jaskanwar Singh, Tushar Agarwal and Somil Mathur). Team Perpetual Motion Squad (Jitesh Gurav, Rajdeep Ghosh, Sidharth Agarwal and Anuj Lihori) bagged the second position. The third place was won by Team AKNT (Nawaz Muallim, Tarun Krishna, Sohail Danish and Adhitya Natarajan).
72. On 12 December 2017, CIIE organized the Mantra Awards 2017 for BITSAA International, which received 19 applications to the 5 categories from the students. The jury comprising of 5 faculty members and 1 student member scrutinized the applications and interviewed the students.
73. On 22 December 2017, Dr R Gomathi Bhavani chaired the session on “Green Technology Track” at 2017 IEEE International Conference on Technological Advancements in Power and Energy (TAP Energy 2017), Amrita University, Kollam, Organized by IEEE Power and Energy Society, Kerala section.
74. One Chemical Engineering student was selected as Annual Report Sub-Committee Member and Middle East/Africa Sub-region Chair, ESC (Executive Student Committee) AIChE.
75. Prof A P Singh has been nominated as an expert in the Ministry of Environment, Forest and Climate Change and by Himachal Pradesh Public Service Commission, He was also nominated as an External Member of Advisory Committee for Special Assistance Programme(SAP) by the University Grant Commission, New Delhi.
76. Students from Flummoxed Quizzing Association of BITS Pilani, Dubai Campus proved their mettle by securing a top position in the GITEX quiz held in the year 2017.

**B4.1 SENIOR OFFICERS****DIRECTOR**

Prof. Dr. R. N. Saha

1. Dr. B. Muralidharan, Dean, Practice School
2. Dr. Priti Bajpayee, Dean, Student Welfare
3. Dr. R. Roop Kumar, Dean, Faculty Affairs
4. Dr. T. G. Thomas, Dean, Admissions
5. Dr. Anand Kumar, Associate Dean, Academic Resource Planning
6. Dr. A. Somasundaram, Associate Dean, Academic Registration & Counseling
7. Dr. K. Kumar, Associate Dean, Instructions
8. Dr. Neeru Sood, Associate Dean, Academic Research
9. Mr. Akshay Chutani, Assistant Registrar

(Details are given in Annexure B4-1)

**B4.2 ADMISSIONS**

Admissions were made twice during the year 2017, in January 2017 for the second semester 2016-2017 and in August 2017 for the first semester 2017-2018 (Details are given in Annexure B4-2). The admission summary is given below:

	<b>Integrated First Degree Programmes</b>	<b>Higher Degree Programmes</b>	<b>Doctoral Programmes (Ph.D.)</b>	<b>Total</b>
Second Semester 2016-2017	08(03)	13(05)	01 (00)	22 (08)
First Semester 2017-2018	300 (112)	17 (08)	04 (01)	321 (121)

Number of female students is given in brackets.

**B4.3 DUAL DEGREES AND TRANSFER**

## (a) Dual Degree

During the academic year 2016-2017, no student was permitted to work concurrently for two first degrees under Dual degree Scheme. (Details are given in Annexure B4-3).

## (b) Transfer

During the academic year 2016-2017, 11 students were permitted to transfer within First degree. (Details are given in Annexure B4-3).

**B4.4 ACADEMIC CALENDAR**

During the Calendar year 2017, the second semester 2016-2017 started on 22.01.2017 and ended on 01.06.2017. The first semester 2017-2018 started on 20.08.2017 and ended on 28.12.2017. The second semester 2016-2017 PS II started on 22.01.2017 and ended on 02.07.2017. The Summer Term 2016-17 started on 04.06.2017 and ended on 30.07.2017. Also PS I started on 04.06.2017 and ended on 30.07.2017. The first semester 2017-2018 PS II started on 01.08.2017 and will end on 04.01.2018.

	<b>Starting Date</b>	<b>Ending Date</b>	<b>Number of Instruction days</b>
Second Semester 2016-2017	22/01/2017	01/06/2017	82
Summer term 2016-2017	04/06/2017	30/07/2017	40
First Semester 2017-2018	20/08/2017	28/12/2017	80

**B4.5 REGISTRATION OF STUDENTS**

The registration for the second semester 2016-17 was held on 22nd January 2017 and that of the first semester 2017-18 was held on 20<sup>th</sup> August 2017. In on-campus programmes, 1581(556) students were registered in the first semester 2017-2018. Details of registration for the first semester 2017-2018 are given in Annexure B4-4.

<b>Semester in Academic Year</b>	<b>Number of students registered</b>
Second Semester 2016-2017	1644(563)
Summer Term 2016-2017	459(161)
First Semester 2017-2018	1581(556)

**B4.6 ACADEMIC COUNSELING BOARD (ACB)**

During the year 2017, the Academic Counseling Board estimated the extent to which students under its purview fell short of the minimum academic performance, drew up a time-frame within which afflictions were to be removed, determined the package of courses for their registration in each semester and laid down the necessary stipulations for achieving intermediate targets. It further monitored their progress and applied necessary mid-course corrections, wherever required. The statistical summary of the number of On-campus students under its purview during the year is given below:

	I Semester 2016- 2017	II Semester 2016- 2017
1. Total number of students under the purview of ACB at the beginning of the semester	112	93
2. No. of students declared out of its purview at the end of the semester	41	16
3. No. of students who left the institute during the semester	10	2
4. No. of students who came under the purview of ACB at the end of the semester	32	21
5. Total No. of students under the purview of ACB during the next semester	93	96

**B4.6.1 Academic Counseling Cell (ACC)**

Academic Counseling Cell (ACC) consisting of faculty and Student Counselors facilitates counseling services for students' who need counseling with prior appointment with a counselor. Counseling services are confidential services to the students. Also if necessary, a Professional Counselor (PC) is arranged.

**B4.7 AWARD OF DEGREES AND MEDALS****B4.7.1 Award of Degrees**

During the year 2017, 383 degrees were awarded as given below: Statistical details of these degrees are given in Annexure B4-5, B4-6 and B4-7.

Award	Number of Degrees Awarded
80 <sup>th</sup> Award (vide Board of Governors meeting – 01 <sup>st</sup> March 2017)	25(6)
81 <sup>th</sup> Award (vide Board of Governors meeting - 4 <sup>th</sup> July 2017)	358(119)
<b>Total</b>	<b>383(125)</b>

**B4. 7.2 Award of Medals****1. Institute Medals for Academic Year 2016-2017**

List of students for award of medals from amongst the students graduated at the end of first semester, second semester and summer term 2016- 2017.

S.No.	ID.No.	Name	Sex	CGPA Obtained	Position Obtained	Type of Medal to be Awarded
<b>Integrated First Degree Programmes (No. of students: 368)</b>						
1.	2013A7TS061U	KHOJA ZAIDALI HAIDERALI	M	9.96	FIRST	GOLD
2.	2013A7TS162U	AMARTYA DAS SHARMA	M	9.94	SECOND	SILVER
3.	2013A3PS076U	LAUREN ALISHA FERNANDES	F	9.93	THIRD	BRONZE
4.	2013AAPS049U	AAMIR JAMAL AHSAN JAMAL	M	9.93	THIRD	BRONZE

**2. Director's Medals for the Best All Round Achievement**

In addition to the Institute Medals, at Dubai Campus Director's medals are awarded to one male and one female student for the best all-round achievement, in every graduating batch. For the 2017 graduating batch, the Director's medals were awarded to the following students:

S.No.	ID. No.	NAME	SEX
1.	2013AAPS266U	RAMBHIA AAKASH NITIN	M
2.	2013A9PS243U	ASHVRIYA	F



### 3. DIAC Award for the Best Academic Performance

The "DIAC Award for the Best Academic Performance" for the universities located in DIAC (Dubai International Academic City) was given to the following students for the year 2016:

S. No.	ID. No.	NAME	SEX	CGPA	DIVISION
<b>First Degree</b>					
1.	2013A7TS061U	KHOJA ZAIDALI HAIDERALI	M	9.96	DISTINCTION
<b>Higher Degree</b>					
1.	2015H112010U	SMITHA S	F	9.73	DISTINCTION

#### B4.8 CAMPUS INTERVIEWS AND PLACEMENT

Efforts were made this year to have more and more industries visit the campus for placement interviews. Despite economic slowdown in Dubai, 85 organisations conducted campus interview and made offers to students (Details are given in Annexure B4-8).

Number of companies which conducted campus interviews	85
No. of students interviewed	172
No. of offers made	86

#### Employed / Higher Studies of Graduates during the Year 2017

Programme	Number Graduated	Employed/ Higher Studies	Unemployed	Those neither informed nor sought help in placement
<b>On-Campus Programme</b>				
<b>B.E. (Hons.)</b>				
Biotechnology	12	6	3	3
Chemical	26	14	5	7
Computer Science	102	62	25	15
Electronics & Communication	63	31	14	18
Electrical & Electronics	46	27	11	8
Electronics & Instrumentation	10	3	5	2
Mechanical	95	52	19	24
Total	354	195	82	77

#### B4.9 COURSES OFFERED

The number of courses offered during the year 2017 is as follows:

	Number of courses offered
Second Semester 2016- 2017	208
Summer Term 2016 - 2017	10
First Semester 2017 – 2018	228

##### B4.9.1 Project-oriented Courses

During this year 2017, many students worked on time-bound projects of various types. The information about the projects done and the names of the students who worked on the projects and the names of the instructors are given in Annexure B4-9. A statistical summary is given below:

S.No.	Course No.	Course Title	No. of Students	
			II Sem. 2016-17	I Sem. 2017-18
1.	BIOT F266	STUDY PROJECT	10	5
2.	BIOT F366	LABORATORY PROJECT	4	16
3.	BIOT F367	LABORATORY PROJECT	3	5
4.	BIOT F376	DESIGN PROJECT	3	1
5.	BIOT F377	DESIGN PROJECT	-	-

S.No.	Course No.	Course Title	No. of Students	
			II Sem. 2016-17	I Sem. 2017-18
6.	BIOT F491	SPECIAL PROJECT	2	-
7.	CHE F266	STUDY PROJECT	1	1
8.	CHE F366	LABORATORY PROJECT	4	2
9.	CHE F367	LABORATORY PROJECT	1	-
10.	CHE F376	DESIGN PROJECT	10	5
11.	CHE F377	DESIGN PROJECT	-	3
12.	CHEM F266	STUDY PROJECT	4	3
13.	CHEM F366	LABORATORY PROJECT	4	2
14.	CHEM F367	LABORATORY PROJECT	1	1
15.	CHEM F376	DESIGN PROJECT	1	1
16.	CS F266	STUDY PROJECT	10	8
17.	CS F366	LABORATORY PROJECT	4	3
18.	CS F367	LABORATORY PROJECT	-	1
19.	CS F376	DESIGN PROJECT	26	36
20.	CS F377	DESIGN PROJECT	11	8
21.	CS F491	SPECIAL PROJECT	9	2
22.	DE G522	DESIGN PROJECT	-	-
23.	ECE F266	STUDY PROJECT	5	4
24.	ECE F366	LABORATORY PROJECT	4	-
25.	ECE F367	LABORATORY PROJECT	-	-
26.	ECE F376	DESIGN PROJECT	8	7
27.	ECE F377	DESIGN PROJECT	-	6
28.	ECE F491	SPECIAL PROJECTS	1	1
29.	EEE F266	STUDY PROJECT	7	4
30.	EEE F366	LABORATORY PROJECT	1	3
31.	EEE F367	LABORATORY PROJECT	-	-
32.	EEE F376	DESIGN PROJECT	14	21
33.	EEE F377	DESIGN PROJECT	12	4
34.	EEE F491	SPECIAL PROJECT	1	1
35.	GS F376	DESIGN PROJECT	-	1
36.	HSS F266	STUDY PROJECT	15	17
37.	INSTR F266	STUDY PROJECT	1	2
38.	INSTR F366	LABORATORY PROJECT	-	1
39.	INSTR F376	DESIGN PROJECT	4	2
40.	INSTR F377	DESIGN PROJECT	1	3
41.	INSTR F491	SPECIAL PROJECT	1	2
42.	MATH F266	STUDY PROJECT	10	15
43.	MATH F376	DESIGN PROJECT	4	8
44.	MATH F377	DESIGN PROJECT	1	-
45.	MATH F491	SPECIAL PROJECT	-	-
46.	ME F266	STUDY PROJECT	25	13
47.	ME F366	LABORATORY PROJECT	13	25
48.	ME F367	LABORATORY PROJECT	6	3

S.No.	Course No.	Course Title	No. of Students	
			II Sem. 2016-17	I Sem. 2017-18
49.	ME F376	DESIGN PROJECT	24	33
50.	ME F377	DESIGN PROJECT	1	11
51.	ME F491	SPECIAL PROJECT	3	3
52.	PHY F366	LABORATORY PROJECT	1	-
53.	PHY F376	DESIGN PROJECT	1	-

#### B4.9.2 New courses

During the year 2017, 29 new courses were offered.

S.No.	Compcode	Course No.	Course Name	Enrolled
1	1781	BITS F211	INTRODUCTION TO IPR	20
2	1892	BITS F214	SCIENCE TECH & MODERNITY	62
3	1237	BITS F313	MULTICRI DE MAK IN E & M	5
4	1893	BITS F399	HUMANISTIC THEORY OF S & T	6
5	547	BITS G513	STUDY IN ADVANCED TOPICS	1
6	1073	CE F211	MECHNICS OF SOLIDS	18
7	1074	CE F212	TRANSPORT PHENOMENA	18
8	1075	CE F213	SURVEYING	17
9	1076	CE F214	CONSTRUCTION MATERIALS	17
10	1652	CE F266	STUDY PROJECT	7
11	1215	CE F323	INTRO TO ENVIRN ENGG	64
12	1236	CE F423	GREEN BUILD & ENER CONSE	17
13	2178	CHE F422	PETROLEUM REFINING TECHNOLOGY	30
14	2262	CHE F497	ATOMIC & MOLECULAR SIMULATIONS	33
15	847	CHE G522	POLYMER TECHNOLOGY	13
16	1550	ECON F411	PROJECT APPRAISAL	6
17	1566	ECON F412	SECUR ANAL & PORTFOL MGT	20
18	1537	FIN F242	INTRO TO FINANCIAL MATH	37
19	1171	GS F233	PUBLIC POLICY	79
20	1172	GS F234	DEVELOPMENT ECONOMICS	80
21	1137	GS F322	CRITI ANAL OF LIT & CINE	99
22	1599	HSS F334	SRIMAD BHAGAVAD GITA	83
23	1835	HSS F350	HUM RIGHTS HIST THEO PRA	75
24	2260	HSS N203T	BASIC ARABIC	14
25	1277	ME F415	GAS DYNAMICS	8
26	1280	ME F418	ROCKET & SPACECRAFT PROP	12
27	1810	ME F423	MICRO FLUIDICS & ITS APP	8
28	1286	ME F452	COMPOSITE MATERIAL & DES	84
29	1931	MST F331	MATERIALS CHARACTERIZATION	4

#### B4.10 INSTITUTIONAL ACTIVITIES

##### B4.10.1 Convocation 2017

Amidst great pride and honor, 382 students of the 14th batch of BITS Pilani, Dubai Campus, were awarded Engineering Degrees. The convocation ceremony was conducted in BITS Pilani, Dubai Campus located in the Academic City. The Chief Guest for the occasion was Mr Navdeep Suri, the Ambassador of India to UAE.

During this prestigious event, the degrees were conferred on 382 Graduates who graduated with Ph.D., Higher Degree and First Degree in the following disciplines of engineering: Chemical Engineering, Electrical and Electronics, Mechanical Engineering, Computer Science, Electronics and Instrumentation Engineering,

Electronics and Communication, Biotechnology, Design Engineering, Microelectronics, Software and M.B.A. Awards for academic excellence and all-round achievement were awarded to the deserving students.

H.E. Navdeep Suri, in his address, congratulated the graduates and emphasized their good fortune in receiving top quality education which has broadened their horizons in terms of career prospects. He highlighted the strong economic and business relations between India and UAE, which would be instrumental in attracting students to become young entrepreneurs. He motivated the graduates to look at joining Indian Foreign Service and consequently contribute towards developing the country's foreign policy.

Dr. Kumar Mangalam Birla, Chancellor, BITS Pilani, in his remote address stressed that youngsters are increasingly thinking afresh and becoming innovative disruptors. A balance between success and peace of mind should be maintained both at the professional and personal front.

Vice Chancellor, Prof. Souvik Bhattacharyya, congratulated the achievement of the graduating students. He highlighted that this year BITS Pilani has been ranked in the World University ranking of both Times Higher Education and QS - the most eminent international Rankings today. The Entrepreneurship Incubation Centre caters to the entrepreneurial spirits of our students in the UAE, which is a hub for entrepreneurial activity. The Expo 2020 has paved the way for a large number of infrastructure projects in Dubai. Keeping this in mind, the Civil Engineering branch was started last year.

Prof. Dr. R.N. Saha, Director BITS Pilani, Dubai Campus, congratulated both the graduating students and their parents for this remarkable achievement. During his report, he revealed the growth plan of expanding program offerings, research and community outreach activities, faculty development and student placement. He emphasized the growing R&D activity in the form of MOUs, funded research, international conferences and so on.

He put special emphasis on the Practice School Programme offered by BITS Pilani and how it not only gave the students work experience but helped them get placed into the companies they interned in. He elaborated that this year 70 companies participated in Campus Placement Program.

The ceremony concluded solemnly, leaving the students in mixed emotions as they bid farewell to their Alma Mater and step ahead into their glorious future.

#### **B4.10.2 Workshops and Conferences**

##### **Following workshops were conducted by various departments during the Academic Year 2016-2017**

1. Department of Mechanical Engineering organised Two-Days Workshop on "Industrial Applications of Decision Making Methods and Optimization Techniques" during 17-18 November 2017. Prof R V Rao coordinated this workshop and totally there were 34 participants from various local Industries and universities i.e., DEWA, RTA, Heriot Watt university, University of Sharjah, King Abdul Aziz University, Jeddah, Saudi Arabia. Faculty and research scholars from all departments also actively participated in this workshop.
2. Department of Mechanical Engineering, organized an International conference on Recent Advances in Materials & Manufacturing Technologies (IMMT) 2017 on 28th and 29th November 2017. Over 130 participants from academics and research background from over 40 universities including the IITs, universities, all campuses of BITS Pilani in India, NUS Singapore, Masdar UAE and many more prestigious universities participated and presented their research papers.
3. Dr. Mary Lourde in association with CETA, UAE organised a national level quiz competition in the UAE-CETA KnowledgeQuest 2017 for high school children at BPDC campus. Around 800 people participated in the event and it was a big success.
4. On 28 August 2017, a workshop on Teaching Effectiveness was organized by the Dept of HSS in collaboration with Teaching Learning Centre and was conducted by Dr Tamali Bhattacharyya, Project Manager, IIT Kharagpur

#### **B4.11 FACULTY PROFILE**

There are 95 Faculty/ Academic staffs in BITS Pilani, Dubai Campus at the end of the first semester 2017-2018. Out of these, 73 are Lecturer and above, and 22 are Lab Instructors and Technical Assistants. Out of these 73 teaching faculty, 69 are Ph.D. holders with several years of teaching experience and 4 have appropriate Master's Degrees with several years of teaching experience. There are 1 Senior Professor, 17 Professors, 13 Associate Professors, 37 Assistant Professors, 4 Lecturers and 1 Visiting Faculty. There is a constant endeavor to add to the strength of the faculty appropriate to the requirements.

During the year, the teacher – student ratio was 1:22. The faculty has been intensely involved in all the facets of BITS, namely, teaching, research, Practice School, educational administration and institutional development.

**Some Faculty Statistics**

(i)	Percentage of teaching staff (Lecturer & above) possessing Ph. D / made good progress towards Ph.D.	<b>96</b>
(ii)	Percentage of teaching staff working for Ph.D.	<b>4</b>
(iii)	Percentage of teaching staff who participated in Practice School Programme in the year	<b>72</b>

**Faculty Development Programme****Technical contributions from faculty and students**

There were a total of 98 contributions which include 50 in various international Journals and 41 Research Publications 7 Book Chapters publications The complete list of research contributions made by the faculty, staff and students is given in Annexures B4-11 and B4-12.

**Some Note-worthy Achievements**

1. Dr. Mary Lourde in association with CETA, UAE organised a national level quiz competition in the UAE-CETA Knowledge Quest 2017 for high school children at BPDC campus. Around 800 people participated in the event and it was a big success.
2. Team IORTA participated in the competition "UAE Drones for Good Award 2017" and reached the finals in which more than 500 teams participated internationally. They came 6th position in the National Category.
3. BITS Pilani, Dubai Campus triumphed at EXPO Live University Innovation Programme with 4 teams (IORTA, Aurora, BITS EEE1 and Vim Pulveres) participating in the final rounds to qualify for the grant
4. Dr B G Prakash Kumar acted as a session Chair in 2nd Student Research Colloquium on "Advances in Engineering & IT" (AEIT-2017) on 3rd & 4th May, 2017, Manipal Univ., Dubai Campus
5. Three interdisciplinary project proposals have been submitted by faculty under the Innovation Impact Grant Programme, Expo Live 2020.
6. Chemical Engineering Student submissions were accepted for the DEWA (Dubai Electricity and Water Authority) Conservation Awards.
7. Zaman SF, Khalil-Ur-Rahman, Ismail S, Kumar BGP, Sood S, Gokhale T and Subramanian R, Optimization of Growth Conditions For Biomass Production And Characterization For Bioenergy Applications , Current Trends in Biotechnology-CTBT 2017, 12-13, April 2017, Manipal University Dubai. (poster presentation), Second Prize
8. Dr. Shazi Shah Jabeen was invited by EXPO Live team to review 10 research project proposals submitted to its University Innovation Program by the student teams of various universities in the UAE. BITS Pilani, Dubai Campus received an award for Strongest Faculty Engagement in EXPO Live University Innovation Program.
9. Microsoft Office Specialist - UAE Championship was organized by FAME. (Financial Accounting & Management Education Training Institute, Dubai). 10 universities and many schools in UAE took part in the competition which had a series of rounds during January to May 2017. Microsoft Office Specialist Championship- UAE Finals was held on May 20, 2017. The following students made BPDC proud:
10. Mr Rewant Verma , 3rd Year CS student, Runner up of MS Power Point 2013,
11. Ms Alina Zaidi, 3rd Year CS student Winner of MS Excel 2013,
12. Ms Sabiha Shaik, 1st Year CS student, Winner of MS Word 2013.
13. They took home laptops, individual trophies and also rolling trophies for college.
14. BITS Pilani Dubai Campus become the top four winning teams in the Hackathon Challenge 2017. Over 150 students from 24 teams from 30 universities in the UAE took part in the event, which supports the directives of the wise leadership to encourage and spread a culture of innovation amongst young people, and promote innovation. On 5th May 2017, Dubai Electricity and Water Authority (DEWA) has organized an event to honour the winning teams in the Hackathon Challenge

**B4.12 SPECIAL LECTURES, INVITED LECTURES**

Number of eminent scholars and distinguished alumni visited the campus and delivered lectures. Details are given in Annexure B4-10

**B4.13 INTERNATIONAL / NATIONAL CONFERENCES / WORKSHOPS**

Details are given above in **B4.10.2**.

**B4.13.1 Invited Lectures/Workshop/Talks by Faculty:**

The following faculty participated in Invited Lectures / Workshop / Talks / Panel Discussions / Chairing the session in International Conferences held during the year:

1. Dr. A.B.Chattopadhyay delivered Key-note address in the International Conference on “Recent Trends in Renewable Energy and Smart Grids(ICRRESG-17)”, organized by College of Engineering and Technology, MODY University ,Laxmangarh ,Rajasthan ,India on 24-25 February 2017.
2. Dr. A.B.Chattopadhyay delivered a special lecture as a Guest of honor in the International workshop on “MATLAB Application in Electrical Engineering” dated 15 July 2017 , in Millia Institute of Technology, Purnea, Bihar , India-854301.
3. Dr. Vincent Shantha Kumar delivered Guest lecture on Bio-corrosion of metallic glasses in Seoul National University, Seoul, South Korea in Jan 2017.
4. Dr. Vincent Shantha Kumar delivered Invited Talk on Bio-corrosion studies on Zr based metallic glasses in International Symposium for Advanced Materials Research (ISAMR 2017), 18th -21st August 2017, Sun Moon Lake. Taiwan

A consolidated list of BPDC faculty who participated in International and National Workshops, along with the details is given in Annexure B4-11 and B4-12.

**B4.14 DEPARTMENT-WISE REPORTS****B4.14.1 Department: Chemical Engineering**

Number of faculty members (as on 31<sup>st</sup> December 2017)

<b>Senior Professors, Professors</b>	-
<b>Associate Professors</b>	01
<b>Assistant Professors</b>	04
<b>Lecturers</b>	-
<b>Visiting Faculty</b>	-

**Head of the Department:** Dr. Nishant Pandya

**Contact details:** nishant@dubai.bits-pilani.ac.in

**Number of Ph.D Scholars:** 01 (Part time)

**Ph.D. Thesis Submitted during the year:** NIL

**A. Sponsored Research activities:****1. Ongoing projects:**

Collaborative research project approved under the Research Initiation Grant of BITS Pilani. Topic: Development of Computer Aided Product Design Tool for Mixtures. **PI: Dr. Nishant Pandya**, BITS Pilani, Dubai Campus, Co-I: Prof. (Dr.) Vincent Gerbaud, Director – Research, Université de Toulouse, INP, CNRS, LGC, France. Duration 2 years starting from 13.10.2016. Budget approved: AED 16,000.

Collaborative research project approved under the Seed Grant of BITS Pilani. Topic: “Optimization of Selected High Yield Grass Species for Biomass and Bioenergy Applications Using Saline and Recycled Wastewater”, sponsored by BPDC; Value: AED 120,000. ICBA undertaken AED 125,000, worth expenses at ICBA for field studies); Prof. Babu, Department of Forage Crops, Tamil Nadu Agricultural University (TNAU) provide data and samples for fresh water based field studies and support; Faculty members: Dr. S. Ramachandran, PI, BPDC, Dr. Shoaib Ismail, Co-PI, ICBA, Dr. Neeru Sood, Co-PI, BPDC, Dr. Trupti Gokhale, Co-PI, BPDC, **Dr. B.G. Prakash Kumar, Co-PI**, BPDC, Dr. C. Babu, Co-PI, TNAU, Mr. Khalil Ur Rahman, Co-PI, ICBA.

2. Projects sanctioned during the year: NIL

3. Projects completed this year: NIL

**B. Publications:**

1. B B Gulyani, A Fathima, Introducing Ensemble Methods to Predict the Performance of Waste Water Treatment Plants (WWTP), International Journal of Environmental Science and Development, Volume 8 Number 7, 501-506, July 2017.

2. B B Gulyani, B. G. Prakash Kumar, A Fathima, Bagging Ensemble Model for Prediction of Dead Oil Viscosity International Journal of Chemical Engineering and Applications, Volume 8 Number 2, 102-105, April 2017
3. V. Gerbaud, M. Teles Dos Santos, N. Pandya, J. M. Aubry, Computer aided framework for designing bio-based commodity molecules with enhanced properties., Chemical Engineering Science, Volume 159, 23 February 2017.

#### C. Conferences attended/papers presented:

1. Shaikh Faisal Zaman, Khalil-Ur-Rahman, Shoaib Ismail, Prakash Kumar B G, Neeru Sood, Trupti Gokhale And Ramachandran S, "Optimization Of Growth Conditions For Biomass Production And Characterization For Bioenergy Applications" Current Trends in Biotechnology 2017 conference held in Manipal University Dubai on April 12-13, 2017. (Awarded the 3rd place overall for the poster presentation competition).
2. Subramanian S C A, Akshai A, Ramachandran S, Prakash Kumar B G\*, " Optimization of macronutrient kinetics for biomass production in *Nostoc calcicola*", International Conference on Recent Advances in Material & Manufacturing Technologies (IMMT 2017) Nov 28-29,2017, BPDC, Dubai.

#### D. Books Published/Edited during the year:

1. Book Chapter: Rajib Ghosh Chaudhuri, Chapter 4 - Metal/semiconductor core/shell nanostructures for environmental remediation in *Book Metal Semiconductor Core-Shell Nanostructures for Energy and Environmental Applications - A volume in Micro and Nano Technologies*, edited by Raju Kumar Gupta and Mrinmoy Misra, Elsevier, May 2017

#### E. Conferences, seminars & workshops conducted: NIL

#### F. Invited Talks given by BITS faculty: NIL

#### G. Invited talks arranged in the department:

1. 16<sup>th</sup> April 2017, Learning from Accidents, Mr. Pradeep Joshi, CEO, AL Green Circle Environment Consultants, Sharjah, UAE.
2. 16<sup>th</sup> April 2017, Environmental Management Systems for Sustainable Development, Dr. S. D. Manjare, Associate Professor, Department of Chemical Engineering, BITS Pilani, Goa Campus, India.
3. 25<sup>th</sup> to 27<sup>th</sup> April 2017, Manufacturing processes in Fertilizer industries, Mr. Chandra P. Srivastava, MD & Principal Consultant, CP Consultancy Services, Hon. Professor, Dept. of Chem. Engg., IIT, BHU, Varanasi, India.
4. 22<sup>nd</sup> November 2017, Safety Engineering Services at Monaco Engineering Solutions, Mr. Albert Kobus, Operations Manager and Mr. Sak Chowdhury, Senior Risk, Reliability & Safety Engineer, Monaco Engineering Solutions, Dubai, UAE.

#### H. Awards and recognitions won by faculty and students:

1. Dr B G Prakash Kumar acted as a session Chair in 2<sup>nd</sup> Student Research Colloquium on "*Advances in Engineering & IT*" (AEIT-2017) on 3<sup>rd</sup> & 4<sup>th</sup> May, 2017, Manipal Univ., Dubai Campus
2. Dr. Nishant Pandya invited as member of International Advisory Committee of International Conference on "*Paradigm shift in Chemical engineering education, processes and technology*", IEI, during September 16-17, 2017, Ahmedabad, Gujarat, India.
3. Three interdisciplinary project proposals have been submitted by faculty under the Innovation Impact Grant Programme, Expo Live 2020.
4. Two teams of students (out of three teams) ranked 2<sup>nd</sup> and 3<sup>rd</sup> in the Case Study competition at two-day Inter-collegiate seminar on *Energy Reserves and Resources (ERR)* organized by American University of Sharjah during April 21-22, 2017.
5. Two teams of students were selected for the final round of the Abu Dhabi Undergraduate Research Competition (URC) held in May 2017.
6. Student submissions were accepted for the DEWA (Dubai Electricity and Water Authority) Conservation Awards.
7. One student has been selected as Annual Report Sub-Committee Member and Middle East /Africa Sub-region Chair, ESC (Executive Student Committee) AIChE.
8. One interdisciplinary project has been selected under University Innovation Programme, Expo Live 2020 (Prize of AED 25,000).
9. Graduated Students of batch 2013-2017 have been selected by highly reputed institute/university for higher studies: Johns Hopkins University, USA; Imperial College London, UK; DELFT, Amsterdam, Netherlands;

Columbia University in the City of New York, USA; Heriot Watt, Dubai Campus, UAE; University of Melbourne, Australia; University of Pennsylvania, USA.

#### **I. Faculty Development, International Collaboration & Industry Immersion:**

Industry interaction and visit to Tiger Steel Industry, Abu Dhabi by faculty for opportunities of collaboration.

#### **J. Significant new equipments/experimental facility added during the year:**

The following equipments were procured by the Chemical Engineering Department:

Tensiometer (Dynamic Contact Angle), Conductivity+TDS online meter, Abbe Refractometer, Hot Oil Bath, Jacketed glass reactor, Visible spectrophotometer, Vortex mixer, Gas flow meters for N<sub>2</sub> and CO<sub>2</sub>, Precision Digital weighing balances, Calorimeter cell, Bath Sonicator, Xenon lamp, Tube furnace, Centrifuge, COD measurement device, Hot plate with magnetic stirrer and with external temperature probe, Refrigerant air Dryer for compressor with Pre Filter 3M, Jar test apparatus.

#### **K. Departmental Association/Club activities:**

AICHE (American Institute of Chemical Engineers) Students' chapter BPDC. ChESA – Chemical Engineering Students' Association

1. AIChE Students' chapter BPDC and ChESA has organized a workshop on MATLAB for beginners, 25<sup>th</sup> March 2017
2. A Hands-on Experience Workshop was organized by the department on a process safety modelling software ALOHA (Area Locations of Hazardous Atmosphere), 30<sup>th</sup> April 2017.
3. AIChE Students' chapter BPDC and ChESA organized an orientation program for new Batch of Chemical Engineering Students 2017-2021 to introduce various activities of the associations, September 2017.
4. AIChE Students' chapter BPDC promoted the Virtual Career Fair 2017 organized by AIChE, 14<sup>th</sup> September 2017
5. AIChE Students' chapter BPDC organized an Introductory Workshop on the software MATLAB, 16<sup>th</sup> September 2017.
6. AIChE Students' chapter BPDC organized an industrial trip to Al Tajir Glass Industries LLC, Dubai, 7<sup>th</sup> October 2017
7. ChESA Organized a Six Sigma Workshop, 12<sup>th</sup> October 2017.
8. ChESA organized a competition The Big Split (during TechnoFest 2017), 25<sup>th</sup> October 2017.
9. AIChE Students' chapter BPDC initiated Pen-Pal System with Sister Chapter BYU, November 2017.
10. ChESA has organized an industrial trip to Star Cement Co. LLC, RAK, 4<sup>th</sup> November 2017.
11. LinkedIn Group created for all the Chemical Engineering Graduates and Students of BITS Pilani (all campuses) - Initiative by AIChE BPDC Student Chapter along with an Alumni
12. Students participated in the SEF (Sustainable Energy Forum, AIChE) Infographics Design Competition 2017.
13. Joint Interactive Session organized on "The Role of Forensic Chemistry in Regulating use of Prohibited Substances in Sports" by Mr. Peter Albert, Chief Analyst at Equine Forensic Unit, CVRL.



**B4.14.2 Department: Civil Engineering**

Number of faculty members (as on 31st December 2017)

<b>Senior Professors, Professors</b>	00
<b>Associate Professors</b>	00
<b>Assistant Professors</b>	02
<b>Lecturers</b>	01
<b>Visiting Faculty</b>	00
<b>Adjunct Professor</b>	00

**Head of the Department:** Dr. M.V.N, SANKARAM (Officiating)**Contact details:** [sankaram@dubai.bits-pilani.ac.in](mailto:sankaram@dubai.bits-pilani.ac.in)**Ph.D. Thesis Submitted during the year:** NIL**Number of Ph.D Scholars:** NIL**Ph.D. Proposal Submitted during the year:** NIL**A. Sponsored Research activities:** NIL**B. Publications:**

1. Srinivas, R., **Singh, A. P.**, and Sharma, R., "A scenario based impact assessment of trace metals on ecosystem of river Ganges using multivariate analysis coupled with fuzzy decision-making approach", International Journal of Water Resources Management, DOI: 10.1007/s11269-017-1738-y.
2. Srinivas, R. and **Singh, A. P.**, "Impact assessment of industrial wastewater discharge in a river basin using interval-valued fuzzy group decision-making and spatial approach", International Journal of Environment, Development and Sustainability, DOI: 10.1007/s10668-017-9994-9.
3. **Singh, A. P.**, Chakrabarti S., and Kumar, S. and Singh, A., "Assessment of air quality in Haora river basin using fuzzy multiple-attribute decision making techniques", Environmental Monitoring and Assessment, DOI: 10.1007/s10661-017-6075-3.

**C. Conferences attended/papers presented:**

1. Dr. Meghana Charde presented a paper titled The State of our Schools in Dubai at EGBC (Emirates Green Building Council) roundtable discussion on 19, November 2017.

**D. Books Published/Edited during the year:** NIL**E. Conferences, seminars & workshops conducted:** NIL**F. Invited Talks given by faculty:** NIL**G. Invited talks / technical visits arranged by the department:**

S.No	Name	Topic	Date
1	Mr. Hemant Gor, Sr. Engineer – Civil & Structural, PETROFAC Intl LLC, Sharjah	Tall Building Engineering	September 14,2017
2	Tamim Emad Youssef, Technical Sales Manager/Applications Services, JK CEMENT WORKS (FZC).	The process of manufacturing of white cement, quality control, logistics and packaging facilities	October 12, 2017

**H. Awards and recognitions won by faculty and students:**

Prof A P Singh has been nominated as an expert in the Ministry of Environment, Forest and Climate Change and by Himachal Pradesh Public Service Commission, He was also nominated as an External Member of Advisory Committee for Special Assistance Programme (SAP) by the University Grant Commission, New Delhi.

**I. Faculty Development, International Collaboration & Industry Immersion;** NIL**J. Significant new equipments/experimental facility added during the year:**

1. CBR Testing Machine with accessories
2. Motorised Sieve Shaker

3. Shear Testing Machine
4. Ductilometer
5. Specific Gravity Frame
6. Water Bath

#### **K. Departmental Association/Club activities:**

1. BPDC Civil Engineering Student Association (SKYLINE) was inaugurated on 14-09-17. The Department of Civil Engineering in collaboration with Practic School Division organised an inaugural talk by Mr. Hemant Gor, Sr. Engineer – Civil & Structural, PETROFAC Intl LLC, Sharjah. In his inaugural talk, Mr Hemant gave a lecture on Tall Building Engineering and also mentioned various opportunities and career growth for Civil Engineering students and also gave various tips on project works.
2. SKYLINE arranged a guest lecture on 12-10-17 by **Tamim Emad Youssef**, Technical Sales Manager/Applications Services handling the regions of GCC, Africa, South America and South East Asia with JK CEMENT WORKS (FZC). In his presentation he covered a general idea about the industry of cement in GCC. A brief about JKCEMENT and its international activities. The process of manufacturing of white cement, quality control, logistics and packaging facilities will be discussed. The range of products supplied in the core markets with a focus on the standard specifications, practices and test methods to meet international requirements. Specific focus was given to the applications of the white cement including the dry mix, precast, GRC and flooring.
3. SKYLINE also organised a Site visit to Construction site under Crompton International Contracting LLC at Al Khawaneej on 27/09/17 and had a very good practical exposure to construction details of various buildings which are under construction.

#### **B4.14.3 Department: Electrical & Electronics Engineering**

Number of faculty members (as on 31st December 2017)

<b>Senior Professors, Professors</b>	03
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	09
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00
<b>Adjunct Professor</b>	00

**Head of the Department:** Dr. A.R.ABDUL RAJAK

**Contact details:** abdulrazak@dubai.bits-pilani.ac.in

**Ph.D. Thesis Submitted during the year:** 2

**Number of Ph.D Scholars:** 11 (8 Full Time, 2 Part Time and 1 off campus)

**Ph.D. Proposal Submitted during the year:** 0

#### **A. Sponsored Research activities:**

1. **Ongoing projects:** Inter Disciplinary Projects  
**Seed Grant:** Dr. V.Kalaichelvi (Co-PI) & Dr.Vilas (Co-PI)  
**Title:** Design and Development of Closed Loop Control System to improve the Process Capability of Incremental Sheet Metal Forming
2. **On-going Consultancy Project with Star Cements**
  - i. **Project Incharge:** Dr.V.Kalaichelvi (Co-PI)  
**Title:** Development of Computer Application for Prediction of Cement Strength
  - ii. **Project Incharge:** Dr.V.Kalaichelvi(Co-PI)  
**Title:** Development of Mobile Application for Raw mix cost optimization
  - iii. **Project Incharge:** Dr. Shazia Hasan; Dr. Mary Lourde(Co-PI)  
**Title:** Harmonic Mitigation Techniques for Cement Industry.
3. Faculty, staff and students made and delivered a prototype of a timer to industry (Au Pure). Dr Anand Kumar led this team.

4. **Projects sanctioned during the year:** Nil
5. **Projects completed this year:** NIL

#### B. Publications:

1. Reshma Babu and R. Swarnalatha, 2017. Comparison of Different Tuning Methods for pH Neutralization in Textile Industry. *Journal of Applied Sciences*, 17 (3): 142-147.
2. Arjun Raja and R Swarnalatha, 2017 "Smart Traffic Signal by Digital Image Processing using PCA Algorithm and Edge Detection Techniques" *Journal of Engineering and Applied Sciences*, 12 (22) : 6076-6082
3. Ajay Kamath and R Swarnalatha "Intelligent Parking System using Circle Hough Transform" *Journal of Engineering and Applied Sciences*. Accepted in Oct 2017.
4. Vishank Bhatia, V. Kalaichelvi & R. Karthikeyan ., "Comparison of GA tuned fuzzy logic and NARMA-L2 controllers for motion control in 5-DOF robot", *International Journal of Computers and Applications*, Vol.39., Issue 2, pp.69-78., 2017 (Taylor & Francis ISSN:1206212 - <http://dx.doi.org/10.1080/1206212X.2017.1281038> -Scopus Indexed)
5. M. Raja, "Application of cognitive radio and interference cancellation in L-Band based future air-to-ground communication system", *Digital Communications and Networks*, Elsevier, Online First (DOI: <https://doi.org/10.1016/j.dcan.2017.09.011>), PP. 1–26, Sep. 2017. (SCI, SCOPUS)
6. M. Raja, "Non-linear and Non-iterative Based Transceiver Design for SU-MIMO Systems", *Journal of Communications and Information Networks*, Springer. (Accepted).
7. M. Raja and Subeen Jain, "Modifying LFSR of ZUC to Reduce Time for Key-Stream Generation", *Journal of Cyber Security and Mobility*, Vol. 5- 4, PP. 257–268, Aug. 2017. (SCOPUS,)
8. M. Raja and Subeen Jain, "Application of FSM Machine and S-Box in KASUMI Block Cipher to Improve its Resistance Against Attack" *International Journal of Network Security (IJNS)*, (Accepted). (SCOPUS)
9. M. Raja, "Design of MIMO System with Individual Transmit Power Constraint and Improper Constellation" *Advances on Broad-Band Wireless Computing, Communication and Applications. Lecture Notes on Data Engineering and Communications Technologies*, Springer. Vol. 12. , 2018. ([https://doi.org/10.1007/978-3-319-69811-3\\_33](https://doi.org/10.1007/978-3-319-69811-3_33)) (SCOPUS).
10. M. Raja, "A Survey on Precoding and Decoding Design in MIMO and OFDM Systems" *Journal of Communications*. (Accepted. Nov. 2017).(SCOPUS)
11. M. Raja, "Transceiver Design for MIMO Systems with Individual Transmit Power Constraints" *Int. Journal of Electrical and computer engineering*. (Accepted in Dec. 2017). (SCOPUS)
12. S. Sinha, Mary Lourde R., T. V. C. Sarma, J. S. Pillai and K. R. Tuckley, "Spectral Feature-Based Classification of Wind Profiler Power Spectra," in *IEEE Transactions on Geoscience and Remote Sensing*, (vol. PP, no. 99, pp. 1-9). doi: 10.1109/TGRS.2017.2775654 (Pre publication available online as Early access)
13. Swati Sinha and T.V. Chandrasekhar Sarma and Mary Lourde R., "Doppler Feature Based Classification of Wind Profiler Data", *Journal of Physics: Conference Series*, IOP press, Vol.787 (1), 2017, pages: 012028. doi:10.1088/1742-6596/787/1/012028
14. Swati Sinha, T V Chandrasekhar, Mary Lourde R, Estimation of Doppler Profile Using Multi-Parameter Cost Function, *IEEE Trans. on Geoscience and Remote sensing*, Vol. 55, issue 2, pp. 932-942, 2017, DOI : 10.1109 / TGRS.2016.2616918
15. Bibina V C1, Upasana Chakraborty2, Mary Lourde R3., Ajit Kumar4 "Time-Frequency Methods for Diagnosing Alzheimer's Disease Using EEG – A Technical Review" *Proceedings of International Conference on Bioinformatics and Biomedical sciences- ICBBS 2017*, NUS, Singapore, June 2017, ACM USA, pp. 49-53.
16. Swati Sinha, T V Chandrasekhar, Mary Lourde R., "Doppler Profile Estimation using Gaussian Wavelets", *International Union of Radio Science URSI –RCRS 2017 3rd Regional Conference on Radio Science*, March 2017, Tirupati, organized by National Atmospheric Research Laboratory (NARL), Department of Space, Government of India, PC-12, pp. 45.
17. Swati Sinha, T V Chandrasekhar, Mary Lourde R., "Classification of Wind Profiler Power Spectra by Signature matching using Wavelet Transform", *International Union of Radio Science URSI –RCRS 2017 3rd Regional Conference on Radio Science*, March 2017, Tirupati, organized by National Atmospheric Research Laboratory (NARL), Department of Space, Government of India, PC-11, pp. 44.
18. Raunaq Saraf and R.Gomathi Bhavani, Assessment of Daylight Performance of a Commercial Office Space in Hot, Arid Climate for Enhanced Visual Comfort Conditions, 2017 IEEE International

Conference on Technological Advancements in Power and Energy ( TAP Energy 2017), 21-23 Dec 2017, Amrita University, Kollam, Organized by IEEE Power and Energy Society, Kerala section.

19. Mohammed Azeem Gafoor and A R Abdul Rajak, Design of Adders with Less number of Transistor, International Journal of Applied Engineering Research , Volume 12, Number 18 (2017) , pp7700-7704

### C. Conferences attended/papers presented:

1. Varsha Venkatesh and R Swarnalatha, "Review and Simulation of Memristors using MATLAB and PSpice", IEEE International Conference on Electrical, Computer and Communication Technologies (IEEE ICECCT 2017)., SVS College of Engineering, Coimbatore, Tamil Nadu, India during Feb 22 – 24, 2017.
2. Varsha Venkatesh and R Swarnalatha " Review and assessment of the rating scales of Parkinson's Disease" 3rd International Conference on Science, Engineering, Law & Management (ICSELM 2017), 25-26 November 2017 Dubai, UAE
3. Mohammed Shamroukh., Ihtisham Qasim Kalimullah., Alan Chacko., Shreya Sharad Barlingay., V.Kalaichelvi and Adhir Baran Chattopadhyay., " Evaluation of Control Strategies in Semi-Active Orthosis for Suppression of Upper Limb Pathological Tremors"., Proceedings of IEEE International Conference on Innovations in Electrical, Electronics, Instrumentation and Media Technology., pp.75-80., Dept of Electrical Technology., Karunya University., Coimbatore., Feb 3-4, 2017 (Ihtisham got best paper award while presenting this paper)
4. Arvind Desikan and V.Kalaichelvi., "ANFIS Modeling of Photovoltaic Systems to mitigate Partially Shaded Conditions" ., Proceedings of IEEE International Conference on Innovations in Electrical, Electronics, Instrumentation and Media Technology., pp.181-186., Feb 3-4 2017. Coimbatore., Feb 3-4 2017.
5. Neetika Singhal., Nishank Singhal., V.Kalaichelvi., " Image Classification Using Bag Of Visual Words Model With FAST And FREAK"., 2017 IEEE International Conference on Electrical, Computer and Communication Technologies (IEEE ICECCT 2017)., SVS College of Engineering, pp.1144-1148., Coimbatore, Tamil Nadu, India during Feb 22 - 24 ., 2017
6. Lauren Alisha Fernandes., Aaditya Saraiya., V.Kalaichelvi and R. Karthikeyan., "Performance Evaluation of Digital Image Processing and Artificial Neural Networks for Weld Line Detection of Robotic Manipulator"., pp.933-938., 9th IEEE-GCC Conference and Exhibition 2017., May 7-10., 2017.
7. Ihtisham Qasim Kalimullah., Arvind Desikan and V.Kalaichelvi., "Analysis of A Proposed Algorithm for Point to Point Control of A 3 DOF Robot Manipulator"., IEEE Control, Automation ,Robotics (ICCAR 2017)., pp.289-292., April 22-24., 2017., Nagoya., Japan.
8. Nishank singhal., srishti and V.Kalaichelvi., "Application of Convolutional Neural Network to Classify Sitting and Standing Postures"., Proceedings of the World Congress on Engineering and Computer Science 2017 Vol I WCECS 2017, October 25-27, 2017, San Francisco, USA., ISBN: 978-988-14047-5-6., ISSN: 2078-0958 ISSN: 2078-0966.
9. Rohen Bhandhari and V.Kalaichelvi., "Analysis and Control Techniques for Two-Link Underactuated Manipulator"., IEEE International Conference on Engineering Technologies and Applied Sciences., Nov 29-Dec 1., 2017., AMA International University., Bahrain
10. Saraiya Aaditya Asit and V.Kalaichelvi., "Vision Based Forward Kinematics Using ANN for Weld-Line Detection with a 5-DOF Robot Manipulator"., Advanced Computational and Communication Paradigms (ICACCP)., Sikkim Manipal Institute of Technology (SMIT), Rangpo, Sikkim, Sep 8-10., 2017., India.
11. Shamith L Saldanha<sup>1</sup>, V.Kalaichelvi and R Karthikeyan., "Prediction Analysis of Weld-Bead and Heat Affected Zone in TIG welding using Artificial Neural Networks"., International Conference on Materials and Manufacturing., BITS Pilani, Dubai Campus., Nov 28-29., 2017
12. M. Raja, "Design of MIMO System with Individual Transmit Power Constraint and Improper Constellation" 12-th International Conference on Broadband and Wireless Computing, Communication and Applications, Barcelona, Spain, Nov. 2017 .
13. Dr. Mary Lourde R., attended the International Conference on Bioinformatics and Biomedical sciences- ICBBS 2017, NUS, Singapore, June 2017, and presented a paper titled "Time-Frequency Methods for Diagnosing Alzheimer's Disease Using EEG – A Technical Review" .
14. Dr. Mary Lourde R., attended International Union of Radio Science URSI –RCRS 2017 3rd Regional Conference on Radio Science, March 2017, Tirupati, organized by National Atmospheric Research Laboratory (NARL), Department of Space, Government of India, and presented the paper "Doppler Profile Estimation using Gaussian Wavelets".
15. Dr. Mary Lourde R., attended International Union of Radio Science URSI –RCRS 2017 3rd Regional Conference on Radio Science, March 2017, Tirupati, organized by National Atmospheric Research

Laboratory (NARL), Department of Space, Government of India, "Classification of Wind Profiler Power Spectra by Signature matching using Wavelet Transform".

16. Dr R Gomathi Bhavani presented the paper, "Assessment of Daylight Performance of a Commercial Office Space in Hot, Arid Climate for Enhanced Visual Comfort Conditions" at 2017 IEEE International Conference on Technological Advancements in Power and Energy ( TAP Energy 2017), 21-23 Dec 2017, Amrita University, Kollam, Organized by IEEE Power and Energy Society, Kerala section.

#### **D. Books Published/Edited during the year:**

1. Chapter in Book: Adhir Baran Chattopadhyay and Sunil Thomas, Department of Electrical and Electronics Engineering, Birla Institute of Technology and Science, Pilani – Dubai Campus., "INVESTIGATIONS ON MODELING OF RENEWABLE ENERGY PHENOMENA TAKING THE EFFECT OF NON- LINEARITIES INTO ACCOUNT", Chapter in edited Book: RENEWABLE ENERGY AND SMART GRID TECHNOLOGY, Edited by V K Jain and S Y Kumar, Bloomsbury Publishing India Pvt Limited, February, 2017. ISBN: 978-93-86432-07-0.
2. Book: Prof. Adhir Baran Chattopadhyay, Dr. D.P.Kothari and Dr. Sunil Thomas, "ADVANCED ELECTRICAL AND POWER SYSTEM DESIGN" , in Press, July, 2017 , Publisher, " New age International Publishers (Private ) Limited, New Delhi, India".

#### **E. Conferences, seminars & workshops conducted**

1. Dr. Mary Lourde in association with CETA, UAE organised a national level quiz competition in the UAE-CETA Knowledge Quest 2017 for high school children at BPDC campus. Around 800 people participated in the event and it was a big success.

#### **F. Invited Talks given by faculty:**

1. Dr. A.B.Chattopadhyay delivered Key-note address in the International Conference on "Recent Trends in Renewable Energy and Smart Grids (ICRRESG-17)", organized by College of Engineering and Technology, MODY University, Laxmangarh, Rajasthan, India on 24-25 February 2017.
2. Dr. A.B.Chattopadhyay delivered a special lecture as a Guest of honor in the International workshop on "MATLAB Application in Electrical Engineering" dated 15 July 2017, in Millia Institute of Technology, Purnea, Bihar, India-854301.

#### **G. Invited talks / technical visits arranged by the department:**

1. Organised an interactive session by the Alumnus "Ruchira Chatterjee CEO at Auxesis Infotech Pvt. Ltd" and Sreeram Muralidharan Consultant at Capgemini, New York on 8th March 2017.
2. A Guest Lecture by Dr Narayana R Aluru on "Computational Nanotech" was organized on 26.8.2017.
3. A Guest Lecture by Dr. Moinuddin on "Surgical Robots" was organized on 05.10.2017.
4. A Guest Lecture by Mr.Yasir Arafat on "Employability Skills " was organized on 07.11.2017.
5. A Guest Lecture by Prof. Hasan Al-Nashash on "Vigilance Assessment and Enhancement Using Multi-Sensory Interactive Physiological Inputs" was organized on 21.11.2017.
6. A Guest Lecture by Dr. Brajesh Kumar Kaushik, on "Innovations and Pathway in Nanoelectronics" was organized on 26.11.2017.

#### **H. Awards and recognitions won by faculty and students**

1. Dr R Swarnalatha had attended the 6th International Genetics Disorders Conference 2016 on 21st & 22nd October 2017 in Park Hyatt Dubai.
2. Dr R Swarnalatha had served as Technical Review Committee member for the second IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT-2017), to be held at SVS College of Engineering, Coimbatore, Tamil Nadu, India during 22 - 24, February 2017.
3. Dr R Swarnalatha has been appointed as Phd Thesis Examiner for Sathayabama University Chennai & SRM University Chennai.
4. Dr R Swarnalatha served as reviewer for Int. Journal of Biomedical Engineering & Technology.
5. Dr R Swarnalatha served as editorial board member for Inder science - International Journal of Applied Sciences.
6. Dr.V.Kalaichelvi served as Core Editorial Committee member for International Conference on Recent Advances in Material and Manufacturing Technologies(IMMT-2017) organized by Mechanical Engg Dept at our Campus and reviewed following six papers:
  - i. Application of Fuzzy TOPSIS for evaluating Machining Techniques using Sustainability Metrics
  - ii. Comparison of Piezo-material based Energy Transduction Systems for Artificial NanoSwimmer

- iii. On surface integrity of Al 2014 alloy finished by Ultrasonic Assisted Abrasive Flow Machining
- iv. Application of Artificial Neural Network and Regression Analysis in Modeling of Surface Roughness in WS2 Solid Lubricant Assisted MQL Turning of Inconel 718
- v. Prediction of Tensile and Shear Strength of Friction surfaced Tool Steel Deposit by using Artificial Neural Networks
- vi. Analysis of Supercapacitor Circuit and its Applications
7. Dr.V.Kalaichelvi served as Technical Program Committee Member for First International Conference on Advanced Computational and Communication Paradigms „Sikkim Manipal Institute of Technology (SMIT), Rangpo, Sikkim, Sep 8-10.,2017.,India.
8. Dr.V.Kalaichelvi attended two days workshop on Industrial applications of Decision making methods and Optimization Techniques from Nov-17-18 2017
9. To gain more practical knowledge about process industries, Dr.V.Kalaichelvi took Instrumentation students and chemical students to Star cements.,Ras al Khaimah and interactive session was held with industry people for the Elective Course on Advanced Process Control on 4.11.2017..
10. Dr.V.Kalaichelvi served as Technical Review Committee member for the second International Conference on Electrical, Computer and Communication Technologies and reviewed three papers on Application of AHP Method for Optimal Location of SSSC Device under Different Operating Conditions, Application of Advanced Shunt FACTS Device for Analyzing the Performance of Transmission System Using Evolutionary Algorithms and Power Flow Analysis and Comparison Using STATCOM, SSSC, UPFC in MATLAB for the SECOND IEEE INTERNATIONAL CONFERENCE ON ELECTRICAL, COMPUTER AND COMMUNICATION TECHNOLOGIES to be held at SVS College of Engineering, Coimbatore during 22 - 24, February 2017
11. Dr R Swarnalatha reviewed four papers titled as “A Review on Application of Artificial Neural Network(ANN) on Protein Secondary Structure Prediction”, “A Rule Based Advisory System For Repair and Maintenance of UPS”, “Analytics for Image, Text and Audio Analysis for Military Surveillance, Command & Control System” and “Aerial path planning using Meta- Heuristics : A survey” for the Second IEEE International Conference on Electrical, Computer and Communication Technologies to be held at SVS College of Engineering, Coimbatore, Tamil Nadu, India during 22 - 24, February 2017.
12. Dr R Swarnalatha served as Technical Review Committee member for the second IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT-2017), to be held at SVS College of Engineering, Coimbatore, Tamil Nadu, India during 22 - 24, February 2017.
13. Dr. Vilas H Gaidhane reviewed the research papers for the Journals 1. IEEE Transaction on Measurement & Instrumentation, 2. IETE Technical Review (Taylor & Francis) 3. International Journal of Electrical Power and Energy Systems (Elsevier) 4. Image, Video and Signal Processing (Springer) 5. Neural Computing and Applications (Springer) 6. Journal of Medical Systems (Springer)
14. Dr. Vilas H Gaidhane acts as International Committee member and reviewer for the IEEE International Conference (CCIS-2016), Mathura (UP) India.
15. Dr.V.Kalaichelvi reviewed four papers such as " Comparative Analysis of Bang-Bang and Adaptive Neuro Fuzzy Logic controller Based Current mode control for single phase power factor correction using DC-DC SEPIC Converter", "A review Comparative study of P,PD,PI,PID and Fuzzy Logic Controllers used in DC-DC Converter", " Artificial Intelligence in Power Station", " COMPUTERIZED CERVICAL CANCER IDENTIFICATION USING MULTIPLE ADAPTIVE NEURO FUZZY INFERENCE SYSTEM" for the forthcoming INTERNATIONAL CONFERENCE ON COMPUTATIONAL SCIENCE & TECHNOLOGY (ICCST'17) held on March 9th and 10th 2017.
16. Dr.V.Kalaichelvi served as a designated reviewer on the technical program committee for the 9th IEEE-GCC Conference and Exhibition 2017 and reviewed two papers such as "Design of PID controllers" and "Permanent Magnet Synchronous Motor Rotor Position Estimation using Fuzzy-based Sliding Mode Observer" held at Bahrain Gulf Conference and Exhibition center from 7th to 10th of May 2017
17. Dr R Gomathi Bhavani attended International workshop in connection with SDME along with Romania team on 30th April 2017 at Hyatt Regency Dubai Creek Heights.
18. Dr R Gomathi Bhavani was part of the Organizing committee of a technical symposium in connection with SDME on “Energy efficient buildings: an international perspective” on 2nd May 2017.
19. Dr R Gomathi Bhavani reviewed PhD thesis titled,“ Fault detection in transmission line and adaptive setting of distance relay” for KIIT University, Bhubaneshwar, India.
20. Dr R Gomathi Bhavani chaired the session on “Green technology track” on 22 Dec 2017 at 2017 IEEE International Conference on Technological Advancements in Power and Energy (TAP Energy 2017), Amrita University, Kollam, Organized by IEEE Power and Energy Society, Kerala section.

21. Dr. A.B.Chattopadhyay reviewed the research paper , TSTE-00510-2017, by Mr. Subhendu Santra, "Stability Analysis and Lyapunov Based Fast Terminal Sliding Mode Q-V Control of Grid Connected hybrid Solar and Wind System" ,IEEE Transactions on Sustainable Energy , July, 2017
22. Dr. A.B.Chattopadhyay reviewed the research paper ,TSTE-00246-2017, by Dr. Ala Hussein, "Heuristic Evolutionary Algorithm-based Modeling for Large-scale PV Arrays under Fault Conditions" , IEEE Transactions on Sustainable Energy , July, 2017
23. Dr. A.B.Chattopadhyay reviewed the research paper, TSTE-00637-2016.R2 by Mr. Xirui Yu, "Damping Inter-Area Oscillations with Large-Scale PV Plant by Modified Multiple-Model Adaptive Control Strategy", IEEE Transactions on Sustainable Energy, March, 2017.
24. Dr. A.B.Chattopadhyay reviewed the research paper, NCAA-D-17-00097 , "Robust Non Linear Fractional order Fuzzy PD plus Fuzzy I Controller applied to Robotic Manipulator", Journal Name: Neural Computing and Applications (Publisher: SPRINGER), June,2017
25. Dr. A.B.Chattopadhyay reviewed the research paper, NCAA-D-17-01301, "Delay-Distribution-Dependent Non-Fragile State Estimation for Discrete-Time Neural Networks under Event-triggered Mechanism", Journal Name: Neural Computing and Applications (Publisher: SPRINGER), December,2017
26. Dr. A.B.Chattopadhyay reviewed the Research Project entitled, "Smart Building; a Vision in Smart Distribution System" ,funded by ICT, Govt. of U.A.E , (financial budget in the tune of AED 100,000.00) , in January, 2017
27. Dr. A.B.Chattopadhyay reviewed the Research Project entitled, "Implementation and Algorithm Development for an Acoustic Sensing System" ,funded by ICT, Govt. of U.A.E , (financial budget in the tune of AED 984,800.00) , in January, 2017
28. Dr. Mary Lourde R served as a technical expert to evaluate Three ICT FUND research project proposal costing AED 3 million in various area of Electrical engineering.
29. Dr. Mary Lourde R served as a reviewer for the journal "Integration, the VLSI Journal" published by Elsevier and reviewed a research manuscript in the area of Trusted IoT, Low power VLSI during July 2017.

#### I. Faculty Development, International Collaboration & Industry Immersion

S.No.	Name of the Project	Funding Agency	Amount	PI/Co Pis
1	Project Proposal," Design and Development of a force mat for gait and stance analysis" ( Submitted)	CSIR	INR 3500000	Co PI: Dr R Swarnalatha
2	Inter Disciplinary Proposal Sustainable Intelligent Manufacturing of Bio Medical Implants (Submitted)	Expolive-Innovation Impact Grant	USD 80000	Co-Founder Dr.V.Kalaichelvi
3	Project Proposal: Lowcost Phasor Measurement Unit design for smart city requirement"(Submitted)	ICT	AED 480000	Pi-Dr. Shazia Hasan Co- PI- Dr. Essa bastaki Dr. Abdul Rajak Dr. Jagadish Nayak
4	Project proposal : "Early detection of Alzheimer's using EEG signal" (Resubmitted)	Bill & Melinda Gates Foundation	USD 90,000	PI - Dr. Mary Lourde R

#### J. Significant new equipments/experimental facility added during the year:

1. IC design software from Mentor graphics with following packages with 10 user licenses
2. HEP IC nanometer package and HEP Design verification package
3. Hardware simulation software PROTEOUS with 50 user licenses
4. Digital Trainer Kits
5. Multisim software from National Instrument with 25 user licenses
6. Software defined radio from AMITEC,Hong Kong
7. Bench Top Digital Multimeters

8. Networking was done at Signal Processing lab and Instrumentation lab

**K. Departmental Association/Club activities:**

**1. AOEE had organised the below events**

- i. Organised an interactive session by Aditya Pandey, IV EEE & Aamir Jamal IV ECE on “Seniors Guide to Masters Application” on 19th Feb 2017.
- ii. Organised an interactive session by the Alumnus “Ruchira Chatterjee CEO at Auxesis Infotech Pvt. Ltd” and Sreeram Muralidharan Consultant at Capgemini, New York on 8th March 2017.
- iii. Organized a workshop by Dr A R Abdul Razak on “PSPICE” on 11th March 2017.
- iv. Organized School Students workshop in department level on 29th March 2017.
- v. Organized a workshop by Dr Vilas on “Multisim” on 29th April 2017.
- vi. A Guest Lecture by Dr Narayana R Aluru on “Computational Nanotech” was organized on 26.8.2017.
- vii. Organized interactive session and a science & technology based quiz session was held for Students from DPS Jaipur on 04.10.17
- viii. A Guest Lecture by Dr. Moinuddin on “Surgical Robots” was organized on 05.10.2017.
- ix. Organised the technical event Mindspark for “Enginuity” from Nov 25th to 27th Oct 2017.
- x. A Guest Lecture by Mr.Yasir Arafat on “Employability Skills ” was organized on 07.11.2017
- xi. A Guest Lecture by Prof. Hasan Al-Nashash on “Vigilance Assessment and Enhancement Using Multi-Sensory Interactive Physiological Inputs” was organized on 21.11.2017
- xii. A Guest Lecture by Dr. Brajesh Kumar Kaushik, on “Innovations and Pathway in Nanoelectronics” was organized on 26.11.2017
- xiii. An industrial visit was organised on 27.11.2017 to Dorman Smith Factory, Dubai for EEE students.
- xiv. Organised school students’ workshop 'Explore Engineering" fon 28.12.17 for EEE department.

**2. TEAM IFOR activities**

- i. IFOR students demonstrated their drones for school students workshop conducted on 29th and 30th March 2017
- ii. Team IFOR students demonstrated their drones to EXPO 2020 team when they have visited dubai campus on April 3rd 2017
- iii. Team IFOR has participated in WETEX: Water, Energy, Technology and Energy Exhibition 2017 exhibiting their past innovations and current projects. This exhibition served as a mean to exhibit Team IFOR’s innovation and paved way for many companies like Siemens Healthineers Global, Oilex and so on to meet the team and interact with them.
- iv. Team IFOR had participated in the International Aerial Robotics Competition 2017 held at Georgia at the American Venue in Atlanta, Georgia, USA, July 2017 and presented a paper on Unmanned Aerial Vehicle
- v. Team IFOR organized an event “Rings of Fire” during Technofest held at BPDC on 25th and 26th October 2017.



**B4.14.4 Department: Mechanical Engineering**Number of faculty members (as on 31<sup>st</sup> December 2017)

Senior Professors, Professors	03
Associate Professors	01
Assistant Professors	07
Lecturers	00
Visiting Faculty	00
Adjunct Professor	00

**Head of the Department:** Dr. M.V.N.SANKARAM**Contact details:** sankaram@dubai.bits-pilani.ac.in**Ph.D. Thesis Submitted during the year:** nil**Number of PhD Scholars:** (nil) Full Time, (05) Part Time and (nil) Off campus**Ph.D. Proposal Submitted during the year:** nil**A. Sponsored Research activities:**

1. Joint research proposals with Indian Campuses/Other Dept faculty on Campus(ONGOING):

PI	Co-PI	Title	Amount	Funding Agency	Duration
Dr. Vincent Shantha Kumar (BITS Dubai Campus)	Prof. R. Karthikeyan (BITS Dubai Campus) Prof. D.M. Kulkarni (BITS Goa Campus)	Bio-Tribocorrosion studies on bulk metallic glasses	AED 90,000	BITS, Pilani Seed Grant	3years Feb 2017- Feb2020
Dr. R. Karthikayn	Dr. Vishal Naranje, Dr. Karthikeyan Dr. Vilas Gaidhane (Inter-Disciplinary)	Design and Development of Closed Loop Control System to Improve the Process Capability of Incremental Sheet Metal Forming	AED 90,000	BITS, Pilani Seed Grant	3years Feb 2017- Feb2020
Dr. Gudipadu Venkatesh & Dr. Srinivasa Prakash Regalla-BITS, Hyderabad		Mathematical modelling of Material removal and surface finish responses and comparison with experimental results of Ultrasonic-assisted Abrasive Flow Machining (UAAF) of Small Diameter Curved Tubes	INR 6754000	SCIENCE & ENGINEERING RESEARCH BOARD (SERB), DST, India	3years

2. Collaboration with Maktoum Bin Hamdan Dental University College, UAE: *Dr R.Karthikeyan & Dr Priyank Upadhyay* for research activities.

3. EXPO 2020 Innovation Impact Grant Project details(Submited):

- i. Sustainable manufacturing of bio-implants using intelligent controlled incremental sheet metal forming under supervision of *Dr.R.Karthikeyan-Mech Dept., BPDC; Dr. Vishal-Mech Dept., BPDC; Dr.V.Kalaichelvi-EEE Dept., BPDC & Dr. Paniti, Imre MTA-SZTAKI Institute for Computer Science and Control, Hungarian Academy of Sciences.*
- ii. Chicken waste to power, Organic manure and Liquified fertilizer under supervision of *Dr. udaya kumar-Mech Dept., BPDC & Dr.Prakash Kumar-Chemical Dept.,BPDC.*
- iii. Magnesium based biodegradable Porous and Syntactic Foams for Biomedical Applications under supervision of *Dr Vincent Shanta Kumar-Mech Dept., BPDC & Dr R Karthikeyan-Mech Dept.,BPDC.*
- iv. *Design and development of a Fixed Wing Solar Airplane under supervision of Dr. Shashank Khurana-Mech Dept., BPDC.*

**B. Publications:**

S.No.	Author(s)*	Title of the Publication	Journal	Vol.	Pages
1	DR.R.Udayakumar and Nijhil Regi Thomas	"Theoretical design for a zero energy house in the middle east "	International Journal of Scientific and Engineering Research	Volume8 Issue 6	PP274-282
2	Vivek J.Shah and DR.R.Udayakumar	Thermal analysis of a ceramic coated piston	International Journal of Engineering Technology, Management and Applied science	Volume 5, Issue 6	PP224-227
3	Vishal G Naranje, Ram Karthikeyan and Vipin Nair	Study of wear performance of deep drawing tooling	IOP Conf. Series: Materials Science and Engineering	244 (2017) 012005 doi:10.1088/1757-899X/244/1/012005	-
4	Vishal G Naranje,H M A Hussein and S Kumar	KumarComputer aided system for parametric design of combination die	IOP Conf. Series: Materials Science and Engineering	244 (2017) 012022 doi:10.1088/1757-899X/244/1/012022	
5	Joysurya Basu, S. Vincent, B. S. Murty, M. J. Kramer, Jatin Bhatt	"Role of polyhedral order in glass to crystal/quasicrystal transition dynamics"	Journal of Non-Crystalline Solids	471 (2017)	256-263
6	Ketul Patel, Ganesh R Karthikeyan, S. Vincent	"Determining stress strain behavior for Zr660Cu10Al15Ni15 bulk metallic glass using object oriented finite element"	Journal of Metastable and Nanocrystalline Materials	29 (2017)	1-8
7	Shashank Khurana, Kojiro Suzuki and Ethirajan Rathakrishnan	"Visualisation of Vortex at Aerospike Root using Hydraulic Analogy"	International Review of Aerospace Engineering Journal	Vol. 10 No. 4, 2017	
8	R.V.Rao, K.C.More, L.S.Coelho and V.C.Mariani.	Multi-objective optimization of the Stirling heat engine through self-adaptive Jaya algorithm	Journal of Renewable and Sustainable Energy	9(3), 2017,033703	
9	R.V.Rao, K.C.More, P.Oclon, J. Taler and D.Taler	Single- and multi-objective design optimization of plate-fin heat exchangers using Jaya algorithm	Heat Transfer Engineering,	2017.(online available <a href="https://doi.org/10.1080/01457632.2017.1363629">https://doi.org/10.1080/01457632.2017.1363629</a> )	Pages 1-16
10	P.Oclon, P.Cisek, M.Rerak, D.Taler, R.V.Rao, A.Vallati, M.Pilarczyk	Thermal performance optimization of the underground power cable system by using a modified Jaya algorithm	International Journal of Thermal Sciences	123, 2018	162-180
11	R.V.Rao and K.C.More	Optimal design and analysis of mechanical draft cooling tower using improved Jaya algorithm	International Journal of Refrigeration	82, 2017	312-324
12	V Bhatia, V Kalaichelvi, R Karthikeyan	Comparison of GA tuned fuzzy logic and NARMA-L2 controllers for motion control in 5-DOF robot	International Journal of Computers and Applications, Talylor Francis	39(2), 2017	69-78
13	Nandakumar Pillai , R. Karthikeyan and J. Paulo Davim	A review on effects of cryogenic treatment of AISI 'D' series cold working tool steels	Rev.Adv. Mater. Sci.	51 (2017)	149-159
14	Rahul Dahiya, Baalaganapathy Manohar, C. Perisamy	Analyzing the Effect and Efficiency of Wind Tower on Fresh Air Handling Unit (FAHU) for Medical Buildings	Journal of Research in Mechanical Engineering and Technology,	Vol.7, 2017,	pp.106-112

**C. Conferences attended/papers presented:**

S.No.	Author(s)	Title of the Paper	Conference	Date & Place
1	Mukesh Singh Tomar and Shashank Khurana	"Theoretical approach of determining Peak Heat Release Rate in Road Tunnel Fires"	4th Arabian Tunelling Conference & 20th Gulf Engineering Forum	21st-22nd February 2017, Dubai, U.A.E
2	Joseph Jeyasurya, Gayathri Krishnan and Shashank Khurana	"Design and Performance Study of a Solar Operated AquaAmmonia Absorption Refrigeration System"	International Workshop on Trends in Solar Power Generation and Energy Harvesting	27th-29th March 2017, Dubai U.A.E
3	R.Udayakumar, Sadjot Biswal , Aravind prasanth and Sankaram	"Design of steering system for a small Formula type vehicle using tire data and slip angles"	3rd International Conference on Vehicle Engineering and Design (ICVED 2017)	July 1-3, 2017 Hongkong
4	Nandakumar Pillai, R Karthikeyan	Effect Of Deep Cryogenic Treatment On Aisi A8 Tool Steel And Development Of Wear Mechanism Maps Using Fuzzy Clustering	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
5	Nandakumar Pillai, R Karthikeyan	Prediction Of Ttt Curves Of Cold Working Tool Steels Using Artificial Neural Network Model	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
6	D.Purushothaman, Krishna Kaushik Yanamundra, Gokul Krishnan, C. Perisamy	Finite element simulation and experimental verification of Cutting force in machining for 6068 Aluminum alloy	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
7	Krishna Kaushik Yanamundra, R Karthikeyan, Vishal Naranje	Finite element simulation and Experimental verification of Incremental Sheet metal Forming	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
8	Akshay Gidwani and Siddanth James, R. Karthikeyan, S. Vincent	Effect of Entropy Generation on Wear Mechanics and System Reliability	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
9	M Tomar and S Khurana	Road tunnel fires and tunnel lining material	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
10	Kesar Mal Kothari , Vishweshwar Samba, R. Udayakumar and Ram Karthikeyan	Modeling and Computational Simulation of Cable Pulling Winch Machine	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
11	Cherish Mani, R. Karthikeyan, S. Vincent	A study on corrosion resistance carried out on welding 316L stainless steel with Monel 400 by GTAW process	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
12	Shresh Kumar, Rebin Anvar, Wookha Ryu, E. S. Park, and S. Vincent	Biocorrosion Evaluation on a Zr-Cu-Ag-Ti Metallic Glass	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
13	G. Venkatesh, Divyank Sood, Apurbba Kumar Sharma	A Fuzzy Logic Approach On Ultrasonic Assisted Abrasive Flow Machining	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
14	Kiran Thomas, S. Vincent , Dipika Barbadikar, Rebin Anwar, Nevil Fernandes, Shresh Kumar,	Corrosion Characterisation In Incoloy 925 And 110 Ksi Low Alloy Steel	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
15	M.C. Subin, Jason Savio Lourence, Ram Karthikeyan , C.Periasamy	Analysis of materials used for Greenhouse roof covering structure using CFD	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
16	Sathish Kannan , Salman Pervaiz , S. Vincent , R. Karthikeyan	Tool life and surface integrity aspects when drilling nickel alloy	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE

S.No.	Author(s)	Title of the Paper	Conference	Date & Place
17	Waleed Qureshi, S. Vincent, Sathish Kannan R. Karthikeyan, Manoj Gupta, Vyasraj Manakari	Influence of Silica Nanospheres on Corrosion Behavior of Magnesium Matrix Syntactic Foams	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
18	Dipika R. Barbadikar, S. Vincent, A.R. Ballal, D.R. Peshwe, and M.D. Mathew	Optimization of BI test parameters to investigate mechanical properties of P92 steel	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
19	P Raja S Bojanampati R Karthikeyan	Effect of rotation speed and welding speed on Friction Stir Welding of AA1100 Aluminium alloy	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
20	S Bojanampati S Venugopal R Karthikeyan	A Case study for comparing the feasibility of manufacturing implant using 3D printing and CNC machine	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
21	D.S. Robinson Smart, Joses Jenish Smart, C.Periasamy	Investigation Of Effect Of Rotary EDM Electrode On Machining Performance Of Al6061 Alloy	International Conference on Materials and Manufacturing (IMMT 2017)	28-29 November, Dubai, UAE
22	Shamith L Saldanha, V.Kalaichelvi and R Karthikeyan	Prediction Analysis of Weld-Bead and Heat Affected Zone in TIG welding using Artificial Neural Networks	International Conference on Materials and Manufacturing IMMT 2017	28-29 November, Dubai, UAE
23	S. Kasid, S. Kumar, Vishal .Naranje	Modelling and prediction of life of knockout bar of compound die	20th International Conference on Advances in Materials and Processing Technologies	11th to 14th December 2017, India

#### D. Books Published/Edited during the year:

S.No.	Author(s)*	Title of the Publication	Journal	Vol.	Pages
1	V. Naranje, S. Kumar,	Knowledge based system for design of deep drawing die for axisymmetric parts, In AI APPLICATIONS IN SHEET METAL FORMING	Book Chapter, Springer Singapore	-	pp. 93-119

#### E. Conferences, seminars & workshops conducted: -

1. Department of Mechanical Engineering organised Two-Days Workshop on "Industrial Applications of Decision Making Methods and Optimization Techniques" during 17-18 November 2017. Prof R V Rao coordinated this workshop and totally there were 34 participants from various local Industries and universities i.e., DEWA, RTA, Heriot Watt niversity, University of Sharjah, King Abdul Aziz University, Jeddah, Saudi Arabia. Faculty and research scholars from all departments also actively participated in this workshop.
2. Department of Mechanical Engineering, organized an International conference on Recent Advances in Materials & Manufacturing Technologies (IMMT) 2017 on 28th and 29th November 2017. Over 130 participants from academics and research background from over 40 universities including the IITs, universities, all campuses of BITS Pilani in India, NUS Singapore, Masdar UAE and many more prestigious universities participated and presented their research papers

#### F. Invited Talks given by faculty:

1. Dr. Vincent Shantha Kumar delivered Guest lecture on Bio-corrosion of metallic glasses in Seoul National University, Seoul, South Korea in Jan 2017.
2. Dr. Vincent Shantha Kumar delivered Invited Talk on Bio-corrosion studies on Zr based metallic glasses in International Symposium for Advanced Materials Research (ISAMR 2017), 18th -21st August 2017, Sun Moon Lake. Taiwan.

**G. Invited talks / technical visits arranged by the department:**

S.No	Name	Topic	Date
1	Dr. Sunil Manjarekar, CEO / MD, Sanbook quality Consultancy, Dubai, UAE.	"Occupational Health and Management Systems"	February 19, 2017
2	Dr Aly Tiab, Design & Engineering Manager, B K Gulf LLC, Dubai.	"Efficiency in Building Services Engineering"	April 25, 2017
3	Dr.Gowrishankar.N	"Materials & Processes for cylinder components for IC engines"	October 1, 2017
4	Dr. Sunil Manjarekar, CEO, SQC Consultancy, UAE	"How Quality Management help Graduate and Undergraduate students"	November 22, 2017
5	Dr Essam E. Khalil. ASHRAE Director at Large Imperial College, London	'Energy Efficient Designs of Low Carbon Buildings in Urban Development'	November 28, 2017

**H. Awards and recognitions won by faculty and students**

S.No.	Students(Mentor)	Achievement
1	Saraiya Aditya Asit, Karan Madan, Rahul ManiKam, Kapoor Yash Aswani and Kartik Sultania (Prof R Udaya Kumar)	Team IORTA participated in the competition "UAE Drones for Good Award 2017" and reached the finals in which more than 500 teams participated internationally. They came 6th position in the National Category.
2	Gayatri Hariharan (Dr Vincent S Kumar)	Won the best paper Award for the paper entitled " Investigation on Heat Transfer Fluids used in Concentrating Solar Power Systems" at 2nd Student Research Colloquium on Advances in Engineering & Information Technology ( AEIT-2017) held during 3-4 May 2017, Manipal University, Dubai Campus
3	Mukarram Ahmed, Gaurav Handa, Mohammed Shamroukh and Soumya Bharadwaj (Dr Trupti Gokhale)	Participated in the IMA Middle East Student Case Competition 2017. In total 15 teams from across the middle East were shortlisted and 4 teams were selected for the finale. One team from Saudi (Prince Sultan University), another from Kuwait (American University of the Middle East) and 2 Universities from Dubai (American University in Dubai) and Bits Pilani Dubai. The finale was held in Novotel- Al Barsha, Dubai on 6-05-2017
4	3 Mechanical Student Teams (with 6 other Institute teams), comprising, Krishna Kaushik and Shreyas Nayak; Joseph Jeyasurya and Gayathri Krishnan; Akshay Gidwani, Kiran Anand Rekha, Siddanth James and R Ved Shankar(Prof R Karthikeyan/Dr Shashank Khurana)	Finalist in Mechanical Engineering Category, The Fifth United Arab Emirates Undergraduate Research Competition 2017, Abu Dhabi, U.A.E.
5	Tarun Krishna, Adhitya Natarajan, Harsith Rani, Mohamed Nawaz, and Pranay Addepalli	Team Trepit won the Runners-up of Startup Weekend Ras Al-Khaimah held from the 12th-14th October 2017. The team received three awards namely, -> Runners Up- Startup Weekend RAK 2017 Edition -> Elevision- Best Marketing Plan Award -> Guiddoo- Superstars of Startup Weekend Award
6	Vaishak Thiruvenkitam, Shivanarain Ravichandran and Mahathi Kishorekumar (Dr Shashank Khurana)	Consolation Prize, Pan-India Student Design Contest, International Conference on Sports Engineering 2017, Jaipur, India

**Prestigious Student Achievements under EXPO Live University Innovation Programme**

The event EXPO Live University Innovation Program-finale pitch, as part of Dubai Expo 2020 had 4 participating teams from BITS Pilani, Dubai Campus amongst the 21 teams from several other universities. All 4 participating teams from the Institute emerged victorious in this final round to qualify for the grant. Over 280 proposals were submitted to the EXPO Live University Innovation Program by students from 33 universities in the UAE. These proposals were assessed equally by an evaluation body consisting of 130 university professors and 24 experts from Expo 2020 Dubai. It is noteworthy that BITS Pilani, Dubai Campus had the maximum number of teams for the finale pitch of EXPO Live University Innovation Program. The teams were divided into 3 groups based on the commonality of the problem they were solving, and were invited to present to a set of 9 experts in their

respective fields. Kudos to the BITS teams for getting through the finale and for being selected to get the grant for their projects. Over the next few weeks, the EXPO Team will reach out to the winning teams individually to discuss the tasks to be accomplished during the next 6 months. Also, the EXPO team will be reaching out to the university to start the Research and Development Agreement process.

The winning teams from the Institute were:

**IORTA** - Anchit B Pandey (3rd yr, Computer Science), Vaidya Satyarth Samir (3rd yr, Computer Science), Sejal Chopra (3rd yr, Computer Science), Patil Vrushali Bhausahab (2nd yr, Electronics and Communications Engineering), Sultan Morbiwala (3rd yr, Mechanical Engineering) and Dr R Udayakumar (Mechanical Engineering)

**Aurora** - Anketha Kannan (4<sup>th</sup> year, Chemical Engineering), Avani Mehta (4<sup>th</sup> year, Electronics and Instrumentation Engineering) & Belinda Sharon (4<sup>th</sup> year, Electronics and Instrumentation Engineering) and Dr. Shashank Khurana (Mechanical Engineering)

#### ***BITS Pilani, Dubai Campus Teams Victorious at Startup Weekend Dubai Edition***

Team Avenue Inc., co-founded by Karthik Bharadwaj, a Mechanical Engineering student of BITS Pilani, Dubai Campus clinched the top Prize at Startup Weekend Dubai Edition held during 16-18 November 2017. The team received a cash prize of Dollars 12,000 IBM Credit in addition to one year working space and mentor-ship from The Bureau Dubai, and qualified for Global Startup Weekend.

Another BITS Pilani, Dubai Campus team 'ProfileUp' consisting of Rachit Mishra, Shehab Abdul, Abhishek Das, Padma Priya, Sultan Morbiwala, Burhanuddin won the Consolation Prize and free mentorship.

Startup Weekend is a global movement of active and empowered entrepreneurs who are learning the basics of founding startups and launching successful ventures. It is one of the largest community of passionate entrepreneurs with over 1800 past events in 120 countries around the world. The 54-hour event brings together like minded entrepreneurs to share ideas, form teams, build products, and most importantly, launch startups

#### **I. Faculty Development, International Collaboration & Industry Immersion**

Dr. Vincent Shantha Kumar, Visited Prof. E.S. Park, Materials Science lab in Seoul National University, Seoul, South Korea in Jan 2017. Successfully carried out experiments during his visit and one research paper jointly co-authored by SNU Professor is now accepted for publication in scopus indexed journal.

#### **J. Significant new equipments/experimental facility added during the year:**

1. MICROWAVE OVEN FURNACE
2. Plastic INJECTION MOULDING MACHINE
3. CRYOGENIC FURNACE APPARATUS
4. POTENTIO STAT Apparatus
5. PETROLEUM EMISSION TESTER
6. CNC -Milling, Lathe & 4-Axis Trainer kits1.Friction apparatus
7. Hydraulic Bench
8. Cavitation Demo Apparatus
9. Free & Forced vertex Apparatus
10. Micro Hardness Tester
11. Ultrasonic flaw detector
12. Magnetic particle tester
13. MICRO Hardness Tester

#### **K. Departmental Association/Club activities:**

1. Prestigious Formula SAE ITALY & Formula Electric ITALY Competition, Participated by SAE students: Formula 6 car team ( Captain-Mr Jasjeev Singh, III yr Mechanical) under the guidance of Prof R.Karthikeyan and Team Gear shifters( Captain-Mr Sadjyot Biswal, IV yr Mechanical) under the guidance of Prof R. Udaya Kumar participated in the 13 th edition of Prestigious Formula SAE ITALY & Formula Electric ITALY Competition, which was held in the Riccardo Paletti Circuit - Varano de" Melagari(PR), Italy from July 19 to 23, 2017.
2. ASME Student Section conducted ON 30-04-2017 FIRST INTER UNIVERSITY INNOVATION CHALLENGE, crowning the winner with a grand cash price of AED 500/- and trophies. The competition features a wide range of topics under which students can develop their innovative ideas and present them in a 5 minutes presentation in the topics Infrastructure, Manufacturing Units, Cyber Security and

Smart Cities. ASME student sections from Manipal and Amity, Dubai campus participated in this challenge.

3. Dr Aly Tiab, Design & Engineering Manager, B K Gulf LLC, Dubai delivered a guest lecture on "Efficiency in Building Services Engineering" on 25-04-17, organised by ASME Student Section.
4. Mechanical Engineering Students Association organised a talk on "Occupational health and Safety Management" by the C.E.O. /M.D. of Sanbook Quality Consultancy on 19-02-2017. SQC is a company that deals with certification pertaining to health, safety and other such aspects pertaining to work.
5. Dr Essam E. Khalil, ASHRAE Director at Large Imperial College London delivered a guest lecture on 'Energy Efficient Designs of Low Carbon Buildings in Urban Development' on 28-11-17. This was organised by ASHRAE Student Section.
6. The Mechanical Engineering Association (M.E.A.) presented a guest lecture on "MATERIALS & PROCESSES FOR CYLINDER COMPONENTS FOR IC ENGINES". On 01-10-2017. The guest speaker is Dr. Gowrishankar.N who is the director of Group Materials Research in India Pistons Ltd. He is also on the Board of Amalgamations Repco Ltd. He is also active in the Quality Movement and had served as the Chairman of NIQR Chennai Chapter.
7. BITS AEROSpace Society(BAEROS organised on the occasion of ongoing #WorldSpaceWeek (4th-10th October, commemorating the launch of Sputnik 60 years ago) an Interactive Talk entitled Latest Cosmic Discoveries by renowned Astrophysicist Prof. Nidhal Guessoum on 09-10-2017. Prof. Nidhal Guessoum is an Algerian astrophysicist, currently a Professor of Physics and Astronomy at American University of Sharjah, UAE He received his M.Sc. and Ph.D. degrees from the University of California at San Diego and spent two years as a post-doctoral researcher at NASA's Goddard Space Flight Center. His research focuses on gamma radiation, from the Milky Way Galaxy and from other sources in the Univers
8. ASME Student Section arranged an industrial visit to Cocoa Cola plant at Al Ain on 20/02/17(Monday) & 21/02/17(Tuesday)
9. MEA Student Section organised a field visit to Emirates Engine Maintenance Center, Warsan, Dubai (5 KM from our camous) on 20/02/17(Monday) & 21/02/17(Tuesday)
10. ASME Student Section in collaboration with PS Division arranged an industrial visit to KHK Scaffolding & Formwork, Ajman on 02/11/17

#### B4.14.5. Department: Computer Science

Number of faculty members (as on 31<sup>st</sup> December 2017)

<b>Senior Professors, Professors</b>	02
<b>Associate Professors</b>	00
<b>Assistant Professors</b>	04
<b>Lecturers</b>	03
<b>Visiting Faculty</b>	00
<b>Adjunct Professor</b>	00

**Head of the Department:** Dr. Santhosh Kumar V.

**Contact details:** santhoshkumar@dubai.bits-pilani.ac.in

**Ph.D. Thesis Submitted during the year:** NIL

**Number of PhD Scholars:** 8(5 Full Time, 3 Part Time and 0- Off campus)

**Ph.D. Proposal Submitted during the year:** NIL

**A. Sponsored Research activities:** NIL

**B. Publications:**

1. Milu Mary Philip, Rahul Varma, Vijayakumar B, Department of Computer Science, Birla Institute of Technology and Science, Pilani, Dubai, UAE, *Requirement Traceability Model Generation for Evolving Software Systems*, Journal of Software Engineering, Year: 2017 | Volume: 11 | Issue: 3 | Page No.: 282-289, Science Alert, USA.
2. Milu Mary Philip, Vijayakumar B, Department of Computer Science, Birla Institute of Technology and Science, Pilani, Dubai, UAE, *Design and Implementation of Combinational Software Architecture for Batch Image Processing System*, International Journal of Software Engineering and Its Application Vol.11, No.6 (2017), pp.79-88, Science and Engineering Research Support Society, South Korea.

**C. Conferences attended/papers presented:**

Faculty Members of CS department, BPDC attended/Presented following papers from Jan, 2017 to Dec, 2017:

1. Ramakrishnan Raman, Dr. S. Vadivel and Dr. Benson, "A Framework for Cost-Effective Distributed Data Mining in academic institutions using Intelligent Agents", IEEE Conference on Information Technology Trends, 2017, Higher Colleges of Technology, Oct. 2017, UAE.
2. Zaidali Khoja and Sujala D Shetty, "Hybrid Recommender System for College Courses", 2017 International Conference on Computational Science and Computational Intelligence (CSCI'17) Dec 14-16, 2017, Las Vegas, USA.

**D. Books Published/Edited during the year: NIL****E. Conferences, seminars & workshops conducted: NIL****F. Invited Talks given by faculty: NIL****G. Invited talks / technical visits arranged by the department:**

The following invited talks have been arranged in the CS department, BPDC during Jan-Dec 2017:

1. Prof. Hoda Al Khzaimi, Director, Centre for Cybersecurity, NYU, Abu Dhabi and Prof Nasir Memon, Professor, CSE, New York University, USA gave a talk on "CYBER-SECURITY" on 08 OCT. 2017.
2. Dr. Prabhu Ram, Consultant – IT (Former Faculty: Univ of North Dakota), gave a talk on "Introduction to Data Sciences", on May 14, 2017.
3. Mr. Dil Sukh Jain, Former Dy Director & Project Director, NRSC, ISRO, Hyderabad, India and Eminent Alumnus of BITS Pilani, 1975 Batch EEE, 1977 Batch M.E. Electronics, gave a talk on "Satellite Remote Sensing & Space Program in India", on April 05, 2017.

**H. Awards and recognitions won by faculty and students**

1. Rishav Jalan, 4th year CSE student, BPDC has won first prize at a competition for inventors with his idea for a "Google" for speech. He impressed judges at the Global Student Entrepreneur Awards competition in the UAE with his Wrappup voice recording app. It has a database of words that are most used on the internet and will highlight words that are unique or rarely used. As the winner of the UAE competition, Mr Jalan will head to Frankfurt, Germany, in April for the global finals where he will compete against 50 others for a share of \$400,000 (Dh1.5m) in prizes. He has won \$3,000 worth of Aramex shipping aid for his business and the GCC Harvard Business School Club will mentor him until the finals in Frankfurt.
2. Three final year students from the Computer Science Department, BPDC, Amartya Das Sharma, Arun S and Shikhar Singh participated in the 17th GULF PROGRAMMING CONTEST held at Gulf University for Science and Technology, Kuwait on March 22-23, 2017. A total of 51 TEAMS representing 17 universities in UAE, Qatar, Oman, Saudi Arabia and Kuwait participated, making this year's the largest iteration of the competition to date. BPDC students won the FIFTH PRIZE in this prestigious and highly competitive Gulf Programming Contest by solving 6 problems (out of 11) and brought laurels to our institution.
3. Teams comprising Tejas Kulkarni and Krishna Kaushik and Shaleen Bengani and Kunal Sethi from BPDC participated in the inaugural edition of Tata Crucible Campus Quiz Dubai 2017 held at BITS Pilani, Dubai Campus on 30th April 2017. The Quiz witnessed multiple rounds of high energy quizzing, comprising a wide range of audio-visual questions from the world of business and economy, where eight top teams were chosen through a preliminary round, followed by a wild card round, who then battled in the on-stage finals round.
4. BITS Pilani Dubai Campus become the top four winning teams in the Hackathon Challenge 2017. Over 150 students from 24 teams from 30 universities in the UAE took part in the event, which supports the directives of the wise leadership to encourage and spread a culture of innovation amongst young people, and promote innovation. On 5th May 2017, Dubai Electricity and Water Authority (DEWA) has organized an event to honour the winning teams in the Hackathon Challenge 2017.
5. Microsoft Office Specialist - UAE Championship was organized by FAME. (Financial Accounting & Management Education Training Institute, Dubai). 10 universities and many schools in UAE took part in the competition which had a series of rounds during January to May 2017. Microsoft Office Specialist Championship- UAE Finals was held on May 20, 2017. Mr Rewant Verma, 3rd Year CS student, Runner up of MS Power Point 2013, Ms Alina Zaidi, 3rd Year CS student Winner of MS Excel 2013, Ms Sabiha Shaik, 1st Year CS student, Winner of MS Word 2013. They took home laptops, individual trophies and also rolling trophies for college.
6. Alina and Sabiha went to Anaheim, California, USA on an all expense payed trip to participate in The World Championship from July 31 – August 2, 2017. There were 157 champions from around 122 countries. The events included Welcome reception, motivational speeches, the competition, a trip to Disney Land and a glorious award ceremony. Alina Zaidi secured World Rank 10 in Excel 2013 Category. She also gave a radio interview in Dubai.



7. BITS Pilani, Dubai Campus Team of students Mr. Rewant Verma (4th Year CSE), Ms. Alina Zaidi (4th Year CSE) and Mohamed Nawaz (3rd Year MECH) has been declared as 2nd runner-ups at BSE Financial Trading Contest. BSE Financial Trading Contest is a Trading Skill Competition which was held in association with 44th World Skills Competition, which took place this year in Abu Dhabi. The competition was held from 15th October 2017 to 18th October 2017 at the Abu Dhabi National Exhibition Center. BSE Financial Trading Competition 2017 was organised by BSE Institute Limited, India in connection with BIL-IBMC, where teams from various universities in the UAE participated.
8. ATXHackathon event took place from 29th to 30th October 2017. ATXHackathon was organized by Al Noor Training Center for Persons with Disabilities powered by Microsoft, is an innovation challenge for UAE Corporates, University students, an arena for software developers, hardware makers & general community to come together and create solutions for the challenges the determined ones face every day. **Team Jisr** consists of students namely Jaskanwar Singh, Jayant Panwar, Kelvin DeCosta, Somil Mathur and Tushar Agarwal from BITS Pilani, Dubai Campus won the 2nd position at ATXHackathon. The Team presented their working prototype Jisr which can translate sign language to text and vice versa, therefore, enabling a two-way communication between the hearing impaired and hearing communities. **Another team IIMAY** consists of students namely Sarthak Sethi, Satyarth Vaidya, Jeevan Sandhu and Mihir Prabhudesai from BITS Pilani, Dubai Campus won the 3rd position at ATXHackathon. The Team presented their application IIMAY which can convert a whole conversation between multiple people into sign language so it is much more convenient for a deaf person to interact in meetings.
9. On 11th and 12th November 2017, Accenture Digital Global Hackathon took place. The participants were asked to use digital technologies in creative and innovative ways, to show how these can transform our everyday lives to develop deeper relationships with citizens, patients, colleagues, students and humanity, in general. The projects executed by the teams, was evaluated by a panel of experienced judges, some of which were top employees of Accenture, Etisalat, EXPO 2020 along with other authoritative figures from the world of Digital technology and innovation. A team Members of Vedant Bajaj, Ritwick Dsouza, Aditya Popat, Shaurya Sood, Saugaat Allabadi from BITS Pilani, Dubai Campus won the second prize of €300 for each team member for their Project "HealthMe" a mobile application using blockchain, providing peer-to-peer, community-driven medical insurance and health records. Another team of students Sarthak Sethi (1st Year ECE), Chirag Ghag (1st Year Biotech), and 3 more (not from BITS) won third prize of €200 for each team member for their project "FeedUs" a web platform for connecting charity organizations to institutions which have left over/waste food like Restaurants, Hotels, Supermarkets etc so it can be used for the poor. The web portal provided real time statistics of leftover / waste food left with kitchens.
10. Stephen Wolfram, computer scientist, physicist, and businessman, USA has appreciated our final year CS student Ms. Aishwarya Singh and her thesis advisor / our faculty member Mr. Gaurav Saxena for the first degree thesis "Classification of Programs using SVMs based on their Intelligence". He has extended all support to them in cellular automata research (A New Kind of Science) and has given an offer to Ms. Aishwarya Singh for summer school at Wolfram Research.

#### **I. Faculty Development, International Collaboration & Industry Immersion**

Mr. Gaurav Saxena, Dr. Santhoshkumar, Dr. Vadivel and Dr. Vijayakumar attended Two-Days Workshop on "Industrial Applications of Decision Making Methods and Optimization Techniques", November 17-18, 2017 organized by Dept. of Mechanical Engg. BITS Pilani, Dubai Campus.

#### **J. Significant new equipments/experimental facility added during the year:**

MYSQL based new Database Server has been installed under UBUNTU OS Machine with IP Address 172.16.100.8, in Server Room and students accessed this new facility from Room 332, Software Systems Laboratory during Jan - May 2017 for Database Systems Lab. course and projects.

#### **K. Departmental Association/Club activities:**

1. Association for Computing Machinery – BPDC Chapter Organised the following events
  - i. Competitive Programming Workshops:
    - a. Held from September to December 2017.
    - b. A series of classes aimed to provide an understanding of algorithms and methods to solve competitive programming questions.
    - c. No. of participants: 12.
  - ii. Code For BITS:
    - a. Event held from October to December 2017.
    - b. The first phase of the event included problem formulation and solution methodology for every-day problems within campus.
    - c. The second phase of the event (actual implementation) will be conducted in the second semester.
    - d. No. of teams that participated: 3 teams (13 students)

- iii. Play2Code:
    - a. Event held on 25-October-2017
    - b. Event consisted of two components:
      - Gaming Round: One member from each team would compete against other teams in a 15-minute round of Counter-Strike 1.6. At the same time, the second team member would have to solve two decoding questions.
      - Programming Round: Depending on the performance in the Gaming Round, teams would be split into 3 groups- A, B and C. Each group would be given a set Programming Questions - with group A getting the easiest questions of the lot and group C getting the toughest. In this round, both the team members can solve the questions simultaneously. All teams will have 1 hour 45 minutes in this round.
    - c. No. of participants: 8
  - iv. Capture the Flag:
    - a. Event held on 26-October-2017
    - b. Participants had to solve network security-related problems
    - c. No. of participants: 8
2. IBM Watson Club – HackaThon@BPDC
  3. IBM Watson Club, formed with the sole purpose of giving our students the very essence of being a Developer, an experience absent within the walls of our campus. Started in 2016 with over 50 students at initiation, IBM Watson Club has turned out to be a campus favorite in making students step up to be the innovators of tomorrow.

HackThon@BPDC was the first ever full-fledged two day Hackathon ever to be organized within our campus and witnessed an overwhelming success with over 40+ participants making their way into the finals. Eight teams showcased their remarkable and innovative ideas, solving various issues in the simplest of ways. The competition was sponsored by IBM and In5 and saw members of both firms coach and train our participants in various ways both technical and pitching related. The first ever IBM workshop on Web and Mobile App Development was also conducted during the same, which saw our students being trained by professionals from IBM Developer Experience Team on the various aspects of coding.

The Winners were decided based on the validity, scalability and originality of their solution. Team Cam-Eye Secured the first place for their innovative solution of building a walking guide for the blind using just an everyday smartphone. They won a free entry into the IBM Global Entrepreneurship Program along with 120000 Dollars' worth cloud storage, to turn their idea into a reality.

#### 4. Microsoft Tech Club

This club is an independent club at the BITS Pilani - Dubai Campus, in association with Microsoft Gulf and aims to involve students for a better learning experience in the field of App Development and Web Design & Development. We aim to teach and train students in Windows 8.1 and Windows Phone 8.1 App Development (Universal Apps), Web Design & Development and using Microsoft Azure to build cloud back-ends and services for their apps.

Seminars, workshops, projects and competitions were organised throughout the year. Members have an added advantage in becoming Microsoft Student Partners. The faculty Advisor for this club is Prof. S. Vadivel, The core committee members are: Rishav Jalan, Naman Kamra, Amartya Das Sharama, Ayush Dattagupta, Alok Rajiv, Kunal Malhotra, Pradeepan Raghavan and Hiloni Mehta. The major events organized and attended by the club members in the year 2017 include: Imagine Cup, Web Development Session with Wordpress and Microsoft Azure and Competitive Programming.

#### 5. Linux Users Group

The Linux Users group was started in Oct. 2005. The registrations are free and open to all BPDC students. The group also provided resource material on UNIX Commands and Editor for first year students and Installation related assistance for UBUNTU OS. This is being mentored by Prof B. Vijayakumar.

**B4.14.6 Department: Biotechnology**

Number of faculty members (as on 15 November 2017)

<b>Senior Professors, Professors</b>	03
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	03
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**Head of the Department:** Dr. S. Ramachandran

**Contact details:** sramachandran@dubai.bits-pilani.ac.in

**Number of Ph.D Scholars:** 2(0 Full Time, 2 Part Time and 0- Off campus)

**A. Sponsored Research activities:****1. Ongoing projects:**

- i. PI: Ramchandran S, CoPI: Gokhale, T, Sood, N, Ismail S, Prakashkumar BG, Babu C, Khalil.Ur.Rahman. Optimization of Selected High Yield Grass Species for Biomass and Bioenergy Applications using Saline and Recycled Wastewater, Feb 2017- to date

**2. Projects sanctioned during the year: NIL****3. Projects completed this year: NIL****B. Publications**

1. Rajeswari S., Indhumathy M., Somasundaram A., Sood N., Arumugam S. (2017) Identification of Salinity Stress Tolerant Proteins in Sorghum Bicolor Computational Approach. In: Arumugam S., Bagga J., Beineke L., Panda B. (eds) Theoretical Computer Science and Discrete Mathematics. ICTCSDM 2016. Lecture Notes in Computer Science, vol 10398, pp. Springer ([https://doi.org/10.1007/978-3-319-64419-6\\_41](https://doi.org/10.1007/978-3-319-64419-6_41))
2. Swati Varshney, Trayambak Basak, Mainak Dutta and Shantanu Sengupta (2017) Proteomics, In: Mass Spectrometry in Chemical Biology: Evolving Applications. (Eds) Norberto Peoporine Lopes and Ricardo Roberto da Silva; pp.: 82-143; Publishing house: Royal Society of Chemistry.
3. Joseph E Reddi S Rinwa V et al. titled "Design and in vivo evaluation of solid lipid nano particulate systems of Olanzapine for acute phase schizophrenia treatment: Investigations on antipsychotic potential and adverse effects" in European Journal of Pharmaceutical Sciences, Vol 104 (2017);page 315-325.
4. Reddi S, Singhvi G, Khosa A, et al. titled "Development and validation of cost effective UV-spectrophotometric method for estimation of domperidone in bulk and pharmaceutical formulations" in Vol 29, 12 (2017); Page 2623 -2626 of Asian Journal of Chemistry.
5. Singhvi G, Shukla V, Ukawala R, et al. titled "Development of a new, rapid and sensitive HPTLC method for estimation of Milnacipran in bulk, formulation and compatibility study" in Vol 10 (2017). Vol 10 (2) S; page S2417-S2423 of Development of a new, rapid and sensitive HPTLC method for estimation of Milnacipran in bulk, formulation and compatibility study.
6. Singhvi G, Kumar V, Ukawala R, et al. titled "Development of bio analytical HPLC method for estimation of milnacipran hydrochloride in rabbit plasma using solid phase extraction technique and its application in pharmacokinetic investigation" in Vol 13, 6(2017); Page 574 - 580 of Current Pharmaceutical Analysis
7. Joseph E, Saha R.N titled "Investigations on pharmacokinetics and bio distribution of polymeric and solid lipid nano particulate systems of atypical antipsychotic drug: effect of material used and surface modification" in Vol 43. 4(2017); page 678-686 of Drug Development and Industrial Pharmacy.
8. Sunil K. Dubey, Amit Anand, and Ranendra N. Saha. "Enantioselective disposition of venlafaxine and its metabolite o-desmethylvenlafaxine in rats." INTERNATIONAL JOURNAL OF PHARMACOKINETICS, 2017, 2(1), 39-45.

**C. Conferences attended/papers presented:**

Following papers were presented in the international conferences by the department faculty/ staff/PhD scholar in the year 2017

1. Thapa, A, Biswal,S, Sood,N, Ramachandran,S, Gokhale,T, Development of a biosensor using photobacterium spp. for the detection of environmental pollutants. BioSmart 2017, 2nd International Conference on Bio-engineering for Smart Technologies, Paris, 30th Aug -1st Sep 2017. (Poster presentation).

2. Zaman SF, Khalil-Ur-Rahman, Ismail S, Kumar BGP, Sood S, Gokhale T and Subramanian R, Optimization of Growth Conditions For Biomass Production And Characterization For Bioenergy Applications, Current Trends in Biotechnology-CTBT 2017, 12-13, April 2017, Manipal University Dubai (poster presentation).
3. Gokhale T, Alternate medicines practiced in Arab regions, International Conference on Ancient Science and Technology Retrospection and Aspiraitons (ASTRA 2017), 18th-19th Jan 2017, H.V. Desai College, Pune, India (oral presentation).
4. S Rajeswari, Sood, N, Gokhale T ,Ramchandran,S. Screening for sensitive and tolerance Barley Accessions to Salinity: A case study with 12 Accessions, Current Trends in Biotechnology-CTBT 2017, pp. 10, ,12-13th April 2017, Manipal University Dubai (oral presentation).
5. S Rajeswari, Sood, N, Sood ,N, S Arumugam, Identification of salinity stress tolerant proteins in Sorghum Bicolor Computational Approach, International conference on theoretical computer science & discrete mathematics (ICTCSDM 2016) springer international, LNCS 10398, pp 318-325,Dec 19-21 , 2016, AKCE, TN, India (oral presentation).
6. Leonardo Micheli, Eduardo F. Fernández, Greg P. Smestad, Hameed Alrashidi, Nabin Sarmah, Nazmi Sellami, Ibrahim A. I. Hassan, Amal Kasry, Gustavo Nofuentes, Neeru Sood, Bala Pesala, S. Senthilarasu, Florencia Almonacid, K.S. Reddy, Matthew Muller, Tapas Mallick (2017) A unified global investigation on the spectral effects of soiling losses of PV glass substrates: preliminary results during IEEE 44th Photovoltaic Specialists Conference (PVSC) from June 25-30,2017 ,Washington DC (Paper was presented by PI) Dr Ramchandran also worked with the data collection and analysis during the course of study but due to Author limitations, only PI from different organizations were mentioned (oral presentation).

**D. Books Published/Edited during the year: NIL**

**E. Conferences, seminars & workshops conducted: NIL**

**F. Invited Talks given by BITS faculty**

1. Dr. R N Saha, delivered an invited talk on Role of materials in design of Nano particulate Systems for Selective Delivery of Drugs during International Conference on Nano- and Functional Materials, on 17th November, 2017, at BITS Pilani.
2. Dr. R N Saha, delivered an invited talk on Design and studies of novel delivery systems for selective distribution and better efficacy, during SciLIFE Lab, Karolinska Institute, on 18th January, 2017 at Stockholm, Sweden.
3. Dr. R N Saha, delivered an invited talk at S P Process Development Institute, Stockholm, on Studies on Some Techniques and Approaches for Enhancement of Bioavailability of some Drugs, on 19th January, 2017 at, Stockholm, Sweden.
4. Dr.R N Saha, delivered a talk on Modified/Selective Distribution of Drug: Nanoparticulate Systems, Characterization, Pharmacokinetic and Biodistribution Studies at GSK R & D Center Hyderabad as an invited speaker.
5. Dr. R N Saha, was invited to be among panel members during : Global Experiments- 21st Century Skills and Their Relation to Employability World Education Summit, spoke about Collaborative Learning in Globalized Environment and Importance of Education for Skill Fulfillment organized at Le Meridian, Dubai, UAE.
6. Dr.R N Saha, was one of the team members in a delegation from India at Edutech 2017: Knowledge, Skill, Technology; organized by Indo-New Zealand Business Council, and delivered a talk on Skill Development: Leveraging Technology on 4th August 2017 at INZBC, Pulman Hotel, Auckland, NZ.

**G. Invited talks arranged in the department:**

1. **Speaker**-Dr. Ashraf Ahmed; **Designation**: Assistant Professor; **Organization**: Retired Professor; **Topic**: Nanobiotechnology; **Date**: 15-Mar-17
2. **Speaker**: Dr. Bhoomendra Bhongade; **Designation**: Assoc. Professor; **Organization**: RAK College of pharmaceutical Sciences; **Topic**: Drug Design and discovery: 3D QSAR CoMFA approach ; **Date**: 26 April 2017
3. **Speaker**: Mr Sarthak Sawarkar; **Designation**: Student (MS in Biomedical Sciences); **Organization**: Penn State, USA; **Topic**: CRISPIR Technology ; **Date**: 10 September 2017
4. **Speaker**: Zubair Ahmed; **Designation**: Graduate researcher; **Organization**: University of Nottingham, UK; **Topic**: Stem cell research; **Date**: 17 September 2017
5. **Speaker**: Dr. Ganesh; **Designation**: Professor; **Organization**: IIT Kanpur; **Topic**: Lafora Disease: From genetics to treatment; **Date**: 01 October 2017

6. **Speaker:** Prof Lakshmi Kotra; **Designation:** Professor; **Organization:** Toronto University, Canada; **Topic:** Drug Discovery and Commercialization; **Date:** 05 November 2017
7. **Speaker:** Dr. Himanshu Dev; **Designation:** Assistant Manager - Admissions Consulting; **Organization:** Emirates Score Plus; **Topic:** Advice on higher education to B.Tech third and fourth year students; **Date:** 19 November 2017
8. **Speaker:** Dr Aiysha Siddiqua; **Designation:** Assistant Professor (Rtd.); **Organization:** Al Ain University of Science and Technology, Dubai, UAE; **Topic:** Structural polymorphism in Tau filaments: An implication for neurodegenerative diseases; **Date:** 23 November 2017

#### H. Awards and recognitions won by faculty and students

Zaman SF, Khalil-Ur-Rahman, Ismail S, Kumar BGP, Sood S, Gokhale T and Subramanian R, Optimization of Growth Conditions For Biomass Production And Characterization For Bioenergy Applications , Current Trends in Biotechnology-CTBT 2017, 12-13, April 2017, Manipal University Dubai. (Poster presentation), Second Prize

#### I. Faculty Development, International Collaboration & Industry Immersion: NIL

#### J. Significant new equipments/experimental facility added during the year:

Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
Bomb Calorimeter	Industrial Microbiol & Bioproc Engg
Microwave Digestion & Synthesizer	Instrumental Methods of Analysis
High Speed Centrifuge	Experiments in Biotechnology
Viscometer	Downstream Processing
Serial Soxhlet Extraction apparatus	Downstream Processing
Zetasizer	Instrumental Methods of Analysis

#### K. Departmental association/club activities:

1. **Al rawabi farm** visit on 7<sup>th</sup> of May 2017 for 25 students.
2. **Al rawabi farm** visit on 22<sup>nd</sup> Nov 2017 for 30 students.
3. International centre for biosaline agriculture (ICBA) visit on 3<sup>rd</sup> may 2017
4. **Farewell** was given for the outgoing batch on 17<sup>th</sup> May 2017
5. **Fresher's Welcome**, 5<sup>th</sup> Sep 2017
6. **Agar Art**, 2<sup>nd</sup> Nov 2017
7. **School Workshop**, Discovering DNA conducted on 16<sup>th</sup> December, 2017

#### L. Student Achievements:

ExpoLive Project, Team Supervised by Dr. Trupti Gokhale, (AED 25,000)

#### M. Student Development: Nil

#### N. Student Projects taken under faculty guidance: Nil

**B4.14.7 Department: General Sciences**Number of faculty members (as on 31<sup>st</sup> December 2017)

<b>Senior Professors, Professors</b>	6
<b>Associate Professors</b>	6
<b>Assistant Professors</b>	6
<b>Lecturers</b>	0
<b>Visiting Faculty</b>	0
<b>Adjunct Professor</b>	0

Head of the Department: Dr. Tapan Kumar Datta

Contact details: dutta@dubai.bits-pilani.ac.in

Ph.D. Thesis Submitted during the year: 0

Number of PhD Scholars: 0

Ph.D. Proposal Submitted during the year: 0

A. Sponsored Research activities: NIL

B. Publications:

S.No.	Faculty Member	Title	Journal	Date	Page
1	Ramachandra Raja, R. Kesava Moorthi, ; R. Roop Kumar	Synthesis and Characterization of Sol-Gel Auto combustion derived Ce/Zr substituted Strontium Hexaferrite Nanoparticles	Journal of Superconductivity and Novel Magnetism (JOSC)	Sep 2017	DOI 10.1007/s10948-017-4320-1, Sep 2017
2	G. Saravana Kumar, R. Roop Kumar , P.Murugakoothan	A combined experimental and theoretical investigations on N, N' - Diphenylguanidine based single crystals for non linear optical applications	Mechanics, Materials Science and Engineering	April 2017	ISSN 2412-5954
3	S. Muniyappan, V.M.Arivunithi, T. Solaiammal, K. Sudhakar, R. Roop Kumar and P. Murugakoothan	Synthesis, Structural, Optical, Morphological and Elemental Characterization of CTAB capped CdS Quantum Dots by facile chemical precipitation Technique	Recent Trends in Materials Science and Applications, Springer Proceedings in Physics	189, 2017	341-348
4.	Tapan Kumar Datta	Effect of green technology investment on a production-inventory system with carbon tax	Advances in Operations Research(Scopus-indexed)	Volume 2017, Article ID 48348, <a href="https://doi.org/10.1155/2017/4834839">https://doi.org/10.1155/2017/4834839</a>	1-12
5.	SV. Divyarashmi, A. Somasundaram and S. Arumugam	Global Secure Domination in Graphs	Springer Lecture Notes in Computer Science	Springer Lecture Notes in Computer Science	50-54
6.	S.Rajeswari, M.Indhumathy, A. Somasundaram, Neeru Sood and S. Arumugam	Identification of Salinity stress tolerant Proteins in Sorghum Bicolor - Computational Approach	Springer Lecture Notes in Computer Science	10398	318-325
7.	Tapan Kumar Datta	Inventory system with defective products and investment opportunity for reducing defective proportion	Operational Research – An International Journal (Springer)	17(1), 2017 (Published online on 27 Jan 2016)	297-312.

**C. Conferences attended/papers presented:**

S.No.	Faculty Member	Title	Journal	Page	Date
1	SV. Divyarashmi, <b>A.Somasundaram</b> and S. Arumugam	Global Secure Domination in Graphs	International Conference on Theoretical Computer Science and Discrete Mathematics	50-54	19-21, Dec-2016. Kalasalingam University, Krishnankoil, India
2	S.Rajeswari, M.Indhumathy, <b>A.Somasundaram</b> , Neeru Sood and S. Arumugam	Identification of Salinity stress tolerant Proteins in Sorghum Bicolor - Computational Approach	International Conference on Theoretical Computer Science and Discrete Mathematics	318-325	19-21, Dec-2016. Kalasalingam University, Krishnankoil, India
3	Seba Sara Varghese <sup>1,2</sup> , Sundaram Swaminathan <sup>3</sup> , <b>Krishna Kumar Singh</b> <sup>1</sup> , Vikas Mittal <sup>2</sup>	DFT Based Simulation of H <sub>2</sub> S Gas Sensing Properties of Doped Graphene Seba	Proceedings of the 3rd World Congress on New Technologies (NewTech'17)	Paper No. ICNFA 103 ISSN: 2369-8128 DOI: 10.11159/icnfa17.103	Rome, Italy – June 6 – 8,2017

**D. Books Published/Edited during the year:**

01 accepted by Springer. Book Title: Emerging Trends of Nanotechnology in Environment and Sustainability – A Review-based Approach. To be published in 2018. Editor – Professor S. Karthiyayini,

**F. Invited Talks given by faculty:** Nil**G. Invited talks / technical visits arranged by the department:**

S. No.	Name of Speaker	Topic	Date
1	Dr. Hemwati Nandan, Gurukula Kangri Vishwavidyalaya, India	Our Universe	05/6/2017
2	Prof. Venkiteswaran, BITS Pilani	Monte Carlo Simulation and MATLAB	05/3/2017-06/3/2017

**H. Awards and recognitions won by faculty and students-** Nil**I. Faculty Development, International Collaboration & Industry Immersion-** Nil**J. Significant new equipments/experimental facility added during the year:**

S. No.	Name of the Equipment
1	Dell Optiplex 7040 Mini tower InterCore 17-6700 Processor with E- series 18.5" LED monitor Black UK
2	Photogate Heads
3	550 Universal Interface
4	Flame Photometer
5	PH Meter
6	Conductivity Meter

**K. Departmental Association/Club activities:**

1. Flummoxed Quizzing Association organised following activities:

i. **POP MANIA PUZZLES STUDENTS**

The Flummoxed Quizzing Association of BITS Pilani, Dubai Campus brought back one of its more sought after events which took upon the theme of pop culture and mainstream media, inviting a great crowd of students to test their knowledge on trivia.

The event first selected participants through a preliminary round followed by a stage round where the top six scoring pairs of participants were pitted against each other. The final rounds questioned students on all topics related to music, art, movies, TV shows and general popular trivia. A small section before the rapid fire round was devoted to questioning participants and audience members on facts related to the Quit India movement as part of a campaign set up by the Indian government. Rahul Rajguru emerged as the winner for the event followed by Adwait Kasar.

ii. **FLUMMOXED EVENT-TECH FIESTA**

The Flummoxed Quizzing Association conducted a much awaited rendition of its technical competitions that involve testing people on their trivial knowledge of science and engineering. Held on October 26<sup>th</sup>, students were grouped in teams of two. The Tech Fiesta saw a great number of participants competing head to head in the preliminary rounds that questioned them on everything from technology to chemistry to biology.

This was followed by a final round in the computer lab. where the top six teams underwent rigorous tirade of brain teasers along with audio and visual rounds finally leading to a close margin of victory between the top two teams. Flummoxed is surely looking forwarding to conducting quizzes on similar themes in the future.

iii. **ONLINE QUIZ- LEAGUE OF CHAMPIONS**

After a week filled with academics and other events related to your studies, the mind does crave for something which is different from the mundane events of the weekly calendar.

So, to help you relax and unwind, and at the same time experience the thrill of competing with your friends, The Quizzing Association of BITS Pilani, Dubai Campus, Flummoxed, shall be hosting an online Quiz every week for this semester. A leaderboard shall be maintained where you could see your progress on a weekly basis against your fellow colleagues and friends. We shall be having a particular theme every week, ranging from 'Pokemon' to 'Game of Thrones' to Football or any other topic of your interest.

You could play these quizzes while sitting in the comfort of your own home, without having to go anywhere or prepare for the events. We shall be posting further details about this league and the weekly quizzes on Facebook to let you know in advance about when you should be online to challenge your friends and see your name rise through the weekly leaderboards.

iv. **COLLABORATIONS**

The Flummoxed Quizzing Association has worked alongside other groups to spread the message of remaining inquisitive and to develop extempore amongst students. In the first semester of the year 2017-2018, the association has conducted quizzes for the astronomy club as well as IEL which were met with great reception by the students. Posters for the same with the association logo can be seen below. Additionally, the association has also developed the quiz section for the 'Wolf of Wall Street' competition held by CIIED.

v. **PARTICIPATING IN QUIZZES HOSTED BY OTHER CAMPUSES AND ORGANIZATIONS.**

The association also takes it upon itself to provide students a learning ground to take up quizzes locally and even participate in those held by parent campus organizations such as BITSAA.

Students from the association proved their mettle by securing a top position in the GITEX quiz held in the year 2017.

#### B4.14.8. Department: Humanities & Social Sciences

Number of faculty members (as on 31<sup>st</sup> December 2017)

<b>Senior Professors, Professors</b>	01
<b>Associate Professors</b>	01
<b>Assistant Professors</b>	03
<b>Lecturers</b>	0
<b>Visiting Faculty</b>	10
<b>Adjunct Professor</b>	0

**Head of the Department:** Dr. Shazi Shah Jabeen

**Contact details:** shazi@dubai.bits-pilani.ac.in

**Ph.D. Thesis Submitted during the year:** Nil

**Number of PhD Scholars:** (01 Full Time, 02 Part Time and 0 Off campus)

**Ph.D. Proposal Submitted during the year:** 01

1. Prakash Inbasekaran: Relationship between Organizational Diversity Climate and Employee Acculturation: An Empirical Study of Expatriates in MNCs of United Arab Emirates

**A. Sponsored Research activities:**

1. Dr Shazi Shah Jabeen, Dr B Vijaykumar (CS, Dubai Campus) Dr Basavadutta Mitra (HSS, Goa Campus) and Dr Rahul Banerjee (CS, Pilani Campus) jointly submitted a research project to the Department of Science & Technology, Ministry of Science & Technology, Government of India on the topic: A low-cost tangible framework for assisting Heritage Tourist-An inclusive approach.



**B. Publications:**

1. Rao, A.S. 2017. Perceived Outcomes of Action Learning Programs: Study from a Large Public Sector Organization in U.A.E, Measuring Business Excellence, vol. 21, Issue 4, pp. 1-18

**C. Conferences attended/papers presented:**

1. Natesa Prasad, Energy Security as a subset of National Goals, International Conference in Delhi on Emerging Global Economic Scenario, 11 November 2017, New Delhi, Book chapter by Bloombury Publishers, Page 144
2. Sheetal Desai, Rao, A.S., Shazi Shah Jabeen and Waheed A. A Comprehensive Examination of Antecedents of Cultural Intelligence (CQ): A Comparison Between Third Culture Kids (TCKs) vs. Monoculture Kids, 3<sup>rd</sup> International Conference on Organization and Management, 19-20 Nov 2017, Abu Dhabi, UAE.

**D. Books Published/Edited during the year: Nil****E. Conferences, seminars & workshops conducted:**

1. On 28 August 2017, a workshop on Teaching Effectiveness was organized by the Dept of HSS in collaboration with Teaching Learning Centre and was conducted by Dr Tamali Bhattacharyya, Project Manager, IIT Kharagpur

**F. Invited Talks given by faculty: Nil****G. Invited talks / technical visits arranged by the department:**

1. On 13 February 2017, Professor Purusottam Bhattacharya, Professor (Retired) of International Relations Jadavpur University, Calcutta, India delivered a talk on Rising India's Quest for a Global Role.
2. On 14 February 2017, Professor Bhaskar Bose, Adjunct Faculty, BITS Pilani, Pilani Campus delivered a talk on Decision Making.
3. On 19 February 2017, Dr. Sunil Manjarekar, CEO / MD, Sanbook quality Consultancy, Dubai, UAE delivered a talk on Occupational Health and Management Systems.
4. On 22 February 2017, Mr. N G Shankar, Senior President- Corporate Audit Aditya Birla Management Corporation Pvt. Ltd conducted an interactive session on Internal Audit and Risk Management.
5. On 26 February 2017, Professor Bhaskar Bose, Adjunct Faculty, BITS Pilani, Pilani Campus conducted an interactive session on Thinking and Creativity.
6. On 6 March 2017, Mr. Ravishankar B, Global Head of Talent Management, HCL Technologies conducted an interactive session on Introduction to Behavioral Science.
7. On 28 March 2017, Mr. Arshad Khan, Director, Trading Campus, Dubai conducted an interactive session on Trading Campus – Upgrade to the Next Level.
8. On 17 September 2017, Prof. Giovanni Schiuma, Chief Editor, Chair of IFKAD delivered a lecture on How to Publish in SCOPUS Journals.
9. On 28 September 2017, Prof. Carlos Edward Juarez, Fulbright-Nehru Scholar and Visiting Professor of Development Studies at BITS Pilani, K.K. Birla Goa Campus delivered a lecture on Skills and Competencies needed for 21st Century.
10. On 5 October 2017, Mr. Prakash Rao, Senior Manager, Landmark Group, UAE and Ph.D Scholar (part-time), HSS Department, BITS Pilani, Dubai Campus delivered a talk on Retail E-commerce.
11. On 24 October 2017, Mr. Vivek Shankar, Managing, Director, Morrowind Consultancy Services, UAE delivered a talk on How to Set up Business in UAE.
12. On 31 October 2017, Prof. Ashok Arora, Ex-Professor, MDI, Gurgaon, India conducted an interactive session on Positioning Strategy: Branding.
13. On 06 Novemebr 2017, as a part of the course Cross Cultural Skills, the students were taken on a cultural excursion to help them develop a better understanding of culture and mapping of theoretical concepts with experiential learning.
14. On 7 November 2017, Mr. Ramnath Venkatraman, Head of Business Learning, Noor Bank, UAE conducted an interactive session on Islamic Economy.
15. On 22 November 2017, Dr Thuppil Venkatesh, Principal Advisor Quality Council of India (QCI) & National Referral Centre for Lead Projects in India (NRCLPI), Professor-Emeritus Department of Biochemistry & Biophysics, St. John's Medical College, Bangalore, India conducted an interactive session on Creativity and Innovation.
16. On 22 November 2017, Dr. Sunil Manjrekar, CEO, SQC Consultancy, UAE delivered a lecture on How Quality Management Help Graduate and Undergraduate Students.
17. On 25 November 2017, Prof. Sonjay Gaur, Professor (Marketing), Sunway Business School, Sunway University, Malaysia delivered a talk on Marketing - Brand Management.

#### H. Awards and recognitions won by faculty and students

1. Dr. Shazi Shah Jabeen was invited by EXPO Live team to review 10 research project proposals submitted to its University Innovation Program by the student teams of various universities in the UAE. BITS Pilani, Dubai Campus received an award for Strongest Faculty Engagement in EXPO Live University Innovation Program.
2. Dr Shazi Shah Jabeen was appointed a member of Organizing Committee of 04th World Conference on Applied Science, Engineering and Technology (WCASET-17) held at Crowne Plaza, Dubai during 6 - 7 September, 2017.
3. Dr Shazi Shah Jabeen was appointed a member of Technical Committee of 7th International Conference on Language, Medias and Culture (ICLMC 2018) to be held during March 26-28, 2018, in Fukuoka, Japan.
4. Dr Shazi Shah Jabeen was appointed a member of Technical Committee of 5th International Conference on Linguistics, Literature and Arts (ICLLA 2018) to be held in Hoam Faculty House of Seoul National University, Seoul, South Korea during January 27-29, 2018.
5. Dr Shazi Shah Jabeen was appointed a member of International Journal of Development and Sustainability (IJDS).

#### I. Faculty Development, International Collaboration & Industry Immersion

1. Dr Shazi Shah Jabeen examined PhD thesis entitled "Theoretical Analysis on Psychodynamic Approach of Human Predicament in the Select Novels of Arun Joshi", Periyar University, India.
2. Dr Shazi Shah Jabeen examined PhD thesis entitled "Universal Values in Select Novels of Ralph Waldo Emerson and Subramanya Bharthi", Bharathidasan University, India.
3. Dr Shazi Shah Jabeen reviewed 21 papers for New Frontier, International Journal of Humanities and Social Sciences. Print ISSN: 2394 - 8221.
4. Dr Shazi Shah Jabeen reviewed four research papers for 7th International Conference on Language, Medias and Culture (ICLMC 2018) to be held during March 26-28, 2018, in Fukuoka, Japan.
5. Dr Shazi Shah Jabeen reviewed three research papers for 5th International Conference on Linguistics, Literature and Arts (ICLLA 2018) to be held in Hoam Faculty House of Seoul National University, Seoul, South Korea during January 27-29, 2018.

#### J. Significant new equipments/experimental facility added during the year: Nil

#### K. Departmental Association/Club activities:

##### 1. In-house publications:

Two issues of the in-house publications of Dubai Campus were released during the year:

- i. @bitsdubai (Institute's newsletter) - Volume 14 Issue 1 (2016-2017)
- ii. @bitsdubai (Institute's newsletter) - Volume 14 Issue 2 (2016-2017)
- iii. Perspectives@bitsdubai (Institute's journal) - Volume 6 Issue 1 (2016-2017)
- iv. Perspectives@bitsdubai (Institute's journal) - Volume 6 Issue 2 (2016-2017)

##### 2. Association : CIIED Report for the year 2016 is appended below

**Instagram Initiative :** One of our goals at CIIED is to spark ideas and conversation among the students at BITS Pilani Dubai Campus. While this can be done by bringing in inspiring speakers from outside who are willing to share their stories, we believe we can do more. There are several inspiring individuals within our university, with ideas they want to spread, with a vision for the future or simple those who have a good story to tell. These are the people we believe can truly strike a chord in the minds of the students, since the words come from fellow students. In our minds, no dream is too big or too small- the stories we choose to share on behalf of the students are all unique. There are stories of those who dream of furthering their studies, those who wish to start their own businesses and more. The one thing common to our posts, are the people- every person is dynamic and their own kind of unique. They are the kind of people who wouldn't leave your life without leaving some kind of a mark. Our Instagram initiative #SomedayIwill was started to talk about these stories. In order to hear the voices of next generation of people who will be carrying the world on their shoulders.

A workshop on '**Cultivating the Start-up culture**' was organized by BITS, Hyderabad through telepresence on 05 February, 2017. The guest speaker was Jan Smejkal, China & APAC Community Director at Start-up Grind, which is the largest independent start-up community that educates, inspires and motivates millions of budding entrepreneurs in over 200 cities. The workshop was an interactive session, where Jan asked the students to talk about their ideas and he pitched in valuable inputs and notions on how they can craft their business model for a prospering venture.

On the 9th of February 2017, CIIED held a workshop in collaboration with **InternsME**. The response to the event was overwhelming, and it was attended by 72 students. Hosted by **Ms. Noor Irfan**- the Success Executive at InternsME- the workshop targeted the employability of students who graduate from BITS Pilani, Dubai.

Another InternsME one-on-one profile building session was organized by CIIE, which received an overwhelming response from students. The InternsME Brand Ambassadors conducted the session (BA Program is run by CIIED on campus) on 22 February 2017. The session helped applicants create an InternsME profile to showcase their personality and skill set so it forms an impact on employers. Similar sessions were held multiple times till 15<sup>th</sup> of March by CIIED & InternsME Brand Ambassadors to cater to more students interested in building their profiles.

**HULT Prize Regional Round, Dubai:** The HULT Prize Foundation is a world renowned non-profit initiative held every year with the aim of launching the world's next wave of determined, ambitious and futuristic social entrepreneurs. It encourages young, innovative minds to solve some big challenges with innovative ideas to foster sustainable start-up enterprises. The 2017 challenge was "Refugees – Reawakening Human Potential" and emphasized on restoring the basic rights and dignity of the people and sects who are victims of unjust war, discrimination, and economic pressures. The first round was held in BITS Pilani, Dubai Campus on December 8, 2016, with 27 teams in participation. The distinguished panel of judges included Rekha Satpal – Head of Community Services at Dubai Internet City, Mr. Jitendra Kapoor – Head of Enterprise at Alibaba Cloud ME, Mr. Ajay Bhandoola, Investor @Fintech and Impact Investments, and Mr. Anshul Srivastav, Digital Officer at Union Insurance. The participants had to pitch their business plans with strategic models and practical road maps, and were posed with series of grueling questions. Team Karamfal (Mihir Prabhudesai, Tarun Krishna, Adhitya Natarajan & Anand Maheshwari) along with Campus Director for HULT Prize, Rahul Jain (Vice President, CIIE) took the flag of BITS to the Regional Finals held in Dubai on 3-4 March 2017, which saw 52 teams from US, Canada, Pakistan, Australia, France and other nations. Their idea received immense appreciation from the judges and peers, and was evinced as a promising start-up pitch. It was indeed a privilege for the university to have participated in an event of such grandeur and scale.

**BPDC Case Challenge:** CIIED successfully held its latest edition of the BPDC Case Challenge from the 24th of March to the 4th of April 2017. This competition has always proven to be a great way of helping participants learn how to analyse and present cases effectively. We've seen great teams being built, and talented public speakers emerge and this time was no different. The competition took place in two rounds. The first round held from the 24th- 31st March 2017 saw a participation of 30 teams. Prior to round 1, a workshop on analysing case studies was held by the guest faculty, Ms. Vidyalakshmi Padmaja. The first round involved the detailed analysis of a case study, and recommendations to the problem statement. Of the 30 teams that registered, 9 teams qualified for round 2 which was held on the 4th April 2017. In the second round, the teams were set a new case study and given time to prepare their analysis and formulate their recommendations. They then presented their findings in front of a panel of judges comprising of Ms Vidyalakshmi Padmaja and CIIE faculty in charge, Dr. Trupti Gokhale.

CIIE organized an InternsME Video Resume Session by Mr. Supratik Mukherjee (Product Manager, InternsME) on 28<sup>th</sup> March 2017. In the talk he elucidated with examples how a proper Video CV can be prepared and answered questions by eager students who wanted to learn and apply that knowledge to take full advantage of the opportunity. The session was followed by a Video Recording session, where based on a few guidelines, students could prepare their own Video Resumes.

CIIE encouraged its members by updating them about the activities held outside college boundaries to network and grow. Some of the events that our students participated in are :

- i. Startup Weekend, Sharjah (54hr weekend for developers, startup enthusiast to develop a working prototype/model/presentation within the weekend)
- ii. Step Conference 2017 (The largest interactive gathering in MENA tackling the latest trends in tech, digital, music and entertainment industries.)
- iii. Genesis 2017 (Manipal University Dubai – Annual Inter University Business Fest)
- iv. Startup School Program (Summer program run by IB Hubs)

CIIE once again collaborated with **Astrolabs**, the only Google TechHub in the MENA Region to introduce the Digital Marketing Track and Web Development Track Scholarship programs of \$3200 (each) for free to students of BITS Pilani, Dubai Campus.

CIIE in the new academic year again, collaborated with InternsME, to provide students on campus with opportunities to apply for either internships or jobs on the InternsME portal. After having an over-whelming response to the call for applications for InternsME Brand Ambassador Program, the following students were selected, Mukarram Ahmed, Rewant Verma, Steve Theol Lobo, Ahmed Kamlani, Tarang Shankarshetty, Viabhav Arora.

**The Wolf of WallStreet – 'Stock Market and Market Simulation Competition'**, a flagship of BITS Pilani Dubai Campus was organized between 10<sup>th</sup> October to 23<sup>rd</sup> October 2017. We had a 66 teams participating from different universities such as MiddleSex, Amity, Murdoch, Manipal , Wollongong , SP Jain. A guest speaker from Barjeel Geogit – Ms. Elizabeth (MBA, CFP), spoke on the issues faced while trading stocks and how to overcome them. Insights were also given to invest in the right markets. 66 teams from 8 universities participated in the online round which took place over 5 working days of the U.S.A stock market. (15<sup>th</sup> – 19<sup>th</sup> October). Top 15 teams at the end of 5 days were promoted to Round 2. The teams that made it to Round 2 were requested to come to BITS Dubai on 23<sup>rd</sup> October for a live floor trading atmosphere with investment marketing followed by a few quizzes covering an array of topics. 6 novel projects were launched along with 3 quiz sessions (hosted by

BPDC's Quizzing club - Flummoxed). The scores achieved in the quizzes were added to the profits earned through trading. The teams that emerged victorious were Gurus Of Dalal Street, The Lone Ranger and AlphaQ. The teams received cash awards of AED 400, 250 and 150 respectively, along with a memento.

The Hult Prize 2018 challenge was "**Harnessing the power of energy to transform the lives of 10 million people**", intriguing the minds of young budding engineers, to find alternative energy solutions for this fast-paced era. The first round was held in BITS Pilani, Dubai Campus on December 4, 2017, with 10 zealous and skilled teams in participation. The distinguished panel of judges included: **Sridhar Venkataraman**, Relationship Marketing Coach and Franchise Owner, Accelerate Asentive UAE, **Sultan Al Zaabi**, Act. Deputy Senior Manager, Demand Management & Tariff, DEWA, Dubai and **Ajith Kumar**, CEO, Square B&C Insulation, Dubai, UAE, who took time off their busy schedules, to give the participating teams constructive feedback and suggestions to transform their ideas into reality. Three teams, exhibited massive potential, and outperformed, the other participating teams with their prospective viewpoints and strategies: The first position was secured by **Team Metamorph** (Urvashi Satwani, Jaskanwar Singh, Tushar Agarwal and Somil Mathur). **Team Perpetual Motion Squad** (Jitesh Gurav, Rajdeep Ghosh, Sidharth Agarwal and Anuj Lihori) bagged the second position. The third place was won by **Team AKNT** (Nawaz Muallim, Tarun Krishna, Sohail Danish and Adhitya Natarajan).

CIIE organized the **Mantra Awards 2017** for BITSAA International, which received 19 applications to the 5 categories from the students. The jury comprising of 5 faculty members and 1 student member scrutinized the applications and interviewed the students on 12<sup>th</sup> December 2017.

## B4.15 DIVISION/ UNIT/ CENTERWISE ACTIVITY HIGHLIGHTS

### B4.15.1 Academic Research Division

#### Award of Ph.D. Degree (viva conducted) Dubai Campus

S. No.	Name	Title
1	Ms. Swati Sinha	"New Algorithms for Atmospheric Wind Profiler Radar Signal Processing and Target Classification"
2	Ms Seba Sara Varghese	" Investigation of Doped Graphene Properties Using Density Functional Theory and its applications in Gas sensing"

**Ph.D. Qualifying examination:** 6 Ph.D candidates under aspirants, faculty development scheme and students category, were permitted to appear in the Ph.D qualifying examination in the year 2017.

#### Sponsored Research Projects

Research projects sponsored by the Institute, are in operation. A list of ongoing research projects is given below:

#### Ongoing Projects:

S. No.	Projects Title	Principal / Co – Principal Investigator	Sponsored by	Amount Sanctioned(AED)
1	Design and Analysis of Magnesium based Syntactic Foams for Military Vehicle Applications	Dr. Priyank Upadhyaya	BITS Pilani(RIG)	20,000
2	A Metabolomics approach to explore the health benefits of Salicornia bigelovi	Dr.Mainak Dutta	BITS Pilani(RIG)	20,000
3	Bio-Tribo Corrosion Evaluation of Ti Based Bulk Metalik Glass/Hydroxyapatite Composites for Bio-Implant Application	Dr.Vincent Shantha Kumar,Dr. Ram Karthikeyan, Dr.Zsolt Kovacs, Dr.D.M.Kulkarni	BITS Pilani(SEED GRANT)	90000
4	Design and Development of Closed Loop Control System to Improve The Proccess Capability of Incremental Sheet Metal Forming	Dr.Ram Karthikeyan, Dr. Vishal Gangadhar Naranje,Dr.V. Kalaichelvi,Dr.Vilas Haridas Gaidhane	BITS Pilani(SEED GRANT)	90000

S. No.	Projects Title	Principal / Co – Principal Investigator	Sponsored by	Amount Sanctioned(AED)
5	Optimization of Selected High Yield Grass Species for Biomass and Bio Energy Applicaton Using Saline and Recycled Wastewater.	Dr.S.Ramachandran(PI),Dr. Neeru Sood, Dr. Trupti Gokhale , Dr. B.G. Prakash Kumar	BITS Pilani(SEED GRANT)	1,25,000

#### Research Contributions through Higher Degree Dissertations:

A total of 21 M.E. and M.B.A. Dissertation Projects were carried out over a period from January 2017 to December 2017 during the academic year 2016-17. The list is given in Annexure B4-13

#### Research Contributions through First Degree Theses:

A total of 43 students completed their first-degree theses during both the semesters of the calendar year 2017. Besides faculty members of the Institute, scientists from R & D labs and other professionals also supervised the thesis work. The complete list is given in Annexure B4-14.

#### Research Publications by Faculty, Staff and Students:

There were a total of 97 contributions which include 47 in various international Journals and 50 in various Conferences and 7 publications in book chapters. The complete list of research contributions made by the faculty, staff and students is given in Annexures B4-11 and B4-12.

#### Some Noteworthy Achievements:

1. **The Memorandum of Understanding** MoU was signed between Al Ain University of Science and Technology (AAU) Library and BITS Pilani Dubai Campus Library for sharing the library resources for research and teaching on Tuesday, September 19, 2017
2. Dr. Vincent Shantha Kumar was invited to deliver guest lecture on Bio-corrosion of metallic glasses in Seoul National University, Seoul, South Korea
3. Prof A P Singh, Civil Engineering Department has been nominated as an expert in the Ministry of Environment, Forest and Climate Change and by Himachal Pradesh Public Service Commission, He was also nominated as an External Member of Advisory Committee for Special Assistance Programme(SAP) by the University Grant Commission, New Delhi.
4. Prof. A.B.Chattopadhyay delivered a special lecture as a Guest of honor in the International workshop on "MATLAB Application in Electrical Engineering" in Millia Institute of Technology, Purnea, Bihar, India
5. .Dr. Vincent Shantha Kumar delivered Invited talk on Bio-corrosion studies on Zr based metallic glasses in International Symposium for Advanced Materials Research (ISAMR 2017) in Taiwan
6. Ms. Gayatri Hariharan and Dr Vincent S Kumar received the best paper Award for the paper entitled " Investigation on Heat Transfer Fluids used in Concentrating Solar Power Systems" at 2nd Student Research Colloquium on Advances in Engineering & Information Technology ( AEIT-2017) at Manipal University, Dubai Campus
7. Team Trepit from BITS Pilani Dubai Campus, (Tarun Krishna, Adhitya Natarajan, Harsith Rani, Mohamed Nawaz, and Pranay Addepalli) of Mechanical Engineering department won the Runners-up position of Startup Weekend Ras Al-Khaimah UAE
8. Vaishak Thiruvokitam, Shivanarain Ravichandran and Mahathi Kishorekumar, from Mechanical Engineering department represented BITS Pilani Dubai Campus in International Conference on Sports Engineering 2017, Jaipur, won the Consolation Prize, Pan-India Student Design Contest .The project was done under the mentorship of Dr Shashank khurana.
9. Team Avenue Inc., co-founded by Karthik Bharadwaj, a Mechanical Engineering student of BITS Pilani, Dubai Campus clinched the top Prize at Startup Weekend Dubai Edition . The team received a cash prize of \$12,000 IBM Credit in addition to one year working space and mentor-ship from The Bureau Dubai, and qualified for Global Startup Weekend.
10. BITS Pilani, Dubai Campus students clinched 4 awards at the very prestigious EXPO Live University Innovation Programme, as part of Dubai Expo 2020. The teams received the project grant of worth AED 25000 each. Over 280 proposals were submitted to the EXPO Live University Innovation Program by students from 33 universities in the UAE. The teams were mentored by Dr R Udayakumar (Team IORTA) Dr. Shashank Khurana(Team AURORA) ,Dr Abdul Razak(Team Smart Dust Bins) Dr. Trupti Gokhale and Dr. Neeru Sood (Team Vim Pulveres)

11. Mechanical Engineering Department successfully organized an International conference on Recent Advances in Materials & Manufacturing Technologies (IMMT) 2017 on 28th and 29th November 2017. Large number of participants attended the conference from India and abroad.
12. Rishav Jalan, CSE student, BPDC won first prize at a competition for inventors with his idea for a "Google" for speech. He has won \$3,000 worth of Aramex shipping aid for his business.
13. Three final year students from the Computer Science Department, BPDC, Amartya Das Sharma, Arun S and Shikhar Singh, won the FIFTH PRIZE among a total of 51 TEAMS representing 17 universities in prestigious and highly competitive Gulf Programming Contest held at Gulf University for Science and Technology, Kuwait
14. BITS Pilani Dubai Campus become the top four winning teams in the Hackathon Challenge 2017. Over 150 students from 24 teams from 30 universities in the UAE took part in the event. Dubai Electricity and Water Authority (DEWA) honoured the winning teams in the Hackathon Challenge 2017.
15. Mr Rewant Verma , Ms Alina Zaidi, Ms Sabiha Shaik, CS students of Computer Science Department, BPDC made BPDC proud by winning a Runner up award of MS Power Point 2013, winner of MS Excel 2013, winner of MS Word 2013 of Microsoft Office Specialist Championship- UAE organized by FAME. (Financial Accounting & Management Education Training Institute, Dubai)
16. Mr. Rewant Verma (4th Year CSE), Ms. Alina Zaidi (4th Year CSE) and Mohamed Nawaz (3rd Year MECH) has been won the 2nd runner-ups award at BSE Financial Trading Contest, held at the Abu Dhabi National Exhibition Center
17. 3rd Year CSE student was Runner up of MS Power Point 2013, Winner of MS Excel 2013 organized by FAME. (Financial Accounting & Management Education Training Institute, Dubai)
18. Team Jisr consists of students namely Jaskanwar Singh, Jayant Panwar, Kelvin DeCosta, Somil Mathur and Tushar Agarwal from BITS Pilani, Dubai Campus won the 2nd position at ATXHackathon. Another team IIMAY consists of students namely Sarthak Sethi, Satyarth Vaidya, Jeevan Sandhu and Mihir Prabhudesai from BITS Pilani, Dubai Campus won the 3rd position at ATXHackathon. ATXHackathon was organized by Al Noor Training Center for Persons with Disabilities UAE powered by Microsoft
19. The BPDC team represented by five of final year CSE students -Vedant Bajaj, Ritwick Dsouza, Aditya Popat, Shaurya Sood, Saugaat Allabadi from BITS Pilani, Dubai Campus won the second prize of €300 for each team member for their Project "HealthMe" a mobile application using blockchain, providing peer-to-peer, community-driven medical insurance and health records in Accenture Digital Global Hackathon .
20. A group of students ,Sarthak Sethi (1st Year ECE), Chirag Ghag (1st Year Biotech) and three others , won third prize of €200 for each team member for their project "FeedUs" a web platform for connecting charity organizations to institutions which have left over/waste food like Restaurants, Hotels, Supermarkets etc so it can be used for the poor in Accenture Digital Global Hackathon held On 11th and 12th November 2017
21. Stephen Wolfram, computer scientist, physicist, and businessman, USA has appreciated CS student of final Ms. Aishwarya Singh for her first degree thesis "Classification of Programs using SVMs based on their Intelligence". He has given an offer to Ms. Aishwarya Singh for summer school at Wolfram Research.

**To appraise themselves about BITS Pilani-Dubai campus, interact with faculty, staff & students and/or to collaborate with the Institute, the following were among the notable visitors to BITS Pilani, Dubai Campus (Please see Annexure B4-10 for list of those who not only visited but also delivered invited talks at Dubai Campus)**

- I. Professor Bhaskar Bose, Adjunct Faculty BITS Pilani, Pilani Campus
- II. Mr. Dil Sukh Jain, Former Dy Director & Project Director, NRSC, ISRO, Hyderabad
- III. Mr. Pradeep Joshi, CEO, AL Green Circle Environment Consultants, Sharjah, UAE
- IV. Mr. Chandra P. Srivastava, MD & Principal Consultant, CP Consultancy Services, Hon. Professor, Dept. of Chem. Engg., IIT, BHU, Varanasi, India..
- V. Dr. Hemwati Nandan Gurukula Kangri Vishwavidyalaya Haridwar, India.
- VI. Prof. Giovanni Schiuma, Chief Editor, Chair of IFKAD
- VII. Prof. Hoda Al Khzaimi, Director of Center of Cyber Security, New York University, Abu Dhabi and Prof. Nasir Memon, Computer Science & Engineering, New York University Abu Dhabi & NYU Tandon School of Engineering, USA.
- VIII. Prof. Nidhal Guessoum, a Professor of Physics and Astronomy at American University of Sharjah, UAE.
- IX. Mr. Vivek Shankar, Managing Director, Morrowind Consultancy Services, UAE.

- X. Dr Thuppil Venkatesh Principal Advisor Quality Council of India (QCI) & National Referral Centre for Lead Projects in India (NRCLPI) Professor-Emeritus Department of Biochemistry & Biophysics St. John's Medical College, Bangalore, India .
- XI. Dr Essam E. Khalil. ASHRAE Director at Large Imperial College London.

***During the year 2016-17, 11 students underwent FD Thesis & Dissertation at off-campus locations:***

1. Utsav Mahidhara - RWTH Aachen University, Germany
2. Namitha Sathish - SCL, Dept.Of Space. Govt.Of India.
3. Aastha Bhardwaj - SCL, Dept.Of Space. Govt.Of India
4. Abhishek Mahajan -, Research Lab Of CSIR. India
5. Shikhar Singh - BITS ,Pilani –
6. Ayanava Sarkar - FULDA, Germany
7. Karthik Vasudev A - Colorado State University
8. Saraiya Aaditya Asit - Cris, Bits,Pilani – India
9. Rubeena Crystal Prabakaran - Equine Forensic Unit,CVRL Dubai
10. Azar Syed - Semi-Conductor Laboratory. India.
11. Mohammed Azeem Gafoor - Sector 72, Semi-Conductor Laboratory. India.

**Following faculty members delivered invited talks, reviewed proposals, reviewed papers for prestigious journals, served as International Advisory members chaired conference sessions during the 2016-2017**

1. Dr. A.B.Chattopadhyay was invited to deliver Key-note address in the International Conference on “Recent Trends in Renewable Energy and Smart Grids(ICRRESG-17)”, organized by College of Engineering and Technology, MODY University ,Laxmangarh ,Rajasthan ,India on 24-25 February 2017.
2. Dr R Swarnalatha served as Technical Review Committee member for the second IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT-2017), at SVS College of Engineering, Coimbatore, Tamil Nadu, India.
3. Dr.V.Kalaichelvi served as Technical Program Committee Member for International Conferences on Advanced Computational and Communication Paradigms Sikkim Manipal Institute of Technology (SMIT), Rangpo, Sikkim, India and during International Conference on Electrical, Computer and Communication Technologies at SVS College of Engineering, Coimbatore.
4. Dr. Vilas H Gaidhane reviewed the research papers for the Journals IEEE Transaction on Measurement & Instrumentation IETE Technical Review (Taylor & Francis) ,International Journal of Electrical Power and Energy Systems (Elsevier),Image, Video and Signal Processing (Springer) ,Neural Computing and Applications (Springer) and Journal of Medical Systems (Springer).
5. Dr.V.Kalaichelvi served as a designated reviewer on the technical program committee for the 9th IEEE-GCC Conference and Exhibition 2017 and reviewed papers for Bahrain **Gulf Conference and Exhibition center**
6. Dr R Gomathi Bhavani reviewed PhD thesis titled,” Fault detection in transmission line and adaptive setting of distance relay” for KIIT University, Bhubaneshwar, India.
7. Dr R Gomathi Bhavani chaired the session on “Green technology track” during IEEE International Conference on Technological Advancements in Power and Energy (TAP Energy 2017), Amrita University, Kollam, Organized by IEEE Power and Energy Society, Kerala section.
8. Dr. A.B.Chattopadhyay reviewed number of research for IEEE Transactions on Sustainable Energy and Neural Computing and Applications (Publisher: SPRINGER)
9. Dr. A.B.Chattopadhyay reviewed the Research Project entitled, “Implementation and Algorithm Development for an Acoustic Sensing System” ,funded by ICT, Govt. of U.A.E , (financial budget in the tune of AED 984,800.00)
10. Dr. Mary Lourde R served as a technical expert to evaluate ICT FUND research project proposal in various areas of Electrical engineering.
11. Dr. Mary Lourde R served as a reviewer for the journal “Integration, the VLSI Journal” published by Elsevier and reviewed a research manuscript in the area of Trusted IoT, Low power VLSI during July 2017
12. Dr. Vincent Shantha Kumar delivered Guest lecture on Bio-corrosion of metallic glasses in Seoul National University, Seoul, South Korea.

13. Dr. Vincent Shantha Kumar delivered Invited Talk on Bio-corrosion studies on Zr based metallic glasses in International Symposium for Advanced Materials Research (ISAMR 2017), Taiwan
14. Dr Neeru Sood was an invited speaker during the International Conference on Applied Nanotechnology and Nanoscience (ICANN-2017) delivered a talk on Biosynthesized Nanoparticles for Sustainable Agriculture in Saline Soils and Marginal Environments.
15. Dr. Trupti Gokhale was invited to give an Invited Talk on "Synthesis of metal Nanoparticles for Applications in Agriculture" at Delivered talk on "Development of Biosensors" at the Inaugural of the Silver Jubilee celebrations of the Microbiology Department, Bharti Vidhya Peeth, Pune, India on 11th July 2017.
16. Dr Trupti Gokhale delivered an invited talk on "Alternate Medicines practiced in Arab regions" at International Conference on Ancient Science and Technology Retrospection and Aspirations (ASTRA 2017) on 18th and 19th January 2017 held at H.V. Desai College, Pune, India.
17. Dr Shazi Shah Jabeen examined PhD thesis entitled "Theoretical Analysis on Psychodynamic Approach of Human Predicament in the Select Novels of Arun Joshi", Periyar University, India.
18. Dr Shazi Shah Jabeen examined PhD thesis entitled "Universal Values in Select Novels of Ralph Waldo Emerson and Subramanya Bharthi", Bharathidasan University, India.
19. Dr Shazi Shah Jabeen reviewed papers for New Frontier, International Journal of Humanities and Social Sciences.
20. Dr B G Prakash Kumar chaired a session during 2nd Student Research Colloquium on "Advances in Engineering & IT" (AEIT-2017) at Manipal Univ., Dubai Campus
21. Dr. Nishant Pandya was invited as member of International Advisory Committee of International Conference on "Paradigm shift in Chemical engineering education, processes and technology", IEI, during September 16-17, 2017, Ahmedabad, Gujarat, India.
22. Dr. R N Saha, delivered an invited talk on Role of materials in design of Nano particulate Systems for Selective Delivery of Drugs during International Conference on Nano- and Functional Materials, on 17th November, 2017, at BITS Pilani.
23. Dr. R N Saha, delivered an invited talk on Design and studies of novel delivery systems for selective distribution and better efficacy, during SciLife Lab, Karolinska Institute, on 18th January, 2017 at Stockholm, Sweden.
24. Dr. R N Saha, delivered an invited talk at S P Process Development Institute, Stockholm, on Studies on Some Techniques and Approaches for Enhancement of Bioavailability of some Drugs, on 19th January, 2017 at, Stockholm, Sweden.
25. Dr. R N Saha, delivered a talk on Modified/Selective Distribution of Drug: Nanoparticulate Systems, Characterization, Pharmacokinetic and Biodistribution Studies at GSK R & D Center Hyderabad as an invited speaker.
26. Dr. R N Saha, was invited to be among panel members during : Global Experiments- 21st Century Skills and Their Relation to Employability World Education Summit, spoke about Collaborative Learning in Globalized Environment and Importance of Education for Skill Fulfillment organized at Le Meridian, Dubai, UAE.
27. Dr. R N Saha, was one of the team members in a delegation from India at Edutech 2017: Knowledge, Skill, Technology; organized by Indo-New Zealand Business Council, and delivered a talk on Skill Development: Leveraging Technology on 4th August 2017 at INZBC, Pulman Hotel, Auckland, NZ.



## Consultancy

Faculty members from of Mechanical Engineering and Electrical and Electronics Engineering department providing consultancy to Star Cement Co. LLC, Dubai as per the details given

S. No.	Principal Investigator	Department	Funding agency	Sanctioned Amount	Project Title
1	Dr.Vishal Naranje	Mechanical Engineering	Star Cement Co. LLC, Dubai	AED 10,000	Development of Mobile Application for Raw mix cost optimization
2	Dr.Vishal Naranje	Mechanical Engineering	Star Cement Co. LLC, Dubai	AED 10,000	Development of Computer Application for Prediction of Cement Strength
3	Dr. Shazia Hasan	Electrical and Electronics Engineering	Star Cement Co. LLC, Dubai	AED 18,000	Harmonic Mitigation
4	Dr. Udaya Kumar	Mechanical Engineering	Star Cement Co. LLC, Dubai	AED 12,000	Comprehensive analysis and customized solutions for Energy Auditing and Energy Conservation at Star Cement Co. LLC., Ras al-Khaimah

### B4.15.2 Professional Body Activities

#### 1. ASME (American Society of Mechanical Engineers) Student Branch

- i. **ASME Student Section** conducted ON 30-04-2017 FIRST INTER UNIVERSITY INNOVATION CHALLENGE, crowning the winner with a grand cash price of AED:500/- and trophies. The competition features a wide range of topics under which students can develop their innovative ideas and present them in a 5 minutes presentation in the topics Infrastructure, Manufacturing Units, Cyber Security and Smart Cities. ASME student sections from Manipal and Amity, Dubai campus participated in this challenge.
- ii. Dr Aly Tiab, Design & Engineering Manager, B K GULF LLC, Dubai delivered a guest lecture on "Efficiency in Building Services Engineering" on 25-04-17, organised by **ASME Student Section**
- iii. **ASME Student Section** arranged an industrial visit to Cocoa Cola plant at Al Ain on 20/02/17(Monday) & 21/02/17(Tuesday)
- iv. **ASME Student Section** in collaboration with PS Division arranged an industrial visit to KHK Scaffolding & Formwork, Ajman on 02/11/17

#### 2. MEA (Mechanical Engineering Association)

- i. **MEA Student Section** organised a field visit to Emirates Engine Maintenance Center, Warsan, Dubai (5 KM from our campus) on 20/02/17(Monday) & 21/02/17(Tuesday)
- ii. **Mechanical Engineering Association** organised a talk on "Occupational health and Safety Management" by the C.E.O./M.D. of Sanbook Quality Consultancy on 19-02-2017. SQC is a company that deals with certification pertaining to health, safety and other such aspects pertaining to work.
- iii. **M.E.A.** presented a guest lecture on "MATERIALS & PROCESSES FOR CYLINDER COMPONENTS FOR IC ENGINES". On 01-10-2017. The guest speaker is Dr. Gowrishankar.N who is the director of Group Materials Research in India Pistons Ltd. He is also on the Board of Amalgamations Repco Ltd. He is also active in the Quality Movement and had served as the Chairman of NIQR Chennai Chapter.

#### 3. SAE (Society of Automotive Engineers)

- i. **Prestigious Formula SAE ITALY & Formula Electric ITALY Competition, Participated by SAE students:** Formula 6 car team ( Captain-Mr Jasjeev Singh, III yr Mechanical) under the guidance of Prof R.Karthikeyan and Team Gear shifters( Captain-Mr Sadiyot Biswal, IV yr Mechanical) under the guidance of Prof R. Udaya Kumar participated in the 13 th edition of Prestigious Formula SAE ITALY & Formula Electric ITALY Competition, which was held in the Riccardo Paletti Circuit - Varano de' Melagari(PR), Italy from July 19 to 23, 2017.

#### 4. AOEE had organised the below events:

- i. Organised an interactive session by Aditya Pandey, IV EEE & Aamir Jamal IV ECE on "Seniors Guide to Masters Application" on 19th Feb 2017.

- ii. Organised an interactive session by the Alumnus “Ruchira Chatterjee CEO at Auxesis Infotech Pvt. Ltd” and Sreeram Muralidharan Consultant at Capgemini, New York on 8th March 2017.
- iii. Organized a workshop by Dr A R Abdul Razak on “PSPICE” on 11th March 2017.
- iv. Organized School Students workshop in department level on 29th March 2017.
- v. Organized a workshop by Dr Vilas on “Multisim” on 29th April 2017.
- vi. An ICE breakers session were organised for fresher’s 07.09.2017
- vii. An orientation session for fresher’s were organised on 05.09.2017.
- viii. A Guest Lecture by Dr Narayana R Aluru on “Computational Nanotech” was organized on 26.8.2017.
- ix. Organized interactive session and a science & technology based quiz session was held for Students from DPS Jaipur on 04.10.2017.
- x. A Guest Lecture by Dr. Moinuddin on “Surgical Robots” was organized on 05.10.2017.
- xi. Organised the technical event Mindspark for “Enginuity” from Nov 25th to 27th Oct 2017.
- xii. A Guest Lecture by Mr.Yasir Arafat on “Employability Skills ” was organized on 07.11.2017.
- xiii. A Guest Lecture by Prof. Hasan Al-Nashash on “Vigilance Assessment and Enhancement Using Multi-Sensory Interactive Physiological Inputs” was organized on 21.11.2017
- xiv. A Guest Lecture by Dr. Brajesh Kumar Kaushik on “Innovations and Pathway in Nanoelectronics” was organized on 26.11.2017
- xv. An industrial visit was organised on 27.11.2017 to Dorman Smith Factory, Dubai for EEE students.
- xvi. Organised school students workshop 'Explore Engineering" fon 28.12.17 for EEE department.

#### 5. **IEEE**

- i. A workshop on how LaTeX platform is used to write research papers for publications was organised in association with IEEE.

#### 6. **IFOR Activities**

- i. IFOR students demonstrated their drones for school students workshop conducted on 29th and 30th March 2017
- ii. Team IFOR students demonstrated their drones to EXPO 2020 team when they have visited dubai campus on April 3rd 2017
- iii. Team IFOR has participated in WETEX: Water, Energy, Technology and Energy Exhibition 2017 exhibiting their past innovations and current projects. This exhibition served as a mean to exhibit Team IFOR's innovation and paved way for many companies like Siemens Healthineers Global, Oilex and so on to meet the team and interact with them.
- iv. Team IFOR had participated in the International Aerial Robotics Competition 2017 held at Georgia at the American Venue in Atlanta, Georgia, USA, July 2017 and presented a paper on
- v. Unmanned Aerial Vehicle
- vi. Team IFOR organized an event “Rings of Fire” during Technofest held at BPDC on 25th and 26<sup>th</sup> October 2017.

#### 7. **AIChE Students' chapter**

- i. *AIChE (American Institute of Chemical Engineers) Students' chapter BPDC. ChESA – Chemical Engineering Students' Association.*
- ii. AIChE Students' chapter BPDC and ChESA has organized a workshop on MATLAB for beginners, 25<sup>th</sup> March 2017.
- iii. A Hands-on Experience Workshop was organized by the department on a process safety modelling software ALOHA (Area Locations of Hazardous Atmosphere), 30<sup>th</sup> April 2017.
- iv. AIChE Students' chapter BPDC and ChESA organized an orientation program for new Batch of Chemical Engineering Students 2017-2021 to introduce various activities of the associations, September 2017.
- v. AIChE Students' chapter BPDC promoted the Virtual Career Fair 2017 organized by AIChE, 14<sup>th</sup> September 2017.
- vi. AIChE Students' chapter BPDC organized an Introductory Workshop on the software MATLAB, 16<sup>th</sup> September 2017.

- vii. AIChE Students' chapter BPDC organized an industrial trip to Al Tajir Glass Industries LLC, Dubai, 7<sup>th</sup> October 2017.

#### 8. Chemistry Students' Association

- i. ChESA Organized a Six Sigma Workshop, 12<sup>th</sup> October 2017.
- ii. ChESA organized a competition The Big Split (during TechnoFest 2017), 25<sup>th</sup> October 2017.
- iii. AIChE Students' chapter BPDC initiated Pen-Pal System with Sister Chapter BYU, November 2017.
- iv. ChESA has organized an industrial trip to Star Cement Co. LLC, RAK, 4<sup>th</sup> November 2017.
- v. LinkedIn Group created for all the Chemical Engineering Graduates and Students of BITS Pilani (all campuses) - Initiative by AIChE BPDC Student Chapter along with an Alumni
- vi. Students participated in the SEF (Sustainable Energy Forum, AIChE) Infographics Design Competition 2017.
- vii. Joint Interactive Session organized on "The Role of Forensic Chemistry in Regulating use of Prohibited Substances in Sports" by Mr. Peter Albert, Chief Analyst at Equine Forensic Unit, CVRL.

#### 9. Microsoft Tech club

The Microsoft Tech Club is run by Microsoft Student Partners, and students of the Microsoft Student Community. The Microsoft Student Partners Program is for students who realize the best tech careers come to those who chase their dreams. MSPs are involved in building apps, training others and social media. They are social, friendly students who enjoy creating global connections. The major events organized and attended by the club members in the year 2017 include: Imagine Cup, Web Development Session with Wordpress and Microsoft Azure and Competitive Programming.

#### 10. Linux Users Group:

The Linux Users group was started in Oct. 2005. The registrations are free and open to all BPDC students. The group also provided resource material on UNIX Commands and Editor for first year students and Installation related assistance for UBUNTU OS. This is being mentored by Prof B. Vijayakumar.

#### 11. BPDC ACM Student Chapter:

- i. Competitive Programming Workshops:
  - a. Held from September to December 2017.
  - b. A series of classes aimed to provide an understanding of algorithms and methods to solve competitive programming questions.
  - c. No. of participants: 12.
- ii. Code For BITS:
  - a. Event held from October to December 2017.
  - b. The first phase of the event included problem formulation and solution methodology for every-day problems within campus.
  - c. The second phase of the event (actual implementation) will be conducted in the second semester.
  - d. No. of teams that participated: 3 teams (13 students)
- iii. Play2Code:
  - a. Event held on 25-October-2017
  - b. Event consisted of two components:
    - Gaming Round: One member from each team would compete against other teams in a 15-minute round of Counter-Strike 1.6. At the same time, the second team member would have to solve two decoding questions.
    - Programming Round: Depending on the performance in the Gaming Round, teams would be split into 3 groups- A, B and C. Each group would be given a set Programming Questions - with group A getting the easiest questions of the lot and group C getting the toughest. In this round, both the team members can solve the questions simultaneously. All teams will have 1 hour 45 minutes in this round.
  - c. No. of participants: 8
- iv. Capture the Flag:
  - a. Event held on 26-October-2017

- b. Participants had to solve network security-related problems
- c. No. of participants: 8

## 12. Chimera

- i. **Al rawabi farm** visit on 7<sup>th</sup> of May 2017 for 25 students.
- ii. **Al rawabi farm** visit on 22<sup>nd</sup> Nov 2017 for 30 students.
- iii. International centre for biosaline agriculture (ICBA) visit on 3<sup>rd</sup> may 2017
- iv. **School Workshop**, Discovering DNA conducted on 16<sup>th</sup> December, 2017

## 13. SKYLINE

- i. BPDC Civil Engineering Student Association (SKYLINE) was inaugurated on 14-09-17. The Department of Civil Engineering in collaboration with Practice School Division organised an inaugural talk by Mr. Hemant Gor, Sr. Engineer – Civil & Structural, PETROFAC Intl LLC, Sharjah. In his inaugural talk, Mr Hemant gave a lecture on Tall Building Engineering and also mentioned various opportunities and career growth for Civil Engineering students and also gave various tips on project works.
- ii. SKYLINE arranged a guest lecture on 12-10-17 by Tamim Emad Youssef, Technical Sales Manager/Applications Services handling the regions of GCC, Africa, South America and South East Asia with JK CEMENT WORKS (FZC). In his presentation he covered a general idea about the industry of cement in GCC. A brief about JKCEMENT and its international activities. The process of manufacturing of white cement, quality control, logistics and packaging facilities will be discussed. The range of products supplied in the core markets with a focus on the standard specifications, practices and test methods to meet international requirements. Specific focus was given to the applications of the white cement including the dry mix, precast, GRC and flooring.
- iii. SKYLINE also organised a Site visit to Construction site under Crompton International Contracting LLC at Al Khawaneej on 27/09/1 and had a very good practical exposure to construction details of various buildings which are under construction.

### B4.15.3: Center for Innovation, Incubation and Entrepreneurship, Dubai (CIIED)

#### Report for the year 2017 is appended below

**Instagram Initiative:** One of our goals at CIIED is to spark ideas and conversation among the students at BITS Pilani Dubai Campus. While this can be done by bringing in inspiring speakers from outside who are willing to share their stories, we believe we can do more. There are several inspiring individuals within our university, with ideas they want to spread, with a vision for the future or simple those who have a good story to tell. These are the people we believe can truly strike a chord in the minds of the students, since the words come from fellow students. In our minds, no dream is too big or too small- the stories we choose to share on the behalf of the students are all unique. There are stories of those who dream of furthering their studies, those who wish to start their own businesses and more. The one thing common to our posts, are the people- every person is dynamic and their own kind of unique. They are the kind of people who wouldn't leave your life without leaving some kind of a mark. Our Instagram initiative #SomedayIwill was started to talk about these stories. In order to hear the voices of next generation of people who will be carrying the world on their shoulders.

A workshop on '**Cultivating the Start-up culture**' was organized by BITS, Hyderabad through telepresence on 05 February, 2017. The guest speaker was Jan Smejkal, China & APAC Community Director at Start-up Grind, which is the largest independent start-up community that educates, inspires and motivates millions of budding entrepreneurs in over 200 cities. The workshop was an interactive session, where Jan asked the students to talk about their ideas and he pitched in valuable inputs and notions on how they can craft their business model for a prospering venture.

On the 9th of February 2017, CIIED held a workshop in collaboration with **InternsME**. The response to the event was overwhelming, and it was attended by 72 students. Hosted by **Ms. Noor Irfan**- the Success Executive at InternsME- the workshop targeted the employability of students who graduate from BITS Pilani, Dubai.

Another InternsME one-on-one profile building session was organized by CIIE, which received an overwhelming response from students. The InternsME Brand Ambassadors conducted the session (BA Program is run by CIIED on campus) on 22 February 2017. The session helped applicants create an InternsME profile to showcase their personality and skill set so it forms an impact on employers. Similar sessions were held multiple times till 15<sup>th</sup> of March by CIIED & InternsME Brand Ambassadors to cater to more students interested in building their profiles.

**HULT Prize Regional Round, Dubai:** The HULT Prize Foundation is a world renowned non-profit initiative held every year with the aim of launching the world's next wave of determined, ambitious and futuristic social entrepreneurs. It encourages young, innovative minds to solve some big challenges with innovative ideas to foster sustainable start-up enterprises. The 2017 challenge was "Refugees – Reawakening Human Potential" and emphasized on restoring the basic rights and dignity of the people and sects who are victims of unjust war,

discrimination, and economic pressures. The first round was held in BITS Pilani, Dubai Campus on December 8, 2016, with 27 teams in participation. The distinguished panel of judges included Rekha Satpal – Head of Community Services at Dubai Internet City, Mr. Jitendra Kapoor – Head of Enterprise at Alibaba Cloud ME, Mr. Ajay Bhandoola, Investor @Fintech and Impact Investments, and Mr. Anshul Srivastav, Digital Officer at Union Insurance. The participants had to pitch their business plans with strategic models and practical road maps, and were posed with series of grueling questions. Team Karamfal (Mihir Prabhudesai, Tarun Krishna, Adhitya Natarajan & Anand Maheshwari) along with Campus Director for HULT Prize, Rahul Jain (Vice President, CIIE) took the flag of BITS to the Regional Finals held in Dubai on 3-4 March 2017, which saw 52 teams from US, Canada, Pakistan, Australia, France and other nations. Their idea received immense appreciation from the judges and peers, and was evinced as a promising start-up pitch. It was indeed a privilege for the university to have participated in an event of such grandeur and scale.

**BPDC Case Challenge:** CIIE successfully held its latest edition of the BPDC Case Challenge from the 24th of March to the 4th of April 2017. This competition has always proven to be a great way of helping participants learn how to analyse and present cases effectively. We've seen great teams being built, and talented public speakers emerge and this time was no different. The competition took place in two rounds. The first round held from the 24th- 31st March 2017 saw a participation of 30 teams. Prior to round 1, a workshop on analysing case studies was held by the guest faculty, Ms. Vidyalakshmi Padmaja. The first round involved the detailed analysis of a case study, and recommendations to the problem statement. Of the 30 teams that registered, 9 teams qualified for round 2 which was held on the 4th April 2017. In the second round, the teams were set a new case study and given time to prepare their analysis and formulate their recommendations. They then presented their findings in front of a panel of judges comprising of Ms Vidyalakshmi Padmaja and CIIE faculty in charge, Dr. Trupti Gokhale.

CIIE organized an InternsME Video Resume Session by Mr. Supratik Mukherjee (Product Manager, InternsME) on 28<sup>th</sup> March 2017. In the talk he elucidated with examples how a proper Video CV can be prepared and answered questions by eager students who wanted to learn and apply that knowledge to take full advantage of the opportunity. The session was followed by a Video Recording session, where based on a few guidelines, students could prepare their own Video Resumes.

CIIE encouraged its members by updating them about the activities held outside college boundaries to network and grow. Some of the events that our students participated in are :

1. Startup Weekend, Sharjah (54hr weekend for developers, startup enthusiast to develop a working prototype/model/presentation within the weekend)
2. Step Conference 2017 (The largest interactive gathering in MENA tackling the latest trends in tech, digital, music and entertainment industries.)
3. Genesis 20117 (Manipal University Dubai – Annual Inter University Business Fest)
4. Startup School Program (Summer program run by IB Hubs)

CIIE once again collaborated with **Astrolabs**, the only Google TechHub in the MENA Region to introduce the Digital Marketing Track and Web Development Track Scholarship programs of \$3200 (each) for free to students of BITS Pilani, Dubai Campus.

CIIE in the new academic year again, collaborated with InternsME, to provide students on campus with opportunities to apply for either internships or jobs on the InternsME portal. After having an over-whelming response to the call for applications for InternsME Brand Ambassador Program, the following students were selected, Mukarram Ahmed, Rewant Verma, Steve Theol Lobo, Ahmed Kamlani, Tarang Shankarshetty, Viabhav Arora.

**The Wolf of WallStreet** – ‘*Stock Market and Market Simulation Competition*’, a flagship of BITS Pilani Dubai Campus was organized between 10th October to 23<sup>rd</sup> October 2017. We had a 66 teams participating from different universities such as MiddleSex, Amity, Murdoch, Manipal, Wollongong, SP Jain. A guest speaker from Barjeel Geogit – Ms. Elizabeth (MBA, CFP), spoke on the issues faced while trading stocks and how to overcome them. Insights were also given to invest in the right markets. 66 teams from 8 universities participated in the online round which took place over 5 working days of the U.S.A stock market. (15<sup>th</sup> – 19<sup>th</sup> October). Top 15 teams at the end of 5 days were promoted to Round 2. The teams that made it to Round 2 were requested to come to BITS Dubai on 23<sup>rd</sup> October for a live floor trading atmosphere with investment marketing followed by a few quizzes covering an array of topics. 6 novel projects were launched along with 3 quiz sessions (hosted by BPDC's Quizzing club - Flummoxed). The scores achieved in the quizzes were added to the profits earned through trading. The teams that emerged victorious were Gurus of Dalal Street, The Lone Ranger and AlphaQ. The teams received cash awards of AED 400, 250 and 150 respectively, along with a memento.

The Hult Prize 2018 challenge was “**Harnessing the power of energy to transform the lives of 10 million people**”, intriguing the minds of young budding engineers, to find alternative energy solutions for this fast-paced era. The first round was held in BITS Pilani, Dubai Campus on December 4, 2017, with 10 zealous and skilled teams in participation. The distinguished panel of judges included: **Sridhar Venkataraman**, Relationship Marketing Coach and Franchise Owner, Accelerate Asentive UAE, **Sultan Al Zaabi**, Act. Deputy Senior Manager, Demand Management & Tariff, DEWA, Dubai and **Ajith Kumar**, CEO, Square B&C Insulation, Dubai, UAE, who took time off their busy schedules, to give the participating teams constructive feedback and

suggestions to transform their ideas into reality. Three teams, exhibited massive potential, and outperformed, the other participating teams with their prospective viewpoints and strategies: The first position was secured by **Team Metamorph** (Urvashi Satwani, Jaskanwar Singh, Tushar Agarwal and Somil Mathur). **Team Perpetual Motion Squad** (Jitesh Gurav, Rajdeep Ghosh, Sidharth Agarwal and Anuj Lihori) bagged the second position. The third place was won by **Team AKNT** (Nawaz Muallim, Tarun Krishna, Sohail Danish and Adhitya Natarajan).

CIIE organized the **Mantra Awards 2017** for BITSAA International, which received 19 applications to the 5 categories from the students. The jury comprising of 5 faculty members and 1 student member scrutinized the applications and interviewed the students on 12<sup>th</sup> December 2017.

#### B4.15.4 PRACTICE SCHOOL

##### Practice School Programme

All first degree students have the option of Practice School. The past statistics show that almost all the students opt for this programme. PS-II was conducted at 51 stations with 180 students and 35 faculty during January – July 2017 and at 50 stations with 180 students and 29 faculty during August 2017-January 2018. PS-I was conducted at 96 stations with 423 students and 27 faculty during June - August 2017.

Categorization of PS stations is given below:

S. No.	Category of Organizations	No. of Organizations	
		PS-II	PS-I
1	Banks & other Financial Institutions	01	01
2.	Design, Development, Consultancy and Software Organization.	31	31
3	Trading	09	09
4	Production, Manufacturing and Maintenance	34	46
5	Other	02	09
Total		76	96

With the present annual PS intake of 783 students, the PS programme covers almost entire eligible student population of the Institute. It is worthy to note that the Practice School operation at the Dubai Campus has been conducted successfully since 2002. The statistical details of the distribution of students and faculty at PS-I stations are given in Annexure B4-15 followed by the details of the Statistics of PS-II are given in Annexure B4-16. The Growth statistics of PS-I, PS-II are given in Annexure B4-17, while facilities available at various PS-II stations are given in Annexure B4-18. The growth of PS stations is depicted in the graph 1.

##### Following is the breakup of students who were registered in PS-I, PS-II.

PS-I	Summer Term 2017	423
PS-II	II Semester 2016-2017	180
PS-II	I Semester 2017-2018	180
<b>Total</b>		<b>783</b>

##### PS-II Assignments: Institute's Contribution to Industrial Development

Apart from developing skills in Professional judgement, data-handling, documentation, decision making ability etc. in students, the PS-II assignments also relate to real life problems of the host organisation. PS-II assignments listed in Annexure B4-19 were completed by the students at their respective PS-II stations during the year 2017.

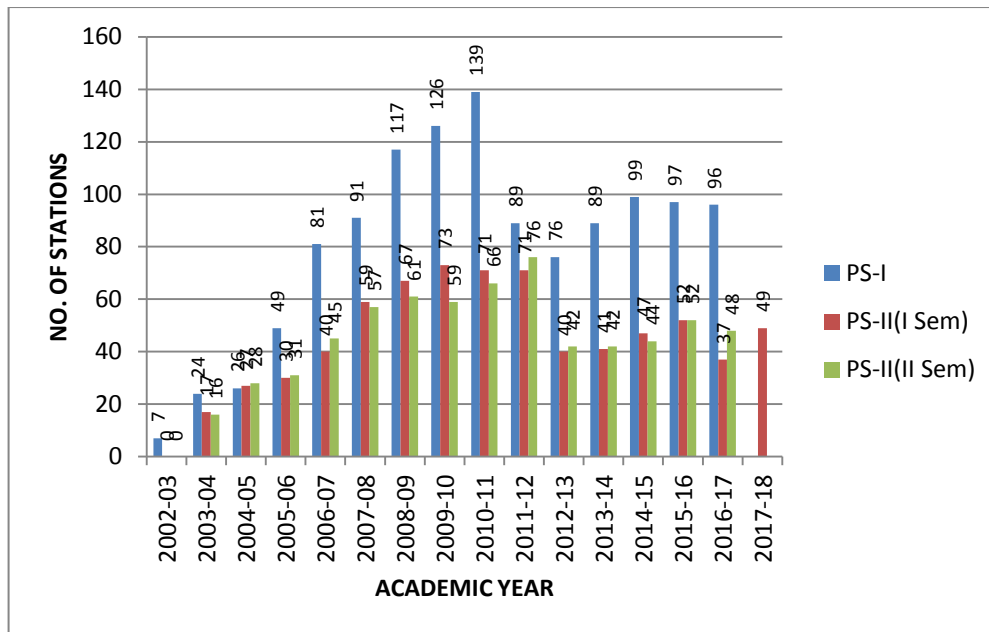
These assignments have been implemented to fulfil the ongoing production, modernization, design, development and research needs of the participating industries; thus, directly contributing to the requirements of industrial R&D.

## Stipend

In appreciation of the contribution made by our students towards the professional wellbeing of the organization, a stipend / out of pocket allowance is paid to the students by the organizations. In addition, other facilities like accommodation, subsidized lunch, transportation, insurance, TA & DA, foreign travel expenses are also provided by some of the organizations.

During the year under review, the PS activities grew further with the some new PS II stations (Table1).

**Graph 1**



**Table1 PS-II Stations Added during the year 2017**

S. No.	Name of the PSII Station	Out of pocket allowance in AED & Others Facilities
1	Ace Auto Maintenance Workshop, Sharjah	750
2	Airicom ME, Dubai	1500
3	Al Green Circle Envir. Consultants, Sharjah	-
4	Al Ras Refrigeration Devices Spare parts, Sharjah	750
5	Analytical Instrumentation & Maintenance Systems, Abu Dhabi	1000
6	Daikin ME, Dubai	2000
7	Dar Al Mas Tools, Sharjah	2000
8	Delphi Systems, Dubai	1000
9	Fractal Systems, Dubai	500
10	Manlift ME	3000
11	Masafi Co. LLC. Dubai	1500
12	Multi Industries, Sharjah	1500
13	PWC Digital Services (NSI Gulf) Dubai	3000
14	Ocean Corner	750
15	Quickbytz ME	1000
16	Quintiles IMS	1000
17	Schindler Pars Intl., Dubai	2000
18	Tendercare FZE, Dubai	1000
19	Tiger Industries, Dubai/Abudhabi	1000

## **B4.16 CENTRAL FACILITIES**

### **B4.16.1 Central Library**

BITS Pilani, Dubai Campus Library, a gateway to knowledge resources, is located in a separate building with two floors and area of about 29,680 sq. ft. It has a contemporary design with reading halls, reference section, stacking area, faculty lounge and digital library with 22 computers, internet browsing centre with 20 computers, 50 individual study carrels, and exclusive 8 (ground and first floors) systems for OPAC. The computers have been replaced with higher configuration for the students in the Library. It has a seating capacity of more than 300.

The Library hours are : Sunday to Wednesday from 7.30 AM to 10.00 PM, Thursday from 7.30 AM to 7.00 PM, Friday from 4.00 PM to 6.00 PM and Saturday from 1.30 PM to 8.30 PM. The Library remains closed on national and Institute holidays. The Library hours are extended till Midnight during all the evaluation components including comprehensive examinations.

The Library Automation software has been upgraded and installed in the new higher end server. All the resources secured with RFID security system and bar-coded which enables for quick and easy service to the user community. The Self Service Kiosk for issue and return of books has been installed. The Online Public Access Catalogue (OPAC) is web enabled (Web OPAC) wherein the users can access the catalogue remotely to search the resources and check their account. Browsing computers have been replaced with higher version. New discussion room for students and new faculty reading room are launched. High end cameras have been installed. Provided one additional discussion room for students.

Federated Search for accessing Online databases (e-journals) and OPAC, on-campus and off-campus has been implemented. Digital library software DSpace has been installed for building Institutional repository

The mission of the Library is: to collect, organize, preserve and provide access to the information necessary for the institute, to achieve its educational, research and service goals; to improve and enhance access to information in all forms, using innovative technology thereby having a broad based collection, to assist in meeting the needs of students, faculty and staff.

The Library renders standard services such as borrowing / lending, reference, referral services, etc.

### **Acquisition Section**

At present, the library has a collection of 20842 books. The collection of the library is growing continuously on a regular basis. 1179 books were added to the existing collection during the year in major disciplines of engineering and sciences. New case study collection on management and engineering courses were acquired. The Library procured a good number of Fiction and General Aptitude books such as TOEFL, GRE, SAT, IELTS. Books on Arabic language have also been added.

### **E-resources**

1. The Library caters the users' needs with the collection of 6386 e-journals from the following e-databases: IEL Online" IEEE Xplore Digital Library, American Society of Mechanical Engineers (ASME) digital collections, ACM Digital Library, EBSCO Engineering Source and EBSCO Humanities International Complete. The e-databases have full text of e-journals with back issues, conference proceedings, e-books and reports.
2. The latest question papers have been digitized and made available through the library online catalogue which can be accessed through internet and intranet <http://webopac.bits-dubai.ac.ae/AutoLib> or <http://weblibrary/AutoLib>.
3. The Library subscribes to e-versions of "The Times of India", "The Economic Times" and "The Hindu".
4. The Library has a collection of 4000 e-books.

### **Reference Section**

- i. The Library procured latest editions of Encyclopedias, Dictionaries and Hand books on core disciplines of Engineering, Technology, General Sciences and General Knowledge.
- ii. The Library subscribes to print version of 50 international journals, 65 magazines and 4 local newspapers.
- iii. The Library has 571 back volumes of journals.
- iv. Library has more than 1525 CD-ROMs on engineering courses and there are 5 computer terminals exclusively meant for the accessing these.
- v. Library has 470 thesis reports, 868 project reports and 2369 practice school reports submitted by students are available for reference.
- vi. The Library has an MOU with the Al Ain University of Science and Technology in UAE for the mutual benefit of both the institutions to facilitate the users to avail Inter Library Loan (ILL) of resources.



### Other Services

1. Federated Search for Online databases (e-journals) and OPAC which enables the users to access from anywhere at any time has been implemented.
2. Digital library software DSpace has been installed for building Institutional repository
3. The Library has Wi-Fi facility within the library which enables the users to use their personal devices for internet browsing / project / thesis work.
4. Library provides photocopy, printing, scanning and binding facilities to the patrons.
5. The Library provides Selective Dissemination of Information (SDI), Current Awareness Services (CAS), Conference Alert Service, Competition for students alert service and Latest arrival service to the patrons and users.
6. Useful articles, news, newspapers clippings related to education are being displayed on the library notice board for the benefit of students and faculty.
7. RFID enabled Self Service Kiosk for issue, return and renewal of books has been installed.
8. Library cataloguing software has been enhanced to international standard Z39.50 protocol.
9. Additional CCTV cameras have been installed.
10. LED display panel has been installed for displaying information about library, its resources and services.

### Facts about the Library

The library collection has grown steadily. Some of the significant statistical data about the library are as follows:

SNo.	Items	Total
1	Number of books	20,842
2	Average number of books circulated per day	145
3	Books added during the year 2017	1179
4	Number of print periodicals subscribed	115
5	Online Databases made available on library site	5
6	CD-ROM collection	1525
7	Total no of back volumes of journals	571
8	Total no. of Reports (Thesis and Project Reports)	1338

### Library Staff Achievements:

1. Mr. Jayadev P Hiremath, Librarian and Mr.K.Jayachandran, Assistant Librarian attended Workshop on “**Information Literacy in the Digital Age**” on 28th November 2017 at Amity University, Dubai.
2. Library Staff and Committee Members visited **Sharjah International Book Fair held at Expo Centre, Sharjah**, UAE on 2nd November 2017 and purchased books for Library.
3. Mr.K.Jayachandran, Assistant Librarian attended Workshop on “**Open Source Technologies for Libraries**” on 24th May 2017 at Skyline University College, Sharjah.
4. The library team organized a guest lecture on “Reading beyond the Textbook” and Book exhibition on 25<sup>th</sup> April 2017 at BITS Pilani, Dubai Campus, Dubai on the occasion of World Book and Copyright day.

### B4.16.2 Infrastructure and Facilities

The campus has world-class, state-of-the-art facilities with well-equipped labs and workshops, separate Library block, Academic Block, Sports Complex, Canteen, Clinic, Gymnasium, etc. The Campus has hostel facility for boy and girl students with single occupancy, centrally air-conditioned furnished rooms and a full-fledged mess which serves both vegetarian and non-vegetarian food.

In addition with the above to improve the infrastructure further, we are working on the refurbishment of the campus. Part of that in 2017 we have added the Tennis Court in the campus facility.

### B4.16.3 Laboratories

The Institution’s laboratories are of international standards and they have grown from 2 to 33 in the last 15 years, each well-equipped with the latest equipment and machines. The following table gives the discipline wise details of various laboratories:

S.No	Discipline	Laboratory
1.	Biotechnology	Biology Laboratory
2.		Instrumental Methods of Analysis Laboratory
3.		Genetic Engineering Laboratory
4.		Microbiology Laboratory
5.		Industrial Microbiology Laboratory
6.		Research Laboratory
7.	Chemical Engineering	Chemical Engineering I Laboratory
8.		Chemical Engineering II Laboratory
9.		Petroleum Laboratory
10.	Chemistry	Chemistry Laboratory
11.	Computer Science	Computer Programming Laboratory
12.		Object Oriented Programming Laboratory
13.		Computer Architecture Laboratory
14.		Microprocessors Programming & Interfacing Laboratory
15.		Software Systems Laboratory
16.	Electrical and Electronics	Electrical Machinery Laboratory
17.		Introduction to MEMS Laboratory
18.		Power Electronics Laboratory
19.	Electronics and Communication	Signal Processing Laboratory
20.		Communication Systems Laboratory
21.		Digital Electronics And Analog Electronics Laboratory
22.	Electronics and Instrumentation	Process Control Laboratory
23.		Electronic Instruments & Instrumentation Technology Laboratory
24.		Virtual Instrumentation Laboratory
25.	Mechanical	Workshop Practice
26.		Prime Movers And Fluid Machines Laboratory
27.		Engineering Graphics
28.		Production Techniques Laboratory
29.		Computer Aided Design Laboratory
30.		Heat Transfer Laboratory
31.		Material Science Laboratory
32.		Mechatronics Laboratory
33.		Fluid Mechanics Laboratory
34.	Physics	Physics Laboratory
35.	Civil	Soil Mechanics Laboratory
36.		Surveying Laboratory
37.		Transportation Engineering Laboratory

#### B4.16.4 Engineering Services

##### 1. Communication and allied facilities

The following facilities are available for the benefit of students and staff:

##### i. IT Infrastructure Facilities and Support Services

- a) The Campus and the hostels are covered with the latest Cisco network Infrastructure of both wired and wireless hotspot environment which provides the internal and external connectivity to fulfill the computing needs of the students.

- b) We have Cisco sponsored networking research lab equipped with the required network components such as routers, switches, firewall, wireless controllers and access points to build the network from the base level to high level of networking. The Cisco lab has all the paper and soft copy material to help the students to learn and start the practical training on Cisco. This Cisco lab will lead the students to achieve the Cisco certifications and software defined Network projects.
- c) The data centre equipped with the following servers and Network components.

ii. **Servers**

- a) HP DL 380 series new generation  
 b) HP Storage serve (SAN)  
 c) QNAP NAS for Backup  
 d) Dell M1000 Blade Enclosure with Three Blade servers

iii. **Network Components**

- a) Cisco Core switches Nexus series  
 b) Cisco Edge switches  
 c) Cisco Firewall  
 d) Cisco Prime system  
 e) Cisco Wireless controller  
 f) Cisco Network admission control and access control system  
 g) Cisco IP Telephony system  
 h) Utopia Internet access control  
 i) Panasonic IP camera setup  
 j) Most of our key critical applications are configured in Virtualized environment with load balancing and cluster mode. We have Business continuity and disaster recovery plan in place and we have a disaster recovery site is configured in different location to continue our operation in case of any unforeseen scenario. Periodic backup is scheduled by disk to disk method to backup the data as snapshots.  
 k) We have Cisco Telepresence system (under BITS Connect 2.0 project) is implemented in our campus which is interconnected to all our campus in India. The Cisco Telepresence classroom, capacity of 160 seating will help the students to participate the online classroom sessions.  
 l) The software tools like AUTOCAD, MATLAB, CATIA, SYNOPSIS, ANSYS, SPSS and ASPEN are available to the students along with a variety of compilers and operating systems.

S.No.	Hardware Equipment	QTY	SOFTWARE
1	HP ProLiant DL380 Gen9 Intel Xeon E5-2620v3 6-Core (2.40GHz 15MB) ,16GB (1 x 16GB) PC4-17000P-R 2133MHz RDIMM ,3 x 300GB (10k rpm) Hot Plug 2.5in Small Form Factor Smart Carrier ,SAS Smart Array P440ar/2G HP Embedded 1Gb Ethernet 4-port 331i Adapter ,HP 2U SFF - Easy Install Rail Kit w/CMA, DVD-RW 2 x 500W ,3/3/3	2	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2-Enterprise x64 edition,CentOS,REDHAT Linux Enterprise, Domain Controller, Web Server
2	HP DL 380 G7 Single Processor / Base Server, 32 GB Memory / 300 GB x 2 Hard drives & 600 GB x 6 Hard Drives	1	ESXI 5.5 update 2,Hypervisor,VMware,Replication server
3	HP DL 380 G7 Dual Processor / Base Server, 32 GB Memory / 300 GB x 2 Hard drives	1	ESXI 5.5 update 2,Hypervisor, Windows Server 2003/2012 R2-Enterprise x64 edition/Linux,Vcenter
4	HP MSA 2040 FC 6x900 SAS SFF Bnd/TVlite, HP MSA 900GB 6G SAS 10K 2.5in DP ENT HDD,	1	HP Storage server
5	12-Bay TurboNAS, Xeon E3-1200 v3 family, 4GB ECC RAM(max. 32GB RAM), 4-LAN, 10G-ready, iSCSI, RAID 0,1, 5, 6, 10, 5+spare, 6+spare, 10+spare, global hot spare, max 8-LAN, PCIe expansion slot x2, redundant power supply, Seagate NAS 4TBx12	1	NAS Backup Server

S.No.	Hardware Equipment	QTY	SOFTWARE
6	DELL PE M1000e Blade Enclosure Chasis (includes 1xCMC and 9x12V High Efficiency Fans) + 3 x 300W redundant Power supply and Fans + 3 x C19 / C20 power cords, Front Media Tray DVD + SD card for CMC + Integrated Analog KVM Switch, Select Brocade M5424 FC8 Switch Redundant (FI) 12 Ports with 2x 8Gb SFPs,	1	
7	PowerEdge M630 Blade Server for M 1000 with 2 x Intel Xeon E5-2640 v3 2.6GHz,20M Cache,8.00GT/s QPI,Turbo,HT,8C/16T (90W) Max Mem 1866MHz (135W) Max Mem 2133MHz, 128GB RAM \ (8 x 16GB RDIMM), 2133 MT/s, Dual Rank, x4 Data Width, 2 x 600GB 15K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive. QLogic 57840S 10Gb Quad Port KR Blade Network Daughter Card, Emulex LPE1205-M 8Gbps Fibre Channel I/O Card for M-Series Blades	2	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2-Enterprise x64 edition,CentOS, Ubuntu,Debian
8	PowerEdge M630 Blade Server for M1000, 2 x Intel Xeon E5-2698 v3 2.3GHz,40M Cache,9.60GT/s QPI,Turbo,HT,16C/32T (135W) Max Mem 2133MHz, 2 x 600GB 15K RPM SAS 12Gbps 2.5in Hot-plug Hard Drive, 64GB RAM (4 x 16GB RDIMM), 2133 MT/s, Dual Rank, x4 Data Width, QLogic 57840S 10Gb Quad Port KR Blade Network Daughter Card, Emulex LPE1205-M 8Gbps Fibre Channel I/O Card for M-Series Blades	1	ESXI 5.5 update 2,Windows Server 2003/2008/2012 R2-Enterprise x64 edition, CentOS
9	Cisco ASA Firewall, ASA5585-S20-K9	2	Cisco IOS
10	Cisco Core Switch Cisco Nexus 9300 Series- N9K-C9372PX, 48 x 1/10-Gbps SFP+ and 6 x 40-Gbps fixed QSFP+ ports,	2	Cisco IOS
11	Cisco Edge switches- WS-C2960X-48FPD-L	3	Cisco IOS
12	Sonicwall NSA 5600 Series	2	Wan optimization
13	Cisco AIR-CT5760, AIR-CT5760 (H/A)	2	Cisco IOS
14	Cisco Unified Communication System,UCS-BE-6000	1	Vcenter
15	Cisco Voice Gateway ,CISCO2901/K9	1	Cisco IOS

#### B4.17 PROCUREMENT AND MAINTENANCE

Facility Management Department is in charge of Maintenance and modification of the infrastructure and facilities in the campus. Any modifications to the infrastructure are taken up by FM Department as per the approval of the Director, BITS Pilani, Dubai Campus. Procurement actions are initiated after the approval by the Purchase Committee, with respect to new equipment, spares, consumables, repairs and modifications of the existing equipment.

During the year 2017, the following jobs of up-gradation / repairs of the existing facilities were done.

1. Painting all common area for institute and hostel
2. Installation of 10 no's garden benches.
3. Replaced the old fluorescent lights to LED's
4. Replacement of Auditorium stage carpet
5. Installation of new furniture for the Civil and Chemical engineering labs.
6. Partition & flooring made for the new civil lab and civil faculty rooms.
7. Installation of new air conditioners for the canteen.
8. Installation of new Tennis court
9. Connection of 24x7 DCD system to the campus.
10. Procurement of office furniture for the new faculty and staff.
11. Procurement of Chiller and other accessories for the Mess and Canteen facility.

12. Installation of dance floor for the students' activity.
13. Replacement of vaporizer for the gas system.
14. Procurement of bed, mattress and pillow for the hostel rooms.

#### **B4.18 EQUIPMENTS AND ACCESSORIES**

A large number of equipments and accessories were purchased for BITS Pilani, Dubai Campus. The list of major equipments is included in the Annexure B4-21.

#### **B4.19 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS**

##### **B4.19.1 Student Council**

President	George Manoj George
Vice President	Shraddha Shetty
General Secretary	Anna Joselin
Ex Officio Member	Prarup Chapparwal

##### **B4.19.2 Day Scholar Representatives**

1st Year	Abhishek Nair
2nd Year	Swetha Sunil
3rd Year	Syed Arafath
4th Year	Albin Raju

##### **B4.19.3 Hostel Committee**

Block A	Jatin Sangtani
Block B	Samaksh Jhalani
Block C	Varun Sangani
Block D	Shouray Duggal
Block G	Prathyusha Kodavala

##### **B4.19.4 Clubs**

Dance (GROOVE)	Dilip Kumar
Art (SHADES)	Leesha Chaurasia
Astronomy (COSMOS)	Madhav Kothari
Social & Environment (MAKE A DIFFERENCE)	Harshal Mittal
Drama (PARIBHASHA)	Roshita Khanna
Public Speaking & Literary Club (EXPRESSIONS)	Abirami Balaji
Photography (REFLEXIONS)	Tejas Kulkarni
Music (TREBLE)	Aryaman Sood
Sports	Malvika Sridhar
Design (Oh,Crop!)	Karan Singh
Fashion Club (Allure)	Anne Joshy

##### **B4.19.5 Student Activities**

BITS Pilani, Dubai Campus encourages student to participate in different extracurricular activities to build team spirit. Professional/scientific activities such as intrauniversity technical festival, Technofest, interuniversity technical festival, Egnuity are organized every year. Students also participate in scientific and professional bodies of international repute such as Student Branch of IEEE, SAE, ASME, ACM, ASHRAE as well as local associations such as MEA, CHEMERA, Linux Users Group, Microsoft Tech. Club etc. Students are equally encouraged to be involved in Sports, cultural and social activities. There are 11 clubs namely Dance Club, Arts Club, Public Speaking & Literary Club, Music Club, Drama Club, Social & Environment's Club, Photography Club, Sports Club, Design Club, Fashion Club and Astronomy Club. The following were some of the important activities held during the year 2017.

#### B4.19.6 The social and Environment Club

Social and Environment club organized many activities during the year 2017, the activities are given below:

**Dandiya Night-** Dandiya Night, an event to celebrate Navratri, was conducted by The Social and Environment Club on 5<sup>th</sup> October, 2017. It was a fundraiser for Spectrum 2017, which is an inter year event held for special needs children at BPDC campus. Dandiya Night event turned out to be a huge success with over 400 people showing their support to help those in need. The event was inaugurated by Dr Priti Bajpai and Dr Geetha and the four office bearers who lit the auspicious lamp. The decorations included an elegant stage backdrop and a photo booth outside the auditorium. The DJ for the Night started the evening program by ethnic and cultural Gujarati Navratri songs followed by Bollywood music.

**Stationary, Clothes and Pulses Collection Drive-** The stationary, clothes and pulses collection drive was held from 8<sup>th</sup> -12<sup>th</sup> October 2017. Stationary items such as papers, pens, pencils, bags, etc were collected and around 150 kg of pulses like Channa dal, Toor dal, Masoor Dal etc were donated to Emirates Red Crescent Society. Boxes and cartons were placed around the campus for clothes collection. Clothes were cleaned and folded, before donated to the Emirates Red Crescent. Around 15 cartons of clothes were collected from students and donated to the foundation. .

**Mental Health Awareness Workshop-** A Mental health awareness workshop 'Break the Myths' was conducted on 30th October 2017. Professional Clinical Psychologists from Human Relations Institute and Clinics, Dubai U.A.E conducted the workshop and about 60 students attended it.

**Blood Donation Camp-** A Blood Donation camp was conducted on 4<sup>th</sup> November, 2017. A team of professionals from Latifa Hospital visited the campus to conduct the blood donation camp. A lot of students turned up to support the initiative. The team was able to collect the required number of blood units of various categories, ensuring the purpose of the event was met and the event was a success.

**Spectrum-** On 9th March, 2017, The Social and Environment Club of BITS Pilani, Dubai campus organised one of the most inspirational events, Spectrum 2017. It was an event to spread happiness amongst the special needs students, and besides that, it gave BPDC students an opportunity to view and be a part of the world through someone else's eyes. The event was inaugurated with the lighting of the auspicious lamp by the Chief Guest, Mrs. Deepa Saha, the Dean of Student Welfare, Dr. Priti Bajpai, the faculty in charge of the club, Dr. Geetha and the office bearers of the club. It was followed by a short welcoming speech by the Vice President of the club. The theme for Spectrum was based on the magical and fantasy land of Disney. There were performances in singing and dance by BPDC students. Over 120 students volunteered to organise activities such as games, singing, sketching, dancing and painting in which 140 students from Senses centre, Al Noor training centre, Manzil centre, stepping stones centre and National Institute of Vocational Education- participated and won several prizes. Smiles erupted on the faces of the children when they were awarded goodie bags full of exciting things and medals to appreciate and recognise their efforts. The event was a great success as it was able to achieve its primary goal of bringing happiness amongst those little princes and princesses and it also taught BPDC students, the virtue of showing gratitude and love. These children are truly an inspiration and a Spectrum of indefinite possibilities!

**Visit to SNF-** On 20th March, 2017, few students of the club visited the SNF centre to distribute small gift items and snacks to spread happiness amongst the children of the centre.

**Earth Day-** On 26th April, 2017, Earth Day celebrations were conducted in the institute by The Social and Environment Club. The event commenced with the 'Addicted to Life' anti-smoking campaign. Professionals conducted tests on students to check their smoking levels and their aim was to promote a healthy lifestyle. It was followed by tree plantation near the girl's hostel, under the presence of the Director Prof. Dr. R. N. Saha, Dr. Geetha, the office bearers of the club and students of the club. A debate competition was held, where students shared their views and opinions on the topic, "Developing countries should prioritise environmental protection over resource extraction". The debate was held with the help of Expressions-The literary club of BPDC. Two teams of three members each participated in this debate and the winning team was given a small cash prize for their efforts and contributions. Following the debate, Earth Day celebrations concluded with the movie, WALL-E being played in the auditorium for the students. It was a movie with a message that we should not overuse our resources and gives us a glimpse of the future we are heading towards and that we need to take care of our environment and we individually need to take steps to ensure the planet is in safe hands.

**Bag of Love-** Bag of love, an initiative by The Social and Environment club was held on 1st May, 2017. It was an event to appreciate the efforts of the support staff and security, throughout the year. They ensure that the campus is kept in safe hands, so that it functions smoothly. The event was held under the presence of the Director Prof. Dr. R. N. Saha, Dr. Geetha, office bearers and members of the club. The Director and the President of the club, Arosha, shared a few words to appreciate the efforts of the support staff and security members. It was followed by the distribution of gift bags, containing everyday items such as snacks, juices and other household items. They were also given calling credit, with the thought that they could speak with their loved ones. The purpose of the event was to bring smiles on the faces of the support staff and club members ensured that they were able to achieve that.

**Organic Farming/Grow your own Food-** Organic garden was started by the students of the club. Chillis, tomatoes, lady fingers, ridge gourd, pumpkin, radish, aritis, etc were grown in the garden, near the boy's hostel.

This garden has started yielding all these crops and are being distributed to students and faculty of the institute. This is to encourage a sustainable development.

**Adventure to Shetidhar-** For the first time, a new initiative was launched by The Social and Environment Club, a trekking trip to Shetidhar in the Himalayas. This trip is scheduled for June 2017 and was a week long trip giving the students a wonderful and adventurous experience. The students were lead by a team of faculty and experts in the field of mountaineering and trekking.

#### **B4.19.7 The Public Speaking and Literary Club**

In the second semester, Expressions the Public Speaking and Environment club took part in the NYUAD Debate Tournament, 2017 held on 7 April and 8 April 2017 at the New York University, Abu Dhabi. The annually conducted regional level debate competition followed British Parliamentary style of debating. Passionate and talented debaters from notable universities across the UAE and Qatar participated in the event. Debating teams from BITS Pilani, Dubai Campus included: Varsha Venkatesh, Steve Lobo, Shraddha Shetty, Balaji Sohan, Indraneil Patil, Eashwaran V., Poorva Parande, Karthik Vasudev and Abirami Baalaji. They were joined by a team of adjudicators comprising of Ashvriya Thapa and Shreya Naha. The challenging format of impromptu debating required the contestants to be aware of the current events happening across the world, think on their feet as well as extending their limits to use their intelligence and wit, without any help from the internet. The preliminary four rounds comprised of motions from diverse arenas of everyday life such as global environmental problems, laws in the GCC, gender inequality, science and technology. The teams from the Institute put their best foot forward in showcasing their debating skills and put up a tough competition to the opponents. The college team also made their way to the semi-finals and were well appreciated. Shraddha Shetty was placed as the sixth best speaker among over 60 participants. In all, the students gained a wonderful experience from extending their own capabilities, from the constructive feedbacks that they received from the judges as well as from the exposure to such a great debating platform.

This year, Jashn2017 was bigger and better than last years. Keeping with it growth, Expressions strived to make JAM (Just a Minute) and Debate grander than last year. JAM was a resounding success with both the participants and spectators. An RJ as a part of the judging panel, who made the entire event much livelier. This was followed by a heated debate on the third day which was again well received.

Looking back at another joyous and momentous semester for Expressions, the club has managed a few feathers on its cap! The club has continued to foster already established talent in Public Speaking and Writing as well as to encourage those who fear the stage and the Writer's block. The club has been lucky under the extremely able guidance of Dr. Anand Kumar as the faculty incharge. This semester also marks the launch of the Expressions Council, a group of 15 extremely enthusiastic, talented and active club members who look after the entire management of the club. The Highlights of the semester have definitely been the launch of the online writing platform called the BPDC bridge, the debut edition of Spelling bee: for the first time ever in BITS Pilani Dubai, the return of the Expression invention Whats the Good Word in Technofest, participation in two inter college off-campus events and obviously the cherry on the cake was the triumphant 1st ever International workshop of Terribly Tiny Tales in BITS Pilani Dubai. The BPDC Bridge which went live on the 29th of August 2017, is a collection of poems, short stories, musings, anecdotes and all other forms of written expression. Aimed at the writers, Expressions also hosted the short tale writing workshop by the Terribly Tiny Tales on the 23d of October2017 which was conducted by none other than their Co-founder Mr.Chintan Ruparel. Expressions also provided students with opportunities at the inter college level by participating in the Model United Nations conference at American University in Dubai on the 2nd, 3rd and 4th November 2017 and the Inter-college Public Speaking Competition by the Emirates Environmental Group on the 26th of November 2017.

#### **B4.19.8 Dance Club**

In the year 2017 groove proved it's passion for dance by winning many laurels at intra and inter university level. The groove won first place in the eastern category at Sparks (intra-university competition held at BPDC) held between 2nd -3rd of October 2017. Groove acquired first position at IMT Vaudeville (inter-university competition held at IMT University) held between 1<sup>st</sup> -2<sup>nd</sup> March 2017. It also secured the First position in eastern category and Third position in the western category at Jashn (Inter-university competition held at BPDC) held between 17<sup>th</sup>-20<sup>th</sup> April 2017. The dance club performed at various events like Icebreakers, Ethnic day, Bits Sports Festival and Diro's Tea Party held in the institute during the year 2017. Groove also performed at BITS Alumni's Global Meet held in Dubai from 5<sup>th</sup>- 7<sup>th</sup> January 2017. The team also bagged the second position at the Skyline Inter-university competition held on 1<sup>st</sup> December 2017. The specialty of Ethnic Day 2017 was that the students had the privilege to perform with the Faculty In-charge Dr. Kalaichelvi .Club performed and organized a Flash mob for the opening ceremony of BITS Sports Festival 2017. The club conducted a 30 minute work-out sessions under the guidance of Dr.Rafiuddin when the institute enthusiastically took up the 30 Day Challenge.

#### **B4.19.9 Drama Club**

The Drama club, Paribhasha, hosted 4 events in the year 2017. Two events, "Proscenium" and "Impulse" were held during Jashn 2017. In Proscenium teams staged a 20 minute play and impulse had 3 rounds, "Ring zap", "Pantomime" and "Mad Ad". During Sparks 2017 an event called "Street Play" was organized. Other events like "Impulse" were also held. The members of the club took part in the inter-university fests held in other colleges like Herriot Watt and IMT. In addition to that, Paribhasha celebrated the World Theatre Day on 27th March,

2017, by showcasing two plays and two short films. An acting workshop was also held on the same day by Sanjeev N K, the founder of ActLab.

#### **B4.19.10 Art Club**

The Art Club "Shades" had been active in every major event of BITS Pilani Dubai Campus in 2017. ARTEX the annual intra-college art event was conducted by Shades during 29th and 30th March 2017. It's main event is Kalakriti' an Art exhibition a show case of various forms of art like Oil painting, Acrylic painting, Water Colour painting, Poster Colour painting, Digital Art, Classroom art, Pencil Sketching, Oil pastels, Pen/ink art, Pencil color shading, Glass painting, Fabric painting, Embroidery, Pot designs, Wool Crochet, Best out of Waste (Junk Art). During Artex competitions like Rangoli making, face painting, Henna designing, Origami, Clay modelling, Beg-borrow-steal, Blind art, Doodle god etc were conducted for the students. Prizes and certificates were given to the winners. Art club was responsible for the art work and decoration for Jashn and Enginuity 2017. Props were provided for various events like impulse and street play. Also the club worked along side for the crew of the Day Dreamer's musical. Art club was responsible for the Art work and decoration of Diro's tea party. The club was involved in the BSF 2017 and ethnic day decorations. Art club students attended the Art Dubai an international art fair with roots in the Middle East, Africa and South Asia took place on March 15-18, 2017 at Madinat Jumeirah, Dubai, UAE. Art club individually had done Rangoli, student signing board decoration and all decorations connected with convocation ceremony on 26th August 2017. Talented team from shades participated in the rangoli competition in Unity in Diversity Rangoli competition, conducted by FOI events LLC, Deepavali Utsav on 27th October 2017 Shades played a major role in synergy decoration. It worked closely with Mechanical Engineering Department, BPDC to put up a great show for International Conference on Recent Advances on Materials and Manufacturing Technologies (IMMT 2017) held on 28-29th November 2017. Shades also conducted free art sessions for the enthusiastic artists on 5th Oct 2017 which was a great success.

#### **B4.19.11. Music Club**

With 110 members in the Year 2017, Trebel | Music Club was one of the most active clubs on campus, taking part in almost all events throughout year. The Club organized the Trebel Musical Nights on 28 April 2017. It was an amalgamation of both Eastern and Western Music Genres. Talented Musicians of BPDC gave amazing performances which were a combination of classical, acoustic and fusion rock. This event was primarily to give a chance to those students who could not show their talents during Sparks or Jashn due to the strict process of selection and limited slots available. The event was graced by the presence of our Director Dr. R.N. Saha, who has always been a constant support to the club; Dean Student Welfare- Dr. Priti Bajpai and Faculty In charge of the club- Dr. M. Rafiuddin, under who's guidance and mentorship the event turned out to be a grand success. From 18- 21 April 2017, the Trebel organized all the musical Events of the inter-college festival of BPDC, JASHN 2017. Events included Eastern Singing (Solo and Duet), Western Singing (Solo and Duet), Instrumental and Battle of the Bands. The Club, for the first time introduced a new category of musical event- Group Singing for Jashn 2017 to encourage more participation from both BPDC and participating universities. The Judges of Jashn 2017 were prominent regional musicians. All the events and activities of Trebel during the year 2017 were a great success due to the efforts put in by all the club council members under the guidance of Dr. M. Rafiuddin.

#### **B4.19.12. The Astronomy Club**

The club organized field trips for the members of Astronomy club. The club has also been holding bi-weekly sessions and group discussions. The club conducted workshops and a seminar.

#### **B4.19.13. Design Club**

Oh, Crop! is the design club of BITS Pilani, Dubai Campus has a total of 40 selected members.

Oh, Crop! has been serving as the digital backbone of the campus, taking up the Graphic Design and Illustration work of all the other clubs on campus (Fashion Club, Drama Club, Music Club, Dance Club, Photography Club, Astronomy Club, Sports Club, Quiz Club, ACM, ASME IFOR, Gear Shifters, Big Data Association, Creative Lab to name a few) and almost every event on Campus and has also been responsible for revamping the digital identity of the institution at large! The Club did its first design work of the year for ICE BREAKERS '17. The Official poster of the event as well as all the Introduction Videos of most of the clubs like Music Club, Fashion Club were shot and edited by Oh, Crop!. Oh, Crop! has actively helped with the Student Council Elections in year 2017. Almost all the electing candidates got their posters designed and videos shot and edited by Oh, Crop!. The Club has been responsible for designing all the posters for various clubs in events such as Ice Breakers, Sparks, Ethnic Day, Enginuity and Jashn! . Oh, Crop! has been responsible for handling the entire design department for BITS SPORTS FESTIVAL 2017! The Club, with the help of its brilliant members designed the Official logo for BITS SPORTS FESTIVAL, which was positively received by everyone!

The Club also handled the design department for JASHN 2017 and thus designed all the posters, banners and online content for the same.

Other than that, Oh, Crop! has also actively taken part in Video Jockeying for in-house concerts during major events such as BSF and JASHN. The Club's then president, Sidharth Lahoti was the official VJ for LOST STORIES (JASHN 2017). The mantle was then taken up by Karan Viraj Singh, who was the official VJ for WAR OF DJs (BSF 2017).



Apart from actively taking part in student organised events, the club has also been responsible for designing and illustrating for various other departments on campus. Oh,Crop! has handled the design and illustrations work for Admissions Dept. in the year 2017. The Club has also lent a helping hand to the Placement Division with their digital design work and thus also helped organize the first ever BITS CAREER FAIR in the year 2017.

Oh, Crop! takes immense pride in the success of its Continuous Mentorship Program for students interested in Graphic Designing and Illustrations. The Club also organized Social 101 social media marketing strategy workshop in the academic year 2017.

The Club has designed the official merchandise for events such as BSF and JASHN 2017. Apart from designing merchandise for events, the club also designed its first ever BITS HOODIE in the year 2017 which received an over-whelming response from all the BITSAINS.

Oh,Crop! has also designed the Year Book for the outgoing batch of 2017. We design, We Illustrate and We Chill. Therefore, Oh,Crop! is a strong believer of the theory that hardwork should be followed up by an equally amazing party. The Club organised the OH,CROP! Chill Thursdays in 2017, a two day long event which witnessed participation in over-whelming numbers. Chill Thursdays main attractions included - the first ever on campus movie night, DJ Party and an exclusive performance by a reputed local guest band.

Theclub believes in unity, teamwork and most importantly in keeping the family spirit of Oh,Crop! alive. Thus, the club has actively celebrated all the festivals such as Eid, Holi, Diwali, Pongal, Christmas throughout the year.

All the events and activities of oh,Crop! during the year 2017 were a great success due to the efforts put in by all the club members under the guidance of Dr. Santosh Kumar.

#### **B4.19.14 Fashion club**

The fashion club ALLURE of BITS Pilani Dubai has always tried to better themselves every year by undertaking new opportunities. In the year 2017, the club had organized Mr and Miss Sparks which is a fashion competition encouraging the participation of all those who want to experience walking the ramp. This was a 3 week training period where selected candidates get trained by the fashion team in order to prepare themselves for the competition. This was followed by Drape a fashion designing competition where all creative minds were provided a platform for proving their mettle. The year 2017 proved to be a victorious year for the club as we were blessed to have won three competitions in a row. This year started with the club bagging the first place at IMT Vaudeville'17, a feat achieved by the club after a break of five whole years. This was followed by the achievement of the first place for Jashn'17. A few members of the club also walked for Forever21 and were featured in the fashion magazine Cosmopolitan. The club also organized the Drape competition to appreciate budding talent. The year ended on a happy note as we stood first in the Skyline Carnival'17 which was an inter-college competition.All the activities were held under the able guidance of the in charge Dr Swarnalatha.

#### **B4.19.15 Photography Club**

During the year 2017 the club covered many events like Jashn, Sparks, Recharge, Bits Sports Festival, Enginuity, Technofest, and also they covered various Talks and workshops held by all the disciplines. A photography competition that was held during Technofest '17, The intra-college technical festival. A photography competition that was held during ENGINuity '17, and prizes were sponsored by Nikon. First cut was a short film competition organized in collaboration with Paribhasha - The Drama Club, BITS Pilani Dubai Campus.

#### **B4.19.16 Sports Club**

The Sports Club at BITS Pilani, Dubai Campus has always tried to promote, develop and improve the quality of sports as well as the facilities involving these sports. In 2017 sports club organized the following sports activities:-

1. **Inter Year Tournaments:** Sports Club organized Inter Year/ Class tournaments for both boys and girls in Cricket, Football, Table-Tennis, Throw ball, Badminton, Chess, Carom, Handball, Basketball, Athletics (Field &Track) and Volleyball.
2. **Inter-University Tournaments:**
  - i. **Gulf Medical University Sports Meet** - BITS Pilani, Dubai Campus participated in GMU Sports Festival Inter University Tournament organized by Gulf Medical University in March 2017. Our Throwball (Girls) and Badminton (Girls) secured first place, while the Lawn Tennis (Boys) and Cricket (Girls) team came runners-up and 2nd runners-up respectively.
  - ii. **American University of Sharjah Sports Fest-** BITS Pilani Dubai Campus teams participated in AUS Inter University Sports Fest, organized by American University of Sharjah held from March 17, 2017 to March 23, 2017. Our Badminton (Girls), and Table tennis teams (Boys and Girls) secured the first place, and the squash (boys) team secured the third place in the tournament.
  - iii. **Skyline University Sports Fest:** - BITS Pilani Dubai Campus participated in the Skyline University Sports Festival held in February 2017. The Throwball and Table Tennis (Girls) teams secured first and second respectively.

- iv. **Scottish Highland Games:** - BITS Pilani Dubai Campus students participated in the Scottish Highland Games and our Table Tennis (Boys) and Badminton (Girls) teams secured second in the Inter University Sports Festival organized by HeriotWatt-Dubai from March 12, 2017 to March 16, 2017.
- v. **Redbull Inter University T20 Tournament :** BITS Pilani Dubai Campus Cricket team Reached finals in the prestigious tournament and lost to Heriot Watt University.

### 3. Intra- College Staff and Faculty Sports Tournament

Staff and Faculty sports tournament was conducted by the Sports Club and featured Badminton, Cricket, Volleyball, Table-Tennis, Carom and Chess as categories of participations.

### 4. Inter- .Year Boxing Championship

Annual sports day, Inter-Year Prize Distribution Ceremony: On 6<sup>th</sup> and 7<sup>th</sup> May 2017 organized Mega event Boxing Finals followed by sports awards ceremony. Medals were handed out to the winners of the intra-university sports events including field and track events, cricket, throw-ball, volleyball, football, badminton, chess and table tennis. Director Dr. R.N. Sasha presided the ceremony as the chief guest and gave away the prizes. Also best Sports persons from each Sport were awarded Best Player Trophies. Also, Faculty and Staff Sports Tournaments award ceremony was held the same day.

### 5. Recharge- 2017

Sports Club was responsible for conducting all the Sports Events for the Hostel Week Celebrations in Recharge-2017. A total of 20 categories of various sports with over 400 participants were conducted in a span of 5 days.

- i. **DIAC Sports Fest:-** November 5<sup>th</sup> – 12<sup>th</sup> November, 2017, BITS Pilani, Dubai Campus participated in DIAC Sports Cup 2017 and won Chess (Male), Badminton (Female), TT (Male), also came runners- up in Chess (Female) , Cricket (Male) , Badminton (Boys) and secured 3<sup>rd</sup> place in Table-tennis Male.
- ii. **Manipal Sports Fest:** - November 12<sup>th</sup> - 16<sup>th</sup> ,2017, BITS Pilani Dubai Campus Sports teams participated in Manipal Sports fest and secured 1<sup>st</sup> place in Chess Boys, Chess Girls, TT Boys, Badminton Girls.
- iii. **1<sup>st</sup> Inter BITS Sports Meet:** The 1<sup>st</sup> Inter BITS Sports Meet was held in BITS Pilani, Dubai Campus during the 14<sup>th</sup> edition of BITS Sports Festival from 13<sup>th</sup>- 17<sup>th</sup> November 2017. The event was the first of its kind and was entirely the efforts put in by the SWD Dean Dr. Priti Bajpai, Sports Club Faculty In-charge, Rafiuddin and THE Sports Club of BITS Pilani, Dubai Campus with constant support from the Director Dr. R.N. Saha. With the initiative of involving our parent and sister campuses from India in the Sports Fest, introducing the idea of the 1st Inter Bits Sports Meet, for which the Club had to go through a rigorous process of talks and negotiations for more than six months with the student bodies, administration and the Vice Chancellor of BITS Pilani University, Dr. Souvik Bhattacharya whom the Sports Club President, Abdul Muqeet met personally at BITS Pilani, Rajasthan to discuss the idea of Inter BITS Sports Meet and the concept of holding it on a rotational basis in all the four campuses of BITS Pilani University. This idea was granted acceptance by the management and administration of our University and the 1st Inter BITS Sports Meet will be held at BITS Pilani, Dubai Campus where- in representative of all the four campuses participated in different categories of sports. The next Inter BITS Sports Meet will be held at BITS Pilani, Hyderabad Campus in the year 2018. I-BSM will return to BITS Pilani, Dubai Campus after 4 years and BPDC will host the 5<sup>th</sup> edition of I-BSM in the year 2021 tentatively.

### B4.19.17 JASHN 2017

An Inter college cultural festival 'Jashn 2017' was held during 17th-20th April 2017. The festival started with an opening act Day Dreamer a musical. The various clubs of BITS Pilani, Dubai Campus organized different events during the cultural fest which comprised of dance, drama, music, literary and art events to name a few. Participants included students from American University of Sharjah, American University of Dubai, BITRAK, Manipal University, Middlesex University, and Canadian University of Dubai, Amity University, IMT and Heriot Watt University. Events like Dance Drama, E Quiz, Battle of DJs, Battle of Bands, Pixels, Devil's Advocate, Singing, Short film, Fashion Show, etc were held. The prize distribution ceremony was held in the presence of the Director Prof. Dr. R. N. Saha. The event concluded with performances by the band 'Rooh' and which performed on an outside stage which was followed by World Renowned DJ, "Lost Stories". The most sought after event of all the events in the institute is indeed Jashn and it has definitely lived up to the expectations of all the students of BITS Pilani Dubai Campus in making a memorable 4 days of fun and laughter.

### B4.19.18 Hostel Week Celebrations 2017

Hostel Week "Recharge" was celebrated with a lot of fanfare in the Dubai Campus starting from 13<sup>th</sup> to 16<sup>th</sup> March 2017, it was a week long affair of fun activities for the hostel students. A special menu was prepared for the week for hostel students. Fun activities like Beg Borrow Steal, Blind Hit, Musical Chairs, Tug of Wars, Eating Competition, Antakshri, Tambola, Kho Kho, Bathroom singing and many outdoor sports were organized. Indoor activities such as chess, carom, badminton and table tennis were organized as well. There was a huge response and participation involved by the hostel students, wardens and the staff. On the final day of the celebrations, a programme was organized in the auditorium. Prizes were distributed to the winners of the various events and various hostel students displayed their skills by dancing and singing on stage. The hostel staff was also honored during the event. A grand Buffet dinner was organized after the closing ceremony which marked the end of the celebrations.

#### **B4.19.19 Farewell Party 2017**

The 'DIROS Tea Party 2017', a farewell party to the passing batch was organized by Student Welfare division on 13th of May 2017. The event began with Department photographs being clicked with the respective department faculty. A programme was then organized in the auditorium to bid farewell to the graduating students. The graduating batch and faculty members attended the ceremony. A dance performance by the Dance Club and music performance by music club entertained the gathering. A lot of fun games were arranged and gifts were awarded to the winners of the games. A 15kg cake was cut by the students. The farewell ended with a dinner and on an emotional note. The Party was indeed one that is kept as a memorable and special day to the passing out batch. Students arrived dresses at their very best to Diros Tea Party and the party ended on an emotional note.

#### **B4.19.20 Welcome Party**

The Fresher's Welcome Party named "Ice-Breakers" was held on 27th August 2017. It was organized by the Student Welfare division with the help of senior students to welcome the new batch of students of 2017. The event began with freshers literally breaking ice blocks with a sledge hammer along with the seniors. A batch tree was planted by the freshers. Dance and music events by the senior students entertained the gathering and students from the new batch were encouraged to display their skills on stage voluntarily. To conclude the welcome party in the auditorium a cake was cut. Refreshments were distributed to all attendees of the event. Various clubs and associations gave a brief about their activities. Such a start to the year is indeed one that is never forgotten by each and every student in BITS Pilani Dubai Campus.

#### **B4.19.21 BITS Sports Festival 2017**

The much-awaited inauguration ceremony of Coca Cola presents 15th BITS SPORTS FESTIVAL was held on November 19<sup>th</sup> 2017. The 5 days of BSF'17 witnessed 16 sporting events, with above 400 athletes from 32 participated universities namely BPDC, GMU, SKYLINE, UOWD, MANIPAL, RAKMHSU, EAU, CUD

HERIOT WATT, AURAK ,ACD, AUD, SZABIST,MIDDLESEX, UOS, AMITY, MURDOCH, CUCA, AJMAN UNIVERSITY, RIT, AL GHURAIR, SP JAIN , HBMSU,UNIVERSITY OF BOLTON, DUBAI MEN'S COLLEGE, AUE, LACC, WESTFORD,INTERNATIONAL COLLEGE AJMAN, BITRAK, CROMWELL and CURTIN.

The evening kickstarted with an impressive march-past that encompassed the contingents of the various participating universities. Following this, the BSF Torch was lit by Dr R.N Saha, Director of Bits Pilani Dubai Campus, Dr. Priti Bajpai, Dean Student Welfare and Dr M Rafiuddin, Convener, BITS SPORTS FESTIVAL symbolizing the flame of sportsmanship. Once the event was officially declared open by Director, Dr R.N Saha, the flags were hoisted, and was followed by the oath taking ceremony, where every athlete pledged oneself to it, led by Malvika Sridhar, President of the Sports Club. Consequently, the vote of thanks was delivered by Navaneeth Tudi, Vice-President of the Sports Club. Finally, the ceremony came to an end, with enthralling dance performances by the students of Bits Pilani Dubai Campus. The sporting matches have begun in full-swing, a wide variety of food stalls have been set-up and the live events devised specially for the visitors and non-athletes, was very well received.

Day 2 of Coca Cola presents 15<sup>th</sup> BITS SPORTS FESTIVAL, was filled with energy and zest, as 64 matches of the various sporting events, were held throughout the day. The athletes, were all pumped to outperform their opponent teams and displayed high spirits of sportsmanship, keeping the zeal of their sport and Bits Sports Festival, massively high spectators and visitors, also took back home a variety of vouchers and gifts, through their enthusiastic participation in the various games of Live Events. The Pani-Puri Eating Competition, The Pushup Challenge and the Talabat Spin the Wheel require a special mention, along with several other tiny minute games, that were enjoyed by both the participants and onlookers, alike.

Day-3 of BITS SPORTS FESTIVAL, witnessed the nerve-wracking quarter finals of the various sporting events. The participating universities, battled against their opponents, in the race to win the coveted trophy. As for the visitors and spectators, there were some really exciting Live Events like, Three Legged Race, Hula Hoop Contests and various other Eating Competitions conducted by the various food stalls. They also had some really exciting offers during various time slots, and hence gave the crowd a variety of cuisines to try out during these 5 days. The energy thus created, by the constantly happening activities throughout the campus, was beyond contagious. Each and every attendee; athlete or visitor, thoroughly enjoyed. The day ended on a zealous note, with the Battle of Bands, with various versatile musicians putting forth some enthralling performances.

By Day 4, all the sporting events, were nearing the finals, with a very few teams, trying to out-beat their opponents. The visitors and spectators were thoroughly entertained and occupied by the variety of live events, that comprised of exciting games and contests. This was also, the final day of Talabat Spin the Wheel contest; attracting crowd in massive numbers throughout the evening. There was a buzz of excitement, among the fan armies of the various universities, as the semi finals came to an end and the fixtures for the finals were announced. The pleasant night of Day 4 was closed with The War of DJs, where a few DJs from across the universities in UAE gave some high-spirited performances, engaging all the visitors. The final day of Coca Cola presents 15th edition of BITS SPORTS FESTIVAL, came to an end on 23rd November with a bang. It was an honor and privilege to have World Star Tennis Player, Padma Bushan Sania Mirza, grace the closing ceremony this year.

Prior to the ceremony, the final day witnessed some nail biting finals;

### Tournament Finals

1. Cricket Boys: BPDC vs Manipal; BPDC won
2. Cricket Girls: BPDV vs Amity; BPDC won
3. Volleyball Girls: AUS vs CUCA
4. Badminton Girls: BPDC vs MDX; BPDC won
5. Throwball Girls: BPDC vs Manipal; BPDC won
6. Football Boys: AUS vs HW
7. TT Boys: BPDC vs UOS; UOS won
8. Chess Boys: BPDC vs DMC; DMC won
9. Chess Girls: Manipal vs RAKMHSU;
10. Volleyball Boys: UOS vs AUS;
11. Basketball Girls: UOS vs BPDC; UOS won
12. Tennis Boys: CUD vs HW
13. Badminton Boys: BPDC vs Manipal; Manipal won
14. Basketball Boys: UOS vs CUD; UOS won
15. TT Girls, Middlesex vs BPDC, Middlesex Won
16. Tennis Girls: Manipal vs BPDC, Manipal Won

The award ceremony began, with the BSF Report, by Dr M Rafiuddin, Convener of BSF. This was followed by a speech by the Guest of Honor and Director of Bits Pilani Dubai Campus, Prof Dr R.N Saha, who wholeheartedly congratulated the Organizing Team for their relentless efforts in organizing an event of such an enormous magnitude. Finally, the Chief Guest Padma Bushan, Sania Mirza distributed the trophies and medals to the winning teams, and enlightened all the budding sportsmen, with a few words of wisdom.

The most coveted, rolling trophy of Coca Cola presents 15th edition of BITS SPORTS FESTIVAL 2017, was awarded to Bits Pilani Dubai Campus, for the 6th consecutive year. Each and every athlete was proud to be associated, with an event of such massive magnitude.

#### B4.19.22. SPARKS 2017

Sparks 2017, an intra-college cultural event was held during 2-3rd October, 2017. The event comprised of competitions held in the auditorium and were organized by the Dance Club, the Drama Club and the Music Club. The dance competition for the festival was divided into 3 categories: Western Group Dance, Eastern Group Dance and Dancing Doubles. There were drama events like Impulse and Street Play. Music events like Eastern and Western rounds of Solo and Duet singing, Instrumental Music and Battle of Bands. There were many brilliant performances that left the audience awestruck. All the judges were amazed at the splendid performances of the students and the hard work, effort and time put in to making this event a success was both prominent and commendable. Certificates of Merit were awarded to the top two performers / teams in each of the competitions. Various food stalls were also set up by the Student Council to tickle the taste buds of the students along with various other stalls that came forwards to attract the large crowd gathered for the events all around campus.

#### B4.19.23. Ethnic Day2017

Ethnic Day is organized every year to celebrate the Foundation Day of BITS Pilani, Dubai Campus. The celebrations were held on the 5th of November 2017 at the campus. Students dressed up in ethnic wear on the day and an event was organized in the auditorium from 3.30 PM to 5:45 PM. The programme began with the lighting of the "diya" and the Director's address. Dance and music performances by students and the staff enthralled the audience. Several On-the-Spot competitions were conducted that were open to all students and faculty members and prizes were given to the winners. Mr. Ethnic and Ms. Ethnic were announced after a few rounds of contest. A separate slot was kept for the Arabic speaking students and they they enthralled the audience with their performances. Ethnic Day brought students of different nationalities together and gave a glimpse of each others culture.

#### B4.19.24. Scholarships

Financial Assistance to Students- 746 students received financial assistance of AED: **4,368,659** /- under different categories for the Academic Year 2016-17, the details of which are given below:

S.No.	Particulars	Students Nos.	Amount in AED
1	Institute Merit Scholarship	659	3,157,500
2	Higher Degree and Doctoral Scholarship	16	93,000
3	Need-based Scholarship (Physically challenged, Bereaved family discount)	6	75,125
4	Others (Staff, Siblings, Sports, Special Concessions)	65	1,043,034
<b>Total</b>		<b>746</b>	<b>4,368,659</b>

BITS Pilani

# annual report 2017

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## **Part B5: Work Integrated Learning Programmes**



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## WORK INTEGRATED LEARNING PROGRAMMES

### B5.1 SENIOR OFFICERS OF THE WORK INTEGRATED LEARNING PROGRAMMES

1. Prof. G Sundar, Director (Off-Campus Programmes & Industry Engagement)
2. Prof. S Gurunayanan, Dean
3. Prof. K Venkatasubramanian, Associate Dean
4. Prof. G Venkiteswaran, Associate Dean
5. Prof. Raghunath Ratabole, Associate Dean
6. Prof. Srinivasa Prakash Regalla, Associate Dean
7. Prof. Anil Kumar, Associate Dean
8. Mr. Rajiv Tandon, Chief Operations Officer
9. Mr. Pradeep Singhdeo, Deputy General Manager, Operations

### B5.2 HISTORY

Since 1979, the Institute has been participating in the human resources development activities of the industries by evolving several degree programmes that integrate the working environment of the employees with the learning environment required by the Institute. These programmes are offered in several domains like Information Technology, Engineering Technology and Management.

The Institute conducts **Work Integrated Learning Programmes (WILP)** as a means of continuing education for employed professionals to meet the Learning & Development needs of a diverse spectrum of industries. These programmes are conducted through a collaborative partnership between BITS Pilani and the organization / industry, to build technical competencies and enable advancement of workplace skills. In a world of rapidly evolving technologies, these programmes represent a successful model to meet the consequent need for continuous education and up-skilling of the workforce.

Over the past three decades, these programmes have grown manifold, meeting the requirements of over 4000 organizations. At present, over 22,000 employed professionals are pursuing various degree programmes through WILP.

### B5.3 SALIENT FEATURES

In line with the educational philosophy of the Institute of integrating theory with practice, the student's own work environment provides an ideal ground for a meaningful combination of the two through assignments, case studies, work experience, and projects. The interplay of work or practice and education is ensured since students are admitted only to a programme that is in line with their work profiles, and with the endorsement and active support of the employer.

The programmes are industry focused, with highly contemporary and relevant curriculum, and the individual courses are taught at the same level of rigor as in programmes on the campus. Instruction is delivered at the workplace, using a judicious combination of asynchronous electronic means, and synchronous, faculty-led classes conducted either physically or through the use of technology. Extensive use is made of virtual laboratories, remote laboratories, simulations, case studies, assignments and projects drawn from the workplace for enhanced experiential learning.

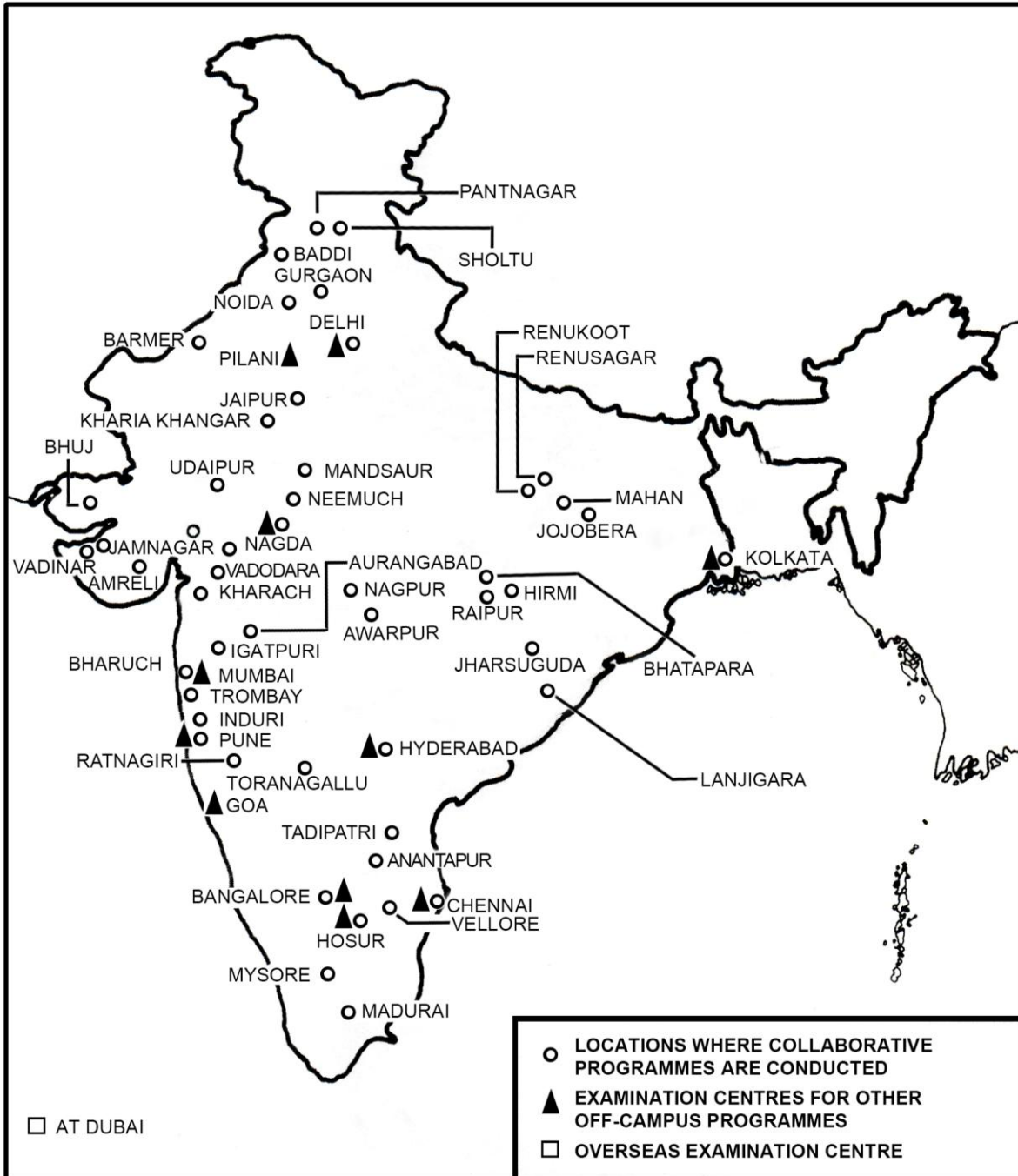
**B5.4 PROGRAMMES OFFERED****Currently Operative Work Integrated Learning Programmes**

<b>Programmes</b>	<b>Collaborating / Sponsoring Organization</b>
<b>Certificate</b>	
1. Manufacturing Practice	- Bosch, Bangalore
<b>Post Graduate Certificate</b>	
1. Internet of Things	- Designed for the HRD requirements of a diverse spectrum of IT Industries
2. Big Data Engineering	- Designed for the HRD requirements of a diverse spectrum of IT Industries
3. Manufacturing Practice	- Bosch, Bangalore
<b>Post Graduate Diploma</b>	
1. Finance	- Designed for the HRD needs of Business organizations
2. Manufacturing Management	- Bosch, Bangalore
<b>B.Tech. Programmes</b>	
1. Engineering Design	- Eaton Technologies, Pune; L&T, Vadodara
2. Engineering Technology	- Designed for the HRD needs of a diverse spectrum of Engineering Industries; and John Deere, Pune
3. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries; and Wipro Bangalore
4. Manufacturing Technology	- Kirloskar Oil Engines, Kolhapur, Bharat Forge, Cummins, Pune, Tata Motors, Jamshedpur, TACO, Pune; Maruti Suzuki, Gurgaon; Mahindra Motor Vehicles, Pune
5. Marine Engineering	- Tolani Maritime Institute, Induri
6. Nautical Technology	- Tolani Maritime Institute, Induri
7. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy - Mumbai
8. Process Engineering	- Aditya Birla Group, Mumbai; JSW Steel, Toranagallu; Vedanta, Jharsuguda; BPCL, Mumbai
<b>M.Sc. Programmes</b>	
1. Business Analytics	- Designed for the HRD needs of a diverse spectrum of Business organizations
2. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries
<b>M.B.A. Programmes</b>	
1. Consultancy Management	- Designed for the HRD needs of a diverse spectrum of Consulting firms
2. Finance	- Designed for the HRD needs of a diverse spectrum of Business organizations
3. Hospital & Health Systems Management	- Designed for the HRD needs of a diverse spectrum of Health care organizations
4. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Manufacturing Industries
5. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
<b>M.Tech. Programmes</b>	
1. Automotive Engineering	- Tata Technologies, Tata Motors, Pune
2. Computing Systems & Infrastructure	- Designed for the HRD requirements of a diverse spectrum of IT Industries; and Wipro Technologies, Bangalore

<b>Programmes</b>	<b>Collaborating / Sponsoring Organization</b>
3. Design Engineering	- Designed for the HRD needs of a diverse spectrum of Engineering Industries; and John Deere, Pune
4. Embedded Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries; and Cisco, Bangalore; UTC, Bangalore, Hyderabad; Cluster programme, Pune, Bangalore
5. Environmental Engineering	- Goa State Pollution Control Board, Goa
6. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Manufacturing Industries
7. Microelectronics	- Designed for the HRD requirements of a diverse spectrum of IT Industries; and Synopsys, Bangalore;
8. Pharmaceutical Operations and Management	- Designed for the HRD requirements of a diverse spectrum of Pharmaceutical Industries; and Lupin, Mumbai, Sun Pharma, Vadodara
9. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
10. Science Communication	- National Council of Science Museums, Kolkata
11. Software Engineering	- Wipro Technologies, Dell-EMC, SAP Labs, Sabre, Oracle, Bangalore; Avaya, Cybage, Tech Mahindra, Pune; IGate, Hexaware, Mumbai; Qualcomm, Hyderabad; Cognizant, Verizon, Chennai
12. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries; and Wipro Technologies, Cisco, Bangalore; TCS, Hyderabad
13. Systems Engineering	- Wipro Infotech, Bangalore
14. Transportation Engineering	- PWD, Goa

B5.5 MAP OF BITS WORK INTEGRATED LEARNING & COLLABORATIVE PROGRAMMES 2017

### MAP OF BITS WORK INTEGRATED LEARNING & COLLABORATIVE PROGRAMMES 2017



**B5.6 ADMISSIONS**

The number of students admitted in each of the semester is given below.

	PG Certificate & Diploma Programmes	Integrated First Degree Programmes	Higher Degree Programmes	Total
Second Semester 2016-2017	-	709(103)	3959(1183)	4668(1286)
First Semester 2017-2018	320(53)	656(48)	2855(0567)	3831(0666)

The programme-wise details are given in **Annexure 1 (Part B5)**.

**B5.7 REGISTRATION OF STUDENTS**

The registration processes for both the semesters was completed on the first day of each semester.

Semester	Number of students registered
Second Semester 2016-2017	17737
First Semester 2017-2018	18023

Details of Registration of students for the First Semester 2017-2018 are given in **Annexure 2 (Part B5)**.

**B5.8 GEOGRAPHICAL DISTRIBUTION OF STUDENTS REGISTERED IN FIRST SEMESTER 2017-2018****(A) INDIA**

State	No. of students		
	Specific	Non Specific	Total
Andhra Pradesh	496	367	863
Assam		22	22
Bihar		29	29
Chandigarh		14	14
Chattisgarh		37	37
Dadra & Nagar Haveli		3	3
Delhi	150	266	416
Goa	21	72	93
Gujarat	135	96	231
Haryana	146	267	413
Himachal Pradesh		15	15
Jammu & Kashmir		13	13
Jharkand	155	31	186
Karnataka	6800	1763	8563
Kerala	163	188	351
Madhya Pradesh		49	49
Maharashtra	1598	1154	2752
Meghalaya		1	1
Mizoram		4	4
Nagaland		3	3
Orissa	16	4	20

State	No. of students		
	Specific	Non Specific	Total
Pondicherry		18	18
Punjab		53	53
Rajasthan		217	217
Tamil Nadu	496	1203	1699
Telangana	217	574	791
Uttar Pradesh	84	261	345
Uttarakhand		33	33
West Bengal	100	162	262
<b>Total</b>	<b>10577</b>	<b>6919</b>	<b>17496</b>

**(B) Foreign**

Country	No. of students		
	Specific	Non Specific	Total
Australia		7	7
Canada		10	10
China		2	2
France		5	5
Saudi Arabia		43	43
Kuwait		77	77
Hongkong		7	7
Malaysia	59	5	64
Oman		22	22
Qatar		43	43
Russia		8	8
Singapore		15	15
UAE		202	202
UK		7	7
USA		15	15
<b>Total</b>	<b>59</b>	<b>468</b>	<b>527</b>
<b>Grand Total</b>	<b>10636</b>	<b>7387</b>	<b>18023</b>

**B5.9 SPONSORING ORGANIZATIONS**

During the year, 6184 organizations have sponsored their employees for Work Integrated Learning Programmes. List of the organizations are given in **Annexure 'B5-3'**.

**B5.10 ACADEMIC CALENDAR**

For the year 2017, Second Semester 2016-2017 started on 24-12-2016 and ended on 06-05-2017, while First Semester 2017-2018 started on 15-07-2017 and ended on 26-11-2017 for all programmes except the following:

**Second Semester 2016-2017**

Degree	Programme	Organization	Location	Start Date	End Date
B.S.	Engineering Design	L&T	Vadodara	23/01/2017	02/07/2017
B.S.	Manufacturing Engineering	Bharat Forge	Pune	05/02/2017	03/08/2017
B.S.	Power Engineering	ABG	Mumbai	23/01/2017	12/08/2017
B.S.	Power Engineering	Essar Power	Hazira	23/01/2017	12/08/2017
B.S.	Process Engineering	Vedanta	Jharsuguda	23/01/2017	02/07/2017
B.Tech.	Engineering Technology	John Deere	Pune	26/02/2017	11/09/2017
B.Tech.	Information Systems	Wipro Infotech	Bangalore	12/03/2017	01/09/2017
B.Tech.	Manufacturing Engineering	TACO	Pune	11/02/2017	16/05/2017
B.Tech.	Manufacturing Technology	Bharat Forge	Pune	05/02/2017	26/07/2017
B.Tech.	Manufacturing Technology	Kirloskar Oil Engines	Pune	11/02/2017	23/07/2017
B.Tech.	Manufacturing Technology	Mahindra Motor Vehicles	Pune	30/04/2017	18/10/2017
B.Tech.	Manufacturing Technology	Maruti Suzuki	Gurgaon	26/03/2017	21/09/2017
B.Tech.	Manufacturing Technology	TACO	Pune/Pantnagar	23/04/2017	12/10/2017
B.Tech.	Manufacturing Technology	Tata Motors	Jamshedpur/ Pantnagar	24/03/2017	10/09/2017
B.Tech.	Power Engineering	JSW Energy	Mumbai	23/01/2017	12/08/2017
B.Tech.	Power Engineering	Ultratech	Mumbai	15/07/2017	26/11/2017
B.Tech.	Process Engineering	ABG	Mumbai	15/07/2017	26/11/2017
B.Tech.	Process Engineering	BPCL	Mumbai	20/05/2017	16/11/2017
B.Tech.	Process Engineering	DRL	Hyderabad	18/02/2017	01/07/2017
B.Tech.	Process Engineering	JSW Steel	Torangallu	11/09/2016	18/07/2017
M.S.	Software Engineering	Cognizant	Chennai	20/08/2016	02/07/2017
M.Tech.	Automotive Engineering	Tata Motors	Pune	19/02/2017	9/07/2017
M.Tech.	Automotive Engineering	Tata Technologies	Pune	11/02/2017	08/07/2017
M.Tech.	Design Engineering	Cluster	Bangalore	26/02/2017	01/09/2017
M.Tech.	Design Engineering	Cluster	Chennai	12/03/2017	24/08/2017
M.Tech.	Design Engineering	Cluster	Delhi	05/03/2017	08/09/2017
M.Tech.	Design Engineering	Cluster	Pune	19/02/2017	23/08/2017
M.Tech.	Design Engineering	John Deere	Pune	18/02/2017	28/07/2017
M.Tech.	Design Engineering	L&T	Vadodara	23/01/2017	02/07/2017
M.Tech.	Design Engineering	SKF	Pune	21/01/2017	18/06/2017
M.Tech.	Embedded Systems	Cluster	Bangalore	18/02/2017	25/08/2017
M.Tech.	Embedded Systems	Cluster	Delhi	05/03/2017	08/09/2017
M.Tech.	Embedded Systems	Cluster	Pune	18/02/2017	23/08/2017
M.Tech.	Embedded Systems	CISCO	Bangalore	15/04/2017	30/09/2017
M.Tech.	Embedded Systems	L&T	Vadodara	23/01/2017	02/07/2017
M.Tech.	Embedded Systems	UTC	Bangalore	08/04/2017	14/10/2017

Degree	Programme	Organization	Location	Start Date	End Date
M.Tech.	Embedded Systems	UTC Fire & Safety	Hyderabad	01/04/2017	19/08/2017
M.Tech.	Manufacturing Management	Vedanta	Jharsuguda	23/01/2017	02/07/2017
M.Tech.	Microelectronics	Cluster	Bangalore	18/02/2017	25/08/2017
M.Tech.	Microelectronics	Wipro	Pune	24/03/2017	01/09/2017
M.Tech.	Pharmaceutical Operations & Management	Cluster	Hyderabad	24/03/2017	20/08/2017
M.Tech.	Pharmaceutical Operations & Management	Lupin	Mumbai	08/01/2017	16/06/2017
M.Tech.	Science Communication	NCSM	Kolkata	03/01/2017	02/06/2017
M.Tech.	Software Engineering	Avaya	Pune	08/01/2017	21/05/2017
M.Tech.	Software Engineering	Cognizant	Chennai	20/08/2016	02/07/2017
M.Tech.	Software Engineering	Cybage	Pune	21/01/2017	17/06/2017
M.Tech.	Software Engineering	EMC	Bangalore	08/04/2017	09/09/2017
M.Tech.	Software Engineering	Hexaware	Mumbai	19/12/2016	14/05/2017
M.Tech.	Software Engineering	IGATE	Pune	09/02/2017	30/06/2017
M.Tech.	Software Engineering	ORACLE	Bangalore	15/04/2017	07/10/2017
M.Tech.	Software Engineering	Qualcomm	Hyderabad	08/01/2017	21/05/2017
M.Tech.	Software Engineering	Sabre	Bangalore	18/02/2017	22/07/2017
M.Tech.	Software Engineering	SAP Labs	Bangalore	04/02/2017	22/07/2017
M.Tech.	Software Engineering	Tech Mahindra	Pune	21/01/2017	18/06/2017
M.Tech.	Software Engineering	Tech Mahindra	Hyderabad	18/02/2017	21/07/2017
M.Tech.	Software Engineering	Verizon	Chennai/ Hyderabad	18/02/2017	03/08/2017
M.Tech.	Software Engineering	Wipro	Bangalore	12/03/2017	01/09/2017
M.Tech.	Software Systems	Cisco	Bangalore	15/04/2017	30/09/2017
M.Tech.	Software Systems	TCS	Hyderabad	01/04/2017	01/10/2017
M.Tech.	Systems Engineering	Wipro Infotech	Bangalore	12/03/2017	01/09/2017
M.Tech.	Transportation Engineering	PWD	Goa	29/04/2017	31/10/2017

### First Semester 2017-2018

Degree	Programme	Organization	Location	Start Date	End Date
B.S.	Engineering Design	L&T	Vadodara	15/07/2017	26/11/2017
B.S.	Manufacturing Engineering	Bharat Forge	Pune	13/08/2017	11/02/2018
B.S.	Power Engineering	Essar Power	Hazira	15/07/2017	26/11/2017
B.S.	Process Engineering	ABG	Mumbai	15/07/2017	26/11/2017
B.S.	Process Engineering	JSW Steel	Torangallu	06/08/2017	16/01/2018
B.S.	Process Engineering	Vedanta	Jharsuguda	15/07/2017	26/11/2017
B.Tech.	Engineering Technology	John Deere	Pune	26/08/2017	08/02/2018
B.Tech.	Information Systems	Wipro Infotech	Bangalore	19/08/2017	09/03/2018
B.Tech.	Manufacturing Engineering	TACO	Pune	15/07/2017	02/12/2017
B.Tech.	Manufacturing Technology	Bharat Forge	Pune	13/08/2017	11/02/2018
B.Tech.	Manufacturing Technology	Cummins	Pune	07/10/2017	14/04/2018



Degree	Programme	Organization	Location	Start Date	End Date
B.Tech.	Manufacturing Technology	Kirloskar Oil Engines	Pune	19/08/2017	07/01/2018
B.Tech.	Manufacturing Technology	Mahindra Motor Vehicles	Pune	06/08/2017	07/02/2018
B.Tech.	Manufacturing Technology	Maruti Suzuki	Gurgaon	08/10/2017	06/04/2018
B.Tech.	Manufacturing Technology	TACO	Pune/ Pantnagar	08/10/2017	20/04/2018
B.Tech.	Manufacturing Technology	Tata Motors	Jamshedpur / Pantnagar	10/09/2017	18/02/2018
B.Tech.	Power Engineering	JSW Energy	Mumbai	08/08/2017	02/12/2017
B.Tech.	Power Engineering	Tata Power	Mumbai	25/09/2017	13/01/2018
B.Tech.	Power Engineering	Ultratech	Mumbai	31/07/2017	10/12/2017
B.Tech.	Process Engineering	BPCL	Mumbai	16/12/2017	14/06/2018
B.Tech.	Process Engineering	JSW Steel	Toranagallu	18/06/2017	27/11/2017
M.Tech.	Automotive Engineering	Tata Motors	Pune	12/08/2017	06/01/2018
M.Tech.	Computing Systems & Infrastructure	Wipro	Bangalore	08/10/2017	30/03/2018
M.Tech.	Design Engineering	Cluster	Bangalore	03/09/2017	16/03/2018
M.Tech.	Design Engineering	Cluster	Chennai	27/08/2017	01/02/2018
M.Tech.	Design Engineering	Cluster	Delhi	03/09/2017	16/03/2018
M.Tech.	Design Engineering	Cluster	Pune	27/08/2017	04/02/2018
M.Tech.	Design Engineering	John Deere	Pune	26/08/2017	08/02/2018
M.Tech.	Design Engineering	L&T	Vadodara	15/07/2017	26/11/2017
M.Tech.	Design Engineering	SKF	Pune	15/07/2017	18/01/2018
M.Tech.	Embedded Systems	Cluster	Bangalore	02/09/2017	16/03/2018
M.Tech.	Embedded Systems	Cluster	Delhi	03/09/2017	16/03/2018
M.Tech.	Embedded Systems	Cluster	Pune	19/08/2017	03/02/2018
M.Tech.	Embedded Systems	Cisco	Bangalore	07/10/2017	14/04/2018
M.Tech.	Embedded Systems	L&T	Vadodara	15/07/2017	26/11/2017
M.Tech.	Embedded Systems	UTC	Bangalore	23/09/2017	14/04/2018
M.Tech.	Embedded Systems	UTC Fire & Safety	Hyderabad	05/08/2017	09/12/2017
M.Tech.	Microelectronics	Cluster	Bangalore	02/09/2017	16/03/2018
M.Tech.	Microelectronics	WIPRO	Pune	10/08/2017	26/12/2017
M.Tech.	Pharmaceutical Operations & Management	Cluster	Hyderabad	01/08/2017	10/12/2017
M.Tech.	Pharmaceutical Operations & Management	Lupin	Mumbai	10/07/2017	17/12/2017
M.Tech.	Science Communication	NCSM	Kolkata	26/08/2017	12/01/2018
M.Tech.	Software Engineering	Avaya	Pune	09/07/2017	17/12/2017
M.Tech.	Software Engineering	Cognizant	Chennai	26/08/2017	24/12/2017
M.Tech.	Software Engineering	Cybage	Pune	08/07/2017	07/01/2018
M.Tech.	Software Engineering	Dell-EMC	Bangalore	16/09/2017	10/02/2018
M.Tech.	Software Engineering	Hexaware	Mumbai	14/08/2017	10/02/2018
M.Tech.	Software Engineering	I-Gate	Pune	05/08/2017	13/12/2017
M.Tech.	Software Engineering	Oracle	Bangalore	14/10/2017	21/04/2018
M.Tech.	Software Engineering	Sabre	Bangalore	15/07/2017	15/12/2017

Degree	Programme	Organization	Location	Start Date	End Date
M.Tech.	Software Engineering	SAP Labs	Bangalore	05/08/2017	20/01/2018
M.Tech.	Software Engineering	Tech Mahindra		06/09/2017	16/12/2017
M.Tech.	Software Engineering	Verizon	Chennai/ Hyderabad	26/08/2017	01/02/2018
M.Tech.	Software Engineering	Wipro	Bangalore	19/08/2017	09/03/2018
M.Tech.	Software Systems	Cisco	Bangalore	28/10/2017	28/04/2018
M.Tech.	Software Systems	TCS	Hyderabad	07/10/2017	22/04/2018
M.Tech.	Systems Engineering	Wipro Infotech	Bangalore	12/08/2017	14/12/2017
M.Tech.	Transportation Engineering	PWD	Goa	01/12/2017	22/04/2018

### B5.11 COURSES OFFERED

The number of courses, offered during the year 2017 is as follows:

	Number of Courses offered
Second Semester 2016-2017	687
First Semester 2017-2018	552

### B5.12 NEW COURSES INTRODUCED

The new courses introduced during the year 2017 are given below:

S.No.	Course No.	Course Title
1.	CIOT ZG511	IoT Technology and Applications
2.	CIOT ZG521	Hardware Architectures for IoT
3.	CIOT ZG531	Communication and Networking Technologies in IoT
4.	CIOT ZG541	Sensors, Actuators, and Signal Processing
5.	CIOT ZG551	Software and Programming in IoT
6.	CIOT ZG561	Data Management in IoT
7.	CIOT ZG571	Capstone Project
8.	HHSM ZG614	Hospital Operations Management
9.	HHSM ZG615	Service Quality Excellence in Healthcare
10.	HHSM ZG617	Strategic Management of Healthcare Organizations
11.	CSI** ZC311	Information Security
12.	CSI** ZG515	Introduction to DevOps
13.	CSI** ZG522	Design and Operation of Data Centers
14.	CSI** ZG524	Middleware Technologies

<b>S.No.</b>	<b>Course No.</b>	<b>Course Title</b>
15.	CSI** ZG526	Web Technologies
16.	CGM* ZC411	Marketing
17.	CGM* ZC421	Financial and Management Accounting
18.	CGM* ZC431	Quantitative Methods
19.	CGM* ZC414	Managerial Economics
20.	CMP* ZC411	Managing People & Organizations
21.	CMP* ZC426	Operations Management
22.	CMP* ZC437	Lean Manufacturing
23.	CMP* ZC422	Total Quality Management
24.	CBDE ZG511	Foundations of Big Data Systems
25.	CBDE ZG521	Platforms for Big Data
26.	CBDE ZG531	Processing Big Data - ETL & Batch Processing
27.	CBDE ZG541	Processing of Real-Time Data and Streaming Data
28.	CBDE ZG551	Big Data Analytics
29.	CBDE ZG571	Capstone Project

**B5.13 LIVE INTERACTIVE LECTURE SESSIONS**

For the WILP courses offered during II Semester 2016-2017 and I Semester 2017-2018 for the B.Tech. Engineering Technology, B.Tech. Information Systems, B.Tech. Manufacturing Technology, B.Tech. Process Engineering, B.Tech. Power Engineering, MSc. Business Analytics, M.Sc. Information Systems, MBA Consultancy Management, MBA Finance, MBA Hospital & Health Systems Management, MBA Manufacturing Management, MBA Quality Management, M.Tech. Computing Systems & Infrastructure, M.Tech. Microelectronics, M.Tech. Software Systems, M.Tech. Manufacturing Management, M.Tech. Embedded Systems degree programmes, live interactive online lecture sessions were delivered through Internet Based Desktop Video Conferencing systems using Cisco WebEx technology. The video lectures were also recorded and made available on-demand. The students and faculty could also interact asynchronously and share learning resources through an online Learning Management System named Taxila, based on Moodle technology.

**Second Semester 2016-2017**

S.No.	Course No.	Course Title
1.	AAOC ZC111	PROBABILITY & STATISTICS
2.	BA ZC411	MARKETING
3.	BA ZC412	MODELS AND APPLICATIONS IN OPERATIONS RESEARCH
4.	BA ZC413	INTRODUCTION TO STATISTICAL METHODS
5.	BA ZG521	FINANCIAL MANAGEMENT
6.	BA ZG522	BUSINESS DATA MIING
7.	BA ZG523	INTRODUCTION TO DATA SCIENCE
8.	BA ZG524	ADVANCED STATISTICAL METHODS
9.	BITS ZC471 / BA ZC471 / HHSM ZC471	MANAGEMENT INFORMATION SYSTEMS
10.	BITS ZG553 / ES ZG553	REAL TIME SYSTEMS
11.	CS ZG524	REAL TIME OPERATING SYSTEMS
12.	CS ZG525	ADVANCED COMPUTER NETWORKS
13.	EA ZC412 / MM ZC412	FLEXIBLE MANUFACTURING SYSTEMS
14.	EA ZC451	INTERNETWORKING TECHNOLOGIES
15.	EA ZC473	MULTIMEDIA COMPUTING
16.	EEE ZG512 / ES ZG512	EMBEDDED SYSTEM DESIGN
17.	ENGG ZC112	ELECTRICAL & ELECTRONICS TECHNOLOGY
18.	ENGG ZC232	ENGINEERING MATERIALS
19.	ENGG ZC242	MAINTENANCE AND SAFETY
20.	ENGG ZC243	MECHANICAL TECHNOLOGY
21.	ES ZC263	DIGITAL ELECTRONICS & MICROPROCESSORS
22.	ES ZG554	RECONFIGURABLE COMPUTING
23.	ET ZC235	MANUFACTURING PROCESSES
24.	ET ZC343	MATERIALS MANAGEMENT
25.	ET ZC344	INSTRUMENTATION & CONTROL
26.	ET ZC362	ENVIRONMENTAL POLLUTION CONTROL
27.	ET ZC413	ENGINEERING DESIGN
28.	ET ZC416	PRODUCTION PLANNING & CONTROL
29.	ET ZC417	MANUFACTURING EXCELLENCE
30.	ET ZC423	ESSENTIALS OF PROJECT MANAGEMENT

<b>S.No.</b>	<b>Course No.</b>	<b>Course Title</b>
31.	ET ZC424	PLANT LAYOUT AND DESIGN
32.	ET ZC434	QUALITY CONTROL ASSURANCE & RELIABILITY
33.	FIN ZG512	GLOBAL FINANCIAL MARKETS AND PRODUCTS
34.	HHSM ZG515	QUANTITATIVE METHODS
35.	HHSM ZG517	HEALTH CARE MANAGEMENT
36.	IS ZC313	OBJECT ORIENTED PROGRAMMING & DESIGN
37.	IS ZC327	SYSTEMS PROGRAMMING
38.	IS ZC337	DATABASE SYSTEMS & APPLICATIONS
39.	IS ZC343	SOFTWARE ENGINEERING
40.	IS ZC353	COMPUTER ORGANIZATION & ARCHITECTURE
41.	IS ZC363	DATA STRUCTURES & ALGORITHMS
42.	IS ZC364	OPERATING SYSTEMS
43.	IS ZC373	COMPILER DESIGN
44.	IS ZC415	DATA MINING
45.	IS ZC423	SOFTWARE DEVELOPMENT FOR PORTABLE DEVICES
46.	IS ZC424 / ES ZC424	SOFTWARE FOR EMBEDDED SYSTEMS
47.	IS ZC444	ARTIFICIAL INTELLIGENCE
48.	IS ZC446	DATA STORAGE TECHNOLOGIES & NETWORKS
49.	IS ZC462	NETWORK PROGRAMMING
50.	IS ZC464	MACHINE LEARNING
51.	IS ZC467	COMPUTER NETWORKS
52.	IS ZC472	COMPUTER GRAPHICS
53.	MATH ZC222	DISCRETE STRUCT FOR COMP SCIENCE
54.	MATH ZC233	CALCULUS
55.	MATH ZC234	LINEAR ALGEBRA & OPTIMIZATION
56.	MBA ZC415	FINANCIAL & MANAGEMENT ACCOUNTING
57.	MBA ZC416	MANAGERIAL ECONOMICS
58.	MBA ZG511	MANAGING PEOPLE & ORGANIZATIONS
59.	MBA ZC411	MARKETING
60.	MBA ZC417	QUANTITATIVE METHODS
61.	MBA ZG514	LEADERSHIP & MANAGING CHANGE
62.	MBA ZG515	CONSULTING & PEOPLE SKILLS
63.	MBA ZG521	FINANCIAL MANAGEMENT
64.	MBA ZG523	PROJECT MANAGEMENT
65.	MBA ZG524 / QM ZG524	QUALITY MANAGEMENT SYSTEMS
66.	MBA ZG525	BUSINESS PROCESS ANALYSIS
67.	MBA ZG526 / QM ZG526	OPERATIONS MANAGEMENT

S.No.	Course No.	Course Title
68.	MBA ZG531 / QM ZG531	STATISTICAL QUALITY CONTROL
69.	MBA ZG541	CONSULTANCY PRACTICE
70.	MBA ZG621	SUPPLY CHAIN MANAGEMENT
71.	MBA ZG634	STRATEGIC CHANGE MANAGEMENT
72.	MGTS ZC211	PRINCIPLES OF MANAGEMENT
73.	MM ZC441 / QM ZC441	HUMAN RESOURCE MANAGEMENT
74.	MM ZG512	MANUFACTURING STRATEGY
75.	MM ZG513	MAINTENANCE ENGINEERING
76.	MM ZG514 / QM ZG514	LEADERSHIP & MANAGING CHANGE
77.	MM ZG515 / QM ZG515	QUANTITATIVE METHODS
78.	MM ZG522 / QM ZG532 / HHSM ZG518 / MBA ZG522	TOTAL QUALITY MANAGEMENT
79.	MM ZG523 / QM ZG523 / POM ZG523	PROJECT MANAGEMENT
80.	MM ZG533	MANUFACTURING PLANNING & CONTROL
81.	MM ZG534	SUSTAINABLE MANUFACTURING
82.	MM ZG535 / QM ZG535 / MBA ZG535	DECISION ANALYSIS
83.	MM ZG537 / MBA ZG537	LEAN MANUFACTURING
84.	MM ZG541	PRODUCT DESIGN
85.	MM ZG611 / QM ZG611 / MBA ZG611	STRATEGIC MANAGEMENT & BUSINESS POLICY
86.	MM ZG621	SUPPLY CHAIN MANAGEMENT
87.	MM ZG627	MANAGERIAL CORPORATE FINANCE
88.	POM ZG515	PHARMA ADMIN & MANAGEMENT
89.	POM ZG522	QUALITY ASSURANCE & REG AFFAIRS
90.	POM ZG542	PRODUCTION & OPRNS MGMT
91.	QM ZG528	RELIABILITY ENGINEERING
92.	QM ZG536	DESIGN OF EXPERIMENTS
93.	QM ZG663	CONCURRENT ENGINEERING
94.	SS ZG513	NETWORK SECURITY
95.	SS ZG514	OBJECT ORIENTED ANALYSIS & DESIGN
96.	SS ZG515	DATA WAREHOUSING
97.	SS ZG518	DATABASE DESIGN & APPLICATIONS
98.	SS ZG519	DATA STRUCTURES & ALGORITHM DESIGN
99.	SS ZG520	WIRELESS & MOBILE COMMUNICATION
100.	SS ZG526	DISTRIBUTED COMPUTING
101.	SS ZG527	CLOUD COMPUTING
102.	SS ZG531 / ES ZG531	PERVASIVE COMPUTING
103.	SS ZG537	INFORMATION RETRIEVAL
104.	SS ZG547	USABILITY ENGINEERING
105.	SS ZG548	ADVANCED DATA MINING
106.	SS ZG552	SOFTWARE TESTING METHODOLOGIES

S.No.	Course No.	Course Title
107.	SS ZG554	DISTRIBUTED DATA SYSTEMS
108.	SS ZG582	TELECOM NETWORK MANAGEMENT
109.	SS ZG622	SOFTWARE PROJECT MANAGEMENT
110.	SS ZG626	HARDWARE SOFTWARE CO-DESIGN
111.	SS ZG653	SOFTWARE ARCHITECTURES
112.	SS ZG656	NETWORKED EMBEDDED APPLICATIONS
113.	SS ZG661 / QM ZG662 / MBA ZG661	SOFTWARE QUALITY MANAGEMENT
114.	TA ZC163	COMPUTER PROGRAMMING (C)
115.	TA ZC164	COMPUTER PROGRAMMING (MATLAB)
116.	TA ZC233	ENGINEERING MEASUREMENTS
117.	TA ZC312	TECHNICAL REPORT WRITING
118.	DESSA ZG511	MECHATRONICS
119.	DESSA ZG521	WORLD CLASS MANUFACTURING
120.	DESSA ZG541	PRODUCT DESIGN
121.	DESSA ZG561	MECHANISMS & ROBOTICS
122.	PEAB ZC112	ELECTRICAL & ELECTRONICS TECHNOLOGY
123.	PEAB ZC211 / PEVA ZC211 / POWAB ZC232 / POWES ZC232 / EDLT ZC231	PRINCIPLES OF MANAGEMENT
124.	PEAB ZC213	ENGINEERING MEASUREMENTS
125.	PEAB ZC231	ENGINEERING MATERIALS
126.	PEAB ZC233	CALCULUS
127.	PEAB ZC313 / PEVA ZC313 / POWAB ZC321 / POWES ZC321 / EDLT ZC241	TECHNICAL REPORT WRITING
128.	POMLM ZG525	PHARMACEUTICAL PROCESS DEVELOPMENT & SCALE-UP
129.	POMLM ZG534	ADV PHARMACEUTICAL TECH
130.	POMLM ZG542	PRODUCTION AND OPERATIONS MANAGEMENT
131.	POMLM ZG631	TQM TOOLS AND TECHNIQUES
132.	POMSS ZG523	PROJECT MANAGEMENT
133.	POMSS ZG532	SUPPLY CHAIN MANAGEMENT
134.	POMSS ZG534	ADVANCED PHARMA TECH
135.	POMSS ZG545	IPR & PHARMACEUTICALS
136.	POWAB ZC112	ELECTRICAL & ELECTRONICS TECHNOLOGY
137.	POWAB ZC164	COMPUTER PROGRAMMING
138.	POWAB ZC231	THERMODYNAMICS
139.	POWAB ZC233	CALCULUS
140.	POWJS ZC316	POWER ELECTRONICS
141.	POWJS ZC317	POWER PLANT ENGINEERING
142.	POWJS ZC342	POWER SYSTEM ENGINEERING – I
143.	POWJS ZC344	INSTRUMENTATION AND CONTROL
144.	POWJS ZC413	PROCESS CONTROL

S.No.	Course No.	Course Title
145.	POWJS ZC422	POWER SYSTEM DRAWING AND DESIGN
146.	POWJS ZC431	MAINTENANCE AND SAFETY
147.	TEPWG ZG521	ENVIRONMENTAL IMPACT ASSESSMENT
148.	TEPWG ZG519	PAVEMENT EVALUATION FIELD PROJECT
149.	TEPWG ZG523	TRANSPORTATION SYSTEMS PLANNING & MANAGEMENT
150.	TEPWG ZG524	URBAN MASS TRANSIT PLANNING, OPERATIONS & MANAGEMENT

**First Semester 2017-2018**

S.No.	Course No.	Course Title
1.	AAOC ZC111	PROBABILITY & STATISTICS
2.	BA ZC412	MODELS & APP IN OPER RESEARCH
3.	BA ZC413	INTRO TO STATISTICAL METHODS
4.	BA ZC414	OPTIMIZATION METHODS FOR ANALYTICS
5.	BA ZC471 / BITS ZC471 / HHSM ZC471 / POMSS ZC471	MANAGEMENT INFORMATION SYSTEMS
6.	BA ZG512	PREDICTIVE ANALYTICS
7.	BA ZG521 / MBA ZG521 / POM ZG513 / POMSS ZG513	FINANCIAL MANAGEMENT
8.	BA ZG522	BUSINESS DATA MINING
9.	BA ZG523	INTRODUCTION TO DATA SCIENCE
10.	BA ZG524	ADVANCED STATISTICAL METHODS
11.	BA ZG525	BIG DATA ANALYTICS
12.	BA ZG621 / MBA ZG621 / MM ZG621 / POM ZG621	SUPPLY CHAIN MANAGEMENT
13.	BITS ZG553 / ES ZG553 / MEL ZG553	REAL TIME SYSTEMS
14.	CS ZG524	REAL TIME OPERATING SYSTEMS
15.	CS ZG525	ADVANCED COMPUTER NETWORKS
16.	DE ZG535	ADVANCED ENGINEERING MATHEMATICS
17.	DE ZG541 / MM ZG541	PRODUCT DESIGN
18.	DE ZG622	COMPUTER AIDED ANALYSIS & DESIGN
19.	DE ZG631	MATERIALS TECHNOLOGY & TESTING
20.	EA ZC412 / MM ZC412	FLEXIBLE MANUFACTURING SYSTEMS
21.	EA ZC451	INTERNETWORKING TECHNOLOGIES
22.	EA ZC473	MULTIMEDIA COMPUTING
23.	EEE ZG512 / ES ZG512 / MEL ZG526	EMBEDDED SYSTEM DESIGN
24.	EEE ZG571	OPTICAL COMMUNICATION
25.	ENGG ZC112 / PE ZC112	ELECTRICAL & ELECTRONIC TECH
26.	ENGG ZC232 / PE ZC232	ENGINEERING MATERIALS
27.	ENGG ZC242	MAINTENANCE & SAFETY
28.	ENGG ZC243	MECHANICAL TECHNOLOGY



<b>S.No.</b>	<b>Course No.</b>	<b>Course Title</b>
29.	ES ZC263	DIGITAL ELECT & MICROPROCESSOR
30.	ES ZG523 / MM ZG523 / QM ZG523 / HHSM ZG519	PROJECT MANAGEMENT
31.	ES ZG554	RECONFIGURABLE COMPUTING
32.	ES ZG573 / MEL ZG573	DIGITAL SIGNAL PROCESSING
33.	ET ZC235	MANUFACTURING PROCESSES
34.	ET ZC323	MECHATRONICS & AUTOMATION
35.	ET ZC343	MATERIALS MANAGEMENT
36.	ET ZC344	INSTRUMENTATION & CONTROL
37.	ET ZC353	ENERGY MANAGEMENT
38.	ET ZC362	ENVIRONMENTAL POLLUTION CONTROL
39.	ET ZC413	ENGINEERING DESIGN
40.	ET ZC416	PRODUCTION PLANNING & CONTROL
41.	ET ZC417	MANUFACTURING EXCELLENCE
42.	ET ZC423	ESSENTIALS OF PROJECT MGMT
43.	ET ZC424	PLANT LAYOUT AND DESIGN
44.	ET ZC434	QUALITY CTRL ASSU AND RELIABILITY
45.	FIN ZG 519	BUSINESS ANALYSIS AND VALUATION
46.	FIN ZG512	GLOBAL FIN MARKETS AND PRODUCTS
47.	FIN ZG513	MGMT OF BANKS & FINANCIAL INST
48.	FIN ZG514	DERIVATIVE & RISK MANAGEMENT
49.	FIN ZG518	MULTINATIONAL FINANCE
50.	HHSM ZC417	MANAGERIAL COMMUNICATION
51.	IS ZC313	OBJECT ORIENTED PROGRAMMING & DESIGN
52.	IS ZC327	SYSTEMS PROGRAMMING
53.	IS ZC328	SOFTWARE TESTING
54.	IS ZC337	DATABASE SYSTEMS & APPLICATIONS
55.	IS ZC343	SOFTWARE ENGINEERING
56.	IS ZC353	COMPUTER ORG & ARCHITECTURE
57.	IS ZC363	DATA STRUCTURES & ALGORITHMS
58.	IS ZC364	OPERATING SYSTEMS
59.	IS ZC373	COMPILER DESIGN
60.	IS ZC415	DATA MINING
61.	IS ZC423 / CSI ZC423	S/W DEV FOR PORTABLE DEVICES
62.	IS ZC424 / ES ZC424	SOFTWARE FOR EMBEDDED SYSTEMS
63.	IS ZC444	ARTIFICIAL INTELLIGENCE
64.	IS ZC446	DATA STORAGE TECH & NETWORKS
65.	IS ZC462 / CSI ZC462	NETWORK PROGRAMMING
66.	IS ZC464	MACHINE LEARNING
67.	IS ZC467	COMPUTER NETWORKS

S.No.	Course No.	Course Title
68.	IS ZC472	COMPUTER GRAPHICS
69.	MATH ZC222	DISCRETE STR FOR COMP SCIENCE
70.	MATH ZC233 / PE ZC233	CALCULUS
71.	MATH ZC234	LINEAR ALGEBRA & OPTIMIZATION
72.	MBA ZC411 / BA ZC411	MARKETING
73.	MBA ZC415 / FIN ZC415	FINANCIAL & MGMT ACCOUNTING
74.	MBA ZC416	MANAGERIAL ECONOMICS
75.	MBA ZC417	QUANTITATIVE METHODS
76.	MBA ZG511	MANAGING PEOPLE & ORGANIZATION
77.	MBA ZG514	LEADERSHIP & MANAGING CHANGE
78.	MBA ZG515	CONSULTING & PEOPLE SKILLS
79.	MBA ZG523	PROJECT MANAGEMENT
80.	MBA ZG524 / QM ZG524	QUALITY MANAGEMENT SYSTEMS
81.	MBA ZG525	BUSINESS PROCESS ANALYSIS
82.	MBA ZG526	OPERATIONS MANAGEMENT
83.	MBA ZG531 / QM ZG531	STATISTICAL QUALITY CONTROL
84.	MBA ZG541	CONSULTANCY PRACTICE
85.	MBA ZG634	STRATEGIC CHANGE MANAGEMENT
86.	MEL ZG621	VLSI DESIGN
87.	MEL ZG631	PHYSICS AND MODELLING OF MICROELECTRONICS DEVICES
88.	MGTS ZC211	PRINCIPLES OF MANAGEMENT
89.	MM ZC441 / QM ZC441	HUMAN RESOURCE MANAGEMENT
90.	MM ZG512	MANUFACTURING STRATEGY
91.	MM ZG513	MAINTENANCE ENGINEERING
92.	MM ZG514 / QM ZG514	LEADERSHIP & MANAGING CHANGE
93.	MM ZG515 / QM ZG515	QUANTITATIVE METHODS
94.	MM ZG522 / QM ZG532 / MBA ZG522 / HHSM ZG518	TOTAL QUALITY MANAGEMENT
95.	MM ZG533	MANUFACTURING PLANNING & CONT
96.	MM ZG534	SUSTAINABLE MANUFACTURING
97.	MM ZG535 / QM ZG535 / MBA ZG535	DECISION ANALYSIS
98.	MM ZG537 / MBA ZG537	LEAN MANUFACTURING
99.	MM ZG611 / POM ZG611 / QM ZG611 / MBA ZG611 / POMSS ZG611	STRAT MGMT & BUSINESS POLICY
100.	MM ZG627	MANAGERIAL CORPORATE FINANCE
101.	POM ZG525 / POMSS ZG525	PHARMACEUTICAL PRO DEV & SCALE-UP
102.	POM ZG534	ADVANCED PHARMACEUTICAL TECH
103.	POM ZG551 / POMSS ZG551	ADVANCED PHYSICAL PHARMACEUTICS
104.	QM ZG526	OPERATIONS MANAGEMENT
105.	QM ZG528	RELIABILITY ENGINEERING

S.No.	Course No.	Course Title
106.	QM ZG536	DESIGN OF EXPERIMENTS
107.	QM ZG663	CONCURRENT ENGINEERING
108.	SS ZG513 / ES ZG513 / CSI ZG513	NETWORK SECURITY
109.	SS ZG514	OBJECT ORIENTED ANALYSIS & DESIGN
110.	SS ZG515 / CSI ZG515	DATA WAREHOUSING
111.	SS ZG518	DATABASE DESIGN & APPLICATIONS
112.	SS ZG519	DATA STRUCTURES & ALGORITHM DESIGN
113.	SS ZG520 / MEL ZG520	WIRELESS & MOBILE COMMUNICATION
114.	SS ZG526	DISTRIBUTED COMPUTING
115.	SS ZG527 / CSI ZG527	CLOUD COMPUTING
116.	SS ZG531 / ES ZG531	PERVASIVE COMPUTING
117.	SS ZG537	INFORMATION RETRIEVAL
118.	SS ZG547	USABILITY ENGINEERING
119.	SS ZG548	ADVANCED DATA MINING
120.	SS ZG552	SOFTWARE TESTING METHODOLOGIES
121.	SS ZG554	DISTRIBUTED DATA SYSTEMS
122.	SS ZG582 / CSI ZG582	TELECOM NETWORK MANAGEMENT
123.	SS ZG622	SOFTWARE PROJECT MANAGEMENT
124.	SS ZG626 / ES ZG626	HARDWARE SOFTWARE CO-DESIGN
125.	SS ZG653	SOFTWARE ARCHITECTURES
126.	SS ZG656 / ES ZG656	NETWORKED EMBEDDED APPLICATIONS
127.	SS ZG661 / QM ZG662 / MBA ZG661	SOFTWARE QUALITY MANAGEMENT
128.	TA ZC163	COMPUTER PROGRAMMING ( C )
129.	TA ZC164 / PE ZC164	COMPUTER PROGRAMMING (MATLAB)
130.	TA ZC233	ENGINEERING MEASUREMENTS
131.	TA ZC312	TECHNICAL REPORT WRITING
132.	PEAB ZC164	COMPUTER PROGRAMMING (MATLAB)
133.	PEAB ZC235 / POWAB ZC234	LINEAR ALGEBRA & OPTIMIZATION
134.	PEAB ZC318	FUNDAMENTALS OF TRANSPORT PROCESSES
135.	PEAB ZC321	CHEMICAL PROCESS CALCULATIONS
136.	POMLM ZC441	HUMAN RESOURCE MANAGEMENT
137.	POMLM ZG513	FINANCIAL MANAGEMENT
138.	POMLM ZG515	PHARMACEUTICAL ADMINISTRATION & MANAGEMENT
139.	POMLM ZG532	SUPPLY CHAIN MANAGEMENT
140.	POMSS ZG512	DOSAGE FORM DESIGN
141.	POMSS ZG525	PHARMACEUTICAL PROCESS DEVELOPMENT & SCALE-UP
142.	POMSS ZG611	STRATEGIC MANAGEMENT & BUSINESS POLICY
143.	POMSS ZG551	ADVANCED PHYSICAL PHARMACEUTICS

S.No.	Course No.	Course Title
144.	POMSS ZG631	TQM TOOLS & TECHNIQUES
145.	POWAB ZC343	MICROPROCESSORS & MICROCONTROLLERS
146.	POWAB ZC243	ENGINEERING MEASUREMENTS
147.	POWAB ZC317	TRANSPORT PHENOMENA
148.	POWJS ZC318	QUALITY CONTROL ASSURANCE & RELIABILITY
149.	POWJS ZC314	PRIME MOVERS & FLUID MACHINES
150.	POWJS ZC316	POWER ELECTRONICS
151.	POWJS ZC441	POWER SYSTEMS ENGINEERING -II
152.	EEGPC ZG511	ENVIRONMENTAL CHEMISTRY
153.	EEGPC ZG512	ENVIRONMENTAL BIOTECHNOLOGY
154.	EEGPC ZG515	ENVIRONMENTAL MANAGEMENT SYSTEMS
155.	EEGPC ZG513	APPLIED TRANSPORT PHENOMENA
156.	POWTP ZC164	COMPUTER PROGRAMMING (MATLAB)
157.	POWTP ZC113	ELECTRICAL AND ELECTRONICS TECHNOLOGY
158.	POWTP ZC235	CALCULUS
159.	POWTP ZC231	THERMODYNAMICS

#### B5.14 PROJECT WORK AND DISSERTATION

Students of B.S., B.Tech. programmes do a full-semester Project Work in their final semester, while students of higher degree programmes like M.S., M.Tech., MBA and M.Phil. submit a Dissertation / Project based on a research and development effort. **Annexure 4** and **Annexure 5** list the titles of some of the Projects and Dissertations submitted by the students of WILP during the year 2017.

#### B5.15 ACADEMIC AND PROFESSIONAL COUNSELLING

During the year, the Academic Monitoring Board (AMB), estimated the extent to which students under its purview fell short of the minimum academic performance, drew up a time-frame within which afflictions were to be removed, determined the package of courses for their registration in each semester and laid down the necessary stipulations for achieving intermediate targets. It further monitored their progress and applied necessary mid-course corrections, wherever required. The statistical summary of the number of students under its purview during the year is given below:

		II Semester 2016-2017	I Semester 2017-2018
1.	Registered and under the under the purview of AMB at the beginning of the semester	503	730
2.	Declared outside the purview of AMB at the end of the semester	330	415
3.	Discontinued during the semester	84	27
4.	Continue to be under the purview of AMB	89	288
5.	New cases referred to AMB at the end of the Semester	865	678
6.	Under the purview of AMB at the beginning of the next semester	954	966
7.	Registered and under the purview of AMB at the beginning of the next semester	730	424

**B5.16 AWARD OF DEGREES**

During the year, a total of 7952 students graduated. The details on the award of degrees are given below.

	Number of degrees awarded
80 <sup>th</sup> Award (vide Board of Governors meeting held on 20.03.2017)	5774(2378)
81 <sup>st</sup> Award (vide Board of Governors meeting held on 13.07.2017)	2178(0512)
<b>Total:</b>	<b>7952(2890)</b>

Statistical details of these degrees are given in **Annexure 6 (Part B5)**.

**B5.17 NEW COLLABORATIVE PROGRAMMES INTRODUCED**

The following new corporate partnership programmes were introduced during the year 2017

1. B.Tech. Manufacturing Technology (Maruti Suzuki, Gurgaon)
2. B.Tech. Manufacturing Technology (Mahindra Motor Vehicles, Pune)
3. B.Tech. Process Engineering (Bharat Petroleum Corporation Ltd., Mumbai)
4. B.Tech. Engineering Technology (John Deere India, Pune)
5. B.Tech. Manufacturing Technology (Cummins, Pune)
6. M.Tech. Microelectronics (Synopsys, Bangalore)
7. M.Tech. Pharmaceutical Operations & Management (Sun Pharmaceutical Industries, Vadodara)
8. M.Tech. Software Engineering (Lowe's Services, Bangalore)
9. M.Tech. Software Systems (Synopsys, Bangalore)
10. M.Tech. Computing Systems & Infrastructure (Wipro, Bangalore)
11. Certificate in Manufacturing Practice (Bosch Ltd., Bangalore)
12. Certificate in General Management (Bosch Ltd., Bangalore)
13. Post Graduate Certificate in Manufacturing Practice (Bosch Ltd., Bangalore)
14. Post Graduate Certificate in General Management (Bosch Ltd., Bangalore)
15. Post Graduate Diploma in Manufacturing Management (Bosch Ltd., Bangalore)

**B5.18 NEW PROGRAMMES INTRODUCED**

The following new programmes were introduced during the year 2017

1. Post Graduate Certificate Programme in Internet of Things
2. Post Graduate Certificate Programme in Big Data Engineering
3. MBA Hospital & Health Systems Management

**B5.19 COLLABORATIVE PROGRAMMES UNDER DISCUSSION**

The new collaborative programmes under discussion are indicated below:

1. M.Sc. Pharmaceutical Chemistry with Dr. Reddy's Laboratories, Hyderabad
2. M.Tech. Automotive Electronics with Tata Motors, Pune

**B5.20 New Initiatives in WILP****1. Post Graduate Programmes in Big Data Engineering and Internet of Things**

With the changing business environment, the demand for Work Integrated Learning Programmes has gained further impetus. Today, organizations encourage their workforce to opt for higher education, not just to retain good talent but also to equip employees with necessary skills and knowledge to take on higher roles and responsibilities.

New Age digital technologies like Cloud, Big Data, Analytics, Mobility, Artificial Intelligence, Machine Learning, Internet of Things, and 3D Printing are transforming various industry sectors at a pace never experienced before. Such a dynamic business environment has created a huge demand for talent development and transformation.

WILP has started addressing this growing demand for digital skills by offering **Post Graduate Certificate Programmes in Big Data Engineering and in Internet of Things**. With rich online learning experience, remote labs, and mentored capstone projects, these programmes are a gateway for technology professionals transitioning into various new roles spawned by these rapidly growing fields.

## 2. Information Technology initiatives

In WILP, robust IT enabled services continue to enhance the productivity and efficiency of the faculty, students and staff. Some of the key IT initiatives for 2017 are mentioned below:

- **Digitization of WILP Admission process:** We have moved away from paper-based processes to convenient and efficient electronic processes. The entire admission process comprising application, review, short listing and admission offer and fee payment is digital, and has been successfully implemented for all programmes.
- **Adoption of Canvas Learning Management System (LMS):** As a pilot, we have evaluated and adopted the world's leading LMS, Canvas, and integrated the same with our IT systems to provide a seamless experience to the students of our Post Graduate Certificate programmes in Big Data Engineering and Internet of Things.

## 3. Remote Lab for Internet of Things

To strengthen our focus on deeper, experiential learning through technology, a remote laboratory for Internet of Things has been set up at the KK Birla Goa Campus. In its first phase, this lab will cater to courses such as Embedded System Design, Real Time Systems, Pervasive Computing, Hardware Software Co-design and Reconfigurable Computing. In the second phase, Digital Signal Processing and Network Embedded Applications will be offered. The lab currently has 10 setups, and can cater to 100 geographically dispersed students per day through an online scheduling system.

## 4. Virtual Labs in Computing Systems

With the increased focus on experiential learning, we have expanded our existing lab facilities for various courses offered in our IT programmes, by implementing a structured virtual laboratory setup. The setup enables the operation of a custom virtual machine, which has the necessary tools, software, and a set of lab capsules. This virtual lab is made available on the AWS Cloud, and also in an independent sandbox mode. Faculty members and students have actively participated in experimenting with the platform, and feedback has been excellent.

## 5. Faculty Development Programme

This year, we focused on enabling our faculty members to offer an enhanced learning experience to students. This included a modified on-boarding effort, as well as a structured Faculty Development Programme.

To ensure that relevant and standardized information about the Institute, organizational structure, and roles and responsibilities is accessible to the faculty upon joining, online orientation modules for off-campus faculty and guest faculty were developed and made available.

Towards faculty development, we conducted activity-based workshops on **Learner Centered Teaching** across several locations. We also conducted online training sessions on Advanced Features of our Moodle-based Learning Management System, followed by online sessions on features of Cisco Webex.

To enable the faculty to share best practices in teaching, we leveraged upon the Mentor Commons Digital Library, an online resource with inspirational videos on teaching-learning topics. Senior faculty members facilitate discussions on carefully selected videos via online sessions on a regular basis. Faculty members actively participate in these sessions, and feedback has been positive.

## 6. Partner Engagement Programme

To ensure that we broaden and deepen our engagement with the industry and strengthen our corporate partnerships, we initiated a **Partner Engagement Programme (PEP)** which includes Leadership Meet-ups, Semester Delivery Review, and an Impact Study. These efforts are focused on defining and articulating the enhanced value proposition that we offer to students and the organizations that partner with us in these programmes.

## 7. Convocation for WILP students at Pilani Campus

Over the years, WILP has been conducting convocations in partnership with collaborating organizations at their respective premises. However, for students graduating from the Programmes for Individuals, such an event was organized for the first time this year. Of around 3000 students that graduated from various Programmes for Individuals in 2016-17, the top 4% (on the basis of academic performance) were invited to the Convocation held at the Pilani Campus in July 2017. The Convocation was a great success, and all graduands from WILP expressed their delight to be part of the event. Going forward, we plan to extend the Convocation to a larger number of students of WILP.

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## DETAILS OF ADMISSIONS MADE DURING THE YEAR 2017

### (A) Second Semester 2016-2017

PROGRAMMES	No. of students joined
<b>1. Integrated First Degree Programmes:</b>	
<b>B.Tech.</b>	
Engineering Technology	292(011)
Information Systems	232(049)
Power Engineering	122(001)
<b>M.Sc.</b>	
Business Analytics	51(033)
Information Systems	12(009)
<b>Sub Total</b>	<b>709(103)</b>
<b>2. Higher Degree Programmes:</b>	
<b>M.Tech.</b>	
Computing Systems & Infrastructure	729 (307 )
Design Engineering	207 (2 )
Embedded Systems	127 (20 )
Manufacturing Management	144 (7 )
Microelectronics	50 (2 )
Pharmaceutical Operations & Management	31 (2 )
Quality Management	120 (1 )
Software Engineering	1659 (653 )
Software Systems	694 (146 )
<b>MBA</b>	
Consultancy Management	55 (3 )
Finance	40 (5 )
Manufacturing Management	59 (1 )
Quality Management	44 (34 )
<b>Sub total</b>	<b>3959 (1183)</b>
<b>Total</b>	<b>4668(1286)</b>

**(B) First Semester 2017-2018**

<b>PROGRAMMES</b>	<b>No. of students joined</b>	
<b>1. PG Certificate &amp; Diploma Programmes:</b>		
<b>Certificate</b>		
Manufacturing Practice		38 (000)
<b>Post Graduate Certificate</b>		
Big Data Engineering		217 (049)
Manufacturing Practice		62 (001)
<b>Post Graduate Diploma</b>		
Finance		3 (001)
<b>Sub total</b>		<b>320(053)</b>
<b>2. Integrated First Degree Programmes:</b>		
<b>B.Tech.</b>		
Engineering Technology		342 (12)
Manufacturing Technology		106 (11)
Power Engineering		43 (0)
Process Engineering		24 (2)
<b>M.Sc.</b>		
Business Analytics		141 (23)
<b>Sub total</b>		<b>656(048)</b>
<b>3. Higher Degree Programmes:</b>		
<b>M.Tech.</b>		
Computing Systems & Infrastructure		140 (26)
Design Engineering		292 (25)
Embedded Systems		243 (53)
Environmental Engineering		34 (9)
Manufacturing Management		231 (16)
Microelectronics		133 (21)
Pharmaceutical Operations & Management		118 (18)
Quality Management		155 (16)
Software Engineering		124 (38)
Software Systems		1055 (264)
<b>MBA</b>		
Consultancy Management		63 (14)
Finance		55 (14)
Hospital & Health Systems Management		80 (33)
Manufacturing Management		72 (5)
Quality Management		60 (15)
<b>Sub total</b>		<b>2855(567)</b>
<b>Total</b>		<b>3831(666)</b>

**SUMMARY**

	<b>II Semester 2016-17</b>	<b>I Semester 2017- 18</b>	<b>Total</b>
PG Certificate & Diploma Programmes	Nil	320(0053)	320(0053)
Integrated First Degree Programmes	709(0103)	656(0048)	1365(0151)
Higher Degree Programmes	3959(1183)	2855(0567)	6814(1750)
<b>Total</b>	<b>4668(1286)</b>	<b>3831(0666)</b>	<b>8499(1952)</b>

**NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2017-2018**

Programme	Year of Admission						Total
	2012 and earlier	2013	2014	2015	2016	2017	
<b>A. Integrated First Degree Programmes</b>							
<b>B.Optom.</b>			2(1)	59(43)			61(44)
<b>B.S.</b>							
Engineering Design			6(0)				6(0)
Engineering Technology	31(0)	21(0)	52(2)				104(2)
Information Systems	11(1)	1(0)					12(1)
Manufacturing Engineering			2(0)				2(0)
Marine Engineering			18(0)				18(0)
Optometry	1(0)	8(7)	90(68)	29(23)			128(98)
Physician Assistant			33(33)				33(33)
Power Engineering			1(0)				1(0)
Process Engineering		4(0)	4(0)				8(0)
<b>B.Tech.</b>							
Engineering Technology				461(14)	464(19)	342(12)	1267(45)
Information Systems			67(17)	232(84)	228(84)		527(185)
Manufacturing Technology			23(0)	87(0)	198(3)	106(11)	414(14)
Marine Engineering	6(0)	41(1)	231(3)	228(2)			506(6)
Nautical Technology	3(0)	25(0)	78(2)	77(1)			183(3)
Power Engineering		24(0)		29(0)	32(0)	43(0)	128(0)
Process Engineering			48(0)	50(1)	116(1)	24(2)	238(4)
<b>Sub. Total</b>	<b>52(1)</b>	<b>124(8)</b>	<b>655(126)</b>	<b>1252(168)</b>	<b>1038(107)</b>	<b>515(25)</b>	<b>3636(435)</b>
<b>B. Higher Degree Programmes</b>							
<b>MBA</b>							
Consultancy Management			3(0)	43(3)	95(10)	63(14)	204(27)
Finance					55(6)	55(14)	110(20)
Hospital & Health Systems Management						80(33)	80(33)
Manufacturing Management	1(0)		3(0)	46(1)	114(5)	72(5)	236(11)
Quality Management	1(1)		4(1)	25(2)	84(17)	60(15)	174(36)
<b>M.S.</b>							
Consultancy Management	2(0)	1(0)					3(0)
Manufacturing Management	4(0)	1(0)					5(0)
Quality Management	1(0)						1(0)
Software Engineering	29(1)	281(9)	1(1)				311(11)
Software Systems	19(1)	42(7)	21(6)	25(19)			107(33)

Programme	Year of Admission						Total
	2012 and earlier	2013	2014	2015	2016	2017	
<b>M.Sc.</b>							
Business Analytics					87(22)	141(23)	228(45)
Information Systems					7(4)		7(4)
<b>M.Phil.</b>							
Hospital & Health Systems Management	2(1)		1(0)	10(1)	30(6)		43(8)
<b>M.Tech.</b>							
Automotive Engineering				4(0)			4(0)
Computing Systems and Infrastructure					692(425)	140(26)	832(451)
Design Engineering				26(3)	361(27)	292(25)	679(55)
Embedded Systems				1(0)	230(39)	243(53)	474(92)
Environmental Engineering						34(9)	34(9)
Manufacturing Management	5(0)	5(0)	13(0)	160(1)	318(16)	230(16)	731(33)
Microelectronics				42(7)	102(18)	133(21)	277(46)
Pharmaceutical Operations and Management					97(13)	119(19)	216(32)
Quality Management		1(0)	11(0)	95(1)	208(32)	155(16)	470(49)
Science Communication				12(1)			12(1)
Software Engineering	34(2)	444(8)	852(480)	2402(1281)	1766(956)	97(38)	5595(2765)
Software Systems	23(0)	97(6)	92(19)	581(46)	1510(275)	1055(264)	3358(610)
Systems Engineering				155(2)	5(0)		160(2)
Transportation Engineering				33(3)			33(3)
<b>Post Graduate Diploma</b>							
Finance						3(1)	3(1)
<b>Sub. Total</b>	<b>121(6)</b>	<b>872(30)</b>	<b>1001(507)</b>	<b>3660(1371)</b>	<b>5761(1871)</b>	<b>2972(592)</b>	<b>14387(4377)</b>
<b>Total Off-campus</b>	<b>173(7)</b>	<b>996(38)</b>	<b>1656(633)</b>	<b>4912(1539)</b>	<b>6799(1978)</b>	<b>3487(617)</b>	<b>18023(4812)</b>

**Note:** The numbers in brackets indicate number of female students.

**LIST OF ORGANIZATIONS WHO HAVE SPONSORED THEIR EMPLOYEES  
FOR WORK INTEGRATED LEARNING PROGRAMMES OF BITS**

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
1....	[24]7 INNOVATION LABS	BENGALURU
2....	1E INFO SYSTEMS	NOIDA
3....	24/7 CUSTOMER,INC	BENGALURU
4....	3DPLM A DASSAULT SYSTEMS CO	PUNE
5....	3DPLM SOFTWARE SOLUTIONS LTD.	PUNE
6....	3M INDIA LTD.	BENGALURU
7....	3M SINGAPORE PVT. LTD.	VELACHERRY
8....	4A DESIGN ENGINEERING PVT. LTD.	CHENNAI
9....	A.P. TRANSPORT DEPARTMENT	RAJAHMUNDRY
10....	AACHI MASALA FOODS PVT. LTD.	KARUR
11....	AAM SONA AXLE PVT. LTD.	AHMEDNAGAR
12....	AAM SONA AXLE PVT. LTD.	UDHAM SINGH NAGAR
13....	AARVI ENCON	BADGAM
14....	AASI MULTISPECIALITY HOSPITAL	RAMANATHAPURAM
15....	AAYUJA TECHNOLOGIES (I) PVT. LTD.	BENGALURU
16....	ABACUS CORPORATION SERVICES	HYDERABAD
17....	ABB (I) LTD.	ABU DHABI
18....	ABB (I) LTD.	BARODA
19....	ABB (I) LTD.	BENGALURU
20....	ABB (I) LTD.	CHENNAI
21....	ABB (I) LTD.	ERODE
22....	ABB (I) LTD.	NASHIK
23....	ABB (I) LTD.	TIRUPPUR
24....	ABB (I) LTD.	VADODARA
25....	ABB AUTOMATION PRODUCTS GMBH	EPELHEIM
26....	ABB GLOBAL INDUSTRIES & SERVICES PVT. LTD.	BENGALURU
27....	ABB GLOBAL INDUSTRIES & SERVICES PVT. LTD.	CHENNAI
28....	ABB GLOBAL INDUSTRIES & SERVICES PVT. LTD.	COIMBATORE
29....	ABB GLOBAL INDUSTRIES & SERVICES PVT. LTD.	MADURAI
30....	ABB GLOBAL INDUSTRIES & SERVICES PVT. LTD.	MANCHERIAL
31....	ABB GLOBAL INDUSTRIES & SERVICES PVT. LTD.	MAYILADUTHURAI
32....	ABB INDIA LTD.	CHENNAI
33....	ABB LLC	ERODE
34....	ABBEY SOFTWARE TECHNOLOGIES	HYDERABAD
35....	ABBOTT HEALTHCARE PVT. LTD.	BISWAN
36....	ABCO INDIA	CHENNAI
37....	ABELLON CLEAN ENERGY LTD.	AHMEDABAD
38....	ABG CEMENT BUSINESS	BALODA BAZAR
39....	ABHINAV IT SOLUTIONS PVT. LTD.	PUNE
40....	ABILITIES (I) PISTONS & RINGS LTD.	DELHI
41....	ABIRAMI ENTERPRISES	CHENNAI
42....	ABJ ENGINEERING & CONTRACTING CO	KOTTAYAM
43....	ABLE MANUFACTURERS	KOLKATA
44....	ABOVE SOLUTIONS PVT. LTD.	BENGALURU
45....	ABP ENGITECH SOLUTIONS PVT. LTD.	ANANTHAPUR
46....	ABP PVT. LTD.	KOLKATA
47....	ABS DIGITAL CABLE PVT.LTD.	DOMBIVLI
48....	ABS GROUP INC	TIRUCHIRAPPALLI

S.No.	Organization	Location
49....	ABS GROUP INC.	THIRUVANANTHAPURAM
50....	ABU DHABI CO FOR ONSHORE PETROLEUM	TIRUNELVELI
51....	ABU DHABI CO FOR ONSHORE PETROLIUM	THRISSUR
52....	ABU DHABI GAS INDUSTRIES LTD.	ANGAMALY
53....	ABU DHABI GAS INDUSTRIES LTD.	CHENNAI
54....	ABU DHABI GAS INDUSTRIES LTD.	ERNAKULAM
55....	ABU DHABI GAS INDUSTRIES LTD.	KOCHI
56....	ABU DHABI GAS INDUSTRIES LTD.	KULITHALAI
57....	ABU DHABI GAS INDUSTRIES LTD.	RUWAIS
58....	ABU DHABI NATIONAL OIL CO	ABU DHABI
59....	ABU DHABI OIL REFINERY CO	ABU DHABI
60....	ABU DHABI OIL REFINERY CO	ARCOT
61....	ABU DHABI OIL REFINERY CO	ARIYALUR
62....	ABU DHABI OIL REFINERY CO	KOZHICKODE
63....	ABU DHABI OIL REFINERY CO	SALEM
64....	ABU DHABI OIL REFINERY CO	TIRUCHIRAPPALLI
65....	ABU DHABI POLYMERS LTD.	ABU DHABI
66....	ABU DHABI SHIP BUILDING	THANJAVUR
67....	ACC LTD.	KYMORE
68....	ACC LTD.	COIMBATORE
69....	ACC LTD.	TIRUPPUR
70....	ACCENTURE (I) PVT. LTD.	BENGALURU
71....	ACCENTURE (I) PVT. LTD.	CHENNAI
72....	ACCENTURE (I) PVT. LTD.	ERODE
73....	ACCENTURE (I) PVT. LTD.	HYDERABAD
74....	ACCENTURE (I) PVT. LTD.	IDUKKI
75....	ACCENTURE (I) PVT. LTD.	INDORE
76....	ACCENTURE (I) PVT. LTD.	KURNOOL
77....	ACCENTURE (I) PVT. LTD.	LUCKNOW
78....	ACCENTURE (I) PVT. LTD.	LUDHIANA
79....	ACCENTURE (I) PVT. LTD.	MUMBAI
80....	ACCENTURE (I) PVT. LTD.	PUNE
81....	ACCENTURE (I) PVT. LTD.	RAMPUR
82....	ACCENTURE (I) PVT. LTD.	THANE
83....	ACCENTURE (I) PVT. LTD.	VADODARA
84....	ACCENTURE SERVICES PVT. LTD.	BENGALURU
85....	ACCENTURE SERVICES PVT. LTD.	ERNAKULAM
86....	ACCENTURE SERVICES PVT. LTD.	HYDERABAD
87....	ACCENTURE SERVICES PVT. LTD.	KOLKATA
88....	ACCENTURE SERVICES PVT. LTD.	NAVI MUMBAI
89....	ACCENTURE SERVICES PVT. LTD.	PUNE
90....	ACCENTURE SERVICES PVT. LTD.	THRISSUR
91....	ACCENTURE SOLUTIONS PVT. LTD.	BENGALURU
92....	ACCENTURE SOLUTIONS PVT. LTD.	CHENNAI
93....	ACCENTURE SOLUTIONS PVT. LTD.	COIMBATORE
94....	ACCENTURE SOLUTIONS PVT. LTD.	DELHI
95....	ACCENTURE SOLUTIONS PVT. LTD.	GURUGRAM
96....	ACCENTURE SOLUTIONS PVT. LTD.	HYDERABAD
97....	ACCENTURE SOLUTIONS PVT. LTD.	KOLKATA
98....	ACCENTURE SOLUTIONS PVT. LTD.	MUMBAI
99....	ACCENTURE SOLUTIONS PVT. LTD.	PATNA
100....	ACCENTURE SOLUTIONS PVT. LTD.	URAN
101....	ACCION LABS	HYDERABAD
102....	ACCORD SOFTWARE AND SYSTEMS PVT. LTD.	BENGALURU

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
103....	ACCORD SOFTWARE AND SYSTEMS PVT. LTD.	CUDDALORE
104....	ACCRETE HITECH SOLUTIONS	HYDERABAD
105....	ACCRETE HITECH SOLUTIONS	PALASA
106....	ACCU PERICISION	BENGALURU
107....	ACCURATE LOGISTICS	CHENNAI
108....	ACG ASSOCIATED CAPSULES PVT. LTD.	MUMBAI
109....	ACG ASSOCIATED CAPSULES PVT. LTD.	PUNE
110....	ACG-PAM PHARMA TECH.PVT.LTD.	VIRAR WEST
111....	A-CHECK GLOBAL	CHENNAI
112....	ACI WORLDWIDE	PUNE
113....	ACME CLEANTECH SOLUTION PVT. LTD.	HAPUR
114....	ACTEMIUM (I) PROCESS SOLUTIONS	BENGALURU
115....	ACTIFIO TECHNOLOGIES (I) PVT. LTD.	TENALI
116....	ACTSINFO	BENGALURU
117....	ADANI POWER MAHARASHTRA LTD.	ASANSOL
118....	ADANI POWER MAHARASHTRA LTD.	BANKURA
119....	ADANI POWER MAHARASHTRA LTD.	HALDIA
120....	ADANI POWER MAHARASHTRA LTD.	SINGRAULI
121....	ADAPTIVE PROCESSES CONSULTING PVT. LTD.	BENGALURU
122....	ADECCO (I) PVT. LTD.	ABU DHABI
123....	ADECCO (I) PVT. LTD.	ALWAR
124....	ADECCO (I) PVT. LTD.	CHENNAI
125....	ADECCO (I) PVT. LTD.	HOWRAH
126....	ADECCO (I) PVT. LTD.	JAIPUR
127....	ADECCO (I) PVT. LTD.	MULKI
128....	ADECCO (I) PVT. LTD.	NEW DELHI
129....	ADECCO (I) PVT. LTD.	THANE
130....	ADEPT CHIPS SERVICES PVT. LTD.	HYDERABAD
131....	ADEPTWORK SOFTWARE SOLUTIONS LLP	SURAT
132....	ADF DATA SCIENCE PVT. LTD.	CHENNAI
133....	ADIENT (I) PVT. LTD.	KANCHEEPURAM
134....	ADIENT (I) PVT. LTD.	PUNE
135....	ADITYA ALUMINIUM	SAMBALPUR
136....	ADITYA BIRLA GROUP	AMRELI
137....	ADITYA BIRLA GROUP	ANANTHAPUR
138....	ADITYA BIRLA GROUP	BALODA BAZAR
139....	ADITYA BIRLA GROUP	BHATAPARA
140....	ADITYA BIRLA GROUP	BHOPAL
141....	ADITYA BIRLA GROUP	BHUJ
142....	ADITYA BIRLA GROUP	BUNDI
143....	ADITYA BIRLA GROUP	CHITTOOR
144....	ADITYA BIRLA GROUP	CUTTACK
145....	ADITYA BIRLA GROUP	GULBARGA
146....	ADITYA BIRLA GROUP	HAVERI
147....	ADITYA BIRLA GROUP	INDORE
148....	ADITYA BIRLA GROUP	JAFARABAD
149....	ADITYA BIRLA GROUP	JAIPUR
150....	ADITYA BIRLA GROUP	KOVAYA
151....	ADITYA BIRLA GROUP	MALKHED
152....	ADITYA BIRLA GROUP	NEEMUCH
153....	ADITYA BIRLA GROUP	RAIPUR
154....	ADITYA BIRLA GROUP	RAWAN
155....	ADITYA BIRLA GROUP	SHAMBHUPURA
156....	ADITYA BIRLA GROUP	TADIPATRI

S.No.	Organization	Location
157....	ADITYA BIRLA RETAIL LTD.	CHENNAI
158....	ADITYA ENVIRONMENTAL SERVICES PVT. LTD.	MUMBAI
159....	ADITYA HOSPITALS	HYDERABAD
160....	ADIUVO DIAGNOSTICS PVT. LTD.	CHENNAI
161....	ADLER MEDIEQUIP PVT.LTD.	PUNE
162....	ADNOC LINDE INDUSTRIAL GASES	ABU DHABI
163....	ADNOC REFINERY	JAMNAGAR
164....	ADNOC REFINING	TRICHUR
165....	ADNOC REFINING	KOCHI
166....	ADNOC REFINING	NAGERCOIL
167....	ADOBE SYSTEMS PVT. LTD.	AGRA
168....	ADOBE SYSTEMS PVT. LTD.	BENGALURU
169....	ADOBE SYSTEMS PVT. LTD.	DELHI
170....	ADOBE SYSTEMS PVT. LTD.	GHAZIABAD
171....	ADOBE SYSTEMS PVT. LTD.	HARIDWAR
172....	ADOBE SYSTEMS PVT. LTD.	KANPUR
173....	ADOBE SYSTEMS PVT. LTD.	NOIDA
174....	ADOBE SYSTEMS PVT. LTD.	ROORKEE
175....	ADOBE SYSTEMS PVT. LTD.	VARANASI
176....	ADOR FONTECH LTD.	NAGPUR
177....	ADP PVT. LTD.	HYDERABAD
178....	ADROIT FACILITY MANAGEMENT	TIRUCHIRAPPALLI
179....	ADS GLOBAL KNOWLEDGE ACADEMY PVT. LTD.	MEERUT
180....	ADTRAN NETWORKS (I) PVT. LTD.	HYDERABAD
181....	ADVANCE SCIENTIFIC EQUIPMENT PVT. LTD.	THANE
182....	ADVANCED ELECTRONICS	NELLORE
183....	ADVANCED MICRO DEVICES	ROHTAK
184....	ADVANCED SYSTEK PVT. LTD.	VADODARA
185....	ADVANCED TRAINING INSTITUTE	HYDERABAD
186....	ADVANCED WATERTEK INDUSTRIES LLC	PUNE
187....	ADVENT TOOLTECH PVT. LTD.	PUNE
188....	ADYARD ABU DHABI LLC	TIRUCHIRAPPALLI
189....	AE ARMA ELEKTROPANC ELECTROMECHANICAL LLC	DUBAI
190....	AECOM (I) PVT. LTD.	BENGALURU
191....	AECOM/URS,BAHRAIN	CUDDALORE
192....	AEDIFICO TECH PVT. LTD.	GHAZIABAD
193....	AEPL	DEHRADUN
194....	AEQUS PVT. LTD.	BELAGAVI
195....	AERIALROOTS TECHNOLOGIES	PUDUCHERRY
196....	AERIS COMMUNICATIONS (I) PVT. LTD.	NOIDA
197....	AERO TECHNICS	THIRUVANANTHAPURAM
198....	AEROEURO ENGINEERING (I) PVT. LTD.	BENGALURU
199....	AERONAUTICAL DEVELOPMENT AGENCY	BENGALURU
200....	AERONAUTICAL DEVELOPMENT ESTABLISHMENT	BENGALURU
201....	AERZEN MACHINES (I) PVT. LTD.	VADODARA
202....	AESSEAL MIDDLE EAST LLC	PALAKKAD
203....	AFOUR TECHNOLOGIES PVT. LTD.	BENGALURU
204....	AFRIASIA	HYDERABAD
205....	AFWWA HOMOEOPATHIC CLINIC	PONDA
206....	AGAMYA SOLUTIONS PVT. LTD.	MUMBAI
207....	AGFA HEALTHCARE SOLUTIONS	DUBAI
208....	AGHARKAR RESEARCH INSTITUTE	PUNE
209....	AGILIZTECH SOFTWARE SERVICES PVT. LTD.	BENGALURU
210....	AGNICE FIRE PROTECTION PVT. LTD.	CHENNAI



S.No.	Organization	Location
211....	AGRAWAL GROUP OF COMPANIES	MARGAO
212....	AGS TRANSACT TECHNOLOGIES LTD.	MUMBAI
213....	AHALIA HOSPITAL	COCHIN
214....	AHEADRACE SOFTWARE DEVELOPMENT SERVICES	HYDERABAD
215....	AIBEL PTE LTD.	SINGAPORE
216....	AIIMSUDR	UDAIPUR
217....	AIR (I) LTD.	CHENNAI
218....	AIR (I) LTD.	MUMBAI
219....	AIR INTERNATIONAL - TTR THERMAL SYSTEM	WARORA
220....	AIR TREATMENT ENGINEERING PVT. LTD.	KOLKATA
221....	AIR WORLDWIDE D.B.A VERISK ANALYTICS	HYDERABAD
222....	AIRBUS (I) PVT. LTD.	BENGALURU
223....	AIRCEL CELLULAR LTD.	CHENNAI
224....	AIRCEL LTD.	DELHI
225....	AIRPORTS AUTHORITY OF INDIA	DWARKA
226....	AIRPORTS AUTHORITY OF INDIA	ERNAKULAM
227....	AIRPORTS AUTHORITY OF INDIA	KOLKATA
228....	AIRPORTS AUTHORITY OF INDIA	VASCO DA GAMA
229....	AISIN AUTOMOTIVE HARYANA PVT. LTD.	REWARI
230....	AIVARG TECHNOLOGIES OPC PVT. LTD.	CHENNAI
231....	AIZANT DRUG RESEARCH SOLUTIONS PVT. LTD.	HYDERABAD
232....	AJ DEVTECH	GREATER NOIDA
233....	AKAMAI TECHNOLOGIES (I) PVT. LTD.	BENGALURU
234....	AKAMAI TECHNOLOGIES (I) PVT. LTD.	CHENNAI
235....	AKAMAI TECHNOLOGIES (I) PVT. LTD.	GWALIOR
236....	AKQA MEDIA (I) PVT. LTD.	GURUGRAM
237....	AKSA SOFTWARE SOLUTIONS PVT. LTD.	SRINAGAR
238....	AKTREA SOLUTIONS (I) PVT. LTD.	CHENNAI
239....	AKZO NOBEL (I) LTD.	BENGALURU
240....	AKZO NOBEL (I) LTD.	NAVI MUMBAI
241....	AL ABBAS GROUP	DUBAI
242....	AL ANWAR CERAMIC TILES CO SAOG,NIZWA,OMA	NAGORE
243....	AL ARABIA TSCD JUMA AL MAJID GROUP	DUBAI
244....	AL DHARIS SPECIALIZED PIPES FITTINGS	PONNANI
245....	AL FARAA GEN. CONTRACTING CO LLC	CHENNAI
246....	AL FARAA GROUP	CUDDALORE
247....	AL GHURAIR IRON & STEEL LLC	ABU DHABI
248....	AL GHURAIR IRON & STEEL LLC	MUSSAFFAH
249....	AL HAJIRY TRADING LLC,OMAN	BHOPAL
250....	AL HASHAR & CO LLC	TRICHUR
251....	AL HASSAN ENGINEERING CO SAOG	RUWI
252....	AL HOSN GAS(ABU DHABI GAS DEVELOPMENT CO	MADURAI
253....	AL JABER TRANSPORT & GENERAL CONTRACTING	AURANGABAD
254....	AL JAZEERA MEDIA NETWORK	DOHA
255....	AL JEHAAT CO	KALYAN
256....	AL KABIR EYE CARE CENTER	SRINAGAR
257....	AL KHALEEJ SUGAR CO LLC	DUBAI
258....	AL KHALEEJ SUGAR CO LLC	PERAMBALUR
259....	AL MAHASIN	CUDDALORE
260....	AL NAKHEEL ELECTRONICS	CHENNAI
261....	AL NASR ENGINEERING	COIMBATORE
262....	AL QABAS EMPLOYMENT	ABU DHABI
263....	AL SABAH ELECTROMECHANICAL INTERNATIONAL	ABU DHABI
264....	AL SABAH ELECTROMECHANICAL INTERNATIONAL	AJMAN

S.No.	Organization	Location
265....	AL SHIRAH	ERODE
266....	AL SHIRAWI ELECTRICAL & MECHANICAL ENGG	DUBAI
267....	AL SHIRAWI ELECTRICAL & MECHANICAL ENGG	ERNAKULAM
268....	AL SHIRAWI ELECTRICAL & MECHANICAL ENGG	RAS AL KHOR
269....	AL TAMIMI ENGINEERING SERVICES LLC	DUBAI
270....	AL YAMAMA CO FOR TRADING & CONTRACTING	CHALLAKERE
271....	ALBA	KINGDOM OF BAHRAIN
272....	ALBAYAAN EDUCATIONAL COMPLEX	SRINAGAR
273....	ALCATEL LUCENT (I) PVT. LTD.	BENGALURU
274....	ALDERLEY FZE	DUBAI
275....	ALDERLEY FZE	KANNUR
276....	ALE (I) PVT. LTD.	CHENNAI
277....	ALEMBIC PHARMACEUTICALS LTD.	VADODARA
278....	ALFANAR CO	DAMMAM
279....	ALFANAR ELECTRICAL SYSTEMS	RIYADH
280....	ALFARAA GROUP	VILLUPURAM
281....	ALFARDAN PROPERTIES	KUTTALAM
282....	ALGOSCALE TECHNOLOGIES PVT. LTD.	NEW DELHI
283....	ALGOTECH INDIA Ltd.	NOIDA
284....	ALKEM LABORATORIES	NAVI MUMBAI
285....	ALKRAFT THERMOTECNOLOGIES PVT. Ltd.	CHENNAI
286....	ALL INDIA INSTITUTE OF MEDICAL SCIENCES	JODHPUR
287....	ALLEGIS GROUP DEPUTED TO FORD TECHNOLOGY	CHENNAI
288....	ALLGO EMBEDDED SYSTEMS PVT. LTD.	BENGALURU
289....	ALLGREEN ECOTECH SOLUTIONS PVT. LTD.	NOIDA
290....	ALLIANCE TIRE CO	MUMBAI
291....	ALLIANCE TIRE GROUP	TUTICORIN
292....	ALLIANZ (I) LTD.	KOLLAM
293....	ALLIANZ (I) LTD.	THIRUVANANTHAPURAM
294....	ALLIANZ CORNHILL INFORMATION SERVICES PVT. LTD.	QUILON
295....	ALLIANZ MANAGED OPERATIONS & SERVICES PVT. LTD.	KANCHEEPURAM
296....	ALLIANZ TECHNOLOGY	THACKALAY
297....	ALLIANZ TECHNOLOGY	THIRUVANANTHAPURAM
298....	ALLISON TRANSMISSION (I) PVT. LTD.	KANCHEEPURAM
299....	ALLSCRIPTS (I) PVT. LTD.	BENGALURU
300....	ALLSCRIPTS (I) PVT. LTD.	GREATER NOIDA
301....	ALLSCRIPTS (I) PVT. LTD.	PUNE
302....	ALLSTATE SOLUTIONS PVT. LTD.	BENGALURU
303....	ALOHA TECHNOLOGY PVT. LTD.	PUNE
304....	ALPHA ICT LLP	PUNE
305....	ALPHA TCOL ENGINEERING SERVICES PVT. LTD.	KOLHAPUR
306....	ALSTOM (I) PVT. LTD.	BENGALURU
307....	ALSTOM (I) PVT. LTD.	DELHI
308....	ALSTOM (I) PVT. LTD.	TIRUPPUR
309....	ALSTOM BHARAT FORGE POWER PVT. LTD.	BHARUCH
310....	ALSTOM SYSTEM (I) PVT. LTD.	AGRA
311....	ALSTOM SYSTEM (I) PVT. LTD.	ALLAHABAD
312....	ALSTOM TRANSPORT (I) LTD.	BENGALURU
313....	ALSTOM TRANSPORT (I) LTD.	DELHI
314....	ALSTOM TRANSPORT (I) LTD.	VISAKHAPATNAM
315....	ALTAIR ENGINEERING (I) PVT. LTD.	BENGALURU
316....	ALTAIR ENGINEERING (I) PVT. LTD.	PUNE
317....	ALTAJIR GLASS INDUSTRIES LTD.	DUBAI
318....	AL-TASNIM ENTERPRISES LLC	TIRUCHIRAPPALLI

S.No.	Organization	Location
319....	ALTEMETRILK (I) PVT. LTD.	CHENNAI
320....	ALTEN CALSOFT LABS PVT. LTD.	BENGALURU
321....	ALTEN CRESTTEK	BENGALURU
322....	ALTIMETRIK (I) PVT. LTD.	CHENNAI
323....	ALTIMETRIK (I) PVT. LTD.	HYDERABAD
324....	ALTRAN (I) PVT. LTD.	BENGALURU
325....	ALTRAN TECHNOLOGIES	BENGALURU
326....	ALTRAN TECHNOLOGIES	CHENNAI
327....	ALUMINIUM BAHRAIN	TUBLI
328....	AMADA SOFT (I) PVT. LTD.	CHENNAI
329....	AMADEUS SOFTWARE LABS (I) PVT. LTD.	BENGALURU
330....	AMADEUS SOFTWARE LABS (I) PVT. LTD.	COIMBATORE
331....	AMANA INDUSTRIES	TIRUCHIRAPPALLI
332....	AMAZON DEVELOPMENT CENTRE (I) PVT. LTD.	ALWAR
333....	AMAZON DEVELOPMENT CENTRE (I) PVT. LTD.	BENGALURU
334....	AMAZON DEVELOPMENT CENTRE (I) PVT. LTD.	HYDERABAD
335....	AMAZON.COM	HYDERABAD
336....	AMBUJA CEMENTS LTD.	JAIPUR
337....	AMBUJA CEMENTS LTD.	SURAT
338....	AMD (I) PVT. LTD.	BENGALURU
339....	AMD (I) PVT. LTD.	HYDERABAD
340....	AMDOCS	DELHI
341....	AMDOCS	NAVI MUMBAI
342....	AMDOCS	PUNE
343....	AMDOCS	RAIPUR
344....	AMDOCS	UTTARPARA
345....	AMEC BLACKCAT	BANSBERIA
346....	AMEC FOSTER WHEELER ASIA PACIFIC PTE. LTD.	ABU DHABI
347....	AMEC FOSTER WHEELER ASIA PACIFIC PTE. LTD.	CHENNAI
348....	AMEC FOSTER WHEELER ASIA PACIFIC PTE. LTD.	SALEM
349....	AMERICAN EXPRESS (I) PVT. LTD.	BENGALURU
350....	AMERICAN EXPRESS (I) PVT. LTD.	DELHI
351....	AMERICAN EXPRESS (I) PVT. LTD.	GURUGRAM
352....	AMERICAN EXPRESS (I) PVT. LTD.	NEW DELHI
353....	AMETEK INSTRUMENTS (I) PVT. LTD.	BENGALURU
354....	AMEYA PECISION ENGINEERS PVT. LTD.	PUNE
355....	AMGEN SINGAPORE MANUFACTURING PTE LTD.	THENI
356....	AMITECH (I) PVT. LTD.	SURAT
357....	AMITY UNIVERSITY	GURUGRAM
358....	AMKETTE	NEW DELHI
359....	AMNEAL PHARMACEUTICAL PVT. LTD.	AHMEDABAD
360....	AMNEAL PHARMACEUTICAL PVT. LTD.	HYDERABAD
361....	AMPHENOL FCI	THRISSUR
362....	AMPLEX EMIRATES LLC	ABU DHABI
363....	AMPOOL (I) PVT. LTD.	PUNE
364....	AMRITA CENTRE FOR CYBER SECURITY	VIJAYWADA
365....	AMRITA CENTRE FOR NANOSCIENCES	KOLLAM
366....	AMRITA VISHWAVIDYAPEETHAM	KOLLAM
367....	AMW AUTO COMPONENTS LTD.	BHUJ
368....	ANALOG DEVICES (I) PVT. LTD.	BENGALURU
369....	ANALOG DEVICES (I) PVT. LTD.	MAPUSA
370....	ANALOG DEVICES (I) PVT. LTD.	PANAJI
371....	ANALYTICS QUOTIENT	KANPUR
372....	ANALYZER CAE SOLUTIONS PVT.LTD.	JALGAON

S.No.	Organization	Location
373....	ANALYZER CAE SOLUTIONS PVT.LTD.	PUNE
374....	ANAND NVH PVT. LTD.	GHAZIABAD
375....	ANCHOR ELECTRICALS PVT. LTD.	DAMAN
376....	ANERGY LTD.	CHENNAI
377....	ANEWA ENGINEERING PVT. LTD.	HYDERABAD
378....	ANH ENGINEERING SERVICES PVT. LTD.	GHAZIABAD
379....	ANKALAN WEB SOLUTIONS PVT. LTD.	BENGALURU
380....	ANNAI VELANKANNI HOSPITALS	TIRUNELVELI
381....	ANRITSU (I) PVT. LTD.	HYDERABAD
382....	ANS STEEL TUBES LTD.	SIWANI
383....	ANSALDO STS (A) A HITACHI GROUP CO.	TIRUCHIRAPPALLI
384....	ANSALDO STS AUSTRALIA PVT. LTD.	PERTH
385....	ANSYS SOFTWARE PVT. LTD.	BENGALURU
386....	ANSYS SOFTWARE PVT. LTD.	PUNE
387....	ANVESHA COMMUNITY DEVELOPMENT	BENGALURU
388....	ANVESHA COMMUNITY DEVELOPMENT	NEW DELHI
389....	AO SMITH (I) WATER PRODUCTS PVT. LTD.	BENGALURU
390....	AON SERVICES PVT. LTD.	BENGALURU
391....	AON SERVICES PVT. LTD.	GREATER NOIDA
392....	AON SERVICES PVT. LTD.	GURUGRAM
393....	AON SERVICES PVT. LTD.	NEW DELHI
394....	APERTA LTD.	COIMBATORE
395....	APMOSYS TECHNOLOGIES PVT. LTD.	NAVI MUMBAI
396....	APOLLO HOSPITALS	CHENNAI
397....	APOLLO HOSPITALS	CHITTOOR
398....	APOLLO HOSPITALS	HYDERABAD
399....	APOLLO HOSPITALS	KAHARGHAR
400....	APOLLO INTERNATIONAL LTD.	GURUGRAM
401....	APOLLO TYRES LTD.	CHENNAI
402....	APOLLO TYRES LTD.	ERNAKULAM
403....	APOLLO TYRES LTD.	GUWAHATI
404....	APOLLO TYRES LTD.	VADODARA
405....	APOTEX PHARMACHEM (I) PVT. LTD.	BENGALURU
406....	APOTEX RESEARCH PVT. LTD.	BENGALURU
407....	APPDYNAMICS TECHNOLOGIES PVT. LTD.	BENGALURU
408....	APPFIRE TECHNOLOGIES	CHENNAI
409....	APPFIRE TECHNOLOGIES	HYDERABAD
410....	APPIRIO	JAIPUR
411....	APPLIED MATERIALS (I) PVT. LTD.	BENGALURU
412....	APPLIED MATERIALS (I) PVT. LTD.	CHENNAI
413....	APPLIED MATERIALS (I) PVT. LTD.	MYSORE
414....	APPLUS VELOSI LLC	HYDERABAD
415....	APPLUS VELOSI OMAN LLC	TIRUCHIRAPPALLI
416....	APPLUSVELOSI LLC	MANGALURU
417....	APPSTER LLP	BHIWANI
418....	APPSTER LLP	NOIDA
419....	APTEAN (I) PVT. LTD.	RAJARAJESHWARI NAGAR
420....	APTEAN (I) PVT. LTD.	SHIMOGA
421....	APTEAN SOFTWARE (I) PVT. LTD.	BENGALURU
422....	APTONLINE LTD.	TIRUPATHI
423....	APTTUS SOFTWARE PVT. LTD.	BENGALURU
424....	ARABIAN GULF SWITCHGEAR	SHARJAH
425....	ARABIAN PIPELINE PROJECTS CO	MANAPARAI
426....	ARC ELECTRICALS	KANCHEEPURAM

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
427....	ARCADIS DESIGN & CONSULTANCY INC	BENGALURU
428....	ARCADIS DESIGN & CONSULTANCY INC	DUBAI
429....	ARCADIS DESIGN & CONSULTANCY INC	HYDERABAD
430....	ARCADIS DESIGN & CONSULTANCY INC	KHAMMAM
431....	ARCESIUM (I) PVT. LTD.	HYDERABAD
432....	ARCHGROUP CONSULTANTS	PUDUKKOTTAI
433....	ARCHGROUP CONSULTANTS	THIRUPPATTUR
434....	ARCHITECTURAL CORNER CONSULTING	CHENNAI
435....	ARCUM ENGINEERING P LTD.	KOLKATA
436....	ARETE GLOBAL	HYDERABAD
437....	ARGUS EMBEDDED SYSTEMS	SECUNDERABAD
438....	ARIBA AN SAP CO	BENGALURU
439....	ARIBA TECHNOLOGIES (I) PVT. LTD.	BENGALURU
440....	ARICENT TECHNOLOGIES PVT. LTD.	ADOOR
441....	ARICENT TECHNOLOGIES PVT. LTD.	ANANTHAPUR
442....	ARICENT TECHNOLOGIES PVT. LTD.	BENGALURU
443....	ARICENT TECHNOLOGIES PVT. LTD.	CHENNAI
444....	ARICENT TECHNOLOGIES PVT. LTD.	DEHRADUN
445....	ARICENT TECHNOLOGIES PVT. LTD.	DELHI
446....	ARICENT TECHNOLOGIES PVT. LTD.	DORNBIRN
447....	ARICENT TECHNOLOGIES PVT. LTD.	ERNAKULAM
448....	ARICENT TECHNOLOGIES PVT. LTD.	FARIDKOT
449....	ARICENT TECHNOLOGIES PVT. LTD.	GURUGRAM
450....	ARICENT TECHNOLOGIES PVT. LTD.	HYDERABAD
451....	ARICENT TECHNOLOGIES PVT. LTD.	JAIPUR
452....	ARICENT TECHNOLOGIES PVT. LTD.	KOLLEGAL
453....	ARICENT TECHNOLOGIES PVT. LTD.	MUVATTUPUZHA
454....	ARICENT TECHNOLOGIES PVT. LTD.	NEW DELHI
455....	ARICENT TECHNOLOGIES PVT. LTD.	NOIDA
456....	ARICENT TECHNOLOGIES PVT. LTD.	PUNE
457....	ARICENT TECHNOLOGIES PVT. LTD.	THODUPUZHA
458....	ARICENT TECHNOLOGIES PVT. LTD.	UTTAM NAGAR
459....	ARIES MARINE	SHARJAH
460....	ARIS GLOBAL SOFTWARE PVT. LTD.	MYSORE
461....	ARISHINA LIFE SCIENCES PVT. LTD.	ERNAKULAM
462....	ARISTOCRAT TECHNOLOGIES (I) PVT. LTD.	AJMER
463....	ARISTOCRAT TECHNOLOGIES (I) PVT. LTD.	DELHI
464....	ARISTOCRAT TECHNOLOGIES (I) PVT. LTD.	FARIDABAD
465....	ARKIPLAN ARCHITECTS CONSULTING ENGINEERS	CHENNAI
466....	ARM EMBEDDED TECHNOLOGIES	BENGALURU
467....	ARM EMBEDDED TECHNOLOGIES	NEW DELHI
468....	ARMAB INSURANCE WORKS	ALAPPUZHA
469....	ARMACELL (I) PVT. LTD.	PUNE
470....	ARMED FORCES	DEHRADUN
471....	ARMED FORCES	GURUGRAM
472....	ARMED FORCES	JAIPUR
473....	ARMED FORCES	NOIDA
474....	ARMOR (I) CODING AND IMAGING SUPPLIES	BENGALURU
475....	ARMY	BAREILLY
476....	ARMY	DELHI
477....	ARMY	GHAZIABAD
478....	ARMY	GURUGRAM
479....	ARMY	JAIPUR
480....	ARMY	JODHPUR

S.No.	Organization	Location
481....	ARMY	KASAULI
482....	ARMY	LUCKNOW
483....	ARMY	MHOW
484....	ARMY	NEW DELHI
485....	ARMY	PALAMPUR
486....	ARMY	PUNE
487....	ARPAN INFRA SOLUTION PVT. LTD.	NAWADA
488....	ARRAYSTORM LIGHTING PVT. LTD.	BENGALURU
489....	ARRK SOLUTIONS PVT. LTD.	NAVI MUMBAI
490....	ARROW ELECTRONICS (I) PVT. LTD.	BENGALURU
491....	ARROW ELECTRONICS (I) PVT. LTD.	NOIDA
492....	ARTEFACTS	BENGALURU
493....	ARUBA NETWORKS (I) PVT. LTD.	ANANTHAPUR
494....	ARUBA NETWORKS (I) PVT. LTD.	BENGALURU
495....	ARUBA NETWORKS (I) PVT. LTD.	CHENNAI
496....	ARUBA NETWORKS (I) PVT. LTD.	COIMBATORE
497....	ARUBA NETWORKS (I) PVT. LTD.	PALAKKAD
498....	ARUNA ALLOY STEELS PVT. LTD.	MADURAI
499....	ARVATO BERTELSMANN	DELHI
500....	ARVIND LIFESTYLE BRANDS LTD.	BENGALURU
501....	ARVIND LTD.	PUNE
502....	ARYAVRAT INFOTECH PVT. LTD.	JAIPUR
503....	ASAHI (I) GLASS LTD.	CHENNAI
504....	ASAHI (I) GLASS LTD.	KOLHAPUR
505....	ASAN CONSULTING	COIMBATORE
506....	ASAP BERHAD	TENKASI
507....	ASCENDUM SOLUTIONS	KOTTAYAM
508....	ASERGIS TELECOM SERVICES PVT. LTD.	DELHI
509....	ASERGIS TELECOM SERVICES PVT. LTD.	NOIDA
510....	ASHOK LEYLAND LTD.	BALASORE
511....	ASHOK LEYLAND LTD.	BENGALURU
512....	ASHOK LEYLAND LTD.	BURDWAN
513....	ASHOK LEYLAND LTD.	CHENNAI
514....	ASHOK LEYLAND LTD.	COIMBATORE
515....	ASHOK LEYLAND LTD.	DHARMAPURI
516....	ASHOK LEYLAND LTD.	HOSUR
517....	ASHOK LEYLAND LTD.	JAIPUR
518....	ASHOK LEYLAND LTD.	KOCHI
519....	ASHOK LEYLAND LTD.	KOLKATA
520....	ASHOK LEYLAND LTD.	MADURAI
521....	ASHOK LEYLAND LTD.	PALWAL
522....	ASHOK LEYLAND LTD.	RUDRAPUR
523....	ASHOK LEYLAND LTD.	SALEM
524....	ASHOK LEYLAND LTD.	TIRUCHIRAPPALLI
525....	ASHOK LEYLAND LTD.	TIRUNELVELI
526....	ASHOK LEYLAND LTD.	VELLORE
527....	ASHOK LEYLAND LTD.	VIRUDHUNAGAR
528....	ASHTECH TOOLING & STAMPING PVT.LTD.	PUNE
529....	ASIA AUTOMATION PVT. LTD.	PUNE
530....	ASIAN INSTITUTE OF MEDICAL SCIENCES	FARIDABAD
531....	ASIANPAINTS LTD.	TIRUCHIRAPPALLI
532....	ASK AUTOMOTIVE PVT. LTD.	AGRA
533....	ASL/DRDO	HYDERABAD
534....	ASM ENTERPRISE PVT. LTD.	DOMBIVLI

S.No.	Organization	Location
535....	ASM TECHNOLOGIES PVT. LTD.	BENGALURU
536....	ASPIRE SYSTEMS (I) PVT. LTD.	CHENNAI
537....	ASPIRESYSTEMS	CHENNAI
538....	ASPIRING MINDS	GURUGRAM
539....	ASSAM RIFLES	SILCHAR
540....	ASTA (I) PVT. LTD.	VADODARA
541....	ASTECHNOSOFT PVT. LTD.	AGRA
542....	ASTER AADHAR HOSPITAL	KOLHAPUR
543....	ASTRAZENECA (I) PVT. LTD.	CHENNAI
544....	ASTRAZENECA (I) PVT. LTD.	DINDIGUL
545....	ASTRAZENECA (I) PVT. LTD.	MYSORE
546....	ASTRAZENECA (I) PVT. LTD.	TIRUCHIRAPPALLI
547....	ASTRAZENECA (I) PVT. LTD.	VISAKHAPATNAM
548....	ASTRON CERTIFICATION	TIRUNELVELI
549....	AT&S (I) PVT. LTD.	MYSORE
550....	AT&T COMMUNICATIONS SERVICES PVT. LTD.	BENGALURU
551....	AT&T GLOBAL BUSINESS SERVICES PVT. LTD.	CHENNAI
552....	ATC TIRES PVT. LTD.	CUDDALORE
553....	ATC TIRES PVT. LTD.	THIRUNELVELI
554....	ATC TIRES PVT. LTD.	TIRUNELVELI
555....	ATHENA DRUG DELIVERY SOLUTIONS	AMBERNATH
556....	ATHENAHEALTH TECHNOLOGIES PVT. LTD.	CHENNAI
557....	ATHENTA TECHNOLOGIES PVT. LTD.	GHAZIABAD
558....	ATKINS	BENGALURU
559....	ATLANTIS LAB PVT.LTD.	PUNE
560....	ATLAS COPCO (I) LTD.	NASHIK
561....	ATLAS COPCO (I) LTD.	PUNE
562....	ATLAS HEALTHCARE SOFTWARE (I) PVT. LTD.	PATNA
563....	ATMECS TECHNOLOGIES LTD.	HYDERABAD
564....	ATOLL SOLUTIONS PVT. LTD.	THALASSERY
565....	ATOS (I) PVT. LTD.	BENGALURU
566....	ATOS (I) PVT. LTD.	BHUBANESWAR
567....	ATOS (I) PVT. LTD.	GREATER NOIDA
568....	ATOS (I) PVT. LTD.	INDORE
569....	ATOS (I) PVT. LTD.	JIND
570....	ATOS (I) PVT. LTD.	NAGPUR
571....	ATOS (I) PVT. LTD.	NAVI MUMBAI
572....	ATOS (I) PVT. LTD.	PUNE
573....	ATOTECH DEVELOPMENT CENTRE PVT. LTD.	RAJAPALAYAM
574....	ATTIVO NETWORK SECURITY (I) PVT. LTD.	BENGALURU
575....	ATTRA INFOTECH PVT. LTD.	MYSORE
576....	ATTUNE INFOCOM PVT. LTD.	AHMEDABAD
577....	AUDIENCE SCIENCE (I) PVT. LTD.	PUNE
578....	AUDIO TECHNOLOGIES AND CODECS	LUCKNOW
579....	AURIONPRO SOLUTIONS LTD.	PUNE
580....	AUROBINDO PHARMA LTD.	DOMMERU
581....	AUROBINDO PHARMA LTD.	EAST GODAVARI
582....	AUROBINDO PHARMA LTD.	HYDERABAD
583....	AUROBINDO PHARMA LTD.	VISAKHAPATNAM
584....	AUSPAN TECHNOLOGY SOLUTIONS LTD.	GURUGRAM
585....	AUTOCOP (I) PVT. LDT	PUNE
586....	AUTODESK	PUNE
587....	AUTOGRADE INTERNATIONAL PVT. LTD.	BENGALURU
588....	AUTOLIV (I) PVT. LTD.	BENGALURU

S.No.	Organization	Location
589....	AUTOMOTIVE ROBOTICS (I) PVT. LTD.	CHENNAI
590....	AUTOMOTIVE ROBOTICS (I) PVT. LTD.	HYDERABAD
591....	AUTOMOTIVE ROBOTICS (I) PVT. LTD.	MIRYALGUDA
592....	AUTOMOTIVE ROBOTICS (I) PVT. LTD.	NIDAMANOOR
593....	AUTOMOTIVE ROBOTICS PVT. LTD.	CHENNAI
594....	AUTOONE ENGINEERING SOLUTIONS PVT. LTD.	PUNE
595....	AVACO INTERNATIONAL	SHARJAH
596....	AVANI TECH PVT. LTD.	HYDERABAD
597....	AVANKIA LTD.	BENGALURU
598....	AVANTEL LTD.	HYDERABAD
599....	AVAYA (I) PVT. LTD.	AURANGABAD
600....	AVAYA (I) PVT. LTD.	PUNE
601....	AVAYA (I) PVT. LTD.	THANE
602....	AVERER TECHNOLOGIES PVT. LTD.	JHUNJHUNU
603....	AVERY DENNISON	PUNE
604....	AVEVA SOLUTIONS LLP	HYDERABAD
605....	AVIN SYSTEMS PVT. LTD.	BENGALURU
606....	AVL (I) PVT. LTD.	GURUGRAM
607....	AVTEC LTD.	HOSUR
608....	AWAL GULF MANUFACTURING CO.	BENGALURU
609....	AWNICS TECHNOLOGIES PVT. LTD.	BENGALURU
610....	AXIOM ENERGY CONVERSION LTD.	HYDERABAD
611....	AXIS BANK	DELHI
612....	AXIS CADES	HYDERABAD
613....	AXISCADES ENGINEERING TECHNOLOGIES PVT. LTD.	BENGALURU
614....	AXXONET SYSTEMS	BENGALURU
615....	AYT INTERNATIONAL LLC	SHARJAH
616....	AZUGATELEMATICS PVT. LTD.	BENGALURU
617....	B M BIRLA HEART RESEARCH CENTRE	KOLKATA
618....	BA CONTINUUM (I) PVT. LTD.	CHENNAI
619....	BA CONTINUUM (I) PVT. LTD.	HYDERABAD
620....	BA CONTINUUM (I) PVT. LTD.	SECUNDERABAD
621....	BA CONTINUUM (I) PVT. LTD.	THANE
622....	BABY DESTINATION	DELHI
623....	BADVE ENGINEERING LTD.	REWARI
624....	BAEHAL SOFTWARE LTD.	COIMBATORE
625....	BAEHAL SOFTWARE LTD.	KOTTAYAM
626....	BAHWAN ENGINEERING CO LLC	DUBAI
627....	BAHWAN TECHNICAL CONTRACTING CO LLC	DUBAI
628....	BAJAJ AUTO LTD.	AURANGABAD
629....	BAJAJ AUTO LTD.	PUNE
630....	BAJAJ AUTO LTD.	RUDRAPUR
631....	BAJAJ ELECTRICALS LTD.	MUMBAI
632....	BAJAJ POWER LTD.	DELHI
633....	BAJORIA APPLIANCES PVT. LTD.	KOLKATA
634....	BAKER HUGHES SINGAPORE PTE.	RAMANATHAPURAM
635....	BALAJI SOFTWARE	THANE
636....	BALIRAM TECHNOLOGIES (OPC) PVT. LTD.	PUNE
637....	BALL AEROCAN (I) PVT. LTD.	AHMEDABAD
638....	BALLY TECHNOLOGIES (I) PVT. LTD.	CHENNAI
639....	BAM HIGGS & HILL LLC	DUBAI
640....	BANK OF AMERICA CONTINUUM (I) PVT. LTD.	CHENNAI
641....	BANK OF AMERICA CONTINUUM (I) PVT. LTD.	HYDERABAD
642....	BANK OF AMERICA CONTINUUM (I) PVT. LTD.	HYDERABAD



S.No.	Organization	Location
643....	BANK OF AMERICA CONTINUUM (I) PVT. LTD.	THANE
644....	BANKBAZAAR.COM	TIRUCHIRAPPALLI
645....	BARCLAYS CAPITAL SERVICES LTD.	WARANGAL
646....	BARCLAYS TECH CENTRE	PUNE
647....	BARCLAYS TECH CENTRE	VISAKHAPATNAM
648....	BARCO ELECTRONIC SYSTEMS PVT. LTD.	GREATER NOIDA
649....	BARCO ELECTRONIC SYSTEMS PVT. LTD.	MORENA
650....	BARRY-WEHMILLER INTERNATIONAL	TIRUPPUR
651....	BARTEC MIDDLE EAST LLC	KANCHEEPURAM
652....	BASE CONTROL TECH FZC	SHARJAH
653....	BASE INFORMATION MANAGEMENT PVT. LTD.	MUMBAI
654....	BASF (I) LTD.	DOMBIVLI
655....	BASF (I) LTD.	NELLORE
656....	BDS STEEL DETAILERS (AUSTRALIA) PVT. LTD.	CHENNAI
657....	BE ENGINEERING SERVICES (I) PVT. LTD.	HYDERABAD
658....	BECHTEL (I) PVT. LTD.	NOIDA
659....	BECKMAN COULTER (I) PVT. LTD.	BENGALURU
660....	BEEINFOTECH	COIMBATORE
661....	BEHR HELLA THERMOCONTROL (I) PVT.LTD.	PUNE
662....	BEKAERT INDUSTRIES PVT. LTD.	CHANDRAPUR
663....	BEKAERT INDUSTRIES PVT. LTD.	PUNE
664....	BELCAN (I) PVT. LTD.	HYDERABAD
665....	BELIEVERS CHURCH MEDICAL COLLEGE HOSPITAL	PATHANAMTHITTA
666....	BELL HELICOPTER TEXTRON	BENGALURU
667....	BELLS SOFT TECH	BENGALURU
668....	BELLSONICA AUTO COMPONENT (I) PVT. LTD.	GURUGRAM
669....	BEML LTD.	BENGALURU
670....	BEML LTD.	CHITTOOR
671....	BEML LTD.	MYSORE
672....	BEML LTD.	NOIDA
673....	BENCHMARK IT SOLUTIONS	RIYADH
674....	BENCHMARK IT SOLUTIONS	SATARA
675....	BENGALURU INTEGRATED SYSTEM SOLUTIONS PVT. LTD.	BENGALURU
676....	BENNETT COLEMAN AND CO LTD.	PUNE
677....	BENNINGER INDAI PVT. LTD.	PUNE
678....	BENTELER AUTOMOTIVE (I) PVT. LTD.	PUNE
679....	BENTLEY SYSTEMS (I)	PUNE
680....	BERI UDYOG PVT. LTD.	KARNAL
681....	BEUMER GROUP	CHEENAI
682....	BEUMER GROUP	KHAJALI
683....	BEUMER GROUP	NAGAPATTINAM
684....	BG EXPLORATION & PRODUCTION (I) LTD.	DAHANU
685....	BG EXPLORATION & PRODUCTION (I) LTD.	MALAPPURAM
686....	BG EXPLORATION & PRODUCTION (I) LTD.	VISAKHAPATNAM
687....	BGR ENERGY SYSTEMS LTD.	CHENNAI
688....	BHAGWATI PRODUCTS LTD.	RAEBARELI
689....	BHAKTIVEDANTA INSTITUTE	MUMBAI
690....	BHARAT BIOTECH INTERNATIONAL LTD.	MEDAK
691....	BHARAT ELECTRONICS LTD.	BENGALURU
692....	BHARAT ELECTRONICS LTD.	GHAZIABAD
693....	BHARAT ELECTRONICS LTD.	HYDERABAD
694....	BHARAT ELECTRONICS LTD.	JHUNJHUNU
695....	BHARAT ELECTRONICS LTD.	MUMBAI
696....	BHARAT ELECTRONICS LTD.	NOIDA

S.No.	Organization	Location
697....	BHARAT ELECTRONICS LTD.	SATYANARAYANAPURAM
698....	BHARAT ELECTRONICS LTD.	VIJAYAWADA
699....	BHARAT FORGE	ASANSOL
700....	BHARAT FORGE	BARAMATI
701....	BHARAT FORGE	BISHNUPUR
702....	BHARAT FORGE	CHITTARANJAN
703....	BHARAT FORGE	KHANDAJ
704....	BHARAT FORGE	MALSHIRAS
705....	BHARAT FORGE	PHALTAN
706....	BHARAT FORGE	PUNE
707....	BHARAT FORGE	RAJGURUNAGAR
708....	BHARAT FORGE	SANGLI
709....	BHARAT FORGE	SATARA
710....	BHARAT FRITZ WERNER	BENGALURU
711....	BHARAT HEAVY ELECTRICALS LTD.	BENGALURU
712....	BHARAT HEAVY ELECTRICALS LTD.	BHOPAL
713....	BHARAT HEAVY ELECTRICALS LTD.	DELHI
714....	BHARAT HEAVY ELECTRICALS LTD.	HARIDWAR
715....	BHARAT HEAVY ELECTRICALS LTD.	HYDERABAD
716....	BHARAT HEAVY ELECTRICALS LTD.	TIRUCHIRAPPALLI
717....	BHARAT PETROLEUM CORPORATION LTD.	ERNAKULAM
718....	BHARAT PETROLEUM REFINER	MUMBAI
719....	BHARAT SANCHAR NIGAM LTD.	BHARUCH
720....	BHARAT SANCHAR NIGAM LTD.	GHAZIABAD
721....	BHARAT SANCHAR NIGAM LTD.	HYDERABAD
722....	BHARTI AIRTEL LTD.	DELHI
723....	BHARTI AIRTEL LTD.	GURUGRAM
724....	BHARTI AIRTEL LTD.	MUMBAI
725....	BHARTI AIRTEL SERVICES LTD.	BHILWARA
726....	BHARTI INFRATEL LTD.	BHUBANESWAR
727....	BHAVANI INDUSTRIES	BENGALURU
728....	BHAVNA SOFTWARE (I) PVT. LTD.	DELHI
729....	BHORUKA CHARITABLE TRSUT	JAIPUR
730....	BHTC (I) PVT. LTD.	PUNE
731....	BHUSHAN POWER AND STEEL LTD.	SAGAR
732....	BILAD OMAN LLC	SOHAR
733....	BILFINGER DEUTSCHE BABCOCK EMIRATES LLC	MUMBAI
734....	BILLIONTAGS CREATIONS PVT. LTD.	CHENNAI
735....	BILT GRAPHIC PAPER PRODUCTS LTD.	CHANDRAPUR
736....	BIN HANIF ELECTO MECHANICAL WORKS LLC	PONNANI
737....	BINLADIN CONTRACTING GROUP	PATHANAMTHITTA
738....	BIOCON LTD.	AGRA
739....	BIOCON LTD.	BENGALURU
740....	BIOCON LTD.	DEORIA
741....	BIOCON SDN BHD	NAGERCOIL
742....	BIOLOGICAL E. LTD.	HYDERABAD
743....	BIOLOGICAL E. LTD.	SECUNDERABAD
744....	BIRLA COPPER	DAHEJ
745....	BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE	DUBAI
746....	BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE	GOA
747....	BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE	HYDERABAD
748....	BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE	PILANI
749....	BIRLASOFT (I) LTD.	HYDERABAD
750....	BIRLASOFT (I) LTD.	MADURAI

S.No.	Organization	Location
751....	BIRLASOFT (I) LTD.	NOIDA
752....	BIRLASOFT (I) LTD.	SECUNDERABAD
753....	BIRMINGHAM STEEL FABRICATION	SHARJAH
754....	BISS PVT. LTD.	BENGALURU
755....	BISTA SOLUTIONS PVT. LTD.	MUMBAI
756....	BIW SOFT PVT. LTD.	CHENNAI
757....	BIZACUITY SOLUTIONS PVT. LTD.	BENGALURU
758....	BK GULF LLC	ARUPPUKOTTAI
759....	BLACKCAT ENGINEERING AND CONSTRUCTION	KARAIKUDI
760....	BLEND COLOURS PVT. LTD.	CHENNAI
761....	BLG CONSTRUCTION SERVICES PVT. LTD.	JHUNJHUNU
762....	BLOGIC INFOTECH PVT.LTD.	HYDERABAD
763....	BLUESTAR LTD.	ARIYALUR
764....	BLUESTAR LTD.	CHENNAI
765....	BLUESTAR LTD.	THANE
766....	BLUESTAR LTD.	UDUMALPET
767....	BLUESTAR LTD.	UDUPI
768....	BMC SOFTWARE (I) PVT. LTD.	BENGALURU
769....	BMC SOFTWARE (I) PVT. LTD.	CHENNAI
770....	BMC SOFTWARE (I) PVT. LTD.	PUNE
771....	BNYMELLON TECHNOLOGY	CHENNAI
772....	BOBST (I) PVT. LTD.	PUNE
773....	BOEING INTERNATIONAL CORPORATION (I) PVT. LTD.	BENGALURU
774....	BOEING INTERNATIONAL CORPORATION (I) PVT. LTD.	HIRIYUR
775....	BOEING INTERNATIONAL CORPORATION (I) PVT. LTD.	HOSUR
776....	BOHLER PACIFIC PTE LTD.	SINGAPORE
777....	BOLTELL INFOMEDIA PVT. LTD.	BENGALURU
778....	BOMBARDIER TRANSPORTATION (I) PVT. LTD.	HYDERABAD
779....	BOMBARDIER TRANSPORTATION (I) PVT. LTD.	VADODARA
780....	BONATRANS (I) PVT. LTD.	AURANGABAD
781....	BOOKYOURGYM FITNESS PVT. LTD.	TUTICORIN
782....	BORDER ROAD ORGANIZATION	BAHADURGARH
783....	BORQS SOFTWARE SOLUTIONS PVT. LTD.	BENGALURU
784....	BORRI POWER ME FZCO	DUBAI
785....	BOS SHELF LLC	KOLLAM
786....	BOSCH AUTOMOTIVE ELECTRONICS (I) PVT. LTD.	BANTWAL
787....	BOSCH AUTOMOTIVE ELECTRONICS (I) PVT. LTD.	BENGALURU
788....	BOSCH AUTOMOTIVE ELECTRONICS (I) PVT. LTD.	TUMKUR
789....	BOSCH CHASSIS SYSTEMS (I) PVT. LTD.	AHMEDNAGAR
790....	BOSCH CHASSIS SYSTEMS (I) PVT. LTD.	PUNE
791....	BOSCH LTD.	AHMEDABAD
792....	BOSCH LTD.	ALWAR
793....	BOSCH LTD.	BENGALURU
794....	BOSCH LTD.	COIMBATORE
795....	BOSCH LTD.	DAUND
796....	BOSCH LTD.	DAUSA
797....	BOSCH LTD.	HAMIRPUR
798....	BOSCH LTD.	HANUMANGARH
799....	BOSCH LTD.	JAIPUR
800....	BOSCH LTD.	KOLHAPUR
801....	BOSCH LTD.	KOTTAYAM
802....	BOSCH LTD.	MUMBAI
803....	BOSCH LTD.	NASHIK
804....	BOSCH LTD.	NEGAMAM

S.No.	Organization	Location
805....	BOSCH LTD.	NEW DELHI
806....	BOSCH LTD.	PUNE
807....	BOSCH LTD.	SANQUELIM
808....	BOSTON ANALYTICS	NEW DELHI
809....	BOTIL OIL TOOLS (I) PVT. LTD.	NOIDA
810....	BRAHMOS AEROSPACE PVT. LTD.	ATTAPUR
811....	BRAHMOS AEROSPACE PVT. LTD.	NEW DELHI
812....	BRAINMOBI	GREATER NOIDA
813....	BRAINVALLEY SOFTWARE PVT. LTD.	CHENNAI
814....	BRAKES (I) PVT. LTD.	CHENNAI
815....	BREACH CANDY HOSPITAL TRUST	MUMBAI
816....	BRIDGESTONE (I) PVT. LTD.	BARWAHA
817....	BRIDGESTONE (I) PVT. LTD.	MUMBAI
818....	BRIDGETREE CONSULTING PVT. LTD.	HOWRAH
819....	BRILLIANT BIO PHARMA PVT. LTD.	HYDERABAD
820....	BRISKON TECHNOLOGIES PVT. LTD.	JAIPUR
821....	BRISTLECONE	PUNE
822....	BRITANNIA INDUSTRIES LTD.	CHENNAI
823....	BRITANNIA INDUSTRIES LTD.	COIMBATORE
824....	BRITANNIA INDUSTRIES LTD.	DALKHOLA
825....	BRITANNIA INDUSTRIES LTD.	RAJGARH
826....	BRITISH TELECOM	BENGALURU
827....	BRITISH TELECOM	DELHI
828....	BRITISH TELECOM	NEW DELHI
829....	BROADCOM COMMUNICATIONS PVT. LTD.	BENGALURU
830....	BROADCOM COMMUNICATIONS PVT. LTD.	HYDERABAD
831....	BROADCOM CORPORATION	BENGALURU
832....	BROADCOM LTD.	BENGALURU
833....	BROADCOM LTD.	DHARWAD
834....	BROADCOM LTD.	ERNAKULAM
835....	BROADCOM LTD.	HYDERABAD
836....	BROADCOM LTD.	KARNAL
837....	BROADCOM SEMICONDUCTORS PVT. LTD.	BENGALURU
838....	BROADGATE TECHNICAL SERVICES	CHENNAI
839....	BROCADE COMMUNICATIONS SYSTEMS PVT. LTD.	BENGALURU
840....	BROCADE COMMUNICATIONS SYSTEMS PVT. LTD.	ERODE
841....	BROCADE COMMUNICATIONS SYSTEMS PVT. LTD.	GWALIOR
842....	BROOKFIELD MULTIPLEX MEDGULF JV WLL	THRISSUR
843....	BRUNEL ENERGY KUWAIT,EQUATE PETROCHEMIC	CHENNAI
844....	BSBK PVT. LTD.	RAIPUR
845....	BSH HOUSEHOLD APPLIANCES MANUFACTURING PVT. LTD.	BENGALURU
846....	BSNL	CHENNAI
847....	BSNL	GHAZIABAD
848....	BSNL	HYDERABAD
849....	BSNL	MUMBAI
850....	BSNL	PURNEA
851....	BT E-SERV (I) LTD.	BENGALURU
852....	BTCXINDIA	VISAKHAPATNAM
853....	BTL (I) PVT. LTD.	BENGALURU
854....	BTL (I) PVT. LTD.	KOTTAYAM
855....	BTL (I) PVT. LTD.	VIJAYAWADA
856....	BUHLER (I) PVT. LTD.	BENGALURU
857....	BUHLER (I) PVT. LTD.	VELLORE
858....	BUMI ARMADA BERHAD	COIMBATORE

S.No.	Organization	Location
859....	BUMI ARMADA BERHAD	THIRUVANNAMALAI
860....	BURCKHARDT COMPRESSION (I) PVT. LTD.	PUNE
861....	BUREAU OF INDIAN STANDARDS	SALEM
862....	BUREAU VERITAS (I) PVT. LTD.	KANNUR
863....	BUREAU VERITAS (I) PVT. LTD.	SURAT
864....	BUREAU VERITAS CERTIFICATION	BENGALURU
865....	BUREAU VERITAS SPA ABU DHABI	KOTTAYAM
866....	BURKAN MUNITIONS SYSTEMS	THRISSUR
867....	BURNDY TECHNOLOGIES	CHENNAI
868....	BUSH ELECTRICALS AND ENGINEERS	THANE
869....	BUSINESS BRIO	KOLKATA
870....	BYDESIGN (I) PVT. LTD.	BENGALURU
871....	C.R.I PUMPS	COIMBATORE
872....	C.S.I SCHOOL OF NURSING	THIRUVANANTHAPURAM
873....	C3I SOLUTIONS	HYDERABAD
874....	C4 ADVANCED SOLUTIONS	ABU DHABI
875....	CA (I) TECHNOLOGIES PVT. LTD.	BENGALURU
876....	CA (I) TECHNOLOGIES PVT. LTD.	CHENNAI
877....	CA (I) TECHNOLOGIES PVT. LTD.	HYDERABAD
878....	CA (I) TECHNOLOGIES PVT. LTD.	KADAPA
879....	CA (I) TECHNOLOGIES PVT. LTD.	SAMBALPUR
880....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	BENGALURU
881....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	DHARWAD
882....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	GUNTUR
883....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	HOSUR
884....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	HYDERABAD
885....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	KOLKATA
886....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	NEW DELHI
887....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	NOIDA
888....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	PUNE
889....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	RANCHI
890....	CADENCE DESIGN SYSTEMS (I) PVT. LTD.	VIRUDHUNAGAR
891....	CADILA HEALTH CARE LTD.	SONAMUKHI
892....	CADMAXX SOLUTIONS PVT. LTD.	BENGALURU
893....	CADSYS (I) LTD.	HYDERABAD
894....	CADVISION ENGINEERS	SECUNDERABAD
895....	CAIR,DRDO	BENGALURU
896....	CAIRN (I) LTD.	GURUGRAM
897....	CALCON INSTRUMENTATION & SALES LLC	ALUVA
898....	CALCUTTA MEDICAL REASERCH INSTITUTE	KOLKATA
899....	CALIBER INTERCONNECT SOLUTIONS PVT. LTD.	COIMBATORE
900....	CALIBER INTERCONNECT SOLUTIONS PVT. LTD.	NAMAKKAL
901....	CALITRON CALIBRATION LABORATORY	PUNE
902....	CALLHEALTH SERVICES PVT. LTD.	HYDERABAD
903....	CALSOFT INC.	PUNE
904....	CALSONIC KANSEI MOTHERSON AUTO PRODUCTS	CHENNAI
905....	CALTEK GROUP	SINGAPORE
906....	CAMERON MANUFACTURING (I) PVT. LTD.	CHENNAI
907....	CAMERON MANUFACTURING (I) PVT. LTD.	COIMBATORE
908....	CAMERON MANUFACTURING (I) PVT. LTD.	TIRUPPUR
909....	CAMERON MANUFACTURING (I) PVT. LTD.	YAOUNDE
910....	CANARA HSBC OBC LIFE INSURANCE	NEW DELHI
911....	CANARYS AUTOMATIONS PVT. LTD.	BENGALURU
912....	CAN-PACK (I) PVT. LTD.	KALYANI

S.No.	Organization	Location
913....	CANVERA DIGITAL TECHNOLOGIES	BENGALURU
914....	CAP GEMINI CONSULTING LTD.	BENGALURU
915....	CAP GEMINI CONSULTING LTD.	PERNAMITTA
916....	CAPARO ENGINEERING (I) LTD.	CHENNAI
917....	CAPGEMINI (I) PVT. LTD.	AMALAPURAM
918....	CAPGEMINI (I) PVT. LTD.	BENGALURU
919....	CAPGEMINI (I) PVT. LTD.	CHENNAI
920....	CAPGEMINI (I) PVT. LTD.	CHIKMAGALORE
921....	CAPGEMINI (I) PVT. LTD.	COIMBATORE
922....	CAPGEMINI (I) PVT. LTD.	DELHI
923....	CAPGEMINI (I) PVT. LTD.	DHARMAPURI
924....	CAPGEMINI (I) PVT. LTD.	DOMBIVLI
925....	CAPGEMINI (I) PVT. LTD.	FARIDKOT
926....	CAPGEMINI (I) PVT. LTD.	HYDERABAD
927....	CAPGEMINI (I) PVT. LTD.	JABALPUR
928....	CAPGEMINI (I) PVT. LTD.	KARAIKUDI
929....	CAPGEMINI (I) PVT. LTD.	MORADABAD
930....	CAPGEMINI (I) PVT. LTD.	NAVI NUMBAI
931....	CAPGEMINI (I) PVT. LTD.	NEW DELHI
932....	CAPGEMINI (I) PVT. LTD.	PANCHKULA
933....	CAPGEMINI (I) PVT. LTD.	PUNE
934....	CAPGEMINI (I) PVT. LTD.	SATARA
935....	CAPGEMINI (I) PVT. LTD.	SURAT
936....	CAPGEMINI (I) PVT. LTD.	TALIPARAMBA
937....	CAPGEMINI (I) PVT. LTD.	TIRUVANNAMALAI
938....	CAPGEMINI (I) PVT. LTD.	VILLUPURAM
939....	CAPGEMINI CONSULTING	BENGALURU
940....	CAPGEMINI FORMLY IGATE	GHAZIABAD
941....	CAPGEMINI TECHNOLOGY SERVICES (I) LTD.	BENGALURU
942....	CAPGEMINI TECHNOLOGY SERVICES (I) LTD.	HYDERABAD
943....	CAPGEMINI TECHNOLOGY SERVICES (I) LTD.	MADURAI
944....	CAPGEMINI TECHNOLOGY SERVICES (I) LTD.	MUMBAI
945....	CAPGEMINI TECHNOLOGY SERVICES (I) LTD.	MYSORE
946....	CAPGEMINI TECHNOLOGY SERVICES (I) LTD.	VASAI
947....	CAPITAL HYUNDAI	NEW DELHI
948....	CAPRICORN GROUP	PUNE
949....	CAPRICOT TECHNOLOGIES PVT. LTD.	HANSI
950....	CAPTRONIC SYSTEMS PVT. LTD.	BENGALURU
951....	CARBONYX ENGINEERING (I) PVT. LTD.	PANAJI
952....	CARBORUNDUM UNIVERSAL LTD.	BENGALURU
953....	CARBORUNDUM UNIVERSAL LTD.	CHENNAI
954....	CARBORUNDUM UNIVERSAL LTD.	HOSUR
955....	CARBORUNDUM UNIVERSAL LTD.	KANCHEEPURAM
956....	CARBORUNDUM UNIVERSAL LTD.	KOLKATA
957....	CARBORUNDUM UNIVERSAL LTD.	MADURANTHAKAM
958....	CARBORUNDUM UNIVERSAL LTD.	VELLORE
959....	CARDIAC DESIGN LABS	MYSORE
960....	CARE HOSPITALS	HYDERABAD
961....	CAREER INSTITUTE OF COMMERCE & ACCOUNTING	ANAND
962....	CARESOF GLOBAL PVT. LTD.	COIMBATORE
963....	CARESOF GLOBAL PVT. LTD.	TIRUNELVELI
964....	CARESPORTSINJURYCLINIC	CHENNAI
965....	CARGILL (I) PVT. LTD.	GURUGRAM
966....	CARGILL BUSINESS SERVICES (I) PVT. LTD.	BENGALURU

S.No.	Organization	Location
967....	CARL ZEISS (I) PVT. LTD.	BENGALURU
968....	CARRIER AIRCONDITIONING & REFRIGERATION	CHANDIGARH
969....	CARRIER AIRCONDITIONING & REFRIGERATION	KOLKATA
970....	CASCADE FANS PVT. LTD.	RAHURI
971....	CASE NEWHOLLAND CONSTRUCTION EQUIPMENT	KANNUR
972....	CATALENT PHARMA	BENGALURU
973....	CATERPILLAR (I) PVT. LTD.	ARAKKONAM
974....	CATERPILLAR (I) PVT. LTD.	BENGALURU
975....	CATERPILLAR (I) PVT. LTD.	CHENNAI
976....	CATERPILLAR (I) PVT. LTD.	HOSUR
977....	CATERPILLAR (I) PVT. LTD.	HYDERABAD
978....	CATERPILLAR (I) PVT. LTD.	NAMAKKAL
979....	CATERPILLAR (I) PVT. LTD.	SALEM
980....	CATERPILLAR (I) PVT. LTD.	VELLORE
981....	CATERPILLAR (I) PVT. LTD.	WARANGAL
982....	CATTLEYA TECHNOSYS PVT. LTD.	BENGALURU
983....	CAUSECODE TECHNOLOGIES PVT. LTD.	NASHIK
984....	CAVENDISH INDUSTRIES LTD.	HARIDWAR
985....	CAVIUM NETWORKS (I) PVT. LTD.	BENGALURU
986....	CAVIUM NETWORKS (I) PVT. LTD.	HYDERABAD
987....	CBRI	ROORKEE
988....	CCEL	ABU DHABI
989....	CDAC	BENGALURU
990....	CDAC	CHANGANACHERRY
991....	CDAC	CHENNAI
992....	CDAC	DHULE
993....	CDAC	ERNAKULAM
994....	CDAC	GURUGRAM
995....	CDAC	HYDERABAD
996....	CDAC	KOTHAMANGALAM
997....	CDAC	MATHURA
998....	CDAC	MUMBAI
999....	CDAC	PUNE
1000....	CDAC	THIRUVANANTHAPURAM
1001....	CDC-QATAR	KARAIKAL
1002....	CDK GLOBAL (I) PVT. LTD.	NELLORE
1003....	CDK GLOBAL (I) PVT. LTD.	PUNE
1004....	CDK GLOBAL (I) PVT. LTD.	TIRUPATHI
1005....	CDK GLOBAL (I) PVT. LTD.	VIJAYAWADA
1006....	CEAT SPECIALTY TYRES LTD.	THANE
1007....	CELANESE SINGAPORE PTE.LTD.	PANAJI
1008....	CELERITFINTECH SERVICES	GHAZIABAD
1009....	CELLIBER TECHNOLOGIES	BENGALURU
1010....	CELOGEN LIFESIENCE & TECHNOLOGIES PVT. LTD.	ANKLESHWAR
1011....	CENTRE FOR SIGHT EYE HOSPITAL	AHMEDABAD
1012....	CENTUM ELECTRONICS LTD.	BENGALURU
1013....	CENTUM RAKON (I) PVT. LTD.	BENGALURU
1014....	CENTURYLINK TECHNOLOGIES (I) PVT. LTD.	BENGALURU
1015....	CENTURYLINK TECHNOLOGIES (I) PVT. LTD.	GHAZIABAD
1016....	CEREBTEC TECHNOLOGIES PVT. LTD.	THRISSUR
1017....	CERNER HEALTHCARE SOLUTIONS PVT. LTD.	BENGALURU
1018....	CERT-IN (NIELIT)	DELHI
1019....	CERT-IN (NIELIT)	NEW DELHI
1020....	CEX WEBUY ENTERTAINMENT PVT. LTD.	THANE

S.No.	Organization	Location
1021....	CG POWER & INDUSTRIAL SOLUTIONS LTD.	AURANGABAD
1022....	CGI (I) PVT. LTD.	BENGALURU
1023....	CGI (I) PVT. LTD.	CHENNAI
1024....	CGI (I) PVT. LTD.	COIMBATORE
1025....	CGI (I) PVT. LTD.	HYDERABAD
1026....	CGI (I) PVT. LTD.	PUNE
1027....	CGI INFORMATION SYESTEMS AND MANAGEMENT	ONGOLE
1028....	CGI INFORMATION SYESTEMS AND MANAGEMENT	PATHANAMTHITTA
1029....	CGI TECHNOLOGIES AND SOLUTIONS INC	HYDERABAD
1030....	CH2M (HALCROW INTERNATIONAL PARTNERSHIP)	SHARJAH
1031....	CH2M HILL (I) PVT. LTD.	NOIDA
1032....	CHAITHANYA EYE HOSPITAL & RESEARCH INSTITUTE	THIRUVANANTHAPURAM
1033....	CHAMBAL FERTILSER & CHEMICAL LTD.	GADEPAN
1034....	CHAMBAL FERTLISERS AND CHEMICALS LTD.	VADODARA
1035....	CHAOLOGIX TECHNOLOGIES (I) PVT. LTD.	HYDERABAD
1036....	CHARTER GLOBAL	PUNE
1037....	CHECKPOINT SYSTEMS (I) PVT. LTD.	BENGALURU
1038....	CHECKTRONIX (I) PVT. LTD.	TIRUCHIRAPPALLI
1039....	CHELSIO COMMUNICATIONS	BENGALURU
1040....	CHEMTEX CONSULTING OF (I) PVT. LTD.	MADURAI
1041....	CHER MEDICAL TECHNOLOGIES	MUMBAI
1042....	CHETAK ENTERPRISES LTD.	NEEMUCH
1043....	CHETTINAD CEMENT CORPORATION LTD.	DINDIGUL
1044....	CHEVRON ORONITE PTE LTD.	CHENNAI
1045....	CHEVRON ORONITE PTE LTD.	SINGAPORE
1046....	CHINA OILFIELD SERVICE LTD.	INDORE
1047....	CHOICE SOLUTIONS LTD.	HYDERABAD
1048....	CHRISTIAN MEDICAL ASSOCIATION OF INDIA	PUNE
1049....	CHRISTIAN MEDICAL COLLEGE	VELLORE
1050....	CHRISTY FRIEDGRAM INDUSTRY	DINDIGUL
1051....	CIARPRO TECHNOLOGIES	CHENNAI
1052....	CIBER AN HTC GLOBAL CO.	BENGALURU
1053....	CIBERSITIES (I) PVT. LTD.	CHENNAI
1054....	CIENA (I) PVT. LTD.	DELHI
1055....	CIENA (I) PVT. LTD.	GHAZIABAD
1056....	CIENA (I) PVT. LTD.	GURUGRAM
1057....	CIENA (I) PVT. LTD.	NEW DELHI
1058....	CIGITAL ASIA PVT. LTD.	BENGALURU
1059....	CIGITAL ASIA PVT. LTD.	FARIDABAD
1060....	CIGNETIX SYSTEMS	COCHIN
1061....	CIPLA LTD.	ARIYALUR
1062....	CIPLA LTD.	CHANDOR
1063....	CIPLA LTD.	GOA
1064....	CIPLA LTD.	MUMBAI
1065....	CIPLA LTD.	PUNE
1066....	CIRCOR FLOW TECHNOLOGIES	MADURAI
1067....	CISCO SYSTEMS (I) PVT. LTD.	BENGALURU
1068....	CISCO SYSTEMS (I) PVT. LTD.	CHENNAI
1069....	CISCO SYSTEMS (I) PVT. LTD.	CHINCHWAD
1070....	CISCO SYSTEMS (I) PVT. LTD.	GHAZIABAD
1071....	CISCO SYSTEMS (I) PVT. LTD.	HYDERABAD
1072....	CISCO SYSTEMS (I) PVT. LTD.	JALPAIGURI
1073....	CISCO SYSTEMS (I) PVT. LTD.	MUMBAI
1074....	CISCO SYSTEMS (I) PVT. LTD.	NEW DELHI



S.No.	Organization	Location
1075....	CISCO SYSTEMS (I) PVT. LTD.	PUNE
1076....	CISCO SYSTEMS (I) PVT. LTD.	THODUPUZHA
1077....	CISCO VIDEO PAY TECHNOLOGY (I) LTD.	BENGALURU
1078....	CISCO VIDEO TECH PVT. LTD.	BENGALURU
1079....	CITICORP SERVICES (I) PVT. LTD.	BANDA
1080....	CITICORP SERVICES (I) PVT. LTD.	BHOPAL
1081....	CITICORP SERVICES (I) PVT. LTD.	JAIPUR
1082....	CITIXSYS TECHNOLOGIES (I) PVT. LTD.	NEW DELHI
1083....	CITRIX R&D (I) PVT. LTD.	BENGALURU
1084....	CITRIX R&D (I) PVT. LTD.	KAKINADA
1085....	CITRIX R&D (I) PVT. LTD.	SHIMLA
1086....	CIVILCO CIVIL ENGG	THRISSUR
1087....	CLADTECH INTERNATIONAL AL RAJHI HOLDING	AJMAN
1088....	CLARION TECHNOLOGIES PVT. LTD.	BENGALURU
1089....	CLARKE SAMADHIN ASSOCIATES	DUBAI
1090....	CLASSIC MARBLE CO	VADODARA
1091....	CLEARPATH ORTHODONTICS	MUMBAI
1092....	CLEAR-TRAIL	INDORE
1093....	CLEVELAND BRIDGE & ENGINEERING MIDDLE EAST	DUBAI
1094....	CLOUD TECHNOLOGIES	HYDERABAD
1095....	CLOUD VISION SYSTEMS PVT. LTD.	PUNE
1096....	CLOUDWAVE TECHNOLOGIES PVT. LTD.	BENGALURU
1097....	CLOUDZEG TECHNOLOGIES PVT. LTD.	JAIPUR
1098....	CLOVE DENTAL CLINIC	NEW DELHI
1099....	CMA SYSTEMS FZ LLC	DUBAI
1100....	CMC LTD.	TIRUMALAGIRI
1101....	CMI FPE LTD.	PANVEL
1102....	CMI INDUSTRY METALS LTD.	NEW MUMBAI
1103....	CMS INFOSYSTEM	NOIDA
1104....	COAL (I) LTD.	NAGPUR
1105....	COASTAL GUJARAT POWER LTD.	KUTCH
1106....	COASTAL GUJARAT POWER LTD.	MUNDRA
1107....	COASTAL GUJARAT POWER LTD.	MUNDRA
1108....	COBHAM MISSION EQUIPMENT	CHENNAI
1109....	COCHIN SHIPYARD LTD.	ERNAKULAM
1110....	CODENOMICON SOFTWARE (I) PVT. LTD.	NEW DELHI
1111....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	BEED
1112....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	BENGALURU
1113....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	BHUBANESWAR
1114....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	CANTON
1115....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	CHENNAI
1116....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	CHINCHWAD
1117....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	CHITTOOR
1118....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	COIMBATORE
1119....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	DARJILING
1120....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	DINDIGUL
1121....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	ERODE
1122....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	GORAKHPUR
1123....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	GUDUVANCHERY
1124....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	GULBARGA
1125....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	GURUGRAM
1126....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	HENRICO
1127....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	HYDERABAD
1128....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	ITARSI

S.No.	Organization	Location
1129....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	JAGADHRI
1130....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	KANCHEEPURAM
1131....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	KANNUR
1132....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	KARAIKAL
1133....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	KOLHAPUR
1134....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	KOLKATA
1135....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	KOLKATA
1136....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	KOLLAM
1137....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	KRISHNAGIRI
1138....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	MADURAI
1139....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	MALAPPURAM
1140....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	MUMBAI
1141....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	MUSIRI
1142....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	MYSORE
1143....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	NAGPUR
1144....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	NEW DELHI
1145....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	PALAKKAD
1146....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	PULIVENDULA
1147....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	PUNE
1148....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	QUINCY
1149....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	RANCHI
1150....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	RUDRAPUR
1151....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	SALEM
1152....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	SHIMLA
1153....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	SINGAPORE
1154....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	SIVAGANGAI
1155....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	SRIKAKULAM
1156....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	TIRUCHIRAPPALLI
1157....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	TIRUVANNAMALAI
1158....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	UDUMALPET
1159....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	VELLORE
1160....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	VENGAPAKKAM
1161....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	VILLUPURAM
1162....	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	VIRUTHUNAGAR
1163....	COLLAB HOUSE PVT. LTD.	WARANGAL
1164....	COLLABERA TECHNOLOGIES PVT. LTD.	HYDERABAD
1165....	COLLEGE OF DENTAL SCIENCES	DAVANGERE
1166....	COLORCON ASIA PVT. LTD.	VERNA
1167....	COLRUYT GROUP	HYDERABAD
1168....	COMAU (I) PVT. LTD.	PUNE
1169....	COMMSCOPE	DUBAI
1170....	COMMSCOPE	MARGAO
1171....	COMMSCOPE	PONDA
1172....	COMMVault SYSTEMS PVT. LTD.	BENGALURU
1173....	COMMVault SYSTEMS PVT. LTD.	CHENNAI
1174....	COMMVault SYSTEMS PVT. LTD.	HYDERABAD
1175....	COMPASS (I) SUPPORT SERVICES PVT. LTD.	THANE
1176....	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	BENGALURU
1177....	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	CALICUT
1178....	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	DELHI
1179....	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	HYDERABAD
1180....	COMPUTER SCIENCES CORPORATION (I) PVT. LTD.	NOIDA
1181....	CONARES METAL SUPPLY LLC	AL DHAID
1182....	CONARES STEEL	DUBAI

S.No.	Organization	Location
1183....	CONAX ACCESS SYSTEMS PVT. LTD.	GHAZIABAD
1184....	CONCEPTIA SOFTWARE TECHNOLOGIES PVT.LTD.	WAYANAD
1185....	CONSILIENCE	NAVI MUMBAI
1186....	CONSOLIDATED CONTRACTORS CO.,OMAN	CHENNAI
1187....	CONSOLIDATED CONTRACTORS INTERNATIONAL	THRISSUR
1188....	CONSULTANCY DEVELOPMENT CENTRE	NEW DELHI
1189....	CONTATA SOLUTIONS PVT. LTD.	HISAR
1190....	CONTINENTAL AUTOMOTIVE BRAKE SYSTEMS IND	NEW DELHI
1191....	CONTINENTAL AUTOMOTIVE COMPONENTS (I) Ltd.	ANANTHAPUR
1192....	CONTINENTAL AUTOMOTIVE COMPONENTS (I) Ltd.	BENGALURU
1193....	CONTINENTAL AUTOMOTIVE COMPONENTS (I) Ltd.	COIMBATORE
1194....	CONTINENTAL AUTOMOTIVE COMPONENTS (I) Ltd.	DURG
1195....	CONTINENTAL AUTOMOTIVE COMPONENTS (I) Ltd.	KOLKATA
1196....	CONTINENTAL AUTOMOTIVE COMPONENTS (I) Ltd.	NAJAF GARH
1197....	CONTINENTAL AUTOMOTIVE COMPONENTS (I) Ltd.	TIRUR
1198....	CONTINENTAL AUTOMOTIVE SINGAPORE PTE LTD.	PUNE
1199....	CONTINENTAL ENGINES PVT. LTD.	REWARI
1200....	CONTROL COMPONENT (I) PVT. LTD.	CHENNAI
1201....	CONTROL COMPUTER SYSTEMS	DUBAI
1202....	CONVERGYS (I) SERVICES PVT. LTD.	BENGALURU
1203....	CONVERGYS (I) SERVICES PVT. LTD.	DELHI
1204....	CONVERGYS (I) SERVICES PVT. LTD.	HYDERABAD
1205....	CONVERGYS INFORMATION MANAGEMENT (I) PVT. LTD.	HYDERABAD
1206....	CORE TIME SOLUTION	NANGAL RAYA
1207....	COREEL TECHNOLOGIES (I) PVT. LTD.	BENGALURU
1208....	CORNING TECHNOLOGIES (I) PVT.LTD.	PUNE
1209....	COROMANDEL TRAVELS LTD.	CHENNAI
1210....	CORONA DIGITEX	BENGALURU
1211....	CORPUS SOFTWARE PVT. LTD.	SOMPETA
1212....	CORTEM GULF	PUDUKKOTTAI
1213....	COSMO FILMS LTD.	VADODARA
1214....	COSTRA GROUP LLC	KOCHI
1215....	COTIVITI (I) PVT. LTD.	HYDERABAD
1216....	COTTON UNIVERSITY	GUWAHATI
1217....	COVALENSE TECHNOLOGIES	BENGALURU
1218....	COVIDIEN ENGINEERING SERVICES PVT. LTD.	HYDERABAD
1219....	COVIDIEN HEALTHCARE (I) PVT.LTD.	MYSORE
1220....	CPA GLOBAL	NEW DELHI
1221....	CQAE(N)	HYDERABAD
1222....	CRAFTSMAN AUTOMATION PVT. LTD.	COIMBATORE
1223....	CRANE PROCESS FLOW TECHNOLOGIES (I) PVT. LTD.	MUMBAI
1224....	CRANE PROCESS FLOW TECHNOLOGIES (I) PVT. LTD.	PUNE
1225....	CRANE PROCESS FLOW TECHNOLOGIES (I) PVT. LTD.	SATARA
1226....	CREATIVE SYNERGIES CONSULTING (I) PVT. LTD.	BENGALURU
1227....	CREATIVE VIRTUAL	MUMBAI
1228....	CRIPUMPS PVT. LTD.	KOLKATA
1229....	CROMPTON GREAVES LTD.	BHOPAL
1230....	CROMPTON GREAVES LTD.	THANE
1231....	CROMPTON POWER & INDUSTRIAL SOLUTIONS LTD.	AHMEDNAGAR
1232....	CRYOGENIC PROCESS CONTROLS	RAMANATHAPURAM
1233....	CRYOLOR ASIA PACIFIC	CHENNAI
1234....	CRYSTAL CROP PROTECTION PVT. LTD.	DELHI
1235....	CS COMMUNICATION AND SYSTEMS (I) PVT. LTD.	NELLORE
1236....	CSC (I) LTD.	NOIDA

S.No.	Organization	Location
1237....	CSC (I) LTD.	PIDUGURALLA
1238....	CSC (I) LTD.	SECUNDERABAD
1239....	CSC AUSTRALIA	BETTIAH
1240....	CSC TECHNOLOGIES (I) PVT. LTD.	HYDERABAD
1241....	CSS CORP PVT. LTD.	CHENNAI
1242....	CSS CORP PVT. LTD.	KURNOOL
1243....	CTK SOFTWARE	BENGALURU
1244....	CTRLS DATACENTERS LTD.	HYDERABAD
1245....	CUBELOGIC SOFTWARE (I) PVT. LTD.	GUNTUR
1246....	CUBUILT ENGINEERS PVT. LTD.	NASHIK
1247....	CUMMINS (I) LTD.	BENGALURU
1248....	CUMMINS (I) LTD.	BURDWAN
1249....	CUMMINS (I) LTD.	CUTTACK
1250....	CUMMINS (I) LTD.	DAUND
1251....	CUMMINS (I) LTD.	DIBRUGARH
1252....	CUMMINS (I) LTD.	DUBAI
1253....	CUMMINS (I) LTD.	HADAPSAR
1254....	CUMMINS (I) LTD.	INDORE
1255....	CUMMINS (I) LTD.	JAIPUR
1256....	CUMMINS (I) LTD.	JAMSHEDPUR
1257....	CUMMINS (I) LTD.	KARUR
1258....	CUMMINS (I) LTD.	KHANDALA
1259....	CUMMINS (I) LTD.	KOLKATA
1260....	CUMMINS (I) LTD.	LATUR
1261....	CUMMINS (I) LTD.	LUCKNOW
1262....	CUMMINS (I) LTD.	MURSHIDABAD
1263....	CUMMINS (I) LTD.	NEW DELHI
1264....	CUMMINS (I) LTD.	NIPANI
1265....	CUMMINS (I) LTD.	PHALTAN
1266....	CUMMINS (I) LTD.	PONDA
1267....	CUMMINS (I) LTD.	PUNE
1268....	CUMMINS (I) LTD.	RAHURI
1269....	CUMMINS (I) LTD.	RANCHI
1270....	CUMMINS (I) LTD.	SATARA
1271....	CUMMINS MIDDLE EAST	DUBAI
1272....	CUMMINS MIDDLE EAST	GANDHINAGAR
1273....	CUMMINS MIDDLE EAST	SHARJAH
1274....	CUMMINS TECHNOLOGIES (I) PVT. LTD.	BHOPAL
1275....	CUMMINS TECHNOLOGIES (I) PVT. LTD.	INDORE
1276....	CUMMINS TECHNOLOGIES (I) PVT. LTD.	PUNE
1277....	CUMMINS TURBO TECHNOLOGIES (I) LTD.	PUNE
1278....	CUSTOMERXPS SOFTWARE PVT. LTD.	THRISSUR
1279....	CV DESIGNERS (I) PVT. LTD.	HYDERABAD
1280....	CVC TECHNOLOGIES (I) PVT. LTD.	MULUND
1281....	CVC TECHNOLOGIES (I) PVT. LTD.	MUMBAI
1282....	CYBAGE SOFTWARE PVT. LTD.	AJMER
1283....	CYBAGE SOFTWARE PVT. LTD.	AMRAVATI
1284....	CYBAGE SOFTWARE PVT. LTD.	AURANGABAD
1285....	CYBAGE SOFTWARE PVT. LTD.	BHUBANESWAR
1286....	CYBAGE SOFTWARE PVT. LTD.	HYDERABAD
1287....	CYBAGE SOFTWARE PVT. LTD.	JABALPUR
1288....	CYBAGE SOFTWARE PVT. LTD.	KARAD
1289....	CYBAGE SOFTWARE PVT. LTD.	KARIMNAGAR
1290....	CYBAGE SOFTWARE PVT. LTD.	KHAMMAM

S.No.	Organization	Location
1291....	CYBAGE SOFTWARE PVT. LTD.	NOORPUR
1292....	CYBAGE SOFTWARE PVT. LTD.	PUNE
1293....	CYBAGE SOFTWARE PVT. LTD.	RAKHAPUR
1294....	CYBAGE SOFTWARE PVT. LTD.	SHIRPUR
1295....	CYBRILLA TECHNOLOGIES	BENGALURU
1296....	CYBRILLA TECHNOLOGIES	JAUNPUR
1297....	CYIENT LTD.	BENGALURU
1298....	CYIENT LTD.	DHENKANAL
1299....	CYIENT LTD.	GIDDALUR
1300....	CYIENT LTD.	HYDERABAD
1301....	CYIENT LTD.	KARIMNAGAR
1302....	CYIENT LTD.	PUNE
1303....	CYIENT LTD.	VIZIANAGARAM
1304....	CYIENT LTD.	WARANGAL
1305....	CYPRESS SEMICONDUCTORS PVT. LTD.	BENGALURU
1306....	CYPRESS SEMICONDUCTORS PVT. LTD.	CHENGANNUR
1307....	CYPRESS SEMICONDUCTORS PVT. LTD.	ERNAKULAM
1308....	CYPRESS SEMICONDUCTORS PVT. LTD.	KOCHI
1309....	CYPRESS SEMICONDUCTORS PVT. LTD.	MADURAI
1310....	CYPRESS SEMICONDUCTORS PVT. LTD.	MYSORE
1311....	CYPRESS SEMICONDUCTORS PVT. LTD.	NAGERCOIL
1312....	CYPRESS SEMICONDUCTORS PVT. LTD.	TIRUPATHI
1313....	D.E.SHAW (I) SOFTWARE PVT. LTD.	HYDERABAD
1314....	DACTER TRAINING & CONSULTANCY PVT. LTD.	DWARKA
1315....	DAIMLER (I) COMMERCIAL VEHICLES PVT. LTD.	CHENNAI
1316....	DAIMLER (I) COMMERCIAL VEHICLES PVT. LTD.	RAJAPALAYAM
1317....	DAIMLER (I) COMMERCIAL VEHICLES PVT. LTD.	THIRUVANANTHAPURAM
1318....	DAIMLER (I) COMMERCIAL VEHICLES PVT. LTD.	TIRUPPUR
1319....	DALMIA CEMENT BHARAT LTD.	BALODA BAZAR
1320....	DALMIA CEMENT BHARAT LTD.	CHENNAI
1321....	DALMIA CEMENT BHARAT LTD.	SATNA
1322....	DANA (I) PVT. LTD.	PUNE
1323....	DANFOSS INDUSTRIES PVT. LTD.	CHENNAI
1324....	DANFOSS INDUSTRIES PVT. LTD.	HYDERABAD
1325....	DANGOTE CEMENT PLC NIGERIA	BHILAI
1326....	DANILELI (I) LTD.	CHENNAI
1327....	DANSKE IT & SUPPORT SERVICES PVT. LTD.	BENGALURU
1328....	DANWAY EME LLC	DUBAI
1329....	DAR AL HANDASAH	PUNE
1330....	DARAMIC BATTERY SEPARATOR (I) PVT. LTD.	TIRUCHIRAPPALLI
1331....	DARE DRDO	BENGALURU
1332....	DASSAULT SYSTEMES (I) PVT. LTD.	BENGALURU
1333....	DASSAULT SYSTEMES (I) PVT. LTD.	JAIPUR
1334....	DASSAULT SYSTEMES (I) PVT. LTD.	PUNE
1335....	DASSAULT SYSTEMES (I) PVT. LTD.	SOLAPUR
1336....	DATAFLOW SERVICE PVT. LTD.	NEW DELHI
1337....	DATAGROUP GEOSPATIAL TECHNOLOGIES PVT. LTD.	HYDERABAD
1338....	DATAMATICS VISTA INFO SYSTEMS LTD.	TIRUCHIRAPPALLI
1339....	DATAVAIL INFOTECH PVT. LTD.	MUMBAI
1340....	DATTA MEGHE INSTITUTE OF MEDICAL SCIENCE	NAGPUR
1341....	DBOI GLOBAL SERVICES PVT. LTD.	BENGALURU
1342....	DBOI GLOBAL SERVICES PVT. LTD.	PUNE
1343....	DCM SHRIRAM LTD.	TIRUCHIRAPPALLI
1344....	DECCAN FINE CHEMICALS (I) PVT. LTD.	GOA

S.No.	Organization	Location
1345....	DECCAN FINE CHEMICALS (I) PVT. LTD.	PONDA
1346....	DECISION MINDS (I) PVT. LTD.	BENGALURU
1347....	DEENANATH MANGESHKAR HOSPITAL PUNE	PUNE
1348....	DEEPAK FASTENERS LTD.	BHOPAL
1349....	DEFIANCE TECHNOLOGIES	CHENNAI
1350....	DEFINITION NETWORKS PVT. LTD.	PUNE
1351....	DELL (I) PVT. LTD.	BENGALURU
1352....	DELL (I) PVT. LTD.	CHENNAI
1353....	DELL (I) PVT. LTD.	DEHRADUN
1354....	DELL (I) PVT. LTD.	GUWAHATI
1355....	DELL (I) PVT. LTD.	HONNAVAR
1356....	DELL (I) PVT. LTD.	HYDERABAD
1357....	DELL (I) PVT. LTD.	KHAMMAM
1358....	DELL (I) PVT. LTD.	NASIRABAD
1359....	DELL (I) PVT. LTD.	PUNE
1360....	DELL EMC CORPORATION	ANANTHAPUR
1361....	DELL EMC CORPORATION	BENGALURU
1362....	DELL EMC CORPORATION	CHENNAI
1363....	DELL EMC CORPORATION	HINDUPUR
1364....	DELL EMC CORPORATION	PUNE
1365....	DELL EMC CORPORATION	TENKASI
1366....	DELL INTERNATIONAL SERVICES PVT. LTD.	BENGALURU
1367....	DELL INTERNATIONAL SERVICES PVT. LTD.	CHENNAI
1368....	DELL INTERNATIONAL SERVICES PVT. LTD.	ELURU
1369....	DELL INTERNATIONAL SERVICES PVT. LTD.	HYDERABAD
1370....	DELL INTERNATIONAL SERVICES PVT. LTD.	PUNE
1371....	DELL INTERNATIONAL SERVICES PVT. LTD.	THOOTHUKUDI
1372....	DELLNER (I) PVT. LTD.	CHENNAI
1373....	DELOITTE CONSULTING (I) PVT. LTD.	BENGALURU
1374....	DELOITTE CONSULTING (I) PVT. LTD.	GURUGRAM
1375....	DELOITTE CONSULTING (I) PVT. LTD.	GWALIOR
1376....	DELOITTE CONSULTING (I) PVT. LTD.	HYDERABAD
1377....	DELOITTE CONSULTING (I) PVT. LTD.	KARIMNAGAR
1378....	DELOITTE CONSULTING (I) PVT. LTD.	MANIKONDA
1379....	DELOITTE CONSULTING (I) PVT. LTD.	MUMBAI
1380....	DELOITTE CONSULTING (I) PVT. LTD.	PATIALA
1381....	DELOITTE CONSULTING (I) PVT. LTD.	THANJAVUR
1382....	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	BAILHONGAL
1383....	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	BELGAUM
1384....	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	BENGALURU
1385....	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	BHIMAVARAM
1386....	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	DAVANGERE
1387....	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	HONNAVAR
1388....	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	KAKINADA
1389....	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	MYSORE
1390....	DELPHI AUTOMOTIVE SYSTEMS PVT. LTD.	TIRUPATHI
1391....	DELPHI CONNECTION SYSTEMS (I) PVT. LTD.	CHENNAI
1392....	DELPHI CONNECTION SYSTEMS (I) PVT. LTD.	KOCHI
1393....	DELPHI CONNECTION SYSTEMS (I) PVT. LTD.	THENI
1394....	DELPHI TECHNOLOGIES	BENGALURU
1395....	DELPHI TECHNOLOGIES	HUBLI
1396....	DELPHI TVS DIESEL SYSTEMS LTD.	COIMBATORE
1397....	DELPHI TVS DIESEL SYSTEMS LTD.	TIRUPPUR
1398....	DELTA POWER SOLUTIONS (I) PVT. LTD.	BENGALURU

S.No.	Organization	Location
1399....	DEP (I) PVT. LTD.	CHENNAI
1400....	DEP (I) PVT. LTD.	KARUR
1401....	DEP (I) PVT. LTD.	THIRUVALLUR
1402....	DEPARTMENT FOR INTERNATIONAL DEVELOPMENT	GURUGRAM
1403....	DEPARTMENT OF TECHNICAL EDUCATION J&K GO	SRINAGAR
1404....	DEPOSITORY TRUST AND CLEARING CORPOR	CHENNAI
1405....	DESCON ENGINEERING QATAR LLC	VENKATAGIRI
1406....	DESIGN SENSE SOFTWARE TECHNOLOGIES	BENGALURU
1407....	DESIGN TECH SYSTEMS LTD.	FARIDABAD
1408....	DESIGNTECH SYSTEM LTD.	KARJAT
1409....	DESMET BALLESTRA (I) PVT.LTD.	MUMBAI
1410....	DESMI (I) LLP	KOTTAYAM
1411....	DEUTSCHE BANK (I) PVT. LTD.	PUNE
1412....	DEVELOPMENT BANK OF SINGAPORE	HYDERABAD
1413....	DEVI ENGINEERING BENGALURU	MADIKERI
1414....	DEWA - DUBAI ELECTRICITY AND WATER AUTHO	DUBAI
1415....	DEWA - DUBAI ELECTRICITY AND WATER AUTHO	KARAIKUDI
1416....	DHAFIR GROUP FOR GENERAL TRADING	ABU DHABI
1417....	DHANLAXMI BANK LTD.	THRISSUR
1418....	DHI (I) WATER & ENVIRONMENT PVT. LTD.	NEW DELHI
1419....	DHRUV CONSULTANCY SERVICES PVT. LTD.	NAVI MUMBAI
1420....	DHRUV EMBEDDED SOLUTIONS	HYDERABAD
1421....	DHYAN NETWORKS AND TECHNOLOGIES	NAGERCOIL
1422....	DIAGNOSEARCH LIFE SCIENCES PVT. LTD.	SERAMPORE
1423....	DIAGNOSYS ELECTRONICS (I) PVT. LTD.	BENGALURU
1424....	DIAGNOSYS ELECTRONICS (I) PVT. LTD.	HYDERABAD
1425....	DIAGNOSYS ELECTRONICS (I) PVT. LTD.	MYSORE
1426....	DIETECH (I) PVT. LTD.	CHENNAI
1427....	DIGI DRIVES PVT. LTD.	PATNA
1428....	DIGIDARTS MARKETING PVT. LTD.	NEW DELHI
1429....	DIGILOGIC SYSTEM PVT. LTD.	HYDERABAD
1430....	DIGITALFACTORS (I) PVT. LTD.	BENGALURU
1431....	DIMENSION DATA (I) PVT. LTD.	BENGALURU
1432....	DIMENSION DATA (I) PVT. LTD.	MUMBAI
1433....	DIRECTI INTERNET SOLUTIONS PVT. LTD.	BENGALURU
1434....	DIRECTORATE OF HEALTH SERVICES	THIRUVANANTHAPURAM
1435....	DIVECHA CENTRE FOR CLIMATE CHANGE	BENGALURU
1436....	DIVI'S LABORATORIES LTD.	VISAKHAPATNAM
1437....	DIYAR UNITED CO.	KOLLAM
1438....	DN HOMES PVT. LTD.	BHUBANESWAR
1439....	DN HOMES PVT. LTD.	CUTTACK
1440....	DNATA / EMIRATES GROUP	DUBAI
1441....	DNATA INTERNATIONAL PVT. LTD.	BENGALURU
1442....	DNV GL	MARAIMALAINAGAR
1443....	DODSAL ENGINEERING AND CONSTRUCTION PTE	COCHIN
1444....	DOHA PETROLEUM	BENGALURU
1445....	DOIT&C,GOVT. OF RAJASTHAN	JHUNJHUNU
1446....	DON SAHONG POWER CO LTD.	BENGALURU
1447....	DONALDSON (I) FILTER SYSTEMS PVT. LTD.	GURUGRAM
1448....	DOOSAN INFRACORE	CHENNAI
1449....	DOOSAN POWER SYSTEMS (I) PVT. LTD.	CHENNAI
1450....	DORMA (I) PVT. LTD.	CHENNAI
1451....	DORSCH QATAR	BENGALURU
1452....	DOTSQUARES	JAIPUR

S.No.	Organization	Location
1453....	DOVER (I) PVT. LTD.	BENGALURU
1454....	DOVER (I) PVT. LTD.	HYDERABAD
1455....	DOW CHEMICALS INTERNATIONAL PVT. LTD.	CHENNAI
1456....	DP GARG EXPORTS PVT.LTD.	GURUGRAM
1457....	DP GARG EXPORTS PVT.LTD.	NOIDA
1458....	DPWORLD -UAE	DUBAI
1459....	DR MEHTA HOSPITAL	CHENNAI
1460....	DR ROHIT'S DENTA& IMPLANT CENTREL	DELHI
1461....	DR. NTR VAIDYA SEVA TRUST	VISAKHAPATNAM
1462....	DR. NTR VAIDYASEVA TRUST	PRAKASAM
1463....	DR. R.N. LAHOTI AYURVEDIC COLLEGE,SULTA	LONAR
1464....	DR. REDDY'S LABORATORIES LTD.	DATIA
1465....	DR. REDDY'S LABORATORIES LTD.	HYDERABAD
1466....	DR. REDDY'S LABORATORIES LTD.	KOLKATA
1467....	DR. REDDY'S LABORATORIES LTD.	SANGAREDDY
1468....	DR. REDDY'S LABORATORIES LTD.	VADODARA
1469....	DREAM STEPS TECHNOLOGIES PVT. LTD.	NEW DELHI
1470....	DRESSER RAND A SIEMENS BUSINESS	PUNE
1471....	DRILL JIG BUSHING MADRAS PVT. LTD.	CHENNAI
1472....	DRUVA DATA SOLUTIONS PVT. LTD.	PUNE
1473....	DRY DOCKS WORLD,DUBAI	ERNAKULAM
1474....	DSM - SINOCHEM PHARMACEUTICALS (I) PVT. LTD.	RUPNAGAR
1475....	DU TELECOM	BHUBANESWAR
1476....	DUBAI AIR CONDITIONERS LLC	CHENNAI
1477....	DUBAI AIR NAVIGATION SERVICES	DUBAI
1478....	DUBAI AIRPORT FREEZONE AUTHORITY	CHENNAI
1479....	DUBAI CABLE CO	MUSSAFFAH
1480....	DUBAI ELECTRICITY & WATER AUTHORITY	DUBAI
1481....	DUBAI ELECTRICITY & WATER AUTHORITY	KOZHIKODE
1482....	DUBAI ELECTRICITY & WATER AUTHORITY	MALAPPURAM
1483....	DUBAI ELECTRICITY & WATER AUTHORITY	THRISSUR
1484....	DUNNHUMBY INDIA	JAIPUR
1485....	DURA AUTOMOTIVE SERVICES (I) PVT. LTD.	HYDERABAD
1486....	DUSANE INFOTECH PVT. LTD.	PUNE
1487....	DVS TECHNOSOFT PVT. LTD.	PUNE
1488....	DXC	LUCKNOW
1489....	DXC TECHNOLOGIES	BENGALURU
1490....	DXC TECHNOLOGIES	CHENNAI
1491....	DXC TECHNOLOGIES	FARIDABAD
1492....	DXC TECHNOLOGIES	GUNTUR
1493....	DXC TECHNOLOGIES	HYDERABAD
1494....	DYANSYS (I) PVT. LTD.	ALAPAKKAM
1495....	DYNACAST SINGAPORE PTE LTD.	JURONG WEST
1496....	DYNAMIC BIZ INC	MIDDLETOWN
1497....	E CUBE (I) SOLUTIONS LTD.	VADODARA
1498....	E.I. DUPONT SERVICES (I) PVT. LTD.	HYDERABAD
1499....	E.I. DUPONT SERVICES (I) PVT. LTD.	VADODARA
1500....	EASI - ALLEGIS SERVICES (I) PVT. LTD.	COIMBATORE
1501....	EASI - ALLEGIS SERVICES (I) PVT. LTD.	KURNOOL
1502....	EASTERN INDUSTRIAL CO	NAVI MUMBAI
1503....	EASUN REYROLLE LTD.	HOSUR
1504....	EATON CORP.( MTL INSTRUMENTS PVT. LTD.)	CHENNAI
1505....	EATON FLUID POWER LTD.	CHENNAI
1506....	EATON TECHNOLOGIES PVT. LTD.	AHMEDNAGAR



S.No.	Organization	Location
1507....	EATON TECHNOLOGIES PVT. LTD.	AURANGABAD
1508....	EATON TECHNOLOGIES PVT. LTD.	BARSHI
1509....	EATON TECHNOLOGIES PVT. LTD.	BELGAUM
1510....	EATON TECHNOLOGIES PVT. LTD.	BHUBANESWAR
1511....	EATON TECHNOLOGIES PVT. LTD.	ICHALKARANJI
1512....	EATON TECHNOLOGIES PVT. LTD.	ISLAMPUR
1513....	EATON TECHNOLOGIES PVT. LTD.	KALYAN
1514....	EATON TECHNOLOGIES PVT. LTD.	KARAD
1515....	EATON TECHNOLOGIES PVT. LTD.	KOLHAPUR
1516....	EATON TECHNOLOGIES PVT. LTD.	NASHIK
1517....	EATON TECHNOLOGIES PVT. LTD.	PANDHARPUR
1518....	EATON TECHNOLOGIES PVT. LTD.	PUDUCHERRY
1519....	EATON TECHNOLOGIES PVT. LTD.	PUNE
1520....	EATON TECHNOLOGIES PVT. LTD.	SALEM
1521....	EATON TECHNOLOGIES PVT. LTD.	SATARA
1522....	EATON'S CROUSE HINDS	CHENNAI
1523....	EBIX SOFTWARE (I) PVT. LTD.	COIMBATORE
1524....	EBIX SOFTWARE (I) PVT. LTD.	GHAZIABAD
1525....	E-BUSINESS SOLUTIONS LTD.	KOLKATA
1526....	EBZ SYSTEC (I) PVT. LTD.	VISAKHAPATNAM
1527....	ECCENTRIC INFOTECH PVT. LTD.	PUNE
1528....	ECHO (I) MANAGED SERVICES PVT. LTD.	GHAZIABAD
1529....	ECI TELECOM PVT. LTD.	NAVI MUMBAI
1530....	E-CONNECT SOLUTIONS PVT. LTD.	UDAIPUR
1531....	EDGEVERVE SYSTEMS LTD.	BENGALURU
1532....	EDGEVERVE SYSTEMS LTD.	HYDERABAD
1533....	EDGEVERVE SYSTEMS LTD.	JHANSI
1534....	EDGEVERVE SYSTEMS LTD.	PUNE
1535....	EDGEVERVE SYSTEMS LTD.	ROORKEE
1536....	EDGEVERVE SYSTEMS LTD.	VISAKHAPATNAM
1537....	EDIFECS TECHNOLOGIES PVT. LTD.	NOIDA
1538....	EFI (I) PVT. LTD.	BENGALURU
1539....	EFKON (I) PVT. LTD.	GURUGRAM
1540....	EGAIN COMMUNICATIONS PVT. LTD.	PATIALA
1541....	EGAIN COMMUNICATIONS PVT. LTD.	PUNE
1542....	EGIS INTERNATIONAL	TUTICORIN
1543....	EICHER GOODEARTH PVT. LTD.	NEW DELHI
1544....	EICHER POLARIS PVT. LTD.	JAIPUR
1545....	EICHER POLARIS PVT. LTD.	SIRSA
1546....	EINFOCHIPS PVT. LTD.	AHMEDABAD
1547....	EINFOCHIPS PVT. LTD.	ANAND
1548....	EINFOCHIPS PVT. LTD.	BENGALURU
1549....	EINFOCHIPS PVT. LTD.	CHOTILA
1550....	EINFOCHIPS PVT. LTD.	KASTURINAGAR
1551....	EINFOCHIPS PVT. LTD.	PUNE
1552....	EINFOCHIPS PVT. LTD.	RAJKOT
1553....	EINFOCHIPS PVT. LTD.	VADODARA
1554....	EINNEL TECHNOLOGIES	CHENNAI
1555....	EIT SERVICES (I) PVT. LTD.	CHENNAI
1556....	EIWAA CONSULTANCY	CHENNAI
1557....	ELECTRO METER CORPORATION	KOLKATA
1558....	ELECTRO METER CORPORATION	KONNAGAR
1559....	ELECTRONICA HITECH MACHINE TOOLS PVT. LTD.	PUNE
1560....	ELECTRONICS CORPORATION OF (I) LTD.	HYDERABAD

S.No.	Organization	Location
1561....	ELECTRONICS CORPORATION OF (I) LTD.	KOLKATA
1562....	ELECTRONICS FOR IMAGING (I) PVT. LTD.	KADAPA
1563....	ELECTRONO SOLUTIONS PVT. LTD.	THENI
1564....	ELECTROSTEEL STEELS LTD.	DHANBAD
1565....	ELECTROTHERM (I) LTD.	AHMEDABAD
1566....	ELGI EQUIPMENTS LTD.	COIMBATORE
1567....	ELGI EQUIPMENTS LTD.	TIRUPPUR
1568....	ELI BUSINESS SOLUTIONS PVT. LTD.	CHENNAI
1569....	ELI RESEARCH (I) PVT. LTD.	BAREILLY
1570....	ELI RESEARCH (I) PVT. LTD.	NEW DELHI
1571....	ELITE SCHOOL OF OPTOMETRY	CHENNAI
1572....	ELIXIER ADNOC LINDE INDUSTRIAL GASES LTD.	HYDERABAD
1573....	ELMACH PACKAGES (I) PVT. LTD.	MUMBAI
1574....	ELOKA ENTERPRISES PVT. LTD.	CHENNAI
1575....	ELSEWEDY CABLES	DOHA
1576....	ELSYTEC POWER PROJECTS PVT. LTD.	CHENNAI
1577....	EMARATECH	DUBAI
1578....	EMBEDDED SYSTEMS SOLUTIONS	BENGALURU
1579....	EMC CORPORATION	BENGALURU
1580....	EMC CORPORATION	ERNAKULAM
1581....	EMC CORPORATION	YSR KADAPA
1582....	EMC SOFTWARE AND SERVICES (I) PVT. LTD.	BENGALURU
1583....	EMC SOFTWARE AND SERVICES (I) PVT. LTD.	PUNE
1584....	EMCO - A DIVISION OF ETA	CHENNAI
1585....	EMCURE PHARMACEUTICALS LTD.	BARAMATI
1586....	EMERSON AUTOMATION SOLUTIONS	DUBAI
1587....	EMERSON AUTOMATION SOLUTIONS	GREATER NOIDA
1588....	EMERSON ELECTRIC CO (I) PVT. LTD.	NAVI MUMBAI
1589....	EMERSON FZE	DUBAI
1590....	EMERSON FZE	UDUPI
1591....	EMERSON FZN	JEBEL ALI
1592....	EMERSON INNOVATION CENTER	NAVI MUMBAI
1593....	EMERSON INNOVATION CENTER	PUNE
1594....	EMERSON NETWORK POWER (I) PVT. LTD.	AMBERNATH
1595....	EMERSON NETWORK POWER (I) PVT. LTD.	BENGALURU
1596....	EMERSON NETWORK POWER (I) PVT. LTD.	CHENNAI
1597....	EMERSON NETWORK POWER (I) PVT. LTD.	DOMBIVLI
1598....	EMERSON NETWORK POWER (I) PVT. LTD.	KALYAN
1599....	EMERSON NETWORK POWER (I) PVT. LTD.	MULUND
1600....	EMERSON NETWORK POWER (I) PVT. LTD.	NAVI MUMBAI
1601....	EMERSON NETWORK POWER (I) PVT. LTD.	PALLIKARNAI
1602....	EMERSON NETWORK POWER (I) PVT. LTD.	PUNE
1603....	EMERSON NETWORK POWER (I) PVT. LTD.	THANE
1604....	EMERSON PROCESS MANAGEMENT ARABIA LTD.	DUBAI
1605....	EMERSON PROCESS MANAGEMENT ARABIA LTD.	GURUGRAM
1606....	EMERSON PROCESS MANAGEMENT ARABIA LTD.	JUBAIL
1607....	EMERSON PROCESS MANAGEMENT ARABIA LTD.	KOLHAPUR
1608....	EMERSON PROCESS MANAGEMENT ARABIA LTD.	PUNE
1609....	EMESA (I) ELEVATOR COMPONENT PVT. LTD.	VIRAR EAST
1610....	EMIDS TECHNOLOGIES PVT. LTD.	BENGALURU
1611....	EMIRATE ADVANCE RESEARCH & TECHNOLOGY	GHAZIABAD
1612....	EMIRATES AIRLINES IT	DUBAI
1613....	EMIRATES ALUMINIUM CO LTD.	AHMEDABAD
1614....	EMIRATES ALUMINIUM CO LTD.	MALAPPURAM

S.No.	Organization	Location
1615....	EMIRATES ALUMINIUM CO LTD.	VARANASI
1616....	EMIRATES BLOCK FACTORY	MANGALURU
1617....	EMIRATES GENERAL PETROLEUM CORPORATION	DUBAI
1618....	EMIRATES GLOBAL ALUMINIUM	DUBAI
1619....	EMIRATES GLOBAL ALUMINIUM	ERNAKULAM
1620....	EMIRATES GLOBAL ALUMINIUM	JEBEL ALI
1621....	EMIRATES STEEL INDUSTRIES	ABU DHABI
1622....	EMIRATES STEEL INDUSTRIES	ABU DHABI
1623....	EMIRATES STEEL INDUSTRIES	COIMBATORE
1624....	EMIRATES STEEL INDUSTRIES	RAJAMPET
1625....	EMMANUEL HOSPITAL ASSOCIATION	LALITPUR
1626....	EMRILL SERVICES LLC	CHENNAI
1627....	EMSTEM TECHNOLOGIES PVT. LTD.	BENGALURU
1628....	EMTEC TECHNOLOGIES	PUNE
1629....	E-MUG TECHNOLOGIES PVT. LTD.	BENGALURU
1630....	ENARKA (I) PVT. LTD.	BIDAR
1631....	ENARKA (I) PVT. LTD.	TIRUNELVELI
1632....	ENCO ENGINEERS COMBINE PVT. LTD.	DEOBAND
1633....	ENDEAVOUR (A GENPACT CO.)	ADOOR
1634....	ENDEAVOUR (A GENPACT CO.)	BENGALURU
1635....	ENDRESS HAUSER FLOWTEC (I) PVT. LTD.	AURANGABAD
1636....	ENDRESS HAUSER FLOWTEC (I) PVT. LTD.	VISAKHAPATNAM
1637....	ENDURANCE TECHNOLOGIES LTD.	AURANGABAD
1638....	ENERGIZER SINGAPORE PTE LTD.	BENGALURU
1639....	ENERGOPROJEKT-ENTEL CO LTD.	DUBAI
1640....	ENERGY EFFICIENCY SERVICES LTD.	NAGPUR
1641....	ENEXL TECHNOLOGIES & SOLUTIONS PVT. LTD.	BENGALURU
1642....	ENGINEERING CONSORTIUM CONSULTING ENGINE	DUBAI
1643....	ENGINEERING INTEGRITY SOLUTIONS	CHENNAI
1644....	ENGINEERS (I) LTD.	GHAZIABAD
1645....	ENGINEERS (I) LTD.	NEW DELHI
1646....	ENOAH ISOLUTION (I) PVT. LTD.	CHENNAI
1647....	ENOIA BABCOCK BORSIG PVT. LTD.	CHENNAI
1648....	ENOIA BABCOCK BORSIG PVT. LTD.	TIRUCHIRAPPALLI
1649....	ENTERKEY SOLUTIONS P LTD.	CHENNAI
1650....	ENVESTNET YODLEE	BENGALURU
1651....	ENVISION ENGINEERING SOULTION	COIMBATORE
1652....	EPAM SYSTEMS (I) PVT. LTD.	HYDERABAD
1653....	EPAM SYSTEMS (I) PVT. LTD.	SURYAPET
1654....	EPPINGER TOOLING ASIA P LTD.	COIMBATORE
1655....	EPTISA (I) PROVATE LTD.	KOLKATA
1656....	EQ TECHNOLOGIC (I) PVT. LTD.	DHULE
1657....	EQ TECHNOLOGIC (I) PVT. LTD.	PUNE
1658....	EQIC DIES AND MOULDS	HYDERABAD
1659....	EQUATE PETROCHEMICAL CO	SHUAIBA
1660....	EQUILIBRIUM SOLUTIONS PVT. LTD.	PUNE
1661....	ERCON COMPOSITES	JODHPUR
1662....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	BENGALURU
1663....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	BILASPUR
1664....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	CHANDIGARH
1665....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	CHENNAI
1666....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	COIMBATORE
1667....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	DIBRUGARH
1668....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	FARIDABAD

S.No.	Organization	Location
1669....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	GHAZIABAD
1670....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	GOALPARA
1671....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	GURUGRAM
1672....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	JAIPUR
1673....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	KOLKATA
1674....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	MUMBAI
1675....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	NADIA
1676....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	NEW DELHI
1677....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	DELHI
1678....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	FARIDABAD
1679....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	GHAZIABAD
1680....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	GURUGRAM
1681....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	KALYANI
1682....	ERICSSON (I) GLOBAL SERVICES PVT. LTD.	KOLKATA
1683....	ERNST & YOUNG LLP	BENGALURU
1684....	ERNST & YOUNG LLP	COCHIN
1685....	ERNST & YOUNG LLP	HYDERABAD
1686....	ERNST & YOUNG LLP	MALAPPURAM
1687....	ERNST & YOUNG LLP	PALAI
1688....	ERNST & YOUNG LLP	PANDALAM
1689....	ESCORTS LTD.	BHIWANI
1690....	ESCORTS LTD.	FARIDABAD
1691....	ESCORTS LTD.	HOSUR
1692....	ESCORTS LTD.	SAMBALPUR
1693....	ESKAYEM CONSULTANTS PVT. LTD.	MUMBAI
1694....	ESKO GRAPHICS (I) PVT. LTD.	BENGALURU
1695....	ESOFT CONSULTING	BENGALURU
1696....	ESOFT CONSULTING	HYDERABAD
1697....	E-SOURCE SOLUTIONS LTD.	BENGALURU
1698....	ESSAR POWER LTD.	SURAT
1699....	ESSAR PROJECTS (I) LTD.	CHENNAI
1700....	ESSAR STEEL (I) LTD.	SURAT
1701....	ESTERLINE TECHNOLOGIES (I) PVT. LTD.	BENGALURU
1702....	ETA ASCON (M&E DIVISION)	MUMBAI
1703....	ETA MELCO ELEVATOR CO LLC	ABU DHABI
1704....	ETA MELCO ELEVATOR CO LLC	RAMANATHAPURAM
1705....	ETERNIS FINE CHEMICALS	KHOPOLI
1706....	ETIHAD AIRWAYS ENGINEERING	ABU DHABI
1707....	ETISALAT	RANCHI
1708....	EUGIA PHARMA SPECIALTIEST LTD.	SECUNDERABAD
1709....	EUPHORIA TECHNOLOGIES	CHENNAI
1710....	EUROFINS IT SOLUTIONS (I) PVT. LTD.	BENGALURU
1711....	EUTHENICS IT SERVICES PVT. LTD.	VISAKHAPATNAM
1712....	EVALUESERVE	BENGALURU
1713....	EVEREADY INDUSTRIES (I) LTD.	SALEM
1714....	EVEREST MACHINE AIDS	DELHI
1715....	EVERSENDI ENGINEERING FZE	SHARJAH
1716....	EVERSENDI OFFSHORE LLC	CHENNAI
1717....	EVOKE TECHNOLOGIES PVT. LTD.	HYDERABAD
1718....	EVOLVUS SOLUTIONS PVT. LTD.	BENGALURU
1719....	EVOQUA WATER TECHNOLOGIES PTE LTD.	SINGAPORE
1720....	EVRY (I) PVT. LTD.	BENGALURU
1721....	EVRY (I) PVT. LTD.	MOHALI
1722....	EXCEL INDUSTRIES LTD.	MUMBAI

S.No.	Organization	Location
1723....	EXCELLENCE INFOCOM	PUNE
1724....	EXCELLENCE INFONET	JUNAGADH
1725....	EXEED GEO TEXTILE LLC	ABU DHABI
1726....	EXIDE INDUSTRIES LTD.	AHMEDNAGAR
1727....	EXILANT TECHNOLOGIES PVT. LTD.	BENGALURU
1728....	EXIMIUS DESIGN	THOOTHUKUDI
1729....	EXL ANALYTICS	BENGALURU
1730....	EXL ANALYTICS	PATIALA
1731....	EXLSERVICE	GAUTAM BUDH NAGAR
1732....	EXPEDIA (I) PVT. LTD.	BHUBANESWAR
1733....	EXPEDIA (I) PVT. LTD.	GURUGRAM
1734....	EXPEDIA (I) PVT. LTD.	VISAKHAPATNAM
1735....	EXPEDIA INC	NEW DELHI
1736....	EXPEDIA.INC	MYSORE
1737....	EXPERION TECHNOLOGIES INDIA PVT.LTD.	MALAPPURAM
1738....	EXPERION TECHNOLOGIES INDIA PVT.LTD.	THRISSUR
1739....	EXPERT GLOBAL SOLUTIONS PVT. LTD.	AHMEDNAGAR
1740....	EXPERT GLOBAL SOLUTIONS PVT. LTD.	AURANGABAD
1741....	EXPERT GLOBAL SOLUTIONS PVT. LTD.	MUMBAI
1742....	EXPERT GLOBAL SOLUTIONS PVT. LTD.	NASHIK
1743....	EXPERT SOFTWARE CONSULTANT LTD.	NOIDA
1744....	EXPLORIDE TECHNOLOGIES PVT. LTD.	TIRUR MALAPPURAM
1745....	EXPRO NORTH SEA	NAVI MUMBAI
1746....	EXTERRAN BELLELI ENERGY FZE	SHARJAH
1747....	EXTERRAN ENERGY FZE	DUBAI
1748....	EXTRACO INDUSTRIES LLC	THRISSUR
1749....	EXTREME NETWORKS (I) PVT. LTD.	CHENNAI
1750....	EXZA INFO SYSTEMS PVT.LTD.	MEDAK
1751....	EXZEO SOFTWARE	NOIDA
1752....	EXZIRE SERVICES PVT. LTD.	DELHI
1753....	EY GBS PVT. LTD.	BENGALURU
1754....	EY GBS PVT. LTD.	THIRUVANANTHAPURAM
1755....	EZE SOFTWARE (I) PVT. LTD.	HYDERABAD
1756....	EZEST SOLUTIONS LTD.	AHMEDABAD
1757....	FACADE ONE SYSTEMS PVT. LTD.	NAGPUR
1758....	FACTSET SYSTEMS (I) PVT. LTD.	HYDERABAD
1759....	FAFADIA TECH	MUMBAI
1760....	FAG BEARINGS (I) LTD.	VADODARA
1761....	FAIR ISAAC (I) SOFTWARE PVT. LTD.	BENGALURU
1762....	FAIVELEY TRANSPORT RAIL TECHNOLOGIES IND	HOSUR
1763....	FASTMAN PTE LTD.	VISAKHAPATNAM
1764....	FAURECIA AUTOMOTIVE SEATING (I) PVT. LTD.	PUNE
1765....	FAURECIA EMISSIONS CONTROL TECHNOLOGIES	MAMBA
1766....	FBM-KNM FZCO	PATHANAMTHITTA
1767....	FCA ENGINEERING (I) PVT. LTD.	BHADRAK
1768....	FCA ENGINEERING (I) PVT. LTD.	CHENNAI
1769....	FCC ELECTROMECHANICAL LLC	CUDDALORE
1770....	FCI TECHNOLOGY SERVICES	THIRUVALATHUR
1771....	FCS COMPUTER SYSTEMS PTE LTD.	NEW DELHI
1772....	FEDERAL BANK LTD.	ALUVA
1773....	FENCE INTERNATIONAL LLC	ABU DHABI
1774....	FERCHAU ENGINEERING PVT. LTD.	BENGALURU
1775....	FERROFAB FZE	TENKASI
1776....	FEUJI	DELHI

S.No.	Organization	Location
1777....	FEV (I) PVT. LTD.	PUNE
1778....	FIAT (I) AUTOMOBILES PVT. LTD.	DEHRADUN
1779....	FIAT (I) AUTOMOBILES PVT. LTD.	PUNE
1780....	FIAT (I) AUTOMOBILES PVT.LTD.	PUNE
1781....	FIAT CHRYSLER AUTOMOTIVE INDA PVT. LTD.	CHENNAI
1782....	FIBREX CONSTRUCTIONS UAE	THRISSUR
1783....	FIDELITY BUSINESS SERVICES (I) PVT. LTD.	BENGALURU
1784....	FIDELITY BUSINESS SERVICES (I) PVT. LTD.	CHENNAI
1785....	FIDELITY INFORMATION SYSTEMS	THAKURLI
1786....	FIDELITY INTERNATIONAL	JAIPUR
1787....	FIELDS INVESTMENT DIFC LTD.	BENGALURU
1788....	FIELDS INVESTMENT DIFC LTD.	CHENNAI
1789....	FIELDS INVESTMENT DIFC LTD.	DUBAI
1790....	FIIND DATA SCIENCES PVT. LTD.	TIRUCHIRAPPALLI
1791....	FINE FINISH ORGANICS PVT. LTD.	MUMBAI
1792....	FINETECH CONTROLS PVT. LTD.	NOIDA
1793....	FINITE FOUR TECHNOLOGIES	MIRAJ
1794....	FINXERA	PANCHKULA
1795....	FIRST (I) NEWS INTERNATIONAL PVT. LTD.	JAIPUR
1796....	FIRST AMERICAN (I) PVT. LTD.	HYDERABAD
1797....	FIRST AMERICAN (I) PVT. LTD.	LOHARDAGA
1798....	FIRST PASS SEMICONDUCTORS PVT. LTD.	VISAKHAPATNAM
1799....	FIS GLOBAL BUSINESS SOLUTION (I) PVT. LTD.	AURANGABAD
1800....	FIS GLOBAL BUSINESS SOLUTION (I) PVT. LTD.	BENGALURU
1801....	FIS GLOBAL BUSINESS SOLUTION (I) PVT. LTD.	CHENNAI
1802....	FIS GLOBAL BUSINESS SOLUTION (I) PVT. LTD.	DELHI
1803....	FIS GLOBAL BUSINESS SOLUTION (I) PVT. LTD.	TIRUNELVELI
1804....	FISERV (I) PVT. LTD.	GHAZIABAD
1805....	FISERV (I) PVT. LTD.	GURUGRAM
1806....	FISERV (I) PVT. LTD.	NOIDA
1807....	FISERV (I) PVT. LTD.	PUNE
1808....	FISSION LABS	HYDERABAD
1809....	FLEET SHIP MANAGEMENT LTD.	BENGALURU
1810....	FLEETGUARD FILTERS PVT. LTD.	CHENNAI
1811....	FLEETGUARD FILTERS PVT. LTD.	PANDHARPUR
1812....	FLEETGUARD FILTERS PVT. LTD.	PUNE
1813....	FLEX (I) PVT. LTD.	CHENNAI
1814....	FLEXTRONICS TECHNOLOGIES (I) PVT. LTD.	ARAKKONAM
1815....	FLEXTRONICS TECHNOLOGIES (I) PVT. LTD.	CHENNAI
1816....	FLEXTRONICS TECHNOLOGIES (I) PVT. LTD.	HYDERABAD
1817....	FLEXTRONICS TECHNOLOGIES (I) PVT. LTD.	KARIMNAGAR
1818....	FLEXTRONICS TECHNOLOGIES (I) PVT. LTD.	VELLORE
1819....	FLIPKART (I) PVT. LTD.	RANCHI
1820....	FLIPKART INTERNET PVT. LTD.	GHAZIABAD
1821....	FLIPKART INTERNET PVT. LTD.	MADURAI
1822....	FLOWSERVE (I) CONTROLS PVT. LTD.	COIMBATORE
1823....	FLOWSERVE (I) CONTROLS PVT. LTD.	TIRUPPUR
1824....	FLOWSERVE (I) CONTROLS PVT. LTD.	BENGALURU
1825....	FLOWSERVE (I) CONTROLS PVT. LTD.	COIMBATORE
1826....	FLOWSERVE (I) CONTROLS PVT. LTD.	MADURAI
1827....	FLOWSERVE (I) CONTROLS PVT. LTD.	SALEM
1828....	FLOWSERVE GULF FZE	DUBAI
1829....	FLSMIDTH PVT. LTD.	ALAPPUZHA
1830....	FLSMIDTH PVT. LTD.	CHENGANNUR

S.No.	Organization	Location
1831....	FLSMIDTH PVT. LTD.	CHENNAI
1832....	FLSMIDTH PVT. LTD.	KARUR
1833....	FLSMIDTH PVT. LTD.	NOIDA
1834....	FLSMIDTH PVT. LTD.	TIRUCHIRAPPALLI
1835....	FLUOR ARABIA LTD.	HOWRAH
1836....	FLUOR DANIEL (I) PVT. LTD.	GURUGRAM
1837....	FLUXGEN ENGINEERING TECHNOLOGIES	BENGALURU
1838....	FOI SYSTEMS	ERODE
1839....	FOLEYDESIGNS PVT. LTD.	BENGALURU
1840....	FORBES MARSHALL PVT. LTD.	PUNE
1841....	FORCE MOTORS LTD.	PUNE
1842....	FORD MOTOR PVT. LTD.	CHENNAI
1843....	FORD MOTOR PVT. LTD.	GOBICHETTIPALAYAM
1844....	FORD MOTOR PVT. LTD.	NEW DELHI
1845....	FORENSIC SCIENCE LABORATORY	KAMO
1846....	FORTE RESEARCH SYSTEMS (I) PVT. LTD.	SANGRUR
1847....	FORTINET TECHNOLOGY	BENGALURU
1848....	FORTINET TECHNOLOGY	HYDERABAD
1849....	FORTIS HEALTHCARE	BENGALURU
1850....	FORTIS HEALTHCARE	CHANDIGARH
1851....	FORTIS HEALTHCARE	MYSORE
1852....	FORTIS HEALTHCARE	THANE
1853....	FORTIS HOSPITAL	DELHI
1854....	FORUS HEALTH PVT. LTD.	HOSUR
1855....	FOWLER WESTRUP	BENGALURU
1856....	FRANCONNECT (I) SOFTWARE PVT. LTD.	NEW DELHI
1857....	FRAUSCHER SENSOR TECHNOLOGY	BENGALURU
1858....	FREIGHTWORKS (DUBAI EXPRESS)	THANJAVUR
1859....	FRESENIUS KABI ONCOLOGY LTD.	BILASPUR
1860....	FRESHDESK	CHENNAI
1861....	FRESHDESK TECHNOLOGIES PVT. LTD.	CHENNAI
1862....	FRESHDESK TECHNOLOGIES PVT. LTD.	THODUPUZHA
1863....	FRESHFISH CONSULTING AND TECHNOLOGIES	MUMBAI
1864....	FRESHWORKS INC	CHENNAI
1865....	FRICK (I) LTD.	DELHI
1866....	FRIENDS CONSULTANCY SERVICES	QUEPEM
1867....	FTD INFOCOM PVT.LTD.	BENGALURU
1868....	FTV PROCLAD (S) PTE LTD.	SINGAPORE
1869....	FU CHUN SHIN MACHINERY MANUFACTURE CO.	HYDERABAD
1870....	FUGENIC ENGINEERING SERVICES	CHENNAI
1871....	FUJAIRAH ASIA POWER CO	KANNUR
1872....	FUJAIRAH ASIA POWER CO	MAVELIKARA
1873....	FUJITSU CONSULTING (I) PVT. LTD.	CUTTACK
1874....	FUJSENG CONSTRUCTION LLC	BHIMAVARAM
1875....	FUTURE ELECTRONICS (DISTRIBUTION) INC.	MADANAPALLI
1876....	FUTURE FACTORY LLP	DOMBIVLI
1877....	FUTURE SUPPLY CHAIN SOLUTIONS LTD.	THANE
1878....	GABRIEL (I) LTD.	GURUGRAM
1879....	GABRIEL (I) LTD.	HOSUR
1880....	GAINSIGHT (I) PVT. LTD.	PATNA
1881....	GAJRA GEARS PVT. LTD.	DEWAS
1882....	GALA PRECISION ENGINEERING PVT. LTD.	CHINCHWAD
1883....	GALA PRECISION ENGINEERING PVT. LTD.	MUMBAI
1884....	GALFAR ALMISNAD ENGG. & CONTG. W.L.L	KOLKATA

S.No.	Organization	Location
1885....	GALFAR ENGINEERING & CONTG. SAOG	BENGALURU
1886....	GAMESA RENEWABLE PVT. LTD.	CHENNAI
1887....	GAMESA RENEWABLE PVT. LTD.	KANCHEEPURAM
1888....	GAMI AIR CONDITIONERS MANUFACTURING CO.	CHENNAI
1889....	GARDNER AEROSPACE PRANITA PVT. LTD.	BENGALURU
1890....	GATELENGTH TECHNOLOGY PVT. LTD.	RAEBARELI
1891....	GATES (I) PVT. LTD.	CHINCHWAD
1892....	GAURISHANKER ELECTROCASTINGS PVT. LTD.	GIRIDIH
1893....	GAVS TECHNOLOGY	CHENNAI
1894....	GAYATRI PROJECTS LTD.	KAKINADA
1895....	GE (I) EXPORTS PVT. LTD.	BENGALURU
1896....	GE (I) INDUSTRIAL PVT. LTD.	BENGALURU
1897....	GE (I) INDUSTRIAL PVT. LTD.	GHAZIABAD
1898....	GE (I) INDUSTRIAL PVT. LTD.	GURUGRAM
1899....	GE (I) INDUSTRIAL PVT. LTD.	HYDERABAD
1900....	GE (I) INDUSTRIAL PVT. LTD.	PUNE
1901....	GE (I) INDUSTRIAL PVT. LTD.	SECUNDERABAD
1902....	GE (I) TECHNOLOGY CENTRE PVT. LTD.	BENGALURU
1903....	GE (I) TECHNOLOGY CENTRE PVT. LTD.	PATIALA
1904....	GE APPLIANCES	BENGALURU
1905....	GE APPLIANCES	HYDERABAD
1906....	GE AUTOMATION & CONTROLS	HYDERABAD
1907....	GE BE PVT. LTD.	BENGALURU
1908....	GE CAPITAL	BENGALURU
1909....	GE DIGITAL	BENGALURU
1910....	GE ENERGY MANAGEMENT	HYDERABAD
1911....	GE HEALTHCARE	BENGALURU
1912....	GE HEALTHCARE	SHIVAMOGGA
1913....	GE MIDDLE EAST FZE	CHENNAI
1914....	GE POWER (I) LTD.	HYDERABAD
1915....	GE POWER (I) LTD.	TIRUCHIRAPPALLI
1916....	GE T&D (I) LTD.	BENGALURU
1917....	GE T&D (I) LTD.	CHENNAI
1918....	GE T&D (I) LTD.	HOSUR
1919....	GE TEK ELECTRONICS PVT. LTD.	DHARMAPURI
1920....	GE BR PFEIFFER (I) PVT. LTD.	NEW DELHI
1921....	GEC JAGDALPUR	JAGDALPUR
1922....	GEETANJALI HOSPITAL	UDAIPUR
1923....	GEETANJALI MEDICAL COLLEGE AND HOSPITAL	UDAIPUR
1924....	GEM ENGINEERING INDUSTRIES (I) PVT. LTD.	HYDERABAD
1925....	GEMALTO (ERSTWHILE SAFENET INC)	GORAKHPUR
1926....	GENAU EXTRUSIONS LTD.	HOSUR
1927....	GENERAL ELECTRIC CO	ALUVA
1928....	GENERAL ELECTRIC CO	BENGALURU
1929....	GENERAL ELECTRIC CO	CHIITTOOR
1930....	GENERAL ELECTRIC CO	CHITTOOR
1931....	GENERAL ELECTRIC CO	HYDERABAD
1932....	GENERAL ELECTRIC CO	KANNUR
1933....	GENERAL ELECTRIC CO	KOPPAL
1934....	GENERAL ELECTRIC CO	MALAPPURAM
1935....	GENERAL ELECTRIC CO	PATNA
1936....	GENERAL ELECTRIC CO	REWA
1937....	GENERAL ELECTRIC CO	THRISSUR
1938....	GENERAL ELECTRIC CO	VADODARA



S.No.	Organization	Location
1939....	GENERAL ELECTRIC CO	VELLORE
1940....	GENERAL ELECTRIC CO	YELANDUR
1941....	GENERAL MOBILE CORPORATION	LUCKNOW
1942....	GENERAL MOTROS TECHNICAL CENTER (I) PVT. LTD.	BENGALURU
1943....	GENERAL MOTROS TECHNICAL CENTER (I) PVT. LTD.	COIMBATORE
1944....	GENERAL MOTROS TECHNICAL CENTER (I) PVT. LTD.	HOSKOTE
1945....	GENERAL MOTROS TECHNICAL CENTER (I) PVT. LTD.	MYSORE
1946....	GENESYS BIOLOGICS PVT. LTD.	HYDERABAD
1947....	GENESYS BIOLOGICS PVT. LTD.	SECUNDERABAD
1948....	GENESYS TELECOM	MUMBAI
1949....	GENIE SOFT SYSTEM	BHAYANDAR
1950....	GENPACT (I) PVT. LTD.	BENGALURU
1951....	GENPACT (I) PVT. LTD.	BHAGALPUR
1952....	GENPACT (I) PVT. LTD.	GHAZIABAD
1953....	GENPACT (I) PVT. LTD.	HYDERABAD
1954....	GENPACT (I) PVT. LTD.	KOLKATA
1955....	GENPACT (I) PVT. LTD.	LUCKNOW
1956....	GENPACT HEADSTRONG CAPITAL MARKETS	EAST GOKALPUR
1957....	GENPACT PHARMALINK CONSULTING	MUMBAI
1958....	GEO SEMICONDUCTORS	BENGALURU
1959....	GEOMETRIC LTD.	BENGALURU
1960....	GEOMETRIC LTD.	CHENNAI
1961....	GEOMETRIC SOFTWARE SOLUTIONS LTD.	NAVI MUMBAI
1962....	GERDAU STEEL (I) PVT. LTD.	TADIPATRI
1963....	GESTAMP AUTOMOTIVE CHENNAI LTD.	CHENNAI
1964....	GEXCON (I) PVT. LTD.	PUNE
1965....	GGL HOTEL AND RESORT CO LTD.	HARBOUR
1966....	GGG INFORMATION SERVICE IND PVT. LTD.	CHENNAI
1967....	GGG INFORMATION SERVICE IND PVT. LTD.	PUNE
1968....	GHANTOOT GULF CONTRACTING	CHENNAI
1969....	GHCL LTD.	VERAVAL
1970....	GIA (I) LABORATORY PVT. LTD.	MUMBAI
1971....	GIESECKE & DEVRIENT (I) PVT. LTD.	JHAJJAR
1972....	GIESECKE & DEVRIENT (I) PVT. LTD.	NEW DELHI
1973....	GIESECKE & DEVRIENT (I) PVT. LTD.	PUNE
1974....	GIGAMON SOLUTIONS (I) PVT. LTD.	KANCHEEPURAM
1975....	GILBARCO VEEDER ROOT (I) PVT. LTD.	KALYAN
1976....	GILBARCO VEEDER ROOT (I) PVT. LTD.	KOLKATA
1977....	GILBARCO VEEDER ROOT (I) PVT. LTD.	PUNE
1978....	GIRNAR SOFTWARE PVT. LTD.	BARAN
1979....	GIRNAR SOFTWARE PVT. LTD.	JAIPUR
1980....	GKN AEROSPACE (I) PVT. LTD.	BENGALURU
1981....	GKN SINTER METALS PVT.LTD.	PUNE
1982....	GL&V (I) PVT. LTD.	PUNE
1983....	GLENEAGLES GLOBAL	GUDUVANCHERY
1984....	GLENMARK PHARMACEUTICAL	MAPUSA
1985....	GLENMARK PHARMACEUTICAL LTD.	AURANGABAD
1986....	GLENMARK PHARMACEUTICAL LTD.	NAVI MUMBAI
1987....	GLOBAL CONVEYOR SYSTEMS	PANAJI
1988....	GLOBAL EDGE SOFTWARE LTD.	BENGALURU
1989....	GLOBAL EDGE SOFTWARE LTD.	HYDERABAD
1990....	GLOBAL EDGE SOFTWARE LTD.	VIJAYAWADA
1991....	GLOBAL FOUNDRIES	BENGALURU
1992....	GLOBAL FOUNDRIES SINGAPORE PTE LTD.	CHENNAI

S.No.	Organization	Location
1993....	GLOBAL HEALTH PVT. LTD.	GURUGRAM
1994....	GLOBAL HEALTHCARE SYSTEMS PVT. LTD.	KOLKATA
1995....	GLOBAL LOGIC (I) LTD.	NAGAPATTINAM
1996....	GLOBAL LOGIC (I) PVT. LTD.	NAGPUR
1997....	GLOBAL MANTRA INNOVATIONS	CHENNAI
1998....	GLOBAL PROCESS SYSTEM	ABU DHABI
1999....	GLOBAL STEEL	CHENNAI
2000....	GLOBAL TELECOMMUNICATION PVT. LTD.	NEW DELHI
2001....	GM TECH CENTER	BENGALURU
2002....	GMAX AUTO LTD.	NARNAUL
2003....	GMCH UDAIPUR	UDAIPUR
2004....	GMMCO LTD.	CHENNAI
2005....	GMMCO LTD.	GULBARGA
2006....	GMMCO LTD.	PORVORIM
2007....	GNS ENGINEERING (I) PVT. LTD.	BENGALURU
2008....	GOA POLLUTION CONTROL BOARD	BARDEZ
2009....	GOA POLLUTION CONTROL BOARD	GOA
2010....	GOA POLLUTION CONTROL BOARD	MADGAON
2011....	GOA POLLUTION CONTROL BOARD	MAPUSA
2012....	GOA POLLUTION CONTROL BOARD	PANAJI
2013....	GOA POLLUTION CONTROL BOARD	PANJIM
2014....	GOA SHIPYARD LTD.	VASCO DA GAMA
2015....	GOA STATE INFRASTRUCTURE DEV CORP.LTD.	CARAMBOLIM
2016....	GODREJ & BOYCE MFG CO LTD.	AMBATTUR
2017....	GODREJ & BOYCE MFG CO LTD.	BADLAPUR
2018....	GODREJ & BOYCE MFG CO LTD.	CALICUT
2019....	GODREJ & BOYCE MFG CO LTD.	CHENNAI
2020....	GODREJ & BOYCE MFG CO LTD.	CHINCHANI
2021....	GODREJ & BOYCE MFG CO LTD.	HARIDWAR
2022....	GODREJ & BOYCE MFG CO LTD.	HOSUR
2023....	GODREJ & BOYCE MFG CO LTD.	JANGIPARA
2024....	GODREJ & BOYCE MFG CO LTD.	KALYAN
2025....	GODREJ & BOYCE MFG CO LTD.	KHARAGPUR
2026....	GODREJ & BOYCE MFG CO LTD.	MUMBAI
2027....	GODREJ & BOYCE MFG CO LTD.	NASHIK
2028....	GODREJ & BOYCE MFG CO LTD.	NEW DELHI
2029....	GODREJ & BOYCE MFG CO LTD.	PONDA
2030....	GODREJ & BOYCE MFG CO LTD.	PUNE
2031....	GODREJ & BOYCE MFG CO LTD.	SHIRWAL
2032....	GODREJ & BOYCE MFG CO LTD.	SINDHUDURG
2033....	GODREJ & BOYCE MFG CO LTD.	THANE
2034....	GODREJ & BOYCE MFG CO LTD.	VADODARA
2035....	GODREJ & BOYCE MFG CO LTD.	VASAI
2036....	GOLDMAN SACHS	BENGALURU
2037....	GOLDMANSACHS SERVICES PVT. LTD.	BENGALURU
2038....	GOODRICH AEROSPACE SERVICE PVT. LTD.	BENGALURU
2039....	GOODWORKLABS PVT. LTD.	BENGALURU
2040....	GOODYEAR SOUTH ASIA PVT. LTD.	AURANGABAD
2041....	GOPIVOTAL SOFTWARE (I) LTD.	MADURAI
2042....	GOVERNMENT FLYING TRAINING SCHOOL	BENGALURU
2043....	GOVERNMENT OF MAHARASHTRA	MUMBAI
2044....	GOVERNMENT OF ODISHA	BHUBANESWAR
2045....	GOVERNMENT POLYTECHNIC FOR WOMEN	BUDGAM
2046....	GOVT. COLLEGE ARTS,SCIENCE & COMMERCE	COLVA

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
2047....	GOVT. COLLEGE ARTS,SCIENCE & COMMERCE	PANJIM
2048....	GOVT. COLLEGE OF ENGINEERING	BHUBANESWAR
2049....	GOVT. ENGINEERING COLLEGE	JAGDALPUR
2050....	GOWRA ENGINEERING TECHNOLOGIES PVT. LTD.	VISAKHAPATNAM
2051....	GRAEBERT (I) SOFTWARE PVT. LTD.	RAMNAGAR
2052....	GRAMEEN KOOA FINANCIAL SERVICE PVT. LTD.	BENGALURU
2053....	GRAMENER TECHNOLOGY SOLUTIONS PVT. LTD.	HYDERABAD
2054....	GRAMIN BANK OF ARYAVART	MEERUT
2055....	GRANITE CONSTRUCTION CO	ABU DHABI
2056....	GRANULES INDIA	MAYILADUTHURAI
2057....	GRASIM INDUSTRIES LTD.	UJJAIN
2058....	GRAZIANO TRASMISSIONI (I) PVT. LTD.	FARIDABAD
2059....	GREAT INNOVUS SOLUTION PVT. LTD.	MADURAI
2060....	GREAT INNOVUS SOLUTIONS PVT. LTD.	MADURAI
2061....	GREAT LAKES INSTITUTE OF MANAGEMENT	GURUGRAM
2062....	GREAT SOFTWARE LABORATORY PVT. LTD.	BHUSAWAL
2063....	GREAVES COTTON LTD.	AURANGABAD
2064....	GREAVES COTTON LTD.	CHENNAI
2065....	GREEN BRIDGE	NAVI NUMBAI
2066....	GREEN CARRIER CONSULTANCY AND TECH SOLUTION	HYDERABAD
2067....	GREEN LINE SOLAR PVT. LTD.	PUDUCHERRY
2068....	GREENLINE DELMARK PVT. LTD.	BISHNUPUR
2069....	GREENMARK DEVELOPERS	HYDERABAD
2070....	GREENWAY ENGINEERING WORKS	KANYAKUMARI
2071....	GREYORANGE (I) PVT. LTD.	KAITHAL
2072....	GREYORANGE (I) PVT. LTD.	KANPUR
2073....	GREYORANGE (I) PVT. LTD.	KOLKATA
2074....	GREYORANGE (I) PVT. LTD.	MUMBAI
2075....	GRIEP PVT. LTD.	COIMBATORE
2076....	GRIFFIN PROJECT DEVELOPMENT CONSULTANT	DUBAI
2077....	GRIT INNOVATION SOFTWARE PVT. LTD.	HYDERABAD
2078....	GROWCONTROLS	HYDERABAD
2079....	GRUPO COSMOS (I) PVT. LTD.	CHENNAI
2080....	GSP CROP SCIENCE PVT. LTD.	VADODARA
2081....	GSS SOFTWARE	CHENNAI
2082....	GT NEXUS AN INFOR CO	TIKAMGARH
2083....	G-TEKT (I) PVT. LTD.	GURUGRAM
2084....	GTN ENGINEERING (I) LTD.	PUDUKKOTTAI
2085....	GTTT(MBI) INDIANNAVY	MUMBAI
2086....	GUAVUS NETWORK SYSTEMS PVT. LTD.	DWARKA
2087....	GUILTFREE INDUSTRIES LTD.	HOWRAH
2088....	GUINEE	GUINEA
2089....	GUJARAT STATE FERTILIZERS AND CHEMICALS	VADODARA
2090....	GULATI STEEL PVT. LTD.	FARIDABAD
2091....	GULF CONTRACTING CO WLL	DELHI
2092....	GULF GLASS INDUSTRIES	MALAPPURAM
2093....	GULF MEP SERVICES	ADOOR
2094....	GULF PIPING CO W.L.L.	MUSSAFFAH
2095....	GULF VALVE - PENTAIR	CHENNAI
2096....	GULF VALVE FZE	AJMAN
2097....	GV TOOL CO	CHENNAI
2098....	H K AL SADIQ SONS CO LTD.	KOZHICODE
2099....	HABBOUSH GROUP GLOBAL LTD.	KAYAMKULAM
2100....	HAL HELICOPTER MRO DIV	IRINJALAKUDA

S.No.	Organization	Location
2101....	HALLIBURTON FAR EAST PTE LTD.	AHMEDABAD
2102....	HALLIBURTON FAR EAST PTE LTD.	MUMBAI
2103....	HALLIBURTON FAR EAST PTE LTD.	SINGAPORE
2104....	HALLIBURTON FAR EAST PTE LTD.	THOOTHUKUDI
2105....	HALMA (I) PVT. LTD. (TEXECOM)	BENGALURU
2106....	HAMAD MEDICAL CORPORATION	DOHA
2107....	HAMILTON HOUSEWARES PVT. LTD.	MUMBAI
2108....	HANON CLIMATE SYSTEMS (I) PVT. LTD.	DHARUHERA
2109....	HANON CLIMATE SYSTEMS (I) PVT. LTD.	RAMPUR
2110....	HANON CLIMATE SYSTEMS (I) PVT. LTD.	SRI GANGANAGAR
2111....	HAPPIEST MINDS TECHNOLOGIES PVT. LTD.	BENGALURU
2112....	HARITA FEHRER LTD.	COIMBATORE
2113....	HARITA FEHRER LTD.	HOSUR
2114....	HARITA FEHRER LTD.	KANCHEEPURAM
2115....	HARITA FEHRER LTD.	PUNE
2116....	HARITA SEATING SYSTEMS LTD.	BENGALURU
2117....	HARITA SEATING SYSTEMS LTD.	DHARWAD
2118....	HARITA SEATING SYSTEMS LTD.	DINDIGUL
2119....	HARITA SEATING SYSTEMS LTD.	HOSUR
2120....	HARITA SEATING SYSTEMS LTD.	THIRUTHURAIPOONDI
2121....	HARITA TECHSERV PVT. LTD.	AMRAVATI
2122....	HARITA TECHSERV PVT. LTD.	PUDUCHERRY
2123....	HARITA TECHSERV PVT. LTD.	PUNE
2124....	HARLEY DAVIDSON MOTOR CO (I) PVT. LTD.	BAWAL
2125....	HARLEY DAVIDSON MOTOR CO (I) PVT. LTD.	GURUGRAM
2126....	HARLEY DAVIDSON MOTOR CO (I) PVT. LTD.	YAMUNA NAGAR
2127....	HARMAN CONNECTED SERVICES	BENGALURU
2128....	HARMAN CONNECTED SERVICES	BERHAMPUR
2129....	HARMAN CONNECTED SERVICES	HARIHAR
2130....	HARMAN CONNECTED SERVICES	MYSORE
2131....	HARMAN CONNECTED SERVICES	PUNE
2132....	HARMAN INTERNATIONAL (I) PVT. LTD.	BENGALURU
2133....	HARMAN INTERNATIONAL (I) PVT. LTD.	COIMBATORE
2134....	HARMAN INTERNATIONAL (I) PVT. LTD.	PIMPRI
2135....	HARMAN INTERNATIONAL (I) PVT. LTD.	PUNE
2136....	HARRISONS MALAYALAM LTD.	COIMBATORE
2137....	HARTFORD STEAM BOILER INTERNATIONAL GMBH	MUMBAI
2138....	HASKONINGDHV (I) PVT. LTD.	NAVI MUMBAI
2139....	HAUTE COTURE	BENGALURU
2140....	HAVELLS (I) LTD.	FARIDABAD
2141....	HAVELLS (I) LTD.	NOIDA
2142....	HBL POWER SYSTEMS LTD.	HYDERABAD
2143....	HBL POWER SYSTEMS LTD.	VISAKHAPATNAM
2144....	HCCBPL GOA	BICHOLIM
2145....	HCL AUSTRALIA SERVICES PVT. LTD.	MUMBAI
2146....	HCL COMNET LTD.	CHENNAI
2147....	HCL COMNET LTD.	NEW DELHI
2148....	HCL COMNET LTD.	RANGAPARA
2149....	HCL JAPAN LTD.	DELHI
2150....	HCL TECHNOLOGIES LTD.	AJMER
2151....	HCL TECHNOLOGIES LTD.	ALLAHABAD
2152....	HCL TECHNOLOGIES LTD.	BENGALURU
2153....	HCL TECHNOLOGIES LTD.	BERHAMPUR
2154....	HCL TECHNOLOGIES LTD.	BHARATPUR

S.No.	Organization	Location
2155....	HCL TECHNOLOGIES LTD.	BODUPPAL
2156....	HCL TECHNOLOGIES LTD.	CHENNAI
2157....	HCL TECHNOLOGIES LTD.	DELHI
2158....	HCL TECHNOLOGIES LTD.	FARIDABAD
2159....	HCL TECHNOLOGIES LTD.	GHAZIABAD
2160....	HCL TECHNOLOGIES LTD.	GUNTUR
2161....	HCL TECHNOLOGIES LTD.	HOSUR
2162....	HCL TECHNOLOGIES LTD.	HYDERABAD
2163....	HCL TECHNOLOGIES LTD.	JAIPUR
2164....	HCL TECHNOLOGIES LTD.	KARIMNAGAR
2165....	HCL TECHNOLOGIES LTD.	KOVILPATTI
2166....	HCL TECHNOLOGIES LTD.	KRISHNAGIRI
2167....	HCL TECHNOLOGIES LTD.	MADURAI
2168....	HCL TECHNOLOGIES LTD.	NALGONDA
2169....	HCL TECHNOLOGIES LTD.	NAMAKKAL
2170....	HCL TECHNOLOGIES LTD.	NELLORE
2171....	HCL TECHNOLOGIES LTD.	NEW DELHI
2172....	HCL TECHNOLOGIES LTD.	NOIDA
2173....	HCL TECHNOLOGIES LTD.	PUNE
2174....	HCL TECHNOLOGIES LTD.	SIVAGANGAI
2175....	HCL TECHNOLOGIES LTD.	SRIKAKULAM
2176....	HCL TECHNOLOGIES LTD.	TUMKUR
2177....	HCL TECHNOLOGIES LTD.	WARANGAL
2178....	HD INFO PVT. LTD.	ADILABAD
2179....	HD INFO PVT. LTD.	HYDERABAD
2180....	HDFC LTD.	VASCO DA GAMA
2181....	HEALTHIUM MEDTECH PVT. LTD.	BENGALURU
2182....	HEAVY ENGINEERING INDUSTRIES & SHIPBUILD	VISAKHAPATNAM
2183....	HEDRICH VACUUM SYSTEMS (I) PVT. LTD.	KOLKATA
2184....	HEIDELBERGCEMENT (I) LTD.	NEW DELHI
2185....	HEISCO	PATHANAMTHITTA
2186....	HELLA (I) AUTOMOTIVE PVT. LTD.	AURANGABAD
2187....	HELLA (I) AUTOMOTIVE PVT. LTD.	JALNA
2188....	HELLA (I) AUTOMOTIVE PVT. LTD.	PUNE
2189....	HELLA (I) AUTOMOTIVE PVT. LTD.	SANGLI
2190....	HELLA (I) AUTOMOTIVE PVT. LTD.	WARDHA
2191....	HELLA (I) AUTOMOTIVE PVT. LTD.	AHMEDABAD
2192....	HELLA (I) AUTOMOTIVE PVT. LTD.	CHENNAI
2193....	HELLA (I) AUTOMOTIVE PVT. LTD.	GREATER NOIDA
2194....	HELLA (I) AUTOMOTIVE PVT. LTD.	LUCKNOW
2195....	HELLA (I) AUTOMOTIVE PVT. LTD.	OOTY
2196....	HELLO SAARTHI	NEW DELHI
2197....	HENDERSON INTERNATIONAL	THIRUVELLORE
2198....	HENKEL ADHESIVES TECHNOLOGIES PVT. LTD.	ALIBAG
2199....	HENKEL ADHESIVES TECHNOLOGIES PVT. LTD.	BENGALURU
2200....	HENKEL ANAND (I) PVT. LTD.	FARIDABAD
2201....	HENKEL ANAND (I) PVT. LTD.	TIRUCHIRAPPALLI
2202....	HEPATICA TECHNOLOGIES PVT. LTD.	BENGALURU
2203....	HEPATICA TECHNOLOGIES PVT. LTD.	CHICKBALLAPUR
2204....	HEPATICA TECHNOLOGIES PVT. LTD.	COIMBATORE
2205....	HEPATICA TECHNOLOGIES PVT. LTD.	ERODE
2206....	HEPATICA TECHNOLOGIES PVT. LTD.	KARUR
2207....	HEPATICA TECHNOLOGIES PVT. LTD.	NAMAKKAL
2208....	HEPATICA TECHNOLOGIES PVT. LTD.	PALANI

S.No.	Organization	Location
2209....	HERE TECHNOLOGIES	MUNGER
2210....	HERO FUTURE ENERGIES PVT. LTD.	JHUNJHUNU
2211....	HERO MOTOCORP LTD.	JAIPUR
2212....	HERO MOTOCORP LTD.	GURUGRAM
2213....	HERO MOTOCORP LTD.	HOSUR
2214....	HERO MOTOCORP LTD.	HARIDWAR
2215....	HERO SOLAR ENERGY PVT. LTD.	HARIDWAR
2216....	HESAWARE TECHNOLOGIES LTD.	NAVI MUMBAI
2217....	HEWIIT ASSOCIATES (I) PVT. LTD.	GURUGRAM
2218....	HEWLETT PACKARD ENTERPRISE	BENGALURU
2219....	HEWLETT PACKARD ENTERPRISE	BHOPAL
2220....	HEWLETT PACKARD ENTERPRISE	GURUGRAM
2221....	HEWLETT PACKARD ENTERPRISE	MUMBAI
2222....	HEWLETT PACKARD ENTERPRISE	NAGERCOIL
2223....	HEWLETT PACKARD ENTERPRISE	RANCHI
2224....	HEWLETT PACKARD ENTERPRISE	SALEM
2225....	HEWLETT PACKARD ENTERPRISE	VISAKHAPATNAM
2226....	HEWLETT PACKARD ENTERPRISE	SINGAPORE
2227....	HEWLETT PACKARD GLOBALSOFT LTD.	BENGALURU
2228....	HEXA OIL&GAS SERVICES LLC	CHENNAI
2229....	HEXAGON CAPABILITY CENTER (I) PVT. LTD.	SIDDIPET
2230....	HEXAGON CAPABILITY CENTER (I) PVT. LTD.	BILASPUR
2231....	HEXAGON CAPABILITY CENTER (I) PVT. LTD.	HYDERABAD
2232....	HEXAWARE TECHNOLOGIES LTD.	CHENNAI
2233....	HEXAWARE TECHNOLOGIES LTD.	ALIBAG
2234....	HEXAWARE TECHNOLOGIES LTD.	KOLKATA
2235....	HEXAWARE TECHNOLOGIES LTD.	MUMBAI
2236....	HEXAWARE TECHNOLOGIES LTD.	NAVI MUMBAI
2237....	HEXAWARE TECHNOLOGIES LTD.	BENGALURU
2238....	HEXAWARE TECHNOLOGIES LTD.	PUNE
2239....	HI STAR WATER SOLUTIONS LLC	TIRUCHIRAPPALLI
2240....	HICAL TECHNOLOGIES PVT. LTD.	BENGALURU
2241....	HIDI RAE CONSULTING ENGINEERS INC	DOHA
2242....	HIGHWAY INDUSTRIES LTD.	REWARI
2243....	HIL LTD.	HYDERABAD
2244....	HILALCO WLL	PALAKKAD
2245....	HILLSBOROUGH GENERAL TRADING LLC	DUBAI
2246....	HIMATSINGKA SEIDE LTD.	BENGALURU
2247....	HIMJAL BEVERAGES PVT. LTD.	HYDERABAD
2248....	HINDALCO INDUSTRIES LTD.	KOCHI
2249....	HINDALCO INDUSTRIES LTD.	KOLLAM
2250....	HINDUJA FOUNDRIES LTD.	CHENNAI
2251....	HINDUJA GLOBAL SOLUTION	SAMASTIPUR
2252....	HINDUJA TECH LTD.	NEYVELI
2253....	HINDUSTAN AERONAUTICS LTD.	BENGALURU
2254....	HINDUSTAN AERONAUTICS LTD.	KORAPUT
2255....	HINDUSTAN AERONAUTICS LTD.	NASHIK
2256....	HINDUSTAN AERONAUTICS LTD.	SUNABEDA
2257....	HINDUSTAN AERONAUTICS LTD.	VISAKHAPATNAM
2258....	HINDUSTAN COCA COLA BEVERAGES PVT. LTD.	BENGALURU
2259....	HINDUSTAN COPPER LTD.	KHETRI
2260....	HINDUSTAN PETROLEUM CORPORATION LTD.	KOCHI
2261....	HINDUSTAN SHIPYARD LTD.	VISAKHAPATNAM
2262....	HINDUSTAN ZINC LTD.	CHITTOOR

S.No.	Organization	Location
2263....	HINDUSTAN ZINC LTD.	UDAIPUR
2264....	HITACHI AUTOMOTIVE SYSTEMS	BHUBANESWAR
2265....	HITACHI CONSULTING CORPORATION	HYDERABAD
2266....	HITACHI DATA SYSTEMS (I) PVT. LTD.	MUMBAI
2267....	HITACHI SOLUTIONS LTD.	THIRUVANANTHAPURAM
2268....	HITECH ENGINEERS	GURUGRAM
2269....	HI-TECH GEARS LTD.	PUNE
2270....	HI-TECH ROBOTIC SYSTEMZ LTD.	NEW DELHI
2271....	HMC MM AUTO LTD.	MATHURA
2272....	HNG FLOAT GLASS LTD.	VADODARA
2273....	HOERBIGER DIVISION/ AL-ZAHEM INTERNATION	MAYILADUTHURAI
2274....	HOGANAS (I) PVT. LTD.	AHMEDNAGAR
2275....	HOLTEC ASIA PVT. LTD.	PUNE
2276....	HONDA CARS (I) LTD.	GHAZIABAD
2277....	HONDA CARS (I) LTD.	GURUGRAM
2278....	HONDA MOTORCYCLE & SCOOTER (I) PVT. LTD.	BENGALURU
2279....	HONDA MOTORCYCLE & SCOOTER (I) PVT. LTD.	NEW DELHI
2280....	HONDA MOTORCYCLE & SCOOTER (I) PVT. LTD.	BHIWADI
2281....	HONDA MOTORCYCLE & SCOOTER (I) PVT. LTD.	PANIPAT
2282....	HONDA R&D (I) PVT. LTD.	YAMUNA NAGAR
2283....	HONDA R&D (I) PVT. LTD.	KANNUR
2284....	HONEYWELL AUTOMATION (I) LTD.	PUNE
2285....	HONEYWELL AUTOMATION (I) LTD.	TALEGAON DABHADE
2286....	HONEYWELL AUTOMATION (I) LTD.	DEHRADUN
2287....	HONEYWELL AUTOMATION (I) LTD.	VIRUDHACHALAM
2288....	HONEYWELL INTERNATIONAL	BENGALURU
2289....	HONEYWELL INTERNATIONAL	NEW DELHI
2290....	HONEYWELL INTERNATIONAL	DELHI
2291....	HONEYWELL INTERNATIONAL	SHARJAH
2292....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	BENGALURU
2293....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	HYDERABAD
2294....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	MADURAI
2295....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	PUNE
2296....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	THANJAVUR
2297....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	KOZHICODE
2298....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	KANPUR
2299....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	CHIKKAMAGALURU
2300....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	GUNTUR
2301....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	SECUNDERABAD
2302....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	NEW DELHI
2303....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	VIJAYAWADA
2304....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	MUMBAI
2305....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	BODINAYAKANUR
2306....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	DELHI
2307....	HONEYWELL TECHNOLOGIES SOLUTION PVT. LTD.	GURUGRAM
2308....	HORIZON ELECTRO SOLUTION PVT. LTD.	PUNE
2309....	HOSPIRA HEALTH CARE (I) PVT. LTD.	VISHAKAPATNAM
2310....	HOSPIRA HEALTH CARE (I) PVT. LTD.	CHENNAI
2311....	HOWARD FINLEY AL KHALEEJ	ABU DHABI
2312....	HOWDEN SOLYVENT (I) PVT. LTD.	KOLKATA
2313....	HP (I) SALES PVT. LTD.	FARIDABAD
2314....	HP COMPUTING AND PRINTING SYSTEMS	BENGALURU
2315....	HP INC	BENGALURU
2316....	HP PPS (I) OPERATIONS PVT. LTD.	BENGALURU

S.No.	Organization	Location
2317....	HP PPS ISO PVT. LTD.	BENGALURU
2318....	HPCL MITTAL ENERGY LTD.	HYDERABAD
2319....	HPCL MITTAL ENERGY LTD.	VELLORE
2320....	HPE SOFTWARE OPERATIONS	BENGALURU
2321....	HPE SOFTWARE OPERATIONS	KOTTAYAM
2322....	HPL ELECTRIC & POWER LTD.	GURUGRAM
2323....	HSBC EDPI PVT. LTD.	BENGALURU
2324....	HSBC GLOBAL TECHNOLOGY	PUNE
2325....	HSBC SOFTWARE DEVELOPMENT (I) PVT. LTD.	BENGALURU
2326....	HSBC SOFTWARE DEVELOPMENT (I) PVT. LTD.	HYDERABAD
2327....	HSBC SOFTWARE DEVELOPMENT (I) PVT. LTD.	PUNE
2328....	HSBC SOFTWARE DEVELOPMENT (I) PVT. LTD.	BHOPAL
2329....	HSBC SOFTWARE DEVELOPMENT (I) PVT. LTD.	SECUNDERABAD
2330....	HSBC SOFTWARE DEVELOPMENT (I) PVT. LTD.	THANE
2331....	HSBC SOFTWARE DEVELOPMENT (I) PVT. LTD.	SOLAPUR
2332....	HUAWEI TECHNOLOGIES (I) PVT. LTD.	BENGALURU
2333....	HUAWEI TECHNOLOGIES (I) PVT. LTD.	ELURU
2334....	HUBNER INTERFACE SYSTEMS (I) PVT. LTD.	BENGALURU
2335....	HUGHES SYSTIQUE PVT. LTD.	BILASPUR
2336....	HUGHES SYSTIQUE PVT. LTD.	DELHI
2337....	HUMANETICS INNOVATIVE SOLUTIONS (I) PVT. LTD.	BENGALURU
2338....	HUMANITICS DIMENSION SOFTWARE PVT. LTD.	GWALIOR
2339....	HUMARALABS TECHNOLOGY PVT. LTD.	GURUGRAM
2340....	HUNTSMAN INTERNATIONAL (I) PVT. LTD.	VADODARA
2341....	HURITS CONSULTING PVT.,LTD.	NAGPUR
2342....	HUSCO HYDRAULICS PVT. LTD.	PUNE
2343....	HUSSMANN SERVICES (I) LLP	BENGALURU
2344....	HUTCHINSON SA (I) LIAISON OFFICE	GURUGRAM
2345....	HYDAC (I) PVT. LTD.	PUNE
2346....	HYFLUX PTE LTD.	MADURAI
2347....	HYSTER-YALE LIFT TRUCKS (I) PVT. LTD.	PUNE
2348....	HYUNDAI MOBIS (I) LTD.	CHENNAI
2349....	HYUNDAI MOBIS (I) LTD.	HYDERABAD
2350....	HYUNDAI MOBIS (I) LTD.	JODHPUR
2351....	HYUNDAI MOBIS (I) LTD.	KHAMMAM
2352....	HYUNDAI MOBIS (I) LTD.	THANJAVUR
2353....	HYUNDAI MOTOR (I) ENGINEERING PVT. LTD.	HYDERABAD
2354....	HYUNDAI MOTOR (I) ENGINEERING PVT. LTD.	CHENNAI
2355....	HYUNDAI MOTOR (I) ENGINEERING PVT. LTD.	VELLORE
2356....	HYUNDAI MOTOR (I) LTD.	CHENNAI
2357....	HYUNDAI MOTOR (I) LTD.	MANAPAKKAM
2358....	I&B AUTOMATION & CONTROLS PVT. LTD.	FARIDABAD
2359....	I&S ENGINEERS	COIMBATORE
2360....	I2I TELESOLUTIONS & TELEMEDICINE PVT. LTD.	BENGALURU
2361....	I2S ENTERPRISE SOLUTIONS SDN BHD	GORAKHPUR
2362....	IBA PARTICAL THERAPY INDAI PVT. LTD.	PUDUKKOTTAI
2363....	IBASET (I) PVT. LTD.	AMBAJI
2364....	IBM (I) PVT. LTD.	ALIGARH
2365....	IBM (I) PVT. LTD.	BENGALURU
2366....	IBM (I) PVT. LTD.	CHENNAI
2367....	IBM (I) PVT. LTD.	COIMBATORE
2368....	IBM (I) PVT. LTD.	GHAZIABAD
2369....	IBM (I) PVT. LTD.	HOWRAH
2370....	IBM (I) PVT. LTD.	PUNE



S.No.	Organization	Location
2371....	IBM (I) PVT. LTD.	VELLORE
2372....	IBM (I) PVT. LTD.	DELHI
2373....	IBM (I) PVT. LTD.	HYDERABAD
2374....	IBM (I) PVT. LTD.	THIRUVANANTHAPURAM
2375....	IBM (I) PVT. LTD.	CHITTOOR
2376....	IBM (I) PVT. LTD.	DHARMAPURI
2377....	IBM (I) PVT. LTD.	FARIDABAD
2378....	IBM (I) PVT. LTD.	GURUGRAM
2379....	IBM (I) PVT. LTD.	KANCHEEPURAM
2380....	IBM (I) PVT. LTD.	KANPUR
2381....	IBM (I) PVT. LTD.	KOLKATA
2382....	IBM (I) PVT. LTD.	KOTA
2383....	IBM (I) PVT. LTD.	LOSAL
2384....	IBM (I) PVT. LTD.	MUMBAI
2385....	IBM (I) PVT. LTD.	NEW DELHI
2386....	IBM (I) PVT. LTD.	NOIDA
2387....	IBM (I) PVT. LTD.	SECUNDERABAD
2388....	IBM (I) PVT. LTD.	VADODARA
2389....	IBM (I) PVT. LTD.	GORANTLA
2390....	IBM (I) PVT. LTD.	ANANTHAPUR
2391....	IBS SOFTWARE SERVICES PVT. LTD.	THIRUVALLA
2392....	IBS SOFTWARE SERVICES PVT. LTD.	THIRUVANANTHAPURAM
2393....	IBS SOFTWARE SERVICES PVT. LTD.	ALAPPUZHA
2394....	IBS SOFTWARE SERVICES PVT. LTD.	COCHIN
2395....	IBS SOFTWARE SERVICES PVT. LTD.	KANNUR
2396....	IBS SOFTWARE SERVICES PVT. LTD.	KOCHI
2397....	IBUILDING AUTOMATION PVT. LTD.	CHENNAI
2398....	ICE (ASIA) PVT. LTD.	MUMBAI
2399....	ICERTIS SOLUTIONS PVT. LTD.	PUNE
2400....	ICICI BANK	NEW DELHI
2401....	ICICI VENTURE FUNDS MANAGEMENT CO	BENGALURU
2402....	ICON CLINICAL RESEARCH (I) PVT. LTD.	CHENNAI
2403....	ICU MEDICAL HUMAN CONNECTIONS	CHENNAI
2404....	ICU MEDICAL LLP	CHENNAI
2405....	IDEA CELLULAR LTD.	CHENNAI
2406....	IDEA CELLULAR LTD.	ERNAKULAM
2407....	IDEA CELLULAR LTD.	KOLKATA
2408....	IDEA CELLULAR LTD.	KOLLAM
2409....	IDEA CELLULAR LTD.	LUCKNOW
2410....	IDEA CELLULAR LTD.	THALASSERY
2411....	IDEA CELLULAR LTD.	VIRAR MAHARASHTRA
2412....	IDEAL LIGHTING SYSTEMS PVT. LTD.	ANKLESHWAR
2413....	IDEAL LIGHTING SYSTEMS PVT. LTD.	THIRUVANANTHAPURAM
2414....	IDEAS REVENUE SOLUTIONS	PUNE
2415....	IDEAZ INFINITE	MUMBAI
2416....	I-DESIGN ENGINEERING SOLUTIONS LTD.	NAGAON
2417....	I-DESIGN ENGINEERING SOLUTIONS LTD.	PUNE
2418....	IDRIVE SOFTWARE (I) PVT. LTD.	BENGALURU
2419....	IFB AUTOMOTIVE PVT. LTD.	BENGALURU
2420....	IFLUIDS ENGINEERING	CHENNAI
2421....	IFS SOLUTIONS (I) PVT. LTD.	FARIDABAD
2422....	IGATE COMPUTER SYSTEMS LTD.	MUMBAI
2423....	IGATE GLOBAL SOLUTIONS	BENGALURU
2424....	IGATE GLOBAL SOLUTIONS	JERSEY

S.No.	Organization	Location
2425....	IGNITARIUM TECHNOLOGY SOLUTIONS PVT. LTD.	BENGALURU
2426....	IGUS (I) PVT. LTD.	NEW DELHI
2427....	IKABIT SOFTWARE SYSTEMS PVT. LTD.	VISHAKAPATNAM
2428....	IKK GROUP OF COMPANIES	CALICUT
2429....	IL&FS TAMILNADU POWER CO LTD.	CHENNAI
2430....	IL&FS TECHNOLOGIES LTD.	JAIPUR
2431....	ILAND FS TECHNOLOGIES	VIJAYAWADA
2432....	ILINK SYSTEMS PVT. LTD.	PUNE
2433....	IMA PG (I) PVT. LTD.	PUNE
2434....	IMAGEX TECHNOLOGIES (I) PVT. LTD.	MADURAI
2435....	IMAGINATION TECHNOLOGIES	HYDERABAD
2436....	IMAX DIAGNOSTICS	BENGALURU
2437....	IMPETUS INFOTECH (I) PVT. LTD.	BENGALURU
2438....	IMPIGER TECHNOLOGIES	ANATAPUR
2439....	IMPLANTAIRE TECHNOLOGIES (I) PVT. LTD.	MYSORE
2440....	INA BEARINGS (I) PVT. LTD.	PUNE
2441....	INAPP INFORMATION TECHNOLOGIES (I) PVT. LTD.	THIRUVANANTHAPURAM
2442....	INATECH INFO SOLUTIONS	CHENNAI
2443....	INAUTIX TECHNOLOGIES (I) PVT. LTD.	CHENNAI
2444....	INAUTIX TECHNOLOGIES (I) PVT. LTD.	PUNE
2445....	INAUTIX TECHNOLOGIES (I) PVT. LTD.	ANUPURAM
2446....	INAUTIX TECHNOLOGIES (I) PVT. LTD.	THIRUVARUR
2447....	INAUTIX TECHNOLOGIES (I) PVT. LTD.	TARAMANI
2448....	INCADEA (I) PVT. LTD.	BENGALURU
2449....	INCAP CMS PVT. LTD.	BENGALURU
2450....	INCEDO INC	GURUGRAM
2451....	INCEDO INC	GHAZIABAD
2452....	INCESSANT TECHNOLOGIES PVT. LTD.	PRASHANTHI NILAYAM
2453....	INCTURE TECHNOLOGIES	BENGALURU
2454....	INCUBE SOLUTIONS PVT.LTD.	WARANGAL
2455....	INDECOMM GLOBAL SERVICES	BENGALURU
2456....	INDEL INDUSTRIES PVT.LTD.	PANVEL
2457....	INDEPENDENT PROFESSIONAL COSNULTANT	DOMBIVLI
2458....	INDIA CONVEYORS PVT. LTD.	KOLKATA
2459....	INDIA JAPAN LIGHTING PVT. LTD.	SALEM
2460....	INDIA MEDTRONIC PVT. LTD.	BENGALURU
2461....	INDIA PISTONS LTD.	CHENNAI
2462....	INDIA WORLD TECHNOLOGIES PVT. LTD.	GURUGRAM
2463....	INDIA YAMAHA MOTORS PVT. LTD.	CHENNAI
2464....	INDIAN AIR FORCE	BENGALURU
2465....	INDIAN AIR FORCE	CHANDIGARH
2466....	INDIAN AIR FORCE	DELHI
2467....	INDIAN AIR FORCE	KANPUR
2468....	INDIAN AIR FORCE	KOCHI
2469....	INDIAN AIR FORCE	NEW DELHI
2470....	INDIAN AIR FORCE	PUNE
2471....	INDIAN AIR FORCE	MOUNT ABU
2472....	INDIAN AIR FORCE	ALLAHABAD
2473....	INDIAN AIR FORCE	BAREILLY
2474....	INDIAN AIR FORCE	BARRACKPORE
2475....	INDIAN AIR FORCE	BELGAUM
2476....	INDIAN AIR FORCE	BIDAR
2477....	INDIAN AIR FORCE	CHENNAI
2478....	INDIAN AIR FORCE	COIMBATORE

S.No.	Organization	Location
2479....	INDIAN AIR FORCE	DARBHANGA
2480....	INDIAN AIR FORCE	DEHRADUN
2481....	INDIAN AIR FORCE	FARIDABAD
2482....	INDIAN AIR FORCE	GHAZIABAD
2483....	INDIAN AIR FORCE	GURUGRAM
2484....	INDIAN AIR FORCE	GUWAHATI
2485....	INDIAN AIR FORCE	GWALIOR
2486....	INDIAN AIR FORCE	HASIMARA
2487....	INDIAN AIR FORCE	JALANDHAR
2488....	INDIAN AIR FORCE	JAMNAGAR
2489....	INDIAN AIR FORCE	JORHAT
2490....	INDIAN AIR FORCE	KOLKATA
2491....	INDIAN AIR FORCE	KOLKATA
2492....	INDIAN AIR FORCE	MEERUT
2493....	INDIAN AIR FORCE	NAGPUR
2494....	INDIAN AIR FORCE	NAINITAL
2495....	INDIAN AIR FORCE	NALIYA
2496....	INDIAN AIR FORCE	NALIYA
2497....	INDIAN AIR FORCE	NASHIK
2498....	INDIAN AIR FORCE	NOIDA
2499....	INDIAN AIR FORCE	PANCHKULA
2500....	INDIAN AIR FORCE	PATNA
2501....	INDIAN AIR FORCE	PURULIA
2502....	INDIAN AIR FORCE	RAIPUR
2503....	INDIAN AIR FORCE	RAMPUR
2504....	INDIAN AIR FORCE	RISHRA
2505....	INDIAN AIR FORCE	ROHTAK
2506....	INDIAN AIR FORCE	SILCHAR
2507....	INDIAN AIR FORCE	SONITPUR
2508....	INDIAN AIR FORCE	TIRUVANNAMALAI
2509....	INDIAN AIR FORCE	UDHAMPUR
2510....	INDIAN AIR FORCE	VISAKHAPATNAM
2511....	INDIAN AIR FORCE	HYDERABAD
2512....	INDIAN AIR FORCE	KOTTAYAM
2513....	INDIAN AIR FORCE	RISHIKESH
2514....	INDIAN AIR FORCE	TEZPUR
2515....	INDIAN ARMY	AJMER
2516....	INDIAN ARMY	BATHINDA
2517....	INDIAN ARMY	BENGALURU
2518....	INDIAN ARMY	CHENNAI
2519....	INDIAN ARMY	CHIRAWAH
2520....	INDIAN ARMY	DEHRADUN
2521....	INDIAN ARMY	DELHI
2522....	INDIAN ARMY	DOMBIVLI
2523....	INDIAN ARMY	GHAZIABAD
2524....	INDIAN ARMY	GURUGRAM
2525....	INDIAN ARMY	HYDERABAD
2526....	INDIAN ARMY	JAIPUR
2527....	INDIAN ARMY	JAISALMER
2528....	INDIAN ARMY	JALANDHAR
2529....	INDIAN ARMY	JAMMU
2530....	INDIAN ARMY	JAMSHEDPUR
2531....	INDIAN ARMY	JHANSI
2532....	INDIAN ARMY	KOCHI

S.No.	Organization	Location
2533....	INDIAN ARMY	KOLKATA
2534....	INDIAN ARMY	MEERUT
2535....	INDIAN ARMY	MHOW
2536....	INDIAN ARMY	NASIRABAD
2537....	INDIAN ARMY	NAVI MUMBAI
2538....	INDIAN ARMY	NEW DELHI
2539....	INDIAN ARMY	NOIDA
2540....	INDIAN ARMY	PANAGARH
2541....	INDIAN ARMY	PUNE
2542....	INDIAN ARMY	RANCHI
2543....	INDIAN ARMY	SANGLI
2544....	INDIAN ARMY	SECUNDERABAD
2545....	INDIAN ARMY	SHIMLA
2546....	INDIAN ARMY	TEZPUR
2547....	INDIAN ARMY	THIRUVANANTHAPURAM
2548....	INDIAN ARMY	UDHAMPUR
2549....	INDIAN ARMY	VAISHALI
2550....	INDIAN ARMY	AHMEDABAD
2551....	INDIAN ARMY	WELLINGTON
2552....	INDIAN COAST GUARD	RAMANATHAPURAM
2553....	INDIAN COAST GUARD	VASCO DA GAMA
2554....	INDIAN GOVERNMENT	BENGALURU
2555....	INDIAN HOTELS CO LTD.	MUMBAI
2556....	INDIAN HUME PIPE CO LRD.	DHULE
2557....	INDIAN IMMUNOLOGICALS LTD.	HYDERABAD
2558....	INDIAN INSTITUTE OF ASTROPHYSICS	BENGALURU
2559....	INDIAN INSTITUTE OF GEOMAGNETISM	NAVI MUMBAI
2560....	INDIAN INSTITUTE OF MANAGEMENT	BENGALURU
2561....	INDIAN INSTITUTE OF MANAGEMENT	HAPUR
2562....	INDIAN INSTITUTE OF SCIENCE EDUCATION	PUNE
2563....	INDIAN INSTITUTE OF TECHNOLOGY	PATNA
2564....	INDIAN INSTITUTE OF TECHNOLOGY	HYDERABAD
2565....	INDIAN INSTITUTE OF TECHNOLOGY	DELHI
2566....	INDIAN INSTITUTE OF TECHNOLOGY	KURDHA
2567....	INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION	HYDERABAD
2568....	INDIAN NAVY	NEW DELHI
2569....	INDIAN NAVY	AMBALA
2570....	INDIAN NAVY	BENGALURU
2571....	INDIAN NAVY	CHENNAI
2572....	INDIAN NAVY	COIMBATORE
2573....	INDIAN NAVY	DABOLIM
2574....	INDIAN NAVY	DELHI
2575....	INDIAN NAVY	FARIDABAD
2576....	INDIAN NAVY	KOCHI
2577....	INDIAN NAVY	MUMBAI
2578....	INDIAN NAVY	NEW DELHI
2579....	INDIAN NAVY	PUNE
2580....	INDIAN NAVY	VASCO DA GAMA
2581....	INDIAN NAVY	VISHAKAPATNAM
2582....	INDIAN NAVY	VISAKHAPATNAM
2583....	INDIAN OIL CORPORATION LTD.	PANIPAT
2584....	INDIAN OIL CORPORATION LTD.	PARADIP
2585....	INDIAN RAILWAYS	LUCKNOW
2586....	INDIAN RAILWAYS	JAIPUR

S.No.	Organization	Location
2587....	INDIAN REDCROSS	CHICKBALLAPUR
2588....	INDIAN SPACE RESEARCH ORGANISATION	THIRUVANANTHAPURAM
2589....	INDIAN SPACE RESEARCH ORGANISATION	SRIHARIKOTA
2590....	INDIAN SPACE RESEARCH ORGANISATION	NAGERCOIL
2591....	INDIAN SUCROSE LTD.	GHAZIABAD
2592....	INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH	KANCHEEPURAM
2593....	INDIRA GANDHI INSTITUTE OF DENTAL SCIENCE	PUDUCHERRY
2594....	INDO AUTOTECH LTD.	BENGALURU
2595....	INDO AUTOTECH LTD.	GUNTUR
2596....	INDO GERMAN TOOL ROOM	BHUBANESWAR
2597....	INDO GULF FERTILISERS	AMETHI
2598....	INDO TIBBETAN BORDER POLICE FORCE	SIKAR
2599....	INDOFIL INDUSTRIES LTD.	NAVI MUMBAI
2600....	INDORAMA INDUSTRIES LTD.	AMRITSAR
2601....	INDO-US MIM TEC PVT. LTD.	BENGALURU
2602....	INDUMATI HR FACILITIES PVT. LTD.	PATNA
2603....	INDUS IND BANK	AHMEDABAD
2604....	INDUS INTERNATIONAL FZC	SHARJAH
2605....	INDUS SOFTWARE TECHNOLOGIES PVT. LTD.	CHENNAI
2606....	INDUS SOFTWARE TECHNOLOGIES PVT. LTD.	PUNE
2607....	INDUS TEQSITE	CHENNAI
2608....	INDUSTRIAL ELECTRIC SPARE CENTRE	CHENNAI
2609....	INDUSTRIAL SEWING MACHINE REPAIRING CENTRE	KOLKATA
2610....	INEDA SYSTEMS PVT. LTD.	HYDERABAD
2611....	INFIMIT SOLUTIONS	BENGALURU
2612....	INFINEON TECHNOLOGIES (I) PVT. LTD.	JUNAGARH
2613....	INFINEON TECHNOLOGIES (I) PVT. LTD.	BENGALURU
2614....	INFINEON TECHNOLOGIES (I) PVT. LTD.	BOKARO
2615....	INFINEON TECHNOLOGIES (I) PVT. LTD.	KANPUR
2616....	INFINEON TECHNOLOGIES (I) PVT. LTD.	NEW DELHI
2617....	INFINERA (I) PVT. LTD.	BENGALURU
2618....	INFINERA (I) PVT. LTD.	MANIPAL
2619....	INFINERA (I) PVT. LTD.	COIMBATORE
2620....	INFINITE COMPUTER SOLUTIONS	BENGALURU
2621....	INFOCEPTS TECHNOLOGIES PVT. LTD.	NAGPUR
2622....	INFOEDGE (I) LTD.	ALWAR
2623....	INFOEDGE (I) LTD.	NEW DELHI
2624....	INFOGAIN (I) PVT. LTD.	NOIDA
2625....	INFOOBJECTS	JAIPUR
2626....	INFOR GLOBAL SOLUTION PVT. LTD.	PUNE
2627....	INFOR GLOBAL SOLUTION PVT. LTD.	HYDERABAD
2628....	INFORMATICA BUSINESS SOLUTIONS PVT. LTD.	BENGALURU
2629....	INFORMATICA BUSINESS SOLUTIONS PVT. LTD.	HOSUR
2630....	INFORMATICA BUSINESS SOLUTIONS PVT. LTD.	SIRSI
2631....	INFOSTRETCH CORPORATION (I) PVT. LTD.	AHMEDABAD
2632....	INFOSTRETCH CORPORATION (I) PVT. LTD.	NAGPUR
2633....	INFOSTRETCH CORPORATION (I) PVT. LTD.	AHMEDABAD
2634....	INFOSTRETCH CORPORATION (I) PVT. LTD.	INDORE
2635....	INFOSYS LTD.	ADOOR
2636....	INFOSYS LTD.	BEGUSARAI
2637....	INFOSYS LTD.	BENGALURU
2638....	INFOSYS LTD.	BHONGIR
2639....	INFOSYS LTD.	BHUBANESWAR
2640....	INFOSYS LTD.	CHENNAI

S.No.	Organization	Location
2641....	INFOSYS LTD.	DHARMAPURI
2642....	INFOSYS LTD.	HYDERABAD
2643....	INFOSYS LTD.	JODHPUR
2644....	INFOSYS LTD.	KALKA
2645....	INFOSYS LTD.	KOLLAM
2646....	INFOSYS LTD.	KOTTAYAM
2647....	INFOSYS LTD.	MOHALI
2648....	INFOSYS LTD.	NAVI MUMBAI
2649....	INFOSYS LTD.	NEW DELHI
2650....	INFOSYS LTD.	PUNE
2651....	INFOSYS LTD.	SECUNDERABAD
2652....	INFOSYS LTD.	SEONI
2653....	INFOSYS LTD.	TENALI
2654....	INFOSYS LTD.	THIRUVANANTHAPURAM
2655....	INFOSYS LTD.	VELLORE
2656....	INFOSYS LTD.	ZIRAKPUR
2657....	INFOSYS LTD.	ALANGULAM
2658....	INFOSYS LTD.	AURANGABAD
2659....	INFOSYS LTD.	BURHAR
2660....	INFOSYS LTD.	CHANDIGARH
2661....	INFOSYS LTD.	COIMBATORE
2662....	INFOSYS LTD.	DAVANGERE
2663....	INFOSYS LTD.	DEHRADUN
2664....	INFOSYS LTD.	DELHI
2665....	INFOSYS LTD.	DWARKA
2666....	INFOSYS LTD.	GIDDERBAHA
2667....	INFOSYS LTD.	GUNTAKAL
2668....	INFOSYS LTD.	GUNTUR
2669....	INFOSYS LTD.	GWALIOR
2670....	INFOSYS LTD.	HUBLI
2671....	INFOSYS LTD.	JAGADHRI
2672....	INFOSYS LTD.	JAIPUR
2673....	INFOSYS LTD.	JAMMU
2674....	INFOSYS LTD.	KALPAKKAM
2675....	INFOSYS LTD.	KANPUR
2676....	INFOSYS LTD.	KARKALA
2677....	INFOSYS LTD.	KATTANGULATHUR
2678....	INFOSYS LTD.	KOCHI
2679....	INFOSYS LTD.	KOLHAPUR
2680....	INFOSYS LTD.	KOLKATA
2681....	INFOSYS LTD.	KOZHIKODE
2682....	INFOSYS LTD.	LUCKNOW
2683....	INFOSYS LTD.	LUDHIANA
2684....	INFOSYS LTD.	MANGALURU
2685....	INFOSYS LTD.	MYSORE
2686....	INFOSYS LTD.	NOIDA
2687....	INFOSYS LTD.	OTTAPALAM
2688....	INFOSYS LTD.	PANCHKULA
2689....	INFOSYS LTD.	PATHANKOT
2690....	INFOSYS LTD.	SALEM
2691....	INFOSYS LTD.	TITWALA
2692....	INFOSYS LTD.	TUTICORIN
2693....	INFOSYS LTD.	VIRUDHUNAGAR
2694....	INFOSYS LTD.	VISAKHAPATNAM

S.No.	Organization	Location
2695....	INFOSYS TECHNOLOGIES LTD.	BENGALURU
2696....	INFOSYS TECHNOLOGIES LTD.	PUNE
2697....	INFOSYS TECHNOLOGIES LTD.	CALICUT
2698....	INFOSYS TECHNOLOGIES LTD.	CHANDIGARH
2699....	INFOSYS TECHNOLOGIES LTD.	CHENNAI
2700....	INFOSYS TECHNOLOGIES LTD.	KAIKONDANAHALLI
2701....	INFOSYS TECHNOLOGIES LTD.	KALYAN
2702....	INFOSYS TECHNOLOGIES LTD.	MYSORE
2703....	INFOSYS TECHNOLOGIES LTD.	PATNA
2704....	INFOSYS TECHNOLOGIES LTD.	SECUNDERABAD
2705....	INFOSYS TECHNOLOGIES LTD.	COIMBATORE
2706....	INFOVENTURES SYSTEMS & SERVICES	CHENNAI
2707....	INGERSOLL RAND TECHNOLOGY & SERVICES PVT. LTD.	CHENNAI
2708....	INGERSOLL RAND TECHNOLOGY & SERVICES PVT. LTD.	BENGALURU
2709....	INGERSOLL RAND TECHNOLOGY & SERVICES PVT. LTD.	MANDYA
2710....	INGERSOLL RAND TECHNOLOGY & SERVICES PVT. LTD.	RAICHUR
2711....	INGRAM MIRCO (I) PVT.LTD.	CHENNAI
2712....	INMANTEC INSTITUTIONS	GHAZIABAD
2713....	INMOBI SOFTWARE PVT. LTD.	BENGALURU
2714....	INNODATA (I) PVT. LTD.	BATHINDA
2715....	INNOHABIT TECHNOLOGIES PVT. LTD.	BENGALURU
2716....	INNOKON LABS	PUDUKKOTTAI
2717....	INNOMINDS SOFTWARE SEZ (I) PVT. LTD.	HYDERABAD
2718....	INNOMINDS SOFTWARE SEZ (I) PVT. LTD.	HATHRAS
2719....	INNOVA RUBBERS PVT. LTD.	AKOLA
2720....	INNOVA RUBBERS PVT. LTD.	NASHIK
2721....	INNOVA SOLUTIONS	CHENNAI
2722....	INNVOLUTION IMAGING TECHNOLOGIES PVT. LTD.	BENGALURU
2723....	INSTITUTE OF CHARTERED ACCOUNTANTS	KOLKATA
2724....	INSTITUTE OF MINERALS & MATERIALS TECHNOLOGY	BHUBANESWAR
2725....	INSTITUTE OF TECHNOLOGY & SCIENCE	GHAZIABAD
2726....	INTAS PHARMACEUTICALS	DEHRADUN
2727....	INTEGRAL RAPIDTRANZ SYSTEMS PVT. LTD.	TIRUCHIRAPPALLI
2728....	INTEGRATED GAS CONTROLS TECHNOLOGIES PVT. LTD.	NAVI MUMBAI
2729....	INTEL (I) PVT. LTD.	BENGALURU
2730....	INTEL (I) PVT. LTD.	BHUBANESWAR
2731....	INTEL (I) PVT. LTD.	HYDERABAD
2732....	INTEL (I) PVT. LTD.	CHENNAI
2733....	INTEL (I) PVT. LTD.	MYSORE
2734....	INTEL (I) TECHNOLOGIES PVT. LTD.	BENGALURU
2735....	INTEL CORPORATION	AKOLA
2736....	INTEL CORPORATION	BENGALURU
2737....	INTEL MOBILE COMM (I) PVT. LTD.	COIMBATORE
2738....	INTEL MOBILE COMM (I) PVT. LTD.	MYSORE
2739....	INTEL MOBILE COMM (I) PVT. LTD.	BENGALURU
2740....	INTEL SECURITY (I) PVT. LTD.	KODUNGALLUR
2741....	INTEL TECHNOLOGIES (I) PVT. LTD.	BENGALURU
2742....	INTEL TECHNOLOGIES (I) PVT. LTD.	MADURAI
2743....	INTEL TECHNOLOGIES (I) PVT. LTD.	TUTICORIN
2744....	INTELENET GLOBAL SERVICES	SECUNDERABAD
2745....	INTELIZIGN ENGG SERVICES PVT. LTD.	CHENNAI
2746....	INTELLECT DESIGN ARENA LTD.	CHENNAI
2747....	INTELLECT DESIGN INC	MIDDLETOWN
2748....	INTELLIFOUR SOFTWARE PVT. LTD.	AURANGABAD

S.No.	Organization	Location
2749....	INTELLIGRAPHICS TECHNOLOGIES (I) PVT. LTD.	BENGALURU
2750....	INTENSE TECHNOLOGIES PVT. LTD.	ONGOLE
2751....	INTENSE TECHNOLOGIES PVT. LTD.	NALGONDA
2752....	INTENT INFOTECH PVT. LTD.	BENGALURU
2753....	INTERGLOBE TECHNOLOGIES	FARIDABAD
2754....	INTERLACE (I) PVT. LTD.	CHENNAI
2755....	INTERNATIONAL AIRCON PVT. LTD.	MORADABAD
2756....	INTERNATIONAL APPLICATION SOLUTIONS PVT. LTD.	VARANASI
2757....	INTERNATIONAL CENTRE FOR AUTOMOTIVE TECH	FARIDABAD
2758....	INTERNATIONAL CENTRE FOR AUTOMOTIVE TECH	GURUGRAM
2759....	INTERNATIONAL DENTAL HOSPITAL	VELLORE
2760....	INTERNATIONAL INFORMATION TECHNOLOGY CO.	MUSCAT
2761....	INTERNATIONAL MANAGEMENT & CONSTRUCTION	ABU DHABI
2762....	INTERNATIONAL NEPAL FELLOWSHIP	POKHARA
2763....	INTERNATIONAL SCHOOL OF ENGINEERING	HYDERABAD
2764....	INTERTEK (I) PVT. LTD.	CHENNAI
2765....	INTERTEK (I) PVT. LTD.	FARIDABAD
2766....	INTERTEK GLOBAL LLC	SHARJAH
2767....	INTERTEK INSPEC OMAN	MADURAI
2768....	INTERTEK-MOODY INTERNATIONAL	CHENNAI
2769....	INTEVA PRODUCTS (I) AUTOMOTIVE PVT. LTD.	PUNE
2770....	INTRAEDGE TECHNOLOGIES PVT. LTD.	PUNE
2771....	INTUIT INC	BENGALURU
2772....	INTUIT PRODUCT DEVELOPMENT CENTER PVT. LTD.	BENGALURU
2773....	INTUIT TECHNOLOGY SERVICES PVT. LTD.	BENGALURU
2774....	INVECAS TECHNOLOGIES PVT. LTD.	HYDERABAD
2775....	INVECAS TECHNOLOGIES PVT. LTD.	RANGAREDDY
2776....	INVENSOFTECH TECHNOLOGIES PVT. LTD.	MYSORE
2777....	INVENT WELD AUTOMATION PVT. LTD.	CHENNAI
2778....	INVENTO LABS PVT. LTD.	SHADNAGAR
2779....	INVESCO (I) PVT. LTD.	HYDERABAD
2780....	INVISTA SINGAPORE FIBRES PTE LTD.	PANJANG
2781....	INZENTIO INFORMATION TECHNOLOGY SERVICES	CHENNAI
2782....	ION TRADING (I) PVT. LTD.	MOHALI
2783....	ION TRADING (I) PVT. LTD.	JIND
2784....	ION TRADING (I) PVT. LTD.	NEW DELHI
2785....	IONIDEA	BENGALURU
2786....	IONIXX TECHNOLOGIES	CHENNAI
2787....	IP CORE SOLUTIONS PVT. LTD.	BENGALURU
2788....	IP INFUSION SOFTWARE (I) PVT. LTD.	BENGALURU
2789....	IP RINGS LTD.	CHENNAI
2790....	IPCA LABORATORIES LTD.	MUMBAI
2791....	IPCA LABORATORIES LTD.	SILVASSA
2792....	IPE GLOBAL LTD.	GHAZIABAD
2793....	IPETRONIK INC	COIMBATORE
2794....	IPETRONIK INC	BENGALURU
2795....	IPHARRM PROCESS TECHNOLOGIES PVT. LTD.	SECUNDERABAD
2796....	IPRC MAHENDRAGIRI TAMILNADU	NAWADA
2797....	IPSOFT GLOBAL SERVICES LTD.	BENGALURU
2798....	IQOR (I) SERVICE LTD.	NEW DELHI
2799....	IRIS HEALTHCARE TECHNOLOGIES PVT. LTD.	CHENNAI
2800....	IRIS HIGHTECH PVT. LTD.	DELHI
2801....	ISGEC HEAVY ENGINEERING LTD.	GHAZIABAD
2802....	ISGEC HEAVY ENGINEERING LTD.	KARNAL



S.No.	Organization	Location
2803....	ISGEC HEAVY ENGINEERING LTD.	NOIDA
2804....	ISORIS TECHNOLOGY SOLUTIONS PVT. LTD.	BENGALURU
2805....	ISPARTA MENSUCAT SAN VE TIC	SALEM
2806....	ISRO PROPULSION COMPLEX	TIRUNELVELI
2807....	ISRO SATELLITE CENTRE	BENGALURU
2808....	ISTRAC,INDIAN SPACE RESEARCH ORGANIZATIO	BENGALURU
2809....	ISUZU MOTORS (I) PVT. LTD.	CHENNAI
2810....	ISUZU MOTORS (I) PVT. LTD.	MELUR
2811....	IT SERVICES AND SOLUTIONS	PUNE
2812....	ITC INFOTECH (I) LTD.	BENGALURU
2813....	ITC INFOTECH (I) LTD.	CHENNAI
2814....	ITC INFOTECH (I) LTD.	KANHANGAD
2815....	ITC INFOTECH (I) LTD.	KOLKATA
2816....	ITER-INDIA,INSTITUTE FOR PLASMA RESEARC	AHMEDABAD
2817....	ITQAN ALKHALEEJ COMPUTERS	MADURAI
2818....	ITSC TECHNOLOGIES PVT. LTD.	NOIDA
2819....	ITT INC.	PUNE
2820....	IVY SOFTWARE	SHAMIRPET
2821....	J D INDUSTRIES	MUMBAI
2822....	J G SUMMIT PETROCHEMICALS GROUP	BATANGAS CITY
2823....	J K CEMENT MANGROL WORKS	CHITTOOR
2824....	J S W ENERGY LTD.	MUMBAI
2825....	J S W STEEL LTD.	BELLARY
2826....	J.P.MORGAN CHASE & CO	BENGALURU
2827....	J.P.MORGAN SERVICES (I) PVT. LTD.	BENGALURU
2828....	J.P.MORGAN SERVICES (I) PVT. LTD.	MUMBAI
2829....	JABIL CIRCUIT (I) PVT. LTD.	PUNE
2830....	JACOBS ENGINEERING (I) PVT. LTD.	THANE
2831....	JADE GLOBAL SOFTWARE PVT. LTD.	NASHIK
2832....	JADE GLOBAL SOFTWARE PVT. LTD.	JAIPUR
2833....	JADE GLOBAL SOFTWARE PVT. LTD.	DELHI
2834....	JAI BALAJI INDUSTRIES LTD.	DURGAPUR
2835....	JAIPUR ENGINEERING COLLEGE AND RESEARCH	JAIPUR
2836....	JAMNA AUTO INDUSTRIES LTD.	JAMSHEDPUR
2837....	JAMSHEDPUR UTILITIES & SERVICES CO	KOLKATA
2838....	JASMIN INFOTECH PVT. LTD.	KARUR
2839....	JASMIN INFOTECH PVT. LTD.	SATHYAMANGALAM
2840....	JAYA HIND IND LTD. PUNE	SHAHADA
2841....	JAYASWAL NECO INDUSTRIES LTD.	RAIPUR
2842....	JAYPEE CEMENT CORPORATION LTD.	GUNTUR
2843....	JAZEERA AL MARJAN ELECTRO MECHANICAL WOR	DINDIGUL
2844....	JBF RAK LLC	TURAIYUR
2845....	JBJ TECHNOLOGY LTD.	DELHI
2846....	JBM AUTO LTD.	CHENNAI
2847....	JBM AUTO LTD.	CHANDIGARH
2848....	JBM AUTO LTD.	GURUGRAM
2849....	JBM AUTO LTD.	FARIDABAD
2850....	JBM AUTO LTD.	KANCHEEPURAM
2851....	JBM AUTO LTD.	DIBRUGARH
2852....	JBM AUTO LTD.	HYDERABAD
2853....	JCB (I) LTD.	PUNE
2854....	JCB (I) LTD.	FARIDABAD
2855....	JCB (I) LTD.	KOTA
2856....	JCB (I) LTD.	PAWAPURI

S.No.	Organization	Location
2857....	JCB (I) LTD.	TALEGAON DABHADE
2858....	JCB (I) LTD.	AJMER
2859....	JCB (I) LTD.	NEW DELHI
2860....	JDA SOFTWARE PVT. LTD.	HYDERABAD
2861....	JET AVIATION DUBAI LLC	DUBAI
2862....	JIGYASA ANALYTICS	HYDERABAD
2863....	JIL INFORMATION TECHNOLOGY LTD.	DELHI
2864....	JINACTUS CONSULTING PVT. LTD.	GURUGRAM
2865....	JINDAL SAW LTD.	BHILWARA
2866....	JINDAL SAW LTD.	MUNDRA
2867....	JINDAL STAINLESS LTD.	HISAR
2868....	JINDAL STAINLESS LTD.	YAMUNA NAGAR
2869....	JINDAL STAINLESS LTD.	BHUBANESWAR
2870....	JINDAL STAINLESS LTD.	JAJPUR
2871....	JK CEMENT LTD.	DELHI
2872....	JK FENNER (I) LTD.	VELLORE
2873....	JK FENNER (I) LTD.	HYDERABAD
2874....	JK TECHNOSOFT LTD.	BENGALURU
2875....	JK TYRES & INDUSTRIES LTD.	MANGALURU
2876....	JOHN CRANE SEALING SYSTEMS PVT. LTD.	BENGALURU
2877....	JOHN CRANE SEALING SYSTEMS PVT. LTD.	PALAKKAD
2878....	JOHN DEERE (I) PVT. LTD.	CHANDRAPUR
2879....	JOHN DEERE (I) PVT. LTD.	AMBALA
2880....	JOHN DEERE (I) PVT. LTD.	BEED
2881....	JOHN DEERE (I) PVT. LTD.	COIMBATORE
2882....	JOHN DEERE (I) PVT. LTD.	GADWAL
2883....	JOHN DEERE (I) PVT. LTD.	HADAPSAR
2884....	JOHN DEERE (I) PVT. LTD.	HYDERABAD
2885....	JOHN DEERE (I) PVT. LTD.	INDORE
2886....	JOHN DEERE (I) PVT. LTD.	KHOPOLI
2887....	JOHN DEERE (I) PVT. LTD.	KOLKATA
2888....	JOHN DEERE (I) PVT. LTD.	PATNA
2889....	JOHN DEERE (I) PVT. LTD.	PUNE
2890....	JOHN DEERE (I) PVT. LTD.	SHRIRAMPUR
2891....	JOHN DEERE (I) PVT. LTD.	SIRSA
2892....	JOHN DEERE (I) PVT. LTD.	AHMEDABAD
2893....	JOHN DEERE (I) PVT. LTD.	AKOLA
2894....	JOHN DEERE (I) PVT. LTD.	CHINCHWAD
2895....	JOHN DEERE (I) PVT. LTD.	DINDIGUL
2896....	JOHN DEERE (I) PVT. LTD.	KARAD
2897....	JOHN DEERE (I) PVT. LTD.	KHARADI
2898....	JOHN DEERE (I) PVT. LTD.	MALVAN
2899....	JOHN DEERE (I) PVT. LTD.	NAGPUR
2900....	JOHN DEERE (I) PVT. LTD.	TIRUNELVELI
2901....	JOHN DEERE (I) PVT. LTD.	UJJAIN
2902....	JOHN DEERE (I) PVT. LTD.	WAGHOLI
2903....	JOHN DEERE (I) PVT. LTD.	RAJGURUNAGAR
2904....	JOHNSON AND JOHNSON PVT. LTD.	AURANGABAD
2905....	JOHNSON AND JOHNSON PVT.LTD.	AURANGABAD
2906....	JOHNSON CONTROLS (I) PVT. LTD.	SANGLI
2907....	JOHNSON CONTROLS (I) PVT. LTD.	UDAIPUR
2908....	JOHNSON CONTROLS (I) PVT. LTD.	PUNE
2909....	JONSON RUBBER INDUSTRIES LTD.	SONIPAT
2910....	JOTUN U.A.E LTD. (LLC)	DUBAI

S.No.	Organization	Location
2911....	JP MORGAN (I) PVT. LTD.	BENGALURU
2912....	JP MORGAN (I) PVT. LTD.	THANE
2913....	JP MORGAN (I) PVT. LTD.	CHENNAI
2914....	JP MORGAN SERVICES (I) PVT. LTD.	DADAR
2915....	JP MORGAN SERVICES (I) PVT. LTD.	MUMBAI
2916....	JS AUTOCAST FOUNDRY (I) PVT. LIMITE	COIMBATORE
2917....	JSW CEMENT LTD.	BELLARY
2918....	JSW CEMENT LTD.	NANDYAL
2919....	JSW CEMENT LTD.	SAWAI MADHOPUR
2920....	JSW ENERGY	BARMER
2921....	JSW ENERGY	BELLARY
2922....	JSW ENERGY	HOSPET
2923....	JSW ENERGY	MUMBAI
2924....	JSW ENERGY	RAMPUR
2925....	JSW ENERGY	RAMPUR
2926....	JSW ENERGY	RATNAGIRI
2927....	JSW ENERGY	ROURKELA
2928....	JSW ENERGY	SALEM
2929....	JSW ENERGY	SHIMLA
2930....	JSW ENERGY	TORANAGALLU
2931....	JSW ENERGY	VIDYANAGAR
2932....	JSW STEEL	ALWAR
2933....	JSW STEEL	BAGALKOT
2934....	JSW STEEL	BALLARI
2935....	JSW STEEL	BELLARI
2936....	JSW STEEL	BELLARY
2937....	JSW STEEL	BHADRAVATHI
2938....	JSW STEEL	CHITRADURGA
2939....	JSW STEEL	DAVANGERE
2940....	JSW STEEL	GANGAVATHI
2941....	JSW STEEL	HALIYAL
2942....	JSW STEEL	HOSAPETE
2943....	JSW STEEL	HOSPET
2944....	JSW STEEL	KOPPAL
2945....	JSW STEEL	KURUGODU
2946....	JSW STEEL	RAJNANDGAON
2947....	JSW STEEL	SHIMOGA
2948....	JSW STEEL	SOLUR
2949....	JSW STEEL	TORANAGALLU
2950....	JSW STEEL	VISHAKAPATNAM
2951....	JSW STEEL	NAGPUR
2952....	JSW STEEL	MUDHOL
2953....	JSW STEEL	CHENNAI
2954....	JUBILANT GENERICS LTD.	MYSORE
2955....	JUBILANT GENERICS LTD.	NOIDA
2956....	JUBILANT LIFE SCIENCES LTD.	NIRA
2957....	JUBILANT LIFE SCIENCES LTD.	PUNE
2958....	JUNIPER NETWORKS (I) PVT. LTD.	BENGALURU
2959....	JUNIPER NETWORKS (I) PVT. LTD.	BHOPAL
2960....	JUNIPER NETWORKS (I) PVT. LTD.	CALICUT
2961....	JUNIPER NETWORKS (I) PVT. LTD.	HOSUR
2962....	JURONG SHIPYARD PTE LTD.	VISAKHAPATNAM
2963....	JUST DIAL LTD.	BOKARO
2964....	JUST DIAL LTD.	RAJKOT

S.No.	Organization	Location
2965....	KALSON ENGINEERING SOLUTIONS	NAVI MUMBAI
2966....	KALSON ENGINEERING SOLUTIONS	NEW PANVEL
2967....	KALYANI MAXION WHEELS LTD.	PUNE
2968....	KANNU IMPEX (I) PVT. LTD.	JAMMU
2969....	KANNUR MEDICAL COLLEGE	KANNUR
2970....	KANOO GROUP	ABU DHABI
2971....	KANTAR TECHNOLOGY	HYDERABAD
2972....	KAVYA CONSULTING5	MYSORE
2973....	KBR INC,ABU DHABI	THIRUVANANTHAPURAM
2974....	KBR INC.	DOHA
2975....	KDU WORLDWIDE TECHNICAL SERVICES	CHALAKUDY
2976....	KEC INTERNATIONAL LTD.	TIRUCHIRAPPALLI
2977....	KEC INTERNATIONAL LTD.	KOLKATA
2978....	KEI INDUSTRIES LTD.	ANANTNAG
2979....	KEI INDUSTRIES LTD.	MAINPURI
2980....	KEMIN INDUSTRIES SOUTH ASIA PVT. LTD.	KOLKATA
2981....	KEMS AUTO COMPONENTS LTD.	ERODE
2982....	KEMS FORGINGS LTD.	BENGALURU
2983....	KENNAMETAL (I) LTD.	BENGALURU
2984....	KENNAMETAL SHARED SERVICES PVT. LTD.	BENGALURU
2985....	KERALA INSTITUTE OF MEDICAL SCIENCES	THIRUVANANTHAPURAM
2986....	KERALA ROAD FUND BOARD	THIRUVANATHAPURAM
2987....	KERALA STATE IT MISSION	VIJAYAWADA
2988....	KERALA WATER AUTHORITY	THIRUVANANTHAPURAM
2989....	KEYSIGHT TECHNOLOGIES	BENGALURU
2990....	KHD HUMBOLDT LTD.	NOIDA
2991....	KHRISTIYA SEVA NIKETAN HOSPITAL	SARENGA
2992....	KILPAUK MEDICAL COLLEGE	CHENNAI
2993....	KINETIC COMMUNICATION LTD.	GADHINGLAJ
2994....	KING NETWORK	UDAIPUR
2995....	KING SAUD MEDICAL CITY	SRINAGAR
2996....	KIRAN ENTERPRISES	AURANGABAD
2997....	KIRLOSKAR BROTHERS LTD.	AHMEDABAD
2998....	KIRLOSKAR BROTHERS LTD.	KHERADE WANGI
2999....	KIRLOSKAR BROTHERS LTD.	PUNE
3000....	KIRLOSKAR CHILLER PVT. LTD.	PUNE
3001....	KIRLOSKAR OIL ENGINES LTD.	PUNE
3002....	KIRLOSKAR OIL ENGINES LTD.	CHENNAI
3003....	KIRLOSKAR OIL ENGINES LTD.	KOLHAPUR
3004....	KIRLOSKAR OIL ENGINES LTD.	UDHAM SINGH NAGAR
3005....	KIRLOSKAR PNEUMATIC CO LTD.	PUNE
3006....	KLAZINA SOFTECH LTD.	MEERUT
3007....	KMF AUTOMOTIVE PVT. LTD.	KANCHEEPURAM
3008....	KNAUF EXEED INSULATION LLC	ABU DHABI
3009....	KNOLLINFO TECHNOLOGIES PVT. LTD.	JAIPUR
3010....	KNORR BREMSE	MUMBAI
3011....	KNORR BREMSE	PUNE
3012....	KNOWLEDGE ASHRAM PVT. LTD.	MAPUSA
3013....	KNOWLEDGELENS PVT. LTD.	HALISAHAR
3014....	KODIAK NETWORKS	BENGALURU
3015....	KOKILABEN DHIRUBHAI AMBANI HOSPITAL	MUMBAI
3016....	KOMET PRECISION TOOLS (I) PVT. LTD.	BENGALURU
3017....	KONE ASSARAIN LLC	MUSCAT
3018....	KONE CRANES I PVT. LTD.	NASHIK

S.No.	Organization	Location
3019....	KONE ELEVATOR (I) PVT. LTD.	CHENNAI
3020....	KONE ELEVATOR (I) PVT. LTD.	MADURAI
3021....	KONE ELEVATOR (I) PVT. LTD.	TIRUNELVELI
3022....	KONE ELEVATORS MIDDLE EAST LLC	UAE
3023....	KONECRANES PVT. LTD.	PUNE
3024....	KOTHARI MEDICAL CENTRE	KOLKATA
3025....	KPIT	MUMBAI
3026....	KPIT	NASHIK
3027....	KPIT INFO SYSTEM PVT. LIMETED	PUNE
3028....	KPIT TECHNOLOGIES	BENGALURU
3029....	KPIT TECHNOLOGIES	MUMBAI
3030....	KPIT TECHNOLOGIES	PUNE
3031....	KPIT TECHNOLOGIES	VAPI
3032....	KPIT TECHNOLOGIES LTD.	CHIDAMBARAM
3033....	KPIT TECHNOLOGIES LTD.	PUNE
3034....	KPIT TECHNOLOGIES LTD.	THRISSUR
3035....	KPMG GLOBAL SERVICES	BENGALURU
3036....	KPMG GLOBAL SERVICES	CHENNAI
3037....	KPOINT TECHNOLOGIES PVT. LTD.	PUNE
3038....	KRAFF SOFTWARE PVT. LTD.	BHAVNAGAR
3039....	KRISHNA MARUTI LTD.	FARIDABAD
3040....	KROMBERG & SCHUBERT GMBH	DUBAI
3041....	KROMBERG & SCHUBERT MEFZ	TIRUCHIRAPPALLI
3042....	KROMBERG AND SCHUBERT	DUNGARPUR
3043....	KSB PUMPS LIMATED	PUNE
3044....	KSB TECH. PVT. LTD.	PUNE
3045....	KSK MAHANADI POWER CO LTD.	GREATER NOIDA
3046....	KSS ABHISHEK SAFETY SYSTEMS PVT. LTD.	GURUGRAM
3047....	KUANTUM PAPERS LTD.	HOSHIARPUR
3048....	L&T CONSTRUCTION	ALLAHABAD
3049....	L&T CONSTRUCTION	BALASINOR
3050....	L&T CONSTRUCTION	COIMBATORE
3051....	L&T CONSTRUCTION	ERNAKULAM
3052....	L&T CONSTRUCTION	HYDERABAD
3053....	L&T CONSTRUCTION	KRISHNANAGAR
3054....	L&T CONSTRUCTION	SADULSHAHAR
3055....	L&T CONSTRUCTION	CHENNAI
3056....	L&T CONSTRUCTION	AHMEDABAD
3057....	L&T CONSTRUCTION	NAVI MUMBAI
3058....	L&T CONSTRUCTION	VADODARA
3059....	L&T CONSTRUCTION	TIRUNELVELI
3060....	L&T CONSTRUCTION	TUMKUR
3061....	L&T CONSTRUCTION	MUMBAI
3062....	L&T CONSTRUCTION	BENGALURU
3063....	L&T CONSTRUCTION	ARKI
3064....	L&T CONSTRUCTION	TUTICORIN
3065....	L&T CONSTRUCTION	ARIYALUR
3066....	L&T CONSTRUCTION	BURDWAN
3067....	L&T CONSTRUCTION	CHAMBA
3068....	L&T CONSTRUCTION	CUTTACK
3069....	L&T CONSTRUCTION	DINAJPUR
3070....	L&T CONSTRUCTION	ERODE
3071....	L&T CONSTRUCTION	GADAG
3072....	L&T CONSTRUCTION	GANDHINAGAR

S.No.	Organization	Location
3073....	L&T CONSTRUCTION	GUNTUR
3074....	L&T CONSTRUCTION	HOSUR
3075....	L&T CONSTRUCTION	JAJPUR
3076....	L&T CONSTRUCTION	KANPUR
3077....	L&T CONSTRUCTION	KENDRAPARA
3078....	L&T CONSTRUCTION	KHARAGPUR
3079....	L&T CONSTRUCTION	KOLKATA
3080....	L&T CONSTRUCTION	MAU
3081....	L&T CONSTRUCTION	NARASARAOPET
3082....	L&T CONSTRUCTION	PUDUCHERRY
3083....	L&T CONSTRUCTION	ROURKELA
3084....	L&T CONSTRUCTION	SALEM
3085....	L&T CONSTRUCTION	TIRUVALLUR
3086....	L&T CONSTRUCTION	VISHAKAPATNAM
3087....	L&T CONSTRUCTION	VIZIANAGARAM
3088....	L&T CONSTRUCTION	BHOPAL
3089....	L&T CONSTRUCTION	TARAKESWAR
3090....	L&T CONSTRUCTION	MADURAI
3091....	L&T CONSTRUCTION	HOWRAH
3092....	L&T HOWDEN PVT. LTD.	FARIDABAD
3093....	L&T HOWDEN PVT. LTD.	NEW DELHI
3094....	L&T HYDROCARBON ENGINEERING LTD.	JAMNAGAR
3095....	L&T HYDROCARBON ENGINEERING LTD.	ARAMBAGH
3096....	L&T HYDROCARBON ENGINEERING LTD.	SERAMPORE
3097....	L&T HYDROCARBON ENGINEERING LTD.	TIRUNELVELI
3098....	L&T HYDROCARBON ENGINEERING LTD.	TIRUPPUR
3099....	L&T HYDROCARBON ENGINEERING LTD.	VADODARA
3100....	L&T INFOTECH LTD.	BENGALURU
3101....	L&T INFOTECH LTD.	CHENNAI
3102....	L&T INFOTECH LTD.	KOTA
3103....	L&T INFOTECH LTD.	PUNE
3104....	L&T INFOTECH LTD.	MANDLA
3105....	L&T INFOTECH LTD.	KALYAN
3106....	L&T INFOTECH LTD.	ALLAHABAD
3107....	L&T INFOTECH LTD.	LUCKNOW
3108....	L&T INFOTECH LTD.	TIRUCHIRAPPALLI
3109....	L&T METRO RAIL HYDERABAD LTD.	HYDERABAD
3110....	L&T MHPS BOILERS PVT. LTD.	FARIDABAD
3111....	L&T MHPS BOILERS PVT. LTD.	GURUGRAM
3112....	L&T SHIPBUILDING LTD.	CHENNAI
3113....	L&T TECHNOLOGY SERVICES LTD.	BELGAUM
3114....	L&T TECHNOLOGY SERVICES LTD.	BENGALURU
3115....	L&T TECHNOLOGY SERVICES LTD.	COCHIN
3116....	L&T TECHNOLOGY SERVICES LTD.	DAVANGERE
3117....	L&T TECHNOLOGY SERVICES LTD.	MUMBAI
3118....	L&T TECHNOLOGY SERVICES LTD.	MYSORE
3119....	L&T TECHNOLOGY SERVICES LTD.	THANE
3120....	L&T TECHNOLOGY SERVICES LTD.	VADODARA
3121....	L&T TECHNOLOGY SERVICES LTD.	PUNE
3122....	L&T VALDEL ENGINEERING LTD.	BENGALURU
3123....	L&T VALVES LTD.	CHENNAI
3124....	L&T VALVES LTD.	TIRUCHIRAPPALLI
3125....	L&T VALVES LTD.	CHEYYAR
3126....	L&T VALVES LTD.	COIMBATORE

S.No.	Organization	Location
3127....	L.V. PRASAD EYE INSTITUTE	HYDERABAD
3128....	LABVANTAGE SOLUTIONS	UTTARPARA
3129....	LADCO GALVANIZERS PVT. LTD.	CHENNAI
3130....	LAFARGE (I) PVT. LTD.	KOLKATA
3131....	LAFARGE (I) PVT. LTD.	CHITTOOR
3132....	LAKSHMI ELECTRICAL CONTROL SYSTEM LTD.	HOSUR
3133....	LAKSHMI MACHINE WORKS LTD.	COIMBATORE
3134....	LALITHA SUPERSPECIALITY HOSPITAL	GUNTUR
3135....	LAM RESEARCH (I) PVT. LTD.	BENGALURU
3136....	LAMPRELL ENERGY LTD.	JEBEL ALI
3137....	LAMPRELL ENERGY LTD.	VISAKHAPATNAM
3138....	LANDIS GYR LTD.	GHAZIABAD
3139....	LANDIS GYR LTD.	NOIDA
3140....	LANDIS GYR LTD.	JAIPUR
3141....	LANDMARK IT SOLUTIONS	HYDERABAD
3142....	LANXESS (I) PVT. LTD.	BHARUCH
3143....	LATERN INNOVATIVE ENGINEERING PVT. LTD.	PONNERI
3144....	LATIFA SCHOOL FOR GIRLS	DUBAI
3145....	LATTICE SEMICONDUCTOR	MAHABOOB NAGAR
3146....	LAVA INTERNATIONAL LTD.	GHAZIABAD
3147....	LAXMANBHAI & CO	DHANBAD
3148....	LEAN THOUGHTS TECHNOLOGIES	BENGALURU
3149....	LEAR AUTOMOTIVE (I) PVT. LTD.	CHENNAI
3150....	LEAR AUTOMOTIVE (I) PVT. LTD.	JODHPUR
3151....	LEAR AUTOMOTIVE (I) PVT. LTD.	KANCHEEPURAM
3152....	LEAR AUTOMOTIVE (I) PVT. LTD.	PUNE
3153....	LEAR AUTOMOTIVE (I) PVT. LTD.	PANDHARPUR
3154....	LEARNINGMATE SOLUTIONS PVT. LTD.	MUMBAI
3155....	LEARNIPHI TECHNOLOGY PVT. LTD.	AHMEDABAD
3156....	LEARNPEDIA EDUTECH PVT. LTD.	HYDERABAD
3157....	LEARNPEDIA EDUTECH PVT. LTD.	NELLORE
3158....	LEDVANCE PVT. LTD.	NOIDA
3159....	LEEBOY CONSTRUCTION EQUIPMENT (I) PVT. LTD.	BENGALURU
3160....	LEIGHTON OFFSHORE SDN BHD	KATPADI
3161....	LEITWIND SHRIRAM MFG. LTD.	CHENNAI
3162....	LEMURIS TECHNOLOGIES	DHARAPURAM
3163....	LENOVO GLOBAL TECHNOLOGY (I) PVT. LTD.	BENGALURU
3164....	LETRIKA ROOTS PVT. LTD.	NAMAKKAL
3165....	LG ELECTRONICS (I) PVT. LTD.	AURANGABAD
3166....	LG SOFT (I) PVT. LTD.	BENGALURU
3167....	LG SOFT (I) PVT. LTD.	JAMNAGAR
3168....	LG SOFT (I) PVT. LTD.	RANGAREDDY
3169....	LG SOFT (I) PVT. LTD.	NOIDA
3170....	LG SOFT (I) PVT. LTD.	SHIKARIPURA
3171....	LG SOFT (I) PVT. LTD.	VINUKONDA
3172....	LG SOFT (I) PVT. LTD.	HYDERABAD
3173....	LIBRATHERM INSTRUMENTS PVT. LTD.	THANE
3174....	LIEBHERR (I) PVT. LTD.	NAVI MUMBAI
3175....	LIEBHERR APPLIANCES (I) PVT. LTD.	AURANGABAD
3176....	LIFE LINE HOSPITAL	CHENNAI
3177....	LIFESCAN PHARMA	KOVVUR
3178....	LIFESENSE MEDICAL SYSTEMS PVT. LTD.	BENGALURU
3179....	LINCOLN HELIOS (I) LTD.	BELLARY
3180....	LINCOLN HELIOS (I) LTD.	BENGALURU

S.No.	Organization	Location
3181....	LINDE ENGINEERING (I) PVT. LTD.	VADODARA
3182....	LINDE ROC SDN BHD	HYDERABAD
3183....	LINKEDIN TECHNOLOGY INFORMATION PVT. LTD.	BENGALURU
3184....	LINKS MIDDLEEAST TECHNICAL SERVICES LLC	ABU DHABI
3185....	LINKSTREET LEARNING PVT. LTD.	BENGALURU
3186....	LINKWELL TELESYSTEMS PVT. LTD.	HYDERABAD
3187....	LIONBRIDGE TECHNOLOGY PVT. LTD.	NAVI MUMBAI
3188....	LIPI DATA SYSTEMS LTD.	UDAIPUR
3189....	LITTLE (I) DENTIST PTE LTD.	KOCHI
3190....	LKS (I) PVT. LTD.	PONDA
3191....	LKS (I) PVT. LTD.	VASCO DA GAMA
3192....	LLOYD ELECTRIC & ENGINEERING LTD.	KOLKATA
3193....	LLOYD ELECTRIC & ENGINEERING LTD.	GHAZIABAD
3194....	LM WIND POWER TECHNOLOGIES (I) PVT. LTD.	BENGALURU
3195....	LNT INFOTECH	BENGALURU
3196....	LOCUZ ENTERPRISE SOLUTIONS LTD.	CHENNAI
3197....	LOCUZ ENTERPRISE SOLUTIONS LTD.	VIJAYAWADA
3198....	LOGICA PVT. LTD.	CHENNAI
3199....	LOGICHIVE SOLUTIONS PVT. LTD.	MYSORE
3200....	LOGIXHEALTH SOLUTIONS PVT. LTD.	BENGALURU
3201....	LOMBARDINI (I) PVT. LTD.	PUNE
3202....	LONESTAR TECHNICAL AND INDUSTRIAL SERVIC	KOZHIKODE
3203....	LOTUS EYE HOSPITAL AND INSTITUTE	TIRUPPUR
3204....	LOWE'S SERVICES (I) PVT. LTD.	BENGALURU
3205....	LOWE'S SERVICES (I) PVT. LTD.	ERODE
3206....	LOWE'S SERVICES (I) PVT. LTD.	VIRUDHUNAGAR
3207....	LOWE'S SERVICES (I) PVT. LTD.	KOTTAYAM
3208....	LSI (I) RESEARCH AND DEVELOPMENT LTD.	LUDHIANA
3209....	LUCAS-TVS LTD.	CHENNAI
3210....	LUCKNOW DEVELOPMENT AUTHORITY LUCKNOW	LUCKNOW
3211....	LUMAX INDUSTRIES LTD.	SONIPAT
3212....	LUPIN LTD.	MUMBAI
3213....	LUPIN LTD.	BOISAR
3214....	LUPIN LTD.	INDORE
3215....	LUPIN LTD.	KHURJA
3216....	LUPIN LTD.	NAGPUR
3217....	LUPIN LTD.	NAVI MUMBAI
3218....	M J CASTING LTD.	BHIWADI
3219....	M J ENGINEERING CONSULTANTS	NEW DELHI
3220....	M.J.ASSOCIATES	BENGALURU
3221....	M.N.DASTUR & CO PVT. LTD.	KOLKATA
3222....	MAADEN ALUMINIUM CO	JAMSHEDPUR
3223....	MAADEN ALUMINIUM CO	THIRUVANANTHAPURAM
3224....	MAADEN ALUMINIUM CO	DURG
3225....	MAC ENERGY SYSTEMS	BENGALURU
3226....	MACBROUT ENGINEERING PVT. LTD.	QUEPEM
3227....	MACER AUTOMOTIVE SYSTEM PVT. LTD.	BENGALURU
3228....	MACHINEPULSE TECH PVT. LTD.	BENGALURU
3229....	MACHINO PLASTICS LTD.	GURUGRAM
3230....	MACUREX SENSORS PVT. LTD.	BENGALURU
3231....	MADINA GROUP W.L.L	CUDDALORE
3232....	MADRAS ENGINEERING INDUSTRIES PVT. LTD.	CHENNAI
3233....	MADRAS MEDICAL MISSION	CHENNAI
3234....	MAGNA INFOTECH LTD.	DELHI



S.No.	Organization	Location
3235....	MAGNA INFOTECH LTD.	VELLORE
3236....	MAGNA POWERTRAIN BENGALURU PVT. LTD.	BENGALURU
3237....	MAGNA QUEST TECHNOLOGIES	PRODDATUR
3238....	MAGNA STEYR (I) PVT. LTD.	PUNE
3239....	MAGNASOFT CONSULTING (I) PVT. LTD.	UDUPI
3240....	MAGNETI MARELLI (I) PVT. LTD.	GURUGRAM
3241....	MAGNETI MARELLI (I) PVT. LTD.	AMBALA
3242....	MAGNETI MARELLI (I) PVT. LTD.	BONGAIGAON
3243....	MAGNETI MARELLI (I) PVT. LTD.	KARNAL
3244....	MAGNETI MARELLI (I) PVT. LTD.	JHANSI
3245....	MAGNITUDE SOFTWARE PVT. LTD.	HYDERABAD
3246....	MAGNUSVISTA TECHNOLOGIES	COIMBATORE
3247....	MAGUS CUSTOMER DIALOG PVT. .LTD.	THIRUVANANTHAPURAM
3248....	MAHARAJA AGRASEN MEDICAL COLLEGE	HISAR
3249....	MAHARSHTRA KNOWLEDGE CORPORATION LTD.	PUNE
3250....	MAHINDRA & MAHINDRA LTD.	CHENGALPETTU
3251....	MAHINDRA & MAHINDRA LTD.	CHENNAI
3252....	MAHINDRA & MAHINDRA LTD.	INDORE
3253....	MAHINDRA & MAHINDRA LTD.	MADURAI
3254....	MAHINDRA & MAHINDRA LTD.	MUMBAI
3255....	MAHINDRA & MAHINDRA LTD.	NAMAKKAL
3256....	MAHINDRA & MAHINDRA LTD.	PUNE
3257....	MAHINDRA & MAHINDRA LTD.	SINGAPERUMAL
3258....	MAHINDRA & MAHINDRA LTD.	GADAG
3259....	MAHINDRA & MAHINDRA LTD.	JAIPUR
3260....	MAHINDRA & MAHINDRA LTD.	MEERUT
3261....	MAHINDRA & MAHINDRA LTD.	NASHIK
3262....	MAHINDRA & MAHINDRA LTD.	RUDRAPUR
3263....	MAHINDRA & MAHINDRA LTD.	SALEM
3264....	MAHINDRA & MAHINDRA LTD.	SURI
3265....	MAHINDRA & MAHINDRA LTD.	ZAHEERABAD
3266....	MAHINDRA & MAHINDRA LTD.	BIDAR
3267....	MAHINDRA & MAHINDRA LTD.	HYDERABAD
3268....	MAHINDRA & MAHINDRA LTD.	THANE
3269....	MAHINDRA & MAHINDRA LTD.	KARAD
3270....	MAHINDRA CIE AUTOMOTIVE LTD.	CHINCHWAD
3271....	MAHINDRA CIE AUTOMOTIVE LTD.	ZAHEERABAD
3272....	MAHINDRA COMVIVA TECHNOLOGIES LTD.	BENGALURU
3273....	MAHINDRA COMVIVA TECHNOLOGIES LTD.	GURUGRAM
3274....	MAHINDRA CONSTRUCTION EQUIPMENT	PUNE
3275....	MAHINDRA ECOLE CENTRALE	HYDERABAD
3276....	MAHINDRA ELECTRIC LTD.	BENGALURU
3277....	MAHINDRA ELECTRIC MOBILITY LTD.	BENGALURU
3278....	MAHINDRA ELECTRIC MOBILITY LTD.	INDORE
3279....	MAHINDRA HEAVY ENGINES LTD.	PUNE
3280....	MAHINDRA LIFESPACES	KALYAN
3281....	MAHINDRA LOGISTICS LTD.	ALWAR
3282....	MAHINDRA RESEARCH VALLEY	CHENNAI
3283....	MAHINDRA REVA ELECTRIC VEHICLES LTD.	BENGALURU
3284....	MAHINDRA SONA LTD.	NASHIK
3285....	MAHINDRA SUSTEN PVT. LTD.	THOOTHUKUDI
3286....	MAHINDRA TWO WHEELERS LTD.	INDORE
3287....	MAHINDRA VEHICLE MANUFACTURERS LTD.	NASHIK
3288....	MAHINDRA VEHICLE MANUFACTURERS LTD.	PUNE

S.No.	Organization	Location
3289....	MAHINDRA VEHICLE MANUFACTURERS LTD.	TALEGAON DABHADE
3290....	MAHINDRA VEHICLE MANUFACTURERS LTD.	NAGPUR
3291....	MAHINDRA VEHICLE MANUFACTURERS LTD.	WARANGAL
3292....	MAHLE BEHR (I) PVT. LTD.	PUNE
3293....	MAHLE BEHR (I) PVT. LTD.	FARIDABAD
3294....	MAHLE BEHR (I) PVT. LTD.	KOLHAPUR
3295....	MAHLE BEHR (I) PVT. LTD.	MUKHED
3296....	MAHLE BEHR (I) PVT. LTD.	MUMBAI
3297....	MAHLE FILTER SYSTEMS (I) PVT. LTD.	SOLAN
3298....	MAHLE FILTER SYSTEMS (I) PVT. LTD.	GURUGRAM
3299....	MAHLE FILTER SYSTEMS (I) PVT. LTD.	CHENNAI
3300....	MAIHAR CEMENT WORKS	MAIHAR
3301....	MAILAM UPKING ENGINEERING LTD.	KANCHEEPURAM
3302....	MAINI MATERIALS MOVEMENT PVT. LTD.	BENGALURU
3303....	MAINTAIN WELL EQUIPMENTS LLC	CHENNAI
3304....	MAKEMYTRIP (I) PVT. LTD.	BENGALURU
3305....	MAKEMYTRIP (I) PVT. LTD.	GURUGRAM
3306....	MAKINO (I) PVT. LTD.	CHENNAI
3307....	MALTIDEVI ENGINEERING WORKS	PUNE
3308....	MAMMUT BUILDING SYSTEM	VELLORE
3309....	MAN TRUCKS (I) PVT. LTD.	PUNE
3310....	MANAV ENERGY PVT. LTD.	CHENNAI
3311....	MANAV ENTERPRISE MIDDLE EAST	SHARJAH
3312....	MANAV RACHNA INNOVATION AND INCUBATION C	NEW DELHI
3313....	MANDO AUTOMOTIVE (I) PVT. LTD.	CHENNAI
3314....	MANDO SOFTTECH (I) PVT. LTD.	GURUGRAM
3315....	MANDO SOFTTECH (I) PVT. LTD.	MANGRULPIR
3316....	MANDO SOFTTECH (I) PVT. LTD.	REWARI
3317....	MANDO SOFTTECH (I) PVT. LTD.	TIRUNELVELI
3318....	MANITOWOC CRANES,POTAIN (I) PVT.LTD.	PUNE
3319....	MANN AND HUMMEL FILTERS PVT. LTD.	BENGALURU
3320....	MAPAL (I) PVT. LTD.	TIRUCHIRAPPALLI
3321....	MAPCO LLC	ABU DHABI
3322....	MAPR TECHNOLOGIES R&D (I) PVT. LTD.	HYDERABAD
3323....	MARATHON ELECTRIC (I) PVT. LTD.	BENGALURU
3324....	MARICO LTD.	GOBICHETTIPALAYAM
3325....	MARK HYDRAULIKS	BATHINDA
3326....	MARKETSHARE INFOTECH (I) PVT. LTD.	HYDERABAD
3327....	MARKIT (I) SERVICES PVT. LTD.	DELHI
3328....	MARLABS SOFTWARE PVT. LTD.	BENGALURU
3329....	MARLABS SOFTWARE PVT.LTD.	BENGALURU
3330....	MARQUARDT (I) PVT. LTD.	PUNE
3331....	MARS INTERNATIONAL (I) PVT. LTD.	SECUNDRABAD
3332....	MARUTEE DESIGN AND ENGINEERING PVT. LTD.	BENGALURU
3333....	MARUTI SUZUKI (I) LTD.	AGRA
3334....	MARUTI SUZUKI (I) LTD.	AMBALA
3335....	MARUTI SUZUKI (I) LTD.	GURUGRAM
3336....	MARUTI SUZUKI (I) LTD.	NEW DELHI
3337....	MARUTI SUZUKI (I) LTD.	CHENNAI
3338....	MARVELL (I) PVT. LTD.	PUNE
3339....	MASTEK LTD.	NAVI MUMBAI
3340....	MASTERCARD TECHNOLOGY PVT. LTD.	KOLLAM
3341....	MASTERCARD TECHNOLOGY PVT. LTD.	NAVI MUMBAI
3342....	MASTERCARD TECHNOLOGY PVT. LTD.	NAYAGARH

S.No.	Organization	Location
3343....	MASTERCARD TECHNOLOGY PVT. LTD.	PUNE
3344....	MASTERCARD TECHNOLOGY PVT. LTD.	VADODARA
3345....	MASTERCARD TECHNOLOGY PVT. LTD.	WADAGONSHERI
3346....	MATHWORKS (I) PVT. LTD.	HYDERABAD
3347....	MATHWORKS (I) PVT. LTD.	BENGALURU
3348....	MATHWORKS (I) PVT. LTD.	RANCHI
3349....	MATYSA IT SERVICES	PUNE
3350....	MAURYA MOTORS LTD.	DUMRAON
3351....	MAVERICKGLOBAL INFO SOFT SERVICES PVT. LTD.	BENGALURU
3352....	MAXIM INTEGRATED	BENGALURU
3353....	MAYBANK SDN BHD	MADURAI
3354....	MAYFLOWER SOFTWARE PVT. LTD.	CHENNAI
3355....	MAZAGON DOCK SHIPBUILDERS LTD.	MUMBAI
3356....	MAZAGON DOCK SHIPBUILDERS LTD.	NASHIK
3357....	MCAFEE SOFTWARE (I) PVT. LTD.	VISAKHAPATNAM
3358....	MCAFEE SOFTWARE (I) PVT. LTD.	BENGALURU
3359....	MCC PTA (I) CORP.PVT.LTD.	HALDIA
3360....	MCDERMOTT MIDDLE EAST INC	DUBAI
3361....	MCDERMOTT MIDDLE EAST INC	ROHTAK
3362....	MCDERMOTT MIDDLE EAST INC	SANGLI
3363....	MCNALLY BHARAT ENGG. CO LTD.	KORBA
3364....	MCNALLY SAYAJI ENGINEERING LTD.	BENGALURU
3365....	MEAN METAL MOTORS	BENGALURU
3366....	MEDHA SERVO DRIVES PVT. LTD.	EAST GPDAVARI
3367....	MEDIA IQ DIGITAL	BENGALURU
3368....	MEDIATEK BENGALURU PVT. LTD.	BENGALURU
3369....	MEDLIFE.COM	BENGALURU
3370....	MEDTEK (I) PVT. LTD.	VIJAYAWADA
3371....	MEDTRONIC (I) PVT. LTD.	HYDERABAD
3372....	MEDTRONIC (I) PVT. LTD.	PUNE
3373....	MEDTRONIC (I) PVT. LTD.	BENGALURU
3374....	MEDWAY HOSPITALS	CHENNAI
3375....	MEEAMI TECHNOLOGIES	HYDERABAD
3376....	MEENAKSHI MISSION HOSPITAL & RESEARCH CENTRE	MADURAI
3377....	MEFAB ENGINEERING INDUSTRY LLC	DUBAI
3378....	MEGA RUBBER TECHNOLOGY PVT. LTD.	HOSUR
3379....	MEGATECH CONTROL ELECT. CONT. CO W.L.L.	MANGAF
3380....	MEGAVENT TECHNOLOGIES PVT. LTD.	JAIPUR
3381....	MEIYAD (I) LLP	FARIDABAD
3382....	MEPSERVE FZCO	DUBAI
3383....	MERCANTILE INFORMATION & TELECOMMUNICATION	PALAKKAD
3384....	MERCEDES-BENZ (I) PVT. LTD.	HONNAVAR
3385....	MERCEDES-BENZ (I) PVT. LTD.	CALICUT
3386....	MERCEDES-BENZ (I) PVT. LTD.	BENGALURU
3387....	MERCEDES-BENZ (I) PVT. LTD.	RATTIHALLI
3388....	MERCEDES-BENZ (I) PVT. LTD.	CHENNAI
3389....	MERCEDES-BENZ (I) PVT. LTD.	DANDELI
3390....	MERCEDES-BENZ (I) PVT. LTD.	HYDERABAD
3391....	MERCEDES-BENZ (I) PVT. LTD.	KASARAGOD
3392....	MERCEDES-BENZ (I) PVT. LTD.	THRISSUR
3393....	MERCEDES-BENZ (I) PVT. LTD.	PUNE
3394....	MERCK PHARMACEUTICAL LTD.	ULHASNAGAR
3395....	MERCURY MANAGEMENT AND TECHNICAL SERVICE	DAHOD
3396....	MERIT TECHNOLOGIES (I) LTD.	CHENNAI

S.No.	Organization	Location
3397....	META MIND TECHNOLOGIES	HYDERABAD
3398....	METACUBE SOFTWARE PVT. LTD.	CHITTOOR
3399....	METACUBE SOFTWARE PVT. LTD.	AJMER
3400....	METACUBE SOFTWARE PVT. LTD.	BHILWARA
3401....	METACUBE SOFTWARE PVT. LTD.	JAIPUR
3402....	METACUBE SOFTWARE PVT. LTD.	UDAIPUR
3403....	METADESIGN SOLUTIONS PVT. LTD.	NEW DELHI
3404....	METAFLEX DOORS (I) PVT. LTD.	GREATER NOIDA
3405....	METALMAN MICRO TURNERS	ALLAHABAD
3406....	METALMAN MICROTURNS	RUDRAPUR
3407....	METALTECH DESIGN PVT. LTD.	GHAZIABAD
3408....	METHODE ELECTRONICS	BENGALURU
3409....	METICULOUS MARKET RESEARCH PVT. LTD.	PUNE
3410....	METITO OVERSEAS LTD.	DUBAI
3411....	METRICSTREAM INFOTECH (I) PVT. LTD.	BENGALURU
3412....	METRICSTREAM INFOTECH (I) PVT. LTD.	PUNE
3413....	METRO HOSPITAL FARIDABAD	FARIDABAD
3414....	METSMITH TECHNO PVT. LTD.	HOSUR
3415....	METSYS TECHNOLOGIES PVT. LTD.	PUNE
3416....	MGA INDUSTRIES	FARIDABAD
3417....	MHB FILTER (I) PVT. LTD.	AKKALKOT
3418....	MICHELIN (I) PVT. LTD.	CHENNAI
3419....	MICHELIN (I) PVT. LTD.	GREATER NOIDA
3420....	MICHELIN (I) PVT. LTD.	BHUBANESWAR
3421....	MICHELIN (I) PVT. LTD.	COIMBATORE
3422....	MICHELIN (I) PVT. LTD.	DINDIGUL
3423....	MICHELIN (I) PVT. LTD.	HUBLI
3424....	MICHELIN (I) PVT. LTD.	KRISHNAGIRI
3425....	MICHELIN (I) PVT. LTD.	MADURAI
3426....	MICHELIN (I) PVT. LTD.	THENI
3427....	MICHELIN (I) PVT. LTD.	VELLORE
3428....	MICHELIN (I) PVT. LTD.	VIRUDHUNAGAR
3429....	MICHELIN (I) PVT. LTD.	THANJAVUR
3430....	MICRO FOCUS SOFTWARE (I) PVT. LTD.	CHENNAI
3431....	MICRO FOCUS SOFTWARE (I) PVT. LTD.	BENGALURU
3432....	MICRO LABS LTD.	BENGALURU
3433....	MICROCHIP TECHNOLOGY (I) PVT. LTD.	BENGALURU
3434....	MICROCHIP TECHNOLOGY (I) PVT. LTD.	MADURAI
3435....	MICROCHIP TECHNOLOGY (I) PVT. LTD.	ODDANCHATRAM
3436....	MICROCHIP TECHNOLOGY (I) PVT. LTD.	CHENNAI
3437....	MICROCHIP TECHNOLOGY (I) PVT. LTD.	PUDUCHERRY
3438....	MICROSEMI (I) PVT. LTD.	BENGALURU
3439....	MICROSEMI (I) PVT. LTD.	HYDERABAD
3440....	MICROSEMI (I) PVT. LTD.	WARANGAL
3441....	MICROSOFT (I) (R&D) PVT. LTD.	BENGALURU
3442....	MICROSOFT (I) (R&D) PVT. LTD.	CHENNAI
3443....	MICROSOFT (I) (R&D) PVT. LTD.	HANAMKONDA
3444....	MICROSOFT (I) (R&D) PVT. LTD.	HYDERABAD
3445....	MICROSOFT (I) (R&D) PVT. LTD.	KOTA
3446....	MICROSOFT (I) (R&D) PVT. LTD.	LUCKNOW
3447....	MICROSOFT (I) (R&D) PVT. LTD.	PANCHKULA
3448....	MICROSOFT (I) (R&D) PVT. LTD.	PUNE
3449....	MICROSOFT CORPORATION	HYDERABAD
3450....	MICROSOFT GTSC	BENGALURU

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
3451....	MIDAS SAFETY PRODUCTS PVT. LTD.	ALAPPUZHA
3452....	MIDDLEBY (I) ENGINEERING PVT. LTD.	HOSUR
3453....	MIKUNI (I) PVT. LTD.	GURUGRAM
3454....	MILLENNIUM TECHNOSOFT LTD.	HYDERABAD
3455....	MILSTAR RF & MICROWAVE SYSTEMS PVT. LTD.	HYDERABAD
3456....	MINDA CORPORATION LTD.	DELHI
3457....	MINDA INDUSTRIES LTD.	AMBALA
3458....	MINDA INDUSTRIES LTD.	YAMUNA NAGAR
3459....	MINDA INDUSTRIES LTD.	GURUGRAM
3460....	MINDA INDUSTRIES LTD.	CHHINDWARA
3461....	MINDA KYORAKU LTD.	GURUGRAM
3462....	MINDA STONERIDGE INSTRUMENTS LTD.	PUNE
3463....	MINDCURV TECHINCAL SERVICES PVT. LTD.	KOCHI
3464....	MINDCURV TSPL	THRISSUR
3465....	MINDLANCE TECH	HYDERABAD
3466....	MINDTECK (I) LTD.	KOLKATA
3467....	MINDTECK (I) LTD.	SAINTHIA
3468....	MINDTREE LTD.	BENGALURU
3469....	MINDTREE LTD.	CHENNAI
3470....	MINDTREE LTD.	COIMBATORE
3471....	MINDTREE LTD.	ERNAKULAM
3472....	MINDTREE LTD.	GURUGRAM
3473....	MINDTREE LTD.	HINDUPUR
3474....	MINDTREE LTD.	HUBLI
3475....	MINDTREE LTD.	KADAPA
3476....	MINDTREE LTD.	KOLKATA
3477....	MINDTREE LTD.	NAGAPATTINAM
3478....	MINDTREE LTD.	VIJAYAWADA
3479....	MINEBEA INTEC	BENGALURU
3480....	MINERALS TECHNOLOGIES	BENGALURU
3481....	MINISTRY OF DEFENCE	LUCKNOW
3482....	MINISTRY OF DEFENCE	KAPURTHALA
3483....	MINISTRY OF LAND BORDER SECURITY	MADURAI
3484....	MINISTRY OF NATIONAL GUARD-HEALTH AFFAIR	COIMBATORE
3485....	MINISTRY OF RAILWAYS	BHOPAL
3486....	MIPCO OPERATION AND MAINTENANCE CO	VIRUDHACHALAM
3487....	MIRABEL TECHNOLOGIES (I) PVT. LTD.	HYDERABAD
3488....	MIRAFRA SOFTWARE TECHNOLOGIES PVT. LTD.	BENGALURU
3489....	MIRAFRA SOFTWARE TECHNOLOGIES PVT. LTD.	KOLKATA
3490....	MIRAFRA SOFTWARE TECHNOLOGIES PVT. LTD.	HYDERABAD
3491....	MISTRAL SOLUTIONS PVT. LTD.	BENGALURU
3492....	MISTRAL SOLUTIONS PVT. LTD.	KOTA
3493....	MISYS HEALTHCARE SYSTEMS (I) PVT. LTD.	BENGALURU
3494....	MISYS SOFTWARE SOLUTIONS (I) PVT. LTD.	BENGALURU
3495....	MISYS SOFTWARE SOLUTIONS (I) PVT. LTD.	BENGALURU
3496....	MIT WORLD PEACE UNIVERSITY	PUNE
3497....	MITEL NETWORKS	BENGALURU
3498....	MITRA AGRO EQUIPMENTS PVT. LTD.	PUNE
3499....	MITSUBISHI ELECTRIC (I) PVT.LTD.	GADCHIROLI
3500....	MITSUBISHI ELECTRIC (I) PVT.LTD.	KOLHAR
3501....	MITTCO LLC	DUBAI
3502....	MITTCO LLC	PALAKKAD
3503....	ML OUTSOURCING SERVICES PVT. LTD.	CHENNAI
3504....	MLL HOSPITAL	MADANAPALLI

S.No.	Organization	Location
3505....	MNADO AUTOMOTIVE INDIANPVT. LTD.	KANCHEEPURAM
3506....	MOBILECODERZ TECHNOLOGIES	NEW DELHI
3507....	MOBILEIRON	SALIGRAMA
3508....	MOBILEUM (I) PVT. LTD.	DELHI
3509....	MOBIS (I) LTD.	GWALIOR
3510....	MOBISIR TECHNOLOGIES PVT. LTD.	BENGALURU
3511....	MOBME WIRELESS SOLUTIONS	KOCHI
3512....	MODINE THERMAL SYSTEMS	CHENNAI
3513....	MOLEX (I) BUSINESS SERVICES PVT. LTD.	BENGALURU
3514....	MOLEX (I) BUSINESS SERVICES PVT. LTD.	SHIVAMOGGA
3515....	MOLEX (I) BUSINESS SERVICES PVT. LTD.	PATNA
3516....	MOL-IT (I) PVT. LTD.	KOLKATA
3517....	MOL-IT (I) PVT. LTD.	HOWRAH
3518....	MOMENTS INFO SERVICES PVT. LTD.	AHMEDABAD
3519....	MONDELEZ (I) FOODS PVT. LTD.	SAHARANPUR
3520....	MONGODB INC	BENGALURU
3521....	MONSANTO HOLDINGS PVT. LTD.	HYDERABAD
3522....	MOONRAFT INNOVATION LABS	MADANAPALLI
3523....	MORGAN STANLEY ADVANTAGES SERVICES LTD.	BENGALURU
3524....	MORGAN STANLEY ADVANTAGES SERVICES LTD.	MUMBAI
3525....	MORGAN STANLEY ADVANTAGES SERVICES LTD.	VIRUDHUNAGAR
3526....	MOSER BAER (I) LTD.	GREATER NOIDA
3527....	MOTHERSON SUMI SYSTEMS LTD.	AHMEDABAD
3528....	MOTHERSON SUMI SYSTEMS LTD.	CHENNAI
3529....	MOTHERSONSUMI INFOTECH & DESIGNS LTD.	KURNOOL
3530....	MOTT MACDONALD & CO LLC	MUSCAT
3531....	MOVE INC.	ERODE
3532....	MPHASIS LTD.	BENGALURU
3533....	MPHASIS LTD.	HYDERABAD
3534....	MPHASIS LTD.	JODHPUR
3535....	MPHASIS LTD.	PUNE
3536....	MPHASIS LTD.	CHENNAI
3537....	MRF LTD.	CHENNAI
3538....	MRF LTD.	HYDERABAD
3539....	MRF LTD.	KARAIKUDI
3540....	MRF TYRES	MADURAI
3541....	MRF TYRES	TIRUCHIRAPPALLI
3542....	MRF TYRES	CHENNAI
3543....	MRV INFOTECH (I) PVT. LTD.	VELACHERY
3544....	MSCRIPTS SYSTEMS (I) PVT. LTD.	CHINTAMANI
3545....	MSD INTERNATIONAL GMBH	CHENNAI
3546....	MSD INTERNATIONAL GMBH	SINGAPORE
3547....	MSL DRIVELINE SYSTEMS LTD.	NASHIK
3548....	MSYS TECH (I) PVT. LTD.	PUNE
3549....	MTU (I) PVT. LTD.	KOLHAPUR
3550....	MTU (I) PVT. LTD.	PUNE
3551....	MUBEA AUTOMOTIVE COMPONENTS (I) PVT. LTD.	PUNE
3552....	MUBEA AUTOMOTIVE COMPONENTS (I) PVT. LTD.	ROURKELA
3553....	MUNICIPAL CORP	AURANGABAD
3554....	MUNJAL CASTINGS	LUDHIANA
3555....	MUNJAL SHOWA PVT. LTD.	GURUGRAM
3556....	MURUGAPPA MORGAN THERMAL CERAMICS	AHMEDABAD
3557....	MUSTAFA SULTAN SCIENCE AND INDUSTRY.CO.	KOOTHATTUKULAM
3558....	MUTHOOT MEDICAL CENTRE	KOLLAM

S.No.	Organization	Location
3559....	MYLAN LABORATORIES LTD.	RAJAHMUNDRY
3560....	MYLAN LABORATORIES LTD.	BENGALURU
3561....	MYLAN LABORATORIES LTD.	GURUGRAM
3562....	MYLAN LABORATORIES LTD.	HOSUR
3563....	MYLAN LABORATORIES LTD.	HYDERABAD
3564....	MYLAN LABORATORIES LTD.	MADURAI
3565....	MYLAN LABORATORIES LTD.	NASHIK
3566....	MYNTRA DESIGNS PVT. LTD.	TIRUCHENGODE
3567....	MYNTRA DESIGNS PVT. LTD.	BENGALURU
3568....	MYSORE MEDICAL COLLEGE AND RESEARCH INSTITUTE	MYSORE
3569....	MYTEX POLYMERS (I) PVT. LTD.	REWARI
3570....	NABORS DRILLING INTERNATIONAL LTD.	THRISSUR
3571....	NAFFCO ELECTROMECHANICAL LLC	KOLLAM
3572....	NAFFCO ELECTROMECHANICAL LLC	TIRUCHIRAPPALLI
3573....	NAFFCO ELECTROMECHANICAL LLC	JEBEL ALI
3574....	NAFFCO ELECTROMECHANICAL LLC	JAFZA
3575....	NAFFCO ELECTROMECHANICAL LLC	DUBAI
3576....	NAGALAND UNIVERSITY	DIMAPUR
3577....	NAGARRO SOFTWARE PVT. LTD.	DELHI
3578....	NAGARRO SOFTWARE PVT. LTD.	GHAZIABAD
3579....	NAGARRO SOFTWARE PVT. LTD.	NEW DELHI
3580....	NAILBITER RESEARCH	AHMEDABAD
3581....	NAKILAT KEPPEL OFFSHORE AND MARINE LTD.	NEYVELI
3582....	NAMO NARAYAN INDUSTRIES	VALANCHERY
3583....	NANO SCIENTIFIC RESEARCH CENTRE PVT.LTD.	KHAMMAM
3584....	NAPIER HEALTHCARE SOLUTIONS (I) LTD.	CHENNAI
3585....	NAPINO AUTO & ELECTRONICS LTD.	FARIDABAD
3586....	NAPINO AUTO & ELECTRONICS LTD.	GHAZIABAD
3587....	NAPINO AUTO & ELECTRONICS LTD.	KHATAULI
3588....	NARAYANA NETHRALAYA	GURUGRAM
3589....	NARAYANA NETHRALAYA	BENGALURU
3590....	NASCON ENGINEERING LTD.	HYDERABAD
3591....	NATCO PHARMA LTD.	HYDERABAD
3592....	NATIOAL ENGINEERING INDUSTRIES	TIRUCHIRAPPALLI
3593....	NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE	MOHALI
3594....	NATIONAL AUTO PLAST	COIMBATORE
3595....	NATIONAL AUTO PLAST	TIRUCHIRAPPALLI
3596....	NATIONAL CENTRE FOR BIOLOGICAL SCIENCES	BENGALURU
3597....	NATIONAL CONTRACTING CO LTD.	ABU DHABI
3598....	NATIONAL COUNCIL OF SCIENCE MUSEUM	AGARTALA
3599....	NATIONAL COUNCIL OF SCIENCE MUSEUM	HOWRAH
3600....	NATIONAL COUNCIL OF SCIENCE MUSEUM	KOLKATA
3601....	NATIONAL COUNCIL OF SCIENCE MUSEUM	KOLLAM
3602....	NATIONAL COUNCIL OF SCIENCE MUSEUM	KONNAGAR
3603....	NATIONAL COUNCIL OF SCIENCE MUSEUM	MUMBAI
3604....	NATIONAL COUNCIL OF SCIENCE MUSEUM	ROURKELA
3605....	NATIONAL DEFENCE ACADEMY	PUNE
3606....	NATIONAL ENGINEERING INDUSTRIES LTD.	JAIPUR
3607....	NATIONAL ENGINEERING INDUSTRIES LTD.	AJMER
3608....	NATIONAL ENGINEERING INDUSTRIES LTD.	DELHI
3609....	NATIONAL ENGINEERING INDUSTRIES LTD.	GHAZIABAD
3610....	NATIONAL ENGINEERING INDUSTRIES LTD.	PATTUKKOTTAI
3611....	NATIONAL ENGINEERING INDUSTRIES LTD.	BHARATPUR
3612....	NATIONAL INFORMATICS CENTER	JAIPUR

S.No.	Organization	Location
3613....	NATIONAL INFORMATICS CENTER	CHENNAI
3614....	NATIONAL INFORMATICS CENTER	GORAKHPUR
3615....	NATIONAL INFORMATICS CENTER	KARALI
3616....	NATIONAL INFORMATICS CENTER	PORVORIM
3617....	NATIONAL INFORMATICS CENTER	PUNE
3618....	NATIONAL INFORMATICS CENTER	RATANGARH
3619....	NATIONAL INFORMATICS CENTER	AGARTALA
3620....	NATIONAL INSTITUTE OF FASHION TECHNOLOGY	BENGALURU
3621....	NATIONAL INSTITUTE OF FASHION TECHNOLOGY	TIRUCHIRAPPALLI
3622....	NATIONAL INSTITUTE OF NUTRITION	HYDERABAD
3623....	NATIONAL INSTITUTE OF WIND ENERGY TECHNOLOGY	CHENNAI
3624....	NATIONAL INSTU. OF OPHTHALMIC SCIENCES	MALAYSIA
3625....	NATIONAL PHYSICAL LABORATORY	NEW DELHI
3626....	NAVA ENERGY ZAMBIA LTD.	CUDDALORE
3627....	NAVISTAR INTERNATIONAL PVT. LTD.	PUNE
3628....	NAVSEMI TECHNOLOGIES PVT. LTD.	BENGALURU
3629....	NCC LTD.	CHENNAI
3630....	NCC LTD.	HYDERABAD
3631....	NCC LTD.	KANIGIRI
3632....	NCR CORPORATION (I) PVT. LTD.	DUBAI
3633....	NCR CORPORATION (I) PVT. LTD.	GURUGRAM
3634....	NCR CORPORATION (I) PVT. LTD.	HYDERABAD
3635....	NCR CORPORATION (I) PVT. LTD.	MUMBAI
3636....	NCR CORPORATION (I) PVT. LTD.	SANGAREDDY
3637....	NCR CORPORATION (I) PVT. LTD.	ALIGARH
3638....	NCS PTE LTD.	HYDERABAD
3639....	NDS SERVICE PAY TV TECHNOLOGY LTD.	BENGALURU
3640....	NEC TECHNOLOGIES (I) PVT. LTD.	PUNE
3641....	NEETA DAIRY	MUMBAI
3642....	NEI LTD.	JAIPUR
3643....	NEI LTD.	JAIPUR
3644....	NEILSOFT LTD.	PUNE
3645....	NELCAST LTD.	GUDUR
3646....	NELCO LTD.	MUMBAI
3647....	NEOIRTECH (I) PVT. LTD.	BENGALURU
3648....	NEOSOFT TECHNOLOGIES	AURANGABAD
3649....	NEOSOFT TECHNOLOGIES	THANE
3650....	NEPRA RESOURCE MANAGEMENT PVT. LTD.	AHMEDABAD
3651....	NESANS MINING AND AUTOMATION PVT. LIM	COIMBATORE
3652....	NESS TECHNOLOGIES (I) PVT. LTD.	HYDERABAD
3653....	NESS TECHNOLOGIES (I) PVT. LTD.	SURAT
3654....	NESS TECHNOLOGIES (I) PVT. LTD.	SECUNDERABAD
3655....	NEST INFORMATION TECHNOLOGIES	ALAPPUZHA
3656....	NEST INFORMATION TECHNOLOGIES	VAIPUR
3657....	NESTLE (I) LTD.	AMRITSAR
3658....	NESTLE (I) LTD.	MOGA
3659....	NESTLE (I) LTD.	PANIPAT
3660....	NESTLE (I) LTD.	QUEPEM
3661....	NESTLE MIDDLE EAST MANUFACTURING	DUBAI
3662....	NET ACCESS (I) LTD.	VELLORE
3663....	NETAPP (I) PVT. LTD.	BENGALURU
3664....	NETCRACKER TECHNOLOGY SOLUTIONS PVT. LTD.	HYDERABAD
3665....	NETCRACKER TECHNOLOGY SOLUTIONS PVT. LTD.	UDAIPUR
3666....	NETENRICH TECHNOLOGIES PVT. LTD.	HYDERABAD



<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
3667....	NETENRICH TECHNOLOGIES PVT. LTD.	SECUNDERABAD
3668....	NETHRAM LLC	THALLIPARAMBA
3669....	NETSKOPE SOFTWARE (I) PVT. LTD.	BENGALURU
3670....	NETTUR TECHNICAL TRAINING FOUNDATION	JAMSHEDPUR
3671....	NETTUR TECHNICAL TRAINING FOUNDATION	VELLORE
3672....	NEULAND LABORATORIES LTD.	HYDERABAD
3673....	NEULAND LABS PVT. LTD.	AMALAPURAM
3674....	NEUSTAR INC	BENGALURU
3675....	NEW ERA SWITCHGEAR PVT. LTD.	UJJAIN
3676....	NEW SPICE SALES & SOLUTION	GHAZIABAD
3677....	NEWT GLOBAL	KUMBAKONAM
3678....	NEX GLOBAL CONSULTANCY SERVICES	SURAT
3679....	NEXTEER AUTOMOTIVE	BENGALURU
3680....	NEXTGEN HEALTHCARE (I) PVT. LTD.	BENGALURU
3681....	NHK AUTOMOTIVE COMPONENTS (I) PVT. LTD.	AHMEDNAGAR
3682....	NHPC LTD.	PATNA
3683....	NICCO ENGINEERING SREVICES LTD.	MUMBAI
3684....	NICE INTERACTIVE SOLUTIONS PVT. LTD.	PUNE
3685....	NICE INTERACTIVE SOLUTIONS PVT. LTD.	MUMBAI
3686....	NIFSER TRAINING AND CONSULTANCY SERVICES	DEHRADUN
3687....	NIHILENT ANALYTICS LTD.	KOLKATA
3688....	NIHILENT TECHNOLOGIES PVT. LTD.	SATARA
3689....	NIHILENT TECHNOLOGIES PVT. LTD.	PUNE
3690....	NIHON COMMUNICATION SOLUTIONS PVT. LTD.	BENGALURU
3691....	NIIT TECHNOLOGIES LTD.	DELHI
3692....	NIIT TECHNOLOGIES LTD.	NEW DELHI
3693....	NIIT TECHNOLOGIES LTD.	DIDWANA
3694....	NILKAMAL LTD.	THANE
3695....	NIMR AUTOMOTIVE LLC	KANCHEEPURAM
3696....	NINELEAPS TECHNOLOGY SOLUTIONS PVT. LTD.	BENGALURU
3697....	NIPPON DATA SYSTEMS	ROHTAK
3698....	NIPPON DATA SYSTEMS	GURUGRAM
3699....	NIRMA CHEMICALS LTD.	BHAVNAGAR
3700....	NIRMA LTD.	JAITARAN
3701....	NIRMAL FIBER PVT. LTD.	REENGUS
3702....	NISSAN ASHOKLEYLAND POWERTRAIN LTD.	CHENNAI
3703....	NIST ITI	VISAKHAPATNAM
3704....	NITS SOLUTIONS	DELHI
3705....	NITYAM WEBTECH	RAJKOT
3706....	NIVIDIOUS SOFTWARE SOLUTION PVT. LTD.	MUMBAI
3707....	NIYUJ ENTERPRISE SOFT SOLUTION PVT. LTD.	PUNE
3708....	NIZWA COLLEGE OF TECHNOLOGY	CHENNAI
3709....	NIZWA COLLEGE OF TECHNOLOGY .	TIRUPPUR
3710....	NIZWA COLLEGE OF TECHNOLOGY,OMAN	KOZHIKODE
3711....	NJS ENGINEERS (I) PVT. LTD.	KOLKATA
3712....	NMC TRADING LLC	TRISSUR
3713....	NMDC LTD.	DANTEWADA
3714....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	BENGALURU
3715....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	CHENNAI
3716....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	KOLKATA
3717....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	PATNA
3718....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	ROURKELA
3719....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	THIRUVANANTHAPURAM
3720....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	LUCKNOW

S.No.	Organization	Location
3721....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	ROHTAK
3722....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	TIRUPPUR
3723....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	KALYAN
3724....	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	MADURAI
3725....	NOMURA STRUCTURED FIN SERVICES	HALDWANI
3726....	NORTH ANDHRA COASTAL EVANGELISING ASSOCI	MACHILIPATNAM
3727....	NORTH TELECOM LLC	DOMBIVLI
3728....	NORTHLAB PTE LTD.	PALAKKAD
3729....	NOUS INFOSYSTEMS	BENGALURU
3730....	NOV FGS,SINGAPORE	SINGAPORE
3731....	NOVARTIS HEALTHCARE PVT. LTD.	BENGALURU
3732....	NOVARTIS HEALTHCARE PVT. LTD.	HYDERABAD
3733....	NOVARTIS SINGAPORE PHARMACEUTICAL MANUFACTURING	SIVAGANGAI
3734....	NOVI DIGITAL ENTERTAINMENT PVT. LTD.	NEW DELHI
3735....	NOVO NORDISK	BENGALURU
3736....	NOX ENGINEERING PVT. LTD.	HYDERABAD
3737....	NPCC	ALAPPUZHA
3738....	NPCC	DUBAI
3739....	NPCC	KANNUR
3740....	NPCC,ABU DHABI	ABU DHABI
3741....	NRI FINTECH (I) PVT.LTD.	KOLKATA
3742....	NTPC ALSTOM POWER SERVICES PVT. LTD.	UDHAMPUR
3743....	NTPC LTD.	SONEBHADRA
3744....	NTS CO LLC	AJMER
3745....	NTT DATA INFORMATION PROCESSING SERVICES	BENGALURU
3746....	NTT DATA INFORMATION PROCESSING SERVICES	NOIDA
3747....	NTT DATA INFORMATION PROCESSING SERVICES	RAJBALHAT
3748....	NTT DATA SINGAPORE PTE LTD.	MADURAI
3749....	NUANCE (I) PVT. LTD.	LUCKNOW
3750....	NUANCE (I) PVT. LTD.	PUNE
3751....	NUCLEAR POWER CORPORATION OF (I) LTD.	KARWAR
3752....	NUCLEAR POWER CORPORATION OF (I) LTD.	MUMBAI
3753....	NUCLEUS SOFTWARE EXPORTS LTD.	NOIDA
3754....	NUCLEUS SOFTWARE EXPORTS LTD.	LUCKNOW
3755....	NUCLEUS SOFTWARE EXPORTS LTD.	NEW DELHI
3756....	NUSECOND TECHNOLOGIES PVT. LTD.	BENGALURU
3757....	NUTANIX TECHNOLOGIES (I) PVT. LTD.	BENGALURU
3758....	NUVISO NETWORKS PVT. LTD.	BENGALURU
3759....	NVIDIA GRAPHICS PVT. LTD.	BENGALURU
3760....	NVIDIA GRAPHICS PVT. LTD.	PUNE
3761....	NVIDIA GRAPHICS PVT. LTD.	HYDERABAD
3762....	NVIDIA GRAPHICS PVT. LTD.	NAGPUR
3763....	NXP (I) PVT. LTD.	BENGALURU
3764....	NXP (I) PVT. LTD.	ALWAR
3765....	NYK AUTO LOGISTICS (I) PVT. LTD.	CHENNAI
3766....	NYQUEST INNOVATION LABS PVT. LTD.	KOLLAM
3767....	O/E/N (I) LTD.	KOTTAYAM
3768....	OASIS INVESTMENT CO LLC	DUBAI
3769....	OBJECT-FRONTIER SOFTWARE PVT. LTD.	CHENNAI
3770....	OCWEN FINANCIALS	THANE
3771....	ODC STANDARDS	HYDERABAD
3772....	ODESSA TECHNOLOGIES	COIMBATORE
3773....	OERLIKON BALZERS	PUNE
3774....	OGNIBENE (I) PVT. LTD.	PUNE

S.No.	Organization	Location
3775....	OIL & NATURAL GAS CORPORATION LTD.	BHIMAVARAM
3776....	OILFIELD SUPPLY CENTRE LTD.	BHOPAL
3777....	OILFIELDS SUPPLY CENTER	THIRUVANANTHAPURAM
3778....	OLA CABS	SRIKAKULAM
3779....	OLCI ENGINEERING (I) PVT. LTD.	PUNE
3780....	OMAN FIBER OPTIC SAOG	AL RUSAYL
3781....	OMAN OIL REFINERIES AND PETROLEUM INDUSTRY	CHENNAI
3782....	OMNEX (I) PVT. LTD.	CALICUT
3783....	OMNI AUTO LTD.	JAMSHEDPUR
3784....	OMNI HOSPITALS	HYDERABAD
3785....	OMNIX INTERNATIONAL	HYDERABAD
3786....	OMT SOFTWARE PVT. LTD.	NEW DELHI
3787....	ON SEMICONDUCTOR TECHNOLOGY (I) PVT. LTD.	GHAZIABAD
3788....	ON SEMICONDUCTOR TECHNOLOGY (I) PVT. LTD.	BENGALURU
3789....	ONDOT SYSTEMS (I) PVT. LTD.	BENGALURU
3790....	ONE97 COMMUNICATIONS	NOIDA
3791....	ONGC PETRO ADDITIONS LTD.	NELLORE
3792....	ONMOBILE GLOBAL LTD.	BENGALURU
3793....	ONTIME INDUSTRIAL SERVICE LTD.	MADURAI
3794....	ONWARD TECHNOLOGIES PVT. LTD.	CHENNAI
3795....	ONWARD TECHNOLOGIES PVT. LTD.	GADAG
3796....	ONWARD TECHNOLOGIES PVT. LTD.	PUNE
3797....	OOYALA (I) PVT. LTD.	CHENNAI
3798....	OPEN SKY LABS PVT. LTD.	BENGALURU
3799....	OPEN-SILICON RESEARCH PVT. LTD.	BENGALURU
3800....	OPENTEXT TECHNOLOGIES (I) PVT. LTD.	HYDERABAD
3801....	OPERATIONAL ENERGY GROUP (I) PVT.LTD.	CHENNAI
3802....	OPTEL VISION	PONDA
3803....	OPTIEMUS ELECTRONICS LTD.	NOIDA
3804....	OPTIMIZORY TECHNOLOGIES PVT. LTD.	NOIDA
3805....	OPTIVAL HEALTH SOLUTIONS PVT. LTD.	HYDERABAD
3806....	OPTUM GLOBAL SOLUTIONS (I) PVT. LTD.	HYDERABAD
3807....	OPTUM GLOBAL SOLUTIONS (I) PVT. LTD.	SECUNDRABAD
3808....	OPTUM GLOBAL SOLUTIONS (I) PVT. LTD.	BENGALURU
3809....	OPTYM (I) PVT. LTD.	GURUGRAM
3810....	ORACLE (I) PVT. LTD.	BELLARY
3811....	ORACLE (I) PVT. LTD.	BENGALURU
3812....	ORACLE (I) PVT. LTD.	DELHI
3813....	ORACLE (I) PVT. LTD.	ERNAKULAM
3814....	ORACLE (I) PVT. LTD.	HYDERABAD
3815....	ORACLE (I) PVT. LTD.	THIRUVANANTHAPURAM
3816....	ORACLE (I) PVT. LTD.	MUZAFFARPUR
3817....	ORACLE (I) PVT. LTD.	BHUBANESWAR
3818....	ORACLE (I) PVT. LTD.	HOSUR
3819....	ORACLE (I) PVT. LTD.	KAKINADA
3820....	ORACLE (I) PVT. LTD.	KOLAR
3821....	ORACLE (I) PVT. LTD.	KOTTAYAM
3822....	ORACLE (I) PVT. LTD.	NARASANNAPETA
3823....	ORACLE (I) PVT. LTD.	NOIDA
3824....	ORACLE (I) PVT. LTD.	SILIGURI
3825....	ORACLE (I) PVT. LTD.	VAZHAKULAM
3826....	ORACLE (I) PVT. LTD.	BHIMAVARAM
3827....	ORACLE (I) PVT. LTD.	CHENNAI
3828....	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	ERODE

S.No.	Organization	Location
3829....	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	BENGALURU
3830....	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	HYDERABAD
3831....	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	NAVI MUMBAI
3832....	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	PINDWARA
3833....	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	PUNE
3834....	ORACLE SOLUTION SERVICES PVT. LTD.	BENGALURU
3835....	ORACLE SOLUTION SERVICES PVT. LTD.	KOLKATA
3836....	ORANGE BUSINESS SERVICES	GURUGRAM
3837....	ORANGE BUSINESS SERVICES	NASHIK
3838....	ORANGE CITY WATER PVT. LTD.	NAGPUR
3839....	ORBICULAR PHARMACEUTICAL TECHNOLOGY PVT. LTD.	SECUNDERABAD
3840....	ORBIT TECHNICAL SOLUTIONS (I) PVT. LTD.	KANCHEEPURAM
3841....	ORGA SYSTEMS (I) PVT. LTD.	KOLKATA
3842....	ORIENTAL BANK OF COMMERCE	MUMBAI
3843....	ORIENTAL STRUCTURAL ENGINEERS PVT. LTD.	DELHI
3844....	OSSCUBE SOLUTIONS LTD.	BIKANER
3845....	OSTRO ENERGY PVT. LTD.	PANDHARKAWADA
3846....	OTIS ELEVATOR CO (I) LTD.	BENGALURU
3847....	OTIS ELEVATOR CO (I) LTD.	TIRUCHIRAPPALLI
3848....	OTIS ELEVATOR CO (I) LTD.	KOZHIKODE
3849....	OVERSEAS AST CO LLC	VIRUDHUNAGAR
3850....	OWLER (I) PVT. LTD.	ERODE
3851....	OZONE HOSPITAL & RESEARCH CENTRE PVT. LTD.	AKOLA
3852....	OZONE OVERSEAS PVT. LTD.	KANGRA
3853....	PACE MICRO TECHNOLOGY	MADURAI
3854....	PADMADGSOFT PVT. LTD.	CHENNAI
3855....	PADMINI VNA MECHATRONICS PVT. LTD.	GURUGRAM
3856....	PALADION NETWORKS PVT. LTD.	BENGALURU
3857....	PALL (I) PVT. LTD.	HYDERABAD
3858....	PALMMASON PVT. LTD.	NEW DELHI
3859....	PANASONIC (I) PVT. LTD.	GHAZIABAD
3860....	PANASONIC (I) PVT. LTD.	GURUGRAM
3861....	PANASONIC (I) PVT. LTD.	HANSI
3862....	PANASONIC (I) PVT. LTD.	JHAJJAR
3863....	PANASONIC (I) PVT. LTD.	REWARI
3864....	PANASONIC (I) PVT. LTD.	NEW DELHI
3865....	PANASONIC AVIONICS CORPORATION	DUBAI
3866....	PANDIT DEENDAYAL PETROLEUM UNIVERSITY	AHMEDABAD
3867....	PANORAMA TELEVISION PVT. LTD.	HYDERABAD
3868....	PARALLEL WIRELESS (I) PVT. LTD.	PUNE
3869....	PARAMETRIC TECHNOLOGY CORPORATION	DHARAMSHALA
3870....	PAREXEL INTERNATIONAL (I) PVT. LTD.	HYDERABAD
3871....	PARKER HANNIFIN (I) PVT. LTD.	COIMBATORE
3872....	PARLE GLOBAL TECHNOLOGIES PVT. LTD.	THANE
3873....	PARLE GLOBAL TECHNOLOGIES PVT. LTD.	MUMBAI
3874....	PARSONS INTERNATIONAL LTD.	ABU DHABI
3875....	PARSONS INTERNATIONAL LTD.	DELHI
3876....	PARSONS INTERNATIONAL LTD.	PATNA
3877....	PARVATHY ORTHO HOSPITAL PVT. LTD.	CHENNAI
3878....	PARVEEN INDUSTRIES PVT. LTD.	DELHI
3879....	PATENT OFFICE MINISTRY OF COMMERCE	DELHI
3880....	PATH PARTNER TECHNOLOGY PVT. LTD.	BENGALURU
3881....	PATSPIN (I) LTD.	ALUVA
3882....	PAVITRA CHITFUND PVT. LTD.	VIJAYAWADA

S.No.	Organization	Location
3883....	PAYPAL (I) PVT. LTD.	CHENNAI
3884....	PAYPAL (I) PVT. LTD.	NEW DELHI
3885....	PAYPAL (I) PVT. LTD.	BENGALURU
3886....	PAYPAL (I) PVT. LTD.	TIRUVANNAMALAI
3887....	PEGA SYSTEMS WORLWIDE PVT. LTD.	HYDERABAD
3888....	PEINER SMAG MACHINERY (I) PVT. LTD.	KALPAKKAM
3889....	PELMAR SUDRISHTI ENGINEERING (I) PVT. LTD.	HYDERABAD
3890....	PEMAC PTE LTD.	CHENNAI
3891....	PENNNAR INDUSTRIES LTD.	JAUNPUR
3892....	PENNNAR INDUSTRIES LTD.	THIRUVANANTHAPURAM
3893....	PENTAIR VALVES AND CONTROL (I) PVT. LTD.	BENGALURU
3894....	PENTAIR WATER (I)	VERNA
3895....	PENTAIR WATER (I) PVT. LTD.	DELHI
3896....	PEOPLESTRONG	NEW DELHI
3897....	PEOPLETECH	HYDERABAD
3898....	PERFECT INTERNATIONAL FZC	THIRUVALLA
3899....	PERFETTI VAN MELLE (I) PVT. LTD.	GURUGRAM
3900....	PERFETTI VAN MELLE (I) PVT. LTD.	HAMIRPUR
3901....	PERFTECH SOLUTIONS PVT. LTD.	BENGALURU
3902....	PERISOFT TECHNOLOGIES PVT. LTD.	MADURAI
3903....	PERSISTENT SYSTEMS LTD.	BENGALURU
3904....	PERSISTENT SYSTEMS LTD.	MANGALURU
3905....	PERSISTENT SYSTEMS LTD.	NAGPUR
3906....	PERSISTENT SYSTEMS LTD.	PUNE
3907....	PERSISTENT SYSTEMS LTD.	SALIGAO
3908....	PERSISTENT SYSTEMS LTD.	THANE
3909....	PETRO SG ASSOCIATES	DOMBIVLI
3910....	PETRO SG ASSOCIATES	MUMBAI
3911....	PETROFAC EMIRATES	BHUBANESWAR
3912....	PETROFAC ENGINEERING SERVICES (I) PVT. LTD.	KAYAMKULAM
3913....	PETROFAC ENGINEERING SERVICES (I) PVT. LTD.	CHENNAI
3914....	PETROFAC ENGINEERING SERVICES (I) PVT. LTD.	NEW DELHI
3915....	PETROFAC INTERNATIONAL LLC	SHARJAH
3916....	PETROFAC INTERNATIONAL LTD.	MALAPPURAM
3917....	PETROFAC INTERNATIONAL LTD.	NAVI NUMBAI
3918....	PETROFAC INTERNATIONAL LTD.	HYDERABAD
3919....	PETROFAC INTERNATIONAL UAE LLC	TIRUCHENDUR
3920....	PETROFAC UAE INTERNATIONAL LLC	CHENNAI
3921....	PETROLEUM DEVELOPMENT OMAN	CHENNAI
3922....	PETROLEUM DEVELOPMENT OMAN	HOLALU
3923....	PETROLEUM DEVELOPMENT OMAN	NAVI MUMBAI
3924....	PETROLEUM DEVELOPMENT OMAN	ERNAKULAM
3925....	PETRON EMIRATES CONTRACTING AND MANUFACTURING	NAVI NUMBAI
3926....	PETRON EMIRATES CONTRACTING AND MANUFACTURING	DUBAI
3927....	PHA (I) PVT. LTD.	CHENNAI
3928....	PHARMAZELL VIZAG PVT. LTD.	VISAKHAPATNAM
3929....	PHENIX CONSTRUCTION TECHNOLOGIES	AHMEDABAD
3930....	PHILIPS (I) LTD.	ANANTHAPUR
3931....	PHILIPS (I) LTD.	BENGALURU
3932....	PHILIPS (I) LTD.	GULBARGA
3933....	PHILIPS (I) LTD.	HYDERABAD
3934....	PHILIPS (I) LTD.	PUNE
3935....	PHILIPS ELECTRONICS (I) LTD.	BENGALURU
3936....	PHILIPS INNOVATION CAMPUS	BENGALURU

S.No.	Organization	Location
3937....	PHILIPS INNOVATION CAMPUS	TENALI
3938....	PHILIPS LIGHTING (I) LTD.	NOIDA
3939....	PHOENIX CONTACT MIDDLE EAST FZ LLC	DUBAI
3940....	PHOENIX MEDICAL SYSTEMS PVT. LTD.	CHENNAI
3941....	PIAGGIO VEHICLES PVT. LTD.	KOLKATA
3942....	PIAGGIO VEHICLES PVT. LTD.	TRIPUNITHURA
3943....	PICNFRAMES TECHNOLOGIES	MANIMAJRA
3944....	PILKINGTON AUTOMOTIVE (I) LTD.	HYDERABAD
3945....	PILKINGTON AUTOMOTIVE (I) LTD.	VISAKHAPATNAM
3946....	PINNACLE HOSPITALS	VISAKHAPATNAM
3947....	PIT SOLUTIONS PVT. LTD.	NAGERCOIL
3948....	PITNEY BOWES	DELHI
3949....	PITNEY BOWES	NOIDA
3950....	PLANT LIPIDS PVT. LTD.	HYDERABAD
3951....	PLINTRON GLOBAL TECHNOLOGY SOLUTIONS PVT. LTD.	CHENNAI
3952....	PLIRIS CONSULTING SERVICES	BENGALURU
3953....	P-MECH SOFTTECH	CHENNAI
3954....	PMI ENGG EXPORTS PVT. LTD.	HOSUR
3955....	PNASAONIC (I) PVT. LTD.	GURUGRAM
3956....	POCKET APP	NAVI MUMBAI
3957....	POKKT TECHNOLOGIES PVT. LTD.	BENGALURU
3958....	POLAKULATH NARAYANAN RENAI MEDICITY	KOCHI
3959....	POLARIS SOFTWARE LABS	BENGALURU
3960....	POLICY BAZAAR	GHAZIABAD
3961....	POLICYBAZAAR INSURANCE WEB AGGREGATOR PVT. LTD.	NEW DELHI
3962....	POLIXEL SECURITY SYSTEMS PVT. LTD.	KANPUR
3963....	POLYCOM TECHNOLOGY (R&D) CENTER PVT. LTD.	HYDERABAD
3964....	POLYCOM UNIFIED COMMUNICATIONS	HYDERABAD
3965....	POLYHOSE (I) RUBBER P LTD.	SRIPERUMBUDUR
3966....	POLYPLASTICS INDUSTRIES (I) PVT. LTD.	AGRA
3967....	POLYPLASTICS INDUSTRIES (I) PVT. LTD.	GORAKHPUR
3968....	POLYPLASTICS INDUSTRIES (I) PVT. LTD.	YAMUNA NAGAR
3969....	POOJA ENTERPRISES	SRIPERUMBUDUR
3970....	POONA HOSPITAL AND RESEARCH CENTER	PUNE
3971....	PORTESCAP (I) PVT. LTD.	MUMBAI
3972....	POSCO MAHARASHTRA STEEL PVT. LTD.	BOKARO
3973....	POSCO MAHARASHTRA STEEL PVT. LTD.	MANGAON
3974....	POSCO MAHARASHTRA STEEL PVT. LTD.	PUNE
3975....	POSCO MAHARASHTRA STEEL PVT. LTD.	GOREGAON
3976....	POSCO MAHARASHTRA STEEL PVT. LTD.	POLADPUR
3977....	POSCO MAHARASHTRA STEEL PVT. LTD.	SANGLI
3978....	POSITRONIC INTERCONNECTS PVT. LTD.	PUNE
3979....	POTAIN (I) PVT. LTD.	PUNE
3980....	POWER SPACK INDUSTRIES PVT. LTD.	REWARI
3981....	POWERED EPC SERVICES LTD.	BENGALURU
3982....	POWERGRID CORPORATION OF (I) LTD.	GURUGRAM
3983....	POWERTECH ENGINEERING LLC	MUSCAT
3984....	POZIBILITY TECHNOLOGIES PVT. LTD.	SERAMPORE
3985....	PPAP AUTOMOTIVE LTD.	NOIDA
3986....	PPD PHARMACEUTICAL (I) PVT. LTD.	CHENNAI
3987....	PPS INTERNATIONAL	GHAZIPUR
3988....	PRADEEP METALS LTD.	MUMBAI
3989....	PRAJ INDUSTRIES LTD.	PUNE
3990....	PRAMATI TECHNOLOGIES	CHENNAI

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
3991....	PRARAS BIOSCIENCES PVT. LTD.	CHITRADURGA
3992....	PRAVIN ELECTRICAL PVT. LTD.	MUMBAI
3993....	PRAXAIR (I) PVT. LTD.	JOLARPETTAI
3994....	PRAXAIR (I) PVT. LTD.	SERAMPORE
3995....	PRECITEC PRECISION MACHINERIES PVT. LTD.	BENGALURU
3996....	PREETHI HOSPITALS PVT.LTD.	MADURAI
3997....	PREM INDUSTRIES	MYSORE
3998....	PREMIER EVOLVICS PVT. LTD.	COIMBATORE
3999....	PREMIER EXPLOSIVES LTD.	HYDERABAD
4000....	PREMIER PRODUCTION FABRICATORS LLC	RUWI
4001....	PRESIDENCY UNIVERSITY	BENGALURU
4002....	PRESTO INFOSOLUTIONS PVT. LTD.	BENGALURU
4003....	PREUSSE (I) PVT. LTD.	SALEM
4004....	PRICEWATERHOUSECOOPERS PVT. LTD.	BENGALURU
4005....	PRICEWATERHOUSECOOPERS PVT. LTD.	HOWRAH
4006....	PRICOL LTD.	DELHI
4007....	PRICOL LTD.	COIMBATORE
4008....	PRICOL TECHNOLOGIES LTD.	NANDYAL
4009....	PRIJO SKYCAM TECHNOLOGIES PVT. LTD.	CHENNAI
4010....	PRIME 4 INSPECTION LLC	VISAKHAPATNAM
4011....	PRIME M2I CONSULTING PVT. LTD.	FARIDABAD
4012....	PRIMERA MEDICAL TECHNOLOGIES	HYDERABAD
4013....	PRINCIPAL GLOBAL SERVICES PVT. LTD.	PUNE
4014....	PRIYA SOFTWEB SOLUTIONS	SURAT
4015....	PRIYAMVADA HERITAGE SILKS LLP	BILASPUR
4016....	PRO DYNAMICS TECHNOLOGIES LLC	KOLLAM
4017....	PROCENTRIS LTD.	KHANDESHWAR
4018....	PRODAPT SOLUTIONS	CHENNAI
4019....	PRODIGY TECHNOVATIONS PVT. LTD.	BENGALURU
4020....	PROFISOLUTIONS PVT. LTD.	ERODE
4021....	PROGRESS SOFTWARE DEVELOPMENT PVT. LTD.	HYDERABAD
4022....	PROKARMA SOFTECH PVT. LTD.	HYDERABAD
4023....	PROKARMA SOFTECH PVT. LTD.	CHENNAI
4024....	PROLIFE MULTISPECIALITY HOSPITAL	BENGALURU
4025....	PROMOBI TECHNOLOGIES PVT. LTD.	KANPUR
4026....	PRONTO SOFTWARE SOLUTIONS	BENGALURU
4027....	PRONTO SOFTWARE SOLUTIONS	CUDDALORE
4028....	PROPERTYGURU	CHENNAI
4029....	PROSPANCE INC	PUNE
4030....	PROTECH SYSTEMS PVT. LTD.	NEW DELHI
4031....	PROTEGO MIDDLE EAST	ALLEPPEY
4032....	PROTEGRITY LAKESIDE INFOTECH	BENGALURU
4033....	PROTOCOL SYSTEMS SDN BHD	NAGERCOIL
4034....	P-SERVE PTE LTD.	SINGAPORE
4035....	PSMITH PROCURMENT PVT. LTD.	NELLORE
4036....	PSPR 3D PROSTHETICS PVT. LTD.	HYDERABAD
4037....	PTC SOFTWARE (I) PVT. LTD.	DELHI
4038....	PTC SOFTWARE (I) PVT. LTD.	FARIDABAD
4039....	PTC SOFTWARE (I) PVT. LTD.	GURUGRAM
4040....	PTC SOFTWARE (I) PVT. LTD.	KOTA
4041....	PTC SOFTWARE (I) PVT. LTD.	PUNE
4042....	PTC SOFTWARE (I) PVT. LTD.	NAVI MUMBAI
4043....	PUBLIC WORKS DEPARTMENT	GOA
4044....	PUBLIC WORKS DEPARTMENT	MAPUSA

S.No.	Organization	Location
4045....	PUBMATIC (I) PVT. LTD.	PUNE
4046....	PUBMATIC (I) PVT. LTD.	DOMBIVLI
4047....	PUNJ LLOYD LTD.	GWALIOR
4048....	PUNJ LLOYD PTE LTD.	SOMPETA
4049....	PURESFTWARE PVT. LTD.	JALANDHAR
4050....	PURESFTWARE PVT. LTD.	DELHI
4051....	PURESFTWARE PVT. LTD.	NEW DELHI
4052....	PURETRAININGS SOFTWARE PVT. LTD.	GREATER NOIDA
4053....	PURPLETALK (I) PVT. LTD.	HYDERABAD
4054....	PURSHOTHAM ENGG INDUSTRIES	BENGALURU
4055....	PUZZOLANA MACHINERY FABRICATORS	MANUGURU
4056....	PYRAMID ENGINEERING	MUMBAI
4057....	PYRO NETWORKS PVT. LTD.	HYDERABAD
4058....	PYRODYNAMICS	BENGALURU
4059....	Q M COMPUTECH PVT. LTD.	NAGPUR
4060....	Q3 TECHNOLOGIES	DELHI
4061....	Q-APPS TECHNOLOGY & BUSINESS SOLUTIONS P	CHENNAI
4062....	QATAR AIRWAYS	CHENNAI
4063....	QATAR ALUMINIUM CO	DOHA
4064....	QATAR ALUMINIUM CO	MESAIEED
4065....	QATAR ALUMINIUM CO	ERNAKULAM
4066....	QATAR ALUMINIUM CO	HYDERABAD
4067....	QATAR AMIRI FLIGHT	THANJAVUR
4068....	QATAR CHEMICAL CO	DOHA
4069....	QATAR CHEMICAL CO	MESAIEED
4070....	QATAR CHEMICAL CO	VISAKHAPATNAM
4071....	QATAR COOL DISTRICT COOLING	DAFNA
4072....	QATAR ENGINEERING & CONSTRUCTION CO WLL	MAYILADUTHURAI
4073....	QATAR FERTILIZER CO	MESAIEED
4074....	QATAR FOUNDATION CO	DOHA
4075....	QATAR GAS OPERATING CO	AHMEDABAD
4076....	QATAR GAS OPERATING CO	VADODARA
4077....	QATAR GAS OPERATING CO	MADURAI
4078....	QATAR GAS OPERATING CO	VAPI
4079....	QATAR GENERAL ELECTRICITY & WATER CORP	MANJERI
4080....	QATAR KENTZ WLL	DOHA
4081....	QATAR POWER CO	DOHA
4082....	QATAR SHELL GTL- QATAR	DOHA
4083....	QBURST TECHNOLOGIES PVT. LTD.	PALAKKAD
4084....	QD-SBG CONSTRUCTION	NAGAPATTINAM
4085....	QD-SBG CONSTRUCTION	DOHA
4086....	QED GROUP LLC	NEW DELHI
4087....	QLOGIC (I) PVT. LTD.	PUNE
4088....	Q-TEC SWITCHGEAR W.L.L.	TIRUNELVELI
4089....	QUADRANT 4 SOFTWARE SOLUTIONS PVT. LTD.	CHENNAI
4090....	QUADRANT EPP SURLON (I) LTD.	NEW DELHI
4091....	QUALCOMM (I) PVT. LTD.	BENGALURU
4092....	QUALCOMM (I) PVT. LTD.	HOOGHLY
4093....	QUALCOMM (I) PVT. LTD.	HYDERABAD
4094....	QUALCOMM (I) PVT. LTD.	LUCKNOW
4095....	QUALCOMM (I) PVT. LTD.	NOIDA
4096....	QUALCOMM (I) PVT. LTD.	SALEM
4097....	QUALCOMM GLOBAL TRADING PTE. LTD.	SINGAPORE
4098....	QUALITY GROUP LTD.	FARIDABAD



S.No.	Organization	Location
4099....	QUANT GULF EQUIPMENT & MAINTENANCE LLC	BENGALURU
4100....	QUATRRO INC	ALWAR
4101....	QUATRRO PVT. LTD.	GURUGRAM
4102....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	THIRUVANANTHAPURAM
4103....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	BELAGAVI
4104....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	BENGALURU
4105....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	KRISHNAGIRI
4106....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	MARKAPUR
4107....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	PALAKKAD
4108....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	THIRUVALLA
4109....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	BELGAUM
4110....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	CALICUT
4111....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	THRISSUR
4112....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	KANNUR
4113....	QUEST GLOBAL ENGINEERING SERVICES PVT. LTD.	YOKOHAMA
4114....	QUICK RAYS PVT. LTD.	DELHI
4115....	QUIKR (I) PVT. LTD.	BENGALURU
4116....	QUINNOX SOLUTION PTE LTD.	SINGAPORE
4117....	QUINSTREET PVT. LTD.	PUNE
4118....	QUINTILES IMS	BENGALURU
4119....	QUINTILESIMS RESEARCH (I) PVT. LTD.	AURANGABAD
4120....	QUINTILESIMS RESEARCH (I) PVT. LTD.	CHENNAI
4121....	QUIPPO VALUERS AND AUCTIONEERS PVT. LTD.	KOLKATA
4122....	QWIKCILVER SOLUTIONS LTD.	BENGALURU
4123....	R L INSTITUTE OF NAUTICAL SCIENCES	MADURAI
4124....	R SYSTEMS INTERNATIONAL	NEW DELHI
4125....	R SYSTEMS INTERNATIONAL LTD.	GHAZIABAD
4126....	R V SOLUTIONS PVT. LTD.	SIKAR
4127....	R.P.TECHSOFT INTERNATIONAL PVT. LTD.	BENGALURU
4128....	R2A AUTOMATION PVT. LTD.	AURANGABAD
4129....	RAD365 SOLUTIONS PVT. LTD.	BALASORE
4130....	RADHARANI RAIL ENGINEERING SYSTEM PVT. LTD.	JHANSI
4131....	RADIAL OMNICHANNEL TECHNOLOGIES	OOTY
4132....	RADISYS (I) PVT. LTD.	ALAPPUZHA
4133....	RADISYS (I) PVT. LTD.	BENGALURU
4134....	RADIX LEARNING PVT. LTD.	BENGALURU
4135....	RADIX MICROSYSTEMS	HYDERABAD
4136....	RAGE FRAMEWORKS PVT. LTD.	PUNE
4137....	RAILTEL CORPORATION OF (I) LTD.	CUTTACK
4138....	RAILTRANZ CONSULTANCY PVT. LTD.	GURUGRAM
4139....	RAJA RAMANNA CENTRE FOR ADVANCED TECHNOL	INDORE
4140....	RAJA SOFTWARE LABS	PUNE
4141....	RAJASTHAN ELECTRONICS & INSTRUMENTS LTD.	JAIPUR
4142....	RAJCOMP INFO SERVICES LTD.	BIKANER
4143....	RALLIS (I) LTD.	ANKLESHWAR
4144....	RAM KRISHNA CARE HOSPITAL,RAIPUR	RAIPUR
4145....	RAMBOLL (I) PVT. LTD.	CHENNAI
4146....	RAMBOLL (I) PVT. LTD.	HYDERABAD
4147....	RAMBUS CHIP TECHNOLOGIES (I) PVT. LTD.	BENGALURU
4148....	RAMCO CEMENTS LTD.	ANAKAPALLE
4149....	RAMCO CEMENTS LTD.	ARIYALUR
4150....	RAMCO CEMENTS LTD.	CHENNAI
4151....	RAMCO SYSTEMS	CHENNAI
4152....	RAMESH CARDIAC & MULTI SPECIALITY HOSPITAL	GUNTUR

S.No.	Organization	Location
4153....	RAMTECH MANUFACTURING INDUSTRIES	HYDERABAD
4154....	RANAL SOFTWARE TECHNOLOGIES PVT. LTD.	PUNE
4155....	RANDACK FASTENERS (I) PVT. LTD.	PUNE
4156....	RANE BRAKE LINING LTD.	CHENNAI
4157....	RANE BRAKE LINING LTD.	THIRUVALLUR
4158....	RANE ENGINE VALVE LTD.	CHENNAI
4159....	RANE ENGINE VALVE LTD.	NAMAKKAL
4160....	RANE ENGINE VALVE LTD.	PALVONCHA
4161....	RANE MADRAS LTD.	HYDERABAD
4162....	RANE NSK STEERING SYSTEMS PVT. LTD.	CHENNAI
4163....	RANE NSK STEERING SYSTEMS PVT. LTD.	GHAZIABAD
4164....	RANE NSK STEERING SYSTEMS PVT. LTD.	ROORKEE
4165....	RANE NSK STEERING SYSTEMS PVT. LTD.	REWARI
4166....	RANE NSK STEERING SYSTEMS PVT. LTD.	BHIWANI
4167....	RANE NSK STEERING SYSTEMS PVT. LTD.	PUNE
4168....	RAPID VALUE SOLUTIONS	BENGALURU
4169....	RAQMIYAT INFORMATION TECHNOLOGY PVT. LTD.	CHENNAI
4170....	RAQMIYAT INFORMATION TECHNOLOGY PVT. LTD.	NAZARETH
4171....	RAQMIYAT INFORMATION TECHNOLOGY PVT. LTD.	PUTHUKOTTAI
4172....	RAQMIYAT LLC	SHARJAH
4173....	RARE SOLUTIONS PVT. LTD.	HYDERABAD
4174....	RASHID AL JABRI GROUP	BUR DUBAI
4175....	RAVE TECHNOLOGIES PVT. LTD.	ULHASNAGAR
4176....	RAYSOFT TECHNOLOGIES	CHENNAI
4177....	RBS SERVICES (I) PVT. LTD.	BENGALURU
4178....	RCV INNOVATIONS PVT.LTD.	CUTTACK
4179....	RDT HOSPITAL	ANANTHAPUR
4180....	REAL IMAGE MEDIA TECHNOLOGIES PVT. LTD.	ORAI
4181....	REALTY AUTOMATION & SECURITY SYSTEMS PVT. LTD.	PUNE
4182....	REAN CLOUD	HYDERABAD
4183....	RECAERO (I) PVT.LTD.	BENGALURU
4184....	RED HAT (I) PVT. LTD.	PUNE
4185....	RED HAT (I) PVT. LTD.	NASHIK
4186....	RED HAT (I) PVT. LTD.	SAHARSA
4187....	REDCARPET TECH PVT. LTD.	NAUGRH
4188....	REDGRAPE BUSINESS SERVICES	KALLAKURICHI
4189....	REDMART (I) PVT. LTD.	BHUBANESWAR
4190....	REDPINE SIGNALS	CHITTOOR
4191....	REGAL BELOIT CORPORATION	HYDERABAD
4192....	REGAL SOLUTIONS PVT. LTD.	MUMBAI
4193....	REGENT RESEARCH WRITING	BENGALURU
4194....	RELIABLE INDUSTRIES	CHENNAI
4195....	RELIANCE COMMUNICATION LTD.	BHAGALPUR
4196....	RELIANCE COMMUNICATION LTD.	MUMBAI
4197....	RELIANCE CORPORATE IT PARK LTD.	AHMEDABAD
4198....	RELIANCE CORPORATE IT PARK LTD.	JAMNAGAR
4199....	RELIANCE CORPORATE IT PARK LTD.	KANCHRAPARA
4200....	RELIANCE CORPORATE IT PARK LTD.	NAVI MUMBAI
4201....	RELIANCE DEFENCE LTD.	NAGPUR
4202....	RELIANCE FOUNDATION	KOLAR
4203....	RELIANCE FOUNDATION	MUMBAI
4204....	RELIANCE INDUSTRIES LTD.	AHMEDABAD
4205....	RELIANCE INDUSTRIES LTD.	JAMNAGAR
4206....	RELIANCE INDUSTRIES LTD.	NAVI MUMBAI

S.No.	Organization	Location
4207....	RELIANCE INDUSTRIES LTD.	NOIDA
4208....	RELIANCE INDUSTRIES LTD.	SURAT
4209....	RELIANCE INFRASTRUCTURE LTD.	THANE
4210....	RELIANCE INFRASTRUCTURE LTD.	MUMBAI
4211....	RELIANCE INFRASTRUCTURE LTD.	PALGHAR
4212....	RELIANCE INFRASTRUCTURE LTD.	VASAI
4213....	RELIANCE JIO INFOCOMM LTD.	BENGALURU
4214....	RELIANCE JIO INFOCOMM LTD.	MUMBAI
4215....	RELIANCE JIO INFOCOMM LTD.	NAVI MUMBAI
4216....	RELIANCE JIO INFOCOMM LTD.	BHUBANESWAR
4217....	RELIANCE JIO INFOCOMM LTD.	GOA
4218....	RELIANCE JIO INFOCOMM LTD.	HYDERABAD
4219....	RELIANCE JIO INFOCOMM LTD.	THANE
4220....	RELIANCE JIO INFOCOMM LTD.	RAJSAMAND
4221....	RELIANCE LIFE SCIENCES PVT. LTD.	VASAI
4222....	RELIANCE RETAIL	NAVI MUMBAI
4223....	RELISYS MEDICAL DEVICES LTD.	HYDERABAD
4224....	RELYON SOLAR PVT. LTD.	SOLAPUR
4225....	RENATA PRECISION COMPONENTS PVT. LTD.	PUNE
4226....	RENAULT NISSAN TECH & BUSINESS CENTRE (I) PVT. LTD.	CHENNAI
4227....	RENAULT NISSAN TECH & BUSINESS CENTRE (I) PVT. LTD.	KANCHEEPURAM
4228....	RENAULT NISSAN TECH & BUSINESS CENTRE (I) PVT. LTD.	KUMBAKONAM
4229....	RENAULT NISSAN TECH & BUSINESS CENTRE (I) PVT. LTD.	SALEM
4230....	REPPIFY (I) PVT. LTD.	AGRA
4231....	REVAMP CONSULTING PVT. LTD.	MUMBAI
4232....	REVENUE & FOREST DEPARTMENT	MUMBAI
4233....	REVITAS TECHNOLOGIES PVT. LTD.	AHMEDABAD
4234....	REYNOLD (I) PVT.LTD.	NOIDA
4235....	RHYTHM LABS PVT. LTD.	MYSORE
4236....	RHYTHMSOFT ROBOTICS AND AUTOMATION PVT. LTD.	DELHI
4237....	RICOH (I) LTD.	AHMEDABAD
4238....	RICON PHARMA INDIA	HYDERABAD
4239....	RIDDLE SOLUTIONS	BENGALURU
4240....	RIEKE PACKAGING SYSTEMS	NEW DELHI
4241....	RIG GAIN PVT. LTD.	MANGALURU
4242....	RIIS TRADING (I) PVT. LTD.	PUNE
4243....	RIKA FORGE	CHENNAI
4244....	RING PLUS AQUA LTD.	NASHIK
4245....	RINGABELL HEALTH PVT. LTD.	BENGALURU
4246....	RISHABH SOFTWARE PVT. LTD.	INDORE
4247....	RJP INFOTEK PVT. LTD.	CHENNAI
4248....	RMJ AUTOMATION SOLUTION AND TRAINING PVT. LTD.	MYSORE
4249....	ROADS AND TRANSPORT AUTHORITY	DUBAI
4250....	ROBERT BOSCH AUTOMOTIVE STEERING PVT. LTD.	BENGALURU
4251....	ROBERT BOSCH AUTOMOTIVE STEERING PVT. LTD.	PUNE
4252....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	ARAKKONAM
4253....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	BENGALURU
4254....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	HYDERABAD
4255....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	TIRUPPUR
4256....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	COIMBATORE
4257....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	THRISSUR
4258....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	TUTICORIN
4259....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	KASARAGOD
4260....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	ERODE

S.No.	Organization	Location
4261....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	ALAPPUZHA
4262....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	BELGAUM
4263....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	CHENNAI
4264....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	DHARWAD
4265....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	DINDIGUL
4266....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	MALAPPURAM
4267....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	MYSORE
4268....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	PATHANAMTHITTA
4269....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	SALEM
4270....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	SATHY
4271....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	SHIMOGA
4272....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	THIRUVANANTHAPURAM
4273....	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	TIRUCHIRAPPALLI
4274....	ROCKWELL AUTOMATION (I) PVT. LTD.	GHAZIABAD
4275....	ROCKWELL COLLINS (I) ENTERPRISES PVT. LTD.	HYDERABAD
4276....	ROCKWELL COLLINS (I) ENTERPRISES PVT. LTD.	HARAPANAHALLI
4277....	ROHDE & SCHWARZ (I) PVT. LTD.	HYDERABAD
4278....	ROLLS-ROYCE (I) PVT. LTD.	BENGALURU
4279....	ROLLS-ROYCE (I) PVT. LTD.	PUNE
4280....	ROLLS-ROYCE (I) PVT. LTD.	GHAZIABAD
4281....	ROLTA INDIA	SIKAR
4282....	ROOP AUTOMOTIVE LTD.	SOHNA
4283....	ROOTS INDUSTRIES (I) LTD.	COIMBATORE
4284....	ROSSELL TECHSYS	BENGALURU
4285....	ROSSELL TECHSYS	KOLHAPUR
4286....	ROTORK CONTROL (I) PVT. LTD.	CHENNAI
4287....	ROURKELA STEEL PLANT	ROURKELA
4288....	ROYAL BANK OF SCOTLAND	CHENNAI
4289....	ROYAL BANK OF SCOTLAND	GURUGRAM
4290....	ROYAL CARE HOSPITAL	COIMBATORE
4291....	ROYAL DUYCH SHELL	BENGALURU
4292....	ROYAL ENFIELD	CHENNAI
4293....	ROYAL ENFIELD	THIRUVARUR
4294....	ROYAL ENFIELD	RANIPET
4295....	RP TECHSOFT INTERNATIONAL PVT. LTD.	CHITTOOR
4296....	RPG LIFE SCIENCES LTD.	NAVI MUMBAI
4297....	RR DONNELLEY	CHIRAKKADAVU
4298....	RR DONNELLEY	THIRUVANANTHAPURAM
4299....	RS CONSULTANCY	HOWRAH
4300....	RSAM TECHNOLOGIES (I) PVT. LTD.	MYSORE
4301....	RSB PHARMA PVT. LTD.	DELHI
4302....	RSG MEDIA SYSTEMS PVT. LTD.	GURUGRAM
4303....	RT VISION TECHNOLOGIES PVT. LTD.	GREATER NOIDA
4304....	RTP CONTROLS (I) PVT. LTD.	BENGALURU
4305....	RTS SYSTEMS PVT. LTD.	MOHALI
4306....	RUD (I) CHAIN PVT. LTD.	THANE
4307....	RURAL DEVELOPMENT DEPARTMENT	BHAGALPUR
4308....	S. NARENDRAKUMAR & CO	THANE
4309....	S.ALAM STEELS LTD.	CHITTAGONG
4310....	S.V.E.J ASSOCIATES	NILGIRIS
4311....	SAANKHYA LABS PVT. LTD.	BELGAUM
4312....	SAANKHYA LABS PVT. LTD.	BENGALURU
4313....	SABIC RESEARCH & TECHNOLOGY PVT. LTD.	KUMTA
4314....	SABMILLER (I) LTD.	KANPUR

S.No.	Organization	Location
4315....	SABRE TRAVEL TECHNOLOGIES PVT. LTD.	BENGALURU
4316....	SABRE TRAVEL TECHNOLOGIES PVT. LTD.	SARJAPURA
4317....	SADEKAR ENVIRO ENG PVT. LTD.	PANJIM
4318....	SAFAS INTERNETWORKING TECHNOLOGIES PVT. LTD.	BENGALURU
4319....	SAFE KIDS HOSPITAL	HYDERABAD
4320....	SAFENET(A GEMALTO SUBSIDIARY)	DELHI
4321....	SAFRAN ENGINEERING SERVICES (I) PVT. LTD.	BENGALURU
4322....	SAFRAN ENGINEERING SERVICES (I) PVT. LTD.	HAVERI
4323....	SAGAR ASIA PVT. LTD.	HYDERABAD
4324....	SAGAR KNITS (I) PVT. LTD.	TIRUPPUR
4325....	SAHARA AND MA'ADEN PETROCHEMICAL CO.	KOLLAM
4326....	SAHARA ENGINEERING	COIMBATORE
4327....	SAHARA PETROCHEMICALS CO	HASSAN
4328....	SAI CONSULTING ENGINEERS PVT. LTD.	FARIDABAD
4329....	SAI STANDARDS SERVICES	ONGOLE
4330....	SAI WARDHA POWER GENERATION LTD.,WARORA	CHANDRAPUR
4331....	SAILPOINT TECHNOLOGIES (I) PVT. LTD.	PUNE
4332....	SAINT GOBAIN (I) PVT. LTD.	ALAPPUZHA
4333....	SAINT GOBAIN (I) PVT. LTD.	BHIWADI
4334....	SAINT GOBAIN (I) PVT. LTD.	PALAKKAD
4335....	SAIPEM (I) PROJECTS PVT. LTD.	CHENNAI
4336....	SAIPEM SNAMPROGETTI	CHENNAI
4337....	SAKAE RIKEN POLYPLASTICS (I) PVT.LTD.	REWARI
4338....	SAKETSOFT TECHNOLOGIES PVT. LTD.	THANE
4339....	SAKRA WORLD HOSPITAL	BENGALURU
4340....	SALCOMP MANUFACTURING (I) PVT. LTD.	CHENNAI
4341....	SALCOMP MANUFACTURING (I) PVT. LTD.	COIMBATORE
4342....	SALCOMP MANUFACTURING (I) PVT. LTD.	KANCHEEPURAM
4343....	SALESFORCE INDIA	HYDERABAD
4344....	SALINA LTD. CO	NANDED
4345....	SALINI IMPREGILO S.P.A.	DOHA
4346....	SALVAGNINI MACHINERY (I) PVT. LTD.	BENGALURU
4347....	SAMALKOT POWER LTD.	EAST GODAVARI
4348....	SAME DEUTZ FAHR (I) PVT. LTD.	MADURAI
4349....	SAMPATH VENKATESWARA COMMUNICATIONS PVT. LTD.	HYDERABAD
4350....	SAMSUNG (I) ELECTRONICS PVT. LTD.	BENGALURU
4351....	SAMSUNG (I) ELECTRONICS PVT. LTD.	NELLORE
4352....	SAMSUNG (I) ELECTRONICS PVT. LTD.	NEW DELHI
4353....	SAMSUNG (I) ELECTRONICS PVT. LTD.	NOIDA
4354....	SAMSUNG (I) ELECTRONICS PVT. LTD.	GHAZIABAD
4355....	SAMSUNG (I) ELECTRONICS PVT. LTD.	JAIPUR
4356....	SAMSUNG (I) ELECTRONICS PVT. LTD.	JODHPUR
4357....	SAMSUNG (I) ELECTRONICS PVT. LTD.	DELHI
4358....	SAMSUNG (I) ELECTRONICS PVT. LTD.	HAMIRPUR
4359....	SAMSUNG (I) ELECTRONICS PVT. LTD.	MEERUT
4360....	SAMSUNG (I) ELECTRONICS PVT. LTD.	CHANDIGARH
4361....	SAMSUNG HEAVY INDUSTRIES (I) PVT. LTD.	NOIDA
4362....	SAMSUNG R&D INSTITUTE	BENGALURU
4363....	SAMSUNG R&D INSTITUTE	CHICKMAGALUR
4364....	SAMSUNG R&D INSTITUTE	FARIDABAD
4365....	SAMSUNG R&D INSTITUTE	NOIDA
4366....	SAMSUNG R&D INSTITUTE	BAILHONGAL
4367....	SAMSUNG R&D INSTITUTE	KALKA
4368....	SAMSUNG R&D INSTITUTE	NAGINA

S.No.	Organization	Location
4369....	SAMSUNG R&D INSTITUTE	GHAZIABAD
4370....	SAMSUNG R&D INSTITUTE	LUCKNOW
4371....	SANDEN VIKAS (I) PVT. LTD.	FARIDABAD
4372....	SANDISK (I) DEVICE DESIGN CENTER PVT. LTD.	BENGALURU
4373....	SANDOR MEDICAIDS PVT. LTD.	HYDERABAD
4374....	SANDVIK ASIA PVT. LTD.	BENGALURU
4375....	SANDVIK ASIA PVT. LTD.	CHANDIGARH
4376....	SANDVIK ASIA PVT. LTD.	KOLHAPUR
4377....	SANDVIK ASIA PVT. LTD.	PUNE
4378....	SANDVIK ASIA PVT. LTD.	UDAIPUR
4379....	SANDVINE TECHNOLOGIES (I) PVT. LTD.	BENGALURU
4380....	SANDVINE TECHNOLOGIES PVT. LTD.	TUMKUR
4381....	SANKALP KPIT SEMICONDUCTOR PVT. LTD.	NELLORE
4382....	SANKALP KPIT SEMICONDUCTOR PVT. LTD.	BENGALURU
4383....	SANKALP SEMICONDUCTOR PVT. LTD.	BENGALURU
4384....	SANKALP SEMICONDUCTOR PVT. LTD.	BHUBANESWAR
4385....	SANKALP SEMICONDUCTOR PVT. LTD.	MANGALURU
4386....	SANKALP SEMICONDUCTOR PVT. LTD.	SHIVAMOGGA
4387....	SANKALP SEMICONDUCTOR PVT. LTD.	CHITRADURGA
4388....	SANKALP SEMICONDUCTOR PVT. LTD.	PUNE
4389....	SANMAR SPECIALITY CHEMICALS LTD.	HOSUR
4390....	SANMINA TECHNOLOGY (I) PVT. LTD.	MADURAI
4391....	SANMINA TECHNOLOGY (I) PVT. LTD.	CHENNAI
4392....	SANOFI PASTEUR	PANVEL
4393....	SANOFI PASTEUR	MUMBAI
4394....	SANRIA ENGINEERING & CONSULTANTS	MYSORE
4395....	SANSERA ENGINEERING	JAMSHEDPUR
4396....	SANTECH TECHNOSOFT PVT. LTD.	JAIPUR
4397....	SANTRES ENGINEERING PVT. LTD.	CHENNAI
4398....	SANTRES ENGINEERING PVT. LTD.	VELLORE
4399....	SANY HEAVY EQUIPMENT INDUSTRY (I) PVT. LTD.	PUNE
4400....	SAP LABS (I) PVT. LTD.	BENGALURU
4401....	SAP LABS (I) PVT. LTD.	KOZHIKODE
4402....	SAP LABS (I) PVT. LTD.	PUNE
4403....	SAP LABS (I) PVT. LTD.	CHANDIGARH
4404....	SAP LABS (I) PVT. LTD.	MUMBAI
4405....	SAP LABS (I) PVT. LTD.	ALLAHABAD
4406....	SAP LABS (I) PVT. LTD.	NELLORE
4407....	SAP LABS (I) PVT. LTD.	PUNGANUR
4408....	SAP LABS (I) PVT. LTD.	COIMBATORE
4409....	SAP LABS (I) PVT. LTD.	KASARAGOD
4410....	SAP LABS (I) PVT. LTD.	CHENNAI
4411....	SAP LABS (I) PVT. LTD.	KOLLAM
4412....	SAP LABS (I) PVT. LTD.	KOTHAMANGALAM
4413....	SAP LABS (I) PVT. LTD.	TIRUCHENGODE
4414....	SAP LABS (I) PVT. LTD.	NOIDA
4415....	SAPIENT CONSULTING PVT. LTD.	BENGALURU
4416....	SAPIENT CONSULTING PVT. LTD.	DELHI
4417....	SAPIENT CONSULTING PVT. LTD.	GHAZIABAD
4418....	SAPIENT CONSULTING PVT. LTD.	NEW DELHI
4419....	SAPIENT CONSULTING PVT. LTD.	PATIALA
4420....	SAPPIO CONSULTANCY SERVICES PVT. LTD.	KOCHI
4421....	SARASWATHI HOSPITAL	COIMBATORE
4422....	SAS R&D (I) PVT. LTD.	PUNE

S.No.	Organization	Location
4423....	SAS RESEARCH AND DEVELOPMENT PVT. LTD.	PUNE
4424....	SASKEN COMMUNICATION TECHNOLOGIES LTD.	MAYILADUTHURAI
4425....	SASKEN COMMUNICATION TECHNOLOGIES LTD.	CHENNAI
4426....	SASKEN TECHNOLOGIES PVT. LTD.	JAGGAMPETA
4427....	SASKEN TECHNOLOGIES PVT. LTD.	PUNE
4428....	SATHYA DENTAL CLINIC	HYDERABAD
4429....	SATISH EYE HOSPITAL	CHENNAI
4430....	SATVEN ENGG SERVICES	KADAPA
4431....	SATVEN ENGG SERVICES	VILLUPURAM
4432....	SATYA ENTERPRISES	HYDERABAD
4433....	SATYAM COMPUTERS SERVICE LTD.	BENGALURU
4434....	SATYAM VENTURE ENGINEERING SERVICES	CHENNAI
4435....	SATYAM VENTURE ENGINEERING SERVICES	HYDERABAD
4436....	SATYAM VENTURE ENGINEERING SERVICES	SALEM
4437....	SATYAM VENTURE ENGINEERING SERVICES	TIRUPPUR
4438....	SATYAM VENTURE ENGINEERING SERVICES	KAKINADA
4439....	SATYAM VENTURE ENGINEERING SERVICES	SECUNDERABAD
4440....	SAUDI ARABIAN BECHTEL CO	MALAPPURAM
4441....	SAUDI NATIONAL CONTRACTING CO LLC	BHAVANI
4442....	SAUDI POWER TRANSFORMER CO	INDORE
4443....	SAVARI SYSTEMS PVT. LTD.	BENGALURU
4444....	SAYANTRIK ENGINEER PVT. LTD.	HYDERABAD
4445....	SCHEDULER,ABU DHABI OIL REFINING CO	ABU DHABI
4446....	SCHEMATIC ENGINEERING INDUSTRIES	ALLAVARAM
4447....	SCHINDLER (I) PVT. LTD.	MUMBAI
4448....	SCHINDLER (I) PVT. LTD.	PUNE
4449....	SCHLUMBERGER (I) TECHNOLOGY CENTER PVT.LTD.	CHENNAI
4450....	SCHLUMBERGER (I) TECHNOLOGY CENTER PVT.LTD.	JAMMU
4451....	SCHLUMBERGER (I) TECHNOLOGY CENTER PVT.LTD.	KOZHICODE
4452....	SCHLUMBERGER (I) TECHNOLOGY CENTER PVT.LTD.	PUNE
4453....	SCHLUMBERGER ASIA SERVICES LTD.	JAMMU
4454....	SCHLUMBERGER OILFIELD (S) PTE. LTD.	CHENNAI
4455....	SCHNEIDER ELECTRIC (I) PVT. LTD.	BENGALURU
4456....	SCHNEIDER ELECTRIC (I) PVT. LTD.	DUBAI
4457....	SCHNEIDER ELECTRIC (I) PVT. LTD.	HYDERABAD
4458....	SCHNEIDER ELECTRIC (I) PVT. LTD.	VADODARA
4459....	SCHNEIDER ELECTRIC (I) PVT. LTD.	COIMBATORE
4460....	SCHNEIDER ELECTRIC (I) PVT. LTD.	KARUR
4461....	SCHNEIDER ELECTRIC (I) PVT. LTD.	NEW DELHI
4462....	SCHNEIDER ELECTRIC (I) PVT. LTD.	CHENNAI
4463....	SCHNEIDER ELECTRIC (I) PVT. LTD.	HOSUR
4464....	SCHNEIDER ELECTRIC (I) PVT. LTD.	THANJAVUR
4465....	SCHNEIDER ELECTRIC INFRASTRUCTURE LTD.	AJMER
4466....	SCHNEIDER ELECTRIC PRESIDENT SYSTEM LTD.	BELGAUM
4467....	SCHNELLECKE JEENA LOGISTICS (I) PVT. LTD.	PUNE
4468....	SCHWING STETTER (I) PVT. LTD.	MUMBAI
4469....	SCHWING STETTER (I) PVT. LTD.	CHENNAI
4470....	SCIENTECHNIC LLC	DUBAI
4471....	SCIENTECHNIC LLC	ABU DHABI
4472....	SCIENTIFIC GAMES CORP.	BENGALURU
4473....	SCIFORMIX TECHNOLOGY PVT. LTD.	MUMBAI
4474....	SCOPE INTERNATIONAL	CHENNAI
4475....	SCRY ANALYTICS	NEW DELHI
4476....	SD (MIDDLE EAST) LLC	AMBALA

S.No.	Organization	Location
4477....	SEA & LAND DRILLING CONTRACTORS INC.	THANE
4478....	SEAGATE HDD (I) PVT. LTD.	BENGALURU
4479....	SEAGATE TECHNOLOGY HDD (I) PVT. LTD.	BENGALURU
4480....	SEAGATE TECHNOLOGY HDD (I) PVT. LTD.	PUNE
4481....	SEAGATE TECHNOLOGY HDD (I) PVT. LTD.	PARAMAKUDI
4482....	SEARS IT & MANAGEMENT SERVICES (I) PVT.LTD.	BENGALURU
4483....	SEARS IT & MANAGEMENT SERVICES (I) PVT.LTD.	PUNE
4484....	SEASIA INFOTECH PVT. LTD.	BATHINDA
4485....	SECO TOOLS (I) PVT. LTD.	PUNE
4486....	SECO TOOLS (I) PVT. LTD.	GHAZIABAD
4487....	SECUDE SOLUTIONS	CHENNAI
4488....	SECURE METERS LTD.	UDAIPUR
4489....	SECURE METERS LTD.	RAJSAMAND
4490....	SECUREIT INFO SOLUTIONS	HYDERABAD
4491....	SECURITY PRINTING & MINTING CORPORATION	NASHIK
4492....	SECURITY TECH ENTERPRISES	NALASOPARA
4493....	SEEDAC SYSTEMS PVT. LTD.	BENGALURU
4494....	SEEKERS EDUCATIONAL SERVICES	TIRUCHIRAPPALLI
4495....	SEFA PVT. LTD.	GHAZIABAD
4496....	SEMBCORP MARINE LTD.	SINGAPORE
4497....	SEMBCROP MARINE LTD.	VISHAKAPATNAM
4498....	SEMCON (I) PVT. LTD.	BENGALURU
4499....	SEMIFI INTEGRATED TECHNOLOGIES	BENGALURU
4500....	SENTROL AUTOMATION LLC	KOZHIKODE
4501....	SENVION (I) PVT. LTD.	BENGALURU
4502....	SERVEU (LLC)	AL-QUOZ
4503....	SERVICE & COMPUTER INDUSTRIES KENYA LTD.	HYDERABAD
4504....	SERVICENOW INC	KOLKATA
4505....	SERVICENOW SOFTWARE DEVELOPMENT (I) PVT. LTD.	BENGALURU
4506....	SERVICENOW SOFTWARE DEVELOPMENT (I) PVT. LTD.	HYDERABAD
4507....	SESA RESOURCES LTD.	PONDA
4508....	SESA STERLITE LTD.	JHARSUGUDA
4509....	SESOTEC (I) PVT. LTD.	PUNE
4510....	SEW EURODRIVE (I) PVT. LTD.	TIRUCHIRAPPALLI
4511....	SEYNSE TECHNOLOGIES PVT. LTD.	THIRUVANANTHAPURAM
4512....	SFO TECHNOLOGIES PVT. LTD.	ERNAKULAM
4513....	SFO TECHNOLOGIES PVT. LTD.	BENGALURU
4514....	SGK TECHNO VENTURES	HYDERABAD
4515....	SGS INSPECTION SERVICES SA LTD.	THOOTHUKUDI
4516....	SHAHI EXPORTS PVT. LTD.	CHICKBALLAPUR
4517....	SHAHI EXPORTS PVT. LTD.	SHIMOGA
4518....	SHAKTHI CONCRETE INDUSTRIES	HIMAYATH NAGAR
4519....	SHANGHAI SHUJIN ENVIRONMENTAL TECHNOLOGY	SHANGHAI
4520....	SHANMUGA HOSPITAL & SALEM CANCER INSTITUTE	SALEM
4521....	SHANTHA BIOTECHNICS PVT. LTD.	HYDERABAD
4522....	SHANTHI GEARS LTD.	COIMBATORE
4523....	SHAPOORJI PALLONJI MID EAST LLC	JAGDALPUR
4524....	SHAPOORJI PALLONJI MID EAST LLC	NAVI NUMBAI
4525....	SHAPOORJI PALLONJI MID EAST LLC	THRISSUR
4526....	SHARDA MOTOR IND. LTD.	PUNE
4527....	SHARJAH ELECTRICITY AND WATER AUTHORITY	SHARJAH
4528....	SHDM J-SYS TECHNOLOGIES PVT. LTD.	JODHPUR
4529....	SHELL (I) MARKETS PVT. LTD.	BENGALURU
4530....	SHELL (I) MARKETS PVT. LTD.	CHENNAI



S.No.	Organization	Location
4531....	SHELL SERAYA CHEMICALS PTE LTD.	THANJAVUR
4532....	SHEOREY DIGITAL SYSTEMS LTD.	BENGALURU
4533....	SHIFT (I) PVT. LTD.	PUNE
4534....	SHIV NADAR UNIVERSITY	NEW DELHI
4535....	SHOLAPUR DISTRICT CENTRAL COOPERATIVE	SOLAPUR
4536....	SHOPTIMIZE (I) PVT. LTD.	PUNE
4537....	SHREE CEMENT LTD.	AJMER
4538....	SHREE CEMENT LTD.	BEAWAR
4539....	SHREE DENTAL HOSPITAL	KALYAN
4540....	SHREE KRISHNA HOAPITAL	ANAND
4541....	SHREE PRATHAMESH HOSPITAL	THANE
4542....	SHREETECH ENGINEERING	YAMUNA NAGAR
4543....	SHRIRAM PISTONS & RINGS LTD.	BHIWADI
4544....	SHRIRAM PISTONS & RINGS LTD.	ALWAR
4545....	SHRIRAM PISTONS & RINGS LTD.	BARABANKI
4546....	SHRIRAM PISTONS & RINGS LTD.	FARIDABAD
4547....	SHRIRAM PISTONS & RINGS LTD.	GHAZIABAD
4548....	SHRIRAM PISTONS & RINGS LTD.	LOHIA NAGAR
4549....	SHRIRAM PISTONS & RINGS LTD.	DHARUHERA
4550....	SHRIRAM PISTONS & RINGS LTD.	KHETRI
4551....	SHRIRAM PISTONS & RINGS LTD.	MAU
4552....	SHRIRAM PISTONS & RINGS LTD.	RAMPUR
4553....	SHUAIBA OXYGEN CO.	TIRUVARUR
4554....	SHUKLAM CONSULTANCY SERVICES	HOSUR
4555....	SIAM MAKRO PUBLIC CO LTD.	BANGKOK
4556....	SICGIL INDUSTRIAL GASES LTD.	VADODARA
4557....	SIECHEM TECHNOLOGIES PVT. LTD.	CHENNAI
4558....	SIEMENS GAMESA WIND POWER	HYDERABAD
4559....	SIEMENS HEALTHCARE PVT. LTD.	BENGALURU
4560....	SIEMENS HEALTHCARE PVT. LTD.	SHIMOGA
4561....	SIEMENS HEALTHCARE PVT. LTD.	TIRUCHIRAPPALLI
4562....	SIEMENS INDUSTRY SOFTWARE PVT. LTD.	PUNE
4563....	SIEMENS LLC	DUBAI
4564....	SIEMENS LTD.	DUBAI
4565....	SIEMENS LTD.	PANAJI
4566....	SIEMENS LTD.	PANJIM
4567....	SIEMENS LTD.	PUNE
4568....	SIEMENS LTD.	BARODA
4569....	SIEMENS LTD.	CHENNAI
4570....	SIEMENS LTD.	CUDDALORE
4571....	SIEMENS LTD.	DELHI
4572....	SIEMENS LTD.	KOLKATA
4573....	SIEMENS LTD.	LUCKNOW
4574....	SIEMENS LTD.	MARGAO
4575....	SIEMENS LTD.	MUMBAI
4576....	SIEMENS LTD.	NASHIK
4577....	SIEMENS LTD.	VASCO DA GAMA
4578....	SIEMENS LTD.	VERNA
4579....	SIEMENS TECHNOLOGY & SERVICES PVT. LTD.	BENGALURU
4580....	SIEMENS TECHNOLOGY & SERVICES PVT. LTD.	PUNE
4581....	SIEMENS TECHNOLOGY & SERVICES PVT. LTD.	THANE
4582....	SIEMENS TECHNOLOGY & SERVICES PVT. LTD.	GHAZIABAD
4583....	SIEMENS TECHNOLOGY & SERVICES PVT. LTD.	GURUGRAM
4584....	SIEMENS WIND POWER PVT. LTD.	GURUGRAM

S.No.	Organization	Location
4585....	SIEMENS WLL	THRISSUR
4586....	SIEMENS,QATAR	DOHA
4587....	SIEMON CABLING SOLUTIONS PVT. LTD.	HYDERABAD
4588....	SIFY TECHNOLOGIES LTD.	CHENNAI
4589....	SIFY TECHNOLOGIES LTD.	CUDDALORE
4590....	SIGACHI INDUSTRIES PVT. LTD.	SECUNDERABAD
4591....	SIGED EMIRATES LLC	TRISSUR
4592....	SIGMA ELECTRIC MANUFACTURING CORPORATION	PUNE
4593....	SIGNION SYSTEMS PVT. LTD.	HYDERABAD
4594....	SIGNODE (I) LTD.	DHARWAD
4595....	SII (I) IT AND ENGINEERING SERVICE PVT.LTD.	ERUMBI
4596....	SIKA (I) PVT. LTD.	BHARUCH
4597....	SILICON IMAGE (I) RESEARCH AND DEVELOPMENT	HYDERABAD
4598....	SILICUS TECHNOLOGY	PUNE
4599....	SILMAX TOOLS (I) PVT. LTD.	BENGALURU
4600....	SILTRONIC SINGAPORE PTE LTD.	HOUGANG
4601....	SILVERTECH MIDDLE EAST	JEBEL ALI
4602....	SILVERTECH MIDDLE EAST FZCO	CHENNAI
4603....	SIM INFOSYSTEMS PVT. LTD.	CHENNAI
4604....	SIMEDARBY GLOBAL SERVICE CENTER	SIVAGIRI
4605....	SIMILITY SOFTWARE SERVICES (I) PVT. LTD.	HYDERABAD
4606....	SIMPLEX INFRASTRUCTURES LTD.	KANPUR
4607....	SIMPSON AND CO LTD.	TIRUNELVELI
4608....	SIMS HOSPITAL	CHENNAI
4609....	SINGAPORE MANAGEMENT UNIVERSITY	BENGALURU
4610....	SINGAPORE OXYGEN AIRLIQUIDE PTE LTD.	CHENNAI
4611....	SINOKING GLOBAL PVT. LTD.	MEERUT
4612....	SIPC SERVICES	SECUNDERABAD
4613....	SIR H N RELIANCE FOUNDATION HOSPITAL	MUMBAI
4614....	SIVANI PHARMA AND SURGICALS DISTRIBUTION	NANDIGAMA
4615....	SIVASAKTHI PRECISION TOOLS	COIMBATORE
4616....	SIXDEE TELECOM SOLUTION PVT. LTD.	BHAGALPUR
4617....	SIXTH ENERGY TECHNOLOGIES PVT. LTD.	BENGALURU
4618....	SKARDIN INDUSTRIAL CORPORATION	BENGALURU
4619....	SKAVA SYSTEMS	TIRUPPUR
4620....	SKF TECHNOLOGIES (I) PVT. LTD.	AJMER
4621....	SKF TECHNOLOGIES (I) PVT. LTD.	VIJAYAWADA
4622....	SKF TECHNOLOGIES (I) PVT. LTD.	BENGALURU
4623....	SKF TECHNOLOGIES (I) PVT. LTD.	CHINCHWAD
4624....	SKF TECHNOLOGIES (I) PVT. LTD.	HOSUR
4625....	SKF TECHNOLOGIES (I) PVT. LTD.	NANDURBAR
4626....	SKF TECHNOLOGIES (I) PVT. LTD.	PUNE
4627....	SKF TECHNOLOGIES (I) PVT. LTD.	AKOLA
4628....	SKF TECHNOLOGIES (I) PVT. LTD.	AURANGABAD
4629....	SKF TECHNOLOGIES (I) PVT. LTD.	KANNUR
4630....	SKF TECHNOLOGIES (I) PVT. LTD.	KOLAR
4631....	SKF TECHNOLOGIES (I) PVT. LTD.	PURNIA
4632....	SKF TECHNOLOGIES (I) PVT. LTD.	RAMANAGARA
4633....	SKF TECHNOLOGIES (I) PVT. LTD.	KARKALA
4634....	SKF TECHNOLOGIES (I) PVT. LTD.	GURUGRAM
4635....	SKIDATA TECHNOLOGIES (I) PVT. LTD.	BENGALURU
4636....	SKILL COUNCIL FOR GREEN JOBS	MEERUT
4637....	SKILL-MINE TECHNOLOGY CONSULTING	BENGALURU
4638....	SKILLNET SOLUTIONS (I) PVT. LTD.	INDORE

S.No.	Organization	Location
4639....	SKILLNET SOLUTIONS (I) PVT. LTD.	MUMBAI
4640....	SKY ESS TECHNO SOLUTIONS	HYDERABAD
4641....	SKYHIGH NETWORKS	BENGALURU
4642....	SLING MEDIA PVT. LTD.	BENGALURU
4643....	SM ELECTRONICS PVT. LTD.	BENGALURU
4644....	SMALL SPARK CONCEPTS	PUNE
4645....	SMART ERP TECHNOLOGIES	HYDERABAD
4646....	SMART TECHIES PVT.LTD.	JAIPUR
4647....	SMARTCHIP PVT. LTD.	NEW DELHI
4648....	SMARTPLAY AN ARICENT CO	BENGALURU
4649....	SMARTRON (I) PVT. LTD.	HYDERABAD
4650....	SMARTSHIFT TECHNOLOGIES PVT. LTD.	KOLLAM
4651....	SMARTSTREAM (I) PVT. LTD.	THANE
4652....	SMARTSTREAM TECHNOLOGIES	BENGALURU
4653....	SMILEASY DENTAL CARE	CHENNAI
4654....	SMILES FOUNDATION	HYDERABAD
4655....	SML ISUZU LTD.	GURDASPUR
4656....	SMM TECH SOLUTIONS	BENGALURU
4657....	SMR AUTOMOTIVE SYSTEMS (I) LTD.	DELHI
4658....	SMR AUTOMOTIVE SYSTEMS (I) LTD.	KADAYANALLUR
4659....	SMT. K. NAVALE COLLEGE OF PHYSIOTHERAPY	VADODARA
4660....	SNAPDEAL	BENGALURU
4661....	SNAPDEAL	NEW DELHI
4662....	SNAPDEAL	PUNE
4663....	SOCIETE GENERALE GLOBAL SOLUTION CENTRE	BENGALURU
4664....	SOCIETY OF NUTRITION,EDUCATION AND HEALTH	THANE
4665....	SOCOMEK INNOVATIVE POWER SOLUTIONS	THANE
4666....	SOCTRONICS TECHNOLOGIES PVT. LTD.	MAHABOOB NAGAR
4667....	SOCTRONICS TECHNOLOGIES PVT. LTD.	HYDERABAD
4668....	SODEXO	BENGALURU
4669....	SOFT DESIGNERS	BENGALURU
4670....	SOFTLINK ASIA PVT. LTD.	NEW DELHI
4671....	SOFTWARE AG PVT. LTD.	BENGALURU
4672....	SOFTWARE AG PVT. LTD.	CHENNAI
4673....	SOFTWARE TECHNOLOGY PARKS OF INDIA	NOIDA
4674....	SOFTWARE TECHNOLOGY PARKS OF INDIA	SRINAGAR
4675....	SOGEFI MNR	MUZAFFARPUR
4676....	SOHAR ALUMINIUM POWER PLANT	SOHAR
4677....	SOLENIS CHEMICALS	HYDERABAD
4678....	SOLUTIONS MIDDLE EAST	ABU DHABI
4679....	SOLUTIONSMAX TECHNOLOGY SERVICES	VISAKHAPATNAM
4680....	SOMA ISOLUX SURAT HAZIRA TOLLWAY PVT. LTD.	VYARA
4681....	SOMI CONVEYOR BELTING LTD.	JODHPUR
4682....	SOMIC ZF COMPONENTS PVT. LTD.	HARIDWAR
4683....	SONA BLW PRECISION FORGINGS LTD.	GURUGRAM
4684....	SONA BLW PRECISION FORGINGS LTD.	HANSI
4685....	SONATA SOFTWARE LTD.	BENGALURU
4686....	SONATA SOFTWARE LTD.	HYDERABAD
4687....	SONY (I) SOFTWARE CENTER PVT. LTD.	COIMBATORE
4688....	SONY (I) SOFTWARE CENTRE PVT. LTD.	BENGALURU
4689....	SONY MIDDLE EAST AND AFRICA	MUMBAI
4690....	SOPRA (I) PVT. LTD.	NEW DELHI
4691....	SOPRA STERIA (I) PVT. LTD.	NOIDA
4692....	SOTI INC.	JAIPUR

S.No.	Organization	Location
4693....	SOURCESOL INTERACTIVE TECHNOLOGIES PRIVA	TIRUCHIRAPPALLI
4694....	SOURIAU (I) PVT. LTD.	KOCHI
4695....	SOUTH (I) KRISHNAN OILS AND FATS PVT. LTD.	NELLORE
4696....	SOUTH CENTRAL RAILWAY	CHENNAI
4697....	SOUTH INDIAN BANK	ERNAKULAM
4698....	SOUTH INDIAN BANK	PATHANAMTHITTA
4699....	SOUTH INDIAN BANK	THRISSUR
4700....	SP ULTRAFLEX SYSTEMS PVT. LTD.	AMBERNATH
4701....	SP ULTRAFLEX SYSTEMS PVT. LTD.	THANE
4702....	SPAN INFOTECH (I) PVT. LTD.	MOHALI
4703....	SPARK FASHION AND EVENTS	HYDERABAD
4704....	SPB CORPORATION LTD.	ASHFORD
4705....	SPECIAL TECHNICAL SERVICES LLC	KARUR
4706....	SPECIAL TECHNICAL SERVICES LLC	MUSCAT
4707....	SPECIALIST SERVICES LLC	AL QOUZE
4708....	SPECTRANET NIGERIA LTD.	MUMBAI
4709....	SPECTRIS TECHNOLOGIES PVT. LTD.	NAVI MUMBAI
4710....	SPECTRUM DYES & CHEMICALS PVT. LTD.	SURAT
4711....	SPHENIX WORLD WIZ LTD.	KANGRA
4712....	SPICER (I) PVT. LTD.	DHARWAD
4713....	SPICER (I) PVT. LTD.	PANTNAGAR
4714....	SPICER (I) PVT. LTD.	RUDRAPUR
4715....	SPIME (I) TECHNOLOGIES	CHENNAI
4716....	SPIRAX SARCO (I) PVT. LTD.	CHENNAI
4717....	SPIRENT COMMUNICATIONS PVT. LTD.	MYSORE
4718....	SPONTEY COMPUTER SYSTEMS PVT. LTD.	BENGALURU
4719....	SPONTEY COMPUTER SYSTEMS PVT. LTD.	KANPUR
4720....	SPONTEY COMPUTER SYSTEMS PVT. LTD.	MAU
4721....	SPRAYING SYSTEMS (I) PVT. LTD.	KOLKATA
4722....	SPRINKLR (I) PVT. LTD.	SHIMOGA
4723....	SQS (I) INFOSYSTEMS PVT. LTD.	ADRA
4724....	SQUARE YARDS CONSULTING PVT. LTD.	GURUGRAM
4725....	SREE ENTERPRISE	CHENNAI
4726....	SREE HARI ENTERPRISES	BENGALURU
4727....	SRF LTD.	CHENNAI
4728....	SRI KRISHNA INDUSTRIES	HOSUR
4729....	SRI MANIDWEEPA TRIPURA MAHASHKTI PEETHAM	HYDERABAD
4730....	SRI SAI ENTERPRISES	CHENNAI
4731....	SRI SANJEEVI HOSPITAL	VILLUPURAM
4732....	SRIDEVI CONSULTING CENTRE	SIRA
4733....	SRIJA EDUCATION AND RESEARCH FOUNDATION	HYDERABAD
4734....	SRIJA SOLUTIONS PVT. LTD.	PUNE
4735....	SRISHTI ENGG. SERVICES	HOSUR
4736....	SRM TECHNOLOGIES PVT.LTD.	CHENNAI
4737....	SRS ENTERPRISES	PUNE
4738....	SS EDUKS MANAGEMENT CONSULTANTS PVT. LTD.	PUNE
4739....	SS INFRASTRUCTURE DEVELOPMENT CONSULTANT	HYDERABAD
4740....	SSA IT CONSULTING SDN BHD	CHENNAI
4741....	ST MARTINS HOSPITAL	SULTHAN BATHERY
4742....	ST MICRO ELECTRONICS PVT. LTD.	GREATER NOIDA
4743....	ST MICRO ELECTRONICS PVT. LTD.	DELHI
4744....	ST. GREGORIOS MEDICAL MISSION HOSPITAL	THIRUVALLA
4745....	ST. STEPHENS HOSPITAL HEALTHCARE FACILIT	GURUGRAM
4746....	STAMPEDE CAPITAL LTD.	HYDERABAD

S.No.	Organization	Location
4747....	STANDARD CHARTERED BANK	NEW DELHI
4748....	STANDARD CHARTERED GBS	CHENNAI
4749....	STANDARD UNITS SUPPLY (I) PVT. LTD.	PUNE
4750....	STANDOUT IT SOLUTIONS	KOTHAMANGALAM
4751....	STAR CEMENT ADITYA BIRLA GROUP ULTRATECH	BHILAI
4752....	STAR CEMENT CO	UDUPI
4753....	STAR CEMENT CO LLC	CHENNAI
4754....	STAR GULF/BOS-SHELF LLC	KANNUR
4755....	STAR HOSPITAL	HYDERABAD
4756....	STAR SERVICES (ADNOC-CPU)	KRISHNAGIRI
4757....	STATE BANK OF HYDERABAD	HYDERABAD
4758....	STATE BANK OF INDIA	COIMBATORE
4759....	STATE BANK OF INDIA	FIROZPUR
4760....	STATE BANK OF INDIA	SATHYAMANGALAM
4761....	STATE BANK OF TRAVANCORE	NAVI MUMBAI
4762....	STATE STREET SYNTEL SERVICES PVT.LTD.	AMBARNATH
4763....	STATE TECHNICAL EDUCATION	SRINAGAR
4764....	STAY TOP IT SOLUTIONS PVT. LTD.	HYDERABAD
4765....	STEEL AUTHORITY OF INDIA LTD.	BHILAI
4766....	STEEL AUTHORITY OF INDIA LTD.	BOKARO
4767....	STEEL AUTHORITY OF INDIA LTD.	KOLKATA
4768....	STEEL EXCHANGE OF INDIA LTD.	KOTHAVALASA
4769....	STEEL EXCHANGE OF INDIA LTD.	VIZIANAGARAM
4770....	STEEL STRIPS WHEELS LTD.	JAMSHEDPUR
4771....	STEELCASE ASIA PACIFIC HOLDINGS (I) PVT. LTD.	PUNE
4772....	STEELSMITH CONTINENTAL MANUFACTURING PVT. LTD.	VADODARA
4773....	STEP ELECTRONICS PVT. LTD.	BENGALURU
4774....	STEPS KNOWLEDGE SERVICES PVT. LTD.	COIMBATORE
4775....	STERIA (I) LTD.	NOIDA
4776....	STERLING & WILSON PVT. LTD.	KOLKATA
4777....	STERLING & WILSON PVT. LTD.	RAJAPALAYAM
4778....	STERLING SOFTWARE (I) LTD.	VISAKHAPATNAM
4779....	STERLITE COPPER	TUTICORIN
4780....	STERLITE TECHNOLOGIES LTD.	NEW DELHI
4781....	STERLITE TECHNOLOGIES LTD.	PUNE
4782....	STERLITE TECHNOLOGIES LTD.	SILVASSA
4783....	STESALIT SYSTEMS LTD.	BENGALURU
4784....	STG INFOTECH INDIA	PUDUCHERRY
4785....	STIGASOFT PVT. LTD.	PADRAUNA
4786....	STOCK HOLDING CORPORATION OF (I)	MUMBAI
4787....	STOCK REDLER (I) PVT. LTD.	BENGALURU
4788....	STOCK REDLER (I) PVT. LTD.	DELHI
4789....	STOCK REDLER (I) PVT. LTD.	GURUGRAM
4790....	STRAITS ORTHOPAEDICS	TIRUCHIRAPPALLI
4791....	STRATA MANUFACTURING PJSC	ABU DHABI
4792....	STREAM INDUSTRIAL & ENGINEERING	AL SADD
4793....	STRIDES SHASUN LTD.	BENGALURU
4794....	STRUCTURAL SOLUTIONS PVT. LTD.	HYDERABAD
4795....	STRUCTURAL SOLUTIONS PVT. LTD.	MUSSOORIE
4796....	STRYKER GLOBAL TECHNOLOGY CENTER PVT. LTD.	GURUGRAM
4797....	STRYKER GLOBAL TECHNOLOGY CENTER PVT. LTD.	PALWAL
4798....	SUBEX LTD.	BENGALURU
4799....	SUBEX LTD.	SAMBHAR LAKE
4800....	SUBROS LTD.	DELHI

S.No.	Organization	Location
4801....	SUBROS LTD.	NOIDA
4802....	SULEKHA.COM NEW MEDIA PVT. LTD.	CHENNAI
4803....	SULTAN QABOOS UNIVERSITY HOSPITAL	MUSCAT
4804....	SULZER TECH (I) PVT. LTD.	PUNE
4805....	SULZER TECH (I) PVT. LTD.	THANE
4806....	SUN MOBILITY PVT. LTD.	CHENNAI
4807....	SUN PHARMA ADVANCED RESEARCH CO LTD.	GURUGRAM
4808....	SUN PHARMA ADVANCED RESEARCH CO LTD.	NEW DELHI
4809....	SUN PHARMA ADVANCED RESEARCH CO LTD.	VADODARA
4810....	SUN PHARMA ADVANCED RESEARCH CO LTD.	BARODA
4811....	SUN PHARMA ADVANCED RESEARCH CO LTD.	DABHOI
4812....	SUN PHARMA ADVANCED RESEARCH CO LTD.	MUMBAI
4813....	SUN PHARMACEUTICAL INDUSTRIES LTD.	GURUGRAM
4814....	SUN PHARMACEUTICAL INDUSTRIES LTD.	DELHI
4815....	SUN PHARMACEUTICAL INDUSTRIES LTD.	ABOHAR
4816....	SUN PHARMACEUTICAL INDUSTRIES LTD.	BARODA
4817....	SUN PHARMACEUTICAL INDUSTRIES LTD.	GHAZIABAD
4818....	SUN PHARMACEUTICAL INDUSTRIES LTD.	KOLKATA
4819....	SUN PHARMACEUTICAL INDUSTRIES LTD.	MAHENDERGARH
4820....	SUN PHARMACEUTICAL INDUSTRIES LTD.	NEW DELH
4821....	SUN PHARMACEUTICAL INDUSTRIES LTD.	NEW DELHI
4822....	SUN PHARMACEUTICAL INDUSTRIES LTD.	SURAT
4823....	SUN PHARMACEUTICAL INDUSTRIES LTD.	VADODARA
4824....	SUN PHARMACEUTICAL INDUSTRIES LTD.	KALKA
4825....	SUN PHARMACEUTICAL INDUSTRIES LTD.	MUMBAI
4826....	SUN PHARMACEUTICAL INDUSTRIES LTD.	DEHRADUN
4827....	SUN PHARMACEUTICAL INDUSTRIES LTD.	ADERAN
4828....	SUN PHARMACEUTICAL INDUSTRIES LTD.	AHMEDABAD
4829....	SUN PHARMACEUTICAL INDUSTRIES LTD.	HALOL
4830....	SUN PHARMACEUTICAL INDUSTRIES LTD.	SAHARANPUR
4831....	SUNBEAM AUTO PVT. LTD.	BHIWADI
4832....	SUNBEAM AUTO PVT. LTD.	GURUGRAM
4833....	SUNDARAM AUTO COMPONENTS LTD.	CHENNAI
4834....	SUNDARAM AUTO COMPONENTS LTD.	HOSUR
4835....	SUNDARAM AUTO COMPONENTS LTD.	KRISHNAGIRI
4836....	SUNDARAM AUTO COMPONENTS LTD.	VELLORE
4837....	SUNDARAM AUTO COMPONENTS LTD.	VIRUTHUNAGAR
4838....	SUNDARAM CLAYTON LTD.	CHENNAI
4839....	SUNDARAM CLAYTON LTD.	HOSUR
4840....	SUNDARAM CLAYTON LTD.	SIVAKASI
4841....	SUNDARAM CLAYTON LTD.	CHENGALPET
4842....	SUNDRAM FASTENERS LTD.	CHENNAI
4843....	SUNDRAM FASTENERS LTD.	PUDUCHERRY
4844....	SUNDYOTA NUMANDIS RESEARCH & FORMULATION	AHMEDABAD
4845....	SUNGARD AVAILABILITY SERVICES	BENGALURU
4846....	SUNMACHX ENGINEERING INDUSTRIES	THANJAVUR
4847....	SUNSMART IP SERVICES	BENGALURU
4848....	SUNTEC BUSINESS SOLUTIONS	PALAKKAD
4849....	SUNTEC BUSINESS SOLUTIONS	THIRUVANANTHAPURAM
4850....	SUPER AUTO FORGE PVT. LTD.	CHENNAI
4851....	SUPER SMELTERS LTD.	KOLKATA
4852....	SUPER SPRING	NEW DELHI
4853....	SUPERMAX PERSONAL CARE PVT. LTD.	PUNE
4854....	SUPRAJA HOSPITALS	HYDERABAD

S.No.	Organization	Location
4855....	SUPREME TELECOMMUNICATIONS LTD.	BENGALURU
4856....	SURELOCK PLASTICS PVT. LTD.	KHARAGPUR
4857....	SUREWAVES MEDIATECH PVT. LTD.	BENGALURU
4858....	SURIN AUTOMOTIVE PVT. LTD.	TASGAON
4859....	SURTEL TECHNOLOGIES PVT. LTD.	INDORE
4860....	SURYA AIRCONDITIONING & REF. PVT. LTD.	BADHARA
4861....	SURYA AROMATIC & ESSENTIAL OILS	DELHI
4862....	SURYA HOSPITAL,MUMBAI	MUMBAI
4863....	SURYAGEN RENEWABLE ENERGY PVT. LTD.	BENGALURU
4864....	SUTURES (I) PVT. LTD.	BENGALURU
4865....	SUZLON ENERGY LTD.	PUNE
4866....	SUZUKI MOTORS GUJARAT PVT. LTD.	MEHSANA
4867....	SWAIDAN TRADING CO LLC	THIRUVANANTHAPURAM
4868....	SWARNA PRAGATI HOUSING MICROFINANCE PVT.	SALEM
4869....	SWIFT PLM SERVICES	PUNE
4870....	SWIFTANT IT SOLUTIONS (I) PVT. LTD.	HOSUR
4871....	SWORD GLOBAL(I) PVT. LTD.	TIRUPPUR
4872....	SYMANTEC SOFTWARE & SERVICES (I) PVT. LTD.	CHENNAI
4873....	SYMANTEC SOFTWARE & SERVICES (I) PVT. LTD.	GANDHINAGAR
4874....	SYMANTEC SOFTWARE & SERVICES (I) PVT. LTD.	PUNE
4875....	SYMANTEC SOFTWARE & SERVICES (I) PVT. LTD.	KOLKATA
4876....	SYMANTEC SOFTWARE & SERVICES (I) PVT. LTD.	DARYAPUR
4877....	SYMANTEC SOFTWARE & SERVICES (I) PVT. LTD.	SANGLI
4878....	SYMANTEC SOFTWARE SOLUTIONS PVT. LTD.	BENGALURU
4879....	SYMPHONY TELECA CORP. PVT. LTD.	BENGALURU
4880....	SYMPHONY TELECA CORP. PVT. LTD.	PUNE
4881....	SYNAPSE TECHNO DESIGN INNOVATIONS PVT. LTD.	MADURAI
4882....	SYNAPSE TECHNO DESIGN INNOVATIONS PVT. LTD.	BENGALURU
4883....	SYNECHRON TECHNOLOGIES PVT. LTD.	BENGALURU
4884....	SYNECHRON TECHNOLOGIES PVT. LTD.	AKOLA
4885....	SYNECHRON TECHNOLOGIES PVT. LTD.	PUNE
4886....	SYNECHRON TECHNOLOGIES PVT. LTD.	SIRPUR KAGHAZNAGAR
4887....	SYNERGIES CASTINGS LTD.	CHENNAI
4888....	SYNIVERSE MOBILE SOLUTIONS PVT. LTD.	SECUNDERABAD
4889....	SYNOPSIS (I) PVT. LTD.	BENGALURU
4890....	SYNOPSIS (I) PVT. LTD.	CHIKMAGALURU
4891....	SYNOPSIS (I) PVT. LTD.	CHITTOOR
4892....	SYNOPSIS (I) PVT. LTD.	COLOMBO
4893....	SYNOPSIS (I) PVT. LTD.	DELHI
4894....	SYNOPSIS (I) PVT. LTD.	ERNAKULAM
4895....	SYNOPSIS (I) PVT. LTD.	FIROZPUR
4896....	SYNOPSIS (I) PVT. LTD.	GHAZIABAD
4897....	SYNOPSIS (I) PVT. LTD.	GREATER NOIDA
4898....	SYNOPSIS (I) PVT. LTD.	HYDERABAD
4899....	SYNOPSIS (I) PVT. LTD.	MALAPPURAM
4900....	SYNOPSIS (I) PVT. LTD.	MUMBAI
4901....	SYNOPSIS (I) PVT. LTD.	MYSORE
4902....	SYNOPSIS (I) PVT. LTD.	NEW DELHI
4903....	SYNOPSIS (I) PVT. LTD.	NOIDA
4904....	SYNOPSIS (I) PVT. LTD.	PANADURA
4905....	SYNOPSIS (I) PVT. LTD.	SECUNDERABAD
4906....	SYNOPSIS (I) PVT. LTD.	GAUTAM BUDH NAGAR
4907....	SYNTEL LTD.	CHENNAI
4908....	SYNTEL LTD.	MADURAI

S.No.	Organization	Location
4909....	SYNTEL LTD.	PUNE
4910....	SYNTEL LTD.	RAJAPALAYAM
4911....	SYNTEL LTD.	COIMBATORE
4912....	SYNTEL LTD.	JAIPUR
4913....	SYNTHESIS WINDING TECHNOLOGIES PVT. LTD.	BENGALURU
4914....	SYSCOM CORP. LTD.	GHAZIABAD
4915....	SYSTECH SOLUTIONS PVT. LTD.	TIRUCHIRAPPALLI
4916....	SYSTEM CONSULTANT INFORMATION (I) LTD.	SHIMOGA
4917....	SYSTEM LEVEL SOLUTIONS	ANAND
4918....	SYSTEM SOFT TECHNOLOGIES	HYDERABAD
4919....	SYSTEMATIC STEEL INDUSTRIES LTD.	CHANDRAPUR
4920....	T M INPUTS & SERVICES PVT. LTD.	SECUNDERABAD
4921....	T&AS DESIGNTECH SERVICES PVT. LTD.	HYDERABAD
4922....	TAG CORPORATION	CHENNAI
4923....	TAGROS CHEMICALS (I) LTD.	CUDDALORE
4924....	TAIKISHA ENGINEERING (I) PVT. LTD.	GURUGRAM
4925....	TAJ AIR LTD.	MUMBAI
4926....	TAKASAGO ENGINEERING (I) PVT. LTD.	TIRUNELVELI
4927....	TAKREER REFINERY	ABU DHABI
4928....	TAKREER REFINERY	ABU DHABI
4929....	TAKREER REFINERY	RUWAIS
4930....	TAKREER REFINERY	ANGAMALY
4931....	TAL MANUFACTURING SOLUTION LTD.	NAGPUR
4932....	TAL MANUFACTURING SOLUTION LTD.	SHIMOGA
4933....	TAL MANUFACTURING SOLUTION LTD.	WARDHA
4934....	TAL MANUFACTURING SOLUTION LTD.	BHANDARA
4935....	TAL MANUFACTURING SOLUTION LTD.	AMRAVATI
4936....	TAL MANUFACTURING SOLUTION LTD.	PUNE
4937....	TAL MANUFACTURING SOLUTION LTD.	ARMORI
4938....	TAL MANUFACTURING SOLUTION LTD.	CHIKODI
4939....	TAL MANUFACTURING SOLUTION LTD.	LATUR
4940....	TALBROS AUTOMOTIVE COMPONENTS LTD.	REWARI
4941....	TALENTICA SOFTWARE (I) PVT. LTD.	PUNE
4942....	TALLY SOLUTIONS PVT. LTD.	DELHI
4943....	TARGET CORPORATION (I) PVT. LTD.	BENGALURU
4944....	TARGET ENGINEERING CONSTRUCTION CO	TALIPARAMBA
4945....	TASEC LTD.	DEHRADUN
4946....	TASEC LTD.	CHAMPAWAT
4947....	TASEC LTD.	NEW DELHI
4948....	TATA ADVANCED MATERIALS LTD.	BENGALURU
4949....	TATA ADVANCED SYSTEMS LTD.	BALAPUR
4950....	TATA ADVANCED SYSTEMS LTD.	DELHI
4951....	TATA ADVANCED SYSTEMS LTD.	GAUTAM BUDH NAGAR
4952....	TATA ADVANCED SYSTEMS LTD.	HYDERABAD
4953....	TATA ADVANCED SYSTEMS LTD.	JAMSHEDPUR
4954....	TATA ADVANCED SYSTEMS LTD.	BASIRHAT
4955....	TATA AUTOCOMP SYSTEMS LTD.	KOLKATA
4956....	TATA AUTOCOMP SYSTEMS LTD.	PUNE
4957....	TATA COMMUNICATIONS LTD.	BENGALURU
4958....	TATA COMMUNICATIONS LTD.	CHENNAI
4959....	TATA COMMUNICATIONS LTD.	INDORE
4960....	TATA COMMUNICATIONS LTD.	NAVI MUMBAI
4961....	TATA CONSULTANCY SERVICES LTD.	BENGALURU
4962....	TATA CONSULTANCY SERVICES LTD.	MUMBAI



<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
4963....	TATA CONSULTANCY SERVICES LTD.	VIJAYAWADA
4964....	TATA CONSULTANCY SERVICES LTD.	HISAR
4965....	TATA CONSULTANCY SERVICES LTD.	HYDERABAD
4966....	TATA CONSULTANCY SERVICES LTD.	CHENNAI
4967....	TATA CONSULTANCY SERVICES LTD.	PATHANAMTHITTA
4968....	TATA CONSULTANCY SERVICES LTD.	BAGALKOT
4969....	TATA CONSULTANCY SERVICES LTD.	MATHURA
4970....	TATA CONSULTANCY SERVICES LTD.	AJMER
4971....	TATA CONSULTANCY SERVICES LTD.	ALIGARH
4972....	TATA CONSULTANCY SERVICES LTD.	BAHADURGARH
4973....	TATA CONSULTANCY SERVICES LTD.	BHIWADI
4974....	TATA CONSULTANCY SERVICES LTD.	BHUBANESWAR
4975....	TATA CONSULTANCY SERVICES LTD.	CHANDANNAGAR
4976....	TATA CONSULTANCY SERVICES LTD.	COIMBATORE
4977....	TATA CONSULTANCY SERVICES LTD.	DEHRADUN
4978....	TATA CONSULTANCY SERVICES LTD.	ERNAKULAM
4979....	TATA CONSULTANCY SERVICES LTD.	GHAZIABAD
4980....	TATA CONSULTANCY SERVICES LTD.	GREATER NOIDA
4981....	TATA CONSULTANCY SERVICES LTD.	GUNTUR
4982....	TATA CONSULTANCY SERVICES LTD.	GURUGRAM
4983....	TATA CONSULTANCY SERVICES LTD.	HATHRAS
4984....	TATA CONSULTANCY SERVICES LTD.	HOOGHLY
4985....	TATA CONSULTANCY SERVICES LTD.	HOSUR
4986....	TATA CONSULTANCY SERVICES LTD.	HOWRAH
4987....	TATA CONSULTANCY SERVICES LTD.	JAIPUR
4988....	TATA CONSULTANCY SERVICES LTD.	KADAPA
4989....	TATA CONSULTANCY SERVICES LTD.	KAKINADA
4990....	TATA CONSULTANCY SERVICES LTD.	KARAIKAL
4991....	TATA CONSULTANCY SERVICES LTD.	KOCHI
4992....	TATA CONSULTANCY SERVICES LTD.	KOLKATA
4993....	TATA CONSULTANCY SERVICES LTD.	KOTTAYAM
4994....	TATA CONSULTANCY SERVICES LTD.	KUMBAKONAM
4995....	TATA CONSULTANCY SERVICES LTD.	LUCKNOW
4996....	TATA CONSULTANCY SERVICES LTD.	LUDHIANA
4997....	TATA CONSULTANCY SERVICES LTD.	MALKANGIRI
4998....	TATA CONSULTANCY SERVICES LTD.	MEDCHAL
4999....	TATA CONSULTANCY SERVICES LTD.	NAGERCOIL
5000....	TATA CONSULTANCY SERVICES LTD.	NAGPUR
5001....	TATA CONSULTANCY SERVICES LTD.	NAMAKKAL
5002....	TATA CONSULTANCY SERVICES LTD.	NEW DELHI
5003....	TATA CONSULTANCY SERVICES LTD.	NOIDA
5004....	TATA CONSULTANCY SERVICES LTD.	PRODDATUR
5005....	TATA CONSULTANCY SERVICES LTD.	PUNE
5006....	TATA CONSULTANCY SERVICES LTD.	RAMPURA PHUL
5007....	TATA CONSULTANCY SERVICES LTD.	SHIVAMOGGA
5008....	TATA CONSULTANCY SERVICES LTD.	THANE
5009....	TATA CONSULTANCY SERVICES LTD.	THRISSUR
5010....	TATA CONSULTANCY SERVICES LTD.	TIRUCHIRAPPALLI
5011....	TATA CONSULTANCY SERVICES LTD.	TIRUPATHI
5012....	TATA CONSULTANCY SERVICES LTD.	TUMKUR
5013....	TATA CONSULTANCY SERVICES LTD.	UDAIPUR
5014....	TATA CONSULTANCY SERVICES LTD.	VISAKHAPATNAM
5015....	TATA CONSULTANCY SERVICES LTD.	MOGA
5016....	TATA CONSULTANCY SERVICES LTD.	ALAPPUZHA

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
5017....	TATA CONSULTANCY SERVICES LTD.	AMBIKAPUR
5018....	TATA CONSULTANCY SERVICES LTD.	AURANGABAD
5019....	TATA CONSULTANCY SERVICES LTD.	BHOPAL
5020....	TATA CONSULTANCY SERVICES LTD.	BILASPUR
5021....	TATA CONSULTANCY SERVICES LTD.	CHANDIGARH
5022....	TATA CONSULTANCY SERVICES LTD.	DELHI
5023....	TATA CONSULTANCY SERVICES LTD.	JHARGRAM
5024....	TATA CONSULTANCY SERVICES LTD.	MALLAVARAM
5025....	TATA CONSULTANCY SERVICES LTD.	NAGAPATTINAM
5026....	TATA CONSULTANCY SERVICES LTD.	RUDRAPUR
5027....	TATA CONSULTANCY SERVICES LTD.	SALEM
5028....	TATA CONSULTANCY SERVICES LTD.	SHYAMNAGAR
5029....	TATA CONSULTANCY SERVICES LTD.	SIDDIPET
5030....	TATA CONSULTANCY SERVICES LTD.	VELLORE
5031....	TATA CONSULTANCY SERVICES LTD.	AHMEDABAD
5032....	TATA CONSULTANCY SERVICES LTD.	AMRITSAR
5033....	TATA CONSULTANCY SERVICES LTD.	BARRACKPORE
5034....	TATA CONSULTANCY SERVICES LTD.	BHIWANI
5035....	TATA CONSULTANCY SERVICES LTD.	DOMBIVLI
5036....	TATA CONSULTANCY SERVICES LTD.	GANDHINAGAR
5037....	TATA CONSULTANCY SERVICES LTD.	KALYAN
5038....	TATA CONSULTANCY SERVICES LTD.	KOLKATA
5039....	TATA CONSULTANCY SERVICES LTD.	MUDALIARPET
5040....	TATA CONSULTANCY SERVICES LTD.	NANDIGAMA
5041....	TATA CONSULTANCY SERVICES LTD.	NARELA
5042....	TATA CONSULTANCY SERVICES LTD.	NAVI MUMBAI
5043....	TATA CONSULTANCY SERVICES LTD.	NEEMUCH
5044....	TATA CONSULTANCY SERVICES LTD.	PANVEL
5045....	TATA CONSULTANCY SERVICES LTD.	RAVULAPALEM
5046....	TATA CONSULTANCY SERVICES LTD.	SECUNDERABAD
5047....	TATA CONSULTANCY SERVICES LTD.	TIRUNELVELI
5048....	TATA CONSULTANCY SERVICES LTD.	TOHANA
5049....	TATA CONSULTANCY SERVICES LTD.	VASHI
5050....	TATA CONSULTANCY SERVICES LTD.	WARANGAL
5051....	TATA CUMMINS PVT. LTD.	BARAMATI
5052....	TATA CUMMINS PVT. LTD.	JAMSHEDPUR
5053....	TATA CUMMINS PVT. LTD.	PUNE
5054....	TATA ELXSI LTD.	BENGALURU
5055....	TATA ELXSI LTD.	COCHIN
5056....	TATA ELXSI LTD.	KAKINADA
5057....	TATA ELXSI LTD.	KOTTAYAM
5058....	TATA ELXSI LTD.	KOVILPATTI
5059....	TATA ELXSI LTD.	NEW DELHI
5060....	TATA ELXSI LTD.	PALAKKAD
5061....	TATA ELXSI LTD.	PUNE
5062....	TATA ELXSI LTD.	SANGLI
5063....	TATA ELXSI LTD.	THIRUVANANTHAPURAM
5064....	TATA ELXSI LTD.	CHENNAI
5065....	TATA ELXSI LTD.	MAHABOOB NAGAR
5066....	TATA ELXSI LTD.	TIRUR
5067....	TATA HOUSING DEVELOPMENT CO LTD.	MUMBAI
5068....	TATA HOUSING DEVELOPMENT CO LTD.	THANE
5069....	TATA INSTITUTE OF FUNDAMENTAL RESEARCH	MUMBAI
5070....	TATA INTERNATIONAL LTD.	INDORE

S.No.	Organization	Location
5071....	TATA INTERNET SERVICES	MUMBAI
5072....	TATA JOHNSON CONTROLS AUTOMOTIVE LTD.	PUNE
5073....	TATA MEMORIAL CENTRE	MUMBAI
5074....	TATA MOTORS LTD.	PUNE
5075....	TATA MOTORS LTD.	KOLHAPUR
5076....	TATA MOTORS LTD.	AHMEDABAD
5077....	TATA MOTORS LTD.	DHARWAD
5078....	TATA MOTORS LTD.	JAMSHEDPUR
5079....	TATA MOTORS LTD.	LADWA
5080....	TATA MOTORS LTD.	LUCKNOW
5081....	TATA MOTORS LTD.	AURANGABAD
5082....	TATA MOTORS LTD.	RAEBARELI
5083....	TATA POWER	AHMEDNAGAR
5084....	TATA POWER	BELGAUM
5085....	TATA POWER	DHANBAD
5086....	TATA POWER	DHENKANAL
5087....	TATA POWER	HALDIA
5088....	TATA POWER	JAMSHEDPUR
5089....	TATA POWER	KALYAN
5090....	TATA POWER	KARJAT
5091....	TATA POWER	KHARAGPUR
5092....	TATA POWER	KHARGHAR
5093....	TATA POWER	KHOPOLI
5094....	TATA POWER	KOPARGAON
5095....	TATA POWER	MAITHON
5096....	TATA POWER	MUMBAI
5097....	TATA POWER	MUNDRA
5098....	TATA POWER	NAVI MUMBAI
5099....	TATA POWER	PALANI
5100....	TATA POWER	PANVEL
5101....	TATA POWER	PARJANG
5102....	TATA POWER	THANE
5103....	TATA POWER	VASHI
5104....	TATA POWER	VISAKHAPATNAM
5105....	TATA POWER	KAKINADA
5106....	TATA POWER	BENGALURU
5107....	TATA POWER	AKOLA
5108....	TATA PROJECTS LTD.	BHUBANESWAR
5109....	TATA PROJECTS LTD.	NELLORE
5110....	TATA SIKORSKY AEROSPACE LTD.	KANPUR
5111....	TATA STEEL LTD.	JAMSHEDPUR
5112....	TATA TECHNOLOGIES LTD.	PUNE
5113....	TATA TECHNOLOGIES LTD.	BENGALURU
5114....	TATA TECHNOLOGIES LTD.	DELHI
5115....	TATA TECHNOLOGIES LTD.	NASHIK
5116....	TATA TECHNOLOGIES LTD.	SOLAPUR
5117....	TATA TECHNOLOGIES LTD.	AHMEDNAGAR
5118....	TATA TECHNOLOGIES LTD.	AURANGABAD
5119....	TATA TECHNOLOGIES LTD.	BHUBANESWAR
5120....	TATA TECHNOLOGIES LTD.	JALGAON
5121....	TATA TECHNOLOGIES LTD.	KOLHAPUR
5122....	TATA TECHNOLOGIES LTD.	NAGPUR
5123....	TATA TECHNOLOGIES LTD.	SALEM
5124....	TATA TELE SERVICES LTD.	CHENNAI

S.No.	Organization	Location
5125....	TAURUS AEROSPACE SYSTEMS PVT. LTD.	BENGALURU
5126....	TAV TECHNOLOGIES	VIRUDHUNAGAR
5127....	TAVANT TECHNOLOGIES	BENGALURU
5128....	TAVISCA SOLUTIONS PVT. LTD.	PUNE
5129....	TAYANA SOFTWARE SOLUTIONS	BENGALURU
5130....	TAYO ROLLS LTD.	KOLKATA
5131....	TCL (I) HOLDINGS PVT. LTD.	CHENNAI
5132....	TE CONNECTIVITY (I) PVT. LTD.	BENGALURU
5133....	TE CONNECTIVITY (I) PVT. LTD.	CHANNAPATNA
5134....	TE CONSULTING (I) PVT. LTD.	BENGALURU
5135....	TEACH GLOBAL SOLUTIONS PVT.LTD.	HYDERABAD
5136....	TEBODIN MIDDLE EAST LTD.	BENGALURU
5137....	TEBODIN MIDDLE EAST LTD.	TIRUCHIRAPPALLI
5138....	TECH BIZ SOLUTION	JODHPUR
5139....	TECH MAHINDRA LTD.	ABOHAR
5140....	TECH MAHINDRA LTD.	AGRA
5141....	TECH MAHINDRA LTD.	AMBALA
5142....	TECH MAHINDRA LTD.	ANDAL
5143....	TECH MAHINDRA LTD.	BEAWAR
5144....	TECH MAHINDRA LTD.	BENGALURU
5145....	TECH MAHINDRA LTD.	BHIMAVARAM
5146....	TECH MAHINDRA LTD.	BHOPAL
5147....	TECH MAHINDRA LTD.	BHUBANESWAR
5148....	TECH MAHINDRA LTD.	CALICUT
5149....	TECH MAHINDRA LTD.	CHAMARAJANAGAR
5150....	TECH MAHINDRA LTD.	CHENNAI
5151....	TECH MAHINDRA LTD.	COIMBATORE
5152....	TECH MAHINDRA LTD.	DELHI
5153....	TECH MAHINDRA LTD.	DEWAS
5154....	TECH MAHINDRA LTD.	DURGAPUR
5155....	TECH MAHINDRA LTD.	ERODE
5156....	TECH MAHINDRA LTD.	FARIDABAD
5157....	TECH MAHINDRA LTD.	FAZILKA
5158....	TECH MAHINDRA LTD.	GOBINDGARH
5159....	TECH MAHINDRA LTD.	GREATER NOIDA
5160....	TECH MAHINDRA LTD.	GUNTUR
5161....	TECH MAHINDRA LTD.	HARIDWAR
5162....	TECH MAHINDRA LTD.	HYDERABAD
5163....	TECH MAHINDRA LTD.	JAMSHEDPUR
5164....	TECH MAHINDRA LTD.	JODA
5165....	TECH MAHINDRA LTD.	KADAPA
5166....	TECH MAHINDRA LTD.	KAKINADA
5167....	TECH MAHINDRA LTD.	KANNUR
5168....	TECH MAHINDRA LTD.	KARNAL
5169....	TECH MAHINDRA LTD.	KOLKATA
5170....	TECH MAHINDRA LTD.	KOLLAM
5171....	TECH MAHINDRA LTD.	KONNAGAR
5172....	TECH MAHINDRA LTD.	KOTTAYAM
5173....	TECH MAHINDRA LTD.	LUCKNOW
5174....	TECH MAHINDRA LTD.	MAHE
5175....	TECH MAHINDRA LTD.	MALDA
5176....	TECH MAHINDRA LTD.	MANCHERIAL
5177....	TECH MAHINDRA LTD.	MARATHAHALLY
5178....	TECH MAHINDRA LTD.	MYSORE

S.No.	Organization	Location
5179....	TECH MAHINDRA LTD.	NAGPUR
5180....	TECH MAHINDRA LTD.	NASHIK
5181....	TECH MAHINDRA LTD.	NAVI MUMBAI
5182....	TECH MAHINDRA LTD.	NEW DELHI
5183....	TECH MAHINDRA LTD.	NOIDA
5184....	TECH MAHINDRA LTD.	PALAKKAD
5185....	TECH MAHINDRA LTD.	PALAMPUR
5186....	TECH MAHINDRA LTD.	PATHANAMTHITTA
5187....	TECH MAHINDRA LTD.	PENNADAM
5188....	TECH MAHINDRA LTD.	PUNE
5189....	TECH MAHINDRA LTD.	RAJAPALAYAM
5190....	TECH MAHINDRA LTD.	ROHTAK
5191....	TECH MAHINDRA LTD.	RUDRAPUR
5192....	TECH MAHINDRA LTD.	SAHARANPUR
5193....	TECH MAHINDRA LTD.	SALEM
5194....	TECH MAHINDRA LTD.	SAMBALPUR
5195....	TECH MAHINDRA LTD.	SECUNDERABAD
5196....	TECH MAHINDRA LTD.	THODUPUZHA
5197....	TECH MAHINDRA LTD.	TIRUCHIRAPPALLI
5198....	TECH MAHINDRA LTD.	TIRUPATHI
5199....	TECH MAHINDRA LTD.	UDUPI
5200....	TECH MAHINDRA LTD.	VELLORE
5201....	TECH MAHINDRA LTD.	VIJAYAWADA
5202....	TECH MAHINDRA LTD.	VIRUDHUNAGAR
5203....	TECH MAHINDRA LTD.	VISAKHAPATNAM
5204....	TECH MAHINDRA LTD.	ZIRAKPUR
5205....	TECH MAHINDRA LTD.	CHEENAI
5206....	TECH MAHINDRA LTD.	ERODE
5207....	TECH MAHINDRA LTD.	GHAZIABAD
5208....	TECH MAHINDRA LTD.	JAMKHED
5209....	TECH MAHINDRA LTD.	JHANSI
5210....	TECH MAHINDRA LTD.	KOLKATA
5211....	TECH MAHINDRA LTD.	MANGALURU
5212....	TECH MAHINDRA LTD.	MOHALI
5213....	TECH MAHINDRA LTD.	MUMBAI
5214....	TECH MAHINDRA LTD.	NANDED
5215....	TECH MAHINDRA LTD.	NAWANSHAHR
5216....	TECH MAHINDRA LTD.	NIZAMABAD
5217....	TECH MAHINDRA LTD.	PUNE
5218....	TECH MAHINDRA LTD.	RAMACHANDRAPURAM
5219....	TECH MAHINDRA LTD.	VADODARA
5220....	TECH MAHINDRA LTD.	ASANSOL
5221....	TECH MAHINDRA LTD.	PATIALA
5222....	TECH MAHINDRA LTD.	ADILABAD
5223....	TECH MAHINDRA LTD.	HINJEWADI
5224....	TECHNICO INDUSTRIES LTD.	NEW DELHI
5225....	TECHNIP (I) LTD.	KALYAN
5226....	TECHNIP (I) LTD.	MUMBAI
5227....	TECHNIP (I) LTD.	TIRUCHIRAPPALLI
5228....	TECHNOLOGY ONE GEN.TRADING LLC	PATTAMBI
5229....	TECHNOLOGY VENTURES MARINE EQPT LLC	THRISSUR
5230....	TECHNOSOFT CORPORATION	ERODE
5231....	TECHNOSOFT ENGINEERING PROJECTS LTD.	NAIGAON
5232....	TECHNOSOLUTIONS & DESIGNS PVT. LTD.	BENGALURU

S.No.	Organization	Location
5233....	TECHNOVA IMAGING SYSTEMS I LTD.	THANE
5234....	TECHOLUTION (I) PVT. LTD.	ERODE
5235....	TECHWAVE CONSULTING PVT. (I) LTD.	HYDERABAD
5236....	TECNICAS REUNIDAS ENGINEERING LLC	DOMBIVLI
5237....	TECTON ENGINEERING & CONSTRUCTION LLC	CHENNAI
5238....	TECTON ENGINEERING & CONSTRUCTION LLC	TIRUCHIRAPPALLI
5239....	TECTON ENGINEERING & CONSTRUCTION LLC	DINDIGUL
5240....	TECUMSEH PRODUCTS (I) PVT. LTD.	FARIDABAD
5241....	TEGA INDUSTRIES LTD.	AGRA
5242....	TEGA INDUSTRIES LTD.	KOLKATA
5243....	TEJA MACHINERY PVT. LTD.	CHENNAI
5244....	TEJAS NETWORKS LTD.	ALWAYE
5245....	TEJAS NETWORKS LTD.	BENGALURU
5246....	TEJOSMA TECHNOLOGY PVT. LTD.	RAICHUR
5247....	TEK SYSTEMS	BENGALURU
5248....	TEKTRONIX (I) PVT. LTD.	VERNA
5249....	TEKTRONIX (I) PVT. LTD.	BENGALURU
5250....	TEKTRONIX (I) PVT. LTD.	MUMBAI
5251....	TEMA BUSINESS SYSTEMS	HYDERABAD
5252....	TEMENOS (I) PVT. LTD.	BENGALURU
5253....	TEMENOS (I) PVT. LTD.	CHENNAI
5254....	TENOVA (I) PVT. LTD.	CHENNAI
5255....	TENTACLE TECHNOLOGIES SDN BHD	COIMBATORE
5256....	TERADATA (I) PVT. LTD.	BENGALURU
5257....	TERADATA (I) PVT. LTD.	HYDERABAD
5258....	TERADATA (I) PVT. LTD.	PUNE
5259....	TERADATA (I) PVT. LTD.	VIJAYAWADA
5260....	TERRAZZO LTD.	SHARJAH
5261....	TESCO HSC	BENGALURU
5262....	TESCO HSC	NAMAKKAL
5263....	TESSOLVE SEMICONDUCTORS PVT. LTD.	BENGALURU
5264....	TESSOLVE SEMICONDUCTORS PVT. LTD.	KANNUR
5265....	TESSOLVE SEMICONDUCTORS PVT. LTD.	KADAPA
5266....	TESSOLVE SEMICONDUCTORS PVT. LTD.	BAGALKOT
5267....	TEST AND VERIFICATION SOULTIONS	MUMBAI
5268....	TEST AND VERIFICATION SOULTIONS	ROORKEE
5269....	TESTO ENGINEERING WORKS PVT. LTD.	PUNE
5270....	TETRA PAK SOUTH EAST ASIA PVT. LTD.	CHENNAI
5271....	TEVATRON TECHNOLOGIES PVT. LTD.	ALLAHABAD
5272....	TEXAS INSTRUMENTS (I) PVT. LTD.	BENGALURU
5273....	TEXAS INSTRUMENTS (I) PVT. LTD.	COIMBATORE
5274....	TEXAS INSTRUMENTS (I) PVT. LTD.	GHAZIABAD
5275....	TEXAS INSTRUMENTS (I) PVT. LTD.	MANGALURU
5276....	TEXTRON (I) PVT. LTD.	BENGALURU
5277....	TEXTRON (I) PVT. LTD.	DHARWAD
5278....	TFL QUINN (I) PVT. LTD.	BHACHUPALLY
5279....	THALES (I) PVT. LTD.	PEDDAPURAM
5280....	THALES (I) PVT. LTD.	CHENNAI
5281....	THERMAX LTD.	AHMEDABAD
5282....	THERMAX LTD.	COIMBATORE
5283....	THERMAX LTD.	CUTTACK
5284....	THERMAX LTD.	ERODE
5285....	THERMAX LTD.	FATEHABAD
5286....	THERMAX LTD.	HYDERABAD

S.No.	Organization	Location
5287....	THERMAX LTD.	MIRAJ
5288....	THERMAX LTD.	PUNE
5289....	THERMAX LTD.	SANGLI
5290....	THERMAX LTD.	SITAMARHI
5291....	THERMAX LTD.	THENI
5292....	THERMAX LTD.	TIRUNELVELI
5293....	THERMAX LTD.	VADODARA
5294....	THERMAX LTD.	SOLAPUR
5295....	THERMOFISHER SCIENTIFIC	BENGALURU
5296....	THINK FUTURE TECHNOLOGIES PVT. LTD.	DELHI
5297....	THINKNSOLUTIONS	CHENNAI
5298....	THINVENT TECHNOLOGIES PVT. LTD.	MANESAR
5299....	THIRD I TECHNOSOFT PVT. LTD.	AHMEDABAD
5300....	THOMSON REUTERS	BENGALURU
5301....	THOUGHTFOCUS TECHNOLOGIES	BENGALURU
5302....	THOUGHTWORKS TECHNOLOGIES (I) PVT. LTD.	CHENNAI
5303....	THOUGHTWORKS TECHNOLOGIES (I) PVT. LTD.	DABWALI
5304....	THOUGHTWORKS TECHNOLOGIES (I) PVT. LTD.	ZAHEERABAD
5305....	THOUGHTWORKS TECHNOLOGIES (I) PVT. LTD.	KANNUR
5306....	THOUGHTWORKS TECHNOLOGIES (I) PVT. LTD.	PUNE
5307....	THUMBAY HOSPITAL	AJMAN
5308....	THYSSENKRUPP INDUSTRIES (I) PVT. LTD.	THANE
5309....	THYSSENKRUPP INDUSTRIES (I) PVT. LTD.	HYDERABAD
5310....	THYSSENKRUPP INDUSTRIES (I) PVT. LTD.	PUNE
5311....	TI METAL FORMING	VELLORE
5312....	TIBCO SOFTWARE (I) PVT. LTD.	PUNE
5313....	TIBCO SOFTWARE (I) PVT. LTD.	ASANSOL
5314....	TIBCO SOFTWARE (I) PVT. LTD.	HYDERABAD
5315....	TIBCO SOFTWARE (I) PVT. LTD.	MUMBAI
5316....	TIBCO SOFTWARE (I) PVT. LTD.	SECUNDERABAD
5317....	TIETO (I) PVT. LTD.	PUNE
5318....	TIL LTD.	GARHWA
5319....	TIME PVT. LTD.	BENGALURU
5320....	TIME PVT. LTD.	TIRUCHIRAPPALLI
5321....	TIME TECHNOPLAST LTD.	THANE
5322....	TIMES BUSINESS SOLUTIONS	BURDWAN
5323....	TIMES INTERNET LTD.	GHAZIABAD
5324....	TIMES INTERNET LTD.	NEW DELHI
5325....	TIMKEN (I) LTD.	JAMSHEDPUR
5326....	TIMKEN ENGINEERING & RESEARCH (I) PVT. LTD.	KANNUR
5327....	TINPLATE CO OF (I) LTD.	JAMSHEDPUR
5328....	TIRUVALLA MEDICAL MISSION	THIRUVALLA
5329....	TISMO TECHNOLOGY SOLUTIONS PVT. LTD.	BENGALURU
5330....	TITAN CO LTD.	BENGALURU
5331....	TITAN CO LTD.	CHENNAI
5332....	TITAN CO LTD.	CHIDAMBARAM
5333....	TITAN CO LTD.	COIMBATORE
5334....	TITAN CO LTD.	HOSUR
5335....	TITAN CO LTD.	KOZHICODE
5336....	TITAN CO LTD.	KRISHNAGIRI
5337....	TITAN CO LTD.	THIRUNELVELI
5338....	TITAN CO LTD.	TIRUNELVELI
5339....	TITAN CO LTD.	TUTACORIN
5340....	TITAN ENGINEERING AND AUTOMATION LTD.	SALEM

S.No.	Organization	Location
5341....	TITAN ENGINEERING AND AUTOMATION LTD.	TIRUPPUR
5342....	TMEIC INDUSTRIAL SYSTEMS (I) PVT. LTD.	BENGALURU
5343....	TMF SERVICES (I) PVT. LTD.	NEW DELHI
5344....	TML DRIVELINES LTD.	JAMSHEDPUR
5345....	TOKAI RIKA MINDA (I) PVT. LTD.	BENGALURU
5346....	TOKHEIM (I) PVT. LTD.	THANE
5347....	TOLANI MARITIME INSTITUTE	PUNE
5348....	TOLEDO ARABIA,RIYASH	CALICUT
5349....	TOMTOM (I) LTD.	PUNE
5350....	TORRY HARRIS BUSINESS SOLUTION PVT.LTD.	BENGALURU
5351....	TOSHANI BROADBAND PVT. LTD.	ICHCHAPURAM
5352....	TOSHIBA SOFTWARE (I) PVT. LTD.	BENGALURU
5353....	TOSHIBA SOFTWARE (I) PVT. LTD.	CHENNAI
5354....	TOSHIBA SOFTWARE (I) PVT. LTD.	PALAMANERU
5355....	TOSHIBA TRANSMISSION & DISTRIBUTION	SECUNDERABAD
5356....	TOTAL DENTAL CARE	SANGLI
5357....	TOTAL OIL (I) PVT. LTD.	CHENNAI
5358....	TOTAL OIL (I) PVT. LTD.	ERNAKULAM
5359....	TOYODA GOSEI MINDA (I) PVT. LTD.	NARNAUL
5360....	TOYODA GOSEI SOUTH (I) PVT. LTD.	BENGALURU
5361....	TOYOTA KIRLOSKAR AUTO PARTS PVT. LTD.	BENGALURU
5362....	TOYOTA KIRLOSKAR MOTOR PVT. LTD.	BENGALURU
5363....	TOYOTA TSUSHO INSURANCE BROKER (I) PVT.LTD.	BENGALURU
5364....	TP VISION (I) PVT. LTD.	BENGALURU
5365....	TPF SOFTWARE (I) PVT. LTD.	CHENNAI
5366....	TPS INFRASTRUCTURE LTD.	DURG
5367....	TPVISION (I) PVT. LTD.	BENGALURU
5368....	TRACTOR AND FARM EQUIPMENTS LTD.	VISAKHAPATNAM
5369....	TRACTOR AND FARM EQUIPMENTS LTD.	CHENNAI
5370....	TRACTOR AND FARM EQUIPMENTS LTD.	DHARMAPURI
5371....	TRACTOR AND FARM EQUIPMENTS LTD.	THIRUVALLUR
5372....	TRAINING AND TECHNICAL EDUCATION	ROORKEE
5373....	TRANTER (I) PVT. LTD.	PUNE
5374....	TRAVANCORE ANALYTICS PVT. LTD.	KOTTAYAM
5375....	TREENI SOFTWARE SOLUTION PVT. LTD.	PUNE
5376....	TREND MICRO	BENGALURU
5377....	TRI WORLD DEVELOPERS	PATHANAMTHITTA
5378....	TRIANGULE	BENGALURU
5379....	TRIANZ HOLDINGS PVT. LTD.	CHENNAI
5380....	TRICHY INSTITUTE FOR WELDING	TIRUCHIRAPPALLI
5381....	TRICORE SOLUTIONS PVT. LTD.	NEW DELHI
5382....	TRIDENT INFOSOL PVT. LTD.	BENGALURU
5383....	TRIDIAGONAL SOLUTIONS PVT. LTD.	PUNE
5384....	TRIMAX IT INFRASTRUCTURE	UJJAIN
5385....	TRIMBLE INFORMATION TECHNOLOGIES (I) Pvt. Ltd.	CHENNAI
5386....	TRIQUESTA PTE LTD.	BENGALURU
5387....	TRISAMYA COSMETICS PVT. LTD.	PATNA
5388....	TRI-SPECTRUM	CHENNAI
5389....	TRIVENI ENGINEERING & INDUSTRIES LTD.	MEERUT
5390....	TRIVENI TURBINES LTD.	BENGALURU
5391....	TRIVITRON HEALTHCARE PVT. LTD.	NAVI MUMBAI
5392....	TROSTEN INDUSTRIES CO LLC	DUBAI
5393....	TRUMPF (I) PVT. LTD.	PUNE
5394....	TRUSTED AEROSPACE ENGINEERING PVT. LTD.	COIMBATORE



S.No.	Organization	Location
5395....	TTS MARINE SERVICES LLC	THOOTHUKUDI
5396....	TUBACEX	KURNOOL
5397....	TUBE INVESTMENTS OF INDIA LTD.	AVADI
5398....	TUBE INVESTMENTS OF INDIA LTD.	CHENNAI
5399....	TUBE PRODUCTS OF INDIA	CHENNAI
5400....	TURBINE SERVICES & SOLUTIONS	ABU DHABI
5401....	TURBOLAB TECHNOLOGIES	CHINSURAH
5402....	TURBOTECH PRECISION ENGINEERING PVT. LTD.	BENGALURU
5403....	TUV RHEINLAND (I) PVT. LTD.	BENGALURU
5404....	TUV RHEINLAND MIDDLE EAST LLC	ALLEPPEY
5405....	TV SUNDRAM IYENGAR & SONS PVT. LTD.	CHENNAI
5406....	TVM SIGNALLING & TRANSPORTATION SYSTEMS	BENGALURU
5407....	TVS ELASTOMERIC	MADURAI
5408....	TVS MOTOR CO LTD.	CHENNAI
5409....	TVS MOTOR CO LTD.	HOSUR
5410....	TVS MOTOR CO LTD.	MYSORE
5411....	TVS MOTOR CO LTD.	DELHI
5412....	TVS SUNDRAM FASTENERS LTD.	HOSUR
5413....	TVS SUNDRAM FASTENERS LTD.	ERODE
5414....	TVS SUNDRAM FASTENERS LTD.	COIMBATORE
5415....	TVS SUNDRAM FASTENERS LTD.	CUDDALORE
5416....	TVS SUNDRAM FASTENERS LTD.	THRISSUR
5417....	TVS UPASANA LTD.	KRISHNAGIRI
5418....	TVS-SUNDARAM CLAYTON LTD.	CHENNAI
5419....	TWI TRAINING & CERTIFICATION (I) PVT. LTD.	CHENNAI
5420....	TYCO FIRE & SECURITY UAE LLC	ABU DHABI
5421....	TYCO FIRE & SECURITY UAE LLC	MADURAI
5422....	UCODESOFT SOLUTIONS PVT. LTD.	ZIRAKPUR
5423....	UDHNA HOSPITAL PVT. LTD.	SURAT
5424....	UEI ELECTRONICS PVT. LTD.	BENGALURU
5425....	UGAM SOLUTIONS	BENGALURU
5426....	UL (I) PVT. LTD.	BENGALURU
5427....	ULTRATECH CEMENT LTD.	KATNI
5428....	ULTRATECH CEMENT LTD.	MUMBAI
5429....	ULTRATECH CEMENT LTD.	PUNE
5430....	ULTRATECH CEMENT LTD.	CHITTOOR
5431....	ULTRATECH CEMENT LTD.	BHUJ
5432....	ULTRATECH CEMENT LTD.	RAJKOT
5433....	ULTRATECH CEMENT LTD.	KOPPAL
5434....	UMAS (I) PVT. LTD.	PUNE
5435....	UNDERWRITERS LABORATORIES INC	BENGALURU
5436....	UNICORN INDUSTRIES LTD.	HYDERABAD
5437....	UNIFY TECHNOLOGY	HYDERABAD
5438....	UNIKEN (I) PVT. LTD.	PUNE
5439....	UNIPRES (I) PVT. LTD.	CHEYYAR
5440....	UNIQUE CHEMICALS	BHARUCH
5441....	UNISYS GLOBAL SERVICES	BENGALURU
5442....	UNITED HEALTH GROUP	GREATER NOIDA
5443....	UNITED HEALTH GROUP	HYDERABAD
5444....	UNITED HEALTH GROUP	NEW DELHI
5445....	UNITED HEALTH GROUP	PALAKONDA
5446....	UNITED HEALTH GROUP	BENGALURU
5447....	UNITED HEALTH GROUP	VISAKHAPATNAM
5448....	UNITED IRON AND STEEL CO LLC	SRIKAKULAM

S.No.	Organization	Location
5449....	UNITED LEX BPO PVT. LTD.	GORAKHPUR
5450....	UNITED PRECISION ENGINEERING CO	YAMUNA NAGAR
5451....	UNITED S.S. ENGINEERING WORKS	FARIDABAD
5452....	UNITED SPECIALIZED INDUSTRIAL FOR TRAD &	KOLLAM
5453....	UNITED TECHNO INFO SYSTEMS	CHENNAI
5454....	UNITED TECHNOLOGIES CORPORATION	HYDERABAD
5455....	UNITED TECHNOLOGY AEROSPACE SYSTEMS	BENGALURU
5456....	UNITY INFOTECH SOLUTIONS LLC	DUBAI
5457....	UNIVERSITY YADUNDE 1	CAMEROON
5458....	UNIVERSITY YADUNDE 1	KIGALI
5459....	UNIVERSITY YADUNDE 1	LIBREVILLE
5460....	UNIVERSITY YADUNDE 1	MAPUTO
5461....	UNIVERSITY YADUNDE 1	SAO TOME
5462....	UNIVERSITY YADUNDE 1	YAOUNDE
5463....	UPANAL CNC SOLUTION	KHAMBHAT
5464....	US TECH SOLUTIONS	BENGALURU
5465....	US TECHNOLOGY INTERNATIONAL PVT. LTD.	CHENNAI
5466....	USHODAYA ENTERPRISES PVT. LTD.	VIJAYAWADA
5467....	UST GLOBAL	BENGALURU
5468....	UST GLOBAL	BIDAR
5469....	UST GLOBAL	COIMBATORE
5470....	UST GLOBAL	DHARMAPURI
5471....	UST GLOBAL	KOLLAM
5472....	UST GLOBAL	PUDUCHERRY
5473....	UST GLOBAL	THIRUVANNAMALAI
5474....	UTC AEROSPACE SYSTEMS	BIJNOR
5475....	UTC AEROSPACE SYSTEMS	GODAVARIKHANI
5476....	UTC AEROSPACE SYSTEMS	GUDHE
5477....	UTC AEROSPACE SYSTEMS	GUNTUR
5478....	UTC AEROSPACE SYSTEMS	HYDERABAD
5479....	UTC AEROSPACE SYSTEMS	JAMMULAPALEM
5480....	UTC AEROSPACE SYSTEMS	MALKAJGIRI
5481....	UTC AEROSPACE SYSTEMS	RAJAHMUNDRY
5482....	UTC AEROSPACE SYSTEMS	TUMKUR
5483....	UTC AEROSPACE SYSTEMS	WARANGAL
5484....	UTC AEROSPACE SYSTEMS	BENGALURU
5485....	UTC AEROSPACE SYSTEMS	CHICKMAGALUR
5486....	UTC AEROSPACE SYSTEMS	CHITRADURGA
5487....	UTC AEROSPACE SYSTEMS	COIMBATORE
5488....	UTC AEROSPACE SYSTEMS	HARIHAR
5489....	UTC AEROSPACE SYSTEMS	SHIMOGA
5490....	UTC AEROSPACE SYSTEMS	LUXETTIPET
5491....	UTC FIRE & SECURITY	HYDERABAD
5492....	UTICO FZC	RAS AL KHAIMAH
5493....	UTKAL ALUMINA INTERNATIONAL LTD.	VISAKHAPATNAM
5494....	UTM SHILLONG	SONEPAT
5495....	UTTAR PRADESH HEALTH SYSTEM STRENGTHENIN	LUCKNOW
5496....	V.C.S.G. MEDICAL COLLEGE & RESEARCH INST	SRIKOT
5497....	V.E.COMMERCIAL VEHICLES LTD.	INDORE
5498....	VA TECH WABAG LTD.	CHENNAI
5499....	VAATA SMART LTD.	CHENNAI
5500....	VAKRANGEE LTD.	MUMBAI
5501....	VALE OMAN PELLETIZING CO.LLC	MARGAO
5502....	VALE OMAN PELLETIZING CO.LLC	VISAKHAPATNAM

S.No.	Organization	Location
5503....	VALE OMAN PELLETIZING CO.LLC	PONDA
5504....	VALE OMAN PELLETIZING CO.LLC	VIZIANAGARAM
5505....	VALEO (I) PVT. LTD.	BENGALURU
5506....	VALEO (I) PVT. LTD.	CHENNAI
5507....	VALEO (I) PVT. LTD.	PUNE
5508....	VALEO LIGHTING SYSTEMS (I) PVT. LTD.	CHENNAI
5509....	VALEOMAN PELLETIZING CO	BICHOLIM
5510....	VALMONT STRUCTURES	PUNE
5511....	VALUE ADDITION FZC	SHARJAH
5512....	VALUELABS SOLUTIONS LLP	HOOGHLY
5513....	VALUELABS SOLUTIONS LLP	HYDERABAD
5514....	VALUELABS SOLUTIONS LLP	WARANGAL
5515....	VALUEMOMENTUM SOFTWARE SERVICES PVT. LTD.	HYDERABAD
5516....	VANNA INFORMATION TECHNOLOGIES (I) PVT. LTD.	SECUNDERABAD
5517....	VANNA INFORMATION TECHNOLOGIES,HYDERABA	HYDERABAD
5518....	VARA UNITED PVT. LTD.	HYDERABAD
5519....	VARIAN MEDICAL SYSTEM (I) SOFTWARE PVT. LTD.	PARBHANI
5520....	VARIAN MEDICAL SYSTEM (I) SOFTWARE PVT. LTD.	SATARA
5521....	VARROC POLYMERS PVT. LTD.	PUNE
5522....	VASSAR LABS	HYDERABAD
5523....	VASUDHA PHARMA CHEM LTD.	HYDERABAD
5524....	VASUDHA PHARMA CHEM LTD.	VISAKHAPATNAM
5525....	VE COMMERCIAL VEHICLES LTD.	INDORE
5526....	VE COMMERCIAL VEHICLES LTD.	BAGHAPURANA
5527....	VEC OIL & GAS CONSULTANTS	AL-KHUWAIR
5528....	VECTONE MOBILES	THENI
5529....	VEDAMS SOFTWARE SOLUTIONS (I) PVT. LTD.	HYDERABAD
5530....	VEDANTA LTD.	ALANGULAM
5531....	VEDANTA LTD.	ALDONA
5532....	VEDANTA LTD.	ALIGARH
5533....	VEDANTA LTD.	AMRELI
5534....	VEDANTA LTD.	ANANTHAPUR
5535....	VEDANTA LTD.	ARUMUGANERI
5536....	VEDANTA LTD.	BALASORE
5537....	VEDANTA LTD.	BALODA BAZAR
5538....	VEDANTA LTD.	BANKURA
5539....	VEDANTA LTD.	BARDEZ
5540....	VEDANTA LTD.	BICHOLIM
5541....	VEDANTA LTD.	CHITTOOR
5542....	VEDANTA LTD.	CURCHOREM
5543....	VEDANTA LTD.	ERAL
5544....	VEDANTA LTD.	GHAZIABAD
5545....	VEDANTA LTD.	GOA
5546....	VEDANTA LTD.	GULBARGA
5547....	VEDANTA LTD.	JAFARABAD
5548....	VEDANTA LTD.	JAIPUR
5549....	VEDANTA LTD.	JHARSUGUDA
5550....	VEDANTA LTD.	KOLKATA
5551....	VEDANTA LTD.	NEEMUCH
5552....	VEDANTA LTD.	PANAGUDI
5553....	VEDANTA LTD.	PONDA
5554....	VEDANTA LTD.	RAIPUR
5555....	VEDANTA LTD.	RANCHI
5556....	VEDANTA LTD.	RATNAGIRI

S.No.	Organization	Location
5557....	VEDANTA LTD.	RAWAN
5558....	VEDANTA LTD.	SANQUELIM
5559....	VEDANTA LTD.	SANVORDEM
5560....	VEDANTA LTD.	SILVASSA
5561....	VEDANTA LTD.	SURAT
5562....	VEDANTA LTD.	THOOTHUKUDI
5563....	VEDANTA LTD.	TIVIM
5564....	VEDANTA LTD.	TUTICORIN
5565....	VEDANTA LTD.	TUTUCORIN
5566....	VEDANTA LTD.	VASCO DA GAMA
5567....	VEDANTA LTD.	VAYOR KUTCHCH
5568....	VEDANTA LTD.	WARDHA
5569....	VELAN IT SOLUTIONS PVT. LTD.	BENGALURU
5570....	VELANKANI ELECTRONICS PVT. LTD.	HOSUR
5571....	VELGRO TECHNOLOGIES LTD.	CHENNAI
5572....	VELOCIS SYSTEM PVT. LTD.	DELHI
5573....	VELOSI OMAN	BHARATPUR
5574....	VENKATESH HR SOLUTIONS	NEEMUCH
5575....	VENTURE GULF ENGINEERING	ERNAKULAM
5576....	VEON CONSULTING PVT. LTD.	BENGALURU
5577....	VERINT SYSTEMS (I) PVT. LTD.	BENGALURU
5578....	VERITAS SOFTWARE (I) PVT. LTD.	PUNE
5579....	VERITAS SOFTWARE (I) PVT. LTD.	VITA
5580....	VERITAS TECHNOLOGIES LLC	PUNE
5581....	VERITAS TECHNOLOGIES LLC	DEOLA
5582....	VERITAS TECHNOLOGIES LLC	DHULE
5583....	VERITAS TECHNOLOGIES LLC	ROHTAK
5584....	VERIZON DATA SERVICES (I) PVT. LTD.	CHENNAI
5585....	VERIZON DATA SERVICES (I) PVT. LTD.	COIMBATORE
5586....	VERIZON DATA SERVICES (I) PVT. LTD.	ERODE
5587....	VERIZON DATA SERVICES (I) PVT. LTD.	KUMBAKONAM
5588....	VERIZON DATA SERVICES (I) PVT. LTD.	PUDUCHERRY
5589....	VERIZON DATA SERVICES (I) PVT. LTD.	TIRUVANNAMALAI
5590....	VERIZON DATA SERVICES (I) PVT. LTD.	BENGALURU
5591....	VERIZON DATA SERVICES (I) PVT. LTD.	BANTWAL
5592....	VERIZON DATA SERVICES (I) PVT. LTD.	BOUDH
5593....	VERIZON DATA SERVICES (I) PVT. LTD.	GAYA
5594....	VERIZON DATA SERVICES (I) PVT. LTD.	GUNTUR
5595....	VERIZON DATA SERVICES (I) PVT. LTD.	HYDERABAD
5596....	VERIZON DATA SERVICES (I) PVT. LTD.	KANNUR
5597....	VERIZON DATA SERVICES (I) PVT. LTD.	KANYAKUMARI
5598....	VERIZON DATA SERVICES (I) PVT. LTD.	KORBA
5599....	VERIZON DATA SERVICES (I) PVT. LTD.	KURNOOL
5600....	VERIZON DATA SERVICES (I) PVT. LTD.	MADIPAKKAM
5601....	VERIZON DATA SERVICES (I) PVT. LTD.	MADURAI
5602....	VERIZON DATA SERVICES (I) PVT. LTD.	MANCHERIAL
5603....	VERIZON DATA SERVICES (I) PVT. LTD.	MANNARGUDI
5604....	VERIZON DATA SERVICES (I) PVT. LTD.	NAGERCOIL
5605....	VERIZON DATA SERVICES (I) PVT. LTD.	NALGONDA
5606....	VERIZON DATA SERVICES (I) PVT. LTD.	NELLORE
5607....	VERIZON DATA SERVICES (I) PVT. LTD.	PALAKKAD
5608....	VERIZON DATA SERVICES (I) PVT. LTD.	PATHANAMTHITTA
5609....	VERIZON DATA SERVICES (I) PVT. LTD.	SECUNDERABAD
5610....	VERIZON DATA SERVICES (I) PVT. LTD.	SRIKAKULAM

S.No.	Organization	Location
5611....	VERIZON DATA SERVICES (I) PVT. LTD.	SURYAPET
5612....	VERIZON DATA SERVICES (I) PVT. LTD.	THIRUVANANTHAPURAM
5613....	VERIZON DATA SERVICES (I) PVT. LTD.	TIRUCHIRAPPALLI
5614....	VERIZON DATA SERVICES (I) PVT. LTD.	TIRUVALLUR
5615....	VERIZON DATA SERVICES (I) PVT. LTD.	VENKATAGIRI
5616....	VERIZON DATA SERVICES (I) PVT. LTD.	VETAPALEM
5617....	VERIZON DATA SERVICES (I) PVT. LTD.	VIJAYAWADA
5618....	VERIZON DATA SERVICES (I) PVT. LTD.	VISAKHAPATNAM
5619....	VERIZON DATA SERVICES (I) PVT. LTD.	THANJAVUR
5620....	VERIZON DATA SERVICES (I) PVT. LTD.	NEW DELHI
5621....	VERSA NETWORKS	SAHARSA
5622....	VERTEXONE PROCESS SOLUTIONS PVT. LTD.	NEW DELHI
5623....	VESTAS R&D CHENNAI PVT. LTD.	THANJAVUR
5624....	VESTAS TECHNOLOGY R&D CHENNAI PVT.LTD.	CHENNAI
5625....	VGUARD INDUSTRIES LTD.	ERNAKULAM
5626....	VIBRACOUSTIC (I) PVT. LTD.	JALANDHAR
5627....	VIDAL HEALTH SYSTEMS	CHENNAI
5628....	VIDEOCON D2H LTD.	GREATER NOIDA
5629....	VIDGYOR MEDIA TECHNOLOGIES PVT. LTD.	ANAKAPALLE
5630....	VIHAAN NETWORKS LTD.	NEW DELHI
5631....	VIJAY TECHNICAL SERVICES & CONSTRUCTION	GURUGRAM
5632....	VIJAYA HOSPITALS	CHENNAI
5633....	VIKAS INDUSTRIES	MUMBAI
5634....	VINAR SYSTEMS PVT. LTD.	DELHI
5635....	VIOS MEDICALS (I) PVT. LTD.	BENGALURU
5636....	VIRTUOSOS SOLUTIONS PVT. LTD.	FARIDABAD
5637....	VIRTUSA (I) PVT. LTD.	HYDERABAD
5638....	VIRTUSA (I) PVT. LTD.	VAYALPAD
5639....	VIRTUSA CONSULTING SERVICES PVT. LTD.	HYDERABAD
5640....	VIRTUSA POLARIS	CHENNAI
5641....	VIRTUSA SOFTWARE SERVICES LTD.	CHENNAI
5642....	VISA CONSOLIDATED SUPPORT SERVICES	CHENNAI
5643....	VISA INC.	BENGALURU
5644....	VISA INC.	CHENNAI
5645....	VISA INC.	MADURAI
5646....	VISA INC.	VIRUDHUNAGAR
5647....	VISA INC.	NAGAPATTINAM
5648....	VISA INC.	NASHIK
5649....	VISA WORLD WIDE PTE LTD.	GUNTUR
5650....	VISMI TECHNOLOGIES PVT. LTD.	CHENNAI
5651....	VISTA AUTOMATION	DUBAI
5652....	VISTA INFOSYSTEMS	CHENNAI
5653....	VISTEON CORPORATION	CHENNAI
5654....	VISTEON CORPORATION	PUNE
5655....	VISTEON ELECTRONICS (I) PVT. LTD.	CHENNAI
5656....	VISTEON ELECTRONICS (I) PVT. LTD.	PUNE
5657....	VISTEON TECH AND SERVICES CENTRE PVT. LTD.	PUNE
5658....	VISTEON TECH AND SERVICES CENTRE PVT. LTD.	BENGALURU
5659....	VISTEON TECH AND SERVICES CENTRE PVT. LTD.	CHENNAI
5660....	VISTEON TECH AND SERVICES CENTRE PVT. LTD.	HYDERABAD
5661....	VISUAL IQ TECHNO SERVICES (I) PVT. LTD.	ERNAKULAM
5662....	VISUAL IQ TECHNO SERVICES (I) PVT. LTD.	RAMGARH
5663....	VITECH SYSTEMS ASIA PVT. LTD.	HYDERABAD
5664....	VIVOTEX (I) PVT. LTD.	HYDERABAD

S.No.	Organization	Location
5665....	VIZAG STEEL	VISAKHAPATNAM
5666....	VIZUAL BUSINESS TOOL PVT. LTD.	CHENNAI
5667....	VMC SYSTEMS LTD.	SECUNDERABAD
5668....	VMWARE SOFTWARE (I) PVT. LTD.	BENGALURU
5669....	VMWARE SOFTWARE (I) PVT. LTD.	THENI
5670....	VMWARE SOFTWARE (I) PVT. LTD.	KUMTA
5671....	VMWARE SOFTWARE (I) PVT. LTD.	PUNE
5672....	VMWARE SOFTWARE (I) PVT. LTD.	HONNAVAR
5673....	VMWARE SOFTWARE (I) PVT. LTD.	BARAMULLA
5674....	VMWARE SOFTWARE (I) PVT. LTD.	CHANDANNAGAR
5675....	VMWARE SOFTWARE (I) PVT. LTD.	COIMBATORE
5676....	VMWARE SOFTWARE (I) PVT. LTD.	KANCHEEPURAM
5677....	VMWARE SOFTWARE (I) PVT. LTD.	NAVI MUMBAI
5678....	VMWARE SOFTWARE (I) PVT. LTD.	THIRUVANANTHAPURAM
5679....	VODAFONE (I) SERVICES PVT. LTD.	PUNE
5680....	VODAFONE SHARED SERVICES (I) PVT. LTD.	PUNE
5681....	VODAFONE SHARED SERVICES (I) PVT. LTD.	SATARA
5682....	VODAFONE SHARED SERVICES (I) PVT. LTD.	THIRUVALLUR
5683....	VODAFONE SHARED SERVICES (I) PVT. LTD.	GHAZIABAD
5684....	VOEREIR (I) PVT. LTD.	NOIDA
5685....	VOITH PAPER TECHNOLOGY (I) PVT. LTD.	KOLKATA
5686....	VOITH PAPER TECHNOLOGY (I) PVT. LTD.	KONNAGAR
5687....	VOLANSYS TECHNOLOGIES PVT. LTD.	AHMEDABAD
5688....	VOLEN SOFTWARE SERVICES PVT. LTD.	RAJAHMUNDRY
5689....	VOLKSWAGEN (I) PVT. LTD.	PUNE
5690....	VOLKSWAGEN IT SERVICES PVT. LTD.	PUNE
5691....	VOLTAS QATAR WLL	THRISSUR
5692....	VOLVO (I) PVT. LTD.	THIRUVANANTHAPURAM
5693....	VOLVO (I) PVT. LTD.	BENGALURU
5694....	VOLVO (I) PVT. LTD.	CHENNAI
5695....	VOLVO (I) PVT. LTD.	MADURAI
5696....	VORTEX ENGINEERING PVT. LTD.	CHENNAI
5697....	VOTARY TECH PVT. LTD.	HYDERABAD
5698....	VPS ROCKLAND HOSPITALS	GURUGRAM
5699....	VST TILLERS TRACTORS LTD.	HOSUR
5700....	VTL ELECTRONICS LTD.	KOLKATA
5701....	VYOMINI TECH PVT. LTD.	NOIDA
5702....	WABCO (I) LTD.	CHENNAI
5703....	WABCO (I) LTD.	CUDDALORE
5704....	WABCO (I) LTD.	TIRUPATHI
5705....	WABCO (I) LTD.	VELLORE
5706....	WADHWANI FOUNDATION	BENGALURU
5707....	WALLMAX INDIA	FARIDABAD
5708....	WALMART GLOBAL TECHNOLOGY SERVICES (I)	BENGALURU
5709....	WALMART LABS	BENGALURU
5710....	WALTER TOOLS (I) P LTD.	MAYILADUTHURAI
5711....	WANBURY LTD.	PANVEL
5712....	WAPCOS LTD.	HISAR
5713....	WATCHDATA TECHNOLOGIES (I) PVT. LTD.	BENGALURU
5714....	WATSON PHARMA PVT. LTD.	GOA
5715....	WDI DRILLING	DUBAI
5716....	WEATHERFORD INTERNATIONAL	PAITHONA
5717....	WEB ACCESS (I) PVT. LTD.	AIROLI
5718....	WEBSITE SKETCHERS PVT. LTD.	NEW DELHI

S.No.	Organization	Location
5719....	WEBSOL ENERGY SYSTEM LTD.	KOLKATA
5720....	WEG INDUSTRIES (I) PVT. LTD.	HOSUR
5721....	WEG INDUSTRIES (I) PVT. LTD.	BENGALURU
5722....	WEIR ENSCI	BENGALURU
5723....	WEIR MINERALS (I) PVT. LTD.	BENGALURU
5724....	WEIR OIL & GAS	COIMBATORE
5725....	WEIR OIL & GAS	THANJAVUR
5726....	WELLPOINT INC.	GLEN ALLEN
5727....	WELLS FARGO (I) SOLUTIONS PVT. LTD.	BENGALURU
5728....	WELLS FARGO (I) SOLUTIONS PVT. LTD.	HYDERABAD
5729....	WELLS FARGO (I) SOLUTIONS PVT. LTD.	SECUNDERABAD
5730....	WELLS FARGO (I) SOLUTIONS PVT. LTD.	VISAKHAPATNAM
5731....	WELMADE LOCKING SYSTEMS PVT. LTD.	PUNE
5732....	WENDT (I) LTD.	BENGALURU
5733....	WENDT (I) LTD.	HOSUR
5734....	WENDT (I) LTD.	JAMSHEDPUR
5735....	WENDT (I) LTD.	KRISHNAGIRI
5736....	WEP SOLUTIONS LTD.	BADDI
5737....	WERKMINDZ PTE LTD.	SINGAPORE
5738....	WESTERN DIGITAL	BENGALURU
5739....	WHEELS (I) LTD.	SRIPERUMBUDUR
5740....	WHIRLPOOL ASIA LLP	PUNE
5741....	WHIRLPOOL OF INDIA LTD.	PUNE
5742....	WHIRLPOOL OF INDIA LTD.	AURANGABAD
5743....	WHIRLPOOL OF INDIA LTD.	CHENNAI
5744....	WHIRLPOOL OF INDIA LTD.	MADURAI
5745....	WHIRLPOOL OF INDIA LTD.	VELLORE
5746....	WHIZCHIP DESIGN TECHNOLOGIES PVT. LTD.	BENGALURU
5747....	WIDASCONCEPTS (I) PVT. LTD.	BENGALURU
5748....	WILDNET TECHNOLOGIES	DELHI
5749....	WINCOR NIXDORF PTE. LTD.	CHOA CHU KANG
5750....	WIPRO GE HEALTHCARE PVT. LTD.	BENGALURU
5751....	WIPRO GE HEALTHCARE PVT. LTD.	HYDERABAD
5752....	WIPRO GE HEALTHCARE PVT. LTD.	PUNE
5753....	WIPRO GE HEALTHCARE PVT. LTD.	VIRAJPET
5754....	WIPRO GE HEALTHCARE PVT. LTD.	DAVANGERE
5755....	WIPRO GE HEALTHCARE PVT. LTD.	TUMKUR
5756....	WIPRO GE HEALTHCARE PVT. LTD.	SECUNDERABAD
5757....	WIPRO INFOTECH	BENGALURU
5758....	WIPRO INFOTECH	CALICUT
5759....	WIPRO INFOTECH	COCHIN
5760....	WIPRO INFOTECH	DHARMANAGAR
5761....	WIPRO INFOTECH	GORAKHPUR
5762....	WIPRO INFOTECH	GURUGRAM
5763....	WIPRO INFOTECH	HISAR
5764....	WIPRO INFOTECH	JAGADHRI
5765....	WIPRO INFOTECH	JALGAON
5766....	WIPRO INFOTECH	KANNUR
5767....	WIPRO INFOTECH	KASHIPUR
5768....	WIPRO INFOTECH	KICHHA
5769....	WIPRO INFOTECH	LUCKNOW
5770....	WIPRO INFOTECH	MUMBAI
5771....	WIPRO INFOTECH	MYSORE
5772....	WIPRO INFOTECH	NEW DELHI

S.No.	Organization	Location
5773....	WIPRO INFOTECH	PANIPAT
5774....	WIPRO INFOTECH	PATIALA
5775....	WIPRO INFOTECH	PAYYANNUR
5776....	WIPRO INFOTECH	PUNE
5777....	WIPRO INFOTECH	REWA
5778....	WIPRO INFOTECH	THANE
5779....	WIPRO TECHNOLOGIES	YAMUNA NAGAR
5780....	WIPRO TECHNOLOGIES	BENGALURU
5781....	WIPRO TECHNOLOGIES	CHENNAI
5782....	WIPRO TECHNOLOGIES	DELHI
5783....	WIPRO TECHNOLOGIES	ERNAKULAM
5784....	WIPRO TECHNOLOGIES	GANDERBAL
5785....	WIPRO TECHNOLOGIES	GURUGRAM
5786....	WIPRO TECHNOLOGIES	JAIPUR
5787....	WIPRO TECHNOLOGIES	KOZHICKODE
5788....	WIPRO TECHNOLOGIES	NEW DELHI
5789....	WIPRO TECHNOLOGIES	ADAMPUR
5790....	WIPRO TECHNOLOGIES	AGNIGUNDALA
5791....	WIPRO TECHNOLOGIES	AGRA
5792....	WIPRO TECHNOLOGIES	AHMEDNAGAR
5793....	WIPRO TECHNOLOGIES	ALAPPUZHA
5794....	WIPRO TECHNOLOGIES	ALIGARH
5795....	WIPRO TECHNOLOGIES	ALUVA
5796....	WIPRO TECHNOLOGIES	AMBALA
5797....	WIPRO TECHNOLOGIES	AMRAVATI
5798....	WIPRO TECHNOLOGIES	AMRITSAR
5799....	WIPRO TECHNOLOGIES	ANANTHAPUR
5800....	WIPRO TECHNOLOGIES	ANNAVARAM
5801....	WIPRO TECHNOLOGIES	ARASIKERE
5802....	WIPRO TECHNOLOGIES	ASANSOL
5803....	WIPRO TECHNOLOGIES	AURANGABAD
5804....	WIPRO TECHNOLOGIES	BAGALKOT
5805....	WIPRO TECHNOLOGIES	BALASORE
5806....	WIPRO TECHNOLOGIES	BALLARI
5807....	WIPRO TECHNOLOGIES	BALLIA
5808....	WIPRO TECHNOLOGIES	BANDA
5809....	WIPRO TECHNOLOGIES	BANKURA
5810....	WIPRO TECHNOLOGIES	BARAKAR
5811....	WIPRO TECHNOLOGIES	BARKUR
5812....	WIPRO TECHNOLOGIES	BARRACKPORE
5813....	WIPRO TECHNOLOGIES	BASAR
5814....	WIPRO TECHNOLOGIES	BATALA
5815....	WIPRO TECHNOLOGIES	BATHINDA
5816....	WIPRO TECHNOLOGIES	BEHAMPUR
5817....	WIPRO TECHNOLOGIES	BELGAUM
5818....	WIPRO TECHNOLOGIES	BELGAVI
5819....	WIPRO TECHNOLOGIES	BEMETARA
5820....	WIPRO TECHNOLOGIES	BERHAMPUR
5821....	WIPRO TECHNOLOGIES	BERHMAPUR
5822....	WIPRO TECHNOLOGIES	BHADRAVATHI
5823....	WIPRO TECHNOLOGIES	BHAGALPUR
5824....	WIPRO TECHNOLOGIES	BHATKAL
5825....	WIPRO TECHNOLOGIES	BHILAI
5826....	WIPRO TECHNOLOGIES	BHIMAVARAM



<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
5827....	WIPRO TECHNOLOGIES	BHUBANESWAR
5828....	WIPRO TECHNOLOGIES	BIHAR SHARIF
5829....	WIPRO TECHNOLOGIES	BIJAPUR
5830....	WIPRO TECHNOLOGIES	BILAGI
5831....	WIPRO TECHNOLOGIES	BILASPUR
5832....	WIPRO TECHNOLOGIES	BIRBHUM
5833....	WIPRO TECHNOLOGIES	BOBBILI
5834....	WIPRO TECHNOLOGIES	BRAHMAPUR
5835....	WIPRO TECHNOLOGIES	BUGUDA
5836....	WIPRO TECHNOLOGIES	BUXAR
5837....	WIPRO TECHNOLOGIES	BYADGI
5838....	WIPRO TECHNOLOGIES	CALANGUTE
5839....	WIPRO TECHNOLOGIES	CALICUT
5840....	WIPRO TECHNOLOGIES	CHAKDAHA
5841....	WIPRO TECHNOLOGIES	CHALAKUDY
5842....	WIPRO TECHNOLOGIES	CHATRAPUR
5843....	WIPRO TECHNOLOGIES	CHERTHALA
5844....	WIPRO TECHNOLOGIES	CHERUKUPALLI
5845....	WIPRO TECHNOLOGIES	CHEYAR
5846....	WIPRO TECHNOLOGIES	CHIKKABALLAPUR
5847....	WIPRO TECHNOLOGIES	CHIKKAMAGALURU
5848....	WIPRO TECHNOLOGIES	CHIKMAGALUR
5849....	WIPRO TECHNOLOGIES	CHIPLUN
5850....	WIPRO TECHNOLOGIES	CHIRALA
5851....	WIPRO TECHNOLOGIES	CHITTOOR
5852....	WIPRO TECHNOLOGIES	COCHIN
5853....	WIPRO TECHNOLOGIES	COIMBATORE
5854....	WIPRO TECHNOLOGIES	CUDDALORE
5855....	WIPRO TECHNOLOGIES	CUTTACK
5856....	WIPRO TECHNOLOGIES	DANKUNI
5857....	WIPRO TECHNOLOGIES	DARBHANGA
5858....	WIPRO TECHNOLOGIES	DARJILING
5859....	WIPRO TECHNOLOGIES	DAVANGERE
5860....	WIPRO TECHNOLOGIES	DENKANIKOTTAI
5861....	WIPRO TECHNOLOGIES	DHANAULA
5862....	WIPRO TECHNOLOGIES	DHANBAD
5863....	WIPRO TECHNOLOGIES	DHARAPURAM
5864....	WIPRO TECHNOLOGIES	DHARMAPURI
5865....	WIPRO TECHNOLOGIES	DHARWAD
5866....	WIPRO TECHNOLOGIES	DHENKANAL
5867....	WIPRO TECHNOLOGIES	DOMBIVLI
5868....	WIPRO TECHNOLOGIES	DUMKA
5869....	WIPRO TECHNOLOGIES	DURG
5870....	WIPRO TECHNOLOGIES	DURGAPUR
5871....	WIPRO TECHNOLOGIES	ELURU
5872....	WIPRO TECHNOLOGIES	ERODE
5873....	WIPRO TECHNOLOGIES	FARIDABAD
5874....	WIPRO TECHNOLOGIES	FARIDKOT
5875....	WIPRO TECHNOLOGIES	FAZILKA
5876....	WIPRO TECHNOLOGIES	GADHINGLAJ
5877....	WIPRO TECHNOLOGIES	GAJUWAKA
5878....	WIPRO TECHNOLOGIES	GANAPAVARAM
5879....	WIPRO TECHNOLOGIES	GANGAVATHI
5880....	WIPRO TECHNOLOGIES	GANJAM

S.No.	Organization	Location
5881....	WIPRO TECHNOLOGIES	GAYA
5882....	WIPRO TECHNOLOGIES	GHAZIABAD
5883....	WIPRO TECHNOLOGIES	GIRIDIH
5884....	WIPRO TECHNOLOGIES	GOLAPALLE
5885....	WIPRO TECHNOLOGIES	GOPALGANJ
5886....	WIPRO TECHNOLOGIES	GOPESHWAR
5887....	WIPRO TECHNOLOGIES	GREATER NOIDA
5888....	WIPRO TECHNOLOGIES	GUDUR
5889....	WIPRO TECHNOLOGIES	GULBARGA
5890....	WIPRO TECHNOLOGIES	GUNTAKAL
5891....	WIPRO TECHNOLOGIES	GUNTUR
5892....	WIPRO TECHNOLOGIES	HALDWANI
5893....	WIPRO TECHNOLOGIES	HALISAHAR
5894....	WIPRO TECHNOLOGIES	HARIHAR
5895....	WIPRO TECHNOLOGIES	HASSAN
5896....	WIPRO TECHNOLOGIES	HAVERI
5897....	WIPRO TECHNOLOGIES	HINGOLI
5898....	WIPRO TECHNOLOGIES	HIRAKUD
5899....	WIPRO TECHNOLOGIES	HONNAVAR
5900....	WIPRO TECHNOLOGIES	HOSANAGAR
5901....	WIPRO TECHNOLOGIES	HOSPET
5902....	WIPRO TECHNOLOGIES	HOSUR
5903....	WIPRO TECHNOLOGIES	HOWRAH
5904....	WIPRO TECHNOLOGIES	HUBLI
5905....	WIPRO TECHNOLOGIES	HYDERABAD
5906....	WIPRO TECHNOLOGIES	IMPHAL
5907....	WIPRO TECHNOLOGIES	INKOLLU
5908....	WIPRO TECHNOLOGIES	IRINJALAKUDA
5909....	WIPRO TECHNOLOGIES	ISLAMPUR
5910....	WIPRO TECHNOLOGIES	JABALPUR
5911....	WIPRO TECHNOLOGIES	JAGADHRI
5912....	WIPRO TECHNOLOGIES	JAGATSINGHPUR
5913....	WIPRO TECHNOLOGIES	JAIGAON
5914....	WIPRO TECHNOLOGIES	JALAKANDAPURAM
5915....	WIPRO TECHNOLOGIES	JALGAON
5916....	WIPRO TECHNOLOGIES	JAMALPUR
5917....	WIPRO TECHNOLOGIES	JAMSHEDPUR
5918....	WIPRO TECHNOLOGIES	JAUNPUR
5919....	WIPRO TECHNOLOGIES	JEYPORE
5920....	WIPRO TECHNOLOGIES	JHARGRAM
5921....	WIPRO TECHNOLOGIES	JIND
5922....	WIPRO TECHNOLOGIES	JODA
5923....	WIPRO TECHNOLOGIES	KACHIKACHERLA
5924....	WIPRO TECHNOLOGIES	KADAPA
5925....	WIPRO TECHNOLOGIES	KAITHAL
5926....	WIPRO TECHNOLOGIES	KALAVAD
5927....	WIPRO TECHNOLOGIES	KALLAKURICHI
5928....	WIPRO TECHNOLOGIES	KALYANI
5929....	WIPRO TECHNOLOGIES	KAMPLI
5930....	WIPRO TECHNOLOGIES	KANCHEEPURAM
5931....	WIPRO TECHNOLOGIES	KANHANGAD
5932....	WIPRO TECHNOLOGIES	KANNUR
5933....	WIPRO TECHNOLOGIES	KANPUR
5934....	WIPRO TECHNOLOGIES	KARAIKUDI

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
5935....	WIPRO TECHNOLOGIES	KARIMNAGAR
5936....	WIPRO TECHNOLOGIES	KARUR
5937....	WIPRO TECHNOLOGIES	KASARAGOD
5938....	WIPRO TECHNOLOGIES	KATIHAR
5939....	WIPRO TECHNOLOGIES	KHARAGPUR
5940....	WIPRO TECHNOLOGIES	KHOPOLI
5941....	WIPRO TECHNOLOGIES	KISHANGANJ
5942....	WIPRO TECHNOLOGIES	KOCHI
5943....	WIPRO TECHNOLOGIES	KOLHAPUR
5944....	WIPRO TECHNOLOGIES	KOLKATA
5945....	WIPRO TECHNOLOGIES	KOOTTANAD
5946....	WIPRO TECHNOLOGIES	KOPPAL
5947....	WIPRO TECHNOLOGIES	KOVILPATTI
5948....	WIPRO TECHNOLOGIES	KOZHIKODE
5949....	WIPRO TECHNOLOGIES	KRISHNAGIRI
5950....	WIPRO TECHNOLOGIES	KULKACHERLA
5951....	WIPRO TECHNOLOGIES	KUNDAPUR
5952....	WIPRO TECHNOLOGIES	KUNDAPURA
5953....	WIPRO TECHNOLOGIES	KUNIGAL
5954....	WIPRO TECHNOLOGIES	KUSHALNAGAR
5955....	WIPRO TECHNOLOGIES	LADWA
5956....	WIPRO TECHNOLOGIES	LAKHISARAI
5957....	WIPRO TECHNOLOGIES	LATUR
5958....	WIPRO TECHNOLOGIES	LOHARA
5959....	WIPRO TECHNOLOGIES	LONI
5960....	WIPRO TECHNOLOGIES	LUCKNOW
5961....	WIPRO TECHNOLOGIES	LUDHIANA
5962....	WIPRO TECHNOLOGIES	MACHILIPATNAM
5963....	WIPRO TECHNOLOGIES	MADANAPALLI
5964....	WIPRO TECHNOLOGIES	MADDIKERA
5965....	WIPRO TECHNOLOGIES	MADURAI
5966....	WIPRO TECHNOLOGIES	MAHABOOB NAGAR
5967....	WIPRO TECHNOLOGIES	MAHISHADAL
5968....	WIPRO TECHNOLOGIES	MALDA
5969....	WIPRO TECHNOLOGIES	MALKAPUR
5970....	WIPRO TECHNOLOGIES	MALOUT
5971....	WIPRO TECHNOLOGIES	MANANTHAVADY
5972....	WIPRO TECHNOLOGIES	MANGALURU
5973....	WIPRO TECHNOLOGIES	MAZHUVANNOOR
5974....	WIPRO TECHNOLOGIES	MEERUT
5975....	WIPRO TECHNOLOGIES	MIDNAPORE
5976....	WIPRO TECHNOLOGIES	MORADABAD
5977....	WIPRO TECHNOLOGIES	MUMBAI
5978....	WIPRO TECHNOLOGIES	MUNGER
5979....	WIPRO TECHNOLOGIES	MUZAFFARPUR
5980....	WIPRO TECHNOLOGIES	MYSORE
5981....	WIPRO TECHNOLOGIES	NABADWIP
5982....	WIPRO TECHNOLOGIES	NAGALAPURAM
5983....	WIPRO TECHNOLOGIES	NAGAPATTINAM
5984....	WIPRO TECHNOLOGIES	NAGERCOIL
5985....	WIPRO TECHNOLOGIES	NAGPUR
5986....	WIPRO TECHNOLOGIES	NALGONDA
5987....	WIPRO TECHNOLOGIES	NAMAKKAL
5988....	WIPRO TECHNOLOGIES	NANDIGAMA

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
5989....	WIPRO TECHNOLOGIES	NARASARAOPET
5990....	WIPRO TECHNOLOGIES	NARAYANPET
5991....	WIPRO TECHNOLOGIES	NARWAD
5992....	WIPRO TECHNOLOGIES	NAVI MUMBAI
5993....	WIPRO TECHNOLOGIES	NEDUMKANDAM
5994....	WIPRO TECHNOLOGIES	NELLORE
5995....	WIPRO TECHNOLOGIES	NIPANI
5996....	WIPRO TECHNOLOGIES	NIZAMABAD
5997....	WIPRO TECHNOLOGIES	NOIDA
5998....	WIPRO TECHNOLOGIES	ONGOLE
5999....	WIPRO TECHNOLOGIES	OOTY
6000....	WIPRO TECHNOLOGIES	PAKALA
6001....	WIPRO TECHNOLOGIES	PALACOLE
6002....	WIPRO TECHNOLOGIES	PALAKKAD
6003....	WIPRO TECHNOLOGIES	PANAGARH
6004....	WIPRO TECHNOLOGIES	PANCHVEER
6005....	WIPRO TECHNOLOGIES	PANDHARPUR
6006....	WIPRO TECHNOLOGIES	PANIPAT
6007....	WIPRO TECHNOLOGIES	PANRUTI
6008....	WIPRO TECHNOLOGIES	PARADIP
6009....	WIPRO TECHNOLOGIES	PATIALA
6010....	WIPRO TECHNOLOGIES	PATNA
6011....	WIPRO TECHNOLOGIES	PAVAGADA
6012....	WIPRO TECHNOLOGIES	PAYYANUR
6013....	WIPRO TECHNOLOGIES	PEDANA
6014....	WIPRO TECHNOLOGIES	PENAMALURU
6015....	WIPRO TECHNOLOGIES	PENUGONDA
6016....	WIPRO TECHNOLOGIES	PILIBHIT
6017....	WIPRO TECHNOLOGIES	POLASARA
6018....	WIPRO TECHNOLOGIES	POLLACHI
6019....	WIPRO TECHNOLOGIES	PRAKASAM
6020....	WIPRO TECHNOLOGIES	PRODDATUR
6021....	WIPRO TECHNOLOGIES	PUNE
6022....	WIPRO TECHNOLOGIES	RAHURI
6023....	WIPRO TECHNOLOGIES	RAIGANJ
6024....	WIPRO TECHNOLOGIES	RAIPUR
6025....	WIPRO TECHNOLOGIES	RAIRANGPUR
6026....	WIPRO TECHNOLOGIES	RAJAHMAHENDRAVARAM
6027....	WIPRO TECHNOLOGIES	RAJAHMUNDRY
6028....	WIPRO TECHNOLOGIES	RAJAM
6029....	WIPRO TECHNOLOGIES	RAJAPUR
6030....	WIPRO TECHNOLOGIES	RAJKOT
6031....	WIPRO TECHNOLOGIES	RAMANATHAPURAM
6032....	WIPRO TECHNOLOGIES	RAMGARH
6033....	WIPRO TECHNOLOGIES	RANCHI
6034....	WIPRO TECHNOLOGIES	RANGARH
6035....	WIPRO TECHNOLOGIES	RASIPURAM
6036....	WIPRO TECHNOLOGIES	RATNAGIRI
6037....	WIPRO TECHNOLOGIES	RAYAGADA
6038....	WIPRO TECHNOLOGIES	ROHTAK
6039....	WIPRO TECHNOLOGIES	SAHARANPUR
6040....	WIPRO TECHNOLOGIES	SAHARSA
6041....	WIPRO TECHNOLOGIES	SALEM
6042....	WIPRO TECHNOLOGIES	SAMASTIPUR

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
6043....	WIPRO TECHNOLOGIES	SAMBALPUR
6044....	WIPRO TECHNOLOGIES	SANGLI
6045....	WIPRO TECHNOLOGIES	SARAN
6046....	WIPRO TECHNOLOGIES	SATARA
6047....	WIPRO TECHNOLOGIES	SATHYAMANGALAM
6048....	WIPRO TECHNOLOGIES	SECUNDERABAD
6049....	WIPRO TECHNOLOGIES	SECUNDRABAD
6050....	WIPRO TECHNOLOGIES	SHAMLI
6051....	WIPRO TECHNOLOGIES	SHIMOGA
6052....	WIPRO TECHNOLOGIES	SHORAPUR
6053....	WIPRO TECHNOLOGIES	SIDDAPUR
6054....	WIPRO TECHNOLOGIES	SITAMARHI
6055....	WIPRO TECHNOLOGIES	SIWAN
6056....	WIPRO TECHNOLOGIES	SONIPAT
6057....	WIPRO TECHNOLOGIES	SRIKAKULAM
6058....	WIPRO TECHNOLOGIES	SURI
6059....	WIPRO TECHNOLOGIES	TADIPATRI
6060....	WIPRO TECHNOLOGIES	TALAVADY
6061....	WIPRO TECHNOLOGIES	TALCHER
6062....	WIPRO TECHNOLOGIES	TELLICHERY
6063....	WIPRO TECHNOLOGIES	TENALI
6064....	WIPRO TECHNOLOGIES	TENALI
6065....	WIPRO TECHNOLOGIES	THALASSERY
6066....	WIPRO TECHNOLOGIES	THANE
6067....	WIPRO TECHNOLOGIES	THANJAVUR
6068....	WIPRO TECHNOLOGIES	THETTU
6069....	WIPRO TECHNOLOGIES	THIRUTHURAIPOONDI
6070....	WIPRO TECHNOLOGIES	THIRUVANANTHAPURAM
6071....	WIPRO TECHNOLOGIES	THIRUVANNAMALAI
6072....	WIPRO TECHNOLOGIES	THODUPUZHA
6073....	WIPRO TECHNOLOGIES	THRISSUR
6074....	WIPRO TECHNOLOGIES	TIRUCHIRAPPALLI
6075....	WIPRO TECHNOLOGIES	TIRUNELVELI
6076....	WIPRO TECHNOLOGIES	TIRUPATHI
6077....	WIPRO TECHNOLOGIES	TIRUPPUR
6078....	WIPRO TECHNOLOGIES	TUMKUR
6079....	WIPRO TECHNOLOGIES	TURUVEKERE
6080....	WIPRO TECHNOLOGIES	TUTICORIN
6081....	WIPRO TECHNOLOGIES	UDAIPUR
6082....	WIPRO TECHNOLOGIES	UDUMALPET
6083....	WIPRO TECHNOLOGIES	UDUPI
6084....	WIPRO TECHNOLOGIES	UJIRE
6085....	WIPRO TECHNOLOGIES	VANDANMEDU
6086....	WIPRO TECHNOLOGIES	VATAKARA
6087....	WIPRO TECHNOLOGIES	VEMABNOOR
6088....	WIPRO TECHNOLOGIES	VERAVAL
6089....	WIPRO TECHNOLOGIES	VIJAYAPUR
6090....	WIPRO TECHNOLOGIES	VIJAYAWADA
6091....	WIPRO TECHNOLOGIES	VILLUPURAM
6092....	WIPRO TECHNOLOGIES	VISAKHAPATNAM
6093....	WIPRO TECHNOLOGIES	WARANGAL
6094....	WIPRO TECHNOLOGIES	WARDHA
6095....	WISEMEN CONSULTING SERVICE (I) PVT. LTD.	CHENNAI
6096....	WISSEN BAUM ENGINEERING SOLUTIONS.LLP	JAMNER

S.No.	Organization	Location
6097....	WITTERN GROUP INC	PALEMAD
6098....	WITTYBEE TECHNOLOGIES LTD.	AHMEDABAD
6099....	WITZENMANN (I) PVT. LTD.	KOLKATA
6100....	WME CONSULTANTS	DUBAI
6101....	WME CONSULTANTS	THRISSUR
6102....	WOCKHARDT HOSPITALS	MUMBAI
6103....	WOOD PLC	KUALA LUMPUR
6104....	WOODGROUP PSN	CHENNAI
6105....	WORLD BANK GROUP	CHENNAI
6106....	WORLD METALS & ALLOYS (FZC)	COIMBATORE
6107....	WORLD PLANNER S CONSULTING ENGINEERS	KANNUR
6108....	WORLDLINE (I) PVT. LTD.	NASHIK
6109....	WORLEY PARSONS ENGINEERING CONSULTING CO	RATNAGIRI
6110....	WORLEY PARSONS OMAN ENG. LLC	VISAKHAPATNAM
6111....	WORLEYPARSONS (I) PVT. LTD.	NAVI MUMBAI
6112....	WORLEYPARSONS ENGINEERING PVT. LTD.	ABU DHABI
6113....	WORLEYPARSONS OMAN ENGINEERING LLC	MUSCAT
6114....	WORLEYPARSONS QATAR	KOZHIKODE
6115....	WOW VISION (I) PVT. LTD.	GREATER NOIDA
6116....	WS ATKINS AND PARTNERS OVERSEAS	SHARJAH
6117....	WS ATKINS(IND) PVT. LTD.	BENGALURU
6118....	WSP MIDDLE EAST	MARTHANDAM
6119....	WSP PARSONS BRINKERHOFF	HULIYAR
6120....	WSP PARSONS BRINKERHOFF	SHARJAH
6121....	WYSKI ENGINEERING & TECHNOLOGY PVT. LTD.	DARBHANGA
6122....	XAVIENT INFORMATION SYSTEM	NOIDA
6123....	XCDIFY SOLUTIONS PVT. LTD.	BENGALURU
6124....	XEROX BUSINESS SERVICES (I) PVT. LTD.	GURUGRAM
6125....	XEROX BUSINESS SERVICES (I) PVT. LTD.	NOIDA
6126....	XEROX TECHNOLOGIES SERVICES (I) LLP	KOCHI
6127....	XILINX (I) TECHNOLOGIES PVT. LTD.	HYDERABAD
6128....	XILINX (I) TECHNOLOGIES PVT. LTD.	NIZAMABAD
6129....	XILINX (I) TECHNOLOGIES PVT. LTD.	SECUNDERABAD
6130....	XORAIL A WABTEC CO	BENGALURU
6131....	XYLEM WATER SOLUTIONS PVT. LTD.	AHMEDABAD
6132....	XYTEL (I) PVT. LTD.	PALAKKAD
6133....	YAMAZAKI MAZAK (I) PVT. LTD.	BENGALURU
6134....	YAMAZAKI MAZAK (I) PVT. LTD.	CHENNAI
6135....	YAMAZAKI MAZAK (I) PVT. LTD.	DELHI
6136....	YAMAZAKI MAZAK (I) PVT. LTD.	PUNE
6137....	YAMUNA MACHINE WORKS LTD.	VALSAD
6138....	YANFENG (I) AUTOMOTIVE INTERIOR SYSTEM	PUNE
6139....	YARDI SOFTWARE (I) PVT. LTD.	VADODARA
6140....	YASH TECHNOLOGIES PVT. LTD.	HYDERABAD
6141....	YASHODA HOSPITAL	HYDERABAD
6142....	YAZAKI (I) PVT. LTD.	PUNE
6143....	YAZAKI WIRING TECHNOLOGIES (I) PVT. LTD.	KOTTAYAM
6144....	YMS MOBITECH PVT. LTD.	JHALAWAR
6145....	YODLEE INFOTECH PVT. LTD.	NILESHWAR
6146....	YOGRAJ MULTITECH ENGINEERING PVT.LTD.	SASWAD
6147....	YOKOGAWA (I) LTD.	PUNE
6148....	ZAFIN LABS	NAGERCOIL
6149....	ZALONI TECHNOLOGIES (I) PVT. LTD.	GUWAHATI
6150....	ZAMIL STEEL	PUDUKKOTTAI

<b>S.No.</b>	<b>Organization</b>	<b>Location</b>
6151....	ZAMIL STEEL	VELLORE
6152....	ZCON SOLUTIONS PVT. LTD.	PUNE
6153....	ZEAL ENCORE TECHNOLOGIES	BENGALURU
6154....	ZEBRONICS (I) PVT. LTD.	JAMSHEDPUR
6155....	ZEN TECHNOLOGIES LTD.	HYDERABAD
6156....	ZENCORP PTE LTD.	LUCKNOW
6157....	ZENER ELECTRICAL & ELECTRONICS SERVICES	SHAHAMA
6158....	ZENSAR TECHNOLOGIES	MADURAI
6159....	ZENSER TECHNOLOGIES	SANGLI
6160....	ZENTECH (I) OFFSHORE & MARINE ENG. PVT.LTD.	NAVI MUMBAI
6161....	ZENTECH (I) OFFSHORE & MARINE ENG. PVT.LTD.	THANE
6162....	ZEOMEGA INFOTECH PVT. LTD.	BENGALURU
6163....	ZEUS BIOTECH PVT.LTD.	THRISSUR
6164....	ZF (I) PVT. LTD.	GUNTUR
6165....	ZF (I) PVT. LTD.	HYDERABAD
6166....	ZF (I) PVT. LTD.	PUNE
6167....	ZF LENKSYSTEM (I) PVT. LTD.	SATARA
6168....	ZF WIND POWER COIMBATORE PVT. LTD.	COIMBATORE
6169....	ZH HEALTHCARE INC	KOCHI
6170....	ZIETA TECHNOLOGIES	BENGALURU
6171....	ZIGMA TECHNOLOGIES	BENGALURU
6172....	ZILOGIC SYSTEMS	CHENNAI
6173....	ZIV AUTOMATION (I) LTD.	BENGALURU
6174....	ZL TECHNOLOGIES (I) PVT. LTD.	HYDERABAD
6175....	ZOHO CORPORATION (I) PVT. LTD.	CHENNAI
6176....	ZOHO CORPORATION (I) PVT. LTD.	KANCHEEPURAM
6177....	ZOHO CORPORATION (I) PVT. LTD.	NAGAIATTINAM
6178....	ZOHO CORPORATION (I) PVT. LTD.	TIRUCHIRAPPALLI
6179....	ZOOL TECH SOLUTIONS PVT. LTD.	BENGALURU
6180....	ZS ASSOCIATES	NEW DELHI
6181....	ZTT (I) PVT. LTD.	CHENNAI
6182....	ZUTI ENGINEERING SOLUTION PVT. LTD.	PUNE
6183....	ZYME SOLUTIONS PVT. LTD.	BENGALURU
6184....	ZYME SOLUTIONS PVT. LTD.	KANNUR

**LIST OF PROJECT WORK SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED  
LEARNING PROGRAMMES IN THE YEAR 2017**

**B.S. Engineering Technology**

1.	A STUDY OF INDIAN ENVIRONMENT POLLUTION CONTROL, CONTRIBUTING FACTORS TOWARDS ENVIRONMENT POLLUTION AND POLLUTION CONTROL MEASURES
2.	A STUDY ON SELECTION OF SEAT SPRING MATERIAL FOR TRUNNION MOUNTED BALL VALVES USING FINITE ELEMENT ANALYSIS (FEA)
3.	A STUDY ON THE IMPLEMENTATION OF AUTOMATION AND IT EFFECTS IN A MEDIUM SCALE FABRICATION COMPANY
4.	ADVANCED ENERGY PERFORMANCE ASSESSMENT OF HVAC SYSTEMS BY INSPECTION AND MONITORING
5.	AFFORDABLE AUTOMATED GUIDED VEHICLE
6.	ALIGNING SHEET METAL SUPPLY CHAIN TO WABCO INDIA MANUFACTURING FOOT PRINT
7.	ANALYSIS AND DESIGN OF A MULTISTOREY BUILDING
8.	ANALYSIS OF GFRP COMPOSITE MATERIALS MONO LEAF SPRING
9.	ANALYSIS OF PROJECT PERFORMANCE - CROSS COUNTRY GAS TRANSPORTATION PIPELINE PROJECT (CONSTRUCTION)
10.	APPLICATION OF HEAT TREATMENT AND CHEMICAL-MILLING IN AEROSPACE DETAIL PARTS
11.	AUGMENTATION OF PRODUCTIVITY FOR HEAVY WALL SEAM WELDING OF PRESSURE VESSELS
12.	AUTOMATION FOR RO BASED WATER TREATMENT PLANT
13.	AUTOMATION OF ACCESS CONTROL SYSTEM
14.	AUTOMATION OF VISUAL INSPECTION FROM MANUAL
15.	AUTOMATION WITH DATA TRACEABILITY FOR MANUFACTURING PROCESS
16.	AUTOMATIZATION OF BLIND HOLE BROACHING WITH CNC
17.	AUTONOMOUS INTELLIGENT VEHICLE
18.	AUXILIARY POWER SUPPLY DISTRIBUTION FOR METRO STATIONS
19.	B&T DRUM EXPAND AND COLLAPSE SERVO FAULT ELIMINATION
20.	BIW WEIGHT REDUCTION STUDY USING FORMABILITY ANALYSIS
21.	BROKEN BUTT DETECTION IN HOT BATH REMOVAL UNIT
22.	BRUSH ROLL STRIP PASS LINE DETECT METHOD CHANGE & PROGRAM MODIFICATION FOR NEW METHOD
23.	BUILDING OF FACILITY FOR ELECTRO POLISHING OF STAINLESS STEEL TO IMPROVE THE SURFACE FINISH & LIFE OF THE PRODUCT
24.	CAD MODEL STANDARDIZATION AND DRAWING QUALITY IMPROVEMENT
25.	CALIBRATION OF MRP PARAMETERS TO IMPROVE OPERATIONAL EFFICIENCY
26.	CAPACITIVE TOUCH AND GESTURE BASED VEHICLE CONTROL PANEL
27.	CHANGE MANAGEMENT IMPLEMENTATION USING PTC WINDCHILL PLM
28.	CHANGE OF WELDING PROCESS FROM SMAW TO THERMITE WELDING FOR CRANE RAIL JOINTS
29.	CO2 ARC ROBOT INTRODUCTION IN MANUAL BIW LINE
30.	COAL MILL PERFORMANCE IMPROVEMENT
31.	COMMISSIONING OF ANALYZER SYSTEM IN PARAXYLENE 4 PLANT
32.	COMPARATIVE ANALYSIS ON DISCOUNT, PROMOTION AND SERVICES VS. COMPETITION- ACC LIMITED
33.	COMPUTATIONAL FLUID DYNAMICS (CFD) ANALYSIS BY USING SOFTWARE 'ANASYS' TO CHECK THE ADEQUACY OF VENTILATION FOR TRANSFORMER & REACTOR
34.	CONCRETE PUMP USING FOR TRANSFERRING LIQUID CONCRETE IN CONSTRUCTION BUILDING
35.	CONSTRUCTION OF WHARF FACILITY AT KHALIFA PORT (KIZAD AREA) FOR AL TAWEELAH ALUMINA PROJECT, ABU DHABI (U.A.E.)
36.	CONSTRUCTION STRATEGIC ANALYSIS OF STEAM GENERATOR
37.	CORROSION IN STEAM LINES DUE TO DUAL FLOW
38.	COST ESCALATION FOR POWER PROJECT



39.	COST REDUCTION BY STRATEGIC PROCUREMENT IN CONSTRUCTION INDUSTRY
40.	CRAS - CREW RAPID ALLOCATION SYSTEM
41.	CYLINDER ASSEMBLY CUSTOMER COMPLAINT REDUCTION
42.	DESIGN & ANALYSIS OF 3D CAD MODEL: MOTORIZED SAND TRAP LOUVERS
43.	DESIGN & FABRICATION OF SQUARE GEAR TO PRODUCE FOUR TIME VELOCITY VARIATION IN ONE OSCILLATION
44.	DESIGN AND ANALYSIS OF A FUEL CELL
45.	DESIGN AND DEVELOP NEW ACCELERATOR PEDAL WITH COST REDUCTION
46.	DESIGN AND DEVELOPMENT OF A LOADING-UNLOADING SYSTEM TO REDUCE CYCLE TIME ASEH TURNING OPERATION
47.	DESIGN AND DEVELOPMENT OF PROTECTION SYSTEM ARCHITECTURE FOR LIFT IRRIGATION SCHEME
48.	DESIGN AND VALIDATION OF GATING SYSTEM FOR SUBMERSIBLE PUMP OUTLET CASING TO MINIMIZE CASTING IMPERFECTION
49.	DESIGN MODIFICATION OF AISI410 STAINLESS STEEL DUAL TUBING HANGER AND CHRISTMAS TREE TO MINIMIZE GALLING DURING INSTALLATION IN FIELD.
50.	DESIGN OF A RE-CONFIGURABLE SEATING FOR PUBLIC PLACES
51.	DESIGN OF AUTOMOTIVE FLOOR CONSOLE FOR PASSENGER CARS
52.	DESIGN OF DRAW DIE FOR CUP FORMATION (CATIA)
53.	DESIGN OF ELECTRICAL DISTRIBUTION SYSTEM FOR HIGH-RISE BUILDING & ITS UTILITIES
54.	DESIGN OF HEAT EXCHANGERS
55.	DESIGN, MANUFACTURING & TESTING OF LV MCC CONTROL PANEL
56.	DEVELOPING ELECTRONICALLY CONTROLLED HYDRAULIC SYSTEM FOR STRADDLE CARRIER "SPREADER TEST RIG"
57.	DEVELOPING PROJECT MANAGEMENT PLAN FOR NEW HOTEL CONSTRUCTION PROJECT
58.	DEVELOPING SOLUTION SCHEMES FOR REDUCTION OF WORKING CAPITAL OF A CONSTRUCTION PROJECT FOR IMPROVING CASH FLOW AND FINANCIALS OF PROJECTS/ CLUSTER AND BUSINESS SEGMENT
59.	DEVELOPING STRATEGIES FOR COST AND TIME IMPLICATION ON CONSTRUCTION PROJECT AT ISOLATED AREA
60.	DEVELOPMENT OF FMVSS HEAD IMPACT ABSORBERS TO COMPLY WITH FMVSS 201U REGULATIONS FOR USA.
61.	DEVELOPMENT OF PC BASED MODULAR TESTER TOOL TO CALIBRATE, TROUBLESHOOT AND ANALYSE ECUS
62.	DEVELOPMENT OF PERFORMANCE TOOL FOR MONITORING AND TROUBLESHOOTING OF KEY PERFORMANCE INDICATORS.
63.	DIGITAL MANUFACTURING
64.	DIMINUTION OF RCL-2 COIL HANDLING TIME
65.	DISTORTION CONTROL OF WELD JOINTS DURING FABRICATION OF TUBULAR ITEMS.
66.	DISTRIBUTED TEMPERATURE SENSING SYSTEM FOR EHV UG CABLES
67.	DLN COMBUSTION SYSTEM FOR GAS TURBINE
68.	EFFECT OF SHEET THICKNESS ON FLC (FORMABILITY LIMIT CURVES) IN SHEET METAL FORMING
69.	ELECTRICAL CAPACITANCE WITH MESHED ELECTRODES FOR PIEZO- AND PYRO-ELECTRIC ENERGY HARVESTING APPLICATIONS
70.	ELECTRICAL DESIGN IN INDUSTRIAL PROJECTS
71.	ELECTRONIC VERIFICATION AND ROUTINE VEHICLE INSPECTION REPORTING SYSTEM
72.	ELECTRONICS AND COMMUNICATION ENGINEERING
73.	ELIMINATE THE ERRORS WHILE UPDATING THE MATRICULE NUMBERS IN THE INFORMATION SYSTEM
74.	ELIMINATION OF LEAKAGE IN 5 LITERS RESERVOIR
75.	ENERGY CONSERVATION MANAGEMENT OF HVAC SYSTEMS IN COMMERCIAL BUILDINGS
76.	ENERGY MANAGEMENT USING VFDS
77.	ENERGY OPTIMIZATION IN DEHYDRATION UNIT
78.	ENGINEERING, PROCUREMENT & INSTALLATION OF 66KV HIGH VOLTAGE UNDERGROUND CABLES AT VARIOUS LOCATIONS IN THE STATE OF QATAR UNDER THE CONTRACT GTC/372B/2010.
79.	ENHANCED RECOVERY OF OFFGAS FROM CRUDE INLET TANK T-2413 BY OPERATING PARAMETERS OPTIMIZATION

80.	ENHANCING CAPACITY UTILISATION OF MANUFACTURING MACHINE TO INCREASE PRODUCTION VOLUME
81.	ENQUIRES & ORDER MANAGEMENT
82.	EQUIPMENT PART LIST (EPL) ANALYSIS, PROCUREMENT AND INVENTORY WITH SUPPLIERS
83.	ERECTION, COMMISSIONING AND MAINTENANCE OF BATCHING PLANT AND ROPE GUIDED HOIST
84.	ETTA - OPERATIONAL EXCELLENCE
85.	EXCAVATOR TRANSPORT SYSTEM FOR INCREASING RELIABILITY OF UNDERCARRIAGE
86.	EXCELLENCE IN PROJECT EXECUTION THROUGH 5S & VSM
87.	EXPERIMENTAL DETERMINATION OF FATIGUE PROPERTIES AND CORRELATION WITH PREDICTION TOOL
88.	FABRICATION OF PORTAL FRAME OF RECLAIMER SYSTEM
89.	FAILURE MODE AVOIDANCE AND IMPROVEMENT OF CHANGE MANAGEMENT IN WIRING
90.	FAULT LEVEL CALCULATION BY MVA METHOD FOR BALANCED THREE PHASE FAULTS
91.	FLAWLESS CHANGE MANAGEMENT SYSTEM IN DESIGN ENGINEERING
92.	FLUE GAS HEAT RECOVERY
93.	FORMABILITY SIMULATION, METHOD PLAN/PROCESS PLAN OF REINFORCEMENT REAR QUARTER UPPER LH/RH AND DESIGN OF DRAW DIE
94.	GIS-GAS INSULATED SWITCH GEAR
95.	GST & IT'S IMPACT ON INDIAN SUPPLY CHAIN
96.	GUIDELINES FOR DOOR TRIM STRUCTURAL DESIGN
97.	HEALTH AND SAFETY CHALLENGES IN TRANSMISSION LINES EXECUTION IN INDIA, POSSIBLE IMPROVEMENTS AND WAY FORWARD
98.	IMPLEMENTATION OF AIR POLLUTION CONTROL SYSTEM (SELECTIVE CATALYTIC REDUCTION) IN SUPERCRITICAL THERMAL POWER PLANTS IN INDIA FOR NOX REDUCTION
99.	IMPLEMENTATION OF AUTO CLIMBING FORMWORK IN CONSTRUCTION OF SILO AT CEMENT PLANTS
100.	IMPLEMENTATION OF CALIBRATION MANAGEMENT SYSTEM
101.	IMPLEMENTATION OF CLASSIFICATION & OBSOLESCENCE MANAGEMENT IN PLM
102.	IMPLEMENTATION OF KANBAN SYSTEM ON LV-DRIVES ASSEMBLY LINES
103.	IMPLEMENTATION OF PRODUCTION KANBAN SYSTEM AT ASSEMBLY TO MATCH PRODUCTION RATE OF FABRICATION WITH CONSUMPTION RATE OF ASSEMBLY LINE
104.	IMPLEMENTING AUTOMATION TECHNOLOGY
105.	IMPLEMENTING PROJECT MANAGEMENT BODY OF KNOWLEDGE (PMBOK) IN CONSTRUCTION PROJECT
106.	IMPLEMENTING PULL FLOW CONCEPT IN STOCK MANAGEMENT
107.	IMPORTANCE OF COMMUNICATION PRACTICES IN PROJECT MANAGEMENT
108.	IMPROVE WORKING ENVIRONMENT IN LONG FIBER INJECTION PROCESS
109.	IMPROVED EQUIPMENT MAINTENANCE THROUGH SAFE EXECUTION
110.	IMPROVEMANT IN CGL FINAL RATE
111.	IMPROVEMENT IN DELIVERY PERFORMANCE
112.	IMPROVEMENT IN EOT CRANE WORKING (EFFICIENT MATERIAL HANDLING)
113.	IMPROVEMENT IN STRETCHER STRAIN IN ID & OD OF COIL
114.	IMPROVEMENT OF GENERATOR STEP-UP TRANSFORMER (GSUT) HV CABLE TERMINATION OUTDOOR SEALING END ( ODSE)
115.	IMPROVEMENT OF RELIABILITY IN ANODE SLOT CUTTING MACHINE IN ANODE BAKING FURNACE, PHASE-2, EMAL
116.	INCREASE BILLING EFFICIENCY & REDUCE T&D LOSSES
117.	INCREASING GAS TURBINE EFFICIENCY AND ITS BENEFITS
118.	INCREASING INVENTORY TURN AROUND CYCLE USING LEAN MANUFACTURING CONCEPTS
119.	INDIGENIZATION OF TRANSMISSION ELECTRONIC CONTROL
120.	INDIRECT SPOT WELDING
121.	INJECTION MOULD DESIGN AND MANUFACTURING PROCESS
122.	INSIGHT IN TO THE HEAT EXCHANGER
123.	INSTALLATION & COMMISSIONING OF INLINE SKIN PASS MILL
124.	INSTALLATION AND COMMISSIONING OF FERRIC OXIDE POWDER STORAGE BIN FOR HCL ACID REGENERATION PLANT.

125.	INSTALLATION OF ELECTRO STATIC PRECIPITATOR
126.	INSTALLATION OF LOWER HEATING VALUE ANALYZER TO IMPROVE FURNACE EFFICIENCY AND SAFETY
127.	INSTALLATION OF ROTARY AIR PRE HEATER
128.	INSULATION COORDINATION STUDIES
129.	INTERIM POWER EVACUATION
130.	INTRODUCTION OF PHASED ARRAY ULTRASONIC TESTING PROCESS FOR REDUCTION OF TESTING TIME AND COST IN FABRICATION
131.	INTRODUCTION OF TRACEABILITY FOR RCCB PRODUCT
132.	INVENTORY OPTIMIZATION THROUGH MRP BASED PLANNING IN SAP
133.	IOT USING IN THE SMART ENERGY MANAGEMENT
134.	LINEAR HEAT DETECTION PLACEMENT
135.	MAINTENANCE COST OPTIMIZATION & DEVELOPMENT IN PETROCHEMICAL PLANT
136.	MAINTENANCE OF PIPE CONVEYING SYSTEM
137.	MARINE ELECTRONICS : FOR SAFE NAVIGATION
138.	MATERIAL DATA ENHANCEMENT & ENRICHMENT
139.	MEASUREMENT SYSTEM ANALYSIS - MSA
140.	MECHANICAL ARCHITECTURE AND CONCEPT DESIGN OF ANGIOGRAPHY PATIENT TABLE FOR CATH-LAB
141.	METALLIC SCRAP REDUCTION IN CUTTER MACHINE
142.	MINI EXCAVATOR MARKET ANALYSIS & PRODUCT DEVELOPMENT
143.	MODULARIZE THE TEST PROGRAM AND IMPROVING OF YIELD
144.	MOLD CHANGE OVER TIME REDUCTION IN HYDRAULIC INJECTION MOULDING MACHINE
145.	MTB ABU DHABI AIRPORT 3D MODEL DEVELOPMENT AND BIM IMPLEMENTATION
146.	MTTR REDUCTION OF BUSH CLAMP FAILURE
147.	MUDA (NON VALUE ADDED TIME REDUCTION), CYCLE TIME REDUCTION
148.	NEW LOW SPEED WIND TURBINE DESIGN AND DEVELOPMENT PLAN TO SUIT INDIAN MARKET
149.	NEW SYNCHRONIZER DESIGN
150.	OIL SPILL RECOVERY USING GRAPHITE INTERCALATION COMPOUND
151.	ON TIME RECEIPT (OTR) IMPROVEMENT OF CRITICAL SUPPLIERS
152.	OPTIMIZATION OF COMPRESSED AIR SYSTEM
153.	PARTIAL STROKE TEST POSITIONER INSTALLATION ON ESD VALVES
154.	PCM PL ENTRY COIL CAR MOVING DECK DERAILING PROBLEM SOLVING
155.	PLASTIC INJECTION MOULD DEVELOPMENT FOR ELECTRONIC APPLICATIONS
156.	POWER AUGMENTATION IN GAS TURBINE WITH WET COMPRESSION SYSTEM
157.	PREDICTIVE MAINTAINANCE AND STANDARDISATION OF CONCRETE PUMP HEALTH INSPECTION PROCEDURE.
158.	PREPARATION OF INSTRUMENTATION HOOK-UPS 2D DIAGRAMS USING 3D MODEL
159.	PREVENTION OF ROD SLIP FROM BELL GRAB TROLLEY AT RODDING SHOP, CARBON PLANT
160.	PROCESS ARCHITECTURE & CONCEPT DESIGN OF INTER DEALER HOME VISIT CLAIMS FOR THE HOME VISITS MADE TO PREMIUM CAR CUSTOMERS
161.	PROCESS CONTROL & INSTRUMENTATION FOR COKE OVEN PLANT & ITS BY-PRODUCT
162.	PRODUCTIVITY IMPROVEMENT IN PERFORMANCE TEST RIG OF STICK COIL ASSEMBLY LINE
163.	PROJECT MANAGEMENT - 2X 600 MW THERMAL POWER, DB POWER PROJECT
164.	PROJECT MANAGEMENT AT 132 KV D/C TRANSMISSION LINE PROJECT
165.	PROJECT MANAGEMENT AT DDUGJY GORAKHPUR - UP
166.	PROJECT MANAGEMENT AT DDUGJY PROJECT AT MEERUT,UP
167.	PROJECT MANAGEMENT FOR CONSTRUCTION OF 220/132/33 KV CHAIBASA SUBSTATION FOR POWERGRID
168.	PROJECT MANAGEMENT FOR DMRC CE01 PACKAGE E&M WORKS OF ELEVATED STATIONS OF DELHI METRO PROJECT PHASE-III
169.	PROJECT MANAGEMENT FOR ELECTRICAL & INSTRUMENTATION WORKS AT TATA STEEL BLAST FURNACE-1, KALINAGNAGAR
170.	PROJECT MANAGEMENT FOR RAPDRP PART-B AT LUDHIANA DISTRICT IN STATE OF PUNJAB ON TURN

	KEY BASIS
171.	PROJECT MANAGEMENT IN ENGINEERING, CONSTRUCTION, TESTING AND COMMISSIONING OF BULK MATERIAL HANDLING SYSTEM
172.	PROJECT MANAGEMENT IN ENGINEERING, PROCUREMENT, CONSTRUCTION, TESTING, COMMISSIONING & PERFORMANCE GUARANTEE TEST OF BULK MATERIAL HANDLING SYSTEM (COAL HANDLING PLANT) OF A CHP NIGHAI PROJECT
173.	PROJECT MANAGEMENT IN PROVIDING, LAYING, JOINTING, TESTING & COMMISSIONING OF DI AND MS PIPE DISTRIBUTION MAINS FOR RECYCLED WATER PIPE LINE IN VARIOUS SECTORS OF GURGAON, HARYANA
174.	PROJECT MANAGEMENT OF ELECTRICAL & INSTRUMENTATION WORKS OF 3X660MW SUPERCRITICAL THERMAL POWER PLANT
175.	PROJECT MANAGEMENT OF ELECTRICAL WORKS AT DELHI METRO RAIL CORPORATION LIMITED
176.	PROJECT MANAGEMENT OF RESTORATION OF TRANSMISSION LINE
177.	PROJECT ON IMPROVEMENT IN COLD LEVELLING AND BENDING FUNCTION EFFECTIVENESS FOR STEEL PLATE MANUFACTURING
178.	PROJECT RISK MANAGEMENT FOR 765 KV
179.	PROPOSED LANDSCAPE IN MURMOOM CAMEL RACING TRACK REUSE OF TREATED SEWAGE WATER FOR LANDSCAPING
180.	QUALITY CRITERIA OF 14.2 ROOT CAUSE ANALYSES AND PROBLEM SOLVING.
181.	RAILWAY SYSTEMS ENGINEERING & INTEGRATION
182.	REDUCE REJECTION IN MD13 P3520 IMF
183.	REDUCING HEAT STAIN DURING WELDING OF NICKEL BASED ALLOYS
184.	REDUCING NUMBER OF GAS GENERATOR TRIPPING EVENTS AT TETRA PAK, CHAKAN
185.	REDUCTION IN FIELD NONCONFORMITIES
186.	REDUCTION OF MAINTENANCE DOWNTIME BY INTRODUCING ADVANCED TECHNOLOGY FOR RUNWAY SURVEY AND EOT CRANE ALIGNMENT SURVEYS AND ITS RECTIFICATION.
187.	REINFORCEMENT MAINTENANCE AND REDUCTION OF WASTAGE
188.	RELIABILITY IMPROVEMENT
189.	RELIABILITY IMPROVEMENT FOR CHILLER MODULES IN DISTRICT COOLING PLANT
190.	RELIABILITY IMPROVEMENT OF COOLING TOWER WATER CIRCULATION SYSTEM
191.	RELIABILITY IMPROVEMENT OF VENTURE CIRCULATION PUMP & ROASTER CHARGE SPRAY PUMP MECHANICAL SEAL SYSTEM AT THE HCL ACID REGENERATION PLANT (ARP)
192.	REMOVAL OF HYDROGEN SULFIDE FROM WASTE WATER TREATMENT PLANTS
193.	RE-ORGANISING OF PLANNING OF MANUFACTURING PARTS AT MACHINE SHOP
194.	REPLACING THE TYRE DESIGN ON 7.5TON BLENDING DRUM MACHINE DUE TO FREQUENT TYRE BURSTING PROBLEM
195.	RESOLUTION OF AIR FILTER BRACKET AND AIR INTAKE PIPE FAILURE ON CUMMINS X1.3 GENSET (DESIGN IMPROVEMENT)
196.	RESOURCE MANAGEMENT IN CONSTRUCTION OF A HIGH RISE BUILDING
197.	REUSE OF FURNACE WASTE GAS FOR STEAM GENERATION.
198.	REVOLUTIONIZING MANUFACTURING USING ADDITIVE MANUFACTURING (3D-PRINTING ))
199.	RISK ASSESSMENT FOR OFFSHORE INSTALLATION
200.	ROLE OF SUPPLY CHAIN MANAGEMENT IN PROJECT COMPLETION
201.	ROOF TURBO VENTILATOR GENERATOR
202.	ROOT CAUSE ANALYSIS OF FREQUENT LEAKAGE IN POTABLE WATER PIPING SYSTEM
203.	SAFE DESIGN FOR OPERATION AND MAINTENANCE OF BULK MATERIAL HANDLING EQUIPMENT IN MINERAL PROCESSING INDUSTRY.
204.	SAVING ENERGY BY STOPPING CW PUMP
205.	SAVING ENERGY IN COMMERCIAL OFFICE ZONES AT EFFICIENT LIGHTING SYSTEMS
206.	SEAMLESS ROCKET MOTOR TUBE MANUFACTURING BY REVERSE FLOW FORMING PROCESS
207.	SELF SERVICE MOBILE APPLICATION
208.	SEWAGE TREATMENT PLANT (MBR) SYSTEM TECHNOLOGY
209.	SINGLE CONDUCTOR WIRE RATIONALIZATION AND MAINTENANCE
210.	SIX SIGMA APPLICATIONS IN CONSTRUCTION
211.	SMALL AREA CONTROLLED RADIOGRAPHY(SCAR)

212.	SMART TECHNOLOGY LIGHTING SYSTEM AT SHOP FLOOR
213.	STAINLESS STEEL CLADDING TECHNOLOGY FOR PRESSURE VESSELS
214.	STANDARDIZATION OF GENERATOR SUBMITTAL PACKAGE FOR BLACK START APPLICATION
215.	STANDARDIZATION OF SKIMMING TOOL FOR SODIUM REDUCTION AND SKIMMING STATION IN CAST HOUSE PHASE I & II
216.	STATIC VAR COMPENSATOR (SVC) IN 400KV TRANSMISSION NETWORK
217.	STRIPPING AND RECYCLING OF RUBBER PRODUCTS FROM THE SCRAPPED UNCURED TYRE TO REDUCE THE SCRAP RATE AND THE ENVIRONMENTAL IMPACT.
218.	STRUCTURAL STEEL FABRICATION & ERECTION PROCESS PLANNING AND CONTROL
219.	STUDY & IMPLEMENTATION OF AUTOMATIC LIGHT CONTROL SYSTEM THROUGH PLC CONTROL IN TOPCOAT PAINTING BOOTH DURING THE SHIFT BREAK TIMES
220.	STUDY AND QUALIFICATION OF PRODUCTION WELDING OF STAINLESS STEELS
221.	STUDY OF PROJECT EXECUTION, MATERIAL HANDLING, RECONCILIATION AND COMMISSIONING OF METER REPLACEMENT WORKS
222.	SUPPLIER QUALITY IMPROVEMENT (PPM REDUCTION)
223.	SUPPLY CHAIN MANAGEMENT
224.	TATA X104 (NEXON) PROJECT SMOOTH EXECUTION FOR THE INTERIOR & EXTERIOR PARTS
225.	TECHNICAL PROPOSAL STUDY ON WELDING AUTOMATION FOR AUTOMOTIVE SUB-ASSEMBLY LINE WITH INDUSTRIAL ROBOTS
226.	TEST TOOL FOR DETECTING THE FRAME LOSS AND CHECKING THE FUNCTIONALITY OF ROADMAP MODE IN X-RAY IMAGING SYSTEMS.
227.	THESIS ON ENERGY REDUCTION TO REDUCE ELECTRICAL UNIT CONSUMPTION
228.	TIME MANAGEMENT
229.	TK-2016-CANOPY STRUCTURE AT POWER PLANT
230.	TO DEVELOP EXPERIMENTAL SETUP FOR THE STUDY OF VORTEX FLOWMETER.
231.	TO ELIMINATE THE CONCERN IP STAY BRKT HOLE NOT MATCHING ON CCB IN LK MODEL REPORTED IN TRIM LINE
232.	TO IMPROVE THE UPTIME OF LEAK TESTING MACHINE FOR DIESEL CYLINDER HEAD (DV5 - VARIANT)
233.	TO INCREASE "PARA XYLENE" PRODUCTION BY OPTIMIZING HEAVY AROMATIC COLUMN OPERATION
234.	TO INCREASE THE PRODUCTIVITY OF PICKLING LINE ONE ADDITIONAL ACID TANK WITH ALL ACCESSORIES TO BE PROVIDED.
235.	TOTAL PRODUCTIVE MAINTENANCE IN PLANT & MACHINERY
236.	TRACTOR MATERIAL VARIANT COMPLEXITY MANAGEMENT
237.	TURBO-CENTRIFUGAL COMPRESSOR CONTROL SYSTEM DESIGN
238.	UPGRADATION AND MODIFICATION OF EXISTING WASTE STABILISATION POND
239.	UPGRADE OF INSTRUMENTS AND ITS CONTROL SYSTEM IN GLYCOL FLASH DRUM DEBOTTLENECKING UNIT.
240.	WELD CENTER LINE CRACK IN CS INCONEL 825 CLAD PIPE TO CS INCONEL 825 CLAD ELBOW WELD JOINT
241.	WESTERT DEDICATED FREIGHT CORRIDOR
242.	WIRELESS AC MAINS VOLTAGE DETECTOR
243.	WORKPLACE SAFETY MANAGEMENT SYSTEM FOR CONSTRUCTION OF RAILWAY BRIDGE OVER RUPSHA RIVER
244.	ZERO BASED COSTING: A RATIONAL APPROACH TO MANAGING PRICES

#### **B.S. Information Systems**

245.	IOT BASED TICKETING SUPPORT SYSTEM FOR DIFFERENTLY ABLED USERS
246.	SIMPLE DISTRIBUTED FILE SYSTEM
247.	STUDENT EVALUATION SYSTEM

#### **B.Tech. Engineering Technology**

248.	FLEXIBILITY IMPROVEMENT IN CHASSIS ASSEMBLY LINE 2 FOR MULTIPLE MODEL PRODUCTION
249.	PREDICTIVE LEARNING OF DIABETES BASED ON CLINICAL MEASURES

**LIST OF DISSERTATION SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED  
LEARNING PROGRAMMES IN THE YEAR 2017**

**M.B.A. Consultancy Management**

250.	A HOLISTIC STUDY ON FACTORS CONTRIBUTING TO AUDIENCE ENGAGEMENT WITH AN ARTICLE ON A WEBSITE
251.	A STUDY ON DEVOPS METHODOLOGY IN IT INDUSTRIES
252.	A STUDY ON IMPACT OF IMPLEMENTING NEW PRODUCT LINE
253.	ADOPTION OF CLOUD TO E-COMMERCE APPLICATIONS
254.	ADVANCE PROJECT MANAGEMENT IN OIL & GAS
255.	ANALYSIS & RE-ENGINEERING OF THE DATA LOAD PROCESS
256.	ANALYSIS AND AUTOMATION OF BUSINESS PROCESS OF UTILITY INDUSTRY
257.	ANALYSIS ON INDIAN STARTUPS - IT CONSULTANCY
258.	APPLICATION ASSESSMENT FOR CLOUD SUITABILITY
259.	APPLICATION OF PROJECT MANAGEMENT PROCESSES TO EXECUTE 'PLM-FINANCIAL & OPERATIONAL DASHBOARD' PROJECT
260.	ART AND SCIENCE OF NEUROMARKETING
261.	ASSESSMENT OF MARKET EXECUTION IN MODERN TRADE
262.	AVOIDING PROJECT FAILURE
263.	BILL PAY ENGAGEMENT AND OPTIMIZATION
264.	BUSINESS PROCESS ANALYSIS :MIGRATION OF VALUE CHAIN MANAGEMENT SYSTEM TO CRM
265.	BUSINESS PROCESS IMPROVEMENT
266.	CHANGE MANAGEMENT AND ANALYSIS
267.	CLOUD ASSESSMENT /ADOPTION STRATEGY
268.	CLOUD SERVICE MANAGEMENT FOR CLOUD PROVIDERS
269.	COAL SOURCING OPTIONS AND IMPACT OF COAL QUALITY VARIATION ON THERMAL POWER PLANT
270.	COMPARING ALTERNATE TECHNIQUES OF INDEXATION TO ENHANCE THE MICRO-MARKET SOLUTION
271.	COMPLIANCE PROJECT
272.	CONSULTANCY ASSIGNMENT FOR ACCESSIBILITY COMPLIANCE OF KEY PRODUCTS OF A LEADING HEALTHCARE COMPANY
273.	CONSULTATION AND IMPLEMENTATION OF PROJECT MANAGEMENT BEST PRACTICES
274.	CONSUMER SERVICES AND SATISFACTION ELECTRICITY DISTRIBUTION BUSINESS
275.	CORE BANKING MODERNIZATION A RESEARCH ON KEY TRENDS, CHALLENGES AND OPPORTUNITIES FOR IT COMPANIES
276.	DESIGN THINKING: AN APPROACH TO INNOVATION AND BUSINESS GROWTH
277.	DESIGNING OF SOLAR ROOF TOP PV SYSTEM
278.	DEVELOPING MODELS FOR ESTIMATING REVENUE USING DATA OF AIRLINES
279.	DEVELOPING STRATEGIC FACILITY CONSULTING LIFE CYCLE FOR REAL ESTATE PROJECTS AND SET UP A LEAN FACILITY MANAGEMENT SERVICE DELIVERY MODEL FOR SUSTAINABLE FACILITY MANAGEMENT FOR THE ORGANIZATION
280.	DIGITAL BANKING - ITS IMPACT ON INDIAN BANKS AND FUTURE PROSPECTS
281.	EFFECTIVE SUPPLY CHAIN MANAGEMENT
282.	EMPLOYEE RETENTION IN IT SECTOR
283.	ENERGY MONITORING AND SUSTAINABILITY
284.	ENHANCING FEATURES IN VIRTUAL PAYMENTS AND CARDS INDUSTRY
285.	ENVIRONMENT, HEALTH AND SAFETY MANAGEMENT ANALYTICS
286.	ERP & CRM INTEGRATION
287.	ERP IMPLEMENTATION IN UTILITY COMPANY.
288.	ESTABLISHING A PHARMACEUTICAL MANUFACTURING PLANT IN THE STATE OF RAJASTHAN (INDIA): FINANCIAL FEASIBILITY ASSESSMENT
289.	EVALUATION AND STUDY OF CRITICAL SUCCESS FACTORS (CSF) FOR AUTOMOTIVE TEST RIG DEVELOPMENT PROJECTS
290.	EVALUATION OF IMPACT OF CONVERSATIONAL BOTS ON LABORATORY INFORMATION MANAGEMENT SYSTEM
291.	EVALUATION OF THE "MICROSERVICES" APPROACH TO SERVICE-ORIENTED ARCHITECTURE (SOA) IMPLEMENTATION
292.	EXPLORATIVE STUDY OF THE TRIBAL HEALTH STATUS TO EVOLVE AN APPROPRIATE STRATEGY IN HOSPITAL OPERATION MANAGEMENT AND EXTENDED COMMUNITY HEALTH CARE PROGRAMME
293.	FORMULATE NEW RECRUITMENT STRATEGY AND PREPARE PROCESS MODEL
294.	GOING DIGITAL (CLOUD TRANSFORMATION)
295.	IMPACT AND EFFECTIVENESS OF OFFICERS PERFORMANCE APPRAISAL SYSTEM IN INDIAN AIR FORCE
296.	IMPACT OF ICD-10 FOR US HEALTHCARE PROVIDERS
297.	IMPROVING BUSINESS POSSIBLE OPPORTUNITIES & DIRECTIONS - MANAGEMENT CONSULTING PRACTICES
298.	IMPROVING PRODUCTION EFFICIENCY THROUGH LEAN MANUFACTURING IMPLEMENTATION FOR SIGNAL GENERATOR

	PRODUCTION IN VTL ELECTRONICS LTD
299.	INITIAL PUBLIC OFFER
300.	INNOVATION AND TECHNOLOGY MANAGEMENT - IT SERVICE INDUSTRY PERSPECTIVE
301.	INTERNET OF THINGS - CONSTRUCT AND IMPACT ON ENTERPRISES
302.	IT IMPACT ANALYSIS ON HEALTHCARE SYSTEM
303.	JOB INVOLVEMENT AND ITS IMPACT ON JOB SATISFACTION
304.	LEADERSHIP AND MANAGING CHANGE
305.	LOAN PRODUCT INTEGRATION OF BI WAREHOUSE WITH NETWORK FOR REVENUE ANALYSIS
306.	LOUVER DEVELOPMENT
307.	MAINTENANCE SERVICES IN ARMED FORCE
308.	MANAGER AS A CHANGE AGENT
309.	MANAGER PERCEPTION TOWARDS THE EMPLOYEE SEPARATION THROUGH ABSCONDING
310.	MARKET OPPORTUNITY - AL ICV TRUCK SPECIAL APPLICATIONS
311.	MARKET POTENTIAL ANALYSIS OF BIN LIFTER
312.	NEW DISTRIBUTION CAPABILITY DISRUPTION TO AIRLINE DISTRIBUTION SYSTEMS
313.	OIL AND GAS SYSTEM OBSOLESCENCE AND UPGRADE
314.	OPTIMIZING ORGANIZATIONAL STRUCTURE AND SKILLS USING UBS'S LEAN TRANSFORMATION FRAMEWORK
315.	OVERVIEW OF VARIOUS ASPECTS OF AN IT PROJECT MANAGEMENT
316.	PARTICIPATORY BANKING UNDER SHARIAH COMPLIANCE
317.	PEER TO PEER LENDING
318.	PM - IT INFRASTRUCTURE PROJECTS
319.	PMO MANAGEMENT APPLICATION
320.	PREDICTIVE MODEL FOR EMPLOYEE ATTRITION
321.	PRODUCT DIVERSIFICATION AND NEW PRODUCT DEVELOPMENT
322.	PRODUCT SUPPORT STRUCTURES FOR CLOUD APPLICATION AND ITS MAINTENANCE
323.	PROJECT EXECUTION BY IMPLEMENTING PROJECT MANAGEMENT TECHNIQUES (ELECTRICAL PERSPECTIVE)
324.	PROJECT FEASIBILITY STUDY ON INCREASING PLANT GENERATION CAPACITY & REGRESSION ANALYSIS ON MANAGEMENT PRACTICES FOR EFFICIENT OPERATION
325.	PROJECT MANAGEMENT IN AUTOMATION BASED POTABLE WATER SYSTEM
326.	PROJECT MANAGEMENT IN CONSTRUCTION OF COKE OVEN PLANT
327.	PROJECT MANAGEMENT TECHNIQUES FOR RESOURCE OPTIMISATION IN IT
328.	PROPOSE METHODS TO ACCELERATE ELECTRONICS DEVELOPMENT CYCLE TIME
329.	QUALCOMM AND BUSINESS CASE FOR LEADING THE WAY TO 5G
330.	RESEARCH ON BUSINESS PROCESS OUTSOURCING IN SUPPLY MANAGEMENT
331.	RISK IDENTIFICATION AND MANAGEMENT IN ENGINEERING
332.	RISK MANAGEMENT FOR CONTRACTORS & OWNERS IN CONSTRUCTION PROJECTS
333.	ROAD SAFETY MANAGEMENT
334.	SCOPE & IMPROVEMENT OF MEP CONSULTANCY IN CONSTRUCTION COST REDUCTION
335.	SIGNIFICANCE OF DOMAIN NAME IN WEBANALYTICS
336.	STAKEHOLDER MANAGEMENT IN CIVIL ENGINEERING PROJECT
337.	STRATEGIC ANALYSIS FOR ERP IMPLEMENTATION IN SMES
338.	STRATEGIC MANAGEMENT FOR TECHNOLOGY BASED INNOVATION
339.	STRATEGY ANALYSIS
340.	STUDY MARKET OPPORTUNITY FOR ARRIS ASSURANCE SOLUTIONS IN INDIA AND ASIA PAC REGIONS
341.	STUDY OF PROJECT MANAGEMENT CYCLE FOR IMPLEMENTING AN ENERGY MANAGEMENT SYSTEM
342.	STUDY ON AGILE PROJECT MANAGEMENT
343.	STUDY ON DEVELOPING VERSATILE PERSONALITY IN CHANGE MANAGEMENT
344.	STUDY ON PERFORMANCE EVALUATION SYSYTEM
345.	STUDY ON PROJECT TRANSITIONS FROM HIGH COST TO LOW COST CENTERS
346.	SUPPLY CHAIN MANAGEMENT AND ITS AUTOMATION FOR FORTUNE 50 AUTOMOTIVE GIANT
347.	TECHNOLOGIES FOR ZERO EFFLUENT DISCHARGE IN MOLASSES BASED DISTILLERY
348.	UNLOCKING HUMAN CAPITAL MANAGEMENT VALUE PROPOSITION
349.	VENDOR EVALUATION SYSTEM & LD ENABLEMENT PROCESS
350.	WINDCHILL IMPLEMENTATION AND INTEGRATION WITH ORACLE ERP

**M.B.A. Manufacturing Management**

351.	5S IMPLEMENTATION IN LUBRICATION MANAGEMENT
352.	A LEAN THINKING ON ROYAL ENFIELD'S ENGINE CAP NUT
353.	A STUDY ON EFFECTIVENESS OF ERP (SHIPPALM) SYSTEM WITH REFERENCE TO SYNERGY MARITIME PVT LTD, CHENNAI
354.	A STUDY ON EFFECTIVENESS OF SUPPLY CHAIN MANAGEMENT IN KABELSCHLEPP INDIA PVT LTD
355.	A SYSTEM ARCHITECTURE APPROACH TO GLOBAL PRODUCT DEVELOPMENT
356.	AGGREGATE PLANNING & PROJECT COSTING FOR PROTOTYPES
357.	APPLICATION OF LEAN PROJECT MANAGEMENT IN CONSTRUCTION PROJECTS
358.	BATTERY PCBA MODULE MANUFACTURING PROCESS DEVELOPMENT AND WELDING DEFECT REDUCTION
359.	CAPACITY ENHANCEMENT WITHOUT INVESTMENT
360.	CHALLENGES IN ADAPTING LEAN IN HIGH VOLUME MANUFACTURING
361.	COMPREHENSIVE SUPPLY CHAIN MANAGEMENT
362.	DECREASE THE IRREGULAR ROLL CHANGE DUE TO ROLL MARK
363.	DESIGN OPTIMISATION AND COST REDUCTION ANALYSIS FOR 9 SPEED MANUAL TRANSMISSION
364.	DESIGN AND DEVELOPMENT PLAN FOR POWER TRAIN ASSEMBLY LINE FROM 1 JPH TO 2 JPH CAPACITY
365.	DEVELOPMENT OF STRATEGIC PLAN TO IMPROVE BUSINESS POTENTIAL OF AN INDUSTRY BASED ON INSTALLED BASE
366.	EFFECT OF PLANNING AND CONTROL ON ORGANIZATIONAL PERFORMANCE - A CASE STUDY ON PETROCHEMICAL MANUFACTURING FIRM
367.	ELECTRICS AND AUTOMATION PROJECT MANAGEMENT: OPPORTUNITIES AND CHALLENGES IN JSW-BF4 PROJECT.
368.	EMPLOYEE GRIEVANCE MANAGEMENT SYSTEM
369.	ENHANCING THE YIELD & EFFICIENCY OF THE PLANT
370.	EXPLOSION PROOF ZONE SYSTEM PRODUCTS, MAINS POWER CONNECTORS & INSTRUMENT CABLES -MARKETING & SALES ANALYSIS RESEARCH
371.	GENERAL MANAGER
372.	IMPACT OF IOT INVENTORY MANAGEMENT
373.	IMPLEMENTATION OF MICROSOFT PROJECTS IN CONSTRUCTION
374.	IMPROVEMENT IN OTIF OF KEY CATEGORIES (NAMELY- WOVEN DRESS & WOVEN TOPS) OF VANHEUSAN WOMEN'S WEAR BRAND FROM 50 % TO 80% USING SIX SIGMA (DMAIC METHODOLOGY)
375.	IMPROVEMENT OF FINAL PRODUCT END WINDING CONDITION IN CONTINUOUS ANNEALING LINE
376.	IMPROVING PROFITABILITY
377.	INCREASE THE PACKAGING SPEED OF CONTINUOUS ANNEALING LINE
378.	LEAN PROCESS DESIGN
379.	LIQUID METAL THROUGHPUT INCREASED BY IMPROVING POT TURNAROUND TIME
380.	MANUFACTURING STRATEGY: PRODUCT PORTFOLIO MANAGEMENT
381.	MARKET POTENTIAL ANALYSIS OF PHOSPO GYPSUM IN FERTILIZERS AND PLASTER OF PARIS (POP) SEGMENT IN INDIA
382.	MARKET RESEARCH AND FORECASTING OF CENTRIFUGAL PUMPS MARKET
383.	MAXIMIZING OPERATIONAL EFFICIENCY TO REDUCE CYCLE TIME FOR MANUFACTURING PROCESS.
384.	NPI & APPROACHES TO OVERCOME DELAY AND RISKS IN PROJECTS.
385.	OPEX COST REDUCTION IN CRACKED GAS COMPRESSOR-TURBINE
386.	OPTIMAL PURCHASING USING LINEAR PROGRAMMING
387.	OPTIMISATION OF ELECTRONIC PACKAGING IN SURVEILLANCE SYSTEM IN NAVAL SHIP
388.	OPTIMISATION OF POWDER COATING PLANT USING LEAN PRINCIPLES
389.	OPTIMIZATION IN DIMENSION CHANGE TIME IN BOBBIN LOADING OF CALENDARING MACHINE
390.	OPTIMIZATION OF GAS TURBINE BY INSTALLING EVAPORATIVE COOLER
391.	OPTIMIZATION OF PROCESS PARAMETERS OF CORROSION MEDIUM ON FRICTION STIR WELDED MAGNESIUM ALLOY
392.	OPTIMIZE MATERIAL HANDLING MANPOWER IN INJECTION MOULDING PLANT BY MINIMIZING THE WASTES
393.	OXIDIZED WHITE LIQUOR AS CAUSTIC REPLACEMENT IN OXYGEN DELIGNIFICATION
394.	PAINT SHOP OPERATIONS SERVICE PROVIDER CHANGE & PROVE OUT
395.	PATANJALI IMPACT ON INDIAN FMCG
396.	PLANNING AND IMPLEMENTATION OF PROJECT
397.	PLANNING PROCESS AND PARAMETERS STANDARDIZATION
398.	PROCESS CONTROL SYSTEM DEVICE INTEGRATION FUNCTIONALITY VALIDATION AND TEST EXECUTION
399.	PROCESS IMPROVEMENT OF ONLINE DIAPER PACKAGING MACHINE
400.	PROCESS OPTIMIZATION, CAPACITY ENHANCEMENT
401.	PRODUCTION ENGINEER
402.	PRODUCT QUALITY IMPROVEMENT USING STRUCTURED PROBLEM SOLVING AND TQM APPROACH
403.	PRODUCTION PLANNING: A CASE STUDY IN PHARMACEUTICAL MANUFACTURING INDUSTRY
404.	PRODUCTIVITY AND QUALITY IMPROVEMENT OF DEFENCE ELECTRONIC PRODUCT



405.	PRODUCTIVITY AND QUALITY STRATEGIES IN MANUFACTURING ORGANISATION
406.	PRODUCTIVITY IMPROVEMENT AT CNC LINE
407.	PRODUCTIVITY IMPROVEMENT AT MPFI LINE FOR SUZUKI FUEL FILTERS
408.	PROJECT EXECUTION STAGES INVOLVED DURING SYNTHESIS OF A NEW CHEMICAL ENTITY (NCE) IN A PHARMA CRO COMPANY
409.	PROJECT TAKE OFF TO REDUCE VEHICLE PRODUCTION LOSS DUE TO PARTS QUALITY
410.	QUANTITATIVE AND QUALITATIVE ANALYSIS ON TECHNOLOGY MANAGEMENT IN AIRCRAFT PRODUCT DEVELOPMENT
411.	RECOVERY OF FLASH STEAM
412.	REDUCTION IN COPQ (COST OF POOR QUALITY)
413.	REDUCTION OF ALUMINIUM SCRAP IN WIRE DRAWING PROCESS OF CONDUCTOR BY TQM
414.	REDUCTION OF MATERIAL REJECTION IN DIESEL ENGINE
415.	RESEARCH AND ANALYSIS OF THE EFFECTIVENESS OF TOTAL QUALITY MANAGEMENT IDEOLOGY IN VALVES PRODUCTION SHOP FLOOR OF HPBP
416.	RETHINKING PROJECT MANAGEMENT
417.	RISK MANAGEMENT STUDY WITH A SPECIAL FOCUS ON POWER TRANSFORMER EXPOSED TO THE ROAD
418.	SEASONING SYSTEM IMPROVEMENT IN SNACKS LINE
419.	SIMPLIFICATION OF PRODUCTION SYSTEM USING FLOW CONCEPT
420.	SIX SIGMA IMPLEMENTATION TO REDUCE REJECTION RATE OF BEARING RINGS DUE TO RACEWAY UNCLEAN PROBLEM
421.	SIX SIGMA PROJECT IDENTIFICATION AND SELECTION
422.	SMART MOBILITY IN INDIAN AUTO INDUSTRY
423.	STANDARD TIME DATA SYSTEM IMPLEMENTATION
424.	STRATEGIC APPROACH MANAGING THE CHANGE FOR A DEMERGED BUSINESS ENTITY WHILE ESTABLISHING TECHNOLOGY LANDSCAPE
425.	STUDY OF REVERSE SUPPLY CHAIN AND RECYCLING IN PLASTIC INDUSTRY.
426.	SUPPLY CHAIN MANAGEMENT OF AIRCRAFT SPARES IN INDIAN AIR FORCE
427.	SUPPLY CHAIN STRATEGIES ADOPTED IN WAREHOUSES WITH SPECIAL REFERENCE TO M/S. INDUSTRIAL FANS INDIA PVT. LTD.
428.	TAKT UP ACTIVITY (CYCLE TIME REDUCTION) OF ONE OF CHASSIS PART PRODUCTION LINE.
429.	TO ENHANCE QUALITY OF STEER AXLE IN LD FORKLIFT OF GODREJ MATERIAL HANDLING
430.	TO REDUCE ABNORMAL ROLL CHANGE DUE TO SCRATCHES IN COLD ROLLING MILL
431.	TO REDUCE DOWNTIME OF AUTOMATIC LABELING MACHINE AND IMPROVEMENT IN QUALITY BY CONDUCTING QUALITY CIRCLES
432.	TO REDUCE THE REJECTION RATE OF BEARING ASSEMBLY PROCESS BY USING SIX SIGMA METHODOLOGY
433.	TQM-ORGANIZATIONAL EFFECTIVENESS-CUSTOMER SATISFACTION INDEX
434.	UNDERSTANDING THE PROCESS CAPABILITY (CP,CPK) OF THE "INDIVIDUAL DISC COATING MACHINE" AND IMPROVING THE SAME
435.	VALUE ANALYSIS
436.	YIELD IMPROVEMENT ON ACTIVATOR COMPONENT BY VALUE STREAM MAPPING AND COST REDUCTION BY VA/VE

#### M.B.A. Quality Management

437.	5S IMPLEMENTATION IN STORE
438.	A COMPREHENSIVE STUDY ON CUSTOMER REQUIREMENTS IN REGULATORY OUTSOURCING
439.	A STUDY ON LEAN MANUFACTURING, IT'S IMPLEMENTATION & ADOPTION BARRIERS AT O/E/N INDIA LIMITED.
440.	ANALYSE AND IMPROVE QUALITY ASSURANCE ACTIVITIES AT SQAE(L), SECUNDERABAD USING PROJECT MANAGEMENT APPROACH AND VALUE STREAM MAPPING TECHNIQUES
441.	ANALYSIS OF QUALITY MANAGEMENT SYSTEM IN OEN INDIA LTD.
442.	ANALYSIS OF SEAL FAILURE OF MULTIPOINT FLOW SELECTOR AND PREVENTION
443.	ANALYSIS OF VENDORS SELECTION & PERFORMANCE FOR OFF-LOADED FABRICATION WORKS IN A CONSTRUCTION INDUSTRY
444.	APPLICATION OF MECHANIZATION AND DIGITILIZATION TECHNOLOGY IN CONSTRUCTION INDUSTRY
445.	BECOME A BETTER LEADER
446.	CHANGE MANAGEMENT IN SOFTWARE PROJECT
447.	COMMAND CENTRE FOR OBPC
448.	DEFECT FREE DESIGN FOR MANUFACTURABILITY FOR PCB'S
449.	DESIGNING AND ESTABLISHING A FRAMEWORK FOR MONITORING KEY METRICS OF AN ONLINE TIME-BASED DISCOUNT RESERVATION STARTUP COMPANY
450.	DEVELOPMENT OF LOT CONTROL & TRACEABILITY MANAGEMENT SYSTEM BY USING QUALITY MANAGEMENT PRACTICES
451.	DIAGNOSTIC STUDY ON BDS VIRCON PEOPLE PROCESSES AND CULTURE
452.	EFFECTIVE CHANGE MANAGEMENT AND ENSURING QUALITY FOR SHORTER RELEASE CADENCE
453.	EFFECTIVE EMPLOYEE MANAGEMENT -IMPROVE THE PRODUCTIVITY

454.	EFFECTIVENESS OF QUALITY SYSTEMS TRAINING
455.	EFFICIENCY AND QUALITY IMPROVEMENT IN KT CREATION
456.	ENHANCING TELECOM APPLICATION QUALITY FOR BETTER USER EXPERIENCE
457.	ENHANCING THE GROWTH AND DEVELOPMENT OF TATA CONSULTANCY SERVICES IN BUSINESS INTELLIGENCE AREA.
458.	ENHANCING THE TRACKING SYSTEM FOR MINOR ENHANCEMENTS OF APPLICATIONS
459.	EVALUATING LEADERSHIP STYLES IN AN ORGANIZATION TO IMPROVE THE ABILITY OF THE LEADER TO LEAD
460.	EXPLORATIVE STUDY AND ANALYSIS OF HUMAN RESOURCE PLANNING IN ABB INOPC IA PG BUSINESS UNIT INORDER TO OPTIMISE RESOURCE UTILIZATION AND IMPROVE PRODUCTIVITY
461.	FIRST TIME RIGHT IMPROVEMENT THROUGH IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT AT KOEL SUPPLIER
462.	FIRST TIME RIGHT YIELD IMPROVEMENT IN TYRE CURING PROCESS
463.	IMPLEMENTATION OF BUILT IN QUALITY PROCESS IN ENGINEERING SIMULATIONS
464.	IMPLEMENTATION OF PROGRAM MANAGEMENT IN A CLIENT ACCOUNT
465.	IMPLEMENTATION OF SOFTWARE BASED PROCESS CONTROL DOCUMENT FOR MANAGING PRODUCTION
466.	IMPORTANCE OF QUALITY AND RISK ASSESSMENT IN PROJECT MANAGEMENT
467.	IMPROVE PROVIDE DATABASE OPERATIONS (PDO) QUALITY % USING SIX SIGMA METHODOLOGY
468.	IMPROVEMENT IN VIBRATION INDUCED FRETTING CORROSION OF GALVANIZED STEEL
469.	INTEGRATED QUALITY ASSURANCE & INSPECTION SERVICES FOR ADANI GROUP OF COMPANIES
470.	INTRODUCING DIGITIZATION AND AUTOMATION IN THE PROCESSES OF QUALITY MANAGEMENT DEPARTMENT TO MEET THE INCREASED BUSINESS NEEDS AND CUSTOMER EXPECTATIONS.
471.	LEAD TIME REDUCTION IN POWERTRAIN ASSEMBLY VALIDATION FOR NEW PRODUCT LAUNCH
472.	MARKET ANALYSIS FOR PFC (POWER FACTOR CORRECTION) PRODUCT.
473.	MARKETING MOBILE CAR WASH
474.	ONLINE VEHICLE TRACKING SYSTEM IN AUTOMOBILE WORKSHOP
475.	PERFORMING DESIGN OF EXPERIMENTS ON MANUFACTURE & REPAIR OF DRILL STEM ELEMENTS FOR COST REUCTION
476.	PLANT DELIVERY IMPROVEMENT
477.	PREDICTIVE ANALYSIS OF ELECTRICAL TEST DATA TO REDUCE INK-JET CARTRIDGE FIELD FAILURE RATE
478.	PROCESS CONTROL ON QUALITY METRICS BY DEVELOPING PREDICTION MODELS
479.	PROCESS STREAMLINING AND WASTAGE MINIMIZATION AT GUWAHATI PACKING STATION
480.	PRODUCT BASED OPTIMIZED LOGISTICS STRATEGY
481.	PROJECT QUALITY MANAGEMENT- A STUDY BASED ON SOFTWARE SERVICE INDUSTRIES
482.	PROJECT RETROSPECTIVES: SELECTING A BETTER PROJECT
483.	QA PROCESS EVALUATION AND STANDARDIZATION
484.	REDUCE NON-CONFORMITY BY OPTIMIZING RAW MATERIAL DEFECTS
485.	REDUCTION OF RATE OF ICU READMISSIONS WITHIN 48 HOURS OF TRANSFER OUT, FROM 2.75 TO LESS THAN 1 IN A PERIOD OF 3 MONTHS
486.	SALES PROMOTION
487.	SCOPE OF ARTIFICIAL INTELLIGENCE IN TRAVEL TECHNOLOGIES
488.	SIX SIGMA METHODOLOGY FOR REDUCTION OF SOFTWARE DEFECTS IN ACTIVE SAFETY COMPONENTS OF VEHICLES
489.	SPEND ANALYTRICS AND LOGISTICS (SUPPLY CHAIN MANAGEMENT)
490.	STANDARDIZATION OF CHANGE MANAGEMENT SYSTEM FOR MEDHEALTH-QM2507
491.	STREAMLINING AND IMPROVEMENT BY IMPLEMENTATION OF TQM, SQC TOOLS,QA SYSTEMS W.R.T AIRCRAFT MAINTENANCE
492.	STREAMLINING THE PROJECT PROCESS MANAGEMENT SYSTEM
493.	STUDY ON TOTAL QUALITY MANAGEMENT IN INTAS PHARMACEUTICAL LIMITED (BIOPHARMA DIVISION)
494.	SUCCESSFUL PROJECT MANAGEMENT
495.	THE FUNCTIONING OF SUPPLY CHAIN MANAGEMENT IN RELIANCE RETAIL. A CASE STUDY- OPTIMUM UTILIZATION OF RESOURCES AND BETTER PRODUCTIVITY

#### **M.S. Consultancy Management**

496.	DATACENTER SET UP AND MIGRATION AND INTERNAL IT ORGANIZATION SETUP FOR SMOOTH AND EFFECTIVE FUNCTIONING OF BUSINESS OPERATIONS.
497.	DEMONETISATION & DIGITAL ECONOMY IMPACT ON CITIZEN, GOVERNMENT & BUSINESSES

#### **M.S. Manufacturing Management**

498.	BUILDING ONE VERSION OF TRUTH PLATFORM FOR DRIVING CONTINUAL SERVICE IMPROVEMENT
499.	DESIGN AND DEVELOPMENT OF WORK STANDARD ESTIMATION (MOST) TRAINING MANUAL
500.	EFFECT OF DEPLUG FORCE ON SIM CARD LIFE CYCLE AND PRODUCTION
501.	ENABLING NEW TIER 1 VENDORS TO MEET WORLD CLASS BOSCH QUALITY STANDARDS THROUGH CIP METHODOLOGY
502.	MARKETING TORQUE MONITORING & DIAGNOSTIC SERVICES FOR THE STEEL INDUSTRY IN INDIA

503.	MODULE DEVELOPMENT IN VISION ASSISTANT TO EXTRACT METALLOGRAPHIC INFORMATION
504.	PROJECT TIMELINE & COST REDUCTION FOR A COMPETITIVE PASSENGER VEHICLE LAUNCH
505.	SAFETY MEASURES FOR MAINTENANCE OF FIRE FIGHTING PUMPS

#### M.S. Quality Management

506.	DEVELOPMENT OF DECISION MAKING FRAMEWORK & FINANCIAL TOOL FOR HYBRID ENERGY SYSTEM MICROGRIDS
507.	DRILL SHAFT TO PERFORM BONE REMOVAL FOR IMPLANTING THE COMPATIBLE ACETABULAR SCREW IMPLANT
508.	REDUCING NUMBER OF WIRING DEFECTS IN MODULE ASSEMBLY
509.	SCRUM PROJECT MANAGEMENT

#### M.S. Software Systems

510.	A NEW ROUTING ALGORITHM FOR TACTICAL AD-HOC NETWORKS
511.	AI ASSISTED CHAT
512.	AI BOT - SURVEILLANCE SYSTEM TO DETECT POTENTIAL THREATS
513.	ALTIBOX - A SMART WAY TO WORK
514.	ANDROID APPLICATION FOR PERSONALIZED DIRECTORY OF SERVICES.
515.	ANDROID BOOTSTRAP PROJECT
516.	AUTO GENERATE TEST SCENARIOS AND TEST CASES USING GHERKIN SYNTAX
517.	AUTOMATE CAN DBC SOFTWARE DEVELOPMENT ON ECU WITH AUTOSAR ARCHITECTURE
518.	AUTOMATED ACADEMIC COURSE SCHEDULER
519.	AUTOMATING IEMS USING UFT
520.	AUTOMATING THE PROCESS OF ALLOCATION AND DEALLOCATION OF STORAGE TO/FROM HOSTS CONNECTED TO THE STORAGE ARRAY.
521.	AUTOMATION SOLUTION FOR ACCESS MANAGEMENT IN ADEPT APPLICATION
522.	AUTOSCALING IN A CLOUD BASED LOAD BALANCING APPLIANCE (NETSCALER).
523.	AUTO-TAGGING AND SEARCHING EMAILS USING AN OUTLOOK PLUG-IN
524.	CANDIDATE RANKING BY COMPETENCY THROUGH CV ANALYSIS
525.	CLIENT ARCHITECTURE FOR SEAMLESS AND EFFICIENT SOURCE SELECTION AND SMART MONETISATION OF OTT SERVICES
526.	CONCEPT MAP BASED TOOL FOR EVALUATING A STUDENT'S UNDERSTANDING IN A TOPIC
527.	CONFIGURING A DEVICE USING GRPC PROTOCOL
528.	CQRS, EVENT SOURCING USING AKKA AND ITS INTEGRATION WITH CLOUD
529.	CRAFT FRAMEWORK ENHANCEMENTS & CONTINUOUS INTEGRATION
530.	DATA ANALYTICS TO IMPROVE OPERATIONAL EFFICIENCY
531.	DATA CAPTURE SYSTEM FOR IOT DEVICES
532.	DATABASE SERVER PERFORMANCE
533.	DEBT & EQUITY BASED CROWD FUNDING INVESTMENTS PORTAL DIGITAL TRANSFORMATION OF REAL ESTATE INVESTMENTS
534.	DESIGNING OF A MIDDLE-WARE SYSTEM
535.	DEVELOPING A MOBILE CHATBOT SOLUTION INTEGRATED WITH ARTIFICIALLY INTELLIGENT AGENTS & MACHINE LEARNING
536.	ENHANCED ANALYTICS FOR HOTSPOT CRASH LOG DATA
537.	ENHANCEMENT IN TESTING PERFORMANCE OF WLAN DUT ( I.E. DEVICE UNDER TEST) USING CABLED ENVIRONMENT
538.	EXAMPLE BASED MACHINE TRANSLATION
539.	EXPLORATION OF BLOCKCHAIN TECHNOLOGY FOR DEVELOPMENT OF DIGITAL INDIA
540.	FILE SYSTEM FOR STORAGE CLASS MEMORY
541.	GAMESTREAM GAME PLAYBACK AUTOMATION USING UX RESOURCE CREATOR
542.	GEOGRAPHICAL INFORMATION SYSTEM & REMOTE SENSING TOOL
543.	HELICOPTER SNAG ANALYSIS, VISUALISATION AND ANOMALY DETECTION USING FLIGHT DATA RECORDER (FDR) DATA
544.	HVAC PRODUCT SELECTION SYSTEM
545.	IMPROVEMENT IN ADHOC WIRELESS NETWORK PERFORMANCE PARAMETERS USING SMART ANTENNA
546.	LANE KEEP ASSIST-VALIDATION METHODS USING DATA ANALYTICS
547.	LATE BINDING DECISION CONTROLLER FOR TEST AUTOMATION FRAMEWORK EXTENSION TO DATA DRIVEN APPROACH
548.	LOG DEPOT MANAGENET
549.	MPEG-DASH STREAMING
550.	MULTIPLE CODE EDITOR
551.	NEAR REAL TIME LOG ANALYSIS AND MINING
552.	OPENFLOW AND ITS USE CASE IN NETWORK FUNCTION VIRTUALIZATION (NFV)
553.	PAYMENT SYSTEM
554.	PICK ROUTE OPTIMIZATION
555.	PREDICTING HOUSE PRICE ON AMES DATASET

556.	PREDICTIVE ANALYTICS ON CANCER DATA
557.	PUBLICATION TRACKING AND CONTROL - USING ORACLE DESIGNER TOOLS
558.	RELEASE OBJECT AND ENVIRONMENT TRACKING
559.	ROAD VEHICLE DIAGNOSTIC COMMUNICATION BASED ON CAN-FD
560.	SAAS MODEL MIGRATION - IMPACT TO REQUIREMENTS ENGINEERING
561.	SCALABLE STREAMING APPLICATION WITH ANALYTICS & DATA VISUALIZATION
562.	SECURING THE TRANSMISSION OF DATA
563.	SENTIMENT ANALYSIS ON TWITTER DATA
564.	SINGLE LOGIN PLATFORM
565.	SMART INTEGRATED 2 WHEELER IGNITION SYSTEM
566.	SOFTWARE BUG TRACKER
567.	SOFTWARE UNIT TESTING COVERAGE, EFFICIENCY AND ADEQUACY
568.	SOUTHBOUND SDK DRIVER FOR STORAGE ARRAY
569.	STRUCTURAL HEALTH MONITORING SYSTEM DESIGN USING WIRELESS SENSOR NETWORKS
570.	SUBSCRIPTION MODEL FOR PTC INSERVICE 10.2
571.	SUMMARIZATION OF ONLINE BOOKS USING HIDDEN MARKOV MODEL ALGORITHM
572.	TEST AUTOMATION FOR WAREHOUSE MANAGEMENT SYSTEM
573.	TEST AUTOMATION OF REMOTE PATIENT MONITORING SYSTEM
574.	TRANSACTION MANAGER
575.	UTILITRON- TEST AUTOMATION METHODOLOGY FOR MORTGAGE APPLICATION CREATION FROM THE EXPERT LENDER MORTGAGE SYSTEM

#### **M.Tech. Manufacturing Management**

576.	A STUDY ON BRAND AWARENESS AND CUSTOMER PERCEPTION OF RANE BRAKE LINING
577.	A STUDY ON BRAND PREFERENCE OF VOLKSWAGEN CARS AMONG CONSUMERS
578.	ADDITIVE MANUFACTURING: TECHNIQUES AND OPTIMIZATION OF PROCESS PARAMETERS
579.	ALTERNATE HEATING METHODOLOGY FOR HEATING PROCESS IN SURFACE TREATMENT
580.	AN ANALYSIS OF MAINTENANCE MANAGEMENT SYSTEM IN A CONSTRUCTION FABRICATION YARD SERVING THE OFFSHORE OIL AND GAS INDUSTRY
581.	AN ANALYTICAL APPROACH TOWARDS ENHANCING THE SUPPLIES BY JIT IMPLEMENTATION - LEAN CONCEPTS
582.	AN ANALYTICAL STUDY ON HOW THE INTERNET OF THINGS CAN CONTRIBUTE TO SUSTAINABLE DEVELOPMENT AND HOW FAR THE INDIAN INDUSTRIES HAS REACHED IN ATTAINING SUSTAINABILITY.
583.	AN APPROACH TO JOB SCHEDULING IN MULTI PROJECT R&D ENVIRONMENT USING AGENT BASED SYSTEMS APPLYING THEORY OF CONSTRAINTS
584.	AN EXPLORATORY STUDY ON IMPLEMENTATION OF LEAN MANUFACTURING PRACTICES IN A READYMADE GARMENT FACTORY
585.	ANALYSIS AND IMPROVEMENT OF VENDOR DELIVERY PERFORMANCE
586.	ANALYSIS OF BRAZE STRENGTH OF CARBIDE TO DIFFERENT GRADES OF STEEL
587.	ANALYSIS OF COOLANT HOLES IN A SOLID CARBIDE DRILL
588.	ANALYSIS OF FREQUENT FAILURE IN RUBBER COUPLING AND AV MOUNTS IN ENGINE TESTBENCH TROLLEYS WHILE TESTING ENGINES.
589.	ANALYSIS OF GLOBAL BEST PRACTICES FOR INNOVATIVE ADAPTATION IN INDIAN SHIBUILDING INDUSTRY & INCREASING PRODUCTIVITY OF SHIYARD BY EFFECTIVE MANUFACTURING ORGANIZATION AND MANAGEMENT DEVELOPMENT
590.	ANALYSIS OF O-RING FAILURE IN AIRCRAFT FLUID SYSTEMS AND LEAKAGE PREVENTION BY ROBUST DESIGN AND IMPROVED MANUFACTURING APPROACH
591.	APPLICABILITY OF ROTATIONAL INERTIA FACTOR IN ROAD LOAD FORCE CALCULATION WHEN USED TO SIMULATE ON A CHASSIS DYNAMOMETER
592.	APPLICATION OF FAILURE MODE, EFFECTS & CRITICALITY ANALYSIS TO EVALUATE THE CNC LATHE IN MANUFACTURING INDUSTRY
593.	APPLICATION OF FMEA IN CEMENT MANUFACTURING
594.	APPLICATION OF LOTO ON MAINTENANCE OF BATCHING PLANT AND CRUSHER PLANT
595.	APPLICATION OF MANUFACTURING TECHNOLOGY AND COSTING TECHNIQUES TO ESTABLISH A COST MODEL FOR INVESTMENT CASTING PROCESS
596.	APPLICATION OF PRODUCT LIFECYCLE MANAGEMENT APPROACH IN DEVELOPMENT OF TARGETED SMALL BIOMOLECULES
597.	APPLICATION OF STATE OF ART GAS CLEANING TECHNOLOGY TO REDUCE THE DUST CONTENT & ENVIRONMENTAL POLLUTION IN BLAST FURNACE
598.	APPLICATION OF STATISTICAL CONTROL TOOLS TO IMPROVE THE QUALITY PERFORMANCE OF GLOBAL DESIGN PROJECTS HANDLED
599.	APPLICATION OF STATISTICAL PROCESS CONTROL TOOLS TO EVALUATE THE PROCESS CAPABILITY IN THE NEW PROCESS DEVELOPMENT OF VARIOUS UNIT OPERATIONS IN BIOPHARMACEUTICAL INDUSTRY
600.	APPLICATION OF TAGUCHI METHODOLOGY FOR OPTIMIZATION OF FACTORS AFFECTING PROJECT DELIVERABLES IN

	ENGINEERING SERVICES
601.	APPLICATION OF VIRTUAL DESIGN TOOLS IN DESIGN OPTIMIZATION OF AUTOMOTIVE BIW PARTS FULFILLING MANUFACTURING REQUIREMENTS
602.	APPLICATIONS OF LEAN MANAGEMENT PRINCIPLES IN WHITE COLLAR JOBS (OFFICE AND ADMINISTRATIVE WORK)
603.	ASSESSMENT OF OCCUPATIONAL HEALTH, SAFETY & ENVIRONMENT MANAGEMENT AT CS2 & H2SO4 PLANT GRASIM INDUSTRIES LIMITED, BIRLAGRAM, NAGDA
604.	ASSESSMENT OF TOTAL QUALITY MANAGEMENT PRACTICES ON ORGANISATIONAL PERFORMANCE
605.	ASSET MAINTENANCE STRATEGY
606.	AUTOMATIC AIR RELEASE VALVE DEVELOPMENT PROJECT
607.	AUTOMATION OF CERAMIC TILE CLEANING PROCESS
608.	AUTOMATION OF THE MAPPING PROCESS OF ROUGH DIAMOND AND MARKING OF GEOMETRIC FEATURE LINES ON IT
609.	AUTOMATION OF TOLERANCE LOOP IDENTIFICATION IN STACK-UP ANALYSIS
610.	AUTOMATION TESTING ON ECU USING HARDWARE IN LOOP TESTING BY ELECTRICAL AND ELECTRONICS TECHNOLOGY
611.	AUTOMOTIVE ASRS (AUTOMATIC STORAGE AND RETRIEVAL SYSTEM) PERFORMANCE ENHANCEMENT
612.	BASIC & ADVANCE MATERIAL SCIENCE FOR HYDRO FIELD
613.	BATCH CYCLE TIME IMPROVEMENT OF MASTIC
614.	BUSINESS PROCESS RE ENGINEERING
615.	CAPACITY ENHANCEMENT OF INDUSTRIAL VALVES THROUGH LEAN MANUFACTURING TECHNIQUES
616.	COMMON RAIL FUEL INJECTION SYSTEM DESIGN FOR DIESEL ENGINE
617.	COMPOSITE REAR UNDER RUN PROTECTION DEVICE FOR ECE R58 REVISION-3
618.	CONCEPT DESIGN APPROACH OF CRANK TRAIN OF A 4 CYLINDER DIESEL ENGINE FOR TRUCK ENGINE
619.	CONCEPTUAL DESIGN OF PORTABLE DEVICE TO SUPPORT MOBILITY CHALLENGE
620.	CONTROLS AT PURCHASING USING DATA ANALYTICS
621.	COST EFFECTIVE APPROACH IN ALUMINIUM INGOT PRODUCTION BY IMPROVING THE STANDARD OPERATING PROCEDURES
622.	COST ESTIMATION TERMINOLOGY OF PLASTIC INJECTION TOOLS
623.	COST REDUCTION IN TRANSVERSE LINK - SNAP RING BY LOCALIZATION
624.	CUMI IS HAVING A VERY LOW MARKET SHARE IN BFL, WE TOOK THIS DEVELOPMENT AS A CHALLENGE ON HOW WE CAN INCREASE OUR MARKET SHARE IN CRANKSHAFT SEGMENT
625.	CYCLE TIME OPTIMIZATION FOR MILLING OPERATION ON HMC BY SIX SIGMA METHOD
626.	DEPICT RESISTANCE SPOT WELDING PROCESS BY ARTIFICIAL NEURAL NETWORK APPROACH TO ESTIMATE THE WELD QUALITY
627.	DESIGN & ANALYSIS OF VERTICAL SURGE TANK WITH NICKEL ALLOYS
628.	DESIGN & DEVELOP 20T EXCAVATOR FUEL SAVING KIT THROUGH HYDRAULIC OPTIMIZATION
629.	DESIGN AND ANALYSIS OF AIRBAG CONNECTOR TO AVOID FAILURE OF AIRBAG DEPLOYMENT
630.	DESIGN AND DEVELOPMENT OF DUEL OUTLET ADAPTORS FOR LARGE PROPELLANT TANKS.
631.	DESIGN AND DEVELOPMENT OF HEAT RECOVERY SYSTEM FOR DEODORIZER COLUMN IN OIL PLANT
632.	DESIGN AND DEVELOPMENT OF QUICK CHARGING INLET FOR ELECTRIC VEHICLE
633.	DESIGN AND OPTIMIZATION OF SUBSTATION PROTECTION RELAY PANELS USING SIPROTEC 5 NUMERICAL RELAYS
634.	DESIGN DEVELOPMENT IN STUFFING BOX FOR BALL MILL WATER INJECTION
635.	DESIGN FOR GRID TIED 1 MW SOLAR ROOFTOP SYSTEM AT GODREJ APPLIANCE FACTORY, MOHALI
636.	DESIGN MODIFICATION & DEVELOPMENT OF ROCKER SHAFT ASSEMBLY IN TWO WHEELER ENGINE
637.	DESIGN OF A LIGHT WEIGHT BUSINESS CLASS SEAT FOR A LONG HAUL FLIGHTS
638.	DESIGN OF ADAPTIVE DAMPER FOR PASSENGER CAR
639.	DESIGN OF BOGIE SUSPENSION FOR HAULAGE VEHICLES
640.	DESIGN OF GROUND BASED PALM TREE TYPE TELECOMMUNICATION MONOPOLE TOWER
641.	DESIGN OF SUPPORT ASSEMBLY FOR VEHICLE STEERING COLUMN
642.	DESIGN OF TAILOR-WELDED-BLANK REINFORCEMENT STRUCTURES IN AUTOMOBILE BIW
643.	DESIGN OPTIMISATION BY MATERIAL CHANGE
644.	DESIGN OPTIMIZATION OF EXTENSION SET USED FOR MEDICATION ADMINISTRATION
645.	DESIGN SOLUTION IMPLEMENTATION FOR REAR ANTI ROLL BAR ARRANGEMENT FIELD FAILURES IN MINING VEHICLES
646.	DESIGN VALIDATION BY VIRTUAL BUILD BEFORE PRODUCTION BUILD
647.	DESIGNING OF LOW COST END COVER PLATE BY CHANGING PROCESS IN ORDER TO INCREASE PRODUCTION RATE AND REDUCE PROCESS COST
648.	DETECTION OF BROKEN DRILL BITS BEFORE PANEL MACHINING
649.	DETERMINATION OF EROSION BARRIERS OF COATING FOR HIGH TEMPERATURE APPLICATION
650.	DEVELOP A COMPREHENSIVE TRAINING MODULE FOR PERSONALITY GROOMING & ENHANCING INTERVIEW SKILLS FOR ENGINEERING STUDENTS AND IMPLEMENT IT IN AN ENGINEERING COLLEGE
651.	DEVELOP MANUFACTURING INTELLIGENCE FOR FINE POWDER PROCESSING THROUGH AUTOMATION
652.	DEVELOPING INVENTORY POLICIES FOR AVT MCCORMICK INGREDIENTS PVT LTD

653.	DEVELOPMENT OF DECISION SUPPORT SYSTEM FOR FILAMENT WINDING MANUFACTURING OPERATION
654.	DEVELOPMENT ADVANCED TOOL FOR MANUFACTURING LIFE-CYCLE MANAGEMENT [ATM]
655.	DEVELOPMENT AND IMPLEMENTATION OF NEW COLLIMATOR
656.	DEVELOPMENT OF A COST EFFECTIVE CMMS SYSTEM TO CONTROL ALL THE MAINTENANCE ACTIVITIES AND ALSO TO KNOW HOW EFFICIENTLY THE SAME SOLUTION CAN BE USED FOR SUCCESSFUL MANAGEMENT OF A PROJECT
657.	DEVELOPMENT OF A DATABASE FOR MAINTENANCE MANAGEMENT SYSTEM IN AN INDUSTRY
658.	DEVELOPMENT OF AIR DISC BRAKE ACTUATOR LIFE TEST FACILITY
659.	DEVELOPMENT OF ELECTRONIC CONTROL UNIT (ECU) FOR ELECTRONIC POWER STEERING
660.	DEVELOPMENT OF MAINTENANCE STRATEGY FOR A HYDROCARBON GAS TREATMENT PLANT
661.	DEVELOPMENT OF PERFORMANCE TEST BENCH FOR AIR PROCESSING DEVICES
662.	DEVELOPMENT OF PREMIUM ALOXIDE BELT -HAND TOOL MARKET
663.	DEVELOPMENT OF SGC440 FOR AUTOMOTIVE AND PANEL APPLICATIONS
664.	DEVELOPMENT OF SILICON CARBIDE SUBMICRON POWDER FOR DIESEL PARTICULATE FILTER PASTE APPLICATION
665.	DEVELOPMENT OF WHEEL HUB BY HOT FORGING TECHNOLOGY
666.	DIGITAL APPRAISAL REPORT SYSTEM (DIGITAR) IN INDIAN AIR FORCE
667.	DRIVING DESIGN TOWARDS SUSTAINABLE PRODUCTS
668.	DYNAMICS-RIDE & HANDLING ACHIEVEMENT BY SUSPENSION DESIGN OPTIMIZATION IN PASSENGER CAR
669.	EFFECT OF BORON IN STEEL
670.	EFFECT OF PHOSPHORUS ON CORROSION BEHAVIOUR OF SG IRON
671.	EFFECT OF VALUE ANALYSIS AND VALUE ENGINEERING CARRIED OUT ON SPECIFIC COMPONENTS ON THE PRODUCT WEIGHT AND COST WITHOUT AFFECTING FUNCTIONING
672.	EFFECT ROCK CHARACTERISTIC ON PRODUCT LIFE CYCLE AND PRODUCTION
673.	EFFECTIVE JOINING OF DISSIMILAR MATERIALS - FIBER REINFORCED PLASTICS WITH STEEL PLATES
674.	EFFECTIVE ONLINE MONITORING OF BAG HOUSE PARAMETERS ALONG WITH THE MODIFICATION & REFURBISHING OF DC DRIVE
675.	EFFECTIVE WAY OF WORKING WITH JAPANESE CUSTOMER USING STRATEGIC MANAGEMENT TOOLS
676.	EFFICIENCY IN CORRECTIVE MAINTENANCE
677.	ELIMINATE CUSTOMER COMPLAINT IN FUEL TANK DUE TO RUST ISSUE AFTER PAINTING FOR ROYAL ENFIELD CUSTOMER
678.	ELIMINATE CUSTOMER COMPLAINT IN REVERSE GEAR PRODUCT DUE TO TEETH RUN OUT ISSUE FOR RENAULT NISSAN CUSTOMER
679.	ELIMINATION OF CRACK IN SPROCKET BY DOE- COMPUTATION AND EXPERIMENT METHOD
680.	ELIMINATION OF IN-PROCESS DEFECTS IN CLOTH PROCESSING.
681.	'ELIMINATION OF ISSUE OF REVERSE GEAR SHIFTING NOT POSSIBLE'
682.	ELIMINATION OF LEAKAGE AT BAFFLE SCREW AREA, IN-LINE DIESEL FUEL INJECTION PUMP HOUSING
683.	ELIMINATION STAIN DEFECT IN TURBINE SHAFT AFTER HEAT TREATMENT PROCESS
684.	ENERGY CONSERVATION PROJECT IN Z SHOP
685.	ENERGY MANAGEMENT & ENERGY CONSERVATION IN CEMENT MANUFACTURING PROCESS
686.	ENERGY MANAGEMENT IN QATALUM COMPRESSED AIR SYSTEM
687.	ENERGY OPTIMIZATION & POWER COST REDUCTION IN CAPTIVE POWER PLANT.
688.	ENERGY SAVING BY CENTRALIZATION OF HYDRAULIC POWER PACK
689.	ENERGY SAVING BY OPTIMIZING THE COMPRESSED AIR REQUIRED TO RUN THE MACHINES
690.	ENERGY SAVING TECHNOLOGY IN FIELD OF REFRIGERATION AND AIR-CONDITIONING.
691.	ENHANCE LABOUR PRODUCTIVITY THROUGH DISTRIBUTION LOSS REDUCTION
692.	ENHANCE MATERIAL CONTROL AND LOGISTIC OPERATION IN OVERSEAS PROJECT DELIVERIES.
693.	ESTABLISHING MANUFACTURING UNIT FOR HEAT SHIELD FOR AUTOMOTIVE APPLICATION
694.	ESTABLISHING THE BEST PRACTICES FOR STANDARDIZING MAHINDRA ELECTRIC IN-HOUSE LOGISTICS & SUPPLY CHAIN
695.	ESTABLISHMENT AND IMPLEMENTATION OF 5S IN WAREHOUSE
696.	ESTABLISHMENT OF HYBRID CCW ORC FOR C6X STARTER MOTOR FOR COST REDUCTION
697.	ESTABLISHMENT OF PRODUCT DEVELOPMENT PLAN TEMPLATES FOR VARIOUS COMMODITIES
698.	EVALUATION OF DIFFERENT TOLERANCE, MATERIAL, STACK UP ANALYSIS MODEL FOR OPTIMIZATION OF C RING FOR TURBOCHARGER VARIABLE NOZZLE FOR PASSENGER CAR
699.	EXPLORING MODEL BASED DEFINITION AND AUTOMATION TECHNIQUES TO IMPROVE THE EFFICIENCY OF PRODUCT LIFE CYCLE
700.	FACILITY LAYOUT IMPROVEMENT USING META-HEURISTIC APPROACH.
701.	FEASIBILITY STUDY FOR DESIGN & IMPLEMENTATION OF SOLAR PHOTO VOLTAIC POWER SYSTEM FOR DANWAY EME HEAD OFFICE IN DUBAI, UAE UNDER SHAMS DUBAI SOLAR PROGRAM
702.	FEASIBILITY STUDY ON CHOICE OF TRANSPORTATION MODE
703.	FEASIBILITY STUDY ON CONVERSION OF WET BOTTOM ASH CONVEYING SYSTEM TO DRY SYSTEM IN AN AFBC BOILERS
704.	FEM APPROACH FOR DESIGN OF THE UPPER SKIN OF THE WING BOX AGAINST BUCKLING FAILURE DUE TO AERODYNAMIC

	LOAD.
705.	FIELD QUALITY IMPROVEMENT OF FRONT WINDSHIELD CRACK CONCERN
706.	FIRE AND GAS SYSTEM DESIGN GUIDELINE FOR ONSHORE POWER HOUSES
707.	FRAMEWORK FOR IDENTIFYING RIGHT METHODOLOGY IN PRODUCTIVITY IMPROVEMENT
708.	HARNESS COST OPTIMIZATION IN COUNTER BALANCE LIFT TRUCK
709.	HEALTH MONITORING FRAMEWORK FOR A TRACKED INFANTRY COMBAT VEHICLE
710.	HYDRAULIC TRANSMISSION DRIVE SELECTION CRITERION FOR MOBILE MACHINES
711.	IDENTIFYING AND ANALYSING CRITICAL PHASES IN NEW PRODUCT DEVELOPMENT
712.	IDENTIFYING ENERGY SAVING POTENTIAL AND FEASIBILITY ANALYSIS IN OIL FIRING SYSTEM POWER PLANTS
713.	IMPACT OF 3D PRINTING ON PLM SOFTWARE INDUSTRY
714.	IMPLEMENTATION OF 24X7 OPERATIONS
715.	IMPLEMENTATION OF DFMA FOR IMPROVING PRODUCT DESIGN PROCESS AND PRODUCTION IN PLASTIC MACHINERIES
716.	IMPLEMENTATION OF NC PROGRAM VALIDATION SOFTWARE
717.	IMPLEMENTATION OF NEW PART-RETAINER TO REPLACE SEAL HOLDER AND CAVITY PLUG IN THE AUTOMOTIVE CONNECTOR
718.	IMPLEMENTATION OF OVERALL EQUIPMENT EFFECTIVENESS(OEE) OF ROBOT WELD MACHINE WITH THE HELP OF LEAN TECHNIQUES
719.	IMPLEMENTATION OF STRATEGIC BUSINESS MODEL DURING DIVERSIFICATION PROCESS OF METAL CASTING UNIT
720.	IMPLEMENTATION OF TOTAL PRODUCTIVE MAINTENANCE IN DIRECT REDUCTION IRON PLANT OF 500—2 TPD KILN UNIT
721.	IMPLEMENTATION OF TQM FUNDAMENTALS IN MANUFACTURING OF ENGINEERING PROJECTS AT SMS INDIA WORKSHOP
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726.	IMPROVE RIGHT FIRST TIME TRACTORS BY REDUCING PROCESS DEFECTS
727.	IMPROVE SERVICE RELIABILITY OF LOCOMOTIVE BRAKE SYSTEM
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733.	IMPROVING THE WIRING HARNESS QCD BY THE IMPLEMENTATION OF ERROR REDUCTION TECHNIQUES
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762.	MINIMIZING FAILURE RATE OF ELEVATOR GUIDE RAIL
763.	MODELLING OF BARRIERS IN EFFECTIVE SUPPLY CHAIN COLLABORATION AND IDENTIFICATION OF COUNTERMEASURES TO IMPROVE SUPPLY CHAIN COLLABORATION
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770.	OPERATIONAL EXCELLENCE AND TIME REDUCTION THROUGH EFFECTIVE PROJECT MANAGEMENT
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773.	OPTIMIZATION OF CAPA MANAGEMENT SYSTEM TO IMPROVE OVERALL EFFECTIVENESS THROUGH DMAIC APPROACH
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775.	OPTIMIZATION OF POWER IN LINE-2 PRE-CLINKERISATION
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779.	OPTIMIZING YIELD ISSUE IN PRINTED CIRCUIT BOARD ENHANCED RELIABILITY & MANUFACTURABILITY OF EFFICIA ECG100 PRODUCT
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784.	OVERHAULING OF TURBINE DRIVEN BOILER FEED PUMP (HPT300-340M-6S)
785.	PERFORMANCE ASSURANCE & QUALITY CONTROL OF RAW MATERIAL FLOW IN MOTION WAGON LOADING SYSTEM (RLS)
786.	PERFORMANCE IMPROVEMENT OF INJECTION MOULDS BY USE OF DMLS ADDITIVE MANUFACTURING TECHNOLOGY
787.	PIPING & EQUIPMENT LAYOUT DETAIL ENGINEERING DESIGN OF ICE-CREAM PROCESS PLANT
788.	PLATEMILL HOT ROLLING PROCESS OPTIMIZATION WITH VARIOUS PRODUCT MIX
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791.	PRE-PACKAGING CAPACITY ANALYSIS FOR PARTS DISTRIBUTION CENTRE
792.	PROCESS ANALYZER VENT-HEADER PRESSURE CONTROL SYSTEM USING PARKER VENT MASTER
793.	PROCESS AND PRODUCTIVITY IMPROVEMENT USING CAD/CAM
794.	PROCESS DESIGN AND DEVELOPMENT FOR 2W HEAD LAMP LIGHTING
795.	PROCESS DESIGN TO ACHEIVE UNIFORM DENSIFICATION IN VITRIFIED CBN WHEELS
796.	PROCESS IMPROVEMENT OF KBE CONFIGURATOR IMPLEMENTATION
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798.	PROCUREMENT PROCESS OF INDIAN AIR FORCE AT FIELD UNIT
799.	PRODUCT DESIGN IMPROVEMENT TO ENHANCE QUALITY
800.	PRODUCT DEVELOPMENT LEAD TIME REDUCTION THROUGH PROJECT MANAGEMENT FLOW DESIGN
801.	PRODUCT DEVELOPMENT:ADVANCED VRLA PRODUCT DEVELOPMENT WITH LSPS (LEAD SEAL POST SEAL) DESIGN IN BATTERY INDUSTRY
802.	PRODUCT LIFE CYCLE MANAGEMENT IN AUTOMOTIVE INDUSTRY
803.	PRODUCTION FLOW ANALYSIS THROUGH VALUE STREAM MAPPING, OF BOILER LINKS (GRADE-91) MANUFACTURING IN BHEL TRICHY
804.	PRODUCTION PLANNING PROCESS FOR TITANIUM MODIFIED SIKORSKY S-92 AIRCRAFT
805.	PRODUCTIVITY IMPROVEMENT AND EFFECTIVE MATERIAL HANDLING
806.	PRODUCTIVITY IMPROVEMENT BY OPTIMIZING WATER FLOW PARAMETERS
807.	PRODUCTIVITY IMPROVEMENT IN FLAP WHEEL FABRICATION LINE.
808.	PRODUCTIVITY IMPROVEMENT IN PASSENGER CAR HYDRAULIC POWER STEERING PUMP ASSEMBLY
809.	PRODUCTIVITY IMPROVEMENT OF 2" XYZ
810.	PRODUCTIVITY IMPROVEMENT THROUGH LEAN TOOLS IMPLEMATION



811.	PRODUCTIVITY IMPROVEMENT THROUGH SINGLE PIECE FLOW CONCEPT
812.	PRODUCTIVITY IMPROVEMENT WITH THE LOGIC OF TEMPO FUZZY BY MULTI SKILLING AND OPERATOR SHUFFLING
813.	PRODUCTIVITY IMPROVEMENTS THROUGH VALUE ANALYSIS
814.	PROGRAMMABLE GENERAL PURPOSE TEST JIG FOR AEROSPACE VEHICLE TESTING
815.	PROJECT MANAGEMENT LIFE CYCLE FOR HYBRID ELECTRIC VEHICLE (HEV) PROGRAMS
816.	PROJECT ON RESOLUTION OF TURBINE SIDE BOLT LOOSENING ON TURBOCHARGERS FOR PASSENGER VEHICLE APPLICATIONS
817.	PROJECT ON SETUP TIME REDUCTION
818.	PROJECT ON STUDY OF UNBALANCE MIGRATION OF THE ROTATING GROUP OF TURBOCHARGER RESULTING IN NOISE SOURCE ON VEHICLE
819.	PROJECT ON TURBOCHARGER END HOUSING TORQUE CAPACITY IMPROVEMENT
820.	PROJECT PLANNING, MONITORING AND TRACKING TOOL
821.	PROPOSED DISSERTATION TITLE : LEAN & GREEN MANUFACTURING: COMPLIMENTARY TECHNIQUES FOR IMPROVING PROFITS & BUSINESS SUSTAINABILITY
822.	QCD IMPROVEMENT OF AERO ENGINE REPAIR SERVICES BY IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT
823.	QUALITY CONSISTENCY IN 14 CHOPSAW, AND TO RAMP UP CHOPSAW PRODUCTION UPTO 1 LAKH PCS PER MONTH IN Q4
824.	QUALITY CONTROL OF PRODUCT BY CONTROLLING ASSEMBLY PROCESS THROUGH GATE SYSTEM
825.	QUALITY IMPROVEMENT & REDUCE REJECTION
826.	QUALITY IMPROVEMENT BY ANALYZING CUSTOMER COMMUNICATION
827.	QUALITY IMPROVEMENT PROJECT ELIMINATION OF QUALITY ISSUE OF SYNCHRO RING LOOSE IN GEARS OF GEARBOX G600
828.	QUALITY IMPROVEMENT PROJECT- ELIMINATION OF REJECTION DUE TO KING PIN BOSS HEIGHT UNDER SIZE OF FA BEAM
829.	QUALITY IMPROVEMENT PROJECT- ELIMINATION OF REJECTION DUE TO KP BORE UNDER LOCK ISSUE IN FA BEAM
830.	QUALITY IMPROVEMENT PROJECT- REDUCTION IN IPTV DUE TO GEAR TEETH FAILURE
831.	QUALITY MANAGEMENT SYSTEM IN CONSTRUCTION INDUSTRY
832.	QUICK CHANGE OVER FOR GTV 400#150 VALVE BODY MACHINING
833.	RADIO FREQUENCY WELDING TECHNIQUE FOR FABRICS
834.	RAMP UP PROJECT RAMP UP OF PRODUCT G950 GEAR BOX UPTO 150/DAY THROUGH UTILIZATION OF EXISTING MACHINES AND MAN POWER
835.	REACH COMPLIANCE AND ITS IMPACT ON AVIATION INDUSTRY
836.	REDESIGN CRANKSHAFT INERTIA FOR LOW ENGINE IDLE RPM
837.	REDUCE THE CYCLE TIME IN DRIVER SEAT LINE
838.	REDUCTION IN CHANGEOVER TIME AT FILING MACHINE
839.	REDUCTION IN DEFECT OF BLOW HOLE THROUGH 6 SIGMA METHOD
840.	REDUCTION IN SINGLE PIECE DEFECTS THROUGH DEPLOYMENT OF 14Q PRINCIPLES AT SUPPLIER
841.	REDUCTION OF FUNCTIONAL DEFECTS IN TRACTOR ASSEMBLY
842.	REDUCTION OF GREEN AND FIRED REJECTIONS ALONG WITH CONSISTENCY IN PRODUCT QUALITY IN THE MANUFACTURING OF THIN WHEELS (GRINDING WHEELS) AT THE NEW MANUFACTURING PLANT
843.	REDUCTION OF LINE REJECTIONS DUE TO RUBBING NOISE IN STARTER MOTOR ASSEMBLY LINE USING DESIGN OF EXPERIMENTS
844.	REDUCTION OF NON-CONFORMANCES AND COST OF POOR QUALITY IN AERO STRUCTURAL ASSEMBLIES USING PROBLEM SOLVING TECHNIQUES
845.	REDUCTION OF NOX IN SUPER CRITICAL POWER BOILERS SCR TECHNOLOGIES
846.	REDUCTION OF PROCESS SCRAP COST DUE TO ASSEMBLY RELATED ISSUES
847.	REDUCTION OF SPECIFIC POWER CONSUMPTION IN CEMENT MILL
848.	REDUCTION OF SPECIFIC POWER IN COALMILL
849.	REJECTION REDUCTION DUE TO LEAK IN ORIFICE HOLDER CASTING
850.	REJECTION REDUCTION IN HIGH PRESSURE DIE CASTING SUPPLIER PROCESS
851.	RELIABILITY CENTERED MAINTENANCE STUDY
852.	RELIABILITY MANAGEMENT OF EMERGENCY SHUTDOWN SYSTEM (ESD)
853.	REMOTE DIAGNOSTICS FOR MERCEDES VEHICLES
854.	REPLACING ELECTROPLATED STEEL SHEETS WITH PRE-COATED STEEL SHEETS TO GET BETTER QUALITY AND COST
855.	RESEARCH ORIENTED REPORT ON "PROJECT MANAGEMENT" TO ACIEVE MORE WITH LEAST COST & TIME OVERRUNS
856.	RIDE COMFORT COMPARATIVE STUDY BETWEEN FIXED CAB MOUNT & SUSPENSION CAB FOR COMMERCIAL VEHICLE
857.	RISK ASSESSMENT AND INCIDENT ANALYSIS IN CASTING INDUSTRY
858.	RISK MANAGEMENT TOOL
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861.	ROOT CAUSE ANALYSIS AND UPGRADATION OF UN-INTERRUPTED POWER SUPPLY SYSTEM
862.	ROOT CAUSING THE CHANGE MANAGEMENT WORK AND IDENTIFY THE OPPORTUNITIES TO REDUCE THEM
863.	SAFETY AND MAINTENACE IN CONSTRUCTION INDUSTRY

864.	SCHEDULING OF BATCH JOBS DURING SYSTEM OUTAGE USING PLANNING SYSTEM
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872.	STOP CRANKNOISE DEFECT BY DEVELOPING AUTOMATIC IN-PROCESS QUALITY OF CRANKCASE
873.	STRATEGIC CHANGE MANAGAMENT IN CUSTOM BUSINESS UNIT OF DR REDDY'S LABS
874.	STRATEGIC MANAGEMENT & BUSINESS PLAN
875.	STRATEGICALLY IMPROVING CUSTOMER SATISFACTION IN AUTOMOTIVE TECHNICAL DOCUMENTATION
876.	STRATEGIES TO BE ADOPTED FOR AN EFFECTIVE AUTOMOTIVE PEDAL DESIGN
877.	STUDY AND DEVELOP COST-EFFECTIVE PROCESS FLOW FOR USING RECYCLING MATERIAL (PRE-HEATING FURNACE SPILLAGE, ESP DUST) TO PRODUCE HIGH GRADE IRON ORE PELLET
878.	STUDY AND DEVELOPE COST-EFFECTIVE PROCESS FLOW USING INDUSTRIAL GRADE WASTE MILL SCALE TO PRODUCED IRON ORE PELLET
879.	STUDY AND IMPLEMENT JUST IN TIME MANUFACTURING SYSTEM TO STATOR FABRICATION CELL OF SUBMERSIBLE MOTOR.
880.	STUDY AND SIMPLIFY DESIGN OF ENGINE MOUNTING SYSTEM IN PASSENGER CARS
881.	STUDY OF FACTORY ELECTRICAL ENERGY CONSUMPTION MEASURING AND RECORDING FOR BETTER ENERGY MANAGEMENT
882.	STUDY ON CHARACTERIZATION OF LAMPS BASED ON LUMINOSITY AND MODULE DESIGN TO VALIDATE THE LAMPS
883.	STUDY ON CONSTRUCTION OF 3D STEEL STRUCTURES - CANOPY OF METRO STATIONS (ELEVATED), RIYADH METRO PROJECT, LINE-3
884.	SUPPLY CHAIN MANAGEMENT
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886.	SUPPLY CHAIN PROCESS FOR ELECTRONICS COMPONENTS IN SCHLUMBERGER
887.	SUSTAINABLE BUSINESS GROWTH, PROFITABILITY & CAPACITY UTILIZATION OF MORGAN ADVANCE MATERIALS INDUSTRIES LTD GREEN FIELD PROJECT KIZAD, ABU DHABI, UAE
888.	SUSTAINABLE MANUFACTURING AND ITS APPLICATION ON THERMOELECTRIC REFRIGERATOR
889.	SYNTHESIS OF ALUMINUM SILICON CARBIDE COMPOSITES THROUGH POWDER METALLURGY ROUTE AND EVALUATION OF PROPERTIES
890.	TECHNO COMMERCIAL FEASABILITY FOR MANUFACTURING OF ACTIVE PHARMACEUTICAL INGREDIENTS
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892.	TECHNOLOGICAL OPTIMIZATION OF DRYER FABRIC ROLL USED IN PAPER INDUSTRY
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894.	THEORETICAL PERFORMANCE PREDICTION & ACTUAL VERIFICATION OF AN AIR BRAKES SYSTEM
895.	TO ANALYZE AND IMPROVE THE PROCESS CAPABILITY OF CRANKCASE LH & RH THROUGH APPLICATION OF STATISTICAL PROCESS CONTROL TOOLS
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897.	TO DECREASE THE CYCLE TIME OF TYRE MAKING MACHINE
898.	TO DEVELOP A HIGH PERFORMANCE GRINDING WHEEL FOR SINGLE RIB GEAR GRINDING APPLICATION USING SUPERIOR GRAIN AND BOND SYSTEM.
899.	TO ELIMINATE DEFECT OF WRONG BATCH FITMENT ON VEHICLES
900.	TO ESTABLISH SNAGGING WHEEL FOR HI CHROME WEAR RESISTANT CASTINGS
901.	TO IMPLEMENT NEW REFRIGERANT (R1234YF) AND VALIDATE A/C PERFORMANCE IN EUR PASSENGER VEHICLE
902.	TO IMPROVE OPERATIONAL EFFICIENCY OF PROJECT
903.	TO IMPROVE OVERALL EQUIPMENT EFFECTIVENESS OF GARMENT MACHINERY IN A GARMENT MANUFACTURING UNIT
904.	TO INCREASE CS2 RECOVERY FROM OIL SCRUBBER WHICH IS IN DISSOLVED FORM IN GAS MIXTURE
905.	TO INCREASE OPERATIONAL PERFORMANCE OF FLY ASH HANDLING SYSTEM IN ASH HANDLING PLANT
906.	TO REDUCE LINE REJECTIONS USING 7QC TOOLS
907.	TO REDUCE MACHINE SHOP REJECTION OF 6BT CUMMINS BS3 CYLINDER HEAD
908.	TO REDUCE THE IN-PROCESS DEFECTS IN SHEETS LINE
909.	TO SETUP & RAMP A HIGH EFFICIENCY CHARGER MANUFACTURING LINE FOR A TOP MOBILE BRAND
910.	TO STREAMLINE MANUFACTURING AND IMPROVE PRODUCTION EFFICIENCY OF ASL METALLIC CANISTERS OF AGNI-5 MISSILE THROUGH PROCESS IMPROVEMENT METHODOLOGY
911.	TO STUDY THE ADVANTAGES OF THE UNITIZED SPHERICAL ROLLER BEARING PLUMMER BLOCK OVER THE CONVENTIONAL SN HOUSINGS + SPHERICAL ROLLER BEARINGS WHEN USED IN A DUSTY/ CONTAMINATED ENVIRONMENT LIKE CEMENT PLANT / COAL CRUSHING/ HANDLING UNIT

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913.	TPM IMPLEMENTATION
914.	USE OF QC TOOL AND ONLINE MEASUREMENT SYSTEM FOR PISTON ROD IN MANUFACTURING
915.	USER INTERFACE MODULE
916.	VALUE STREAM AND PROCESS OPTIMIZATION OF BELL 407 NOSE & CONSOLE ASSEMBLY BLACK PAINT PROCESS
917.	VALUE STREAM MAPPING AND LEAN IMPLEMENTATION IN THE MRO FACILITY FOR OVERHAUL OF ROLE EQUIPMENT OF A FRONTLINE FIGHTER AIRCRAFT
918.	VALUE STREAM MAPPING OF THE EXISTING PRODUCTION PROCESS AND IDENTIFY SOURCES OF WASTE AND IDENTIFY THE WAYS TO ELIMINATE THOSE WASTES
919.	VESSEL OPERATIONS AND MANAGEMENT
920.	VIRTUAL ERGONOMICS ANALYSIS OF OFF ROAD VEHICLE OPERATOR CONTROLS
921.	VIRTUAL REALITY IN MANUFACTURING
922.	WELDING PRODUCTIVITY IMPROVEMENT AND COST REDUCTION BY CHANGING WELDING METHODS
923.	ZD (ZERO DEFECT) PROJECT FOR JCB AND BOSCH ON MODEL LINE WITH THE HELP OF SIX SIGMA METHODOLOGY
924.	ZERO DEFECT STRATEGY FOR LEAK FREE HIGH PRESSURE FUEL INJECTOR
925.	OPTIMIZATION OF PRODUCT DESIGN FOR 1.05 L COMMON RAIL DIESEL ENGINE
926.	ROLE OF PRODUCT LIFE CYCLE MANAGEMENT(PLM) IN INDUSTRY 4.0
927.	REDUCTION IN COMPRESSED AIR CONSUMPTION BY 5%UP TO MARCH 17
928.	100% ELIMINATION OF REJECTION OF 3/7 GEAR M/S G1150 DUE TO GEAR TEETH UNCLEAN DURING PROFILE GRINDING

#### M.Tech. Quality Management

929.	A STUDY OF QUALITY MANAGEMENT SYSTEM IN PROJECT PLANNING, PROJECT FINANCING & PROJECT IMPLEMENTAION
930.	A STUDY ON BOOST TO INDIAN REGIONAL AVIATION SECTOR THROUGH CONCURRENT USE OF INDIAN AIR FORCE AIR BASES FOR CIVIL AVIATION
931.	A STUDY ON THE INFLUENCE OF COGNITIVE BIASES ON SOFTWARE TESTING AND QUALITY ASSURANCE
932.	ADVANCED METER INFRASTRUCTURE
933.	AIRCRAFT ENGINE HEALTH MONITORING SYSTEM AND QUALITY ASSURANCE
934.	ALIGNING BUSINESS WITH IT- EC3 PROJECT
935.	ANALYSIS AND PREVENTION OF CRANK NOISE ON PETROL ENGINES AT VEHICLE QUALITY STAGE
936.	ANALYSIS OF HIGH PRESSURE FUEL PUMP FAILURE IN ORPHEUS 70105 AERO ENGINE AND ITS REDUCTION BY IMPROVING ATF FUEL QUALITY
937.	ANALYSIS ON INCREASING TRENDS OF ACCIDENTS / INCIDENTS IN SUBMARINES DUE TO HUMAN ERRORS AND ITS EFFECTS ON MAINTENANCE
938.	ANALYSIS ON MULTIPLE FAILURE IN REFRIGERATOR
939.	ANALYSIS ON REDUCTION OF BUNKER CONSUMPTION TO REDUCE OVERALL HEAD COST AND IMPROVE ENVIRONMENTAL EMISSIONS
940.	APPLICATION OF CONCURRENT ENGINEERING IN FOOD PROCESSING ON SHIPS FOR ENHANCING NUTRITIONAL VALUE, OPERATIONAL BENEFITS AND HEALTH BENEFITS.
941.	APPLICATION OF DESIGN OF EXPERIMENTS TO DEVELOP, OPTIMIZE AND VALIDATE ANALYTICAL METHODS USED FOR THERAPEUTIC PROTEIN DRUGS
942.	APPLICATION OF DMAIC TECHNIQUE FOR IMPROVING QUALITY OF SHREDDED MOZZARELLA PRODUCTS
943.	APPLICATION OF FMEA IN MANUFACTURING PROCESS OF GFRC
944.	APPLICATION OF ISO 9001:2015 QUALITY MANAGEMENT SYSTEM FOR IMPROVING TRAINING AND ACHIEVING CERTIFICATION FOR 17 TECHNICAL TYPE TRAINING SCHOOL
945.	APPLICATION OF PROJECT MANAGEMENT CONCEPTS FOR REPAIR AND SALVAGE OF MEDIUM LIFT HELICOPTER(MI 8) AIRFRAME FOR DISPALY AND TRAINING
946.	APPLICATION OF QUALITY MANAGEMENT SYSTEM TO IMPROVE SHOP FLOOR RESULTS
947.	APPLICATION OF TOTAL QUALITY MANAGEMENT PROTOCOL IN QUALITY FAILURE COST REDUCTION
948.	APPLICATION OF TOTAL QUALITY MANAGEMENT TOOLS AND TECHNIQUES IN MANAGEMENT OF CLINICAL STUDIES
949.	ASSESSING AND BENCHMARKING FLSMIDTH QUALITY MANAGEMENT SYSTEM PRACTICES WITH INDUSTRY BEST PRACTICES
950.	AUTOCLAVED AERATED CONCRETE PANELS FOR CUSTOMER, CONTRACTOR AND ENVIRONMENTAL BENEFITS
951.	AUTOMATED MAIN GATE TANK LORRY REPORTING AND SECURITY MANAGEMENT SYSTEMS FOR BPCL, MANGALORE COASTAL INSTALLATION
952.	CHALLENGES IN TOTAL QUALITY MANAGEMENT DURING CONSTRUCTION OF HIGHWAY PROJECTS IN INDIA
953.	COMPARATIVE STUDY BETWEEN THE EFFECT OF ISO 9001:2015 PRIOR AND AFTER ITS IMPLEMENTATION IN CONSTRUCTION INDUSTRIES
954.	COMPARISON AND EVALUATION OF OPEN SOURCE PERFORMANCE TESTING TOOLS. (POC)
955.	COMPARITIVE STUDY OF VARIOUS POST PROCESSING OPERATIONS ON MATERIALS USED IN AEROSPACE INDUSTRY
956.	COMPETITIVE PERFORMANCE BENCHMARKING OF FIBER CEMENT INDUSTRIAL CLOTHING
957.	CONCURRENT ENGINEERING IMPLEMENTATION IN SWITCHGEAR MANUFACTURING
958.	CONDITIONAL MONITORING OF LATHE MACHINE

959.	CONTINUAL PRODUCT QUALITY IMPROVEMENT THROUGH TQM, SQC & SPC TECHNIQUES
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961.	CUSTOMER SATISFACTION STUDY AND ENHANCEMENT USING 7 QC & OTHER STATISTICAL TOOLS IN PRS UNIT IN SHARED SERVICES
962.	DASHBOARD FOR ALL
963.	DASHBOARD FOR SERVICE OPERATIONS TEAM
964.	DEFECT TRIAGING SYSTEM
965.	DEFENCE CONSTRUCTION DEFECTS ANALYSIS, TRENDS AND QUALITY OF CONTRACTS
966.	DESIGN AND BUILD OF PRE AIR CONDITIONER FOR AIRCRAFT
967.	DESIGN COMPREHENSIVE 'QUALITY METRICS' TO ACHIEVE GREATER PRODUCT QUALITY FOR SAP'S S4HANA INDUSTRY SOLUTIONS
968.	DETERMINE AND ELIMINATE THE ROOT CAUSE FOR THE INCREASE IN THE FAILURE RATE OF PCB.
969.	DEVELOPING A COMPREHENSIVE PLAN TO INCREASE PROCESS EFFICIENCY THROUGH CHANGES IN ETO STERILIZATION FOR STERILE MEDICAL DEVICES WITHIN DMPL PREMISES
970.	DEVELOPING A FRAME WORK TO IMPROVE RIGHT FIRST TIME IN 2MW WIND TURBINE BLADE
971.	DEVELOPMENT OF A TOOL FOR MEASURING SUPPLIER QUALITY PERFORMANCE
972.	DEVELOPMENT OF AN OPTIMAL BOILER PROPER PIPING INSTALLATION TECHNIQUE
973.	DEVELOPMENT OF GUIDE SLEEVE USED ON AIR DISC BRAKE ASSEMBLY THROUGH COLD FORGING METHOD
974.	DEVELOPMENT OF INTEGRITY MANAGEMENT METHODOLOGIES BY RISK BASED ASSESSMENTS WILL IMPROVE RELIABILITY AND MAINTAINABILITY OF AGED OIL AND GAS PRODUCTION ASSETS FOR LONG-TERM PROFITABILITY.
975.	DEVELOPMENT OF LABORATORY INFORMATION MANAGEMENT SYSTEM (LIMS) FOR PACKAGING LABORATORY
976.	DEVOPS COLLABORATIVE APPROACH FOR ACCELERATING SOFTWARE DEVELOPMENT, QUALITY ASSURANCE AND OPERATIONS
977.	DYNAMIC PRODUCT RELIABILITY PREDICTION TO IMPROVE THE BUSINESS IMPACT
978.	ECONOMICAL APPROACH, COST REDUCTION IN PROCESS VALVES MAINTENANCE BY VALUE ENGINEERING AND EFFECTIVE REPAIR / REFURBISHMENT TECHNOLOGY
979.	EFFECTIVE BLOCK TECHNOLOGY TO IMPROVE QUALITY AND PRODUCTIVITY
980.	EFFECTIVENESS OF NON-DESTRUCTIVE TESTING METHODS ON MANUFACTURED PRODUCT AND COMPARISON
981.	ELIMINATING CUSTOMER (INTERNAL) COMPLAINT DUE TO ROCKER LEVER ASSEMBLY ADJUSTING SCREW JAMMING ISSUE WITH THE LOCK NUT DURING VALVE LASH SETTING PROCESS IN CUSTOMER CUMMINS - B3.3 LITER - DIESEL ENGINES FOR INDUSTRIAL AND GENSET APPLICATIONS.
982.	ELIMINATION OF NON-VALUE ADDING ACTIVITIES BY USING VALUE STREAM MAPPING
983.	ENERGY AUDIT OF A CAMPUS
984.	ENERGY CONSERVATION & OPTIMIZATION OF STEAM DISTRIBUTION SYSTEM IN RCF TROMBAY UNIT
985.	ENGINEERING DRAWING QUALITY ENHANCEMENT-A CONTINUOUS IMPROVEMENT APPROACH
986.	ENHANCE OVERALL PRODUCTIVITY (MEAN & STANDARD DEVIATION) BY 10 % OF SOFTWARE DEVELOPMENT PROJECT BY EMPLOYING AN INNOVATIVE SOLUTION SO THAT SOFTWARE PROJECT IS COMPLETED WITHIN THE EFFORTS ALLOCATED BY THE MANAGEMENT
987.	ENHANCE THE RELIABILITY OF VENDING MACHINES
988.	ESTABLISH FRAMEWORK FOR LOW ROLLING RESISTANCE IN BICYCLE TYRE
989.	ESTABLISHING A COMPETENCY MODEL TO QUALITY PERSONNEL FOR AN EFFECTIVE QUALITY MANAGEMENT
990.	ESTABLISHING FRAMEWORK FOR CARBON FOOTPRINT ASSESSMENT AS PER ISO 14064:2012 AND EVALUATING CARBON INTENSITY FOR BIAS, RADIAL AND OTR PRODUCT LINE FOR 2015-2016 PERIOD
991.	ESTABLISHING FRAMEWORK FOR ORGANIZATIONAL EFFICIENCY & EFFECTIVENESS IMPROVEMENT AND EVALUATING THE EFFECTIVENESS OF ACTIVITIES & INITIATIVES FOR 2015-2016 PERIOD
992.	ESTABLISHING SMALL WIND TURBINES ON TRAIN AS PER IEC 61400-4:2012 & ISO/DIS 16079-1 FOR GENERATING ELECTRICITY AND REDUCING CARBON EFFECT
993.	EVOLUTION OF STRATEGIC ASSET MANAGEMENT FROM CONVENTIONAL MAINTENANCE MANAGEMENT
994.	EXPERIMENTAL STUDY ON STRESS CONCENTRATION FACTOR
995.	FAILURE ANALYSIS OF CLADDED VESSELS
996.	GSM NETWORK PERFORMANCE IMPROVEMENT
997.	GUIDELINES AND METHODOLOGY FOR EFFECTIVE IMPLEMENTATION OF PROJECT MANAGEMENT TOOLS IN SETTING UP OF AN INTEGRATED STEEL PLANT PROJECT FROM CONCEPT TO COMMISSIONING
998.	HARDWARE DESIGN OPTIMIZATION AND PRODUCTION PROCESS OPTIMIZATION FOR OUTDOOR CPE TO ACHIEVE COST EFFECTIVE SOLUTION
999.	HIGH RISK SUPPLIER IMPROVEMENT
1000.	HOW TQM CAN BE APPLIED AS AN EFFECTIVE TOOL IN ACHIEVING BUSINESS EXCELLENCE?
1001.	HUMAN FACTORS IN AIRCRAFT MAINTENANCE AND INSPECTION
1002.	HYBRID POWER SYSTEM
1003.	IDENTIFICATION AND IMPROVEMENT OF AIRCRAFT SERVICING PROCESS
1004.	IMPLEMENT DMAIC PROCESS TO REDUCE CYCLE TIME
1005.	IMPLEMENTATION OF ADVANCED NON DESTRUCTIVE TECHNIQUE FOR NASR FULL FIELD DEVELOPMENT PROJECT- PACKAGE-1

1006.	IMPLEMENTATION OF AGILE METHODOLOGY FOR ACCURATE MODULE IN PHOENIX APPLICATION.
1007.	IMPLEMENTATION OF CONCURRENT ENGINEERING AND TOTAL QUALITY MANAGEMENT FOR PROCESS QUALITY IMPROVEMENT IN REFRIGERATOR PLANT
1008.	IMPLEMENTATION OF KAIZEN IN OPERATIONS AND MAINTENANCE OF OPG POWER GENERATION PVT LTD
1009.	IMPLEMENTATION OF SELENIUM TEST AUTOMATION SUITE USING CUCUMBER BDD FRAMEWORK [BEHAVIOUR DRIVEN DEVELOPMENT]
1010.	IMPLEMENTING QUALITY FUNCTION DEPLOYMENT IN ARENA OF USE OF FLY-ASH FOR MINIMIZE CEMENT IN CONCRETE FOR COST MINIMIZE AND ALSO MINIMIZE HEAT EVOLUTION
1011.	IMPORTANCE OF NON VERBAL COMMUNICATION IN LEADERSHIP
1012.	IMPROVE CUSTOMER ENGAGEMENT TO DRIVE PRODUCT SUPPORT BUSINESS
1013.	IMPROVE PERFORMANCE OF HEAT EXCHANGERS BY REDUCING CORROSION EFFECT IN HEAT EXCHANGER TUBES
1014.	IMPROVE THE OVERALL EFFICIENCY OF CULTIVATOR PLANT
1015.	IMPROVEMENT IN CAPACITY VERIFICATION PROCESS
1016.	IMPROVEMENT IN COMPRESSOR LOW VOLTAGE START ABILITY
1017.	IMPROVEMENT IN MANUFACTURING OPERATIONS
1018.	IMPROVING COPYEDITING QUALITY AND EFFICIENCY BY SIX SIGMA METHODS
1019.	IMPROVING FATIGUE LIFE OF SUSPENSION SPRING
1020.	IMPROVING THE QUALITY OF STEEL SLABS BY CONTROLLING THE PROCESSES OF STEEL MAKING AND TO REDUCE THE DEFECTS RATE
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1022.	INCREASE THE EFFECTIVENESS OR QUALITY OF VOICE TEST EXECUTION PROCESS
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1025.	INTERNET OF THINGS - THE OPPORTUNITIES AND THE THREAT FOR IT/NETWORKING COMPANIES.
1026.	INTRODUCTION AND IMPACT OF TECHNOLOGY TIE-UP ON AN ORGANISATION
1027.	IPTV REDUCTION OF 50 AH BATTERY IN SCV VEHICLES
1028.	MANAGING LEADERSHIP DURING USE OF WEAPON OF MASS DESTRUCTION BY NEIGHBOURING COUNTRY
1029.	MARKET QUALITY IMPROVEMENT THROUGH CUSTOMER SUPPORTING ACTIVITIES
1030.	MEDICAL EQUIPMENT ACCURACY IMPROVEMENT
1031.	MIGRATION PROJECT FROM MAINFRAME TO LINUX
1032.	MINIMIZING OF GIRTH WELD REPAIRS IN DUPLEX STAINLESS STEEL PIPELINE
1033.	MODULAR CONSTRUCTION AND ERECTION PREFABRICATED DOME LINER FOR NUCLEAR BUILDING IN KAPP-3&4
1034.	NEW PIPING TIE-INS TO THE EXISTING FUEL GAS LINES BY COLD CUTTING, WELDING AND NON DESTRUCTIVE TESTING METHODS
1035.	OIL LEAK CONTAINMENT IN FLOW-LINE TRANSPORTATION
1036.	ONLINE MAINTENANCE MANAGEMENT SYSTEM
1037.	OPTIMIZATION AND IMPROVEMENT OF MAGNETIC INDUCTION PROPERTY OF ELECTRICAL STEEL. INDUCTION PROPERTY OF ELECTRICAL STEEL.
1038.	OPTIMIZATION OF CEMENT CONTENT IN M-25 CONCRETE USING FLYASH
1039.	OPTIMIZATION OF FW EXTENSIBILITY TEST SUITE AND TEST EFFECTIVENESS MEASURE
1040.	OPTIMIZING THE QUALITY AND OPERATIONAL EFFICACY OF CMCC (CENTRAL MAINTENANCE CONTROL CENTRE) SOFTWARE USED BY PAN-IAF.
1041.	OVALITY REDUCTION IN BEARING COMPONENT (CUP) DURING HEAT TREATMENT AND STUDY THE IMPACT IN GRINDING PROCESS & PRODUCT CHARACTERISTICS.
1042.	POWER BRAID WELDING, COMPACTING AND BRAZING
1043.	PROCESS DRIVEN MAINTENANCE APPROACH USING TQM TOOLS
1044.	PROCESS IMPROVEMENT OF MATERIAL PROVISIONING USING SIX-SIGMA METHODOLOGY
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1047.	PROCESS OPTIMIZATION AT AUTOMOTIVE STARTER SUB-ASSEMBLY LINE THROUGH DESIGN OF EXPERIMENTS
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1055.	PROPOSAL FOR TOTAL QUALITY MANAGEMENT IN INDUSTRIAL AUTOMATION DIVISION
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1061.	QUALITY MANAGEMENT SYSTEM OF FLOW CONTROL VALVES AND ITS VENDOR ASSESSMENT
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1067.	RECTIFICATION OF FLARE BRIDGE
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1095.	STUDY OF AAC BLOCKS AND PANELS IN CONSTRUCTION INDUSTRY
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1101.	TO INCREASE PRODUCTIVITY OF DGQA ORGANISATION BY REDUCING QUALITY ASSURANCE CYCLE TIME OF DEFENCE EQUIPMENTS & STORES BY APPLYING TOTAL QUALITY MANAGEMENT TOOLS & TECHNIQUES
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1253.	AUTOMATED DVM GENERATOR
1254.	AUTOMATED ENVIRONMENT PROVISIONING AND DEPLOYMENT IN AWS
1255.	AUTOMATED GROUND TRUTH GENERATION USING OBJECT TRACKING ALGORITHM
1256.	AUTOMATED IDENTIFICATION OF HELPFUL ONLINE PRODUCT REVIEWS
1257.	AUTOMATED INSTALLATION OF MULTIPLE LINUX OPERATING SYSTEM
1258.	AUTOMATED MANUAL TEST CASE GENERATION FOR GUI APPLICATIONS
1259.	AUTOMATED PATENT PRIOR ART RETRIEVAL
1260.	AUTOMATED RDBMS DATA ARCHIVING AND DE ARCHIVING USING SQOOP AND HADOOP
1261.	AUTOMATED REGRESSION TESTING USING SELENIUM
1262.	AUTOMATED SMART DIARY WITH NLP
1263.	AUTOMATED SYSTEM TO CHARACTERIZE DCT HYDRAULIC CONTROL MODULE
1264.	AUTOMATED SYSTEM TO CONFIGURE MACHINE AND LAUNCH TESTSUITE ON REMOTE SERVER
1265.	AUTOMATED TEST FRAMEWORK WITH CUCUMBER
1266.	AUTOMATED VIRTUAL NETWORK FUNCTION ONBOARDING ON OPENSTACK NFV CLOUD INFRASTRUCTURE
1267.	AUTOMATED XQUERY GENERATOR FROM MAPPING SHEET
1268.	AUTOMATIC BUG TRIAGE USING SEMI-SUPERVISED TEXT CLASSIFICATION
1269.	AUTOMATIC CLASSIFICATION OF PHONOCARDIOGRAM (PCG) DATA TO IDENTIFY HEART ABNORMALITY
1270.	AUTOMATIC EXTRACTION OF TRENDING MEDIA PROGRAMS AMONG SOCIAL NETWORKING SITES.
1271.	AUTOMATIC FAULT REPORTING TOOL TO IMPROVE CUSTOMER EXPERIENCE IN INTEGRATION CLOUD SERVICE
1272.	AUTOMATIC IRRIGATION SYSTEM USING INTERNET OF THINGS

1273.	AUTOMATIC KEY PROVISIONING FOR SWITCH-TO-SWITCH MACSEC
1274.	AUTOMATIC SEAT BELT BUCKLE LIFTER AND UNBUCKLING SYSTEM
1275.	AUTOMATIC SEGMENTATION AND 3D RENDERING OF THE HEART, NUCLEAR MEDICAL IMAGE
1276.	AUTOMATIC WHEELCHAIR
1277.	AUTOMATIC WIRELESS NETWORK SECURITY TESTING USING RASPBERRY-PI
1278.	AUTOMATING CHANGE MANAGEMENT FORM CREATION
1279.	AUTOMATING CLINICAL DATA ENTRY OF PRESCRIPTION DOCUMENTS
1280.	AUTOMATING DEFECTS REPORT FROM QC USING COM4JAPI, OTACLIENT, CRON JOB, ANT BUILD AND JAVA
1281.	AUTOMATING PLANT GRAPHICS MIGRATION
1282.	AUTOMATING PROBLEM MANAGEMENT
1283.	AUTOMATING REPORT COMPARISON FOR EFFECTIVE TESTING
1284.	AUTOMATION FRAME WORK DESIGN FOR WEB BASED TESTING AND WIRELESS SENDOR NETWORK DESIGN FOR ENVIRONMENTAL MONITORING
1285.	AUTOMATION FRAMEWORK
1286.	AUTOMATION FRAMEWORK FOR IPV6 STACK EVALUATION
1287.	AUTOMATION FRAMEWORK FOR RADIUS & TACACSPLUS IN 1FINITY
1288.	AUTOMATION OF BANKING PROCESS:LOAN ORIGATION
1289.	AUTOMATION OF CALIBRATION SYSTEM
1290.	AUTOMATION OF CODING USING SCRIP TOOL
1291.	AUTOMATION OF COVERAGE COUNTRY REPORTS
1292.	AUTOMATION OF DISASTER RECOVERY PROCESS IN IT OPERATIONS
1293.	AUTOMATION OF INFRASTRUCTURE SERVICES ON CLOUD TECHNOLOGY
1294.	AUTOMATION OF MANUAL TEST CASES OF ATM TRANSACTIONS
1295.	AUTOMATION OF WEB APPLICATION TESTING USING SELENIUM WEBDRIVER
1296.	AUTOMATION OF WEB-APPLICATION TESTING
1297.	AUTOMATION OF WINDOWS ACPI FEATURE PWRTEST.EXE BY API.
1298.	AUTOMATION REPORTING SOLUTION DASHBOARD
1299.	AUTOMATION TEST SCRIPT ENGINE
1300.	AUTOMATION TESTING FRAMEWORK DEVELOPMENT FOR VEHICLE DIAGNOSTICS VALIDATION
1301.	AUTOMATION TESTING USING ROBOT FRAMEWORK
1302.	AUTOMATION: DATABASE TABLESPACE MANAGEMENT
1303.	AUTOMATIVE DATABASE CORRECTIVE SYSTEM
1304.	AUTOMOBILE SOC VERIFICATION FRAMEWORK
1305.	AUTONOMA INTEGRATION DESIGNER
1306.	AUTOSAR BASED BODY CONTROL MODULE
1307.	AWS S3 I/F FOR NON-AWS CLOUD STORAGE SERVICE
1308.	BA TRANSPORT APP
1309.	BACKUP AND RESTORE APP
1310.	BANK ACCOUNT NUMBER PORTABILITY
1311.	BANKING ON CLOUD
1312.	BASIC RISK BASED AUTHENTICATION USING MACHINE LEARNING
1313.	BATCH PROCESSING HUGE FILES
1314.	BEHAVIOR ANALYSIS & LOGICAL ENGINE (BALE) FOR FILE DETECTION IN FILE REPOSITORIES.
1315.	BIG DATA IMPLEMENTATION OF DRUG QUERY SYSTEM
1316.	BIGDATA BASED RETAIL RECOMMENDER SYSTEM FOR NON E-COMMERCE
1317.	BIN BASED ROUTING LOGIC IN PAYMENT GATEWAY
1318.	BINARY REGRESSION SEARCH AUTOMATION FOR BUGS
1319.	BIOMEDICAL APPLICATION DEVELOPMENT USING OPTICAL FIBER EMBEDDED SENSOR (BLOOD GROUP DETECTION)
1320.	BIOMETRIC AUTHENTICATION FRAMEWORK TO FACILITATE SECURE IDENTITY AND ACCESS SOLUTIONS
1321.	BITS INTERACTIVE VIRTUAL AGENT (BOT)
1322.	BLA3D-A SOFTWARE SUITE FOR 3D PRINTING
1323.	BLACK BOX TESTING
1324.	BLOCKCHAIN - INNOVATION IN FINANCIAL MARKETS
1325.	BLOCKCHAIN FOR B2B CONTRACTS (A VIEW FROM UNCONTROLLED SHIPMENTS)
1326.	BLOCKCHAIN TECHNOLOGIES, AND USECASE IN BANKING DOMAIN
1327.	BLOCKCHAIN: DIGITALLY REBUILDING THE PATENT REGISTRATION PROCESS
1328.	BLOGGING WEB PAGE
1329.	BON VOYAGE (TRIP MANAGEMENT)

1330.	BOOTLOADER DESIGN AND FIRMWARE UPGRADE OVER CAN PROTOCOL
1331.	BOOTLOADER UPDATER FOR IN-VEHICLE ECU USING CAN FD FLEXIBLE DATA RATE PROTOCOL
1332.	BOT: ROBOTIC & IT PROCESS AUTOMATION
1333.	BOTS IN BUSINESS PROCESS MANAGEMENT
1334.	BUDGET ALLOCATION TOOL
1335.	BUILD A DEEP LEARNING MODEL TO IDENTIFY NERVE STRUCTURES IN ULTRASOUND IMAGES WITH SPATIOTEMPORAL CONSISTENCY FOR NERVE SEGMENTATION
1336.	BUILD PROCESS AUTOMATION
1337.	BUILDING HYPER-SCALE ENTERPRISE SERVICES USING AZURE SERVICE FABRIC
1338.	BUILDING PIPELINE(CI/CD) WITH ADVANCED DEVOPS TOOLS
1339.	BUSINESS INSIGHTS OF USER USAGE RECORDS OF DATA CARDS
1340.	BUSINESS INTELLIGENCE PROCESS INVOLVED DATA MART
1341.	C & C++ CODE FORMATTER, BEAUTIFIER AND TEXT ANALYZER USING NLP
1342.	CALL-OUT RATE REDUCTION IN ELEVATOR SYSTEMS
1343.	CAMPAIGN LAUNCHING USING RANDOM FOREST TECHNIQUE
1344.	CAMPAIGN MANAGEMENT AND REPORTING SYSTEM
1345.	CAMPUS RECRUITMENT SYSTEM
1346.	CANCER DIAGNOSIS USING DATA MINING TECHNOLOGY
1347.	CAPGEN PORTAL ( CAPACITY INFORMATION PORTAL WITH DATA ANALYSIS AND REPORTING)
1348.	CAR POOLING BASED SYSTEM
1349.	CAR SALES ANALYTICS
1350.	CHAOTIC SEARCHABLE ENCRYPTION FOR MOBILE CLOUD STORAGE
1351.	CHARACTER RECOGNITION IN E-GOVERNANCE DOCUMENTS USING COMPUTATIONAL INTELLIGENCE (NATURE INSPIRED TECHNIQUES)
1352.	CHAT BOT BASED OMNI-CHANNEL PLATFORM
1353.	CHAT BOT FOR BETTER CONVERSATIONAL COMMERCE EXPERIENCE USING IBM WATSON
1354.	CHAT BOT FOR NEW JOINEE
1355.	CHAT BOT FOR SELF-HEALING
1356.	CHECKING FOR APPLICATION VULNERABILITIES USING FAULT INJECTION
1357.	CHLOROPHYLL METER DEVICE DEVELOPMENT USING RASPBERRY PI SOC
1358.	CHOOSING RIGHT DEVELOPMENT METHODOLOGY FOR CUSTOMIZING ERP APPLICATIONS
1359.	CHURN PREDICTION IN TELECOM INDUSTRY
1360.	CHURN PREDICTION MODEL FOR DIGITAL SERVICE PROVIDER
1361.	CITIZEN SERVICES THROUGH CRIME AND CRIMINAL TRACKING NETWORKS AND SYSTEMS (CCTNS) ON MOBILE PLATFORM
1362.	CLASSIFICATION OF DRIVER BEHAVIOR USING COMPUTER VISION TECHNOLOGY
1363.	CLASSIFICATION OF NON FUNCTIONAL REQUIREMENTS USING SOFT COMPUTING TECHNIQUES
1364.	CLASSIFY HANDWRITTEN DIGITS FROM IMAGE FILE
1365.	CLICK STREAM ANALYTICS
1366.	CLIENT INFRASTRUCTURE IMPROVEMENT BASED ON ADVANCED PREDICTION ALGORITHMS
1367.	CLIENT IPS SUPPORT USING HYPERSCAN IN NETSKOPE PROXY
1368.	CLOUD ASSISTED INFORMATION TRACKING AND REPORTING TOOL
1369.	CLOUD AUDITING (A WAY TO SECURE CLOUDS)
1370.	CLOUD BASED ARCHITECTURE FOR DISTRIBUTED AND SCALABLE SYSTEMS
1371.	CLOUD BASED DISTRIBUTION POINT SUPPORT
1372.	CLOUD BASED E-ENGINES WITH MULTIPLE LANGUAGE SUPPORT FOR DESCRIPTIVE, DIAGNOSTIC, PREDICTIVE, PRESCRIPTIVE ANALYSIS ACROSS MULTIPLE DOMAINS
1373.	CLOUD BASED SECURITY ENFORCEMENT FOR BRANCH OFFICE ROUTERS
1374.	CLOUD COMPUTING
1375.	CLOUD COMPUTING COST-A SURVEY ON BALANCE BETWEEN THE COST AND THE PERFORMANCE
1376.	CLOUD COMPUTING SECURITY ANALYSIS
1377.	CLOUD DATA PROTECTION AND EFFECTS ON ENTERPRISES
1378.	CLOUD ENABLEMENT OF RELAYHUB
1379.	CLOUD ERP - A DILEMMA FOR ORGANISATIONS TO ADOPT?
1380.	CLOUD INFRASTRUCTURE MANAGEMENT
1381.	CLOUD METRIC (MONITORING OF SERVERS)
1382.	CLOUD PLATFORM FOR AUTONOMOUS VEHICLE DATA PROCESSING AND DISTRIBUTION
1383.	CLOUD SECURITY CONFIGURATION MANAGER
1384.	CLOUD SERVER CONFIGURATIONS WITH ORCHESTRATOR SCRIPTS

1385.	CLOUD SOLUTION FOR STORING AND PROCESSING VIRUS SAMPLES
1386.	CLOUD UNIFIED PLATFORM (CUP)
1387.	CLUSTER-BASED ROUTING FOR THE MOBILE SINK IN WIRELESS SENSOR NETWORKS WITH OBSTACLES
1388.	CLUTTER GENERATOR FOR AUTOMOTIVE RADAR TESTING
1389.	COCKPIT INTEGRATION WITH PORTABLE ELECTRONIC DEVICES (PED)
1390.	CODEX- BUILD MANAGEMENT SYSTEM
1391.	COGNITIVE COMPUTING IN ENTERPRISE APPLICATIONS
1392.	COLUMN ACCESS REQUEST PLUGIN
1393.	COLUMN-ORIENTED DATABASE IMPLEMENTATION IN POSTGRESQL FOR IMPROVING PERFORMANCE OF READ-ONLY QUERIES
1394.	COMMON AUTOMATION FRAMEWORK
1395.	COMMON VULNERABILITY EXPOSURES (CVE) TRACKER
1396.	COMPANY’S VEHICLE MANAGEMENT TOOL
1397.	COMPARATIVE STUDY BETWEEN ALGORITHMS FOR DEALING WITH STORM WORM
1398.	COMPARATIVE STUDY OF DIFFERENT OPERATING SYSTEMS FOR IOT
1399.	COMPARATIVE STUDY OF OPENWHISK, INSTANT RUNTIMES, IBM CONTAINERS, OPENSTACK AND BUILD A CLOUD APPLICATION BY INTEGRATING THE BEST FEATURES
1400.	COMPARISON STUDY OF VISUALFORCE (FORCE.COM PLATFORM FRAMEWORK) TO VISUALFORCE EMBEDDED WITH ANGULAR JS : CONCERNING THE QUALITY OF DEVELOPMENT
1401.	COMPLAINTS REDUCTION IN BANKING
1402.	COMPLIANCE CONCIERGE
1403.	COMPONENT QUALITY PREDICTION BY ARTIFICIAL NEURAL NETWORK
1404.	COMPUTER ASSISTED LEARNING AND LIFE CYCLE MANAGEMENT OF A MACHINE LOGICS FOR A MEDICAL DEVICE
1405.	COMPUTER NETWORKS AND SECURITY
1406.	CONFIGURING CRACKLIB DICTIONARY
1407.	CONGESTION CONTROL MECHANISM IN CARRIER AGGREGATION
1408.	CONNECTED DEVICES AND TRUST FRAMEWORK
1409.	CONNECTED VEHICLES
1410.	CONNECTED VEHICLES FORMATION OF VEHICULAR NETWORK USING WAVE PROTOCOL
1411.	CONTENT MANAGEMENT SYSTEM VERSIONING AND DEPLOYEMENT
1412.	CONTINUOUS INTEGRATION / CONTINUOUS DEPLOYMENT
1413.	CONTINUOUS INTEGRATION AND DEPLOYMENT OF ANDROID CODE USING THE DOCKER
1414.	CONVERSATION AGENT FOR BANK
1415.	CONVERSATIONAL COMMERCE: ARTIFICIAL INTELLIGENT CHATBOT FOR CUSTOMER NEED
1416.	CONVERSION OF DATA USING JAVA BATCH JOB INSTEAD OF ETL TOOL
1417.	CORPORATE CUSTOMER ONBOARDING INTO THE BANK SYSTEMS
1418.	CORRUPTION CONTROL THROUGH BUDGET MAINTENANCE
1419.	COSMIC FUNCTION BASED APPROACH FOR SOFTWARE SIZING USING MACHINE LEARNING
1420.	COST AND TIME EFFICIENT TRAVEL SEARCH SYSTEM
1421.	COST EFFECTIVE WAY TO IDENTIFY BOTNETS AND PREVENT DDOS ATTACKS
1422.	COST REDUCTION VIA QAQC
1423.	COST-EFFECTIVE INTERNET ACCESSIBLE PLATFORM IN LOAN SERVICING
1424.	CREATE REPL PACKAGE FOR ATOM IDE
1425.	CREATING OPERATIONAL ENTERPRISE STANDARD REPORT USING PENTAHO REPORTING
1426.	CREATING SOA BASED TEST AUTOMATION FRAMEWORK FOR KIOSK SYSTEM
1427.	CROSS LINGUAL SEMANTIC REFERENCE FRAMEWORK FOR MULTI LINGUAL SEARCH ON INDIAN LANGUAGES
1428.	CUSTOMER ANALYSIS
1429.	CUSTOMER ANALYTICS
1430.	CUSTOMER CONNECT MARKETING ANALYSIS(CCMA)
1431.	CUSTOMER DATA ANALYSIS WITH APACHE SPARK & APACHE ZEPPELIN
1432.	CUSTOMER EXPERIENCE IN TELECOM NETWORK USING BIGDATA TECHNOLOGY
1433.	CUSTOMER EXPERIENCE MANAGEMENT (CEM) TECHNOLOGY GAP ASSESSMENT & RECOMMENDATIONS
1434.	CUSTOMER IDENTIFICATION HUB
1435.	CUSTOMER INVOICES AUTOMATION
1436.	DAILY ORDER PREDICTION OF A PRODUCT USING R AND ML
1437.	DARK FIBER TROUBLE TO RESOLVE
1438.	DARK FIBRE ACCESS E2E TESTING
1439.	DASHBOARD FOR SMART CITIES

1440.	DATA ANALYSIS WITH APACHE NIFI
1441.	DATA ANALYTICS WITH PREDICTIVE ALGORITHM
1442.	DATA ATTENUATOR
1443.	DATA CORRECTIONS USING SPARK
1444.	DATA EMBEDDING IN VIDEO STEGANOGRAPHY USING ZERO ORDER HOLD METHOD FOR SECURED DATA TRANSMISSION
1445.	DATA INFRASTRUCTURE PLATFORM
1446.	DATA INTEGRATION - A CASE STUDY
1447.	DATA INTEGRATION AND ANALYTIC OVER CLOUD PLATFORM
1448.	DATA INTEGRATION FROM HETEROGENOUS DATA SOURCES
1449.	DATA MINING APPROACHES FOR FINANCIAL DATA ANALYSIS
1450.	DATA MINING CHALLENGES AND OPPORTUNITIES IN ASTROINFORMATICS
1451.	DATA MINING FOR MEDICAL ANALYSIS
1452.	DATA MINING OF ENTERPRISE QUALITY DATA USING NATURAL LANGUAGE TOOLKIT
1453.	DATA MINING ON PROJECT & ACCOUNTING DATABASE
1454.	DATA OVER ACOUSTIC USING OFDM
1455.	DATA OVER ACOUSTIC USING OFDM
1456.	DATA PIPILINE FRAMEWORK
1457.	DATA PROTECTION IN CLOUD SYSTEMS
1458.	DATA SECURITY AND REPLICATION ON CLOUD
1459.	DATA SECURITY IN CLOUD COMPUTING
1460.	DATA STORAGE AND MINING FOR SUPPORT PROJECT
1461.	DATA STORAGE SECURITY IN CLOUD COMPUTING
1462.	DATA STORAGE, PROCESSING AND ANALYSIS IN A DISTRIBUTED ENVIRONMENT
1463.	DATA WAREHOUSING AND DATA MINING
1464.	DATA WAREHOUSING TO ENHANCE ANALYTICS IN CUSTOMER SERVICE LEVEL.
1465.	DATABASE HEALTH CHECK AUTOMATION
1466.	DATABASE INFRA AUTOHEAL SYSTEM (DIAS)
1467.	DATABASE SYSTEMS PERFORMANCE AND RELIABILITY MONITORING.
1468.	DDL TRACKING SYSTEM FOR OPEN SOURCE DBMS FOR AGILE ENVIRONMENT
1469.	DDOS ATTACKS AND THEIR DEFENSE REMEDIAL APPROACHES
1470.	DDOS PROTECTION AND LOAD BALANCING IN SOFTWARE DEFINED NETWORK USING FLOODLIGHT CONTROLLER
1471.	DEALERSHIP APPOINTMENT CHATBOT
1472.	DECENTRALIZED MODEL BUILDING IN DATA-PARALLEL DISTRIBUTED MACHINE LEARNING SYSTEMS
1473.	DEEP LEARNING APPROACH FOR AUTOMATIC EMAIL CLASSIFICATION'
1474.	DEEP LEARNING IN NATURAL LANGUAGE PROCESSING
1475.	DEEP LEARNING MODEL TO PREDICT COMPANY'S REVENUE BASED ON FINANCIAL INDICATORS
1476.	DEEP LEARNING WITH FASTER RCNN FOR TEXT SPOTTING: AN AUTOMOTIVE APPROACH
1477.	DELIVERY EXCELLENCE
1478.	DEMAND ANALYSIS FOR BACKORDER PREDICTION
1479.	DEMAND PRICING
1480.	DEMOGRAPHIC SURVEILLANCE ANDROID APPLICATION
1481.	DEMONETIZATION SENTIMENT ANALYSIS USING TWITTER DATA
1482.	DEMONSTRATE THE REDUCE EFFORT IN CONTENT TESTING USING JUNIT FRAMEWORK
1483.	DE-MYSTIFYING DETERMINISTIC ETHERNET FORAY IN INDUSTRIAL AND AUTOMOTIVE SPACE AND MITIGATING VERIFICATION CHALLENGES IN TIME SENSITIVE NETWORKS
1484.	DEPLOYING DOCKER CONTAINERS ON ARM PLATFORMS
1485.	DEPLOYMENT OF PCRF INTO VNF
1486.	DESIGN AND BUILD A DATA WAREHOUSE FOR PROJECTS METRICS
1487.	DESIGN AND DEVELOPMENT OF A BOT FOR SMART SHOPPING
1488.	DESIGN AND DEVELOPMENT OF A BOT TO REVIEW AND MONITOR CODING PRACTICES
1489.	DESIGN AND DEVELOPMENT OF A DOMAIN SPECIFIC COGNITIVE ASSISTANT
1490.	DESIGN AND DEVELOPMENT OF DUAL SMART CARD READER USING I.MX233 APPLICATIONS PROCESSOR
1491.	DESIGN AND IMPLEMENT A RULE ENGINE TO PRE-VALIDATE THE BULK CSV DATA AGAINST THE SALESFORCE VALIDATION RULES
1492.	DESIGN AND IMPLEMENTATION OF DATA WAREHOUSE FOR GLOBAL PHARMA CLIENT
1493.	DESIGN AND SIMULATION OF ELECTRONIC SOFT STARTER FOR DC DRIVES RATED 7.5 TO 15KW / 220 V DC IN POWER PLANTS
1494.	DESIGN OF A MULTI-LAYERED ARCHITECTURE FOR EFFECTIVE IMPLEMENTATION OF SENTIMENTAL ANALYTICS OF INDIAN POLICY SYSTEM THROUGH SOCIAL MEDIA.

1495.	DESIGN OF SENSOR INTERFACE WITH NI WSN NODES FOR SHM APPLICATIONS
1496.	DESIGN TO EXECUTION DTE
1497.	DESIGN,DEPLOYMENT AND ANALYSIS CONSIDERATIONS FOR A SMART UNIVERSITY CAMPUS
1498.	DESIGNING AN AUTOMATION FRAMEWORK
1499.	DESIGNING AND DEVELOPING PRINCIPLES OF A RESPONSIVE WEB DESIGN TO SERVE MULTI DEVICE AUDIENCE
1500.	DETECTING MALICIOUS URLS USING MACHINE LEARNING TECHNIQUES
1501.	DETECTION OF OUTER AND INNER LOOPS FOR A CLUSTER OF CONNECTED TRIANGLES IN A PLANE
1502.	DEVELOP AN APPLICATION TO MANAGE THE SNAPSHOTS OF CLOUD HOSTED ASSETS
1503.	DEVELOP AN INTERACTIVE UTILITY OVER VOICE COMMANDS FOR NETBACKUP
1504.	DEVELOP BUSINESS INTELLIGENCE TOOLS AND ANALYTICS IN SUPPORT OF DATA DRIVEN DECISION MAKING
1505.	DEVELOPER EXPERIENCE IN SAP CLOUD FOUNDRY COCKPIT
1506.	DEVELOPING A LOGISTIC SOFTWARE IN CLOUD
1507.	DEVELOPING AND MANAGING CLOUD NATIVE APPLICATIONS
1508.	DEVELOPING COMMON, ROBUST REGULATORY FRAMEWORK FOR MIFID II
1509.	DEVELOPMENT OF ANDON SYSTEM IN PRODUCTION LINE
1510.	DEVELOPMENT OF ANDROID BASED DATA COLLECTION FRAMEWORK AND ANALYSIS FOR INTELLIGENCE GATHERING FOR DEFENCE AND UTILIZATION IN COUNTER INTELLIGENCE OPERATIONS
1511.	DEVELOPMENT OF DATUM FEATURE SYMBOL(DFS) FOR PTC CREO
1512.	DEVELOPMENT OF MACHINE DATA ONTOLOGY FOR MACHINE HEALTH DIAGNOSTICS
1513.	DEVELOPMENT OF REMOTE HANDLING TECHNIQUE OF HIGH VOLTAGE POWER SUPPLY
1514.	DEVELOPMENT OF USER MANAGEMENT PORTAL FROM E-BUSINESS MONITORING APPLICATION USING WEB TECHNOLOGIES (SERVLETS, JSP, STRUTS 2, HIBERNATE 3)
1515.	DEVELOPMENT OF PECHORA FUNCTIONAL CHECK SIMULATOR
1516.	DIAGNOSIS COMMUNICATION APPLICATION
1517.	DIAGNOSTIC & CELL BALANCING THE BATTERY PACK OF ELECTRIC VEHICLE AT PRODUCTION LINE & SERVICE STATION.
1518.	DIGITAL CHANNEL STACKING SOLUTION ON STB
1519.	DIGITAL DESIGN USING FINFETS
1520.	DIGITAL E-COMMERCE ONLINE EMPORIUM CART
1521.	DISCOVERY AND RECONCILIATION OF LTE NETWORK
1522.	DISCRIMINATION OF FLASH EVENTS FROM HR D-DOS ATTACKS
1523.	DISEASE PREDICTION USING MACHINE LEARNING ALGORITHMS ON DENTAL RADIOGRAPHS
1524.	DISSEMINATION OF AIRLINE OPERATIONAL AND TECHNICAL DATA TO PILOTS IPADS USING CLOUD TECHNOLOGY
1525.	DISTRIBUTED INSTALL AGENT FOR CREO APPLICATION
1526.	DISTRIBUTED METADATA MANAGEMENT FOR LARGE CLUSTER-BASED STORAGE SYSTEM
1527.	DIXF INBOUND - TRADE AGREEMENTS FOR MICROSOFT DYNAMICS AX
1528.	DM/ML ALGORITHM WITH R LANGUAGE
1529.	DOOR ALERT SYSTEM FOR PASSENGER CARS
1530.	DPMS - DRUG AND PROFILE MANAGEMENT SYSTEM
1531.	DRIVER HEALTH MONITORING SYSTEM
1532.	DRIVER MONITORING SYSTEM
1533.	DRIVER SAFETY ENHANCEMENT BASED ON HEART BEAT MONITORING SYSTEM
1534.	DROWSINESS DETECTION AND ALERTING SYSTEM
1535.	DTH SUBSCRIPTION VIA QR CODE
1536.	DTV FOR VEHICLE INFOTAINMENT SYSTEM.
1537.	DYNAMIC ASSET MANAGEMENT AND ALERTS
1538.	DYNAMIC CONTENT MANAGEMENT SOLUTION FOR BUILDING WEBSITES USING AEM(ADOBE EXPERIENCE MANAGER)
1539.	DYNAMIC LOAD DISTRIBUTION ON CLOUD
1540.	DYNAMIC SCHEDULING IN REAL TIME MULTICORE SYSTEMS
1541.	DYNAMIC WEB EXPLORATION DATA MINING BY CUSTOMIZED APRIORI ALGORITHM
1542.	DYNAMIC/SURGE PRICING
1543.	EARLY FAULT DETECTION OF SPACECRAFT ACTUATOR SYSTEM USING MACHINE LEARNING: CASE STUDY - REACTION WHEELS
1544.	EASING CLOUD DEPLOYMENT OF MCAFFEE EPOLICY ORCHESTRATOR THROUGH DEPLOYMENT TOOL
1545.	EBDCIC FILE PROCESSING IN HADOOP ENVIRONMENT
1546.	E-BUISNESS APPLICATION
1547.	ECMP IN BGP, BGP ADD-PATH, BGP DIVERSE PATHS
1548.	E-COMMERCE ANALYTICS
1549.	E-COMMERCE ANDROID APPLICATION

1550.	E-COMMERCE PLATFORM FOR DIVERSE CRAFTSMANSHIP
1551.	EDUCATIONAL INSTITUTES PERFORMANCE ANALYSIS USING ADAPTIVE REPLICATION MANAGEMENT IN HDFS BASED ON SUPERVISED LEARNING
1552.	EFFECTIVE GPS BASED BLOOD DONOR TRACKER MOBILE APP
1553.	EFFECTIVE TEST SUITE GENERATION FOR BLACK BOX TESTING
1554.	EFFECTIVE UTILIZATION OF AUDIO END-POINTS AND ENHANCING USER-EXPERIENCE IN ANDROID BASED EMBEDDED SYSTEMS
1555.	EFFECTIVE UTILIZATION OF DIAGNOSTIC DATA IN TECHNICAL SUPPORT BUSINESS
1556.	EFFECTIVE WASTE CLEARANCE MONITORING SYSTEM USING MOBILE & IMAGE PROCESSING TECHNOLOGIES FOR SMART CITIES
1557.	EFFICIENCY DETECTION AND STRESS REDUCTION BY ANALYZING COGNITIVE LOAD
1558.	EFFICIENCY SOLUTIONS IN COMPLAINT HANDLING AND FIELD ISSUES
1559.	EFFICIENT CLASSIFICATION OF DATA STREAMS USING VFDT(VERY FAST DECISION TREE)
1560.	EFFICIENT QUERY PROCESSING IN SPARSE DATABASE BY AVOIDING SUBSPACES
1561.	EFFICIENT RESYNCHRONISATION OF SLS MAPS AFTER DOUBLE LAN FAILURE USING MASTER-SLAVE ALGORITHM
1562.	ELASTIC AND SCALABLE DATA FOR CLOUD COMPUTING
1563.	ELASTICSEARCH WITH LOGSTASH AND KIBANA
1564.	ELK CONFIGURATION WITH FILEBEAT, METRICBEAT TO PROCESS AND ANALYZE DIFFERENT LOG FILES AND SERVER HEALTH
1565.	EMAIL QUEUE HANDLER USING AWS BUCKET
1566.	EMBEDDED SIM REMOTE PROVISIONING
1567.	EMERGENCY HELP WITH SMARTDEVICELINK
1568.	EMOTION DETECTION AND RECOGNITION FROM NEURAL SIGNALS USING DEEP MACHINE LEARNING
1569.	EMPLOYEE MANAGEMENT SYSTEM
1570.	EMV CHIP VALIDATION FOR CARD ISSUERS VIA MASTERCARD
1571.	ENABLING PUBLIC AUDITABILITY AND DATA DYNAMICS FOR STORAGE SECURITY IN CLOUD COMPUTING
1572.	ENCRYPTED DATA MANAGEMENT WITH DEDUPLICATION IN CLOUD COMPUTING
1573.	ENCRYPTION AND SECURE INTER-BODY COMMUNICATION SYSTEM IN WIRELESS SENSOR NETWORK
1574.	END USER EXPERIENCE MONITORING
1575.	END-TO-END TEST AUTOMATION
1576.	ENERGY CONSERVATION BASED ON WIRELESS SENSOR NETWORK
1577.	ENERGY EFFICIENT AND RELIABLE DATA TRANSFER PROTOCOL
1578.	ENERGY SAVING FOR UC (UNIT COOLING) FAN
1579.	ENHANCE VERIGATE AUTOMATION
1580.	ENHANCED MESSAGING EXPERIENCE IN ENTERPRISE SOCIAL NETWORKING APPLICATION FOR ANDROID
1581.	ENHANCEMENT OF SEARCH BY IMAGE
1582.	ENHANCING INDEXING IN SPATIAL DATABASES USING GI14 HYBRID ALGORITHM
1583.	ENTERPRISE CODE MANAGEMENT SOLUTION
1584.	ENTERPRISE EMPLOYEE TIMESHEET TRACKER
1585.	ENTERPRISE IOT AND INDUSTRY 4.0 ADOPTION, TRENDS AND FUTURE STUDY, PERSPECTIVE, OPPORTUNITIES FOR GSI AND ISV
1586.	ENTERPRISE SOFTWARE PRODUCT FOR SELLERS
1587.	ENTERPRISE WEB CRAWLER
1588.	ERASURE CODING AS A DATA PROTECTION METHOD
1589.	ERICSSON GUI MANAGED OBJECT
1590.	ERP-ORDER INITIATION
1591.	ESSENTIAL HR TOOLS
1592.	ESTIMATING PROBABILITY OF DEFAULT FOR CREDIT CARD CLIENTS AND SETTING GUIDELINE FOR NEW CREDIT APPLICATION
1593.	ETHERNET CONNECTION BETWEEN DISPENSERS AND FORECOURT CONTROLLER.
1594.	EVALUATION OF DESCRIPTIVE ANSWERS FOR REAL-TIME EXAMINATION
1595.	EVOLVED NETWORK TEST SUITE
1596.	EXECUTION OF KEY LOGGER IN REMOTE MACHINE USING SSH BRUTE FORCE
1597.	EXPENSE FORECASTING FOR ENTERPRISE USING HYBRID TIME SERIES FORECASTING MODELS
1598.	EXPLOITING THE AVAILABILITY OF TESTS USING HIGH VOLUME AUTOMATED TESTING
1599.	EXPLORING BIG DATA USING MICROSOFT AZURE HDINSIGHT
1600.	EXPLORING THE MOTIVATING FACTORS OF INDIAN CROWD TOWARDS CROWDSOURCING SOFTWARE DEVELOPMENT
1601.	EXTEND ORACLE DATABASE 11G INTO CLUSTERS AND CLOUD
1602.	EXTENDED EYE
1603.	EXTENSIBLE LOGGING FRAMEWORK

1604.	FACEBOOK MESSENGER BOT FOR CAPITAL FIRST
1605.	FACILITATE CONTINUOUS INTEGRATION BY DECOMPOSITION OF SOFTWARE IN TO SMALLER COMPONENTS TO ENABLE FASTER BUILD AND RELEASE CYCLES
1606.	FACTSET: STOCK MARKET RECOMMENDATIONS OVERCOMING COLD-START
1607.	FAILURE ANALYSIS AND REPORTING
1608.	FAILURE-AWARE RESOURCE PROVISIONING SYSTEM
1609.	FAIR CAB
1610.	FARM CONNECT B2B E-COMMERCE
1611.	FARMERS CALL CENTER QUERY DATA ANALYSIS USING CLASSIFICATION AND QUERY TYPE PREDICTION
1612.	FASTER DISPLAY GRAPHICS PROCESSING FOR HIGHER RESOLUTIONS 4K & BEYOND DURING PRE-SILICON PHASE USING FPGA AND DISPLAY ONLY GRAPHICS DRIVER
1613.	FAULT MANAGEMENT AND HEALTH MONITORING ON AVAIONICS BUS
1614.	FEATURE ACCESSIBILITY ANALYTICS FOR MEDICAL DEVICES
1615.	FETCH-LOG TOOL
1616.	FILE SYSTEM USING DISTRIBUTED OBJECT STORAGE
1617.	FILE TRANSFER FROM SERVER TO CLIENT BASED ON FORMAT
1618.	FINANCIAL MARKET ANALYSIS SYSTEM
1619.	FINDING POINTS OF INTEREST IN A LARGELY QUITE SURVEILLANCE VIDEO FEED
1620.	FINE TUNING DATABASE TO IMPROVE THE PERFORMANCE OF ITSM AND SMARTIT
1621.	FIXED POINT DNN INFERENCE FRAMEWORK FOR EMBEDDED SYSTEMS
1622.	FLASHING OVER THE RF
1623.	FLASHING SOLUTION FOR IOT DEVICES
1624.	FLEET SYSTEM
1625.	FLEX - RE-ARCHITECT AND REWRITE TE FULFILLMENT
1626.	FORECASTING WITH VIDEO ANALYTICS
1627.	FRAMEWORK ANALYSIS TO SUPPORT MULTIPLE PLATFORMS FOR APPLICATION GUI
1628.	FRAMEWORK FOR TOP K SPATIAL KEYWORD SEARCH
1629.	FRAMEWORK TO CREATE AN ECOSYSTEM OF AUTOMATICALLY DETECTING AND BUILDING SOURCE CODE CHANGES, FEATURING AUTO-INSTALL AND SELF-TEST OF AVAYA PROACTIVE CONTACT INCLUDING CUI BASED AGENTS, WITH FAILURE DETECTION AND REPORTING
1630.	FRAUD DETECTION SYSTEM
1631.	FREQUENT ITEMSET DATA MINING
1632.	FRIEND RECOMMENDER SYSTEM
1633.	FUNCTIONAL & OPERATIONAL ANALYSIS OF THE ENTERPRISE SERVICE BUS USING DATA ANALYTICS
1634.	FUNCTIONAL TEST CASE SCHEDULER, ANALYZER AND VERDICT REPORTER FOR RNC USER PLANE
1635.	FUNNYBOT - NEW JOKES GENERATION USING CHARACTER LEVEL LSTM
1636.	FUTURE OF E-COMMERCE IN INDIA - CHALLENGES & OPPORTUNITIES
1637.	FUZZY APPROACH TO ENHANCE ROUTE STABILITY OF AODV ROUTING PROTOCOL
1638.	FUZZY SEARCH USING MULTIPLE WORDS
1639.	GAINING USEFUL INSIGHTS BY ANALYZING CONVERSATION
1640.	GAME TESTING
1641.	GDS WORLDSPAN BOOKING DETAILS RETRIEVAL
1642.	GENERIC AUTOMATION FRAMEWORK FOR SOFTWARE TESTING
1643.	GENERIC COMPUTING PLATFORM FOR EARTH OBSERVATION (EO) SERVICES
1644.	GENERIC SEARCH INTERFACE FOR SCIENCE DATA ARCHIVES
1645.	GENOMIC LOCATION MATCHER
1646.	GEOSPATIAL APPLICATION FOR PREPARATION OF URBAN PLANS USING OPEN SOURCE TOOLS AND TECHNOLOGIES
1647.	GPS AND GPRS BASED TIME AND ATTENDANCE TRACKING SYSTEM USING ANDROID APPLICATION
1648.	GPS BASED RESOURCE TRACKING & COMMUNICATION
1649.	GRAPHICAL CHASSIS SIMULATOR
1650.	GREEN SCORE
1651.	GROUPWARE MANAGEMENT SYSTEM
1652.	GUI TOOL FOR INTERPRETATION AND DEBUGGING OF ATM ECO-SYSTEM
1653.	GUIDED MAINTENANCE USING AUGMENTED REALITY
1654.	HADOOP BASED DATA STORE FOR B2B APPLICATION
1655.	HATIM SOCIAL WORK MANAGEMENT SYSTEM
1656.	HEAD UP DISPLAY FOR PASSENGER CARS
1657.	HEALTH AND FITNESS MANAGEMENT SYSTEM



1658.	HEALTHCARE DATABASE
1659.	HEALTHCARE MOBILE APPLICATION
1660.	HETEROGENEOUS NETWORKS AGGREGATION FOR DOWNLOAD ACCELERATION
1661.	HIGH AVAILABILITY AIX CLUSTER WITH GEOGRAPHIC LOGICAL VOLUME MANAGER FOR POWERHA SYSTEMMIRROR ENTERPRISE EDITION
1662.	HIGH AVAILABILITY SOLUTIONS FOR MISSION CRITICAL APPLICATIONS
1663.	HIGH LEVEL TEST APPLICATION PROGRAMMING INTERFACE
1664.	HIGH PERFORMANT ANALYTICS FRAMEWORK USING MAP REDUCE
1665.	HIGH RAINFALL AREA IDENTIFICATION USING SATELLITE SENSORS & WEATHER FORECAST MODEL
1666.	HOLIDAY PACKAGE MANAGEMENT SYSTEM
1667.	HOME AUTOMATION WITH IOT
1668.	HOME MONITORING & CONTROL SYSTEM USING MICROCONTROLLER AND ANDROID APP
1669.	HOOT-STRUCTURED SEARCH ENGINE
1670.	HOTEL FREE TEXT SEARCH - SEARCH, RETRIEVE AND RECOMMEND HOTELS BASED ON THE DESCRIPTION, AMENITIES, PRICE AND REVIEWS USING INFORMATION RETRIEVAL AND TEXT MINING.
1671.	HOTEL REVENUE UPLIFT GUIDE
1672.	HR E-APPROVAL SYSTEM
1673.	HSS AS AN OPENID CONNECT SERVER
1674.	HUMAN HEALTH PREDICTION SYSTEM USING MACHINE LEARNING
1675.	HUMAN RESOURCE ANALYSIS
1676.	HUMAN RESOURCE MANAGEMENT SYSTEM
1677.	HUMAN RESOURCE MANAGEMENT SYSTEM
1678.	HYBRID AUTOMATION TESTING SOLUTION USING BDD
1679.	HYBRID E-COMMERCE WEB APPLICATION
1680.	HYBRID MOBILE APPLICATIONS
1681.	HYBRID TEST AUTOMATION FRAMEWORK
1682.	IBM FILENET P8 SYSTEM SECURITY ANALYZER
1683.	IBM SPECTRUM SCALE FILE SYSTEM DEPLOYMENT USING APACHE AMBARI FRAMEWORK ON HADOOP CLUSTERS.
1684.	ICU PATIENT MORTALITY PREDICTION AND CONTRIBUTING FEATURES DETECTION
1685.	IDENTIFYING AND ADDRESSING REACHABILITY AND POLICY ATTACKS IN SECURE BGP
1686.	IDENTIFYING SPATIAL AND TEMPORAL VIDEO COMPRESSION ARTIFACTS: A MACHINE LEARNING APPROACH
1687.	IDENTITY MANAGEMENT
1688.	IDLE DR TO IMPROVE MT PAGE PERFORMANCE
1689.	IFRS9 CALCULATION ENGINE IN HADOOP
1690.	IMAGE ABSTRACTION IN AUTOMOTIVE USING TENSOR FLOW ON RASPBERRY PI
1691.	IMAGE ANALYSIS FOR AGE ESTIMATION
1692.	IMAGE BASED OBJECT ANALYSIS USING SALESFORCE EINSTEIN
1693.	IMAGE CLASSIFICATION TO IDENTIFY SPAM IMAGES
1694.	IMAGE SENSOR IINTERFACE WITH SAM V71 XPLAINED ULTRA EVALUATION KIT.
1695.	IME MANAGER FOR WEBOS
1696.	IMPLEMENT DIGITAL CREDIT AGREEMENT FOR RETAIL FINANCE
1697.	IMPLEMENTATION OF AADHAAR BASED AFFORDABLE AND SECURED ONLINE EXAMINATION SYSTEM FOR MASSES AND IDENTIFYING THE CHALLENGES THEREIN
1698.	IMPLEMENTATION OF CME (CORONAL MASS EJECTION) DETECTION LOGIC IN SPACECRAFT ON-BOARD FPGA FOR VELC PAYLOAD IN ADITYA L1 SATELLITE.
1699.	IMPLEMENTATION OF CYBER DEFENCE ENGINE IN AIOP ON LAYERSCAPE HARDWARE
1700.	IMPLEMENTATION OF DATA MINING RECOMMENDATION CONCEPT IN CONSUMER BASED PRODUCT SEARCH
1701.	IMPLEMENTATION OF GREEN INTERNET USING HOP-BY-HOP ROUTING
1702.	IMPLEMENTATION OF HYBRID VPN MODEL IN CREATING COST-EFFECTIVE ENTERPRISE NETWORKING SOLUTION
1703.	IMPLEMENTATION OF NETWORK ACCESS CONTROL WITH ISE
1704.	IMPLEMENTATION OF PROJECT AND PORTFOLIO MANAGEMENT PROCESS
1705.	IMPLEMENTATION OF SCALABLE AUTOMATION FRAMEWORK FOR AW10 PRODUCT WITH MULTIPLE BROWSER SUPPORT, REST API AND SEAMLESS INTEGRATION WITH JENKINS CONTINUOUS INTEGRATION TOOL
1706.	IMPLEMENTING AUTOMATED CLEARING HOUSE WITH CLOUD COMPUTING
1707.	IMPLEMENTING DEFAULT CUSTOMER VLAN FOR AN EDGE PORT IN PROVIDER BRIDGING SOFTWARE AND TO ENSURE THE SOFTWARE QUALITY BASED ON QUALITY ASSURANCE PRINCIPLES
1708.	IMPLEMENTING EMAIL NOTIFICATIONS USING BI PUBLISHER TOOLS
1709.	IMPLEMENTING PROCESS FLOWS USING E-TOM FRAMEWORK
1710.	IMPLEMENTING QUALITY OF SERVICE IN ROUTERS WITH TRAFFIC METERING, QUEUEING AND SCHEDULING

1711.	IMPORTANCE OF METADATA IN DATAWARE HOUSE
1712.	IMPORTANCE OF UNIT VERIFICATION AT SOFTWARE LEVEL
1713.	IMPROVE SEARCH RELEVANCY AND SEARCH EXPERIENCE FOR A LARGE UNSTRUCTURED DATA USING MACHINE LEARNING
1714.	IMPROVEMENT OF PEOPLE EXPERIENCE IN GOVERNMENT ORGANIZATIONS
1715.	IMPROVING EFFICIENCY OF CAR INFOTAINMENT SYSTEM IN REAL WORLD PROBLEMS
1716.	IMPROVING LIFETIME OF SENSOR NETWORKS WITH OPTIMAL SINK SOLUTION AND DUTY CYCLE
1717.	IMPROVING REPETITIVE SEQUENTIAL READ PERFORMANCE OF THE NAND STORAGE
1718.	IMPROVING SECURITY OF CLUSTER NODES IN MANETS:- A TRUST BASED APPROACH
1719.	INCREMENTAL CLUSTERING OF NEWS ARTICLES
1720.	INDEPENDENT UPGRADATION OF FEATURES OVER THE AIR IN REAL TIME SYSTEMS
1721.	INDUSTRIAL DATA LOGGING SYSTEM
1722.	INDUSTRIAL REFRIGERATION COMPRESSOR CONTROL SYSTEM
1723.	INFLUENCE OF USER COGNITIVE ASPECTS ON E-COMMERCE WEBSITES
1724.	INFORMATION PROCESSING FROM AUDIO VIDEO DATA
1725.	INFOSYS TRAINING DATA ANALYTICS
1726.	INFOTAINMENT NETWORKS: NETWORK ARCHITECTURES ANALYSIS AND EVALUATION
1727.	INFRA ANALYTICS USING PUPPET
1728.	INFRA-FREE SOLUTION
1729.	IN-GUEST COMPLIANCE FRAMEWORK
1730.	INSTADIO
1731.	INSTANT MESSAGING AND COMMUNICATION
1732.	INSURANCE ANALYTICS
1733.	INSURANCE CLAIMS TRANSFORMATION CONTACT SYSTEM INTEGRATION
1734.	INTEGRATED LOGISTICS
1735.	INTEGRATING DATATORRENT CE FOR DATA MOVEMENT AS A PLATFORM APPLICATIONS
1736.	INTEGRATING TWO ANDROID APPS AND MAKING THEM MODULAR
1737.	INTEGRATING USB 3.0 BASED FPGA PLATFORMS IN GNU RADIO FRAMEWORK
1738.	INTEGRATION OF ARTIFICIAL INTELLIGENCE IN TO E-BUSINESS THROUGH CHATBOT APPLICATION
1739.	INTEGRATION OF INTERNET RADIO RADIO.NET IN THE SMART CROSSCONNECT
1740.	INTEGRATION TEST AUTOMATION FOR DATA BACKUP AND RESTORE FOR MFP
1741.	INTELLIGENT APP FOR SUPERIOR CUSTOMER ENGAGEMENT
1742.	INTELLIGENT BANK ASSISTANT
1743.	INTELLIGENT HOUSING PORTALS USING CHABOT AGENT
1744.	INTELLIGENT RESOURCE ALLOCATION FOR BIG DATA CLOUD SYSTEMS
1745.	INTELLIGENT ROUTING USING NETWORK TRAFFIC MEASUREMENT
1746.	INTELLIGENT SOLUTION FOR E-COMMERCE BUSINESS
1747.	INTELLIGENT STUDENT ENQUIRY CHATBOT SYSTEM VIA RECALL-GATE LSTM
1748.	INTELLIGENT SUPPORT SYSTEM TO HELP TROUBLESHOOTING
1749.	INTELLIGENT TRANSPORTATION SYSTEM
1750.	INTELLILYZER - A IINTELLIGENT DOCUMENT ANALYZER
1751.	INTERACTIVE VOICE RESPONSE(IVR) FOR HEALTH INSURANCE ORGANIZATION
1752.	INTERNET OF THING BASED HOME AUTOMATION
1753.	INTERNET OF THINGS (IOT) FOR THE SAFETY OF TRANSPORTATION INFRASTRUCTURE
1754.	INTERNET OF THINGS BASED PARKING TECHNOLOGY
1755.	INTERVIEW MANAGEMENT SYSTEM
1756.	INVESTIGATION ON IMPROVING STABILITY IN ENTERPRISE CLOUD
1757.	IO-MT BASED MEDI-CARE SYSTEM USING RASPBERRY PIE
1758.	IOT BASED BIOMETRIC AUTHENICATION ON RASPBERRY PI FOR VEHICULAR SAFETY SYSTEM
1759.	IOT BASED HOME AUTOMATION
1760.	IOT BASED INDUSTRIAL DATA MONITORING EXPERT SYSTEM
1761.	IOT BASED SMART WATERING SYSTEM
1762.	IOT ENABLED GENERIC COMMUNICATION GATEWAY FOR REMOTE MONITORING
1763.	IP RECOVERY USING MULTIPLE ROUTING CONFIGURATIONS
1764.	IP TELEPHONY - VOIP
1765.	IP TRACEBACK WITH DETERMINISTIC PACKET MARKING
1766.	IPHONE APPLICATION - SNAPCHAT STYLE LIVE ANIMATED FILTER
1767.	IPV6 SUPPORT FOR TFTP AND SNTP
1768.	IRP (IT RECRUITMENT PORTAL)

1769.	IRS SATELLITE DATA ASSESSMENT SYSTEM
1770.	ISSUE MANAGEMENT SYSTEM USING SERVICE CLOUD
1771.	IT AUDIT OF BRANCH OFFICES
1772.	IT AUTOMATION WITH PROCESS ENGINE
1773.	IT ENABLEMENT FOR STATE POWER UTILITY
1774.	IT HELPDESK BENCHMARKING IN SERVICEDESK PLUS
1775.	IT PROCESS AUTOMATION (AD PASSWORD RESET) USING SERVICE NOW
1776.	IVR TO CHAT APPLICATION
1777.	J.A.R.V.I.S. TOOL
1778.	JAVA APPLLET REPLACEMENT
1779.	JAVA UTILITY FOR AUTOMATING MANIPULATION OF BANK/AGGREGATOR FILES
1780.	JIRA QUERIES/SEARCHES USING COMMAND PROMPT AND EXPORTING TO EXCEL
1781.	JUNOS BASED VIRTUAL PTX ROUTER
1782.	KERNEL RELIABILITY FRAMEWORK
1783.	KERNEL TRACE ANALYZER TO SIMPLIFY PERFORMANCE ANALYSIS
1784.	KEY-AGGREGATE SEARCHABLE ENCRYPTION (KASE) FOR GROUP DATA SHARING VIA CLOUD STORAGE
1785.	KNOWLEDGE EXTRACTION FROM MEDIA CONTENT
1786.	KNOWLEDGE MAGNIFICATION AND CAREER ENHANCEMENT
1787.	KNOWLEDGE-BASED QUESTION-ANSWERING SYSTEM TO AUTOMATE CORPORATE HELPDESK
1788.	LAMDAA - LAM DATA ACQUISITION AND ANALYSIS
1789.	LAND ESTIMATE USING AERIAL PHOTOGRAPHY WITH MEASURING TOOLS
1790.	LANGUAGE INDEPENDENTSPEAKER RECOGNITION SYSTEM
1791.	LEAD TO CASH USING FORWARDING AGREEMENT QUOTATION IN SAP TRANSPORTATION MANAGEMENT
1792.	LEADS ANALYSIS FOR US INSURANCE MARKETING
1793.	LEAVE MANAGEMENT SYSTEM USING PEOPLESOFT AND SQL
1794.	LEAVE MANAGEMENT SYSTEM USING SAP UI5/FIORI FOR BETTER USER EXPERIENCE AND FASTER PROCESSING
1795.	LEGAL INFORMATION SYSTEM FOR GOVERNMENT ORGANIZATIONS
1796.	LEVERAGING MACHINE LEARNING TO DETECT DATABASE HACKS USING HEXPLET DATA STRUCTURE
1797.	LFTP - LAM SPECIFIC FILE TRANSFER PROTOCOL
1798.	LIBRARY AUTOMATION MANAGEMENT SYSTEM
1799.	LICENSE MANAGEMENT SYSTEM AND SECURITY PRACTICES
1800.	LIGHT WEIGHT INTERNET PROTOCOL
1801.	LINK FAULT DEBUGGER
1802.	LIVE STREAM PROCESSING SENTIMENT ANALYSIS TO BENEFIT MASTERCARD
1803.	LOAD BALANCING IN MULTICORE AUTOMOTIVE SYSTEMS
1804.	LOAN PREDICTIVE MODEL
1805.	LOCALIZED PREDICTIVE ANALYTICS FOR HIGHER PREDICTIVE POWER AND CONFIDENCE
1806.	LOCATION INTELLIGENCE FOR NEXT GENERATION OUTSIDE PLANT TELECOM NETWORK INVENTORY SYSTEMS
1807.	LOCATION TRACKING AND FENCING
1808.	LOG AGGREGATION AND MONITORING IN REAL TIME
1809.	LOG ANALYSIS USING HADOOP
1810.	LOGISTICS MANAGEMENT AT DISTRIBUTION CENTRE
1811.	LOW LATENCY COMMUNICATION SERVER FOR ON PREMISE CUMULUS
1812.	LOW POWER AUDIO PLAYBACK USING GSTREAMER MULTIMEDIA FRAMEWORK
1813.	MACHINE LEARNING ALGO IMPLEMENTATION
1814.	MACHINE LEARNING METHODS IN MOBILE TELECOM INDUSTRY
1815.	MACHINE MAINTAINENCE AUTOMATION
1816.	MACHINES WITH MORAL OBLIGATIONS
1817.	MAINFRAME CPU USAGE-COST REDUCTION
1818.	MAKING APPLICATION CENTER CLOUD READY
1819.	MALWARE DETECTION IN CLOUD COMPUTING
1820.	MARINE MONITORING SYSTEM
1821.	MARKET DATA PRICE VALIDATION
1822.	MARKET MIX MODELING FOR E-COMMERCE USING DATA ANALYTICS
1823.	MASTER DATA HARMONIZATION USING MACHINE LEARNING TECHNIQUES
1824.	MEASUREMENT OPERATIONS SUPPORT SYSTEM
1825.	MEDICAL DATABASE ANALYSIS USING R
1826.	MEDICINE INVENTORY MANAGEMENT

1827.	MEDIUM TERM PLANNING & BUDGETING ANALYSIS
1828.	MENTAL HEALTH ANALYSIS ON WORKPLACE
1829.	MERGING CLOUD ACCOUNTS AND MANAGING OVER OPENSTACK
1830.	METADATA MANAGEMENT PORTAL FOR METADATA IMPORT, CLASSIFICATION AND ENRICHMENT
1831.	METHOD AND DESIGN FOR EFFECTIVE MEMORY MANAGEMENT IN EMBEDDED SYSTEMS
1832.	MICROSERVICES BASED ARCHITECTURE
1833.	MIDDLEWARE SYSTEM - IBM DATAPOWER INTEGRATION SERVICES
1834.	MIGRATING ENTERPRISE APPLICATIONS TO CLOUD
1835.	MIGRATING TRADITIONAL DATA WAREHOUSE TO HADOOP DATA WAREHOUSE
1836.	MIGRATING WORKLOADS TO CLOUD-ROADMAP FOR AIRLINE
1837.	MIGRATION OF L2 NETWORK TO L2.5 MPLS NETWORK USING ISIS ROUTING PROTOCOL
1838.	MIGRATION OF MICROCONTROLLER IN AN ECU
1839.	MIGRATION OF MPLS CIRCUIT TO METROE
1840.	MIGRATION OF WEB APPLICATIONS
1841.	MIGRATION TO ENTERPRISE CLOUD CURRENT DAY REQUIREMENT, BENEFITS AND CHALLENGES
1842.	MILITARY INTELLIGENCE INFORMATION EXTRACTION FROM OPEN SOURCE
1843.	MINING DATA FOR MULTIPLE ALERT PATTERN ANALYSIS
1844.	ML MODEL TO PREDICT THE VALUE OF ASSETS CAPTURED BY INFOLEASE
1845.	MOBILE ACCESSIBILITY
1846.	MOBILE APP FOR CERTIFICATION MANAGEMENT
1847.	MOBILE APPLICATION TO AUTOMATE PERIPHERAL BLOOD SMEAR IMAGE ANALYSIS
1848.	MOBILE BROWSER FOR ANDROID
1849.	MOBILE DEVICE SIMULATION FOR END POINT MANAGEMENT TEST
1850.	MOBILE EDGE COMPUTING PRIMARY INGREDIENT OF 5G NETWORKS
1851.	MOBILE MOSAIC
1852.	MOBILE SUBSCRIBER TRACING AT HSS
1853.	MOBILITY CLIENT FOR MANAGING PRODUCT DATA
1854.	MOBILITY SOLUTION LEVERAGING THE POWER OF CONNECTED DEVICES TO TRANSFORM HEALTH MANAGEMENT
1855.	MOBILIZING ENTERPRISE APPLICATIONS
1856.	MODELING LANGUAGE-AGNOSTIC AUDITORY INTERACTIONS USING MACHINE LEARNING
1857.	MODELLING & FORECASTING FINANCIALS USING TRAINING DATA SETS
1858.	MODELLING FOR SENTIMENT ANALYSIS IN ENTERPRISE SOCIAL NETWORKING APPLICATION
1859.	MODULAR BGP COMPLIANCE TOOL
1860.	MONITORING NETWORK & RESOURCES ON CLOUD (MNRC-24X7)
1861.	MOVIE RECOMMENDATION SYSTEMS
1862.	MOVING FROM LEGACY SYSTEMS TO CLOUD COMPUTING & HYPERCONVERGENCE PLATFORM IN NEWLY SETUP BANK
1863.	MOVING TO THE CLOUD IN LARGE ENTERPRISES: A FRAMEWORK FOR OBJECTIVELY EVALUATING THE BENEFITS AND RISKS
1864.	MOVING TO THE CLOUD: SECURING HEALTH RECORDS IN CLOUD & BIG DATA
1865.	MSPE BULK SERVICE MIGRATION
1866.	MULTI CLOUD VM MANAGEMENT WEB PORTAL USING VAGRANT AND ANSIBLE
1867.	MULTI-CLASS EMOTION DETECTION IN REGIONAL LANGUAGE TEXT USING MACHINE LEARNING TECHNIQUE
1868.	MULTI-DIMENSIONAL MACHINE LEARNING METHODOLOGY FOR EFFICIENT TRAFFIC SIGN BOARD ANALYSIS IN AUTONOMOUS DRIVING
1869.	MULTI-LEVEL BOOT LOADER DESIGN FOR RADIO CHIP WITH FASTER FLASH BOOT TIME CAPABILITIES
1870.	MULTILEVEL DATA COMPRESSION
1871.	MULTILEVEL IMAGE SEGMENTATION FOR OBJECT EXTRACTION
1872.	MULTILINGUAL CHATBOT SYSTEM
1873.	MULTIMEDIA AND DOCUMENT OPTIMIZING ENGINE
1874.	MULTI-MODULE APPLICATION ARCHITECTURE USING SERVERLESS TECHNOLOGY (AWS LAMBDA SERVICE)
1875.	MULTIPATH TCP: ANALYSIS, DESIGN AND IMPLEMENTATION
1876.	MULTIPURPOSE TOOL FOR AUTOMATIC BUG TRIAGING
1877.	MULTI-THREADED EXECUTION FRAMEWORK WITH APACHE STORM FOR R ANALYTICS ALGORITHMS
1878.	MUTUAL AUTHENTICATION FRAMEWORK FOR CLOUD COMPUTING
1879.	MYBELL HYBRID APPLICATION AUTOMATION SCRIPT
1880.	N2 PURGE FOR CASSETTES WITH PROCESSING WAFERS
1881.	NATURAL LANGUAGE PROCESSING (NLP) BASED DIGITAL ASSISTANT FOR HUMAN-MACHINE-INTERFACE (HMI)
1882.	NATURAL TERRAIN FEATURE CLASSIFICATION FROM REMOTE SENSING SATELLITE IMAGES USING INTELLIGENT WATER DROPS ALGORITHM

1883.	NAVAL SHIPBUILDING PROJECT MANAGEMENT
1884.	NB-IOT - NPRACH RECEIVER SIMULATION
1885.	NEAR ZERO DOWNTIME DEPLOYMENTS ON ORACLE
1886.	NEED FOR PRODUCTION TESTING/VALIDATION TO ASSURE SOFTWARE QUALITY
1887.	NETWORK & CLOUD MANAGEMENT
1888.	NETWORK AND WIRELESS NETWORK SECURITY
1889.	NETWORK AUTOMATION USING DEVOPS TOOLS
1890.	NETWORK AUTOMATION USING SERVICENOW ORCHESTRATOR
1891.	NETWORK CAPACITY MANAGEMENT USING ZABBIX IN A DATACENTER
1892.	NETWORK MANAGEMENT SYSTEMS
1893.	NETWORK MANAGEMENT TOOL
1894.	NETWORK MONITORING AND PROGRAMMING USING PYTHON
1895.	NETWORK PARAMETER CONFIGURATION USING IPC
1896.	NETWORK PERFORMANCE MANAGER
1897.	NETWORK SECURITY AS A SERVICE BY FIREWALL
1898.	NETWORK STACK PARALLELIZATION
1899.	NETWORK THREAT ADVANCED ANALYTICS
1900.	NETWORK TIME SYNCHRONIZATION FOR WSN
1901.	NETWORK UPGRADATION: NETWORK EVOLUTION AND ROAD-MAP IN MYLAN LAN INFRASTRUCTURE
1902.	NETWORK-BASED SPAM DETECTION FRAMEWORK FOR REVIEWS IN ONLINE SOCIAL MEDIA
1903.	NETWORKING WITH LIGHTWEIGHT MICROCONTROLLERS
1904.	NEWS IN ONE GO USING NLP
1905.	NFV DIGITAL FEDERATION PLATFORM
1906.	NIELIT AIZAWL MIS
1907.	NIKE REVENUE FORECAST
1908.	NLP APPLICATION TO MANAGE A FINANCIAL REGULATION (DFA)
1909.	NLP: SEMANTIC ANALYSIS OF SENTENCES
1910.	NODE MANAGER AS MICRO SERVICE IN NMS
1911.	NON GEO IMPORT FOR SINGLE LINE & MULTI LINE ORDERS
1912.	NON-PROFIT CARPOOLING SYSTEM
1913.	NOSQL DATASTORE
1914.	NPF MANAGEMENT SYSTEM IN INDIAN AIR FORCE
1915.	NVRAM EMULATION USING NOR FLASH
1916.	OFFLINE POSTPAID BILLING
1917.	OFFLOAD CAPWAP DATPATH TO ACCELERATED LAYER ON QORIQ LAYERSCAPE HARDWARE
1918.	ON-DEMAND ORDERING OF BUSINESS TELECOM SERVICES
1919.	ONLINE ANALYTICAL PROCESSING INCEPTION IN IT SERVICE MANAGEMENT FOR DECISION MAKING AND TREND ANALYSIS
1920.	ONLINE BANKING APPLICATION
1921.	ONLINE COURSE REGISTRATION
1922.	ONLINE GEOSPATIAL DATA EDITING
1923.	ONLINE IT FAULT MONITORING SYSTEM
1924.	ONLINE ORDER MANAGEMENT SYSTEM
1925.	ONLINE PORTAL FOR ENTERTAINMENT INDUSTRY
1926.	ONLINE PROFIT & LOSS BALANCE SHEET STATEMENT REPORT
1927.	ONLINE PURCHASING MODEL USING INFLUENTIAL SOURCES OF CONSUMER INFORMATION.
1928.	ONLINE QUIZ APPLICATIONS
1929.	ONLINE QUIZ PORTAL USING MVC ASP.NET CORE
1930.	ONLINE VOTING SYSTEM
1931.	ONLINE WEDDING PLANNER
1932.	OPEN CTI ARCHITECTURE FOR SIMPLER IMPLEMENTATION WITH PEGA CALL USING PEGA 7
1933.	OPEN SECURE HASH ALGORITHM FOR EFFICIENT DATA INTEGRITY
1934.	OPENTEXT CONTENT SERVER
1935.	OPSCAT - INTELLIGENT BOTS TO AUTOMATE IT OPERATIONS
1936.	OPTIMISED KERNEL ECOSYSTEM FOR AN EFFICIENT DATA STORAGE ON AN OPTICAL NETWORKING EQUIPMENT
1937.	OPTIMIZATION DURING VOICE CALL IN DUAL SIM MOBILE
1938.	OPTIMIZATION OF PHYSICAL DOWNLINK CONTROL CHANNEL(PDCCH) IN LTE
1939.	OPTIMIZED CLOUD BASED DATABASE FOR SCALABLE REAL-TIME DATA
1940.	ORACLE PLM DATA MIGRATION USING ETL TECHNOLOGY

1941.	ORDER TO CASH PROCESS
1942.	ORGANISING MARATHONS SIMPLIFIED - EXPLORING IMAGE PROCESSING, AI AND ML
1943.	OUTLIER ANALYSIS TO IDENTIFY PROBABLE MONEY LAUNDERING TRANSACTIONS
1944.	OUTLIER DETECTION AND ADJUSTMENTS USING AUTO ENCODERS
1945.	OVER THE TOP(OTT) SERVICE PROVISIONING
1946.	OVERCURRENT PROTECTION ALGORITHM FOR IEC61850 BASED IED
1947.	P MONEY (PASSENGER MONEY)
1948.	PARALLEL EXECUTION FRAMEWORK FOR REAL-TIME SATELLITE DATA PROCESSING
1949.	PARKING ACCESS CONTROL AND SMART BILLING
1950.	PARKING MANAGEMENT
1951.	PARTIAL FACE DETECTION FOR CONTINUOUS AUTHENTICATION
1952.	PATIENT QUEUE MANAGEMENT BY ESTIMATING TIME FOR TREATMENT
1953.	PATTERN RECOGNITION IN DNA SEQUENCES USING BIOINFORMATICS APPROACH: A CORRELATION BETWEEN COMPLEX REARRANGEMENTS IN THE CDNA READS AND THE MEMORY FUNCTIONS OF THE SOURCE TISSUE
1954.	PDF417 BARCODE PERFORMANCE OPTIMIZATION
1955.	PENETRATION TESTING USING KALI LINUX
1956.	PEOPLESOFT EXPENSE REIMBURSEMENT IMPLEMENTATION USING AWE
1957.	PERFORMANCE ANALYSIS AND TUNING OF DATABASE APPLICATION FOR SSD
1958.	PERFORMANCE BENCHMARK FOR MACHINE LEARNING ALGORITHMS
1959.	PERFORMANCE IMPROVEMENT OF IOT SYSTEM
1960.	PERFORMANCE PROFILING OF CLOUD DATABASE SYSTEMS
1961.	PERFORMANCE TESTING OF SMART ARCHIVING TOOL
1962.	PERSONALIZED DASHBOARD FRAMEWORK FOR HCM DOMAIN
1963.	PERSONNEL TRACKER AND LOCATION NOTIFICATION SYSTEM FOR DAILY USE AND EMERGENCY ALERT
1964.	PIN CODE AFFLUENCE DETECTION
1965.	PLAGIARISM DETECTION BY EXTRACTING RELEVANT PHRASES FROM DOCUMENTS
1966.	PORTAL FOR MANAGING CUSTOMER OPERATIONS
1967.	PORTING AND CUSTOMIZING IOT STACK FOR CUSTOM DESIGNED IEEE 802.15.4 MOTES CONSIDERING LOW POWER REQUIREMENTS
1968.	PORTING OF VPN TECHNOLOGY IN EMBEDDED DEVICES
1969.	PORTING SQLLITE TO ARM BASED MICROCONTROLLER WITH FILE SYSTEM AND REAL TIME OPERATING SYSTEM
1970.	POWER MANAGEMENT
1971.	POWER MANAGEMENT FRAMEWORK FOR ARM PLATFORM WITH RTOS
1972.	POWER STATE MANAGER FOR OPENWRT BASED PORTABLE WI-FI HOTSPOT AND ROUTER
1973.	POWER TEST FOR BIKE INFOTAINMEN SYSTEMS
1974.	PRECONDITIONING VALIDATION LIBRARY FOR SD CARDS
1975.	PREDICT OPTIMIZED EXPERIENCE FOR THE WEBSITE
1976.	PREDICTING BUILD INTEGRITY USING MACHINE-LEARNING
1977.	PREDICTING DISRUPTION TO AIRPORT AND AIRLINE SCHEDULES DUE TO WEATHER
1978.	PREDICTING THE IDEAL MIX OF FLEET FOR EMPLOYEE TRANSPORT FACILITY PROVIDED IN ORGANIZATIONS USING REGRESSION ANALYSIS
1979.	PREDICTING THE PROBABILITY THAT A DIAGNOSED BREAST CANCER CASE IS MALIGNANT OR BENIGN BASED ON WISCONSIN DATASET FROM UCI REPOSITORY
1980.	PREDICTION OF CUSTOMER PATTERN ITEMSET USING HADOOP AND R PROGRAMMING
1981.	PREDICTION OF HOME PRICES BASED ON HOME FEATURES
1982.	PREDICTION OF USER INTERESTS BASED ON SOCIAL TEXT IN A DATAWAREHOUSE
1983.	PREDICTIVE ANALYTICS AND ITS APPLICATIONS
1984.	PREDICTIVE ANALYTICS TO IMPROVE THE SUCCESS OF NEW PRODUCTS
1985.	PREDICTIVE DATA-DRIVEN DELIVERY FRAMEWORK FOR AGILE IT SERVICES
1986.	PREMEDITATED HEALTH WARNING SYSTEM
1987.	PRE-SI INTEGRATION AND VALIDATION FOR IA BASED SOC USING VIRTUAL PLATFORM AND FPGA
1988.	PRICERULES FOR CHARGING MOBILE CDRS IN DEUTSCHE TELEKOM
1989.	PRICESTRAT ANALYZER:GENERATE CUSTOMER INSIGHTS USING DUNNHUMBY'S DATA SCIENCE MODEL
1990.	PRIME COLLABORATION ASSURANCE
1991.	PRIORITISING CANDIDATES FOR INTERVIEW USING MACHINE LEARNING
1992.	PRIVACY PRESERVING RANKED MULTI-KEYWORD SEARCH FOR MULTIPLE DATA OWNERS IN CLOUD COMPUTING
1993.	PRIVACY-PRESERVING OUTSOURCED ASSOCIATION RULE MINING ON VERTICALLY PARTITIONED DATABASES
1994.	PRODUCT SOCIAL FEEDBACK ON CLOUD

1995.	PROFICIENT IMPLEMENTATION OF AUTOMATION SCRIPTS IN SELENIUM BY USING POM INTEGRATED WITH JENKINS
1996.	PROFILING A CUSTOMER FOR CREDIT RISK USING LOGISTIC REGRESSION AND DECISION TREES
1997.	PROGRAMMING WITH NEXUS 9000 NX-API
1998.	PROJECT PLAN FOR DEVELOPING ONLINE TAILORS SHOPS APPLICATION
1999.	PROJECT VOLDEMORT: DISTRIBUTED KEY-VALUE STORAGE SYSTEMS AND ITS APPLICATION
2000.	PROPOSAL TO CASH
2001.	PROPOSED DISSERTATION TITLE : REAL-TIME MONITORING WITH DATA ACQUISITION OF ENERGY METER USING G3-PLC COMMUNICATION TECHNOLOGY
2002.	PROSE PROXIMITY SERVICE FOR OPEN DIRECT DISCOVERY
2003.	PROSPECT DEAL MANAGEMENT FOR TRANSACTION BILLING SYSTEMS
2004.	PROTECTING DATABASES USING EKM
2005.	PROTOTYPING HARDWARE AND SOFTWARE USING VIRTUAL PLATFORMS
2006.	QBOARD - A DASHBOARD FOR TRACKING DESIGN AND IMPLEMENTATION QUALITY
2007.	QUALITY CENTER AUTOMATION
2008.	QUALITY CONTROL MODULE FOR NAJM CASES
2009.	QUERY BUILDER ENGINE WITH NATURAL LANGUAGE PROCESSING FOR REPORT GENERATION
2010.	QUOTING AUTOMOTIVE DEALERSHIP SOFTWARE AS SOFTWARE AS A SERVICE
2011.	RBM GENIUS UPGRADE FOR BT WHOLESALE
2012.	REAL TIME AD SERVING SYSTEM FOR MOBILE PLATFORM
2013.	REAL TIME ANALYTICS SOLUTION FOR GENERATING INSIGHTS THROUGH MINING OF DATA FROM ENTERPRISE APPLICATIONS
2014.	REAL TIME BATTERY MANAGEMENT SOFTWARE FOR UAVS
2015.	REAL TIME DATA SENSING AND DISTRIBUTION USING IOT PROTOCOL
2016.	REAL TIME FACE RECOGNITION AND MONITORING OF PEOPLE IN PREMISES USING CAMERA NETWORK
2017.	REAL TIME REPORTING AND GOVERNANCE OF JIRA
2018.	REAL TIME SECURING COMPONENTS AND DIAGNOSTICS
2019.	REAL TIME SIGN LANGUAGE TO SPEECH CONVERSION USING PATTERN MATCHING
2020.	REAL TIME TASK SCHEDULING IN CLOUD ENVIRONMENT
2021.	REAL TIME TRACKING AND SAFETY APPLICATION
2022.	REAL TIME TRANSPORT SOLUTION FOR CORPORATE EMPLOYEES
2023.	REAL TIME TRAVEL ASSISTANT
2024.	REAL TIME VIEW OF END-TO-END BUILD PIPELINE
2025.	REALIZATION OF FAST DENSE OPTICAL FLOW ALGORITHM USING HETEROGENEOUS (CPU/GPU) ARCHITECTURE
2026.	REALIZATION OF MICROSERVICES ARCHITECTURE USING A SIMPLE E-COMMERCE APPLICATION
2027.	REAL-TIME DATA REPLICATION
2028.	REAL-TIME REPORTING WITH DASHBOARD USING ORCHESTRATOR
2029.	REAS: INTRODUCED IN MANAGED ETHERNET ACCESS SERVICE
2030.	REBUILDING EXISTING RECONCILIATION TOOL
2031.	REBUILDING IENROLL USING NODE.JS
2032.	RECOMMENDATION SYSTEM FOR JOB
2033.	RECOMMENDER SYSTEM FOR EFFICIENT COMPUTING INFRASTRUCTURE MANAGEMENT
2034.	RECOMMENDER SYSTEM FOR SHARE(STOCK) RESEARCH APPLICATION
2035.	RECORD LINKAGE AND DEDUPLICATION USING SCALABLE MACHINE LEARNING
2036.	REDFISH AUTOMATION
2037.	REDUCING DEFECT LEAKAGE WITH SOFTWARE REDUCTION TECHNIQUES
2038.	REFERENCE IOT PLATFORM BASED ON RENESAS SYNERGY DEVICES
2039.	RELATIONSHIP MINING USING HADOOP AND HBASE
2040.	RELIABLE TRAIN STATUS THROUGH CROWD SENSING
2041.	RELIANCE JIO DEALER SALES MANAGEMENT
2042.	RELIANCE JIO MNP LIFE CYCLE WITH STUB SIMULATION
2043.	REMEDY BASED CHANGE ARCHIVAL
2044.	REMOTE AUTHENTICATION OF ANDROID LOGIN CREDENTIALS
2045.	REMOTE MANAGEMENT AND CONTROLLING SECURITY PROFILES OF EMBEDDED APPLICATIONS
2046.	REPORTING THE DIGIT CLASSIFICATION ACCURACY OF VARIOUS CLASSIFICATION TECHNIQUES BY TRAINING THE NETWORK
2047.	REPORTING TOOL FOR POLLUTING VECHILES
2048.	RESEARCH - PERFORMANCE OF POSTGRESSDB - PHYSICAL2VIRTUAL
2049.	RESEARCH ON HEAT DETECTION SENSOR PROBE FOR CATTLE
2050.	RESEARCH ON IMPLEMENTING MICROSERVICES ON A MONOLITHIC MULTI-MODULAR SYSTEM

2051.	RESEARCH PAPER ON IOT FOR MASSES & IMPACT ON DEVELOPING ECONOMIES
2052.	RESOURCE ALLOCATION USING GENETIC ALGORITHM
2053.	RESOURCE MONITORING SYSTEM
2054.	RESOURCE TIME RECORDER (RTR)
2055.	RESPONSIVE PRODUCT PAGE FOR ONLINE SELL
2056.	RESPONSIVE STUDENT MANAGEMENT SYSTEM
2057.	RESTRICTED ENTERPRISE SEARCH ENGINE
2058.	RETAIL - SMART CONVERSATIONAL SYSTEM
2059.	RETAIL BUSINESS ANALYTICS WITH BIG DATA SOURCES AND TABLEAU VISUALIZATION
2060.	RETAIL SHOPPING PREDICTORS
2061.	RETAIL STORE ANALYTICS
2062.	RETAIL STORE SALES ANALYSIS AND REPORTING
2063.	REVENUE AND DEMAND MANAGEMENT DSS
2064.	REVENUE ASSURANCE AND FRAUD MANAGEMENT SYSTEM
2065.	REVOLUTIONIZING MIPI CAMERA SERIAL INTERFACE(CSI) AND DISPLAY SERIAL INTERFACE(DSI) IN AUTOMOBILE SPACE AND OVERCOME VERIFICATION CHALLENGES IN SOC FRAMEWORK
2066.	RIDIFY RIDE SHARING APPLICATION
2067.	RISKINESS OF CODE CHANGES PREDICTION MODEL
2068.	RMAN RESTORE/BACKUP AUTOMATION
2069.	ROAD EXTRACTION USING K-MEANS CLUSTERING AND MORPHOLOGICAL OPERATIONS
2070.	ROBOTIUM AUTOMATION FRAMEWORK
2071.	ROLE OF COMPUTER NETWORKS IN THE BUSINESS ENVIRONMENT
2072.	ROUTEME.SG MOBILE APPLICATION DEVELOPMENT
2073.	SAAS PROVISIONING FOR BUSINESS ENTERPRISE WITH UBIQUITOUS SECURE ACCESS.
2074.	SALES DETAIL ANALYSIS AND REPORTING TOOL
2075.	SALES FORCE CRM INTEGRATION WITH REPUTATION SYSTEM
2076.	SALES WEB PORTAL USING CLOUD SERVICE MANAGEMENT
2077.	SAMSUNG R & D INSTITUTE, BANGALORE
2078.	SAP CUSTOMER SERVICE TICKET CODE RECOMMENDER
2079.	SAP DEVELOPMENT : (1) SQL SERVER (PLC) AUTOMATION INTERFACE USING SAP PI (PROCESS INTEGRATION MODULE) FOR CONSUMPTION POSTING IN SAP (2) MIS -MINING COST SHEET
2080.	SAP GRC GLOBAL RULESET DESIGN & BUILD
2081.	SATELLITE IMAGE DATA FEATURE DETECTION
2082.	SAVE ORDER AS TEMPLATE
2083.	SCALABLE, EXTENDABLE AND TESTABLE METADATA MANAGEMENT
2084.	SCALED AGILE FRAMEWORK (SAFE) FOR FINANCIAL SERVICES
2085.	SCANNING WORKTATION IN ASSETEXPLORER
2086.	SCHEDULER LOG ANALYSIS AND DISPLAY
2087.	SDN PERFORMANCE MONITORING
2088.	SEAMLESS MIGRATION TOOL FOR ARUBA CONTROLLERS
2089.	SEARCH AND MINING BIG DATA WITH RDF GRAPH TECHNOLOGY
2090.	SEARCH BENCHMARKING AND IMPROVEMENT IN GIF BASED MOBILE APPLICATION USING RECOMMENDATION/PREDICTIVE ANALYTICS
2091.	SEARCH ENGINE FOR GADGET REVIEWS
2092.	SEARCHABLE SECURED DATA STORAGE IN CLOUD
2093.	SEAT OCCUPANCY DETECTION SYSTEM FOR CINEMA THEATRE
2094.	SECURE ASSIST TEST FRAMEWORK
2095.	SECURE BOOT ON I.MX6
2096.	SECURE CONFIGURATION OF COTS BASED EMBEDDED SYSTEM FOR MISSION CRITICAL APPLICATIONS
2097.	SECURE FIRMWARE IMAGE PACKER TOOL
2098.	SECURE IOT DEVICES FROM THE BOTTOM UP.
2099.	SECURE MMC BOOT IN BUSINESS GATEWAY
2100.	SECURED DATA STORAGE ON CLOUD
2101.	SECURED DATA TRANSMISSION IN MOBILE AD-HOC NETWORK
2102.	SECURED SCHOOL BUS TRACKING MOBILE APP
2103.	SECURING APPLICATION ACCESS WITH IDENTITY AND ACCESS MANAGEMENT.
2104.	SECURING IOT COMMUNUCATION WITH HELP OF SECURE ELEMENT
2105.	SECURITY AND CREDIT-LIMIT SOLUTIONS USING MIDDLEWARE TECHNOLOGY - IBM WEBSHERE DATAPOWER



2106.	SECURITY AND PRIVACY OF SENSITIVE DATA IN CLOUD COMPUTING
2107.	SECURITY AUDITING AND STANDARDIZATION FOR CLOUD
2108.	SECURITY CREDENTIAL MANAGEMENT SYSTEM (SCMS) FOR VEHICULAR COMMUNICATION (V2X)
2109.	SECURITY HEALTH REPLICATION OF DATACENTER
2110.	SECURITY IMPLICATIONS FOR ENTERPRISE IOT
2111.	SECURITY MECHANISMS FOR LINUX BASED EMBEDDED SYSTEMS
2112.	SECURITY TESTING IN CLOUD SERVICE
2113.	SELECTIVE CALLING IN RADIO TUNING
2114.	SELF LEARNING RECOMMENDATIONS ENGINE
2115.	SELF-MANAGED DISTRIBUTED SYSTEMS
2116.	SEMANTIC WEB MINING AND WEB CRAWLER
2117.	SEMI-SUPERVISED CLASSIFICATION USING EM
2118.	SENSEX LOG DATA PROCESSING USING BIG DATA TOOLS
2119.	SENTIMENT ANALYSIS
2120.	SENTIMENT ANALYSIS AND PREDICTION ON PEOPLE'S SOCIAL EXPRESSIONS & THINKING
2121.	SENTIMENT ANALYSIS FOR SPAM REVIEW DETECTION
2122.	SENTIMENT ANALYSIS OF TWEETS TO PROVIDE RATINGS TO MOVIES/TV SERIES
2123.	SENTIMENT ANALYSIS OF TWITTER DATA FOR TRENDING FEEDS TO DEMONSTRATE AND STUDY THE IMPACT ON SOCIAL AND POLITICAL SENTIMENTS
2124.	SENTIMENT ANALYSIS USING HADOOP
2125.	SENTIMENT ANALYSIS USING R FOR STOCK MARKET TRENDS PREDICTION
2126.	SENTIMENT EMBEDDING WITH APPLICATIONS TO SENTIMENT ANALYSIS
2127.	SENTIMENTAL ANALYSIS OF TWITTER DATA USING MACHINE LEARNING ALGORITHMS
2128.	SEO KEYWORD RECOMMENDATION TOOL USING WEB TRAFFIC AND SEARCH DATA TO INCREASE LEAD CONVERSION
2129.	SERVER BASED SATELLITE IMAGE PROCESSING FOR CROP AREA ESTIMATION USING OPEN SOURCE TOOLS
2130.	SERVER PATCHING AUTOMATION
2131.	SERVER ROOM MONITORING SYSTEM
2132.	SERVER-LESS RECOMMENDATION ENGINE FOR EMBEDDED DEVICES
2133.	SERVICE LEVEL AGREEMENT FOR CLOUD COMPUTING
2134.	SERVICE PREDICTION FOR VEHICLES
2135.	SERVICE PROVISIONING PATH COMPUTATION ALGORITHM
2136.	SERVICENOW WITH SALT STACK
2137.	SHARED MAP & SKETCH
2138.	SHAREPOINT APPLICATION MODEL/ APP MODEL
2139.	SHAREPOINT BRANDING & SERVICES
2140.	SHOPPING CART GENERATION USING APRIORI
2141.	SIGNAL DEGRADE ALERT SYSTEM FOR ETHERNET VIRTUAL CONNECTION
2142.	SIM INVENTORY MANAGEMENT IN TELECOM
2143.	SIMULATION OF INTELLIGENT DRIVER ASSISTANT SYSTEM - VANET
2144.	SIMULATION OF MEDIUM ACCESS CONTROL (MAC) LAYER FOR LONG TERM EVOLUTION (LTE) WIRELESS BROADBAND TECHNOLOGY IN OMNET++ SIMULATOR USING MIXIM FRAMEWORK
2145.	SINGLE ORDER ETHERWAY SUPERFAST GEA
2146.	SINGLE WINDOW SYSTEM
2147.	SMART ALARM -ADVANCED LOCATION BASED ALARM AND REMINDERS
2148.	SMART CABIN
2149.	SMART CAN ANALYZER
2150.	SMART HELP WITH INTELLIGENT FORECAST
2151.	SMART HOME
2152.	SMART HOME CONNECTIVITY USING HOMEPLUG GREEN PHY
2153.	SMART HOME POWERED BY INTERNET OF THINGS
2154.	SMART HOME SECURITY SYSTEM USING MESHBLU PLATFORM
2155.	SMART PARKING
2156.	SMART PRODUCT SECURITY PLATFORM
2157.	SMART REST API FRAMEWORK
2158.	SMART SEARCH
2159.	SMART SUPERVISOR USING IOT
2160.	SMART SYSTEM TO AUTO GENERATE MOBILE APPLICATIONS TO BRING DEVELOPMENT EFFICIENCY
2161.	SMART VEHICLE MANAGER FOR TELEMATICS AND CONTROL

2162.	SMART, SELF-LEARNING WI-FI BASED LOCATION TRACKER WITH GAMIFICATION INTEGRATED
2163.	SNIPIRR SNIP BASED IMAGE RETRIEVAL USING RELEVANCE FEEDBACK
2164.	SOCIAL NETWORKING DATA ANALYSIS
2165.	SOCIETY MANAGEMENT SYSTEM USING CLOUD COMPUTING
2166.	SOFT COMPUTING BASED PREDICTION OF ROAD ACCIDENTS
2167.	SOFTWARE AND APPLICATION CONTAINERIZATION THROUGH DOCKER
2168.	SOFTWARE AS A SERVICE: AUTOMATED VERIFICATION OF MEDIA FILES
2169.	SOFTWARE AS PATENTABLE SUBJECT MATTER IN VARIOUS JURISDICTION AND IPR FOR STARTUPS
2170.	SOFTWARE DEFINED NETWORKING APPLICATION FOR DYNAMIC SERVICE FUNCTION CHAINING
2171.	SOFTWARE DEFINED NETWORKING FOR EFFICIENT CONTENT DELIVERY
2172.	SOFTWARE DESIGN AND PRODUCT ARCHITECTURE OF A SMART PIN POSITIONING TOOL FOR COMPLEX ELECTRONIC CIRCUITS
2173.	SOFTWARE DEVELOPMENT & TESTING METHODOLOGY FOR SOFTWARE ENGINEER
2174.	SOFTWARE FOR GENERATION/DUMPING OF COMMAND SEQUENCE FOR ONBOARD TELECOMMAND PROCESSOR MEMORY OF LEO SPACECRAFTS
2175.	SOFTWARE INTEGRATION OF AIR-TO-AIR WEAPON SYSTEM ON ADVANCED FIGHTER AIRCRAFT
2176.	SOFTWARE SYSTEM FOR PIPING CONSTRUCTION PROGRESS MIS DASHBOARD
2177.	SOFTWARE TEST PLANNING AND TEST DESIGN PROCESSES METRICS
2178.	SOFTWARE TESTING AND QUALITY ASSURANCE OF HRM PORTAL FOR EMPLOYEES
2179.	SOFTWARE TESTING AND QUALITY ASSURANCE OF MANUAL LOGICAL PLANNING TEMPLATE
2180.	SOFTWARE TESTING ESTIMATION USING TEST SCENARIOS
2181.	SOGEA - ENABLE SEARCH BY BBEU SERVICE
2182.	SOLID STATE DIGITAL VIDEO RECORDER
2183.	SOUNDING REFERENCE SIGNAL FOR TIMING ALIGNMENT AND UPLINK FREQUENCY SELECTIVE SCHEDULING IN LTE ENODEB.
2184.	SOURCE CODE ANALYZER PORTAL
2185.	SPAM IMAGE IDENTIFICATION
2186.	SPARK BASED OPTIMIZED BIGDATA PIPELINE FRAMEWORK
2187.	SPARK COMPUTATION FRAMEWORK FOR BIG DATA ANALYTICS
2188.	SPEECH PROCESSING
2189.	STAA BUILD AUTOMATION FRAMEWORK
2190.	STAF# MULTI-PLATFORM KEYWORD DRIVEN AUTOMATION FRAMEWORK
2191.	STARTER CONTROL AND ITS DIAGNOSIS FOR A PASSENGER VEHICLE
2192.	STATISTICAL ANALYSIS OF FLIGHT RECORDS USING BIGDATA
2193.	STATISTICAL EFFORT PREDICTION MODEL - APPLICATION
2194.	STATISTICAL FRAUD ANALYSIS FOR LEASING & LENDING REVALIDATION
2195.	STEER BY WIRE
2196.	STL CONSTRUCTION FOR INFREQUENT DATA STRUCTURES
2197.	STOCK MARKET PREDICTION THROUGH SENTIMENT ANALYSIS OF RSS FEEDS/TWITTER DATA
2198.	STOCK MARKET PREDICTIVE ANALYSIS USING TDM
2199.	STOCK PRICE ANALYSIS USING DATA MINING TECHNIQUES
2200.	STORAGE CHASSIS MANAGEMENT CONTROLLER
2201.	STORAGE SPACE ANALYTICS FOR CAPACITY PLANNING IN CLOUD ENVIRONMENTS
2202.	STUDENT GROWTH PREDICTION MODEL USING MACHINE LEARNING APPROACH
2203.	STUDY AND FRAMEWORK DEVELOPMENT FOR TESTING WITH OPEN SOURCE AUTOMATION TOOLS (PROTRACTOR AND APPIUM)
2204.	STUDY NATURAL LANGUAGE PROCESSING OPPORTUNITIES FOR IFS ERP
2205.	STUDY OF PERFORMANCE EVALUATION OF ROUTING PROTOCOLS IN WIRELESS ADHOC NETWORKS
2206.	STUDY ON WATERFALL VS AGILE MINDSET
2207.	STUDY, DESIGN & PERFORMANCE EVALUATION OF MOBILE ADHOC NETWORK (MANET) FOR INDIAN ARMY
2208.	STUDYING AND COMPARING ALGORITHMS OF NP-COMPLETE PROBLEMS
2209.	SUBSTITUTION LOGIC FOR EXPIRED/DISCONTINUED DATA
2210.	SUCCINCT IMAGE DESCRIPTION GENERATION IN TAMIL USING DEEP LEARNING
2211.	SUMMARIZATION AND SENTIMENT ANALYSIS FROM USER HEALTH POSTS
2212.	SURROUND VIEW CAMERA ADVANCED DRIVER ASSISTANCE SYSTEM
2213.	SYSTEM ARTIFACTS FOR INCIDENT HANDLING
2214.	SYSTEM GENERATED RATING BY OPINION MINING
2215.	SYSTEM PROFILER AND LOG ANALYZER TOOL
2216.	TAMPED VIDEO IDENTIFICATION USING PASSIVE APPROACH

2217.	TARGET MARKETING
2218.	TDP AUTOMATION SCRIPT - (AN AUTOMATION SCRIPT TO EXECUTE TESTING LIFE CYCLE)
2219.	TELEPHONY RTP EXTRACTOR
2220.	TELSA- TELECOMMUNICATION EVENT LOG SEQUENCE ANALYZER
2221.	TENSOR FIELD VISUALIZATION IN SIMCENTER 3D POST
2222.	TEST AUTOMATION- A SMART APPROACH TO REDUCE TEDIOUS EFFORTS
2223.	TEST AUTOMATION FRAMEWORK FOR CRITICAL SOFTWARE APPLICATIONS
2224.	TEST AUTOMATION FRAMEWORK USING SELENIUM TOOL
2225.	TEST AUTOMATION OF NISSAN INCENTIVE MANAGEMENT SYSTEM APPLICATION
2226.	TEST AUTOMATION USING SELENIUM WEBDRIVER
2227.	TEST MANAGEMENT SYSTEM
2228.	TEST MANGEMENT ECONVERGENCE ENHANCEMENT
2229.	TESTING & MODELLING OF SOFTWARE THREATS TO INFORMATION SYSTEMS
2230.	TESTING AUTOMATION FRAMEWORK USING UFT TOOL
2231.	TESTING TECHNIQUES FOR CROSS PLATFORM MOBILE APPLICATIONS
2232.	THE APPLICATION AND ANALYSIS OF DATA MINING IN CLUSTERING DATA IN OIL AND GAS DOMAIN
2233.	THE CLOUD DATA BACKUP SOLUTION
2234.	THE COMPLETE BANKING SOLUTION
2235.	TIBCO SPOTFIRE DEPLOYMENT PIPELINE ON CLOUD
2236.	TIME SERIES DATA PIPELINING AND PROCESSING.
2237.	TIME SERIES DATA WITH CASSANDRA
2238.	TO GO WITH NO DATA LATENCY AT PRESENTATION LAYER: REAL-TIME DATA REPORTING
2239.	TO MANAGE MASTERS RELATED TO WAREHOUSE MANAGEMENT
2240.	TOKEN BASED SINGLE SIGN-ON FOR RELGO NETWORKS APPLICATIONS
2241.	TOLL-FREE DATA FRAUD DETECTION
2242.	TOOL ACCESS AUTHORIZATION PORTAL
2243.	TOOL TO EXECUTE MIGRATION READINESS CHECK FOR PROCESS KNOWLEDGE SYSTEM.
2244.	TOPIC BASED DATA EXTRACTION USING FOCUSED WEB-CRAWLER
2245.	TOPOLOGY AWARE SHAPE MANIPULATION OF VECTOR GRAPHICS
2246.	TRACE (ANDROID APPLICATION)
2247.	TRACK ME USING GLOBAL POSITIONING SYSTEM
2248.	TRACKING AND MANAGEMENT OF PACKAGES
2249.	TRADE PRODUCT LIFECYCLE MANAGEMENT
2250.	TRADING AND PORTFOLIOS MANAGEMENT
2251.	TRADING SYSTEM
2252.	TRENDING SKILLS ANALYTICS
2253.	TRUST BASED CLUSTER ROUTING FOR MANET
2254.	TWITTER ANALYSIS USING APACHE HADOOP
2255.	TWO WHEELER HEALTH MANAGEMENT SYSTEM
2256.	UBERISATION: AN IMPACT ON LABOUR-INTENSIVE INDUSTRIES BUT WILL IT LAST?
2257.	UCDS - UBIQUITOUS CLOUD DATA STORAGE SECURITY
2258.	UI AUTOMATION DEVELOPMENT FOR BENCHVUE SOFTWARE USING WHITE FRAMEWORK
2259.	UI AUTOMATION USING SELENIUM ON A SALESFORCE APPLICATION.
2260.	ULTRA SOUND BASED COTTON CONTAMINATION DETECTION
2261.	UNDERSTANDING ABOUT PARALLEL ARCHITECTURES AND IMPLEMENTATION
2262.	UNIFIED AND EXTENSIBLE FRAMEWORK FOR FIRMWARE MANAGEMENT OF EMBEDDED DEVICES
2263.	UNIFIED IDENTITY, APPLICATION ACCESS AND INFORMATION RIGHTS FRAMEWORK FOR A FEDERAL DEPARTMENT: A SUGGESTED APPROACH
2264.	UNIFIED RECOMMENDATION MACHINE: NLP, TOPIC MODELING, COLLABORATIVE & CONTENT FILTERING TO ACHIEVE PERSONALIZED AND NON-PERSONALIZED RECOMMENDATIONS
2265.	UNIVERSAL ACCESSIBILITY OF PDF DOCUMENTS WITH ENGAGEONE <sup>®</sup> OUTPUT MANAGER
2266.	UNIVERSITY ERP SOLUTION
2267.	UNSTRUCTURED DATA VALIDATION TOOL
2268.	UNSUPERVISED LEARNING APPROACH TO OUTLIER DETECTION
2269.	UP-SELL/ CROSS-SELL INSURANCE PRODUCT
2270.	USAGE OF CUSTOMIZED TEMPLATES FOR PROVISIONING SERVICES
2271.	USE LATER IN - METHOD AND DEVICE FOR CREATING A MAPPED RELATIONSHIP OF A SELECTED CONTENT WITH ONE OR MORE APPLICATIONS.

2272.	USER ACTIVITY PREDICTION USING SALTED SEQUENCE PREDICTION ALGORITHMS
2273.	USER REGISTRATION AND IDENTIFICATION USING NFC
2274.	USING ADVANCED DATA MINING & ARTIFICIAL INTELLIGENCE TECHNIQUES FOR ENHANCED CUSTOMER COMPLAINT CLASSIFICATION FOR TELECOM SERVICE PROVIDER
2275.	USING K-MEANS ALGORITHM FOR NETWORK INTRUSION DETECTION THROUGH DATA CLUSTERING
2276.	UTILITY AUTOMATION USING NFC
2277.	UTILIZATION OF WCDMA HAND SETS BEYOND BASE STATION ANTENNA COVERAGE AREA
2278.	VALIDATING THE ORIGINALITY OF WINDOWS APPLICATION ON IBM MOBILEFIRST PLATFORM FOUNDATION
2279.	VARIOUS DATA MINING TECHNIQUES AND ITS APPLICATION
2280.	VEHICLE ROUTING PROBLEM SOLUTION USING ELITIST AND ASRANK ALGORITHM ON CUDA ARCHITECTURE
2281.	VERBATIM THEME ANALYZER
2282.	VERIFICATION OF USB TYPE-C USING VERIFICATION IPS
2283.	VIRTUAL APPLE DEP SERVER
2284.	VIRTUAL ASSISTANT - CHATBOT
2285.	VIRTUAL GPU DEVICE EMULATOR FOR KVM HYPERVISOR
2286.	VIRTUAL MACHINE MIGRATION FROM PRIVATE TO PUBLIC CLOUD
2287.	VIRTUAL POWERTRAIN - REALIZING REAL TIME BEHAVIOR OF POWERTRAIN CONTROL SYSTEM
2288.	VIRTUALIZATION
2289.	VIRTUALIZATION AND ORCHESTRATION OF POLICY SERVER
2290.	VIRTUALIZATION PERFORMANCE ANALYSIS OF KVM & VMWARE HYPERVISOR FOR TELECOM APPLICATIONS
2291.	VIRTUALIZATION USING VMWARE
2292.	VISA RELEASE
2293.	VISUAL DATA AND QUERY OPTIMIZATION
2294.	VOICE CONTROL ROBOT
2295.	VOICE CONTROLLED ROBOT USING ANDROID APP
2296.	VOICE INTEGRATION WITH CLOUD PLATFORM
2297.	VOICE OPERATED INSURANCE CLAIM SUBMISSION SYSTEM
2298.	VOIP PROTOCOLS DRAWBACKS AND PREVENTIVE MEASURES
2299.	VSEARCHENGINE
2300.	WAREHOUSE MANAGEMENT ENVIRONMENT CREATOR
2301.	WARRANTY ANALYSIS DATABASE CREATION FOR GENERATOR CONTROLS AND GENERATION OF REPORTS BASED ON DATABASE SYSTEM APPLICATION
2302.	WATERMARKING OF 3D OBJECT
2303.	WEB ACTIVITY ANALYSIS USING MACHINE LEARNING
2304.	WEB APPLICATION AUTOMATION
2305.	WEB APPLICATION FOR DATA CONSOLIDATION BY IMPLEMENTING EFFICIENT DATA STRUCTURE ALGORITHM
2306.	WEB APPLICATION FOR INTERGRAPH BATCH SERVICES
2307.	WEB APPLICATION FOR SOFTWARE TICKETING SYSTEM
2308.	WEB AUTOMATION FRAMEWORK
2309.	WEB AUTOMATION WITH MULTI-BROWSER SUPPORT AND PARALLEL EXECUTION IN CI
2310.	WEB CRAFT (CONNECT ALL AT ONE PLACE)
2311.	WEB CRAWLER BASED ON ARTIFICIAL BEE COLONY
2312.	WEB DATA MART ANALYTICS
2313.	WEB SERVICES USING SOAP
2314.	WEB TESTING AUTOMATION USING SELENIUM
2315.	WEBCAPM AUTOMATION
2316.	WEBMETHODS LOG ANALYTICS PORTAL
2317.	WI-FI - ANTENNA SELECTION AND POWER MEASUREMENT APPLICATION
2318.	WIFI ENABLED WEARABLE NOTIFICATION DEVICE
2319.	WIKI DOCUMENT INDEXER AND SEARCH ENGINE
2320.	WIRELESS CRITICAL PROCESS CONTROL IN OIL AND GAS REFINERY PLANTS
2321.	WIRELESS INSPECTION AND NOTIFICATION SYSTEM USING IOT TO MONITOR TYRE PRESSURE AND CURB EMISSION IN URBAN AREA
2322.	WIRELESS PUBLIC ALERTING SERVICE
2323.	WORD PREDICTION USING DATA MINING
2324.	WORK ORGANIZER APP WITH CALENDAR AND CONTACTS INTEGRATION
2325.	WSEARCH DATABASE FOR FASTER CAD EXPERIENCE
2326.	WSN BASED IOT SMART HOME CONTROL

**STATEMENT OF DEGREES AWARDED**

Degrees	No. of degrees	
	80 <sup>th</sup> Award (20.03.2017)	81 <sup>st</sup> Award (13.07.2017)
<b>A. Integrated First Degrees</b>		
<b>B.S.</b>		
Engineering Technology	171(07)	202(07)
Information Systems	25(00)	2(00)
Manufacturing Engineering	30(01)	69(01)
Marine Engineering	14(00)	19(00)
Nautical Technology	21(00)	10(00)
Optometry	27(22)	57(51)
Physician Assistant	-	23(20)
Power Engineering	63(00)	1(00)
Process Engineering	71(02)	4(00)
<b>B.Tech.</b>		
Marine Engineering	220(00)	4(00)
Nautical Technology	26(00)	38(00)
Process Engineering	-	43(00)
<b>Sub Total</b>	<b>668(32)</b>	<b>472(79)</b>
<b>B. Higher Degrees</b>		
<b>M.S.</b>		
Consultancy Management	1(01)	1(00)
Engineering Management	1(00)	-
Manufacturing Management	3(01)	1(00)
Microelectronics	1(00)	-
Pharmaceutical Operations & Management	1(00)	-
Quality Management	1(00)	2(01)
Software Engineering	1165(745)	40(19)
Software Systems	21(11)	17(02)
Telecommunications & Software Engineering	6(00)	-
<b>MBA</b>		
Consultancy Management	35(10)	71(11)
Manufacturing Management	34(02)	49(03)
Quality Management	11(04)	40(14)
<b>M.Tech.</b>		
Automotive Engineering	1(00)	65(05)
Design Engineering	66(06)	30(06)
Embedded Systems	57(14)	20(05)
Environmental Engineering	23(08)	-
Manufacturing Management	235(13)	209(13)
Microelectronics	23(04)	50(03)

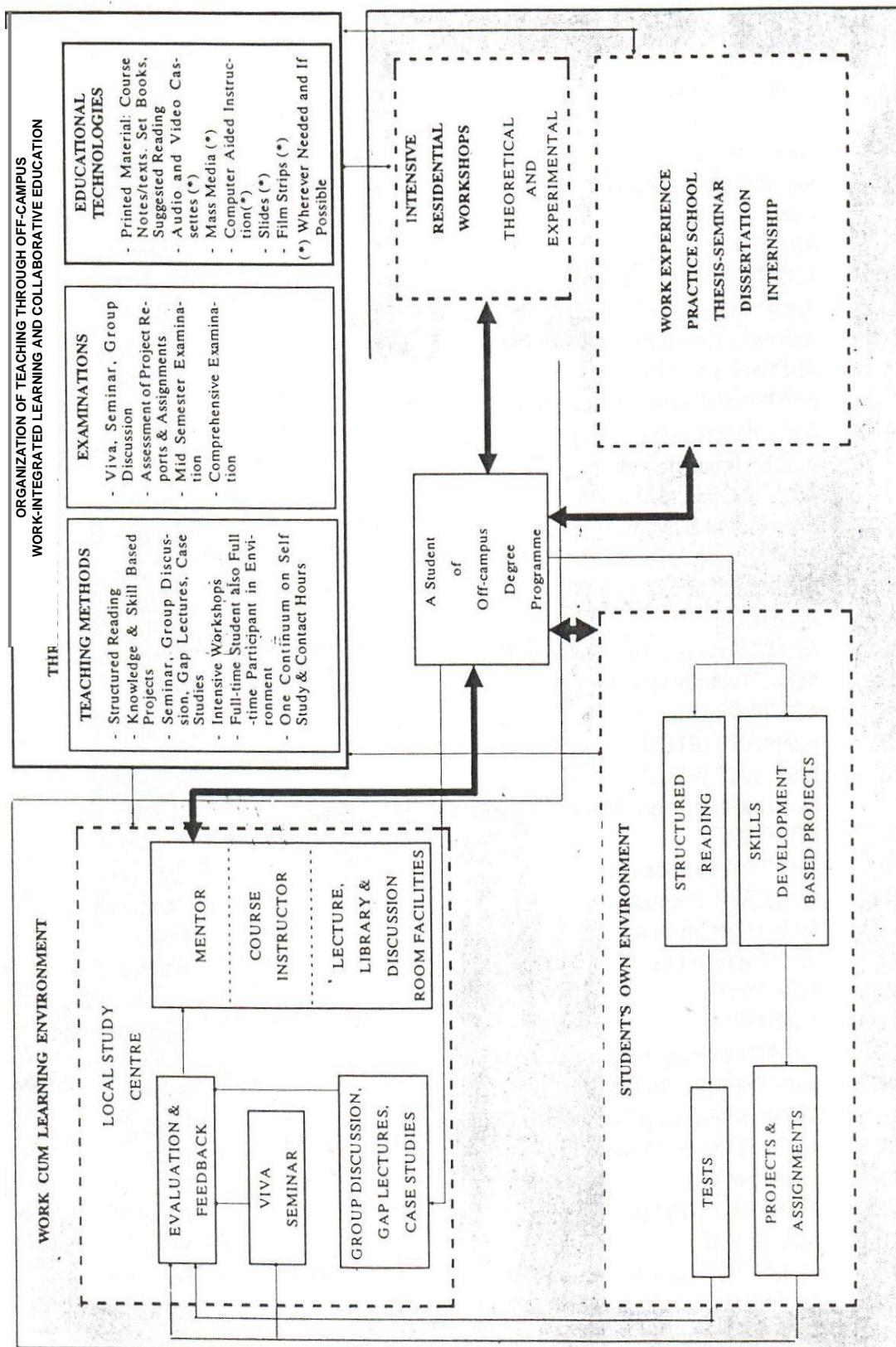
Degrees	No. of degrees	
	80 <sup>th</sup> Award (20.03.2017)	81 <sup>st</sup> Award (13.07.2017)
Pharmaceutical Operations & Management	8(00)	-
Quality Management	93(11)	119(17)
Science Communication	11(03)	-
Software Engineering	2655(1329)	262(114)
Software Systems	572(151)	704(209)
Systems Engineering	68(25)	-
Telecommunications & Software Engineering	1(01)	-
<b>M.Phil.</b>		
Consciousness Studies	1(00)	-
Hospital and Health Systems Management	12(07)	20(07)
Optometry	-	6(04)
<b>Sub Total</b>	<b>5106(2346)</b>	<b>1706(433)</b>
<b>Total</b>	<b>5774(2378)</b>	<b>2178(512)</b>

**Note:** The numbers in brackets indicate number of female students.

#### SUMMARY

Award	80 <sup>th</sup>	81 <sup>th</sup>	Total
Integrated First Degrees	668(32)	472(79)	1140(111)
Higher Degrees	5106(2346)	1706 (433)	6812(2779)
<b>Total</b>	<b>5774(2378)</b>	<b>2178(512)</b>	<b>7952(2890)</b>

**Note:** The numbers in brackets indicate number of female students.



A Schematic depicting Person-centred Approach to a Student's Programme of Study in the Off-campus, Education System under Work Integrated Learning Program viewed from the Student's stand-point



**BITS Pilani**  
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Programmes and Industry Engagement

**Prof. Ranendra N. Saha**

Director, Dubai Campus

**Prof. S.C. Sivasubramanian**

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**Prof. S. Balasubramanian**

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Dean, Faculty Affairs

**Prof. Niranjana Swain**

Dean, Practice School

**Prof. S. Gurunaryanan**

Dean, Admissions and Work Integrated Learning Programmes

**Prof. Suman Kapur**

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