

BITS Pilani

# annual report<sub>2015</sub>



**BITS Pilani**  
Pilani | Dubai | Goa | Hyderabad

innovate

achieve

lead

Appendix 'P': Ref. BG Agenda Item No.69.10  
Appendix 'F': Ref. GB Agenda Item No.55.09

## **ANNUAL REPORT 2015**

**REPORT OF THE BOARD OF GOVERNORS AS TO  
THE STATE AND CONDITION OF THE INSTITUTE FOR  
THE PERIOD 1ST JANUARY 2015 TO 31ST DECEMBER 2015**



**BITS Pilani**  
Pilani | Dubai | Goa | Hyderabad

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**BITS Pilani**

# **annual report** 2015

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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



**Acting Vice-Chancellor**  
Prof. V.S. Rao

## OTHER SENIOR OFFICERS OF THE INSTITUTE

Prof. Ashoke Kumar Sarkar  
*Director, Pilani Campus*

Prof. Sasikumar Punnekkat  
*Director, K.K. Birla Goa Campus*

Prof. V.S. Rao  
*Director, Hyderabad Campus*

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

Prof. G. Sundar  
*Director, Off-Campus Programmes*

Prof. Ashwin Srinivasan  
*Deputy Director, K K Birla Goa Campus*

Prof. M.M.S. Anand  
*Registrar*

Mr. Manoj Fitkariwala  
*Chief Financial Officer (on-deputation)*

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

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

Prof. R. Mahesh  
*Dean, Faculty Affairs*

Prof. Niranjana Swain  
*Dean, Practice School*

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

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

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

## OBITUARY



**Dr. SARALA BIRLA**  
(1924-2015)

The morning of 28th March, 2015 brought with it profound grief surrounding the sad and sudden demise of Dr. Sarala Birla, wife of Shri B.K. Birla at Delhi. She passed away as a result of old-age related heart failure at the age of 91.

Dr. Sarala Birla was born on 23rd, November 1924 to freedom fighter Brijlal Biyani. She was married to Mr. Basant Kumar Birla, and was the daughter-in-law of the pioneering industrialist Mr. G.D. Birla and the grandmother of billionaire Kumar Mangalam Birla. A visionary educationalist, she has been considered the founder of about 45 educational institutions supported by the Birla family. Her collection of Indian art ranks amongst India's notable private collections.

A condolence meeting of the student and staff members of BITS Pilani, was held in all the campuses. A true visionary, with a heart of gold and a remarkably progressive outlook towards life, she will be missed by the entire educational community.

## **Distinguished Alumnus Award 2015:**

***“BITS Pilani Distinguished Alumnus Award” in 2015 to the following alumni:***



**Prof. Bharat Bhushan:** The Distinguished Alumnus Award in the Category of Academic Teaching and Research is awarded to Prof. Bharat Bhushan in recognition of his outstanding contributions to dissemination and creation of knowledge and his services to his profession and the society at large. Prof. Bhushan is an Ohio Eminent Scholar and The Howard D. Winbigler Professor in the Department of Mechanical Engineering, Affiliated Faculty in the

John Glenn College of Public Affairs, and the Director of the Nanoprobe Laboratory for Bio- & Nanotechnology and Biomimetics (NLBB) at the Ohio State University, Columbus, Ohio, USA.



**Mr. Manoj Saxena:** The Distinguished Alumnus Award in the Category of Entrepreneurship is awarded to Mr. Manoj Saxena in recognition of his outstanding contributions to the society. Mr. Saxena is the Director of San Antonio Branch at Federal Reserve Bank of Dallas since 2012 and provides input on regional economic conditions as part of the Federal Reserve’s monetary policy functions. He currently serves as a Board Member of Communities

In Schools Inc., as a Member of Advisory Board of Global Giving Foundation Inc. He also serves on the boards of Any Baby Can, Austin Technology Council and the Saxena Foundation. In 2001, he was awarded the Distinguished Alumni Award by Michigan State University. An avid auto racing enthusiast, he has completed track, endurance and rally races in a variety of race cars including Formula 1, Radical/LMP, Porsche GT3 RS, Formula Mazda, and Formula Renault.



## A.1 HIGHLIGHTS OF ACHIEVEMENTS DURING THE YEAR 2015

1. The Convocation ceremony at Pilani Campus was held on Sunday, 16th August, 2015. During this event, 1024 first degrees, 257 higher degrees and 20 PhD degrees were awarded. Prof. Ashutosh Sharma, Secretary, Department of Science and Technology, Government of India graced the occasion as the Chief Guest. On 5th September, 2015, the Convocation ceremony was held at BITS Pilani, Dubai Campus. Amidst great pride and honor, 375 students of Ph.D., Postgraduate and Undergraduate programmes of BITS Pilani, Dubai Campus were awarded Engineering Degrees. The Chief Guest for the occasion was Dr. Eesa Mohammed Bastaki, President, University of Dubai. Convocation of the K.K. Birla Goa Campus was held on 9th August, 2015. The Chief Guest was Mr. Naveen Tewari, Founder and CEO, InMobi. Of the 673 students who received the degrees, Mutthkhod Shridevi Sharangowda, Pooja Malik and Zantye Manali Sunil were the winners of gold, silver and bronze medals respectively. Hyderabad Campus Convocation was held on 26th July, 2015. The Chief Guest, Padma Vibhushan, Dr. Karan Singh, Member of Parliament, Rajya Sabha and Vice Chancellor Prof. B.N.Jain participated in the Fourth Convocation of the campus for award of various degrees [First Degree (651), Higher Degree (84) & Ph.D (13)] who have qualified at the end of Semester II, 2014-15. Ms. Anupriya Gagneja, Mr. Pratyush Mahapatra and Mr. Shyam Krishna Shenoy, were the winners of the gold, silver and bronze medals respectively.
2. 22 Board toppers of Class XII of 2015 have joined three campuses of BITS Pilani this year.
3. Campus placement improved during the year. Four campuses put together, number of companies visiting our campuses for recruitment rose from 465 in 2014 to 510 in 2015.
4. Number of candidates who wrote BITSAT admission test increased from 186181 in 2014 for 2236 seats to 194927 for 2200 seats. The number of girl candidates wrote the BITSAT was 47644.
5. During the year 2015, 100 new faculty members (34 in Pilani, 28 in Goa 29 in Hyderabad and 9 in Dubai) joined. 60 faculty members (24 in Pilani, 11 in Goa, 22 in Hyderabad and 3 in Dubai) left the Institute for reasons such as planned/forced separation, resignation, expiry of term and retirement.
6. As many as 13 BITS Pilani students have excelled in CAT 2015 exam. Pranjal Agarwal, a final year Mechanical Engineering student secured 100 percentile in his first attempt in the CAT exam.
7. The university signed MOUs with 18 globally reputed organizations during the year. They are listed in Section A.7 of the Quick Glance Section.
8. The project idea "HITCH: An interactive platform that facilitates communication, remote control and local positioning/tracking system for mobile devices" done by the students: Akshay Sonandkar, Yash Bardapurkar and Vandan Phadke was selected for Prof. Suresh Ramaswamy Memorial Award 2015-16.
9. BITS Pilani received EDU-RAND Award. EDU-RAND Award is an initiative borne out of the engineering college rankings announced earlier this year. The award ceremony was held on 10th October, 2015 at IISER, Pune as a part of EDU's Fifth Annual Vice Chancellor's Retreat this year.
10. Mr. Kailash Satyarthi, winner of the Nobel Peace Prize 2014, visited the campus on 29th January, 2015. He was accompanied by his wife, Smt. Sumedha Satyarthi.
11. International admissions to any University brings in the perspective of integrating an international, intercultural, and global dimension to the teaching/learning, and research functions of an University. Towards this objective, BITS-Pilani, commenced admissions to International students in the year 2015-16 and admitted 28 students in various Science, and Engineering branches at its' Hyderabad campus. The plan to internationalize academic programs at BITS, Pilani and its' campuses is an effort to bring students from other nationalities to experience the vibrant academic environment prevailing at BITS, Pilani. In the year 2016-17, BITS, Pilani has expanded this scheme to its' Goa campus as well.
12. BITS Pilani received Dataquest - CMR Top T School Award. BITS Pilani has topped the chart in the private T-School ranking, with high scores in almost all the parameters. BITS Pilani has scored high on parameters such as top institute, human resources, and alumni. Dataquest-CMR Top T School Survey is India's premier survey of engineering colleges. The T School Rankings are a benchmark in the industry and is used by students and recruiters alike. BITS Pilani has been ranked No. 1 under India's top-Tech Schools 2015 based on DQ-CMR survey of colleges, employers and Alumni.

### RANKING OF BITS PILANI BY VARIOUS MAGAZINES IN 2015

Magazines	Year	Heading	Ranking
Dataquest	May 2015	Top 100 Private T-School	1
		Top 10 Institute Scores 2015	1
		Alumni Scores	1
		Top 10 HR Scores 2015	1
		Zone-Wise Top Private T-School (East)	1
		Zone-Wise Top Private T-School (North)	1
		Overall Top 10 Institutes Rank Comparison in Different Scores	1
Educationworld.in	May 2015	India's Top 200 Universities National League table	6
		India's Top Ranked Private Universities	1
		Parameters of Excellence: Competence of Faculty	1
		Infrastructure and Facilities	4
		Research Innovation	1
		Faculty Welfare & Development	4
		Placement	2
		Pedagogic Systems and Process	3
		Industry Interface	1
		India's most admired Science/Technology Universities	3
Higher Education Review	May 2015	Top 100 Private Engineering Colleges Survey 2015	1
		Top 20 Academically Best Engineering Colleges	1
		Top 20 Engineering Colleges with High Quality Placement	1
		Top 20 Engineering Colleges with Higher Quality Infrastructure	2
India Today	June 2015	Top 5 Best Colleges	3
		Zonal Ranking (North)	2
		Top 20 Engineering Colleges	3
The Week	June 2015	Top 100 engineering colleges	6
		Top Private Engineering Colleges	1

13. The 34<sup>th</sup> Annual Blood donation camp 2015, jointly organized by NSS BITS Pilani and the Indian Red Cross Society, was held during 31st January to 1st February, 2015 at the SAC Pilani Campus. The event received an overwhelming response from faculty members and the student community. A record total of 951 units of blood were donated. The event broke its own record of BDC 2014 (815 units collected), which was recognized and awarded by Dr. Harshvardhan, Honorable Minister of Science & Technology as the most successful Blood Donation Camp organized by an educational institute earlier in June 2014.
14. NSS, BITS Pilani, in collaboration with Sports Council, organized the fourth edition of Junoon- a two day sports fest for the specially-abled on 12th September and 13th September, 2015. NSS BITS Pilani is proud to have hosted Mr. Amit Saroha, recipient of Arjuna Award and an inspirational para-athlete who was the chief guest for the event.
15. To mark the occasion of the International Day of Yoga, BITS Pilani and NSS BITS Pilani chapter organized a yoga session on June 21st, 2015 at Student Activities Centre (SAC). An online essay competition was also organized for students on the topic "Origin of Yoga and its Relevance in Present Society".
16. After 25 years of graduation, around 220 Alumni from the Batch of 1986-90 came back to their Alma Mater between 6th and 8th November, 2015 to celebrate their Silver Jubilee Reunion. More than 100 of them came from countries like – USA, UK, Canada, Hong Kong, Singapore. The batch included senior IAS officers, Educationists, entrepreneurs, venture capitalists, investment bankers, NGO founders, researchers etc. Other than taking part in multiple events such as career mentoring session for students, they also met with faculty members. They felicitated the faculty members who had taught them in a special function and

expressed their gratitude to their Alma mater. In the felicitation function on Friday 6th November, a movie "Manjunath" directed by a BITS Pilani '86 batch alumnus, Mr. Sandeep Verma, was also screened in the auditorium. BITS Alumni Affairs Cell, Pilani campus thanked the Alumni for breaking all past records by having a presence of more than 220 Alumni for Silver Jubilee Reunion.

17. Students' Awards Ceremony at Pilani campus was held to mark the occasion for Prof. L. K. Maheshwari Foundation Awards and Prof. K. E. Raman Award for Best Outgoing Student in Electronics & Instrumentation Engineering. For the year 2015, the award for Best graduating student went to Mr. Prakhar Kumar. For the year 2015, the award for Girl student of the year was bagged by Ms. Anshula Verma. Prof. K. E. Raman Award for Best Outgoing Student in Electronics & Instrumentation Engineering was given to Ms. Preeti Kumar.
18. BITS Pilani received ASSOCHAM National Excellence Award for Best Use of ICT-2015 held at New Delhi on 18th April, 2015.
19. The Prof B.M. Mithal Memorial Lecture, a mark of respect to the great teacher, educationist, administrator and philosopher, initiated by the Pharmacy Department of BITS, Pilani in 2001, was held on 14th February, 2015. The lecture was jointly organized by Department of Pharmacy, BITS, Pilani and Prof B.M. Mithal Endowment Trust, Pilani.
20. The Basant Book Festival was held at Akshay Supermarket during 20th February to 4th March, 2015 under the supervision of Mr. Giridhar Kunkur, the Librarian and Chief PMRU.
21. An essay competition on "Why do I love Books?" was organized for the students of BITS Pilani campus in the BITS Library on 24th February, 2015. Nearly 100 students participated in the essay competition.
22. The 64th Founder's Day was celebrated at the Pilani campus on Basant Panchami, Saturday, 24th January, 2015. Gala, jollity and revelry marked the occasion. Down the memory lane, the Pilani campus was inaugurated on Basant Panchami Day in 1951 by the First President of India, Dr. Rajendra Prasad. On this occasion, Prof. G. Raghurama felicitated fourteen retiring non-teaching staff members. He also presented Best Performance Awards to nine non-teaching staff members and Certificates of Appreciation to nine non-teaching staff members.
23. Pilani campus celebrated 48th Engineers Day on 15th September, 2015 in honour of Sir M. Visvesvaraya - one of India's greatest engineers. To celebrate the 48th Engineers Day to commemorate the birthday of the legendary engineer Sir Mokshagundam Visvesvaraya, following events were organized: Essay writing competition, Oral presentation and Poster presentation for first degree and higher degree students on the theme of "Engineering challenges for knowledge Era".
24. The Basketball team of KK Birla Goa campus was runner-up in the All Goa Inter Collegiate Basketball Open Tournament organized by Don Bosco Oratory Panjim. The Tennis team won the Open Championship at Panjim, organized by Gasper Dias.
25. The International Conference on Evidence Based Management(ICEBM) 2015, the first of its kind in the Asian sub-continent, was organized by the Department of Management Pilani campus during 20th March and 21st March, 2015.
26. National conference on Advances in Microelectronics, Instrumentation and Communication (MICOM-2015) was organized by the EEE Department, BITS Pilani, Pilani Campus during 20th November and 21st 2015. The conference theme covered major areas of specialization offered by the department such as Microelectronics, Instrumentation and Communication.
27. The Physics department of BITS Pilani, Pilani campus hosted a national school in Theoretical High Energy Physics during 16th November to 5th December, 2015. Conceived in 1985, these schools are conducted annually as a part of training for PhD students in high energy physics and are funded by SERB (Science and Engineering Research Board), Department of Science and Technology, Govt. of India. High energy physics, also known as particle physics, attempts to answer some of the most fundamental questions such as, what is everything made up of and what fundamental forces bind things to make the Universe we see today.
28. The 3rd Indo-German Workshop on "Sustainable Engineering" was organized on 3rd November, 2015 at BITS Pilani, Pilani campus in association with Institute of Machine Tool and Production Technology (IWF), Technische Universitat (TU) Braunschweig, Germany and Government Engineering College, Bikaner, Rajasthan on "Sustainability; future factories; resource, and energy efficiencies".
29. BITS Pilani alumni is building fetal monitoring devices to address 3, 00,000 annual prenatal deaths in India. Mr. Vibhav Joshi and Mr. Sumedh Kaulgud, along with other alumni of BITS Pilani, founded Sattva MedTech in 2014 and are developing a next-generation fetal health monitoring device which leverages advanced sensors and algorithms. This device, called the Sattva Fetal Lite, has been designed and

engineered for use in India and other low-and-mid-income countries. The team has also received the BITS 75 Charitable trust grant and has completed its first clinical study with St. John's Medical College, Bengaluru. It won the title 'Top 10 Innovator' in the India Innovation Growth Programme run by Stanford GSB, Lockheed Martin, IC squared – University of Texas at Austin, FICCI & DST – Government of India.

30. New Interactive Library Portal "infoBITS" was launched at Pilani campus by Prof. A.K. Sarkar Director Pilani Campus, on 7th August, 2015. BITS Pilani Librarian and Unit Chief, Publications and Media Relations Unit, Mr. Giridhar Kunkur, delivered an orientation lecture about the library sources and services. He also explained in detail about the online library services and resources accessible through new library portal such as Book Finder, Daily News, Lost & Found Items, Periodical Finder, infoBITS bulletins, Audio Visual Resources, E-Books, Online Catalogue (Web OPAC), Online Databases, Inter Library Loan, Old Question Papers, Institutional Repository and Communication Panel.
31. Prof. R. R. Mishra and Prof. Rajesh Mehrotra explained about the Teaching Learning Centre (TLC), a new initiative and its vision and mission statements on 7th August, 2015. Prof. Mehrotra spoke about the activities that TLC of Pilani Campus that had planned for the year 2015-16, and said that the orientation programme jointly being organized by BITS library and the TLC was the first such event to be organized by the TLC. He emphasized the need of such orientation programmes for both faculty and students and hoped that it would succeed in fulfilling that need.
32. Prof. Rajiv Gupta, Senior Professor, Department of Civil Engineering, attended and presented a paper titled "Application of Genetic Algorithm in Design of Water Tanks" at the International Conference on Advances in Civil, Structural and Mechanical Engineering - ACSM 2015, conducted by IRED, USA, in Bangkok, Thailand from 21st February and 22nd February, 2015. He also attended ESRI User Conference 2015 in San Diego, California, USA from 20th July to 24th July, 2015, and presented a paper titled "Environmental & Socio-Economic Impacts of Mass Rapid Transit Using GIS", co-authored by R Srinivas, and V Swathi Under University Immersion program he also made a visit to the University of Virginia as a visiting faculty at the Department of Systems & Information Engineering during 19th May to 19th July, 2015.
33. Dr. V.S. Nirban, Department of Humanities and Social Sciences attended and presented a paper titled "Discourse Analysis of an Online Academic Discussion" at the 4th International Conference on Communication, Media, Technology and Design organized by Eastern Mediterranean University, Cyprus, and Anadolu University in Dubai during 16th May to 18th May, 2015.
34. Dr. (Ms.) Anupam Yadav, Department of Humanities and Social Sciences attended and presented a paper titled "Alternative Epistemologies and Normative Directionality" at the 10th Annual International Conference on Philosophy organized by Athens Institute for Education and Research in Athens, Greece during 25th May to 28th May, 2015.
35. Dr. Vishal Saxena, Department of Biological Sciences attended and presented paper titled "Apicoplast & its Metabolic Pathways: Unique drug targets in *Plasmodium*" at the College of Public Health, University of South Florida, Tampa, Florida on 7th July, 2015 and was also a visiting scholar during 8th June to 29th July, 2015.
36. Prof. K. S. Sangwan presented a paper titled "Predictive Modelling and Optimization of Machining Parameters to Minimize Surface Roughness Using Artificial Neural Network Coupled with Genetic Algorithm" during the 15<sup>th</sup> CMMO conference held during 11th June and 12th June, 2015 at KIT, Karlsruhe, Germany.
37. Dr. Pratik N Sheth, Department of Chemical Engineering, went to Oklahoma State University, Stillwater Campus, OKC, USA, as a Visiting Scholar under the scheme of University Immersion Program and gave a presentation on "Thermochemical Conversion of Biomass to produce biofuels" on 15th July, 2015.
38. Dr. Praveen Goyal, Department of Management, attended and presented a paper titled "Influence of perceived CSR on Service Quality, Trust and Customer Loyalty: Insights from Indian Hotel Industry" in the 4th Asian Management Research and Case (AMRC) Conference 2015, organized at the Graduate School of Business, University Sains, Malaysia, during 10th January and 11th January, 2015.
39. Prof. Dalip Kumar, Department of Chemistry presented an India-Japan joint research project with Prof. Kazuhito Tanabe, Department of Energy and Hydrocarbon Chemistry, Kyoto University, under India-Japan S & T cooperation, in the Graduate School of Engineering, Kyoto University, Japan during 5th January to 17 January, 2015. He also delivered a guest lecture on "Remarkable Linking Effect on Photocytotoxicity of Porphyrin Conjugates with DNA Binding Agents" in the Kumamoto University, Japan on 13th January, 2015.

40. Dr. Udayan Chanda, Department of Management, attended and presented a paper titled "Intergenerational Effects of Diffusion on CDMA and WCDMA Technologies under Direct Network Externalities" in the 4th Asian Management Research and Case (AMRC) Conference 2015, organized at the Graduate School of Business, University Sains, Malaysia, during 10th January and 11th January, 2015
41. Dr. Dinesh Yadav, Department of Humanities and Social Sciences presented "The Kitchen" in the Sydney International Arts Festival, Sydney, Australia during 21st January to 24th January, 2015, and in the Auckland Arts Festival, Auckland, New Zealand during March 12-18, 2015. He also attended the Prague Quadrennial of Performance Design and Space, Kafka House, Prague, Czech Republic for an exhibition in the Indian student section, during 18th June to 28th June, 2015.
42. Dr. M.S. Soni, Department of Mechanical Engineering visited the Clean Energy research Centre (CERC), University of South Florida, Tampa, USA, on 31st July, 2015 during 7th June, 2015 as a visiting scholar and gave a presentation on Spiritual Thermodynamics. He was also a visiting scholar at Columbia University, New York.
43. Mr. Jitendra Kumar, Research Scholar, Department of Electrical & Electronics Engineering presented a paper titled "Investigation on Rudimentary Geometries of Dielectric Resonator Antenna" at the 36th Progress in Electromagnetics Research Symposium (PIERS), 2015, in Prague, Czech Republic, organized by the Electromagnetics Academy, Cambridge, USA, and the Czech Technical University, Prague during 6th July to 9th July, 2015.
44. Prof. Navneet Gupta, Department of Electrical & Electronics Engineering, presented a paper titled "Pattern Reconfigurable Antenna Using Non-uniform Serpentine Flexure Based RF-MEMS Switches" at the 36th Progress in Electromagnetics Research Symposium (PIERS), 2015, in Prague, Czech Republic organized by The Electromagnetics Academy, Cambridge, USA, and the Czech Technical University, Prague during 6th to 9th July, 2015.
45. Dr. Arnab Hazra, Electrical & Electronics Engineering (EEE) was awarded with the Innovative student project award (Doctoral Level) for Best PhD thesis by Indian National Academy of Engineering (INAE) for the year 2015.
46. Dr. Arun Kumar, Department of Management, received the AIMS International Young Management Researcher Award, 2014 by the Association of Indian Management Scholars at IIM Kozhikode on 2nd January, 2015.
47. From 22nd March to 25th March, 2015, table tennis, squash and tennis (boys and girls) teams participated in AUS Racket Inter University Tournament organized by American University of Sharjah and secured winners position in table tennis (girls & boys) and badminton, Runners up in tennis boys.
48. From 5th May and 6th May, 2015, Dubai campus in Association with ADIB (Abu Dhabi Islamic Bank) had organized a Financial Education Awareness Program for the benefit of students. 92 students participated and vouchers worth AED 1500 were distributed to the students.
49. On 1st October 2015, Mr. Phanindra Sama, Founder of RedBus.in, Mr. Jaswinder Singh Chadha, President and CEO of Atria, Dr. Nayana Somaratna, Co-founder at Medical Joyworks, had an interactive session in Auditorium on How to become a successful entrepreneur - Entrepreneurial Journey.
50. On 13th October, 2015, Prof. R. N. Saha, the Director of Dubai campus, inaugurated the "Music Room" for the use of Trebel, the music club.
51. On 5th November, 2015, "ETHNIC DAY" was organized to celebrate the "FOUNDATION DAY" of BITS Pilani, Dubai Campus. Students dressed up in ethnic wear on the day and a cultural event was organized in the Institute Auditorium.
52. On 29th November 2015, Ms. Anjana Kamath, Senior Business Development Manager and Ms. Geetha Nayak, Managing Partner, Design Infinity LLC – Dubai delivered motivational talk.
53. From 6th December to 9th December, 2015, the 13th BITS Sports Festival (BSF 2015) held at BITS Pilani, Dubai Campus. Mr. Pullela Gopichand, Coach, Indian National Badminton Team, and Prof. V.S. Rao, Acting Vice Chancellor were the Chief Guest and Guest of Honour for the Prize distribution ceremony. The Athletics Overall Championship and BSF 2015 Overall Championship trophy were won by BITS Pilani, Dubai Campus.
54. On 15th December 2015, Dr. Amrish Kamboj, Chief Operating Officer/Pathologist, Eastern Clinical Laboratories, Dr. Rajarathinam Ayyanar, Specialist Neurologist, Zulekha Hospita, Dr. Fatima Al Hashimi, Head of the Administration and Education Unit, Dubai Cord Blood and Research Center, Pathology and Genetics Department, Latifa Hospital Dubai Health Authority and Dr. Antony Thomas, Premier Diagnostics

and Medical Centre, Dubai had one day interactive session on “Diagnostics and Healthcare” with a Focus on Expo 2020.

55. NGPE-2015 Part C (an examination in experimental skill) was conducted at Department of Physics, BITS Pilani, KK Birla Goa campus on Sunday, 7th June, 2015. Prof. Arun V Kulkarni was the Examination Superintendent where 6 national toppers were selected through a multi-stage process from among over 10000 students who appeared NGPE Parts A and B.
56. In Goa Campus, three new labs are constructed for Physics, Chemistry and Biology near Wing C with a carpet area of 150 Sq m each. Scholar student area has been created to carry out their theoretical research work. The Biology and EE labs were developed to accommodate research and academic purpose.
57. International Conference on Trends in Cell and Molecular Biology held on 28th November, 2015 at Goa. (TCMB, 2015). This conference aimed at providing opportunities and bringing together biochemists, molecular biologists, cell and developmental biologists, computational biologists on a common platform to present their exciting and new findings and also to establish research and to find global partners for future collaboration. ‘Toxicity’ as this is one of the major health concerns, whether due to environmental stresses or due to unknowing exposure to some toxic substances needs to be re-looked in depth.
58. The second edition of tiNai Ecofilm Festival (TEFF) 2015 and National Conference on Ecocinema recently concluded in BITS Pilani, K K Birla Goa Campus. Inaugurated on 8th October, 2015, the event hosted by the Department of Humanities and Social Sciences, was spread over three days, screened 20 ecofilms selected out of 82 entries, conducted a national conference with twenty paper presentations along with two workshops by eminent filmmakers and activists.
59. Prof. Sunil Bhand of KK Birla Goa campus has been presented Joseph Wang Award 2015 by Cognizure in recognition of his outstanding research in Analytical Chemistry.
60. Prof. Pushkar from Humanities and Social Sciences Goa campus has been listed in an article in Forbes India (January 2015) as one of India’s 24 thinkers “who best explains a rapidly-changing India to the world (and the world to India)”
61. Rayson K Alex from Humanities and Social Sciences department has been appointed as a member of the Jury for Vatavaran, a prestigious environment film festival organized by Government of India.
62. Prof. Santonu Sarkar of CSIS department was awarded the prestigious Accenture Research Grant among 11 Leading Universities to Promote Greater R&D Collaboration, Accelerate Pace of Innovation-2015 Accenture Open Innovation University Grant Program
63. Mr. Ujash Shah (2012A4PS134G, Mechanical Engineering Department) has been selected for the prestigious S. N. Bose Scholars Program for the year 2015. He Worked on a summer project for 10 weeks at Purdue University, Indiana. The program was supported by DST, Govt. of India, Indo-US STF and WINStep Forward.
64. Priyadarshini Pai (2012PHXP007G, Research scholar in the Department of Biological Sciences) received the FEBS Journal poster prize at the 2015 NextGen Genomics, Biology, Bioinformatics & Technologies Conference, Hyderabad, October 2015. Poster title: Identification of catalytic residues in enzymes using support vector machines.
65. Recipients of Mantra Awards 2015 from the BITSAA International in partnership with CEL are as follows:

Mantra Outstanding Leadership	- Anadi Rakesh Misra (2012A3PS141G)
Mantra Entrepreneur of the Year Award	- Prakhar Sharma (2011B3A4436G)
Mantra Award for Social Leadership	- Sanskriti Atul Dawle (2012A7PS083G)
Mantra Innovator of the Year Award	- Aman Srivastava (2012A7PS126G)
66. French Ambassador, H.E. Mr. François Richier visited BITS Pilani, K.K. Birla Goa Campus on 27th April, 2015 and addressed several issues related to the global fight against climate change and the role of France as chair of the upcoming conference.
67. Prof. Man Mohan Sharma, Padma Bhushan and Padma Vibhushan, Former director of ICT Mumbai visited the Goa campus and the departments on 30th September, 2015 and gave a talk on “Innovations in Chemical Industries” on 1st October 2015.
68. Prof. Jean-Marie LEHN (Nobel Laureate), ISIS, Université de Strasbourg, France, visited BITS Pilani, K.K. Birla Goa Campus on 21st February, 2015, interacted with key officials and delivered a lecture on “From Matter to Life: Chemistry? Chemistry!” to faculty and students.

69. A workshop on effective teaching and learning was conducted during 18th July to 20th July, 2015 at K.K. Birla Goa Campus wherein select faculty members from Pilani, Dubai, Goa and Hyderabad campuses participated. The workshop was conducted by renowned resource persons from NUS Singapore, WIPRO Mission 10X as well as BITS Pilani.
70. In Hyderabad Campus, renovation, maintenance and a lot of new equipments have been added to support academics, research and development. Most of the street lights were replaced with LED bulbs to save energy. Hostels (2nos), E type housing, Shopping complex and medical Centre have been repainted outside. The natural drain has been fully constructed and completed. The basement/cellar spaces under SAC have been developed. The basketball court has been provided with visitors' gallery. 46 additional rooms have been constructed in the LGF level in Gandhi Bhavan Hostel. Two new labs (1) Infectious diseases lab & (2) Animal house for biology department has been developed.
71. 5th International Conference on Product Lifecycle, Modelling, Simulation and Synthesis (PLMSS 2015) 15th December to 17th December, 2015 was inaugurated on 15th December, 2015 at the BITS, Pilani – Hyderabad campus auditorium. Dr. G. Satheesh Reddy, Scientific Adviser to Raksha Mantri and Director RCI inaugurated the conference. Mr. Jayes Ranjan, Secretary IT, Telangana State was the Guest of Honor Prof VS Rao, Vice Chancellor, BITS Pilani, Dr. K. Tamilmani, DG (Aero), Dr. Satish Kumar, DG (Missiles & Strategic Systems), Prof. Abdel Aziz Bouras, Qatar University, Doha and Dr. Tessa Thomas, Director PLMSS also participated the inaugural function. PLMSS 2015 was being jointly organized by BITS Pilani, Hyderabad Campus in association with the Advanced Systems Laboratory (ASL), DRDO under the guidance of PLMSS TRUST. On 15th December, 2015, a Pre-conference workshop on the theme 'PLM for Digital Manufacturing' was organized by experts from IIT Kharagpur & IIT Bombay, who have shared their experiences with the participants.
72. ARENA, the annual sports festival of BITS-Pilani Hyderabad Campus, was launched to bring out the sporting spirit in students from different parts of the country, and to create an opportunity for them to take part in various sporting disciplines, over a period of four days. Arena'15 saw around 3000 participants from all across the nation participating in many indoor and outdoor sports events, held for both boys and girls. There was a footfall of 4500. The fest offered comprehensive entertainment and sportive atmosphere, in terms of not only competitions but also extravagant entertainment and professional shows.
73. Mr. A. Sai Darshan, a student of the fourth year, did his summer internship at Institute of Energy and Process Systems Engineering, TU Braunschweig, Germany under Prof. Dr. Ing. Ulrike Krewe through DAAD (German academic exchange service) summer fellowship (Summer 2015).
74. Ms. Niteesha Devulapally, a student of the fourth year, did her summer internship at the University of Alberta Edmonton, Canada, through the MITACS Globalink Program in Summer 2015.
75. Mr. Srivastan Ramesh received B.V. Raju Memorial Award for Outstanding Student from BITS Pilani Hyderabad campus. He received a certificate and a cash prize of Rs. 2500 from Indian Institute of Chemical Engineers (IICHE-HRC), July 2015.
76. Ms. Sarayu M, a student of the fourth year was awarded the Winter Research Scholarship to perform an internship at the Queensland Alliance for Agriculture and Food Innovation (QAAFI), University of Queensland, through the Winter Research Program, University of Queensland, Australia (Summer 2015).
77. Dr. N. Kishore Kumar visited Max-planck Institute for Mathematics in the Science, Leipzig, Germany during 18th May, 2015 to 3rd July, 2015 for research and collaboration on "Tensor and decomposition".
78. Dr. Sumit Kumar Vishwakarma visited Harbin Engineering University, Harbin, China, during 25th May to 11th July, 2015 for research in collaboration on "Seismic wave propagation".
79. Dr. Manish Kumar visited University of Central Florida, Orlando, USA during 12th July to 16th July, 2015 for research in collaboration on "Image Processing and Image Encryption".
80. Mr. Kodali Naveen, a third year student, received MITACS Golbal Link scholarship to do summer intern at Canada.
81. Mr. Aditya Chandrasekhar, a third year student, received Viterbi-India Scholarship for summer internship in the USA.
82. Tejas Nagendra and Siddharth Dalmia, third year students, received DAAD scholarship to do summer intern in Germany and France.

## A.2 ADMINISTRATIVE APPOINTMENTS

The following administrative appointments were made during the year:

- A. Prof. V.S. Rao, Director of Hyderabad Campus has been appointed as Acting Vice Chancellor with effect from 1st August, 2015.
- B. Prof. Sasikumar Punnekkat has been appointed as Director of K. K Birla Goa Campus with effect from 25th February, 2015 for a term of 5 years.
- C. Prof. Ashoke Kumar Sarkar, Senior Professor has been appointed as Director – Piloni Campus with effect from 16th April, 2015 for a term of 3 years.
- D. Prof. Ashwin Srinivasan has been appointed as Deputy Director of K. K Birla Goa Campus with effect from 29th January, 2015 for a term of 3 years.
- E. Prof. S. Gurunarayanan has been appointed as Dean of Admissions (University wide) and Dean of Instruction Division (Piloni Campus) with effect from 24th August, 2015.
- F. Prof. Sasikumar Punnekkat, Director, K K Birla Goa Campus has been appointed as Chairman, Alumni Affairs with effect from 2nd September, 2015.
- G. The following have been appointed as Associate Deans at K K Birla Goa Campus as per details given below:

S.No.	Name	Administrative Function	Period
1.	Prof. K.R. Anupama	Practice School	08-05-2015 to 15-01-2017
2.	Prof. J.V. Rao	Student Welfare	13-07-2015 to 15-01-2017

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

S.No.	Name	Department	Period
<b>(a) Piloni Campus:</b>			
1	Prof. Gajendra Singh Chauhan	Humanities and Social Sciences	15-05-2015 to 31-08-2016
2	Prof. Chandra Shekhar	Mathematics	07-11-2015 to 31-08-2016
3	Prof. Bijay Kumar Rout	Mechanical Engineering	06-08-2015 to 31-08-2016
4	Prof. Arun Kumar Giri	Economics & Finance	06-08-2015 to 31-08-2016
<b>(b) K K Birla Goa Campus:</b>			
5	Dr. Judith Maria Braganca	Biological Sciences	21-11-2015 to 20-11-2017
6	Prof. Saibal Ganguly	Chemical Engineering	21-11-2015 to 20-11-2017
7	Dr. Anjan Chattopadhyay	Chemistry	21-11-2015 to 20-11-2017
8	Dr. Bharat M. Deshpande	Computer Science and Information Systems	21-11-2015 to 20-11-2017
9	Dr. Aswini Kumar Mishra	Economics	21-11-2015 to 20-11-2017
10	Prof. M. K. Deshmukh	Electrical & Electronics Engineering & Instrumentation	21-11-2015 to 20-11-2017
11	Prof. Meenakshi Raman	Humanities and Social Sciences	21-11-2015 to 20-11-2017



S.No.	Name	Department	Period
12	Dr. Prasanna Kumar N.	Mathematics	21-11-2015 to 20-11-2017
13	Prof. Shibu Clement	Mechanical Engineering	21-11-2015 to 20-11-2017
14	Dr. Toby Joseph	Physics	21-11-2015 to 20-11-2017

I. The following have been appointed as Professor-in-charges (University wide):

S.No.	Name & Campus	Name of Centre	Period
1.	Prof. Srinivas Rao, K. K Birla Goa campus	Centre for Innovation, Incubation & Entrepreneurship (CIIE)	01-06-2015 to 31-08-2016
2.	Prof. R.R. Mishra, Pilani campus	Teaching Learning Centre TLC)	10-06-2015 to 31-08-2016

J. The following have been appointed as Faculty-in-charges (Campus wise):

S.No.	Name & Campus	Name of Centres	Period
1.	Dr. Jyoti Tikoria, Pilani	Centre for Innovation, Incubation & Entrepreneurship (CIIE)	01-06-2015 to 31-08-2016
2.	Prof. Srinivasa Rao, Dubai	Centre for Innovation, Incubation & Entrepreneurship (CIIE)	01-06-2015 to 31-08-2016
3.	Prof. Mridula Goel, K K Birla Goa	Centre for Innovation, Incubation & Entrepreneurship (CIIE)	01-06-2015 to 31-08-2016
4.	Dr. Chandu Parimi, Hyderabad	Centre for Innovation, Incubation & Entrepreneurship (CIIE)	01-06-2015 to 31-08-2016
5.	Prof. Rajesh Mehrotra, Pilani	Teaching Learning Centre (TLC)	10-06-2015 to 31-08-2016
6.	Prof. R Udayakumar, Dubai	Teaching Learning Centre (TLC)	10-06-2015 to 31-08-2016
7.	Dr. Varinder Singh, K K Birla Goa	Teaching Learning Centre (TLC)	10-06-2015 to 31-08-2016
8.	Prof. P K Thiruvikraman, Hyderabad	Teaching Learning Centre (TLC)	10-06-2015 to 31-08-2016

K. Prof. Shibasish Chowdhury is appointed as Chief Warden with effect from 6th August, 2015 for a period of one year.

L. 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. Sachin U Belgamwar	Malviya Bhawan A,B & C Block	19-01-2015
2.	Dr. Dipendu Bhunia	Ram Bhawan	12-06-2015
3.	Dr. R Raghunathan	Sir C V Raman Bhawan	20-07-2014
4.	Dr. Sunil Kumar Dubey	Vyas Bhawan	08-08-2015

The names and designations of senior officers of different campuses are given in Annexures (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 54th Meeting on 25th September, 2015 under the Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute. Details are given in 'Annexure A-1'.

## Board of Governors

The Board of Governors of the Institute held its 68th Meeting on 25th September, 2015 under the Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute. Details are given in 'Annexure A-2'.

## Finance Committee

The Finance Committee of the Institute held its 54th Meeting on 30th March, 2015 under the Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute.

## Senate

The Senate of the Institute met four times during the year. It held its 172nd, 173rd, 174th and 175th meetings on 7th February, 2015, 10th March, 2015, 16th July, 2015 and 7th December, 2015 respectively.

## Examination Committee

The Examination Committee met 8 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 2015

A total of 194927 candidates, including 47644 girls, from all over the country applied for BITSAT 2015 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, 2015.

### BITSAT 2015 Highlights are

- Computer-based objective type online test, conducted from 14th May, 2015 to 31st May, 2015 in 63 centers across India and in Dubai.
- 162528 candidates appeared in BITSAT-2015 for 2200 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, direct admission offers were made to board toppers irrespective of their BITSAT score. 22 board toppers joined BITS in 2015.

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 2015 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 2014-2015	I Semester 2015-2016
<b>1. BITS Pilani, Pilani Campus</b>		
Integrated First Degree Programmes	-	899 (116)
Higher Degree Programmes	-	275 (81)
Doctoral Programmes	31(13)	21 (04)
<b>Total</b>	<b>31(13)</b>	<b>1195(201)</b>

	II Semester 2014-2015	I Semester 2015-2016
<b>2. BITS Pilani , K.K. Birla Goa Campus</b>		
Integrated First Degree Programmes	-	643(62)
Higher Degree Programmes	-	36(13)
Doctoral Programmes	10(01)	26 (8)
<b>Total</b>	<b>10(01)</b>	<b>705(83)</b>
<b>3. BITS Pilani, Hyderabad Campus</b>		
Integrated First Degree Programmes	-	683(113)
Higher Degree Programmes	-	60( 21)
Higher Degree (3 year Integrated Programmes)	-	7( 03 )
Doctoral Programmes	12(08)	15 (10)
<b>Total</b>	<b>12(08)</b>	<b>765 (147)</b>
<b>4. BITS Pilani, Dubai Campus</b>		
Integrated First Degree Programmes	6 (03)	443 (161)
Higher Degree Programmes	12 (02)	23 (04)
Doctoral Programmes	4 (01)	7 (04)
<b>Total</b>	<b>22 (06)</b>	<b>473 (148)</b>
<b>5. Work-Integrated Learning Programmes</b>		
Integrated First Degree Programmes	145 (021)	923(083)
Higher Degree Programmes	2966(100)	2153(500)
<b>Total</b>	<b>3111 (121)</b>	<b>3076 (583)</b>
<b>GRAND TOTAL</b>	<b>3186 (149)</b>	<b>6214 (1162)</b>

## A.5 FLEXIBILITIES: DUAL DEGREE ADMISSIONS

During the academic year 2015-2016, 697 students (277 at Pilani, 242 at Goa and 177 at Hyderabad and 1 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 10172 (2819) 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
76th Award (vide Board of Governors approval on 04.05.2015)	65(11)	25(3)	61(10)	47(15)	4345(1552)
77th Award (vide Board of Governors approval on 17.07.2015)	1301(268)	826(126)	858(209)	329(103)	2315(522)
<b>Total</b>	<b>1366(279)</b>	<b>851(129)</b>	<b>919(219)</b>	<b>376(118)</b>	<b>6660(2074)</b>

**(b) Award of Medals for Academic Year 2014-2015****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 2014-2015 is given in the following table:

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
Integrated First Degree Programmes (No. of students: 834)						
1.	2010B3A3505P	ROHIT AGGARWAL	M	9.88	FIRST	GOLD
2.	2011A3PS029P	AJAY SINGHVI	M	9.86	SECOND	SILVER
3.	2011A2PS516P	SIDDHARTH AWASTHI	M	9.82	THIRD	} (Bracketed) BRONZE
4.	2011A7TS872P	SHRUTI GUPTA	F	9.82	THIRD	

**BITS Pilani, K.K. Birla Goa Campus**

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
Integrated First Degree Programmes (No. of students: 602)						
1.	2011A8PS005G	MUTHKHOD SHRIDEVI SHARANGOWDA	F	9.81	FIRST	GOLD
2.	2011A7PS003G	POOJA MALIK	F	9.78	SECOND	SILVER
3.	2011A1PS426G	ZANTYE MANALI SUNIL	F	9.63	THIRD	BRONZE

**BITS Pilani, Hyderabad Campus**

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
Integrated First Degree Programmes (No. of students: 650)						
1.	2011A7PS545H	ANUPRIYA GAGNEJA	F	9.83	FIRST	GOLD
2.	2011A3PS042H	PRATYUSH MAHAPATRA	M	9.77	SECOND	SILVER
3.	2011A4PS001H	SHYAM KRISHNA SHENOY A	M	9.73	THIRD	BRONZE

**BITS Pilani - Dubai Campus**

S.No.	ID.No.	Name	Gender	CGPA Obtained	Position Obtained	Type of Medal Awarded
Integrated First Degree Programmes (No. of students: 333)						
1.	2011A7TS175U	SANA ZAKIR HUSSAIN	F	9.99	FIRST	GOLD
2.	2011A4PS061U	MOHAMED ATYAB	M	9.97	SECOND	SILVER
3.	2011AAPS292U	JENNIFER D'SOUZA	F	9.95	THIRD	BRONZE

## A.7 MoUs

The Institute has signed Memoranda of Understanding with the following reputed organizations during 2015:

1. IGATE Global Solutions Limited, Bangalore
2. Norwegian University of Life Science (NMBU), Norway
3. University College Dublin, National University of Ireland, Dublin
4. AMSA Renal Care, Dubai
5. Indian School of Business, Gachibowli, Hyderabad
6. Macquaire University, Australia
7. GE India Exports Private Limited, Hyderabad
8. Michigan State University, College of Engineering, East Lansing, Michigan, USA
9. National Institute of Wind Energy, Chennai
10. The University of Wisconsin-Madison, USA
11. University of Tartu, Estonia, USA
12. University of Limoges, France
13. CSIR-National Institute of Oceanography(NIO), Goa
14. Sabre Travel Technologies Pvt. Ltd., Bangalore
15. Tata Motors Limited, Mumbai
16. Siemens Technology Services Pvt. Ltd., Bangalore
17. E.I. DuPont India Pvt. Ltd., Hyderabad
18. The University of De Perpignan, Via Domitia, France

## 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 2014-2015	4517	2804	3193	1637	21060	33211
First Semester 2015-2016	4595	2840	3302	1765	20474	32976
Summer Term 2014-2015	842	590	804	353	-	2589
<b>GRAND TOTAL</b>						<b>68776</b>

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

During Second Semester 2014-2015, a total of 783 Ph.D. students were on-rolls, while a total of 803 Ph.D. students were on-rolls during First Semester 2015-2016.

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

S.No.	CATEGORY	No. of Ph.D. Students on Rolls							
		II Sem 2014-2015				I Sem 2015-2016			
		Pilani	Goa	Hyderabad	Dubai	Pilani	Goa	Hyderabad	Dubai
1	Research Scholars 9FT+PT)	273	117	174	22	280	141	180	27
2	Lectures and Staff	56	32	20	10	50	30	21	9
3	Ph D Aspirants	76	0	0	3	62	0	0	3
<b>TOTAL</b>		<b>405</b>	<b>149</b>	<b>194</b>	<b>35</b>	<b>392</b>	<b>171</b>	<b>201</b>	<b>39</b>
<b>GRAND TOTAL</b>		<b>783</b>				<b>803</b>			

## A.9 COURSES OFFERED

Semester/ Summer Term	Pilani Campus	Goa Campus	Hyderabad Campus	Dubai Campus	Work-Integrated Learning Programmes
II Semester 2014-2015	413	306	344	202	708
I Semester 2015-2016	532	292	344	209	718
Summer Term 2014-2015	9	3	26	10	–

## A.10 DEGREES OFFERED AT DIFFERENT CAMPUSES

### Pilani Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
<p><b>B.E.</b>            Chemical            Civil            Electrical &amp; Electronics Engineering            Mechanical            Computer Science            Electronics &amp; Instrumentation            Manufacturing Engineering</p> <p><b>B.Pharm.</b></p> <p><b>M.Sc.</b>            Biological Sciences            Chemistry            Economics            Mathematics            Physics</p> <p><b>M.Sc.</b>            General Studies</p>	<p><b>M.E.</b>            Chemical            Civil with Specialization in Structural Engineering.            Computer Science            Mechanical            Software Systems            Microelectronics            Embedded Systems            Design Engineering            Biotechnology            Civil with Specialization in Transportation Engineering.            Chemical with Specialization in Petroleum Engineering.            Civil with Specialization in Infrastructure Engineering.            Manufacturing Systems Engineering.            Communication Engineering</p> <p><b>M.Pharm.</b>  <b>M.Pharm.</b> (with Specialization in Pharmaceutics)  <b>M.Pharm.</b> (with Specialization in Pharmaceutical Chemistry)  <b>Master of Business Administration (M.B.A.)</b></p>
<b>C. Ph.D.</b>	

### K.K. Birla Goa Campus

A. Integrated First Degree Programmes	B. Higher Degree Programmes
<p><b>B.E.</b>            Chemical            Computer Science            Electrical &amp; Electronics Engineering.            Electronics &amp; Instrumentation            Mechanical</p> <p><b>M.Sc.</b>            Biological Sciences            Chemistry            Economics            Mathematics            Physics</p>	<p><b>M.E.</b>            Biotechnology            Chemical Engineering            Design Engineering            Embedded Systems            Microelectronics            Software Systems</p>
<b>C. Ph.D.</b>	

## 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>Civil with Specialization in Structural Engineering.</li> <li>Computer Science</li> <li>Computer Science (with specialization in Information Security)</li> <li>Design Engineering</li> <li>Embedded Systems</li> <li>Mechanical with Specialization in Thermal Engg.</li> </ul> <p><b>M.Pharm.</b> (with Specialization in Pharmaceutics)</p> <p><b>M.Pharm.</b> (with Specialization in Pharmaceutical Chemistry)</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>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	182	136	156	71
Number of offers made	837	638	524	115

## A.12 FACULTY DATA

As on January 1, 2016, 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	-	3	3	1	11
Professors	31	-	12	14	18	75
Associate Professors	49	7	31	37	14	138
Assistant Professors	126	18	75	87	25	331
<b>Non-Tenured</b>						
Sr. Professor Emeritus	1	-	-	-	-	1
Professors on Contract	-	-	-	-	-	-
Visiting Professors	-	-	-	1	-	1
Assistant Professors on Contract	-	-	-	-	-	-
Visiting Assistant Professors	3	-	3	-	-	6
Sr. Lecturers	-	-	-	-	5	5
Lecturers	40	18	37	16	2	113
Visiting Faculty	1	1	2	07	1	12
Adjunct Faculty	-	1	-	-	-	1
Instructors	-	2	-	-	-	2
Professor Emeritus	-	-	1	-	-	1
Visiting Associate Professor	-	-	1	-	-	1
<b>Total</b>	<b>255</b>	<b>47</b>	<b>165</b>	<b>165</b>	<b>66</b>	<b>698</b>

During the year 2015, 100 new faculty members (34 in Pilani, 28 in Goa 29 in Hyderabad and 9 in Dubai) joined. 60 faculty members (24 in Pilani, 11 in Goa, 22 in Hyderabad and 3 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

### Pilani, Goa and Hyderabad Campuses:

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.

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



2015 the Practice School programme was operated at 438 stations, with 21 stations hosting both Practice School-I (PS-I) and Practice School-II (PS-II), accommodating 4277 students and 157 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	25 (24)	3 (3)
2.	Design, Development, Consultancy and Software Organization	155 (176)	49 (30)
3.	National Research Laboratories and other Research Centers	32 (33)	29 (26)
4.	Production, Manufacturing and Public Work Units	43 (73)	94 (107)
5.	Publishing Houses, News Agencies and Museums	1 (1)	7 (4)
	<b>Total</b>	<b>256 (307)</b>	<b>182 (170)</b>

In 2015, an integrated practice school allotment for 4277 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 breakup of students who were registered in PS-I, PS-II & PS for Higher Degree:**

**(Note: - The figure shown in brackets relate to the year 2014.)**

PS-I Summer Term 2014-2015 (2038) 2096

PS-II II Semester 2014-2015 (911) 860

I Semester 2015-2016 (1139) 1072

**PS for Higher Degree**

II Semester 2014-2015 (217) 246

I Semester 2015-2016 (00) 03

**Total (4305) 4277**

### Dubai Campus

During the calendar year 2015, the Practice School Programme was operated at 127 stations, with 25 stations hosting both Practice School-I (PS-I) and Practice School-II (PS-II), accommodating 640 students and 53 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)	00 (02)
2.	Design, Development, Consultancy and Software Organization.	30 (21)	29 (27)
3.	Trading	08 (06)	04 (07)
4.	Production, Manufacturing and Maintenance	34 (35)	45 (57)
5.	Other	00 (01)	11 (06)
	<b>Total</b>	<b>72 (63)</b>	<b>89 (99)</b>

With the present annual PS intake of 640 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 2014 is given in parenthesis.)

PS-I	Summer Term 2015	(369) 324
PS-II	II Semester 2014-2015	(141) 148
PS-II	I Semester 2015-2016	(152) 168
<b>Total</b>		<b>(662) 640</b>

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

Since 1979, the Institute has been participating in the human resource development needs of the industries. The Institute has evolved several degree programmes by integrating the working environment of the employees with the learning environment required by the Institute. These programmes were first started as M.E. (Collaborative) programmes in 1979. Later, from 1988, the Institute ventured into Off-campus Work-Integrated Learning Programmes in Science and Technology areas. These programmes:

- (a) are targeted to meet the needs of continuing education of employed professionals;
- (b) are based on Science & Technology approach and operate disciplines that are non-conventional and Science & Technology oriented;
- (c) are designed for the purposeful acquisition of scientific methods, modern skills and involvement in open-ended experiments;
- (d) judiciously combine the flexibility and ingenuity of the off-campus system with all the regular features of the on-campus system; and
- (e) allow the employed professionals to pursue a meaningful and relevant university degree with minimum dislocation from their work environment.

#### **SALIENT FEATURES**

All programmes offered under the Work-Integrated Learning Programmes are characterized by a person-centered approach where the rigour and standard are maintained as in the institute's on-campus programmes. While a number of on-campus programmes are also available under off-campus, the Institute interacts with various organizations like industries, hospitals and national laboratories with a view to designing and offering specialized programmes. Many organizations sponsor their employees for various programmes, in order to prepare their human resources to meet the challenges posed by the growth of industries and rapid advancement of technology in India and abroad.

#### **COURSES OFFERED**

The number of courses, offered during the year 2014 is as follows:

<b>Semester</b>	<b>Number of Courses offered</b>
Second Semester 2014-2015	708
First Semester 2015-2016	718

## DEGREES OFFERED

Table 1: Currently Operative Off-Campus Work-Integrated-Learning Programmes at a Glance

Programmes	Collaborating / Sponsoring Organization
<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
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
5. Marine Engineering	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
6. Nautical Technology	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
7. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy - Mumbai; Essar Power, Hazira
8. Process Engineering	- Aditya Birla Group, Mumbai; JSW Steel, Toranagallu; DRL, Hyderabad; Sesa Sterlite, Jharsuguda
<b>B.Optom. Programme</b>	
1. Optometry	- Sankara Nethralaya, Chennai; LV Prasad Eye Institute, Hyderabad; The Tun Hussein Onn National Eye Hospital, Malaysia
<b>M.Sc. Programme</b>	
1. 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. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
3. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
<b>M.Tech. Programmes</b>	
1. Automotive Engineering	- Tata Technologies, Pune
2. Design Engineering	- John Deere, Pune; Cluster Programme, Pune
3. Embedded Systems	- UTC, Bangalore; iGate, Mumbai; L&T, Vadodara; Cluster programme, Pune
4. Environmental Engineering	- Goa State Pollution Control Board, Goa
5. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries, Sesa Sterlite, Jharsuguda
6. Microelectronics	- Cypress, Qualcomm, Texas Instruments, Bangalore
7. Pharmaceutical Operations and Management	- Lupin, Mumbai; Cipla, Mumbai
8. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
9. Science Communication	- National Council of Science Museums, Kolkata
10. Software Engineering	- EMC, Bangalore; Tech Mahindra, Pune; iGate, Mumbai; Qualcomm,

Programmes	Collaborating / Sponsoring Organization
	Hyderabad; SAP Labs, Bangalore; Persistent, Pune; Cybage, Pune; CTS, Chennai; TCS, Hyderabad; Virtusa, Chennai; Wipro Technologies, Bangalore
11. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries; Wipro Technologies, Bangalore; TCS, Hyderabad
12. Systems Engineering	- Wipro Infotech, Bangalore
13. Telecommunications and Software Engineering	- Avaya, Pune, Tech Mahindra, Pune
<b>M.Phil.</b>	
1. Consciousness Studies	- Bhaktivedanta Institute, Mumbai
2. Hospital and Health Systems Management	- CMC, Vellore; Bombay Hospital, Mumbai
3. Optometry	- Sankara Nethralaya, Chennai

**Table 2: The following Off-Campus Work-Integrated-Learning Programmes are also operated for students who had previously registered**

Programmes	Collaborating / Sponsoring Organization
<b>B.S. Programmes</b>	
1. Engineering Design	- Eaton Technologies, Pune; L&Ties, Vadodara
2. Engineering Technology	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
3. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries and Wipro Infotech, Mumbai
4. Manufacturing Engineering	- Bharath Forge, TACO, Kirloskar Oil Engines, Pune
5. Marine Engineering	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
6. Nautical Technology	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
7. Optometry	- Sankara Nethralaya, Chennai; LV Prasad Eye Institute, Hyderabad; The Tun Hussein Onn National Eye Hospital, Malaysia
8. Physician Assistant	- Madras Medical Mission, Chennai
9. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy - Mumbai; Essar Power, Hazira
10. Process Engineering	- Aditya Birla Group; Hindalco Industries, Dahej; JSW Steel, Toranagallu; DRL, Hyderabad; Sesa Sterlite, Jharsuguda
<b>M.S. Programmes</b>	
1. Automotive Engineering	- Tata Technologies, Pune
2. Consciousness Studies	- Bhaktivedanta Institute, Mumbai
3. Consultancy Management	- Consultancy Development Centre, New Delhi
4. Design Engineering	- Eaton Technologies, Pune, L&T, Vadodara; SKF, Pune
5. Embedded Systems	- John Deere, iGate, Pune; L&T, Vadodara
6. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
7. Microelectronics	- Wipro Technologies, Cypress, Qualcomm, IBM, Bangalore

<b>Programmes</b>	<b>Collaborating / Sponsoring Organization</b>
8. Pharmaceutical Operations & Management	- Lupin, Mumbai
9. Quality Management	- Indian Institute of Quality Management, Jaipur
10. Science Communication	National Council of Science Museums, Kolkata
11. Software Engineering	Wipro Technologies, EMC, SAP Labs - Bangalore; CTS, Virtusa, Chennai; Tech Mahindra, Pune ; Cybage, Persistent, iGATE, Mumbai, TCS, Hyderabad, Qualcomm, Hyderabad
12. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries
13. Systems Engineering	- Wipro Infotech – Bangalore
14. Telecommunications & Software Engineering	- Tech Mahindra, Avaya – Pune

## ADMISSIONS

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

<b>Programmes</b>	<b>II Semester 2014-15</b>	<b>I Semester 2015-16</b>	<b>Total</b>
Integrated First Degree Programmes	145(021)	923(083)	1068(104)
Higher Degree Programmes	2966(100)	2153(500)	5119(600)
<b>Total</b>	<b>3111(121)</b>	<b>3076(583)</b>	<b>6187(704)</b>

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.

<b>Semester</b>	<b>Number of students registered</b>
Second Semester 2014-2015	21060
First Semester 2015-2016	20474

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 6660 students graduated. The details on the award of degrees are given below.

<b>Award</b>	<b>76<sup>th</sup> Award (04.05.2015)</b>	<b>77<sup>th</sup> Award (17.07.2015)</b>	<b>Total</b>
Integrated First Degrees	721(0048)	461(055)	1182(0103)
Higher Degrees	3624(1504)	1854(467)	5478(1971)
<b>Total</b>	<b>4345(1552)</b>	<b>2315(522)</b>	<b>6660(2074)</b>

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

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

### Alumni Affairs Division (AAD) Activities

#### *Distinguished Alumnus Award 2015:*

“BITS Pilani Distinguished Alumnus Award” in 2015 to the following alumni:

- **Prof. Bharat Bhushan**, Director, Nanoprobe Laboratory for Bio- & Nanotechnology & Biomimetics, The Ohio State University
- **Mr. Manoj Saxena**, Founder, Exterprise and Webify Inc.,

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

#### **Mantra Awards 2015:**

The Center for Entrepreneurial Leadership (CEL) along with Alumni Affairs Division and BITSAA International instituted the Mantra Awards. The Mantra Awards recognize and reward outstanding students who have demonstrated extraordinary leadership potential and/or entrepreneurial initiative. This year's awards were given to the following:

1. **Mantra Award for Outstanding Leadership:** Anadi Rakesh
2. **Mantra Entrepreneur of the Year Award:** Prakhar Sharma
3. **Mantra Award for Social Leadership:** Sanskriti Dawle
4. **Mantra Innovator of the Year Award:** Aman Srivastava

#### ***BITSians Day:***

The third edition of 'BITSians Day' was celebrated on 7th August, 2015.

#### **Alumni Affairs Cell, Pilani campus**

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 225 Alumni of 1986-90 batch with a total number of more than 300 participants including family members participated in a Silver Jubilee Reunion organized between 6th and 8th November 2015. More than 100 Alumni of 1991 batch with a total number of more than 120 participants including family members participated in a Reunion organized between 26th December and 28th December, 2015. Around 40 Alumni of 1975-80 batch visited the campus during 31st January to 2nd February 2015. 1960-65 batch celebrated their golden Jubilee reunion during 17th March to 19th March, 2015 with more than 20 alumni along with their family members. 1965-70 batch celebrated their golden Jubilee reunion of admission year during 22nd February and 23rd February, 2015 with more than 130 alumni along with their family members. Graduating student tea parties were organized on 27th April, 2015 and on 27th November, 2015.

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

#### **K K Birla GOA Campus**

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

Alumni Affairs Division of BITS Pilani K K Birla Goa Campus has organized 9 Embryo & On-campus talks from August – December, 2015.:

##### **Alumni Summit:**

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 first ever **Alumni Summit 2015** on the **30th of August 2015**. It was a first of its kind event and witnessed speakers who had established themselves in various fields of life. They reminisced about their life back at the BITS campuses and their journey thereafter. Seven speakers were invited to take the stage:

- Anugula Rakesh Reddy- a BJP Youth Wing politician and the founder of Nirmaan
- Akash Gupta- the founder of Grey Orange Robotics
- Jenish Mehta- a Graduate Student at California Institute of Technology
- Ajay Chaturvedi- the founder of HarVa and a published Author
- Nikita Bhardia- an MBA from IIM Ahmedabad and the founder of Udaan
- Harish Sivaramakrishnan – the lead singer of the band Agam
- Garv Malik- a standup comedian and founder of OpenMics.

**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 Praneet Bhatia, Aman Srivastava, Sanskritie Dawle and Ankur Omar 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.

**A.16 FINANCE AND FUND SUPPORT**

The accounts of the Institute for the financial year 2014-2015 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 2014-2015**

**Investments :** As on 31st October, 2015, 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. 18861.43 lakhs.

**Expenditure :** The excess of expenditure over income as per Income & Expenditure Account was Rs.1.50 lakhs.

**Pension to Staff :** As on 31<sup>st</sup> October 2015, forty one members of the staff were receiving pension. During the financial year 2014-2015, the Institute spent Rs. 38.45 lakhs on pension.

**Gratuity to Staff :** Institute has paid Rs. 146.90 lakhs to 46 staff members who left the institute.

**Medical Facilities :** During the financial year 2014-2015, the Institute spent Rs. 208.47 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. 575.07 lakhs on scholarships to staff children/spouse/self to cover the fees for education at the Institute and local schools. Further, 2764 students received financial assistance of Rs. 1541.00 lakhs from different sources, details of which are given below:

S. No.	Particulars	No. of Students	Amount in Rs.
1.	UGC PG Scholarship	235	17625504
2.	Students Aid Fund	105	1714673
3.	Other States Scholarship	15	1188037
4.	Institute Merit Scholarship	406	26901620
5.	Institute Merit-cum-Need Scholarship	2003	106669951
<b>Total</b>		<b>2764</b>	<b>154099785</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	33.75
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
8.	EEE & I	5	138.00	36.50
9.	Mechanical Engineering	5	163.00	68.00
10	Biological Science	5	55.00	25.25
11	Chemistry Level II	5	165.00	0
<b>Total</b>			<b>1109.50</b>	<b>378.44</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>136.20</b>

**BITS Pilani, Dubai Campus****SCHOLARSHIPS****Financial Assistance to Students**

695 students received financial assistance of AED 4,793,175/- under different categories for the Academic Year 2014-15, the details of which are given below:

S.No	Particulars	No. of Students.	Amount in AED
1	Institute Merit Scholarship	553	3603500
2	Higher Degree and Doctoral Scholarship	73	516300
3	Need-based Scholarship (Physically challenged, Bereaved family discount)	13	153125
4	Others (Staff, Siblings, Sports, Special Concessions)	56	520250
<b>Total</b>		<b>695</b>	<b>4793175</b>

**A.17 OBITUARIES**

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

1. Dr. Sarala Birla wife of Shri B.K. Birla, died on 28th March, 2015 in Delhi.
2. Dr. Vijay Arora, PSRN 3353, Associate Professor (Off-Campus) at Pilani Campus died on 15th September 2015 due to cardiac arrest at Pune.

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

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## **GENERAL BODY**

The 54<sup>th</sup> meeting of the General Body of the institute held 25<sup>th</sup> September 2015 under Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute.

Before taking up the Agenda, the General Body paid homage to late Smt. Sarala Birla, and appreciated her contribution in overall development of the Institute.

The Chancellor heartily welcomed the members and thanked them for attending the meeting and apprised the members that number of applicants registering for our BITSAT entrance test continues to grow. It increased from 186,000 in 2014 to 195,000 in 2015 and the number of cities where the test is conducted also increased to 63 from 49 in 2014. The trend is encouraging and an indicator that BITS remains an aspirational Institute of choice. Students admitted to our First Degree Bachelor's Programme increased marginally from 2150 to 2239 due to lack of hostel rooms. Whereas admission to our Higher Degree (Master's Programme) and PhD Programmes was at 408 students compared to 609 the previous year, owing to a deliberate strategy to make the inventory of student housing first available to First Degree students.

The Chancellor also apprised the members that the Student Placement Office continued to deliver improvements and introduce new enabling policies and processes. For the period April to March, the number of recruiters visiting the Indian Campuses increased from 239 in 2013-14 to 264 in the current year. Recruiters included a number of reputed companies such as McKinsey & Co, McKinsey Knowledge Centre, BCG, ICICI Bank, ILFS, Citibank, and Barclays Technology. A number of reputed E-Commerce companies, Amazon, Flipkart & Myntra, Snapdeal, and Housing.com also visited. Banks included Goldman Sachs, Citibank, Credit Suisse, Bank of America, Fidelity, and JP Morgan. During the period April to March, 83% of our First Degree students have been placed, compared to 81% in the previous year.

The Chancellor informed the members that Our Work Integrated Learning Programmes (WILP) continues to be a very important and integral part of BITS. Close to 22,000 working professionals are enrolled in these programmes. The focus as regards WILP is to address companies' and working professionals' needs for technical programmes that reskill, enhance employability, and enable employee retention. A roadmap to improve operations across the value chain has is under implementation. Business development and marketing our programmes to working professionals and companies will progressively be undertaken by persons experienced in these areas, so that our academic resources can invest time in innovating programmes, courses, and instruction. A Chief Operations Officer (COO) has been hired. A small team has also been hired, and will be expanded during the year. Similar improvement initiatives in Faculty mix, Programme & Content Design, Content Development, and Delivery Models for small clusters in smaller metros are under implementation. The regulations governing this mode of instruction has become regressive in the last couple of years and continues to be uncertain. Necessary review of the curriculum, and changes in degree nomenclature has been largely completed.

He also informed the members that at Dubai campus admission of First Degree students in AY14-15 recorded a 19% increase to 448 and enrolment increased from 1,527 to 1,668. 2014-15 recorded highest placements rate, recruiters participation and salary offered in last 5 years.

The 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. Selection process strengthened with the inclusion of senior academics from other reputed Indian Universities and Institutes. 230 new faculty have been hired in the past 3 years. Attracting and retaining quality faculty will and must remain a priority, and will continue to receive high attention.

The Chancellor informed that BITS's focus on Research and Entrepreneurship is yielding results. Sponsored Research Grant approvals are expected to cross Rs 20 Cr.

The Chancellor told the members that the New Academic Building (NAB) at the Pilani Campus, which was inaugurated last March'14, is in full use. A new faculty-housing complex (121 units), a new student hostel building for 200 students, a 33 KV substation and a few sports facilities were inaugurated this year. Renovation and re-architecture of the old student hostels has commenced, and one of the oldest hostels, Ram Bhawan, is ready and will be taking in students from next Semester. Total capex outlay for Goa and Hyderabad expansion

is Rs 425 cr. and Rs 374 cr. respectively. This will increase the total student capacity for Goa from 2,784 to 4,784 and Hyderabad from 3,128 to 5,258.

The Chancellor informed the members that the engagement with alumni continues to strengthen, with alumni participating in many ways. The second Global Meet was held at the Hyderabad Campus in January this year. The number of alumni attending went up to nearly 2,500. The next meet will be held in December 2016 at Dubai.

The Chancellor also informed that 2014 marked the 50<sup>th</sup> Anniversary of BITS having become a Deemed University. A number of events to commemorate this important milestone were conducted.

The Chancellor mentioned that the income for 2014-15 reported 14.3% growth at Rs 389.9 Cr compared to last year at Rs 341.20 Cr. On campus income at Rs 260.9 Cr has increased by 20.3% over last year and Off Campus fees at Rs 129.0 Cr has increased 3.7% over last year. Off-campus fee constitutes 33.1% of total fees.

He told that expenses grew by 19.1% over last year but were 6.0% lower than the budget. Employee' cost increased by 21.6% over last year. However this was 1.1% lower than budget. Scholarship cost increased by 28.7% over last year and was lower than budget by 8.8%.

As a consequence, Earnings before Interest, Depreciation and Tax (EBIDTA) was at healthy Rs 144.9 Cr (37.2% of Income), exceeding budget of Rs 129.3 Cr (33.2% of income). EBITDA from On-campus Income was at Rs 49.8 Cr. Whereas EBITDA from off campus was at Rs 95.1 Cr.

Net Earnings stands at Rs 127.7 Cr. compared to Rs. 103.8 Cr of last year. Budget for FY15 was at Rs 109.2 Cr. Capital Expenditure during the year was Rs. 90.0 Cr, less than the Budget of Rs 182.9 Cr mainly due to delay in obtaining regulatory approvals for the Hyderabad and Goa Campuses. Cash and Cash equivalents as on Mar 31, 2015 was at Rs. 215.0 Cr. Total Debt as on 31<sup>st</sup> March 2015 was at Rs 9.0 Cr. No fresh borrowing during 2014-2015. Entire debt was repaid during Q1 of FY'16. With this Indian campuses are now debt free.

BITS Dubai Campus financials are healthy and meeting budgeted targets. Income and Expenditure have been as budgeted, and BITS Dubai continues to generate surplus adequate to repay the loans. An amount of Rs 5.95 Cr (AED 3.72 MN) was paid to ETA (deferred consideration) as full and final settlement based on intake numbers pursuant to share purchase agreement. US\$ 2 Mn (Rs 12.4 Cr) of loan was prepaid during December '14. This is over and above the normal repayment schedule of US\$ 2.78 Mn Outstanding loan as of date is US\$ 20.75 Mn (Rs 122.0 Cr). During the year interest rate on loan were negotiated. Spread is reduced by 2% and now stands at 2.5%. Effective rate including 6m Libor is around 3%. There is plan to increase the fees from AY 2017 onwards. Fees have remained same for last 5 years.

The Chancellor informed the members that total income is budgeted at Rs 438.6 Cr, which is a 12.5% increase over last year. On-Campus enrolment expected to increase by 1.8% (at 10,742), Off-campus enrolment to decrease by 5.4% (at 20,013) mainly due to decrease in intake from one of the major customers. On-Campus fee at Rs 296.6 Cr, an increase of 13.7% over last year and Off-Campus fee at Rs 142.1 Cr, an increase of 10.0% over last year.

An increase in employee cost at 9.0% has been budgeted at Rs 134.6 Cr. A net increase of 80 faculty members is planned in line with the targeted faculty/student ratios and requirement in WILP. Expenses are budgeted to increase by overall 17.1%. EBIDTA is budgeted at Rs. 152.0 Cr (34.6%), a growth of 4.8% as compared to previous year. Low growth in EBITDA mainly due to change in On-Campus/Off-Campus revenue mix and expenses for various initiatives. Total EBITDA from WILP is budgeted at Rs 100.9 cr. Net Income/Surplus is budgeted at Rs. 105.6 crores compared to Rs. 127.7 Cr. Drop is mainly on account of profit of Rs 28.6 cr on sale of mutual fund in last year.

Capex commitments are budgeted at Rs. 176.9 Cr during FY16. A significant share of this on the Project Parivartan, Expansion of Goa and Hyderabad campus- Rs.111.0 cr, Equipments and Central Instrumentation facility-Rs 34.6 and other routine capex- Rs 31.3 cr. Cash generation and Borrowings – To fund our capex during FY 16 in all the campuses, our operations would generate sufficient cash and there would not be requirement for any additional borrowing. Loan repayment due in 2015-16 is Rs 9 Cr and that would be funded through our internal accruals. Debt at the end of year is estimated at Rs NIL. The cash position at the end of the year, after meeting capex and debt repayment commitments, will be at healthy Rs 211.9 Cr.

The members unanimously appreciated the same.

The General Body placed on record the excellent contribution made by Prof. B.N. Jain as Vice-Chancellor and Prof. G. Raghurama as Director, Pilani Campus whose term ended in June 2015 and April 2015 respectively.

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

- (a) Nomination of Shri Rajiv Verma, Chief Executive Officer, HT Media Limited, Hindustan Times House, New Delhi as a member of the Board of Governors under the constituency "*Three Members Selected by the General Body of the Institute*" for the term ending on 15<sup>th</sup> April 2017.
- (b) Nomination of Shri Ashish Dhawan, Chief, Executive Officer, Central Square Foundation, New Delhi as a member of the General Body of this Institute for a period of three years with effect from 7<sup>th</sup> July 2014 under the constituency "*A Representative of the Federation of Indian Chambers of Commerce and Industry*".
- (c) Constitution of Board of Governors of the society, namely, 'Pilani Innovation and Entrepreneurship Development Society' registered at Jhunjhunu under the Rajasthan Societies Registration Act, 1958, on behalf of Birla Institute of Technology & Science, Pilani.
- (d) Resolution for authorized persons to act as representative to attend and vote for and on behalf of BITS Society at the 2<sup>nd</sup> Annual General Meeting of Birla Institute of Technology & Science Company, Kolkata.
- (e) Resignation of Dr. C.E.G. Justo, nominee of UGC, from the membership of the General Body with effect from 22<sup>nd</sup> March 2014. Members appreciated his contribution to the Institute.

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 2014 to 31<sup>st</sup> December 2014. 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 2014 and approved the Budget Estimates of the Institute for the financial year 2015-2016 as recommended by Finance Committee and Board of Governors.

## **BOARD OF GOVERNORS**

The Board of Governors of the institute held its 68<sup>th</sup> Meeting on 25<sup>th</sup> September 2015 under Chairmanship of Dr. Kumar Mangalam Birla, Chancellor of the Institute.

Before taking up the Agenda, the Board of Governors paid homage to late Smt. Sarala Birla, and appreciated her contribution in overall development of the Institute.

The Chancellor heartily welcomed the members and thanked them for attending the meeting and apprised the members that number of applicants registering for our BITSAT entrance test continues to grow. It increased from 186,000 in 2014 to 195,000 in 2015 and the number of cities where the test is conducted also increased to 63 from 49 in 2014. The trend is encouraging and an indicator that BITS remains an aspirational Institute of choice. Students admitted to our First Degree Bachelor's Programme increased marginally from 2150 to 2239 due to lack of hostel rooms. Whereas admission to our Higher Degree (Master's Programme) and PhD Programmes was at 408 students compared to 609 the previous year, owing to a deliberate strategy to make the inventory of student housing first available to First Degree students.

The Chancellor also apprised the members that the Student Placement Office continued to deliver improvements and introduce new enabling policies and processes. For the period April to March, the number of recruiters visiting the Indian Campuses increased from 239 in 2013-14 to 264 in the current year. Recruiters included a number of reputed companies such as McKinsey & Co, McKinsey Knowledge Centre, BCG, ICICI Bank, ILFS, Citibank, and Barclays Technology. A number of reputed E-Commerce companies, Amazon, Flipkart & Myntra, Snapdeal, and Housing.com also visited. Banks included Goldman Sachs, Citibank, Credit Suisse, Bank of America, Fidelity, and JP Morgan. During the period April to March, 83% of our First Degree students have been placed, compared to 81% in the previous year.

The Chancellor informed the members that Our Work Integrated Learning Programmes (WILP) continues to be a very important and integral part of BITS. Close to 22,000 working professionals are enrolled in these programmes. The focus as regards WILP is to address companies' and working professionals' needs for technical programmes that reskill, enhance employability, and enable employee retention. A roadmap to improve operations across the value chain has is under implementation. Business development and marketing our programmes to working professionals and companies will progressively be undertaken by persons experienced in these areas, so that our academic resources can invest time in innovating programmes, courses, and instruction. A Chief Operations Officer (COO) has been hired. A small team has also been hired, and will be expanded during the year. Similar improvement initiatives in Faculty mix, Programme & Content Design, Content Development, and Delivery Models for small clusters in smaller metros are under implementation. The regulations governing this mode of instruction has become regressive in the last couple of years and continues to be uncertain. Necessary review of the curriculum, and changes in degree nomenclature has been largely completed.

He also informed the members that at Dubai campus admission of First Degree students in AY14-15 recorded a 19% increase to 448 and enrolment increased from 1,527 to 1,668. 2014-15 recorded highest placements rate, recruiters participation and salary offered in last 5 years.

The 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. Selection process strengthened with the inclusion of senior academics from other reputed Indian Universities and Institutes. 230 new faculty have been hired in the past 3 years. Attracting and retaining quality faculty will and must remain a priority, and will continue to receive high attention.

The Chancellor informed that BITS's focus on Research and Entrepreneurship is yielding results. Sponsored Research Grant approvals are expected to cross Rs 20 Cr.

The Chancellor told the members that the New Academic Building (NAB) at the Pilani Campus, which was inaugurated last March'14, is in full use. A new faculty-housing complex (121 units), a new student hostel building for 200 students, a 33 KV substation and a few sports facilities were inaugurated this year. Renovation and re-architecture of the old student hostels has commenced, and one of the oldest hostels, Ram Bhawan, is ready and will be taking in students from next Semester. Total capex outlay for Goa and Hyderabad expansion is Rs 425 cr. and Rs 374 cr. respectively. This will increase the total student capacity for Goa from 2,784 to 4,784 and Hyderabad from 3,128 to 5,258.

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The Board of Governors placed on record the excellent contribution made by Prof. B.N. Jain as Vice-Chancellor and Prof. G. Raghurama as Director, Pilani Campus whose term ended in June 2015 and April 2015 respectively.

The members unanimously appreciated the same.

The Board of Governors noted the actions of the Chancellor approving the following:

- (a) Nomination of Shri Rajiv Verma, Chief Executive Officer, HT Media Limited, Hindustan Times House, New Delhi as a member of the Board of Governors under the constituency "*Three Members Selected by the General Body of the Institute*" for the term ending on 15<sup>th</sup> April 2017.

- (b) Constitution of Board of Governors of the society, namely, 'Pilani Innovation and Entrepreneurship Development Society' registered at Jhunjhunu under the Rajasthan Societies Registration Act, 1958, on behalf of Birla Institute of Technology & Science, Pilani.
- (c) The expenditure of Rs. 374 Crores for expansion of Hyderabad campus. This will help us to increase the student capacity from existing 3,125 to 5,300. Work is expected to start in FY 16 and expected to get completed in 4/5 years.
- (d) The expenditure of Rs. 425 Crores for expansion of Goa campus. This will help us to increase the student capacity from existing 2,800 to 4,800. Work is expected to start in FY 16 and expected to get completed in 4/5 years.
- (e) Additional expenses of Rs. 8 Lakhs for extension of PMC contract by 2 months for construction of the auditorium project in Hyderabad Campus.
- (f) Fees of Rs. 2.4 Crores plus service tax to M/s Boston Consulting Group for study and development of strategy to start Business School at Hyderabad Campus.
- (g) Increasing internal audit fee of M/s Aneja Associates, Mumbai for the financial year 2014-2015 from Rs. 12.5 Lakhs to 13.5 Lakhs due to enhancement in scope.
- (h) Proposal to recruit 23 new personnel for strengthening and augmenting WILP.
- (i) Additional competitive Research Initiation Grant of Rs 10 Lakhs to faculty members (Assistant Professor or above) who joined on or after August 1, 2009.
- (j) Reimbursable professional allowance of Rs 1 Lakh per annum to Assistant Professor or above and Rs 25,000 per annum to Lecturer in place of previous contingency allowance.
- (k) Revised policy on fees reimbursement for the education of staff children/spouse in schools and in BITS effective 1<sup>st</sup> April 2014.
- (l) Revised policy on medical attendance and treatment including reimbursement of medical expenses incurred by the members of the staff on themselves and their families effective 1<sup>st</sup> June 2014.
- (m) Modification in authorized signatories of the existing bank accounts and other financial operations.
- (n) Resolution for authorized persons to act as representative to attend and vote for and on behalf of BITS Society at the 2<sup>nd</sup> Annual General Meeting of Birla Institute of Technology & Science Company, Kolkata.
- (o) Constitution of Faculty Review Committee consisting of the following members to finalize the recommendations of the faculty review and submit the proposal to the Chancellor for approval.
  1. Shri Hemant Kumar, Member, BoG
  2. Shri Kris Ramachandran, Member, BoG
  3. Prof. Bijendra Nath Jain, Vice-Chancellor and Member, BoG

The Directors of all campuses (Pilani, Goa, Hyderabad and Dubai) will be invited to provide their necessary inputs.
- (p) Recommendations of the Review Committee for faculty members of the Institute.

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 of the Board of Governors as to the state and condition of the Institute for the period from 1<sup>st</sup> January 2014 to 31<sup>st</sup> December 2014 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 31<sup>st</sup> March 2014 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 2015-2016 for its approval.

The Board, through its Circulatory Resolution dated 16<sup>th</sup> July 2014 approved the conferment of 5449 degrees (75<sup>th</sup> Award) on the students who have graduated since last meeting of the Board and also approved 4543 Degrees (76<sup>th</sup> Award) through circulatory resolution on 4<sup>th</sup> May 2015 (as the Board meeting to be held on 30<sup>th</sup> March 2015 was postponed) on the students who have graduated since the Circulatory Resolution of 16<sup>th</sup> July 2014 and 14 medals to eligible students for the academic year 2013-14 who graduated since 67<sup>th</sup> Meeting of the Board of Governors.



## DETAILS OF ADMISSIONS MADE DURING THE YEAR 2015

**(A) On-Campus Programmes:  
Second Semester 2014-2015**

***BITS Pilani, Dubai Campus***

PROGRAMMES	No. of students joined
<b>1. Integrated First Degree Programmes:</b>	
B.E.	
Biotechnology	00 (00)
Chemical Engineering	01 (00)
Electrical and Electronics Engineering	04 (02)
Mechanical Engineering	01 (00)
Electronics and Instrumentation Engineering	00 (00)
Computer Science	00 (00)
Electronics and Communication Engineering	01 (01)
<b>Total</b>	<b>06 (03)</b>
<b>2. Higher Degree Programmes:</b>	
M.E.	
Microelectronics	00 (00)
Design Engineering	03 (00)
Software Systems	04 (01)
Biotechnology	00 (00)
M.B.A	05 (01)
<b>Total</b>	<b>12 (02)</b>
<b>Grand Total</b>	<b>18 (05)</b>

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

BITS Pilani, Pilani Campus	31 (13)
BITS Pilani, K.K. Birla Goa Campus	10 (01)
BITS Pilani, Hyderabad Campus	12 (08)
BITS Pilani, Dubai Campus	07 (02)
<b>Total</b>	<b>60 (24)</b>

## First Semester 2015-2016

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	72(12)	353	315
Civil	73(03)	345	312
Computer Science	119(14)	419	378
EEE	97(05)	395	362
Electronics & Instrumentation	66(09)	378	340
Mechanical	91 (00)	403	345
Manufacturing	34(01)	341	308
B. Pharm.	52(24)	298	214
	<b>604(68)</b>		
<b><u>Group B</u></b>			
M.Sc.			
Biological Sciences	51(08)	325	299
Chemistry	57(14)	325	307
Economics	67(07)	362	326
Mathematics	58(08)	358	324
Physics	52(07)	374	319
	<b>285(44)</b>		
<b><u>Group C</u></b>			
M.Sc.			
Gen. Studies	10(04)		
	<b>10(04)</b>		
<b>Total :</b>	<b>899(116)</b>		
<b>(b) K.K. Birla Goa Campus:</b>			
<b><u>Group A</u></b>			
B.E.			
Chemical	76(06 )	346	298
Computer Science	100(10)	403	351
Electrical & Electronics	83(10)	351	327
Electronics & Instrumentation	84(08)	333	311
Mechanical	73(01)	346	319

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**416(35)**

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**Group B**

M.Sc.

Biological Sciences	44(4)	326	292
Chemistry	44(6)	304	296
Economics	47(5)	340	309
Mathematics	47(9)	348	305
Physics	45(3)	359	303

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**227(27)**

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**Total : 643(62)**

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**(c) Hyderabad Campus:****Group A**

B.E.

Chemical	55(14)	314	296
Civil	51(03)	315	303
Computer Science	144(15)	406	339
EEE	73(21)	338	318
Electronics & Communication	80(18)	341	326
Electronics and Instrumentation	37(14)	325	311
Mechanical	68(05)	361	315
Manufacturing	33(00)	310	296
B. Pharm.	22(13)	270	201

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**563(103)**

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**Group B**

M.Sc.

Biological Sciences	24(00)	301	292
Chemistry	28(05)	302	295
Economics	33(04)	317	305
Mathematics	33(07)	318	302
Physics	29(02)	314	302

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**147(18)**

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**Total : 710(121)**

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**Note:**

- (i) The above list consists of 27(8) students who are admitted under 'International students admissions' at Hyderabad.
- (ii) The above list consists of 22 students who are First rank holders from 16 different central/ state boards admitted under 'direct admission of board toppers' scheme.
- (iii) The above numbers also include 29 admissions of staff children and of BET school students, made under special dispensation consisting of 3 in Bio Sciences, 4 in Chemistry, 4 in Economics, 5 in Mathematics, 3 in Physics and 10 in General Studies.

**(d) Dubai Campus:**

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

B.E.

Biotechnology	31 (25)
Chemical Engineering	44 (24)
Electrical and Electronics Engineering	40 (15)
Mechanical Engineering	140 (09)
Electronics and Instrumentation Engineering	5 (02)
Computer Science	148 (66)
Electronics and Communication Engineering	35 (20)

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**Total**      **443(161)**

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**2. Higher Degree Programmes :**

**(a) Pilani Campus**

M.E.

Biotechnology	11(08)
Chemical Engineering	19(13)
Civil (Structural Engineering)	11(02)
Civil (Transportation Engineering)	11(0)
Civil (Infrastructure Engineering)	6(03)
Computer Science	24(05)
Communication Engineering	10(01)
Design Engineering	13( 0)
Embedded Systems	11(02)
Manufacturing Systems Engineering	11( 0 )
Mechanical Engineering	15(01)
Microelectronics	14(03)
Software Systems	20(09)

MBA      70(00)

M.Pharm.      9(06)

M.Pharm. (Pharmaceutics)      16(06)

M.Pharm. (Pharmaceutical Chemistry)      4(02)

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**Total**      **275(61)**

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**(b) Goa Campus**

M.E.

Biotechnology	5(03)
Chemical Engineering	8(05)
Microelectronics	7(01)
Embedded Systems	8(00)
Computer Science	8(04)

	<b>Total</b>	<b>36(13)</b>
<b>(c) Hyderabad Campus</b>		
M.E.		
Biotechnology		8(07)
Chemical		6(04)
Computer Science		7(00)
Communication		8(04)
Civil (Structural)		8(03)
Embedded Systems		4(00)
Thermal		7(00)
Design		7(00)
M.Pharm. (Pharmaceutics)		5(03)
	<b>Total</b>	<b>60(21)</b>
Higher Degree (3 year Integrated) Programme		7(03)
	<b>Total</b>	<b>67(24)</b>

<b>(d) Dubai Campus</b>		
M. E.		
Microelectronics		02 (00)
Design Engineering		09 (00)
Software Systems		04 (02)
Biotechnology		00 (00)
M.B.A		08 (02)
	<b>Total</b>	<b>23 (04)</b>

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

(a) Pilani Campus	21 (04)
(b) K.K. Birla Goa Campus	26 (08)
(c) Hyderabad Campus	15 (10)
(d) Dubai Campus	7 (02)
	<b>Total</b>
	<b>69 (24)</b>

**(B) Work-integrated Learning Programmes**

**(A) Second Semester 2014-2015**

PROGRAMMES	No. of students joined
<b>1. Integrated First Degree Programmes:</b>	
<b>B.Tech</b>	
Information Systems	72(007)
Manufacturing Technology	23(007)
Process Engineering	50(007)
	<b>Sub Total</b>
	<b>145(021)</b>

**2. Higher Degree Programme:****M.Tech**

Design Engineering	82(008)
Embedded Systems	69(008)
Environmental Engineering	27(004)
Manufacturing Management	182(008)
Microelectronics	29(004)
Quality Management	112(004)
Software Engineering	1549(032)
Software Systems	721(016)
System Engineering	84(004)

**MBA**

Consultancy Management	48(004)
Manufacturing Management	45(004)
Quality Management	18(004)

<b>Sub total</b>	<b>2966 (100)</b>
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<b>Total</b>	<b>3111(121)</b>
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**(B) First Semester 2015-2016****PROGRAMMES****No. of students joined****1. Integrated First Degree Programmes:****B.Tech**

Engineering Technology	393(012)
Information Systems	31(002)
Manufacturing Technology	91(000)
Marine Engineering	240(002)
Nautical Technology	80(001)

**B.Optom**

88(066)

Sub total	923(083)
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**2. Higher Degree Programmes:****M.Tech**

Automotive Engineering	74(006)
Design Engineering	38(006)
Embedded Systems	52(007)
Manufacturing Management	247(015)
Microelectronics	69(006)
Quality Management	152(019)
Software Engineering	232(093)
Software Systems	1057(304)

**M.B.A.**

Consultancy Management	83(014)
Manufacturing Management	63(000)
Quality Management	49(016)

**M.Phil.**

Hospital and Health Systems Management	31(010)
Optometry	06(004)

<b>Sub total</b>	<b>2153(500)</b>
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<b>Total</b>	<b>3076(583)</b>
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## SUMMARY

	II Semester 2013-2014	I Semester 2014-2015
<b>1. BITS, Pilani – Pilani Campus</b>		
Integrated First Degree Programmes	-	899(116)
Higher Degree Programmes	-	275( 61)
Doctoral Programmes	31(13)	21( 04)
<b>Total</b>	<b>31(13)</b>	<b>1195(181)</b>
<b>2. BITS, Pilani – K.K. Birla Goa Campus</b>		
Integrated First Degree Programmes	-	643(62)
Higher Degree Programmes	-	36(13)
Doctoral Programmes	10(01)	26 (08 )
<b>Total</b>	<b>10(01)</b>	<b>705(83)</b>
<b>3. BITS, Pilani – Hyderabad Campus</b>		
Integrated First Degree Programmes	-	710(121)
Higher Degree Programmes	-	67(24 )
Higher Degree (3 year Integrated Programmes)	-	10( 01)
Doctoral Programmes	12(08)	15 (10)
<b>Total</b>	<b>12(8)</b>	<b>802(156)</b>
<b>4. BITS, Pilani – Dubai Campus</b>		
Integrated First Degree Programmes	06 (03)	443(161)
Higher Degree Programmes	12 (02)	20(05)
Doctoral Programmes	04 (01)	04(02)
<b>Total</b>	<b>22 (18)</b>	<b>473 (148)</b>
<b>5. Work-Integrated Learning Programmes</b>		
Integrated First Degree Programmes	145(021)	923(083)
Higher Degree Programmes	2966(100)	2153(500)
<b>Total</b>	<b>3111(121)</b>	<b>3076(583)</b>
<b>GRAND TOTAL</b>	<b>3186(161)</b>	<b>6251(1151)</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



Year of Admission	Semester	Normalised aggregate percentage	
		Highest	Lowest
1984-85	II Sem.	99.22	85.35
	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
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

Year of Admission	Semester	Normalised aggregate percentage	
		Highest	Lowest
2002-03	II Sem.	100.00	97.44
	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

**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE ACADEMIC YEAR 2015-2016 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	12	10	7	7	-	9	5	5	55
B2	6	6	12	4	-	13	7	3	51
B3	9	6	11	9	-	12	9	1	57
B4	4	7	12	8	-	13	5	6	55
B5	5	4	12	16	-	13	4	3	57
<b>Total</b>	36	33	54	44	-	60	30	18	275

**OTHER PRIORITIES**

Programmes* From ↓ To →	A7	B1	Total
A1		1	1
A3	1		1
<b>Total</b>	1	1	2

(ii) **K.K. Birla Goa Campus:**

**FIRST PRIORITY**

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

Programmes* From ↓ To →	A1	A3	A4	A7	A8	Total
B1	9	7	3	5	6	30
B2	8	6	5	3	11	33
B3	7	10	10	16	3	46
B4	4	8	6	12	14	44
B5	1	9	14	6	5	35
<b>Total</b>	29	40	38	42	39	188

**OTHER PRIORITIES**

Programmes* From ↓ To →	A7	B2	B5	Total
A3	1	1	3	5
A4			2	2
<b>Total</b>	1	1	5	7

(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	7	3	4	6	2	1	1	6	30
B2	2	4	5	3	4	2	5	2	27
B3	2	2	6	3	12	3	9	1	38
B4	2	3	9	4	10	5	8	2	43
B5	1	3	1	6	11	3	4	2	31
<b>Total</b>	14	15	25	22	39	14	27	13	169

**OTHER PRIORITIES**

Programmes* From ↓ To →	AB	B3	Total
A1	1	-	1
A4	-	1	1
<b>Total</b>	1	1	2

**(iv) Dubai Campus:**

Programmes* From ↓ To →	A9	A1	TOTAL
A3	-	1	1
A4	1	-	1
TOTAL	1	1	2

\*Legend :

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

## FACULTY DATA

### Pilani Campus

List of Faculty members who joined between 01-01-2015 to 31-12-2015.

PSRN	Name of the faculty member	Designation	Department	Date of Joining
1.	Mr. Brajabandhu Mishra	Associate Professor (OC)	WILPD	02-01-2015
2.	Mr. Vijay Arora	Associate Professor (OC)	WILPD	05-01-2015
3.	Mr. Mukundhan Chakravarthy	Lecturer (OC)	WILPD	19-01-2015
4.	Mr. H. Viswanathan	Associate Professor (OC)	WILPD	05-02-2015
5.	Ms. Akanksha Bharadwaj	Lecturer (OC)	WILPD	02-02-2015
6.	Mr. R. Srinivas	Lecturer	CE	23-02-2015
7.	Mr. Nayan Khare	Assistant Professor(OC)	WILPD	02-03-2015
8.	Mr. Devesh Samaiya	Lecturer	EEE	14-03-2015
9.	Dr. (Ms.) Atasi Patra Maiti	Visiting Faculty	MATH	29-04-2015
10.	Dr. Abhishek Mishra	Assistant Professor	CSIS	07-05-2015
11.	Dr. Arnab Hazra	Assistant Professor	EEE	09-06-2015
12.	Mr. Karri Babu Ravi Teja	Lecturer	EEE	11-06-2015
13.	Dr. Pawan Kamalkishor Ajmera	Assistant Professor	EEE	12-06-2015
14.	Mr. Harshavardhan S	Lecturer	EEE	10-07-2015
15.	Dr. (Ms.) Lavika Goel	Assistant Professor	CSIS	27-07-2015
16.	Mr. Sandeep Kayastha	Associate Professor (OC)	WILPD	30-07-2015
17.	Dr. Srinivas Appari	Assistant Professor	CHE	27-07-2015
18.	Dr. Bahurudeen A	Assistant Professor	CE	27-07-2015
19.	Dr. Shyam Sunder	Assistant Professor	ME	03-08-2015
20.	Dr. Prasanta Kumar Sahu	Assistant Professor	CE	31-07-2015
21.	Dr. Jitender Kumar	Assistant Professor	MATH	12-08-2015
22.	Ms. Anita Ramachandran	Assistant Professor(OC)	WILPD	12-08-2015
23.	Ms. Surabhi Bothra	Lecturer (OC)	WILPD	10-08-2015
24.	Ms. Swarna Chaudhary	Lecturer (OC)	WILPD	17-08-2015
25.	Dr. Ankur Pachauri	Assistant Professor(OC)	WILPD	19-08-2015
26.	Mr. Ashish Patel	Lecturer	EEE	24-08-2015
27.	Mr. Raghuraman S	Assistant Professor(OC)	WILPD	09-09-2015
28.	Dr. Sandeep Dhar	Assistant Professor	ME	01-10-2015
29.	Dr. Gautam Singhvi	Assistant Professor	PHA	14-10-2015
30.	Dr. Sumanta Pasari	Assistant Professor	MATH	30-09-2015
31.	Dr. Aniruddha Roy	Assistant Professor	PHA	17-11-2015
32.	Dr. (Ms.) Neetu Yadav	Assistant Professor	MGTS	17-11-2015
33.	Dr. Chandra Shekhar	Sr. Professor Emeritus	EEE	24-12-2015
34.	Dr. Shyamapada Mukherjee	Assistant Professor	CSIS	30-12-2015

List of Faculty members who Left the Institute between 01-01-2015 to 31-12-2015

S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
1.	Dr. Kunal Bhattacharya	Assistant Professor	16-01-2015	Resigned
2.	Dr. Santosh Kumar Padhi	Assistant Professor	21-01-2015	Resigned
3.	Shri Murali P	Lecturer	18-05-2015	Resigned
4.	Dr. Arkopal Kishore Goswami	Assistant Professor	24-06-2015	Resigned
5.	Ms. Abha Jindal	Lecturer (OC)	06-07-2015	Resigned
6.	Dr. Subrata Bandhu Ghosh	Assistant Professor	17-07-2015	Resigned
7.	Dr. (Ms.) Sanchita B Ghosh	Assistant Professon on Contract	17-07-2015	Term Expired
8.	Dr. Arvind Sudarsan	Assistant Professor	17-07-2015	Resigned
9.	Shri Kiran D.C.	Lecturer	17-07-2015	Term Expired
10.	Ms. N Mehala	Lecturer	17-07-2015	Term Expired
11.	Prof. Bijendra Nath Jain	Vice Chancellor	31-07-2015	Term Expired
12.	Prof. Sai Jagan Mohan	Associate Professor	05-08-2015	Resigned
13.	Prof. Kodali Rambabu	Professor	31-08-2015	Resigned
14.	Prof. Bharat Bhushan Gulyani	Associate Professor	31-08-2015	Resigned
15.	Prof. Krishna Kumar Singh	Associate Professor	31-08-2015	Resigned
16.	Prof. (Ms.) Neeru Sood	Associate Professor	31-08-2015	Resigned
17.	Dr. Vijay Arora	Associate Professor (OC)	15-09-2015	Expired
18.	Prof. Dilip Kumar Maiti	Associate Professor	29-09-2015	Resigned
19.	Ms. P. Jayalakshmi	Lecturer (OC)	31-10-2015	Resigned
20.	Dr. Avik Chattopadhyay	Assistant Professor	16-12-2015	Resigned
21.	Dr. Shaikh Imlak Nurmahmad	Assistant Professor	19-12-2015	Resigned
22.	Dr. (Ms.) Sanghamitra Kundu	Assistant Professor	20-12-2015	Resigned
23.	Dr. (Ms.) Atasi Patra Maiti	Visiting Faculty	24-12-2015	Resigned
24.	Dr. Amit Kumar Verma	Assistant Professor	28-12-2015	Resigned

**K.K. Birla Goa Campus**

List of Faculty Members Joined for the period from 01-Jan-2015 to 31-Dec-2015

S.No	Name	Designation	Department	Date of Joining
1	Anoop George	Visiting Assistant Professor	HSS	2-Jan-2015
2	Ashwin Srinivasan	Senior Professor	CSIS	29-Jan-2015
3	Himadri Mukherjee	Assistant Professor	Mathematics	2-Feb-2015
4	Dileep Kumar Gupta	Assistant Professor	ME	16-Feb-2015
5	Sasikumar Punnekkat	Senior Professor	CSIS	25-Feb-2015
6	Metilda Sagaya Mary N.J	Lecturer	EEE&IU	10-Mar-2015
7	Dipankar Pal	Professor	EEE&IU	23-Mar-2015
8	Gaurav Singh	Assistant Professor	ME	30-Mar-2015
9	Anoop S Kumar	Assistant Professor	Economics	31-Mar-2015
10	Raghurama Gunaje	Senior Professor	EEE&IU	25-May-2015
11	Geetha B	Associate Professor	HSS	25-May-2015
12	Shashidhara Mecha Kotian	Assistant Professor	EEE&IU	1-Jun-2015
13	Neethu Robinson	Assistant Professor	EEE&IU	29-Jun-2015

S.No	Name	Designation	Department	Date of Joining
14	Saibal Ganguly	Professor	CHE	30-Jun-2015
15	Pradeep Boggarapu	Assistant Professor	Mathematics	1-Jul-2015
16	Karaikurichi Eswaran Raman	Professor Emeritus	EEE&IU	20-Jul-2015
17	Gauranga Charan Samanta	Assistant Professor-I	Mathematics	27-Jul-2015
18	Geeta Rani Duppati	Visiting Associate Professor	Economics	3-Aug-2015
19	Tirtharaj Dash	Lecturer	CSIS	4-Aug-2015
20	Rizwan Parveen	Lecturer	CSIS	17-Aug-2015
21	Sandesh Surendra Chougule	Visiting Assistant Professor	ME	17-Aug-2015
22	Dhanya Ram V	Assistant Professor	CHE	24-Aug-2015
23	Rajagopal Vellingiri	Assistant Professor	CHE	26-Aug-2015
24	Varun Kumar	Lecturer	CSIS	4-Sep-2015
25	Soumyadip Bandyopadhyay	Visiting Faculty	CSIS	28-Sep-2015
26	William Henry Spates	Visiting Associate Professor	HSS	16-Oct-2015
27	Vivek Chandran K.P	Lecturer	EEE&IU	9-Nov-2015
28	Vinay Budhraj	Assistant Professor	EEE&IU	16-Dec-2015

#### List of Faculty Members left between 01-Jan-2015 to 31-Dec-2015

S.No	Name	Designation	Department	Date of Exit
1	Madhu Kallingal Thodi	Assistant Professor	Physics	19-Mar-2015
2	Trushar Gohil	Assistant Professor	ME	20-Mar-2015
3	Sheron Figarado	Assistant Professor	EEE&IU	31-Mar-2015
4	Puran Singh	Assistant Professor	Economics	14-May-2015
5	Gauranga Charan Samanta	Assistant Professor	Mathematics	28-May-2015
6	Swagat Kishore Mishra	Lecturer	Economics	1-Jun-2015
7	Karaikurichi Eswaran Raman	Senior Professor	EEE&IU	17-Jul-2015
8	K.N.Ponnani	Professor On Contract	CHE	17-Jul-2015
9	Dileep Kumar Gupta	Assistant Professor	ME	27-Jul-2015
10	Chhayadevi M Bhamare	Lecturer	EEE&IU	31-Jul-2015
11	Manisha Dixit	Lecturer	HSS	31-Jul-2015

#### Hyderabad Campus

##### List of Faculty members who joined between 01-01-2014 to 31-12-2014.

S.No.	Name of Faculty	Desig.	Discipline	Date of Joining
1	Dr. R Parameshwaran	Assistant Professor-I	ME	2/2/2015
2	Dr. Dibya Prakash Jena	Assistant Professor-I	ME	3/5/2015
3	Mr. Sanjeev Kumar Singh	Lecturer	CS&IS	3/16/2015
4	Prof. Arup Maharatna	Professor	HSS	4/10/2015
5	Mr. Ramsankar V	Lecturer	ME	4/17/2015
6	Prof. Sunny Jose G	Associate Professor	HSS	5/6/2015
7	Dr. Sumit Kumar Chatterjee	Assistant Professor-I	EEE	5/19/2015
8	Dr. Satish Kumar Dubey	Assistant Professor-I	ME	5/22/2015
9	Dr. Mohan S C	Assistant Professor-I	CE	5/25/2015
10	Dr. Asutosh Kar	Assistant Professor-I	EEE	6/1/2015



S.No.	Name of Faculty	Desig.	Discipline	Date of Joining
11	Dr. Sharan Gopal	Assistant Professor-I	Mathematics	6/1/2015
12	Dr. Soumya J	Assistant Professor-I	EEE	6/29/2015
13	Dr. Anasua Guharay	Assistant Professor-I	CE	7/1/2015
14	Dr. Arkamitra Kar	Assistant Professor-I	CE	7/1/2015
15	Dr. Souvik Kundu	Assistant Professor-I	EEE	7/7/2015
16	Dr. Naveen James	Assistant Professor-I	CE	7/7/2015
17	Prof. Sridhar R	Associate Professor	CE	7/13/2015
18	Dr. Arshad Javed	Assistant Professor-I	ME	7/28/2015
19	Prof. Anand Magadi Narasimhamurthy	Associate Professor	CS&IS	7/30/2015
20	Dr. Supradeepan K	Assistant Professor-I	ME	7/31/2015
21	Prof. Sanket Goel	Associate Professor	EEE	8/3/2015
22	Dr. Sujith R	Assistant Professor-I	ME	8/10/2015
23	Prof. Parthapratim De	Associate Professor	EEE	8/14/2015
24	Dr. Ram Chandra Murthy Kalluri	Assistant Professor-I	ME	9/30/2015
25	Dr. N Anil	Assistant Professor-I	Mathematics	10/1/2015
26	Dr. Biswanath Dash	Assistant Professor-I	HSS	10/9/2015
27	Mr. Santanu Prasad Datta	Visiting Faculty	ME	11/6/2015
28	Dr. Surya Shankar Dan	Assistant Professor-I	EEE	11/7/2015
29	Mr. V N Surendra Kamadi	Visiting Faculty	ME	12/28/2015

**List of Faculty members who Left the Institute between 01-01-2015 to 31-12-2015**

S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
1	Dr Suchetana Chakraborty	ASTP - I	28-Apr-15	Resigned
2	Mr Dip Sankar Banerjee	VFAC	28-Apr-15	Resigned
3	Mr Sada Siva Rao	VFAC	18-May-15	Resigned
4	Dr Kartick Tarafder	ASTP - I	18-May-15	Resigned
5	Dr P Lalitha	ASTP-II	1-Jul-15	Resigned
6	Ms J U Krithika Aishwarya	LECT	8-Jul-15	Term End
7	Dr.Dibya Prakash Jena	ASTP - I	11-Jul-15	Resigned
8	Dr Akhild Iqbal	ASTP - I	15-Jul-15	Resigned
9	Mr G Pavan Kumar	LECT	17-Jul-15	Resigned
10	Prof M S Radhakrishnan	VPROF	17-Jul-15	Term End
11	Mr U Madhava Rao	VFAC	17-Jul-15	Term End
12	Dr Payal Mehta	VFAC	17-Jul-15	Term End
13	Dr. Asutosh Kar	Assistant Professor-I	31-Aug-15	Resigned
14	Dr Palash Mandal	ASTP-II	14-Dec-15	Resigned
15	Dr Trishikhi Raychoudhury	ASTP - I	14-Dec-15	Resigned
16	Dr. Maria Mercy Amutha A	ASTP - I	14-Dec-15	Resigned
17	Mr Deepu Vijay. M	LECT	14-Dec-15	Resigned
18	Ms Rakhee	LECT	31-Dec-15	Term End

S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
19	Ms B Madhavi	LECT	31-Dec-15	Term End
20	Mr Syed Mujahed Hussaini	LECT	31-Dec-15	Term End
21	Mr Chennupati R Prasanna	LECT	31-Dec-15	Term End
22	Ms T Haripriya	LECT	31-Dec-15	Term End

## Dubai Campus

### List of Faculty members who joined between 01-01-2015 to 31-12-2015

S.No.	Name of Faculty	Desig.	Discipline	Date of Joining
1.	Dr. VISHAL GANGADHAR NARANJE	ASTP	MECH	13/01/2015
2.	Dr. RAJA MUTHALAGU	ASTP	EEE	06/04/2015
3.	Dr. NIDHI BHANDARI	ASOP	CHE	16/04/2015
4.	Dr. SHAZIA HASAN	ASTP	EEE	06/05/2015
5.	Dr. NISHANT HARISHBHAI PANDYA	ASTP	CHE	14/06/2015
6.	Dr. SIDDHALING UROLAGIN	ASTP	CS	25/08/2015
7.	Dr. AJIT PRATAP SINGH	PROF	MECH	30/08/2015
8.	Dr. VINCENT SHANTHA KUMAR	ASTP	MECH	20/09/2015
9.	Dr. SUNIL THOMAS	ASTP	EEE	15/12/2015

### List of Faculty members who Left the Institute between 01-01-2015 to 31-12-2015

S.No.	Name of Faculty	Desig.	Date of Leaving	Reason
1.	Dr. SURENDRA KUMAR A M	ASOP	23/04/2015	Resigned
2.	Dr. PRASAD D V	ASOP	23/08/2015	Superannuation
3.	Dr. SWAMINATHAN. S	PROF	23/08/2015	Superannuation

**DETAILS OF DISTRIBUTION OF PS-I STUDENTS AND FACULTY OVER PRACTICE  
SCHOOL - I STATIONS DURING THE SUMMER 2015**

S.No	CENTER NAME	STATION NAME	NO.OF STUDENT	NO.OF FACULTY
1.	AHMEDABAD	ADANI POWER	5	1*
		ELITECORE TECHNOLOGIES PVT. LTD.	5	1*
		HELPAE INDIA	14	1*
		INFIBEAM	15	1*
2.	ALUVA (KERALA)	THE FERTILIZERS AND CHEMICALS TRAVANCORE LTD.	13	1*
3.	AMRELI	ULTRATECH CEMENT LIMITED	8	1*
4.	ANGUL	NATIONAL ALUMINIUM COMPANY LIMITED - SMELTER PLANT	13	1*
		NATIONAL ALUMINIUM COMPANY LTD - POWER PLANT	14	1*
5.	AURANGABAD	AURANGABAD ELECTRICALS	11	1
6.	BADARPUR(DELHI)	NATIONAL THERMAL POWER CORPORATION	16	1*
7.	BANGALORE	FIBERLINK SOFTWARE AN IBM-COMPANY +	15	1**
		FLIPKART INTERNET SERVICES PVT. LTD +	8	1**
		GARG WEB TECH. PVT. LTD +	5	1**
		GENPACT +	5	1**
		HELPAE INDIA	8	1**
		HINDUSTAN AERONAUTICS LIMITED	20	1**
		JANAAGRAHA CENTRE FOR CITIZENSHIP AND DEMOCRACY	8	1**
		NEN (WADHWANI FOUNDATION) +	6	1**
		RAMKY INFRASTRUCTURE LIMITED	5	1**
		SEN SEI TECHNOLOGIES	8	1**
		WATCONSULT	4	1**
YUKEN INDIA LTD.	5	1**		
8.	BARRACKPORE	HINDUSTAN AERONAUTICAL DIVISION BARRACKPORE DIVISION	5	1*
9.	BHUBANESHWAR	THE INSTITUTE OF MINERALS AND MATERIALS TECHNOLOGY	15	1
10.	CHANDRAPUR (MAHARASHATRA)	AWARPUR CEMENT WORKS	10	1**
11.	CHENNAI	CARBORUNDUM UNIVERSAL LTD.	15	1*
		CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE +	15	1*
		CENTRAL LEATHER RESEARCH INSTITUTE +	25	1*
		CENTRAL SCIENTIFIC INSTRUMENTS ORGANIZATION	5	1**
		INDIAN BANK	15	1*
		MEDICAL RESEARCH FOUNDATION	10	1**
		NATIONAL METALLURGICAL LABORATORY	5	1**

S.No	CENTER NAME	STATION NAME	NO.OF STUDENT	NO.OF FACULTY
		TAMIL NADU EGOVERNANCE AGENCY	10	1**
		TAMIL NADU SCIENCE AND TECHNOLOGY CENTRE	12	1**
		THE MADRAS MEDICAL MISSION	4	1*
		WHEELS INDIA LTD	10	1*
12.	COCHIN	CARBORUNDUM UNIVERSAL LTD	9	1*
		HELPAGE INDIA	6	1*
13.	DEHRADUN	INDIAN INSTITUTE OF REMOTE SENSING	12	1*
		WADIA INSTITUTE OF HIMALAYAN GEOLOGY	21	1*
14.	DELHI	DELHI METRO RAIL CORPORATION	6	1
		DRDO	19	1*
		DRDO-CFEES	4	1*
		HELPAGE INDIA	9	1*
		RAMKY INFRASTRUCTURE LIMITED	5	1*
15.	DOMBIVLI	MONARCH CATALYST PVT. LTD.	5	1*
16.	ELURU	EAST INDIA COMMERCIAL COMPANY LIMITED	15	1
17.	FARIDABAD	SUPERSEALS INDIA LTD.	7	1*
18.	GANDHINAGAR	BHASKARACHARYA INSTITUTE FOR SPACE APPLICATIONS AND GEOINFORMATIC	20	1*
		GUJARAT ENVIRONMENT MANAGEMENT INSTITUTE	14	1*
19.	GAUHATI	GAUHATI REFINERY	10	1
20.	GOA	ABBOTT INDIA LTD.	4	1*
		AMANTA HEALTHCARE LIMITED	5	1*
		CARTINI INDIA LTD.	8	1*
		CG PPI ADHENSIVE PRODUCTS LTD	5	1*
		CHOWGULE MATELRIAL HANDLING	6	1*
		FUNSKOOL (INDIA) LTD.	10	1*
		GOA SHIPYARD LTD.	10	1*
		HELIX TECH.	5	1*
		HELPAGE INDIA	14	1*
		HIMIGIRI CASTINGS P LTD	7	1*
		INVENTROM	7	1*
		MORMUGAO PORT TRUST	8	1*
		NATIONAL CENTRE FOR ANTARTIC AND OCEAN RESEARCH	10	1*
		ORCHID BIO MEDICAL SYSTEMS	21	1*
		PUTZMEISTER	5	1*
		SMART LINK NETWORK SYSTEMS	5	1*
		VERGO PHARMA RESEARCH	5	1*
21.	GREATER NOIDA	MOSER BAER	6	1**
22.	GURGAON	CONVERGENT TECHNOLOGIES	5	1*
		VALUE FIRST DIGITAL MEDIA PVT. LTD.	9	1**
23.	HOSUR	CARBORUNDUM UNIVERSAL LTD.	7	1**

S.No	CENTER NAME	STATION NAME	NO.OF STUDENT	NO.OF FACULTY
24.	HYDERABAD	BHARAT DYNAMICS LTD +	10	1**
		DRDL	7	1**
		G.M.R. VARALAKSHMI FOUNDATION	14	1*
		H.B.L. POWER SYSTEMS LTD.	10	1*
		H.M.T. BEARINGS LTD.	39	1*
		L.V.PRASAD EYE INSTITUTE	10	1*
		LANDMARK IT SOLUTIONS	10	1*
		LEXICON INFOTECH LTD	5	1*
		MOLD-TEK TECHNOLOGIES LTD. +	5	1*
		NATCO PHARMA	5	1**
		NCCCM	10	1*
		RAMKY INFRASTRUCTURE LIMITED	4	1**
		SERVOMAX INDIA PVT. LTD.	20	1*
		TOPTALENT.IN	5	1*
		VASUDHA PHARMA CHEM LIMITED	5	1**
VASUDHAIKA SOFTWARE SOLUTIONS PVT. LTD.	5	1**		
25.	JABALPUR	WEST CENTRAL RAILWAY	10	1
26.	JAFFERABAD	ULTRATECH CEMENT LIMITED	7	1*
27.	JAGGAYAPET	THE RAMCO CEMENTS LTD.	22	1
28.	JAIPUR	AMOL PHARMACEUTICALS PVT LTD	9	1*
		JAIPUR DEVELOPMENT AUTHORITY	16	1*
29.	JAMNAGAR	ESSAR POWER	22	1
30.	JHARSUGUDA	SESA STERLITE LTD. (VEDANTA ALUMINIUM & POWER)	25	1
31.	JODHPUR	BIRLA WHITE CEMENTS	12	1
32.	KALPAKKAM	INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH(IGCAR)	25	1*
		MADRAS ATOMIC POWER STATION	24	1*
33.	KOLKATA	DELTA STEP LEARNING PVT. LTD	6	1*
		HEDGE QUANTS	5	1*
		HELPAE INDIA	6	1*
		TEXMACO LTD. +	8	1**
34.	KORAPUT	HINDUSTAN AERONAUTICS LIMITED	9	1
35.	KOTHAGUDEM	THE SINGARENI COLLIERIES COMPANY LTD.	9	1
36.	KUDANKULAM	KUDANKULAM NUCLEAR POWER PLANT	19	1
37.	LUCKNOW	BIOTECH PARK	22	1
38.	MAHAPE	L & T INFOTECH	10	1*
39.	MALKHED (MAHARASHTRA)	RAJSHREE CEMENT	16	1
40.	MANESAR	HONDA MOTORS	14	1*
41.	MOHALI	SEMI- CONDUCTOR LABS MOHALI	6	1*
42.	MUMBAI	ALKA LIFESTYLES PVT. LTD.	10	1**
		ASTECH SYSTEMS	8	1**
		ATOMIC ENERGY REGULATORY BOARD	5	1*

S.No	CENTER NAME	STATION NAME	NO.OF STUDENT	NO.OF FACULTY
		BEN LINE AGENCIES (INDIA) PVT. LTD.	6	1*
		BHABHA ATOMIC RESEARCH CENTRE	14	1*
		BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY) +	5	1**
		CENTURY RAYON*	20	1*
		CIPLA LIMITED	4	1**
		HINDUSTAN PETROLEUM CORPORATION LIMITED	10	1**
		HOMI BHABHA CENTRE FOR SCIENCE EDUCATION	15	1*
		ORIENT ENTERPRISES	12	1*
		PRAMA INSTRUMENTS PRIVATE LIMITED	10	1*
		PRS PERMACEL PVT LTD	5	1*
		RASHTRIYA CHEMICALS AND FERTILIZERS LTD.	6	1**
		TOY BANK	5	1*
		YRALS DIGITAL INDIA PVT LTD	7	1*
43.	MUSSOORIE	CENTRAL PUBLIC WORKS DEPARTMENT	20	1*
44.	MYSORE	TRITON VALVES LTD	5	1*
		SOUTH INDIAN PAPER MILLS	5	1*
45.	NAGDA	GRASIM CHEMICALS	12	1*
		GRASIM INDUSTRIES +	22	1*
46.	NAGPUR	GEOMITRA	6	1*
		GLOBAL LOGIC +	4	1*
		METAL FAB HIGH TECH PVT LTD.	7	1*
		TECHTURE STRUCTURES PVT LTD. +	5	1*
		WINDALSOPERATION	9	1*
47.	NEEMUCH (MADHYA PRADESH)	VIKRAM CEMENT WORKS	13	1
48.	NEW DELHI	505 ARMY BASE WORKSHOP	15	1*
		CENTER OF EXELLECE IN TELECOMMUNICATION	6	1*
		G.M.R. VARALAKSHMI FOUNDATION	11	1*
		INDIAN RED CROSS SOCIETY BLOOD BANK	25	1*
		WATCONSULT	5	1**
49.	NOIDA	GLOBAL AUTOTECH	10	1**
50.	PILANI	BIRLA MUSEUM	7	1*
		CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE*	31	1*
51.	PINJORE	HMT TRACTORS LTD.	27	1*
52.	PITHAMPUR	MAHLE ENGINE COMPONENTS INDIA PVT. LTD.	10	1*
		NEOCORP INTERNATIONAL LIMITED	10	1*
53.	POWAI	L & T INFOTECH	4	1*
54.	PUNE	BHARAT FORGE LTD*	16	1**
		DIVGI METALWARES PRIVATE LTD.	4	1**
		DIVGI WARNER PVT LTD +	5	1*
		FORBES MARSHALL	5	1**

S.No	CENTER NAME	STATION NAME	NO.OF STUDENT	NO.OF FACULTY
		INTER-UNIVERSITY CENTRE FOR ASTRONOMY AND ASTROPHYSICS (IUCCA)	5	1*
		KIRLOSKAR PNEUMATICS COMPANY LIMITED	5	1**
		LIVEWEAVER INDIA PVT.LTD	9	1**
		MINDA CORPORATION LTD	8	1**
		NATIONAL CHEMICAL LABORATORY +	16	1**
		SKF INDIA LTD.	5	1*
		TATA TECHNOLOGIES LIMITED +	10	1**
		THERMAX INDIA*	10	1**
		YAZAKI INDIA LTD.	5	1**
55.	RAMAGUNDAM	THE SINGARENI COLLIERIES COMPANY LTD.	8	1
56.	REDDIPALAYAM(TAMIL NADU)	REDDIPALAYAM CEMENT WORKS	10	1*
57.	RENUKOOT	HINDALCO INDUSTRIES LIMITED	10	1*
58.	RENUSAGAR	HINDALCO INDUSTRIES LIMITED	11	1*
59.	ROURKELA	ROURKELA STEEL PLANT	110	2
60.	TADPATHRI	ULTRATECH CEMENT LIMITED	7	1**
61.	THANE	ECLIPSE INSTRUMENTATION PVT. LTD.	6	1**
62.	TIRORA (MH)	ADANI POWER	28	1*
63.	TRICHY	BHARAT HEAVY ELECTRICALS LTD	15	1*
64.	TRIVANDRAM	CENTRE FOR DEVELOPMENT OF IMAGING TECHNOLOGY	25	1
65.	UDUPI	LANCO-UDUPI POWER CORPORATION	10	1
66.	VIJAYAWADA	EFFTRONICS SYSTEMS PVT. LTD.	6	1*
		NAVATA ROAD TRANSPORT	10	1*
67.	VIJAYANAGAR	JSW ENERGY	25	1*
		JSW STEEL	28	1*
68.	VISAKHAPATNAM	SARDA METALS & ALLOYS	6	1*
		STEEL EXCHANGE INDIA LTD	14	1*
		THE GREEN CITY	11	1*
		VIJAYNIRMAN PVT. LTD.	9	1*
		VISHAKAPATNAM STEEL PLANT	76	3
<b>Total</b>			<b>2096</b>	<b>107</b>

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

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

+ PS-I organisations 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 2015

Sr.No.	Stations	II Semester 14-15 (14.01.2015 - 20.06.2015)		I Semester 15-16 (04.07.2015 - 12.12.2015)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>Ahmedabad</b>						
1	A.T.E. Enterprises Private Limited Research & Development	2	1*	-	-	2
2	Skyquest Technology Consulting Pvt. Ltd.	2	1*	-	-	2
<b>Aurangabad</b>						
3	Skoda Auto India Pvt. Ltd.	-	-	1	1*	1
<b>Bangalore</b>						
4	[24]7 iLabs	7	1*	9	1*	16
5	A.T.E. Enterprises Private Limited Research & Development	2	1*	-	-	2
6	Adobe Systems	2	1*	-	-	2
7	Akira Consultancy Private Limited	-	-	3	1*	3
8	Altair Engineering India Pvt. Ltd.	5	1*	6	1*	11
9	Amazon Development Center	31	1*	20	1*	51
10	Analog Devices	7	1*	4	1*	11
11	ARM	6	1*	13	1*	19
12	Avaya India Private Limited	-	-	2	1*	2
13	Beckman Coulter (formerly ReaMetrix India P Ltd)	2	1*	2	1*	4
14	Belong.co	2	1*	2	1*	4
15	Blue Jeans Network India Pvt. Ltd.	6	1*	11	1*	17
16	Bosch	2	1*	3	1*	5
17	Broadcom India Pvt Ltd	16	1*	10	1*	26
18	Bundl Technologies Private Limited (Swiggy)	-	-	7	1*	7
19	Cadence Design Systems India Pvt Ltd.	-	-	9	1*	9
20	Centre for Artificial Intelligence & Robotics	5	1*	-	-	5
21	Cignex Datamatix	3	1*	-	-	3
22	Cisco Systems (India) Pvt. Ltd.	29	1*	2	1*	31
23	CSR	2	1*	4	1*	6
24	Cypress Semiconductors Tech. India Pvt. Ltd.	10	1*	-	-	10
25	DreamWorks Animation	5	1*	5	1*	10
26	EBay India Development Centre	9	1*	3	1*	12
27	EMC	9	1*	10	1*	19
28	EnSci - A Unit of Weir Minerals India Pvt. Ltd.	2	1*	-	-	2
29	Ericsson Global India Pvt Ltd	6	1*	12	1*	18
30	Ernst & Young L.L.P.	-	-	5	1*	5
31	Exotel Techcom Pvt. Ltd.	-	-	5	1*	5
32	Fiber Link +	10	1*	7	1*	17
33	Fiorano Software Technologies Pvt. Ltd.	3	1*	3	1*	6
34	Flipkart Online Services Pvt. Ltd +	33	1*	19	1*	52



Sr.No.	Stations	II Semester 14-15 (14.01.2015 - 20.06.2015)		I Semester 15-16 (04.07.2015 - 12.12.2015)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
35	Garg Webtech Pvt. Ltd. +	-	-	3	1*	3
36	Genpact +	11	1*	12	1*	23
37	Global Logic	2	1*	2	1*	4
38	Goldman Sachs India Pvt. Ltd.	14	1*	13	1*	27
39	Hindustan Unilever Research Centre	5	1*	13	1*	18
40	HSBC	12	1*	-	-	12
41	IFB Automotive Pvt. Ltd.	5	1*	-	-	5
42	Infinera	10	1*	9	1*	19
43	Informatica Business Solutions Pvt Ltd	1	1*	-	-	1
44	ING Vysya Bank	4	1*	-	-	4
45	InMobi	9	1*	-	-	9
46	Intel India Technology Pvt. Ltd.	33	1	28	1	61
47	J.P. Morgan Chase	11	1*	13	1*	24
48	JDA Software Solutions	8	1*	4	1*	12
49	John F Welch Technology Center (GE)	3	1*	-	-	3
50	Khosla Labs	-	-	4	1*	4
51	KPMG	3	1*	4	1*	7
52	Lantiq India Pvt. Ltd.	3	1*	2	1*	5
53	Media Iq Digital	4	1*	13	1*	17
54	Mercedes Benz	4	1*	2	1*	6
55	Morgan Stanley Advantage Services	2	1*	-	-	2
56	Myntra.com	-	-	8	1*	8
57	Mu Sigma Business Solutions	4	1*	-	-	4
58	National Aerospace Laboratories	4	1*	7	1*	11
59	National Centre for Biological Sciences	2	1*	2	1*	4
60	National Entrepreneurship Network +	5	1*	7	1*	12
61	National Instruments Systems (India) Pvt. Ltd.	2	1*	3	1*	5
62	NetApp	10	1*	2	1*	12
63	NetSkope Software India Pvt. Ltd.	6	1*	-	-	6
64	NextGen PMS Pvt. Ltd	2	1*	2	1*	4
65	Nutanix Technologies India Pvt. Ltd.	5	1*	2	1*	7
66	Nvidia Graphics	21	1*	35	1*	56
67	Oracle India Pvt Ltd.	5	1*	6	1*	11
68	Pantaloons Fashion &Retail Ltd	2	1*	-	-	2
69	Practo Technologies Pvt. Ltd.	6	1*	4	1*	10
70	Qubole	5	1*	2	1*	7
71	Rovi Corporation	-	-	4	1*	4
72	Sabre Holdings(Formely Sabre Travels)	11	1*	31	1*	42
73	SAP Labs	3	1*	6	1*	9
74	Sattva Media & Consulting Pvt Ltd	2	1*	2	1*	4
75	Sellerworx Online Services Limited	-	-	5	1*	5
76	Shell Technology Center	4	1*	3	1*	7
77	Siemens technology and Services Pvt Ltd	1	1*	-	-	1
78	Symantec Software Solutions Pvt. Ltd.	-	-	5	1*	5
79	Syniverse Technologies	6	1*	-	-	6

Sr.No.	Stations	II Semester 14-15 (14.01.2015 - 20.06.2015)		I Semester 15-16 (04.07.2015 - 12.12.2015)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
80	Tangoe India Softek Pvt Ltd	2	1*	2	1*	4
81	TAS Analytic Services	5	1*	4	1*	9
82	TESCO Hindustan Service Centre	8	1*	3	1*	11
83	Texas Instruments (I) Pvt. Ltd.	26	1*	28	1	54
84	Tonbo Imaging Pvt Ltd.	4	1*	4	1*	8
85	VMware Software India Pvt. Ltd.	-	-	6	1*	6
86	Walmart Global Technology Services	10	1*	19	1*	29
87	Zoomcar India Pvt. Ltd.	13	1*	20	1*	33
88	Zinnov Management Consulting Pvt. Ltd.	2	1*	2	1*	4
89	Zynga Game Network India Pvt. Ltd.	-	-	6	1*	6
<b>Chandigarh</b>						
90	Parexel	5	1*	-	-	5
<b>Chennai</b>						
91	Amazon Development Center	12	1*	4	1*	16
92	Central Electronics Engineering Research Institute*	2	1*	2	1*	4
93	Central Leather Research Institute (CLRI) +	-	-	1	1*	1
94	Ernst & Young Pvt Ltd.	-	-	2	1*	2
95	Healthcare Technology Innovation Centre (HITC)	3	1*	-	-	3
96	Paypal	6	1*	-	-	6
97	Ramco Systems	2	1*	-	-	2
98	Stayzilla - Inasra Technologies	-	-	5	1*	5
99	Structural Engineering Research Centre	4	1*	-	-	4
<b>Dehradun</b>						
100	Indian Institute of Petroleum	4	1*	4	1*	8
<b>Delhi</b>						
101	Amazon Development Center	-	-	3	1*	3
<b>Dharwad</b>						
102	Tata Motors	-	-	3	1*	3
<b>Goa</b>						
103	IFB Industries	5	1	3	1	8
<b>Greater Noida</b>						
104	ST Microelectronics(I) Pvt.Ltd.	9	1*	6	1*	15
<b>Gurgaon</b>						
105	Aurum Equity Partners	2	1*	3	1*	5
106	Bain Capability Center Pvt. Ltd	-	-	3	1*	3
107	Bharti Soft Bank	2	1*	-	-	2
108	Bundl Technologies Private Limited (Swiggy)	-	-	4	1*	4
109	GlaxoSmithKline	3	1*	-	-	3
110	Hike	4	1*	4	1*	8
111	KPMG	-	-	6	1*	6
112	Lama Capital Management	-	-	2	1*	2
113	LEXINNOVA	9	1*	3	1*	12
114	Mahle Filters India Ltd	2	1*	3	1*	5
115	Mediology Software Pvt. Ltd.	2	1*	-	-	2
116	Reckitt Benckiser	5	1*	5	1*	10
117	Sagacious Research	3	1*	-	-	3

Sr.No.	Stations	II Semester 14-15 (14.01.2015 - 20.06.2015)		I Semester 15-16 (04.07.2015 - 12.12.2015)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
118	Skoda Auto India Pvt. Ltd.			2	1*	2
119	Sprinklr	4	1*	-	-	4
120	SRF Ltd.	2	1*	3	1*	5
121	ZS Associates	4	1*	3	1*	7
<b>Hosur</b>						
122	Faiveley Transport Rail Technologies India Ltd (FTRTIL)	3	1*	4	1*	7
<b>Hyderabad</b>						
123	Adaequre	3	1*	3	1*	6
124	Amazon Development Center	25	1*	21	1*	46
125	Bharat Dynamics Ltd +	5	1	4	1*	9
126	Bundl Technologies Private Limited (Swiggy)	-	-	3	1*	3
127	CA Technologies	3	1*	6	1*	9
128	Centre for DNA Fingerprinting and Diagnostics	3	1*	-	-	3
129	Chitika	2	1*	-	-	2
130	Cognitive Scale	2	1*	-	-	2
131	Dupont Knowledge Center	-	-	2	1*	2
132	Fiorano Software Technologies Pvt. Ltd.	2	1*	-	-	2
133	IMI Mobile	2	1*	4	1*	6
134	Indian Institute of Chemical Technology	11	1*	6	1*	17
135	Inside View	3	1*	3	1*	6
136	International Advanced Research Centre for Powder Metallurgy and New Materials	2	1*	-	-	2
137	JDA Software Solutions	6	1*	6	1*	12
138	Jord International	2	1*	-	-	2
139	Moldtek India +	-	-	3	1*	3
140	Mordor Intelligence	-	-	12	1*	12
141	My smart price	4	1*	3	1*	7
142	Mylan Labs Ltd. (formerly Matrix Labs Ltd.)	6	1*	-	-	6
143	Nvidia Graphics	3	1*	-	-	3
144	Oracle India Pvt Ltd.	5	1*	4	1*	9
145	Polmon	2	1*	-	-	2
146	Polycom Technology (R&D) Centre Pvt. Ltd.	9	1*	-	-	9
147	Purpletalk	3	1*	-	-	3
148	Salesforce	3	1*	-	-	3
149	Silicon Image R&D Pvt Ltd	5	1*	4	1*	9
150	SM Silicon India Pvt Ltd	2	1*	-	-	2
151	Smartrak	7	1*	-	-	7
152	Steelwedge Software Inc.	-	-	2	1*	2
153	Stellar Software Technologies Pvt Ltd	-	-	2	1*	2
154	Worley Parsons India	2	1*	4	1*	6
<b>Jaipur</b>						
155	CEG Limited	4	1*	-	-	4
156	Stellarix Consultancy Services Pvt Ltd	3	1*	2	1*	5
<b>Jamshedpur</b>						
157	Tata Motors	8	1*	6	1*	14

Sr.No.	Stations	II Semester 14-15 (14.01.2015 - 20.06.2015)		I Semester 15-16 (04.07.2015 - 12.12.2015)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>Kolkata</b>						
158	Development Consultants Pvt. Ltd. (DCPL)	2	1*	-	-	2
159	Pantaloons Fashion & Retail Ltd	2	1*	-	-	2
160	Tega Industries	2	1*	2	1*	4
161	Texmaco Ltd. *	2	1*	-	-	2
<b>Kumarapatnam</b>						
162	Grasim Industries Ltd.	-	-	2	1*	2
<b>Lucknow</b>						
163	Tata Motors	-	-	2	1*	2
<b>Mumbai</b>						
164	Aditya Birla Corporate IT	2	1*	-	-	2
165	Aditya Birla Corporate World Class Manufacturing	3	1*	-	-	3
166	Aditya Birla Science & Technology Company Ltd.	5	1*	6	1*	11
167	Barclays	5	1*	-	-	5
168	Bundl Technologies Private Limited (Swiggy) *	-	-	4	1*	4
169	Carwale (Automotive Exchange Pvt. Ltd.)	4	1*	5	1*	9
170	Century Rayon *	2	1*	2	1*	4
171	Credit Suisse	20	1*	30	1*	50
172	DBOI (Deutsche Bank)	2	1*	8	1*	10
173	Development Consultants Pvt. Ltd. (DCPL)	4	1*	2	1*	6
174	Dorsch Consult (India) Pvt. Ltd.	-	-	2	1*	2
175	Dow Chemical International Pvt Ltd	2	1*	-	-	2
176	Exponentia data	2	1*	3	1*	5
177	Geometric Limited	2	1*	2	1*	4
178	Here Maps - A Nokia Company	6	1*	4	1*	10
179	Hourglass Research	2	1*	3	1*	5
180	Housing.com (Locon Solutions Private Limited)	-	-	5	1*	5
181	J.P. Morgan Chase	24	1*	36	1*	60
182	J.P. Morgan Services India Pvt. Ltd	7	1*	13	1*	20
183	KPMG	2	1*	9	1*	11
184	Man Infraconstruction Ltd	5	1*	-	-	5
185	Mayuresh Group	4	1*	-	-	4
186	Micro Labs Limited	2	1*	-	-	2
187	Morgan Stanley Advantage Services	3	1*	-	-	3
188	Morningstar	2	1*	4	1*	6
189	MSCI Barra Client Services	3	1*	-	-	3
190	MSCI Barra Data Management	2	1*	-	-	2
191	MSCI Barra Quantitative Equity Research	3	1*	4	1*	7
192	MSCI Index and Research	3	1*	-	-	3
193	Nomura Services India Pvt	-	-	2	1*	2
194	Tiny Owl Technology Pvt. Ltd.	-	-	3	1*	3
195	Oracle Financial Services Software Ltd. ( OFSS)	2	1*	-	-	2
196	Pantaloons Fashion & Retail Ltd	2	1*	-	-	2
197	VMS (Vakil Mehta Seth) Consultants Private Limited	2	1*	2	1*	4
198	Worley Parsons India	3	1*	6	1*	9

Sr.No.	Stations	II Semester 14-15 (14.01.2015 - 20.06.2015)		I Semester 15-16 (04.07.2015 - 12.12.2015)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>Nagda</b>						
199	Grasim Industries Ltd. +	2	1*	1	1*	3
<b>Nagpur</b>						
200	Global Logic +	2	1*	-	-	2
201	Skyline Consulting Engrs Pvt. Ltd.	-	-	2	1*	2
202	Techture Structures Pvt Ltd. +	5	1*	2	1*	7
<b>New Delhi</b>						
203	AnovIP	-	-	4	1*	4
204	Akosha	2	1*	-	-	2
205	Central Road Research Institute	4	1*	4	1*	8
206	Grey Orange Robotics Pvt. Ltd.	3	1*	10	1*	13
207	HILTI India Pvt. Ltd.	2	1*	2	1*	4
208	LEA Associates	4	1*	-	-	4
209	National Council of Applied Economic Research	3	1*	4	1*	7
210	National Institute of Science and Tech. Dev. Studies (NISTADS)	2	1*	2	1*	4
211	Pantaloons Fashion & Retail Ltd	2	1*	-	-	2
212	Value Edge India	9	1*	10	1*	19
<b>Noida</b>						
213	Alliance Infotech	3	1*	5	1*	8
214	ARM Embedded Technologies Private Limited	-	-	2	1*	2
215	Barclays	2	1*	-	-	2
216	CSR Ltd.	2	1*	1	1*	3
217	Cignex Datamatix Technology	-	-	2	1*	2
218	Global Logic	3	1*	-	-	3
219	Opera Solutions	2	1*	2	1*	4
220	Tolexo Online Pvt Ltd	3	1*	-	-	3
<b>Pilani</b>						
221	Central Electronics Engineering Research Institute +	5	1*	6	1*	11
<b>Pune</b>						
222	Avaya India	6	1*	15	1*	21
223	B.G.Shirke Construction Technology Pvt. Ltd.	2	1*	-	-	2
224	Bentley Systems India Pvt Ltd	3	1*	-	-	3
225	Bharat Forge Ltd +	2	1*	2	1*	4
226	Centre for Development of Advanced Computing	2	1*	-	-	2
227	Credit Suisse	31	1*	28	1*	59
228	Divgi Warner Pvt Ltd +	2	1*	2	1*	4
229	Eaton Technologies	1	1	2	1*	3
230	Halliburton Technology Center	2	1*	2	1*	4
231	IDeaS - SAS	3	1*	4	1*	7
232	Ishwar Parmar Group	2	1*	-	-	2
233	Mahle Behr India Engineering Services	2	1*	2	1*	4
234	Mahle Filters India Ltd	-	-	2	1*	2
235	Marvel India	1	1*	-	-	1
236	National Chemical Laboratory +	6	1*	5	1*	11
237	Nvidia Graphics	3	1*	5	1*	8

Sr.No.	Stations	II Semester 14-15 (14.01.2015 - 20.06.2015)		I Semester 15-16 (04.07.2015 - 12.12.2015)		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
238	Reflexis Systems India Pvt Ltd.	5	1*	6	1*	11
239	Sokrati Technologies Pvt. Ltd.	-	-	3	1*	3
240	Spicer India Ltd.	-	-	2	1*	2
241	Tata Autocomp Systems Ltd.	5	1*	5	1*	10
242	Tata Chemical Innovation Center	4	1*	-	-	4
243	Tata Motors	30	1	25	1*	55
244	Tata Technologies +	4	1*	5	1*	9
245	Tensilica	3	1*	3	1*	6
246	Thermax +	2	1*	3	1*	5
247	ZS Associates	2	1*	12	1*	14
<b>Roorkee</b>						
248	Central Building Research Institute	2	1*	2	1*	4
<b>Satara</b>						
249	Spicer India Ltd.	-	-	3	1*	3
<b>Surat</b>						
250	Ace Business and Market Research Group	3	1*	-	-	3
<b>Thailand</b>						
251	Aditya Birla Chemicals Ltd	2	1*	4	1*	6
<b>Trivandrum</b>						
252	Centre For Development Of Imaging Technology +	3	1*	3	1*	6
253	Klientas	1	1*	-	-	1
254	Leap Consulting	-	-	2	1*	2
255	Samson and Sons builders and developers	2	1*	-	-	2
<b>Valsad</b>						
256	Atul Ltd.	-	-	3	1*	3
<b>Total</b>		<b>1106</b>	<b>45</b>	<b>1075</b>	<b>49</b>	<b>2181</b>

+Stations hosting PS-I also

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

### PRACTICE SCHOOL GROWTH 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 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

**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
First Sem. 1999-2000	324	42	84
Second Sem. 1999-2000	335	42	91
First Sem. 2000-2001	347	43	85



Semesters	No. of students who attended PS-II	No. of faculty who supervised PS-II	No. of PS-II stations
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	860	44	179
First Sem 2015-2016	1072	49	178

**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
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

Semesters	No. of students who attended PS	No. of faculty who supervised PS	No. of PS stations where Higher Degree students were also sent
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	246	34	79
First Sem 2015-2016	3	2	2

+ 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 2015**

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
<b>AHMEDABAD</b>				
1	A.T.E. Enterprises Private Limited Research & Development	Rs.15000/- p.m.	No	No
2	Skyquest Technology Consulting Pvt. Ltd	No	No	No
<b>AURANGABAD</b>				
3	Skoda Auto India Pvt. Ltd.	Rs.8000/- p.m.	No	No
<b>BANGALORE</b>				
4	[24]7 iLabs	Rs.40000/- p.m.	Assistance Provided to arrange accommodation.	III AC Train Fare on one side. Free company bus.
5	Adobe Systems	Rs.30000/- p.m.	No	Reimbursement of Cheapest Mode of transportation.
6	Akira Consultancy Private Limited	Rs.20000/- p.m.	No	No
7	Altair Engineering India Pvt. Ltd.	Rs.15100/- p.m.	No	Company bus at cost
8	Amazon Development Center	Rs.30000/- p.m.	No	To & Fro Air Fare & Free Transport Free food coupons worth Rs.1250 p.m
9	Analog Devices	Rs.20000/- p.m.	No	III AC Train Fare To & Fro. Subsidized canteen facilities
10	Avaya India Private Limited	Rs.18000/-p.m.	No	Free Company Bus
11	ARM Embedded Technologies Private Limited	Rs.20000/- p.m.	No	Fully Subsidized lunch & snacks
12	A.T.E. Enterprises Private Limited, Research & Development	Rs.15000/- p.m.	No	No
13	Beckman Coulter (formerly ReaMetrix India Pvt. Ltd)	Rs.15000/- p.m.	No	Free Breakfast & Lunch. Free company bus
14	Blue Jeans Network India Pvt. Ltd.	Rs.50000/- p.m.	No	To & Fro air Fare & Free Transport. Free lunch.
15	Belong .co	Rs.18000/-p.m.	No	Free lunch
16	Bosch	Rs.15000/- p.m.	No	Free lunch
17	Broadcom India Pvt Ltd	Rs.24000/- p.m.	No	Company Bus at Cost. Subsidized canteen facilities.
18	Bundl Technologies Private Limited (Swiggy)	Rs.20000/- p.m.	No	No
19	Cadence Design Systems India Pvt Ltd.	Rs.20000/- p.m.	No	Company bus at cost.
20	Centre for Artificial Intelligence & Robotics	No	No	No
21	Cignex Datamatix Technology	Rs.15000/- p.m.	No	No
22	Cisco Systems (India) Pvt. Ltd.	Rs.45000/- p.m.	No	No
23	CSR	Rs.22000/- p.m.	No	Free breakfast &

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
				lunch
24	Cypress Semiconductors Tech. India Pvt. Ltd.	Rs.25000/- p.m.	No	No
25	DreamWorks Animation	Rs.35000/- p.m.	No	Air fare. Free breakfast. Free company bus.
26	EBay India Development Centre	Rs.45000/- p.m.	Yes	Free lunch. Free company bus.
27	EMC	Rs.25000/- p.m.	No	Subsidized food @ Rs.200 p.m Company bus at cost.
28	EnSci - A Unit of Weir Minerals India Pvt. Ltd.	Rs.10000/- p.m.	No	No
29	Ericsson Global India Pvt. Ltd.	Rs.20000/- p.m.	No	No
30	Ernst & Young L.L.P.	Rs.15200/- p.m.	No	Fully subsidized Lunch & snacks
31	Exotel Techcom Pvt. Ltd.	Rs.20000/- p.m.	No	No
32	Fiber Link +	Rs.20000/- p.m.	No	Free lunch.
33	Fiorano Software Technologies Pvt. Ltd.	Rs.20000/- p.m.	No	No
34	Flipkart Internet Services Pvt. Ltd +	Rs.25000/- p.m.	No	Free canteen facilities.
35	Garg Webtech Pvt. Ltd.+	Rs.7000/- p.m.	No	First Class Rail Fare
36	Genpact+	Rs.12000/- p.m.	No	No
37	Global Logic	Rs.15000/- p.m.	No	No
38	Goldman Sachs India Pvt. Ltd.	Rs.15500/- p.m.	No	Subsidized food. Company bus at cost.
39	Hindustan Unilever Research Centre	Rs.8000/- p.m.	No	Subsidized lunch & breakfast
40	HSBC	Rs.22500/- p.m.	No	No
41	IFB Automotive Pvt. Ltd.	Rs.15000/- p.m.	No	No
42	Infinera	Rs.30000/- p.m.	No	No
43	Informatica Business Solutions Pvt Ltd	Rs.30000/- p.m.	Yes	No
44	ING Vysya Bank	Rs.15000/- p.m.	No	No
45	InMobi	Rs.20000/- p.m.	No	No
46	Intel India Technology Pvt. Ltd.	Rs.22000/- p.m.	No	To & fro air fare.
47	J.P. Morgan Chase	Rs.15000/- p.m.	No	Subsidized breakfast, Lunch & dinner. Free company bus.
48	JDA Software Solutions	Rs.18000/- p.m.	No	Subsidized canteen facilities. Company bus at cost.
49	John F Welch Technology Center (GE)	Rs.20000/- p.m.	No	No
50	Khosla Labs	Rs.15000/- p.m.	Arranged by Institute	No
51	KPMG	Rs.15000/- p.m.	No	No
52	Lantiq India Pvt. Ltd.	Rs.20000/- p.m.	No	Free Food coupons worth Rs.1250 per month. Free company bus.
53	Media Iq Digital	Rs.20000/- p.m.	No	No
54	Mercedes Benz	Rs.12000/- p.m.	No	Subsidized lunch & Breakfast

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
				Free company bus.
55	Morgan Stanley Advantage Services	Rs.30000/- p.m.	No	No
56	Myntra.com	Rs.25000/- p.m.	One week accommodation	To and fro airfare
57	Mu Sigma Business Solutions	Rs.10000/- p.m.	No	No
58	National Aerospace Laboratories	Rs.8000/- p.m.	Accommodation provided for maximum six person only.	Subsidized canteen facilities
59	National Centre for Biological Sciences	Rs. 8000/- p.m.	No	No
60	National Entrepreneurship Network*	Rs.15000/- p.m.	No	Free company bus.
61	National Instruments Systems (India) Pvt. Ltd.	Rs.20000/- p.m.	No	Subsidized breakfast, lunch & dinner
62	NetApp	Rs.30000/- p.m.	No	Free lunch. Company bus.
63	NetSkope Software India Pvt. Ltd.	Rs.36000/- p.m.	No	No
64	NextGen PMS Pvt. Ltd	Rs.30000/- p.m.	No	No
65	Nutanix Technologies India Pvt. Ltd.	Rs.55000/- p.m.	No	Free breakfast, lunch & dinner.
66	Nvidia Graphics	Rs.25000/- p.m.	Company provided accommodation for initial 14 days	Airfare one way from respective location to Bangalore. Free shuttle facility available. Free lunch and Subsidized breakfast
67	Oracle India Pvt Ltd.	Rs.25000/- p.m.	No	Free lunch.
68	Pantaloons Fashion & Retail Ltd	Rs.10000/- p.m.	No	No
69	Practo Technologies Pvt. Ltd.	Rs.40000/- p.m.	No	No
70	Qubole	Rs.35000/- p.m.	No	No
71	Rovi Corporation	Rs.40000/- p.m.	Temporary accommodation provided in first Week	No
72	Sabre Holdings(Formerly Sabre Travels)	Rs.25000/- p.m.	No	No
73	SAP Labs	Rs.25000/- p.m.	No	Free lunch. First class rail fare. Free company bus.
74	Sattva Media & Consulting Pvt Ltd	Rs.15000/- p.m.	No	Subsidized canteen facilities.
75	Sellerworx Online Services Limited	Rs.15000/- p.m.	No	No
76	Shell Technology Center	Rs.20000/- p.m.	No	Free lunch.
77	Siemens technology and Services Pvt Ltd	Rs.20000/- p.m.	No	No
78	Symantec Software Solutions Pvt. Ltd.	Rs.40000/- p.m.	No	Subsidized canteen facilities.
79	Syniverse Technologies	Rs.18000/- p.m.	No	No
80	Tangoe India Softek Pvt Ltd	Rs.25000/- p.m.	No	No
81	TAS Analytic Services	Rs.15500/- p.m.	No	No
82	TESCO Hindustan Service Centre	Rs.25000/- p.m.	No	No
83	Texas Instruments (I) Pvt. Ltd.	Rs.25000/- p.m.	No	Food coupons worth Rs.735/-p.m.

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
				Air fare. Free company bus.
84	Tonbo Imaging Pvt Ltd.	Mechanical students: Rs.12000/- p.m. Other students: Rs.28000/- p.m.	No	No
85	VMware Software India Pvt. Ltd.	Rs.30000/- p.m.	No	First Class Rail Fare
86	Walmart Global Technology Services	Rs.30000/- p.m.	No	Free lunch & subsidized breakfast Free company bus
87	Zinnov Management Consulting Pvt. Ltd.	Rs.18000/- p.m.	No	No
88	Zoomcar India Pvt. Ltd.	Rs.25000/- p.m.	No	No
89	Zynga Game Network India Pvt. Ltd.	Rs.35000/- p.m.	No	Free breakfast, lunch & dinner
<b>CHANDIGARH</b>				
90	Parexel	Rs.15000/- p.m.	No	No
<b>CHENNAI</b>				
91	Amazon Development Center	Rs.30000/- p.m.	No	Free food coupons worth Rs.1250 p.m Airfare
92	Central Electronics Engineering Research Institute*	Rs.8000/- p.m. (Scholarship)	No	No
93	Central Leather Research Institute (CLRI)*	Rs.8000/- p.m. (Scholarship)	No	No
94	Ernst & Young Pvt Ltd.	Rs.15200/- p.m.	No	Fully subsidised lunch & snacks
95	Healthcare Technology Innovation Centre (HITC)	Rs.10000/- p.m.	No	No
96	Paypal	Rs.50000/- p.m.	No	To & Fro II Class AC Train Fare.
97	Ramco Systems	Rs.25000/- p.m.	No	No
98	Stayzilla - Inasra Technologies	Rs.35000/- p.m.	No	No
99	Structural Engineering Research Centre	Rs.8000/- p.m. (Scholarship)	No	No
<b>DEHRADUN</b>				
100	Indian Institute of Petroleum	Rs.8000/- p.m. (Scholarship)	Yes	No
<b>DELHI</b>				
101	Amazon Development Center	Rs.30000/- p.m.	No	To & Fro air fare & free transport. Free food, coupons worth Rs.1250 p.m.
<b>DHARWAD</b>				
102	Tata Motors	Rs.18000/- p.m.	No	Free canteen facility Free company bus
<b>GOA</b>				
103	IFB Industries	Rs.15000/- p.m.	Arranged by Institute.	II Class rail fare
<b>GREATER NOIDA</b>				
104	ST Microelectronics(I) Pvt.Ltd.	Rs.18000/- p.m.	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
<b>GURGAON</b>				
105	Aurum Equity Partners	Rs.15000/- p.m.	No	No
106	Bain Capability Center Pvt. Ltd	Rs.25000/- p.m.	Accommodation provided for one week	Subsidized lunch & breakfast If late drop facility & food reimbursement
107	Bharti Soft Bank	Rs.25000/- p.m.	No	No
108	Bundl Technologies Private Limited (Swiggy)	Rs.20000/- p.m.	No	Air fare for field trips
109	GlaxoSmithKline	Rs.20000/- p.m.	No	No
110	Hike	Rs.30000/- p.m.	No	Free lunch
111	KPMG	Rs.15000/- p.m.	No	Subsidized lunch. Company bus at cost
112	Lama Capital Management	Rs.5000/- p.m.+ additional bonus based on performance	No	No
113	LEXINNOVA	Rs.20040/- p.m.	Yes	Free canteen facility Airfare
114	Mahle Filters India Ltd	Rs.8000/- p.m.	No	No
115	Mediology Software Pvt. Ltd.	Rs.20000/- p.m.	No	No
116	Reckitt Benckiser	Rs.30000/- p.m.	No	Free company bus.
117	Sagacious Research	Rs.12000/- p.m.	No	No
118	Skoda Auto India Pvt. Ltd.	Rs.14000/- p.m.	No	No
119	Sprinklr	Rs.50000/- p.m.	No	No
120	SRF Ltd.	Rs.12000/- p.m.	No	Company bus
121	ZS Associates	Rs.25000/- p.m.	No	Free lunch Free company bus
<b>HOSUR</b>				
122	Faiveley Transport Rail Technologies India Ltd (FTRTIL)	Rs.10000/- p.m.	Yes	Free breakfast & Lunch. Free company bus.
<b>HYDERABAD</b>				
123	Adaequire	Rs.15000/- p.m.	No	No
124	Amazon Development Center	Rs.30000/- p.m.	No	Free company bus
125	BHARAT DYNAMICS LTD <sup>+</sup>	Rs.5000/- p.m.	No	Subsidized lunch
126	Bundl Technologies Private Limited (Swiggy)	Rs.20000/- p.m.	No	No
127	CA Technologies	Rs.25000/- p.m.	Yes	Free lunch
128	Centre for DNA Fingerprinting and Diagnostics	No	Yes	Company Shuttle is available from the hostel to the organization.
129	Chitika	Rs.40000/- p.m.	No	No
130	Cognitive Scale	Rs.30000/- p.m.	No	No
131	Dupont Knowledge Center	Rs.20000/- p.m.	No	Free company bus.
132	Fiorano Software Technologies Pvt. Ltd.	Rs.20000/- p.m.	No	No
133	IMI Mobile	Rs.18000/- p.m.	No	No
134	Indian Institute of Chemical Technology	Rs.8000/- p.m.	Hostel @ICT available at subsidized rates.	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
135	Inside View	Rs.35000/- p.m.	No	No
136	International Advanced Research Centre for Powder Metallurgy and New Materials	No	No	No
137	JDA Software Solutions	Rs.18000/- p.m.	No	Subsidized canteen facilities.
138	Jord International	Rs.12000/- p.m.	No	Reimbursement on cheapest mode of transportation.
139	Moldtek India*	Rs.8000/- p.m.	No	No
140	Mordor Intelligence	Rs.14000/- p.m.	No	No
141	My smart price	Rs.20000/- p.m.	No	Free lunch.
142	Mylan Labs Ltd. (formerly Matrix Labs Ltd.)	Rs.6000/- p.m.	No	No
143	Nvidia Graphics	Rs.25000/- p.m.	No	No
144	Oracle India Pvt Ltd.	Rs.25000/- p.m.	No	Subsidized canteen facilities.
145	Polmon	Rs.7000/- p.m.	No	Official local conveyance Paid.
146	Polycom Technology (R&D) Centre Pvt. Ltd.	Rs.15000/- p.m.	No	No
147	Purpletalk	Rs.15000/- p.m.	No	No
148	Salesforce	Rs.25000/- p.m.	No	No
149	Silicon Image R&D Pvt Ltd	Rs.20000/- p.m.	No	No
150	SM Silicon India Pvt Ltd	Rs.15000/- p.m.	Yes	No
151	Smartrak	Rs.20000/- p.m.	No	No
152	Steelwedge Software Inc.	Rs.20000/- p.m.	Twin sharing accommodation Provided.	III AC train fare to & fro. Free lunch Free company bus.
153	Stellar Software Technologies Pvt Ltd	Rs.10000/- p.m.	No	No
154	Worley Parsons India	Rs.16000/- p.m.	No	Subsidized lunch Free company bus
<b>JAIPUR</b>				
155	CEG Limited	Rs.10000/- p.m.	No	No
156	Stellarix Consultancy Services Pvt Ltd	Rs.10000/- p.m.	No	No
<b>JAMSHEDPUR</b>				
157	Tata Motors	Rs.18000/- p.m.	Yes	Free lunch
<b>KOLKATA</b>				
158	Development Consultants Pvt. Ltd. (DCPL)	Rs.9000/- p.m.	No	No
159	Pantaloons Fashion &Retail Ltd	Rs.10000/- p.m.	No	No
160	Tega Industries	Rs.15000/- p.m.	Yes	Subsidized canteen facilities
161	Texmaco Ltd.*	Rs.3000/- p.m.	No	No
<b>KUMARAPATNAM</b>				
162	Grasim Industries Ltd.	Rs.5000/- p.m.	Yes	Subsidized food
<b>LUCKNOW</b>				
163	Tata Motors	Rs.18000/- p.m.	No	Free lunch
<b>MUMBAI</b>				
164	Aditya Birla Corporate IT	Rs.15000/- p.m.	No	No
165	Aditya Birla Corporate World Class Manufacturing	Rs.8500/- p.m.	Yes	Official local conveyance paid Subsidized canteen



S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other facilities
166	Aditya Birla Science & Technology Company Ltd.	Rs.8500/- p.m.	Yes	No
167	Barclays	Rs.25000/- p.m.	No	No
168	Bundl Technologies Private Limited (Swiggy)+	Rs.20000/- p.m.	No	Air fare
169	Carwale (Automotive Exchange Pvt. Ltd.)	Rs.15000/- p.m.	No	Subsidized lunch & breakfast
170	Century Rayon+	Rs.6000/- p.m.	Accommodation provided only for boys	Subsidized breakfast, lunch & dinner
171	Credit Suisse	Rs.25000/- p.m.	No	No
172	DBOI (Deutsche Bank)	Rs.15000/- p.m.	No	Subsidized canteen facilities.
173	Development Consultants Pvt. Ltd. (DCPL)	Rs.8000/- p.m.	Accommodation only for Boys @ Rs.200 per day	Free lunch
174	Dorsch Consult (India) Pvt. Ltd.	Rs.12000/- p.m.	Provided by the organization	No
175	Dow Chemical International Pvt Ltd	Rs.15000/- p.m.	No	No
176	Exponentia data	Rs.25000/- p.m.	No	No
177	Geometric Limited	Rs.12000/- p.m.	No	Fully subsidized lunch & snacks.
178	Here Maps - A Nokia Company	Rs.20000/- p.m.	No	Subsidized canteen facilities. Free company bus.
179	Hourglass Research	Rs.15000/- p.m.	No	Fully subsidized lunch & snacks
180	Housing.com (Locon Solutions Private Limited)	Rs.45000/- p.m.	No	Lunch
181	J.P. Morgan Chase	Rs.15000/- p.m.	No	Subsidized canteen facilities.
182	J.P. Morgan Services India Pvt. Ltd	Rs.30000/- p.m.	No	Subsidized canteen Facilities.
183	KPMG	Rs.15000/- p.m.	No	No
184	Man Infraconstruction Ltd	Rs.5000/- p.m.	No	No
	Mayuresh Group	Rs.10000/- p.m.	Yes	No
185	Micro Labs Limited	Rs.9500/- p.m.	No	No
186	Morgan Stanley Advantage Services	Rs.30000/- p.m.	No	No
187	Morningstar	Rs.30000/- p.m.	No	Company bus at cost
188	MSCI Bara Client Services	Rs.25000/- p.m.	No	Air fare
189	MSCI Barra, Data Management	Rs.25000/- p.m.	No	Air fare
190	MSCI Barra, Quantitative Equity Research	Rs.40000/- p.m.	No	No
191	MSCI Index and Research	Rs.30000/- p.m.	No	No
192	Nomura Services India Pvt	Rs.35000/- p.m.	No	Subsidized lunch
193	Oracle Financial Services Software Ltd. ( OFSS)	Rs.25000/- p.m.	Free transport	No
194	Pantaloons Fashion & Retail Ltd	Rs.10000/- p.m.	No	No
195	Tiny Owl Technology Pvt. Ltd.	Rs.50000/- p.m.	No	No
196	VMS (Vakil Mehta Seth) Consultants Private Limited	Rs.8000/- p.m.	No	No
197	Worley Parsons India	Rs.19000/- p.m.	No	Subsidized food

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
				Free company bus
<b>NAGDA</b>				
198	Grasim Industries Ltd.*	Rs.5000/- p.m.	Yes	Subsidized breakfast, lunch & dinner. Official local conveyance paid
<b>NAGPUR</b>				
199	Global Logic*	Rs.15000/- p.m.	No	No
200	Skyline Consulting Engrs Pvt. Ltd.	Rs.5000/- p.m.	No	No
201	Techture Structures Pvt Ltd.*	Rs.5000/- p.m.	No	No
<b>NEW DELHI</b>				
202	Akosha	Rs.20000/- p.m.	No	Conveyance allowance for field trips
203	anovIP	Rs.10000/- p.m.	No	No
204	Central Road Research Institute	Rs.8000/- p.m.	No	Subsidized canteen facilities
205	Grey Orange Robotics Pvt. Ltd.	A3, A4,A8 : Rs.25000/- p.m. A7,C6: Rs.35000/- p.m.	No	Subsidized canteen facilities.
206	HILTI India Pvt. Ltd.	Rs.15000/- p.m.	No	TA for field trips
207	LEA Associates	Rs.8000/- p.m.	No	No
208	National Council of Applied Economic Research	Rs.6500/- p.m.	Free boarding.	Subsidized canteen facilities. Free lodging.
209	National Institute of Science and Tech. Dev. Studies (NISTADS)	Rs.8000/- p.m.	No	Subsidized Lunch
210	Pantaloons Fashion &Retail Ltd	Rs.10000/- p.m.	No	No
211	Value Edge India	Rs.15000/- p.m.	No	No
<b>NOIDA</b>				
212	Alliance Infotech	Rs.15000/- p.m.	No	Subsidized Lunch
213	ARM Embedded Technologies Private Limited	No	No	No
214	Barclays	Rs.25000/- p.m.	No	No
215	CSR Ltd.	Rs.22000/- p.m.	No	Lunch provided. Company bus at cost.
216	Cignex Datamatix Technology	Rs.20000/- p.m.	No	No
217	Global Logic	Rs.15000/- p.m.	No	No
218	Opera Solutions	Rs.30000/- p.m.	No	No
219	ST Microelectronics(I) Pvt.Ltd.	Rs.18000/- p.m.	No	Free dinner
220	Tolexo Online Pvt Ltd	Rs.22000/- p.m.	No	No
<b>PILANI</b>				
221	Central Electronics Engineering Research Institute*	Rs.8000/- p.m.	No	Subsidized canteen facilities
<b>PUNE</b>				
222	Avaya India Private Limited	Rs.18000/- p.m.	No	First class rail fare Free company bus
223	B.G.Shirke Construction Technology Pvt. Ltd.	Rs.9000/- p.m.	No	No
224	Bentley Systems India Pvt Ltd	Rs.18000/- p.m.	No	No

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
225	Bharat Forge Ltd <sup>+</sup>	Rs.5000/- p.m.	No	Free breakfast & lunch
226	Centre for Development of Advanced Computing	Rs.10000/- p.m.	No	No
227	Credit Suisse	Rs.25000/- p.m.	No	No
228	Divgi Warner Pvt Ltd <sup>+</sup>	Rs.10000/- p.m.	No	Reimbursement on Conveyance on cheapest mode
229	Eaton Technologies	Rs.10500/- p.m.	No	Subsidized lunch & breakfast. Company bus at cost.
230	Halliburton Technology Center	Rs.12000/- p.m.	No	No
231	IdeaS – SAS	CS student with 8.5+ CGPA: Rs.50000/- p.m.(taxable) Others: Rs.25000/- p.m.	No	Free lunch. Company bus at cost.
232	Ishwar Parmar Group	Rs.6000/- p.m.	No	No
233	Mahle Behr India Engineering Services	Rs.8000/- p.m.	No	No
234	Mahle Filters India Ltd	Rs.8000/- p.m.	No	Subsidized canteen facilities.
235	Marvel India	Rs.25000/- p.m.	No	No
236	National Chemical Laboratory <sup>+</sup>	Rs.8000/- p.m.	No	No
237	Nvidia Graphics	Rs.25000/- p.m.	No	Free breakfast, lunch & dinner. Free company bus.
238	Reflexis Systems India Pvt Ltd.	Rs.20000/- p.m.	No	Subsidized canteen facilities. Second class rail Fare. Company bus at cost.
239	Sokrati Technologies Pvt. Ltd.	Business analyst: Rs.15000/- p.m. Others: Rs.20000/- p.m.	No	No
240	Spicer India Ltd.	Rs.8000/- p.m.	No	Fully subsidized lunch & snacks. Free company bus
241	Tata Autocomp Systems Ltd.	Rs.12000/- p.m.	No	Subsidized lunch & breakfast. Free company bus.
242	Tata Chemical Innovation Center	Rs.10000/- p.m.	Yes	Company bus
243	Tata Motors	Rs.12000/- p.m.	No	Fully subsidized lunch & snacks. Free company bus
244	Tata Technologies <sup>+</sup>	Rs.12000/- p.m.	No	Subsidized canteen facilities. Company bus at cost.
245	Tensilica	Rs.18000/- p.m.	No	Company bus at cost.
246	Thermax India <sup>+</sup>	Rs.5000/- p.m.	No	Subsidized breakfast, lunch & dinner
247	ZS Associates	Rs.25000/- p.m.	No	Free breakfast, lunch & dinner

S.No.	PS-II Station	Out of Pocket Allowances (Rs. Per Month)	Accommodation provided	Other
<b>ROORKEE</b>				
248	Central Building Research Institute	Rs.8000/- p.m.	Yes	Subsidized breakfast, lunch & dinner
<b>SATARA</b>				
249	Spicer India Ltd.	Rs.8000/- p.m.	No	Fully subsidized lunch & snacks. Free company bus.
<b>SURAT</b>				
250	Ace Business and Market Research Group	Rs.10000/- p.m.	No	III AC train fare to & fro
<b>THAILAND</b>				
251	Aditya Birla Chemicals(Thailand)Ltd-Sulphites	5,000(Thai Bhat)	Yes	Free air fare Fully subsidized lunch & snacks
<b>TRIVENDRUM</b>				
252	Centre For Development Of Imaging Technology*	Rs.5000/- p.m.	Free company bus	Subsidized lunch
253	Klientas	Rs.10000/- p.m.	No	No
254	Leap Consulting	Rs.10000/- p.m.	No	No
255	Samson and Sons builders and developers	Rs.5000/- p.m.	No	No
<b>VALSAD</b>				
256	Atul Ltd.	Rs.8000/- p.m.	No	No

+ Stations hosting PS-I also

**LIST OF PROJECT ASSIGNMENTS FOR SECOND SEMESTER 2014-2015**

<b>1.</b>	<b>SKYQUEST TECHNOLOGY CONSULTING PVT. LTD, AHMEDABAD</b>
	1. LANDSCAPING AND SCOUTING OF TECHNOLOGIES
	2. TECHNOLOGY LANDSCAPING OF WOUND CARE, TINNITUS CARE, PGPR SEED COATING TECHNOLOGY, HOSPITAL INFECTIONS & HOME CARE TECHNOLOGIES
<b>2.</b>	<b>ALTAIR ENGINEERING INDIA PVT. LTD, BANGALORE</b>
	3. AUTOMATION OF THERMAL LOAD CREATION ALONG A WELD LINE
	4. DEVELOPING VERIFICATION DUMP READING TOOL FOR ENSIGHT AND LSDYNA POSTPROCESSOR RESULT FILES AND ALSO DEVELOPING OF ACTIVEX CONTROL THROUGH A CAB FILE
	5. AUTOMATION IN HYPERCRASH USING XML
	6. BUILD VERIFICATION TESTING FOR THE NVH DIRECTOR
	7. VARIOUS TEST RIG DEVELOPMENTS
<b>3.</b>	<b>AMAZON DEVELOPMENT CENTER, BANGALORE</b>
	8. PAYMENT AUTOMATION FOR JUNGLEE WEBSITE ASSOCIATES
	9. RESPONSIVE DESIGN FOR AMAZON STUDENT AND CAMPUS
	10. ENABLING SELF SERVICE OF PRODUCT AGGREGATOR CONFIGURATIONS USING TENANCY CONFIGURATION SYSTEMS
	11. EMLATE DESIGNER, ASIN UPDATER AND ASIN RETRIEVER
	12. SELLER REWARDS
	13. DEVELOPMENT OF LOGAUDIT PORTAL
	14. ANALYTICS PLATFORM DEVELOPMENT
	15. DEVELOPMENT OF DASHBOARD FOR QUALITY METRICS AND HEALTHCHECK MONITORING OF ENVIRONMENT
	16. STUDY AND OPTIMIZATION OF AMAZON WIRELESS CARRIER FEED INGESTION AND PUBLISHING PROCESS
	17. DOUBLE;FRAMEWORK DEVELOPMENT FOR UI FUNCTIONAL TESTING OF AMAZON CONSUMER WEBSITE DETAIL PAGE &DOUBLE; AND &DOUBLE;DEVELOPMENT OF DASHBOARD FOR MONITORING AND ANALYSIS OF AMAZON WEBSITE DETAIL PAGE DEPLOYMENT CYCLES & DOUBLE
	18. DEVELOPING A FRAMEWORK FOR REPLAYING PRODUCTION AMAZON USER AND DEVELOPING A WEB BASED APPLICATION FOR MONITORING HEALTH OF DEVELOPMENT
	19. IMPROVEMENTS TO ABUSE INVESTIGATION TOOLS
	20. EFFICIENCY ENHANCEMENT OF COMPONENT REVERSAL ORDERING WORKFLOW SERVICES
	21. DASHBOARD DEVELOPMENT FOR JUNGLEE PREFLIGHTS
	22. DEVELOPMENT OF CONFIGURATION SET USER INTERFACE ON ECOMMERCE PLATFORM MANAGEMENT CONSOLE
	23. CREATING ACCESSORIES PAGE FOR EU MARKETS AND EXTENSION OF ALOHAASINHEALTHCHECKER FOR EU MARKETS
	24. DEVELOPMENT OF ANDROID INTERPRETER APPLICATION FOR AMAZON INSTANT VIDEO SERVICE
	25. TOP CONTRIBUTORS: TOP PUBLISHERIDS ,UA IPS CONTRIBUTING TO ROBOTIC TRAFFIC.
	26. DEVELOPMENT OF DASHBOARD FOR JUNGLEE QA MOBILE TEAM
<b>4.</b>	<b>ANALOG DEVICES, BANGALORE</b>
	27. TO REDUCE THE POWER CONSUMPTION IN MEMS SENSOR CHIP
	28. UNDERSTANDING THE CONCEPTS OF SCATTER LOADING, FLASH AND SRAM BASED CONFIGURATION PROGRAMS AND IMPLEMENTING THE SAME IN KEIL FOR CM40X MICROCONTROLLER AND DEVELOPMENT OF FAT32 APIS TO INTERFACE SD/MMC CARD WITH BF707 MICROCONTROLLER
	29. VERIFICATION OF HIGH PERFORMANCE DSP PROCESSORS
	30. FUNCTIONAL VERIFICATION OF RTL
	31. TESTING AND VALIDATION OF A NEW MICROCONTROLLER, AND DEVELOPMENT OF AN API TO INTERFACE SD CARD THROUGH SPI PROTOCOL.

<b>5.</b>	<b>ARM EMBEDDED TECHNOLOGIES PRIVATE LIMITED, BANGALORE</b>
	32. THE DESIGN AND IMPLEMENTATION OF ARCHITECTURAL CHECKER
	33. TOP LEVEL VALIDATION OF ADVANCED ARM PROCESSORS
	34. MEMORY MARGINING AND AUTOMATION
	35. VERIFICATION AND FUNCTIONAL COVERAGE ANALYSIS OF CACHE COHERENT TRAFFIC INJECTOR
	36. CONFIGURATION & SIGN OFF FOR CORTEX A7 MPCORE MICROPROCESSOR ON 16 NM TECHNOLOGY & POWER PLANNING FOR 28NM CORTEX-A53 HPM/HPC MICROPROCESSOR
	37. READ/WRITE SENSITIVE DEVICE MODULE
	38. GENERATION OF ASSEMBLY TESTCASES FROM EXCEL BASED ARCHITECTURE REGISTER TABLE
	39. NETLIST EXTRACTION AND FIGURE OF MERIT ANALYSIS
	40. BENCHMARKING THE PERFORMANCE OF A NEW CPU
<b>6.</b>	<b>BECKMAN COULTER (FORMERLY REAMETRIX INDIA P LTD), BANGALORE</b>
	41. DESIGN AND DEVELOPMENT OF IMMUNE MONITORING PRODUCTS- DURACLONE TRI T-STAT CD3/CD4/CD45 REAGENT, DURACOUNT C AND DURACOUNT B BEADS
	42. DEVELOPMENT OF STORAGE BUFFER SHOWING COMPATIBILITY WITH DURACLONE REAGENTS AND STUDY OF A 6 COLOR IMMUNOFLUORESCENCE STAIN PANEL IN ASSOCIATION WITH COUNTING BEADS ON FLOW CYTOMETERS
<b>7.</b>	<b>BLUE JEANS NETWORK INDIA PVT. LTD, BANGALORE</b>
	43. BLUEJEANS BROWSER EXTENSIONS DEVELOPMENT AND TEST AUTOMATION OF BLUEJEANS WEB APP
	44. DEVELOPMENT OF A FRAMEWORK TO MONITOR API LATENCIES AND INDIGO AUTOMATION
	45. ENHANCING WEB ACCESSIBILITY FOR PEOPLE WITH WIDE RANGE OF DISABILITIES & DEVELOPMENT ENVIRONMENT SETUP AUTOMATION USING DOCKER
	46. MOBILE TEST AUTOMATION AND REST-API TEST AUTOMATION OF BLUEJEANS APPLICATION
	47. TEST AUTOMATION OF BLUE JEANS NETWORK WEB USER INTERFACE. & DEVELOPMENT OF PRODUCTIVE TOOLS FOR QUICK MONITORING OF THE PROGRESS OF TEAMS.
	48. INCREASING EFFICIENCY OF TRANSCODER BY IMPLEMENTATION OF CHUNKING OF RECORDINGS AND TESTING FEW FEATURES OF BLUE JEANS
	49. WEB AUTOMATION FRAMEWORK UPGRADATION AND PERFORMANCE TESTING OF PRIMETIME
<b>8.</b>	<b>BOSCH, BANGALORE</b>
	50. 3D CFD SIMULATIONS USING OPENFOAM
	51. LOCALIZATION & COST REDUCTION PROJECTS
<b>9.</b>	<b>BROADCOM INDIA PVT LTD, BANGALORE</b>
	52. OPTIMIZATION OF AUDIO CODEC ALGORITHMS
	53. STRUCTURAL TESTING OF A LAYER 2 ETHERNET SWITCH
	54. A REPORT ON DESIGN VALIDATION OF SPDIF RECEIVER AND MULTI-CHANNEL AUDIO INTERFACE RECEIVER MODULES OF AUDIO BLOCK
	55. VERIFICATION OF 3D GRAPHIC IP
	56. GATE LEVEL SIMULATIONS
	57. POST SILICON VALIDATION OF ARM BASED SOC
	58. GATE LEVEL SIMULATIONS
	59. DESIGN AND DEVELOPMENT OF AUDIO CODEC
	60. DESIGN VALIDATION OF SPDIF RECEIVER AND MULTI-CHANNEL AUDIO INTERFACE RECEIVER MODULES OF AUDIO BLOCK
	61. DESIGN FOR TESTABILITY FOR VLSI DESIGNS
	62. VERIFICATION OF A LAYER-2 ETHERNET SWITCH
	63. DESIGN AND DEVELOPMENT OF AUDIO CODEC
<b>10.</b>	<b>CENTRE FOR ARTIFICIAL INTELLIGENCE &amp; ROBOTICS, BANGALORE</b>
	64. FORCE CONTROL OF LEGGED ROBOT
	65. FORCE CONTROL OF 4 LEGGED WALKING ROBOT
	66. DESIGN OF END EFFECTOR FOR A SOIL SCOOPING ROBOT
	67. FORMULATION AND SIMULATION OF HETEROGENEOUS MULTI-ROBOT EXPLORATION STRATEGIES
	68. SENTIMENT ANALYSIS
	69. HUMAN ACTIVITY ANALYSIS USING CONVOLUTIONAL NEURAL NETWORKS
	70. DESIGN OF AUTOMATIC SCOOPING SYSTEM FOR SOIL SAMPLE COLLECTION IN AREAS INACCESSIBLE TO HUMANS.

<b>11.</b>	<b>CSR, BANGALORE</b>
	71. EMBEDDED APPLICATION DEVELOPMENT
	72. PBAP CLIENT 1.2
	73. AUTOMATION TESTING
	74. ASIC SECURITY DESIGN
	75. RATE ADAPTATION & CHANNEL ASSESSMENT TESTING
<b>12.</b>	<b>DREAMWORKS ANIMATION, BANGALORE</b>
	76. STUDY AND DEVELOPMENT OF FEATURES IN STUDIO TOOLS
	77. TECHNICAL DIRECTION IN DREAMWORKS ANIMATION PRODUCTION
<b>13.</b>	<b>EBAY INDIA DEVELOPMENT CENTRE, BANGALORE</b>
	78. STORES PERSONALIZATION
	79. GAMIFICATION OF MERCHANT ONBOARDING FLOW
	80. WEB INTELLIGENCE TO GATHER BUSINESS INSIGHTS
	81. BUSINESS WEB INSIGHTS -SERVICE
	82. BROWSER PLUGIN FOR RECORDING FLOW AND CONVERT TO MAUI/BREEZE
	83. DEVELOPMENT AND TESTING OF WEBFLOWS
	84. SELF-HOSTED VIDEO PLATFORM
	85. SIFM (SELL IT FOR ME) GUIDANCE TOOL
	86. USING MACHINE LEARNING FOR DERIVING SELLER INSIGHTS AT EBAY
	87. FINANCIAL PLANNING & ANALYSIS FOR DESIGNATED MARKET AREAS AND STUBHUB!
	88. MERCHANT DEVELOPMENT AND SELLER ANALYSIS
<b>14.</b>	<b>EMC, BANGALORE</b>
	89. NETWORK CONFIGURATION MANAGER MIGRATION FROM JBOSS TO SPRING
	90. REST CLIENT DEVELOPMENT FOR APPSYNC DATA REPLICATION MANAGEMENT SOFTWARE.
	91. FAILOVER MANAGER OPERATIONS FOR EMC SMARTS PRODUCTS
	92. GENERIC RULE EDITOR FOR CREATING RULE TEMPLATES FOR STORAGE COMPLIANCE
	93. HARDWARE INVENTORY TOOL AND AUTOMATION OF E-FT (EMBEDDED FAST TOOLS) & E-NAS (EMBEDDED NETWORK ATTACHED STORAGE) TEST CASES USING TESTCOMPLETE FRAMEWORK
	94. STORAGE MANAGEMENT INITIATIVE SPECIFICATIONS AND EMC VIPR SRM'S COLLECTING AND ALERTING MODULES
<b>15.</b>	<b>ENSCI - A UNIT OF WEIR MINERALS INDIA PVT. LTD, BANGALORE</b>
	95. ANALYSIS OF HINDERED SETTLING CLASSIFIER TO OPTIMIZE SEPARATION EFFICIENCY AND
	96. KNIFE GATE VALVE TESTING
	97. A COMPARISON OF DIFFERENT PATTERNS OF PERFORATED FLAME ARRESTER ELEMENT THROUGH EXPERIMENT AND SIMULATION
	98. PROJECT 1- RUBBER SLEEVE COMPRESSION ANALYSIS
	99. PROJECT 2- VACUUM VALVE ACTUATION
	100. ANALYSIS OF HINDERED SETTLING CLASSIFIER TO OPTIMIZE SEPARATION EFFICIENCY AND
	101. PONTOON DESIGN FOR DEWATERING PUMPS
<b>16.</b>	<b>ERICSSON GLOBAL INDIA PVT. LTD, BANGALORE</b>
	102. ASSESSMENT OF SOFTWARE STACKS FOR SCALABILITY TESTS
	103. IMPROVEMENTS IN OPENDAYLIGHT INFRASTRUCTURE IN CONTEXT OF CLUSTERING & DATASTORE
	104. BUILDING AN SDN BASED NETWORK ANALYTICS TOOL
	105. ASSESSMENT OF SOFTWARE STACKS FOR SCALABILITY TESTS
	106. ASSESSMENT OF OPEN SOURCE SOFT STACKS
	107. DEVELOPING A TROUBLESHOOTING APPLICATION FOR A LIVE SDN NETWORK
	108. NETWORK ANALYTICS AND VISUALIZATION TOOL
	109. SDN APPLICATION ECOSYSTEM
	110. IMPROVEMENTS IN OPENDAYLIGHT INFRASTRUCTURE IN CONTEXT OF CLUSTERING & DATASTORE
	111. DEVELOPING A TROUBLESHOOTING APPLICATION FOR A LIVE SDN NETWORK.
	112. DEVELOPMENT OF A NETWORK DEBUGGING AND VISUALIZATION TOOL
	113. ASSESSMENT OF SOFTWARE STACKS FOR SCALABILITY TESTS
	114. OSI MODEL L2-L3 SOLUTIONS FOR THE DATA CENTRE
	115. SOFTWARE DEFINED NETWORKING ANALYTICS TOOL

	116. ASSESSMENT OF SOFTWARE STACKS FOR SCALABILITY TESTS
	117. IMPROVEMENTS IN OPENDAYLIGHT INFRASTRUCTURE IN CONTEXT OF CLUSTERING & DATASTORE
	118. DOS ATTACK PREVENTION IN SDN
	119. DEVELOPMENT OF SDN APPLICATION ECOSYSTEM
<b>17.</b>	<b>FIBER LINK, BANGALORE</b>
	120. ENHANCEMENTS FOR REGISTRATION PORTAL AND PORTAL MANAGER
	121. ENHANCEMENT OF MAAS360 ADMIN APP , WEBSITE DESIGNING FOR MAAS360 ANDROID APP STORE AND APP BRANDING AUTOMATION
	122. BUG FIXING (IOS & PORTAL) AND SOFTWARE TESTING (ANDROID)
	123. TRUSTEER THREAT MANAGEMENT INTEGRATION FOR ANDROID
	124. ANDROID FOR WORK
	125. DESIGN OF NOTES CONTAINER FOR THE PERSONAL INFORMATION MANAGER COMPONENT OF MAAS360
	126. DEVELOPMENT OF ENTERPRISE GATEWAY FOR MAAS360
<b>18.</b>	<b>FIORANO SOFTWARE TECHNOLOGIES PVT. LTD, BANGALORE</b>
	127. FIORANO SOA: TESTING & ENHANCEMENT
	128. CREATING AND TESTING OF FIORANO ADAPTERS
	129. COMPREHENSIVE TESTING AND DEVELOPMENT OF WEB CONSOLE FOR FMQ
<b>19.</b>	<b>FLIPKART INTERNET SERVICES PVT. LTD, BANGALORE</b>
	130. AUTOMATION OF MULTI-DEVICE PREVIEWS OF E-MAILERS USING LITMUS
	131. SUPPORT FOR LOG ATTACHMENTS AND ERROR MESSAGES IN AZKABAN (OPENSOURCE JOB SCHEDULER) ALERTS
	132. DEVELOPMENT OF SERVICES&APOS; HEALTH MONITORING SYSTEM WITH OUTLIER DETECTION.
	133. VALIDATION FRAMEWORK FOR INVOICES
	134. INGESTION OF ACCRUALS INTO BIGFOOT
	135. SERVICE TO RUN AND LOG CRONS
	136. AUTOMATION OF RATE CARD UPDATE
	137. BIGFOOT DATA INGESTION
	138. BUILDING A WORKFLOW TO ENABLE SELLER DATA VERIFICATION
	139. CONFIGURATION MANAGER FOR LOAD BALANCER
	140. CREATION OF A TRENDING DASHBOARD/REPORT FOR REVENUE ANALYSIS AND CONVERSION DROP FOR TRAFFIC QUALITY ANALYSIS
	141. CUSTOMER PLATFORM ANALYTICS
	142. CUSTOMER RETURN AT FLIPKART
	143. DATA GOVERNANCE AT FLIPKART - DESIGN AND DEVELOPMENT
	144. DESIGN AND IMPLEMENTATION OF DISTRIBUTED AND SCALABLE SCHEDULER. EXTRACTION AND VISUALIZATION OF EMAILS OPEN, CLICKS STATISTICAL DATA
	145. DESIGNING OF COST DASHBOARD FOR LARGE APPLIANCES AND SERVICE BRAND ANALYSIS.
	146. DESIGNING OF CONSOLIDATED DASHBOARDS FOR PROCUREMENT DIVISION
	147. DEVELOPING FEATURES FOR FLIPKART APP ON WINDOWS PHONE 8.1
	148. DEVELOPING OFFERS FOR MOBILE APP
	149. DEVELOPMENT OF INTERNET AND SMS CHAT APPLICATION FOR FLIPKART USERS
	150. DEVELOPMENT OF QLIK-VIEW DASHBOARD FOR CSAT AT VARIOUS LEVELS.
	151. DEVELOPMENT OF RULES SERVICE FOR PHOENIX SYSTEM
	152. DEVELOPMENT OF USER INTERFACES FOR SELLER RESOURCE MANAGEMENT
	153. DOWNLOADING AND PARSING STATEMENTS IN MT940 FORMAT AND HISTORICAL FUND POSITIONING
	154. FLIPKART WEBSITE LOCALISATION
	155. IMPLEMENTATION OF ENHANCEMENTS TO WINDOWS EBOOKS APP
	156. IMPLEMENTATION OF ENHANCEMENTS TO WINDOWS EBOOKS APPLICATION
	157. INTEGRATING CLOUD TELEPHONY SERVICES WITH CRM
	158. INTRODUCING HANDHELDS IN THE WAREHOUSE AND SELLER RETURN REJECT FLOW
	159. MIS-SHIPMENT ALERT INDICATOR AND BIGFOOT DATA INGESTION
	160. MOBILE APPLICATION DEVELOPMENT FOR DELIVERY HUBS
	161. OPTIMIZING FLIPKART SERVICE DESK SEARCH
	162. PAYMENT GATEWAY DOWNTIME PREDICTION



	163. PREDICT USER'S PERSONA FOR HYPER TARGETED MARKETING
	164. PROMISE ADHERENCE DASHBOARD FOR CUSTOMER SUPPORT
	165. RETAIL ANALYTICS FOR BOOKS AND GENERAL MERCHANDIZE
	166. REVERSE IMAGE SEARCH
	167. SMART NOIFIER - NOTIFICATION BROADCASTER ON INTERACTIVE GATEWAY
	168. USER PERSONA CLASSIFICATION FOR HYPERTARGETED MARKETING USING MACHINE LEARNING
	169. WEIGHING INTELLIGENCE
<b>20.</b>	<b>GENPACT, BANGALORE</b>
	170. GENPACT DET DEVELOPMENT
	171. COMPETITIVE ANALYSIS OF INDUSTRIAL SOLUTIONS, A BUSINESS SEGMENT OF GE ENERGY MANAGEMENT
	172. CHURN ANALYSIS,INDUSTRIAL MAPPING
<b>21.</b>	<b>GLOBAL LOGIC, BANGALORE</b>
	173. DESIGN AND IMPLEMENTATION OF ONLINE SHOP DISCOVERY AND SHOP MANAGEMENT SYSTEM (IPSUM)
	174. DESIGN OF ONLINE SHOP DISCOVERY AND MANAGEMENT APPLICATION (IPSUM)
<b>22.</b>	<b>GOLDMAN SACHS INDIA PVT. LTD, BANGALORE</b>
	175. 10B10 TRADE CONFIRMATIONS
	176. A STUDY OF EXOTIC DERIVATIVES AND THEIR GLOBAL MARKET.
	177. ANALYSIS OF COLLATERAL POSITIONS COMING IN AND OUT OF GS FROM POSITION REPORTING PERSPECTIVE
	178. AUTOMATION AND REVAMP OF INTERNAL REPORTS
	179. CLEARING OPERATIONS INCOME AND FINANCE
	180. CLIENT ASSET PROTECTION AS PER CFTC REGULATIONS, FCA BACK REPORTING & HONG KONG STAMP DUTY
	181. CLIENT CONTROL MONITOR
	182. CONFIRMATION DRAFTING AUTOMATION
	183. CREDIT RATING REVIEW AND DIRTY FLAG REPORT
	184. DOCUMENTATION OF INTERNAL SYSTEM RECONCILIATION REPORT
	185. ENTERPRISE SYSTEMS MANAGEMENT AND DTC SETTLEMENTS AND RECONCILIATIONS
	186. EQUITY DERIVATIVE RECONCILIATION
	187. INITIAL MARGIN CALCULATION
	188. LOANS INNOVATION FOR EFFICIENCY
	189. PRIVATE WEALTH MANAGEMENT : CLIENT DATA CONTROL MONITOR
	190. PROCEDURE DOCUMENTATION AND EMAIL MANAGER AUTOMATION
	191. PROJECT 1:TESTING AUTOMATION, PROJECT 2: CONFIRM ANALYTICS
	192. TEAM ROOM UTILIZATION AND PREDICTIVE ATTENDANCE MODEL
<b>23.</b>	<b>HINDUSTAN UNILEVER RESEARCH CENTRE, BANGALORE</b>
	193. EFFECT OF DOBS (ANIONIC SURFACTANT) ON SWEEP FLOCCULATION BY ALUMINIUM SALTS
	194. EFFECT OF FOAM MICROSTRUCTURE ON FOAM DRAINAGE AND FLOW BEHAVIOR IN FOAMS
<b>24.</b>	<b>INFINERA, BANGALORE</b>
	195. LINT AND CONSTRAINT FLOW CREATION
	196. SERIAL FLASH CONTROLLER DESIGN FOR FPGA
	197. XIS WEB CLIENT
	198. FUNCTIONAL VERIFICATION OF TRIF BLOCK
	199. FEATURE AUTOMATION TESTING
	200. SGMII MODEL DEVELOPMENT
<b>25.</b>	<b>INFORMATICA BUSINESS SOLUTIONS PVT LTD, BANGALORE</b>
	201. BUSINESS GLOSSARY DESKTOP APPLICATION
	202. PLUGINS FOR INFORMATICA VIBE DATA STREAM
	203. DATA TRANSFORMATION WEB APPLICATION DEVELOPMENT FOR EXCEL
	204. MAHOUT IMPLEMENTATION FOR ML IN RULEPOINT
	205. INFORMATICA CONNECTOR TOOLKIT FEATURE EXTENSION
	206. TO ENHANCE UPGRADE-TEST FRAMEWORK TO SUPPORT DESTRUCTIVE CHANGES
	207. PROFILING AND LOGGING USING ASPECTJ,

	208. INTEGRATION OF PMD WITH PERFORCE SWARM,
	209. GRAPH DATABASES (NEO4J,ORIENTDB) PERFORMANCE TESTING.
	210. POWEREXCHANGE FOR LDAP FOR INFORMATICA'S DI RELEASE 10.0.0
	211. SEGMENT ANALYZER TOOL AND CLOUD MDM PERFORMANCE PROFILER
	212. TEAM BASED DEVELOPMENT FOR INFORMATICA ADMINISTRATOR
<b>26.</b>	<b>INTEL INDIA TECHNOLOGY PVT. LTD, BANGALORE</b>
	213. A DEVELOPMENT OF TRACE AND DEBUG TOOL
	214. A TECHNIQUE TO CALCULATE G-FORCES IN VEHICLES FOR TELEMATICS APPLICATIONS
	215. APPLICATION OF STEREO CAMERAS
	216. AUTOMATION OF REGRESSION TESTING ON 3D GFX PIPE ARCHITECTURE
	217. DEVELOPMENT OF AN APP FOR AUTOMATING THE CODE COVERAGE ANALYSIS, DOXYGEN USAGE AND CUSTOMIZING THE DOCUMENTATION GENERATED USING DOXYGEN AND UNIT TESTING FRAMEWORK
	218. DEVELOPMENT OF NON INVASIVE AND CUFF LESS BLOOD PRESSURE MEASUREMENT TECHNIQUES.
	219. DEVELOPMENT OF TRACE AND DEBUG TOOL
	220. DEVELOPMENT OF WRISTBAND FOR CONTINUOUS MEASUREMENT OF HEART RATE USING PZT SENSOR
	221. ECG EDGE COMPRESSION
	222. EXECUTABLE MEMORY AS NVM
	223. EXTRACTING PERFORMANCE STATISTICS FROM ARCHITECTURAL MODELS FOR USE OF RTL SIMULATIONS
	224. FORMAL VERIFICATION AND REGRESSION AUTOMATION
	225. GENERIC SOC FOR WEARABLE AND IOT DEVICES
	226. IMAGE BASED OBJECT RECOGNITION
	227. IMPLEMENTATION OF L1 NORM OPTIMIZATION TO CREATE COMPRESSIVE SENSING DESIGN SPACE
	228. INTEGRATION OF CAMERA IP TO SOC USING COLLAGE & WORKING ON DISPLAY BLOCK OF SOC
	229. INTELLIGENT VALIDATION FRAMEWORK
	230. OBJECTIVE AND SUBJECTIVE ANALYSIS OF AUDIO DROPS IN MULTIMEDIA SYSTEMS
	231. PERFORMANCE ANALYSIS OF GRAPHICS TURBO ALGORITHMS ON INTEL PLATFORMS WITH ANDROID
	232. PHYSICAL DESIGN AUTOMATION
	233. POWER CHARACTERIZATION AND HARDWARE ACCELERATION OF ECG EDGE ALGORITHMS
	234. PREDICTION OF RADIATED EMISSIONS FROM A TABLET
	235. PRE-SILICON VALIDATION OF PCU UNIT USING FORMAL BASED JASPERGOLD APP
	236. RUNTIME SECURITY EXTENSIONS FOR AMBA FABRIC
	237. TESTBENCH QUALIFICATION UTILITY TO IMPROVE THE VERIFICATION ENVIRONMENT
	238. UI DEVELOPMENT FOR EMC EXERCISER
<b>27.</b>	<b>J.P. MORGAN CHASE, BANGALORE</b>
	239. ANALYSIS AND RECONCILIATION OF HEDGE FUND TRADES IN JP MORGAN CHASE
	240. EXTRACTION OF EXECUTION RATES FOR AUTOMATION
	241. FUNCTIONING OF RECONCILIATION OPERATION UNIT (MIS) AND DEVELOPMENT AND TESTING OF XCEPTOR TOOL
	242. PROCESSING AND RECONCILIATION OF DERIVATIVES AND PRICING AUTOMATION OF DERIVATIVES
	243. RECONCILIATION IN A BANK AND VALUE ADDITION TO REDUCE MANUAL INPUT
	244. REPORT ON TRADE SETTLEMENTS
	245. ROOT CAUSE ANALYSIS FOR KICKBACK OF PAYMENTS FOR NOSTRO RESOLUTIONS
	246. SYDNEY MANAGED FUNDS
	247. TECHNOLOGY FIXES AND AUTOMATION
<b>28.</b>	<b>JDA SOFTWARE SOLUTIONS, BANGALORE</b>
	248. AUTOMATION OF DATABASE REFRESH
	249. AUTOMATION OF DB BACKUP FOR INTACTIX PROJECTS ON CONTROL-M & AUTOMATED EMAILS ALERTS
	250. FOR PRODUCT DUPLICATES IN DATABASE
	251. BUILDING A SAMPLE BOOKSTORE APPLICATION IN ABPP STUDIO AND FIXING OP ENGINE ISSUES
	252. DEVELOPMENT OF AN APPLICATION CHECKS TOOL USING .NET & C#
	253. DISTRIBUTION CENTRIC SUPPLY CHAIN INTEGRATION
	254. EMPLOYEE SHIFT & ONCALL ALLOWANCE SYSTEM
	255. QUALITY ASSESSMENT IN DUTY MANAGEMENT SOFTWARE

	256. QUALITY ASSESSMENT IN JDA SEQUENCING
	257. REPORT AUTOMATION IN SPACE PLANNING USING VBA
	258. SCRIPTING FOR AUTOMATION ON VARIOUS TASKS
	259. SHIFT4 PAYMENT GATEWAY INTEGRATION WITH MMHF PRODUCT OF JDA & CONTINUOUS INTEGRATION OF POS+
	260. STUDY OF JDA CLOUD SHARED SERVICES AUTOMATION IN PRODUCT SUPPORT ENVIRONMENT
	261. THE DEVELOPMENT AND DESIGN OF AN INTERNAL CUSTOMER MANAGEMENT SYSTEM WEBSITE FOR JDA SOFTWARE PVT. LTD.
	262. WEB APPLICATIONS FOR ABPP STUDIO AND RECOMMENDER SYSTEMS
<b>29.</b>	<b>KPMG, BANGALORE</b>
	263. SOFTWARE ASSET MANAGEMENT
<b>30.</b>	<b>LANTIQ INDIA PVT. LTD, BANGALORE</b>
	264. UVM AND FORMAL VERIFICATION
	265. VARIOUS METHODOLOGIES USED TO VERIFY SEMICONDUCTOR CHIPS
	266. VERIFICATION AND PATTERN RESIMULATION OF A COMMUNICATION CHIP W-5
<b>31.</b>	<b>MEDIA IQ DIGITAL, BANGALORE</b>
	267. DEVELOPMENT OF DPI-MANAGER SERVICE USING ANGULARJS
	268. DIGITAL ADVERTISING & MARKETING- STRATEGIES & CAMPAIGN ANALYSIS (CONTEXTUAL ANALYSIS)
	269. DIGITAL ADVERTISING AND MARKETING – STRATEGIES & CAMPAIGN ANALYSIS (REACH ANALYSIS)
	270. OPTIMISING DISPLAY ADVERTISEMENT BY SOCIAL MEDIA ANALYSIS
	271. RE-TARGETING STRATEGY IN DIGITAL ADVERTISING
<b>32.</b>	<b>MERCEDES BENZ, BANGALORE</b>
	272. ESTABLISHING ERP METHOD FOR FLOOR RESONANCE
	273. DEVELOPMENT OF TOOLS FOR AUTOMATING FLOW AND QUALITY CHECK PROCESS
	274. Q10 CHILD SAFETY SIMULATION IN REAR IMPACTS
	275. FUEL CELL VEHICLES & ENGINE MOUNTS FATIGUE ANALYSIS PROCESS AUTOMATION
	276. INFLUENCE OF MESH QUALITY ON KINEMATICS & RESPONSE OF UPPER EXTREMITIES IN A PEDESTRIAN IMPACT USING THUMS-D HUMAN BODY MODEL
<b>33.</b>	<b>MU SIGMA BUSINESS SOLUTIONS, BANGALORE</b>
	277. ASSET CONSUMPTION ACTIVITIES IN INNOVATION AND DEVELOPMENT DEPARTMENT
	278. ASSET MAINTENANCE - INNOVATION AND DEVELOPMENT
	279. COMMERCIALIZATION ACTIVITIES IN IRD DIVISION
	280. DEVELOPMENT OF A WEB BASED ANALYTICS TOOL
	281. MACHINE LEARNING AND ITS APPLICATIONS IN TEXT MINING
	282. POC&APOS;S ON GRAPH DATABASES AND INTERPRETING THE CONSTANT TERM IN LINEAR REGRESSION
	283. PRODUCT ENHANCEMENT - DATA PREPARATION AND SEGMENTATION
	284. SEGMENTATION ENHANCEMENTS IN DECISION SCIENCES WORKBENCH
	285. UNDERSTANDING STATISTICAL TECHNIQUES USED IN ANALYTICS INDUSTRY AND EDA- UNIVARIATE AND BIVARIATE ANALYSIS
<b>34.</b>	<b>NATIONAL AEROSPACE LABORATORIES, BANGALORE</b>
	286. DESIGN AND DEVELOPMENT OF MULTILAYER THERMAL BARRIER COATINGS ARCHITECTURE.
	287. DEVELOPMENT OF TITANIUM-ALUMINIUM-CARBIDE NANOSTRUCTURED HARD COATINGS
	288. ELECTROLESS DEPOSITION OF NI-W-P COATING ON CARBON FIBERS USING DIFFERENT PRE-TREATMENT METHODS
	289. PREPARATION AND CHARACTERIZATION OF GRAPHENE AND TITANIUM DOPED CARBON THIN FILMS
	290. STUDY OF TOOL WEAR IN THE MICRO-DRILLING OF TITANIUM SUPER ALLOYS USING TUNGSTEN CARBIDE AND HIGH SPEED COBALT MICRO-DRILLS
<b>35.</b>	<b>NATIONAL CENTRE FOR BIOLOGICAL SCIENCES, BANGALORE</b>
	291. DOUBLE;BIOINFORMATICS IN MICROARRAY ANALYSIS AND METABOLIC NETWORK RECONSTRUCTION AND DEVELOPMENT OF A PCR BASED ASSAY FOR MOLECULAR DIAGNOSTICS
	292. IDENTIFYING THE MECHANISM ENABLING A ONE-WING FLAP IN DIPTERANS
	293. CLONING FMR1 AND ITS DOMAINS AND AGO2 GENES AND ITS PROTEIN EXPRESSION. VISUALIZATION OF AGO2 AND FMRP CO-LOCALIZATION IN CORTICAL NEURONS.
<b>36.</b>	<b>NATIONAL ENTREPRENEURSHIP NETWORK, BANGALORE</b>
	294. PROGRAM MANAGING, DATABASE COMPILATION & CONTENT DEVELOPMENT

	295. SUCCESS STORIES DEVELOPMENT PROCESS AND NEN STUDENT ENGAGEMENT PROGRAM
	296. MARKETING IN SOCIAL MEDIA AND CONTENT MANAGEMENT
	297. MENTOR PLATFORM AND EXPERT NETWORK
<b>37.</b>	<b>NATIONAL INSTRUMENTS SYSTEMS (INDIA) PVT. LTD, BANGALORE</b>
	298. ADJACENT CHANNEL POWER MEASUREMENTS ON FPGA.
	299. RFMX: TOOLS AND INFRASTRUCTURE.
	300. AUTOMOTIVE RADARS
	301. DIGITAL PREDISTORTION OF A POWER AMPLIFIER
<b>38.</b>	<b>NETAPP, BANGALORE</b>
	302. EXTERNAL CACHE FOR STORAGE APPLIANCES IN CLOUD
	303. PARABLAZE
	304. HARDWARE ACCELERATION OF DEDUPLICATION USING NVIDIA GPU
	305. SPAM SUPPRESSION IN LOG VIEWER
	306. NETAPP SNAPCREATOR FRAMEWORK
	307. DATA DRIVEN RULE EXTRACTION
	308. MACHINE LEARNING ON BURST DUPLICATE ADVISOR
<b>39.</b>	<b>NETSKOPE SOFTWARE INDIA PVT. LTD, BANGALORE</b>
	309. SERVER SIDE ACTIVITIES
	310. RESEARCH AND VISIBILITY COVERAGE OF CLOUD APPLICATIONS
<b>40.</b>	<b>NVIDIA GRAPHICS, BANGALORE</b>
	311. GRAPHIC CONCURRENCIES AND GPU STRESS ON ANDROID
	312. QUALIFICATION OF VERIFICATION WITH FUNCTIONAL COVERAGE MODELS FOR AN ARM BASED SOC BACKBONE
	313. BRINGUP AUTOMATION USING ATE UTILITIES
	314. VERIFICATION OF TIMERS IN TEGRA SOC
	315. VERIFICATION OF ARCHITECTURAL REQUIREMENTS FOR SELF MODIFYING CODE
	316. PHYSICAL DESIGN METHODOLOGY & TIMING CONSTRAINT ANALYSIS
	317. ENHANCEMENT OF IN-HOUSE EDA FLOWS FOR INSERTION AND VALIDATION OF DFT IN GPU & TEGRA SOCS
	318. TEGRA3 BOARD SUPPORT PACKAGE
	319. GRAPHWALKER TOOL TO GENERATE STIMULUS FOR COHERENCY VERIFICATION
	320. APPLICATION INSPIRED DIRECTED PERFORMANCE TEST GENERATION FOR GRAPHICS PLATFORMS
	321. FORMAL VERIFICATION OF OBS BUS IN TEGRA SOC
	322. AUDIO PRE-PROCESSING ALGORITHMS FOR IN-VEHICLE INFOTAINMENT
	323. ADVANCED ON-CHIP VARIATION FOR TIMING ENCLOSURE OF SRAM BASED MEMORY DESIGN
	324. SEQUENTIAL FAULT SIMULATION OF CUSTOM CELLS
	325. RTL VERIFICATION OF PCIE
	326. GPU FULL CHIP TESTBENCH IMPROVEMENTS
	327. QSPI BOOT OF TEGRA
	328. DEVELOPMENT AND VERIFICATION OF C-MODELS OF SoC UNITS
	329. IMPLEMENTING AND VALIDATING NEW PROCESSOR EXTENSIONS IN AN ARM INSTRUCTION SET SIMULATOR
	330. REST WEBSERVICES DEVELOPMENT AND TESTING FOR CHIP PERFORMANCE REPORTING AND TRIAGING TOOL
	331. ANDROID AUDIO ROUTING
	332. IMPLEMENTING AND VALIDATING NEW PROCESSOR EXTENSIONS IN AN ARM INSTRUCTION SET SI ARM INSTRUCTION SET SIMULATOR
	333. DESIGN AND IMPLEMENTATION OF USB AUDIO PLAYER USING GSTREAMER FRAMEWORK AND RENDERING OF H.264 YOUTUBE VIDEOS ON FIREFOX (HTML5) USING NVIDIA'S HARDWARE ACCELERATED PLUGINS
	334. UNIT LEVEL VERIFICATION OF GRAPHICS PIPELINE
	335. FUNCTIONAL VERIFICATION OF PERIPHERAL COMPONENT INTERCONNECT-EXPRESS(PCIE) TRANSACTION LAYER
	336. POWER SUITE:: NETLIST POWER ESTIMATION TOOL & MTBF ANALYSIS
	337. TIMING AND NETLIST CLOSURE FOR TEGRA SOCIP
	338. ENHANCING MEMORY SUBSYSTEM DESIGN INFRASTRUCTURE

	339. SYNTHESIS AND NETLISTING CHECKS OF MEMORY SUBSYSTEM
	340. NATIVE LOW POWER BASED POWER AWARE VERIFICATION FLOW (FOR LARGE SCALE DESIGNS)
	341. VERIFICATION OF USB 3.0
	342. SOC VERIF- DFD FEATURES IN NEXT GENERATION NVIDIA CPUS
	343. EDGE ADAPTIVE IMAGE SCALING IN VIDEO POST-PROCESSING ENGINE
	344. FUNCTIONAL COVERAGE AND VERIFICATION OF MEMORY CONTROLLER INTERFACE
<b>41.</b>	<b>ORACLE INDIA PVT LTD, BANGALORE</b>
	345. MAINTAINING AND DEVELOPING THE PRE-MERGE TOOL
<b>42.</b>	<b>PRACTO TECHNOLOGIES PVT. LTD, BANGALORE</b>
	346. PRACTO INTERNATIONAL EXPANSION RESEARCH, PATIENT HEALTH INFORMATION HANDLING PRACTICES AUDIT AND PRACTO SEARCH – DIAGNOSTICS MASTER DATA MANAGEMENT
	347. INCENTIVE MODELLING, COMPETITOR ANALYSIS, SERVICE-LEVEL AGREEMENT (SLA) AND MANAGEMENT INFORMATION SYSTEM (MIS) REPORT
	348. TO INCREASE TARGET RATE OF PRACTO PRODUCTS BY COMPETITOR ANALYSIS, DOCTORS PERSONAS AND MODULE ANALYSIS
	349. SALES DATA ANALYSIS AND KEYWORD ANALYSIS FOR SEARCH ENGINE OPTIMIZATION (SEO).
<b>43.</b>	<b>SABRE HOLDINGS(FORMELY SABRE TRAVELS) , BANGALORE</b>
	350. MOBILE AND WEB AUTOMATION TESTING AND MANUAL PRODUCT TESTING
	351. ACTIVATIONS DASHBOARD
	352. SABRE DYNAMIC AVAILABILITY AND SABRE CONNECT
	353. DEVELOPMENT OF QA TEST AUTOMATION FRAMEWORK
	354. AIR EXTRAS IMPLEMENTATION IN GETTHERE APPLICATION
	355. EDIFACT EVALUATOR
	356. TEST AUTOMATION AND DEVELOPMENT FOR CODESHARE MANAGER
	357. CODESHARE MANAGER MODULE DEVELOPMENT AND TESTING
	358. TEST AUTOMATION OF WEB APPS ON MOBILE & DESKTOP
	359. MIGRATION OF FRAMEWORK, ENHANCEMENT OF UI, TEST AUTOMATION, IMPLEMENTATION OF SUBSCRIPTION PROMOTIONS
	360. AIR EXTRAS IMPLEMENTATION IN GETTHERE APPLICATION
	361. APOS ALLIANCE REVENUE MANAGEMENT
	362. SMARTGWT-BASED WEBAPP DEVELOPMENT WITH FOCUS ON MAP COMPONENT & CSV-TO-GRID COMPONENT
	363. SOAPUI AUTOMATION TESTING FRAMEWORK DEVELOPMENT
	364. FLIGHT AVAILABILITY UTILITY TOOL DEVELOPMENT
	365. DEVELOPMENT OF IUR PARSER, OFFLINE TOOL AND AUTOMATION OF MANUAL TEST CASES USING QTP.
	366. IMPROVEMENT OF SUPERBOT FRAMEWORK
	367. POC TO INTEGRATE STARCITE SERVICES
<b>44.</b>	<b>SAP LABS, BANGALORE</b>
	368. AUTOMATION FRAMEWORK FOR THE SAP BUSINESSOBJECTS MOBILE IOS APPLICATION
	369. ENABLING CLUSTERING FOR BI LAUNCHPAD TO PROVIDE FAILOVER AND SCALABILITY
<b>45.</b>	<b>SHELL TECHNOLOGY CENTER, BANGALORE</b>
	370. IMPACT OF OPERATIONAL AND CHEMICAL MODIFICATIONS ON POLYETHER POLYOL PROPERTIES
	371. TREATMENT OF OIL FIELD PRODUCED WATER USING CERAMIC MEMBRANE
<b>46.</b>	<b>SYNIVERSE TECHNOLOGIES, BANGALORE</b>
	372. AUTOMATION OF DISCOUNT TARIFFS, ONLINE QUIZ AND SURVEY PORTAL AND QUALITY ASSURANCE TARIFF CHECK SCRIPTS
	373. AUTOMATION OF SMOKE TESTS/WEB TEST USING SELENIUM
	374. SHAREPOINT TEAM SITE
	375. AUTOMATED TICKET ALERTING SYSTEM WITH DESKTOP APPLICATION USING JAVA
	376. AUTOMATION OF EXECUTIVE BROADCAST
	377. APPLICATION TO PEER REPORTING
	378. AUTOMATION OF EXECUTIVE BROADCASTS
	379. AUTOMATION OF DRE DEPLOYMENT
	380. RELIABLE TRANSFER OF FILES FOR A CRON JOB 3. LOAD BALANCE FOR GTP PACKETS
	381. AUTOMATION OF TESTING FRAMEWORK

	382. AUTOMATION OF DRE DEPLOYMENT; RELIABLE FILE TRANSFER
<b>47.</b>	<b>TANGOE INDIA SOFTEK PVT LTD, BANGALORE</b>
	383. MATRIX SOFTWARE DEVELOPMENT
<b>48.</b>	<b>TAS ANALYTIC SERVICES, BANGALORE</b>
	384. CENTRALIZED ORDER REGULATION FOR TIME INC. MAGAZINES
	385. IN-MARKET ANALYTICS
	386. TIME INC RETAIL - ADVANCED ANALYTICS RESEARCH
	387. CENTRALIZED ORDER REGULATION
<b>49.</b>	<b>TESCO HINDUSTAN SERVICE CENTRE, BANGALORE</b>
	388. REPORT RATIONALIZATION AND PROCESS RE-ENGINEERING FOR TESCO&APOS;S DOTCOM TEAMS
	389. PERFORMANCE OF BLINKBOX VS. COMPETITORS
	390. SEARCH ENGINE MARKETING AND OPTIMIZATION
	391. ELECTRIC PROOF OF DELIVERY
	392. ANALYSIS OF KPI&APOS;S IN ORDER TO PROVIDE SEARCH ENGINE MARKETING (SEM) INSIGHTS
	393. PYTHON BASED DATA FEEDS USING SCRAPERS
	394. BUSINESS ANALYSIS OF THE GROCERY HOME SHOPPING ARM OF TESCO PLC
	395. NEW RANGE PROPOSITION, SAME DAY DELIVERY, HUB STORE ANALYSIS
	396. DEVICE INFLUENCED METRIC ANALYSIS FOR WINE BY THE CASE BUSINESS
	397. COMPETITOR ANALYSIS
	398. OPTIMIZATION, REPORTING & PERFORMANCE OF NON - DIRECT ACCOUNTS
	399. REFRIGERATOR CAMPAIGN, CLOTHING ABANDONED BASKET EMAIL, GROCERY SLOTS EMAIL CAMAFIGN
<b>50.</b>	<b>TEXAS INSTRUMENTS (I) PVT. LTD , BANGALORE</b>
	400. AUTOMATION OF E-FUSE VALIDATION
	401. ENABLING ROBOTIC OPERATING SYSTEM ON TDA2X (VAYU)
	402. BEHAVIORAL MODELING OF PLL ON VERILOG
	403. EXPERIMENTS FOR TI-NI ANALOG BUNDLE
<b>51.</b>	<b>TONBO IMAGING PVT LTD, BANGALORE</b>
	404. HAND HELD THERMAL IMAGER USING DM365 BOARD
	405. ROLLING SHUTTER CORRECTION USING IMU AND TERRAIN SIMULATOR
	406. THERMAL IMAGE PROCESSING ON FPGA
	407. CAMERA CALIBRATION AND TERRAIN SIMULATOR
<b>52.</b>	<b>WALMART GLOBAL TECHNOLOGY SERVICES, BANGALORE</b>
	408. SEQUENCING OF ORDER ITEMS FOR PICKING
	409. BIG DATA ANALYTICS
	410. SALES PATTERN ON HAND CORRECTION
<b>53.</b>	<b>ZOOMCAR INDIA PVT. LTD, BANGALORE</b>
	411. THIRD PARTY API INTEGRATIONS AND EMAIL AUTOMATION
	412. CLICK CHECKOUT AND INTEGRATION OF PAYMENT GATEWAY
<b>54.</b>	<b>AMAZON DEVELOPMENT CENTER, CHENNAI</b>
	413. AUTOCODE GENERATION OF C++ AND JAVA LIBRARY FROM AMAZON SERVICE DEFINITION LANGUAGE
	414. EINK COVER IMAGE COMPRESSION
	415. DEVELOPMENT OF GRAPHICS RENDERING AND STRING OPERATION TEST APP FOR EMBEDDED JAVA VM, OTA DASHBOARD DEVELOPMENT
	416. SIMPLIFY MAKING CONFIGURATION CHANGES
	417. GRAPHICS EXTRACTION FROM PDF
	418. DIGITAL OPERATIONS WORKFLOW
	419. ADDING FEATURES TO AUTHORING TOOLS
	420. AUTHORING TOOL FOR PUBLISHERS
	421. MANAGING VENDOR DATA THROUGH A SELF-SERVICE UI AND ABILITY TO VIEW AND EDIT BUSINESS RULES THROUGH A UI
	422. SECURED FILE SHARING APPLICATION FOR KINDLE FIRE DEVICES
	423. PERFORMANT AND EXTENSIBLE VALIDATION FRAMEWORK FOR KINDLE DOCUMENTS.
	424. Writing A Script Parser To Create Overlay Windows

	425. RECOGNIZING SPECIAL GESTURES ON TOUCH SCREEN DEVICES.
	426. REMOTE DEVICE MANAGEMENT
	427. LOGGING INCORPORATION FOR CONSUMER METRICS ANALYSIS & API BUILDING IN KINDLE E-INK DEVICES
	428. ANDROID DIAGNOSTICS VIA CROWD SOURCING
<b>55.</b>	<b>HEALTHCARE TECHNOLOGY INNOVATION CENTRE (HITC) , CHENNAI</b>
	429. IMPLEMENTATION OF SPO2 MEASUREMENT IN A WEARABLE BIO-PARAMETER MONITOR
	430. PORTING OF GLIMPSE TO THE QT FRAMEWORK AND FEATURE ENHANCEMENTS OF THE EYE-PAC PLATFORM
<b>56.</b>	<b>PAYPAL, CHENNAI</b>
	431. EXTRACTION OF TEXT FROM IMAGES OF WEBPAGES
	432. COMPASS RAS AND FULLY AUTOMATED UNIT TESTING
	433. PXP CODE ENGINE AND OAP APPLICATIONS
	434. MONEY MANAGEMENT
	435. ANOMALY DETECTION IN DATASETS WITHOUT DOMAIN KNOWLEDGE
	436. GENERATION OF HTML CODE FROM IMAGES OF WEBPAGES
<b>57.</b>	<b>RAMCO SYSTEMS, CHENNAI</b>
	437. SCREEN DESIGN (DEFECT FIXING) & COLLABORATION
	438. RWV DESIGNING AND GRAPH DATABASE
	439. HUMAN CAPITAL MANAGEMENT FEATURES: GOAL MANAGEMENT, SCENARIO PLAYER & PERFORMANCE MANAGEMENT SYSTEM
	440. SCRIPT GENERATOR TOOL: IMPLEMENTATION ON THE ENTERPRISE ARCHITECT ADD-IN FRAMEWORK
	441. MULTI-LANGUAGE SCREEN PROJECT
	442. MASTER DATA COLLECTION FORMAT
	443. DATA GENERATION AND ANALYSIS TOOL FOR QUERIES AND OPTIMIZATIONS
	444. MULTILEVEL PROFITABILITY OF RAMCO SYSTEMS, DATABASE MANAGEMENT, AND DEMOS IN PRESALES SRP
	445. DATA HEALTH MONITORING TOOL
	446. WEB BASED WYSIWYG XML EDITOR
	447. PROJECT CRYSLIS
	448. TAGGING MANAGEMENT
	449. INTEGRATING D3.JS,MOXTRA WITH RWV(DEVELOPMENT PLATFORM)
	450. DATA GENERATION AND ANALYSIS TOOL FOR QUERIES AND OPTIMIZATIONS
	451. PRE-SALES DEMONSTRATION SETUP – HUMAN CAPITAL MANAGEMENT ON CLOUD
	452. DEVELOPING ETL AND WORKFLOW TESTING
	453. DATA GENERATION AND ANALYSIS TOOL FOR QUERIES AND OPTIMIZATIONS
	454. MASTER DATA COLLECTION FORMAT
	455. DATA MIGRATION AND POST - LIVE ENHANCEMENTS
	456. MAINTENANCE & BUG FIXING
	457. DEFECT FIXING AND CODE MAINTENANCE IN RAMCO AVIATION MATERIALS MODULE.
	458. DATABASE OFFLINE WORK
	459. DESIGNING PORTLETS FOR SERVICES RESOURCES PLANNING SYSTEMS
	460. REPLACEMENT OF SHOWMODALDIALOG BOX
	461. MIGRATION OF ACTIVEX CHART TO EJS GANTT
	462. MULTI LANGUAGE SCREEN PROJECT
	463. SHOWMODALDIALOG WINDOW REPLACEMENT
	464. A REPORT ON SRP FOR RAMCO SYSTEMS
	465. INTEGRATING D3.JS CHARTS WITH RAMCO VIRTUAL WORKS
<b>58.</b>	<b>STRUCTURAL ENGINEERING RESEARCH CENTRE, CHENNAI</b>
	466. RETROFITTING OF BRIDGE OVERLAYS
	467. DAMAGE PROGNOSIS DUE TO FATIGUE LOADING IN CONCRETE
	468. A NEW APPROACH TOWARDS STRUCTURAL HEALTH MONITORING (SHM)
	469. ESTIMATION OF RADIUS OF REBARS USING GROUND PENETRATING RADAR (GPR) IMAGING AND COVERMETER
	470. PROBABILISTIC MODEL FOR THE HYDRATION OF CEMENT

<b>59.</b>	<b>INDIAN INSTITUTE OF PETROLEUM, DEHRADUN</b>
	471. KINETIC AND THERMODYNAMIC MODELING OF CARBONDIOXIDE ABSORPTION IN AMINE SOLUTIONS
	472. DEVELOPMENT OF PROCESSES FOR PRODUCTION OF N-METHYL-2-PYRROLIDONE
	473. DEVELOPMENT OF NON-HDS METHODS FOR VARIOUS CRUDE FRACTIONS
	474. ANALYSIS OF REAL WORLD DRIVING CYCLE USING EMISSION MODELLING
	475. STUDY THE EFFECT OF CATALYST IN DELAYED COKING REACTION”
	476. PINCH ANALYSIS OF CRUDE DISTILLATION UNIT, DESULPHURIZATION OF LIQUID FUEL USING SOLVENT EXTRACTION AND SIMULATION STUDY OF DIVIDED WALL COLUMN (D.W.C.)
<b>60.</b>	<b>PERSISTANT SYSTEM, GOA</b>
	477. MOBILE MONITORING OF BODY HEALTH PARAMETERS
	478. EVALUATION OF DIFFERENT OPERATING SYSTEMS FOR MICAZ MOTE
<b>61.</b>	<b>ST MICROELECTRONICS(I) PVT.LTD, GREATER NOIDA</b>
	479. DESIGN OF OP AMP , BAND GAP REFERENCE AND ANALYSIS OF PHASE LOCKED LOOP
	480. TRANSMITTER DESIGN FOR HIGH SPEED SERIAL LINKS
	481. DESIGN AND ANALYSIS OF PHASE LOCKED LOOP BLOCKS
	482. DEVELOPMENT OF MATLAB MODEL OF ADC-BASED SERIAL LINK RECEIVER
	483. SIMULATION OF FAILURE MODES IN A 6T-SRAM AND RECOVERY METHODS
	484. DEVELOPMENT AND VERIFICATION OF VERILOG TIMING MODEL FOR SRAM MEMORY LIBRARY
	485. SIMULINK MODELLING OF SIGMA DELTA MODULATOR FOR FRACTIONAL N PLL
	486. IMPLEMENTATION AND TESTING OF BER PLATFORMS FOR HIGH SPEED SERIAL LINKS
	487. ASSERTION BASED VERIFICATION OF UTMI USING SYSTEM VERILOG
	488. DESIGN OF INTELLIGENT MONITOR SUBSYSTEM AND STUDY OF MEMORY BIST
	489. NOISE MODELLING USING SUPPLY NOISE SENSITIVITY MATRIX IN A PHY
	490. FORMAL VERIFICATION OF SYSTEM ON CHIP BRIDGES
	491. POWER SUPPLY NOISE MODELLING AND ANALYSIS OF MIXED SIGNAL IPS
<b>62.</b>	<b>AURUM EQUITY PARTNERS, GURGAON</b>
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<b>63.</b>	<b>BHARTI SOFT BANK, GURGAON</b>
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<b>64.</b>	<b>HIKE, GURGAON</b>
	496. VOIP FOR HIKE
	497. WEBCLIENT FOR HIKE
	498. HIKE WEBCLIENT
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	505. INTELLECTUAL PROPERTY BASED SWOT ANALYSIS
	506. PATENT SEARCH SERVICES
	507. INTELLECTUAL PROPERTY BASED SWOT ANALYSIS
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	509. HEAT EXCHANGER DESIGN AND PLANT DOCUMENTATION
	510. PRODUCTION OF A SPECIALITY CHEMICAL (BFBTF) AND FILTRATION PROCESS
	511. FLUIDISED BED REACTOR
<b>68.</b>	<b>TATA CONSULTANCY SERVICES, GURGAON</b>
	512. APPLICATION OF SDN AND NFV IN CONTEMPORARY NETWORKING



	513. APPLICATION OF MACHINE LEARNING METHODOLOGIES TO TEXT REPAIRING
	514. APPLICATION OF INFORMATION EXTRACTION ON UNSTRUCTURED NOTES, STUDY OF IPV4 TO IPV6 TRANSITION
	515. UNDERSTANDING UMTS PROTOCOLS AND WCDMA AIR INTERFACE
	516. WEBRTC ENABLED IOS APPLICATION
<b>69.</b>	<b>FAIVELEY TRANSPORT RAIL TECHNOLOGIES INDIA LTD (FRTL), HOSUR</b>
	517. SUPPLIER PANEL STRATEGY
	518. ESTABLISHMENT OF PRODUCTION LINE FOR RS10 DOORS
<b>70.</b>	<b>AMAZON DEVELOPMENT CENTER, HYDERABAD</b>
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	520. FEATURE ENHANCEMENT-SELLER POLLING WIDGET
	521. AUTOMATED UI TESTING
	522. ENHANCING USABILITY FOR CARRIER INFORMATION MANAGEMENT SERVICE USERS
	523. MIGRATION OF CONSIGNMENT SWEEP TOOL TO JAVA
	524. INDEX MIGRATION FROM ORACLE DATABASES TO KEY VALUE STORE
	525. HIREON: AN ONLINE PORTAL USED FOR HIRING PROCESS
	526. MANUAL DEPLOYMENT, FEATURE ADDITION AND ARCHITECTURE REDESIGN OF CIMS METRICS SERVICE
	527. ENHANCING OUTBOUNDLOOKUPTOOL
	528. MIGRATION OF WIDGET DATA FROM CODE TO G2S2 CONFIG
	529. ADDRESS TRANSLATION
	530. TAM TOOL
	531. DEVELOPMENT OF CLEAR RECEIPT TOOL
	532. NEXT GENERATION SHIPTRACK TOOLS
	533. INBOUND TRANSPORTATION MANAGEMENT AT AMAZON
	534. DEVELOPMENT OF INDIA LINE HAUL MANAGEMENT SYSTEM
	535. HIREON: ONLINE TOOL FOR CONDUCTING TESTS
	536. ENHANCEMENTS FOR TRANSIT TIME SYSTEMS
	537. ADDRESS ATTRIBUTE MANAGEMENT PORTAL
	538. WIDGET DEVELOPMENT FOR SERVICE DETAIL PAGE
<b>71.</b>	<b>BHARAT DYNAMICS LTD, HYDERABAD</b>
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	540. DESIGNING EMPLOYEE PERFORMANCE APPRAISAL & RECOGNITION PORTAL
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	543. ADVANCED (DYNAMIC) SIMULATION OF THE MODAL ANALYSIS OF THE FLARE CONTAINER ASSEMBLY IN SIEMENS NX 7.5.
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	544. MECHANISM AND FUNCTIONAL SIGNIFICANCE OF PYROPHOSPHORYLATION BY IP7
<b>73.</b>	<b>FIORANO SOFTWARE TECHNOLOGIES PVT. LTD, HYDERABAD</b>
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	546. TESTING OF ADAPTERS AND ESTUDIO COMPONENTS
<b>74.</b>	<b>IMI MOBILE, HYDERABAD</b>
	547. REVAMPING OPEN HOUSE
	548. AUTOMATING CHARTS CREATION AND DATA COLLECTION FROM WEBSITES USING JAVA, SCORING DATA IN REAL TIME, LINEAR OPTIMIZATION USING AIMMS AND EVALUATING CMS
	549. COMPETITIVE ANALYSIS AND REVAMPING OF CLOUD BASED MOBILE ENGAGEMENT PLATFORM
	550. SOCIAL MEDIA ANALYSIS, NEAREST NEIGHBOUR SEARCH, GOOGLE AD-WORDS AND CHURN ANALYSIS
<b>75.</b>	<b>INDIAN INSTITUTE OF CHEMICAL TECHNOLOGY, HYDERABAD</b>
	551. QUANTITATIVE MEASURES TO SIMILARITY AND DIVERSITY TO MOLECULES AND MOLECULAR PROFILE REPORT GENERATION
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	553. PRESSURE DROP VARIATION FROM MACRO TO MICRO CHANNELS: A FLOW MODELING APPROACH
	554. SEPARATION OF FLUORIDE AND ARSENIC FROM GROUND WATER BY MEMBRANE SEPARATION TECHNIQUE

	555. DETERMINATION OF OPTIMAL PARAMETERS FOR ALKYLATION OF PHENOL USING DOE APPROACH
	556. CALORIMETRIC STUDIES ON THE SYNTHESIS OF METHYL ETHYL KETAZINE AND HYDRAZINE HYDRATE
	557. EXPANDED PORPHYRIN - DITHIENOPYRROLE BASED DYE-SENSITIZED SOLAR CELL - DESIGN, SYNTHESIS AND FABRICATION
	558. ONLINE FAULT DETECTION DIAGNOSIS OF BIOLOGICAL BATCH PROCESS
	559. MULTI VARIATE STATISTICAL PROCESS MONITORING OF BATCH PROCESSES
	560. EXPERIMENTATION AND SIMULATION OF SEPARATION PROCESSES FOR ALCOHOL WATER MIXTURES
<b>76.</b>	<b>INDUSTRYARC, HYDERABAD</b>
	561. MARKET RESEARCH IN THE FIELDS OF FACTORY AUTOMATION, DIODE LASER, 3D PRINTING AND DISTANCE MEASUREMENT SENSORS
	562. MISUMI PROJECT & MARKET RESEARCH
	563. ELECTRONICS MARKET REPORT
	564. MISUMI PROJECT & DIODE LASER MARKET RESEARCH
	565. MISUMI PROJECT & DIODE LASER MARKET RESEARCH & FLOW SENSORS MARKET RESEARCH
	566. MARKET RESEARCH AND ANALYTICS
	567. MISUMI PROJECT, DIODE LASER MARKET RESEARCH, DRIVER MONITORING SYSTEMS REPORT AND RADIATION HARDENED ELECTRONIC DEVICES AND COMPONENTS REPORT
	568. MARKET RESEARCH AND ANALYSIS OF FLOW SENSORS, DIODE LASERS , MISUMI U.S. FACTORY AUTOMATION
	569. MARKET RESEARCH AND ANALYSIS OF 3D PRINTING MATERIALS, DISTANCE MEASUREMENT SENSORS, DIODE LASER AND MISUMI FACTORY AUTOMATION
<b>77.</b>	<b>INSIDE VIEW, HYDERABAD</b>
	570. ENHANCEMENTS IN API PRODUCT OF INSIDEVIEW INC.
	571. OUTLIER DETECTION IN NEWS PAIRING AND WRITE TIME ARTICLE CLUSTERING OF NEWS
	572. PREDICTION OF FUTURE TRENDS FROM ONLINE NEWS CORPUS
<b>78.</b>	<b>INTERNATIONAL ADVANCED RESEARCH CENTRE FOR POWDER METALLURGY AND NEW MATERIALS, HYDERABAD</b>
	573. SYNTHESIS AND CHACATERISATION OF MN DOPED CDS NPS/ZNO NWS BASED QUANTUM DOT CELL
	574. FACILE SYNTHESIS OF SOFT MAGNETS
	575. MORPHOLOGY CONTROLLED SYNTHESIS OF MESOPOROUS SNO2 SPHERES FOR APPLICATION IN DSSC
	576. SILVER NANOWIRE BASED ELECTRODES FOR SOLAR CELL APPLICATION
<b>79.</b>	<b>JDA SOFTWARE SOLUTIONS, HYDERABAD</b>
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	578. AUTOMATION OF ABPP MODULES OF TRANSPORTATION MANAGER APPLICATION
	579. QUALITY ASSURANCE OF MTO(MAKE TO ORDER) AND CC(COMPASS CONTRACT)
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	581. VALIDATION OF DCS TEST CASE SCENARIOS
	582. DEVELOPMENT IN AS400 FOR E3
	583. QUALITY ASSURANCE OF ENTERPRISE STORE OPERATIONS
	584. AUTOMATION OF JDA WORKFORCE MANAGEMENT EMPLOYEE TRANSFER API TESTING USING FITNESSE
	585. TEST AUTOMTION FOR POST DEPLOYMENT TESTING
<b>80.</b>	<b>JORD INTERNATIONAL, HYDERABAD</b>
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	587. IMPROVEMENT IN TUBE SIDE HEAT TRANSFER COEFFICIENT USING TUBE INSERTS, ELECTRIC HEATERS, FUEL GAS SKIDS
	588. MIGRATION OF HIDE APPLICATION FROM EXCEL TO WIN-FORMS
<b>81.</b>	<b>MY SMART PRICE, HYDERABAD</b>
	589. DEVELOPMENT OF CHROME PLUGIN, BUILT A RECOMMENDATION ENGINE
	590. PLUGIN DEVELOPMENT , GMAIL API WITH OAUTH
<b>82.</b>	<b>NVIDIA GRAPHICS, HYDERABAD</b>
	591. SYSTEM VERIFICATION OF PWM AND TACH IPS
	592. POWER ESTIMATION / MEASUREMENT IN T186 / T210
	593. DYNAMIC THERMAL MANAGEMENT OF QUAD CORE TEGRA PROCESSORS
<b>83.</b>	<b>ORACLE INDIA PVT LTD, HYDERABAD</b>
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	595. DESIGN STUDIO DEVELOPMENT

	596. DESIGN STUDIO ENHANCEMENT AND DEBUGGING
	597. OPERATIONAL INTELLIGENCE USING OBIEE
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	598. AUTOMATION OF HYDROGENATION AND SOLVENT RECOVERY SYSTEM IN PHARMACEUTICAL BATCH PROCESSE
<b>85.</b>	<b>POLYCOM TECHNOLOGY (R&amp;D) CENTRE PVT. LTD, HYDERABAD</b>
	599. SOFTWARE DEVELOPMENT FOR POLYCOM VIDEO ENDPOINTS
	600. A REPORT ON LOAD TESTING OF BLF FEATURE ON VVX PHONES AND DEVELOPMENT OF HOOKS FOR TA (TEST AUTOMATION) AND IMPROVEMENT OF UI (USER INTERFACE) FOR NEW RELEASE
	601. TEST AUTOMATION FOR VARIOUS GS CALL SCENARIOS
	602. ENHANCEMENT OF BOSS-ADMIN FEATURE TO DUAL ROLE & DEVELOPMENT OF TEST AUTOMATION HOOKS FOR VVX PHONES
	603. DEVELOPMENT AND AUTOMATION OF VOIP PHONES
	604. DEVELOPMENT OF FEATURES AND TEST AUTOMATION HOOKS FOR VVX PHONES
	605. WEBUI AUTOMATION
	606. TESTING AND AUTOMATION OF PATHVIEW APPLICATION AND INTEGRATION TO HDX
	607. TESTING OF BT0E PLAYBACK FEATURE AND DEVELOPMENT OF TA HOOKS FOR POLYCOM VoIP PHONES
	608. DEVELOPMENT OF TA HOOKS FOR AUTOMATION FRAMEWORK
<b>86.</b>	<b>SALESFORCE, HYDERABAD</b>
	609. JENKINS, CHAOS MONKEY TOOL AND WINTERMUTE
	610. KERBEROS AND KINGPIN PLUGIN
	611. CHAOS MONKEY
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	613. USB PROTOCOL, LOGIC SYNTHESIS AND DESIGN OF 32 CHANNEL AUDIO
<b>88.</b>	<b>WORLEY PARSONS INDIA, HYDERABAD</b>
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	615. PROCESS DESIGN IN UPSTREAM OF OFFSHORE OIL & GAS PRODUCTION
<b>89.</b>	<b>STELLARIX CONSULTANCY SERVICES PVT LTD, JAIPUR</b>
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	618. RESEARCH METHODOLOGY IN PATENT INVALIDATION AND PATENT LANDSCAPE
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	621. DEVELOPMENT OF WEAR LINER FOR CEMENT AND POWER INDUSTRIES
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	623. AUTO ADJUSTING SKIRT SEALING SYSTEM FOR CONVEYOR
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	626. FIXTURE DESIGN AND INDUSTRIAL ENGINEERING FOR LOCO
<b>93.</b>	<b>PAXCEL TECHNOLOGIES, MOHALI</b>
	627. MARKETING RESEARCH OF VARIOUS MOBILE APPS AND SOFTWARE TESTING
	628. DEVELOPMENT AND PROMOTION OF TALENTHUNTONLINE
<b>94.</b>	<b>ADITYA BIRLA CORPORATE IT, MUMBAI</b>
	629. MASTER DATA MANAGEMENT PORTAL DEVELOPMENT
<b>95.</b>	<b>ADITYA BIRLA CORPORATE WORLD CLASS MANUFACTURING , MUMBAI</b>
	630. VALUE STREAM MAPPING AND ANALYSIS OF HINDALCO PLANT
	631. VALUE STREAM MAPPING ANALYSIS OF HTC
<b>96.</b>	<b>ADITYA BIRLA SCIENCE &amp; TECHNOLOGY COMPANY LTD, MUMBAI</b>
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	634. SULPHUR RECOVERY FROM H2S GAS
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	635. ANDROID APP OF CARWALE
	636. IOS APP OF CARWALE
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	637. WASTEWATER TREATMENT AND SULPHUR RECOVERY AT CENTURY RAYON
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	639. PRODUCTION & MARKET FEASIBILITY OF SELECT CHEMICALS
<b>99.</b>	<b>CREDIT SUISSE, MUMBAI</b>
	640. EQUITY CONTROLS AS AN INTEGRAL PART OF OPERATIONAL RISK MANAGEMENT
	641. EUROPEAN HYDRIDS REPORT ANALYSIS AND REPORTING
	642. SECTORAL ANALYSIS OF SECURITIES LENDING, COST OF CAPITAL . AND DELTA ONE PRODUCTS
	643. VAR-SIGNIFICANCE IN MARKET RISK
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	647. FO SOURCING
	648. BLACK SCHOLES MODEL FOR OPTION PRICING, MEASURES OF RISK AND GREEK SENSITIVITIES
	649. ROLE OF ECONOMIC RISK CAPITAL IN RISK MANAGEMENT AT CREDIT SUISSE
	650. VAR
	651. COUNTERPARTY CREDIT RISK – CREDIT VALUATION ADJUSTMENTS
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	654. RAR SCENARIOS
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	655. CREDIT RATING
	656. EBA STRESS TEST -GCRT QUANTITATIVE IMPACT ANALYSIS
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	658. POWER PLANT COMPONENT DESIGN AND STUDY OF POWER PLANTS AT HAZIRA AND DAHEJ
<b>102.</b>	<b>DOW CHEMICAL INTERNATIONAL PVT LTD, MUMBAI</b>
	659. CONSTRUCTION CHEMICALS MARKET STUDY FOR AMINES.
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<b>103.</b>	<b>GEOMETRIC LIMITED, MUMBAI</b>
	661. USER INTERFACE DEVELOPMENT AND VOLUME COMPUTATION
	662. FEATURE RECOGNITION
<b>104.</b>	<b>HERE MAPS - A NOKIA COMPANY, MUMBAI</b>
	663. SMARTCOOKIE – A REAL-TIME AUTOMATED ASSISTANCE SYSTEM FOR MAP-TOOLS
	664. TO ANALYSE LOGS AND DETERMINE PERFORMANCE BOTTLENECKS IN VARIOUS TOOLS USED BY HERE FOR MAP CREATION AND MAINTENANCE
	665. MAP PRODUCTION LINE
	666. NAVIGATION ANDROID APPLICATION
	667. SPATIAL DATA ANALYSIS
	668. CREATION OF DATA DEGRADATION METRIC AND REPORT
	669. INCREMENTAL MAP UPDATE IN NAVIGATION DATA STANDARDS
	670. CONNECTIVITY VALIDATION, THICK CLIENT APPLICATION & THREAD SAFETY
<b>105.</b>	<b>HOURGLASS RESEARCH, MUMBAI</b>
	671. INTELLECTUAL PROPERTY RIGHTS AND PATENT INFRINGEMENT ANALYSIS
	672. INTELLECTUAL PROPERTY RIGHTS
	673. PATENT INFRINGEMENT ANALYSIS
<b>106.</b>	<b>J.P. MORGAN CHASE, MUMBAI</b>
	674. AUTOMATION OF SHARE UNIT CONVERSIONS, SNDB CREATION FOR POI ACTIVITIES
	675. BANKING SECTOR & BASEL NORMS
	676. CORPORATE ACTIONS - ASSET SERVICING

	677. DDA ACCOUNT DEBIT/CREDIT ENTRIES WITH MITS APPLICATION
	678. EFFICIENCY IMPROVEMENT (DUBLIN FINANCIAL REPORTING)
	679. FINANCIAL REPORTING STRATEGIC PROGRAM
	680. IDENTIFYING AND ELIMINATING THE INCOME BREAKS BY APPLYING ROOT CAUSE ANALYSIS
	681. INSTRUCTION MANAGEMENT: ANALYSIS OF ERRORS AND RESOLUTION
	682. MARKET INTELLIGENCE AND AUTOMATION
	683. OPTIMIZING ROUNDING VARIANCES IN THE NEW AUTOMATED ACCOUNTING PLATFORM
	684. PROCESS DEVELOPMENT IN CAPSTOCK (CAPFM) BREAKS FOR CET TEAM
	685. PROCESS EFFICIENCY PROJECTS IN TRADE OPERATIONS
	686. PROCESS IMPROVEMENT IN BANKING OPERATIONS
	687. PROCESS IMPROVEMENT OF CAPSTOCK (CAPFM) BREAKS FOR CET TEAM
	688. REPORTING USER DEVELOPED TOOLS REMEDIATION
	689. RESOURCE ALLOCATION USING ANALYTIC HIERARCHY PROCESS
	690. REVIEW AND ANALYZE SWIFT MSG MT-564 STEP OUT REASONS ON CAMA UNAPPROVED QUEUE.
	691. ROOT CAUSE ANALYSIS OF FUND SERVICES INCOME OPERATIONS
	692. ROOT CAUSE ANALYSIS OF TRADE BREAKS
	693. TESTING OF PROPOSED TOOL TO BE USED FOR RECORDING AND ANALYZING ERRORS
	694. TESTING PROCESS FOLLOWED IN UAT
	695. TRANSFORMATION, EFFICIENCY AND COMPLIANCE OF BUSINESS WORKFLOW
	696. TREASURY SERVICES OPERATIONS
	697. UNIQUE TRADE IDENTIFIER (UTI) SCRUBBING
	698. USER ACCEPTANCE TESTING OF IM
	699. UTI SCRUBBING
	700. VPR AND CONVERSIONS AUTOMATION
<b>107.</b>	<b>J.P. MORGAN SERVICES INDIA PVT. LTD, MUMBAI</b>
	701. CALCULATION OF FREE CASH FLOW IN DCF VALUATION AND A STUDY OF LEVERAGED BUYOUT ANALYSIS
	702. CREATING PITCHBOOKS FOR BUY/SELL SIDE TRANSACTIONS
	703. DEBT CAPITAL MARKET
	704. EQUITY CAPITAL MARKETS : CONVERTIBLE BOND FUNDED SHARE REPURCHASE
	705. TMT ASIA
	706. VALUATION OF BANKS
	707. YIELDCOS, AN EMERGING ASSET CLASS IN US POWER SECTOR
<b>108.</b>	<b>KPMG, MUMBAI</b>
	708. SOFTWARE LICENSE REVIEWS (SLR).
<b>109.</b>	<b>MAYURESH GROUP, MUMBAI</b>
	709. MARKET RESEARCH AND SURVEY TO ANALYZE PROFITABILITY AND FEASIBILITY OF UPCOMMING PROJECTS
	710. PLANNING, SCHEDULING, COST ESTIMATION AND EXECUTION OF ECO-EDEN CLUB EXTENSION
	711. SCHEDULING AND ESTIMATION OF BHAKTI PARK BUILDING NO 1
<b>110.</b>	<b>MORNINGSTAR, MUMBAI</b>
	712. EFFECT OF CORPORATE ACTIONS ON INDEX CALCULATION
<b>111.</b>	<b>MSCI BARA CLIENT SERVICES, MUMBAI</b>
	713. PRE-SALES ANALYTICS SUPPORT
	714. CREATING RESPONSES TO RFP
	715. PORTFOLIO RISK MANAGEMENT ANALYTICS AND REPORTING
<b>112.</b>	<b>MSCI BARRA, DATA MANAGEMENT, MUMBAI</b>
	716. DATA STREAMLINING TO ENSURE DATA QUALITY
	717. GIS AND MARKET DATA STREAMLINING.
<b>113.</b>	<b>MSCI BARRA, QUANTITATIVE EQUITY RESEARCH, MUMBAI</b>
	718. FACTOR INDEX CONSTRUCTION
	719. CALCULATION OF INDEX TURNOVER AND ANALYSIS OF REBALANCING RESULTS
	720. CREATING MSCI VALUE AND GROWTH INDICES
<b>114.</b>	<b>MSCI INDEX AND RESEARCH, MUMBAI</b>

	721. ESG ASSESSMENT OF LOCAL AUTHORITIES AND SOVEREIGN COUNTRIES AND ASSESSING THE ELIGIBILITY OF GREEN BOND
	722. ANALYSIS OF MSCI INDEX DATA USAGE IN INDIAN KPO SEGMENT
<b>115.</b>	<b>WORLEY PARSONS INDIA, MUMBAI</b>
	723. ACTIVITIES AND FUNCTIONS OF PROCESS DEPARTMENT IN AN EPC
	724. YAMAMA FEED JOB
	725. WATER DISPOSAL AREA - HUMMA, ARQ, SOUTH FUWARIS, FUTURE GROWTH PROJECT
	726. FLARE RADIATION ANALYSIS
<b>116.</b>	<b>GRASIM INDUSTRIES LTD, NAGDA</b>
	727. ANALYSIS OF PETTY CONTRACT SYSTEM IN GRASIM INDUSTRIES AND ITS STANDARDIZATION
<b>117.</b>	<b>GLOBAL LOGIC, NAGPUR</b>
	728. IOS APPLICATION DEVELOPMENT
	729. ANDROID BASED APPLICATION DEVELOPMENT TO SUPPORT A SPECIFIC NEUROSTIMULATOR TECHNOLOGY
	730. AUTOMATION OF RELEASE REPORT GENERATION & FABRICATION OF FALL-DETECTION ELECTRONIC SYSTEM
	731. POC ON APACHE HADOOP AND SPARK
<b>118.</b>	<b>TECHTURE STRUCTURES PVT LTD, NAGPUR</b>
	732. ASSISTANCE OF BUILDING INFORMATION MODELLING DURING CONSTRUCTION IN INDIA
<b>119.</b>	<b>ANOVIP, NEW DELHI</b>
	733. INTELLECTUAL PROPERTY SERVICES IN THE FIELD OF PATENT RESEARCH ANALYTICS
	734. INTELLECTUAL PROPERTY SERVICES IN THE FIELD OF PATENT INFRINGEMENT & MONETIZATION
<b>120.</b>	<b>CENTRAL ROAD RESEARCH INSTITUTE, NEW DELHI</b>
	735. ESTIMATION OF ECONOMIC LOSS DUE TO IDLING OF VEHICLES AT SIGNALIZED INTERSECTION AND FINDING MITIGATION MEASURES
<b>121.</b>	<b>GREY ORANGE ROBOTICS PVT. LTD, NEW DELHI</b>
	736. FLOOR MAPPING SYSTEM
	737. BUTLER INTERFACE
<b>122.</b>	<b>HILTI INDIA PVT. LTD, NEW DELHI</b>
	738. EXPLORING BUSINESS EXPANSION AVENUES IN CENTRAL DELHI AND WEST DELHI REGIONS
	739. TERRITORY PLANNING IN MUMBAI'S M&E SEGMENT
<b>123.</b>	<b>NATIONAL COUNCIL OF APPLIED ECONOMIC RESEARCH, NEW DELHI</b>
	740. EVALUATION STUDY OF TARGETED PUBLIC DISTRIBUTION SYSTEM
	741. ANALYSIS OF VALUE OF URBAN LAND BASED ON TRENDS AND PATTERNS IN THE PRICES OF LAND, ESTIMATION OF GSDP FOR DAMAN & DIU AND DADAR & NAGAR HAVELI, BUSINESS CYCLE PROPERTIES AND DSGE MODELING FOR AN EMERGING MARKET ECONOMY, CALCULATION OF NOMINAL FRICTION IN ITEMS OF WPI & CPI.
<b>124.</b>	<b>NATIONAL INSTITUTE OF SCIENCE AND TECH. DEV. STUDIES (NISTADS), NEW DELHI</b>
	742. MOTIVATION OF INDIAN STUDENTS TO STUDY SCIENCE
	743. INNOVATIVE TREATMENT TECHNOLOGY FOR DOMESTIC WASTEWATER
	744. A STUDY OF PATENTING ACTIVITY IN GRAPHENE
	745. COMPARISON OF BIOTECHNOLOGY POLICY OF INDIA AND CHINA
<b>125.</b>	<b>VALUE EDGE INDIA, NEW DELHI</b>
	746. EXTERNAL REFERENCE PRICING
	747. CREATION OF ANDROID APPLICATION NAMED AS "U FIRST- DISCOVER YOURSELF ONE DAY AT A TIME".
	748. COMPETITIVE INTELLIGENCE IN THE FIELD OF PHARMACEUTICS
	749. EXAMINE THE CNS MARKET FOR ALZHEIMER'S DISEASE: COMPETITIVE LANDSCAPE, PIPELINE ANALYSIS AND CRITICAL ANALYSIS OF CLINICAL TRIALS.
	750. MANAGEMENT AND DEVELOPMENT OF A SALES FORCE EFFECTIVENESS TOOL
<b>126.</b>	<b>ALLIANCE INFOTECH, NOIDA</b>
	751. FORMATION OF A MARKET INTELLIGENCE REPORT
	752. PRE SALES AND MARKETING ACTIVITIES
<b>127.</b>	<b>CSR LTD., NOIDA</b>
	753. IMPLEMENTATION OF OPEN SOURCE MODULES WIREMOCK AND SWAGGER
	754. LTS MAP SERVER PERFORMANCE ENHANCEMENT
<b>128.</b>	<b>GLOBAL LOGIC, NOIDA</b>

	755. ARDUINO BASED PROJECTS
	756. SERVER-SIDE DATA MANAGEMENT FOR MOBILE APPLICATIONS , WEB ANALYTICS
	757. E-COMMERCE APPLICATIONS IN IOS AND ANDROID
	758. PHONEGAP MOBILE APPLICATION DEVELOPMENT
	759. INSERTION OF ADVERTISEMENTS IN VIDEOS (ON DEMAND) USING WOWZA STREAMING ENGINE
	760. GOLIATH ANALYTICS
<b>129.</b>	<b>CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE, PILANI</b>
	761. VLSI ARCHITECTURE FOR HISTOGRAM EQUALIZATION
	762. BLDC MOTOR CONTROL TECHNIQUES
	763. MICROCONTROLLER BASED TEMPERATURE CONTROL OF MOS BASED GAS SENSOR
	764. FABRICATION OF GOLD NANO-PATTERNS USING SCANNING PROBE LITHOGRAPHY
	765. GAIT ANALYSIS USING KINECT FOR DIAGNOSIS OF HEALTH PROBLEMS IN HOME.
	766. CARBON NANOTUBE BASED GAS SENSORS
	767. IMPLEMENTATION OF SERIAL PERIPHERAL INTERFACE BETWEEN FPGA AND WSN NODE
	768. ZIGBEE PROTOCOL ANALYSIS
<b>130.</b>	<b>AVAYA INDIA PRIVATE LIMITED, PUNE</b>
	769. POC OF FRAMEWORK TO ADD WPF COMPONENT IN AVAYA EMC PRODUCT
	770. BUILDING A FRAMEWORK FOR TESTCASE WRITING AND EXECUTION
<b>131.</b>	<b>B.G.SHIRKE CONSTRUCTION TECHNOLOGY PVT. LTD, PUNE</b>
	771. STRUCTURAL DESIGN OF G+1 BUILDINGS AND WATER RETAINING STRUCTURES
	772. DESIGN OF G+1 STRUCTURES AND WATER RETAINING STRUCTURES
<b>132.</b>	<b>BHARAT FORGE LTD, PUNE</b>
	773. TOOL COST REDUCTION OF CL3 LINE IN MCD-II
	774. REDUCTION OF AXLE BEAM INVENTORY HOLDING COST USING JUST IN TIME MANUFACTURING
	775. STRESS ANALYSIS ON WELDED JOINTS
<b>133.</b>	<b>CENTRE FOR DEVELOPMENT OF ADVANCED COMPUTING, PUNE</b>
	776. IMPLEMENTATION OF COUPLED ATMOSPHERE & HYDROLOGY MODELLING FRAMEWORK (WRF-HYDRO) ON PARAM YUVA II
	777. SCALABILITY STUDY OF WRF MODEL ON INTEL XEON PHI BASED PARAM YUVA II SYSTEM
<b>134.</b>	<b>CREDIT SUISSE, PUNE</b>
	778. BACKTESTING
	779. BASEL 2.5 SECURITIZATION AND HEDGES TRADE ANALYSIS AND RECONCILIATION
	780. CLUSTERNET-A MARKET RISK APPLICATION
	781. CREDIT RISK CHANGE MANAGEMENT
	782. CREDIT RISK EVALUATION
	783. CREDIT RISK EXPOSURE HANDLING
	784. CREDIT RISK EXPOSURE MANAGEMENT
	785. DATA MANAGEMENT AND CONTROL
	786. DEPARTMENT CONTROLLER FOR INFLATION AND PRIME SERVICES
	787. DERIVATIVE PRODUCTS AND FINANCIAL REPORTING OF DAILY P&L (PROFIT AND LOSS)
	788. FOBO RECONCILIATIONS FOR EMEA & APAC STOCK LOAN BORROW
	789. GIS- INSIGHT RECONCILIATION PROCESS
	790. INVESTMENT BANKING – CLIENT FINANCE: KEY CONCEPTS AND PROCESSES
	791. LINE CHANGE ACTIVITIES FOR PRODUCT CONTROL DEPARTMENT
	792. MARKET RISK CHANGE MANAGEMENT
	793. MYRIAD - FEED MANAGEMENT
	794. MYRIAD DATA ONBOARDING ONTO STANDARD FILE FORMAT
	795. ONBOARDING THE TRADE DATA INTO MYRIAD
	796. P7: DAILY TRADE ATTRIBUTION & DB MANAGEMENT
	797. PNL & FOBO RECONCILIATION
	798. PREPERATION & REPORTING SCORECARD
	799. PRICE TESTING, STRUCTURED TRADE REVIEW, AUTOMATION & REPORTING
	800. PROCESS EXCELLENCE
	801. RDS & MARS/ET BAU RELEASE CYCLE

	802. RECONCILIATION OF FRONT OFFICE AND BACK OFFICE DATA
	803. REFERENCE DATA CONTROL
	804. REPORTING DAILY PROFIT & LOSS FOR EMG LONDON AND GFX BOOKS
	805. RISK FACTOR IDENTIFICATION
	806. RUN THE BANK
	807. STRUCTURED TRADE REVIEW, WORK FLOW TOOL AUTOMATION AND INDEPENDENT PRICE VERIFICATION
	808. UNDERSTANDING AND IMPROVING PROCESSES RELATED TO THE CONSOLIDATION AND CONTROL OF CLEAN P&L
<b>135.</b>	<b>DIVGI WARNER PVT LTD, PUNE</b>
	809. PRODUCTIVITY IMPROVEMENT USING VALUE STREAM MAPPING, DMAIC APPROACH AND TIME STUDY
	810. PROJECT MANAGEMENT APPLICATION DEVELOPMENT
	811. ADVANCED PRODUCT QUALITY PLANNING AND ISO 14001 AUDIT
<b>136.</b>	<b>EATON TECHNOLOGIES, PUNE</b>
	812. RELIABILITY ASSESSMENT OF ELECTRICAL SYSTEMS USING 'DESIGN FOR RELIABILITY' APPROACH
	813. DEVELOPING A SIMULINK BASED HYDRAULIC TOOL BOX WITH BASIC ELEMENTS TO BUILD A COMPLEX HYDRAULIC SYSTEM
<b>137.</b>	<b>HALLIBURTON TECHNOLOGY CENTER, PUNE</b>
	814. FINES CONSOLIDATION IN OIL WELL DRILLING
	815. COMPATIBILITY STUDY OF MUD AND SPACER FOR VARIOUS COMPOSITIONS.
<b>138.</b>	<b>IDEAS - SAS, PUNE</b>
	816. CAB OPTIMIZATION SYSTEM
	817. IDEAS FUNCTION SPACE REVENUE MANAGEMENT
	818. CAB OPTIMIZATION SYSTEM
	819. CAB-SERVICE OPTIMIZATION
<b>139.</b>	<b>ISHWAR PARMAR GROUP, PUNE</b>
	820. STUDY OF VARIOUS ASPECTS ON CONSTRUCTION MANAGEMENT
<b>140.</b>	<b>MAHLE FILTERS INDIA LTD, PUNE</b>
	821. QUALITY SUSTENANCE AND SYSTEM IMPROVEMENT
	822. COST OF POOR QUALITY REDUCTION (MINIMIZE INPUT/OUTPUT GAP)
<b>141.</b>	<b>NATIONAL CHEMICAL LABORATORY, PUNE</b>
	823. SYNTHESIS OF NOBLE METAL NANOCCLUSERS AND ENCAPSULATION IN MESOPOROUS SILICA NANOPARTICLES.
	824. ADSORPTION OF DYES ON MONTMORILLONITE CLAY
	825. MODELING OF CONTINUOUS EXTRACTION COLUMNS (REACTIVE AND NON-REACTIVE)
<b>142.</b>	<b>NVIDIA GRAPHICS, PUNE</b>
	826. EXTRACTION OF TIMESTAMPS FROM MP4 FILES AND ADDING TOOLS FOR TEGRA VIDEO DRIVERS
	827. PERFORMANCE TESTING TOOLS FOR MULTI-GPU SYSTEMS
<b>143.</b>	<b>REFLEXIS SYSTEMS INDIA PVT LTD, PUNE</b>
	828. AUTOMATED DEPLOYMENT IN JENKINS
	829. AUTOMATION FRAMEWORK USING SELENIUM WEBDRIVER AND JUNIT
	830. HR WORK LOG AUTOMATION
	831. INVENTORY SYSTEM WEB APPLICATION AARCHITECTURE
	832. INVENTORY SYSTEM WEB APPLICATION DEVELOPMENT
<b>144.</b>	<b>TATA AUTOCOMP SYSTEMS LTD, PUNE</b>
	833. BUSINESS OPERATIONS MANAGEMENT OF IEDGE LEARNING PROGRAM
	834. SPEND ANALYSIS, VENDOR ANALYSIS AND COST REDUCTION OF SPARE PARTS PURCHASING THROUGH COMMON VENDOR
	835. APOS;SUPPORTING IN SETTING UP TATA AUTOCOMP AFTERMARKET PROCESSES&APOS; AND &APOS;BENCHMARKING OF E-LEARNING PROGRAM AND LAUNCHING STUDENT DISCOUNT SCHEME&APOS;
	836. TO BUILD PLAN AND EXECUTE FOR DISTRIBUTION CHANNEL, DIGITAL MEDIA AND CUSTOMER RELATIONSHIP
<b>145.</b>	<b>TATA MOTORS, PUNE</b>
	837. ASSISTING IN PRODUCT ANALYSIS AND NEW PRODUCT DEVELOPMENT AT TATA MOTORS, PUNE
	838. REDUCTION OF HIGH ENGINE OIL CONSUMPTION IN 497 DIESEL ENGINES



	839. IMPLEMENTATION AND ANALYSIS OF 'WORLD CLASS QUALITY' AND OTHER IT PROJECTS
	840. LEAKAGE PREVENTION IN M&HCV TATA TRUCKS, PUNE
<b>146.</b>	<b>TATA TECHNOLOGIES, PUNE</b>
	841. DEVELOPMENT OF A PROCEDURE FOR DESIGN AND OPTIMIZATION OF BACKHOE-LOADER LINKAGES
	842. DESIGN OF A SCREW JACK
	843. UNIVERSAL CAR HEAT SOAK MODEL
	844. NUMERICAL ANALYSIS COOLANT FLOW IN ENGINE COOLING JACKET
<b>147.</b>	<b>TENSILICA, PUNE</b>
	845. OPTIMIZATIONS OF DSP KERNELS ON TENSILICA DSP PLATFORM
	846. AUTOMATED PATCH MANAHEGEMENT AND TESTING OF XPLOERER
	847. SPEECH RECOGNITION SYSTEM
<b>148.</b>	<b>THERMAX INDIA, PUNE</b>
	848. DEVELOPMENT OF HEAT RECOVERY CONDENSING ECONOMIZERS
	849. DESIGN AND FABRICATION OF EVACUATED RECEIVER TUBE FOR PARABOLIC TROUGH CSP TECHNOLOGY
<b>149.</b>	<b>CENTRAL BUILDING RESEARCH INSTITUTE, ROORKEE</b>
	850. DESIGN AND ANALYSIS OF HOLLOW CORE UNIT BASED ON ACI 318-1995
	851. ANALYSIS OF RCC BEAMS UNDER FATIGUE
	852. APPLICATION OF POLYPROPYLENE FIBER IN JACKETING OF RC MEMBERS
	853. EXPERIMENTAL AND NUMERICAL STUDY OF SOIL GEOGRID INTERACTION
<b>150.</b>	<b>ACE BUSINESS AND MARKET RESEARCH GROUP, SURAT</b>
	854. CNS DRUGS MARKET
<b>151.</b>	<b>ADITYA BIRLA CHEMICALS(THAILAND)LTD-SULPHITES, THAILAND</b>
	855. EFFICIENCY CALCULATION AND IMPROVISATION OF CYCLONE SEPARATORS
	856. STANDARDIZATION OF PACKING SACKS AND THEIR COST REDUCTION
	857. REDUCTION OF STEAM USAGE
	858. CONTINUAL IMPROVEMET OF PRODUCTION PROCESS OF SULFITE AND STUDY OF VALUE ADDED PRODUCTS
	859. TO REDUCE NITROGEN GAS CONSUMPTION IN THE PLANT WHICH HAS BEEN INCREASING OVER THE FEW YEARS FOR UNKNOWN REASONS . TO ENLIST THE REASONS AND TRY TO MINIMIZE THEIR EFFECT. THE BUDGET FOR NITROGEN IS 20 NM3/TON AND ACTUAL TO DATE RATIO IS 42 NM3/TON.
	860. TO REDUCE NATURAL GAS CONSUMPTION IN THE PLANT WHICH HAS BEEN INCREASING FROM PAST 4 YEARS FOR UNKNOWN REASONS . TO ENLIST THE REASONS AND TRY TO MINIMIZE THEIR EFFECT. TO OPTIMIZE THE HYDROGEN PEROXIDE PRODUCTION. THE DECIDED BUDGET FOR NATURAL GAS CONSUMPTION IS 15.24 MBTU/TON AND ACTUAL TO DATE RATIO IS 15.5-15.6 MBTU/TON.
	861. DESIGN PROJECTS FOR PLANT IMPROVISATION
<b>152.</b>	<b>CENTRE FOR DEVELOPMENT OF IMAGING TECHNOLOGY, TRIVANDRUM</b>
	862. CEP OFFICE AND SCHOOL AUTOMATION
<b>153.</b>	<b>KLIENTAS, TRIVANDRUM</b>
	863. LAW PUNDITS - BUSINESS DEVELOPMENT & ANALYSIS AND KLIENTAS- CORPORATE DESIGN
	864. WEB DEVELOPMENT USING WORDPRESS BACKEND.
	865. CONTENT MANAGEMENT SYSTEM WEBSITE DEVELOPMENT
	866. FINANCIAL ACCOUNTING AND DATA MINING
	867. BUSINESS DEVELOPMENT AND MARKETING

**LIST OF PROJECT ASSIGNMENTS FOR FIRST SEMESTER 2015-2016**

<b>1.</b>	<b>SKODA AUTO INDIA PVT. LTD, AURANGABAD</b>
	1. DAILY DISS ALARM COMPLAINTS DOCUMENTATION,UPDATING STATUS
<b>2.</b>	<b>[24]7 ILABS, BANGALORE</b>
	2. ADVERTISEMENT RE-TARGETING AND PRODUCT RECOMMENDATION
	3. AUTOMATION OF CLIENT ONBOARDING
	4. BIG DATA INDEXING
	5. CONFIGURING AND MAKING DATA READY FOR BATCH AND REAL TIME PROCESSING
	6. ENHANCING [24]7 ASSIST DEPLOYMENT PROCESS
	7. INTELLIRESPONSE: DATA INTEGRATION AND CONTEXT TRANSFER
	8. QUALITY ASSURANCE IN ACTIVE SHARE
	9. REDESIGN OF SPIRIT NOC DASHBOARD
	10. WEB PERFORMANCE OPTIMIZATION AND PLUGIN DEVELOPMENT FOR THE ASSIST CHAT PLATFORM
<b>3.</b>	<b>AKIRA CONSULTANCY PRIVATE LIMITED, BANGALORE</b>
	11. AKIRA DATABASE MANAGEMENT SYSTEM
	12. BUSINESS INTELLIGENCE ETL, DATABASE DEVELOPMENT, (EVOIPSTORE.COM) & DASHBOARD DEVELOPMENT IN QLIKVIEW
	13. MARKET RESEARCH
<b>4.</b>	<b>ALTAIR ENGINEERING INDIA PVT. LTD, BANGALORE</b>
	14. DEVELOPING A CONTEXT PARADIGM BASED FRAMEWORK FOR NVH DIRECTOR
	15. DEVELOPMENT OF ANALYTICS SOLUTION WITH HIQUBE MULTI-DIMENSIONAL DATABASE MODELLING SYSTEM
	16. DEVELOPMENT OF INPUT LOADS FOR ROAD LOADS ANALYSIS
	17. GRAPHIC USER INTERFACE DESIGNER
	18. IMPORTING HYPERMESH MODELS INTO ETABS,INTERPOLATION METHOD, INVOKING THE COMMANDS THROUGH SEARCHTOOL, BUGS AND IMPROVEMENTS IN SEARCHTOOL ,GUI FOR NEWLY DEVELOPED COMMAND.
	19. SOLVER MODEL CHECKER IN ABAQUS, MULTIPLE INP FILE IMPORT THROUGH SCRIPT
<b>5.</b>	<b>AMAZON DEVELOPMENT CENTER, BANGALORE</b>
	20. SELF SERVICE CONFIGURATIONS USING TCS
	21. ANDROID APP CRAWLER
	22. APP INTROSPECTION CONSOLE
	23. AUTOMATION OF GIFT EXPIRY FUNCTIONALITY, PROTECTING AMAZON CUSTOMER INFORMATION AND ENABLING CANDY GC AS A BUSINESS
	24. DASHBOARD FOR RELEASE NOTES MANAGEMENT
	25. DATA DIMENSIONALITY REDUCTION AND VISUALIZATION, IP BASED AGGREGATION ACROSS ADVERTISING DATASETS
	26. DESIGNING A SCALABLE SYSTEM FOR PROCESSING CUSTOMER FEEDBACK AND VARIATIONS DASHBOARD
	27. DEVELOPMENT OF UI PORTAL AND WORKFLOW MIGRATION
	28. FLYT MIGRATION SANDBOX
	29. FUDSERVICE FOR SPACE MANAGEMENT OD FULFILLMENT CENTERS
	30. ITS AND TESTRIX AUTOMATION TOOL
	31. JUNGLEE IOS APP
	32. MOBILE APP CRAWLER AND CRAWL MANAGEMENT SERVICE
	33. NOTIFICATION STREAM USING AWS LAMBDA AND TASK MANAGEMENT SERVICE
	34. SCA APPROVAL SYSTEM IN TCS WORKFLOWS
	35. SEARCH ENGINE OPTIMIZATION
	36. STUDENT REFERRAL PAGE MIGRATION
	37. SUPPORT VIDEO UPLOAD AND STREAMING FOR AMAZON HOME SERVICES CUSTOMERS
	38. TESTRIX AUTOMATION FRAMEWORK
	39. UTILITY TO GENERATE SCREEN GRAPH FOR AN ANDROID (IOS) APPLICATION.
<b>6.</b>	<b>ANALOG DEVICES, BANGALORE</b>
	40. EXTERNAL KEY ON SELF TEST FOR ACCELEROMETER SENSOR
	41. OFFSET CALIBRATION IN MEMS GYROSCOPES USING SUPPORT VECTOR MACHINES
	42. OFFSET CALIBRATION OF MEMS GYROSCOPE USING KALMAN FILTERING

	43. OP-AMP ANALYSIS AND TRANSISTOR PARAMETERIZATION
<b>7.</b>	<b>ARM EMBEDDED TECHNOLOGIES PRIVATE LIMITED, BANGALORE</b>
	44. ARCHITECTURE TRACE BASED COVERAGE ANALYSIS AND DEVELOPMENT OF A TOOL FOR EXTRACTION OF MEMORY COHERENCE INFORMATION
	45. COMBINING EXECUTABLE BINARIES
	46. CREATING A UNIFIED REGRESS FLOW
	47. DEBUGGING AND VERIFICATION FRAMEWORK FOR TEST BUILD AUTOMATION
	48. DESIGN OF A CONFIGURABLE FRAMEWORK FOR A STATIC TIMING ANALYSIS TOOL AUTOMATION
	49. DETERMINATION OF ACCESS DISTURB MARGIN & WRITE DISTURB MARGIN IN 6T SRAM BITCELL & PERFORMANCE GAIN ANALYSIS OF 16NM COMPARED TO 28NM COMPILERS
	50. IMPLEMENTATION OF ARM CORTEX-A53 SINGLE CORE PROCESSOR
	51. MARGIN METHODOLOGIES ON SINGLE PORT SRAMS AND IMPLEMENTATION OF A TERNARY CONTENT ADDRESSABLE MEMORY
	52. MARGIN METHODOLOGIES ON SINGLE PORT SRAMS AND LEAFCELL PARASITIC EXTRACTION
	53. PERFORMANCE ANALYSIS AND BENCHMARKING
	54. REDUCING TURNAROUND TIME FOR DEBUGGING FAILURES IN RANDOM INSTRUCTION SEQUENCE
	55. REGRESSION ANALYSIS OF MEMORY MODELS
	56. VERILOG TIMING CONSTRAINT VALIDATION METHODOLOGY
<b>8.</b>	<b>AVAYA INDIA PRIVATE LIMITED, BANGALORE</b>
	57. SECURE MEDIA STREAMING SNAP-IN USING WEBRTC
<b>9.</b>	<b>BECKMAN COULTER (FORMERLY REAMETRIX INDIA P LTD) , BANGALORE</b>
	58. DEVELOPMENT OF DRIED REAGENT ASSAYS IN FLOW CYTOMETRY FOR IN VITRO DIAGNOSTIC USE AND RESEARCH USE
	59. MARKET ASSESSMENT & COMPETITIVE MAPPING FOR THE HPV/TB MARKET IN SELECTED GEOGRAPHIES
<b>10.</b>	<b>BELONG.CO, BANGALORE</b>
	60. CONTENT GENERATION PLATFORM FOR BELONG
	61. DATA PRODUCT FOR PASSIVITY PREDICTION
<b>11.</b>	<b>BLUE JEANS NETWORK INDIA PVT. LTD, BANGALORE</b>
	62. BACKEND SUPPORT FOR INVITED MEETINGS
	63. DECOMPOSITION OF MEETME SERVICE INTO MICRO SERVICES
	64. AUTOMATED LOAD TEST EXECUTOR
	65. AUTOMATION OF BLUE JEANS WEB UI
	66. BLUE JEANS DEV-BOX AUTOMATION; MEETING RECORDING RECOVERY TOOL
	67. BLUEJEANS MIDDLEWARE TEST AUTOMATION
	68. DEVELOPMENT FOR RIVET MEETME PRODUCT
	69. IMPLEMENTATION OF SCOREBOARD AND INTELLI REPORTS
	70. MEDIA (DENIM) AUTOMATION IN BLUEJEANS
	71. SEAM DEVELOPMENT FOR PRIMETIME
	72. TEST AUTOMATION OF WEB APPLICATION UI
	73. UI DEVELOPMENT OF AUDITS FEATURE FOR SPECTOR
<b>12.</b>	<b>BOSCH , BANGALORE</b>
	74. A STUDY OF PROCESSES IN A BOILER PROJECT
	75. DESIGN AND DEVELOPMENT OF DIESEL VAPOR PLUG SYSTEM
	76. USE OF PROBLEM-SOLVING AND SHAININ TO SOLVE QUALITY ISSUES-
<b>13.</b>	<b>BROADCOM INDIA PVT LTD, BANGALORE</b>
	77. AUDIO VERIFICATION
	78. BT-COEX
	79. DSP SUBSYSTEM SIMULATIONS AT CORE & CHIP LEVEL ENVIRONMENT
	80. IMPROVING PERFORMANCE AND FLEXIBILITY OF AUDIO CODECS
	81. IP CORE VERIFICATION
	82. OPTIMISATION OF AUDIO CODECS
	83. PERFORMANCE ANALYSIS OF CABLE AND SATELLITE SYSTEMS
	84. PHYSICAL BLOCK IMPLEMENTATION AT 16NM TECHNOLOGY NODE
	85. VERIFICATION AND EMULATION OF ROUTER CHIP
	86. WIRELESS STANDARDS FOR LAA-LTE AND WIFI 802.11AC

<b>14.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY) , BANGALORE</b>
	87. DEVELOPMENT OF TRAINING MODULES FOR DELIVERY EXECUTIVES AT SWIGGY
	88. DATA ANALYSIS AND AUTOMATION FOR SWIGGY'S OPERATIONS TEAM TO REDUCE ORDER RELATED IRREGULARITIES
	89. ANALYSIS OF EMAND SIDE DATA FOR MARKETING AND EXPANSION OF SWIGGY
	90. DATA ANALYSIS AND DEVELOPMENT OF MODELS FOR SWIGGY'S PICKUP AND DELIVERY PARTNER SCHEME
	91. DIGITAL MARKETING AND CONTENT MARKETING MANAGEMENT
	92. ENHANCING CUSTOMER EXPERIENCE & SWIGGY EXPRESS : A NEW INITIATIVE
	93. STREAMLINING ACCOUNTS PAYABLE PROCESS THROUGH USE OF TECHNOLOGY AND TRADE MARKETING
	94. SWIGGY EXPRESS - A NEW INITIATIVE ; RECONCILIATION & THE REASON BUCKET
<b>15.</b>	<b>CADENCE DESIGN SYSTEMS INDIA PVT LTD, BANGALORE</b>
	95. ANALOG CIRCUIT DESIGN OF PHASE LOCKED LOOP, RESISTANCE CALIBRATION AND EQUALIZER CIRCUITS.
	96. CONFIGURING AN FPGA USING A MICROSD CARD ( HC AND XC)
	97. FUNCTIONAL VERIFICATION OF PCIE CONTROLLER USING VERILOG
	98. METHODOLOGY FOR BEHAVIORAL MODEL VS SCHEMATIC CHECKING
	99. PLL CALIBRATION AND DESIGNING
	100. POWER AND RAIL ANALYSIS USING VOLTUS AND EDI AND LIBRARY FILE GENERATION
	101. TEST BENCH ENHANCEMENT FOR HIGH SPEED IO BUFFERS
	102. USB MASS STORAGE DEVICE USING XILINX VIVADO
<b>16.</b>	<b>CISCO SYSTEMS (INDIA) PVT. LTD, BANGALORE</b>
	103. AUTOMATING TRAFFIC GENERATION FOR P4 PROGRAMMABLE SWITCH
	104. DEVELOPMENT OF NETWORK AUTOMATION TOOL FOR P4 PROGRAMMABLE SWITCH CONTROLLER
<b>17.</b>	<b>CSR, BANGALORE</b>
	105. AUTOMATION OF PTS TESTING ON BLUETOOTH CHIPS
	106. CREATE AUTOMATION TEST FRAMEWORK CSR MESH NODE TESTING
	107. DYNAMIC FREQUENCY SELECTION TESTING AND AUTOMATION
<b>18.</b>	<b>DREAMWORKS ANIMATION, BANGALORE</b>
	108. HELP TRANSITION OF OLD ANIMATION WORKFLOWS INTO NEW ONES FOR THE ANIMATION DEPARTMENT AND SUPPORT AS A TECHNICAL DIRECTOR
	109. PLUGIN DEVELOPMENT, LOD TESTING AND SUPPORT AS TECHNICAL DIRECTOR
	110. STUDIO PIPELINE DEVELOPMENT
	111. STUDIO PRODUCTIVITY TOOLS
	112. TESTING OF restful WEB SERVICES
<b>19.</b>	<b>EBAY INDIA DEVELOPMENT CENTRE, BANGALORE</b>
	113. ELASTIC SEARCH SNAPSHOT AND RESTORE
	114. EVALUATING SPARK'S MLLIB FOR INSIGHTS
	115. HALF.COM SEARCH AS A SERVICE
<b>20.</b>	<b>EMC, BANGALORE</b>
	116. AUTOMATION OF DATA TRANSFER BETWEEN BLOCK AND OBJECT STORAGE ON VIPR CONTROLLER
	117. COLLABORATIVE SAN ALERTS
	118. CREATING CHROME EXTENSION FOR DEBUGGING XCP WEB PAGES
	119. DEPLOYMENT OF ETCD CLUSTER AND UNDERSTANDING OPEN SWITCH
	120. INTEGRATING BLOB STORE AND SWIFT API FOR DOCUMENTUM PLATFORM, INTEGRATING JIRA WITH TABLEAU
	121. INTEGRATION OF JIRA WITH TABLEAU
	122. PARAMETERIZED LOADABLE ARRAY MODULE (PLAM) FOR POWERPATH
	123. REAL TIME BIG DATA ANALYTICS
	124. RESOLVING SECURITY ISSUES RELATED TO PERSONAL STORAGE TABLE FOR "MY DOCUMENTUM FOR MICROSOFT OUTLOOK "
	125. SOLUTIONPACK FOR ADT REGRESSION, AUTOMATION OF P&S TESTING
<b>21.</b>	<b>ERICSSON GLOBAL INDIA PVT. LTD, BANGALORE</b>
	126. AUTOMATION FRAMEWORK ARCHITECTURE
	127. CLUSTERING OF DOCKER INSTANCES OF OPENDAYLIGHT CONTROLLERS
	128. DEVELOPMENT OF GRAPHICAL USER INTERFACE FOR DATA CENTER NETWORK DESIGN TOOL

	129. GLUSTERFS BASED DISTRIBUTED FILE SYSTEMS FOR IP SERVICES
	130. IMPROVING THE PERFORMANCE OF CLOUD STORAGE SYSTEM
	131. INCREASING HE CODE COVERAGE OF THE PROJECT &APOS;VPNSERVICE&APOS;& INTEGRATING OPENSTACK&APOS;S BGPVPN PLUGN WITH OPENDAYLIGHT.
	132. MESSAGE TRANSFER USING RABBITMQ
	133. O&M OF APPLICATION SERVER OF IP MULTIMEDIA SUBSYSTEM
	134. REPRESENTATIONAL STATE TRANSFER API FOR PLANNING AND WORK FLOW RUNTIME INFRASTRUCTURE
	135. TO IMPROVE EFFICIENCY OF CLOUD DISKS BY SIMULATION OF CLOUD STORAGE DEVICES
<b>22.</b>	<b>ERNST &amp; YOUNG L.L.P, BANGALORE</b>
	136. ANALYSIS OF SURVEY DATA
	137. SURVEY ANALYTICS
	138. SURVEY ANALYTICS – GUI
	139. TEST ANALYTICS ON LIVE-MINED TWITTER DATA AND LOCAL FILES
	140. TEXT ANALYTIC
<b>23.</b>	<b>EXOTEL TECHCOM PVT. LTD, BANGALORE</b>
	141. CODE DEPLOYMENT AUTOMATION USING JENKINS & ANSIBLE
	142. EXOTEL CORDOVA ANDROID APP VERSION UPGRADATION AND INCORPORATION OF ANALYTIC TOOLS INTO APP AND VISUALIZING SERVER ARCHITECTURE.
	143. MONITORING SYSTEM USING NAGIOS/VICTOROPS/GRAFANA
	144. MULTI TENANT WEB APPLICATION FOR INTERNAL TOOLS -GERIATRIX
<b>24.</b>	<b>FIBER LINK, BANGALORE</b>
	145. ANDROID APP DEVELOPMENT: MAAS360 APPLICATION SUITE
	146. CUSTOM ATTRIBUTES , IOS AUTOMATION , COCOA PODS
	147. DB2 SUPPORT FOR MAAS360 PLATFORM
	148. DEVELOPMENT OF MAAS360SDK , WORKLIGHT SERVER AND RUBY SERVER
	149. ENHANCEMENTS TO VARIOUS MODULES OF MAAS 360
	150. NEW FEATURES TO ANDROID-APP CATALOG ON PORTAL-SIDE FOR MAAS360
	151. SYSLOG INTEGRATION FOR REAL-TIME APPLICATION LOG ANALYSIS.
<b>25.</b>	<b>FIORANO SOFTWARE TECHNOLOGIES PVT. LTD, BANGALORE</b>
	152. ADDING TEST CASES TO SOA TESTING FRAMEWORK, TESTING AND FIXING THE ALLOTTED BUGS
	153. AUTOMATING TEST CASES IN THE SOA TESTING FRAMEWORK & REDESIGN OF FIORANO API MANAGEMENT DASHBOARD USING CSS
	154. TESTING AND DEVELOPMENT OF FIORANO ADAPTERS
<b>26.</b>	<b>FLIPKART INTERNET SERVICES PVT. LTD, BANGALORE</b>
	155. ANDROID APP DEVELOPMENT FOR HUB-SYSTEM
	156. ANDROID APP DEVELOPMENT TO FACILITATE WAREHOUSE OPERATIONS
	157. AUDIENCE TARGETING ENHANCEMENT
	158. DATA VISUALISATION IN ZEPPELIN
	159. EMPLOYEE MOBILE APP
	160. FRAUD DETECTION CONSOLE
	161. FRM FRAUD DETECTION CONSOLE
	162. HEADLESS BROWSERS TO CRAWL DYNAMIC SITE AND BREADCRUMBS EXTRACTION
	163. IMPLEMENTING MATERIAL DESIGN FOR UI OF E-KART FIELD APP AND RATIONALISING THE ALERT NOTIFICATION SYSTEM FOR THE E-KART TEAM
	164. IMPROVEMENTS TO DEMAND FORECASTING PROCESS
	165. OPTIMIZATION OF WAREHOUSE MANAGEMENT SYSTEM AT FLIPKART
	166. POC AND IMPLMENTATION OF PULSE DASHBOARD FEATURES.
	167. PRODUCT LISTING ADS SDK FOR WINDOWS
	168. PROVIDING A DATA STORE WITH OPTIMISED QUERIES FOR SHIPMENT DATA
	169. QA AUTOMATION FOR FORWARD FLOW IN WAREHOUSE
	170. RESOLUTION TOOL
	171. SEARCH AND SECURITY IMPLEMENTATION IN PEOPLE DATABASE TOOL
	172. ZEPPELIN-R
<b>27.</b>	<b>GARG WEBTECH PVT. LTD, BANGALORE</b>
	173. LOCALKIRANASTORE ADMIN ANDROID APP, 2. FOTA UPDATE USING BLUETOOTH BY ANDROID APP.

	174. FOTA UPDATE AND SCHEMATICS OF PILLBOX AND BLUETOOTH HUB
	175. FOTA UPDATE, ECG DATA TESTING AND APP DEVELOPMENT USING CORDOVA
<b>28.</b>	<b>GENPACT, BANGALORE</b>
	176. ADOBE SELF DETAIL , KPI DASHBOARD
	177. ANALYSIS AND VISUAL REPRESENTATION OF DATA USING R PROGRAMMING AND EXCEL: 1. PROJECT MATCH 2. PROJECT COST CURVE 3. PROJECT PARALLEL
	178. DATA READINESS PROJECT FOR ERP IMPLEMENTATION
	179. GE HEALTHCARE LOGISTICS
	180. KPI DASHBOARD
	181. KPI DASHBOARD CREATION USING R PROGRAMMING AND TABLEAU
	182. P D MODEL
	183. SOCIAL MEDIA RESEARCH, PD MODEL, DEM REPORT, KYC COMPLIANCE CHECK
	184. TOOL DEVELOPMENT USING VBA AND R
	185. UNDERSTANDING THE REQUIREMENTS OF CONSUMER IN OTC/CONSUMER HEALTH CARE
	186. WEB APPLICATION FOR MACHINE LEARNING USE CASES
<b>29.</b>	<b>GLOBAL LOGIC, BANGALORE</b>
	187. DEVELOPING AN IOT PLATFORM
<b>30.</b>	<b>GOLDMAN SACHS INDIA PVT. LTD, BANGALORE</b>
	188. ANALYSIS OF THE DATA QUALITY BREAKS RELATING TO REGULATORY REPORTS
	189. AUTOMATION OF TRADE CONFIRMATIONS
	190. BENCHMARK ANALYSIS
	191. CONSOLIDATED REPORTING
	192. DATA WAREHOUSING AND BIG DATA ANALYTICS
	193. ENHANCEMENT OF MACRO FOR A RECONCILIATION
	194. EXOTIC TRADE REVIEW
	195. FAILED SETTLEMENTS
	196. INVESTMENT GUIDELINES: NCG REDUCTION
	197. PROCESS AUTOMATION AND ANALYSIS
	198. REPORT MIGRATION REQUIREMENTS TO A QUERY TOOL
<b>31.</b>	<b>HINDUSTAN UNILEVER RESEARCH CENTRE, BANGALORE</b>
	199. CHARACTERIZATION OF FOAMS- STUDY ON STRUCTURAL PARAMETERS
	200. DESIGN OF ADSORPTION SYSTEM
	201. EFFECT OF SURFACTANTS (IONIC AND NON-IONIC) ON AGGREGATE STRENGTH OF SWEEP FLOCS
	202. EXTRACTION AND CHARACTERISATION OF SERICIN
	203. IN-SITUMETAL NANOPARTICLE SYNTHESIS USING HAIR FIBERS
	204. MECHANISTIC UNDERSTANDING OF SOLVENT BASED CLEANING ON OILY SOIL (A) ROLE OF SOLUBILITY PARAMETER (B) ROLE OF INTERFACES
	205. NANOCELLULOSE FROM TEA FIBERS-EXTRACTION, PURIFICATION AND CHARACTERIZATION
	206. PHOTO CHEMISTRY OF CHROMOPHORES AND REACTIVE OXYGEN SPECIES
	207. POLYMORPH CONTROL OF CALCIUM CARBONATE USING FOAM AS A TEMPLATE
	208. SPREADING OF FOAMS ON POROUS SURFACE
	209. STUDY OF SETTLING BEHAVIOR OF PARTICLES IN SOLID-LIQUID SUSPENSIONS
	210. STUDY THE EFFECT OF DEGREE OF ETHOXYLATION OF ALKYL SULFATES ON EQUILIBRIUM AND DYNAMIC SURFACE PROPERTIES
	211. TREATMENT OF GREY WATER
<b>32.</b>	<b>INFINERA, BANGALORE</b>
	212. BUILD SERVER ALLOCATION
	213. CUSTOMER DEFECTS METRICS & WARNING LIST TOOL
	214. DESIGN AND DEVELOPMENT OF INFINERA RESOURCE MANAGEMENT SYSTEM (IRMS)
	215. ELECTRICAL AND SERDES DESIGN VALIDATION
	216. HIGH SPEED SERDES INTERFACE VALIDATION
	217. METADATA TRACKING AND CODE GENERATION
	218. NETCONF INTERFACE AND CLIENT PROTOCOL TEST AUTOMATION
	219. VERIFICATION AND VALIDATION INFRASTRUCTURE ENHANCEMENTS FOR MAPPER CHIPS
<b>33.</b>	<b>INTEL INDIA TECHNOLOGY PVT. LTD, BANGALORE</b>
	220. ANALOG FRONT END FOR COMPRESSIVE SENSING OF PPG SIGNALS IN A WEARABLE SYSTEM

	221. ANALYSIS OF INTEL PROCESS LIBRARIES USING SCRIPTING
	222. ANALYSIS OF MEMORY BANDWIDTH COMPRESSION FOR MEDIA APPLICATIONS ON GPU
	223. ARCHITECTURE DEFINITION / SYSTEM LEVEL DESIGN OF DELTA-SIGMA ANALOG TO DIGITAL CONVERTER FOR THERMAL SENSOR APPLICATIONS.
	224. BOUNDARY SCAN VALIDATION FOR INTEL SOC
	225. BUG FIX VALIDATION SIGN-OFF USING FAN-IN/OUT LOGIC CONE
	226. CODE DEVELOPMENT BY UNIT LEVEL TESTING AND STATIC ANALYSIS
	227. COMPRESSIVE SENSING IN OPTICAL PPG
	228. DESIGN & IMPLEMENTATION OF POSITIONING & LOCALIZATION ALGORITHM BASED ON IMU SENSOR AND WHEEL ODOMETRY DATA ON INTEL EDISON BASED OMNI ROBOT
	229. DESIGN AND IMPLEMENTATION OF ULTRA-LOW-POWER, PIEZO-BASED HEART RATE NOSE BRIDGE SENSING FOR SMART GLASSES
	230. DESIGN OF RECONFIGURABLE HARDWARE ACCELEROMETER
	231. DEVELOPMENT AND DEBUGGING OF PLATFORM TOOLS FOR CLIENT PLATFORMS; AND DEVELOPMENT AND DEPLOYMENT OF WINDOWS STORE APPS FOR INTEL INDIA'S SWPC 2015
	232. DEVELOPMENT OF CONTINUOUS, NON-INVASIVE CUFFLESS BLOOD PRESSURE MEASURING TECHNIQUE
	233. EARLY FLOORPLAN ANALYSIS
	234. ENHANCEMENT OF XML PARSER LIB AND HWAPI LIB
	235. HARDENING OF DOCKER CONTAINERS
	236. HEAR RATE EXTRACTION FROM ECG
	237. IMPLEMENTATION OF A MESH NETWORKIN PROTOCOL FOR LOW RATE WIRELESS PERSONAL AREA NETWORK (WPAN)
	238. INTEL TOPOLOGY TOOL FOR AUDIO DRIVERS
	239. INSERTION OF AUTO-REPEATERS BETWEEN TWO FUNCTIONAL BLOCKS
	240. MODELLING DESIGN WARE(DW) COMPONENTS FOR FORMAL VERIFICATION
	241. NOISE SENSING AND CANCELLATION USING ETI IN ECG SIGNALS
	242. POSITION TRACKING USING A FOOT MOUNTED IMU
	243. SCALABLE AND MODULAR VALIDATION FRAMEWORK OF A CDC UNIT
	244. SOFTWARE DEVELOPMENT FOR TESTING BLUETOOTH LOW ENERGY STACK
	245. SYSTEM LEVEL ANALYSIS OF LTE PHYSICAL LAYER FOR NEXT GENERATION MOBILE COMMUNICATION SYSTEMS
	246 UNDERSTANDING THE MULTITESTER FRAMEWORK AND DEVELOPING A CONTINUOUS INTEGRATION FRAMEWORK
	247. VERIFICATION OF FULL CHIP CONNECTIVITY OF INTEL INTEGRATED GRAPHICS 2.POWER EXECUTION ANALYSIS
<b>34.</b>	<b>J.P. MORGAN CHASE, BANGALORE</b>
	248. 1. QLIKVIEW REPORTS 2. PROCESS AUTOMATION IN BROKERAGE
	249. ANALYSIS OF TRANSACTIONS IN EMEA REGION WITH THE HELP OF A MS ACCESS BASED DATABASE
	250. AUTOMATION OF REPORTS AND DASHBOARD MAINTENANCE
	251. BUSINESS MANAGEMENT OF CUSTODY MO
	252. IMPLEMENTATION OF NEWTON IN HEDGE FUNDS
	253. IMPROVING EFFICIENCY USING AUTOMATION TECHNIQUES
	254. KILL THE TAIL: A RECONCILIATION OVERVIEW
	255. MEASUREMENT AND IMPROVEMENT OF THE EFFICIENCY AND PRODUCTIVITY OF THE DAILY ACTIVITIES OFTHE TRANSFER AGENCY
	256. MIGRATION OF CLIENTS BETWEEN PORTALS
	257. MIGRATION OF HEDGE FUND OF FUNDS AND UNIT TRUST RECONCILIATION PLATFORM
	258. MIS RATIONALISATION
	259. OPERATIONS EXCELLENCE
	260. STANDARDIZATION OF STATIC
<b>35.</b>	<b>JDA SOFTWARE SOLUTIONS, BANGALORE</b>
	261. DEVELOPING UI using AXURE RP and AUTOMATION TESTING on SELENIUM
	262. FUNCTIONAL TESTING ON DAILY BUILDS OF JDA PLATFORM
	263. GUI AUTOMATION,FUNCTIONAL TESTING AND JENKINS CI FOR REDPRAIRIE POINT OF SALE PLUS APPLICATION
	264. QUALITY ASSURANCE OF WAREHOUSE MANAGEMENT SYSTEM

<b>36.</b>	<b>KHOSLA LABS, BANGALORE</b>
	265. DEVELOPMENT OF AN ANDROID APPLICATION FOR THE EGOVERNMENTS FOUNDATION
	266. PREDICTIVE DATA ANALYSIS OF COMPLAINT DATA OF CORPORATION OF CHENNAI
<b>37.</b>	<b>KPMG, BANGALORE</b>
	267. RESEARCH ON PROSPECTIVE CLIENTS FOR KPMG
<b>38.</b>	<b>LANTIQ INDIA PVT. LTD, BANGALORE</b>
	268. ADSL PARSER
	269. FIXED POINT IMPLEMENTATION
<b>39.</b>	<b>MEDIA IQ DIGITAL, BANGALORE</b>
	270. BUILDING AND DEVELOPING AN ENTERPRISE SOFTWARE
	271. DIGITAL ADVERTISING - CAMPAIGN MEDIA PLANS, INSIGHTS & USER JOURNEY ANALYSIS
	272. DIGITAL ADVERTISING & MARKETING – RESEARCH, IMPLEMENTATION AND ANALYSIS
	273. DIGITAL ADVERTISING & MARKETING- CAMPAIGN ANALYSIS & RETARGETING
	274. DIGITAL ADVERTISING & MARKETING- STRATEGIES & CAMPAIGN ANALYSIS
	275. DIGITAL ADVERTISING & MARKETING- STRATEGIES & CAMPAIGN ANALYSIS (CONTEXTUAL ANALYSIS)
	276. DIGITAL MARKETING AND ADVERTISING AND BUSINESS INTELLIGENCE
	277. DPI
	278. ONLINE DIGITAL ADVERTISING.
	279. SALES PIPELINE AND LEADS MANAGEMENT TOOL
<b>40.</b>	<b>MERCEDES BENZ, BANGALORE</b>
	280. SENSITIVITY ANALYSIS OF ELEMENTS IN FEA - SIZE & TYPE
	281. THORACIC RESPONSE OF THE 5TH PERCENTILE FEMALE FE MODEL FOR THE TABLE TOP VALIDATION TESTS
<b>41.</b>	<b>MYNTRA.COM, BANGALORE</b>
	282. BUILDING A FASHION REPOSITORY BY CRAWLING DIFFERENT SOURCES
	283. BUY & MERCHANDISE ASSIST
	284. LOOK CREATOR
	285. PRODUCT INFORMATION MANAGEMENT SYSTEM
	286. SEARCH STABILISATION AND ENHACEMENTS
	287. TRAINING PORTAL USING DRUPAL
<b>42.</b>	<b>NATIONAL AEROSPACE LABORATORIES, BANGALORE</b>
	288. ANALYSIS OF ADAPTIVE LAMINATED PLATE USING ISOGEOMETRIC FORMULATION EMPLOYING HSDT
	289. ANTI-REFLECTIVE TRANSPARENT CONDUCTOR FOR APPLICATION IN FLEXIBLE ELECTRONICS
	290. FINITE ELEMENT ANALYSIS OF ENERGY EFFICIENT LAMINATE
	291. HEAT FLOW ANALYSIS IN SOLAR THERMO ELECTRIC DEVICES COATED WITH SPECTRO-SELECTIVE COATINGS
	292. MODELING OF THE ELECTROCHEMICAL PERFORMANCE OF INTERNAL REFORMING SOLID OXIDE FUEL CELLS (SOFC)
	293. SYNTHESIS OF ELECTROSPUN CATHODE NANOFIBERS FOR SOLID OXIDE FUEL CELL
	294. TRANSPARENT CONDUCTIVE TA/AL/TA-GRID ELECTRODE WITH HIGH THERMAL STABILITY FOR OPTOELECTRONIC AND EMI SHIELDING APPLICATIONS
<b>43.</b>	<b>NATIONAL CENTRE FOR BIOLOGICAL SCIENCES, BANGALORE</b>
	295. EXAMINING LIGHT SENSING AND CIRCADIEN RHYTHM IN FLATWORMS (PLANARIAN) IN CONTEXT OF REGENERATION AND HOMEOSTASIS
	296. SCRUM AND DATABASE MANAGEMENT USING MYSQL AND PHP + KEYWORD SEARCH ENGINE
<b>44.</b>	<b>NATIONAL ENTREPRENEURSHIP NETWORK, BANGALORE</b>
	299. CONSOLIDATION OF NETWORK AND GLOBALIZATION OF ENTERPRISE
	300. DATA ANALYSIS
	301. DIGITAL MARKETING
	302. IMPACT ASSESSMENT OF WADHWANI FOUNDATION
	303. NEW GEOGRAPHY EXPLORATION AND SUPPORT THE DEVELOPMENT OF NETWORK THROUGH RESEARCH
	304. PRODUCTION OF E-LEARNING CONTENT USING ARTICULATE
	305. SCRUM AND DATABASE MANAGEMENT USING MYSQL AND PHP + KEYWORD SEARCH ENGINE
<b>45.</b>	<b>NATIONAL INSTRUMENTS SYSTEMS (INDIA) PVT. LTD, BANGALORE</b>
	306. AUTO-DETECTION OF DMRS PARAMETERS
	307. COMMON FRAME SYNCHRONIZATION FOR ALL MEASUREMENTS



	308. FPGA ACCELERATORS
	309. IMPLEMENTING WLAN STANDARD 802.11AD IN LABVIEW
<b>46.</b>	<b>NETAPP, BANGALORE</b>
	310. CHANGE DRIVEN TEST EXECUTION
	311. PERFORMANCE ANALYSIS OF RS AND MSR ERASURE CODES
<b>47.</b>	<b>NEXTGEN PMS PVT. LTD, BANGALORE</b>
	312. DEVELOPMENT OF P3 PLATFORM FOR MONITORING CSR ACTIVITIES
<b>48.</b>	<b>NUTANIX TECHNOLOGIES INDIA PVT. LTD, BANGALORE</b>
	313. ENHANCEMENT OF TESTING FRAMEWORK FOR POWERSHELL CMDLETS
	314. INLOOKS AND ENHANCEMENT OF ITS TESTING FRAMEWORK
<b>49.</b>	<b>NVIDIA GRAPHICS, BANGALORE</b>
	315. ADDING AND STREAMLINING THE ESSENTIAL COMPONENTS REQUIRED FOR BOOTING OF NVIDIA TEGRA PROCESSOR
	316. ARREGEN TOOL DESIGN
	317. BUILD FLOW OPTIMIZATIONS FOR THE SOC VERIFICATION ENVIORNMENT
	318. BUILD TIME IMPROVEMENT IN A SOC VERIFICATION ENVIRONMENT
	319. CONVERTING VMM BASED TESTBENCHES TO UVM BASED TESTBENCHES
	320. DESIGN AND VALIDATION OF C-MODELS FOR UNITS OF soc
	321. DEVELOPMENT AND VALIDATION OF WORKFLOW MANAGEMENT TOOLS FOR VARIOUS CHIPS AND DEVELOPMENT OF PARITY PLUGIN
	322.DEVELOPMENT OF CAD TOOLS TO AID IN SCAN INSERTION FOR THE DFT TEAM.
	323. ESTABLISH CONNECTIVITY BETWEEN ANDROID/IOS MOBILE WITH CAR&APOS;S HEAD UNIT
	324. ETHERNET EVALUATION FOR AUDIO SMART DISPLAY
	325. FEATURE ADDITION/OPTIMIZATION IN MULTIMEDIA S/W
	326. FINFET CIRCUIT IMPLEMENTATION IN 10NM TECHNOLOGY AND DESIGN OF DROOP DETECTOR SENSOR CIRCUIT.
	327. FORMAL VERIFICATION OF CPU DECODER
	328. FUNCTIONAL VERIFICATION OF SUB-SYSTEM MEMORY
	329. GPU PLACE AND ROUTE
	330. GRAPHICS & DISPLAY CONCURRENCIES ON AUTOMOTIVE FRAMEWORKS
	331. I/O SYSTEM-ON-CHIP VERIFICATION(SOCV)
	332. INFRASTRUCTURE IMPROVEMENT FOR MC (MEMORY CONTROLLER) PERFORMANCE MODEL
	333. LOW POWER DESIGNING
	334. PERFORMANCE REPORTING AND TRIAGING TOOL
	334. PERFORMANCE VERIFICATION OF GPU MEMORY SUBSYSTEM.
	336. PHYSICAL DESIGN AND ADVANCED TIMING CONSTRAINT ANALYSIS TECHNIQUES
	337. PIXEL COMPRESSION FOR BANDWIDTH REDUCITON
	338. POWER ESTIMATION TOOL
	339. PRE SILICON ARCHITECTURE VERIFICATION
	340. PRODUCTION TOOLS FOR THE GENERATION, SIGNING AND FLASHING OF FIRMWARE.
	341. SCAN INSERTION IN FLOPS AND INSERTION OF LEVEL SHIFTERS.
	342. SCRIPTS FOR ANALYSING CHIP VALIDATION OUTPUTS
	343. SEMI FORMAL VERIFICATION OF APBSLVGEN
	344. Soc DESIGN AND OPTIMIZATION
	345. TRACE TOOLS DEVELOPMENT
	346. TRANSISTOR LEVEL TIMING FOR ADVANCED TECHNOLOGY NODES
	347. UNIT LEVEL VERIFICATION OF GPU UNITS
	348. VERIFICATION OF HISPEED HUB FOR VOLTA
	349. VERIFICATION OF SECOND LEVEL CLOCK GATING USING FORMAL VERIFICATION
<b>50.</b>	<b>ORACLE INDIA PVT LTD, BANGALORE</b>
	350. AUTOMATION OF TEST CASES FOR ORACLE CALL REPORT APP
	351. CUSTOMER RELATIONSHIP MANAGEMENT FUSION WEB APPLICATIONS DEVELOPMENT USING ORACLE APPLICATION DEVELOPMENT FRAMEWORK
	352. EMPLOYING ELK STACK FOR MONITORING PAAS SERVICE MANAGER AND ORACLE TRAFFIC DIRECTOR LOGS
	353. ORACLE ACTIVITY TRACKER SERVICE

	354. ORACLE DATABASE APPLIANCE-WORKLOAD CONSOLIDATION ADVISOR
	355. SCHEDULER CLOUD SERVICE: SCHEDULING CODE-EXECUTION
<b>51.</b>	<b>PRACTO TECHNOLOGIES PVT. LTD, BANGALORE</b>
	356. DESIGNING A FEEDBACK HEALTH DASHBOARD
	357. MDM , DQS IMPROVEMENT AND DE-DUPLICATION OF DATA
	358. PRACTO CONSULT, AUTOMATION & ANALYSIS OF DE VOICE REPORTS
	359. PRACTO CONSULT, METRICS FOR VOICE AND NON-VOICE SUPPORT TEAMS IN OPERATIONS DEPARTMENT, PRACTO-RAY WEEKLY ANALYSIS
<b>52.</b>	<b>QUBOLE, BANGALORE</b>
	360. ADDING NEW FEATURES TO SQOOP
	361. INTEGRATION OF ELASTICSEARCH WITH PRESTO ENGINE
<b>53.</b>	<b>ROVI CORPORATION, BANGALORE</b>
	362. CLIENT SERVER QUERY SYSTEM
	363. ENHANCEMENTS TO DOM, JARVIS & DEVLEOPER PORTAL
	364. FEATURE ENHANCEMENT FOR DOM AND JARVIS
	365. ONTOLOGY CREATION AND FEATURE SELECTION FOR THE ENTERTAINMENT DOMAIN
<b>54.</b>	<b>SABRE HOLDINGS(FORMELY SABRE TRAVELS) , BANGALORE</b>
	366. MOBILE APP DEVELOPMENT FOR GETTHERE
	367. ADAPTING AUTOMATED RUN SCRIPTS FOR COMPATIBILITY WITH NEWER VERSIONS OF APPLICATIONS AND WORKING ON CODE COVERAGE METRICS FOR A PRODUCT USING INTELLIJ, TEAMCITY, AND THE JUNIT AND MOCKITO UNIT TESTING FRAMEWORKS AND DEVELOPING A GENERIC TESTING TOOL FOR TESTING COMMON CODE/FEATURES ACROSS THE TBAM CODEBASES USING THE JAVA REFLECTION API AND DEVELOPING A PYTHON TOOL FOR RETRIEVING INFORMATION FROM PASSENGER REACCOMMODATION LOGS
	368. AUTOMATIC FAILURE ANALYSIS TOOL
	369. AUTOMATION SCRIPTING IN TEST COMPLETE AND INTEGRATION OF MCT WITH INTERACT
	370. AUTOMATION TESTING AND TOOL DEVELOPMENT
	371. AUTOMATION TESTING OF FARES MANAGER AND CONTRACT MANAGER
	372. AUTOMATION, TEST-COMPLETE & MCT
	373. DEVELOPING A RESPONSIVE MOBILE APPLICATION AND AIR FARE TRENDS IN GETTHERE
	374. DEVELOPMENT OF GUI SCREENS
	375. DEVELOPMENT OF JAVA APPLICATION FOR GENERATING ANALYZER REPORTS, EXTENDING JASPER FUNCTIONALITY TO REPRESENT CORRECT STATUS OF EACH REPORT IN THE DATABASE, GENERATING A SEARCH UI USING SOLR, AGGREGATING COLUMNS USING R PROGRAMMING IN JAVA.
	376. DEVELOPMENT OF SOFTWARE API TO ANALYZE AND GENERATE REPORTS OF CODE COVERAGE METRICS FOR ANY GIVEN PROJECT RELEASE
	377. EMD MIGRATION TOOL,AUTOMATE SERVER LOGIN,RESOLVING ISSUES
	378. ENHANCING PAYMENT WEB SERVICES TEST FRAMEWORK
	379. ENHANCING PWS TEST FRAMEWORK IN FITNESS
	380. EXECUTION AND REPORTING DASHBOARD
	381. JAVA APPLICATION TO CALCULATE VELOCITY OF A TEAM
	382. JUNIT TESTING WITH MOCKITO FRAMEWORK, DBUNIT TESTING ON DAO METRICS, RALLY CUSTOMIZATION FOR THE AGILE PROCESS, AND FITNESS FILE CORRECTION AND AUTOMATION.
	383. MIGRATION OF APPLICATION INFORMATION DATABASE FROM PHP IMPLEMENTATION TO FLEX IMPLEMENTATION
	384. MOBILE APP DEVELOPMENT FOR GETTHERE
	385. MODIFICATION OF THE DRIVER SCRIPT AND CREATION OF NEW FUNCTIONS AND MODIFICATION OF EXISTING ONES IN THE REUSABLE JAR FOR AUTOMATION OF TEST CASES
	386. ONE BUILD
	387. PLUGIN DEVELOPMENT IN INTELLIJ AND UI DEVELOPMENT IN ECLIPSE
	388. QA ENGINEERING AND SOFTWARE TESTING OF CREW MANAGER CLASSIC FOR EASA FTL RULES
	389. REVAMP THE LAYOUT OF QIK POINT OF SALE APP FOR MAC OS
	390. SELF-SERVICE WEB CHECK-IN AUTOMATION
	391. TFE AUTOMATION AND SHAREPOINT SITE DEVELOPMENT
	392. TICKETING INSTRUMENT PANEL MIGRATION FROM DJANGO TO ANGULAR JS
	393. UNIT TESTING USING JUNIT AND MOCKITO,DAO TESTING, WORKING WITH FITNESS & JMETER, FIXING FAILING FITNESS AFTER DATABASE SWITCHOVER, MOCK TEST AUTOMATION
	394. WEB PORTALS AND APP DEVELOPMENT FOR NEW HIRES

<b>55.</b>	<b>SAP LABS, BANGALORE</b>
	395. DEVELOPMENT & TESTING IN BUSINESS INTELLIGENCE PLATFORM
	396. ENTERPRISE MESSAGING (SCRIBBLE)
	397. GISP DEVELOPMENT
	398. IOT CONNECTOR
	399. ONBOARDING SUSTENANCE AND AUTOMATION SCRIPTING
	400. SHARE-POINT APP-PART MODEL
<b>56.</b>	<b>SATTVA MEDIA &amp; CONSULTING PVT LTD, BANGALORE</b>
	401. THE ALTERNATIVE AND ONLINE MEDIA
	402. THE ALTERNATIVE AND CONSULTING
<b>57.</b>	<b>SELLERWORX ONLINE SERVICES LIMITED, BANGALORE</b>
	403. 1.REPORT AUTOMATION 2. INVOICE LISTING , CUSTOMIZATION AND GENERATION
	404. CATALOG AUTOMATION PROCESS
	405. PASSWORD TOOL, ANDROID NOTIFICATION
	406. PIM(PROJECT INFORMATION MANAGEMENT) AND WEB SCRAPPING
	407. WEB SCRAPING
<b>58.</b>	<b>SHELL TECHNOLOGY CENTER, BANGALORE</b>
	408. DEVELOPMENT OF DEOXYGENATION KINETIC MODEL FOR CATALYTIC HYDROLYSIS
	409. EFFECT OF DOPANTS ON THE ACTIVITY OF LOW TEMPERATURE DENOX
	410. PREPARATION & TESTING OF CATALYSTS FOR HYDROTREATING.
<b>59.</b>	<b>SYMANTEC SOFTWARE SOLUTIONS PVT. LTD, BANGALORE</b>
	411. AUTOMATION ON PLATFORMS (TOMCAT, DATAPOWER)
	412. CUSTOMIZATION OF THE APPLICATION OPSDASHBOARD
	413. ONLINE BASE CERTIFICATE TYPE EDITOR
	414. PORTING AND CONFIGURATION OF VIP EG ON SYMANTEC ACCESS MANAGER BRIDGE, BOOST TEST LIBRARY UNIT TESTING FRAMEWORK AND AUGMENTING SESSION MANAGEMENT USING SHARED WEB WORKER.
	415. QUALITY ASSURANCE OF CERTIFICATE INTELLIGENCE CENTER (CIC)
<b>60.</b>	<b>TANGOE INDIA SOFTEK PVT LTD, BANGALORE</b>
	416. MATRIX ENVIRONMENT BUILDING, WORKING WITH EXCEL SHEETS IN ECLIPSE AND JSON OBJECT READING
<b>61.</b>	<b>TAS ANALYTIC SERVICES, BANGALORE</b>
	417. CENTRALIZED ORDER REGULATION FOR TIME INC. MAGAZINES & OTHER CLIENTS
	418. MARKETING AND RESEARCH
	419. RESEARCH AND MARKETING FOR TIME INC.
<b>62.</b>	<b>TESCO HINDUSTAN SERVICE CENTRE, BANGALORE</b>
	420. AUTOMATION OF REPORTING AND PERFORMANCE IMPROVEMENT OF EPOD
	421. REGION WISE ANALYSIS OF KEY METRICS
	422. RESPONSIVE DESIGN FOR EMAIL MARKETING
<b>63.</b>	<b>TEXAS INSTRUMENTS (I) PVT. LTD, BANGALORE</b>
	423. ADAPTIVE VOLTAGE SCALING ARCHITECTURE EVALUATION.
	424. ANALOG PHASE INTERPOLATORS FOR FRACTIONAL FREQUENCY GENERATORS(FFGS)
	425. ANALYSIS AND DEVELOPMENT OF SLM (SINGLE LEVEL METAL) DIGITAL CMOS CORE LIBRARY.
	426. CHARACTERIZATION AND TRIMMING CAPABILITY DEVELOPMENT FOR A HIGH PRECISION DAC
	427. COMPENSATION OF TRACE IMPEDANCE IN AUDIO TEST-BOARD.
	428. DESIGN AND ANALYSIS OF VOLTAGE LOCKED LOOP (VLL).
	429. DESIGN AND PROCESS COMPENSATION OF DRIVE STRENGTH PROGRAMMABLE CMOS INPUT OUTPUT BUFFERS.
	430. DESIGN OF A 2.4GHZ LC OSCILLATOR WITH PRECISE TUNING RANGE OF $\pm 100$ KHZ
	431. DESIGN OF A BENCH BOARD FOR TESTING AUTOMATION
	432. DESIGN OF AN EFFICIENT SINGLE INDUCTOR MULTIPLE OUTPUT(SIMO) BUCK CONVERTER
	433. DESIGN OF OVER VOLTAGE PROTECTION(OVP) BLOCK WITH LOAD INSENSITIVITY
	434. DESIGN OF POWER EFFICIENT LOW PHASE NOISE OSCILLATOR FOR ISM BAND OPERATION
	435. DESIGN OF ROBOTIC ARM FOR BENCH TEST AUTOMATION.
	436. DESIGN OF SUB-CIRCUITS FOR INTEGRATED MOTOR DRIVERS
	437. DEVELOPING TESTER ENVIRONMENT IN CADENCE VIRTUOSO FOR PRE SILICON SIMULATION.

	438. DIGITAL MULTIMETER
	439. EMISSIONS AND IMMUNITY SIMULATION AT BOARD LEVEL
	440. ENABLING AT SPEED TESTING FOR COMPLEX RF SAMPLED HIGH SPEED DATA CONVERTORS
	441. FUNCTIONAL TEST FAULT GRADING FOR DIGITAL FIR FILTER
	442. IMPROVEMENT OF ENERGY EFFICIENCY OF THE ILLUMINATION CIRCUIT IN THE 3D TOF CAMERA
	443. MODELLING OF MICROSPEAKER IN MATLAB AND SIMULINK
	444. NON - LINEARITY TESTING OF MULTIPLE DIGITAL TO ANALOG CONVERTERS
	445. OPTIMIZATION OF IC TEST CODE USING PATTERN BASED TESTING (PBT) TECHNIQUE FOR AUTOMATIC TEST EQUIPMENT (ATE).
	446. PARALLEL CHARACTERIZATION OF MULTIPLE DACS USING SAR ADCS.
	447. SIMULATION MODEL FOR DAISY CHAINING ON SAR AD
	448. TO REDESIGN AND OPTIMIZE AREA OF VOLTAGE REGULATOR
	449. TOP LEVEL VERILOG MODELING OF SAR ADC
<b>64.</b>	<b>TONBO IMAGING PVT LTD, BANGALORE</b>
	450. EMBEDDED LINUX FOR IMAGING APPLICATIONS
	451. IMAGE FUSION USING WAVELET TRANSFORM
	452. IMPLEMENTATION OF IMAGE FUSION USING FIELD PROGRAMMABLE GATE ARRAY.
	453. OPTICAL CENTER CALIBRATION OF THERMAL CAMERS AND TRAFFIC SURVEILLANCE
<b>65.</b>	<b>VMWARE SOFTWARE INDIA PVT. LTD, BANGALORE</b>
	454. LONG VIRTUAL WIRE
	455. MOCKING DATA COLLECTION USING WIREMOCK SERVER.
	456. V-CLOUD AIR NETWORKING SERVICE UTILITIES
	457. VIDM ANALYTICS OPERATOR PORTAL
	458. VIDM OPERATOR PORTAL
	459. VMOCKSERVER: AN INTELLIGENT MULTI-MOCK SERVER FOR WEB SERVICES
<b>66.</b>	<b>WALMART GLOBAL TECHNOLOGY SERVICES, BANGALORE</b>
	460. BARE METAL TO CLOUD
	461. COMPARATIVE ANALYSIS OF FRONT-END PERFORMANCE
	462. DATA ANALYTICS AND AUTOMATION TASKS
	463. DATA PREPARATION FOR MEMBER ENGAGEMENT PLATFORM
	464. DEVELOPMENT OF USER INTERFACE
	465. FIREWALL REQUEST AND AUDIT
	466. FORMATION OF THE WEATHER CAUSALITY MATRIX FOR 5800 US STORES
	467. GSCOPE
	468. IMPACT OF REVIEWS AND RATINGS ON WALMART SALES
	469. INFORMIX TO CASSANDRA DATA MIGRATION
	470. INVENTORY CONTROL FOR GLS NEXTGEN
	471. PRODUCT DEVELOPMENT
	472. RESTFUL WEB SERVICES
	473. SHELF SPACE OPTIMIZATION
	474. USER INTERFACE DEVELOPMENT AND GIT MIGRATION
	475. WALMART FEED NOTIFICATION CENTRE
	476. WEB APPLICATION DEVELOPMENT TO SUIT BUSINESS NEEDS
	477. WISMO- WHERE IS MY ORDER
<b>67</b>	<b>ZINNOV MANAGEMENT CONSULTING PVT. LTD, BANGALORE</b>
	478. EMC TALENT POOL
	479. SALES ORGANIZATION STUDY- MNC TECHNOLOGICAL CLIENT
<b>68</b>	<b>ZOOMCAR INDIA PVT. LTD, BANGALORE</b>
	480. ANDROID APPLICATION DEVELOPMENT AND OPTIMIZATION
	481. BUSINESS ANALYSIS
	482. BUSINESS AND DATA ANALYTICS
	483. DIGITAL MARKETING
	484. DRIVER'S LICENSE
	485. HANDLING ALL COMMUNICATIONS GOING THROUGH ZOOMCAR(EMAIL AND SMS)
	486. HUB ARRIVAL

	487. IMPROVEMENTS IN RESCHEDULING PROCESS
	488. MANAGEMENT & OPERATIONS
	489. OPERATIONS EXCELLENCE
	490. PRODUCT AND OPERATION
	491. PRODUCT AT ZOOMCAR
	492. PROJECTS DONE AS A PART OF BACKEND TEAM.
	493. PS 2 EXPERIENCE AT ZOOMCAR INDIA PVT LTD
	494. SEARCH ENGINE MARKETING
	495. TECHNIQUES AND SKILLS USED FOR THE FRONTEND AT ZOOMCAR
	496. TO BUILD AND DEVELOP IOS APPLICATION
	497. TRACKING OF CAR BLOCKS
	498. WEB AND UI/UX DESIGN
	499. WEB DEVELOPMENT AT ZOOMCAR
<b>69.</b>	<b>ZYNGA GAME NETWORK INDIA PVT. LTD, BANGALORE</b>
	500. AWS MIGRATION, BLOB REDUCTION, RELEASE MANAGER, ANIMATION AND ADOBE AIR TOOLBOX FIX
	501. CONTENT INTEGRATION
	502. FARM VILLE- BEHIND THE SCENES
	503. REVENUE OPTIMIZATION
	504. SYSTEMS OPTIMIZATIONS AND FEATURE DEVELOPMENT
	505. VARIOUS FEATURE ADDITIONS, GAMEPLAY OPTIMIZATIONS AND BUG FIXES IN FARMVILLE 2
<b>70.</b>	<b>AMAZON DEVELOPMENT CENTER, CHENNAI</b>
	506. DISASTER RECOVERY AND TICKET MANAGEMENT
	507. IDENTIFYING NEW MARKUPS FOR A BETTER READING EXPERIENCE
	508. KCQ FEATURE EXTRACTOR AND TYPO DETECTOR
	509. LUMOS
<b>71.</b>	<b>CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE, CHENNAI</b>
	510. IMPLEMENTING SUPPORT VECTOR MACHINES ON A RASPBERRY PI
	511. IMPLEMENTATION OF ADVANCED MACHINE LEARNING ALGORITHMS ON OPEN SOURCE PLATFORM
<b>72.</b>	<b>CENTRAL LEATHER RESEARCH INSTITUTE (CLRI), CHENNAI</b>
	512. PREDICTIVE MODELLING OF BIOPROCESS USING ONLINE MONITORING OF METABOLIC HEAT .
<b>73.</b>	<b>ERNST &amp; YOUNG PVT LTD, CHENNAI</b>
	513. APPLICATION FOR SECURITY ANALYTICS
<b>74.</b>	<b>STAYZILLA - INASRA TECHNOLOGIES, CHENNAI</b>
	514. CREATION OF SHINY DASHBOARDS AND TWITTER ANALYSIS USING R
	515. HOTEL RECOMMENDER SYSTEM
	516. MARKET MIX MODELING
	517. TOOLS, ALGORITHMS AND VISUALIZATIONS FOR BUSINESS INTELLIGENCE ANALYTICS
	518. VISUALISATIONS FOR KIBANA
<b>75.</b>	<b>INDIAN INSTITUTE OF PETROLEUM, DEHRADUN</b>
	519. EXTRACTION OF AROMATICS FROM LCO
	520. KINETIC MODELLING OF BIOMASS GROWTH AND MATURATION FOR LIPID PRODUCTION INSIDE AN AIRLIFT BIOREACTOR
	521. REAL WORLD NOX EMISSIONS AND THEIR CORRELATION WITH DRIVING PARAMTERS
	522. SEPARATION OF TERNARY MIXTURES USING A DIVIDING WALL COLUMN
<b>76.</b>	<b>AMAZON DEVELOPMENT CENTER, DELHI</b>
	523. AUTOMATIC SHIPMENT ASSIGNMENT TO STORES
	524. STOREAPP-PROBLEMFLOW
	525. USER BASED AUTHENTICATION
<b>77.</b>	<b>TATA MOTORS, DHARWAD</b>
	526. MOST STUDY IN THE BIW SHOP
	527. UPDATION OF DML MBPA SYSTEM AND PREPARATION OF PQS FOR LCV MODELS
	528. WORK STANDARDIZATION AND ERGONOMICS STUDY
<b>78.</b>	<b>IFB INDUSTRIES, GOA</b>
	529. FEATURE ENHANCEMENT OF TOP LOADING WASHING MACHINES BY PROVIDING PROVISION FOR WASHING OF DELICATES
	530. REJUVENATION OF DRYER

	531. RE-ENGINEERING THE MATERIALS OF COMPONENTS OF TL AND FL WASHING MACHINES THEREBY INCREASING THE VALUE.
<b>79.</b>	<b>ST MICROELECTRONICS(I) PVT.LTD, GREATER NOIDA</b>
	532. DESIGN AND ANALYSES OF PLL AND ITS SUB BLOCKS
	533. DESIGN, RTL SYNTHESIS, FUNCTIONAL VERIFICATION OF SOC USING DESIGN TOOLS
	534. DESIGNING OF TWO STAGE OPERATIONAL AMPLIFIER AND ANALYSIS OF PLLS
	535. DEVELOPMENT OF COMMON FUNCTION LIBRARY FOR ARM V8 ARCHITECTURE
	536. EVALUATION OF CAD TOOLS & AUTOMATION OF LAYOUT ENGINEERS
	537. SYNTHESIS, DFT INSERTION AND FORMAL VERIFICATION OF SOC USING DESIGN TOOLS
<b>80.</b>	<b>AURUM EQUITY PARTNERS, GURGAON</b>
	538. HOW INVESTMENT BANKS IDENTIFY NEW BUSINESS OPPORTUNITIES - FOCUS ON RENEWABLE AND AUTOMOBILE SECTORS
	539. MEDICAL DEVICE SECTOR IN INDIA
	540. SCOPE OF SOLAR POWER INDUSTRY IN INDIA
<b>81.</b>	<b>BAIN CAPABILITY CENTER PVT. LTD, GURGAON</b>
	541. LIVE/ IP CASES
	542. ROLE OF CONSULTING IN PRIVATE EQUITY
	543. STUDY OF TOTAL SHAREHOLDER RETURNS (CORPORATE FINANCE)
<b>82.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), GURGAON</b>
	544. COMPETITIVE ANALYSIS AND FOOD ORDERING HABITS OF CONSUMERS.
	545.MARKET RESEARCH,ANALYSE SWIGGY'S VENDOR MANAGEMENT STRATEGIES AND COMPETITIVE ANALYSIS
	546.SALES PROCESS, ANALYSIS OF OPERATIONS & EMPLOYEE ENGAGEMENT
	547.STRATEGIC TALENT MANAGEMENT & COMPETITIVE STUDY ON SALES PROCESS
<b>83.</b>	<b>HIKE, GURGAON</b>
	548. ANDROID DEVELOPMENT FOR HIKE ANDROID PLATFORM
	549. DEVELOPING ANDROID FEATURES & BACKEND APIS
	550. DEVELOPING ANDROID FEATURES & BACKEND MICRO-SERVICES
	551. WINDOWS PHONE AUTOMATION FRAMEWORK
<b>84.</b>	<b>KPMG, GURGAON</b>
	552. BID ADVISORY FOR LEADING TELECOM CLIENT
	553. BUSINESS SOFTWARE ALLIANCE (BSA) - SOFTWARE LICENSING REVIEW (SLR) AND SUPPLIER VENDOR REVIEW (SVR)
	554. DATA ANALYSIS IN COMPLIANCE AND SAM
	555. INTELLECTUAL PROPERTY AND ITS CURRENT ECOSYSTEM IN INDIA AND ENGAGEMENT WITH INDUSTRY ASSOCIATIONS ON THOUGHT LEADERSHIP AND CLOUD ADVISORY
	556. INTELLECTUAL PROPERTY AND SUPPLIER VENDOR REVIEWS
	557. PTS REVIEW FOR AN INDIAN FULL SERVICE CARRIER
<b>85.</b>	<b>LAMA CAPITAL MANAGEMENT, GURGAON</b>
	558. TRADING STRATEGIES
<b>86.</b>	<b>LEXINNOVA, GURGAON</b>
	559. INTELLECTUAL PROPERTY (IP)
	560. PATENT ANALYSIS AND LITIGATION TECHNIQUES
<b>87.</b>	<b>MAHLE FILTERS INDIA LTD, GURGAON</b>
	561. IMPROVEMENT IN SEAMING MACHINE-PROCESS CAPABILITY
	562. REJECTION REDUCTION OF PLASTIC MOLDED PARTS
	563. SUPPLIER PLATING PROCESS BENCHMARKING AND STANDARDIZATION
<b>88.</b>	<b>RECKITT BENCKISER, GURGAON</b>
	564. AUTOMATION OF UPGRADATION FOR AN APPLICATION
	565. CREATION OF AUDIT REPORTS, IMPROVING NWC USING INSIGHT UNLIMITED AND ADMINISTERING ARIBA MYBUY
	566. DEVELOPMENT OF DATABASE MONITORING TOOL
	567. FINANCIAL DATA CONSOLIDATION THROUGH ICE
	568. SUPPLY CHAIN INFORMATION SYSTEMS IN RB.
<b>89.</b>	<b>SKODA AUTO INDIA PVT. LTD, GURGAON</b>
	569. CIDD REBRANDING OF SAIPL DEALERSHIPS
	570. REDUCTION OF PENDING CARS IN SKODA NETWORK

<b>90.</b>	<b>SRF LTD, GURGAON</b>
	571. DESIGNING BASIC ENGINEERING PACKAGE AND OPTIMIZATION OF PROCESS USING VISIMIX AND ASPEN.
	572. DESIGNING BASIC ENGINEERING PACKAGE AND OPTIMIZATION USING ASPEN AND VISIMIX SOFTWARES
	573. REACTOR AND COLUMN DESIGN WITH THERMODYNAMIC CALCULATIONS ALONG WITH ASPEN AND VISIMIX SIMULATION
<b>91.</b>	<b>ZS ASSOCIATES, GURGAON</b>
	574. 1) DATA INTEGRATION AND TERRITORY ALIGNMENT PROJECT 2) OPERATIONS MATURITY MODEL TOOL
	575. TERRITORY ALIGNMENT AND OPERATIONAL EXCELLENCE EXPERTISE - 1. DATA INTEGRATION AND TERRITORY ALIGNMENT FOR A PHARMACEUTICAL FIRM 2. DEVELOPING SOFTWARE TOOL TO QUANTITATIVELY TRACK PERFORMANCE OF VARIOUS WORK STREAMS WITHIN ZS
	576. MARKETING MIX AND SALES FORCE SIZING
<b>92.</b>	<b>FAIVELEY TRANSPORT RAIL TECHNOLOGIES INDIA LTD (FTRIL), HOSUR</b>
	577. OVERVIEW NPR & I DEPT. ,PPI-GLOBAL SOURCING, TIME STUDY OF DOOR ASSEMBLY, LAYOUT DESIGN FOR ACTUATOR ,TBU, BOOGIE BRAKES ASSEMBLY
	578. STORE MANAGEMENT AND SOURCING OF PARTS
	579. STUDY OF PROJECT AND QUALITY MANAGEMENT IN FAIVELEY RAIL TECHNOLOGIES
	578. SUB CONTRACT CONVERSION TO BOUGHT OUT AND STORE MANAGEMENT
<b>93.</b>	<b>ADAEQURE, HYDERABAD</b>
	581. ETL TRANSFORMATIONS USING APACHE FLINK
	582. TAXILLA
	583. WEBHOOKS DESIGN, OAUTH2
<b>94.</b>	<b>AMAZON DEVELOPMENT CENTER, HYDERABAD</b>
	584. AAA REQUEST METRICS REPORT GENERATOR
	585. DATABASE MIGRATION FROM ORACLE TO DYNAMODB
	586. DESIGN AND IMPLEMENTATION OF ARCHITECTURE FOR A NEW ANALYTICAL SERVICE
	587. DEVELOPING AN AUTOMATED TREND-LINE PREDICTION SYSTEM AND ENHANCEMENT OF 587. MISSORT AND CASEMANAGEMENT TOOLS
	588. DEVELOPING DEPLOYMENT VALIDATION SYSTEM FOR CAIRO
	589. DEVELOPMENT OF A GENERIC PRICING ENGINE TO COMPUTE SHIPMENT RATES IN AMAZON LOGISTICS.
	590. DEVELOPMENT OF A SERVICE TO VALIDATE CAIRO ESTIMATORS AND GENERATE REPORTS
	591. DEVELOPMENT OF ADMIN PORTAL FOR ALEXANDRIA
	592. DEVELOPMENT OF PRECOMPUTATION MODULE AND OTOM SERVICE USER INTERFACE FOR VENDOR PAYMENTS SYSTEM
	593 DEVELOPMENT OF UI FOR INVOICE VISIBILITY AND & REPORTING MIGRATION FROM PERL TO HADOOP-JAVA
	594. GATE ACCESS CODE EXTRACTION
	595. INTENT IDENTIFICATION FROM TEXT MESSAGING USING PATTERN RECOGNITION
	596. INVOICE MANAGEMENT : BULK EDITING INVOICES
	597. ORDER VOLUME AGGREGATION AND VISUALIZATION
	598. PREDICTIVE HELP
	599. PROJECT MCOP: DEVELOPING APIS AND UI FOR MULTI COMPANY ORDERING PLATFORM (MCOP) OPERATIONS
	600. REDESIGN OF DATE RANGE REPORTS PAGE OF SELLER CENTRAL
	601. REGIONALIZATION OF DATA OWNED BY SERVICES TO REDUCE CROSS-REGION NETWORK TRAFFIC
	602. USER INTERFACE AND FUNCTIONALITY IMPROVEMENT
	603. USING MACHINE LEARNING TECHNIQUES TO FIND PATTERNS FOR OFF-MANIFEST
	604. UX ENHANCEMENTS FOR FLUID (A DRAG AND DROP WEB PAGE BUILDER TOOL). SETTING UP AUTOMATED TEST SUITE, DEPLOYMENT PIPELINE AND MONITORING MECHANISMS FOR USECASESESSIONSERVICE (A TIER-1 WEBSERVICE POWERING AMAZON CRM TOOL).
<b>95.</b>	<b>BHARAT DYNAMICS LTD, HYDERABAD</b>
	605. 3D SIMULATION OF MISSILE GUIDANCE LAW ON MATLAB
	606 INVENTORY MANAGEMENT CONTROL TOOL
	607. TRAINING SIMULATOR & LAB INVENTORY MANAGER
<b>96.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY) , HYDERABAD</b>

	608. INCREASING AVERAGE ORDER VALUE,STREAMLINING DE ONBOARDING PROCESS
	609. STREAMLINING ON-BOARDING OF DELIVERY EXECUTIVES
	610. STREAMLINING ON-BOARDING PROCESS AT SWIGGY
<b>97.</b>	<b>CA TECHNOLOGIES, HYDERABAD</b>
	611. UNIT TESTING CA WORKLOAD AUTOMATION
	612. UNIT TESTING CA-WAAE
	613. UNIT TESTING FOR AUTOSYS
	614. UNIT TESTING- WORKLOAD AUTOMATION AUTOSYS EDITION
	615. WRITING UNIT TEST CASES FOR CAWAAE
<b>98.</b>	<b>DUPONT KNOWLEDGE CENTER, HYDERABAD</b>
	616. PROCESS MODELLING AND SIMULATION OF BIO CHEMICAL PROCESS
	617. SEED INVENTORY TRANSACTION REPORT
<b>99.</b>	<b>IMI MOBILE, HYDERABAD</b>
	618. BUSINESS ANALYTICS
	619. GOOGLE ANALYTICS AND MARKET RESEARCH
	620. WORKING ON PROJECTS AND FINDING SOLUTIONS
<b>100.</b>	<b>INDIAN INSTITUTE OF CHEMICAL TECHNOLOGY, HYDERABAD</b>
	621. COMMERCIALISATION OF HYDRAZINE HYDRATE PRODUCTION
	622. FLUIDIZATION OF BIOMASS
	623. RECOVERY OF PURE HYDROGEN AND CHLORINE FROM INDUSTRIAL WASTE DILUTE HYDROCHLORIC ACID
	624. SYNTHESIS AND CHARACTERIZATION OF PYRAZOLE DERIVATIVES
	625. SYNTHESIS OF TROGER&APOS;S BASE AND ITS ANALOGUES
<b>101.</b>	<b>INSIDE VIEW, HYDERABAD</b>
	626. IV CHROME PLUGIN & UNIFIED ADMIN PORTAL
	627. META DATA EXTRACTION
<b>102.</b>	<b>JDA SOFTWARE SOLUTIONS, HYDERABAD</b>
	628.AUTOMATION
	629.NEXTGEN MTO AND MRO 8.3.1
	630.QUALITY ASSURANCE OF JDA ENTERPRISE STORE OPERATIONS(ESO)
	631.SELENIUM FRAMEWORK DEVELOPMENT
	632.SOFTWARE DEVELOPMENT AND TESTING FOR JDA PLATFORM
	633.SOFTWARE TESTING IN INTELLIGENT FULFILMENT
<b>103.</b>	<b>MOLDTEK INDIA, HYDERABAD</b>
	634.QUALITY ASSURANCE AND CONTROL
	635. STEEL DETAILING QUALITY ASSURANCE
<b>104.</b>	<b>MORDOR INTELLIGENCE, HYDERABAD</b>
	636. COMPANY AND BUSINESS RESEARCH IN ICT DOMAIN
	637.MARKET RESEARCH & CONSULTING OF GLOBAL HEALTHCARE INDUSTRY.
	638. MARKET RESEARCH ANANLYSIS: CHEMCIALS
	639. QUALITATIVE AND QUANTITATIVE MARKET RESEARCH
	640. SALES - MARKET RESEARCH
<b>105.</b>	<b>MY SMART PRICE,HYDERABAD</b>
	641.BRANDING THROUGH &APOS;STUDENTPROGRAM&APOS;
	642..E-COMMERCE MARKETING ANALYSIS
	643.E-COMMERCE USER DATA AND SOCIAL MEDIA MARKETING ANALYTICS
<b>106.</b>	<b>ORACLE INDIA PVT LTD, HYDERABAD</b>
	644.BUILDING TRADE AGREEMENTS UI USING ADF
	645.CONTINUOUS INTEGRATION BUILD LABEL ANALYTICS
	646.DEVELOPING REST SERVICES API FOR BUG TRACKING AND ENVIRONMENTS OPERATIONS SYSTEM
<b>107.</b>	<b>SILICON IMAGE R&amp;D PVT LTD, HYDERABAD</b>
	647. CLOCK DOMAIN CROSSING
	648. QA AUTOMATION TOOL DEVELOPMENT & DEBUGGING
	649. STUDY OF CMOS AMPILFIERS
<b>108.</b>	<b>STEELWEDGE SOFTWARE INC, HYDERABAD</b>
	650. DATA MIGRATION UTILITY



	651. EXTRACTION OF REJECTED RECORDS TO FTP DURING DATA LOAD PROCESS
<b>109.</b>	<b>STELLAR SOFTWARE TECHNOLOGIES PVT LTD, HYDERABAD</b>
	652.PRODUCT DEVELOPMENT, SALES AND SOURCING
	653.UI/UX DEVELOPMENT
<b>110.</b>	<b>WORLEY PARSONS INDIA, HYDERABAD</b>
	654. DESIGN OF SUCTION PILES FOR OFFSHORE DEEPWATER STRUCTURES
	655. LEVEL MEASUREMENT IN VARIOUS STORAGE TANKS
	656. MECHANICAL EQUIPMENT DESIGN AND SELECTION IN UPSTREAM OIL AND GAS INDUSTRY
	657. PROCESS DESIGN IN UPSTREAM OF OIL AND GAS PRODUCTION
<b>111.</b>	<b>STELLARIX CONSULTANCY SERVICES PVT LTD, JAIPUR</b>
	658. METHODS AND TOOLS FOR PATENT TESTING AND ANALYSIS.
	659. PATENT ANALYSIS AND NOVELTY SEARCH
<b>112.</b>	<b>TATA MOTORS, JAMSHEDPUR</b>
	660.MINIMIZING CLUTCH DEFECTS AND FAILURES USING SIX SIGMA
	661.PROCESS CONTROL AND OPTIMIZATION IN CENTRALIZED PAINT SHOP
	662.SUPPLIER INTEGRATION FOR QUALITY ENHANCEMENT AT SUPPLIER END TO ACHIEVE OVERALL SUPPLIER DEVELOPMENT
	663.SUPPLIER INTEGRATION FOR QUALITY ENHANCEMENT OF RAW MATERIAL AND SUPPLIER OVERALL DEVELOPMENT
	664.TMPS AND APPLICATIONS OF PFD, PFMEA AND PROCESS SHEET TO VEHICLE AND INDUSTRIAL ENGINES
	665.WORKFLOW AND PRODUCTIVITY IMPROVEMENT THROUGH APPLICATION OF MAYNARD OPERATION SEQUENCE TECHNIQUE(MOST)
<b>113.</b>	<b>TEGA INDUSTRIES, KOLKATA</b>
	666. 3D MODELLING OF MOLDS AND DESIGN OF SOP'S FOR SUPPLY CHAIN PROCESS
	667. FLAT SCREEN UPPER MOULD PLATE MODIFICATION BY COPPER PLATE
<b>114.</b>	<b>GRASIM INDUSTRIES LTD., KUMARAPATNAM</b>
	668. FINDING AND REDUCING VARIATIONS IN UNBLEACHED PULP VISCOSITY
	669. OPTIMIZING ENERGY CONSUMPTION IN SPIN BATH RECOVERY SYSTEM
<b>115.</b>	<b>TATA MOTORS, LUCKNOW</b>
	670. A STUDY OF DEVIATIONS OBSERVED IN THE PIST REPORT OF SLEEPER CAB FOR ACHIEVING WCQ LVL.
	671. RECOVERY ANALYSIS OF MEMO DATA AND IMPROVEMENT OF COSTS INCURRED IN WARRANTY CELL
<b>116.</b>	<b>ADITYA BIRLA SCIENCE &amp; TECHNOLOGY COMPANY LTD, MUMBAI</b>
	672.ALTERNATIVE BIO BASED ROUTE FOR CARBON BLACK PRODUCTION AND MODIFICATION
	673.ENHANCEMENT OF 1-DAY STRENGTH OF CEMENT
	674.EVALUATION OF RED SIDE PROCESS CHEMISTRY OF BAYER ALUMINA REFINERY
	675.HARVESTING KINETIC ENERGY OF WIND AND RIVER FLOW
	676.IMAGE ANALYSIS AND DESIGN OF A VIDEOMICROSCOPE FOR IMPURITY DETECTION IN VISCOSE FIBER SOLUTION
	677.STUDY OF RATE OF WATER EVAPORATION DURING THE FORMATION OF LYOCCELL DOPE
<b>117.</b>	<b>BUNDL TECHNOLOGIES PRIVATE LIMITED (SWIGGY), MUMBAI</b>
	678. LAUNCH AND EXPANSION STRATEGY FOR SWIGGY MUMBAI
	679. LAUNCH AND EXPANSION STRATEGY OF AN ON DEMAND FOOD DELIVERY PLATFORM
	680. OPERATIONS MANAGEMENT FOR SWIGGY, MUMBAI
<b>118.</b>	<b>CARWALE (AUTOMOTIVE EXCHANGE PVT. LTD.) MUMBAI</b>
	681.CARWALE ANDROID APPLICATION DEVELOPMENT AND MODIFICATION
	682.DEVELOPMENT AND MODIFICATIONS IN CARWALE IOS APP
	683.IMPROVING UI AND USER PERFORMANCE FOR CARWALE ANDROID APP
	684.MODIFICATIONS ON THE CARWALE LIVE APP.
	685.OPTIMIZATION AND BRINGING NEW FEATURES IN CARWALE IOS APP.
<b>119.</b>	<b>CENTURY RAYON, MUMBAI</b>
	686. BENEFICIATION OF UNBURNT CARBON FROM FLY ASH, COMPARISON AND PERFORMANCE EVALUATION OF VARIOUS FILTERS IN RAYON PLANT
	687. BENEFICIATION OF UNBURNT COAL FROM FLY ASH AND COMPRESSION AND PERFORMANCE EVALUATION OF THE FILTERS IN RAYON DEPARTMENT
<b>120.</b>	<b>CREDIT SUISSE, MUMBAI</b>
	688.ANALYSIS OF SECURITIES LENDING BUSINESS

	689.BASEL III: BANKING, FINANCIAL AND INSURANCE REGULATIONS
	690.CONTROLS FOR OPERATIONAL RISK MANAGEMENT
	691.COUNTERPARTY CREDIT RISK – CREDIT VALUATION ADJUSTMENTS
	692.DEVELOPING AN ALTERNATE METHODOLOGY FOR OBLIGOR LGD CALCULATION AT OBLIGOR LEVEL
	693.ECONOMIC RISK CAPITAL
	694.EQUITY CONTROLS AS AN INTEGRAL PART OF INVESTMENT BANKING
	695.FIXED INCOME DIVISION, NON-STRATEGIC UNIT -- MARKET LIQUIDITY RISK MANAGEMENT
	696.FULL REVAL ERROR CORRECTION COMPONENT
	697.IMPACT ANALYSIS USING VALUE AT RISK
	698.INSIGHTS OF IB BUSINESS FROM CONTROLS PERSPECTIVE
	699.INVESTMENT BANKING CONTROLS AND REGULATIONS
	700.MEASURES OF RISK AND GREEK SENSITIVITIES
	701.MODEL VALIDATION
	702.OPTION GREEKS AND VALUE AT RISK
	703.PRICING MODEL VALIDATION
	704.RISK FACTOR IDENTIFICATION
	705.RISK NOT IN VAR TO VAR CONVERSION
	706.RISK REPORTING FOR ICAAP 2B
	707.ROLE OF BACK TESTING IN REGULATORY CAPITAL AND RISK MANAGEMENT
	708.SCENARIO ANALYSIS OF MARKET RISKS
	709.SCENARIO AND IMPACT ANALYSIS
	710.SCENARIO FEED LOADING
	711.SECURITIES LENDING: DIVIDEND RECONCILIATION
	712.STRATEGIC RISK MANAGEMENT
	713.TRADE CAPTURES & VERIFICATIONS: INHERENT METRICS IN IB RISK MITIGATION
	714. UNDERSTANDING COUNTERPARTY CREDIT RISK MANAGEMENT AND ASSOCIATED METRICS.
	715.VALUE AT RISK AND GREEKS IN FINANCIAL WORLD
	716.VALUE AT RISK SIGNIFICANCE IN MARKET RISK
<b>121.</b>	<b>DBOI (DEUTSCHE BANK), MUMBAI</b>
	717.CREDIT RATING PROCESS FOR CORPORATE, BANKS AND FUND MANAGERS
	718.CREDIT RATING ANALYSIS
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	720.MARKET RISK DATA ANALYSIS
	721.THE THIRD GREEK BAILOUT & RECAPITALIZATION OF BANKS
	722.VAR CALCULATION AND OUTLIER ANALYSIS
<b>122.</b>	<b>DEVELOPMENT CONSULTANTS PVT. LTD. (DCPL), MUMBAI</b>
	723. DESIGN AND ANALYSIS OF POWER PLANT STRUCTURES
<b>123.</b>	<b>DORSCH CONSULT (INDIA) PVT. LTD, MUMBAI</b>
	724.URBAN PLANNING IN SMART CITIES
	725. STANDARDIZATION AND URBAN PLANNING IN SMART CITIES
<b>124.</b>	<b>EXPONENTIA DATA, MUMBAI</b>
	726.TEXT MINING AND TEXT ANALYTICS
	727.WEB SCRAPING USING SCRAPY
	728.WEB/APP ANALYTICS
<b>125.</b>	<b>GEOMETRIC LIMITED, MUMBAI</b>
	729. AUTOMATION OF LANGUAGE LOCALIZATION IN DFMPRO, 2. ANALYSIS AND DEVELOPMENT OF CASTING AND MILLING MODULE RULES IN DFMPRO
	730. WEB DEVELOPMENT 2)BUILDING A WRAPPER TO EXPOSE NATIVE CODE TO THE MANAGED
<b>126.</b>	<b>HERE MAPS - A NOKIA COMPANY, MUMBAI</b>
	731.CLIENT-SIDE LANE GEOMETRY
	732.DATABASE REPLACEMENT AND DEVELOPMENT
	733. DEVELOPING FRAMEWORK FOR JAVA BASED PRODUCT EXTRACTION.
	734.UX COMPONENTS FOR LIGHTWEIGHTED TOOLS
<b>127.</b>	<b>HOURLASS RESEARCH, MUMBAI</b>
	735.PATENT ANALYTICS - PATENT LANDSCAPES, PATENTABILITY SEARCHES AND INFRINGEMENT SEARCHES

	736.PRODUCT INFRINGEMENT ANALYSIS
<b>128.</b>	<b>HOUSING.COM (LOCON SOLUTIONS PRIVATE LIMITED), MUMBAI</b>
	737.BUILDING THE FLOOR PLAN BY USING EXTERNAL SENSORS AND ANDROID PHONE'S BUILT-IN SENSORS
	738.HOME SCREEN REVAMP IN THE ANDROID APP
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	740.SOFTWARE DEVELOPMENT (BACKEND)
	741.TESTING AND REFACTORING THE TILE SERVER
<b>129.</b>	<b>J.P. MORGAN CHASE, MUMBAI</b>
	742. ASSET SERVICES: GLOBAL ASSET SERVICES
	743. ASSET SERVICING - PRE RECONCILIATION OF INCOME BREAKS BETWEEN CUSTODY AND FUND ACCOUNTS; BLOOMBERG COST OPTIMIZATION; INCOME CURRENCY MISMATCH INVESTIGATION.
	744. AUTOMATION OF THIRD PARTY DERIVATIVE PROCESSING
	745. AUTOMATION FOR THE EFFICIENCY OF TRANSACTION PROCESSING
	746. BILLINGS FORECAST USING STATISTICAL ANALYSIS
	747. BUILDING A COMPREHENSIVE RULE LIBRARY FOR CLIENT AVIVA
	748. CASH MANAGEMENT PROCESS AUTOMATION
	749. CLIENT QUERIES DELEGATED REPORTING
	750. DIFFERENT COMPONENTS OF REGULATORY REPORTING IN FIXED INCOME
	751. DUAL MIGRATION OF BUSINESS PROCESSES
	752. ENHANCEMENT OF THE ON BOARDING PROCESS
	753. EXCEL AUTOMATION
	754. FAIL-STATUS EFFICIENCY IMPROVEMENT
	755. FINANCIAL REPORTING
	756. FINDING WORD STRINGS FOR AUTOMATION
	757. IMPACT ASSESSMENT OF MARKETS IN FINANCIAL INSTRUMENTS DIRECTIVE II
	758. IMPROVEMENT OF PRODUCTIVITY AND EFFICIENCY THROUGH AUTOMATION
	759. INVESTOR FUND ACCOUNTING SERVICES - REMEDIATION OF THIRD PARTY ASSETS
	760. MANUAL REPORTS AUTOMATION
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	762. PERFORMANCE MANAGEMENT
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	765. PROJECT AUTOMATION
	766. RECONCILIATIONS SYSTEMS REVIEW
	767. REMEDIATION OF THIRD PARTY ASSETS USING ACCEPTOR
	768. ROLE OF GLOBAL CUSTODIAN IN A TRADE CYCLE
	769. SERVICE DIFFERENTIATION
	770. STRAIGHT THROUGH PROCESSING & TRANSACTION ANALYSIS
	771. VISUAL BASIC AND JAVA DEVELOPMENT
	772. WORD STRINGS FOR AUTOMATION
<b>130.</b>	<b>J.P. MORGAN SERVICES INDIA PVT. LTD, MUMBAI</b>
	773.IDENTIFICATION OF FUNDING GAPS OF FIRMS AND VAR ANALYSIS FOR CLIENTS
	774.COMPARISON MODELS
	775.DERIVATIVE ANALYSIS, PRICING AND IDENTIFYING FUNDING GAP IN BALANCE SHEETS OF FIRM AND THEIR CAPEX NEEDS
	776.EQUITY RESEARCH- FOOD RETAIL EMEA
	777.EUROPEAN PAYMENTS INDUSTRY OVERVIEW
	778.EUROPEAN TELECOM, OIL & GAS AND FOOD RETAIL INDUSTRY
	779.FAMILIARIZATION OF GLOBAL BOND INDICES
	780.IMPACT OF CHINESE DEVALUATION ON OIL & GAS SECTOR
	781.OUTLOOK OF AUTOMOBILE SECTOR & CAPITAL GOODS SECTOR IN EUROPE
	782.PANAMANIA INDEX - STYLE ROTATION ALL SEASON STRATEGY
	783.SPIN-OFF
	784.VALUATION AND COMPARISON MODELS
	785.VALUATION OF A FIRM

<b>131.</b>	<b>KPMG, MUMBAI</b>
	786. ANALYSIS OF LICENSING METRICS OF ORACLE AND SYMANTEC, CREATION OF AN AUDIT KIT FOR IBM
	787. CONSULTING ON MANUFACTURING STRATEGIES FOR A PHARMACEUTICAL COMPANY
	788. ESTIMATION OF RETURN ON INVESTMENT FROM LICENSE COMPLIANCE ADVISORY SERVICES
	789. ILMT INSTALLATION AND DEPLOYMENT
	790. INSTALLATION OF SOFTWARE ASSET MANAGEMENT TOOL: LANDESK AND STUDY OF OPEN SOURCE ALTERNATIVE TO COMMONLY CHARGED PRODUCTS
	791. OPERATIONAL EXCELLENCE AT PHARMACEUTICAL PLANTS AND MANUFACTURING EXCELLENCY PRODUCT
	792. PART 1: DRAFTING OF PROJECT CHARTERS AND OPERATIONAL EXCELLENCE PROJECT, PART 2: COMPLIANCE TO UNFAIR COMPETITION ACT, PART 3: GOOD MANUFACTURING PRACTICES (GMP) COMPLIANCE AUDIT
	793. TARGETING OF INDIAN COMMERCIAL BANKS AND FINANCIAL ANALYSIS OF ISLAMIC RETAIL BANKS IN BAHRAIN
<b>132.</b>	<b>MORNINGSTAR, MUMBAI</b>
	794. CREDIT RATING OF MORTGAGE BACKED SECURITIES
	795. INDEX INVESTING AND THE EFFECT OF CORPORATE ACTIONS ON INDEX CALCULATION
	796. INDUSTRY CLASSIFICATION AND ITS IMPORTANCE
	797. SINGLE FAMILY RENTAL AND RESIDENTIAL MORTGAGE BACKED SECURITIES (RMBS) SECURITIZATION
<b>133.</b>	<b>MSCI BARRA QUANTITATIVE EQUITY RESEARCH, MUMBAI</b>
	798. INDEX MANAGEMENT RESEARCH
	799. STUDY OF BENCHMARK EQUITY INDEXES AND THEIR CONSTRUCTION FOR INSTITUTIONAL INVESTORS
	800.FACTOR AND MULTI ASSET CLASS INDEX RESEARCH
<b>135.</b>	<b>NOMURA SERVICES INDIA PVT, MUMBAI</b>
	801. FINANCIAL RISK MANAGEMENT AND INCREMENTAL RISK CHANGE
	802. GLOBAL MARKETS: STRUCTURING
<b>136.</b>	<b>TINY OWL TECHNOLOGY PVT. LTD, MUMBAI</b>
	803.IN-HOUSE SOFTWARE DEVELOPMENT
	804.MOBILE DEVELOPMENT FOR TINYOWL APP
	805.WEB DEVELOPMENT AT TINYOWL
<b>137.</b>	<b>VMS (VAKIL MEHTA SETH) CONSULTANTS PRIVATE LIMITED, MUMBAI</b>
	806. ANALYSIS AND DESIGN OF REINFORCED CONCRETE STRUCTURES
<b>138.</b>	<b>WORLEY PARSONS INDIA, MUMBAI</b>
	807.DESIGN OF INTEGRATED AVIATION FUEL FARM FACILITY AND HYDRANT SYSTEM
	808.DESIGN OF PIPERACKS
	809.DETAILED DESIGN OF ATF STORAGE FACILITY AND FEED STUDY FOR SULPHUR RECLAIMING/REMELTING
	810.INSTRUMENTATION IN METERING STATION
	811. STUDY AND ANALYSIS OF THE THERMAL STRESSES DEVELOPED IN THE PIPING SYSTEM.
	812.TRANS ANATOLIAN NATURAL GAS PIPELINE
<b>139.</b>	<b>GRASIM INDUSTRIES LTD, NAGDA</b>
	813.OPTIMIZATION OF PROCESS PARAMETERS OF MULTI-STAGE FLASH EVAPORATORS, PULPERS AND MIX CHARGE LYE SYSTEMS
<b>140.</b>	<b>SKYLINE CONSULTING ENGRS PVT. LTD, NAGPUR</b>
	814.APPLICATION OF BIM IN CONSTRUCTION MANAGEMENT
	815.QUANTITY ESTIMATION AND CONSTRUCTION MANAGEMENT THROUGH BIM
<b>141.</b>	<b>TECHTURE STRUCTURES PVT LTD, NAGPUR</b>
	816. DETAILED WORKFLOW TO VISUALIZE LOD500 REVIT MODEL USING AUTODESK 3DS MAX
	817. USE OF BUILDING INFORMATION MODELLING TO GENERATE STEEL REINFORCEMENT IN CONCRETE STRUCTURAL COMPONENTS
<b>142.</b>	<b>ANOVIP, NEWDELHI</b>
	818.INTELLECTUAL PROPERTY RIGHTS
	819.NOVELTY ASSESSMENT, MARKET RESEARCH, DATABASE ENTRIES, INVALIDATION
	820.PATENT ANALYSIS (NOVELTY SEARCH, INVALIDITY SEARCH, FREEDOM TO OPERATE SEARCH)
<b>143.</b>	<b>CENTRAL ROAD RESEARCH INSTITUTE, NEWDELHI</b>
	821.DEVELOPMENT OF SUSTAINABLE TRANSPORTATION MODE CHOICE SCENARIO
	822.LEVEL OF SERVICE CRITERIA OF URBAN ROADS: A CASE STUDY IN DELHI

	823.MITIGATION MEASURES TO COMBAT TRAFFIC DELAY AT SIGNALIZED INTERSECTION IN DELHI
	824.SMART JOURNEY PLANNING USING SATELLITE IMAGERY AND GIS DATABASE
<b>144.</b>	<b>GREY ORANGE ROBOTICS PVT. LTD, NEWDELHI</b>
	825.BUTLER SIMULATOR AND EMULATOR
	826.CAMERA FOCUS TOOL AND LINEAR SORTER EMULATOR
	827.FIELD SIDE DEVICE INTERFACING MODULES
	828.GUIDANCE SYSTEM IMPLEMENTATION FOR AN AGV SYSTEM ON A LOW FOOT PRINT DSP
	829.MAN-HOUR ANALYSIS OF SORTING SYSTEM
	830.MAP LAYOUT TOOL
	831.QUALITY CONTROL OF ASSEMBLY PARTS AND DESIGN OF JIGS
	832.SORTER EMULATION
	833.WIRELESS PICK PUT TO LIGHT DEVICE & ACTIVE CELL BALANCING
	834.WIRELESS PICK/PUT TO LIGHT & COULOMB COUNTING
<b>145.</b>	<b>HILTI INDIA PVT. LTD, NEW DELHI</b>
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<b>146.</b>	<b>NATIONAL COUNCIL OF APPLIED ECONOMIC RESEARCH, NEWDELHI</b>
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	838. MULTIPLE PROJECTS UNDER MACRO-ECONOMICS RESEARCH TEAM
	839. WATER BANKING
<b>147.</b>	<b>NATIONAL INSTITUTE OF SCIENCE AND TECH. DEV. STUDIES (NISTADS), NEW DELHI</b>
	840. FRUIT AND VEGETABLE PROCESSING INDUSTRY: S&T POLICY ISSUES
	841. GLOBALIZATION OF CLIMATE MITIGATION TECHNOLOGY AND STUDY OF GROWTH THROUGH CHINESE P.V.
<b>148.</b>	<b>VALUE EDGE INDIA, NEWDELHI</b>
	842. COMPETITIVE BIOSIMILAR MARKET FOR IMMUNOLOGY IN G6 COUNTRIES
	843. COMPETITIVE INTELLIGENCE FOR CLIENTS
	844. COMPETITIVE INTELLIGENCE NEWSWIRE AND MARKET ASSESSMENT IN PHARMACEUTICAL INDUSTRIES
	845. COMPETITIVE INTELLIGENCE, MARKET RESEARCH
	846. HEALTHCARE CLAIMS MANAGEMENT
	847. LANDSCAPE MODEL
	848. MERGER AND ACQUISITION IN PHARMACEUTICALS
	849. PUBLICATION ANALYSIS
<b>149.</b>	<b>ALLIANCE INFOTECH, NOIDA</b>
	850.ADDITIVE MANUFACTURING-OVERVIEW & RESEARCH METHODOLOGY FOLLOWED
	851.INTEGRATED COMPLAINT MANAGEMENT SYSTEM
	852.MARKET RESEARCH ON &APOS;PRECISION AGRICULTURE&APOS; AND &APOS;CLEAN ENERGY&APOS; MARKET
	853.SALES AND MARKETING IN AN EARLY STAGE VENTURE
	854.VAPORIZER MARKET FORECASTING
<b>150.</b>	<b>ARM EMBEDDED TECHNOLOGIES PRIVATE LIMITED, NOIDA</b>
	855. ASSIST TECHNIQUES FOR LOW POWER SRAM OPERATION
	856. LOW VOLTAGE OPERATION OF SRAM
<b>151.</b>	<b>CIGNEX DATAMATIX TECHNOLOGY, NOIDA</b>
	857. GENERATION OF BIG DATA SOLUTIONS
<b>152.</b>	<b>CSR LTD, NOIDA</b>
	858. TEST FRAMEWORK AUTOMATION FOR THE INTERNET OF THINGS
<b>153.</b>	<b>OPERA SOLUTIONS, NOIDA</b>
	859.EMPLOYEE PERFORMANCE DASHBOARD, VENDOR RISK ASSESSMENT AND OPTIMAL SCHEDULE GENERATOR
	860.GENERATING OPTIMAL MOVIE SCHEDULES USING MODELLING OF HISTORICAL DATA
<b>154.</b>	<b>CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE, PILANI</b>
	861.DEVELOPMENT OF PYTHON BASED GUI FOR SHM FOR NI/TI INSTRUMENTS
	862.ELECTRONIC INTERFACE FOR PRECISE TEMPERATURE CONTROL AND READOUT CIRCUIT FOR MOX BASED GAS SENSORS
	863.SIMULATION OF SILICON BASED SOLR CELLS AND STUDY OF TRANSPARENT CONDUCTING OXIDES

	864.SPEED CONTROL OF DC MOTOR AND PITCH ANGLE CONTROL OF ROBOTIC ARM USING MICROPROCESSORS
	865.STUDY OF PHYSICAL & PROPAGATION CHARACTERISTICS OF UNDERWATER CHANNEL (CHANNEL MODELING USING LAB VIEW)
	866.THERMAL MANAGEMENT OF KLYSTRON
<b>155.</b>	<b>AVAYA INDIA PRIVATE LIMITED, PUNE</b>
	867.ANALYTICS BASED WEB CHAT
	868.AUTOMATED REGRESSION FOR AVAYA COMMUNICATOR IN IOS
	869.AUTOMATION OF LAB LICENSE GENERATOR & BACKUP SERVER SETUP AT AVAYA, THORNTON
	870.AUTOMATION OF SESSION MANAGER ECO SYSTEM
	871.AUTOMATION SUITE FOR RECENTLY LAUNCHED PRODUCT OF AVAYA
	872. BRIEF ANALYSES OF ANDROID APPLICATION TESTING AND AUTOMATE THE PROCESS OF DECODING CRASH DUMP FILES.
	873.DESIGN & DEVELOPMENT OF A PLUGIN TO DOWNLOAD DATA IN VARIOUS FORMATS FROM A PACKET CAPTURE FILE IN WIRE SHARK
	874.DESIGN AND DEVELOPMENT OF A PROTOTYPE APPLICATION FOR AVAILING MEDIA SERVICES FOR A IP-PBX SYSTEM USING A SOFT MEDIA SERVER
	875.MACHINE LEARNING TOOL TO PREDICT AREAS OF REGRESSION
	876.NETWORK MONITORING TOOL
	877.SOCIAL MEDIA INTEGRATION FOR CONTACT CENTER
	878.TEST AUTOMATION OF COMMUNICATION MANAGER ; CREATION OF AVAYA GMDP WEBSITE
	879.THE WEB BASED SURVEY DEVELOPMENT TOOL
<b>156.</b>	<b>BHARAT FORGE LTD, PUNE</b>
	880. FURNACE ENERGY ANALYSIS
	881. 1. IMPLEMENTATION OF LEAN USING VSM (VALUE STREAM MAPPING) 2. ERGONOMIC SOLUTIONS TO REDUCE RISK PRIORITY NUMBER (RPN) 3. INSTALLATION PROCEDURE OF AXLE BEAM FLEXIBLE FABRICATION MACHINES.
<b>157.</b>	<b>CREDIT SUISSE, PUNE</b>
	882.ANALYSIS OF CREDIT RISK FOR EXPOSURE LIMIT MONITORING ACROSS VARIOUS TRADING INSTRUMENTS
	883.BAU ESSENTIALS RELEASE CYCLE AND RFI FRAMEWORK
	884.CREDIT RISK REPORTING- EXPOSURE MOVES ANALYSIS
	885.CREDIT VALUATION AND STRUCTURED TRADE REVIEW
	886.CREDIT VALUATIONS CONTROL
	887.DATA MANAGEMENT CONTROL SUSPENSE REPORT
	888.EXPOSURE MOVES ANALYSIS
	889.EXPOSURE ANALYSIS AND VALIDATION
	890.FRONT OFFICE- BACK OFFICE RECONCILIATION
	891.INDEPENDENT PRICE VERIFICATION & STRUCTURED TRADE REVIEWS
	892.INDEPENDENT PRICE VERIFICATION AND TECHNICAL FOCUS GROUP
	893.INVESTMENT BANKING CLIENT FINANCE - KEY CONCEPTS AND PROCESSES
	894.MARKET RISK REPORTING
	895.P&L ATTRIBUTION
	896.PROFIT AND LOSS ATTRIBUTION FOR SWAP OVER FUTURES BOOKS
	897.PROJECT P7 AND ITS VARIOUS COMPONENTS AND ROLLOUTS
	898.RECONCILIATION OF FRONT OFFICE AND BACK OFFICE DATA
	899.RISK ANALYSIS AND MONITORING
	900.SCENARIOS EXPOSURE ANALYSIS
	901.SFT REIMAGINING AND THRESHOLD
	902.STRATEGIC BACK TESTING
	903.STRUCTURED TRADE REVIEW, AUTOMATION & REPORTING
	904.TSRD (TIME SERIES REFERENCE DATA)- MARKET RISK APPLICATION
	905.VALUATION CONTROL – STRUCTURED TRADE REVIEWS AND REPORTING
<b>158.</b>	<b>DIVGI WARNER PVT LTD, PUNE</b>
	906.CAPACITY VERIFICATION AND PRODUCTIVITY IMPROVEMENT & UPDATION OF LEGAL REQUIREMENT MONITORING TOOL FOR ISO14001 AND OHSAS 18001
	907.DESIGN VALIDATION OF HEAVY-DUTY TRANSFER CASE USING TOLERANCE ANALYSIS

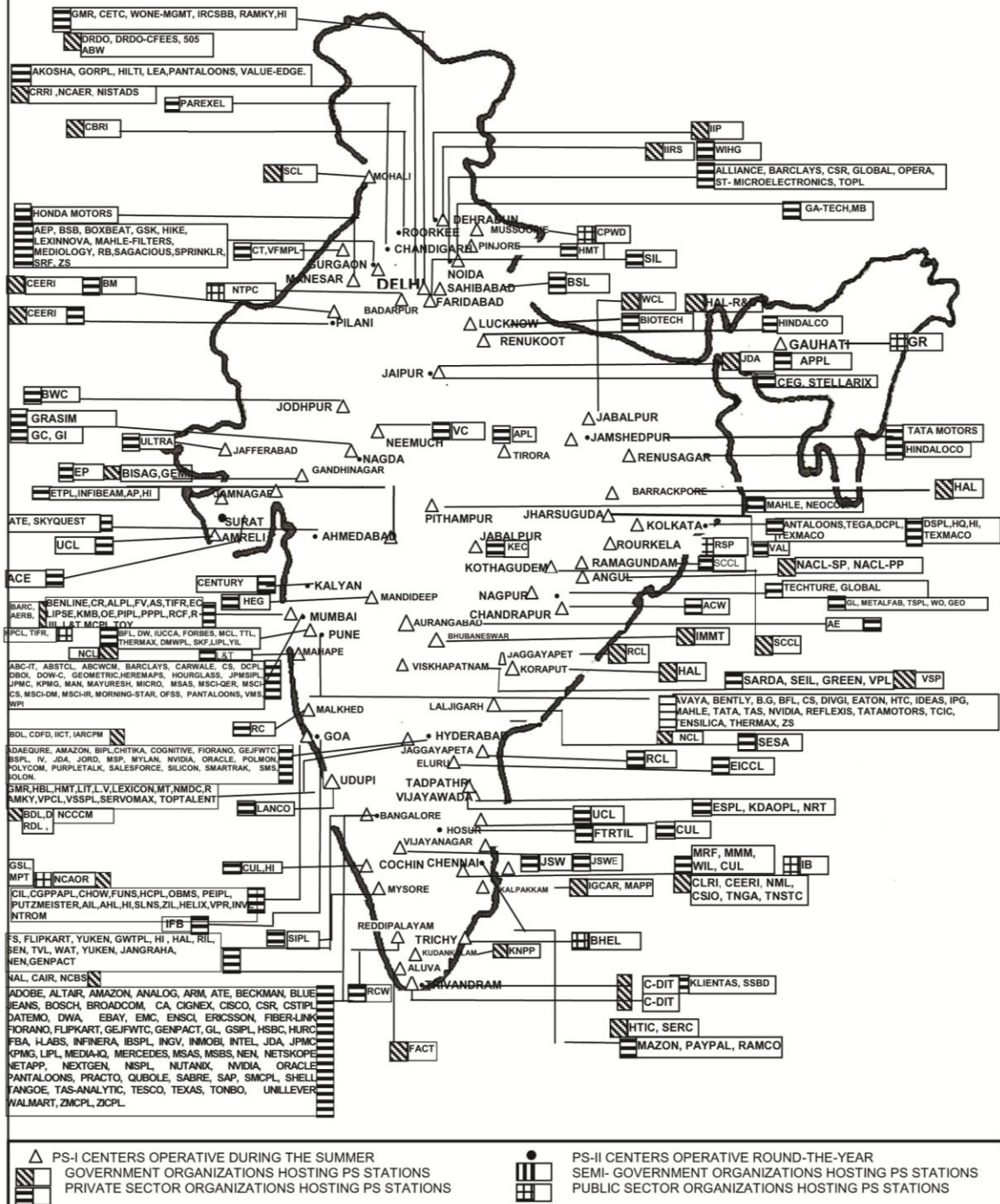
<b>159.</b>	<b>EATON TECHNOLOGIES, PUNE</b>
	908. CONCEPT BUILDING AND DESIGNING OF A COST EFFECTIVE JOINT PULLER FOR INSTALLATION OF POW-R-WAY III BUSWAY & REDESIGNING A CONTACTOR BASED AUTOMATIC TRANSFER SWITCH MECHANISM FOR A COST EFFECTIVE AND WORKING OPERATING MECHANISM.
	909. WIND AND ICE LOAD ANALYSIS ON RECLOSER UNIT AND ANALYTICAL STRESS ANALYSIS OF THE FRAME DESIGNED FOR THE RECLOSER UNIT
<b>160.</b>	<b>HALLIBURTON TECHNOLOGY CENTER, PUNE</b>
	910. DEVELOPMENT OF PARALLEL CORE FLOOD APPARATUS TO STUDY ACID DIVERSION IN CARBONATE FORMATIONS
	911. NUMERICAL AND EXPERIMENTAL CHARACTERIZATION OF REVERSIBLE GELS
<b>161.</b>	<b>IDEAS – SAS, PUNE</b>
	912.DEVELOPMENT OF INVENTORY MANAGENT APPLICATION , FUNCTION SPACE AUTOMATION AND ANALYSIS OF SITE MINDER AND G3 DATA
	913.RECRUITMENRT PORTAL
	914.WEB APPLICATION FOR INVENTORY MANAGEMENT, SUPPORT WORKBENCH(IDEAS SOFTWARE TOOLS TEAM) -SWB
<b>162.</b>	<b>MAHLE FILTERS INDIA LTD, PUNE</b>
	915.COST OF POOR QUALITY(COPQ) REDUCTION - DONE USING THE PARETO ANALYSIS OF THE INTERNAL REJECTION DATA
	916. 1. IMPROVISATION OF MAHINDRA AUTO MANUFACTURING CELL. 2. DRAWING VMAP 1 FOR PU1 MANUFACTURING LINE. 3. RESOLVING DEFORMATION PROBLEM OF CLAMP IN P601 MAHINDRA FILTER. 4. REDUCING EXTRA FLASH AND ABNORMAL PLEATS FILTER DEFECTS. 5. DESIGN OF UNIVERSAL DISPENSING TABLE FOR PU2 MANUFACTURING LINE. 6. REDUCING SEAL HEIGHT IN B4A PANEL FILTERS.
<b>163.</b>	<b>NATIONAL CHEMICAL LABORATORY, PUNE</b>
	917.CHARACTERISATION OF PACKED BED
	918.ONLINE SVR BASED CONTROLLER FOR DISTURBANCE REJECTION IN NON LINEAR SYSTEMS
	919.QSAR CLASSIFICATION AND REGRESSION MODEL FOR A SERIES OF ANT TUBERCULAR AGENTS
	920. ROLS BASED CONTROLLER FOR A NONLINEAR PROCESS AND SOFT SENSORS FOR BATCH BIOREACTORS.
<b>164.</b>	<b>NVIDIA GRAPHICS, PUNE</b>
	921.ENHANCEMENTS TO THE PROFILING TOOL FOR EXPEDITED KERNEL PERFORMANCE OPTIMIZATION
	922.FILTER DRIVERS
	923.FSF RELEASE VERIFICATION
	924.PROGRAM A MEDIA PROCESSING MODULE
	925. TARGET KERNEL DIRECTLY FROM USER SPACE.
<b>165.</b>	<b>REFLEXIS SYSTEMS INDIA PVT LTD, PUNE</b>
	926.DESIGNING BATCH MODE APPLICATION USING A PEER-TO-PEER NETWORK AND DEVELOPING RESTFUL WEB SERVICES FOR REFLEXIS WORKFORCE SCHEDULER
	927.INTEGRATION OF APACHE KAFKA INTO REFLEXIS STORE PULSE
	928.K REGISTRY TEAM
	929. REFLEXIS PREDICTIVE ANALYTICS AND REFLEXIS WORKFORCE SCHEDULER
<b>166.</b>	<b>SOKRATI TECHNOLOGIES PVT. LTD, PUNE</b>
	930. AUTOMATION OF HTML5 ADS
	931. MOBILE DEEP LINKING RESEARCH
	932. OUTBOUND BUSINESS DEVELOPMENT
<b>167.</b>	<b>SPICER INDIA LTD, PUNE</b>
	933. CONSOLIDATION OF LOGISTICS ACROSS SPICER INDIA PVT LTD
	934. PROCESS MAPPING AND STANDARDIZATION AT A MICRO LEVEL
<b>168.</b>	<b>TATA AUTOCOMP SYSTEMS LTD, PUNE</b>
	935.CENTRAL PURCHASE - SOURCING
	936.E PROCUREMENT AND AUTOMATION OF SUPPLIER ORDER
	937.IEDGE LEARNING MARKETING AND ANALYSIS
	938.OPERATIONS AND PROGRAM MANAGEMENT OF IEDGE LEARNING
	939.VALUE STREAM MAPPING _ STUDY AND APPLICATIONS
<b>169.</b>	<b>TATA MOTORS, PUNE</b>
	940.ANALYSIS OF COOLING SYSTEM FAILURES OF COMMERCIAL VEHICLES; INVENTORY MANAGEMENT- HANDLING AND STORAGE
	941.BILL OF MATERIAL VALIDATION OF UTILITY VEHICLES

	942.COST REDUCTION
	943.CREATING A QUALITY TABLE WITH CORRELATION BETWEEN CUSTOMER REQUIREMENTS AND PRODUCT CHARACTERISTICS
	944.IMPLEMENTATION OF MAYNARD OPERATIONS SEQUENCING TECHNIQUES IN GI AND ALUM-I FOUNDRY, CHINCH WAD
	945.IMPROVEMENT OF QUALITY OF LOGISTICS IN M/S JAPTECH INDUSTRIES – A SUPPLIER OF TML
	946.IMPROVEMENTS IN LOGISTICS MANAGEMENT AND INVENTORY CONTROL OF 407 FRAMES, FUEL TANKS AND STRONG WHEELS AT TML
	947.IMPROVING ON FIELD PERFORMANCE OF ENGINE COMPONENTS
	948.JD POWER IQS TARGETING TATA MODELS
	949.LQOS- VLO AT PVBU, PUNE
	950.OPTIMIZING THE COST OF QUALITY, WALK HOME FAILURE REDUCTION
	951.PPM REDUCTION AND RESOLVING EAGLE QUALITY ISSUES
	952.PROJECT SANKALP: RESOLVING QUALITY ISSUES AT SUPPLIER END, IAI CHAKAN
	953.REDUCE PPM OF HIGH PPM PARTS FOR SUPPLIERS LISTED UNDER PROJECT SANKALP
	954.REDUCTION OF PPM OF HIGH PPM SUPPLIERS FOR POWER TRAIN GROUP FOR FY 14-15
	955.REDUCTION OF PREMATURE TIRE WEAR IN 1109 LPT
	956.REDUCTION OF QUALITY ISSUES FOR JAI HIND AUTOMATION, SELECTED UNDER PROJECT SANKALP
	957.ROOT CAUSE ANALYSIS FOR TOP ELECTRICAL IPTV COMPLAINTS FOR INDIGO AND SUPPLIER TRANSFORMATION OF M/S ELECTRICA
	958.ROOT CAUSE ANALYSIS AND IMPLEMENTATION OF ONE POINT LESSONS IN SAFARI/SUMO BIW
	959.STANDARDIZATION OF PROJECT SANKALP
	960.TECHNICAL REVIEW SIGN OFF FOR NEW PART DEVELOPMENT
	961.WORK MEASUREMENT AND LINE BALANCING OF PAINT SHOP AT TATA MOTORS PUNE
	962.WORK MEASUREMENT IN PAINT SHOP J-1 & J-12 OF TATA MOTORS
	963.WORLD CLASS SUPPLIER QUALITY (WCSQ) IMPLEMENTATION AT SELECTED ELECTRICALS & ELECTRONICS GROUP SUPPLIERS; ACCELERATING IMPLEMENTATION OF COST REDUCTION IDEAS
<b>170.</b>	<b>TATA TECHNOLOGIES, PUNE</b>
	964.DEFROST DUCT MORPHING
	965.OPTIMIZATION OF AUTOMOBILE DOOR THROUGH COMPUTER AIDED ENGINEERING ANALYSIS
	966.REDUCTION OF TIME TAKEN IN BIW SIMULATION PROJECT
	967.SEPARATION OF GASES USING FLAT SHEET MEMBRANE IN OPEN FOAM
	968.TOP-DOWN MODELLING TECHNIQUES & GEOMETRIC DIMENSIONING AND TOLERANCES
<b>171.</b>	<b>TENSILICA, PUNE</b>
	969.IMPLEMENT GRAPHIC EQUALIZER ON XTENSA XPLORER
	970.IMPLEMENTATION OF SENSOR FUSION ALGORITHMS ON FUSION CORE
	971. WORKING MULTICHANNEL AUDIO HDMI OUTPUT FOR XILINX XTKC705 FPGA BOARD & XAF ONALC5677 REALTEK BOARD.
<b>172.</b>	<b>THERMAX INDIA, PUNE</b>
	972.AVERAGE LAB OUR COSTING OF VARIOUS MODELS OF HIGH TEMPERATURE GENERATOR
	973.FINITE VOLUME ANALYSIS OF HORIZONTAL AIR PREHEATED DESIGN AND DETERMINATION OF HEAD REQUIREMENT BY FORCED DRAUGHT FAN FOR PNEUMATIC SYSTEM OF FUEL FEEDING
	974.MARKET POTENTIAL MAPPING FOR STEAM ENGINEERING PRODUCTS IN ACTUAL USER MARKET IN INDIA
<b>173.</b>	<b>ZS ASSOCIATES, PUNE</b>
	975.ALIGNMENT AND PLACEMENT
	976.DATA STABILITY AND AUTOMATING THE PROCESS
	977.DESIGN & DEVELOPMENT OF TEMPLATE & RELATED STUDY MATERIAL IN QLIKVIEW
	978.INCENTIVE COMPENSATION(IC) DESIGN
	979.INTEGRATED SAS DATABASE FOR HEMATOLOGY MARKET
	980.MARKETING MIX MODELING
	981.MARKETING SCIENCE PROJECTS FOR XYZ CLIENT TEAM
	982.MULTIVARIATE LINEAR REGRSSION USING TERADATA SQL, AMAZON REDSHIFT
	983.SALES TARGETING
	984.SEGMENTATION, TARGETING, CALL PLANNING AND PERFORMANCE SCORECARD
<b>174.</b>	<b>CENTRAL BUILDING RESEARCH INSTITUTE, ROORKEE</b>
	985. NUMERICAL ANALYSIS OF LOW VELOCITY IMPACT STUDY OF RC BEAMS



	986. STRUCTURAL ANALYSIS OF HERITAGE STRUCTURE USING FINITE ELEMENT MODELING
<b>175.</b>	<b>SPICER INDIA LTD, SATARA</b>
	987.HEIJUNKA PRODUCTION SYSTEM MAPPING FOR ENABLING MATERIAL REQUIREMENT PLANNING THROUGH SAP
	988.LAYOUT FOR LIGHT DUTY LINE AND BARCODE
	989.MATERIAL FLOW MANAGEMENT AND PROCESS MAPPING
<b>176.</b>	<b>ADITYA BIRLA CHEMICALS(THAILAND)LTD-SULPHITES, THAILAND</b>
	990. A) SOLUTION FOR MSP CAKING PROBLEM , B) COMPRESSOR EFFICIENCY C) KILN MONITORING D) SODA ASH PNEUMATIC CONVEYING SYSTEM
	991. UNDERSTANDING AND IMPROVING WAREHOUSE PACKING PROCESS B. ANALYSIS AND IMPROVEMENT OF HYDROGEN PEROXIDE PRODUCTION C. REPORTING DAILY PRODUCTION D. WRITING OPERATING MANUAL FOR THAI PEROXIDE LIMITED
	992.PRODUCT DEVELOPMENT
	993.STUDY OF MONOSODIUM PHOSPHATE CAKING AND COMPRESSOR EFFICIENCY CALCULATION
<b>177.</b>	<b>CENTRE FOR DEVELOPMENT OF IMAGING TECHNOLOGY , TRIVANDRUM</b>
	994.DEVELOPMENT OF WORK-FLOW AUTOMATED COMPLAINT REGISTRY AND NAVIGATIONS SYSTEM
	995.TET STUDENT REGISTRATION PORTAL
	996.VISUAL COMMUNICATION AND CONTENT DEVELOPMENT
<b>178.</b>	<b>LEAP CONSULTING, TRIVANDRUM</b>
	997. SETTING UP A NEW PLATFORM TO FACILITATE E-WASTE MANAGEMENT
	998. SETTING UP THE FINANCIAL PROCESS FLOW FOR A MEDICAL HOSPITAL CUM COLLEGE IN KERALA
<b>179.</b>	<b>ATUL LTD, VALSAD</b>
	999.DEVELOPMENT OF P& ID & APOS;S
	1000.THOROUGH UNDERSTANDING OF PROCESS FLOW DIAGRAMS(PFD & APOS;S) & DRAFTING PROCESS &INSTRUMENTATION DIAGRAMS(P & ID & APOS;S)
	1001.UPGRADATION OF P&ID OF VARIOUS INTERMEDIATE PRODUCTS MANUFACTURED IN ATUL LTD

# BITS PRACTICE SCHOOL STATIONS 2014-2015



## Alumni Affairs Division

### **Distinguished Alumnus Award 2015:**

“BITS Pilani Distinguished Alumnus Award” in 2015 to the following alumni:

- **Prof. Bharat Bhushan**, Director, Nanoprobe Laboratory for Bio- & Nanotechnology & Biomimetics, The Ohio State University
- **Mr. Manoj Saxena**, Founder, Exterprise and Webify Inc.,

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

### **Mantra Awards 2015:**

The Center for Entrepreneurial Leadership (CEL) along with Alumni Affairs Division and BITSAA International instituted the Mantra Awards. The Mantra awards were to recognize and reward outstanding students who have demonstrated extraordinary leadership potential and/or entrepreneurial initiative. This year's awards were given to the following:

1. **Mantra Award for Outstanding Leadership:** Anadi Rakesh
2. **Mantra Entrepreneur of the Year Award:** Prakhar Sharma
3. **Mantra Award for Social Leadership:** Sanskriti Dawle
4. **Mantra Innovator of the Year Award:** Aman Srivastava

### **Alumni Cell Pilani Campus**

During the year, a number of Alumni related events were organized including Silver Jubilee Reunion, Golden Jubilee Reunion, Farewell parties to passing out graduates. Brief about some of the prominent activities organised during the year are as under:

#### **Visit by 1975-80 Batch Alumni**

The 1975-80 Batch was on campus to celebrate their Reunion for three days – 31<sup>st</sup> Jan to 2<sup>nd</sup> February 2015. There were more than 40 extra ordinary achievers in different walks of life who had come with their families to rejoice their past memories. During these three days, the batch organised special programmes including visit to different places such as museum, saraswati temple, library, institute research labs etc. The batch also visited Pilani Resource Centre and organised its annual function.

#### **Silver Jubilee Reunion of 1986-1990 Batch**

After 25 years of graduation, around 220 Alumni from the Batch of 1986-90 came back to their Alma Mater between 6<sup>th</sup> and 8<sup>th</sup> November 2015 to celebrate their Silver Jubilee Reunion. More than 100 of them came from abroad – USA, UK, Canada, Hong Kong, Singapore etc. The batch includes senior IAS officers, Educationists, entrepreneurs, venture capitalists, investment bankers, NGO Founders, researchers etc. Other than taking part in multiple events such as career mentoring session for students they also met with faculty members. They felicitated the faculty members who had taught them in a special function and expressed their gratitude to their Alma mater. In the felicitation function on Friday 06<sup>th</sup> November Prof V S Rao the Vice Chancellor, BITS Pilani welcomed them and admired about their success in different fields and wished them a happy and fulfilling life in all sphere – be it professional, personal or spiritual. He also shared about the vital role of industry engagement through Practice School and WILP in development of institute. Prof A K Sarkar , Director Pilani campus welcomed them and shared about future developmental plans about the institute. He stated that BITS has some magnetic power and BITsians have a magical power to make impossible a possible. A movie “Manjunath” directed by a BITS-Pilani '86 batch alumnus, Mr Sandeep Verma was also screened in the auditorium. BITS Alumni Affairs Cell, Pilani campus thanked the Alumni for breaking all past records by having a presence of more than 220 Alumni for Silver Jubilee Reunion. BITS and its success lies in its Alumni having achieved great heights in different walks of life and their contributions to society at large.

A campus walk about, visit to Museum/Shivganga and grand Music Night is also planned during this visit.

#### **Golden Jubilee Reunion of 1960-1965 Batch**

After 50 years of graduation, around 30 Alumni along with their family members from the Batch of 1960-65 came back to their Alma Mater to celebrate their Golden Jubilee Reunion during 17<sup>th</sup> March to 19<sup>th</sup> March

2015. The batch interacted with senior students on specific topics like Prospects and Opportunities in Various Sectors of the Economy and met faculty members. They also conducted room dedicating/renaming ceremony for TP class room in Goa. They also suggested certain measures to help the institute grow. During this function Prof B N Jain, the Vice Chancellor, BITS Pilani shared his thoughts about future thrust areas with a special emphasis on research to take the institute to greater heights. In felicitation function, Prof G Raghurama, Director Pilani campus welcomed them and shared about infrastructural developmental plans about the campus.

#### **Reunion of 1965-1970 Batch**

After 50 years of their admission to BITS, around 130 Alumni along with their family members from the Batch of 1965-70 came back to their Alma Mater to celebrate their Golden Jubilee Reunion during 22<sup>nd</sup> Feb. to 23<sup>rd</sup> Feb. 2015.

The batch organised an interaction cum felicitation function, during this function Prof B N Jain, the Vice Chancellor, BITS Pilani shared his thoughts about future thrust areas with a special emphasis on research to take the institute to greater heights. In felicitation function, Prof G Raghurama, Director Pilani campus welcomed them and shared about infrastructural developmental plans about the campus.

#### **Visit by 1991 Batch Alumni**

After 25 years of their admission to BITS, around 100 Alumni from the Batch of 1991 came back to their Alma Mater to celebrate their Reunion during 26<sup>th</sup> Dec. to 28<sup>th</sup> Dec. 2015. More than 30 of them came from abroad – USA, UK, Australia, Singapore among many other countered. The batch visited the campus and nearby places and recollected their old memories.

The batch conducted music nite and enjoyed their old days. They also met Director, Prof AK Sarkar and exchanged thoughts on institute growth. The batch expressed their gratitude and were determined to give back to their Alma mater.

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

A high tea party was organized to bid a farewell to graduating students of class 2015. Farewell to graduating students of 2011-15 batch was held at the VFAST lawns on Monday, 27<sup>th</sup> April 2015. Speaking on the occasion, Vice Chancellor Prof B N Jain congratulated the students and called upon them to make their family and their institution proud. He also said that they should remember all those who helped them to reach the present level. Prof A K Sarkar, Prof G Raghurama, Prof Surekha Bhanot and Prof H O Bansal shared their thoughts for the benefit of graduating students.

Similar farewell graduating party was organized on 27<sup>th</sup> November 2015 to bid farewell to graduating students of class 2015. Around 450 students of 2011-15 batch were present in the function. Prof A K Sarkar, Director, Prof. H O Bansal, faculty –in charge, Alumni cell, Prof Surekha Bhanot, Prof K N Sachdev and Prof Sibashish shared their thoughts with students and wish the student very best in their future endeavors and advised the students to be connected with their alma mater.

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.

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

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

##### ***BITSians Day:***

The third edition of 'BITSians Day' was celebrated on 7<sup>th</sup> of August, 2015.

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

Alumni Affairs Division of BITS Pilani K K Birla Goa Campus has organized 9 Embryo & On-campus talks from August – December, 2015. Details are as follows:

S. No	Name of the Alumn(us)i	Topic	Date
1	Dr. Robert Waggoner	The Science And Potential Of Lucid Dreaming	8/18/2015
2	Kushal Khandelwal	What to expect from MS/PHD program in US/EU.	8/22/2015
	Animesh Srivastava		
	Arnav Goel		
3	Karan Gaikwad	A Career in Mobile Gaming	8/28/2015

S. No	Name of the Alumn(us)i	Topic	Date
4	Ajay Chaturvedi	Alumni Summit	8/30/2015
	Nikita Bharadia		
	Anugula Rakesh Reddy		
	Harish Sivaramakrishnan		
	Akash Gupta		
	Jenish Mehta		
	Garv Malik		
5	Adwait Gandhe	Building your Profile for Higher Education after BITS	9/1/2015
	Parth Bhogate		
6	Justice Markanday Katju	Old Customs Vs New Ideologies	9/10/2015
7	Vishal Saraswat	Applications Of Public Key Cryptography	9/10/2015
8	Raghavendra Singh	Brain Inspired Computing	10/5/2015
9	Gaelen Pereira	Career Prospects For Electrical & Electronics Master Grads In US	9/15/2015

**Alumni Visits:**

S. No	Name	Batch	Profession	Purpose of visit
1	Varun Anand	2008	Entrepreneur	On-campus Talk
2	Karan Gaikwad	2006	Software Designer	
3	Ajay Chaturvedi	1991	Entrepreneur	Alumni Summit
4	Nikita Bharadia	2008	MBA	
5	Anugula Rakesh Reddy	2002	Politician	
6	Harish Sivaramakrishnan	1998	Musician	
7	Akash Gupta	2008	Entrepreneur	
8	Jenish Mehta	2005	Post-Graduate	
9	Garv Malik	2011	Comedian	
10	Raghavenda Singh	1989	Brain Inspired Computing Expert	On-campus Talk
11	Satish Sankaralingam	Microelectronics(2005)	Circuit Designer(Intel)	Professional
12	Danish	CS(2015)	Research Fellow(IISc)	IT Training Placement
13	Pranav Ramarav	CS(2015)	Research Fellow(Microsoft Research)	
14	Mansi gupta	CS(2015)	Software Engineer(Linkedin)	
15	Deepak Gopinath	CS(2014)		
16	Akhilesh Anandh	CS(2015)		
17	Shruti Rijhwani	CS(2015)	Research Fellow(Microsoft Research)	
18	Konark Pandey	EEE(2006)	Brand Manager (TOI)	Batch Reunion
19	Jayanth Sridhar	MSc Bio (1988)	Engineering Management	Collaboration
20	Anant Kamath	EEE (2011)	Entrepreneur	Campus Visit
21	Aditya Chintawar	EEE (2008)	Entrepreneur	Personal

***Alumni Summit:***

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 first ever **Alumni Summit 2015** on the **30th of August 2015**. It was a first of its kind event and witnessed speakers who had established themselves in various fields of life. They reminisced about their life back at the BITS campuses and their journey thereafter. Seven speakers were invited to take the stage:

- Anugula Rakesh Reddy- a BJP Youth Wing politician and the founder of Nirmaan
- Akash Gupta- the founder of Grey Orange Robotics
- Jenish Mehta- a Graduate Student at California Institute of Technology
- Ajay Chaturvedi- the founder of HarVa and a published Author
- Nikita Bhardia- an MBA from IIM Ahmedabad and the founder of Udaan
- Harish Sivaramakrishnan – the lead singer of the band Agam
- Garv Malik- a stand up comedian and founder of OpenMics.

***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 Praneet Bhatia, Aman Srivastava, Sanskritie Dawle and Ankur Omar 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.

## RESEARCH PROJECT GRANTS

### Pilani Campus:

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
1.	Synthesis and detailed characterization of 'ship-in-a-Bottle' complexes inside the microporous and mesoporous material	Dr. Saumi Ray	DST	20.00
2.	Syntheses of efficient and pure blue triplet emitting materials for fabrication of white organic light emitting diodes (WOLEDs)"	Dr Inamur R Laskar	DST	22.17
3.	Design and Synthesis of Novel Bioactive Heterocycles as Anticancer	Dr Dalip Kumar	CSIR	13.58
4.	Novel Synthetic Methodologies for Biologically Important Compounds using Lanthanide Triflates as Lewis Acids in Ionic Liquids	Dr. Anil Kumar	UGC	08.77
5.	Development of a novel synthetic route for an anti-HIV drug	Dr. Dalip Kumar, Dr. Anil Kumar	Ranbaxy	11.50
6.	Design, Synthesis And Biological Evaluation of Indole-based Heterocycles as Anticancer Agents	Dr Dalip Kumar	UGC	7.50
7.	Crystal Engineering of Metal-Organic Frameworks using Organic Linkers Derived from Template-Controlled Solid-State Reactions	Dr.Madhushree Sarkar	DST	23.40
8.	An Extensive Computational Development of Multi-reference Coupled-cluster Methods for Electronic Structure Investigations of Big Molecules	Dr.PrashantU. Manohar	DST	22.40
9.	Study on physicochemical and interfacial properties of some mixed micellar systems of novel Gemini and conventional surfactants in water and water-organic solvent mixed media	Dr.Subit K. Saha	A B Group	10.00
10.	Development of Framework for Multi-agent Robotic Systems	Dr.Sudeep Mohan	CAIR (DRDO)	9.50
11.	Design of Modified Release Multi-Unit Particulate Delivery Systems for Fixed-Dose Combination of Artesunate and Amodiaquine for Pediatrics	Dr. Shrikant Y Charde	UGC Major Research Project	10.25
12.	Evaluation of Anti-Diabetic Foot Cream Pharmaceutical Application Studies of Polymers Manufactured by BASF	Dr. R. P. Pareek	TTK LIG Ltd., Chennai	1.00
13.	Design of novel nasal delivery systems for selected drugs	Dr. ShrikantCharde	BASF, Mumbai	2.00
14.	Studies on newer use of Carbopols as pharmaceutical excipients	Prof. R. N. Saha	Torrent Research Centre, Ahmedabad	20.00
15.	Design, Synthesis and Study of Novel Benzopiperidine analogs as HIV-1 Reverse Transcriptase Inhibitors	Prof. R. N. Saha	Lubrizol, USA	12.00
16.	Aakash Ganga – A Social Enterprise Model for RWH and Agriculture of low water demanding economically important plant	Dr. S. Murugesan	BITS, Pilani Research Initiation Grant	2.00
17.	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Masonry Structures	Prof. Rajiv Gupta	Department of Science and Technology, New Delhi	61.96
18.	Failure and Stability of Laminated Composite Plates with Cutouts	Prof.S. B. Singh	Aditya Birla Group (ABG)	10.00
19.	A Study on Sludge Minimization during	Prof S. B. Singh	K.K. Birla Academy Projects, BITS, Pilani	4.50
20.		Dr. AnupamSinghal	ABG	10.00

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
21.	The Treatment of Pickling Effluent and Utilization of Sludge GIS based Characterization of Ground water in Shekhawati Region of Rajasthan	Dr. AnupamSinghal	DST	18.00
22.	Investigation into the Behavior of Coupling	Dr. DipenduBhunia	BITS Faculty Research Initiation Grant	2.00
23.	Mobilization of Metals from Copper Mine Tailings of Khetri Copper Mine, Rajasthan and their Attenuation by Soil: Groundwater Pollution Implications	Dr. Sanghamitra Kundu	DST	11.27
24.	Dynamic Buckling Responses of Composite Structures	Mr. S. N. Patel	BITS Faculty Research Initiation Grant	2.00
25.	Establishment of National MEMS Design Centers	Prof. N.N. Sharma	National Program on Micro and Smart Systems (HR PARC)	16.7
26.	Indigenization of Lab-on-Chip for UTI Pathogen Detection	Prof. N.N. Sharma (CO-PI)	National Program on Micro and Smart Systems (Bio PARC)	82.51
27.	Development, Design and Engineering of 28-DOF Humanoid to avoid obstacles and handle specified objects in the environment	Dr. B.K. Ruot	Ministry of Information and Technology, (MIT)	45
28.	Flow in Closed Microfluidic Channel	Prof. N.N. Sharma	INUP, IIT, Powai	Equipment usage, and contingency
29.	Design and development of OptofluidicMicropumps	Prof. N.N. Sharma	CEERI-BITS	Equipment usage & Chemicals
30.	Carbon Nanotube from Carbon Black: Subproject of Project OSCAR being carried out in IIT Bombay	Prof. N.N. Sharma	Aditya Birla Group	10
31.	Cardiovascular Disease in Human Population: Mathematical Modeling and Analysis of its Incidence, Risk Factors and Preventive Strategies	Dr. SaiJagan Mohan	MHRD	3
32.	Modeling and Simulation of Viscose Flow through JetPack Assembly	Dr. Pratik N. Sheth Dr. Suresh Gupta (Co-Invstigator)	Birla Cellulosic Kharach	5.52
34.	Characterization of Bio-oil produced via Pyrolysis of Jatropha Cake Residue	Dr. Pratik N. Sheth	BITS, Pilani	2.00
35.	Experimental studies of Bio-mitigation of CO <sub>2</sub>	Dr. Smita Raghuvanshi Mr. Subhajit Majumder(CI)	BITS, Pilani	2.00
36.	Determination of Foaming Properties of Aqueous Ethanol Solution Using Industrial Surfactant Sodium Lauryl Sulfate	Dr. Pradipta Chattopadhyay	BITS, Pilani	2.00
37.	Optimization of Complex Chemical Processes Using Evolutionary Algorithms	Dr. Ashish M. Gujarathi	BITS, Pilani	2.00
38.	Nano technology for enhanced utilization of native-phosphorous by plants and higher moisture retention in arid soils	Dr. JitendraPanwar	Indian Council of Agricultural Research (ICAR), Govt. of India, New Delhi.	3.726 Crores (41.53 Lakhs for BITS Pilani Centre)
39.	Molecular characterization of ACC (1-aminocyclopropane-1-carboxylate) deaminase activity of associative bacteria isolated from plants of desert of Rajasthan	Dr. PrabhatNathJha	DBT	41.35
40.	Molecular characterization of <i>Anopheles stephensi</i> gut epithelial peroxidases and their role in modulating immunity against bacterial and fungal antigens	Dr. Sanjeev Kumar	DST	47.18
41.	Characterization of immune signaling	Dr. Lalita Gupta	DST	21.20



S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
	pathway in <i>Anopheles</i> mosquitoes			
42.	Analyzing structural and functional evolutionary links between RubisCO and carbon concentration mechanism proteins	Dr. Sandhya Mehrotra	DST	23.96
43.	Development of surface Plasmon resonance instrument with a novel optical design	Dr Raj kumar Gupta	DST	25.66
44.	Synthesis of Platinum (II) based pure blue emitting triplet harvesting materials and their applications in white organic light emitting diodes as single emissive dopants	Dr Inamur Rehman lashkar	CSIR	20.20
45.	Design and characterization of electrochromic rear view mirrors using conducting polymers	Dr S Sindhu	DST	24.35
46.	Developing a smart crop management system using data analytics	Dr Navneet Goel	IBM	6.75
47.	Studies on cell lines as model for predicting in vitro buccal permeation of various classes of drugs and its co-relation with n vivo data	Dr S Y Charde	DST	23.58
48.	Design, synthesis ans evaluation of novel tetrahydroisoquinoline analogs as anti-HIV agents	Dr S Murugesan	DST	24.75
49.	Endophytic bacteria mediated phytoremediation of organic pollutants	Dr Parmeela	DST-WoS	25.10
50.	Organo catalysis as green approach for synthesis of pyrrolinine/fused pyrrolidines: towards the synthesis of related alkaloids	Dr Indresh kumar	DST	21.90
51.	Removal of heavy metals from industrial wastewater using biofiltration	Dr Smita Raghuvanshi	UGC	5.50
52.	Dynamics of Biological Species: Some Mathematical Models	Dr. Atasi Patra	DST	10.86
53.	An agent-based tool for prediction, analysis, reporting and dispensing of Climate data	Dr Yash Sharma	UGC	8.85
54.	Design and development of test rig to understand dynamics of nanorobots	Dr N N Sharma	UGC	9.37
55.	Investigation of the effect of carbonation on the properties of concrete	Dr Dipendu Bhunia	DST	34
56.	Steady state measurements of fluorescent in restricted environments	Dr D D Pant	UGC	11.63
57.	Investigations on quark-gluon plasma through quarkonia suppression in QCD matter	Dr Madhukar Mishra	DST	11.40
58.	Bio Mems Device for separation of bioparticles	Dr N N Sharma	DBT	20.25
59.	Design Synthesis and evaluation of novel beta secretase inhibitors for the treatment Alzheimer's Disease	Dr Priti Jain	UGC	2.00
60.	Design and Characterization of novel buccal drug delivery system of felodipine	Dr Murali Manohar Pandey	UGC	1.70
61.	A New Distributed Computing Framework for Data Mining	Dr Navneet Goel	DIT	95.00
62.	Transition Metal-Catalysed coupling/reductive coupling of saturated alkyl halide with electron withdrawn alkenes	Dr Paritosh Shukla	UGC	11.95
63.	A Normative Analysis of Selflessness as the Inner Perspectives of Good Life	Dr K N Sachdeva	ICPR	2.00
64.	Study of the indus valley scripts through linguistic and Markov Chanin Methods	Dr Niladri Sarkar	INSA	1.75

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
65.	Removal of volatile organic compounds from waste streams using biofiltration	Dr Smita Raghuvanshi	DST	14.18
66.	Synthesis of Novel NOS Containing Heterocycles and evaluation of their anticancer activities	Dr Dalip Kumar	DBT	18.80
67.	Phytochemical and metabolic characterization of Prosopsis cineratia pods(Sangri) as potential nutraceuticals	Dr Pankaj Sharma	DST	21.30
68.	Enzymatic kinetic resolution of racemic amidoalkyl naphthols and their derivatives	Dr Santosh Padhi	BITS	2.00
69.	Possible mechanism of attenuation of the cardioprotective and neuroprotective effect of Ischemic preconditioning Organocatalytic cascade towards substituted Pyrrole 3-	Dr Rajeev Taliyan	BITS Faculty Research Initiation Grant	2.00
70.	carboxyaldehydes: A variation in Paal Knorr Pyrrole synthesis	Dr Indresh Kumar	BITS Faculty Research Initiation Grant	2.00
71.	Space time coupled least squares spectral element methods for parabolic problems using parallel computers	Dr Pankaj Biswas	BITS Faculty Research Initiation Grant	2.00
72.	Synthesis and characterization of metal oxide dendrimer encapsulated nanoparticles and electrocatalysis	Dr Surojit Pande	BITS Faculty Research Initiation Grant	2.00
73.	Design and Synthesis of Bile acid nucleosides conjugates linked via amino acids as potential anticancer agents	Dr Rajeev Sakhuja	BITS Faculty Research Initiation Grant	2.00
74.	Design and spectroscopic characterization of novel donor acceptor systems to be used in light energy conversion	Dr Shamik	BITS Faculty Research Initiation Grant	2.00
75.	Analysisi of genetic diversity of maloria parasite using genetic and microsatellite markers from Bikaner	Shilpi Garg	BITS Faculty Research Initiation Grant	2.00
76.	Characterisation of genes regulation the polarity of sensory organs of Drosophila	Dr Monolisa Mishra	BITS Faculty Research Initiation Grant	2.00
77.	Awareness, Use and Implicatin of Web 2.0 for supplementing calssroom teaching at graduate level	Dr Virendra Nirban	BITS Faculty Research Initiation Grant	2.00
78.	Cinematic Arts: A critical sstudy of Multidisciplinary aspects of cinema	Dr Sushila Shekhawat	BITS Faculty Research Initiation Grant	2.00
79.	Modelling Modal Shift to Bus Rapid Transit System(BRTS) from other modes of travel in Jaipur	Dr Shriniwas Arkatkar	BITS Faculty Research Initiation Grant	2.00
80.	Condition Monitoring of Dynamic System by Vibration Response Analysis	Dr. Arun Jalan	BITS Research Initiation Grant	2.00
81.	Preparation and characterization of thin films of electrochromic conducting polymer and fabrication of prototype smart pixel displays	Dr. S. Sindhu	CSIR	14.10
82.	Impact of PMGSY Roads on Accessibility in Rural Areas	Dr. A.K.Sarkar	NRRDA	22.63
83.	Molecular studies on extracellular biosynthesis of metal nanoparticles	Dr. Jitendra Panwar	DST-Nano mission	45.50
84.	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Concrete and Masonry Structures	Dr. S.B.Singh	DST	23.50
85.	Novel a-Amino, a-Aminoxy and a-Hydrazino acids linked Bio-conjugates: Design, Synthesis and Biological Evaluation	Dr. Rajeev Sakhuja	UGC-Start upgrant	6.00
86.	Size-Dependent Hydrogenation Catalysis with Mono-(Pd and Pt) and	Dr. Surojit Pande	UGC-Start up grant	6.00

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
87.	Bimetallic (Pd@Pt) Nanoparticles in Quantum Dot Region Implication of Glycogen Synthase Kinase-3 and Histone Deacetylase inhibitor in neurological disorders associated insulin resistance syndrome	Dr. Rajiv Taliyan	UGC-Start up grant	6.00
88.	Enzyme Catalyzed Kinetic Resolution of (a) Racemic Amidoalkyl naphthols and (b) Racemic 1-Amidomethyl-	Dr. Santosh Padhi	UGC Start up grant	6.00
89.	Design of new ionic receptor molecules derived from Schiff Bases: syntheses and their spectroscopic and theoretical characterization	Dr. Shamik Chakraborty	UGC Start up grant	6.00
90.	Facility management using GIS and Genetic algorithm	Dr. Rajiv Gupta	DST	19.99
91.	Exploration of novel ionic liquid-supported sulfonyl reagents for organic synthesis	Dr. Anil Kumar	CSIR	12.76
92.	Understanding the epigenetic regulation in modulating inflammatory response mediated by NF-kb through AT1 and AT2 receptor in type II diabetic nephropathy	Dr. Anil G. Bhanudas	DST	19.41
93.	Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type-2 Diabetes	Dr. Anil G. Bhanudas	DST	39.66
94.	The role of Hippo signaling pathway components in autophagy regulation in hepatocellular carcinoma	Dr. Rajdeep Chowdhury	DST	24.05
95.	Engineering halospermum montanum hydroxynitrile lyase for potential synthetic and industrial applications	Dr. Santosh Padhi	DST	25.00
96.	Removal of Heavy metals from industrial wastewater using metallic nanoparticles as absorbents	Dr. Suresh Gupta	DST	21.47
97.	Study of Traffic flow characteristics on expressways	Dr. Srinivas Arkatkar	DST	21.47
98.	Production of hydrogen rich fuel gas from Jatropha residue cake	Dr. Pratik Seth	DST	24.90
99.	Evaluation and enhancement of foam stability of ethanol based aqueous foam using commercial surfactant sodium lauryl sulfate	Dr. Pradipta Chattopadhyay	DST	25.00
100.	Design and Development of opinion mining framework	Dr. Yash Sharma	DST	13.26
101.	Design, development and implementation of a building integrated photovoltaic system for rural application	Dr. Rajneesh Kumar	State Innovation council	43.26
102.	Exploring neuroprotective effect and molecular mechanisms of remote limb ischemic post-conditioning against brain stroke	Dr. Rajeev Taliyan	DST	25.0
103.	Characterization of surface errors in machining of thin-walled curved geometries	Dr. Tufan Chand Bera	DST	24.09
104.	Enhancing phytochemical production by the use of elicitors	Dr. Sachi Singh	DST	21.80
105.	Dark energy modeling of cosmic acceleration with observational constraint in Einstein gravity and modified theories	Dr. Suresh Kumar	DST	14.16
106.	Synthesis and characterization of Metal Oxide Core- (Metal) shell nanoparticles in quantum dot region and their application in electrocatalysis	Dr. Surojit Pande	DST	24.93
107.	Design of synthetically tunable azino-	Dr. Rajeev Sakhuja	DST	24.70

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
108.	fused chromene conjugates as potential organogelators Development of Listening and speaking modules of English languages through multimedia lab for rural students of class XI-XII	Dr. Devika	UGC	4.09
109.	Role of Conserved oligomeric golgi complex (COG7) gene in the morphogenesis of hearing organ in drosophila	Dr. Monalisa Mishra	DST	24.75
110.	Study of awareness, uses and implications of web 2.0 for supplementing classroom teaching at graduate level	Dr. Virendra Nirbaan	UGC	7.89
111.	Transforming language learning with new technologies for enhancing employability of college students from rural background	Dr. Pusph Lata	UGC	8.94
112.	A Mechanistic analysis of the role of pro-inflammatory cytokines in induction of epithelial to mesenchymal transition in hepatocellular carcinoma	Dr. Sudeshna Mukherjee	DST	16.80
113.	Study of Structural Response and Strengths of Thin-Walled FRP Composite Girders	Dr. S.B.Singh	CSIR	14.32
114.	The Study of post-reionization HI distribution using the redshifted signal and Ly forest towards understanding cosmic accelation	Dr. Tapomoy G. Sarkar	DST	10.38
115.	Identifying microRNA signatures associated autophagy induced chemoresistance in hepatocellular carcinoma	Dr. Rajdeep Chowdhury	UGC-Start up grant	6.00
116.	Analysis of hypothetical and putative proteins dual targeted to apicoplast and mitochondria in plasmodium vivax	Dr. Shilpi Garg	UGC Start up grant	6.00
117.	Role of Protein kinase D in eye development of Drosophila	Dr. Monalisa Mishra	UGC Start up grant	6.00
118.	Information transfer during collective motion	Dr. Kunal Bhattacharya	BITS Research Initiation Grant	2.00
119.	Application of Enriched Microbial Biofilter for Metal Detoxification in Industrial Wastewater	Dr. Subhazit Mazumder	UGC	2.00
120.	Neuro-pharmacological investigation of novel Quinoxaline Carboxamides: Novel Serotonergic Modulators for their Anti-depressant and Anxiolytic Activity	Dr. Shvetank Bhatt	UGC	2.00
121.	Synthesis, Characterization and applications of Novel Ionic Liquid supported Metal Complexes	Dr. Bharti Khungar	UGC	13.40
122.	Synthesis, Metallochemistry and Reactivities of D-Glucose derived Glycoconjugates	Dr. Ajay Kumar Sah	UGC	9.13
123.	Development and Validation of sustainability framework for manufacturing industries	Dr. Abhijeet Digalwar	UGC	3.22
124.	Recovery of Multiple Metals ions from Industrial Wastewater using Adsorption	Dr. Utkarsh Maheswar	UGC	2.00
125.	Study of native chemical ligation at tryptophan and aspergine sites and its application in peptide synthesis	Dr. Kiran Bajaj	DST	25.50
126.	Experimental Investigation on CO2 based refrigeration system in Trans-critical cycle	Dr. M.S.Dasgupta	DST	27.50
127.	Design of Ionic Liquid linked Benzotriazoles as Useful Synthetic	Dr. Rajeev Sakhuja	BITS Seed Grant	9.80

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
128.	Auxiliaries in Organic Synthesis A Digital Humanities Approach to Interpret the Visual Culture of Shekhawati Region	Dr. Leela Rani	BITS Seed Grant	13.90
129.	Electromagnetic Characterization of Three Dimensional Targets with Plasma Cladding for Stealth Technology Using Recursive Convolution Finite Difference Time Domain Methods	Dr. Niladri sarkar	BITS Seed Grant	5.20
130.	Investigation & Development of an ICT Driven MIS for Small Milk Producers	Dr. Leela Rani	BITS Seed Grant	3.20
131.	Effect of esculetin on the development of type II diabetic nephropathy	Dr. Anil G. Bhanudas	BITS Research Initiation Grant	2.00
132.	Developing metal Doped Bismuth Vanadate (BIMEVOX) Systems for fuel cell and catalytic applications	Dr. Banasri Roy	BITS Research Initiation Grant	2.00
133.	LCAT and ApoB the two modulators of cholesterol metabolism: are they regulated by HFHS and TNFa	Dr. Prafulla C. Shukla	BITS Research Initiation Grant	2.00
134.	Role of Pro-inflammatory Cytokines in Epithelial to Mesenchymal transition in Hepatocellular carcinoma	Dr. Rajdeep Chowdhury	BITS Research Initiation Grant	2.00
135.	Enzymatic Kinetic resolution of racemic amidoalkyl naphthols and their derivatives	Dr. Santosh padhi	BITS Research Initiation Grant	2.00
136.	Synthesis and characterization of polymeric nanoparticles for applications in oral drug delivery	Dr. Sonal mazumder	BITS Research Initiation Grant	2.00
137.	Understanding and facilitating mentor- protégé relationships: An appreciative inquiry approach	Dr. Rajneesh Choubisa	BITS Research Initiation Grant	2.00
138.	Manufacturing Ultra-light high performance green composites from renewable feedstock	Dr. Subrata Bandhu Ghosh	BITS Research Initiation Grant	2.00
139.	Women at the work place: Investigating gender differences in sciences at higher education institution	Dr. Tanu Shukla	BITS Research Initiation Grant	2.00
140.	Exploring Nothe-East India through the lens of its literary productions	Dr. Kumar Sankar Bhattacharya	BITS Research Initiation Grant	2.00
141.	Growth and characterization of substrate supported transition metal nanostructures useful for catalytic, electronic and sensor applications	Dr. Subhashis Gangopadhyay	BITS Research Initiation Grant	2.00
142.	Micromodel experiments demonstrating gravity and capillary dominated immiscible flow of mercury in porous media	Dr. Shibani Khanra Jha	BITS Research Initiation Grant	2.00
143.	Development of ecofriendly nonionic surfactants coupled ultrasonic extraction technology for conophylline, an antidiabetic lead molecule and its comparison with conventional extraction techniques	Dr. Paul Atish Tulshiram	BITS Research Initiation Grant	2.00
144.	A study of Indian university models between 1857 and 1964	Dr Harikrishnan gopinandhan nair	BITS Research Initiation Grant	2.00
145.	Strengthening of Local Soil Using Fly Ash	Dr. Kamalesh Kumar	UGC	2.00
146.	Modeling and Simulation of Metallocene Catalyzed Olefin Polymerization	Dr. Nikhil Prakash	UGC	2.00
147.	Study of Laser interaction with atomic clusters and preformed plasma	Dr. Amol Holkundkar	DST-FAST TRACK	15.0
148.	Development of drivers barriers and key performance indicators for implementation of green manufacturing in indian micro small and medium	Dr. K.S.Sangwan	UGC	9.91

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
149.	ceramic enterprises Design of Supplier Development Implementation Framework for Indian Manufacturing Industries	Dr. Srikanta Routroy	UGC	9.41
150.	Characterization of Isoprenoid biosynthetic pathway enzymes from Plasmodium vivax	Dr. Vishal Saxena	UGC	7.88
151.	Designing, Synthesis and validation of a dehydration stress responsive promoter in plants	Dr. Sandhya Mehrotra	UGC	12.86
152.	Studies on design and characterization of multi-unit controlled release dosage formulation of Milnacipran Hydrochloride, in vitro release mechanism and in vivo pharmacokinetic parameters in animals	Dr. Gautam Singhvi	UGC	1.40
153.	Investigations on metal tolerance ability of soil fungi and their potential towards nanoparticle synthesis	Dr. Jitendra Panwar	UGC	15.06
154.	Cinematics Arts : A Critical study of Interdisciplinary aspects with special reference to Literature, Audio Visual and Performance	Dr. Sushila Shekhawat	UGC	5.54
155.	An Empirical Study on impact of information and communication technology on productivity in small and medium textile enterprises in Rajasthan	Dr. Leela Rani	UGC	6.51
156.	Time-resolved Spectroscopy of Fluorescent Molecules in Micellar Systems	Dr. D.D.Pant	DST	53.00
157.	Understanding impact of social learning forms on environmentally sustainable behavior in children	Dr. Leela Rani	ICSSR	5.00
158.	Characterization of major components of [Fe-S] cluster assembly pathway in plasmodium vivax	Dr. Shilpi garg	DST	23.00
159.	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-FAST TRACK	24.98
160.	Effect of partial replacement of cement with marble slurry on concrete	Dr. Anshuman	DST	23.38
161.	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
162.	Thermodynamic studies on force induced transitions in DNA molecule in crowded environment	Dr Navin Singh	DST	18.64
163.	Studies in Laboratory Scale oxygen fired fluidized bed based on co-firing rice husk with coal	Dr Ravi Inder Singh	DST	26.46
164.	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	MNRE	29.39
165.	UGC- Start-up-grant Design and Synthesis of Heavy metal based aggregation induced emission active complexes and their application in Bio-imaging	Dr Sonal Mazumder	UGC	6.00
166.	Modeling of cardio vascular flows and influence of magnetic field on circulation	Dr Inamur R Laskar	DST	35.90
167.		Dr. Ashish Tiwari	DST	11.63

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
168.	Rooftop Rainwater harvesting for safe,potable and healthy drinking water and ground water replenishment for BITS Pilani, Pilani campus	Dr. Rajiv Gupta	BITS CORE Project	91.00
169.	Zinc Recovery from Industrial waste using bioleaching	Dr. Suresh Gupta	BITS CORE Project	48.00
170.	Mobile Wireless Sensor Network Based Tracking and Sensing System for Underground Coal Mine Exploration, Safety and Security	Dr. Anupam Singhal	Ministry of mines	30.38
171.	Dynamic buckling analysis of composite structures	Dr. S N Patel	CSIR	8.37
172.	An Impact Assessment study of pradhan mantri gram sadak yojana on gender	Dr. Sanjeev Choudhary	NRRDA	4.92
173.	Studying the impact of anopheles Gut Microbial environment on immunity and plasmodium development	Dr. Lalita Gupta	ICMR	9.83
174.	RNAi screening to study the role of Aedes ATP-binding cassette (ABC) transporters against blood-borne pathogens	Dr. Sanjeev Kumar	DBT	45.78
175.	Heat Transfer augmentation from a square heated cylinder due to rectangular eddy promoter and nanofluids under the incident of couette-poiseuille flow	Dr. Dilip Kumar Maiti	DST	14.28
176.	Role of histone ubiquitination & angiotensin converting enzyme-2 in the development renal fibrosis under type 1 diabetic condition	Dr. Gaikwad Anil Bhanudas	CSIR	20
177.	Development of Botanical based Novel formulation with Mosquito Larvicidal action for indian population	Dr. Paul Atish Tulshiram	DST	12.19
178.	Flow through a membrane modeled of Porous cylindrical particles using particle-in-cell approach	Dr. Ashish Tiwari	DST(Indo-Russia)	12.86
179.	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
180.	Nonlinear Singular Differential Equations Arising in real life	Dr. Amit Kr Verma	DST	16.52
181.	Exploring the Antiobesity potential of selected ayurvedic medicinal plants using pancreatic lipase inhibition assay and synergy guided fractionation	Dr. Paul Atish Tulshiram	DST_FAST TRACK	27.30
182.	Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer	Dr. Deepak Chitkara	DST	27.20
183.	Nano-formulation of Lysofylline-fatty acid conjugate for effective treatment of diabetes	Dr. Anupama Mittal	DST	26.90
184.	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 CSR	3.45
185.	German Academic Exchange Programme	Dr. K.S.Sangwan	DAAD	341.00
186.	Investigation on the factors affecting the radiation performance of wireless	Dr. Praveen Kumar A V	BITS Research Initiation Grant	2.00
187.	Innovative use of cutting edge technology in Site-Specific....in Rajasthan	Dr. Dinesh Yadav	BITS Research Initiation Grant	2.00

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
188.	Women-at-work: The Spatial Negotiations of the "Urban" by Female Domestic Workers in Kolkatta	Dr. Somdata Bhattacharya	BITS Research Initiation Grant	2.00
189.	Catalytic Route to Linear Alkyl Benzenes (LABs) via C-C Coupling Reactions using Transition Metal Catalysts	Dr. Bhibhas Ranjan Sarkar	BITS Research Initiation Grant	2.00
190.	Design, Development, Experimental and CFD modeling of prototype of stripper ash cooler of circulating fluidized bed boilers	Dr. Ravi Inder Singh	BITS Research Initiation Grant	2.00
191.	Design, Development of DSP Controlled Reduced Device Count Multi-level Inverter for Single Phase Applications	Dr. Pradyumn Chaturvedi	BITS Research Initiation Grant	2.00
192.	Design and characterization of enteric coated lipid nanoparticles for anti-HIV drug delivery	Dr. Anil Jindal Brijbhushan	BITS Research Initiation Grant	2.00
193.	Nano-carriers for co-delivery of small molecules and oligonucleotides	Dr. Deepak Chitkara	BITS Research Initiation Grant	2.00
194.	Development and Evaluation of Lipo-polymeric Micelles for Drug Delivery	Dr. Anupama Mittal	BITS Research Initiation Grant	2.00
195.	Bio-analytical Method Development and Validation of Racemic Drugs by Dried Blood Spot Technique and Its Application to Pharmacokinetic Studies	Dr. Sunil Kumar Dubey	BITS Research Initiation Grant	2.00
196.	GM Foods, Food Security and WTO: Exploring the Politics of Food in India	Dr. Sunita Raina	BITS Research Initiation Grant	2.00
197.	Development of a framework to manage household solid waste for sustainable development	Dr. Srinivas Kota	BITS Research Initiation Grant	2.00
198.	Food Sense: A Framework for Safe Storage, Preparation and Delivery of Food	Dr. Sundaresan Raman	BITS Research Initiation Grant	2.00
199.	Alternative Epistemologies and Interdisciplinarity of Knowledge: A Philosophical Exploration	Dr. Anupam Yadav	BITS Research Initiation Grant	2.00
200.	Chemical-Looping Combustion in Recirculating Fluidized Bed	Dr. Raman Sharma	BITS Research Initiation Grant	2.00
201.	Bioremediation of waste automobile engine oil	Dr. Amit Jain	BITS Research Initiation Grant	2.00
202.	Women and Equity in Higher Education: A Comparative study of power dynamics in Indian and Dutch Academia	Dr. Sailaja Nanadigama	BITS Research Initiation Grant	2.00
203.	Syngas production by reforming of biogas over Ni-based catalytic monoliths	Dr. Srinivas Appari	BITS Research Initiation Grant	2.00
204.	Preparation and characterization of self emulsifying multi particulate drug delivery system for poorly water soluble drug	Dr. Gautam Singhvi	BITS Research Initiation Grant	2.00
205.	Preparation and characterization of chitosan nanoparticles prepared using a novel micellar system to deliver poorly water soluble drugs	Dr. Aniruddha Roy	BITS Research Initiation Grant	2.00
206.	Development of an automated non-destructive test system for condition evaluation of pavements	Dr. Amit Goel	BITS Additional Cometicative Research Grant	9.45
207.	Development of Nano-carriers for improved Drug delivery	Dr. Deepak Chitkara	BITS Additional Cometicative Research Grant	9.90
208.	Organocatalytic approach towards bioactive important six membered	Dr. Indresh Kumar	BITS Additional Cometicative Research	8.20



S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
209.	nitrogen heterocycles Investigations into issues in Deploying software defined networks on traditional Network infrastructure	Dr. K. Haribabu	Grant BITS Additional Cometitive Research Grant	8.20
210.	Design and Development of an Efficient Power conditioning Unit for photovoltaic Applications	Dr. Pradyumn Chaturvedi	BITS Additional Cometitive Research Grant	9.70
211.	Graphite Carbon nitride(g-C3N4) based semiconductor heterostructures for photocatalysis and electrocatalysis	Dr. Surojit Pande	BITS Additional Cometitive Research Grant	6.95

***KK Birla Goa Campus:***

**Ongoing Sponsored Research Projects**

S.No.	Title of the project	Name of Principal Investigator/ Co-investigator	Funding Agency	Sanctioned amount of the project (Rs)	Duration
1.	Structure elucidation of VC0395_300 protein from Vibrio cholera (leading to an alternate methodolerae epidemics)	Dr. Sumit Biswas 2010/37B/51/BRNS	BRNS, DAE	[24,30,050]	3 years
2.	A new novel biodegradable polymer scaffold for cartilage tissue engineering	Dr. Vijayashree Nayak 2011/37B/04/BRNS	BRNS, DAE	[23,34,700]	3 years
3.	Aspects of some astrophysical systems like supernovae and neutron tars in the light of new physics	Dr. Prasanta Das 2011/37P/08/BRNS	BRNS, DAE	[20,77,700]	3 years
4.	Study the effect on nanopartcles on protein synthesis and expression of small GTPases	Dr. Angshuman Sarkar 2011/37B/25/BRNS	BRNS	[21,13,400]	3 years
5.	Physicochemical characterization of the primary sigma factor of Vibrio cholera	Dr. Sumit Biswas BT/210/NE/TBP/2011	DBT (under Twinning Program for the NE)	[7,97,000]	3 years
6.	Study of effective interactions in charged colloidal suspensions	Dr. Raghunath Behera 01(2513)/11/EMR-II	CSIR	[12,00,000]	3 years
7.	Photoluminescence Studies on Undoped and Transition Metal Doped ZnO Nanoparticles	Dr. Teny Theresa John	DST-FT	[23,34,000]	3 Years
8.	Studies on Putative GGEEF/Sensory Box Domain Protein of Vibrio Cholerae	Dr. Sumit Biswas SR/FT/LS-122/2010	DST	[21,80,000]	3 years
9.	Magnetotactic bacteria: Bioresource of nanomagnets (Magnetosomes)	Dr. Nimali N Prabhu SR/FT/LS-120/2011	DST	[25,00,000]	3 years
10.	Tissue engineering of human placental stem cells into a functional pancreas	Dr. Anasuya Ganguly SR/FT/LS-137/2011	DST	[22,14,000]	3 years
11.	Magnetotransport in magnetic tunnel junctions	Dr. Ram Shankar Patel SR/NM/NS-1002/2010(G) Dr. K.R. Anupama	DST	[52,65,000]	3 years
12.	Design and development of condition based monitoring of pipelines using wireless sensor networks	Dr. Arun Kumar Jalan Dr. Lucy J Gudino Dr. K. N. Ponnani Dr. Sharad Srivastava Dr. Neena Goveas	GAIL	[71,36,000]	2 years

S.No.	Title of the project	Name of Principal Investigator/ Co-investigator	Funding Agency	Sanctioned amount of the project (Rs)	Duration
13.	Seawater desalination using liquefied natural gas (LNG) refrigeration	GAIL/NOIDA/R&D/BITS/ WSN/2012/01 Prof. K. Srinivas GAIL/NOIDA/R&D/BITS- GOA-LNG/2012/01	GAIL	[3,82,21,000]	3 years
14.	Prediction of thermodynamic, thermophysical, transport, thermoacustical and excess properties of binary, multicomponent liquid mixtures and ionic liquids (RTIL's)	Dr. Ranjan Dey 01(2682)/12/EMR-II	CSIR	[10,12,830]	3 years
15.	High-efficiency energy conversion in Steam boilers using unmixed combustion	Prof. K. Srinivas SR/S3/CE/031/2011 Prof. D. M. Kulkarni	DST	[31,05,000]	3 years
16.	Experimental wear analysis of an artificial hip implant materials using an advanced tribometer customized for bio-tribological studies	Mr. A. C. Kukarni Dr. Hemant Kumar Mrs. Jyotsna Kulkarni SR/S3/MERC/0077/ 2011 Dr. P. Bhavana	DST	[22,00,000]	2 years
17.	An Investigation on Derivatives of meso Tetrathienylporphyrin as dye sensitized Solar cells	02(0076)/12/EMR-II	CSIR	[17,11,080]	3 years
18.	Protein-ranking and novel Intervention strategies against mycobacterium tuberculosis using graph theory and bioinformatics resources	Dr Veeky Baths Dr. Utpal Roy SR/FT/LS-83/2012	DST-FT	[8,60,000]	3 years
19.	Experimental investigations of rotational moulding process using nano-scale fumed silica composites	Dr.Sachin D Waigaonkar SR/FTP/ETA-61/2012	DST-FT	[15,84,000]	3 years
20.	Spectroscopic investigation of the properties of low lying electronic states of some chemopreventive retinyl nitrones and comparison of their light-induced properties with retinyl iminium ions	Dr. Anjan Chatopadhyay Dr. Mainak Banerjee 01(2681)/12/EMR-II	CSIR	[12,64,830]	3 years
21.	Synthesis of metal-organic-porous material based efficient chiral heterogenous catalysts by post synthetic modification and their applications in asymmetric reactions	Dr. Mainak Banerjee 02(0075)/12/EMR-II	CSIR	[22,25,580]	3 years
22.	Analysis of metabolically active bacterial species in anaerobic digesters	Dr. M. Srikanth 37(1555)/12/EMR-II	CSIR	[21,10,800]	3 years
23.	Probing New Physics at high energy colliders	Dr. Prasanta Das 03(1244)/12/EMR-II	CSIR	[15,66,800]	3 years
24.	Rotational moulding of LLDPE using nanoscale fumed silica composites	Dr.Sachin Waigaonkar F.20-3(21)/2012(BSR)	UGC Start up grant for newly recruited faculty	[6,00,000]	3 years
25.	Cloning and characterization of the promoters of	Dr. Malabika Biswas 2013/37B19/BRNS	BRNS	[23,99,719]	3 years

S.No.	Title of the project	Name of Principal Investigator/ Co-investigator	Funding Agency	Sanctioned amount of the project (Rs)	Duration
26.	Staphylococccys. aureus temperate bacteriophage,φ11 Studies in neighborhood magic graphs	Dr. Tarkeswar Singh SR/S4/MS:734/11	DST (Major)	[12,69,360]	3 years
27.	Identification and characterization of abiotic stress responsive With No Lysine (WNL) kinase in rice (Oryza sativa L.)	Dr. Kundan Kumar SB/FT/LS-312/2012	DST-FT	[22,65,000]	3 years
28.	Neutron stars as a source of potential continuous gravitational wave emitter	Dr. Tarun Kumar Jha Dr. S. K. Sahay 2013/37P/5/BRNS	BRNS	[17,00,000]	3 years
29.	Role of environmental toxin in kidney related diseases in Canacona Taluk, Goa	Dr. M. Srikanth 27(0284)/13/EMR-II	CSIR	[11,99,400]	3 years
30.	Alternative splicing in signal transduction and disease: A genome wide approach	Dr. Indrani Talukdar SB/YS/LS-60/2013 Dr. N. N. Ghosh	DST-FT	[20,00,000]	3 years
31.	Development and characterization of nanomaterials for biosensors and biocatalysis	INT/DST/INT/UK/P-41/2012 Prof. Sunil Bhand Dr. C. K. Mitra UK counterpart Prof. Paul Antony Milner, University of Leeds Prof. Sunil Bhand	UKIERI-DST	[26,32,000] [60,60,500]	2 years
32.	Imprinted polymer for sensing and removal of selected antibiotic and pesticide residue	NFBSFARA/PHT-4007/2013-14 Dr. Y S Rajput, NDRI, Karnal Prof. Sudhir Chandra, IIT, Delhi Dr. Chandradew Sharma	NFBSFARA ICAR	(BITS share out of total 139.68410 lakhs consortium project)	2 years
33.	Searching for new physics in B-meson decay	Principal collaborator: Dr. Rahul Sinha 2013/37P/34/BRNS	BRNS	[19,74,500]	3 years
34.	Improving the energy efficiency of solar cells by spin caloritronics	Dr. Ethirajulu S. Kannan SR/FTP/PS-138/2012	DST-FT	[22,08,000]	3 years
35.	Biotransformation of Phosphogypsum by sulphate reducing bacteria	Dr. M. Srikanth BT/PR7470/BCE/8/952/2013	Environmental Biotechnology Division (DBT)	[5,21,000]	1 years
36.	Development of efficient bioleaching process for the metal recovery from spent catalysts	Dr. S. S. Baral Dr. P. Venkateswara Rao	DBT	[17,62,600]	3 years

S.No.	Title of the project	Name of Principal Investigator/ Co-investigator	Funding Agency	Sanctioned amount of the project (Rs)	Duration
37.	Preparation of Magnetically Separable, Mesoporous TiO <sub>2</sub> Catalyst and Study of their Catalytic Properties	Dr. N.N. Ghosh Coinvestigator: Dr. Mainak Banerjee	CSIR	[19,04,800]	3 years
38.	CROSS CULTURAL COMMUNICATION – An empirical analysis of cross cultural communication variables in Indian industries leading towards developing appropriate strategies for multi-cultural workplaces and academia	Dr. Basavadatta Mitra	UGC	[6,50,600]	3 years
39.	Development of $\beta,\beta'$ -edge fused $\pi$ -elongated donor-acceptor porphyrin possessing Near-IR optical spectra	Dr. Subhadeep Banerjee	DST-FT	[22,60,000]	3 years
40.	Flow investigation through uED-milled metallic micro channels	Dr. G. Karthikeyan	DST-FT	[21,21,000]	3 years
41.	Regulation of hypothalamic gonadotropin releasing hormone expression by putrescine in female rats	Dr. Arnab Banerjee	SERC, New Delhi	[22,24,000]	3 years
42.	Nonadiabatic molecular processes on threefold electronic degeneracies	Dr. Tanmoy Mondal DST/INSPIRE Faculty Award /2013	DST- Inspire	[35,00,000]	3 years
43.	Development of polymer-ferrite (and/or grapheme) nanocomposites having high thermal stability and microwave absorption property for Radar Absorbing Coating Application	Dr. N.N. Ghosh ERIP/ER/1305004/M/01/1523 Dr. A K Mishra	DRDO	[14,59,000]	3 years
44.	Mining closure, economic disruption and local level sustainability: A case study of Goa, India	Co Directors: Dr. R. P. Pradhan Dr. Debashish Patnaik Dr. Kotha Mahendra 02/15/2014-15/RPR Dr. Vijayashree Nayak	ICSSR	[9,00,000]	2 years
45.	Study on EMT regulation through TGF $\beta$ /SMADs in gall bladder disease	Coinvestigator Dr. Utpal Roy Dr. Rajani Gaind VMHC & Safdarjung Hospital, Delhi	SERB	[37,90,000]	3 years
46.	Microbial Diversity and Biotechnological Potentials of selected polar microorganisms	SB/SO/BB-0103/2013 Mrs. Purnima Singh Mentor: Dr. Utpal Roy SR/WOS-A/LS-419/2013	DST- WOS	[17,65,000]	3 years
47.	Experimental and simulation studies on coke mitigation in petroleum refinery systems	Prof. Srinivas Krishnaswami Coinvestigator: Prof Ponnani	Centre for High Technology (CHT)	[1,32,97,000]	3 years
48.	Investigations on microstructures of hard-soft ferrite nanocomposites and influence of microstructures on	Dr. N.N. Ghosh Coinvestigator: Dr. P. Parameswaran	UGC-DAE	[2,63,400]	1 years

S.No.	Title of the project	Name of Principal Investigator/ Co-investigator	Funding Agency	Sanctioned amount of the project (Rs)	Duration
	their properties	CSR/Acctts/2014-15/671			
49.	Gheolocial Dynamic of poymer layered silicate/graphene nano-composites	Dr. Asima Shaukat DST/INSPIRE Faculty Award /2014	DST- Inspire	[35,00,000]	5 years
50.	Chalcogen containing azomethine macrocycles and bicycles: synthesis, characterization, metal complexes and theoretical investigations of nature of intramolecular interactions between divalent chalcogen and nitrogen atoms	Dr. Arunashree Panda Coinvestigator: Dr. R. N. Behera	DST WOS	[17,10,000]	3 years
51.	Addressing challenges in application development for heterogenous computing platform for speedup and power efficiency	SR/WOS-A/CS-04/2014 (G) Dr. Santonu Sarkar SB/S3/EECE/0170/2014	DST	[37,55,775]	3 years
52.	Studies on anticoagulant platelet aggregation inhibitors from Indian cobra and viper venoms	Dr. Dibakar Chackrabarty Coinvestigator: Dr. Angshuman Sarkar Dr. Veeky Baths BT/PR5713/BRB/10/1112 /2012	DBT	[36,54,400]	3 years
53.	Purification and characterization of a promising antifungal peptide (with special reference to Candida albicans and Cryptococcus neoformans) produced by a Wild-type Bacillus sp. and cloning of its structural gene	Dr. Utpal Roy Coinvestigator: Prof. Dibakar Chakrabarthi SB/SO/HS/015/2013 Prof. Sunil Bhand	DST	[10,00,000] Sanctioned	3 years
54.	Development of a field portable devise for the analysis of environmental contaminants in water	Prof. Sunil Bhand Coinvestigator: Prof A P Koley Mr Gautam Bacher PCs: Dr. V K Suri Dr. R. Balasubramaniam Shivam Mishra Ashwin Rathod (ALL from Precision Engineering division, BARC, Mumbai)	BRNS	[24,98,010] Sanctioned	3 years
55.	Studies of the effects of quinacrine (QC) on regulation of Rho like small- GTPase and apoptosis in human lung and breast cancer cell lines cultured <i>in vitro</i>	36(2)/14/25/2014-BRNS Dr. Angshuman Sarkar Coinvestigator: Dr. Indrani Talukdar	DBT	Approved Proposed amount [23,97,388]	3 years
56.	Speech processing system to overcome distorted hearing in eldely sensorineural hearing impaired	Dr. Lucy Gudino Coinvestigator: Dr. K. R. Anupama	SEED, DST	Approved Proposed amount [61,08,640]	3 years
57.	Study and analysis of fluid dynamics and heat transfer	Dr. Ranjit S Patil	SERB-fast track	Approved	3 years

S.No.	Title of the project	Name of Principal Investigator/ Co-investigator	Funding Agency	Sanctioned amount of the project (Rs)	Duration
	characteristics in circulating fluidized bed heat exchanger with novel designs of distributor plates			Proposed amount [17,65,000]	

#### Ongoing Departmental Projects

Title of the Project	Name of the Department	Funding Agency	Sanctioned Amount (Rs)	Duration
Fund for improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)	Biological Sciences	DST	29,00,000	5 years
Fund for improvement of S&T Infrastructure in Higher Educational Institutions (FIST)	Physics	DST	49,25,000	5 years
Fund for improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)	Mechanical Engineering	DST	40,00,000	5 years
Fund for improvement of S&T Infrastructure in Higher Educational Institutions (FIST)	Chemistry	DST	38,50,000	5 years
Fund for improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)	EEE &IE	DST	18,00,000	5 years
Fund for improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)	Mathematics	DST	18,75,000	5 years
Fund for improvement of S&T Infrastructure in Higher Educational Institutions (FIST)	Chemical Engineering	DST	31,00,000	5 years

#### Hyderabad Campus:

S.No	Title of the Project	Principal Investigator	Funding Agency	Department	Sanctioned Amount	Duration
1	Daewoong Pharmaceutical Co., Ltd	Dr. Srikant Charde & Dr. Punna Rao Ravi	Daewoong Pharmaceuticals Co.,Ltd	Pharmacy	527080	1 year
2	Construction of arbitrary tensor networks using cross approximation techniques	Dr. N.Kishore Kumar	NBHM	Mathematics	289500	3years
3	Bioconversion of Coal Rejects To Biogas And Humic Acid	Dr. Asma Ahmed	DBT-BIRAC	Chemical Engineering	600000	3years
4	Mycobacterium tuberculosis acetyl coenzymes a carbonylase inhibitors: structure based drug design, synthesis and biological evaluation	Prof. D. Sriram	DST-Indo Polish	Pharmacy	1189000	2years
5	Turnor targeted nanomedicines for Photodynamic therapy	Dr. Swati Biswas	DST-Indo-Belarus Joint S & T Project	Pharmacy	958000	2years
6	Algorithms for Narrow Beamwidth Emitter Location(Anabel)	Prof. Yoganandam	DLRL-Consultancy	EEE	994948	9months
7	Studies on CO <sub>2</sub> capture from flue gases using regenerable solid adsorbents	Dr. Srikanta Dinda	CSIR	Chemical Engineering	666000	3years
8	Pharmacological evaluation of novel double stranded RNA dependent rotein kinase (PKR) inhibitors for diabetic cardiomyopathy	Dr. Arti Dhar	CSIR	Pharmacy	716000	3years
9	PARALLAX:Lightweight Code Self-verification for Internet of	Prof. C. Hota	DeitY	Computer Science and	3830000	4years

S.No	Title of the Project	Principal Investigator	Funding Agency	Department	Sanctioned Amount	Duration
	Things (IoT) Devices			Information Systems		
10	UK-India Centre for Advanced Technology for Minimization of indiscriminate use of Antibiotics (UKICAT-MA)	PI - Dr. Prashant Garg (LVPEI), Co-PI – V Vamsi Krishna	DBT - MRC	Pharmacy	3500000	3years
11	Characterisation of Fibre/Matrix Interface in advanced composites	Dr. Ramesh Babu A	DRDO/CARS	Chemical Engineering	996360	1year
12	Spectral element methods for elliptic and parabolic interface problems in R2 on parallel computers	Dr. N Kishore Kumar	NBHM	Mathematics	1359100	3years
13	Aripiprazole sustained release injectable depot formulation	Dr. Swati Biswas	Daewoong Pharmaceuticals	Pharmacy	859480	1year
14	Comprehensive intelligent ARI Monitor for early detection of pneumonia in rural areas of Medchal Mandal, AP	Prof. MB Srinivas	ICMR	EEE	795000	3years
15	Using CEFR based Bilingual Rating Scales to improve the writing ability of ESL learners: A Multiple case study	Dr. Santosh Kumar Mahapatra	British Council	Humanities & Social Sciences	148000	1year
16	Investigations of folding of Cysteine-rich Neurotoxins in Ionic Liquids by Molecular Dynamics simulation and Quantum Mechanical calculations	Dr. Durba Roy	DST-SERB	Chemistry	2522800	3years
17	Role of double stranded RNA dependent protein kinase (PKR) in hypertension: Mechanism and prevention	Arti Dhar	DST-SERB	Pharmacy	2604000	3years
18	Design and synthesis & biological evaluation of Mycobacterium tuberculosis serine/threonine protein kinase B(PknB) inhibitors	Prof. D. Sriram	DST	Pharmacy	2761000	3years

## 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. V.S. Rao (Acting)

**Members admitted by General Body:**

1. Shri Sidharth Birla
2. Prof. Asis Datta
3. Shri K.C. Jain
4. Smt. Manjushree Khaitan
5. Shri Hemant Kumar
6. Prof. L.K. Maheshwari
7. Shri Arvind Singh

**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:**

Vacant

**Representative of AICTE:**

Dr. S.K. Chopra

**Representative of FICCI:**

Shri Ashish Dhawan

**Non-Member Secretary:**

Prof. M.M.S. Anand, Registrar

### (B) BOARD OF GOVERNORS

**Chancellor:**

Dr. Kumar Mangalam Birla

**Pro-Chancellor:**

Smt. Shobhana Bhartia

**Honorary Treasurer:**

Vacant

**Vice-Chancellor of BITS:**

Prof. V.S. Rao (Acting)

**One Director of Campuses by rotation:**

Prof. G. Sundar

**One Nominee of AICTE:**

Vacant

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

Vacant

**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:**

1. Shri Rajiv Verma

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

1. Smt. Manjushree Khaitan
2. Shri Kris Ramachandran

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

Vacant

**Non-Member Secretary:**

Prof. M.M.S. Anand, 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. V.S. Rao (Acting)

**Registrar:**

Prof. M.M.S. Anand, Member-Secretary



## (D) BUILDING AND WORKS COMMITTEE

**Chairman (Vice-Chancellor):**

Prof. V.S. Rao (Acting)

**Members:**

**Director, Pilani Campus:**

Prof. Ashoke Kumar Sarkar

**Director, Hyderabad Campus:**

Prof. V.S. Rao

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

Prof. Sasikumar Punnekkat

**Nominated members (2):**

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

**Member-Secretary:**

Prof. M.M.S. Anand, 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
- Two external experts in the concerned discipline
- Director of one of the 4 campuses – nominated by the Vice-Chancellor
- One of the Chairman of the Department Level short-listing committee from one of the campuses in the concerned department/discipline
- Dean of Faculty Affairs – Convenor
- Directors of the remaining BITS campuses (Special Invitees)

2. **University Level Short-listing Review Committee:**

- Vice-Chancellor (or his nominee) - Chairman
- Directors of Pilani, Goa, Hyderabad Campuses
- Dean of Faculty Affairs - Convenor
- Director, Dubai Campus (Special invitee)

3. **Campus Level Short-listing Review Committee (one for each campus in India)**

- Director of the campus
- 2 or more Professors – to be identified by the campus Director
- Professor In-Charge of Faculty Affairs of the campus

4. **Department Level Application Short-listing 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 Professor, ELSE
  - (b) Any Professor from the Department, ELSE
  - (c) Any Professor from a related discipline, ELSE
  - (d) Any Professor from the campus
- All other Professors and Associate Professors from the Department,
- Additionally up to two Professors from the campus if the members above are fewer than 3 – to be nominated by the campus Director.

**Note:** The short-listing committee will seek the views of all faculty members in the department in its effort to short-list or not short-list 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. V.S. Rao (Sr. PROF), Acting

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

Prof. Ashoke Kumar Sarkar (Sr. PROF)

### *Secretary:*

Prof. M.M.S. Anand (PROF)

### *Directors:*

1. Prof. Ranendra N. Saha (Sr. PROF), Dubai  
Campus
2. Prof. Sasikumar Punnekkat (Sr. PROF),  
K.K. Birla Goa Campus
3. Prof. V. S. Rao (Sr. PROF.), Hyderabad Campus
4. Prof. G. Sundar (Sr. PROF), Off-Campus  
Programmes & Industry Engagement,  
Hyderabad Campus

### *Deputy Director:*

Prof. Ashwin Srinivasan (Sr. PROF),  
K.K. Birla Goa Campus

### *Deans:*

#### **University Wide:**

##### ***Pilani Campus***

1. Prof. S. Balasubramaniam (PROF)
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 Wide:**

##### ***Pilani Campus***

1. Prof. S.C. Sivasubramanian (PROF)

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

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:*

#### ***Pilani Campus***

1. Prof. Hari Om Bansal (ASOP)
2. Prof. Anshuman Dalvi (ASOP)
3. Prof. Hemant Ramanlal Jadhav (ASOP)
4. Prof. Anil Kumar (ASOP)
5. Prof. Dalip Kumar (PROF)
6. Prof. Sanjeev Kumar (ASOP)
7. Prof. Hitesh Datt Mathur (ASOP)
8. Prof. Bijay Kumar Rout (ASOP)
9. Prof. Srikanta Routroy (ASOP)
10. Prof. Kumar Neeraj Sachdev (ASOP)
11. Prof. P. Srinivasan (ASOP)
12. Shri K. Venkatasubramanian (ASTP)

#### ***Off-Campus Centre***

1. Prof. S. Sindhu (ASOP), *Bangalore*
2. Prof. G. Venkiteswaran (ASOP), *Chennai*

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

1. Prof. K. R. Anupama (PROF)
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. Shrikanth Mutnuri (ASOP)
8. Prof. Jagarlamudi Venkateswara Rao (ASOP)
9. Prof. Raghunath A. Ratabole (ASOP)

#### ***Hyderabad Campus***

1. Prof. Souri Banerjee (PROF)
2. Prof. K.V.G. Chandrasekhar (ASOP)
3. Prof. Sandip Shridharrao Deshmukh (ASOP)
4. Dr. P. Sankar Ganesh (ASTP)
5. Prof. Chittaranjan Hota (PROF)
6. Prof. Vidya Rajesh (ASOP)
7. Prof. Srinivasa Prakash Regalla (PROF)
8. Prof. Morapakala Srinivas (ASOP)
9. Prof. P.K. Thiruvikraman (ASOP)
10. Prof. A. Vasana (ASOP)
11. Prof. P. Yogeewari (PROF)

#### ***Dubai Campus***

1. Prof. Somasundaram Arumugam (ASOP)
2. Prof. R. Anand Kumar (PROF)

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

Professors (PROF):

**Pilani Campus**

1. Prof. Debashish Bandyopadhyay
2. Prof. Surekha Bhanot
3. Prof. V.K. Chaubey
4. Prof. Ashis Kumar Das
5. Prof. Balram Dubey
6. Prof. Navneet Goyal
7. Prof. Chandra Bhan Gupta
8. Prof. Rajiv Gupta (Sr. PROF)
9. Prof. Arya Kumar (on EoL)
10. Prof. Rajiv Kumar
11. Prof. R.K. Mittal (Sr. PROF) (on EoL)
12. Prof. Rashmi Ranjan Mishra
13. Prof. Janardan Prasad Misra
14. Prof. Sudeept Mohan
15. Prof. Rajendra Prasad Pareek
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. Niti Nipun Sharma (on EoL)
22. Prof. Chandra Shekhar (Sr. PROF Emeritus)
23. Prof. Ajit Pratap Singh (on EoL)
24. Prof. Shamsheer Bahadur Singh

**K.K. Birla Goa Campus**

1. Prof. Arun V. Kulkarni
2. Prof. S. Krishnaswamy
3. Prof. Dipankar Pal
4. Prof. G. Raghurama (Sr. PROF)
5. Prof. K.E. Raman (PROF Emeritus)
6. Prof. Sutapa Roy Ramanan
7. Prof. Santonu Sarkar

**Hyderabad Campus**

1. Prof. Arup Maharatna
2. Prof. N. Rajesh
3. Prof. Komaragiri Srinivasa Raju
4. Prof. Addepalli Ramu
5. Prof. P.N.K. Rao
6. Prof. D. Sriram
7. Prof. S. Swaminathan

**Dubai Campus**

1. Prof. S. Karthiyayini
2. Prof. C. Periasamy
3. Prof. Dawood Jalaluddin Shariff
4. Prof. Shah Jabeen Shazi

5. Prof. Ajit Pratap Singh
6. Prof. Krishna Kumar Singh
7. Prof. R. Udayakumar
8. Prof. S. Vadivel

Associate Professors (ASOP):

**Pilani Campus**

1. Prof. Anshuman
2. Prof. Rakesh Choubisa
3. Prof. Sanjiv Kumar Choudhary
4. Prof. P.R. Deepa
5. Prof. Devika
6. Prof. A.K. Digalwar
7. Prof. Uma S. Dubey
8. Prof. Poonam Goyal
9. Prof. Lalita Gupta
10. Prof. Navneet Gupta
11. Prof. Raj Kumar Gupta
12. Prof. Subhash Narayan Karbelkar
13. Prof. Pradipkumar Haribhau Keskar
14. Prof. Bharti Khungar
15. Prof. I.R. Laskar
16. Prof. Kusum Lata
17. Prof. Pushp Lata
18. Prof. Arun Maity
19. Prof. V. Manjuladevi
20. Prof. Ravi Kant Mittal
21. Prof. Rakhee
22. Prof. Saumi Ray
23. Prof. Jitendra Panwar
24. Prof. Mukesh Kumar Rohil
25. Prof. Ajay Kumar Sah
26. Prof. Vishal Saxena
27. Prof. Arvind Kumar Sharma
28. Prof. Sangeeta Sharma

**Off-Campus Centre**

1. Prof. Krishnamurthy Bindumadhavan,  
*Hyderabad*
2. Prof. Sandeep Kayastha, *Hyderabad*
3. Prof. Koneru Gopal Krishna, *Hyderabad*
4. Prof. Brajabandhu Mishra, *Bangalore*
5. Prof. T. Venkateswara Rao, *Hyderabad*
6. Prof. H. Viswanathan, *Bangalore*
7. Prof. Satya Sudhakar Yedlapalli, *Bangalore*

**K.K. Birla Goa Campus**

1. Prof. Geetha B
2. Prof. Saroj S. Baral
3. Prof. Raghu Nath Behera
4. Prof. Dibakar Chakraborty
5. Prof. Gaurav Dar

6. Prof. Narendra Nath Ghosh
7. Prof. Mridula Goel
8. Prof. Meenal Kowshik
9. Prof. Basavadatta Mitra
10. Prof. Patincharath Nandakumar
11. Prof. Vijayashree Nayak
12. Prof. Bhavana P.
13. Prof. Rabi Narayan Panda
14. Prof. R.P. Pradhan
15. Prof. Halan Prakash
16. Prof. Utpal Roy
17. Prof. Tarkeshwar Singh
18. Prof. Pravin M. Singru
19. Prof. Radhika Vathsan

**Hyderabad Campus**

1. Prof. A. Michael Alphonse
2. Prof. A. Sajeli Begum
3. Prof. Manab Chakravarty
4. Prof. Parthapratim De
5. Prof. Srikanta Dinda
6. Prof. Sanket Goel
7. Prof. Sunny Jose Gosman
8. Prof. Amit Kumar Gupta
9. Prof. R. Gururaj
10. Prof. Jeevan Jaidi
11. Prof. R. Krishnan
12. Prof. Anand Magadi Narasimhamurthy
13. Prof. Sridhar Raju
14. Prof. Kannan Ramaswamy
15. Prof. BVSN Prabhakar Rao
16. Prof. V.R. Vinayaka Rao
17. Prof. Punna Rao Ravi
18. Prof. N. Suresh Kumar Reddy
19. Prof. Pradyumn Kumar Sahoo
20. Prof. Dipak Kumar Satpathi
21. Prof. I. Sreedhar
22. Prof. Jayanty Subbalakshmi
23. Prof. K. Sumithra
24. Prof. Ramakrishna Vadrevu

**Dubai Campus**

1. Prof. Nidhi Bhandari
2. Prof. Tapan Kumar Datta
3. Prof. Bharat Bhushan Gulyani
4. Prof. Vijaya Ilango
5. Prof. Kavita Sunil Jerath
6. Prof. Geetha Kannan
7. Prof. Sankaram M.
8. Prof. Jagadish Nayak
9. Prof. Mary Lourde R.

10. Prof. Ramachandran Subramanian

*Heads of Departments:*

**Pilani Campus**

1. Prof. Rahul Banerjee (PROF)
2. Prof. Anil Kumar Bhat (PROF)
3. Prof. Gajendra Singh Chauhan (ASOP)
4. Prof. Arun Kumar Giri (ASOP)
5. Prof. Anu Gupta (ASOP)
6. Prof. Suresh Gupta (ASOP)
7. Prof. Manoj Kumar (ASOP)
8. Prof. Rajesh Mehrotra (ASOP)
9. Prof. S. Murugesan (ASOP)
10. Prof. Debi Datt Pant (ASOP)
11. Prof. Chandra Shekhar (ASOP)

**K.K. Birla Goa Campus**

1. Prof. Judith Maria Braganca (ASOP)
2. Prof. Anjan Chattopadhyay (ASOP)
3. Prof. Shibu Clement (ASOP)
4. Prof. Mukund Keshavrao Deshmukh (PROF)
5. Prof. Bharat M. Deshpande (ASOP)
6. Prof. Saibal Ganguly (PROF)
7. Dr. Toby Joseph (ASTP)
8. Dr. Aswini Kumar Mishra (ASTP)
9. Prof. Prasanna Kumar N. (ASOP)
10. Prof. Meenakshi Raman (PROF)

**Hyderabad Campus**

1. Prof. Jagdeesh Anmala (ASOP)
2. Dr. A. Ramesh Babu (ASTP)
3. Dr. Anupam Bhattacharya (ASTP)
4. Prof. Shrikant Yashwant Charde (ASOP)
5. Prof. Bivudutta Mishra (ASOP)
6. Prof. N.L. Bhanu Murthy (ASOP)
7. Prof. M.G. Prasuna (ASOP)
8. Dr. Aravinda N. Raghavan (ASTP)
9. Prof. Y.V. Daseswara Rao (ASOP)
10. Prof. Ramana Sonti (ASOP)
11. Prof. Y. Yoganandam (PROF)

**Dubai Campus**

1. Prof. Maneesha Bhagchandani (ASOP)
2. Prof. Adhir Baran Chattopadhyay (PROF)
3. Dr. Trupti Swarup Gokhale (ASOP)
4. Prof. Ram Karthikeyan (PROF)
5. Dr. B.G. Prakash Kumar (ASTP)
6. Prof. A. Srinivasa Rao (ASOP)
7. Prof. B. Vijayakumar (PROF)

*Co-opted Members:*

1. Dr. Abdul Rajak A.R. (ASTP), *Dubai Campus*
2. Dr. Mallika Parveen C (ASTP), *Dubai Campus*

3. Dr. Phaneendra Kiran C (ASTP),  
*Hyderabad Campus*
4. Dr. Lucy J. Gudino (ASTP),  
*K.K. Birla Goa Campus*
5. Dr. Jyoti (ASTP), *Pilani Campus*
6. Dr. Angshuman Sarkar (ASTP),  
*K.K. Birla Goa Campus*
7. Dr. Meenakshi Viswanathan (ASTP),  
*Hyderabad Campus*

*Librarians:*

1. Shri Giridhar M. Kunkur, *Pilani Campus*
2. Dr. K.N. Sheshadri, *Dubai Campus*

*Workshop Superintendent:*

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

*Chief Wardens:*

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

2. Dr. Ramesha C.K. (ASTP),  
*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)

*Student Members:*

1. Shri Archit Gadhok, 2012B2A7758P
2. Shri Arush Gupta, 2012A3PS016U
3. Shri Anmol Shrivastava, 2012A4PS121G
4. Shri Mahavadi Kashyap, 2012A8PS423H

## MEMBERS OF THE SENATE APPOINTED BODIES

### (A) RESEARCH BOARD

*Chairman (Vice-Chancellor):*

Prof. V.S Rao (Acting)

*Vice Chairman (Dean, ARD):*

Prof. Sanjay Kumar Verma

*Secretary (Registrar):*

Prof. M.M.S. Anand

*Directors of all BITS Campuses:*

1. Prof. Ashoke Kumar Sarkar
2. Prof. Ranendra N. Saha
3. Prof. Sasikumar Punnekkat
4. Prof. V.S. Rao

*Deputy Directors:*

Prof. Ashwin Srinivasan

*Dean, Sponsored Research & Consulting:*

Prof. Sunil Bhand

*Chief Research & Development Officer:*

Vacant

*Faculty Members (8):*

1. Prof. G.S. Chauhan, *Pilani Campus*
2. Dr. Jyoti, *Pilani Campus*
3. Prof. N.N. Ghosh, *K.K. Birla Goa Campus*
4. Prof. Tarkeshwar Singh, *K.K. Birla Goa Campus*
5. Prof. Suman Kapur, *Hyderabad Campus*
6. Prof. K. Srinivasa Raju, *Hyderabad Campus*
7. Prof. R. Karthikeyan, *Dubai Campus*
8. Dr. M. Madijagan, *Dubai Campus*

### (B) ACADEMIC COUNSELLING BOARD

#### I. Pilani Campus:

*Chairman : Associate Dean , ARCD*

Prof. Bijay Kumar Rout

*Dean, ID:*

Prof. S. Gurunarayanan

*Associate Dean, SWD:*

Prof. Kumar Neeraj Sachdev

*Faculty Members (2):*

1. Dr. Sanjiv Kumar Choudhary
2. Dr. Tanu Shukla

*Student Members (2):*

1. Mr. Divyanshu Jain, 2011A4PS238P
2. Mr. Prem Mukesh Parekh, 2011A7PS086P

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

*Chairman : Associate Dean , ARCD*

Prof. Neena Goveas

*Associate Dean, ID:*

Prof. Aditya Prasad Koley

*Associate Dean, SWD:*

Prof. J.V. Rao

*Faculty Members (2):*

1. Prof. P. Bhavana
2. Dr. Ranjit S. Patil

*Student Members (2):*

1. Mr. Sinai Kunkolienkar Raj Ramnath, 2012B5PS234G
2. Ms. Samyukta Ramnath, 2012A3B5038G

#### III. Hyderabad Campus:

*Chairman : Associate Dean , ARCD*

Prof. Morapakala Srinivas

*Associate Dean, ID:*

Prof. A. Vasani

*Associate Dean, SWD:*

Dr. Sandip Shridharrao Deshmukh

*Faculty Members (2):*

1. Dr. Aruna Malapati
2. Dr. Manab Chakravarty

*Student Members (2):*

1. Mr. Ghantasala Sai Krishna, 2011B3A4604H
2. Mr. Aalhad Parulekar, 2011A3PS260H

#### 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. Prof. Geetha
2. Mr. Sunil Thomas

*Student Members (2):*

1. Ms. Iyer Aiswarya Rajesh, 2011A7PS247U
2. Mr. Avishek Goel, 2011A4PS086U

### (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. Shri K. Venkatasubramanian
5. Dr. G. 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. Prasanta Kumar Das, K.K. Birla Goa Campus

3. Prof. Vidya Rajesh, Hyderabad Campus

4. Prof. Neeru Sood, Dubai Campus

*One Faculty Member from each Campus*

Prof. Inamur R. Laskar, Pilani Campus  
Prof. Anjan Chattopadhyay, K.K. Birla Goa Campus  
Prof. Amit Kumar Gupta, Hyderabad Campus  
Prof. R. Udayakumar, 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. Dr. Gajendra Singh Chauhan
2. Dr. Saumi Ray

*Student Member (1):*

Mr. Keshav Venkatraman, 2012A4PS211P

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

*Chairman : Associate Dean, SWD*

Prof. J.V. Rao

*Chief Warden:*

Dr. Ramesha C.K.

*Faculty Members (2):*

1. Prof. Tarkeshwar Singh
2. Prof. Radhika Vathsan

*Student Member (1):*

Mr. Bittu N, 2012B5A3514G

### III. Hyderabad Campus:

*Chairman : Associate Dean, SWD:*

Dr. S.S. Deshmukh

*Chief Warden:*

Dr. Kumar Pranav Narayan

*Two Faculty Members (2):*

1. Prof. Punna Rao Ravi
2. Dr. Aruna Malapati

*Student Member (1):*

Mr. Chaitanya Reddy, 2012A4PS353H

### IV. Dubai Campus:

*Chairman : Dean , SWD:*

Prof. Priti Bajpai

*Chief Warden:*

Dr. Santosh Kumar Vasudevan

*Two Faculty Members (2):*

1. Dr. Rusal Raj
2. Dr. Sujala D. Shetty

*Student Member (1):*

Ms. Shreya Jain, 2013A7PS064U

### (G) NOMINATIONS COMMITTEE

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

Prof. Ashoke Kumar Sarkar

*Deputy Directors:*

Prof. Ashwin Srinivasan

*Members of Senate (4):*

1. Prof. Rajiv Gupta, *Pilani Campus*

2. Prof. N. Rajesh, *Hyderabad Campus*

3. Prof. Aditya Prasad Koley, *K.K. Birla Goa Campus*

4. Prof. Thoppil George, *Dubai Campus*

*Secretary:*

Prof. M.M.S. Anand, Registrar

### (H) LIBRARY COMMITTEE

#### I Pilani Campus:

<u>S.N.</u>	<u>Department</u>	<u>Name of the member</u>
1.	Biological Sciences	Prof. Uma S. Dubey
2.	Civil Engineering	Dr. Shibani Khanra Jha
3.	Chemical Engineering	Dr. Amit Jain
4.	Chemistry	Dr. Rajeev Sakhuja
5.	Computer Science & Information Systems	Dr. Sundaresan Raman
6.	Off-Campus Work-Integrated Learning Programmes	Dr. Manojkumar Surajkarani Soni
7.	Economics & Finance	Prof. N.V. Muralidhar Rao
8.	Electrical & Electronics Engineering & Instrumentation	Dr. Pawan Kamalkishor Ajmera
9.	Humanities and Social Sciences	Dr. Dinesh Yadav
10.	Mathematics	Dr. Shivi Agarwal
11.	Mechanical Engineering	Dr. Amol M. Marathe
12.	Management	Dr. Satendra Kumar Sharma
13.	Pharmacy	Dr. Rajeev Taliyan
14.	Physics	Dr. H. Amol Ramdas Shilpa

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. Indrani Talukdar
2.	Chemical Engineering	Dr. Rajagopal Vellingiri
3.	Chemistry	Prof. Rabi Narayan Panda
4.	Computer Science & Information Systems	Shri T.S.R.K. Prasad
5.	Economics	Dr. Rajorshi Sen Gupta
6.	Electrical & Electronics Engineering & Electronics and Instrumentation	Dr. Priyanka Desai
7.	Humanities and Social Sciences	Dr. Nilak Datta
8.	Mathematics	Dr. Amit Setia
9.	Mechanical Engineering	Dr. Gaurav Singh
10.	Physics	Dr. Teny Theresa John

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	Prof. S. Swaminathan
2.	Civil Engineering	Dr. Arkamitra Kar
3.	Chemical Engineering	Prof. Srikanta Dinda
4.	Chemistry	Dr. Durba Roy
5.	Computer Science & Information Systems	Prof. Anand Magadi Narasimhamurthy
6.	Economics and Finance	Dr. Suddatta Banerjee
7.	Electrical & Electronics Engineering	Dr. Souvik Kundu
8.	Humanities and Social Sciences	Prof. Sunny Jose Gosman
9.	Mathematics	Dr. Sumit Kumar Vishwakarma
10.	Mechanical Engineering	Dr. N. Jalaiah
11.	Pharmacy	Prof. Punna Rao Ravi
12.	Physics	Dr. V. Satyanarayana Murthy

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	Prof. Neeru Sood
2.	Chemical Engineering	Prof. Nidhi Bhandari
3.	Computer Science	Dr. Siddhaling Urolagin
4.	Electrical & Electronics Engineering, Electronics and Instrumentation Engineering and Electronics and Communication Engineering	Dr. Muthalagu Raja
5.	General Sciences	Dr. Suhel Ahmed Khan
6.	Humanities and Social Sciences	Dr. Mubeena
7.	Mechanical Engineering	Dr. Vincent Shanthakumar

Dr. K.N. Sheshadri (Librarian) - Chairman of the Library Committee

## (I) ADMISSION COMMITTEE

*Vice-Chancellor (Chairman):*  
Prof. V.S. Rao (Acting)

*Members:*

*Director, Pilani Campus:*  
Prof. Ashoke Kumar Sarkar

*Director, K.K. Birla Goa Campus:*  
Prof. Sasikumar Punnekkat

*Director, Hyderabad Campus:*  
Prof. V.S. Rao

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

*Director (Off-campus Programmes):*  
Prof. G. Sundar

*Dean/Associate Dean (Admissions), Pilani Campus, (Convenor):*  
Prof. S. Gurunaryanan (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, USA*.

## STATISTICS OF Ph.D. QUALIFYING EXAMINATION

### BITS, PILANI - PILANI CAMPUS

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

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2014-15	25	25	21	4
I Sem. 2015-16	24	24	20	4
<b>Total</b>	<b>49</b>	<b>49</b>	<b>41</b>	<b>8</b>

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

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2014-15	-	-	-	-
I Sem. 2015-16	1	1	1	-
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</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		7		24

Discipline wise Break-up		Organizational Break-up		Discipline wise Break-up	
EEE	1	Research	7	Biosciences	09
				Chemistry	00
				Chemical	01
				EEE	03
				Mathematics	02
				Mechanical	00
				CSIS	02
				Lang. & Hum.	03
				Management	00
				Pharmacy	00
				Physics	01
				Econ. & Fin.	03
				Civil	00
					<b>24</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. 2014-15	17	17	17	0
I Sem. 2015-16	14	14	12	2
<b>Total</b>	<b>31</b>	<b>31</b>	<b>29</b>	<b>2</b>

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

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2014-15	0	0	0	-
I Sem. 2015-16	1	1	1	-
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</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		7		24

Discipline wise Break-up		Discipline wise Break-up	
EEE	1	Biosciences	9
		Chemistry	0
		Chemical	1
		EEE	3
		Mathematics	2
		Mechanical	0
		CSIS	2
		Lang. & Hum.	3
		Management	0
		Pharmacy	0
		Physics	1
		Econ. & Fin.	3
		Civil	0
			<b>24</b>

## 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. 2014-15	23	23	23	0
I Sem. 2015-16	09	09	06	3
<b>Total</b>	<b>32</b>	<b>32</b>	<b>29</b>	<b>3</b>

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

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2013-14	2	2	2	-
I Sem. 2014-15	2	2	2	-
<b>Total</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>-</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)
	4		9		23

Discipline wise Break-up		Discipline wise Break-up	
EEE	2	Biosciences	4
CSIS	1	Chemistry	5
Mech	1	Chemical	4
		EEE	0
		Mathematics	0
		Mechanical	2
		CSIS	1
		Lang. & Hum.	1
		Management	0
		Pharmacy	3
		Physics	2
		Econ. & Fin.	0
		Civil	1
		<b>23</b>	<b>23</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. 2013-14	14	14	9	5
I Sem. 2014-15	-	-	-	-
<b>Total</b>	<b>14</b>	<b>14</b>	<b>9</b>	<b>5</b>

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

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2013-14	-	-	-	-
I Sem. 2014-15	-	-	-	-
<b>Total</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</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)
	-		4		10

Discipline wise Break-up	Discipline wise Break-up
	Biosciences 0
	Chemistry 0
	Chemical 0
	EEE 6
	Mathematics 0
	Mechanical 2
	CSIS 2
	Lang. & Hum. 0
	Management 0
	Pharmacy 0
	Physics 0
	Econ. & Fin. 0
	Civil 0
	<b>10</b>

BITS Pilani

# annual report 2015

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

Prof. Ashoke Kumar Sarkar

**REGISTRAR**

Prof. M.M.S. Anand

**New Administrative appointments**

The following administrative appointments were made during the year:

- A. Prof. Ashoke Kumar Sarkar, Senior Professor has been appointed as Director – Pilani Campus with effect from 16<sup>th</sup> April 2015 for a term of 3 years.
- B. Prof. S. Gurunaranan has been appointed as Dean of Admissions (University wide) and Dean, Instruction Division (Pilani Campus) with effect from 24<sup>th</sup> August 2015.
- C. Followings have been appointed as Heads of Departments as per details given below:

S.No.	Name	Department	Period
1	Prof. Gajendra Singh Chauhan	Humanities and Social Sciences	15-05-2015 to 31-08-2016
2	Prof. Chandra Shekhar	Mathematics	07-11-2015 to 31-08-2016
3	Prof. Bijay Kumar Rout	Mechanical Engineering	06-08-2015 to 31-08-2016
4	Prof. Arun Kumar Giri	Economics & Finance	06-08-2015 to 31-08-2016

- D. Following has been appointed as Professor-in-charge (University wide):

S.No.	Name	Name of Centre	Period
1.	Prof. R.R. Mishra	Teaching Learning Centre TLC)	10-06-2015 to 31-08-2016

- E. Following have been appointed as Faculty-in-charges (Campus wise):

S.No.	Name	Name of Centres	Period
1.	Dr. Jyoti Tikoria	Centre for Innovation, Incubation & Entrepreneurship (CIIE)	01-06-2015 to 31-08-2016
2.	Prof. Rajesh Mehrotra	Teaching Learning Centre (TLC)	10-06-2015 to 31-08-2016

- F. Prof. Shibasish Chowdhury is appointed as Chief Warden with effect from 6<sup>th</sup> August 2015 for a period of one year.

- G. 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. Sachin U Belgamwar	Malviya Bhawan A,B & C Block	19-01-2015
2.	Dr. Dipendu Bhunia	Ram Bhawan	12-06-2015
3.	Dr. R Raghunathan	Sir C V Raman Bhawan	20-07-2014
4.	Dr. Sunil Kumar Dubey	Vyas Bhawan	08-08-2015

The names and designations of senior officers of Pilani campus are given in ‘Annexure B1-14’.

## 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 2014-2015	–	–	31(13)	<b>31(13)</b>
First Semester 2015-2016	899(116)	275(61)	21(04)	<b>1195(181)</b>

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

## B1.3 DUAL DEGREES AND TRANSFERS

### Dual Degree

During the Academic year 2015-2016, 277 students were permitted to work concurrently for two first degrees under Dual Degree scheme. See 'Annexure B1-2' for details.

## 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 2013-2014	12-1-2015	16-5-2015	77
First Semester 2014-2015	3-8-2015	14-12-2015	80
Practice School II 2014-15	12-1-2015	21-6-2015	138
Practice School I 2014-15	24-5-2015	21-7-2015	47
Practice School II 2015-16	4-7-2015	13-12-2015	140
Summer Term 2014-2015	22-5-2015	16-7-2015	48

## B1.5 COURSES OFFERED

The number of courses offered during the year 2015 is as follows:

	Number of Courses offered
<b>II Semester 2014-2015</b>	413
<b>I Semester 2015-2016</b>	532
<b>Summer term 2014-2015</b>	9

The list of new courses introduced during 2015 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 2014-2015	4517
First Semester 2015-2016	4595
Summer Term 2014-2015	842

Details of Registration of students for the First Semester 2015-2016 are given in 'Annexure B1-3'.

## B1.7 ACADEMIC COUNSELLING BOARD (ACB)

During the year, the Academic Counselling 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 2014-2015	I Semester 2015-2016
1. Total number of students under the purview of ACB at the beginning of the semester	154	218
2. No. of students declared out of its purview at the end of the semester	57	146
3. No. of students who left the Institute during the semester	4	3
4. No. of new students who came under the purview of ACB at the end of the semester	125	72
5. Total No. of students under the purview of ACB during the next semester	218	141

## B1.8 AWARD OF DEGREES AND MEDALS

### a. Award of Degrees

#### On Campus Programmes

During the year 65 degrees were awarded in the Board of Governors meeting held on 04.05.2015 (76<sup>th</sup> Award) and 1301 degrees were awarded on 17.07.2015 (77<sup>th</sup> Award), through a Circulatory Resolution. Statistical details of these degrees are given in 'Annexure B1-4'.

Since 77<sup>th</sup> award, more students have become eligible for the award of Degrees.

### b. Award of Medals

For Academic Year 2014-2015

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 2013-2014 in the following table:

S.No.	Name & ID NO.	Sex	CGPA obtained	Position obtained	Type of medal awarded
<b>Integrated First Degree Programmes (Total number of students 834)</b>					
1.	Rohit Aggarwal 2010B3A3505P	M	9.88	First	Gold
2.	Ajay Singhvi 2011A3PS029P	M	9.86	Second	Silver
3.	Siddharth Awasthi 2011A2PS516P	M	9.82	Third	Bronze
4.	Shruti Gupta 2011A7TS872P	F	9.82	Third	Bronze

**B1.9 CAMPUS INTERVIEWS AND PLACEMENT**

Number of companies which conducted campus interviews	182
No of interviews	1688
No of offers made	837

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 2015**

Programme	Number graduated	Employed/ Higher Studies	Unemployed	Those neither informed nor sought help in placement
<b>On-Campus Programmes</b>				
<b>B.E.(Hons.)</b>				
Chemical	60	58	2	0
Civil	55	49	5	1
Computer Science	94	91	3	0
EEE	89	76	10	3
Electronics & Instrumentation	56	49	4	3
Mechanical	75	69	5	1
Manufacturing	32	29	2	1
Electronics & Communication	01	01	0	0
<b>B.Pharm</b>	24	14	8	2
<b>M.Sc.(Hons.)</b>				
Bio. Sciences	49	36	4	9
Chemistry	42	36	2	4
Economics	52	44	2	6
Mathematics	52	43	3	9
Physics	54	43	3	8
<b>M.Sc.(Tech.)</b>				
General Studies	21	1	20	0
Information Systems	69	64	4	1
Finance	16	15	1	0
<b>M.E.</b>				
Biotechnology	15	11	4	0
Chemical	12	6	4	2
Chemical (Spl. In Petrochem)	6	3	2	1
Civil (Spl. in Structural Engg.)	14	4	6	4
Civil (Spl. in Transportation Engg.)	10	2	4	4
Civil (Spl. in Infrastructure Systems)	12	3	6	3
Communication Engg.	17	12	4	1
Computer Science	19	16	3	0
Design Engg.	9	5	2	2

Programme	Number graduated	Employed/ Higher Studies	Unemployed	Those neither informed nor sought help in placement
Embedded System	6	6	0	0
Manufacturing Systems Engg.	10	5	2	3
Mechanical	11	10	1	0
Microelectronics	12	10	2	0
Software Systems	29	20	2	7
<b>M.Pharm</b>	9	6	3	0
<b>M.Pharm.</b> (Spl. In Pharmaceutics)	14	12	2	0
<b>M.Pharm.</b> (Spl. Pharmaceutical Chemistry)	6	5	1	0
<b>MBA</b>	50	34	14	2
<b>Total</b>	<b>1102</b>	<b>888</b>	<b>140</b>	<b>77</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)

Senior Professors, Professors	02
Associate Professors	07
Assistant Professors	07
Lecturers	02
Visiting Faculty (Adjunct Faculty)	01

**Head of the Department:** Dr. Rajesh Mehrotra

**Contact details:** rmehrotra@pilani.bits-pilani.ac.in

**Number of PhD Scholars:** 34

**Number of RA:** 02 (One DST Women Scientist and One DST Young Scientist)

#### Ph.D. Thesis Submitted during the year: 06

- (i) In vivo Transcriptome Analysis of Plasmodium falciparum Clinical Isolates: Glimpses into Molecular Events in Complicated Malaria - Dr. Amit Kumar Subudhi (2015)
- (ii) Analysis of ACGT Cis elements across Plant Genomes and its characterization using Protein Phosphatase 2C(PP2C) like promoter from Arabidopsis thaliana - Dr. Purva (2015)
- (iii) V.Nalini (2010PHXF038P); Title: Evaluation of Molecular Targets In Clinical Management of Intra-ocular Tumors (Retinoblastoma and Uveal Melanoma).
- (iv) Mr. Swarna Kanchan (2007PHXF007P) Understanding the protein evolution: A genomic and modelling study,
- (v) Ashish Runthala, Protein Structure Prediction: Challenging targets for CASP10, Journal of Biomolecular Structure and Dynamics, 2012, 30(5), 607-615
- (vi) Mr. Manoj Kannan (1996PH29707P) Genetic and Epigenetic Impacts of L1 Retrotransposition in Mouse and Man"

#### A. SPONSORED RESEARCH ACTIVITIES:

##### Ongoing projects:

1. (PI: Sandhya Mehrotra, Co PI: Rajesh Mehrotra) "Design, synthesis and validation of a dehydration stress responsive promoter in plants" Funding Agency: University Grants Commission (UGC), Govt. of India, New

Delhi; Sanctioned Amount: 12.88 Lakhs Duration: 3 Years (2013-2016).

2. (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: 45.5 Lakh; Duration: 3 Years (2013-2016).
3. (PI: Jitendra Panwar) "Investigations on metal tolerance ability of soil fungi and their potential towards nanoparticle synthesis" Funding Agency: University Grant Commission (UGC), Govt. of India, New Delhi; Sanctioned Amount: 15.05800 Lakh; Duration: 3 Years (2013-2016).
4. (PI: Sanjeev Kumar Co-PI: Lalita Gupta) "Molecular Characterization of Anopheles stephensi gut epithelial peroxidases and their role in modulating immunity against bacterial and fungal antigens" Funding Agency: Department of Science and Technology (DST), Govt. of India, New Delhi; Sanctioned Amount: 47.18 Lakhs; Duration: 3.5 Years (2012-2016).
5. ((PI: Sanjeev Kumar Co-PI: Lalita Gupta) DBT project, "RNAi screening to study the role of Aedes ATP-binding cassette (ABC) transporters in immunity against blood-borne pathogens" Funding Agency: DBT, Govt. of India, New Delhi; Sanctioned Amount: 46.32 Lakhs, Duration 3 Years (2015-2018)
6. (PI: Lalita Gupta) "Studying the impact of Anopheles gut microbial environment on immunity and Plasmodium development" Funding Agency: Indian Council of Medical Research (ICMR), Govt. of India. Approved amount: 30 Lakh, Duration: 3 Years (2015-2018).
7. (PI: P R Deepa): "Identification of potential molecular inhibitors of Fatty acid synthase (FASN) at the enzyme activity and gene expression level". Funding Agency: DBT-COE R&D Project-1, New Delhi. No.: BT/01/CEIB/11/V/16; Sanctioned amount: 33.67 Lakhs. In collaboration with Vision Research Foundation, Sankara Nethralaya, Chennai
8. (PI: Vishal Saxena) "Characterization of Isoprenoid biosynthetic pathway enzymes from *Plasmodium vivax*" Funding Agency: University Grants Commission, Govt. of India, New Delhi; Sanctioned amount 7.88 lakhs Duration: 3 years (2013-2016)
9. (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).
10. (PI: Rajdeep Chowdhury) "Role of Hippo Signaling Pathway Components in Autophagy Regulation in Hepatocellular Carcinoma" Funding Agency: DST-SERB, Govt. of India, New Delhi; Sanctioned Amount: 24 Lakhs; Duration: 3 Years (2013-2016).
11. (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).
12. (PI: Sudeshna Mukherjee) "A mechanistic analysis of the role of pro-inflammatory cytokines in induction of epithelial to mesenchymal transition in hepatocellular carcinoma" Funding agency: DST FAST Track (Young Scientist), Amount Sanctioned: 17 Lakhs, Duration: 3 Years (2013-16).

## 2. Projects sanctioned during the year 2015.

1. (PI: Lalita Gupta) "Studying the impact of Anopheles gut microbial environment on immunity and Plasmodium development" Funding Agency: Indian Council of Medical Research (ICMR), Govt. of India. Approved amount: 30 Lakh, Duration: 3 Years
2. (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.
3. (Co-PI: Sandhya Marathe PI: Amol Marathe and) "Modeling immune response to *Salmonella* during typhoid" Funding Agency: Department of Science and Technology (DST), Govt. of India, New Delhi; Sanctioned Amount: Yet to be confirmed by DST (proposed amount: 41.43 Lakh); Duration: 3 Years

## 3. Projects completed

1. (PI: Rajesh Mehrotra) "Cloning and characterization of protein phosphatase 2C promoter. Funding agency: DST; Sanctioned amount: 12.57 lakhs; Duration: 3 years.
2. (PI: Rajesh Mehrotra) "Natural and Engineered Lipases for Biodiesel Production (Co-investigator). Funded Agency: Aditya Birla Group, Sanctioned Amount: 10 Lakh. Duration: 2 Years.
3. (PI: S K Verma) Development of recombinant DNA based Biosensor device for detection of arsenic in water samples, Funding agency: DST, New Delhi, Sanctioned Amount: 36.5 Lakhs, Duration Three Years.
4. (PI: Jitendra Panwar) "Nano technology for enhanced utilization of native-phosphorous by plants and



- higher moisture retention in arid soils” Funding Agency: Indian Council of Agricultural Research (ICAR), Govt. of India, New Delhi; Sanctioned Amount: 6.147119 Crore (41.539 Lakh); Duration: 6 Years (2008-2014).
5. (PI: Lalita Gupta) “Characterization of immune signaling pathway in *Anopheles* mosquitoes” Funding Agency: Science and Engineering Research Board (SERB), DST, Govt. of India, New Delhi; Sanctioned Amount: 21.2 Lakhs; Duration: 3 Years (2012-2015).
  6. (PI: Lalita Gupta) “Characterization of immune signaling pathway in *Anopheles* mosquitoes” Funding Agency: Aditya Birla Groups (ABG), Sanctioned Amount: 10 Lakhs; Duration: 2 Years
  7. (PI: Sanjeev Kumar, Co-PI: Lalita Gupta) “Molecular Characterization of *Anopheles stephensi* gut epithelial peroxidases and their role in modulating immunity against bacterial and fungal antigens” Funding Agency: Department of Science and Technology (DST), Govt. of India, New Delhi; Sanctioned Amount: 47.18 Lakhs; Duration: 3 Years (2012-2015).
  8. (PI: P R Deepa): “To Investigate the Effect of Fatty Acid Synthase (FASN) siRNA in a FASN expressing cancer cell line”. In collaboration with Vision Research Foundation, Sankara Nethralaya, Chennai. Funding Agency: ICMR. Sanctioned Amount: 25 Lakhs. Duration: 3 years (2011-2014).
  9. (PI: P R Deepa): “Cardiovascular Disease in human population: Mathematical modeling and analysis of its incidence, risk factors, and preventive strategies”, Collaboration with Dr Padma Murali, Mathematics Dept, BITS Pilani - Chennai Centre. Funding Agency: UGC. Sanctioned amount: 8.44 Lakhs. Duration: 3 years (2011-2014).
  10. PI: Prabhat Nath Jha) “Molecular characterization of diazotrophic plant growth-promoting endophytic bacteria isolated from arid desert of Rajasthan. Funding Agency: Department of Science and Technology, Ministry of Scientific Affairs, India. Sanctioned Amount: 14.53 Lakh. Duration: 3 Years.
  11. (PI: Prabhat Nath Jha, Co PI: Rajesh Mehrotra, S K Verma) “Molecular Characterization of ACC (1 aminocyclopropane-1-carboxylate) Deaminase Activity of Associative Bacteria Isolated from Plants of Desert of Rajasthan. Funded Agency: Department of Biotechnology, Sanctioned amount: 41.35 Lakh. Duration: 3 years (2012-2015)
  12. (PI: Rajdeep Chowdhury) “Identifying microRNA Signatures Associated with Autophagy Induced Chemoresistance in Hepatocellular Carcinoma” Funding Agency: UGC, Govt. of India, New Delhi; Sanctioned Amount: 6 Lakhs; Duration: 2 Years (2013-2015).
  13. (PI: Rajdeep Chowdhury) “Role of Pro-inflammatory Cytokines in Epithelial to Mesenchymal Transition in Hepatocellular Carcinoma” Funding Agency: RIG-BITS-Pilani; Sanctioned Amount: 2 Lakhs; Duration: 2 Years (2013-2015).
  14. (PI: Pankaj Kumar Sarma) “Phytochemical and Metabolic Characterization of *Prosopis cineraria* pods (sangri) as Potential Nutraceuticals” Funding Agency: DST-SERB, Govt. of India, New Delhi; Sanctioned Amount: 21.3 Lakhs; Duration: 3 Years (2012-2015).
  15. (PI: Shilpi Garg) “Analysis of genetic diversity of malaria parasite from Bikaner, India” Funding Agency: Birla Institution of Technology and Science, Pilani, Rajasthan; Sanctioned amount 2 lakhs Duration: 2 years (2012-2014).
  16. (PI: Shilpi Garg) “Analysis of hypothetical and putative proteins dual targeted to apicoplast and mitochondria in *Plasmodium vivax*” Funding Agency: University Grants Commission (UGC), Govt. of India, New Delhi; Sanctioned amount 6 lakhs Duration: 2 years (2014-2015)
  17. (PI: Santosh Kumar Padhi): “Enzyme Catalyzed Kinetic Resolution of (a) Racemic Amidoalkyl naphthols and (b) Racemic 1-Amidomethyl-Imidazo [1,2-a] Pyridines” Funded by UGC, New Delhi, India, Amount 6 Lakhs, Duration: 2 years (2013 - 2015)
  18. (PI: Prameela Jha): “Endophytic bacteria mediated phytoremediation of organic pollutants” Funding Agency: Department of Science and technology, India. Sanctioned amount: 25.10 lakhs; Duration: 3 years (2012-2015).

#### 5. Project proposals approved during the year 2015:

1. (PI: Lalita Gupta) “Studying the impact of *Anopheles* gut microbial environment on immunity and *Plasmodium* development” Funding Agency: Indian Council of Medical Research (ICMR), Govt. of India. Approved amount: 30 Lakh, Duration: 3 Years
2. (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

3. (Co-PI: Sandhya Marathe PI: Amol Marathe and) "Modeling immune response to *Salmonella* during typhoid" Funding Agency: Department of Science and Technology (DST), Govt. of India, New Delhi; Sanctioned Amount: Yet to be confirmed by DST (proposed amount: 41.43 Lakh); Duration: 3 Years.

#### 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. Swarna Kanchan, Mehrotra R. and Chowdhury, S. 2015. In-Silico analysis of Endonuclease III protein family identifies key residues and processes during evolution. *J. Mol. Evol.*, 81:54–67
2. Sidhu, G.K., Sharma, R., Mehrotra, R., Mehrotra, S. 2015. Analysis of 39 cyanobacterial species reveals rbcX subunit to be present between L and S Subunits. *Journal of Advances in Biology*, 7 (3):1420-1426
3. Mehrotra, R., Sangwan, C., Khan, Z.A., Mehrotra, S. Cis regulatory elements in regulation of plant gene expression: an overview; *Gene technology* (2015) 4:3
4. Mehrotra, Rajesh; Taparia, Tanvi; Manjiri, MVSS; Shukla, Paritosh; Mehrotra, Sandhya "Developments and Challenges in Biodiesel Production from Microalgae: A Review" 2015 (In Press Biotechnology and applied Biochemistry)
5. Runthala, A. and Chowdhury, S. 2015. Unsolved problems of ambient computationally intelligent TBM algorithms. *Studies in Computational Intelligence – Volume 611: Hybrid soft computing approaches* (Research Volume, Editor: Siddhartha Bhattacharyya, Paramartha Dutta and Susanta Chakraborty, Springer Publishers), 75-105.
6. Jha, P., Panwar, J. and Jha, P.N. 2015. Secondary plant metabolites and root exudates: guiding tools for polychlorinated biphenyl biodegradation. *International Journal of Environmental Science and Technology*, 12: 789-802.
7. Bhargava, A., Jain, N., Gangopadhyay, S. and Panwar, J. 2015. Development of gold nanoparticle-fungal hybrid based heterogeneous interface for catalytic applications. *Process Biochemistry*, 50: 1293-1300.
8. Jain, N., Alam, P., Laskar, I.R. and Panwar, J. 2015. Aggregation induced phosphorescence' active iridium (III) complexes for integrated sensing and inhibition of bacteria in aqueous solution. *RSC Advances*, 5: 61983-61988.
9. Jain, N., Bhargava, A., Rathi, M., Dilip, R.V. and Panwar, J. 2015. Removal of protein capping enhances the antibacterial efficiency of biosynthesized silver nanoparticles. *PLoS ONE*, DOI: 10 (7): e0134337. doi:10.1371/journal.pone.0134337.
10. Kajla M, Gupta K, Kakani P, Dhawan R, Choudhury TP, Gupta L, Gakhar SK and Kumar S. 2015. Identification of an Anopheles Lineage-Specific Unique Heme Peroxidase HPX15: A Plausible Candidate for Arresting Malaria Parasite Development. *J Phylogen Evolution Biol*, 3:4
11. Dhawan R, Gupta K, Kajla M, Kumar S, Gakhar SK, Kakani P, Choudhury TP, Gupta L. 2015. Molecular characterization of SOCS gene and its expression analysis on Plasmodium berghei infection in Anopheles culicifacies. *Acta Trop.*, 152:170-5
12. Kajla M, Gupta K, Gupta L and Kumar S. 2015. A Fine-Tuned Management between Physiology and Immunity Maintains the Gut Microbiota in Insects. *Biochem Physiol*, 4:4
13. Kajla M, Bhattacharya K, Gupta K, Banerjee U, Kakani P, Gupta L and Kumar S. 2015. Identification of the temperature- induced larvicidal efficacy of Agave angustifolia against Aedes, Culex and Anopheles larvae. *Front. Public Health* doi: 10.3389/fpubh.2015.00286
14. Nitu K., Dubey, U.S. and Agarwal, U. (Accepted 2015). 'Evolution of Classification of Bladder (Urothelial) Cancer. *National Journal of Integrated Research in Medicine* (Manuscript Number: NJIRM-2015-09-125).
15. Dubey, U.S., Manohar, L., Mittal, A. and Kapur, S. (Accepted 2015) Therapeutic potential of camel milk. *Emir. J Food Agr.* doi: 10.9755/ejfa.2015-04-122
16. B. Dubey, B., Dubey, P. and Dubey, U.S. (Accepted, 2015) Role of Media And Treatment on an SI Model, *Nonlinear Analysis: Modeling and Control* (Ref No NA1403-023).
17. B. Dubey, Dubey, P. and U.S. Dubey. (Accepted 2015) "Dynamics of an SIR Model with Nonlinear Incidence and Treatment Rate", *Applications and Applied Mathematics*. Accepted for Proceedings in ICMBAA -2015 (Springer)
18. Baig N, Singh RP, Chander S and Jha PN; Murugesan S and Saha AK. 2015. Synthesis, evaluation and molecular docking studies of amino acid derived N-glycoconjugates as antibacterial agents. *Bioorg Chem*. (Accepted, 2015)

19. Singh RP, Shelke GM, kumar A and Jha PN. 2015. Biochemistry and Genetics of ACC deaminase: A weapon to 'stress ethylene' produced in plants. *Front Microbiol.* 6:937 doi: 10.3389/fmicb.2015.00937.
20. Singh RP, Jha P. and Jha PN. 2015. The Plant Growth Promoting Bacterium *Klebsiella* Sp. SBP-8 Confers Induced Systemic Tolerance in Wheat (*Triticum aestivum*) Plant Under Salt Stress Condition. *J Plant Physiol.* 184:57-67.
21. Chander S, Ashok P, Singh S, Jha PN and Murugesan S. 2015. A Rapid, Green, Efficient Microwave-Assisted Synthesis and Antimicrobial Activity of Novel Glycinamide of 6,7-Dimethoxy-1, 2, 3, 4-Tetrahydroisoquinolines. *Curr Microwave Chem.*, 9:33.
22. Gupta G, Gupta AD and Jha PN. 2015. Biocontrolling and Colonization Potential of *Pseudomonas aeruginosa* PM389 Isolated from *Pennisetum Glaucum* under Field Conditions. *Intl J Res Emerging Sci Tech.* 2:104-116.
23. Khedar P, Pericherla K, Singh RP, Jha PN and Kumar A. 2015. Click chemistry inspired synthesis of piperazine-triazole derivatives and evaluation of their antimicrobial activities. *Med Chem Res.* 24:3117–3126.
24. Singh RP, Mishra SM, Raghuvanshi S and Jha PN. 2015. GC-MS analysis of change in fatty acid composition of halobacterium *Bacillus licheniformis* HSW-16 under varying salinity condition. *J Microbiol Biotechnol Food Sci.* 5:290-292.
25. Gupta G and Jha PN. 2015. Screening of potential PGPR candidates as future biofertilizers: A strategic approach from lab to field". *Res J Biotechnol.* 10:48-62.
26. Mishra S., Singh R.P., Raghuvanshi S., Gupta S and Jha PN. 2015. Deducing the bio-perspective capabilities of Fe (II) utilizing bacterium *Pseudomonas aeruginosa* KP isolated from extreme environment. *Biochem Anal. Biochem.* 4:166. doi: 10.4172/2161-1009.1000166.
27. Singh RP and Jha PN. 2015. Plant Growth Promoting Potential of ACC Deaminase Rhizospheric Bacteria Isolated from *Aerva javanica*: A Plant Adapted to Saline Environments. *Intl J Curr Microbiol Appl Sci.* 4:142-152.
28. Singh RP and Jha PN. 2015. Characterization and Optimization of Alkaline Protease Production from *Bacillus Licheniformis* Hsw-16 Isolated from Sambhar Salt Lake. *Int J Appl Sci Biotechnol.* Vol 3: 347-351.
29. Pallavi B, Sharma A, Jha PN., Singh RP and Shukla P. 2015. Novel grinding synthesis of pyranopyrazole analogues and their evaluation as antimicrobial agents. *Heterocycles.* 91:1615 - 1627.
30. Singh RP, Jha PN. 2015. Molecular identification and characterization of rhizospheric bacteria for plant growth promoting ability. *Int. J. Curr. Biotechnol.* 3:12-18.
31. Chander, S., Ashok, P., Singh, S., Jha, P.N. and Murugesan, S. (2015). A Rapid, Green, Efficient Microwave-Assisted Synthesis and Antimicrobial Activity of Novel Glycinamide of 6,7-Dimethoxy-1, 2, 3, 4-Tetrahydroisoquinolines. *Current Microwave Chemistry*, 2, 000-000 (Epub).
32. Jangir, M. M., Kashyap, J. S., Vani, B. and Chowdhury, S. 2015. The role of cyanobacteria in agriculture. *Journal of Agroecology and Natural Resource Management, Vol.2 (5)*, 345-350.
33. Self-Assembled Oleic Acid Nanoparticle Mediated Targeting of Mitogen Activated Protein Kinase Signaling in Combination with DNA Damage in Cancer Cells. Palvai S, More P, Mapara N, Nagraj J, Chowdhury R, Basu S. *ChemNanoMat (Wiley-VCH)*; Dec 2015 (In Press).
34. Chitosan encapsulated ZnS:M (M: Fe<sup>3+</sup> or Mn<sup>2+</sup>) quantum dots for fluorescent labeling of sulphate reducing bacteria. Raghuram HS, Pradeep S, Dash S, Chowdhury R and Mazumder S. *Bulletin of Materials Science*; Oct 2015 (In Press).
35. Russells viper venom (RVV) affects regulation of small GTPases and causes nuclear damage. Pathan JS, Martin A, Chowdhury R, Sarkar A and Chakrabarty D. *Toxicon*; Oct 2015 (In press).
36. Cancer: an evolutionary perspective. Nagraj J, Mukherjee S and Chowdhury R. *J Cancer Biol Res*; 2015, 3(2): 1064.
37. Fast microwave assisted synthesis of pyrazolopyran derivatives as new anticancer agents. Shukla P, Sharma A, Chowdhury R, Dash S and Pallavi B. *Current Microwave Chemistry (Bentham Science Publisher)*; 2015, 3, 1-6.
38. Runthala, A. 2015. Non-Linear and Misleading Template Scoring Criteria: Root Cause of Protein Modelling Inaccuracies. *Current Synthetic and Systems Biology*, 3, 2.
39. Runthala, A. 2015. Functionally Tolerable Mutations Incorporated in Proteins guides the Evolution Process. *Journal of Investigative Genomics*, 2, 29.

40. Garg, S., Kakkar, S. and Runthala, A. 2015. Improved Protein Model Ranking through Topological Assessment. Computational Biology and Bioinformatics: Gene Regulation (Research Volume, Editor: Ka-Chun Wong, CRC Press, Taylor & Francis Group, In Press)

### C. CONFERENCES ATTENDED/ PAPERS PRESENTED:

1. Nogia, P., Tomar, V., Sidhu, G.K., Mehrotra, R., and Mehrotra, S. 2015. Extensive duplication and subfunctionalization of a nitrate transporter gene in *Arabidopsis thaliana*: Multiple factors involved in paralog retention, Plant genome evolution: A current opinion conference, 6-8th September 2015, Amsterdam, The Netherlands.
2. Mehrotra, R., Jain, A., Khan, Z.H., Sangwan, C., and Mehrotra, S. 2015. Analysis of the promoter region of an amino acid transmembrane transporter from *Arabidopsis thaliana* reveals internal duplication of 196 base pairs Plant genome evolution: A current opinion conference, 6-8th September 2015, Amsterdam, The Netherlands.
3. Vipul, Sachin Saxena, Purva Bhalothia, Sandhya Mehrotra and Rajesh Mehrotra :Genome wide analysis of W-box in *Arabidopsis thaliana* reveals skewed distribution of TGACACATTTTGAC sequence in chromosome 1. Presented in IIT Kanpur "5th Annual International Conference on Advances in Biotechnology (BIOTECH 2015)" held at IIT, Kanpur during March 13-15, 2015.
4. Nogia P, Mehrotra, R. and Mehrotra, S. An approach towards introduction of cyanobacterial bicarbonate transporter into the chloroplast inner envelope of model C3 plant/s. In: *1st annual conference on Trends in Cell and Molecular Biology (TCMB 2015)*, December 19-21<sup>st</sup>, 2015, BITS Pilani K K Birla Goa Campus, Goa, India.
5. Tomar, V., Sidhu, G.K., Nogia P., Mehrotra, R. and Mehrotra, S. Occurrence and arrangement of three multisubunit inorganic transporters in cyanobacteria 3<sup>rd</sup> international Plant Physiology congress" Challenges and Strategies in Plant Biology Research" December 11-14, 2015, JNU, New Delhi, India.
6. Nagraj, J., Divya Nivedita, Joshi, P., Mukherjee, S., Chowdhury, R. and Chowdhury, S. 2015, Predicting microRNAs targeting Autophagy Pathway Genes. In: Annual International Conference on Advances in Biotechnology (BIOTECH 2015), 13th – 15th March 2015, Indian Institute of Technology, Kanpur (IITK).
7. Jangir, M. M., Kashyap, J. S., B. Vani, and Chowdhury, S. 2015, The Role of Cyanobacteria in Agriculture. In: National conference on Innovative Research in Agriculture, Food Science, Forestry, Horticulture, Aquaculture, Animal Sciences, Biodiversity, Environmental Engineering and Climate Change (AFHABEC-2015). 31 Oct.-1 Nov. 2015, Organized by "Krishi Sanskriti" at Jawaharlal Nehru University, New Delhi.
8. Jangir, M. M., Kashyap, J. S., B. Vani, and Chowdhury, S. 2015, Elucidating the Alkaline Tolerance Mechanism of *Arthrospira platensis*: An In-silico study. In: 3rd International Plant Physiology Congress- Challenges and Strategies in Plant Biology Research, 11-14 December, JNU, New Delhi.
9. Jangir, M. M., Kashyap, J. S., B. Vani, and Chowdhury, S. 2015, Study of Alkaline Tolerance Mechanism in *Arthrospira platensis* NIES-39 - Sensitivity at different pH Regimes. In: Trends in Cell and Molecular Biology, TCMB 2015, 19-21st December at BITS Pilani KK Birla Goa Campus.
10. Panwar, J., Bhargava, A., Dilip, R.V. and Pareek, V. 2015. Rhizospheric metal tolerant fungal isolates: Leading edge tool for sustainable synthesis of metal and metal oxide nanoparticles. In: *2<sup>nd</sup> International Conference on Crop Improvement (ICCI-2015)*, Universiti Putra, Putrajaya, Malaysia. December 2-3, 2015, p. 34.
11. Dilip, R.V., Bhargava, A., Pareek, V. and Panwar, J. 2015 Rapid and efficient synthesis of silver nanoparticles by metal tolerant fungus. In: *4<sup>th</sup> International Conference on Advanced Nanomaterials and Nanotechnology*, December 8-11, 2015, Indian Institute of Technology, Guwahati.
12. Pareek, V., Bhargava, A., Khan, M.A., Dilip, R.V., and Panwar, J. 2015. Enhanced catalytic degradation of rhodamine B using mycogenic gold nanoparticles. In: *4<sup>th</sup> International Conference on Advanced Nanomaterials and Nanotechnology*, December 8-11, 2015, Indian Institute of Technology, Guwahati.
13. Gupta L, Gupta K, Dhawan R, Kajla M, Kakani P, Choudhury TP and Kumar S. 2015. SOCS5 in malaria vectors: Annotation, phylogenetic analysis in 18 *Anopheles* species. 6<sup>th</sup> World Congress on Biotechnology, New Delhi, 05-07<sup>th</sup> October.
14. Choudhury TP, Kajla M, Kakani P, Gupta K, Dhawan R, Gupta L and Kumar S. 2015. Exploring the role of *Anopheles stephensi* HEME PEROXIDASE in mosquito innate immunity. 6th World Congress on Biotechnology, New Delhi, 05-07th October.
15. Gupta L, Gupta K, Kumar S, Bihani A, Sharma Y and Trishal S. 2015. Genome-wide analysis of ABC transporters and characterization of ABC C12 in *Aedes aegypti*. 4<sup>th</sup> Congress on Insect Science, Indian

- Society for Advancement of Insect Science, Punjab Agricultural University, Ludhiana, Punjab.16-17<sup>th</sup>April.
16. Kumar S, Kajla M, Bhattacharya K, Banerjee U, Gupta K and Gupta L. 2015. Identification of plant secondary metabolites as potent mosquitocidals. 4th Congress on Insect Science, Indian Society for Advancement of Insect Science, Punjab Agricultural University, Ludhiana, Punjab.16-17<sup>th</sup>April (Recipient of Best Oral Presentation Award)
  17. Dubey,P., Dubey, P., and Dubey, U.S. "An SIR Model with Nonlinear Incidence Rate and Holling Type III Treatment Rate. *International Conference on Recent Advances in Mathematical Biology, Analysis and Applications (ICMBAA-15)*, June 4-6. Aligarh Muslim University. Aligarh.
  18. P. Dubey, B. Dubey and U.S. Dubey, Optimal Control for Therapeutic Drug Treatment on a Delayed Model Incorporating Immune response. *BIOMAT2015 International Symposium on Mathematical and Computational Biology*. Nov 1-6. Indian Institute of Technology Roorkee. Roorkee, Uttarakhand, India.
  19. Dazzo FB, Liu J, Kwatra K, Gross C, Philips N, Monosmith C, Klemmer K, Ji Z, Gidcumb C, Shah R, McGarrell D, Folland I, Ganesan I, Smith P, Yanni Y, Gantner S, Jha P, Card K, Lundback S, Niccum B, Zamani S, Leader I, Stawkey D, Patel B, Jones A, and Abukar T. 2015. CMEIAS v3.10: Advanced computational tools of image analysis software designed to strengthen microscopy-based approaches for understanding microbial ecology. In: All Investigator Meeting, Kellogg Biological Station Long-Term Ecological Research Mtg, Michigan, USA.
  20. Nehra P., Singh R.P., Sivasubramanian S.C., Jha P.N. and Khungar B. 2015 Synthesis, Characterization and Applications of an Ionic Liquid-supported Zinc Complex, National conference on "Frontiers at the chemistry-allied sciences interface", Department of Chemistry, University of Rajasthan, Jaipur, March 13-14, 2015. Abstract PP-43 and Pg. no. 99.
  21. Nahata S, Singh RP and Jha P.N. 2015. Mediation of induced systemic tolerance (IST) by ACC Deaminase bacteria isolated from desert region of Rajasthan. (WAICEE-2015), February 27-28, 2015, Pg. No. 30 BITS Pilani, Dept of Chem. Engineering
  22. Sharma, P.K. 2015. Use Of Analogies From Nonscience And Other Pedagogical Tools In Teaching Biochemistry And Cell Biology To A Large, Multi-Disciplinary, First Year Undergraduate Class. In: Second International Conference on Frontiers in Biological Sciences, Department of Life Science, February 22-24, 2015, NIT, Rourkela, India.
  23. Asati, V. and Sharma, P.K. 2015. Purification and Characterization of Isoflavone Conjugate Hydrolyzing  $\beta$ -glucosidase (ICHG) from *Cyamopsis tetragonoloba*. In: National Research Scholars Meet- December 17-18, 2015, ACTREC, NAVI MUMBAI.
  24. Participated as resource person in DBT and DU-DST Purse funded "Hands on training and capacity building for training workshop for photosynthesis assessment methods and data interpretation" being organized by the Department of Botany, University of Delhi, Delhi from Feb 11 to Feb 16, 2015.
  25. Chowdhury R, Nagraj J and Mukherjee S. "Molecular Characterization of Chemo-resistance in Hepatocellular Carcinoma using Hep3B cell line as a model". Global Cancer Summit. 18-20th November 2015 (Oral Presentation).
  26. Fageria L, Nagraj J, Mathur A, Gaikwad A, Goru S, Mukherjee S and Chowdhury R. "Molecular Alterations Involved in Cisplatin-induced Chemo-resistance and Epigenetic Alterations in Hepatocellular Carcinoma Cells". Global Cancer Summit. 18-20th November 2015 (Poster Presentation- BEST POSTER AWARD).
  27. Dash S, Fageria L, Cheziyan V, Sarda N, Mukherjee S and Chowdhury R. "The Effect of Pro-inflammatory Cytokines on Epithelial to Mesenchymal Transition in Hepatocellular Carcinoma Cells". Global Cancer Summit. 18-20th November 2015 (Poster Presentation).
  28. Nagraj J, Niveditha D, Joshi KP, Mukherjee S, Chowdhury S and Chowdhury R. "Predicting MicroRNAs Targeting Autophagy Pathway Genes". 5th Annual International Conference on Advances in Biotechnology. Global Science and Technology Forum (GSTF), IIT Kanpur, 13-15th March 2015 (Oral Presentation- BEST ORAL PRESENTATION AWARD)
  29. Sandhya Marathe, Milli Sabera, Suchismita Setthy, Debabrat Sabat, Harekrushna Sahoo, Monalisa Mishra. Plumage pattern investigation of *Psittacula krameri* at high resolution. In: 3rd International Multidisciplinary Microscopy and Microanalysis Congress & Exhibition (InterM), October 19-23, 2015, Oludeniz MUGLA / TURKEY
  30. Biswa Bhusan Mohapatra, Sandhya Marathe, Gudra Hembram, Monalisa Mishra. Feather coloration of purple sunbird (*Nectarinia asiatica*). In: 3rd International Multidisciplinary Microscopy and Microanalysis Congress & Exhibition (InterM), October 19-23, 2015, Oludeniz MUGLA / TURKEY.

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

1. Biochemistry Concepts and Connections by Appling et al (Global edition) Contributed questions in 10 chapters.
2. Yadav, B.K., Akhtar, M.S. and Panwar, J. 2015. Rhizospheric plant microbe interactions: Key factor to soil fertility and plant nutrition. In: *Plant Microbe Symbiosis: Applied Facets*, N.K. Arora (Ed.), Springer, India, pp. 127-145.
3. Solanki, P., Bhargava, A., Chhipa, H., Jain, N. and Panwar, J. 2015. Nano-fertilizers and their smart delivery system. In: *Nanotechnologies in Food and Agriculture*, Rai, M., Ribeiro, C., Mattoso, L. and Duran, N. (Eds.), Springer International Publishing, Switzerland, pp. 81-101.
4. Yadav, R.S., Panwar, J., Meena, H.N., Thirumalaisamy, P.P. and Meena, R.L. 2015. Developing disease suppressive soil through agronomic management. In: *Organic Amendments and Soil Suppressiveness in Plant Disease Management*, Meghwanshi M.K. and Verma, A. (Eds.), Springer International Publishing, Switzerland, pp. 61-94.
5. Akhtar, M.S., Panwar, J., Abdullah, S.N.A. and Siddiqui, Y. Swamy, M.K. and Ashkani, S. 2015. Biocontrol of plant parasitic nematodes by fungi: efficacy and control strategies. In: *Organic Amendments and Soil Suppressiveness in Plant Disease Management*, Meghwanshi M.K. and Verma, A. (Eds.), Springer International Publishing, Switzerland, pp. 219-247
6. Minu Kesheri, Swarna Kanchan, Shibasish Chowdhury, and Rajeshwar Prasad Sinha. 2015. Secondary and tertiary structure prediction of proteins: A Bioinformatics approach. In: *Complex System Modelling and Control Through Intelligent Soft Computations Studies in Fuzziness and Soft Computing*, Volume 319, Quanmin Zhu and Ahmad Taher Azar (Eds.), Springer International Publishing Switzerland, pp 541-569.
7. Runthala, A., Chowdhury, S 2015. Unsolved problems of ambient computationally intelligent TBM algorithms. In: *Hybrid Soft Computing Approaches: Research and Applications*. Vol- 611 (Eds. Bhattacharyya Siddhartha, Dutta Paramartha, Chakraborty Susanta), Springer India, pp 75-105.
8. "Arsenic Toxicity: Remediation and Treatment". Chowdhury R, Verma SK, Mukherjee S. CRC Press, Taylor & Francis, Boca Raton, Florida. Book Chapter, Aug 2015.

**E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED: NONE****F. INVITED TALKS GIVEN BY BITS FACULTY**

1. Dr Rajesh Mehrotra gave an invited talk in Okinawa Institute of Science and Technology, Japan on June, 2015. The title of the talk is ICRF-193, anti-cancer Topo II inhibitor, produces the bow-closed unique spindle and increases ploidy in fission yeast
2. Panwar, J. Rhizospheric metal tolerant fungal isolates: Leading edge tool for sustainable synthesis of metal and metal oxide nanoparticles. In: *2<sup>nd</sup> International Conference on Crop Improvement*, Universiti Putra, Putrajaya, Malaysia. December 2-3, 2015. (Plenary Lecture).
3. Sandhya Mehrotra: Improving C3 plant productivity using cyanobacterial bicarbonate transporters. An invited talk at the Proceedings of the 7th Indo-Global Summit and expo on Food and beverages, New Delhi, October 08-10, 2015
4. Ashis Das: Making Sense out of Antisense in *Plasmodium spp.* Kashmir University, Srinagar, January 10<sup>th</sup>, 2015.

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

1. Dr Arun Sethuram of Temple University Philadelphia, an alumni of our institute delivered a talk entitled "Model-based inference in the genomics of structured populations" on February 6, 2015.
2. Bhakti Niskama Shanta, Ph.D., delivered a talk entitled "Sorry Darwin: Chemistry Never Made the Transition to Biology" on February 20, 2015
3. Bhakti Vijnana Muni, Ph.D., delivered a talk entitled "Information, Knowledge and Life in 21st Century" on February 20, 2015.
4. Dr. Ravi Gupta, Cardiologist from Eternal Heart Care Centre & Research Institute, Jaipur delivered a talk entitled "ALL YOU WANTED TO KNOW ABOUT YOUR HEART" on January 16, 2015.
5. Prof. RamaKrishna Sen of IIT Kharagpur delivered a talk entitled "Holistic Understanding of Energy–Environment–Water Nexus: A Bio-inspired Approach towards deriving Global Solutions in Biorefinery Model" on March 27, 2015.
6. Title: Role of accessory factors in assembling ribosome. Speaker: Nikhil Jain, PhD, Department of Molecular Virology and Microbiology, Baylor College of Medicine, Houston TX 77030 on 10<sup>th</sup> Oct., 2015.

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

1. Rajesh Mehrotra: Rajesh Mehrotra received visiting fellowship of the Okinawa Institute of Science and Technology
2. Jitendra Panwar: Selected under INSA International Bilateral Exchange/ Collaboration Programme 2016.
3. Jitendra Panwar: Judge, Sahodaya complex Inter School debate on "Organ Transplantation is Ethical", November 15, 2014, Birla Balika Vidyapeeth, Pilani, India.
4. Jitendra Panwar: Biography earned position in the renowned books published by Marquis Who's Who LLC, United States of America and International Biographical Center (IBC), Cambridge, England.
5. Sandhya Mehrotra: DST travel award to attend Plant genome evolution, a current opinion conference at NH Grand Krasnapolsky, Amsterdam, The Netherlands, 6-8 September 2015.
6. Editorial Board Member: Vector Biology Journal. <http://www.scitechnol.com/vector-biology-journal.php>
7. External Examiner for M.Sc (Home Science Food & Nutrition) Practical exam Food Microbiology, Smt. Indramani Mandelia Shiksha Niket, Pilani, Rajasthan, April, 2015
8. Act as a Judge for the model presented by students during Science Conclave organized by Chaudhary Bansi Lal University, Bhiwani, Jan 18<sup>th</sup> 2015.
9. Fageria L, Nagraj J, Mathur A, Gaikwad A, Goru S, Mukherjee S and Chowdhury R. "Molecular Alterations Involved in Cisplatin-induced Chemo-resistance and Epigenetic Alterations in Hepatocellular Carcinoma Cells". Global Cancer Summit. 18-20th November 2015 (Poster Presentation- BEST POSTER AWARD).
10. Nagraj J, Niveditha D, Joshi KP, Mukherjee S, Chowdhury S and Chowdhury R. "Predicting MicroRNAs Targeting Autophagy Pathway Genes". 5th Annual International Conference on Advances in Biotechnology. Global Science and Technology Forum (GSTF), IIT Kanpur, 13-15th March 2015 (Oral Presentation- BEST ORAL PRESENTATION AWARD).
11. Runthala, A.: Got my paper "Protein Structure Prediction: Challenging Targets for CASP10" got globally recognized and awarded at the first rank among all articles published since 2012 in protein science by BiomedLib Agency, USA.
12. Got invited to be the lead guest editor for the Science Publishing Group, USA special issue.
13. Runthala, A.: Got invited to be the Reviewer for the Advances in Genomics and Genetics, and Research and Reports in Biology journal of Dove Press, NewZealand.
14. Runthala, A.: Got invited to be the Editor for the Biotechnology Journals of STM Publishers, India.
15. Runthala, A.: Got invited to be the plenary lecture in the 5th Annual World Congress of Microbe-2015 in Shanghai, China, July 31 – August 2, 2015.
16. Runthala, A.: Got invited for an editorial commentary article for the Journal of Bioterrorism and Biodefense and Current Synthetic and Systems Biology by the OMICS Publishing Group, USA.
17. Got invited for a research monograph by the Bio-Molecular Modeling Volume of Annex Publishers.
18. Runthala, A.: Got invited to be the Editor for the London Publishing Group, UK.
19. Runthala, A.: Got invited to be the Reviewer for the Drug Designing Journal and Journal of Pharmacogenomics & Pharmacoproteomics of OMICS Publishing Group, USA.
20. Runthala, A.: Got invited to be submit a commissioned article for the Computational Biology Journal of Hindawi Publishing Group.
21. Runthala, A.: Got invited to be the plenary lecture in the International Conference on Synthetic Biology, Houston USA during September 28-30, 2015.
22. Runthala, A.: Got invited to submit a commissioned article for the Current Analytical Chemistry, Current Protein and Peptide Science and Letters, Current Bioinformatics and Drug Design & Discovery journal of Bentham Science Publishers.
23. Runthala, A.: Got invited to be the Reviewer of Bioinformatics Journal of Oxford University Press.
24. Runthala, A.: Got invited to submit a NIGMS research grant for Protein structure research by, Trialect Firm of USA funded FOA.

25. Runthala, A.: Got invited for a commissioned article by the International Journal of Statistics in Medical Research of LifeScience Global publishers.
26. Runthala, A.: Got awarded as the reviewer for the International Conference on Electronic Design, Computer Networks & Automated Verification, during January 29-31, 2015 in Shillong.
27. Runthala, A.: Got invited to be the Reviewer for the Journal of Advances in Biology.
28. Runthala, A.: Got invited to be the Editor for the Advance Drug Research Publications group.
29. Runthala, A.: Got invited for a plenary lecture in International Conference on Protein Engineering during October 26-28, 2015 at Chicago, USA.

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

1. Rajesh Mehrotra initiated collaboration with Prof. Akhio Yokota, NARA Japan.
2. Rajesh Mehrotra has international collaboration with Prof. Mitsuhiro Yanagida, OIST Japan.
3. Sandhya Mehrotra initiated collaboration with Prof. Akhio Yokota, NARA Japan, and has submitted a feasibility study project to JST.
4. Uma S. Dubey visited National Institute of Pathology, New Delhi to further enhance multidisciplinary research collaboration.
5. Sandhya Marathe visited Indian Institute of Science, Bangalore, to establish collaboration and has submitted a joint-project to EMR-DST.
6. Ashis Das: On going discussions with Tulip Industries, GOA on DIAGNOSTICS. Confidentiality Agreement already signed.
7. P R Deepa:
  - a. As an off-campus faculty, she have been interacting with industry professionals and mentoring our students pursuing Practice School courses (PS-I and PS-II) in the industry & research labs (biotech and pharma). Some of these organizations are: Hyderabad: Centre for DNA Diagnostics & Fingerprinting (CDFD), CSIR-Indian Institute of Chemical Technology (IICT), Mylan Laboratories; Bangalore: National Centre for Biological Sciences (NCBS), Beckman Coulter India Pvt Ltd ; Chennai: Sankara Nethralaya, CSIR-Central Leather Research Institute (CLRI).
  - b. Involved in teaching courses (Geriatric Optometry; Recent Advances in Optometry) for WILP collaborations with Elite School of Optometry (Sankara Nethralaya), and programme coordination of MS (Software Engg) with Aricent Technologies, and MS (Engg Management) with Technip India Pvt Ltd, an EPC company.

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

Purchased FPLC, Deep freezer (-70°C), vacuum concentrator, multistack-orbital shaker and nanodrop

#### **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.

The society got the new momentum by starting the wall magazine named "Biologue".

#### **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)**
  - DST Inspire Fellowship received by Vandana Tomar, Zaiba Hasan Khan, Monica M, Jyothi Nagraj
  - Vandana Tomar qualified GATE



- Zaiba Hasan Khan qualified ARS-NET and GATE
- Anukriti Mathur received Khurana Fellowship award in 2015.
- Ankita Gupta and Bhanupriya received Khurana Fellowship award
- Smarth Kakkar got selected for the summer internship at University of New South Wales in 2015.
- Shikhin Garg got selected for the Summer Research Programme at S.N. Bose National Centre for Basic Sciences, India from May 2015 to July 2015.
- Divyanshu Choudhary and Akshay Verma got admission to IIM, Calcutta in 2015.
- Yash Sinha got selected for the Physical Sciences Research in the Rochester Institute of Technology at Rochester, New York .
- Gurpreet Sidhu cleared GATE (Biotechnology)

### B1.10.2 Department: Civil Engineering

Number of faculty members (as on 31 December 2015)

<b>Professors &amp; Senior Professors</b>	04
<b>Associate Professors</b>	03
<b>Assistant Professors</b>	09
<b>Lecturers</b>	02
<b>Visiting Faculty</b>	-

**Head of the Department** : Prof. Manoj Kumar

**Contact details** : manojkr@pilani.bits-pilani.ac.in

**Number of PhD Scholars** : 18

**Ph.D. Thesis Submitted during the year** : 03

### B. SPONSORED RESEARCH ACTIVITIES

#### (i) Projects Sanctioned during the year 2015

S.No.	Project Title	Principal/ Co-Principal Investigator	Sponsored Organization	Amount sanctioned (Rs. In Lacs)
1.	Dynamic buckling response of composite structures	S. N. Patel	CSIR, New Delhi	11.52
2.	Development of an Automated Non-Destructive Test system for Condition Evaluation of Pavements	Amit Goel	Additional competitive Research Grant, BITS Pilani	9.45

#### (ii) Ongoing projects (Sanctioned Prior to 2015):

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Sanction (Rs. in Lacs)
1.	Investigation of the Effect of Carbonation on the Properties of Concrete	Dipendu Bhunia S B Singh	DST, New Delhi	34.0
2.	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Concrete and Masonry Structures	S. B. Singh	DST, New Delhi	23.5
3.	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
4.	Facility Management Using GIS and Genetic Algorithm	RAJIV GUPTA	DST, New Delhi	19.99
5.	GIS based characterization of ground water in Shekhawati region of Rajasthan	Anupam Singhal Rajiv Gupta	DST, New Delhi	18.0
6.	Mobilization of Metals from Copper Mine	Sanghamitra Kundu	DST, New Delhi	11.27

S.No.	Project Title	Principal/ Co-Principal Investigator	Agency	Sanction (Rs. in Lacs)
	Tailings of Khetri Copper Mine, Rajasthan and their Attenuation by Soil: Groundwater Pollution Implications			
7.	Strengthening of Local Soil using Fly Ash	Kamalesh Kumar	UGC, New Delhi	2.0
8.	Micromodel Experiments Demonstrating Gravity and Capillary Dominated Immiscible Flow of Mercury in Porous Media	Shibani K Jha	BITS Research Initial Grant	2.0
9.	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
10.	Zinc Recovery from Industrial Waste using Bioremediation.	Suresh Gupta (CHE) S.K. verma (BIO) Anupam Singhal	BITS Pilani CoE-WWE	48.00
11.	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
12.	Potential of Marble Slurry as a Mineral Admixture in Concrete	Anshuman Dipendu Bhunia	DST, New Delhi	28.38
13.	Study of Structural Response and Strengths of Thin-Walled FRP Composite Girders	S. B. Singh	CSIR, New Delhi	18.00

**(iii) Projects completed in the year 2015**

S.No.	Project Title	Principal/Co-principal Investigator	Agency	Sanction (Rs. in Lakhs)
1.	Aakash Ganga – A Social Enterprise Model for RWH and Agriculture of low water demanding economically important plant	Rajiv Gupta	DST, New Delhi	~62.0

**(iv) Ongoing Consultancy Projects:**

S.No.	Project Title	Sponsored by	Sanction Amount	Investigators
1.	Road Safety Audit for Ringus-Sikar stretch of NH-11 (43.887 km)	National Highway Authority of India	18.11 lacs	Prof. A K Sarkar Prof. A. P. Singh Dr. Amit Goel

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

Civil Engineering department undertaken more than 7 lacs consultancy works from government departments such as PWD, PMGSY (Gramin Gaurav Path), DRDO etc. and completed successfully.

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

S.No.	Title of the Paper	Authors	Name of Journal	Volume & page number Year
1.	Strengthening of Masonry Beam with ECC as Bed Joint.	S. B. Singh, Pankaj Munjal, and N. Thammishetti	Jl. of Engineering Science and Technology, School of Engineering, Taylor's University	29-39, 2015
2.	Study of the Bond Behavior of Carbon Fiber Reinforced Polymer (CFRP) Bars.	S. B. Singh and Aditi Chauhan	The Indian Concrete Journal	89(4), 32-40, 2015
3.	Assessment of Air Quality in Haora River Basin	Chakrabarti S., Singh, A. P., and Kumar, S.	Pollution Research,	34 (3), 215-222, 2015
4.	Water quality assessment of a river basin under Fuzzy Multi-Criteria Framework	Singh, A. P., Srinivas, R., Kumar, S. and Chakrabarti S	Int. J. Water	9(3), 226-247, 2015

S.No.	Title of the Paper	Authors	Name of Journal	Volume & page number Year
5.	Quantification of Accessibility to Health Facilities in Rural Areas	Shalini K., A. K Sarkar, A. P. Singh	J. Case Studies on Transport Policy. Elsevier	3(3), 311-320, 2015
6.	Application of Recycled Coarse Aggregates and E-Waste for Pavements with Low Traffic	Rajiv Gupta, Harish Puppala and Nakka Rajesh	IOSR Journal of Mechanical and Civil Engineering	12(2), Ver. II 64-70, 2015
7.	Is India Bim Ready?	Rajiv Gupta, Mohit Gupta, Akshit Gupta	The Masterbuilder, India's Premier Construction Magazine,	Tue, Jan 20th, 2015
8.	Last thirty years of Construction Management Research	Rajiv Gupta, P Jain, S Das,	International Journal of Advance Research in Engineering, Science & Technology (IJAREST)	02(06), June, 2015, pp: 100-111
9.	Prediction of Safe Bearing Capacity of Non-Cohesive Soil in Arid Zone using Artificial Neural Networks	Rajiv gupta; Kartik Goyal; Navneet Yadav	ASCE's International Journal of Geomechanics	online on June 24, 2015.
10.	Role of Water-Cement Ratio on Strength Development of Cement Mortar.	S. B. Singh, Pankaj Munjal, and N. Thammishetti	Journal of Building Engineering, Elsevier	DOI.10.1016/J.Job e.2015.09.03, 2015
11.	Review of Design Provisions for Masonry Structures	S. B. Singh and Thamiseti, Nikesh	International Journal of Earth Sciences and Engineering	February, 2015
12.	Influence of different processing methods on the pozzolanic performance of sugarcane bagasse ash.	Bahurudeen, A. and Manu Santhanam	Cement and Concrete composites	56, 32-45, 2015
13.	Performance evaluation of sugarcane bagasse ash based Portland pozzolana cement in concrete.	Bahurudeen, A., K. Deepak, D. V. Gokul, and Manu Santhanam	Cement and Concrete composites	59, 77-78, 2015
14.	Pozzolnic Performance of Sugarcane Bagasse Ash	Bahurudeen, A., Kaiser Wani, Basit M and Manu Santhanam	ASCE Journal of Materials in Civil Engineering	2015
15.	Sugarcane bagasse ash as supplementary cementitious material: Availability and potential for use in concrete.	Bahurudeen, A., K.S. Vaisakh and Manu Santhanam	Indian Concrete Journal	89, 41-50, 2015
16.	Development of an efficient procedure for sustainable low carbon cements manufacturing.	Siva Teja, J. Rajeswari, K. Deepak and A. Bahurudeen	Applied Mechanics and Materials.	787, pp 142-146, 2015
17.	Performance Based Intersection Layout Under a Flyover for Heterogeneous Traffic	Maji, A., Maurya, A., Nama, S. and Sahu, P	Journal of Modern Transportation	23 (2), 119-129 , 2015
18.	Groundwater Quality Assessment in Some Selected Area of Rajasthan, India Using Fuzzy Multi-criteria Decision Making Tool	R. Srinivas, Prashant Bhakar, Ajit Pratap Singh	ICWRCOE, Aquatic Procedia Elsevier	Volume 4: 1023-1030, 2015
19.	Handling Short Run Disequilibrium in Freight Demand Forecasting at Major Indian Ports Using Error Correction Approach	Sahu, P., and Patil, G.	European Transport/Transporti Europei	Issue 59, Paper No. 5, ISSN 1825-3997, 2015.
20.	Statistical Investigations of Snowfall and Temperature with Passenger Car and Truck Traffic on Primary Highway in Canada	Roh, H-J., Sahu, P., Sharma, S., Datla, S., and Mehran, B.	ASCE Journal of Cold Regions Engineering	ISSN 0887-381X, 2015 (DOI: 10.1061/(ASCE)C R.1943-

S.No.	Title of the Paper	Authors	Name of Journal	Volume & page number Year
				5495.0000099
21.	Estimation of Freight Demand at Mumbai Port Using Regression and Time Series Models	Patil, G.R. and Sahu, P.	KSCE Journal of Civil Engineering	ISSN 1226-7988, eISSN 1976-3808, 2015. (DOI: 10.1007/s12205-015-0386-0).
22.	Modeling Snow and Cold Effects for Classified Highway Traffic Volumes	Roh, H-J., Sharma, S., and Sahu, P.	KSCE Journal of Civil Engineering	ISSN 1226-7988, eISSN 1976-3808, 2015. (DOI: 10.1007/s12205-015-0236-0).
23.	Analysis and Modeling of Highway Truck Traffic Volume Variations during Severe Winter Weather Conditions in Canada”	Roh, H-J., Sharma, S., Sahu, P., and Datla, S.	Journal of Modern Transportation	Vol. 23 (3), pp. 228-239, 2015. (DOI: 10.1007/s40534-015-0082-2).
24.	Artificial neural network modeling for evaluating roughness parameters based on pavement distress values	Rumi Sutradhar, Manish Pal and A.K. Sarkar.	Indian Highways	43(5), pp. 11-14, 2015
25.	Numerical and Experimental Modeling of the Static Response of Simply Supported Thin-Walled Box Girder Bridges	G. C.Ezeokpube, S. B. Singh and N. N., Osadebe	Nigerian Journal of Technology	34(4), pp. 685-698 (http://dx.doi.org/10.4314/njt.v34i4.4)
26.	Effect of Shear Deformation on Flexural Response of Laminated Composite I-Beam	S. B. Singh, Himanshu Chawla, and Pankaj Munjal	Journal of Aerospace Sciences, and Technologies, Aeronautical Society of India	67 (4), pp 514-522, 2015
27.	Structural Response of Thin-Walled FRP Laminated Monosymmetrical I-Beams,”	S. B. Singh and Himanshu Chawla, (2015)	Advances in Structural Engineering, Springer India	DOI 10.1007/978-81-322-2187-6_155, pp.2011-2024
28.	Environmental Impact Assessment of Industrial Clusters in Central India Using Fuzzy Decision Analysis	Vidyarthi, A.K., Singh, A. P. and Shrivastava, P.	Int. J. Industrial Pollution Control	31(2), 213-221
29.	Quantification of Accessibility to Health Facilities in Rural Areas,	Shalini K., Sarkar, A.K., Singh, A. P. and Arkatkar, S.S.,	J. Case Studies on Transport Policy, Elsevier	3(3), 311-320
30.	Simplified Procedure for Calculating Bearing Capacity of Cohesionless Soil using Standard Penetration Test as an alternative to the IS 6403 Method	Mittal R. K., and Bansal P.	Electronic Journal of Geotechnical Engineering	ISSN 1089-3032, Vol. 15, Bund. J, pp. 10929-10946
31.	Correlation Between Safe Bearing Capacity and Angle of Internal Friction of Pilani Soil	Kamalesh Kumar	HCTL Open International Journal of Technology Innovations and Research (IJTIR)	Vol. 16, July 2015, e-ISSN: 2321-1814, ISBN: 978-1-943730-43-8

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

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
1.	Impact of PMGSY roads on Rural Accessibility: A case study in Rajasthan	Ashoke kumar Sarkar, S. Kanuganti and A. P. Singh	National Seminar on Geoinformatics Applications in Rural Development,	26-27 March, 2015, NIRDPR, Hyderabad.

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
2.	Design, development and implementation of first flush system:	Sourabh Bhati, and Rajiv Gupta,	Third International Conference on Creativity and Innovation at Grassroots [ICCI],	IIM, Ahmedabad, Jan 19-22, 2015
3.	Improving benefits cost ratio for "Mounting Solar Power Plants on Water Canal top": A conceptual note,	Rajiv Gupta,	One day Technical meet on designing Economic Structures for Canal Tops Solar PV-Power Plants.	National Institute of Solar Energy, Gwai Pahari, Gurgaon, 24th April, 2015
4.	Environmental & Socio-Economic Impacts of Mass Rapid Transit Using GIS	Rajiv Gupta, R Srinivas, V Swathi	ESRI User Conference	San Diego, California, USA, 20-24th July, 2015
5.	Impact of drought on community, vulnerability and coping methods used in villages of northern Rajasthan, India	Rajiv Gupta, Amrita	2nd World Congress on disaster Management	19-22 Nov. 2015, Vishakhapatnam Andhra Pradesh, India
6.	Sensing of contaminants in potable water using TiO <sub>2</sub> functional film	Akshatha N, RK Gupta, V. Manjuladevi, P. Shukla and Rajiv Gupta	International Conf. on Emerging Technologies - Micro to Nano,	24-25 October 2015, Jaipur, India
7.	Centre for Desert Development Technologies, Pilani	Rajiv Gupta	Alignment of National Action Program on Combating Desertification to 10 years Strategy of UNCCD	Arid Forest research Institute at Jodhpur, 18 <sup>th</sup> March 2015
8.	A Review of Emerging Trends on Water Quality Measurement Sensors	Jyotirmoy Bhardwaj, Rajiv Gupta, K. K. Gupta,	IEEE International Conference on Technologies for Sustainable Development	ICTSD, DBIT, Mumbai, Feb, 2015
9.	A Finite Element Approach to Study the Structural Response of Skew Box Girder Bridges	Tanmay Gupta and Manoj Kumar	4th Int. Conference on Advance Trends in Engg. Tech. and Research,	BKIT Kota, 18th-20th June 2015
10.	Integrating Fuzzy AHP and GIS to Prioritize Sites for the Solar plant Installation	Rajiv Gupta, Harish Puppala, Shalini Kanuganti	12th International Conference on Fuzzy Systems and Knowledge Discover (FSKD'2015), held by Hunan University	August 15-17, 2015, Zhangjiajie, China., P1550
11.	Application of Genetic Algorithm in Design of Water Tanks	Rajiv Gupta	International Conference On Advances in Civil, Structural and Mechanical Engineering - ACSM	IREC, USA, Bangkok, Thailand, 21-22 Feb., 2015
12.	A Review of Emerging Trends on Water Quality Measurement Sensors	Jyotirmoy Bhardwaj, Rajiv Gupta, K. K. Gupta,	IEEE International Conference on Technologies for Sustainable Development (ICTSD -2015)	DBIT, Mumbai, 4-6 Feb., 2015
13.	Application of Multi-Criteria Analysis in Environment Impact Assessment	R. Patil, A. Singhal, Rajiv Gupta	International Conference on Water: From Pollution to Purification, (ICW 2015), Centre for Environment Education and Technology (CEET)	Kottayam, India, Jan, 23-26, 2015
14.	Design, development and implementation of first flush system	Sourabh Bhati, and Rajiv Gupta	Third International Conference on Creativity and Innovation at Grassroots [ICCI],	IIM, Ahmedabad, Jan 19-22, 2015
15.	An Experimental Investigation of The Effect of Carbonation on Properties of Plain Concrete	Shaik Hussain, Dipendu Bhunia, and S. B. Singh	Eighth International Conference on Construction in the 21st Century (CITC-8). Changing the Field:	May 27-30, Thessaloniki, Greece, 2015

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
			Recent Developments for the Future of Engineering and Construction	
16.	GIS Application for the Environmental Management in Critically Polluted areas due to Industrial Clustering	Sonal, Manisha, Rajiv Gupta, Anupam Singhal	International Conference on Water: From Pollution to Purification, (ICW 2015), Centre for Environment Education and Technology (CEET)	Kottayam, India, Jan, 23-26, 2015.
17.	Simultaneous Demand Estimation Models for Major Seaports in India	Sahu, P., and Patil, G. R	94th Annual Meeting, Transportation Research Board	Washington D.C., USA, 11th – 15th Jan, 2015
18.	Flexural and shear performance of high dosage steel fibre reinforced concrete in suspended slabs	R.P.West, A. K. Mohammed and D. Bhunia, S. Hussain	Proceedings of UKIERI Congress-2015	NIT Jalandhar, 2-5th November 2015
19.	An Experimental Investigation of the Effect of Carbonation on Properties of Plain Concrete	D. Bhunia and S.B.Singh	Eighth International Conference on Construction in the 21st Century (CITC-8) "Changing the Field: Recent Developments for the Future of Engineering and Construction	Thessaloniki, Greece, May 27-30, 2015
20.	A study on mechanical properties of plain concrete with depth of carbonation	S. Hussain, D. Bhunia and S.B.Singh	Proceedings of UKIERI Congress-2015	NIT Jalandhar, 2-5th November 2015.
21.	Determination of Best Suited Cross Section Shape for Skewed Concrete Box-Girder Bridges	Tanmay Gupta, Manoj Kumar.	Structural Engineers World Congress (SEWC)	Singapore, Oct. 19-22, 2015
22.	Groundwater Quality Assessment in some selected area of Rajasthan, India Using Fuzzy Multi-Criteria Decision Making Tool	Srinivas, R., P. Bhakar, and A.P. Singh	ICWRCOE-15	NIT Suratkal April 17-18,
23.	Sustainability analysis of a stretch of Ganga river using fuzzy multi-criteria decision making approach	Srinivas, R. and Singh, A.P.	Hydro 2015 International, 20th International Conference on Hydraulics, Water Resources and River Engineering	IIT Roorkee, India. 17-19 Dec., 2015
24.	Assessment of Level-of-Service of Two-Lane Highways with Heterogeneous Traffic.	Saha, P., Sarkar, A. K. & Pal, M.	94th Annual meeting of Transportation Research Board,	Washington, D.C., 11-15 January 2015
25.	Study of Modal Shift to Bus Rapid Transit (BRT) In Developing Country: A Case Study in India	Ajinkya S. Mane, Ashoke Kumar Sarkar and Shrinivas S. Arkatkar	94th Annual meeting of Transportation Research Board,	Washington, D.C., 11-15 January 2015
26.	Lateral Torsional Buckling Response of Pultruded GFRP Laminated Beams with Bearing Stiffeners,	S. B. Singh, and Himanshu Chawla	International Conference on Advances in Civil and Environmental Engineering 2015 (ACEE2015), Pulau Pinang,	Malaysia, July 28-30, 2015
27.	Strengthening of Masonry Beams with ECC as Bed Joint	S. B. Singh, Pankaj Munjal, and Nikesh Thammishetti	International Conference on Advances in Civil and Environmental Engineering 2015 (ACEE2015)	Pulau Pinang, Malaysia, July 28-30, 2015
28.	Influence of Water-Cement	S. B. Singh, Pankaj	Proc. of UKIERI Concrete	NIT Jalandhar,

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
	Ratio on Mechanical Properties of Cement Mortar	Munjal, and Thamiseti Nikesh	Congress,	Nov. 2-5, 2015
29.	Concrete Research Driving Profit and Sustainability	Shaik Hussain, Dipendu Bhunia, and S. B. Singh	Proc. of UKIERI Concrete Congress,	NIT Jalandhar, Nov. 2-5, 2015
30.	A Study on Effect of Carbonation on the Strength of Un-Reinforced Concrete	Shaik Hussain, Dipendu Bhunia, and S. B. Singh	Proc. of IABSE	Geneva, Switzerland, Sept. 23-25, 2015
31.	Prediction of live storage of water resources using neural network time series model, case study on Mettur dam	Mulchandani, H.K, and Singh, A.P.	Hydro 2015 International, 20th International Conference on Hydraulics, Water Resources and River Engineering	17-19 Dec., 2015, IIT Roorkee, India.
32.	Short Term Traffic Prediction Using Monte Carlo Simulation	Mishra, Raunak and Singh, Ajit Pratap and Sharma, Antriksh and Sarkar, A.K.	3rd Conference of Transportation Research Group of India	Kolkata, India, 17-20 December 2015
33.	Evaluation of Bus Route Operations Using Fuzzy AHP	Mishra, Dewal and Wagale, Makrand and Singh, Ajit Pratap and Sarkar, Ashoke Kumar (2015).	3rd Conference of Transportation Research Group of India	Kolkata, India, 17-20 December 2015
34.	Development of a Pavement Management system for rural roads using HDM-4	Narayan, K Siddharth and Singh, Ajit Pratap and Wagale, Makrand and Sarkar, A. K.	3rd Conference of Transportation Research Group of India	Kolkata, India, 17-20 December 2015
35.	A Study on Industrial Waste as a Fertilizer	Anuradha Devi, Anupam Singhal , Rajiv Gupta, S.K. Verma and A.N.Singh	5th Annual conference on Advances in Biotechnology	IIT Kanpur 13 <sup>th</sup> to 15th March 2015
36.	Correlation Between Safe Bearing Capacity and Angle of Internal Friction of Pilani Soil	Kamalesh Kumar	First International Conference on Advances in Engineering and Management Research organized by HCTL Open Publications Solutions	Dehradun 19 July, 2015
37.	Atterberg Limits Estimation of Pilani Soil Using Ultrasonics	Kamalesh Kumar	6th Int. Conf. on Structural Engineering and Construction Management,	Sri Lanka, 11-13 December, 2015
38.	Dynamic Buckling Study of Laminated Composite Plate	S.N.Patel, P.A.Abhishek, R. Deepthi Reddy and Nikam Amol S	International Conference on Innovations in Structural Engineering	Osmania University, Hyderabad, 14-16, Dec. 2015
39.	Dynamic Response of Laminated Composite Plates	S.N.Patel and V.Keshav	International Conference on Computer Aided Engineering	GITAM University – Hyderabad, 10-12, Dec.2015
40.	Dynamic Analysis of Isotropic Plates	V. Keshav and S.N.Patel,	National Conference of Recent Advancements in Civil and Environmental Engineering	BRCM College of Engg.& Tech. Bahal, 28-29, Nov. 2015
41.	Dynamic Buckling Study of Laminated Composite Stiffened Plate	S.N.Patel, P.A.Abhishek, R. Deepthi Reddy and Nikam Amol S.	The 2015 World Congress on Advances in Structural Engineering and Mechanics	South Korea 25-29, August 2015
42.	Nonlinear Dynamic Instability Analysis of Laminated Composite	S.N. Patel	18th International Conference on Composite Structures	Epic Sana, Lisbon, Portugal, 15-18,

S.No	Title of Paper	Authors	Name of Conference	Venue & Date of conference
	Stiffened Plates			June, 2015
43.	Review of Alignment design consistency in Mountainous/ Hilly Roads	Nama, S., Maurya, A., Maji, A., Sahu, P., and Edara, P.	3rd Conference of Transportation Research Group of India	Kolkata, 17th – 20th Dec., 2015
44.	An Improved Approach to Forecast Mormugao Port Freight Flow	Sahu, P., and Patil, G. R.	3rd Conference of Transportation Research Group of India	Kolkata, 17th – 20th Dec., 2015
45.	Investigation of Factors Affecting the Consistency of Short-Period Traffic Counts	Kenno, S. Y., Sahu, P., Mehran, B., and Sharma, S.	3rd Conference of Transportation Research Group of India	Kolkata, 17th – 20th Dec., 2015
46.	Optimization of Earthwork Cost for Road Project using Mathematical Programming	Choudhari, S., Sahu, P., and Roy, D.	3rd Conference of Transportation Research Group of India	Kolkata, 17th – 20th Dec., 2015
47.	Simultaneous Demand Estimation Models for Major Seaports in India	Sahu, P., and Patil, G. R.	94th Annual Meeting, Transportation Research Board	Washington D.C., USA, 11th – 15th Jan., 2015
48.	RC Jacketing on RCC Frame of overhead water tanj using results of Non-destructive Testing: A Case Study	Mishra A, Singh M, Srivastava A	6 <sup>th</sup> Int. Conf. on Structural Engg. and Construction Management	Kandy, Sri Lanka, 11-14 Dec. 2015
49.	Development of sugarcane bagasse ash blended geopolymer for use in concrete	Deepika S, Madhuri G, Bahurudeen, A, Santhanam M	RILEM International Conference Concrete	Australia, Aug. 30- Sept. 02, 2015
50.	Development of ambient cured slag based alkali activated concrete for use in precast industry	Madhuri P, Bahurudeen, A, Santhanam, M	UKIERI Concrete Congress: Concrete Research Driving Profit and Sustainability	NIT Jalandhar, 2-5th Nov. 2015
51.	Early Age Compressive Strength Prediction of Mortar using Isothermal Calorimetry and Linear Regression Model	Gokul Dev V., Viswanath Mahadevan and Bahurudeen A	International Conference on modeling and simulation in Civil Engineering	TKM, India, 9-11 Dec. 2015
52.	Modeling the hydration kinetics of blended cements. International Conference on modeling and simulation in Civil Engineering	Siva Teja Chopperla, Bahurudeen A, and K. Mohammed Haneefa	International Conference on modeling and simulation in Civil Engineering	TKM, India, 9-11 Dec. 2015
53.	Development of sustainable concrete paver blocks using sugarcane bagasse ash blended cement	Deepika, S, Godara, A, Mondal, D, Bahurudeen, A, Santhanam, M	ICI International Conference ACECON 2015	Kolkata, India, 8-10 Oct. 2015
54.	Performance evaluation of sugarcane bagasse ash and rice husk ash blended cements against sulphate attack	Yamuna V, Bahurudeen, A, Santhanam, M	UKIERI Concrete Congress: Concrete Research Driving Profit and Sustainability	NIT Jalandhar, 2-5th Nov. 2015
55.	Performance of sugarcane bagasse ash and rice husk ash blended cements	Yamuna V, Bahurudeen, A, Santhanam, M (2015)	ICI International Conference ACECON 2015	Kolkata, India, , 8-10 Oct. 2015

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

### Book/Book Chapter

- Dr. S. N. Patel contributed a Chapter on 'Nonlinear Finite Element Bending Analysis of Laminated Composite Shell Panels' in the book "Advances in Structural Engineering" Published by Springer India, ISBN: 978-81-322-2189-0
- Dr. G. Muthukumar and Dr. Manoj Kumar authored a chapter on 'Influence of Openings on the Structural Response of Shear Wall' in the in the book "Advances in Structural Engineering: Materials, Volume 3, January 2015, pp 2209-2239, Published by Springer India, ISBN: 978-813222187-6, 978-813222186-9.



- Dr. Kamlesh Kumar authored a book "Basics of Environmental Resource Management" and it was published by New Age International Publishers, New Delhi.

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

1. Dr. S. N. Patel delivered a lecture entitled "Analysis of Structures- Basic to Advance", 12th Mar. 2015, Dept. of Civil Engineering, BRCM College of Engineering and Technology, Bahal, Haryana

#### **G. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED:**

Civil Engineering Department organized one day convention on 25<sup>th</sup> April 2015, Civil Infrastructure Systems- An Academia-Industry-Public Collaboration. This convention was attended by following experts

- Mr. Nisheet kr. Singh, Asst. Vice President (Projects) Kalpataru Power Transmission Ltd., Delhi
- Mr. Raj Kamal Yadav, Planning Manager, Cushman & Wakefield (I) Pvt Ltd., Gurgaon
- Mr. Vijay Sharma, Head (Product Development) at Delhi International Airport, GMR Group
- Dr. Errampalli Madhu, Principal Scientist, Central Road Research Institute (CRRI), New Delhi
- Mr. S. S. Khandelwal, Associate Director, Consulting Engineers Group, Jaipur

#### **H. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION**

- Prof. Rajiv Gupta visited University of Virginia under the University Immersion Programme of Institute from May to July 2015.
- Dr. Anupam singhal visited Trinity College, Dublin under University Immersion Programme from 19th May to 16th July, 2015
- Prof. S B Singh received the " Best Paper Award" at conference ACEE2015, Malaysia
- Prof. Rajiv Gupta chaired the session 12th International Conference on Fuzzy Systems and Knowledge Discover (FSKD'2015), held by Hunan University on August 15-17, 2015, in Zhangjiajie, China
- Prof. S. B. Singh was honored as Guest of Honor at Seminar on Mitigation of Seismic Effects on Infrastructure Projects, Sponsored by UGC, New Delhi, Andhra University, Visakhapatnam, March 30, 2015.
- Prof. S. B. Singh was Invited as an Expert Committee Member for Comments on Honey Combing of Vivekanand Lecture Theatre Complex at MNIT Jaipur in February, 2015.
- Dr. Bahurudeen, A. received Outstanding PhD Thesis award from Indian Concrete Institute (ICI) for year 2015
- Dr. Bahurudeen, A. received OPERA (Outstanding Potential for Excellence in Research and Academics) award from BITS Pilani in 2015.
- Dr. Bahurudeen, A, received Best Project award (PhD), in the 52<sup>nd</sup> Convocation, at IIT Madras (Bhagyalakshmi and Krishna Iyengar Award) in 2015
- Dr. Kamlesh Kumar was nominated as member of Editorial Team for the Journal of STM Journals: Journal of Geotechnical Engineering for the year 2015.
- Mr. R Srinivas received "Best Paper Award of ICWRCOE'15" in International Conference on Water resources, coastal and Ocean Engineering held at NIT Karnataka in March, 2015.

#### **I. AWARDS AND RECOGNITIONS WON BY STUDENTS**

- Pragnesh Pahuja and Sanchit Bajaj were selected for the MITACS Internship at Queen's University Canada in the summer 2015.
- Pragun Vinayak was selected for Science Academies' Summer Research Fellowship at Indian Institute of Science, Bangalore in the summer of 2015.
- Apoorv Singh Saini scored 99.92 percentile in CAT 2015.
- Pragun Vinayak was awarded the OPJEMS scholarship in 2015.
- Amitabh Agarwal and Pragun Vinayak were awarded the 2015 BITSAA Mantra Awards for Entrepreneur of the Year and Outstanding Leadership respectively.

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

1. Concrete Cutter
2. Pundit Lab Ultrasonic Test Machine

3. Cement Autoclave
4. Standard Penetration Test
5. Tubular Fermenter with its accessories

#### **K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES**

The Civil Engineering Association (CEA) organized the following events throughout the year.

##### **Informal Meet**

An informal meet was held at sky lawns on 5<sup>th</sup> August. The meet was an introduction to the executive committee and other post holders of the association. The freshers were briefed about the various possibilities after graduating with a degree in civil engineering and a great positive response was received from them. They were distributed a copy of the annual civil engineering association magazine HIGHRISE.

##### **Formal Meet**

A formal meet was held on 26<sup>th</sup> August in LTC. The meet was attended by all faculty members, research scholars, newly admitted students and senior year students. The meet started with a presentation by CEA on the spectrum of civil engineering. They were also briefed about faculty profiles of the civil department. It was then followed by the address of Prof. Manoj Kumar, HOD, Civil Engineering Department who spoke at length on the various dimensions of Civil Engineering. Other faculty members also addressed the gathering about their respective specializations. The concluding remarks and vote of thanks were presented by Dr. Dipendu Bhunia, Professor In-Charge, CEA. 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.

##### **On campus Site Visit**

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

##### **AutoCAD Workshop**

A one day rigorous training on AutoCAD was conducted by Mr. Ishan Sheikh (Certified in AutoCAD), an Undergraduate civil engineering first degree student, on September 6<sup>th</sup> at BITS Pilani. The event saw widespread participation from all disciplines. The workshop was mainly aimed at making the students aware of importance of AutoCAD software as well as to make them self-sufficient in 2D and 3D modelling.

##### **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 2016. Emphasis was given to make the APOGEE events better and more challenging. Project ideas were encouraged and many projects got selected for further rounds.

##### **Farewell Meet**

A farewell meet was organised for the passing out class of 2016, in the First semester on 18<sup>th</sup> November 2015. This event was attended by all faculty members of the Civil Engineering department. The CEA bid farewell to its graduating students. This event was preceded by the farewell dinner.

**B1.10.3 Department: Chemical Engineering**

Number\* of faculty members (as on 31 December 2015)

<b>Professor</b>	01*
<b>Associate Professor</b>	02
<b>Assistant Professors</b>	12
<b>Lecturers</b>	03
<b>Visiting Faculty</b>	00

\*On &amp; Off Campus. \*\* On deputation to Dubai Campus

**Head of the Department:** Dr. Suresh Gupta**Contact details:** sureshg @pilani.bits-pilani.ac.in**Number of PhD Scholars:** 07**Ph.D. Thesis Submitted during the year:** 05**A. SPONSORED RESEARCH ACTIVITIES**

Total number of Sponsored Projects in the department: 10 [1 (Department Grant) + 6 (Research Grant) + 3 (Research Initiation Grant)]. Details are given below.

**(i) Ongoing projects**

<b>Project Title</b>	<b>Principal Investigator</b>	<b>Co-Investigator</b>	<b>Agency</b>	<b>Sanction (Rs. in Lakh)</b>
DST-FIST	Head of Department	-	DST	80.50
Production of hydrogen-rich fuel gas from Jatropha residue cake	Dr. Pratik N Sheth	-	DST	26.07
Evaluation and enhancement of foam stability of ethanol based aqueous foam using commercial surfactant sodium lauryl sulfate	Dr. Pradipta Chattopadhyay	-	DST	25.0
Removal of Heavy Metals from Industrial wastewater using metallic Nanoparticles as adsorbents	Dr. Suresh Gupta	-	DST	21.47
Removal of Volatile Organic Compounds (Chlorinated VOCs, non-Methane Hydrocarbons, Ethylene Glycol) from Waste Streams using Biofiltration	Dr Smita Raghuvanshi	-	DST	14.50
Zinc Recovery from Industrial Waste using Bioleaching	Dr. Suresh Gupta	Dr. S K Verma	BITS Pilani	48.0

**(ii) Projects sanctioned during the year**

<b>Project Title</b>	<b>Principal Investigator</b>	<b>Co-Investigator</b>	<b>Agency</b>	<b>Sanction (Rs. in Lakh)</b>
Chemical-Looping Combustion in Recirculating Fluidized Bed	Dr. Raman Sharma	-	BITS, Pilani	2.0
Bioremediation of waste automobile engine oil	Dr. Amit Jain	-	BITS, Pilani	2.0
Syngas production by reforming of biogas over Ni-based catalytic monoliths	Dr. Srinivas Appari	-	BITS, Pilani	2.0

(iii) **Projects completed this year**

Project Title	Principal Investigator	Co-Investigator	Agency	Sanction (Rs. in Lakh)
UGC-DRS-SAP	Head of Department	-	UGC	38.7
Removal of Heavy Metals from Industrial Wastewater using Biofiltration	Dr Smita Raghuvanshi	Dr Suresh Gupta	UGC	5.50
Application of Enriched Microbial Biofilter for the Detoxification of Metal Wastes from Industrial Wastewater	Mr. Subhajit Majumder	-	UGC	2.0
Recovery of Multiple Metal Ions from Industrial Wastewater using Adsorption	Mr. Utkarsh Maheshwari	-	UGC	2.0
Research Initiation Grant	Dr. Banasri Roy	-	BITS, Pilani	2.0
Research Initiation Grant	Dr. Sonal Mazumder	-	BITS, Pilani	2.0
Formulation and Evaluation of Polymeric Nanoparticles for Treating Rheumatoid Arthritis	Dr. Sonal Mazumder	-	UGC	6.0

**B. PUBLICATIONS**(i) **The faculty of the department published 24 papers in international refereed journals during the year.**

1. Utkarsh Maheshwari, Suresh Gupta, A novel method to identify optimized parametric values for adsorption of heavy metals from waste water. *Journal of Water Process Engineering*, 2015. (doi:10.1016/j.jwpe.2014.12.007)
2. Utkarsh Maheshwari, Suresh Gupta, Removal of Cr(VI) from Wastewater Using a Natural Nanoporous Adsorbent: Experimental, Kinetic and Optimization Studies. *Adsorption Science & Technology*, Vol. 33, 71-88, 2015.
3. Utkarsh Maheshwari, Suresh Gupta, Removal of Cr(VI) from Wastewater using Activated Neem Bark in a Fixed-bed Column: Interference of Other Ions and Kinetic Modelling Studies. *Desalination and Water Treatment*, Published online 2015 (doi:10.1080/19443994.2015.1030709).
4. Utkarsh Maheshwari, Bhuvanesh Mathesan and Suresh Gupta, "Efficient Adsorbent for simultaneous removal of Cu(II), Zn(II) and Cr(VI): Kinetic, Thermodynamics and Mass Transfer Mechanism", *Process Safety and Environmental Protection*, 2015, 98: 198-210.
5. Subhajit Majumder, Gayathri Gangadhar, Smita Raghuvanshi, Suresh Gupta, "Biofilter column for removal of divalent copper from aqueous solutions: performance evaluation and kinetic modeling" *Journal of Water Process Engineering*, Vol 6, pp. 136-143, 2015.
6. Subhajit Majumder, Gayathri Gangadhar, Smita Raghuvanshi, Suresh Gupta, "A comprehensive study on the behavior of a novel bacterial strain *Acinetobacter guillouiae* for bioremediation of divalent copper", *Bioprocess and Biosystems Engineering*, Vol 38(9), pp. 1749-1760, 2015.
7. Somesh Mishra, Rajnish P singh, Smita Raghuvanshi, Suresh Gupta, "Deducing the Bio-Perspective Capabilities of Fe(II) Oxidizing Bacterium Isolated from Extreme Environment" *Biochemistry & Analytical Biochemistry*, Published online (doi:10.4172/2161-1009.1000166)
8. A. K. Pani, and H. K. Mohanta, "Online monitoring and control of particle size in the grinding process using least square support vector regression and resilient back propagation neural network" *ISA transactions*, 56, 206-221, 2015.
9. P.K. Singh, S. Bhanot, and H.K. Mohanta, "Particle Swarm Optimization based Fuzzy Logic Control of pH Neutralization Process" *International Journal of Applied Engineering Research*, 10 (63), 211-215, 2015.
10. Tapas K Patra and Pratik N Sheth, "Biomass gasification models for downdraft gasifier: A state-of-the-art review" *Renewable and Sustainable Energy Reviews*, 50, 583-593, 2015.

11. R. Sharma and Pratik N Sheth, "Thermo-Chemical Conversion and of Jatropha Deoiled Cake: Pyrolysis vs. Gasification", *International Journal of Chemical Engineering and Applications*, Vol. 6 (5), 376-380, 2015.
  12. C. Sekhar, B. Roy, and S. Aich, "Synthesis of nanoscale oxide scaffold on Nitinol surface using hydrothermal treatment", *Surface Engineering*, 31 (10), 747-751, 2015.
  13. B. V. Vedula, M. Chopra, E. Joseph, S. Mazumder, "Preparation and characterization of nanoparticles of carboxymethyl cellulose acetate butyrate containing acyclovir", *Applied Nanoscience*, 6 (2), 197-208, 2015.
  14. S. Mazumder, Y. Fan, C.J. Cornelius, "Carbon-Ionomer nanocomposite wetting properties: The role of ionomer composition and surface roughness", *International Journal of Material Science and Application*, 4(2), 69-76, 2015.
  15. Srinivas Appari, Ryota Tanaka, Chengyi Li, Shinji Kudo, Jun-ichiro Hayashi, Vinod M. Janardhanan, Hiroaki Watanabe, Koyo Norinaga, "Predicting the Temperature and Reactant Concentration Profiles of Reacting Flow in the Partial Oxidation of Hot Coke Oven Gas using Detailed Chemistry and a One-dimensional Flow Model" *Chemical Engineering Journal*, 266, 82-90, 2015.
  16. Narumon Thimthong, Srinivas Appari, Ryota Tanaka, Keita Iwanaga, Shinji Kudo, Jun-ichiro Hayashi, Tetsuya Shoji, Koyo Norinaga, "Kinetic modeling of non-catalytic partial oxidation of nascent volatiles derived from fast pyrolysis of woody biomass with detailed chemistry" *Fuel Processing Technology*, 134, 159- 168, 2015.
  17. Koyo Norinaga, Huamei Yang, Ryota Tanaka, Srinivas Appari, Keita Iwanaga, Yuka Takashima, Shinji Kudo, Tetsuya Shoji, Jun-ichiro Hayashi, "A mechanistic study on the reaction pathways leading to benzene and naphthalene in cellulose vapor cracking" *Biomass and Bioenergy*, 69, 144-154, 2015.
  18. Hua-Mei Yang, Srinivas Appari, Shinji Kudo, Jun-ichiro Hayashi, and Koyo Norinaga, "Detailed Chemical Kinetic Modeling of Vapor-Phase Cracking of Volatiles Derived from the Fast Pyrolysis of Lignin" *Industrial & Engineering Chemistry Research*, 54, 6855–6864 (2015).
  19. Chengyi Li, Srinivas Appari, Ryota Tanaka, Kyoko Hanao, Yeonkyung Lee, Shinji Kudo, Jun-ichiro Hayashi, Vinod M. Janardhanan, Hiroaki Watanabe, Koyo Norinaga, "A CFD study on the reacting flow of partially combusting hot coke oven gas in a bench-scale reformer" *Fuel*, 159, 590-598 (2015).
  20. Narumon Thimthong, Srinivas Appari, Ryota Tanaka, Keita Iwanaga, Tomoaki Namioka, Shinji Kudo, Jun-ichiro Hayashi, Koyo Norinaga, "Numerical Study on the Steam Reforming of Biomass Tar Using a Detailed Chemical Kinetic Model", *Journal of the Japan Institute of Energy*, 94, 794- 804 (2015).
  21. Jain, Amit, Babu B. V. "Relative Response Array: A New Tool for Control Configuration Selection", *International Journal of Chemical Engineering and Applications*, 6 (5) 2015, 356-362.
  22. Gupta, M. K., Srivastava, R. K., Kumar, S. Gupta, S., Nahak, B., "Mechanical and Water Absorption Properties of Hybrid Sisal/Glass Fibre Reinforced Epoxy Composite" *American Journal of Polymer Science & Engineering*, 3, 208-219, 2015.
  23. Mazumder S, Pavurala N, "A Review on Nanoprobes for Sensing, Imaging and Disease Detection". *Journal of Materials Science & Nanotechnology*, 3(3), 303, 2015.
  24. Pradipta Chattopadhyay, R. Arun Karthick, "Optimum Ethanol-Hexanol foams for Formulation of Detergents", *International Journal of Chemical Sciences*, 13(4), 1961-1968, 2015.
- ii. The faculty of the department published 20 papers in international/national conferences during the year.**
1. Pradipta Chattopadhyay, R. Arun Karthick, Perla Kishore, "Comparison studies for Foamability of foam generated by use of Surf Excel and Sodium Lauryl Sulfate", *Proceedings of Conference on Recent Trends in Chemical Engineering and Technology (REACT 2015)*, Nagpur, India, 27-28th February, 2015.
  2. Pradipta Chattopadhyay, R. Arun Karthick, Venkata Vijayan, Soumya Chowdhury, "Foamability and stability of foam generated by use of Ethanol and Surf Excel", *Proceedings of Workshop on Analytical Instruments for Chemical and Environmental Engineers (WAICEE 2015)*, BITS Pilani, Pilani, India, 27-28th February, 2015.
  3. Jain, R., Suman, S., Gupta, Anshu., Mazumder, S., "Synthesis and Characterization of Polymeric Nanoparticles for Oral Delivery of Aspirin for Anti Cancer Treatment" in *International Conference and Exhibition on Biotechnology*, Hyderabad, 3-4 August, 2015.

4. Chopra, M., Jain, R., Mazumder, S., "Synthesis and characterization of polymeric nanoparticles for oral delivery of curcumin" in International Conference on Nanotechnology (ICNT 2015), Haldia, 19-22 February, 2015.
5. Mazumder, S., "Effect of polysaccharide chemistry on solution concentration of nanoparticle complexes of polysaccharides and antiviral drugs", Nanotech Dubai 2015, Dubai, UAE, 16-18 March, 2015
6. Dewangan, A.K., Varkey, S., Mazumder, S., "Synthesis of Curcumin Loaded CMCAB Nanoparticles for Treatment of Rheumatoid Arthritis", International Conference on Chemical, Environmental and Biological Sciences (CEBS 2015), Dubai, 18-19 March 2015.
7. Varkey, S., Dewangan, A.K., Mazumder, S., 2015. "Optimization of Product Parameters of Drug Loaded Polymeric Nanoparticles Prepared by Rapid Precipitation", International Conference on Chemical, Environmental and Biological Sciences (CEBS 2015), Dubai, 18-19 March 2015.
8. Riddhi J, Shravan P and A K Sharma, Statistical Thermodynamics: Opportunities and Challenges, Workshop on Analytical Instruments for Chemical and Environmental Engineers (WAICEE 2015), Feb 27-28, 2015, Pilani, India.
9. Ashwath A B, Karthick R and A K Sharma, Effects of Secondary Cracking in Fluid Catalytic Cracker, National Conference on Technological Advances in Chemical, Petroleum and Natural Gas Engineering (ACPNe 2015), April 10-11, 2015, Chandigarh, India.
10. Somesh Mishra, Smita Raghuvanshi and Suresh Gupta, "Closed system for CO<sub>2</sub> sequestration and production of valuable bio-molecule via Chemolithotroph", Proceedings of International conference on carbon dioxide utilization to be held from July 5-9, 2015 at Singapore.
11. Chelikani Sowmya, Annie Christina Jenifer, Amrita Preetam and Smita Raghuvanshi, "Life Cycle Assessment of Waste Water Treatment Plant (WWTP)", Proceedings of International conference on carbon dioxide utilization to be held from July 5-9, 2015 at Singapore.
12. Vikrant Bhakar, D.N.S. Hemanth Kumar, Nitin Krishna Sai, Kuldip Singh Sangwan, Smita Raghuvanshi, Proceedings of 13th Global Conference on 13th Global Conference on Sustainable Manufacturing, held from Septemeber 16-18, 2015 at Vietnam.
13. Smita Raghuvanshi, Siddharth Kawadiya, Harshal Dongre, Prateek Sai Gehlot, Suresh Gupta, "Characterization of a Biofiltration System for removal of trichloroethylene (TCE)", Proceedings of 68th Annual Session of Indian Institute of Chemical Engineers (CHEMCON 2015) and present their peper held at IIT Guwahati during 27 - 30 December, 2015.
14. Shravan P, Raghuram H. S., Mazumder S, Synthesis and Characterization of ZnS quantum dots in aqueous media, Workshop on Analytical Instruments for Chemical and Environmental Engineers (WAICEE 2015), Feb 27-28, 2015, Pilani, India.
15. Shravan P, Raghuram H. S., Mazumder S, Synthesis and Characterisation of Fe(III) doped ZnS based Colloidal Quantum Dots in Aqueous Media in International Conference on Nanotechnology (ICNT 2015), Haldia, 19-22 February, 2015.
16. Pradipta Chattopadhyay, R. Arun Karthick, Venkata Vijayan, Soumya Chowdhury, "Comparison of Foaming Properties of Ethanol- Tween 20 and Ethanol- Tween 80 Systems", Proceedings of 6th Asian Conference on Colloid and Interface Science (ACCIS 2015), Sasebo, Japan, 24-27th November, 2015. (International).
17. Pradipta Chattopadhyay, R. Arun Karthick, "Optimum Foams for understanding detergent formulations", Proceedings of 6th Asian Conference on Colloid and Interface Science (ACCIS 2015), Sasebo, Japan, 24-27th November, 2015. (International).
18. Pradipta Chattopadhyay, R. Arun Karthick, Venkata Vijayan, Soumya Chowdhury, Roshan Mishra "Optimum Isopropanol foams for soil remediation applications", Proceedings of World Research Journals Conference (WRC 2015), Dubai, UAE, 7-9th December, 2015. (International).
19. Pradipta Chattopadhyay, R. Arun Karthick, Venkata Vijayan, Soumya Chowdhury, "Optimum Dodecanol-detergent foam performance for formulation of eco-friendly surfactants", Proceedings of World Research Journals Conference (WRC 2015), Dubai, UAE, 7-9th December, 2015. (International).
20. Pradipta Chattopadhyay, R. Arun Karthick, Venkata Vijayan, "Optimum Foaming Capability for Long Chain Alcohol- Detergent Mixtures", Proceedings of 68th Annual Session of IICHE (CHEMCON 2015), Guwahati, India, December 27-30, 2015. (National).

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

1. Dr. Sonal Mazumder attended International Conference and Exhibition in 2nd Edition Nanotech Dubai - 2015 for an oral presentation on "Effect of Polysaccharide Chemistry on the solution concentration of nanoparticle complexes of polysaccharides and antiviral drugs" held from 16 to 18 March 2015 in Dubai - UAE.
2. Mr. Maulick Chopra, attended International Conference on Nanotechnology (ICNT - 2015) and present a paper on "Synthesis and characterization CMACB-curcumin nanoparticles for drug delivery". from February 19-22, 2015 in Haldia, W.B.
3. Dr. Pradipta Chattopadhyay attended 6th Asian Conference on Colloids and Interface Science (ACCIS 2015), held in Sasebo, Japan from 24-27th November, 2015.
4. Dr. H K Mohanta and Dr. Banasri Roy attended 68th Annual Session of Indian Institute of Chemical Engineers (CHEMCON 2015) and were present a paper on Control of a Fluidized-bed Catalytic Cracking Unit using PID and Fuzzy Logic Controllers & Effect of variable conditions on VPR and APR of n-BuOH over Ni/CeO<sub>2</sub> and Ni/Al<sub>2</sub>O<sub>3</sub> catalysts held at IIT Guwahati during 27 December 2015 - 30 December 2015
5. Dr. Suresh Gupta and Dr. Smita Raghuvanshi attended 3rd International Conference on Chemical, Biological, and Environmental Sciences (ICCBES' 15) and were present a paper on Cobalt Oxide Nanoparticles for the Removal of Cu(II) from Aqueous Solution & Mitigation of CO<sub>2</sub> using isolated species from Sewage Treatment Plant: A biobased approach held at Bangkok (Thailand) during 31st December 2015 - 1st January 2016
6. The team of three ME Chemical Engineering students i.e Nitin Krishna Sai L, Garima Verma and Amrita Preetam attended 68th Annual Session of Indian Institute of Chemical Engineers (CHEMCON 2015) and present their paper held at IIT Guwahati during 27 December 2015 - 30 December 2015
7. Nitin Sai K, ME Chemical Engineering student attended 13th Global Conference on Sustainable Manufacturing (GCSM) in Ho Chi Minh City at Vietnam from September 16 - 18, 2015 and also presented a paper entitled "Life cycle assessment of filtration systems of reverse osmosis units: a case study of a university campus".

**D. BOOKS/BOOK CHAPTERS PUBLISHED : NA****E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED**

Indian Institute of Chemical Engineers (IICChE), and Dept. of Chemical Engineering, Birla Institute of Technology and Science, Pilani jointly organized a workshop on Analytical Instruments for Chemical and Environmental Engineers (WAICEE-2015) during February 27-28th, 2015. WAICEE was organized for the 2nd time after WAICEE during March, 2013. It took a great deal of time and efforts, contributed sincerely and passionately by the faculty, staff and remarkably energetic students of the Department. Theory & Experiment – are complementary to each other in our systematic and in-depth understanding of Science, Engineering and Technology. This workshop, with this thought in mind, was designed to amalgamate Expert Lectures and Demonstrations. The workshop commenced with the inauguration by Chief Guest: Dr. S. N. Chakravarty and Vice Chancellor: Prof. B. N. Jain, in the presence of Director: Prof. G. Raghurama. The workshop included 1 Keynote Address, 6 Expert Lectures and 9 Demonstrations. They ranged discussing: Reinforcement of Rubber and Latex Compounds with Nanofiller, Thermal Analysis & Surface Characterization, Gas Chromatography (GC), Atomic Absorption Spectroscopy (AAS), X-Ray Diffraction (XRD), Scanning Electron Microscopy (SEM), Transmission Electron Microscopy (TEM), Various techniques for Elemental Analysis and emulsion / suspension / dispersion via multiple light scattering. This charged discussion on "theoretical understanding" of various Analytical Techniques, was coupled with "practical in-sight" demonstrated by the use of Analytical Instruments like: TGA, DSC, BET Surface Area Analyzer, GC, AAS, UV-Visible, FTIR, XRD, Dynamic Foam and Volume Trace Analyzers. A good overview of Research in the department was shared by Head of the Department. Apart from all this, there was a "Poster Session" displaying 17 themes sharing a spectrum of relevant and current aspects of research in Chemical and Environmental Engineering. There were participants from inside and outside BITS. The posters were judged by Dr. S. N. Chakravarty from KPS Consultants, New Delhi and Prof. P.K. Mitra, former professor, Jadavpur University, Kolkata. 3 posters were awarded best poster prize: Mr. Ashok Sharma from Chemistry, BITS Pilani (1st), Mr. Shravan Pradeep and Mr. H Sai Raghuram from Chemical Engineering, BITS Pilani (2nd) and Mr. Sunil Nahata, Biotechnology, BITS Pilani (3rd).

A cultural event was organized for participants, guests, speakers and organizers. Ragamaliika, a renowned dance and music club in BITS Pilani, staged a music concert "Rasanubhav". The performance, which lasted for a tad more than an hour, showcased assorted styles of Carnatic and Hindustani music. The concert engrossed the audience of students, faculty and attendees of WAICEE 2015 alike.

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

- i. Dr. Suresh Gupta, Invited Distinguished Speaker "Biohydrogen production" the National Workshop on "Opportunities and Challenges in Bio-fuels & Bio-lubricants" scheduled during November 21-22, 2015 at HBTI, Kanpur.
- ii. Dr. Suresh Gupta, keynote speaker India-Japan Bilateral Conference (BICON - 2015) organised by Biyani Group of College, Jaipur from September 20 - 27, 2015.
- iii. Dr. Sonal Mazumder delivered an invited talk in International Conference on Nanotechnology (ICNT 2015) organised by Haldia Institute of Technology, Haldia, 19-22 February, 2015.
- iv. Dr. Sonal Mazumder delivered an invited talk in Department of Chemical Engineering, BITS Pilani, Dubai campus 18 March 2015.

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

Department of Chemical Engineering, BITS, Pilani, Pilani Campus along with IChE Pilani Regional Center had successfully organized an invited talk by:

- i. Prof. Munawar A. Shaik, Associate Professor, IIT Delhi on 13<sup>th</sup> August, 2015. The topic of the presentation was "Planning and scheduling of Batch and Continuous Process Operations". The talk covers different mathematical programming approaches for modeling and solution of process planning & scheduling problems for chemical batch and continuous process operations with applications in refinery petrochemicals, polymers, pulp & paper, bio-pharmaceuticals, pipeless plants, and fast moving consumer goods (FMCG) manufacturing. The talk was attended by faculty members, PhD scholars and students from graduate and postgraduate programmes.
- ii. Dr. B V Babu, Vice Chancellor of Galgotias University, Greater Noida on 19<sup>th</sup> September, 2015. The topic of the presentation was Evolutionary Computation.
- iii. Prof. Man Mohan Sharma, Former Director, ICT, Mumbai on 1<sup>st</sup> October 2015. The topic of the presentation was "Innovations in Chemical Industries". This Lecture was telecast across all campuses (Pilani, Hyderabad and Dubai) through our Tele presence facility to be followed by question- answer session from the audience
- iv. Dr. M.O. Garg, Director, IIP Dehradun, CSIR, interacted with Students to provide latest ongoing project details in the field of Chemical and Petroleum Engineering.
- v. Dr. Siddhartha Mukherjee, Director-Technology, Air Liquide Global E &C Solutions India Pvt. Ltd. Delivered a talk on September 12, 2015 on the topic of "The Role of a Chemical Engineer in Process Industry".

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

- Dr. Banasri Roy has been awarded the OPERA Award for 5- years 2015-19 from BITS - Pilani, Pilani Campus.
- Dr. Suresh Gupta, External Academic Expert Members in Board of Studies (BoS) Constitution for Chemical Engineering, Galgotia University, Noida.

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

- Dr. Pratik N Sheth undertaken the University Immersion Program in Oklahana State University Stillwater, OK, USA from May 27 - July 24, 2015.
- Dr. Smita Raghuvanshi undertaken the University Immersion Program in Duke University, Durham, NC, USA from June 06 - July 28, 2015.
- Dr. Suresh Gupta, Dr. Smita Raghuvanshi, Dr. Pratik N Sheth & Mr. Somesh Mishara are participating in First Industry Day of BITS, Pilani, Hyderabad Campus on 10<sup>th</sup> April, 2015.
- Dr. Pratik N Sheth has been appointed as an External Examiner to conduct the B.Tech & M. Tech (Chemical Engineering) practical examinations of V Semester of 2015 at Banasthali Univeristy, Banasthali.
- Dr. Sonal Mazumder & Dr. Banasri Roy has been invited for to conduct a Two Day training course at RALSON (INDIA) Ltd, Ludhiana on "Instrumentatin Analysis of Polymers & Chemicals (UV & VIS, FTIR, HPLC, GPC, MS and NMR Spectroscopy" from October 29 -30, 2015.
- Dr. Banasri Roy has participated in the interdisciplinary research workshop (IDR Workshop under Mission - 2015) held at BITS, Pilani Hyderabad Campus from November 2-3, 2015.
- Dr. Pratik N Sheth visited to TERI Gualpahari campus, Gurgaon in February 2015 to explore the opportunity for R&D collaboration and submitted a collaborative research proposal to MNRE..



- Dr. Banasri Roy visited to Tata Institute of Fundamental Research from 6th to 7th October, 2015 for Collaborative work on Fuel cell materials.
- Dr. Sonal Mazumder visited to Century Rayon, Monarch catalyst, PRS Permacel - May 18-July 16, 2015 to explore the opportunities for Practice school, industrial project collaboration.
- Dr. Amit Jain has acted as an External Examiner for B.Tech (Chemical Engineering) - VI Semester practical examinations at Banasthali University, Banasthali in April - 2015.
- Dr. Sonal Mazumder started collaboration with University Institute of Pharmaceutical Sciences, Panjab university, Chandigarh and initiated student exchange during December 2015 related to her drug delivery research.

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

- Analytical and Environmental Laboratories have been strengthened by the addition of new equipments namely Muffle Furnace, Hot Plate Magnetic Stirrer, Freeze Dryer, Non Contact Infrared thermometer, Auto Vacuum Desiccator, Ultrasonic liquid processor, HPLC Pump, Autoclave Vertical, Vacuum Cleaner, Colony Counter Microprocessor, Fermenter Bio-edge, Digital Balance, Syringe Pump, Microscope etc.
- Research facilities such as Bio Filter Column, Compressor, Fluidized Bed Cold Model, etc. were created to strengthen ongoing research.

#### **K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES**

##### **Chemical Engineering Association**

During the year 2015, the primary objective of the Chemical Engineering Association was to improve the quality of events and projects in APOGEE to provide students with opportunities to showcase their mettle and creative talents. This technical festival held during 25<sup>th</sup>-28<sup>st</sup> March, 2015. The students participated and presented a wide variety of projects over 16 categories, such as Simulation and Mathematical modelling, Environment, Energy, Industrial processes and Applications and Pure Sciences. Out of 38 projects that were submitted, a total of 22 were presented in the final round of APOGEE. This also consisted of a winning project in Health & Nutrition category, presented by a group of students from the current third year Chemical batch. Several of the students in the current fourth year batch, presented a total of 12 scientific papers in APOGEE.

In addition to the projects and papers, the association also organized three events during APOGEE 2015, and a pre-apogee event 'HINTERIA' in collaboration with IChE Student Chapter, BITS Pilani. The most prominent event was Chem-E-Car, which was to test engineering skills and intuitions. The aim was to check the approach towards planning and efficiency. The next event was Dexter's Laboratory, conducted in collaboration with the Chemistry and Biology associations, consisting of theoretical and practical rounds. The remaining event is demonstration of chemical science.

In April, towards the end of the semester, the executive committee for the academic year 2015-16 was nominated and was officially announced in the farewell dinner organized for the Class of 2015. Prof R.P.Vaid award was given to Mr. Kota Vishal. The Monali Dey award was given to Ms. Reena Jain and Mr. Roshan Mishra. The Lakshmi Memorial Award was given to Mr. Perla Kishore for his best overall performance. The Tresbian Award was given to Mr. John Arnold David. The Alumni Award was given to Mr. Kaushik Raj. This semester was ended with the farewell dinner for the outgoing batch of 2012, involving a farewell message from all the respected faculty members.

During the First semester, 2015 (August-December), Chemical Engineering Association organized various activities starting from the informal interaction held on 6<sup>th</sup> August for answering various range of questions regarding Chemical Engineering, Chemical Engineering Association (ChEA), Indian Institute of Chemical Engineering(IICHE), and various events organized in BITS. Chemical Engineering Association collected data from the final year students about their summer internships which may help the later batches for pursuing good internships. Chemical Engineering Association along with the other departmental associations celebrated Engineers Day on 15<sup>th</sup> September by organizing events like Quiz, Power Point Presentations, Essay writing, Poster Presentations on the theme "Engineering Challenges in Knowledge Era". We raised fund for association by arranging T-shirt signings followed by distribution of T-shirts to the signed students and billing them.

For APOGEE – 2016, association organized two APOGEE meets. First meet organized on 24<sup>th</sup> September to briefly explain students about APOGEE and various events organized during APOGEE mainly about Project Presentation, Poster Presentation rules, categories and important dates. Second APOGEE meet held on 15<sup>th</sup> October after mid-semester examinations to discuss about various project ideas proposed by students on the aspects such as feasibility, Category justification, etc. The Association ended the activities in this semester by organizing a Farewell party to the final year students(Class of 2016).

**B1.10.4 Department: Chemistry**Number of faculty members (as on 31<sup>st</sup> December 2015)

<b>Senior Professors, Professors</b>	04
<b>Associate Professors</b>	05
<b>Assistant Professors</b>	08
<b>Lecturers</b>	01
<b>Visiting Faculty</b>	00
<b>DST Inspire Faculty</b>	01
<b>Research Associate</b>	01

**Head of the Department:** Prof. Anil Kumar**Contact details:** anilkumar@pilani.bits-pilani.ac.in**Number of Ph D Scholars:** 45**Ph.D. Thesis Submitted and awarded during the year: Submitted:** 03**A. SPONSORED RESEARCH ACTIVITIES**

Total number of Sponsored Projects in the department: 18. 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>
HOD	DST	DST-FIST Programme	87.00
Dr. Dalip Kumar	DBT	Synthesis of Novel N,O,S containing heterocycles and evaluation of their anticancer activities	54.38
Dr. Shamik Chakraborty	SERB	Competition between charge transfer and proton transfer processes in some newly designed Schiff bases: Spectroscopic and theoretical investigations in condensed phase	24.98
Dr. Ajay K Sah	UGC	Synthesis, metallochemistry and reactivities of D-Glucose derived Glycoconjugates	9.13
Dr. Anil Kumar	CSIR	Exploration of Novel Ionic Liquid-Supported Sulfonyl Reagents for Organic Synthesis	16.12
Dr. Bharti Khungar	UGC	Synthesis, Characterization and Applications of Novel Ionic Liquid-supported Metal Complexes	13.48
Dr. Bibhas R. Sarkar	BITS Pilani (RIG)	Catalytic Route to Linear Alkyl Benzenes (LABs) via C-C Coupling Reactions using Transition Metal Catalysts	2.00
Dr. Dalip Kumar	DST	Design and synthesis of Porphyrin-based photosensitizers as anticancer agents Supported by the India-Japan Science Council under DST-JSPS S&T Programme of Cooperation	4.50
Dr. I. R. Laskar	DST SERB (major)	Design and Syntheses of Heavy Metal based Aggregation Induced Emission Active Complexes and their Applications in Bio-imaging	35.00
Dr. R. K. 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. Raj Kumar Gupta & Dr. Paritosh Shukla	BITS Pilani	Detection of contaminants in water using functional ultrathin films, sponsored by BITS Pilani under Waste Water Energy	10.00
Dr. Indresh Kumar	BITS Pilani	Organocatalytic approach towards bioactive important six-membered nitrogen heterocycles	8.20

Principal Investigator	Funding Agency	Title of the Project	Amount (Lakhs)
Dr. Surojit Pande	DST-SERB	Synthesis and Characterization of (Metal Oxide)core - Metalshell Nanoparticles in Quantum Dot Region and Their Application in Electrocatalysis.	24.93
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
Dr. Rajeev Sakhuja	DST-SERB	Design of Synthetically Tunable Azino-fused Chromene Conjugates as Potential Organogelators.	24.70.
Dr. Bibhas R. Sarkar	BITS Pilani	Catalytic Route to Linear Alkyl Benzenes (LABs) via C-C Coupling Reactions using Transition Metal Catalysts	2.00
Dr. Dalip Kumar	DST-JSPS	Design and synthesis of Porphyrin-based photosensitizers as anticancer agents Supported by the India-Japan Science Council under DST-JSPS S&T Programme of Cooperation.	4.50
Dr. Dalip Kumar and Dr. Anil Kumar	Ranbaxy	Novel synthesis of anti-HIV agents	27.50
Dr. Kiran Bajaj	DST Fast Track	Studies on Native Chemical Ligand at Tryptophan & Arginine Sites	25.60

## (ii) Projects sanctioned

PI	Funding Agency	Title of the Project	Amount (in lakhs)
Dr. Mrinmoyee Basu	DST SERB	Decoration of Plasmonic Nanoparticles on Ultrathin 2D Nanostructure of Metal Chalcogenides and Their Application in Photoelectrochemical Water Splitting and Photocatalysis	27.28
Dr. Mrinmoyee Basu	DST-Inspire	Decoration of Co-catalyst on the Ultrathin 2D Sheets of Metal Chalcogenides and Their Application in Photoelectrochemical Water Splitting	35.00

## Projects completed

Principal Investigator	Funding Agency	Project Name	Sanctioned Amount (Lakhs)
Dr. Prashant Uday Manohar	DST, Fast Track	An extensive computational development of multi-reference coupled-cluster methods for electronic structure investigations of big molecules	22.40
Dr. Madhushree Sarkar	DST	Crystal Engineering of Metal-Organic Frameworks using Organic Linkers derived from Template-Controlled Solid-State Reactions	23.40
Dr. Inamur Rahaman Laskar	CSIR	Syntheses of Pt(II) based pure blue emitting triplet harvesting materials and their application in white organic light emitting diodes as single emissive dopants	20.00
Dr. Paritosh Shukla	UGC	Transition metal-catalysed Coupling/Reductive Coupling of Saturated Alkyl halides with Electron Withdrawing Alkenes	11.95
Dr. Surojit Pande	UGC	Size-Dependent Hydrogenation Catalysis with Mono- (Pd and Pt) and Bimetallic (Pd @Pt) Nanoparticles in Quantum Dot Region	6.00
Dr. Rajeev Sakhuja and Dr. Anil Kumar	BITS SEED Grant	Design of Ionic Liquid linked Benzotriazoles as Useful Synthetic Auxiliaries in Organic Synthesis	9.80
Dr. Rajeev Sakhuja	BITS Pilani	Design & Synthesis of Bile acid-Nucleosides conjugates linked via amino acids as potential anticancer agents	2.00

Principal Investigator	Funding Agency	Project Name	Sanctioned Amount (Lakhs)
Dr. Dalip Kumar	UGC	Design, Synthesis and biological evaluation of indol-based heterocycles as anti cancer agents.	7.51
Dr. Indresh Kumar	DST	Organocatalysis as green approach for synthesis of pyrrolidine/fused pyrrolidine: towards the synthesis of related alkaloids	21.90
Dr. I R Laskar	DST (Major)	Syntheses of Efficient and Pure Blue Triplet Emitting Materials for Fabrication of White Organic Light Emitting Diodes (WOLED)	22.20
Dr. Surojit Pande	BITS (RIG),	Synthesis and Characterization of Metal Oxide (TiO <sub>2</sub> and IrO <sub>2</sub> ) Dendrimer-Encapsulated Nanoparticles (DENs) for Catalysis and Electrocatalysis" 2012 to 2014	2.00
Dr. Rajeev Sakhuja	UGC start-up Grant	UGC-BSR Start-up grant for newly recruited faculty at Assistant Professor level in science department.	6.00
Dr. Shamik Chakraborty	UGC	Design of new ionic receptor molecules derived from Schiff bases: Syntheses and their spectroscopic and theoretical characterisation.	6.00

## B. PUBLICATIONS

The faculty of the department published forty five papers in international/national refereed journals during the year.

1	N Nandwana, K Pericherla, P Kaswan, Anil Kumar, Yb(OTf) <sub>3</sub> -catalyzed Mannich reaction of imidazo[1,2-a]pyridine and pyrazolo[1,5-a]pyrimidines, Indian J. Chem. 2015, 54B, 290-300.
2	Rajeev Sakhuja, S. M. Abdul Shakoor, Santosh Kumari, Anil Kumar, Microwave-Assisted Expedite Synthesis of 2-Phenylimidazo[1,2-a]pyridylquinoxalin-2(1H)-ones. Journal of Heterocyclic Chemistry, 2015, 52(3), 773-779
3	M Jha, GM Shelke, TS Cameron, Anil Kumar, Microwave-assisted expedite synthesis of 2-phenylimidazo[1,2-a]pyridylquinoxalin-2(1H)-ones, J. Heterocyclic Chem. 2015, 15, 773-779.
4	Paritosh Shukla, Ashok Sharma, Sumati Anthal, and Rajni Kant, Synthesis of Functionalised Pyrazolopyran Derivatives: Comparison of Two-Step vs One-Step vs Microwave Assisted Protocol and X-ray Crystallographic Analysis of 6-Amino-1,4-dihydro-3-methyl-4-phenylpyrano[2,3-c]pyrazole-5-carbonitrile", Bulletin of Material Science, 2015, Vol. 38, No.5, 1119-1127
5	Ashok Sharma, Badvel Pallavi, Prabhat Nath Jha, Rajnish Prakash Singh, and Paritosh Shukla, Environmentally Benign Synthesis and Evaluation of Pyrazolopyran Analogues as Antimicrobial Agents, Heterocycles, 2015, Vol. 91, No. 8, 1615-1627.
6	Tanvi Taparia, Manjari M., Rajesh Mehrotra, Paritosh Shukla and Sandhya Mehrotra, Developments and Challenges in Biodiesel Production from Microalgae: A Review, Biotechnology and Applied Biochemistry, 2015, Accepted
7	Santosh Kumari, Sunita Joshi, S. M. Abdul Shakoor, Devesh S. Agarwal, Siva S. Panda, Debi D. Pant, Rajeev Sakhuja, Synthesis, Absorption, and Fluorescence Studies of Coumaryl-Labelled Amino Acids and Dipeptides Linked Via Triazole Ring, Aust. J. Chem. 2015, 68, 1415.
8	Y. Shao, P. Manohar.P.M.W. Gill, and M. Head-Gordon, Advances in molecular quantum chemistry contained in the Q-Chem 4 program package, Mol. Phys. 2015, 113, 184-215
9	Sanjeed Schamnad and Shamik Chakraborty, Substitution effect in O-H...Se hydrogen bond - Density Functional Theory study of substituted phenol-SeH <sub>2</sub> complexes, Chem. Phys. Lett. 622, 2015
10	Ajay K. Sah and Noorullah Baig, Synthesis and Characterization of Glucose Derived ioxomolybdenum (VI) Complexes and Their Application in Sulphide Oxidation, Catal Lett 2015, 145, 905-909
11	Rituparna Bhattacharjee and Ram Kinkar Roy, Negativity of Fukui function of some isolated s and p block elements: The role of orbital relaxation effect. Chem. Phys. Lett. 2015, 637, 88-93.
12	GM Shelke, VK Rao, M Jha, TS Cameron, Anil Kumar, Synthesis of 5,7-diarylpyrazolo[1,5-a]pyrimidines via KOH mediated tandem reaction of 1H-pyrazol-3-amines and chalcones, Tetrahedron Lett. 2015, 56, 549-553.
13	P Kaswan, K Pericherla, HK Saini, Anil Kumar, Microwave assisted catalyst-free synthesis of substituted 1,2,4-triazoles, Synlett, 2015, 26, 404-407.
14	HK Saini, S Dhiman, K Pericherla, Anil Kumar, 2-(3'-Indolyl)-N-arylthiazole-4-carboxamides: Synthesis and evaluation of antibacterial and anticancer activities, Bioorg. Med. Chem. Lett. 2015, 25 (19), 4225-4231

15	Mukund P. Tantak, Jing Wang, Rajnish Prakash Singh, Anil Kumar, Kavita Shah, Dalip Kumar 2-(3'-Indolyl)-N-arylthiazole-4-carboxamides: Synthesis and evaluation of antibacterial and anticancer activities, 2015, 25(9) 4225-4231
16	Sunita Joshi, Santosh kumari, Rituparna Bhattacharjee, Rajeev Sakhuja, Debi D. Pant, Estimation of ground and excited-state dipole moments of synthesized coumarin derivative, (S)-(1-((7-hydroxy-2-oxo-2H-chromen-4-yl)methyl)-1H-1,2,3-triazol-4-yl)methyl 2-(((9H-fluoren-9-yl)methoxy)cabonylamino)-3-phenylpropanoate from a solvatochromic shift and theoretical methods, J. Molecular Liquids, 2015, 209, 219-223.
17	RP Singh, GM Shelke, Anil Kumar, PN Jha, Iodine-mediated microwave assisted synthesis of 2-arylnaphthofurans via cyclization of 1-(1'-arylvinyl)-2-naphthols, Synthesis, 2015 (in press).
18	K Pandey, S Choudhary, MK Muthyala, Anil Kumar, Recent developments in the synthesis of imidazo[1,2-a]pyridines, Synthesis, 2015, 47, 887-912.
19	S Choudhary, Saroj, K Pandey, Anil Kumar, Synthesis of imidazo[1,2-f]phenanthridines through palladium-catalyzed intramolecular C-C bond formation, Synthesis, 2015 (in press).
20	Paritosh Shukla, Ashok Sharma, Badvel Pallavi, and Chien Hong Cheng, Nickel-Catalysed Reductive Heck Type Coupling of Saturated Alkyl Halides with Acrylates and Oxabenzonorbornadiene, Tetrahedron, 2015, 71, 2260-2266
21	Rajeev Sakhuja, Krishnakanth Kondabolu, Tania Córdova-Sintjago, Sean Travers, Adam S. Vincek, Myong Sang Kim, Khalil A. Abboud, Lijuan Fang, Zhuming Sun, Clinton E. Canal, Raymond G. Booth, Novel 4-Substituted-N,N-dimethyltetrahydronaphthalen-2-amines: Synthesis, Affinity, and In Silico Docking Studies at Serotonin 5-HT <sub>2</sub> -type and Histamine H <sub>1</sub> G Protein-Coupled Receptors, Bioorganic & Medicinal Chemistry, 2015; 23(7), 1588-1600.
22	Sonu, S. Kumari and S. K. Saha, Effect of polymethylene spacer of cationic gemini surfactants on solvation dynamics and rotational relaxation of Coumarin 153 in aqueous micelles, J. Phys. Chem. B., 2015, 119, 9751.
23	Design, synthesis and bioevaluation of novel 6-(4-hydroxypiperidino)naphthalen-2-ol-based potential selective estrogen receptor modulators for breast cancer, Eur. J. Med. Chem. 2015, 92, 103-114.
24	Indresh Kumar, P. Ramaraju, N. A. Mir and A. Singh, Linear dialdehydes as promising substrates for aminocatalyzed transformations, Org. Biomol. Chem., 2015, 13, 1280.
25	P Kaswan, K Pericherla, D Purohit, Anil Kumar, Synthesis of novelazole fused-quinazolines via one-pot sequential Ullmann type coupling and intramolecular dehydrogenative C-N bonding, Org. Biomol. Chem. 2015, 13, 2947-2950.
26	A. K. Tiwari, S. Gangopadhyay, C.-H. Chang, S. Pande, S. K. Saha, Study on Metal Nanoparticles Synthesis and Orientation of Gemini Surfactant Molecules Used as Stabilizer, J. Colloid. Int. Sci., 2015, 445, 76-83
27	Dalip Kumar, Bhupendra Mishra, K. P. Chandrashekar, Santosh B. Khandagale, Mukund P. Tantak, Anil Kumar, Kanako Akamatsu, Eriko Kusaka, Kazuhito Tanabe, Takeo Ito Synthesis of meso-(4'-cyanophenyl) porphyrins: efficient photocytotoxicity against A549 cancer cells and their DNA interactions, RSC Adv., 2015, 5, 53622
28	Navin Jain, Parvej Alam, Inamur Rahman Laskar, and Jitendra Panwar, Aggregation Induced Phosphorescence' Active Iridium(III) Complexes for Integrated Sensing and Inhibition of Bacteria in Aqueous Solution, RSC Adv, 2015, 5, 61983-61988
29	Fayaz Baig, Rajni Kant, Vivek K. Gupta and Madhushree Sarkar Effects of non covalent interactions in light emitting properties of bis-pyridyl-alkyl-di-imines, RSC Adv, 2015, 5, 51220
30	K Pericherla, GM Shelke, YC Kothari, Anil Kumar, Imidazolium salt-supported mukaiyama reagent: An efficient condensation reagent for amide bond formation, RSC Adv. 2015, 5, 13797-13804.
31	D Kumar, B Mishra, KP Chandra Shekar, SB Khandagale, MP Tantak, Anil Kumar, I Takeo, K Tanabe, E Kusaka, K Akamatsu Ionic liquid-supported benzyl azide: An efficient soluble scavenger for alkynes, RSC Adv. 2015, 5, 67049-67053.
32	A Jha, Y Yadav, AB Naidu, VK Rao, Anil Kumar, VS Parmar, WJ MacDonald, CKL Too, J Balzarini, CJ Barden, TS Cameron One-pot, three component tandem reaction of 2-aminopyridines, acetophenones and aldehydes: synthesis of 3-arylimidazo[1,2-a]pyridines, RSC Adv. 2015, 5, 3670-3677.
33	P Khedar, K Pericherla, RP Singh, PN Jha, Anil Kumar, Synthesis of meso-(4'-cyanophenyl) porphyrins: efficient photocytotoxicity against A549 cancer cells and their DNA interactions, RSC Adv. 2015, 5, 53618-53622.
34	Parvej Alam, Gurpreet Kaur, Amrit Sarmah, Ram Kinkar Roy, Angshuman Roy Choudhury, and Inamur Rahman Laskar, Highly Selective Detection of H <sup>+</sup> and OH <sup>-</sup> with a Single Emissive Iridium(III) Complex: A Mild Approach to Conversion of Non-AIE to AIE Complex (AIE = Aggregation Induced Emission), ACS Organometallic 2015, 34, 4480-4490
35	Archana Choudhary, Bidisa Das, and Saumi Ray, Encapsulation of a Ni-Salen complex in Zeolite-Y: an experimental and DFT study, Dalton Trans., 2015, 44, 3753
36	Richa Rakshit, Samir Ghorai, Amrit Sarmah, Ram Kinkar Roy and Chandan Mukherjee, Inter-Ligand Azo (N=N) Unit Formation and Thereafter Stabilization of A Co(II)-Diradical Complex via Metal-to-

	Ligand dp–pp back donation: Synthesis, Characterization, and Theoretical Study, Dalton Trans, 2015,44, 3724-3727.
37	Parvej Alam, Gurpreet Kaur, Shamik Chakraborty, Angshuman Roy Choudhury, Inamur Rahaman Laskar, Aggregation Induced Phosphorescence' Active 'Rollover' Iridium(III) Complex as Multi-Stimuli-Responsive Luminescence Material, Dalton Trans., 2015,44, 6581-6592.
38	Sunita Joshi, Santosh Kumari, Rituparna Bhattacharjee, Amrit Sarmah, Rajeev Sakhuja, Debi D Pant Experimental and theoretical study: determination of dipole moment of synthesized coumarin-triazole derivatives and application as turn off fluorescence sensor: high sensitivity for iron (III) ions, Sensors and Actuators B Chemical, 2015 (in press); DOI: 10.1016/j.snb.2015.07.053
39	Parvej Alam, Gurpreet Kaur, Vishal kachwal, Asish Gupta, Angshuman Roy Chaudhury and Inamur Rahaman Laskar, Highly Sensitive Explosive Sensing by "Aggregation Induced Phosphorescence" Active Cyclometalated Iridium(III) Complexes , Journal of Materials Chemistry, 2015, 3, 5450-5456.
40	K Pericherla, P Kaswan, K. Pandey, Anil Kumar, Access to substituted dihydrothiopyrano[2,3-b]indoles via sequential rearrangements during s-alkylation and au-catalyzed hydroarylation on indoline-2-thiones, J. Org. Chem. 2015, 80, 5272–5278.
41	Amrit Sarmah and Ram Kinkar Roy, Interaction between Small Gold Clusters and Nucleobases: A Density Functional Reactivity Theory Based Study, J. Phys. Chem. C, 2015, 119, 17940–17953.
42	S. Shyamal, P. Hajra, H. Mandal, J. K. Singh, A. K. Satpati, S. Pande, C. Bhattacharya Effect of Substrates on the Photoelectrochemical Reduction of Water over Cathodically Electrodeposited p-Type Cu <sub>2</sub> O Thin Films, ACS Appl. Mater. Interfaces 2015, 7, 18344–18352
43	Ashok Sharma, Rajdeep Chowdhury, Subhra Dash, Badvel Pallavi, and Paritosh Shukla, Fast Microwave Assisted Synthesis of Pyranopyrazole Derivatives as New Anticancer Agents, Curr. Microwave Chem. 2015, 3, 1-6.
44	A Multi-stimuli Responsive "AIE" Active Salicylaldehyde-based Schiff Base for Sensitive Detection of Fluoride, P. Alam, V. Kachwal, I. R. Laskar, Sensors and Actuator B, 2016 (accepted)
45	Z. Xie, G. R. Akien. Bibhas. R. Sarkar, B. Subramaniam, R. V. Chaudhari, Continuous Hydroformylation with Phosphine-functionalized Polydimethylsiloxane Rhodium Complexes as Nanofilterable Homogeneous Catalysts, Industrial and Engineering Chemistry Research, 2015, 54, 10656-10660
46	Fageria, P.; Nazir, R.; Gangopadhyay, S.; Barshilia, H. C.; Pande, S., Graphitic-carbon nitride support for the synthesis of shape-dependent ZnO and their application in visible light photocatalyst RSC Advances, 2015, 5, 80397-80409.
47	Paramita Hajra, Sanjib Shyamal, Aparajita Bera, Harahari Mandal, Debasis Sariket, Malay Kundu, Surojit Pande, Chinmoy Bhattacharya. Optimization of Triton-X 100 surfactant in the development of Bismuth Oxide thin film semiconductor for improved photoelectrochemical water oxidation behavior, Electrochimica Acta, 2015, 185, 229-235.
48	Toshikee Yadav, Deepti Tikariha, Jyotsna Lakra, Manmohan L. Satnami, Amit K. Tiwari, Subit K. Saha and Kallol K Ghosh, Solubilization of polycyclic aromatic hydrocarbons in structurally different gemini and monomeric surfactants: A comparative study, J. Molecular Liquids, 2015, 204, 216-221.
49	Srishti Sinha, Deepti Tikariha, Jyotsna Lakra, Amit K. Tiwari, Subit K. Saha and Kallol K. Ghosh, Effect of polar organic solvents on self-aggregation of some cationic monomeric and dimeric surfactants, J. Surfactants and Detergents, 2015, 18, 629-640
50	Sunita Joshi, Santosh Kumari, Rituparna Bhattacharjee, Amrit Sarmah, Rajeev Sakhuja, Debi D Pant, Experimental and theoretical study: Determination of dipole moment of synthesized coumarin–triazole derivatives and application as turn off fluorescence sensor: High sensitivity for iron(III) ions, Sensors and Actuators B Chemical 2015, 7, 220
51	S. M. Abdul Shakoor, Devesh S. Agarwal, Anil Kumar, Rajeev Sakhuja, Copper catalyzed direct aerobic double-oxidative cross-dehydrogenative coupling of imidazoheterocycles with aryl acetaldehydes: an articulate approach for dicarbonylation at C-3 position, 2016 (in press).
52	S. M. Abdul Shakoor, Sunita Choudhary, Kiran Bajaj, Manoj Kumar Muthyala, Anil Kumar and Rajeev Sakhuja, Imidazolium-supported benzotriazole: an efficient and recoverable activating reagent for amide, ester and thioester bond formation in water, RSC Adv., 2015, 5, 82199.
53	P. Ramaraju, N. A. Mir, D. Singh, V. K. Gupta, Rajni Kant, and Indresh Kumar; Enantioselective Synthesis of N-PMP-1,2-dihydropyridines via Formal [4 + 2] Cycloaddition between Aqueous Glutaraldehyde and Imines; Org. Lett., 2015, 17, 5582. Highlighted in SYNFACTS (Synfacts 2016, 12(1), 0026)
54	Noorullah Baig, Rajnish Prakash Singh, Subhash Chander, Prabhat Nath Jha, Sankaranarayanan Murugesan, Ajay K. Sah, Synthesis, evaluation and molecular docking studies of amino acid derived N-glycoconjugates as antibacterial agents Bioorg. Chem, 2015, 63, 110-115.
55	Samir Ghorai, Amrit Sarmah, Ram Kinkar Roy, Archana Tiwari, and Chandan Mukherjee, Effect of Geometrical Distortion on the Electronic Structure: Synthesis and Characterization of Monoradical-Coordinated Mononuclear Cu(II) Complexes , Inorganic Chemistry, DOI: 10.1021/acs.inorgchem.5b01257 Inorg. Chem. XXXX, XXX, XXX–XXX.

**C. CONFERENCES ATTENDED/PAPERS PRESENTED**

- S. Pande, Oral presentation on "Synthesis of Mono- (Au & Pd) and Bimetallic (AuPd) Nanoparticles via Photochemical Route using Graphitic-Carbon Nitride ( $g\text{-C}_3\text{N}_4$ ) Quantum Dots", 17<sup>th</sup> National Conference on Surfactants, Emulsions and Biocolloids organized by School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh, during November 4-6, 2015.
- S. Pande, Invited talk on "Synthesis and visible-light driven photocatalyst of graphitic( $g\text{-C}_3\text{N}_4$ )/ZnO, Pd, and Pt nanoparticles", National Conference on Frontiers at the Chemistry-Allied Sciences Interface (FCASI-2015) organized by Department of Chemistry, University of Rajasthan, Jaipur, during 13 - 14<sup>th</sup> March, 2015.
- P. Fageria, S. Pande, National Conference on Frontiers at the Chem-Allied Sciences Interface (FCASI-2015) at University of Raj, Jaipur, organized by Center of Advanced Study, Depart of Chem, UOR, Jaipur, during 13-14 March, 2015.
- P. Fageria, S. Pande, National Conference on Recent Advancements in Chemical Sciences (RAICS 2015) organized by Department of Chemistry, MNIT Jaipur, during 21-23 August, 2015.
- Sunita Kumari, Sonu, G. Sundar and Subit K. Saha, "Solvation Dynamics and Rotational Relaxation of Coumarin 480 in Aqueous Micelles: Effect of Polar Spacer Group and Hydrophobic Tails of Cationic Gemini Surfactants" in National conference on Frontiers at the Chemistry- allied Sciences Interface (FCASI-2015), held at University of Rajasthan, Jaipur. March 13-14, 2015.
- Sunita Kumari, Sonu, G. Sundar and Subit K. Saha, "Aggregation Behavior of Hexadecyltrimethylammonium Surfactants with Various Counterions: A Solvation Dynamics and Rotational Relaxation Study" in National conference on Recent Advancements in Chemical Sciences (RACIS-2015), held at Malaviya national institute of technology, Jaipur. August 21 - 23, 2015.
- Sunita Kumari, Sonu, G. Sundar and Subit K. Saha, "Effect of Counterions on Solvation Dynamics and Rotational Relaxation of Coumarin 480 in Aqueous Micelles of Hexadecyltrimethylammonium Surfactants" in International conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration (NDCS-2015), held at Department of Chemistry, BITS Pilani, Pilani Campus. October 16-18, 2015.
- Rajeev Sakhuja attended 52<sup>nd</sup> Annual Convention of Chemists 2015 at JECRC University Jaipur, from December 28-30.
- Rajeev Sakhuja attended International conference on "Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration (NDCS-2015)" organized by Department of Chemistry, BITS Pilani during October 16-18, 2015.
- Noorullah Baig, Ajay Kumar Sah, "Glucose derived dioxo-molybdenum (VI) complexes: synthesis, characterization and their studies on sulphide oxidation" "18<sup>th</sup> European Carbohydrate Symposium" (EUROCARB 18), Held at Moscow, Russia, August 2-6, 2015
- Noorullah Baig, Ajay Kumar Sah, " Synthesis of bis(indolyl)methanes under solvent free condition using glucopyranosylamine derived *cis*-dioxoMo(VI) complex as a catalyst" "International Conference on Nascent Developments in Chemical Sciences" (NDCS 2015), BITS Pilani, Pilani Campus, Rajasthan, India, October 16-18, 2015
- Shamik Chakraborty, Faraday Discussion No 177 on Temporally and Spatially Resolved Molecular Science: Organised by Royal Society of Chemistry at IISc Bangalore, India, During Jan, 12-14, 2015.
- Shamik Chakraborty, National Conference on Frontiers at the Chem-Allied Science Interface (FCASI-2015) at the University of Rajasthan, Jaipur, India, During March 13-14, 2015.
- Shamik Chakraborty, Spectroscopy and Dynamics of Molecules and Clusters (SDMC-2015) at Naini Retreat, Nainital, India. Organised by IITShamik Chakraborty, International Chemical Congress of Pacific Basis Societies, Pacificchem-2015, at Honolulu, Hawaii, USA, During December 15-20, 2015. Kanpur and IISER Mohali, during Feb, 19-22, 2015.
- Archana Choudhary, Bidisa Das and Saumi Ray, "Effect of Host Supercage on the Encapsulated Complexes in Zeolite Y: Experimental and DFT Study" in National conference on Frontiers at the Chemistry – allied Science Interface (FCASI-2015), held at university of Rajasthan, jaipur, 13-14 March, 2015
- Archana Choudhary, and Saumi Ray, "Effect of Encapsulation on the Optical, Magnetic and catalytic properties of the square planar nickel Schiff-base in zeolite Y." International conference on Nascent Development in Chemical Sciences: Opportunities for Academia- Industry collaboration (NDCS-2015), held at Department of Chemistry, BITS Pilani, Pilani Campus. October 16-18, 2015.
- Archana Choudhary, Bidisa Das and Saumi Ray, "Encapsulated Schiff Base Nickel Complexes in Zeolite Y: Correlation Between Catalytic Activities and Extent of Distortion Supported by Experimental

and DFT Studies” National Conference on New Frontiers in Chemistry - From Fundamentals to Applications, (NFCFA-2015), held at Department of Chemistry, BITS Pilani K.K. Birla Goa Campus. December 18-19, 2015.

- Pankaj Nehra, Vaishali Saini, Bharti Khungar, S. C. Sivasubramanian “Synthesis, Characterization, Biological Activities and Photophysical properties of an Ionic Liquid-supported Schiff Base Zinc Complex”, International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration, BITS Pilani, October 16-18 2015.
- Vaishali Saini, Pankaj Nehra, Bharti Khungar, “Ionic liquid functionalized metal salen complexes: Synthesis, characterization and applications”, International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration, BITS Pilani, October 16-18 2015.
- Indresh Kumar; Attended and act as co-convener of "International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration" at BITS Pilani during October 16-18, 2015.
- GM Shelke, M Jha, A Kumar, “Facile access to substituted dihydrothiopyrano[2,3-*b*]indoles *via* sequential rearrangements during *S*-alkylation and Au-catalyzed hydroarylation on indoline-2-thiones” at 21<sup>st</sup> ISCBC- 2015, Department of chemistry, CDRI, Lucknow, February 25-28<sup>th</sup>, 2015.
- GM Shelke, A Kumar, M Jha, “Synthesis of Substituted Benzothiazino[3,2-*a*]indoles and Dihydroisothiochromeno[3,4-*b*]indoles *via* Intramolecular C-N and C-C Coupling” at NDCS-2015, Department of chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, October 16-18, 2015.
- GM Shelke, A Kumar, M Jha, “Synthesis of Substituted Benzothiazino[3,2-*a*]indoles and Dihydroisothiochromeno[3,4-*b*]indoles *via* Intramolecular C-N and C-C Coupling” at CCDDR-2015, Department of chemistry, Malaviya National Institute of Technology Jaipur, Rajasthan, 23-25 November, 2015.
- S Choudhary, M K Muthyala, A Kumar: “Ionic liquid phase synthesis (IoLPs) of 2 aminothiazoles and imidazo[1,2-*a*]pyridines” at 21<sup>st</sup> ISCBC- 2015, Department of chemistry, CDRI, Lucknow, February 25-28<sup>th</sup>, 2015.
- S Choudhary, K Pandey, A Kumar: “Exploration of Ionic Liquid-supported Sulfonyl Chloride for Suzuki-Miyaura Cross Coupling Reaction” at NDCS, Department of chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, October 16-18, 2015.
- P Kaswan, K Pericherla, H.K Saini, A Kumar: “Tandem one pot, three component reaction of methyl ketones, aldehydes and 2-aminopyridines for the synthesis of 3-arylimidazo[1,2-*a*]pyridines” at National Conference on Frontiers at The Chemistry- Allied Sciences Interface (FCASI-2015), Department of Chemistry, University of Rajasthan, Jaipur, March 13-14, 2015.
- P Kaswan, N Nandwana, A Kumar: “” at NDCS-2015, Department of chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, October 16-18, 2015.
- P Kaswan, N Nandwana, A Kumar: “” at 52nd Annual Convention of Chemists 2015 and International Conference on Recent Advances in Chemical Sciences, Department of Chemistry, JECRC University, Jaipur, Rajasthan, December 28-30<sup>th</sup>, 2015.
- Khima Pandey, S Choudhary, A Kumar: “Imidazolium-supported Sulfonyl Hydrazine- An Efficient Scavenger for Aldehydes and Ketones” at 21<sup>st</sup> ISCBC- 2015, Department of Chemistry, CDRI, Lucknow, February 25-28<sup>th</sup>, 2015.
- Khima Pandey, S Choudhary, Saroj, A Kumar: “Sulfonic Acid Functionalized Imidazolium Triflate Catalysed Construction of 4*H*-chromenes and Benzo[*f*]furans” at NDCS, Department of chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, October 16-18, 2015.
- Khima Pandey, S Choudhary, Saroj, A Kumar: “Sulfonic Acid Functionalized Imidazolium Triflate Catalysed Construction of 4*H*-chromenes and Benzo[*f*]furan derivatives” at NFCFA-2015, Department of Chemistry, BITS Pilani KK Birla Goa Campus, Goa, 18-19<sup>th</sup> December, 2015.
- Saroj, S Choudhary, M Muthyala, A Kumar: “Ionic Liquid-Supported Azide: An Efficient Soluble Scavenger for Alkynes” at 21<sup>st</sup> ISCBC- 2015, Department of Chemistry, CDRI, Lucknow, February 25-28<sup>th</sup>, 2015.
- Saroj, Ganesh M Shelke, K Pandey, A Kumar: “Sulfonic Acid Functionalized Imidazolium-Salt Catalyzed and Ultrasound Promoted Synthesis of 3-Alkylated/Alkenylated Indole” at NDCS, Department of chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, October 16-18, 2015.



- Saroj, Ganesh M Shelke, K Pandey, A Kumar: "Sulfonic Acid Functionalized Imidazolium-Salt Catalyzed and Ultrasound Promoted Synthesis of 3-Alkylated/Alkenylated Indole" at NFCFA-2015, Department of Chemistry, BITS Pilani KK Birla Goa Campus, Goa, 18-19<sup>th</sup> December, 2015.
- Hitesh K Saini, K Pericherla, P Kaswan, A Kumar: "A copper catalysed efficient synthesis of Naphtho[1',2':4,5]imidazo[1,2-a]pyridines" at 21<sup>st</sup> ISCBC- 2015, Department of Chemistry, CDRI, Lucknow, February 25-28<sup>th</sup>, 2015.
- Hitesh K Saini, P Kaswan, K Pericherla, A Kumar: "Synthesis of Naphtho-Fused Imidazo[1,2-a]pyridines via copper catalysed cascade reaction and study o their photophysical properties" at NDCS, Department of chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, October 16-18, 2015.
- Hitesh K Saini, P Kaswan, K Pericherla, A Kumar: "Synthesis of Naphtho-Fused Imidazo[1,2-a]pyridines via copper catalysed cascade reaction and study o their photophysical properties" at CCDDR-2015, Department of chemistry, Malaviya National Institute of Technology Jaipur, Rajasthan, 23-25 November, 2015.
- National workshop on "Nuclear Magnetic Resonance (NMR) Spectroscopy" organized at SAIF, IIT Madras, Chennai during 25 - 27, Feb 2015.
- Shiv Dhiman, H K Saini, N K. Nandwana, D Kumar, A Kumar: "One-Pot Copper Catalyzed Tandem Knoevenagel Condensation, Amination and Cyclization: A Facile Regioselective Synthesis of Quinoline Derivatives" at NDCS, Department of chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, October 16-18, 2015.
- Shiv Dhiman, H K Saini, N K. Nandwana, D Kumar, A Kumar: "One-Pot Copper Catalyzed Tandem Knoevenagel Condensation, Amination and Cyclization: A Facile Regioselective Synthesis of Quinoline Derivatives" at NDCS, Department of chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, October 16-18, 2015.
- Nitesh Kumar Nandwana, K Pericherla, P Kaswan, A Kumar: "Synthesis of Novel Azole-Fused Quinazolines *via* Tandem Approach" at 21<sup>st</sup> ISCBC- 2015, Department of Chemistry, CDRI, Lucknow, February 25-28<sup>th</sup>, 2015.
- Nitesh Kumar Nandwana, S Dhiman, G M Shelke Anil Kumar: "Synthesis of Imidazo Quinazolines *via* Copper Catalyzed Ullmann Type C-N Coupling and Dehydrative Cyclization" at NDCS, Department of chemistry, Birla Institute of Technology and Science Pilani, Pilani Campus, Rajasthan, October 16-18, 2015.
- Nitesh Kumar Nandwana, S Dhiman, G M Shelke Anil Kumar: "Synthesis of Imidazo Quinazolines *via* Copper Catalyzed Ullmann Type C-N Coupling and Dehydrative Cyclization" NFCFA-2015, Department of Chemistry, BITS Pilani KK Birla Goa Campus, Goa, 18-19<sup>th</sup> December, 2015
- Moyna Das and Dr. Madhushree Sarkar, " Study of Photophysical Properties of bis-benzyl-alkyl-di-imines" in International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration (NDCS-2015), Department of Chemistry, BITS Pilani, Pilani Campus, October 16-18, 2015
- Fayaz Baig, Rajnikant, Vivek K Gupta, and Madhushree Sarkar, "Analysis of Structure-Optical Property Relationship of bis-pyridyl alkyl di-imines" in International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration (NDCS-2015), Department of Chemistry, BITS Pilani, Pilani Campus, October 16-18, 2015

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

Topics in Heterocyclic Chemistry, chapter: Benzotriazole: Much More Than Just Synthetic Heterocyclic Chemistry, Kiran Bajaj, Rajeev Sakhuja, Springer, December 2015

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

- Department of Chemistry organized International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration, (NDCS-2015) during October 16-18, 2015.
- Department of Chemistry organized Q-Chem Users' Workshop on October 19, 2015.

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

Faculty members of the department delivered invited lectures at following conferences/symposia during the year.

- Anil Kumar, Carbon-Hydrogen and Nitrogen-Hydrogen Bond Activation: Application in the Synthesis of Novel Heterocyclic Compounds, "52<sup>nd</sup> Annual Convention of Chemists 2015 and International Conference on Recent Advances in Chemical Sciences" held at JECRC, University, Jaipur from 28-30<sup>th</sup> December 2015.
- Anil Kumar, Exploration of carbon-hydrogen and nitrogen-hydrogen bond activation towards synthesis of some heterocyclic compounds, "National Conference on New Frontiers in Chemistry - From Fundamentals to Applications, (NFCFA-2015), held at Department of Chemistry, BITS Pilani K.K. Birla Goa Campus. December 18-19, 2015.
- Anil Kumar, Exploration of carbon-hydrogen and nitrogen-hydrogen bond activation towards synthesis of some heterocyclic compounds, Department of Chemistry, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
- Anil Kumar, Exploration of carbon-hydrogen and nitrogen-hydrogen bond activation towards synthesis of some heterocyclic compounds, Wockhardt Research Centre, Aurangabad, Maharashtra
- Dr. Prashant U Manohar delivered a talk on "Resolution-of-identity and Cholesky decomposition representations of equation-of-motion MP2 variants" at IACS, Kolkata during his research collaborative visit to Prof. Debashis Mukherjee during December 15-20, 2015
- International Chemical Congress of Pacific Basin Societies, 2015 (PACIFICHEM 2015) at Honolulu, Hawaii, USA during December 15-20, 2015
- Subit Kumar Saha, "Restricted water dynamics and rotational relaxation of Coumarin 480 at the Stern layer of aqueous micelles of cationic gemini surfactants" in National Conference on Frontiers at the Chemistry – Allied Sciences Interface (FCASI-2015) held at Department of Chemistry, University of Rajasthan, Jaipur. March 13-14, 2015.
- Subit Kumar Saha, "Study on solvation dynamics and rotational relaxation in aqueous micelles of cationic gemini surfactants: effect of polymethylene spacer groups" in 17<sup>th</sup> National Conference on Surfactants, Emulsions & Biocolloids (NATCOSEB XVII), held at School of Studies in Chemistry, Pt. Ravishankar Shukla University, Raipur, Chhattisgarh. November 04-06, 2015.
- Rajeev Sakhuja "Greener Methodologies for the Synthesis of Biologically Important Scaffolds" at the 52<sup>nd</sup> Annual Convention of Chemists 2015 at JECRC University Jaipur, from December 28-30.
- Dalip Kumar, An efficient and easy access to natural and synthetic azaheterocycles: Structure-based approach to develop novel anticancer agents, "52<sup>nd</sup> Annual Convention of Chemists 2015 and International Conference on Recent Advances in Chemical Sciences" held at JECRC, University, Jaipur from 28-30<sup>th</sup> December 2015.
- Dalip Kumar, Synthesis and photocytotoxicity of novel water-soluble cationic porphyrins, International Conference on "Current Challenges in Drug Discovery Research" (CCDDR 2015) Organized by Department of Chemistry, Malaviya National Institute of Technology Jaipur, Jaipur-302017 (INDIA) November 23-25, 2015).
- Dalip Kumar, Indole Derivatives as Novel Tubulin Interacting Agents, National Conference on Frontiers at The Chemistry - Allied Sciences Interface (FCASI-2015) Department of Chemistry, University of Rajasthan, Jaipur, India 13-14 March, 2015.
- Dalip Kumar, Synthetic Analogues of Indole Alkaloids as Potent Tubulin Inhibitors, 21<sup>st</sup> International ISCB Conference on Current trends in drug discovery and developments: CDRI, Lucknow, India, February 25-28, 2015.
- Dalip Kumar, delivered an invited lecture on "Remarkable Linking Effect on Photocytotoxicity of Porphyrin Conjugates with DNA Binding Agents" at Kumamoto University, Japan on January 13, 2015
- Dr. R K Roy, "Frontiers in Electronic Structure Theory – 2015 (FEST-2015)". May 26-28, 2015, Bogmallo Beach Resort, Goa.
- Indresh Kumar; Invited lecture entitled "Amino-catalyzed transformations of dicarbonyls: Synthesis of medium sized nitrogen heterocycles" during International Symposium (ISCBC-2015) CURRENT TRENDS IN DRUG DISCOVERY AND DEVELOPMENTS during February, 25 -28, 2015 at CDRI-Lucknow.
- Indresh Kumar; Invited lecture entitled "Organocatalytic cascade strategy for synthesis of small molecule natural products (SMNPs)" at Syngenta, Goa on July 07, 2015.
- Indresh Kumar; Invited lecture entitled "Amino-catalyzed transformations of dicarbonyls: Synthesis of medium sized nitrogen heterocycles" during NATIONAL CONFERENCE ON RECENT

ADVANCEMENTS IN CHEMICAL SCIENCES (RAICS 2015) during August 21-23, 2015 at MNIT Jaipur.

- Indresh Kumar; Invited Lecture "Aminocatalyzed Transformations of Dicarboxyls: Asymmetric Synthesis of Medium Sized Nitrogen Heterocycles" during "52<sup>nd</sup> Annual Convention of Chemists 2015 and International Conference on Recent Advances in Chemical Sciences" at JECRC, University, Jaipur, during 28-30<sup>th</sup> December 2015.

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

S. No	Name of Speaker	Affiliation	Title	Date of talk
1	Dr. Sudeshna Ray	Assistant Professor of Chemistry in AISECT University, Bhopal, India	Exploration of new phosphors using a "Mineral-inspired approach" and control of photoluminescence properties of phosphor by "Charge-compensated aliovalent element substitution"	26/09/2014
2	Dr. Anurag Prakash Sunda	Post Doctoral Fellow at Chemistry and Physics of Materials Unit, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India.	Atomistic Simulations of Hydrated PFSA Membranes and Protic/Aprotic Ionic Liquids as Electrolytes in PEM Fuel Cells	27/11/2014
3	Professor Raj Pal Singh	Director, Research and Development Centre in Pharmaceutical Sciences and Applied Chemistry, Poona College of Pharmacy, Bharati Vidyapeeth Deemed University Erandawane.	Higher Education, Scientific Research and Industrial Competitiveness in India: Role of Chemistry.	23/02/2015
4	Professor N. Rajesh	<i>Department of Chemistry Birla Institute of Technology and Science (BITS), Pilani - Hyderabad Campus</i>	Greener alternatives for environmental remediation"- A Perspective.	18/03/2015
5	Professor Debasis Das	Department of Chemistry University of Calcutta, Kolkata	Corroborative model study of catechol oxidase and phosphatase: Recent Development	18/04/2015
6	Prof. I. N. N. Namboothiri	Department of Chemistry Indian Institute of Technology Bombay, Mumbai	Multi-component and Cascade Reactions of Nitroalkenes for the Synthesis of aCarbocycles and Heterocycles	04/05/2015
7	Dr. Kokawa Ryohei	<i>Senior Scientist &amp; Head of SPM Division, Shimadzu Corporation, Japan.</i>	Technological Evolution in Nano-World by Shimadzu : SPM, XPS & EPMA	27/08/2015
8	Dr. Swapan Ghosh	<i>FNA, FNASc, FASc Dr. Raja Ramanna Professor BARC, Mumbai</i>	Concept of Density in Chemistry	16/09/2015
9	Dr. Tapan Kumar Ghanty	<i>Theoretical Chemistry Section Radiation Chemistry &amp; Chemical Dynamics Division</i>	Role of Theoretical & Computational Chemistry in Designing New Molecules and Novel Materials	09/09/2015

S. No	Name of Speaker	Affiliation	Title	Date of talk
		<i>BARC, Mumbai</i>		
10	Dr. Sravendra Rana	Institute of Chemistry Martin-Luther University Halle-Wittenberg, Germany	Self-healing Materials	21/12/2015

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

1. Prof. Anil Kumar, Three Year American Chemical Society Membership Award, American Chemical Society, Washington DC, USA, August 2015
2. Dr. Indresh Kumar, Awarded "Outstanding Potential for Excellence in Research and Academics (OPERA)" from BITS Pilani, January 2015
3. Parvej Alam, Award of the best poster 21st ISCB International Conference (ISCB-2015) on "Current Trends in Drug Discovery and Developments" held at Central Drug Research Institute, Lucknow, February, 2015
4. Dr. Shamik Chakraborty, Pacificchem 2015 Early Career Chemist award from the Organizing Committee of the 2015 International Chemical Congress of Pacific Basin Society
5. Dr. Indresh Kumar has been selected for ISCB YOUNG SCIENTIST AWARD-2016 IN CHEMICAL SCIENCES by Indian Society of Chemists and Biologists, Lucknow
6. Dr. Dalip Kumar bestowed upon Professor R. D. Desai 80th Birthday Commemoration Medal & Prize by Indian Chemical Society during "52nd Annual Convention of Chemists 2015 and International Conference on Recent Advances in Chemical Sciences" held at JECRC, University, Jaipur from 28-30th December 2015
7. Mr. Santosh B Khandagale, Awarded best poster presentation prize, International Conference on Nascent Developments in Chemical Sciences (NDCS-2015) : Opportunities for Academia- Industry Collaboration, Department of Chemistry BITS Pilani, Pilani Campus, India October 16-18, 2015.
8. Prof. R. K. Roy, Three Year American Chemical Society Membership Award, American Chemical Society, Washington DC, USA, August 2015.
9. Sunita Kumari, Award of best poster in the National Conference on "Recent Advancements in Chemical Sciences" (RACIS-2015), held at Malaviya National Institute of Technology, Jaipur. August 21 - 23, 2015.
10. Ms. Pinku was awarded RSC sponsored best poster award at International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration, (NDCS-2015) during October 16-18, 2015

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

Dr. Bibhas R. Sarkar went for Industry Immersion Program in Summer 2015 to Aditya Birla Science and Technology Co. Ltd. Taloja, Navi Mumbai

Dr. Surojit Pande, Industry Immersion at NAL Bangalore during 08/06/2015 to 16/07/2015

Dr. Indresh Kumar has made a two months visit (during May-July 2015) to VerGo Pharma, Goa through the Industry-Immersion program by BITS Pilani.

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

Purchased one programmable air oven using BITS additional seed grant

EYELA Low Temp. Reaction Bath with Magnetic Stirrer Model PSL-1810

## K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES

### Activities of Chemistry Association

During the academic year 2015-2016, the association had been involved in various activities. This report summarizes the work done by the association during the year 2015-2016.

Apogee Project Meets: Two Project meets were conducted in order to discuss ideas for projects that were eventually presented during APOGEE 2016. It saw enthusiastic involvement from students of all years.

During APOGEE 2016, two events, *Who-Dunnit* and *Dexter's Lab* (in collaboration with Biology and Chemical Engineering Associations), will be conducted by the Chemistry Association.

A get together and interaction session of newly admitted students with 2<sup>nd</sup> and 3<sup>rd</sup> year students was organised in the month of Aug 2015 at Sky lawns. The juniors were informed about the educational and structural system of the institute and also about the activities of the association. A formal meet for freshers with senior students and faculty members of the department was held subsequently, at the Lecture Theatre Complex. The meeting was attended by faculty members and a substantial number of 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> year students. The students were introduced to the faculty and were told about different courses and research areas of the department. Students were also informed about the relevance and activities of the association by the President, Secretary and Apogee coordinator. The meeting finally concluded with refreshments.

An informal dinner cum interaction session for all students of M.Sc. Chemistry and faculty members was organized at Vatika Restaurant on 26<sup>th</sup> September 2015, with the purpose of strengthening ties between students and faculty. It received excellent response from both the sides, making it a huge success.

The discussion about prototype presentation during APOGEE 2016 happened on 29<sup>th</sup> September 2015. Previous year's projects were shared with all present so that they get an idea about how to choose projects and work accordingly. The second meeting happened on 15<sup>th</sup> Oct 2015 and project ideas were shared and details of project such as implementation methodology, feasibility etc. were explained.

Sweat shirt of Chemistry Association was introduced and student signing was taken. Good response and appreciable signing was received.

### B1.10.5 Department: Computer Science & Information Systems

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

<b>Senior Professors, Professors</b>	05
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	10
<b>Lecturers</b>	05
<b>Visiting Faculty</b>	01

**Head of the Department: Professor Rahul Banerjee**

**Contact details:** [rahul@pilani.bits-pilani.ac.in](mailto:rahul@pilani.bits-pilani.ac.in)

**Number of PhD Scholars: 11**

#### A. SPONSORED RESEARCH ACTIVITIES & FUNDING

# Three ongoing funded research projects from DietY, DST and CAIR are in progress. In addition, work is in progress in the area of establishment of one of India's earliest Software-Defined Networking Research Testbed at the Centre for Excellence in SDN of the Department of Computer Science & Information Systems based on a research equipment grant worth about Rs. 1 Crore from Cisco Inc., San Francisco.

#### B. PUBLICATIONS

**The faculty of the department published following papers in international refereed journals during the year.**

1. Lavika Goel, Daya Gupta, V.K. Pancha: "Two-phase Anticipatory System Design Based on Extended Species Abundance Model of Biogeography for Intelligent Battlefield Preparation", International. Knowledge Based Systems, Elsevier Publications, 2015. Vol. 89, pp.420-445
2. SK Hafizul Islam: "Design and analysis of a three party password-based authenticated key exchange protocol using extended chaotic maps", International. Information Sciences, vol. 312, pp. 104-130. 2015.

3. SK Hafizul Islam, Abhishek Singh: "Provably secure one-round certificateless authenticated group key agreement protocol for secure communications", *International. Wireless Personal Communications*, no. 79, pp. 1975-1991, 2015.
4. SK Hafizul Islam, M. S. Farash, G. P. Biswas, M. K. Khan, M. S. Obaidat: "A pairing-free certificateless digital multisignature scheme using elliptic curve cryptography", *International Journal of Computer Mathematics*, (Taylor & Francis)[SCIE] 2015. Vol. 10, pp.1-18, 2015
5. Poonam Goyal, N. Mehala, and Navneet Goyal: "Incremental Models for Query Clustering and Query-Context Aware Document Clustering", *International Journal of knowledge and Web Intelligence (Accepted)*, 2015
6. Pankaj Vyas, RK Mittal: "The applications of SFTA and SFMEA approaches during software development process: an analytical review" *International. International Journal of Critical Computer-Based Systems (IJCCBS)*, Vol.6, No.1, pp.29-49, 2015.

### C. CONFERENCES

The faculty of the department published following papers in international/national Conferences during the year.

#### (i) Conferences attended/papers presented outside India:

Gautam, A., Murthy, A. K., Kumar, G., Ram, A. S. P., Jha, B., Mohan, S. (2015). Cluster, Allocate, Cover: An Efficient Approach for Multi-Robot Coverage. Accepted manuscript submitted for publication in *2015 IEEE International Conference on Systems, Man, and Cybernetics (SMC2015)*, Hong Kong, China, 2015.

#### (ii) Conferences attended/papers presented in India (both International and National):

1. K Haribabu, and Hota Chittaranjan: "Analysis of Floating Index Caching Technique for P2P Overlay Index Propagation", 16<sup>th</sup> International Conference on Distributed Computing and Networking, Goa, India, 2015.
2. Lavika Goel: "A 2D Illumination Based Adaptive Gaze Tracking Approach for Varied Head Orientations" 2<sup>nd</sup> International Conference on Computing for Sustainable Global Development (INDIACOM), IEEE Xplore, IEEE Publications held at Bharti Vidyapeeth, New Delhi, 2015.
3. Avinash Gautam: "Cluster, Allocate, Cover: An Efficient Approach for Multi-Robot Coverage", International Conference on Systems, Man, and Cybernetics (SMC 2015) to held in Hong Kong, China [Scopus Indexed, h5-Index = 22], 2015.
4. Vandana Agarwal and Surekha Bhanot: "Firefly Inspired Feature Selection for Face Recognition", 8<sup>th</sup> International Conference on Contemporary Computing (IC3-2015) held at JIIT, Noida, India, 20-22 August 2015.[SCOPUS indexed , h5-index =10 ] (Presented), 2015.
5. Amit Bisaria, Virendra S Shekhawat, V K Chaubey: "Heuristic Algorithms for Routing and Wavelength Assignment (RWA) Planning Algorithms in Optical WDM Networks", International Conference on Telecommunication Technology and Management (ICTTM-2015), IIT Delhi, India, April 2015.
6. Rupal Bhargava, Yashvardhan Sharma: "Analyzing Sentiments through Text Summarization", International Conference on Evidence Based Management, 2015.
7. Poonam Goyal, Sonal Kumari, Dhruv Kumar, Sundar Balasubramaniam, Navneet Goyal, Saiyedul Islam and Jagat Sesh Challa: "Parallelizing OPTICS for Commodity Clusters", 16<sup>th</sup> International Conference on Distributed Computing and Networking (ICDCN'15), January 2015, Goa, India, 2015
8. N Mehala, D Bhatia and P Goyal, "An approach for search result topic identification and labelling", In Proceedings of Second ACM IKDD Conference on Data Science (CoDS 2015), March 2015, Bengaluru, India.
9. Mayuri Digalwar, Praveen Gahukar, Sudeept Mohan, Biju K. Raveendran: "STREAM: A Simulation Tool for Energy Efficient Real Time Scheduling and Analysis", 6<sup>th</sup> International Workshop on Analysis Tools and Methodologies for Embedded and Real Time Systems (WATERS 2015), Lund, Sweden, July 3, 2015.
10. Vishal Gupta: "Simulating WDN network using EPANET", International Conference on Evidence Based Management (ICEBM 2015), BITS Pilani, 2015.
11. Yashvardhan Sharma: "Temperature Prediction based on Fuzzy Time Series and MTPSO with Automatic Clustering Algorithm", 2nd International Symposium on Computational and Business Intelligence (ISCBI-II 2014), 2015.
12. Yashvardhan Sharma, D. Bhatia: "Near Real Time Data Warehouse with Priority Updates", 2<sup>nd</sup> Workshop on Smarter Planet and Big Data Analytics, 16th International Conference on Distributed Computing and Networking (ICDCN 2015).
13. Yashvardhan Sharma, Mayank Garg, Ekansh Mittal: "Political Opinion Mining from Twitter", International Conference on Evidence Based Management 2015 (ICEBM 2015).
14. Vandana Agarwal and Surekha Bhanot, "Firefly Inspired Feature Selection for Face Recognition", 8<sup>th</sup> International Conference on Contemporary Computing (IC3-2015), Jaypee Institute of Information Technology (JIIT), Noida, India, 20-22 August 2015. [SCOPUS indexed , h5-index =10]
15. Jagat Sesh Challa, Poonam Goyal, Nikhil S., Sundar Balasubramaniam, Navneet Goyal, "A concurrent k-NN search algorithm for R-tree", In 8th ACM Compute '15, October 2015, Ghaziabad, India.

16. Deabshu Sinha, K Haribabu, Sundar Balasubramaniam, "Real-time Monitoring of Network Latency in Software Defined Networks" "IEEE International Conference on Advanced Networks and Telecommunications Systems (IEEE ANTS 2015)" Kolkata, India, December 15-18, 2015
17. Yashvardhan Sharma, Jigar Bhatt, Rachit Magon, "A Multi Criteria Review-Based Hotel Recommendation System", IEEE Proceedings of the International Workshop on Social Media Mining and Analysis (SMMA-2015) in conjunction with The 15<sup>th</sup> IEEE International Conference on Computer and Information Technology (CIT-2015), Liverpool, England, UK, 26-28 October 2015

**D. BOOKS PUBLISHED/EDITED /CHAPTER WRITTEN DURING THE YEAR: NIL.**

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

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

1. Rahul Banerjee: A Scalable Open-Learning Experiment at BITS Pilani: Projects Any-Learn and NetFirst: --- A Perspective from Ground Zero, **Keynote Lecture**, EZ India Summit featuring Google for Education, Jaipur, August 9, 2015.
2. Rahul Banerjee: Ubiquitous Computing in Higher Learning: IoT to IoPPT and Beyond, Invited Lecture, CII's ICT-East Summit on Internet of Things, Kolkata, August 7, 2015.
3. Rahul Banerjee: Ubiquitous Computing Technology Research for the Underserved - A Case Study of Research-driven Outreach Work being done at BITS Pilani, Inaugural Invited Lecture, National Conference on Raj Yog and IT, BK Campus, Mount Abu, Rajasthan, September 26-28, 2015.

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

1. Debin Gao, Assistant Professor from School of Information Systems, Singapore Management University, "A research talk on secrecy and privacy of keystroke dynamics in user authentication", February 12, 2015
2. Mani Madhukar, IBM Innovation Centre, Talk on "IBM BlueMix Cloud and Beyond", March 31<sup>st</sup>, 2015
3. Balaji Srinivas Holur, Sr. Vice President/SRI-Bangalore-Multimedia & Systems Division/Samsung Electronics, "BitFlip and Cache significance in case Embedded Systems, CPU behavior and RAM/ROM impact in case Embedded Systems, Embedded System Power and thermal behavior", July 27, 2015.
4. Aditya Mathur, Professor, Head of Information Systems Technology and Design, and Center Director iTrust, Singapore University of Technology and Design: "Talk on Cutting Edge Research Opportunities in Singapore", September 4, 2015.

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

1. Young Scientist Award

Dr. Lavika Goel from Department of CSIS, BITS Pilani received YOUNG SCIENTIST AWARD (in the category of Engineering / Artificial Intelligence) of the Research Awards - VIFRA 2015.

2. Best Paper in 8th Annual ACM Compute 2015 Conference

Sonal Kumari, Anil Maheshwari, Poonam Goyal and Navneet Goyal received Best Paper award in 8th Annual ACM Compute-2015 Conference on "Big Data and Analytics" for presenting the paper titled "Parallel Framework for Efficient K-means Clustering".

3. Special Mention Poster in 8th Annual ACM Compute 2015 Conference

Poonam Goyal, Jagat Sesh Challa and Sunder Balasubramaniam received the Special Mention Poster award in 8th ACM Computer-2015 Conference on "Big Data and Analytics" for the paper titled "A concurrent KNN Search Algorithm for R-Tree"

4. Avinash Gautam: Selected for a prestigious research exchange program, viz. Sakura Science Program administered by Japan Science and Technology Agency and hosted Robotics Laboratory, Hiroshima University, Japan, during 2nd Dec 2015 to 23rd Dec 2015. The program was fully funded by Japan Science and Technology Agency.

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

**Industry Immersion:**

1. Virendra Singh Shekhawat: "Blue Jeans Networks, Bangalore" from 22<sup>nd</sup> June to 24<sup>th</sup> July, 2015
2. Vishal Gupta : "Blue Jeans Networks, Bangalore" from 22<sup>nd</sup> June to 24<sup>th</sup> July, 2015

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

S.No.	Software/Equipment	No. of Licenses or Quantity
1.	8 Port 100 Mbps D Link Switch	03
2.	IBM SPSS Modeler Client -16.0 upgrade 25 users + new 40 users	02
3.	IBM SPSS Modeler Server 16.0 Single User	01
4.	TurtleBot 2 Docking System	01
5.	Apple Macbook Pro 13" Display	01
6.	MS Office for Mac 2011 Home & Student	01
7.	HP Switch E3500-24G-POE+YI (J9310A)	02
8.	42U Rack Frame/600x1000/steel/NRS	03
9.	Dell Latitude E5250 Laptop	01
10.	10078 e-Health Sensor Platform	01
11.	Dell Optiplex 3020 Minitower CTO, Intel Core i54590	56
12.	Dell Optiplex 9020 Minitower CTO, Intel Core i54590	40
13.	M iPad Tablet white	01
14.	UNO R3 Developmen Board	08
15.	PR000080-MQ8 Flammable Gas, Hydrogen detection sensor 203T Module	02
16.	PR000082-M135 Sensor Air Quality Sensor Hazardous Gas Detection Module 2030	02
17.	PR000075-MQ3 Alcohole Detector Sensor Module – 2032	02
18.	CG312 MQ2 Smoke Gas Sensor Module for Arduino	02
19.	2x Carbon Monoxide Sensor Module	01
20.	Brand New Soldering Lead wire Tin Lead	01
21.	Jumper Wire Male to Male	40
22.	Dell Optiplex 9020 Mini Tower Intel Core i5-4590 Processor	04

**K. DEPARTMENTAL ASSOCIATIONS ACTIVITIES****K.1 List of events organized by the Computer Science Association:**

Month	Name of the Event	Date	Venue
January	Alumni Research Talks 4.0	16 <sup>th</sup> -18 <sup>th</sup>	LTC
February	CodeNite	17 <sup>th</sup>	Online
	Istrike Workshop	26 <sup>th</sup>	LTC
	Qrious	28 <sup>th</sup>	Online
March	Anti-Coding	1 <sup>st</sup>	1101
	Hackathon Webinar	18 <sup>th</sup>	LTC
	T Shirt Signings	23 <sup>rd</sup>	Mess
	Coder	24 <sup>th</sup>	Online
	Hackathon	25 <sup>th</sup>	IPC



Month	Name of the Event	Date	Venue
	Istrike	27 <sup>th</sup>	3115
	Smash The Bug	27 <sup>th</sup>	1101,1102
	Mind-Sweeper	28 <sup>th</sup>	IPC 1102,1105
	CodeStorm	28 <sup>th</sup>	1101,1102,1138
April	APOGEE Review Meet	7 <sup>th</sup>	3160
	Farewell Grub	28 <sup>th</sup>	RPA VKB mess
	Farewell Memento Distribution	28 <sup>th</sup>	LTC QT
	Executive Committee Declaration	30 <sup>th</sup>	SAC
August	CSA Orientation	10 <sup>th</sup>	LTC 5102
	Recruitments- first years and second years	12 <sup>th</sup>	Sky Lawns
	Informal Interactions	12 <sup>th</sup>	SAC
September	Competitive Programming Special Interest Group(CPSIG)	13 <sup>th</sup>	LTC 5102
	Intra CSA Session	13 <sup>th</sup>	2207
	CPSIG	14 <sup>th</sup> and 15 <sup>th</sup>	LTC 5102
	Engineers' Day	15 <sup>th</sup>	LTC 5104
	Mindturner	16 <sup>th</sup>	LTC 5102
	CPSIG	22 <sup>nd</sup>	LTC 5102
	Intra-CSA idea discussion meet	23 <sup>rd</sup>	2207
	CPSIG	24 <sup>th</sup>	LTC 5102
	Project Meet	29 <sup>th</sup>	LTC 5102
November	ART meet	23 <sup>rd</sup>	SAC
	Farewell memento distribution	23 <sup>rd</sup>	5102
	Farewell Grub	23 <sup>rd</sup>	RPA and VKB messes
	ART mess signings	26 <sup>th</sup>	Bhawan messes

**B1.10.6 Department: Economics and Finance**

Number of faculty members (as on 31 December 2015)

<b>Professors</b>	<b>02</b>
<b>Associate Professor</b>	<b>01</b>
<b>Assistant Professor</b>	<b>04</b>
<b>Visiting Faculty and Lecturer</b>	<b>01</b>

**Head of the Department: Prof. A K Giri****Contact details:** akhiri@pilani.bits-pilani.ac.in**Number of PhD Scholars:** 08**A. PUBLICATIONS**

The faculty of the department published the following papers in international/national refereed journals during the year.

1. Madhu Sehrawat and A K Giri, "Financial development and economic growth: Empirical evidence from India", *Studies in Economics and Finance, Emerald Publication Limited*, Vol.32, No.3, pp.340-356.
2. Madhu Sehrawat and A K Giri, "Financial development and poverty reduction in India: an empirical investigation", *International Journal of Social Economics, Emerald Publication Limited*, Vol. 43, No.2, pp.106 -122.
3. Madhu Sehrawat and A K Giri, "The role of financial development in economic growth: Empirical evidence from Indian States", *International Journal of Emerging Market, Emerald Publication Limited*, Vol.10, No.4, pp. 765 – 780
4. Madhu Sehrawat, A K Giri and Geetilaxmi Mohapatra, "The impact of financial development, economic growth and energy consumption on environmental degradation: Evidence from India", *Management of Environmental Quality, Emerald Publication Limited*, Vol.26, No. 5, pp.666-682
5. Madhu Sehrawat and A K Giri, "Financial development, poverty and rural-urban income inequality: evidence from South Asian countries", *Quality & Quantity: Springer*, DOI: 10.1007/s11135-015-0164-6
6. Madhu Sherawat and A K Giri, "Re-examining the threshold effects in the inflation–growth nexus: evidence from India", *International Journal of Economics and Empirical Research*, Vol. 3, No.2, pp.57-67.
7. Pooja Joshi and A K Giri, "Dynamic Relations between macroeconomic variables and Indian Stock Price: An application of ARDL bounds testing approach", *Asian Economic and Financial Review*, Vol. 5, No. 10, pp.1119-1133.
8. Pooja Joshi and A K Giri, "Macroeconomic Variables and Stock market development in India: An application of ARDL bounds testing approach", *Empirical Economics Letters*, Vol. 14, No.7, pp.705 – 718
9. Pooja Joshi and A K Giri, "Fiscal Deficits and Stock Prices in India: Empirical Evidence. *International Journal of Financial Studies*", Vol. 3, No.3, 393-410
10. Pooja Joshi and A K Giri, "Macroeconomic determinants of Stock market development: Empirical evidence from India", *Business Perspectives*, Vol. 14, No,2, pp.36-50
11. Pooja Joshi and A K Giri, "Cointegration and Causality between Macroeconomic variables and Stock Prices: Empirical Analysis from Indian Economy", *Business and Economic Research, Macro Think Institute Publication*, 2015, Vol.5, No. 2, pp.327-345
12. Geetilaxmi Mohapatra and A K Giri, "Energy Consumption, Economic Growth and CO2 emissions: Empirical Evidences from India", *The Empirical Econometrics and Quantitative Economics*, Vol. 4, No. 1, pp.17-32.
13. Pooja Joshi and A K Giri, "Examining the Relationship between Sectoral Stock Market Indices and Sectoral Gross Domestic Product: An Empirical Evidence from India", *Global Journal of Management and Business Research*, Volume 15, No. 9, pp.15-26

14. A K Giri and Geetilaxmi Mohapatra, "Does Foreign Aid Accelerate Economic Growth? An Empirical Analysis for India", *Utkal Economic Papers*, Vol.17, pp. 43-59.
15. Varun Chotia and N V M Rao, "Examining the Inter-linkages between Regional Infrastructure Disparities, Economic Growth and Poverty: A Case of Indian States" *Economic Annals*, Volume LX, No. 205, pp. 53-71.
16. Varun Chotia and N V M Rao, "Investigating the Landscape of India's Balance of Payments: Cointegration and Causality Analysis", *International Journal of Statistics and Economics*, Volume 16, No. 3, pp.44 – 53.
17. Krishna M and Bino Paul, "On-the-job Search in India: Some Macro Findings, *Labour and Development* Vol 21, No 2, pp.143-157.
18. Dadhich, Gaurav, Varun Chotia and Omvir Chaudhry, "Impact of Foreign Institutional Investment on Stock Market Volatility In India", *Indian Journal of Finance*, DOI: 10.17010//2015/v9i10/79561.

## B. CONFERENCES

The faculty of the department published the following papers in international/national Conferences during the year.

1. A K Giri and Madhu Sehrawat, "Panel data analysis of financial development, economic growth and rural-urban income inequality: Evidence from SAARC Countries", paper presented at 2nd International conference on Economics and Finance, *Organized by Nepal Rastra Bank*, 26 - 28 February, 2015, Kathmandu, Nepal.
2. Madhu Sehrawat and A K Giri, " An empirical relationship between financial development indicators and human capital in some selected Asian countries", paper presented at 2nd International conference on Economics and Finance, *Organized by Nepal Rastra Bank*, 26 - 28 February, 2015, Kathmandu, Nepal.
3. Geetilaxmi Mohapatra and A K Giri, "The composition of public expenditure and economic growth in India: Evidence from Auto-Regressive Distributed Lag Approach", paper presented at 2nd International conference on Economics and Finance, *Organized by Nepal Rastra Bank*, 26 - 28 February, 2015, Kathmandu, Nepal.
4. Varun Chotia and N.V M Rao. (2015) "A GMM based approach to examine the relationship between expenditure in Social Infrastructure and Human Development". *Annual Conference, Papers in Public Economics and Policy* organized by *National Institute of Public Finance and Policy (NIPFP)*, Mar 12-13, New Delhi.
5. Varun Chotia and N.V M Rao (2015) "Examining the Relationship between Labour Laws and Economic Development of India". *International Conference on Law and Economics* jointly organized by *Gujarat Law University, Indian Institute of Management Ahmedabad (IIM Ahmedabad)*, Mar 14-15, Ahmedabad.
6. Rajan Pandey and Arya Kumar, "Modelling persistence in conditional volatility of asset returns", 11<sup>th</sup> International Conference on Business and Finance, *The conference was organized by ICFAI, Hyderabad*, during January 8– 9, 2015, Hyderabad.

**C. BOOKS PUBLISHED / WRITTEN DURING THE YEAR:** None

**D. BOOK CHAPTERS PUBLISHED / WRITTEN DURING THE YEAR:** None

**E. INVITED TALKS GIVEN BY BITS FACULTY:** None

**F. AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS:** None

## G. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES

Economics and Finance Association started the new semester in August with interaction with the new batch of first year Economics and students in first week. The orientation was given by Anirudh Agarwal, the Financial Head of Economics and Finance Association. New students were introduced to the world of economics and finance by giving them a presentation of main stream economics topics such as 2008 global financial crisis.

A series of presentations were conducted throughout the semester to give the first yearites an exposure of the current topics in the domain of economics and finance.

EFA also conducted a series of internship talks where senior students who had pursued internships in academic institutes of great repute such as IIM Ahmedabad, IIM Bangalore, and London School of Economics, interacted with the members of the association and talked about every aspect of their internship starting from all the places where they applied, their project work and experience gained during the period

In November EFA conducted the event 'Mock-Stock' which saw a participation of over 100+ students. The event was based on the concept of virtual stock market trading.

EFA successfully conducted four events during APOGEE 2015. SMS, BITSOPLOY, Bits Fantasy and Business Master.

Stock Market Simulation, popularly known as SMS was designed on the concept of live trading floor. The event recorded 300+ participation from different colleges of the country and was the kernel event of the technical festival. EFA also conducted a similar pre APOGEE event based on online virtual stock market trading with real time stock prices on the DSIJ website.

A new event named BITSOPLOY was conducted during APOGEE 2015. The event saw a participation of more than 250 students from different colleges. The event gave a BITSIAN flavor to the original game of monopoly and was widely appreciated by the participants.

EFA also introduced a new event in the APOGEE named Business Master. The event was conducted in collaboration with Bits Pilani Consulting Club. This was a business aptitude competition where participants were judged on the basis of their general knowledge of business and economics, ability to tackle real life business problems and make guess estimates.

Bits Fantasy was an online cricket fantasy league in collaboration with EspnCricinfo, where participants had to create their dream team for World Cup matches, and earn points when their team players performed well.

A farewell program was organised for the economics and finance students of batch 2011 at the end of the semester.

So, overall it has been a wonderful and interesting learning experience for all the members of EFA throughout the year.

### **B1.10.7 Department: Electrical, Electronics & Instrumentation**

#### **Department: Electrical, & Electronics Engineering**

Number of faculty members (as on 31 December 2015)

<b>Senior Professors, Professors</b>	<b>05</b>
<b>Associate Professors</b>	<b>04</b>
<b>Assistant Professors</b>	<b>12</b>
<b>Lecturers</b>	<b>16</b>

**Head of the Department: Dr. Anu Gupta**

**Contact details: [anug@pilani.bits-pilani.ac.in](mailto:anug@pilani.bits-pilani.ac.in)**

**Number of PhD Scholars: full time 14, Part time 3**

#### **A. Sponsored Research/ development activities:**

- New lab equipments were procured through DST-FIST grant for research , development and teaching in laboratories

#### **B. Publications:**

(i) The faculty of the department published 33 papers in international/national refereed journals during the year.

1. Prachi Sharma and Navneet Gupta, "Investigation on material selection for gate dielectric in nanocrystalline silicon (nc-Si) thin-film transistors (TFTs) using Ashby's, VIKOR and TOPSIS" *Journal of Material Science: Materials in Electronics*, Springer-Verlag Berlin, vol. 26, 9607-9613, 2015. (SCI and Scopus indexed). [Impact factor: 1.596].
2. Prachi Sharma and Navneet Gupta, "Model for threshold voltage instability in top-gated nanocrystalline silicon thin film transistor" *Journal of Computational Electronics*, DOI: 10.1007/s10825-015-0789-7. [SCI Indexed, Impact factor-1.520]
3. Jitendra Kumar, Biswajeet Mukherjee and Navneet Gupta, "A Novel Tetraskelion Dielectric Resonator Antenna for wideband applications" *Microwave and Optical Technology Letters*, Wiley-Blackwell, vol 57, 2781-2786, 2015. (SCI and SCOPUS indexed). [Impact factor: 0.568].
4. Jitendra Kumar and Navneet Gupta, "Bandwidth and Gain Enhancement Technique for Gammadion Cross Dielectric Resonator Antenna" *Wireless Personal Communications: Springer-Verlag Berlin*, vol. 85, 2309-2317, 2015 (SCI and SCOPUS indexed). [Impact factor: 0.653].

5. Jitendra Kumar and Navneet Gupta, "Linearly Polarized Asymmetric Dielectric Resonator Antennas for 5.2 GHz WLAN Applications" *Journal of Electromagnetic Waves and Applications* Taylor & Francis, UK, 1228-1237, vol. 29, 1228-1237, 2015. (SCI and Scopus indexed). [Impact factor: 1.40].
6. Jitendra Kumar and Navneet Gupta, "A Comparative Study of Different Feeding Mechanisms for Dielectric Resonator Antennas" *The IUP J. of Telecommunications* IUP Publications, India, vol. VII, pp. 39-47, 2015.
7. Navneet Gupta and Abhinav Mishra, "Material Selection Methodology for Minimizing Direct Tunneling in Nanowire Transistors" *J. Electron Dev.*, Perpignan University, France, 1811-1815, vol. 21, 2015.
8. Ashish K Sharma and Navneet Gupta, "An Improved Design of MEMS Switch for Radio Frequency Applications" *Int. J. of Applied Electromagnetics and Mechanics* IOS Press, Japan, vol. 47, pp. 11-19, 2015. DOI: 10.3233/JAE-130085. (SCI and Scopus indexed). [Impact factor: 0.737].
9. Jitendra Kumar and Navneet Gupta, "Investigation on Microwave Dielectric Materials for Dielectric Resonator Antennas" *Int. J. of Applied Electromagnetics and Mechanics* IOS Press, Japan, vol. 47, pp. 263-272, 2015. DOI: 10.3233/JAE-140051. (SCI and Scopus indexed). [Impact factor: 0.737]
10. Joshi, Jagdish Chandra, Gupta KK, "Improved Face Recognition Rate based on PCA and LDA using Image Processing Techniques", *Journal of Instrumentation Technology and Innovations*, vol 5(2), pp.19-24, 2015. (ISSN: 2347 -7261, eISSN: 2249 – 4731).
11. Joshi, Jagdish Chandra, Gupta KK, "A Literature Review on Face Recognition Technology", was presented during MICOM-2015 and now shortly being published in "The IUP Journal of Telecommunications". (Under Publication as intimated by publishers through e-mail)
12. A. Mishra, R. Jimit, A. R. Asati, K.S. Raju, " Mapping and Partitioning of Task Graphs Using Kernighan-Lin/Fiduccia-Mattheyses Algorithm", *International Journal of Emerging Technologies in Computational and Applied Sciences (IJETCAS)*, Issue 11, Vol. 1, pp. 58-61, Feb., 2015.
13. Ashish Mishra, Vivek Vanga, Vani V, Abhijit Rameshwar Asati and Kota Solomon Raju, "Resource Estimation of Programs for Reconfigurable Computing Systems" *International Journal of Applied Engineering Research (IAER)*, Volume 10, Number 12, pp. 30699-30712, 2015.
14. Priya Gupta, Anu Gupta and Abhijit Asati "Power-Aware Design of Logarithmic Prefix Adders in Subthreshold Regime: A Comparative Analysis" *Elsevier journal of Procedia Computer Science*, Vol. 46, pp. 1401 – 1408, 2015.
15. Priya Gupta, Anu Gupta and Abhijit Asati, "Leakage Immune Modified Pass Transistor based 8T-SRAM Cell in Sub-threshold Region," *International Journal of Reconfigurable Computing Hindavi publishing corporation* Volume 2015. (<http://dx.doi.org/10.1155/2015/749816>)
16. Priya Gupta, Anu Gupta and Abhijit Asati, "Ultra Low Power MUX Based Compressors for Wallace and Dadda Multipliers in Sub-Threshold Regime" *American Journal of Engineering and Applied Sciences*, Nov. 2015, pp:702-716, DOI: 10.3844/ajeassp.2015.702.716
17. S. L. Murotiya and A. Gupta, "Hardware-efficient low-power 2-bit ternary ALU design in CNTFET technology," *International Journal of Electronics*, Taylor & Francis, Sep. 2015. DOI:10.1080/00207217.2015.1082199 (SCI Indexed)
18. A. Panday and H.O. Bansal, Hybrid Electric Vehicle Performance Analysis Under Various Temperature Conditions, year 2015, *Energy Procedia*, Vol. 75, 1962-1967.
19. M. Angira, G. Sundaram, and K. J. Rangra, "A Novel Approach for Low Insertion Loss, Multi-band, Capacitive Shunt RF-MEMS Switch," *Wireless Personal Communications*, vol. 83, pp. 2289-2301, 2015.
20. M. Angira, G.M. Sundaram, K. Rangra, "Performance improvement of a Reconfigurable Series-Shunt Switch via asymmetric structure based RF-MEMS capacitive switch", *International Journal of Advances in Engineering Sciences and Applied Mathematics*, Springer, vol.7, pp. 198-203, 2015.
21. M. Angira and K. Rangra, "A novel design for low insertion loss, multi-band RF-MEMSSwitch with low pull-in voltage," *JESTECH, Elsevier*, DOI:10.1016/j.jestch. 2015.07.001 2015.
22. Nitin Chaturvedi, S Gurunaryanan "An Efficient block pinning for multi-core architectures", *Journal of Microprocessor and Microsystems*, Elsevier, ISSN 0141- 9331, 39(3), pp.181-188, 2015.
23. Nitin Chaturvedi, Arun Subramanian, S Gururnarayanan, "An Efficient data access policy for shared last Level Cache", *WSEAS transaction on computers*, ISSN 2224-2872, 14(5), pp.38-48, 2015.
24. Nitin Chaturvedi, Arun Subramanian, S Gururnarayanan, "Selective cache line replication scheme in Shared Last Level Cache", *Procedia of Computer Science*, Elsevier, ISSN 1877-0509, pp.1095-1107, 2015.

25. Nitin Chaturvedi, Aun S, S Gurunaryanan "An Adaptive Migration-Replication Scheme (AMR) for Shared Cache in Chip Multiprocessors", *The Journal of Supercomputing*, Springer , Volume 71, Issue 10 , Page 3904-393, 2015.
26. A Ananda Kumar , Dheerendra Singh, "An IFOC-DSVPWM Based DC-Link Voltage Compensation of Z-Source Inverter Fed Induction Motor Drive for EVs," *Hindawi Adv. Power Electron.*, vol. 2015, pp. 1-14, 2015.
27. A Ananda Kumar , Dheerendra Singh, "Digital Implementation of DSVPWM Control for EV fed through Impedance Source Inverter," *Int. J. Power Electron. Drive Syst.*, vol. 6, no. 3, 2015.
28. A Ananda Kumar , Dheerendra Singh, "Implementation of New Algorithm for EV fed through an Impedance Source Inverter," *Int. J. Appl. Eng. Res. (IJAER)*, vol. 10, no. 10, pp. 26321-26338, 2015.
29. S. Mohanty, K. K. Gupta, Kota Solomon Raju, "Vibration Feature Extraction and Analysis of Industrial Ball Mill using MEMS Accelerometer Sensor and Synchronized Data Analysis", *Procedia Computer Science Journal*, vol. 58, pp. 217-224, 2015.
30. Y.K. Bhatshvar, H.D. Mathur, "Two Stage Optimized Fuzzy Controlled Multi-Area System for AGC in Smart Grid Age", *Procedia Technology*, Volume 21, Pages 381-385, 2015.
31. Arvind Biswal, H.D. Mathur, "Optimized PMU Stationing for Wide Area Monitoring of Power Grid", *Procedia Technology*, Volume 21, Pages 2-7, 2015.
32. Yogesh Krishan Bhatshvar, Hitesh Datt Mathur, Houria Siguerdidjane & Surekha Bhanot, "Frequency Stabilization for Multi-area Thermal-Hydro Power System Using Genetic Algorithm-optimized Fuzzy Logic Controller in Deregulated Environment, *Electric Power Components and Systems*", 43:2, pp. 146-156, 2015
33. Y.K. Bhatshvar, H.D. Mathur and Houria Siguerdidjane, "Study of Impact of Wind Power Generating System Integration on Frequency Stabilization in Multi-area Power System with Fuzzy Logic Controller in Deregulated Environment" Vol. 9, Issue 1, *Frontiers in Energy (Springer)*, pp. 7-21, 2015.
34. G.M. Sundaram, Mahesh Angira, Navneet Gupta and Kamaljit Rangra, "Material Selection for CMOS Compatible High Q and High Frequency MEMS Disk Resonator using Ashby Approach," *International Journal of Nanoelectronics and Materials*. [accepted]

### C. Conferences:

The faculty of the department published 55 papers in international/national Conferences during the year.

#### (i) Conferences attended/papers presented outside India:

1. Jitendra Kumar and Navneet Gupta, "Investigation on Rudimentary Geometries of Dielectric Resonator Antenna" *36<sup>th</sup> Progress In Electromagnetics Research Symposium (PIERS-2015)*, Prague, Czech Republic, July 6-9, 2015.
2. Ashish K Sharma and Navneet Gupta, "Pattern Reconfigurable Antenna Using Non-uniform Serpentine Flexure Based RF-MEMS Switches" *36<sup>th</sup> Progress In Electromagnetics Research Symposium (PIERS-2015)*, Prague, Czech Republic, July 6-9, 2015.
3. Vineet Kumar, Abhijit Asati, Anu Gupta, "An Iris Localization Method for Noisy Infrared Iris Images" *IEEE International Conference on Signal and Image Processing Applications (ICSIPA) Kuala Lumpur, Malaysia*, 18-21 October, 2015.
4. Anish Dhiman, Rahul Singhal, "Design and Simulation of All-Polymeric Reconfigurable Optical Node" *15th International Conference on Numerical Simulation of Optoelectronic Devices (NUSOD 2015)*, 7-11 September 2015, Taipei, Taiwan.
5. Abhsihek Joshi, Pranathi Pothireddy, and Rahul Singhal, "Probe-Feed Effect in Polygonal Patch Antennas", *2015 IEEE 4th Asia-Pacific Conference on Antennas and Propagation (APCAP 2015)*, Bali Island, Indonesia, June 30 - July 3, 2015.
6. Parikshit Singh, Surekha Bhanot, H K Mohanta, "Self-Tuned Fuzzy Logic Control of a pH Neutralization Process", *21<sup>st</sup> International Conference on Automation & Computing*, University of Strathclyde, Glasgow, UK, 11-12 September 2015
7. S. Mohanty, K. K. Gupta, and Kota Solomon Raju, "Vibro-Acoustic Fault Analysis of Bearing using FFT, EMD, EEMD, and CEEDMAN and Their Implications", *International Conference on Machine Learning and Signal Processing (MALSIP 2015)*, SPRINGER LN Series, Melaka, Malaysia, Dec 2015.

#### (ii) Conferences attended/papers presented in India:

1. Prachi Sharma, Navneet Gupta, "Investigation of channel material quality effect on the top-gated nanocrystalline silicon thin film transistor (nc-Si TFT) performance using ATLAS SILVACO" *18th*

- International Workshop on the Physics of Semiconductor Devices (IWPSD-2015), IISC Bangalore, December 7-10, 2015.
2. Prachi Sharma and Navneet Gupta, "Deposition of Nanocrystalline Silicon Thin Film by E-beam Evaporation for Display Applications" National Conf. on Adv. in Microelectronics, Instrumentation and Communication (MICOM-2015), BITS-Pilani, Rajasthan, Nov 20-21, 2015. (Best paper award)
  3. Jitendra Kumar and Navneet Gupta, "An Eco-Design of Dielectric Resonator Antenna for Wideband Applications" National Conf. on Adv. in Microelectronics, Instrumentation and Communication (MICOM-2015), BITS-Pilani, Rajasthan, Nov 20-21, 2015.
  4. Kavindra Kandpal and Navneet Gupta, "ZnO-Thin-Film Transistors: Advances, Challenges and Future Trends" National Conf. on Adv. in Microelectronics, Instrumentation and Communication (MICOM-2015), BITS-Pilani, Rajasthan, Nov 20-21, 2015.
  5. Vaibhav Garg and Navneet Gupta, "Study on the Selection of Gate Dielectrics for ZnO based Thin-Film Transistors (TFTs)" National Conf. on Adv. in Microelectronics, Instrumentation and Communication (MICOM-2015), BITS-Pilani, Rajasthan, Nov 20-21, 2015.
  6. Vineet Kumar, Abhijit Asati, and Anu Gupta, "Iris Localization Based on Integro-Differential Operator for Unconstrained Infrared Iris Images," International Conference on Signal Processing, Computing and Control (ISPCC), JUIT-Waknaghat, Himachal Pradesh, India, Sept. 24-26, 2015.
  7. Shrikant Bhutada, Abhijit Asati and Anuj Dubey "Design of Ultra Low power Flip Flops in Sub-Threshold Region for Bio-medical Applications in 45nm, 32nm and 22nm Technologies" The 2015 IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT 2015), Coimbatore ,India, 5-7, March, 2015.
  8. V S Rakesh Krishna, Nitin Singla, Lovena Balani, Rahul Singhal, "Bidirectional 64-QAM OFDM-Over-Fiber Transmission on Single Carrier PON", IEEE INDICON 2015, 17-20 December 2015, Jamia Millia Islamia, New Delhi, India.
  9. Abhishek Joshi, Rahul Singhal, "Gain Improvement in Polygonal Patch Antennas", IEEE INDICON 2015, 17-20 December 2015, Jamia Millia Islamia, New Delhi, India.
  10. Abhishek Joshi, Rahul Singhal, "Edge Perturbation Effect in Polygonal Patch Antennas", 2015 International Conference on Signal Processing, Computing and Control (2015 ISPCC), 24 - 26 September 2015, JUIT, Waknaghat, Solan, Himachal Pradesh, India.
  11. Karan Raj Singh, Anu Gupta, "A Hardware optimized Low power RNM Compensated three stage Operational amplifier with Embedded Capacitance Multiplier Compensation" 2nd IEEE International Conference on VLSI Systems, Architecture, Technologies and Applications (VLSI SATA 2016), Amrita School of Engineering, Bengaluru, India, 10 - 12 January 2016 (Accepted), Paper will be archived in the IEEE Xplore,.
  12. Priya Gupta, Divya Samnani, Anu Gupta, Abhijit Asati, "Design and ASIC Implementation of Column Compression Wallace/Dadda Multiplier in Sub-Threshold Regime," Proceedings of the 9th INDIACom;INDIACom - 2015, 2nd International Conference on "Computing for Sustainable Global Development", New Delhi, India, 11– 13 March, 2015.
  13. Priya Gupta, Ishan Munje, Nikhil Kaswan, Anu Gupta and Abhijit Asati, "Effectiveness of body bias & hybrid logic: An energy efficient approach to design adders in sub-threshold regime" International Journal. of Circuits and Architecture, Design -Inderscience Publishers, 2015), (accepted with minor revision )
  14. Deepansh Dubey, Anu Gupta: A Low Power Low Noise Bio-Amplifier with Tunable Gain, IEEE International Conference on Electrical, Computer and Communication Technologies (EESCO 2015), VIIT, Vishakhapatnam, 24th-25th January 2015.
  15. D. Dubey, Anu Gupta, "A Low Power Low Noise Amplifier for Biomedical Applications", Electrical, Computer and Communication Technologies (ICECCT), 2015 IEEE International Conference on , 5-7 March 2015, SVS College of Engineering, Coimbatore, pp:1-6, DOI:10.1109/ICECCT.2015.7226134 , Paper is archived in the IEEE Xplore, (IMPACT FACTOR-4.935)
  16. D. Dubey, Anu Gupta, "Improvement of Operational Amplifier in Subthreshold Region using Forward Body Bias", IEEE India Conference (INDICON), Jamia Millia Islamia, New Delhi, India from 17-20 December 2015 (Accepted), Paper will be archived in the IEEE Xplore,.
  17. Priya Gupta, Anu Gupta and Abhijit Asati, "Ultra Low Power MUX Based Compressors for Wallace and Dadda Multipliers in Sub-Threshold Regime" American Journal of Engineering and Applied Sciences, Nov. 2015, pp:702-716, DOI: 10.3844/ajeassp.2015.702.716
  18. A.V. Praveen Kumar, "Higher Order Mode of a Microstripline fed Cylindrical Dielectric Resonator Antenna", 2<sup>nd</sup> International Conference on Communication Systems (ICCS15), Oct. 18-20, 2015, BKBIET, Pilani, Rajasthan (oral presentation)

19. A.V. Praveen Kumar, "Parasitic Metal Loading to Purify the Higher-Order mode of a Cylindrical Dielectric Resonator Antenna", National Conference on Advances in Microelectronics, Instrumentation and Communication (MICOM15) , Nov. 20-21, 2015, BITS Pilani, Rajasthan (oral presentation) (Best paper award)
20. A.V. Praveen Kumar, "Differentially fed Half-Cylindrical Dielectric Resonator Antenna for Dual-mode Applications", National Conference on Advances in Microelectronics, Instrumentation and Communication (MICOM15) , Nov. 20-21, 2015, BITS Pilani, Rajasthan (oral presentation)
21. Puneet Kr.Chaudhary, Pradyumn Chaturvedi and Girish Parmar, " Modeling of Bidirectional Inverter Energy Storage System from Non-Renewable Energy Using MATLAB/SIMULINK ", International Conference on 'Advances in Power Generation from Renewable Energy Sources' (APGRES 2015), Rajasthan Technical University, Kota, 15-16 June 2015.
22. Puneet Kr. Chaudhary, Pradyumn Chaturvedi and Girish Parmar, " Implementation of High Efficiency DC-DC Boost Converter for PV Cell Applications ", International Conference on 'Advances in Power Generation from Renewable Energy Sources' (APGRES 2015), Rajasthan Technical University, Kota, 15-16 June 2015.
23. A Panday and H O Bansal, " Development of an intelligent power split control strategy in HEVs" National Conference on Advances in Microelectronics, Instrumentation and Communications (MICOM), BITS, Pilani-20-21 Nov 2015.
24. S Khandelwal, A Panday and H O Bansal, "Battery Selection to Improve Performance of Plug-in Hybrid Electric Vehicles", International Conference on Advanced Research Applications in Engineering and Technology, June 29-30 2015, RCET, Bhilai.
25. A Panday and H O Bansal, " Optimal Fuel Control Of Series-Parallel Input Split Hybrid Electric Vehicle using Genetic Algorithm Based Control Strategy", IEEE International Conference on Energy Economics and Environment, 27-28 March 2015, Greater Noida, India.
26. P Pani, Abhishek, R. Athreya, A. Panday, H. P. Agrawal and H O Bansal, "Integration of the Vehicle-to-Grid Technology", IEEE International Conference on Energy Economics and Environment, 27-28 March 2015, Greater Noida, India.
27. Ishan Tyagi, Vinita Tiwari, V.K. Chaubey "Performance Analysis of Different Pulse Shapes for Optical Transmission", IEEE International Conference on Control, Communication and Computing (ICCC), 19-21 November, 2015, Thiruvananthapuram, Kerala, India.
28. V S Rakesh Krishna, Vinita Tiwari, V.K. Chaubey "Investigation of Optimum Fiber types For High speed RZ-DQPSK transmission systems", Workshop on Recent Advances in Photonics (WRAP-2015), 16-17 December, 2015, IISc Bangalore, India.
29. Garvit Goyal, Dheerendra Singh "MPPT using Fuzzy Logic Control under Partial Shading Conditions for Photovoltaic Systems" National Seminar on best practices for power Generation, Transmission, and Distribution, Jindal Institute of Power & Technology, Tamnar, 6-7 Jan. 2016
30. Mehak, B Sai Teja, Dheerendra Singh "Feasible study of efficient hybrid renewable energy systems for rural areas of Rajasthan", National Seminar on best practices for power Generation, Transmission, and Distribution, Jindal Institute of Power & Technology, Tamnar, 6-7 Jan. 2016
31. Shivam Kandelwal, Parakh Sarda, Dheerendra Singh "Design Of A Wireless Battery Charging System Using Ambient Radio Frequency Energy Harvesting", National Seminar on best practices for power Generation, Transmission, and Distribution, Jindal Institute of Power & Technology, Tamnar, 6-7 Jan. 2016.
32. Shivam Kandelwal, Parakh Sarda, Dheerendra Singh, "Constant Current Controlled Feedback Based Lithium - Ion Battery Charger" National Seminar on best practices for power Generation, Transmission, and Distribution, Jindal Institute of Power & Technology, Tamnar, 6-7 Jan. 2016.
33. S. Mohanty, K. K. Gupta, Kota Solomon Raju, V. Mishra, Vipin Kumar, P. Bhanu Prasad "Vibration Characteristic of Variable Density Ore using SFE Technique", National Conference on Advances in Microelectronics, Instrumentation and Communication (MICOM 2015), BITS, Pilani, Nov 2015.
34. J. C. Joshi and K. K. Gupta, "A Literature Review on Face Recognition Techniques," National Conference on Advances in Microelectronics, Instrumentation and Communication (MICOM 2015), BITS, Pilani, Nov 2015.
35. Ankita Singh and K. K. Gupta, "A Contrast Enhancement Techniques for Low Light Images", AIP Conference Proceeding, 2nd International Conference on Communication Systems (ICCS 2015), BKBIT, Pilani, Oct 2015



36. Togis Thomas and K. K. Gupta, "NB-PLC Channel Modelling with Cyclostationary Noise Addition & OFDM Implementation for Smart Grid," AIP Conference Proceeding, 2nd International Conference on Communication Systems (ICCS 2015), BKBIT, Pilani, Oct 2015.
37. Antapurkar Shwetal Kirtikumar, Avinash Pandey and K. K. Gupta, " GFDM Performance in terms of BER, PAPR and OOB and comparison to OFDM system," AIP Conference Proceeding, 2nd International Conference on Communication Systems (ICCS 2015), BKBIT, Pilani, Oct 2015.
38. S. Mohanty, K. K. Gupta, Kota Solomon Raju, " Vibration Feature Extraction and Analysis of Industrial Ball Mill using MEMS Accelerometer Sensor and Synchronized Data Analysis," 2nd International Symposium on Computer Vision and the Internet (Visionnet-2015), Kochi 2015.
39. S. Mohanty, K. K. Gupta, and Kota Solomon Raju, "Multi-Channel Vibro-acoustic Fault Analysis of Ball Bearing using Wavelet based multi-scale PCA," Proceedings of 21th National Conference on Communications (NCC 2015), IIT, Mumbai, 2015.
40. S. Mohanty, K. K. Gupta, and Kota Solomon Raju, "Multi-Channel Vibration Feature Extraction of Ball Mill Using Synchronized Wavelet Based Multi-Scale Principal Component Analysis," 9th International Conference on Circuits, Systems, Signal and Telecommunications (CSST '15), United Arab Emirates, Dubai, 2015
41. S. Mohanty, K. K. Gupta, and Kota Solomon Raju, "Effective Sample Length Selection to Avoid Dead Zone Effect in Ball Mill Vibration Signal Analysis and Applications," 2nd IEEE International Conference on Signal Processing and Integrated Networks (SPIN-2015), AMITY University, Noida 2015.
42. Jyotirmoy Bhardwaj, Rajiv Gupta, K. K. Gupta, "A Review of Emerging Trends on Water Quality Measurement Sensors," IEE2015.E International Conference on Technologies for Sustainable Development (ICTSD -2015), DBIT, Mumbai.
43. H.D. Mathur, H. Siguerdidjane and Y.K. Bhatshvar, "Power Frequency Balance in Multi-Generation Smart Grid System with V2G option" In the proceedings of 12th IEEE India International Conference (INDICON) 2015, 17-20 December, Delhi, India.
44. Y.K. Bhatshvar and H.D. Mathur, " Four Step Based ACO Optimized Fuzzy Logic Controller for Inter-area Oscillation Control in an Interconnected Power System", In the Proceedings of National Conference on Advances in Microelectronics, Instrumentation and Communication, 20-21 November, Pilani, India, 2015.
45. Arvind Biswal and H.D. Mathur, "Optimal Stationing of PMUs for Wide Area Monitoring In Smart Grid Scenario" In the proceedings of International Conference on Advanced Research Applications in Engineering and Technology, 29-30 June, Bhilai, India, 2015 .
46. Arvind Biswal and H.D. Mathur, "Identification of Optimal Locations of PMUs for WAMPAC in Smart Grid Environment", In the proceedings of IEEE International Conference on Technological Advancements in Power and Energy, 24-26 June, Kollam, India, 2015
47. G.M. Sundaram, M. Angira, Navneet Gupta and K. Rangra, " A MEMS Disk Resonator-based Band pass Filter Electrical Equivalent Circuit Simulation," *International Conference on Emerging Technologies: Micro to Nano-2015 (ETMN 2015)*, Jaipur, India 24-25 October 2015.
48. Lucky Sharan, Rupanshi, V K Chaubey , "Simulink Models for Performance Analysis of High Speed DQPSK Modulated Optical Link", 2<sup>nd</sup> International Conference on Communication Systems (ICCS15), Proceedings of American Institute of Physics (AIP), Oct. 18-20, 2015, BKBIET, Pilani, Rajasthan (oral presentation)

#### **D. Books Published/Edited /Chapter written/ reviewed articles during the year:**

1. Priya Gupta, Anu Gupta and Abhijit Asati, contributed a chapter in a book titled "Detailed analysis of ultra low power column compression Wallace and Dadda multiplier in sub-threshold regime" Handbook of Research on Advanced Hybrid Intelligent Techniques and Applications," IGI global Publisher, 2015, pp:0-654
2. Dr. Abhijit Asati was Technical Committee member and reviewed research articles for the National Conference on Advanced in Microelectronics, Instrumentation and Communications (MICON-2015), at Birla Institute of Technology and Science Pilani, India, 20-21, November 2015.
3. Dr. Abhijit Asati reviewed research articles for IEEE International Conference on Signal and Image Processing Applications (ICSIPA) Kuala Lumpur, Malaysia, 18-21 October, 2015.
4. Dr. Abhijit Asati Program Committee member and reviewed research articles for the Nineteenth International Symposium on VLSI Design and Test (VDAT-2015) at Institute of technology Nirma university, Ahmedabad, India, June 26-19, 2015.
5. Dr. Abhijit Asati reviewed a book by Sedra, Kenneth, Smith, "Microelectronic Circuits", Adapted by Dr. Chandorkar , Oxford University Press, Seventh Edition. 2015.

6. Dr Pradyumn Chaturvedi reviewed the research articles for Refereed International Journals such as Electric Power Component and System, IET Power Electronics, International Journal of Electronics, International Journal of Power Electronics. He also reviewed the paper for IEEE International Conference on Industrial Technology (ICIT), to be held at Taipei, Taiwan in March 2016 and *IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems 2015 held at NIT Calicut*.
7. Dr Pradyumn Chaturvedi Member acted as Member, Technical Program Committee, International Conference on Recent Developments in Control, Automation and Power Engineering, 12-13 March, 2015, Amity School of Engineering & Technology, Amity University, Uttar Pradesh, Sector-125, Noida, U.P., India.
8. Mr. Mahesh Angira reviewed two research articles for Microsystem Technologies and one research article for Wireless Personal Communications.
9. Mr. Mahesh Angira reviewed one research article for International Conference on Signal Processing, Computing and Control, Jaypee University of Information Technology, Waknaghat, India, 24-26 Sept., 2015.
10. Dr. Dheerendra Singh was in Technical Committee member and reviewed research articles for 2<sup>nd</sup> IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE–2016) , 23-25 December 2016". The conference is organized by Poornima College of Engineering and Poornima University, Jaipur, Rajasthan, India
11. Prof Surekha Bhanot reviewed paper titled "Analysis of Voltage and Current Mode Signaling Interconnects using FDTD Technique" for IETE Journal of Research.
12. Prof Surekha Bhanot reviewed paper titled Modern Controller design for an Unstable Bioreactor Process Journal of Institution of Engineers Series B
13. K. K. Gupta reviewed research articles for Elsevier Journal on Measurement (3), Elsevier Journal on Computers and Electrical Engineering (4), IET Journal on Circuits, Devices and Systems (2), Inderscience Journal - IJISTA (1), STM Journal - JoITI (1).

#### **E. Conferences, seminars & workshops conducted**

- Dr. Navneet Gupta and Dr. Hari Om Bansal was Convener and Organizing Secretary of *National Conf. on Adv. in Microelectronics, Instrumentation and Communication (MICOM-2015)* organized by EEE Department, BITS-Pilani, Rajasthan during Nov 20-21, 2015.

#### **F. Invited Talks / chairing session by EEE faculty:**

1. Dr. Navneet Gupta gave an invited talk on "Electromagnetic Waves and its Technological Applications in Real Life" during a workshop on *Transformation in Science and Technology: A paradigm shift in all spheres of education* organised by CEERI Pilani during September 1-3, 2015.
2. Dr. Abhijit Asati delivered a talk on VLSI Design, overview, at MIET, Gondia, Maharashtra.
3. Dr. Abhijit Asati delivered a talk on VLSI trends at Adani power Ltd. Tirora, Maharashtra.
4. Chintanpalli, A. (Jan 2015). Factors Affecting the Cues for Concurrent Vowel Identification: Vowel Level, Age and Hearing Loss, DA-IICT, Gandhinagar, India.
5. Chintanpalli, A. (July 2015). Effects of Age and Hearing Loss on Concurrent Vowel Identification, IIIT Hyderabad, India.
6. Dr. Pradyumn Chaturvedi delivered Invited Talk in National Seminar on "Smart Grid Technology" at IES College of Engineering, Bhopal on 20 Aug 2015.
7. Dr. Pradyumn Chaturvedi delivered Expert Talk in National Workshop on "Some Practical Issues in AC-DC-AC Drive System" at Madhav Institute of Technology and Science, Gwalior on 24 Mar 2015.
8. Dr. Pradyumn Chaturvedi delivered Invited Talk in National Seminar on "Power Electronics for Renewable Energy" at Modern Institute of Technology and Research Centre, Alwar on 18 Mar 2015.
9. Dr. Pradyumn Chaturvedi delivered Key Note Speech in National Conference on "Smart Grid: Components, Implementation, Control and Key Challenges " at Atmiya Institute of Technology & Science, Rajkot on 13 Mar 2015.
10. Dheerendra Singh delivered invited talk on "Feasible study of efficient hybrid renewable energy systems for rural areas of Rajasthan", National Seminar on best practices for power Generation, Transmission, and Distribution, Jindal Institute of Power & Technology, Tamnar, 6-7 Jan. 2016.

**G. Invited talks / Visits / attended workshops of distinguished Guests arranged in the department:**

1. Prof A K Sinha, Prof IIT, KHARAGPUR visited EEE department on 23 Feb 2015. He delivered a lecture on Smart Grid: A Global Scenario.
2. Dr. Sanjeet Dwivedi, Senior Control Engineer, Danfoss Power Electronics A/S, Gråsten, Denmark visited EEE department on 23 Dec 2015 and interacted with faculty members.
3. Ms Prachi Sharma (research scholar) Attended the workshop on "Bringing the Nanoworld Together Seminar 2014" held at IIT Delhi, during Nov. 27-28, 2014.
4. Ms Prachi Sharma (research scholar) attended Ten days hands on training in "Fabrication and Electrical Characterization of MOS Capacitor" at IISC, Bangalore, India in July, 2015
5. Dr. Ananth Krishna Chintanpalli attended the "Winter School on Speech and Audio Processing (WiSSAP), Gandhinagar, (4 – 7) January 2015. He also chaired one of the sessions.
6. Dr. Pradyumn Chaturvedi arranged and coordinated the Visit of Dr. Sanjeet Dwivedi, Sr. Control Design Engineer, Danfoss Power Electronics A/S, Denmark on 23 Dec 2015. This visit will help the department to collaborate with the Power Electronics Giant in the world.

**H. Awards and recognitions won by faculty and students**

1. Dr. Navneet Gupta was awarded Distinguish Teaching Award: Engineering by MTC Global Award for Excellence, Bangalore for remarkable contribution in Teaching and Research.
2. Dr. Navneet Gupta was appointed as Reviewer for Third Int. Conf. on Technological Advances in Electrical, Electronics and Computer Engineering (TAECS 2015), Lebanese University, Beirut, Lebanon held during April 29-May1, 2015
3. Dr. K. K. Gupta was appointed as Technical Committee (TC) Member of International Conference on Signal Processing and Integrated Networks (SPIN- 2015) at AMITY, Noida; International Conference on Control Automation and Applied Mechanics ICCAAM-2015, Sousse, Tunisia; Technical Program Committee (TPC) Member of International Conference on Computer Applications & Aided Diagnosis ICCAAD-2015, Sousse, Tunisia ; Technical Program Committee (TPC) Member of WiCOM-2015, the 11th International Conference on Wireless Communication, Networking and Mobile Computing, China.
4. Dr. K. K. Gupta was appointed as Reviewer for International Conference on Signal Processing and Integrated Networks (SPIN- 2015) at AMITY, Noida; Technical Program Committee (TPC) Member of WiCOM-2015, the 11th International Conference on Wireless Communication, Networking and Mobile Computing, China.
5. Ms Prachi Sharma (research scholar) was Awarded CSIR- Senior research fellowship in 2015.
6. Dr. Praveen Kumar AV was appointed as reviewer for the journal Advances in Electrical and Electronic Engineering, VSB-Technical University of Ostrava, Department of Telecommunications, Czech Republic on 20/10/2015
7. Dr Pradyumn Chaturvedi has been elected as Member, Asian Council of Science Editors, and Dubai (Membership No 91.10174).
8. Dr Pradyumn Chaturvedi has been elected as Member, International Editorial Board, International Journal "IOSR Journal of Electrical and Electronics Engineering".

**I. Faculty Development, International Collaboration & Industry/ University Immersion**

1. Dr. Pradyumn Chaturvedi went to ABB India Ltd., Bangalore in the field of Medium Voltage Drives during Jun-Jul 2015 under Industry-Immersion scheme
2. Dr. Dheerendra Singh went to Florida International Uni. From May 20, 2015 - July 20, 2015 under university immersion scheme of BITS PILANI
3. Dr. Rajnish Kumar went to University of Salerno, Salerno, Italy from May 20, 2015 - July 20, 2015 under university immersion scheme of BITS PILANI
4. Dr. H.D. Mathur was invited as "Visiting Scientist" by Visiting Scientist, Laboratory of Signals and System, Centrale Supélec, Paris, France from June- July 2015.

**J. Significant new equipments/experimental facility added during the year**

- ANSYS Academic Research HF Package Includes: ANSYS Designer(RF&SI),HFSS,SIwave,Q3D Extractor, Optimetrics, ECAD Translators, MCAD Translators, Parallel(Multiprocessing)
- Cadence Design Systems(Software)- UG Bundle (Analog and Digital FE and BE for UG/PG Courses), Users 20., Research Bundle (Full Suite) Users 20.
- CST STUDIO SUITE - Software

- Microwave Vector Network Analyzer, 30KHz to 26.5GHz
- VPItransmissionMaker Optical Systems (TR-OS) – Software
- Broadband Horn Antenna, Automatic turn table

#### K. Departmental association/club activities:

##### EEE / ENI Association

- **APOGEE 2016 Projects:** For APOGEE 2016 we had invited projects and papers from the students and around 50 projects and papers are been sent.
- **APOGEE 2016 Events:** EEE Association had Pitched the following events for APOGEE 2016:
  1. Robots at War (In association with Instrumentation Forum)
  2. Track-O-Mania (In association with Instrumentation Forum)
  3. I-Strike (In association with Computer Science Association)
- **I<sup>2</sup>R Lectures:** A Lecture series named I<sup>2</sup>R was conducted by the association to cultivate interest in Electronics among the first year students by introducing them to the basic electronics. The lectures were taken up the members of association which included Introduction to Basic Electronics where the students were given the hardware to create a small circuit in first semester 2015-2016. The response was good with students requesting for more such lectures. We are planning to conduct more I<sup>2</sup>R Lectures in further coming years. This year we had the lecture about water level implementation using basic transistors and LED'S.
- **Special Interests Groups** – This academic year 2015-2016, we started with Special Interests groups (SIG's) aiming to help second yearites gain insights into basic electronics. The idea is to make an automatically controlled quadrotor. Being a bigger project, the second years would get an experience into working in teams and learning to collaborate with other teams towards completing a bigger goal. The project is aimed at completion during APOGEE 2016.
- **First Year Representatives** – This year , first year representatives were recruited mainly to spread the EEE Assoc. activities among first yearites, so that people who are interested in doing any new projects can easily contact and get the inventory whatever available with us to work on. First Year Representatives are also needed to volunteer and organize events in APOGEE 2016.

#### B1.10.8 Department: Humanities and Social Sciences

Number of faculty members (as on 31 December 2015)

<b>Senior Professors, Professors</b>	00
<b>Associate Professors</b>	06
<b>Assistant Professors</b>	13
<b>Lecturers</b>	02
<b>Visiting Faculty</b>	01

**Head of the Department:** Prof. G.S. Chauhan

**Contact details:** gsc@pilani.bits-pilani.ac.in

**Number of PhD Scholars:** 17

**Ph.D. Thesis Submitted during the year:**

Research achievements, (ongoing projects, sanctioned/completed this year), Publications- research articles, books, chapters, conference proceedings)

1. Devika. Development of Listening and Speaking Modules of English Language through Multimedia Lab for Rural Students of class XI-XII. Amount: 4,09,500/-; UGC (Ongoing).
2. Yadav Dinesh, Abandoned People: Abandoned Places. 2.5 Lakh; Ministry of Culture, Govt. of India.
3. Yadav Dinesh, Re-establishing the art of Sekhawati Mural painting by capacity building of the women of Bhopa community. 2 Lakh; Sangeet Natak Academy, New Delhi.

4. Sangeeta Sharma. "Rural women empowerment and sustainable growth" in collaboration with MNIT, Jaipur, Monica Sharma, Amount 30 Lakhs, DST, 2015
5. Choudhary Sanjiv, Impact Assessment Study of Pradhan Mantri Gram Sadak Yojana (PMGSY) including Gender- funded by NRRDA, MoRD, Govt. of India, New Delhi-Principal Investigator, 492000/-
6. Choudhary Sanjiv, An Empirical Study of Effectiveness of Classroom Teaching at BITS, Pilani-Pilani Campus from Students' Perspective-funded by Teaching and Learning Centre, BITS, Pilani-Pilani Campus- Principal Investigator
7. Nandigama, Sailaja., "Women and Equity in Higher Education: A Comparative study of power dynamics in Indian and Dutch Academia" Amount: 1,00,000/-; BITS RIG Project (Ongoing).
8. Shushila Shekhawat, *Cinematic Arts: A critical study of Interdisciplinary Aspects in Cinema with special reference to Literature, Audio-Visual and Performance* received from UGC in March 2013. Amount Rs.5,54,600, Duration -two years.
9. Virendra Singh Nirban Awareness, Uses and Implications of Web2.0 in Supplementing Classroom Teaching at Undergraduate Level (Principal Investigator) Amount: 7.84 Lakhs Grant Agency: UGC (2013-15)
10. Raina, Sunita. Ongoing Research Initiation Grant Project titled "GM Foods, Food Security and WTO: Exploring the Politics of Food in India"

#### PUBLICATIONS

1. Chauhan Gajendra Singh, Arun Kumar Poonia, Meenakshi Sharma and Madhusmita Das. A Study of First Page Advertising Trends in Select Indian Newspapers. Published in 'The IUP Journal of Marketing Management' Vol XIV No.4 November 2015 ISSN: 0972-6845.
2. Chauhan Gajendra Singh and Priti Vyas. A Panacea for Enhancing Engineering Graduates' Employability in IT Industry. Published in Soft Skills: The IUP Journal of Soft Skills, Vol. IX, No. 4, December 2015, pp. 50-66.
3. Chauhan Gajendra Singh and Arun Kumar Poonia. A Multimodal Discourse Analysis of Select Tourism Video commercials of Incredible India Campaign. Published in *International Journal of Travel and Tourism* Volume 8, Issue 1 & 2, 2015 ISSN:0974-2603.
4. Chauhan Gajendra Singh "Cognizance of Media Literacy in Higher Education." Published in '*Indian Higher Education At A Crossroads*' ISBN 978-93-5128-153-5, Kalpaz Publications, New Delhi, 2015.
5. Chauhan Gajendra Singh "English in a Globalized World: Count Their Aspirations Before You Teach." Published in 'The Indian Journal of English Studies' / Arun Kumar Poonia and Gajendra Singh Chauhan ISSN 09750258, Vol. L II (50-2), 2015.
6. Chauhan Gajendra Singh "Sexist Communication in Advertisements: It's Not Fair Honey!" Published in an anthology titled '*Celebrating Literary Diversity*', Aadi publications, Jaipur ISSN 973-93-82430-58-4, 2015.
7. Yadav, Anupam (2015) "Contemporary Continental Aesthetics", a module for Post-graduate program for UGC e-PG Pathshala program ( an MHRD project under its National Mission on Education through ICT, [epgp.inflibnet.ac.in](http://epgp.inflibnet.ac.in))
8. Yadav, A. (2015) "Alternative Epistemologies and Normative Directionality" Athens: ATINER's Conference Paper Series, No. PHI2015-1610.
9. Swarupa Deb and Hari Nair "A comparative study of the changing status of transgender people in India, Pakistan, Bangladesh and Nepal" Accepted for publication by ICSSR-NRC in the proceedings of the Northern Regional Social Science Congress.
10. Kumar Neeraj Sachdev, "Culture, Ecological Sensitivity and Professionals," *Creative Space: International Journal*, Vol. 3, No. 3, 2015, pp. 001-006
11. PushpLata(Co-Author). *Socio-cultural impact of film celebrities on teenagers: an empirical study*, *International Journal. Indian Culture and Business Management*, Vol. 11, No. 3, 2015, pp 308-22. Copyright © 2015 Inderscience Enterprises Ltd.
12. Choubisa, R., & Shukla, T. (2015). Positive Psychology & Economic Development: Reckoning Linkages, Needs & Agenda. In Shukla, A. & Dubey, A. (Eds). *Mental Health: Psychosocial Perspective (Volume II-Multigroup Analysis)* (pp. 66-93) Concept Publishing Company, New Delhi. [ISBN: 93-5125-170-5]
13. Choubisa, R. (2015). The Role of Seasonal Frugal Markets as Precursors of Sustainable Business: An Interpretative Phenomenological Paradigm. Proceedings of the International Conference on Evidence

- Based Management (pp-262-267) [Volume II]. BITS Pilani. Excel Publishing House, New Delhi. [ISBN: 978-93-84935-18-4]
14. Choudhary Sanjiv, A joint paper entitled Evaluation of English Textbooks for Class X prescribed in BSER and CBSE Schools has been accepted for publication in July 2015 issue of *Indian Educational Review* (NCERT)
  15. Nandigama, Sailaja., "How Green are We? Role of Stakeholders, their Lifestyles, Values and Practices in Informing Investment Behaviour in the Indian Context", in *Investing in a Sustainable Future: Integrating Environmental, Social and Governance Factors*, Edited by Nini S. Gulla. Excel India Publishers: New Delhi, ISBN: 978-93-84869-56-4, pp. 1-6, 2015.
  16. Bhattacharya, Somdatta. "Seeking Refuge in a Hostile City: Minority Narratives of Kolkata in Aparna Sen's *36 Chowringhee Lane* and Anjan Dutt's *Bow Barracks Forever*." *Studies in the Humanities*. 42 (1-2): 2015. Print.
  17. Shekhawat, Sushila. A Comparative Study of Identity Formation and Selection of Choice in Recent Women Writings. (2015). Lotus Wine: Critical Responses to Indian Literature in English. Ed. Binod Mishra and Prashant Mishra. Adhyayan Publishers and Distributors. 171-189.
  18. Choubisa, R., & Shukla, T. (2015). Positive Psychology & Economic Development: Reckoning Linkages, Needs & Agenda. *Mental Health: Psychosocial Perspective (Volume 2 Multi group Analysis)* (pp. 66-93) Concept Publishing Company, New Delhi. ISBN: 93-5125-170-5.
  19. Shukla, T. (2015). Professional Ethics: The Crisis in Higher Education, *Indian Higher Education at Cross Roads*, pp239-245. Kalpaz Publications, New Delhi. ISBN: 9789351281535
  20. Shukla, T. (2015). Structural Barriers in Progress of Academic World: Concerns related to Marginalized Sections. *Advancement of Development Administration*. pp 413-418 *National Institute of Development and Administration. ICADA. ISBN: 9789742318505*
  21. Shukla, T. (2015). Rejuvenating Standards in Higher Education. *Proceedings of the International Conference on Evidence Based Management (pp-612-619) [Volume II]*. Excellent Publishing House, New Delhi. [ISBN: 978-93-84935-18-4]
  22. Shukla, T. (2015). Dynamic Construct and Static Gender: Constructing Higher Education by Deconstructing Well Being *Mental Health: Psychosocial Perspective (Volume II-Multigroup Analysis)* (pp. 231-247) Concept Publishing Company, New Delhi. ISBN: 93-5125-170-5.
  23. Shukla, T. (2015). Organizational Effectiveness a precursor to Organizational Health, *Mental health Issues and Interventions, Psychosocial Perspective (Volume II-Multigroup Analysis)* (pp. 247-93) Concept Publishing Company, New Delhi. ISBN: 9789351251736
  24. Shukla, T. (2015). Structural Barriers at Work Place. *Indian Higher Education at Cross Roads*, pp220-227 Kalpaz Publications, New Delhi. ISBN: 9789351281535
  25. V. S. Nirban and Priyanka Kumari (2015). Discourse Analysis of Online Academic Discussion. ACCEPTED. Special Issue OJCMT.
  26. Raina, Sunita. 2015. Conference Proceedings Paper titled "Constructing a Counter-Expertise: Mobilizing Knowledge to Resist Bt Technology in India," accepted for the Knowledge from the Margins: Social Justice and Sustainability Conference that took place at Michigan State University, USA, on August 18-19, 2015.
  27. Sharma Ruchika, Reena Jain. Psycholinguistics aspects of Brand Familiarity and Recognition: A Study of Indian Brand Names. 2015. *Glacier Journal of Scientific Research*, April 2015 Issue I volume I.
  28. Devika and Piyush Gupta. "Dolly Mishra in Vishal Bhardwaj's *Omkara* (2006): A Feminist Reading of the Film." *Shakespeare: A reappraisal*. (Vol. II). Eds. Sunita Sinha and Carole Rozzonelli. Atlantic Publishers and Distributors, 2015. 187-203. Print. ISBN 978-81-269-1963-5.

## BOOKS

1. PushpLata. Co-author, *Communication Skills*, Second Edition, New Delhi: Oxford University Press (OUP), 2015
2. Sharma Sangeeta, *Soft Skills- An integrated approach to maximize personality*. Coauthor, Wiley: New Delhi. 2015
3. Sharma Sangeeta, *Technical Communication- Principles and Practice*. Coauthor, Third Edition. OUP: New Delhi. 2015
4. Chauhan Gajendra Singh *Soft Skills- An integrated approach to maximize personality*. Coauthor, Wiley: New Delhi. 2015.

**CONFERENCES**

1. Chauhan Gajendra Singh Conference on : Advertising and New Social Identities: Discourse of Marketing and Relationship USMD2015 'Discourse and Identity in Asia' held in University of Malaya, Kuala Lumpur, Malaysia 14-16, November 2015.
2. Chauhan Gajendra Singh National Conference on Consumer Behaviour in Hospitality and Tourism Industry on August 7-8, 2015. Co-presented a research paper with Arun Poonia entitled "The significance and Role of Tourism Advertising in Destination Image: Time for a Proper Research."
3. Chauhan Gajendra Singh II Asia Pacific International Conference On Changing Business Practices in current environment organized by Sydenham Institute of Management Studies, Research and Entrepreneurship Education, University Of Mumbai on January 8-9, 2015. Presented a research paper entitled "Modi's Election Campaign: How to Use Media and Market Politics!"
4. Yadav, Anupam Presented a paper titled "The Quest for Selfhood and Moral Identity "in the International Conference/Symposium on Self-Knowledge and Moral Identity organised by the department of HSS, IIT, Bombay and ICPR New Delhi, held at IIT, Bombay, Mumbai from 13-15 January, 2015.
5. Yadav, Anupam Presented a paper titled "Alternative Epistemologies and Normative Di-rectionality" in the 10th International Conference on Philosophy at Athens Institute for Education and Research held at Athens, Greece from 25-28 May, 2015.
6. Devika. "Usefulness and Employability of Shakespeare's Radio and Audio Plays." 7<sup>th</sup> International Conference on *Language in Shakespeare: Rhetorical, Aesthetic, Communicative* organized by Maharshi Dayanand University, Rohtak in collaboration with The Shakespeare Association on 8-10 October 2015.
7. Yadav Dinesh, 'Forts as space, form, event and action in site-specific performance making' in the Theatre Architecture Working Group of International Conference of IFTR on Theatre and Democracy, organized by Theatre Department of S N School of Hyderabad University, Hyderabad from 6 – 10 July 2015.
8. Yadav Dinesh, Abandoned People: Abandoned Places (1947 Indian Partition Stories in Site-specific performances). IACLALS Annual Conference, 2015 on SPACE, PLACE, TRAVEL, DISPLACEMENT, EXILE. 12-14 February 2015 Department of Humanities and Social Sciences, BITS Pilani (Goa Campus)
9. Nair Hari, "Democracy and the Gandhian Constructive Programme: The case of university education" at the National Seminar The future of India's democracy: Social, economic and political aspects organized by the Department of Political Science, University of Delhi on the 30th and 31st of January 2015.
10. Kumar Neeraj Sachdev, "Professional Ethics and Moral Dilemmas," in First National Conference on Human Values and Professional Ethics, organized by Department of Mentoring and Value Inculcation, Chandigarh University, SAS Nagar, India during December 11-12, 2015
11. Kumar Neeraj Sachdev, "An Analysis of Inner Perspective of Moral Identity," in ICPR, New Delhi sponsored Philosophy Teachers' Meet of North-Western Zone on The Crisis of Multiple Identities in the Contemporary World, organized by Department of Guru Nanak Studies, Guru Nanak Dev University, Amritsar, India during December 29-31, 2015
12. Bhattacharya, Kumar sankar, "Anatomizing Selfhood: Postcolonial Identity Politics in India's North East." 24th Annual British Commonwealth and Postcolonial Studies Conference, Savannah, GA., USA. February 13-14, 2015.
13. Cejková, E., Slezácková, A., Cefai, C., Potgieter, J., Singh, K., Choubisa, R., Jarden, A., Howard, F., & Dvoráková, S. (2015). Subjective Well-being and Life Values: Their Relations and Differences among Czech, Maltese, South African, Indian, and New Zealand University Students. Poster Presented in Conference Social Processes and Personality ([www.spao.eu](http://www.spao.eu)) Brno (Czech Republic) during 9-11<sup>th</sup> September 2015.
14. Ankit Singh and Sangeeta Sharma "Journey of Flipkart: A success story of online shopping" in the International conference on e Business Prospects , Challenges and Implications on 27-28<sup>th</sup> March 2015 at Manipal University Jaipur.
15. Sangeeta Sharma "Women empowerment through entrepreneurial ventures" in National seminar on Capacity Building among Women in India- Entrepreneurship and Estate sponsored by National Commission for Women and organized by National Law University, Jodhpur on October 2&3, 2015
16. Nandigama, Sailaja., "Performance of success and Failure at the grassroots Conservation and Development Interventions: Gender dynamics in Participatory Forest Management in India" paper

- presented at the Pathways to Shared Prosperity for Forest Users and Forest-Reliant Economies-FLARE Conference, organized by the University of Michigan and PROFOR at the Musée de l'Homme, Paris, France, November 27-30, 2015.
17. Nandigama, S., "Women and Equity in Higher Education: A Comparative Study of Practices in Indian and Dutch Academia" paper presented in the National Conference held by the National Commission for Women (National Seminar) on 'Capacity Building Among Women in India: Entrepreneurship and Estate' at National Law University, Jodhpur on 2-3 October, 2015.
  18. Nandigama, Sailaja., "How Green are We? Role of Stakeholders, their Lifestyles, Values and Practices in Informing Investment Behaviour in the Indian Context", paper presented in the UGC sponsored National Seminar on 'Investing in a Sustainable Future: Integrating Environmental, Social and Governance Factors' organized by the BM Ruia Women's College of SNDT University, Mumbai, 24th and 25th April, 2015.
  19. Bhattacharya, Somdatta. "Difficult Lives and Labour: Narratives of Female Domestic Labour in Kolkata" at the Locating Lives: IABA Asia-Pacific Conference, Flinders University, Adelaide, Australia, 1-3 December, 2015.
  20. Shekhawat, Sushila. *Shakespeare and Contemporary Indian Politics: An Analysis of Haider by Vishal Bharadwaj*. International Conference on "Shakespeare in Indian and European Languages: A Postmodern Review organized by Jai Narain Vyas University and Shakespeare Association, India during 16-18 November, 2015.
  21. Shukla, T. "Rejuvenating Standards in Higher Education" in International Conference on Evidence Based Management, BITS Pilani, March 20-21, 2015
  22. Shukla, T. "Customer Relationship Management & Banking Industry: An Exploration on Technological Intervention" in HR Conference on Talent Management and Transformation, BML Munjal University, 14<sup>th</sup> Dec, 2015
  23. Shukla, T. "Information Technology in relation to Human Resource Management: An Impact Evaluation Study" in International Conference on Organization and Management at InterContinental Hotel Abu Dhabi, November 22-23, 2015
  24. Chakraborty, Tathagato. *Homosexuality as an Exclusionary Trope in Postcolonial Urban Existence*. 24<sup>th</sup> Annual British Commonwealth and Postcolonial Studies Conference. Georgia Southern University, GA, USA. February, 2015.
  25. Priyanka Kumari and V. S. Nirban (2015). "Measuring Employees' Intercultural Sensitivity: Towards a Sustainable Business Approach" at the International Conference on Research and Business Sustainability, organized by Department of Management Studies, IIT Roorkee, India, and Sheffield Business School, Sheffield Hallam University, U.K., 4 - 6 December, 2015.
  26. V. S. Nirban and Anirudh Agarwal (2015). "Understanding Sentiment Polarity in User Generated Discourse on Social Media" at the International Conference of Communication and Social Media 2.0, organized by School of Communication, Amity University, Jaipur during 20- 22 November 2015.
  27. V. S. Nirban (2015). "Dynamics of Interpersonal Relationships Among Student Community on Social Media" at the IJAS International Conference of Academic Disciplines organized by IJAS at University College of London, UK during 3- 6 November 2015.
  28. V. S. Nirban and Priyanka Kumari (2015). "Discourse Analysis of an Online Academic Discussion" at the 4th International Conference on Communication, Media, Technology and Design organized by Eastern Mediterranean University, Cyprus, in Dubai, 16 - 18 May, 2015.
  29. Raina, Sunita. 2015. Paper titled "Capitalizing Knowledge: Transforming NARS in a Neoliberalizing India" presented at the annual meeting of the Society for Social Studies of Science (4S) at Denver, USA, on November 11-14, 2015.

#### WORKSHOPS AND INVITED TALKS

1. Anil Rai, with eight BITS-students, invited by IIT ROORKEE for the winter convention, arranged by SPIC MACAY Association, during 13<sup>th</sup>-19<sup>th</sup> December, 2015, to participate and promote the Indian Music Art and culture.
2. Yadav Dinesh, Curator for Indian Student Section in the Prague Quadrennial of Performance Design and Space 2015, 18<sup>th</sup> – 28<sup>th</sup> June 2015 Prague, Czech Republic.
3. Nair Hari, Lecture sesión titled "La noción de justicia en el pensamiento indio: una discusión a partir del Bhagavadgita" for the Diplomado de Estudios de Asia, Universidad Nacional Autónoma de México (20 de octubre, de 18 a 20 hrs por videoconferencia)



4. Nair Hari, Participated in the Workshop on Effective Teaching and Learning, 18-20 July 2015 at BITS Pilani, Goa Campus organized by Quality Assurance and Assessment Imperative of Mission 2015 with three invited resources persons from the Centre for the Development of Teaching and Learning, National University of Singapore as well as one invited resources person from Wipro Mission10X.
5. Lata, Pushp conducted a workshop on *Developing Communication Effectiveness with Technology* at Central Electronics Engineering Research Institute (CSIR-CEERI) at Pilani on 1 September 2015, as part of three- day workshop on *Transformation in Science and Technology, A Paradigm Shift in all Sphere of Education* organized by CVM Educational Society during 1-3 Sep 2015.
6. Sharma Sangeeta, Conducted workshop on “ Soft Skills for School Teachers” in BITS Pilani on 23<sup>rd</sup> February 2015
7. Sharma Sangeeta, Invited talk on “ Effective communication: A cutting edge for management students” at Sai Ram College of Management at Chennai on 26<sup>th</sup> February 2015.
8. Sharma Sangeeta, Talk on Teaching –Learning sharing experiences at BITS Pilani, organized by TLC BITS on 29<sup>th</sup> October 2015.
9. Sharma Sangeeta, Two days workshop on “Effective communication for managers” at TAPMI , Manipal Jaipur on 30<sup>th</sup> and 31<sup>st</sup> October 2015
10. Sharma Sangeeta, Invited lecture on “ How to Crack the Interviews” at FMS, Sukhadia University to MBA students on 5<sup>th</sup> December 2015
11. Sharma Sangeeta, Key note speaker in the Marketing Management session of 6<sup>th</sup> International conference on “ Creativity and Innovation Excellence for world in motion” at Prestige Institute of Management, Gwalior on 10<sup>th</sup> January 2015.
12. Nandigama, Sailaja., delivered an invited talk in the welcome panel on “Pathways to Shared Prosperity for Forest Users and Forest-Reliant Economies” at the FLARE Conference, organized by the University of Michigan and PROFOR at the Musée de l'Homme, Paris, France, November 27, 2015.
13. Nandigama, Sailaja., (Convener), Intensive Workshop on Research Methodology, Organized by the Humanities and Social Sciences Department, BITS Pilani from 9-11 February, 2015 at BITS Pilani, Vidya Vihar, Rajasthan.
14. Shukla, T. Intensive Workshop on *Research Methodology*, 9-11 Feb, 2015, BITS Pilani, Rajasthan
15. Shukla, T. Participated in ‘R’ workshop on Statistics & Design by Dept of Management, BITS Pilani
16. V. S. Nirban Delivered a lecture on Presentation skills at Birla Shishu Vihaar, Pilani for Students.
17. Sharma Ruchika, Delivered lecture on Vocabulary Extension at Birla Shishu Vihar School, Pilani. 18 December, 2015.
18. Shekhawat Shushila, Organised an Invited talk on feature Writing by Juhi shah, 4 Sep,2015, BITS, Pilani Rajasthan

#### **Guest editor for journals, editorials**

1. Devika. Executive Editor. *Contemporary Issues in Languages and Humanities*. A refereed four monthly international journal. ISSN No. 2249-9792.
2. Devika and Piyush Gupta. “Studies in Aesthetic Delight (Parmananda) in Hindi Film Adaptations.” The NEHU Journal XIII (1): Jan-Jun 2015. 1-20. ISSN 0972-8406.
3. PushpLata. Reviewed research papers for International Journal of Arts and Culture, BioInfo Publications, Arab World English, Journal of Education from JSTF, Pertanika.
4. Sanjiv Kumar Choudhary Member, Editorial Boards of -1. International Journal of English Linguistics, and 2. English Language Teaching, published by Canadian Centre of Science and Education.
5. Shukla, T. Journal of Modelling in Management, Emerald Publications
6. Shukla, T. International Journal of Information Systems in the Service Sector, IGI

#### **Departmental activities (conferences, seminars & workshops, invited talks)**

1. Devika A one day workshop on *Soft Skills* for school teachers of Pilani at BITS Pilani on 23 February 2015.
2. PushpLata, Event Coordinator for *Constitution Day* 15 December 2015 organised by Department of Humanities and Social Sciences at NAB, BITS, Pilani.
3. Sharma Sangeeta, Conducted and organized workshop on “ Soft Skills for School Teachers” in BITS Pilani on 23<sup>rd</sup> February 2015

4. Sharma Sangeeta, Conducted and organized workshop on “ Soft Skills for School Teachers” in BITS Pilani on 23<sup>rd</sup> February 2015
5. Nandigama, Sailaja., Delivered an invited lecture on “Ethnography” in the *Intensive Workshop on Research Methodology* on Ethnography and Participant Observation, organized by HSS Department, BITS Pilani from 9-11 February, 2015 at BITS Pilani, Pilani Campus.
6. Nandigama, Sailaja., Delivered an invited lecture on “Participant Observation” in the *Intensive Workshop on Research Methodology* on Ethnography and, organized by HSS Department, BITS Pilani from 9-11 February, 2015 at BITS Pilani, Pilani Campus.
7. Nandigama, Sailaja., Delivered an invited lecture on “Women in Dutch and Indian Academia”, in the Departmental Research Seminar, 11 December, 2015 at the Department of Humanities and Social Sciences, BITS Pilani, Pilani Campus.
8. Nandigama, Sailaja., Delivered an invited lecture on “Cross Cultural Comparison”, in the Course on Cross Cultural Skills (IC: Prof. Pushplata), on 19 November, 2015 at the Department of Humanities and Social Sciences, BITS Pilani, Pilani Campus.
9. Shukla, T. Organized Intensive Workshop on *Research Methodology*, 9-11 Feb, 2015, BITS Pilani, Rajasthan
10. Shukla, T. Delivered lectures on Quantitative Approach in the workshop on research methodology
11. Dr. Bhagwati. P. Agrawal delivered a talk on the topic “Sustainability, Culture and Innovation” on 4<sup>th</sup> September 2015. Coordinated by Tathagato Chakraborty.
12. Shekhawat Shushila, Organised an Invited talk on feature Writing by Juhi shah, 4 Sep,2015, BITS, Pilani Rajasthan

#### Awards and recognitions won by faculty and students

1. Yadav Dinesh, Member advisory board of the SGT University, Gari Harsaru, Gurgoan Haryana.

#### B1.10.9 Department: Mathematics

Number of faculty members (as on 31 December 2015)

<b>Senior Professors, Professors</b>	03
<b>Associate Professors</b>	04
<b>Assistant Professors</b>	10
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**Head of the Department:** Prof. Chandra Shekhar

**Contact details:** chandrashekhar@pilani.bits-pilani.ac.in

**Number of Ph. D. Scholars:** 11

**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

Details are given below.

##### A ) Principal Investigator : Dr. Ashish Tiwari

A research project entitled "Modeling of cardiovascular flows and influence of magnetic field on circulation" of duration three years (Starting from 01-12-2014) awarded by the Department of Science and Technology (DST) under the FAST track scheme for young scientists, for a period of 3 years. The project budget is Rs. 11.62 Lakhs.

##### B) Principal Investigator: Dr. Suresh Kumar

A major research project entitled "Dark Energy Modeling of Cosmic Acceleration with Observational Constraints in Einstein Gravity and Modified Theories" of duration three years (Starting from 06-09-2013) awarded by the

Department of Science and Technology (DST) under the FAST track scheme for young scientists, for a period of 3 years. The project budget is Rs. 14.16 Lakhs.

## 2. Projects funds sanctioned during the year : 03

Principal Investigator	Title of the Project	Funding Agency	Amount in lac rupees and Duration
Dr. Amit Kumar Verma	Non linear singular differential equations arising in real life	DST	Rs. 16,51,680, 3years
Dr. Dilip Kumar Maiti	Heat transfer augmentation from a square heated cylinder due to rectangular eddy promoter and nonofluids under the incident of couette-poseuille flow	DST	Rs 14,2800.00, 3 years
Dr. Ashish Tiwari	Flow through a membrane modeled of porous cylindrical particles using particle-in-cell approach	DST	Rs 12,86000
Dr. Atasi Patra Maiti	Analytical and numerical study on dynamics of biological species with delay	DST (WOS-A)	Rs 20,25,000

### Projects completed this year: 01

#### a) Co- Investigator : Dr. Shivi Agarwal

Project Title: An Impact Assessment Study of Pradhan Mantri Gram Sadak Yojana (PMGSY) on Gender Duration: 4 months (Feb, 2015 to May 2015) awarded by NRRDA, New Delhi. The project budget is Rs. 4.92 Lakhs.

## PUBLICATIONS

The faculty of the department published 17 papers in international/national refereed journals during the year.

1. Agarwal, Shivi, DEA-neural network approach to assess the performance of public transport sector in India", OPSEARCH, DOI 10.1007/s 12597-015-0229-2, 2015.
2. Agarwal, Shivi, Scale Efficiency with Fuzzy Data", International Journal of Business and System Research, (in Press).
3. Dubey B., Dubey Preeti and Dubey Uma S., Dynamics of an SIR Model with nonlinear incidence and treatment rate, Appl. Appl. Math., 10(2): 718-737, (2015).
4. Dubey B., Hussain J., Raw S.N. and Upadhyay R. K., Modeling the effect of pollution on biological species: A socio-ecological problem, Computational Ecology and Software, 5(2): 152-174, (2015).
5. Gupta, CB, Sachin Kumar and R B Singh., A Study of Socio Economic Determinants at Age of First Birth in India:, Mathematical Modelling, Optimization and information Technology, LAMBERT Academic Publishers, Germany (2015) PP 316-332, ISBN 978-3-71422-1, Ed. Omparkash
6. Kumar, Vipin, Sharma, Anupama and Gupta, C. B., A Deterministic Inventory Model for Weibull Deteriorating Items With selling price Dependent Demand and Parabolic Time Varying holding Cost, international Journal of soft Computing and engineering PP 52-59 Vol.5, Issue I , March 2015. (Impact factor 1.275).
7. Kumar, Vipin, Sharma, Anupma, Gupta, C.B., Two-Warehouse Partial Backlogging Inventory Model For Deteriorating Items With Ramp Type Demand, Innovative Systems Design and Engineering, ISSN 2222-1727 (Paper) ISSN 2222-2871 (Online) Vol.6, No.2, 2015 86
8. Kumar, Devendra Fitted Mesh Method for a Class of SingularlyPerturbed Differential-Difference Equations, Numer. Math. Theor. Meth. Appl., 8(4), 496-514, (2015).
9. Kumar S., Consistency of the nonflat LCDM model with the new result from BOSS, Physical Review D, 92, 103512 (2015)
10. Sharma, B K, Sharma M, Gaur R K and Mishra A., Mathematical Modeling of Magneto Pulsatile Blood Flow through a Porous Medium with a Heat Source. International Journal of Applied Mechanics and Engineering, 20(2), 385-396. (2015)
11. Malik A.K., Shekhar C., Vashisth V., Chaudhary A.K., Singh S.R., Sensitivity analysis of an inventory model with non-instantaneous and time-varying deteriorating items, Conference Proceeding of ICCS AIP 2015 (Accepted).

12. Jain M., Shekhar C. and Shukla S., Queueing Analysis of Machine Repair Problem with Controlled Rates and Working Vacation under F-policy, Proceedings of the National Academy of Sciences, India Section A: Physical Sciences (2015) (Accepted).
13. Jain M., Shekhar C. and Shukla S., N-policy for a Repairable Redundant Machining system with Controlled Rates, RAIRO-Operations Research (2015) (Accepted).
14. Singh H., Shekhar C. and Kumar S., Statistical study of yoga on mental health among children of the residential school, International Journal of Allied Practice, Research and Review, 2(5);9-14, (2015)
15. Shekhar C., Kumar S. and Singh H., Assessment of the yoga on the status of the physical fitness among children of the residential school, International Journal of Latest Technology in Engineering, Management and Applied Science, 4(3);16-20, (2015).
16. Jain M., Bhagat A. and Shekhar C., Double orbit finite retrial queues with priority customers and service interruptions, Applied Mathematics and Computation (Elsevier), 253;324-344, (2015).
17. Karaa S., Pani A. K. and Yadav S. A priori hp-estimates for discontinuous Galerkin approximations to linear hyperbolic integro-differential equations, Appl. Numer. Math., 96, 1-23, (2015).

#### C.1 CONFERENCES ATTENDED/PAPERS PRESENTED

1. Agarwal, Shivi, Fuzzy BCC Data Envelopment Analysis: A Credibility Approach", Workshop on Applied Optimization Models and Computation, held at Indian Statistical Institute, Delhi Centre, during January 28-30, 2015.
2. Agarwal, Shivi, Scale Efficiency with Fuzzy Data", Proceedings of the International Conference on Evidence Based Management (ICEBM 2015), held at BITS Pilani, Pilani Campus, during 20-21 March 2015,
3. Agarwal, Shivi, Evaluation of Efficiency and Effectiveness of Public Transport Sector of India using DEA Approach", 13th International Conference on Data Envelopment Analysis, held at Technical University Braunschweig, Germany, during August 24-28, 2015.
4. Agarwal, Shivi Malmquist Productivity Index with Fuzzy Data by Possibility Theory ", 20th Asian Technology Conference in Mathematics (ATCM 2015), held at Leshan Normal University, Leshan, China, during December 16-20, 2015.
5. Dubey, B. , Role of mathematical modelling on the management of an wetland park, Presented in an International Conference on Mathematical and Computational Biology held at I.I.T. Kanpur during February 28 – March 03, 2015.
6. Gupta, C. B., 1<sup>st</sup> International Conference of Indian Society of Information Theory and Applications (ISITA) on Mathematical Modeling, Optimization and Information Technology at Sri Sai College of Engineering & Technology, Pathankot (Punjab) and delivered a talk on Role of Sterilization on Family Planning program. Also member of Scientific Advisory Committee during 16-19 January 2015
7. Gupta, C. B., International Conference on Optimization, Computing and Business analysis for Sustainable Development (ICOCBASD, 2015) at Central university of Rajasthan, Kishangarh (Ajmer) and delivered a talk on 22 January 2015 on Impact of Sterilization on Family Planning program during 20-22 February 2015
8. Gupta, C. B., Delivered an invited talk on 30 January 2015, on simulation and its Application at Govt. Polytechnic, Bikaner on the Occasion of Short Term course on Operation Research and Mathematical Sciences organized by Department of Applied Sciences, NITTTR, Chandigarh during 27-31 January, 2015.
9. Gupta, C. B., National Conference on Recent Trends and developments in statistics NCRTDS, at Department of Statistics, M D University, Raktak and delivered a talk on Sterilization and Family Planning program: a Case Study on 23 January 2015.
10. Gupta, C. B., Guest of honour in the national seminar on Rural Market in india: an Unexplored Terrain organized by Department of Management Studies, mahatma Gandhi University, nalgonda, Telangana on 13 March 2015.
11. Kumar, Devendra, International conference on current trends in PDEs: Theory and Computations organized by department of Mathematics, South Asian University, New Delhi, during December 28--30, 2015.
12. Kumar, Jitender, Rank properties of the semigroup of endomorphisms over Brandt semigroup, Presented in International Conference on Semigroups Algebras and Applications: ICSAA-2015, Cochin, during 17-19 September 2015.

13. Mathur, Trilok attended and chaired a session, National Conference on Advances in Mathematical Sciences and Applications in Engineering & Technology (AMS-AET) 2015 held at Poornima University, Jaipur during July 25-26, 2015
14. Mathur, Trilok, On subordination of harmonic univalent functions associated with Wright's generalized hypergeometric functions, Presented in 20<sup>th</sup> Asian Technology Conference in Mathematics (ATCM 2015) at Leshan National University, Leshan, CHINA during December 16-20, 2015.
15. Chaudhary, Nidhi, Kumar, Rajiv, Murali, Padma, Modeling the Dynamics of Amyloid Formation of Islet Beta, Symposium on Modeling and Computational Fluid Dynamics, BITS Pilani-Pilani Campus. on 4<sup>th</sup> April, 2015,
16. Chaudhary, Nidhi, Kumar, Rajiv, Murali, Padma, Global stability of a model of formation of amyloidosis in the presence of a therapeutic agent, International conference on Recent Advances in Mathematical Biology & Applications, Aligarh Muslim university during June 4-6, 2015
17. Shekhar, C., Jain, M., Mishra, R.P., Raina, A.A., Particle swarm optimization and sensitivity analysis of repairable redundant system, presented in 7<sup>th</sup> International conference on Quality, Reliability, Infocom Technology and Business Operations (ICQRITBO 2015) organized by Department of Operational Research, University of Delhi during 28-30 December 2015.
18. Shekhar, C. Jain, M., Raina, A.A., Transient analysis of Markovian (m, M) machining system with threshold policies and geometric renegeing presented in 17<sup>th</sup> International Conference of International Academy of Physical Sciences (CONIAPS XVII) on Emerging Trends in Physical Sciences & Technology organized by University of Rajasthan, Jaipur during 16-18 January 2015.
19. Tiwari, A. and Yadav, P.K., Stokes' flow through assemblage of non-homogeneous porous cylindrical particles using cell model technique", Presented in 18<sup>th</sup> Conference of International Academy of Physical Sciences (CONIAPS-XVIII) held at University of Allahabad, Allahabad, during 22-24 December 2015..
20. Yadav, Sangita, International Congress on Industrial and Applied Mathematics (ICIAM 2015), China, during Aug. 10-14, 2015.
21. Yadav, Sangita and Pani, Amiya K., Superconvergence of a class of expanded discontinuous galerkin methods for fully nonlinear elliptic problems in divergence form, Presented in Conference on Computational PDEs 2015, during Dec 21-23, 2015.
22. Yadav, Sangita and Pani, Amiya K, Superconvergence of semidiscrete discontinuous galerkin methods for parabolic equations, Invited Speaker in International Conference on Current trends in PDEs: Theory and Computations held at South Asian University, New Delhi, during Dec. 28-30, 2015.
23. Sumanta Pasari, Stochastic Modelling of Earthquakes and Forecasting in Northwest Himalaya, Presented in National Conference on Emerging Trends and Mathematical Sciences (NCETMMS-2015) organized by the Calcutta Mathematical Society held at Salt Lake, Kolkata, during December 17-19, 2015

## C.2 WORKSHOPS ATTENDED

1. Gupta, C. B., Workshop of subject experts in the Commission's office for the selection of college lecturer in Mathematics, at RPSC Ajmer on 12.10.2015
2. Kumar, Devendra, Short Term Training Program on "Modeling, Computing, Simulation in Science & Engineering, organized by department of Mathematics, VNIT Nagpur, during July 06 -- 10, 2015.
3. Kumar, Devendra, Short Term Training Program on "Advanced Numerical Methods in Fluid Dynamics" organized by department of Mathematics, NIT Warangal, during April 17--19, 2015.
4. Kumar, Devendra, Advanced Workshop on Finite Difference Methods for Differential Equations organized by department of Mathematics, South Asian University, New Delhi, during March 13--17, 2015.
5. Rakhee, Workshop on Queueing Theory, organized by Chair of Production Management, Business School, University of Mannheim, Germany in Orebgrgl, Austria, presented my work titled "Time-dependent Channel Reservation Scheme for Handoff Calls in a Cellular Mobile Network". during December 16-20, 2015
6. Venkiteswaran, G. Workshop on "The Future of Mathematics", organized by The Fraunhofer Institute and Department of Mathematics, Technical University of Kaiserslautern, Germany, during October 11-18, 2015.

7. Yadav, Sangita, Pedagogical training for mathematics teachers, organized by ICT Mumbai, during Nov. 02-07, 2015

**D. BOOKS PUBLISHED/EDITED DURING THE YEAR**

Gupta, C.B., Singh S. R. and Kumar, Mukesh, Engineering Mathematics, Tata MCGraw Hill Education New Delhi 2015.

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

One day symposium on “Modeling and Computational Fluid Dynamics” on 4<sup>th</sup> April 2015

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

1. Dubey, B., Linear and non-linear dynamics of population, and (ii) Optimal resource utilization models in a refresher course on “Mathematical Modelling and its Applications in Science and Engineering” held at Rajiv Gandhi Pradyogiki Vishwavidyalaya, Bhopal MP, during February 02-06, 2015
2. Dubey, B., Modeling the dynamics of a fishery model with optimal harvesting policy at Joint meeting of the 5th China-Japan-Korea Colloquium and the 25<sup>th</sup> Meeting of the Japanese Society for Mathematical Biology held at Doshisha University, Kyoto, Japan during August 26-29, 2015
3. Gupta, C. B., Role of Sterilization on Family Planning program. at 1<sup>st</sup> international conference of Indian society of Information theory and applications (ISITA) on Mathematical Modeling, Optimization and Information Technology at Sri Sai College of Engineering & Technology, Pathankot (Punjab) during 16-19 January 2015
4. Gupta, C. B., Impact of Sterilization on Family Planning program at International Conference on Optimization, Computing and Business analysis for Sustainable Development (ICOCBASD, 2015) at Central university of Rajasthan, Kishangarh (Ajmer) during 20-22 February 2015
5. Gupta, C. B., Sterilization and Family Planning program: a Case Study at National Conference on Recent Trends and developments in statistics NCRTDS 2015, at Department of Statistics, M D University during 21-23 February 25, 2015
6. Gupta, C. B., Simulation and its Application at Govt. Polytechnic, Bikaner on the Occasion of Short Term course on Operation Research and Mathematical Sciences organized by Department of Applied Sciences, NITTR, Chandigarh during 27-31 January, 2015.
7. Gupta, C. B., Hazard Model of Age at First Birth: A Case study of India. and chaired a technical session at National Seminar on “Recent Developments in Pure Applied Mathematics and 19<sup>th</sup> Professor P.D. Verma Memorial Lecture(NSRDPAM & PDVML-2015)” Department of Mathematics, University of Rajasthan, Jaipur during September 12-13, 2015
8. Gupta, C. B., Influence of Various Socio, Economic and Demographic Factors on Age at First Birth with reference to India at International Conference on Communication Systems at BKBIET Pilani, and chaired a technical session. Also member of International Advisory committee during on 18-20 October 2015
9. Gupta, C. B., Defferential Equations and its applications at Poornima Institute of Engineering nd Technology, Jaipur on 09 September 2015.
10. Gupta, C. B., Mathematics and its applications. at SML PG College, Jhunjhunu on 5.October.2015
11. Kumar, Rajiv, Gave plenary Lecture on “Multiplicative perturbation of generators of semi group” at an International Conference on Analysis and appl. held at Aligarh Muslim University , during December 19-21 2015
12. Kumar, Rajiv, Chairperson of a paper presentation session on December 21 at international Conference on Analysis and application held at Aligarh Muslim University during December 19-21 2015
13. Mathur, Trilok, The Golden Ratio, at CSIR-CEERI Pilani, in a CSIR-CVM Workshop for Students & Teachers “Transformation in Science & Technology” during September 1-3, 2015.
14. Yadav, Sangita and Pani, Amiya K, Superconvergence of semidiscrete discontinuous Galerkin methods for parabolic equations, Invited Speaker in International Conference on Current trends in PDEs: Theory and Computations held at South Asian University, New Delhi, during Dec. 28-30, 2015

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

1. Prof. M.K. Kadalbajoo, Department of Mathematics and Statistics, Indian Institute of Technology Kanpur delivered a talk on the topic "A Spline Collocation Method for Pricing Options Under Jump Diffusion Model" on 05-01-2015.
2. Prof. G. Rangarajan, Department of Mathematics, Indian Institute of Science Bangalore delivered a talk on the topic "Synchronized chaos: Stability and Pattern Formation" on 30-07- 2015.
3. Prof. A.N. Filippov, Department of Higher and Applied Mathematics, Gubkin Russian State University of Oil and Gas, Moscow, Russia delivered a talk on the topic "Mathematical Modelling of Membrane Filtration Process" on 18-12-2015

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

1. Chandra Shekhar, Appointed as Interview Committee Member, Uttarakhand Public Service Commission, Uttarakhand

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

1. Kumar, S., Visited Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune, India under Visiting Associate Programme of IUCAA during May 24- June 7, 2015
2. Rakhee, Visited Chair of Production Management, Business School, University of Mannheim, Germany under DFG Bilateral Co-operation fellowship, during 01st December 2015 - 15th January 2016.
3. Tiwari, A , Started a collaborative project with Prof. A.N. Filippov under joint Indo-Russian project

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

1. **HPC server : 5 by HP**
2. **Workstations : 23 HP Z230 workstations**
3. **Software TecPlot**
4. **Software Super Lingo**
5. **Software Mathematica**

**K. DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES****Mathematics Association****Mathematics Association conducted the following activities during 2015 :**

1. 3<sup>rd</sup> edition of Magazine "To infinity and beyond"
2. National Science Week in collaboration with Physics Association, Chemistry Association and Biological Society. Mathematics association hosted event Sudoku: The final winners of the event Sudoku were: Antil Singhal and Akhil Nemani
3. Organized Workshop on "Cyber Security" in collaboration with IEEE, BITS Pilani and The Cyber Blog of India". Founder of The Cyber Blog of India Mr. Nitish Chandan and his team were our guests. More than 250 students attended this one day workshop.

**Events in APOGEE 2015**

1. APOGEE Projects: Total 14 projects were passed by Mathematics Association  
The project Building a Quantum Computer Simulator bagged the second prize in the category Simulation and Mathematical Modeling (Non-chemical) in Project Presentation Competition in APOGEE 2015.
2. Gambling Mathematics: Winners were -
  - i. Sagnik Mukherjee and Karan Patil (First prize)
  - ii. Abhishek Parekh and Asim Shah (Second prize)

**B1.10.10 Department: Mechanical Engineering**

Number of faculty members (as on 31 December 2014)

<b>Senior Professors, Professors</b>	4
<b>Associate Professors</b>	05
<b>Assistant Professors</b>	18
<b>Lecturers</b>	03
<b>Visiting Faculty</b>	02

**Head of the Department:** Prof. B.K Rout**Contact details:** rout@pilani.bits-pilani.ac.in**Number of PhD Scholars:** 26**Ph.D. Thesis Submitted during the year:** 03**A. SPONSORED RESEARCH ACTIVITIES**

Total number of Sponsored Projects in the department:

Details are given below.

**(i) Ongoing projects:**

1. Department of Science and Technology (DST): Characterization of surface errors in machining of thin-walled curved geometries, Rs. 24.09 Lacs, Dr. T. C. Bera.
2. Department of Science and Technology (DST): Experimental Investigation on CO<sub>2</sub> Based Refrigeration System in Trans-critical Cycle, Rs. 27.5 Lacs, PI: Prof. M. S. Dasgupta, Co-Investigator: Dr. D. K. Gupta.
3. DAAD, Germany: Indo-German Automotive Life Cycle Engineering (InGA-LCE), 2013-15, 94423 € (Approximately 70 Lacs), Dr Kuldip Singh Sangwan, Prof Christoph Herrmenn and Dr. K C Vora
4. UGC Major Research Project: Development and Validation of Sustainability Measurement Framework for Manufacturing Industries, Rs.3.22 Lacs, PI: Dr. A. K. Digalwar, Co-Investigator: Prof. K S Sangwan
5. UGC Major Research Project: Development of drivers, barriers and key performance indicators for implementation of green manufacturing in Indian Micro, small and medium ceramic enterprises, Rs. 9.908 Lacs, PI: Prof. K. S. Sangwan.
6. Department of Science and Technology (DST): Fund for Improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST), 2012-17, 165 Lacs.
7. UGC Major Research Project: Design of Supplier Development Implementation Framework for Indian Manufacturing Industries, Rs. 9.40 Lacs, PI: Prof. Srikanta Routroy.
8. Department of Science and Technology (DST): Studies in fluidized bed combustor with co firing rice husk and coal under oxy fired conditions, 31.3 Lacs, Dr. Ravi Inder Singh
9. BITS Pilani, RIG, Design, Development and CFD Modeling of ash cooler of circulating fluidized bed boilers, Rs. 2.00 Lacs, Dr. Ravi Inder Singh.

**(ii) Projects sanctioned during the year****(iii) Projects completed this year**

1. Ministry of Information and Technology, (MIT) :Development, Design and Engineering of 28-DOF Humanoid to avoid obstacles and handle specified objects in the environment, 2012-March to 2015 - Sept, 45 Lacs, PI: Prof. B.K Rout.

**Department-MechanicalEngineering****1. Detail of FDTS in the following format**

SNo.	ID No	Name	Title	Supervisor	Department
<b>II Sem 2014-15</b>					
1	2009A5AB901P	Utkarsh Yadav	Vehicle routing Problems: State of art Review and future Research	Satyendra Sharma	Mechanical
2	2010B1A4763P	Venkatesh Ganesan	Counting Euler Tours on	Samir Dutta	Mechanical



SNo.	ID No	Name	Title	Supervisor	Department
			Undirected Bounded Tree width Graphs		
3	2010B1A4820P	Aman Khurana	Autonomous Balancing Bicycle Bot	B .K.Rout	Mechanical
4	2010B1A4829P	Aarushi Bhargava	Life assessment of components of ultra supercritical Power Plant	P.Srinivasan	Mechanical
5	2010B1AB360P	Prakhar Patni	Multivariate Analysis of supply development impediments using cluster and canonical analysis	Srikanta Routroy	Mechanical
6	2010B1AB425P	Deshpande Shaunakraj Mukund	Relation between crude oil prices and OVX (Volatility Index)	Imlan N. Shaikh	Mechanical
7	2010B1AB798P	Kanchita P Kundargi	Bench marking for supplier development	Srikanta Routroy	Mechanical
8	2010B2A4364P	Anjal Khan	Application of parameter optimization technique of dynamic experiment	B.K.Rout	Mechanical
9	2010B2A4458P	Kommavarapu Raghavendra	Modeling of Reliability in Product development process	R.P. Mishra	Mechanical
10	2010B2A4768P	Rohan Desai	Retail Location Decision Using an Integrated Dematel - ANP Method	Satendra Sharma	Mechanical
11	2010B2A4799P	Pranjal Jain	Reliability analysis of Mechanical components using marker chain	gajanand Gupta	Mechanical
13	2010B3A4617P	Rahul Chandnani	Data uploading & dispensing application using android for use their monitoring systems	Yashvardhan Sharma	Mechanical
14	2010B3A4624P	Peeyush Kumar	Design of closed loop supply chain	B.K.Rout	Mechanical
15	2010B3AB642P	Dushyanth Srihari Gummalam	Lean Manufacturing: Best Practices in the Automobile Industry	R. P. Mishra	Mechanical
16	2010B4A4681P	Bajaj Jash Shailendra	Human Detection Based on Explicit Skin Color Space Thresh holding and minor Motion	M.S.Dasgupta	Mechanical
19	2010B4AB607P	Pratik Bhagchandani	benchmarking for Agile Manufacturing system	Srikanta Routroy	Mechanical
20	2010B4AB671P	Shahade Ketan Gajananrao	Reliability Modeling of Mechanical Equipment	R.P. Mishra	Mechanical
21	2010B4AB678P	Rohit Joshi	Study and Research of Hybrid Vehicles Technology in India	Ravi Inder Singh	Mechanical
22	2010B5A4677P	Prateek Singhvi	Reliability Modeling for Mechanical Equipment	gajanand Gupta	Mechanical
23	2010B5AB442P	Sista Aditya	Supply Chain Optimization Using A.T. Techniques	K.S.Sangwan	Mechanical
24	2010B5AB644P	Bang Siddharth Vasant	Development of Framework for Analyzing Global Supply Chain Security: A case study of Different Industries	Satyendra Sharma	Mechanical
25	2010B5AB665P	Saripally Aditya Bharadwaj	Numerical Study Of Effective Thermal Conductivity Of Composites	Sachin U. Belgamwar	Mechanical
26	2011A4TS093P	Akshay S Menon	Product Development of a device for the Intimation of malasia Detection from Blood Smears-with Focus on Image Processing Involved	Sai Siva Gorthi	Mechanical

SNo.	ID No	Name	Title	Supervisor	Department
27	2011A4TS130P	Ritvik Vasani	Product Development of a device for the Intimation of malaria Detection from Blood Smears-with Focus on making an automated stage	Sai Siva Gorthi	Mechanical
28	2011A4TS151P	Mohit Kumar	Development of Bio-ceramic Scaffolds using a Novel Integrated Approach of Additive manufacturing and Starch Consolidation	S.B.Ghosh	Mechanical
29	2011A4TS152P	Prithvijit Mukherjee .	Study of Viscous Fingering Instability in porous media flows	Sai Jagan Mohan	Mechanical
30	2011A4TS221P	Raghav Agarwal .	On some aspects of contact angle hysteresis	Satish Kumar Dubey	Mechanical
31	2011A4TS232P	Rachit Bhargava .	Design of traffic light and traffic sign detection system for autonomous vehicles	K Madhawa Krishna	Mechanical
32	2011A4TS233P	Saket Nihal .	a comparative study on Pre-Gushed thin walled structure	M.S.Dasgupta	Mechanical
33	2011A4TS238P	Divyanshu Jain .	Study and Modeling of Heat transfer Process in Foil	Sai Jagan Mohan	Mechanical
34	2011A4TS239P	B Naveen .	evaluating the impact of link's cross section on the manipulator's performance	B.K.Rout	Mechanical
35	2011A4TS241P	Mohammad Atif	Reduced order modeling of flow past cylindrical Bluff bodies	Amol M. Marathe	Mechanical
36	2011A4TS244P	Anurag Nandi	Variation of elastic modulus with thickness of CuZr metallic glass nano plate	Murali Palla	Mechanical
37	2011A4TS265P	V.Krishna Kumar	Design of Government supported healthcare supply chain for generic medicine	Srikanta Routroy	Mechanical
38	2011A4TS269P	Vijay Jain	An Indirect method for mass production of customized ceramic components	K.S.Sangwan	Mechanical
39	2011A4TS280P	Shaurya Kaushal	immune response to Mycobacterium Tuberculosis	Amol M. Marathe	Mechanical
40	2011A4TS289P	Aditya Pande	Design and development of sequential & Concurrent data stouchrun for data indeping in data missing	Srinivas Kota	Mechanical
41	2011A4TS303P	Abhishek Kumar .	instabilities in a rotating Pipe flow	Sai Jagan Mohan	Mechanical
42	2011A4TS313P	Ankit Kumar Rout .	Application of fuzzy logic ISM and Graph Theory in supply chain	Srikanta Routroy	Mechanical
43	2011A4TS336P	Jammalamadaka Mani Sai Suryate .	Mathematical Modeling and Computational analysis of Blood Flow	Sai Jagan Mohan	Mechanical
44	2011A4TS474P	S Srivignesh .	Automated 3D modeling from 2D images followed by rapid prototyping	M.S.Dasgupta	Mechanical
45	2011A4TS499P	Siddhansh Agarwal .	Orientation Order in Suspensions of Micro swimmers	Sai Jagan Mohan	Mechanical
46	2011A4TS507P	Nibir Pathak .	Study of Non Fourier heat conduction	Sai Jagan Mohan	Mechanical
47	2011ABTS463P	Dharap Mihir Satish .	Design optimization of a gearbox	R.P. Mishra	Mechanical

SNo.	ID No	Name	Title	Supervisor	Department
48	2011ABTS471P	Hemang Chawla .	Gesture based human robot interaction	B.K.Rout	Mechanical
<b>I Sem 2015-16</b>					
1	2011B5A4681P	Rajat Sharma	Road Profile Estimation	M.S.Dasgupta	Mechanical
2	2012A4PS063P	Ajinkya Bhole	Computer Vision, Robot Mechanisms and Control, Probabilistic Robotics	Sachin U.Belgamwar	Mechanical
3	2011B4AB718P	Shashank Gupta	Mechanical Design Tribology	R.P.Mishra	Mechanical
4	2012A4PS294P	Varun Sharma	Microfluidic Approaches in the Profuction of Artificial Cells	Sachin U. Belgamwar	Mechanical
5	2011A4PS001P	Amal Kalita	Documentary Film making on Auroville	K. Sankar Bhattacharya	Mechanical
6	2012ABTS625P	Harsh Khandelwal	Sustainability in open social manufacturing system	K S Sangwan	Mechanical
7	2012A4TS238P	Tanmayee Kher	Life cycle assessment of recycled 3-D filament	K S Sangwan	Mechanical
8	2012A4TS003P	Bable Ashutosh M	Thermal Analysis of thin wall machining	T.C.Bera	Mechanical
9	2012A4TS342P	C.Abhilash Reddy	Analysis of enablers of green steel supply chain in India	Srikanta Routroy	Mechanical
10	2012A4TS181P	G.Vamsi Krishna	Performance Analysis of green steel supply chain	Srikanta Routroy	Mechanical
11	2011A4TS286P	Himanshu Sanghi	Rectangular drawings and Rectangular duals of planar graphs	J.S Rathore	Mechanical
12	2011A4TS304P	Rohan Shankar	Improvement of Responsiveness and Efficiency of IC Engine	P.Srinivasan	Mechanical
13	2011B4A4693P	Anantim Raj	To study the various parameters involved in the design of an airless tyre	Arun K. Jalan	Mechanical
14	2011B4A4394P	Shrey Raheja	Improvement of Responsiveness and Efficiency of IC Engine	P.Srinivasan	Mechanical
15	2011B5A4563P	Pankaj K. Maurya	Biomimetics as a design methodology	Srinivas Kota	Mechanical
16	2012A4PS211P	Keshav Venkatraman	Firms' performance measurement	Imlak Shaikh	Mechanical
17	2011B3A4617P	Sahil Punchhi	The Development of kinematic and kinetic multi segment foot models for gait analysis.	Arun K. Jalan	Mechanical

**2. Detail of HDD in the following format.**

S.No	ID No	Name	Title	Supervisor	Department
1	2013H106139P	Pranoy Suresh Nambiar	Phase Field Modelling of High Temperature Deformation of Phase Separating alloy	Murali Palla	Mechanical
2	2013H106140P	Kotecha Maulik Chhabilkumar	A study of hidden variable damage tracking method	Amol M. Marathe	Mechanical
3	2013H106141P	Amitabh Kumar	Crack propagation behavior of Bio-Based composite material by considering plastic behavior of material	Murali Palla	Mechanical
4	2013H106142P	Diwan Ketan Anil	Heat receiver optimization of shuffler dish collector	M.S.Soni	Mechanical
5	2013H106143P	Yash Srivastava	Chaotic motions of out of plane	Amol M.	Mechanical

S.No	ID No	Name	Title	Supervisor	Department
			vibrations of a wind turbine blade	Marathe	
6	2013H106144P	Mahadule Swapnil Sitaram	Modelling and simulation of water cooled gas cooler for trans-critical CO2 refrigeration system	M.S.Dasgupta	Mechanical
7	2013H106147P	Praveen Kumar Rao	Simulation of CO2 (R744) transcritical CO2 refrigeration cycle; Indian Context.	Satish Kumar Dubey	Mechanical
8	2013H106149P	Bitty Varghese	Thermal Design & two phase flow analysis of Ejector for transcritical CO2 refraction cycle.	Satish Kumar Dubey	Mechanical
9	2013H141113P	Arpit Khandelwal	Effective Modules and Crack propagation behavior of Bio-Based composite Material	Murali Palla	Mechanical
10	2013H141115P	Chobharkar Amit Satishrao	Prediction & Optimization of machining parameters to minimize surface roughness using RSM	Girish Kant	Mechanical
11	2013H141117P	Rajkumar Shufen	Study and Implementation of Active Vibration Control by using Smart Material	Arun Kumar Jalan	Mechanical
12	2013H141120P	Pushpaj Kumar	Multi performance optimization for different surface roughness characteristics using grey relation analysis coupled with principle component analysis	Girish Kant	Mechanical
13	2013H142132P	Anita Sharma	Role of enablers and barriers in TPM implementation in India	R.P.Mishra	Mechanical

### 3. Pre submission seminar conducted during 1<sup>st</sup> Jan 2015- 31Dec 2015

S.No.	Name of Student	Department	Title
1	Girish Kant	Mechanical	Prediction and Optimization of Machining Parameters for Minimizing Surface Roughness and Power Consumption during Turning of AISI 1045 Steel
2	Anil Jindal	Mechanical	Network Design and Optimization of Closed-loop Supply Chain

### 4. PhD qualifying examination conducted-

Semester	Permitted to appear	Appeared	Passed	Failed	Did not appear
II Sem 2014-15	2	2	2	0	0
I Sem 2015-16	Nil	Nil	Nil	Nil	Nil

### 5. Research Related Seminar/ Workshop

SNo.	Title of Seminar	Resource Person	Name of Department	Date
1	3 <sup>rd</sup> Indo-German Workshop on Sustainable Engineering	Prof. K. S. Sangwan, Prof. A. K. Digalwar, Dr. M. S. Soni, Dr. Smita Raghuvanshi from BITS Pilani and Prof. C. Herman, The Technische Universitat (TU), Braunschweig, Germany	Mechanical	3-4 November 2015
2	Phasefield modelling of Solid-Solid Phase Transformations	Dr. Rajeev Ahluwalia, IHPC, Singapore	Mechanical	23rd December 2015

**6. Research Publications in journals (Year2015)**

S.No.	Title of the Publications	Authors	Name of the Journal	Volume and Page Number
1	Study of a 30 MW Bubbling Fluidized Bed Combustor Based on Co-Firing Biomass and Coal	Ravi Inder, H Dhiman and SK Mohapatra	Academy of Science, Sadhna, Springer	Vol. 40, Part 4, pp. 1283–1299
2	Evaluation of collection methods in reverse logistics by using fuzzy mathematics	Anil Jindal and K S Sangwan	Benchmarking: An International Journal	Vol. 22, Issue 3, pp. 393-410
3	Thermal performance investigation of earth air tunnel heat exchanger coupled with a solar air heating duct for northwestern India	Sanjeev Jakhar, Rohit Misra, Vikas Bansal, M.S. Soni	Energy and Buildings	Volume 87, 1 January 2015, pp. 360-369
4	Computing Melnikov Curves for Periodically Perturbed Piecewise Smooth Oscillators	Amol Marathe and Aseem Dua	International Journal of Bifurcation and Chaos	Volume 25, Issue 05, May 2015, DOI: 10.1142/S0218127415500674
5	Performance analysis of agile supply chain	Srikanta Routroy and Arjun Shankar	International Journal of Manufacturing Technology and Management	Vol. 29, No. 3/4, pp. 180-
6	Investigation of mechanical strength of 2D nanoscale structures using a molecular dynamics based computational intelligence approach	A Garg, V Vijayaraghavan, CH Wong, K Tai, PM Singru, SS Mahapatra, KS Sangwan	International Journal of Modern Physics B	Vol. 29, No. 1, pp. 1450242
7	An approach to develop green capability in manufacturing supply chain	Srikanta Routroy and Sunil Kumar C V	International Journal of Process Management and Benchmarking	Vol. 6 No.1, pp. 1-28
8	Lean production: literature review and trends	NVK Jasti, R Kodali	International Journal of Production Research	Vol.53, No.3, pp.867-885
9	A benchmarking approach for supply chain risk management	Srikanta Routroy and Arjun Shankar	International Journal of Services and Operations Management	Vol. 20 No. 3, pp. 335-357
10	Strategy for Supplier Development Program Implementation: A Case Study	Srikanta Routroy and Sunil Kumar C V	International Journal of Services and Operations Management	Vol. 21 No. 2, pp. 238-264
11	Modelling and evaluation of product quality at conceptual design stage	Shashank Gupta, Srinivas Kota and Rajesh P. Mishra	International Journal of System Assurance Engineering and Management	10.1007/s13198-015-0357-3, pp.1-15
12	Application of AHP and TOPSIS method for supplier selection between India and China in Textile Industry	Sasi, Jayaram and Digalwar, A. K.	International Research Journal of Engineering and Technology	Vol. 2, No. 4, pp.1730-1738
13	An ensemble evolutionary approach in evaluation of surface finish reduction of vibratory finishing process	A Garg, V Vijayaraghavan, CH Wong, K Tai, SS Mahapatra, KS Sangwan	Journal of Engineering Computation	Vol. 32, No.5
14	Study of effect of feed on cutting force coefficients in turning	H Manikandan, TC Bera, SK Patil	Journal of material science and mechanical	Vol. 2, No. 1, pp. 70-73

S.No.	Title of the Publications	Authors	Name of the Journal	Volume and Page Number
			engineering	
15	Modeling the performance measures of world class manufacturing using interpreting structural modeling	A K Digalwar, Anil Jindal, K S Sangwan	Journal of Modelling in Management	Vol. 10 Issue 1, pp. 4-22
16	Ranking of Drivers for Green Manufacturing Implementation Using Fuzzy Technique for Order of Preference by Similarity to Ideal Solution Method	Varinder Kumar Mittal and Kuldip Singh Sangwan	Journal of Multi- Criteria Decision Analysis	Vol 22, No.1-2, pp. 119-130
17	A bibliometric analysis of green manufacturing and similar frameworks	Kuldip Singh Sangwan and Varinder Kumar Mittal	Management of Environmental Quality: An International Journal	Vol. 26, No 4, pp. 566-587
18	Three dimensional CFD Modelling of 45TPH Fluidised Bed Combustor based on Biomass and Coal	Ravi Inder Singh, H Dhiman and S K Mohapatra	Material Research Innovations	Vol. 19, S. 8, pp.118-124
19	Measurement of Manufacturing Agility: A Case Study	Srikanta Routroy, Pavan Kumar Potdar and Arjun Shankar	Measuring Business Excellence	Vol. 19 No. 2, pp. 1-22
20	Predictive Modelling and Optimization of Machining Parameters to Minimize Surface Roughness using Artificial Neural Network Coupled with Genetic Algorithm	G Kant, KS Sangwan	Procedia CIRP	Vol 31, 2015, pp. 453-458
21	Optimization of Machining Parameters to Minimize Surface Roughness using Integrated ANN-GA Approach	K S Sangwan, S Saxena, G Kant	Procedia CIRP	Vol 29, 2015, pp.305-310
22	Network Design and Optimization for Multi-product, Multi-time, Multi-echelon Closed-loop Supply Chain under Uncertainty	Jindal, A. and Sangwan, K. S	Procedia CIRP	Volume 29, pp. 656-661
23	Environmental impact analysis of a water supply system: study of an Indian university campus	V Bhakar, N Sihag, R Gieschen, A Stefan, C Herrmann, K S Sangwan	Procedia CIRP	Vol 29, pp. 469-474
24	Life Cycle Assessment of CRT, LCD and LED Monitors	Vikrant Bhakar, Aashray Agur, A.K. Digalwar, Kuldip Singh Sangwan	Procedia CIRP	Vol 29, pp. 433-438
25	Reduction of Post-kiln Rejections for Improving Sustainability in Ceramic Industry: A Case Study	J Bhamu and K S Sangwan	Procedia CIRP	Vol 26, pp. 618-623
26	Predictive Modeling for Power Consumption in Machining Using Artificial Intelligence Techniques	G Kant and K S Sangwan	Procedia CIRP	Vol. 26, pp. 403-407
27	Interpretive structural modelling approach for Sustainable development of electric vehicle market in India	Digalwar, A. K. and Ganneri G.	Procedia CIRP	Vol.26, pp. 40-45
28	Sustainability issues in turning process: A study in Indian	Dambhare, Sunil, Deshmukh, Samir, Borade, Atul, Digalwar,	Procedia CIRP	Vol.26, pp. 379-384

S.No.	Title of the Publications	Authors	Name of the Journal	Volume and Page Number
	machining Industry	A. K. and Phate, Mangesh		
29	Development of a framework for implementation of World-class Maintenance Systems using Interpretive Structural Modeling approach	Rajesh P. Mishra, Ram Babu Kodali, Gajanand Gupta, Nidhi Mundra	Procedia CIRP	Vol.26, pp. 379-384
30	Achieving Supply Chain Coordination through Lot Size Based Discount	Srikanta Routroy, Manu Dixit and Sunil Kumar C V	Procedia Material Science	Vol. 2 No. 4/5, pp. 2433-2442
31	Demystifying Manufacturer Satisfaction through Kano Model	Sunil Kumar C V and Srikanta Routroy	Procedia Material Science	Vol. 2 No. 4/5, pp. 1585-1594
32	Validity and reliability of lean enterprise frameworks in Indian manufacturing industry	NVK Jasti, R Kodali	Proceedings of the Institution of Mechanical Engineers, Part B: Journal of mechanical engineering,	January 12, 2015, doi: 0954405414555736
33	A critical review of lean supply chain management frameworks: proposed framework	NVK Jasti, R Kodali	Production Planning & Control	Volume 26, Issue 13, 2015, pages 1051-1068
34	Modeling and assessment of e-waste take-back strategies in India	M Dwivedy, P Suchde, RK Mittal	Resources, Conservation and Recycling	DOI: 10.1016/j.resconrec.2015.01.003
35	Parametric study of transient temperature distribution in FSW of 304L stainless steel	P Chansoria, P Solanki, MS Dasgupta	The International Journal of Advanced Manufacturing Technology	pp. 1-17
36	Agglomeration in stripper ash coolers of CFBC- A Case Study	Ravi Inder Singh	The Journal of Institution of Engineers-Part C	Springer, 2015
37	Heat Transfer Enhancement in Absorber Tube of Parabolic Trough Concentrators Using Wire-Coils Inserts	Ketan Diwan , M. S. Soni	Universal Journal of Mechanical Engineering	Volume 3, 2015, pp.107-112

#### 7. 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	Network design and optimization for multi-product, multi-time, multi-echelon closed-loop supply chain under uncertainty	Anil Jindal and K S Sangwan	Procedia - CIRP, Swedan	Sweden
2	Development of self assessment model for enterprise sustainability	Vkrant, Bhakar, Nitesh, Sihag, V., Mamidi, S., Dinda, A. K. Digalwar, and K.S. Sangwan,	Proceedings of National Conference on Sustainable Manufacturing (NCSM-2015)	2-3 January 2015, MNIT Jaipur
3	Barriers to VMI -FAHP based analysis of VMI stakeholders	Atul, Borade, A.K. Digalwar, J. Suanova, and Sunil Dambhare,	8th ISDSI Conference	Hyatt Regency, Pune, 2-4 January 2015
4	An Application of TOPSIS for Selection of Machining Parameters From Environmental Impact	Sunil, Dambhare Atul Borade and A.K. Digalwar,	8th ISDSI Conference	Hyatt Regency, Pune, 2-4 January 2015

S.No.	Title of the Publication	Authors	Name of Conference	Venue and Date of Conference
	Perspective			
5	Strategic Framework for sustainable development of heavy engineering sector in India	A. K., Digalwar, Nidhi, Mundra, Atula Borade and B.A Metri	8th ISDSI Conference	Hyatt Regency, Pune, 2-4 January 2015
6	An application of the reliability centered maintenance: case study of conventional lathe machine	G. Gupta and R.P. Mishra,	8th ISDSI International Conference	Hyatt Regency, Pune Jan 02-04,2015
7	An application of reliability centered maintenance using fuzzy logic on conventional lathe machine	G. Gupta, R P Mishra,	International Conference on Evidence Based Management 2015 (ICEBM2015)	BITS Pilani, March 20-21, 2015
8	Reliability Analysis and Identification of Critical Components using Markov	G. Gupta, R. P. Mishra, P. Jain,	2015 IEEM IEEE	Suntec, Singapore, Dec. 06-08, 2015
9	An application of reliability centered maintenance using RPN mean and range on conventional lathe machine	G.Gupta, R.P. Mishra, P.Singhvi	7th ICQRIT 2015	University of Delhi, Delhi, Dec 28-30, 2015
10	Study of effect of feed on cutting force coefficients in turning	H Manikandan, TC Bera, SK Patil	International conference on Mechanical, Material, Industrial, Automotive, Aeronautical and Nano-Technology	New Delhi, India
11	Understanding Consumers' Perceptions of Sustainable Products in India	Prabir Sarkar, Srinivas Kota and Bijendra Kumar	International Conference on Research into Design 2015	NSSC, IISc, Bangalore. 7-9 January 2015
12	Various aspects of green issues in Indian steel supply chain: An overview	Sishir Goyal and Srikanta Routroy	First International Conference on Evidence Based Management	BITS Pilani, Pilani Campus
13	Modeling Inter dependencies of Supplier Development Enablers	Srikanta Routroy and Sunil Kumar C V	3rd International Conference on Industrial Engineering (ICIE-2015) & 57th National Convention of Indian Institution of Industrial Engineering	Sardar Vallabhbhai National Institute of Technology, Surat
14	Sustainable Supply Chain in Product Development	Srinivas Kota and Kirthi Bandi	International Conference on Research into Design 2015	NSSC, IISc, Bangalore. 7-9 January 2015
15	Demystifying Supplier Satisfaction through Kano Model	Sunil Kumar C V and Srikanta Routroy	First International Conference on Evidence Based Management	BITS Pilani, Pilani Campus
16	Co-Firing of Coal with Pine Needles in a 20kW Oxy-Fired Bubbling Fluidized Bed: Experimental Investigation	Ravi Inder Singh and Rajesh Kumar	ICAER-2015	Dec. 14-17, 2015, IIT Mumbai, Mumbai, India
17	CFD Analysis of a Fluidized Bed Combustor Based on Co-Firing	Hemant Kumar, SK Mohapatra and Ravi Inder Singh	IMECE2015, ASME	Nov. 2015Texas, Houston, USA
18	Experimental Analysis of Splash Zone of Fluidized bed Combustor Using Rice Husk and Coal Under Variable Oxygen Conditions	Ravi Inder Singh and Rajesh Kumar	22nd Fluidized bed combustion	June 2015, Turku, Finland



S.No.	Title of the Publication	Authors	Name of Conference	Venue and Date of Conference
19	Heat Transfer Analysis of Splash Zone of Short Fluidized bed Combustor using coal and biomass under variable oxygen conditions	Ravi Inder Singh	CHT-15 ICHMT International Symposium on Advances in Computational Heat Transfer	May 25-29, 2015, Rutgers University, Piscataway, USA
20	Identifying and ranking green product development factors: An Analytical Hierarchy Process approach	A.K.Digalwar and A. R. Tagalpalewar	3rd International Conference on Industrial Engineering (ICIE-2015) & 57th National Convention of Indian Institution of Industrial Engineering	Sardar Vallabhbhai National Institute of Technology, Surat
21	Simulation of vehicle assembly line using ARENA	Akshay Sarada, A.B. Rane, A. K Digalwar, and V.K. Sunnapwar	3rd International Conference on Industrial Engineering (ICIE-2015) & 57th National Convention of Indian Institution of Industrial Engineering	Sardar Vallabhbhai National Institute of Technology, Surat
22	Geometrical approach to On line Trajectory generation, Obstacle avoidance and Footstep planning for a Humanoid Robot	K Nawade, V Aditya, A Shrivastava, BK Rout	15th IEEE-RAS International Conference on Humanoid Robots,	Seoul, South Korea 2015,
23	Performance Analysis of Earth Water Heat Exchanger for Concentrating PhotoVoltaic Cooling	Sanjeev Jakhar, M. S. Soni, and Nikhil Gakkhar	Vth International Conference on Advances in Energy Research, ICAER 2015	IIT Bombay, Mumbai, India, 15-17 December, 2015
24	Analysis of Water Cooling of CPV Cells Mounted on Absorber Tube of a Parabolic Trough Collector	Nikhil Gakkhar, M. S. Soni, and Sanjeev Jakhar	Vth International Conference on Advances in Energy Research, ICAER 2015	IIT Bombay, Mumbai, India, 15-17 December, 2015
25	Thermal Analysis and Simulation of Combined Heat and Power from CPV cells Mounted on PTC Receiver	M.S. Soni and Nisha Tamar	Global Energy Technology Summit 2015 Clean n Green Energy: The New Normal (GETS 2015), organized by NTPC Ltd.	The Grand Hotel, Nelson Mandela Marg, Vasant Kunj, New Delhi, November 7-9, 2015

8. **Awards and honors for BITS faculty** - Not Available

9. **Books published by faculty members** - Not Available

#### 10. Faculty Research Area

Department	Sl. No.	Name of faculty	Research Area
Mechanical	1	R.K.Mittal	Robotics
	2	N.N.Sharma	MEMS and Nano Systems
	3	Mani Sankar Dasgupta	Design, Simulation
	4	Kuldip Singh Sangwan	Manufacturing
	5	P. Srinivasan	Production Engineering
	6	Arun Maity	Project Management, Manufacturing Excellence
	7	Bijay Kumar Rout	Quality, Reliability, Operations Research and Robotics
	8	Abhijeet K Digalwar	Manufacturing Engineering and Management
	9	Srikanta Routroy	Industrial Engineering and Management
	10	Manoj Kumar S Soni	Solar Thermal and Thermal Engineering
	11	Venkataraman P B	Operations Management, Decision Sciences
	12	Sharad Shrivastava	Biomedical Engg, Engineering Materials

Department	Sl. No.	Name of faculty	Research Area
	13	Ravi Inder Singh	Thermal Engineering
	14	Ravi Shrikrishna Reosekar	Manufacturing Organization and Management
	15	R P Mishra	Manufacturing Systems Engineering
	16	Pavan Kumar Potdar	Materials Management, Manufacturing Management
	17	Naga Vamsi Krishna Jasti	Lean Manufacturing
	18	Jitendra Singh Rathore	Nano System and Fluidics
	19	Sachin U Belgamwar	Materials Engineering and MEMS
	20	Amol M. Marathe	Nonlinear vibrations
	21	Sudeep Kumar Pradhan	Supply chain Management, Operation Management
	22	Palla Murali	Solid Mechanics, Materials Science
	23	Arun Jalan	Dynamics, Vibration
	24	Srinivas Kota	Product Design, Life Cycle Assessment
	25	Tufan Chandra Bera	Manufacturing
	26	Shyam Sunder Yadav	Computational Fluid Dynamics
	27	Sandeep Dhar	Hybrid Lifting Algorithms
	28	Girish Kant	Manufacturing Engineering
	29	Anil Jindal	Manufacturing
	30	Gajanand Gupta	Manufacturing

#### DEPARTMENTAL ASSOCIATION/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 2015, which saw an impressive participation from colleges all over India. ASME has sponsored Team BITS and Team Robocon which work on yearlong projects and participate in competitions within and outside the country. Teams under our chapter have conducted two workshops, one on SolidWorks by Team BITS and another on Voice and Hand-Gesture Controlled Robots by Team Robocon. Moreover Paper Wings, a competition wherein teams were required to make designs of planes made out of paper was organised and cash prizes were given away to the winners. ASME, BITS Pilani Chapter also had a Membership Drive to increase involvement of students in such activities. Apart from activities within BITS, we have successfully opened a new ASME chapter in BKBIET, to further expand the ASME network. For APOGEE 2016, abstracts of four projects and one paper under ASME, BITS Pilani Chapter have been selected. Subrahmanyam Pulipaka from our chapter got selected to the student leader development conference at ASME International Mechanical Engineering Congress and Exposition in Montreal.

##### (iii) RC

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 & Instrumentation Engineering discipline.

##### (iv) 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.

#### (v) CRIS

Demonstration of the humanoid robot at IIT Delhi, Participated Hisens conference 2015 organized by Hiroshima University and CEERI Pilani, Completion of the DIT sponsored project. Participated in Robocup 2015 held in China and stood 5th in teen sized robot.

#### B1.10.11 Department: Management

Tenth batch of sixty students were admitted to the M.B.A Programme (launched from 1<sup>st</sup> sem.2006) this year. The institute used CAT and GMAT scores for short-listing candidates for its MBA Programme for 2015. This was followed by group discussion and personal interviews for the candidates that were conducted by the faculty teams of Management Department at Delhi, Hyderabad, Bangalore and Pilani. The major change that was incorporated in the eligibility conditions for applying to our MBA Program was relaxing the condition of allowing only engineering degree or BITS first degree holders to any candidate with a post graduate degree in any discipline. This was done to increase the heterogeneity of perspectives such a mixed population in the class can bring.

#### 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 an International conference Evidence Based Management. The department organized three workshops in emerging areas related to Business Process Simulation, Human Resource Outsourcing and International Business Eleven structured sessions of eminent guest speakers were organized during this year. 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 prolifically published papers in international journals, national journals and in conference proceedings (a total of forty in all) as well as a few have submitted proposals for projects to the sponsoring organizations

#### 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 2015**.

#### SPONSORED RESEARCH PROJECTS

##### Ongoing

S.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1	Entrepreneurship Development Programs on campus	Prof. Arya Kumar	National Entrepreneurship Network	22,67,000	2007 - ongoing
2	An Empirical Study on the Impact of Information and Communicating Technology on Productivity in Small and Medium Textile Enterprises of Rajasthan	Dr Leela Rani	UGC	6,50,000	01-04-2013 - ongoing
3	Understanding Impact of Social Learning Forms on Environmentally Sustainable Behavior in Children	Dr Leela Rani	ICSSR	5,00,000	10-05-2014 - 10-12-2016

## PUBLICATIONS

### International/National Journals

1. Aggarwal Remica and Bakshi A. (2015), "Chance Constraint based multi-objective Vendor Selection using NSGA II " *Procedia Computer Science* , Volume 48, Pages 699–705
2. Aggarwal Remica and Singh, S.P. (2015), "Chance Constraint Based Multi-Objective Stochastic Model for Supplier Selection" *International Journal of Advanced Manufacturing & Technology* Volume 79, Issue 9, pp 1707-1719
3. Aggarwal, Remica and Chanda, Udayan, "Optimal Duration of Advertising Campaigns for Successive Technology Generations using Innovation Diffusion Theory", *International Journal of Operational Research*, (Forthcoming).
4. Arun Kumar Agariya & Sri Harsha Yayi (2015), "ERM Scale Development and Validation in Indian IT Sector", *Journal of Internet Banking & Commerce*, 20(1), 1-16. (Impact Factor: 0.3 as per Scopus)
5. Arunima Rana, Anil Bhat, Leela Rani, (2015), "A classificatory scheme for antecedents of the sources of "online brand equity"", *Journal of Research in Interactive Marketing*, Vol. 9 Iss 4 pp. 262 - 298
6. Chanda, Udayan and Aggarwal, Remica, "Bayesian Network on Labour Dissonance: A Social Sector Development challenge to India ", *Journal of Management Analytics* (Accepted for Publication)
7. Chanda, Udayan and Das, Soumitra, (2015), "Multi-Stage Diffusion Dynamics in Multiple Generation High Technology Products", *Journal of High Technology Management Research*, 26, 88–104.
8. Kumar, Alok and Chanda, Udayan, "Economic Order Quantity Model for New Product under Fuzzy Environment where Demand follows Innovation Diffusion Process with Salvage Value", *International Journal of Procurement Management* (Forthcoming).
9. Kumar, Alok and Chanda, Udayan, "Economic Order Quantity under Permissible Delay in Payments for New Products in Dynamic Pricing-Advertising Condition", *International Journal of Business Innovation and Research* (Forthcoming).
10. Mahesh, J., Bhat, A. (2015), 'Proposed Framework For Identifying "Indian" Management Practices'. *International Journal of Research in Management & Social Science*, 3 (1- IV): 21- 26
11. Matai, Rajesh (2015), "Solving Multi Objective Facility Layout Problem by Modified Simulated Annealing", *Applied Mathematics and Computation*-Accepted.
12. S. Kamboj, Z. Rahman and M. Yadav, Goyal, P. (2015), "Impact of Social CRM Capabilities on Firm Performance: Examining the Mediating Role of Co-Created Customer Experience" *International Journal of Information Systems in the Service Sector* (forthcoming)
13. S. Kamboj, Z. Rahman, Goyal, P. (2015), "A resource-based view on marketing capability, operations capability and financial performance: An empirical examination of mediating role, *Procedia Social and Behavioural Sciences*, Vol. 189, pp. 406-415
14. Satyendra Sharma (2015)"Optimal Selection of Third-Party Logistics Service Providers using Quality Function Deployment and Taguchi Loss Function", Accepted in *Benchmarking: An International Journal*, Vol. 22, No. 7, pp. 1281-1300 Indexed in Scopus
15. Satyendra Sharma (2015), "Risk adjusted total cost of ownership model for strategic sourcing" Accepted in *International Journal of Procurement Management*, Vol.9 Indexed in Scopus
16. Satyendra Sharma and Anil Bhat (2015) "Risk Mitigation in Automotive Supply Chain: An Empirical Exploration of Enablers to Implement Supply Chain Risk Management", *Global Business Review*" Sage Publication, Scopus Indexed Accepted for Vol.16, No.4.
17. Satyendra Sharma and Srikanta Routroy (2015), "Modelling information risks in supply chain using Bayesian networks", *Journal of Enterprise Information Management*, Accepted, Vol. 29
18. Satyendra Sharma, Anil Bhat and Vinod Kumar (2015), " Path analysis model for supply chain risk management" Accepted in *International Journal of Logistics Management*, SCI Indexed
19. Satyendra Sharma, Srikanta Routroy and Utkarsh Yadav (2015), "Vehicle routing problems: Recent literature review of its variants", *International Journal of Operational Research*, Accepted

### Conferences

1. Agarwal, A. and Arun Kumar Agariya (2015). *Internal Marketing: Does it really matter in Indian telecom sector*. International conference on Telecommunication technology and management, IIT-Delhi.
2. Aggarwal, R. "A Chance Constraint based Approach for Dynamic Vendor Selection Problem with Distinctive Price Breaks under time varying Stochastic data" at EURO conference on Operations Research , Glasgow , UK July 12<sup>th</sup>- 15<sup>th</sup>2015.

3. Aggarwal, R. and Sahoo, A. "Improving the efficiency of learning applications using User Experience Metrics" at FORE International Operations Conference (FIOC 2015) November 26<sup>th</sup>-27<sup>th</sup>, 2015, Delhi.
4. Aggarwal, R. and Singh, S. "A Hybrid Approach for Supplier Selection based on Revised Data Envelopment Analytic Hierarchy Process" as invited talk at EURO conference on Operations Research, Glasgow, UK, July 12<sup>th</sup>-15<sup>th</sup> 2015.
5. Arun Kumar Agariya & Jyoti Tikoria (2015), "Development of Customer Relationship Management Framework for Indian Airline Industry", 4th Asian Management Research and Case Conference, Universiti Sains Malaysia (10-11 January, 2015).
6. Bhattacharya, P., Satija, S., & Gupta, R. K. (2015). 'Envisioning India towards Next Decade through a Positive Lense'. Presented in 3rd PAN-IIM World Management Conference, IIM Indore, December 16-18, 2015.
7. Bhattacharya, P., Satija, S., & Gupta, R. K. (2015). 'Positive Organizational Practices and Processes in Indian Engineering and Technology Institute'. Presented in 4th Biennial Indian Academy of Management Conference, IIM Lucknow Noida Campus, Dec. 11-13, 2015.
8. Chanda, Udayan (2015), "Intergenerational Effects of Diffusion on CDMA and WCDMA Technologies under Direct Network Externalities", 4th Asian Management Research and Case Conference (AMRC) 2015, Universiti Sains Malaysia, Pulau Pinang, Malaysia
9. Chanda, Udayan and Kumar, Alok (2015), "Innovation Diffusion Based Inventory Model under Dynamic Advertising and Pricing Policy" Proceedings of International Conference on Evidence Based Management, vol. 2 661-665.
10. Chanda, Udayan and Kumar, Alok (2015). "Stage wise Innovation Diffusion with a Dynamic Market". FORE International Operations Conference 2015 (FIOC-2015), FORE, New Delhi.
11. Dubey, S., & Satija, S. (2015). 'Psychological Capital in relation with Organizational Virtuousness and Performance: Paradigm for the Next Decade'. Presented in 3rd PAN-IIM World Management Conference, IIM Indore, December 16-18, 2015.
12. Goyal, P. (2015), "Influence of perceived CSR on Service Quality, Trust and Customer Loyalty: Insights from Indian Hotel Industry" presented at International Conference 4th Asian Management Research and Case (AMRC) Conference 2015, January 10-11, 2015, Graduate School of Business, Universiti Sains Malaysia
13. Kumar, Alok and Chanda, Udayan (2015), "Inventory Model for Permissible Delay in Payments of New Products under Dynamic Pricing and Advertising Expenditure" Proceedings of International Conference on Evidence Based Management, vol. 2 493-496.
14. Kumar, Alok and Chanda, Udayan (2015). "Inventory Model For Repeat Purchase Under Innovation Diffusion Criterion". FORE International Operations Conference 2015 (FIOC-2015) held during November 26-27, 2015 at FORE, New Delhi.
15. Neha Gupta, Divya Mehta & Jyoti Tikoria (2015), Impact of Information Technology on Human Resource Management: An Exploratory Research on select Indian Banks, Published in conference proceedings of International Conference on Evidence Based Management (ICEBM 2015), organized on 20-21st March 2015 at BITS Pilani.
16. Rani, L. and Sharma, M., "A Study of Awareness Level of Environmental Sustainable Consumption Issues Among Children", presented at Global Cleaner Production and Sustainable Consumption Conference 2015, 1st to 4th Nov. 2015, organized by Journal of Cleaner Production and Elsevier at Sitges, Spain.
17. S. Kamboj, Z, Rahman and M. Yadav, Goyal, P. (2015), "A Capability Based View on Social Media Technologies and Firm Performance Relationship: An Empirical Examination of the Mediating Role", Presented at International Conference on Evidence Based Management, Organized by Department of Management, BITS Pilani
18. Satyendra Sharma, Risk modelling of Infrastructure projects: A simulation model", Intl conference on Speed, Scale, and Sustain organized by SVNIT and IIE (26-28 Nov. 2015)
19. Sharma, M. and Rani, L., "A Study of awareness level of Environmental Sustainable Consumption Issues among Children", presented at International Conference on Evidence Based Management, March 22nd-23rd, 2015 organized by Department of Management, Birla Institute of management and Science Pilani at Pilani Campus.
20. Sharma, M. and Rani, L., "Identification of Social Learning Tools for Teaching Sustainable Consumption Behavior", presented at International Conference on Social Entrepreneurship and Sustainable Development by Centre for Social Entrepreneurship, February 2015, organized by School of Management and Labour Studies, Tata Institute of Social Sciences.

21. Tiwari, P.; Bhat, A. K. & Tikoria, J., "Social entrepreneurship: Rise of New hybrid sector", published in conference proceedings of Eleventh Biennial Conference on Entrepreneurship, organized by Entrepreneurship Development Institute of India, Ahmedabad on 18- 20 February 2015.

#### CONFERENCES/WORKSHOPS ATTENDED BY FACULTY

1. Dr. Anubha has participated in Case Teaching Seminar organized by IIMA & Harvard Business School Press at Dr. Reddy's Leadership Academy, Hyderabad.
2. Dr. Satyendra Sharma has participated in eight days training program on lean six sigma organized by MSME, Govt. of India. During June-July, 2015.

#### BOOKS/CHAPTERS PUBLISHED : NIL

#### CONFERENCES/WORKSHOPS ORGANIZED BY THE DEPARTMENT

##### International Conference on Evidence Based Management 2015:

Department of Management, BITS Pilani, Pilani Campus organized a two-day international conference on Evidence Based Management from 20<sup>th</sup> to 21<sup>st</sup> March, 2015. The conference was well attended and brought together 250+ scholars from India and abroad, who were interested in advancing the evidence based practices in decision making. Three keynote speakers highlighted the day, including a talk by Prof. Hemant Merchant, University of South Florida; Prof. B.N. Jain, BITS Pilani and the final address from Prof. Snehenhu B. Kar, University of California at Los Angeles (UCLA). The conference consisted of a range of sessions including theme sessions and academic sessions. The speakers highlighted a broad range of business-related issues and problems and emphasized the importance of evidence based practices for sound managerial decision making. Overall 170 peer reviewed research papers were presented from different domain of management. These research papers were also published in the two volumes of Conference Book Proceedings. Conference also had tie-up with four reputed international journals for special issue publications.

##### Workshops Organized by the Department

S. No.	Dates	Title	Resource Person	No. of Participants
1	28th Feb' 2015	Workshop on HRO- Module-2	Mr. Atul Tiwari Ms. Soma Sarkar Rao	15
2	23rd August 2015	Workshop on Business Process Simulation	Prof. D.S Broca (XLRI, Jamshedpur)	40
3	18th November 2015	Workshop of Country Selection and Evaluation for International Business	Dr. Mridula Mishra (IIFT, New Delhi)	75

#### INVITED TALKS GIVEN BY THE FACULTY : NIL

#### INVITED TALKS ARRANGED BY THE DEPARTMENT

S.No.	Name	Topic of presentation/Area of Expertise	Dates of Visit
1.	Prof. Hemant Merchant Kate Tiedemann College of Business, University of South Florida St. Petersburg	Some thoughts on art of presenting scientific evidence	20/03/2015
2.	Prof. B. N. Jain Vice Chancellor, BITS Pilani	Data driven approach for resource allocation in multi campus university	20/03/2015
3.	Prof. Snehenhu B. Kar Department of Community Health Sciences, University of California at Los Angeles (UCLA)	Evidence based management: Key issues and challenges in health sector	20/03/2015
4.	Prof. M. J. Xavier Executive Director, VIT Business School, Vellore	Evidence based management: Research across business, social sector, education sector and public policy	20/03/2015
5.	Dr. Balwant Singh Ex-Principal Advisor, Department of Statistics and Information Management (DSIM) of Reserve Bank of India (RBI)	Monetary policy : evidence based practice	20/03/2015
6.	Dr. Vasudevan Sundararajan Vice President - Business Analytics, HSBC	Data driven insights for competitive advantage	21/03/2015
7.	Dr. Amit Bardhan Professor,	Tools and techniques in Evidence based management	21/03/2015

	Faculty of Management Studies, University of Delhi, Delhi		
8.	Dr. Kanhaiya Singh Professor FORE School of Management, New Delhi	Evidence based management practices in banking sector	21/03/2015
9.	Mr. Somnath Mitra Worked with IBM, India Mr. Mitra has more than 16 years of work ex in IT industry, with experience in Oil & Gas (upstream, and downstream) domain, and Telecom domain.	Management information systems	12th - 13th April 2015
10.	Mr. Atul Tiwari Head – HR & Training People Strong  Ms. Soma Sarkar Rao Member- HR Team People Stron	Second Module of Human Resource Outsourcing Workshop  Topic: HRO Process Management & Governance	28/02/2015
11.	Mr. Mukesh D. Jain VP & Head, Advertising & Analytics Jio Digital Media Services	Big Data, Business Analytics	23rd-24th Feb. 2015

## FACULTY AND STUDENT ACHIEVEMENT

### Faculty Achievements/Awards

1. Dr. Anubha Dadhich has been appointed as Reviewer for International Journal of Business Systems & Research
2. Dr. Anubha Dadhich has been appointed as Reviewer for Journal of Modeling Management
3. Dr. Anubha Dadhich has qualified asMBTI Certified Trainer
4. Dr. Arun Kumar has received AIMS International Outstanding Management Researcher Award, 2015 by Association of Indian Management Scholars at IBA, Bangalore on December, 19, 2015
5. Dr. Arun Kumar has received AIMS International Young Management Researcher Award, 2014 by Association of Indian Management Scholars at IIM, Kozhikode on Jan, 2, 2015
6. Dr. Arun Kumar has received Bharat Excellence Award from Shri Randhir Singh (Honorable Former Governor of Sikkim) on 29<sup>th</sup> November, 2015 at Delhi
7. Dr. Jyoti has received Premium Awards for Entrepreneurship Week 2015 by National Entrepreneurship Network (NEN)-Wadhvani Foundation.
8. Dr. Praveen Goyal has been appointed as Editorial board member of Journal of Advanced Research in Operational & Marketing Management
9. Dr. Praveen Goyal has been appointed as Guest Editor for the special issue of International Journal of Management Practice (Inderscience Publication)
10. Dr. Praveen Goyal has been appointed as Guest Editor for the special issue of Business and System Research (Inderscience Publication)
11. Dr. Praveen Goyal has received Young Scientist Award- VIFRA 2015, VENUS International Foundation, Chennai - 600088, India.
12. Dr. Satyendra Sharma has received Young Management Researcher award 2015 by Association of Indian Management Scholars at IBA, Bangalore on December, 19, 2015
13. Dr. Udayan Chanda has been appointed as Editorial Board Member of Journal of Knowledge Management & Information Technology.
14. Dr. Udayan Chanda has been appointed as Editorial board member of Journal of Advanced Research in Operational & Marketing Management
15. Dr. Udayan Chanda has been appointed as Guest Editor of Special Issue on: Evidence-based Processes in Business and Systems in International Journal of Business and Systems Research (IJBSS).
16. Dr. Udayan Chanda has been appointed as Guest Editor of Special Issue On: Evidence Based Management for Services Sector in International Journal of Information Systems in the Service Sector (IJISS).

17. Dr. Udayan Chanda has received Young Scientist Award- VIFRA 2015, VENUS International Foundation, Chennai - 600088, India.

#### Students Achievements:

S.No	Organizing Institute	Name of Competition	Details of Competitions	Students Participation
1.	IIT B	Upkriya- The B-Plan competition	Upkriya was a social entrepreneurial event wherein The B-plan we presented was a feasibility study of Bio-Diesel extraction from wastes.	Team Name:- BITSIANS Members:- 1. Nair Abhay Sivasankaran 2. Prabu Kalidoss 3. Krishnan S
2.	IIT-B	Abhyuttan	Abhyuttan was a marketing event organized as a part of Avenues'15 the managerial fest of IIT-B. The initial round was a quiz after which we did a case study pertaining to market research and demand forecasting.	BITSIANS
3.	IIM Indore (Mumbai Campus)	Pitch for Piggybank , Paridrishya on 26/27 Oct	Building Marketing Plan for Paper boat Tackling Painting business expansion( Demand>Supply)	Bitsians - Shivam Gupta , Himanshu Mishra (Pitch for Piggybank) Incredibles - Shivam Gupta , Himanshu Mishra, Samir Husain(Paridrishya)
4.	IIM Indore (mumbai)	Yudhghosh on 27 oct 2015	Presentation on problems and their solution of Paperboat (hector beverages)	Team name- BITSians Team member- Shivam Gupta & Himanshu
5.	IIM Indore (mumbai)	Yudhghosh on 28 Oct 2015	Case study and presentation on Business problem	Team name- Incredibles Team members- Shivam gupta
6.	IMI, Delhi	Strategy Bazaar	Case Study on Ride-it, a car pooling venture.	Bitsians: Ambuj Jain and Arunodoy Bhattacharjee
7.	Doms IIT Madras	5 Samurai, 25 Oct 2015	Presented a b-plan to revive the market hold, growth and expansion of LabourNet	The monks Members- Anupam Roy, Vaibhav Surange, Girish Prakash, Nitin Chaudhary, Rohit Sharma
8.	BIMTECH	VIHAAN - BEST MANAGER on 24th Oct, 2015	Testing overall managerial skills	Shivam Gupta
9.	IIT Mumbai, NMIMS	Avenues- Abhyutthan on 30th Oct, CONVISAGE on 31st Oct	Finalist in the 'ABHYUTTHAN' - the marketing event of AVENUES-2015, the international B-school fest of Shailesh J. Mehta School of Management, IIT Bombay Became the 'National Finalist' at CONVISAGE - LIVE Case Study Challenge of CLASSVERSE held at NMIMS Mumbai, 2015	SAKSHAM Mohit Saxena Aakash Rathi Anubhav
10.	IIT B	Upkriya- The B-Plan competition	Upkriya was a social entrepreneurial event wherein The B-plan we presented was a feasibility study of Bio-Diesel extraction from wastes.	Team Name:- BITSIANS Members:- 1. Nair Abhay Sivasankaran 2. Prabu Kalidoss



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				3. Krishnan S
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**i. FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION AND INDUSTRY IMMERSION**

**ii. SIGNIFICANT NEW EQUIPMENTS/EXPERIMENTAL FACILITY ADDED DURING THE YEAR - N/A**

**DEPARTMENTAL ASSOCIATION/CLUB ACTIVITIES**

**All India Management Convention, Interface 2015**

38th All India Management Convention, Interface 2015 was organized by the Department of Management of BITS Pilani on 6<sup>th</sup> February to 8<sup>th</sup> February 2015. Interface serves as a platform for students and professionals to come alive with the skills and ideas that are necessary to run the ever dynamic and fast growing industries in India. It's a Pan-India Management Convention where students showcase their exceptional managerial dexterity, innovative business ideas and incomparable entrepreneurial skills. Interface which started as an annual event in 1978 has been running every year with increasing participation from various colleges across the country.

The three days Management extravaganza with the theme, 'Effervescence (Spark/Zeal to compete)' had several events including BodhOpera: Paper presentations(Operations), Great Final: Fiscal policy strategies (Finance) Mind Jolter: Case studies (Finance), Trade Maniac: Online Virtual Trading Event (Finance), Strategic CSR Plan Competition (HR) , Aavishkaar: Case Study Competition (HR), Ad Maniac: Creative advertisements (Marketing), Kaleidoscope: Case study (Marketing), Op-Arena (Operations), OperaGyaan: Workshops(Operations) , Manav Ojas (HR), Come.Save.Resolve(HR), Sarachana : Short Story Competition (Reflexionar), Doodle in a Muddle : Doodle Making (Reflexionar) etc.

Prof. G. Raghurama, Director BITS Pilani, Pilani campus graced the inaugural function. Dr. Chandrashekhar, Senior Scientist (CEERI) was the chief guest and delivered the keynote address. He laid focus on the importance of Management in every field, every possible area including day to day household activities. From the smallest and least important thing to the largest and most important thing cannot excel without proper Management. Our Guest of Honour Mr Divya Joshi (Vodafone corporate zonal affairs head) along with another Corporate veteran Mr. Mohit Chhabra enlightened the students on several corporate strategies specially related to marketing strategies used for proper functioning and growth of businesses.

After the inauguration ceremony, the valedictory ceremony of Interface 2015 turned out to be a mini corporate workshop rather than just being a prize distribution ceremony. Mr Gagan Arora, Chief Executive Officer (PrintVenue) and Mr. Lokesh Sikka, Talent Acquisition Head (Snapdeal) graced the event by sharing their experiences and their young Entrepreneurship talent as the mini workshop was more focused towards entrepreneurship talks. Finally the end of the event came with the felicitation and prize distribution ceremony.

#### **B1.10.12 Department: Pharmacy**

Number of faculty members (as on 31 December 2015)

<b>Senior Professors, Professors</b>	03
<b>Associate Professors</b>	01
<b>Assistant Professors</b>	10
<b>Lecturers</b>	04
<b>Visiting Faculty</b>	00

**Head of the Department:** Dr. S. Murugesan

**Contact details:** murugesan@pilani.bits-pilani.ac.in

**Number of PhD Scholars:** 18

**Number of PhD Scholars being supported through Projects and External Funding:** 13

**Number of First Degree and Higher Degree Students being Supported by Sir Ratan Tata Trust:** 16

**Ph.D. Thesis Submitted during the year:** 10

#### **A. SPONSORED RESEARCH ACTIVITIES**

##### **(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.	Studies of Carbopols Use for Controlled Release and Other Uses by Extrusion and Spheronization Techniques	Prof. R.N. Saha	Lubrizol, USA	12.00
2.	International Malarial Research Consortium for the development of Novel Classes of Antimalarials	Prof. R. Mahesh	DBT	21.86
3.	Exploring neuroprotective effect and molecular mechanisms of remote limb ischemic post conditioning against brain stroke	Dr. Rajeev Taliyan	DST-SERB	25.00
4.	Understanding the Epigenetic Regulation in modulating Inflammatory Response mediated by NF-kB through AT1 or AT2 receptor in Type II diabetic nephropathy	Dr Anil Gaikwad	DST SERB	19.41

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
5.	Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type 2 Diabetes	Dr Anil Gaikwad	DST SERB	39.66
6.	Effect of Esculetin on Angiotensin II in rat thoracic aorta under hyperglycaemic and hyperinsulinaemic conditions	Dr Anil Gaikwad	UGC-Major	13.43
7.	Role of Histone Ubiquitination & Angiotensin Converting Enzyme 2 in the Development of Renal Fibrosis under Type I Diabetic Condition	Dr Anil Gaikwad	CSIR-EMR II	32.85
8.	Development of botanical based novel formulation with mosquito larvicidal action for Indian population	Dr.Atish Paul	DST-SYST	12.19
9.	Exploring The Antiobesity Potential of Selected Ayurvedic Medicinal Plants Using Pancreatic Lipase Inhibition Assay and Synergy Guided Fractionation Approach	Dr.Atish Paul	DST-SERB	27.30
10.	Design and characterization of enteric coated lipid nanoparticles for anti-HIV drug delivery	Dr. Anil Jindal	BITS Pilani	2.00
11.	Nano-carriers for co-delivery of small molecules and oligonucleotides	Dr. Deepak Chitkara	BITS Pilani	2.00
12.	Development of Nano-Carriers for Improved Drug Delivery	Dr. Deepak Chitkara	BITS, Pilani (Additional Competitive Research Grant)	9.50
13.	Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer	Dr. Deepak Chitkara	DST-SERB	27.20
14.	Bioanalytical Method Development and Validation of Racemic Drugs by Dried Blood Spot Technique and Its Application to Pharmacokinetic Studies	Dr. Sunil Kumar Dubey	BITS Pilani	2.00
15.	Development and Evaluation of Lipo-polymeric Micelles For Drug Delivery	Dr. Anupama Mittal	BITS Pilani	2.00
16.	Nano-formulation of lysophylline-fatty acid conjugate for effective treatment of diabetes	Dr. Anupama Mittal	DST SERB	26.90
17.	Preparation and characterization of self emulsifying multi particulate drug delivery system for poorly water soluble drug	Dr. Gautam Singhvi	BITS Pilani	2.00
18.	Preparation and characterization of chitosan nanoparticles prepared using a novel micellar system to deliver poorly water soluble drugs	Dr. Aniruddha Roy	BITS Pilani	2.00

#### Brief Write Up of Projects:

##### ***Studies of Carbopols Use for Controlled Release and Other Uses by Extrusion and Spheronization Techniques***

Carbopols, important pharmaceutical excipients, are brand products of Lubrizol USA and are used for different purposes for making formulations or drug delivery systems. Different carbopols have been selected and used, alongwith other excipients for making granules by extrusion and spheronization techniques. Other excipients used are MCC, starch, etc. Optimization of process parameters are going on. Also analytical methods, both UV spectrophotometric and HPLC, of selected drugs have been developed.

##### ***International Malarial Research Consortium for the development of Novel Classes of Antimalarials***

Malaria an infectious disease caused by Plasmodium parasites, among which Plasmodium falciparum is the most dangerous one, with the highest rates of complications such as cerebral malaria and mortality. Therefore, development of novel and effective chemical class of anti-malarial drugs especially compounds that act against novel biochemical targets is the better approach to deceive the problem faced by clinically used drugs.

The DBT (Indo-Canada) project includes the development of novel molecules against cysteine protease, aimed to overcome the limitations/challenges of existing anti-malarial pharmacotherapy, which could be a milestone for the treatment of malaria. The existing inhibitors were used as a template for making a pharmacophore model. Based on this model different series of novel compounds were designed, synthesized, characterized (1H NMR, and mass) and screened. The preliminary structure activity relationships served as a solid starting point for structural modification of the hit compound in order to improve potency, selectivity and pharmacokinetic parameters for the generation of the lead. In summation, the present work is expected to provide some novel molecules beneficial in the clinic.

### ***Exploring neuroprotective effect and molecular mechanisms of remote limb ischemic post-conditioning against brain stroke***

Extensive pre-clinical studies have shown that many neuroprotectants reduce infarction and improve neurological functioning in animal models of stroke, however, very few neuroprotectants have been successfully translated into clinical applications. The current lack of clinical treatment for acute stroke necessitates the exploration of novel concepts that may eventually lead to clinical application such as ischemic preconditioning and post conditioning strategy. IPC can even be produced via a remote organ, such as limbs, kidney and abdominal aorta; a phenomenon termed as remote ischemic post-conditioning that reduce myocardial injury in rats. The molecular characterization of ischemic remote post-conditioning of fundamental importance to establish the neuroprotective mechanisms, if any, elicited by remote ischemic post conditioning against brain injury. Therefore, this study has been designed to investigate the neuroprotective effect of remote limb ischemic post-conditioning and its potential molecular mechanism against brain stroke in rats

### ***Understanding the Epigenetic Regulation in modulating Inflammatory Response mediated by NF- $\kappa$ B through AT1 or AT2 receptor in Type II diabetic nephropathy***

Covalent modifications of histone residues determine chromatin structure dynamics and transcription factor accessibility, i.e. epigenetic control of chromatin replication and gene transcription. For example, transcriptional activity of calmodulin-binding transcription activator (CAMTAs, promotes cardiomyocyte hypertrophy) is governed by association with class II histone deacetylases (HDACs), which negatively regulate cardiac growth. A recent study also reports the role of elevated acetylated histone in vascular injury and remodeling in type I diabetic patients. These reports imply the involvement of global epigenetic changes in the pathogenesis of the diabetic complications. Considering these facts in the proposed project we hypothesized that covalent modification of histone H3 may have an important role in chromatin remodeling in diabetic kidney and transcription of inflammatory genes. Different histone modifications will be studied in this kidney under diabetic complications.

### ***Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type 2 Diabete***

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.

### ***Effect of Esculetin on Angiotensin II in rat thoracic aorta under hyperglycaemic and hyperinsulinaemic conditions***

Diabetes specific microvascular disease is a leading cause of blindness (retinopathy), renal failure (nephropathy) and nerve damage (neuropathy), and diabetes-accelerated atherosclerosis (vasculopathy) leads to increased risk of myocardial infarction, stroke and finally to heart failure. Outcome of the proposed study will result in the understanding of the vascular dysfunction under pre-diabetic condition and type 2 diabetic conditions. Further, protective effects of esculetin in preventing the vascular dysfunction through its anti oxidant mechanism will be an addition to class of different antioxidant used for the treatment of hypertension. Hence, esculetin could be an alternative to for the treatment of hypertension which is associated with an pre-diabetic or type 2diabetic conditions.

### ***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.

### ***Development of botanical based novel formulation with mosquito larvicidal action for Indian population***

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 startergy, but it is well know 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.

#### ***Exploring The Antiobesity Potential of Selected Ayurvedic Medicinal Plants Using Pancreatic Lipase Inhibition Assay and Synergy Guided Fractionation Approach***

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.

#### ***Design and characterization of enteric coated lipid nanoparticles for anti-HIV drug delivery***

According to the latest statistics on global HIV and AIDS epidemic by UNAIDS, WHO and UNICEF, around 35.3 million people were living with HIV/AIDS around the globe in 2012. Nanotechnology based approaches offer some unique opportunities specifically for the targeting of antiretroviral drugs to HIV reservoir sites. Following oral administration, lipid nanoparticles can access to lymphatic transport systems through Peyer's patches or by stimulating chylomicron production and transport via triglyceride rich lipoproteins. The present project therefore deals with the design of enteric coated lipid nanoparticles to enable high concentration of anti-HIV drug at lymphoid tissues following oral administration. Lipids are prone to hydrolysis by the acidic lipase in the stomach which could result in the release of free drug in the gastrointestinal track. Enteric coating could protect the lipid nanoparticle from degradation by acid lipase and prevent the release of free drug before absorption of nanoparticles in the intestine.

#### ***Nano-carriers for co-delivery of small molecules and oligonucleotides***

Targeting the molecular pathways using oligonucleotides such as siRNA and miRNA is gaining interest. Further, their combination with the known therapeutic molecules improved the clinical outcome particularly in cancer therapy. However, simultaneous delivery of oligonucleotides and small molecules faces a lot of challenges owing to their different physico-chemical properties. Amphiphilic copolymers with hydrophobic segments and cationic pendant groups may improve the delivery of these agents. They could also improve the in-vivo stability and non-specific bio-distribution of the loaded therapeutic agents. Also, the hydrophobic domains in copolymers help in solubilization of hydrophobic molecules enabling their simultaneous delivery. Thus the current project aims to develop and evaluate cationic copolymers for delivery of hydrophobic anticancer agents and oligonucleotides. The project will provide amphiphilic copolymers which could form polyplexes with oligonucleotides and load hydrophobic drug molecules.

#### ***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.

#### ***Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer***

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.

#### ***Bioanalytical Method Development and Validation of Racemic Drugs by Dried Blood Spot Technique and Its Application to Pharmacokinetic Studies***

Many drugs contain chiral centers and their enantiomers may have considerably different dissolution profiles, potency, pharmacological activity and pharmacokinetics. There is an increase in the demand of chiral separation methods in industries as racemates are being replaced by single enantiomeric forms. The method development for enantiomeric separation is challenging and time consuming. Chiral separation and analysis enhances the clarity of the pharmacological and toxicological data obtained and can also help in controlling the quality of synthesized drugs. The dried blood spots (DBS) sampling technique is gaining importance in preclinical, neonatal screening and clinical studies due to its many advantages.

**Development and Evaluation of Lipo-polymeric Micelles For Drug Delivery.**

The project aims at developing a new self-assembling, lipo-polymeric carrier for efficient delivery of hydrophobic drugs. The proposed lipopolymer contains polyethylene glycol and polycarbonate based hydrophobic core with cholesterol pendant groups and will form nano-micelles upon self-assembly. Successful delivery of model drug  $\alpha$ -lipoic acid using this polymer would provide a platform delivery system for hydrophobic drugs.

**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.

**Preparation and characterization of self emulsifying multi particulate drug delivery system for poorly water soluble drug**

Drugs exhibit poor aqueous solubility may lead to poor oral absorption, high intra- and inter-subject variability and lack of dose proportionality. On the other hand, such drugs are administered in higher doses than actually needed to achieve the desired plasma level, leading to the rise of adverse effects and toxicity problems. Therefore, suitable formulation approaches need to be developed to improve solubility and bioavailability of poorly soluble drugs. The purpose of the present work is to investigate the feasibility of self emulsifying multi particulate delivery system for poorly soluble drug to provide better outcomes than existing dosage forms. Different formulation variable and process parameters will be analyzed with suitable experimental design in order to evaluate the effects of formulation components on the characteristics of the multi-particulate drug delivery systems.

**Preparation and characterization of chitosan nanoparticles prepared using a novel micellar system to deliver poorly water soluble drugs**

Chitosan is a highly biocompatible and biodegradable biopolymer with cationic, bioadhesive and permeability-enhancing properties. In the proposed work, different chemical modification will be done on the chitosan backbone structure to make it suitable to form micelles. Different poorly soluble drugs will be encapsulated in these micelles and their efficacy will be evaluated.

**(ii) Projects sanctioned during the year**

S.No.	Project Title	Principal Investigator	Agency	Sanction Rs.in Lakh
1	Role of Histone Ubiquitination & Angiotensin Converting Enzyme 2 in the Development of Renal Fibrosis under Type I Diabetic Condition	Dr. Anil Gaiwad	CSIR-EMR II	32.85
2	Development of botanical based novel formulation with mosquito larvicidal action for Indian population	Dr. Atish Paul	DST-SYST	12.19
3	Exploring The Antiobesity Potential of Selected Ayurvedic Medicinal Plants Using Pancreatic Lipase Inhibition Assay and Synergy Guided Fractionation Approach	Dr. Atish Paul	DST-SERB	27.30
4	Development of Nano-Carriers for Improved Drug Delivery	Dr. Deepak Chitkara	BITS, Pilani (Additional Competitive Research Grant)	9.50
5	Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer	Dr. Deepak Chitkara	DST-SERB	27.20
6	Nano-formulation of lysophylline-fatty acid conjugate for effective treatment of diabetes	Dr. Anupama Mittal	DST SERB	26.90
7	Preparation and characterization of self emulsifying multi particulate drug delivery system for poorly water soluble drug	Dr. Gautam Singhvi	BITS Pilani	2.00
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**Brief write up of projects:****Role of Histone Ubiquitination & Angiotensin Converting Enzyme 2 in the Development of Renal Fibrosis under Type I Diabetic Condition**

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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.

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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.

#### ***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.

#### ***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.

#### ***Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer***

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.

#### ***Preparation and characterization of self emulsifying multi particulate drug delivery system for poorly water soluble drug***

Drugs exhibit poor aqueous solubility may lead to poor oral absorption, high intra- and inter-subject variability and lack of dose proportionality. On the other hand, such drugs are administered in higher doses than actually needed to achieve the desired plasma level, leading to the rise of adverse effects and toxicity problems. Therefore, suitable formulation approaches need to be developed to improve solubility and bioavailability of poorly soluble drugs. The purpose of the present work is to investigate the feasibility of self emulsifying multi particulate delivery system for poorly soluble drug to provide better outcomes than existing dosage forms. Different formulation variable and process parameters will be analyzed with suitable experimental design in order to evaluate the effects of formulation components on the characteristics of the multi-particulate drug delivery systems.

***Preparation and characterization of chitosan nanoparticles prepared using a novel micellar system to deliver poorly water soluble drugs***

Chitosan is a highly biocompatible and biodegradable biopolymer with cationic, bioadhesive and permeability-enhancing properties. In the proposed work, different chemical modification will be done on the chitosan backbone structure to make it suitable to form micelles. Different poorly soluble drugs will be encapsulated in these micelles and their efficacy will be evaluated.

**(iii) Projects completed this year**

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. In Lakh)
1	Design, Synthesis and Evaluation of Novel Tetrahydroquinoline & Tetrahydroisoquinoline analogs as anti-HIV agents	Dr. S. Murugesan	DST-SERB	25.28
2	Effect of Esculetin on the development of type II diabetic nephropathy	Dr. Anil Gaikwad	BITS-Research Initiation Grant	2.00
3	Implication of Glycogen Synthase Kinase-3 $\beta$ and Histone deacetylase inhibitor in neurological disorders associated with insulin resistance	Dr. Rajeev Taliyan	UGC	6.00
4	Development of ecofriendly nonionic surfactants coupled ultrasonic extraction technology for conophylline- An antidiabetic lead molecule and its comparison with conventional extraction techniques	Dr. Atish T Paul	BITS-Research Initiation Grant	2.00

**Brief Write Up of Projects:**

**Design, Synthesis and Evaluation of Novel Tetrahydroquinoline & Tetrahydroisoquinoline analogs as anti-HIV agents**

In the above mentioned project, some novel analogs of 1,2,3,4-tetrahydroquinoline and 1,2,3,4-tetrahydroisoquinoline will be designed based upon the pharmacophoric requirements for the inhibition of HIV activity by using Schrodinger Glide molecular modelling software. Based on the results of the docking study, the hit molecule will be synthesized by optimized reaction procedures. It will be followed by purification and characterization by appropriate analytical methods like TLC, Column chromatography, IR, NMR, Mass and Elemental analysis. Finally all these confirmed molecules will be subjected to screen against inhibition of HIV and other allied opportunistic infections. At last but not the least, based on the overall results, lead molecule will be identified and further will be optimized.

**Effect of Esculetin on the development of type II diabetic nephropathy**

Diabetic nephropathy is a result of several metabolic and hemodynamic processes. Individuals with chronic kidney disease are more likely to die of cardiovascular disease. Esculetin has antioxidant activity, an inhibitory effect on the growth of human breast cancer cells and a synergistic effect with retinoic acid on the differentiation of human leukaemia cells. 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 against type 2 diabetic nephropathy.

**Implication of Glycogen Synthase Kinase-3 $\beta$  and Histone deacetylase inhibitor in neurological disorders associated with insulin resistance**

Insulin resistance syndrome is a risk factors for various neurodegenerative disorder including depression, memory deficit and Alzheimer's disease. Moreover, it has been reported that in memory deficit and AD, with or without co-morbid depression, the brain itself becomes insulin resistant and that this promotes or even triggers key pathophysiological events involved in genesis of neurological disorders. However, the molecular mechanism underlying the mirror relationship between insulin resistance and neurological disorders is not fully understood. Increasing evidence suggests that HDAC and A $\beta$  induces hyperphosphorylation of tau though the activation of GSK-3 $\beta$ . Therefore, this study was designed to investigate the pharmacological potential of GSK-3 $\beta$  and HDAC inhibitors, alone and in combination, in depression, memory deficits and AD associated with insulin resistance syndrome.

**Development of ecofriendly nonionic surfactants coupled ultrasonic extraction technology for conophylline- An antidiabetic lead molecule and its comparison with conventional extraction techniques**

Extraction is the first and most important step in natural product drug discovery. Conventional methods have several disadvantages including environment issues, poor extraction efficiency etc. To overcome these problems an important strategy is developing environment friendly techniques using "Green Chemistry" approach. Recently, conophylline (an antidiabetic lead molecule) which acts via regeneration of pancreatic  $\beta$ -cell has been patented for treatment of diabetes. The current project aims for developing nonionic surfactant coupled with



ultrasonic assisted extraction (UAE) for efficient and ecofriendly extraction of conophylline.

**(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
2	Fellowships to Research Scholars under Basic Scientific Research Scheme (BSR)	UGC	102.00*
3	Fellowship to First Degree and Higher Degree Students of Department	Sir Ratan Tata Trust	14.00

\*5 fellowships have been awarded for 5 years with a support of Rs. 16000/- per month to every research scholar and contingency grant of Rs.12000/- per student per annum.

**Brief Write Up:**

**DST FIST**

Department has been sanctioned Rs. 125 lakhs under DST FIST Phase II during last year. From this fund UPLC-MS/MS facility is 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**

S.No.	Authors	Title	Journals	Vol.	Page
1	Gupta D, Thangaraj D, Radhakrishnan M	A novel 5HT <sub>3</sub> antagonist 4i (N-(3-chloro-2-methylphenyl)quinoxalin-2-carboxamide) prevents diabetes-induced depressive phenotypes in mice: Modulation of serotonergic system	Behavioral Brain Research	297	41-50
2	Kurhe Y, Mahesh R	Ondansetron attenuates co-morbid depression and anxiety associated with obesity by inhibiting the biochemical alterations and improving serotonergic neurotransmission.	Pharmacology Biochemistry and Behavior	136	107-116
3	Mundra S, Mahesh R	Pyridine-based microwave assisted one-pot synthetic protocol for the synthesis of ethyl 3-substituted-4-oxo-2-thioxo-1,2,3,4-tetrahydropyrimidine-5-carboxylates	Research on Chemical Intermediates	Manuscript Accepted	
4	Kurhe Y, Mahesh R	Mechanisms linking depression co-morbid with obesity: An approach for serotonergic type 3 receptor antagonists as novel therapeutic intervention	Asian Journal of Psychiatry	17	3-9
5	Chakka S. K, Kalamuddin M, Mundra S, Mahesh R, Malhotra P, Mohammed A, Kotra L. P.	Identification of novel class of falcipain-2 inhibitors as potential antimalarial agents.	Bioorganic & Medicinal Chemistry	23	2221-2240
6	Gupta D, Mahesh R, Kurhe Y	Effect of a novel 5-HT <sub>3</sub> receptor antagonist 4i, in corticosterone-induced depression-like behavior and oxidative stress in mice.	Steroids	96	95-102
7	Jindal A, Mahesh R, Bhatt S	Type 4 phosphodiesterase enzyme inhibitor, rolipram rescues behavioral deficits in olfactory bulbectomy models of depression: Involvement of hypothalamic-pituitary-adrenal axis, cAMP signaling aspects and antioxidant defense system.	Pharmacology Biochemistry and Behavior	132	20-32

S.No.	Authors	Title	Journals	Vol.	Page
8	Kurhe Y, Mahesh R, Devadoss T	QCM-4, a 5-HT <sub>3</sub> receptor antagonist ameliorates plasma HPA axis hyperactivity, leptin resistance and brain oxidative stress in depression and anxiety-like behavior in obese mice	Biochemical and Biophysical Research Communications	456	74-79
9	Mundra S, Mahesh R	Evaluation of novel 1-(4-(substituted)piperazin-1-yl)-2-(phenylamino)ethanone derivatives as Falcipain-2 inhibitors.	Journal of young Pharmacist	7	96-105
10	Dhar AK, Mahesh R, Jindal A, Bhatt S	Piperazine analogues of naphthyridine-3-carboxamides and indole-2-carboxamides: Novel 5-HT <sub>3</sub> receptor antagonists with antidepressant like activity.	Archive Der Pharmazie	348	34-45
11	R.P. Pareek	A study of Anemic Status and impact of Supervised Iron Therapy on Rural School going Children	Online International Interdisciplinary Research Journal	V	71-76
12	Priti Jain, Pankaj K Wadhwa, Hemant R Jadhav	Reactive astrogliosis: Role in Alzheimer's Disease.	CNS & Neurological Disorders – Drug Targets	14	872-879
13	Priti Jain, Pankaj K Wadhwa, Shilpa Rohilla, Hemant R Jadhav	Rational design, synthesis and in vitro evaluation of allylidene hydrazinecarboximidamide derivatives as BACE-1 inhibitors.	Bioorganic & Medicinal Chemistry Letters	26	33-37
14	Priti Jain, Pankaj K Wadhwa, Hemant R Jadhav	QSAR and Docking Studies of N-hydroxy Urea Derivatives as Flap Endonuclease-1 Inhibitors	Current Computer Aided Drug Design	Manuscript Accepted	
15	Priti Jain and Hemant R. Jadhav	Design, Synthesis and Evaluation of 2-thio-pyrimidine Derivatives as BACE-1 inhibitors.	International Journal of Pharmaceutical Sciences and Research	-	389-391
16	Pankaj K Wadhwa, Hemant R Jadhav	Design and Docking of 6-Methyl-3-Phenoxy-N-Phenylquinoline-4-Carboxamide Derivatives as Flap Endonuclease-1 Inhibitors.	International Journal of Pharmaceutical Sciences and Research	-	386-388
17	Vadiraj D. Kurdekar and Hemant R. Jadhav	Novel Pharmacophore for design of PAD4 inhibitors.	International Journal of Pharmaceutical Sciences and Research	-	398-400
18	Vadiraj D. Kurdekar and Hemant R. Jadhav	Small Molecular Inhibitors for the Treatment of Rheumatoid Arthritis : Progress so Far	Mini- Reviews in Medicinal Chemistry	15	123-144
19	Vadiraj D. Kurdekar and Hemant R. Jadhav	A new open source data analysis python script for QSAR study and its validation	Medicinal Chemistry Research	24	1617-1625
20	Mahaveer singh, Hemant R. jadhav	Design of Novel Pharmacophore for Histamine 3 Receptor Antagonist	International Journal of Pharmaceutical Sciences and Research	11	395-397
21	Penta Ashok, Scott Franzblau, Baojie Wan, Sankaranarayanan Murugesan	Design, synthesis and evaluation of diarylpiperazine derivatives as potent antitubercular agents	European Journal of Medicinal Chemistry	105	238-244
22	Ajay K. Sah, Noorullah Baig, Rajnish P Singh, Subhash Chander, Prabhat N Jha, Sankaranarayanan Murugesan	Synthesis, evaluation and molecular docking studies of amino acid derived N-glycoconjugates as antibacterial agents	Bioorganic Chemistry	63	110-115
23	Penta Ashok,	Design, synthesis of novel $\beta$ -	Bioorganic Medicinal	25	1232-1235

S.No.	Authors	Title	Journals	Vol.	Page
	Subhash Chander, Jan Balzarini, Christophe Pannecouque, Sankaranarayanan Murugesan	carboline derivatives and their selective anti-HIV-2 activity	Chemistry Letters		
24	Subhash Chander, Penta Ashok, Anupam Singh and Sankaranarayanan Murugesan	De-novo design, synthesis and evaluation of novel 6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline derivatives as HIV-1 reverse transcriptase inhibitors	Chemistry Central Journal	9	33
25	Geeta Yadav, Swastika Ganguly, Sankaran Murugesan and Abhimanyu Dev	Synthesis, Anti-HIV, Antimicrobial Evaluation and Structure Activity Relationship Studies of some Novel Benzimidazole Derivatives	Anti infective agents	13	65-77
26	Subhash Chander, Penta Ashok, Rajnish Singh, Prabhat N. Jha and Sankaranarayanan Murugesan	A rapid, green, efficient microwave-assisted synthesis and antimicrobial activity of novel glycinamide of 6,7-dimethoxy-1, 2, 3, 4-tetrahydroisoquinolines	Current Microwave Chemistry	2	44-52
27	Penta Ashok, Cui-Lin Lu, Subhash Chander, Yong-Tang Zheng and Sankaranarayanan Murugesan	Design, synthesis and biological evaluation of 1-(thiophen-2-yl)-9H-pyrido[3,4-b]indole derivatives as anti-HIV agents	Chemical Biology and Drug Design	85	722-728
28	Penta Ashok, Hiren Lathiya, Sankaranarayanan Murugesan	Manzamine alkaloids as antileishmanial agents - A review	European Journal Medicinal Chemistry	97	928-936
29	Penta Ashok, Hardik Sharma, Hiren Lathiya, Subhash Chander, Sankaranarayanan Murugesan	In-silico design and study of novel Piperazinyl $\beta$ -carbolines as inhibitor of HIV-1 reverse transcriptase	Medicinal Chemistry Research	24	513-522
30	Sharma S, Taliyan R	Targeting histone deacetylases: A novel approach in Parkinson's Disease	Parkinson's Disease	Manuscript Accepted	
31	Sharma S, Taliyan R	Beneficial effects of sodium butyrate in 6-OHDA induced neurotoxicity and behavioral abnormalities: Modulation of histone deacetylase activity	Behavioural Brain Research:	291	306-314
32	Sharma S, Taliyan R	Transcriptional dysregulation in Huntington's disease: The role of histone deacetylases	Pharmacological Research	100	157-169
33	Taliyan R, Ramagiri S	Delayed neuroprotection against cerebral ischemia reperfusion injury: putative role of BDNF and GSK-3 $\beta$	J Receptors and Signal Transduction	Manuscript Accepted	
34	Ramagiri S, Taliyan R	Neuroprotective effect of hydroxy safflor yellow A against cerebral ischemia-reperfusion injury in rats: putative role of mPTP	Journal of basic and clinical physiology and pharmacology	10	172-178
35	Pandey A, Goru SK, Kadakol A, Malek V, and Gaikwad AB	Differential Regulation of ACE2 and NF- $\kappa$ B by Ang II Receptor Subtypes in Type 2 Diabetic Kidney	Biochimie	118	71-81
36	Kadakol A, Malek V, Goru SK, Pandey A, and Gaikwad AB	Esculetin Reverses Histone H2A/H2B Ubiquitination, H3 Dimethylation, Acetylation and Phosphorylation in preventing Type 2 Diabetic Cardiomyopathy	Journal of Functional Foods	17	127-136
37	Kadakol A, Malek V, Goru SK, Pandey A,	Esculetin Attenuates Alterations in Ang II and Acetylcholine	Biochemical and Biophysical Research	461	342-347

S.No.	Authors	Title	Journals	Vol.	Page
	Bagal MB and Gaikwad AB	Mediated Vascular Reactivity Associated with Hyperinsulinemia and Hyperglycemia	Communications		
38	Kadakol A, Pandey A, Malek V, Goru SK, and Gaikwad AB	Insulin sensitizing and cardioprotective effects of Esculetin and Telmisartan combination by attenuating Ang II mediated vascular reactivity and cardiac fibrosis	European Journal of Pharmacology	765	591-597
39	Pandey A, Malek V Prabhakar V, Kulkarni YA, and Gaikwad AB	Nanoparticles and Neurotoxicity: A Mechanistic Approach	CNS & Neurological Disorders - Drug Targets	14	1-8
40	Kumar P, Kadakol AM, Prashanth KS, Nitin AM, Vinayak SJ, Baruad CC and Gaikwad AB	Curcumin as an adjuvant to breast cancer treatment	Anti-Cancer Agents in Medicinal Chemistry	15	647-656
41	Gaikwad AB, Vidya S, and Pandey A	Natural HDAC Inhibitors: Nature's Answer to the Cancer	Journal of Pharmaceutical Sciences and Technology Management	1	21-36
42	Pandey A, Pooja M, Chandak PG and Gaikwad AB	PARG Inhibitors Success: A Long Way To Go!	Current Enzyme Inhibition	10	81-93
43	Anupama Mittal and Deepak Chitkara	Structural modifications in polymeric micelles to impart multifunctionality for improved drug delivery	Therapeutic Delivery, Future Science group	Manuscript Accepted	
44	Sunil K Dubey, Amit Anand, Ranendra N Saha	Stability indicating high performance thin layer chromatographic method for quantitation of venlafaxine in bulk and pharmaceutical dosage form	Drug Development and Therapeutics	6	33-37

### C. CONFERENCES ATTENDED/PAPERS PRESENTED:

S.No.	Authors	Title	Name of Conference	Place	Date
1.	Balwani G., Makhija P., Joseph E., Saha R N	Design and Optimization of Solid Lipid Nanoparticles for Oral Delivery of Ganciclovir	14th International Symposium of the Controlled Release Society-Indian Chapter (CRS-IC)	Mumbai	February 23-24, 2015
2	Emil Joseph., Vibhu Nagpal., Garima Balwani., Satish Reddi., and R N Saha	Preformulation solubility and distribution coefficient studies of Olanzapine in various buffers using inhouse developed UV-spectrophotometric method	Pharmceutica	Crowne Plaza, Dubai, UAE.	March 16-18, 2015
3	Garima Balwani, Emil Joseph, Pooja Makhija, Ranendra Narayan Saha	Ganciclovir-loaded solid lipid nanoparticles prepared with TPGS as stabilizer: Formulation, characterization and in vitro drug release	Pharmceutica	Crowne Plaza, Dubai, UAE.	March 16-18, 2015
4	Emil Joseph., Garima Balwani., Vibhu Nagpal., Satish Reddi., and R N Saha	QbD based design and development of surface modified polymeric nanoparticulate systems of antipsychotic drug for brain targeting	Pharmceutica	Crowne Plaza, Dubai, UAE.	March 16-18, 2015
5	Kurhe Y, Mahesh R, Thangaraj D	Serotonergic type 3 receptor antagonist (4-phenylpiperazin-1-yl) (quinoxalin-2-yl) methanone (4a) attenuates depression co-morbid with obesity by	IBRO/APRC Varanasi School (Molecular Advancements in Neurobiology)	Varanasi, India	September 5-20, 2015

S.No.	Authors	Title	Name of Conference	Place	Date
		promoting serotonergic neuromodulation and reversing insulin resistance in experimental mice			
6	Gupta D, Mahesh R	4i (N-(3-Chloro-2-methylphenyl) quinoxalin-2-carboxamide), a novel 5HT3 antagonist, reverses diabetes-induced depressive phenotype	25th ISN-APSN Joint Biennial Meeting organized by Australasian Society for Neuroscience (ANS),	Cairns, Australia	August 23-27, 2015
7	Mundra S, Mahesh R,	Evaluation of novel class of falcipain-2 inhibitors as potential anti-malarial agents	New Frontiers In Chemistry –From Fundamentals To Applications	Goa, India	December 18-19, 2015
8	Bhatt S, Mahesh R, Devadoss T, Jindal A	Pharmacological profiling of quinoxalin derivative (6g), a novel serotonergic 5-HT3 receptor antagonist for its antidepressant- and anxiolytic-like activity in traumatic brain injury model in rats	IPC Conference	Mysore, India	December 19-21, 2015
9	R.P.Pareek	Conference attended	70th Annual Conference of Association of Physicians of India	Gurgaon, India	February 19-22, 2015
10	R.P.Pareek	Conference attended	The 51st EASD Annual Meeting organized by the European Association for the study of Diabetes (EASD).	Stockholm, Sweden	September 14-18, 2015
11	R.P.Pareek	Chairperson - Hepatitis	26th Annual Conference API, Rajasthan Chapter	Salasar ( Sikar), India	October 10-11, 2015
12	Priti Jain, Shilpa Rohilla and Hemant R. Jadhav	Allylidene hydrazinecarboximidamide derivatives as BACE-1 inhibitors	NDCS 2015: International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia- Industry Collaboration	BITS Pilani, Pilani Campus	October 16-18, 2015
13	Pankaj Wadhwa and Hemant R. Jadhav	Design and Docking of N-(2,6-dioxo-1,2,3,6-tetrahydropyrimidin-4-yl)-N-(4-hydroxyphenyl) benzamide Derivatives as Flap Endonuclease-1 Inhibitors	NDCS 2015: International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia- Industry Collaboration	BITS Pilani, Pilani Campus	October 16-18, 2015
14	Priti Jain and Hemant R. Jadhav	Design, Synthesis and Evaluation of 2-thio-pyrimidine Derivatives as BACE-1 inhibitors	APTICON-2015: 20th Annual Convention of Association of Pharmaceutical Teachers of India	Indore	October 9-11, 2015
15	Pankaj K Wadhwa, Hemant R Jadhav	Design and Docking of 6-Methyl-3-Phenoxy-N-Phenylquinoline-4-Carboxamide Derivatives as Flap Endonuclease-1 Inhibitors.	APTICON-2015: 20th Annual Convention of Association of Pharmaceutical Teachers of India	Indore	October 9-11, 2015
16	Vadiraj Kurdekar and Hemant R Jadhav	Novel Pharmacophore for design of PAD4 inhibitors.	APTICON-2015: 20th Annual Convention of Association of Pharmaceutical Teachers of India	Indore	October 9-11, 2015

S.No.	Authors	Title	Name of Conference	Place	Date
17	Subhash Chander, Penta Ashok and Sankaranarayanan Murugesan	Design, synthesis, in-vitro evaluation and docking studies of novel 6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline derivatives as HIV-1 reverse transcriptase inhibitors	Recent Developments in Medical Biotechnology and Structure Based Drug Design	Department of Biotechnology, IIT Guwahati	December 06 - 07, 2015
18	Ashok Penta and Sankaranarayanan Murugesan	Design, synthesis and in-vitro evaluation of novel 1-(4-chlorophenyl)-2-(3,4-dihydroquinolin-1(2H)-yl)ethyl phenylcarbamate derivatives as inhibitor of HIV-1 RT	International conference on Nascent Developments in Chemical Sciences	Department of Chemistry, BITS Pilani, Pilani Campus	October 16 - 18, 2015
19	Sankaranarayanan Murugesan	-	Biotech Policy of Rajasthan 2015	Department of Science and Technology, Government of Rajasthan, Jaipur	September 10, 2015
20	Sharma S, Taliyan R	Pharmacovigilance In India: Perspectives and Prospects'	National Symposium	Sir Madanlal Institute of Pharmacy-Etawah,U.P	March 14, 2015
21	Ramagiri S, Taliyan R	Mitochondrial KATP-Channel Role in Neuroprotective Effect of Remote limb Ischemic Pre conditioning against Cerebral Ischemia -reperfusion Injury	International Conf. 'Molecular Pharmacol, Drug Discovery & Nanopharmaceuticals	Chitkara University, Patiala, Punjab	March 27-28, 2015
22	Taliyan R, Sharma, S, Singh S	Sodium butyrate, a Histone deacetylase inhibitor, attenuates 6-hydroxydopamine induced hemi-Parkinsonism in rats	International Conf. International society for neurochemistry with Australasian Society for Neuroscience (ANS).	Australia	August 23-25, 2015
23	Ramagiri S, Taliyan R	Neuroprotective effect of HDAC inhibitor against cerebral ischemic reperfusion injury	3rd Middle East and North Africa Stroke Conference	Dubai, UAE	October 22-23, 2015
24	Sharma, S, Taliyan R	Histone deacetylase inhibitor improves learning and memory consolidation in high fat diet induced cognitive deficit in mice	IBRO-APRC/ISN-APSN Joint Advanced School, Korea Brain Research Institute, Daegu,	South Korea	September 14-20, 2015
25	Taliyan R, Sharma S	Modulation of epigenetic pathways by targeting histone deacetylases improve memory consolidation in insulin resistance induced cognitive deficit in mice	International conf. "Cutting-Edge Pharmacology: Contemporary Issues and Future Challenges"& 48th Annual Conf. of Indian Pharmacological Society (IPSCON-2015)	Saurashtra University, Gujarat	December 18-20, 2015
26	Atish T. Paul, S N C Sridhar, Manasi Agrawal, Seshank Mutya	Conophylline as a Potential Pancreatic Lipase Inhibitor: An In vitro and In silico Investigation	International Conference on Nascent Developments in Chemical Sciences: Opportunities For Academia-Industry Collaboration	BITS Pilani	October 16-18, 2015
27	Sunil K Dubey, Vaibhav Baleraoa, Sahil Sama, Rajeev Taliyan, Rajesh Khadgawat	Development of a Simple, Economical Method for the Determination of Endocrine Disrupting Chemical Bisphenol A and Effect of	International Conference on Nascent Developments in Chemical Sciences: Opportunities for	BITS Pilani, Pilani Campus	October 16-18, 2015

S.No.	Authors	Title	Name of Conference	Place	Date
		Solid Phase Extraction on Its Recovery	Academia-Industry Collaboration NDCS-2015		
28	Sunil K Dubey, Vaibhav Baleraoa, Rajeev Taliyan, Rajesh Khadgawat	Quality Assessment by Content Analysis of Cholecalciferol (Vitamin D3) in Marketed Oral Formulations by Simple Sensitive and Validated Chromatographic Method	International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration NDCS-2015	BITS Pilani, Pilani Campus	October 16-18, 2015
29	Mahaveer singh, Hemant R. jadhav	Design of Novel Pharmacophore for Histamine 3 Receptor Antagonist	Association of Pharmaceutical Teachers of India 20th Annual National Convention-2015	Indore at DAVV	October 9-11, 2015

#### D. BOOKS CHAPTER PUBLISHED/EDITED DURING THE YEAR

S.No.	Authors	Title	Publisher
1	Pandey A, Kulkarni YA and Gaikwad AB	Curcumin: The epigenetic therapy (Chapter-6)	Elsevier
2	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
3	Yogesh A. Kulkarni, Mayuresh S. Garud, Manisha J. Ozaa, Anil Bhanudas Gaikwad	Diabetes, diabetic complications and Flavonoids (Chapter-5)	Elsevier
4	Kalyani H. Barve, Yogesh A. Kulkarni, Anil Bhanudas Gaikwad	Nutraceuticals Therapeutic Agents for Inflammation (Chapter-7)	Elsevier

#### E. CONFERENCES, SEMINARS & WORKSHOPS CONDUCTED - None

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

1. Dr. Sunil Kumar Dubey delivered a talk on Recent Advances in Liquid Chromatography Mass Spectrometry and Its Application in Determination of Pathogens at Microbial Technology and Biofilms: Avenues and Applications organised by MNIT Allahabad, January 10-14, 2015.
2. Dr. Rajeev Taliyan delivered a talk on "The potential of epigenetics-based therapeutics in Alzheimer's and Parkinson's disease associated with metabolic syndrome" Emerging Trends in Pharmacological Research & Pharmacy Practice, Rayat-Bahara University, Mohali, Punjab, October 16, 2015.
3. Dr. Rajeev Taliyan delivered a talk on "Role of Histone deacetylase inhibitors and Epigenetic Modifications in Neurodegenerative Disorders" at "Recent advances in CNS drug discovery" RamEesh Institute of Vocational and Technical Education, Greater Noida, U.P, October 31, 2015.
4. Mr. Mahaveer singh delivered a talk on "Pharmaceutical education: present scenario" at "Education in India: Challenges and Opportunities" organised by St. Joseph's Hi-Tech Gurukul & Rajasthan Patrika on March 28, 2015.

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

1. Dr. T. Narendar, Principal Scientist, CSIR-CDRI, Lucknow, India
2. Dr. Bhuvanewswari Sridhar, Head-API R&D, Hospira Healthcare India Pvt. Ltd (Pfizer Company),
3. Dr. Ravi Kumar Namball, Director - Formulations R&D, Hospira Healthcare India Pvt. Ltd (Pfizer Company)
4. Dr. Ian A. Cliffe, Vice-president and Head, (Chemistry) Daiichi Sankyo India Pharma Pvt. Ltd, Gurgaon, india

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

1. Dr. Rajeev Talyan received Prof. Manjeet Singh -Gold medal award (cash prize INR 3100) for research in molecular pharmacology, during international conf and 48th Annual Indian Pharmacological Society (IPSCON-2015) held on December 18-20, 2015, at Saurashtra University, Rajkot, Gujarat
2. Dr. Sunil Dubey chaired a session "Multiscale Analysis: Pharmacokinetics/dynamics of Amyloid Modulation, Strategy Formulation" at Meeting of the Information Technology Research Academy, Government of India, January 15-17, 2015.
3. Dr. Sunil Dubey won IP Quiz competition conducted by IPR team of Aditya Birla group January, 2015 .
4. Ms Priti Jain received Best poster prize for paper titled " Priti Jain and Hemant R Jadhav, Design, Synthesis and Evaluation of 2-thio-pyrimidine Derivatives as BACE-1 inhibitors" in the category PB: Medicinal Chemistry, Pharmaceutical Analysis, Quality Assurance and Drug Regulatory Affairs at 20<sup>th</sup> Association of Pharmaceutical Teachers of India (APTI) Annual National convention (APTICON-2015) held at Indore from October 9-11, 2015.
5. Ms Priti Jain was also awarded prestigious Late Murugeppa Sirse Memorial Award for the Best Poster presented at 20<sup>th</sup> Association of Pharmaceutical Teachers of India (APTI) Annual National convention (APTICON-2015) held at Indore from October 9-11, 2015.
6. Ms. Sruthi Ramagiri received best poster award for paper titled "Sruthi Ramagiri, Rajeev Taliyan: Mitochondrial KATP channel role in neuroprotective effect of remote limb ischemic post conditioning against cerebral ischemia reperfusion injury" at Molecular Pharmacology, Drug Discovery and Nanopharmaceuticals" (MPDDNP-2015) organised by Chitkara University on March 27-28, 2015.
7. Ms Sruthi Ramagiri received best oral presentation award for the paper titled "Sruthi Ramagiri, Rajeev Taliyan: Beneficial neuroprotective effect of GSK-3 $\beta$  inhibitors against brain stroke and associated cognitive impairments in diabetic rats" at INDO Diabetes EXPO-Bangalore on November 23-25, 2015.
8. Mr. Sorabh Sharma received Young Scientist Award in a National Symposium Sponsored by Indian Council of Medical Research held at Etawah, India on March, 2015.
9. Mr. Sorabh Sharma received a travel grant (USD 1500) by IBRO Regional grants to attend the 25th ISN-APSN Biennial Meeting in Cairns, Australia held on August, 23-27, 2015.
10. Ms Deepali Gupta received grants from International Society for Neurochemistry (ISN) for attending and presenting research work in 25th ISN-APSN Joint Biennial Meeting organized by Australasian Society for Neuroscience (ANS), Cairns, Australia, August 23-27, 2015.
11. Mr. Sorabh Sharma received a travel grant to attend IBRO-APRC/ISN-APSN Joint Advanced School held in Daegu, South Korea on September 14-20, 2015.
12. Mr. Yeshwant selected and received grants from International Brain Research Organisation (IBRO) for attending and presenting research work in IBRO/APRC Varanasi School (Molecular Advancements in Neurobiology), Varanasi, India, September 5-20, 2015.

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

1. Tablet Coating Machine
2. Differential scanning Calorimetry
3. High Pressure Homogenizer
4. -20°C Deep Freezer
5. Semi-dry Transfer Apparatus
6. Manual Microtone

**J. DEPARTMENTAL ASSOCIATION****Pharmacy**

In the year 2015, the Department of Pharmacy, its students and faculty members, continued their untiring efforts for further betterment and had several achievements and activities during the year. 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 received grants worth Rs.139.94 lakh from various government funding agencies. This resulted in Department being supported by various funding agencies under Departmental schemes. The total value of Departmental grants received for ongoing projects is more than Rs. 251.0 lakhs. The total value of projects and grants that are ongoing is more than Rs. 5.3 crore.



This APOGEE, 23 project ideas had been submitted out of which 18 projects were selected for Round 2 of pitching. 11 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.

During APOGEE 2015, BITS Pharmaceutical Society had organized the following events:

- 1) **Doper's quiz:** An online quiz event opens for all students. Around 150 students participated. This event comprised of questions and pic-connect puzzles related to Pharmacy as well as some general questions.
- 2) **ESPOIR:** A Health Business plan competition open for all (in teams of 2) and 12 teams participated out of which 7 teams were selected for final.

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. The Pharmaceutical Society organized freshers welcome function for new students and farewell dinner twice during the year (in both semesters) for the graduating students.

During the year Sir Ratan Tata Trust, Mumbai, New Delhi recognized the achievements of Department by sanctioning fellowships to students of Department. Sir Ratan Tata Trust, Mumbai gave scholarship to 16 meritorious students.

### **B1.10.13 Department: Physics**

Number of faculty members (as on 31 December 2015)

<b>Senior Professors, Professors</b>	02
<b>Associate Professors</b>	08
<b>Assistant Professors</b>	11
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**HOD:** Dr. D. D. Pant

**Contact details:** ddpant@pilani.bits-pilani.ac.in, 01596-515288

**Number of PhD Scholars:** 21 (including part-time students)

**Thesis Submitted:** 04

### **RESEARCH ACHIEVEMENTS**

Projects: (ongoing projects, sanctioned/completed this year): 14

<b>S.No</b>	<b>Title</b>	<b>Sponsoring Agency</b>	<b>Amount</b>	<b>P.I.</b>
1	Time-resolved Spectroscopy of Fluorescent Molecules in Micellar Systems.	DST Major Project	Rs. 53.01 lacs	Dr. D. D. Pant
2	Steady state measurements of Fluorescent molecules in restricted environments	UGC Major Project	Rs. 11.63 lacs	Dr. D. D. Pant
3	Detection of contaminants in water using functional ultrathin films (Sub Project of Rain Water Harvesting Prof Rajiv Gupta)	Waste Water Energy Programme of BITS Pilani	Rs 9.32 lacs (Total Project fund:Rs 91 lacs)	Dr. Raj Kumar Gupta (Co-PI) PI:Prof Rajiv Gupta
4	Investigations on Quark Ggluon Plasma through quarkonia suppression in QCD matter.	DST	Rs. 11.40 lacs	Dr. Madhukar Mishra
5	Study of Indus Valley Scripts Through Linguistic and Markov Chain Methods	Indian National Science Academy, New-Delhi	Rs. 6.8 lacs	Dr. Niladri Sarkar

S.No	Title	Sponsoring Agency	Amount	P.I.
6	A multiple-scattering computing platform for nanomaterials	Marie Curie International Research Staff Exchange Scheme (IRSES) of the European Commission (EC) (7 <sup>th</sup> Framework Programme (FP-7))	€25,200	Dr. Rakesh Choubisa (Coordinator: Dr. D. Sebilliau, CNRS (France))
7	Design and characterization of electrochromic rear view mirrors using conducting polymers	DST major	Rs. 24.35 lacs	Dr. S. Sindhu (Co-PI: Manjuladevi. V)
8	The study of post-reionization HI distribution using the redshifted 21-cm signal and Ly-alpha forest towards understanding cosmic acceleration	DST fast track	Rs 10.38 lacs	Dr. Tapomoy Guha Sarkar
9	Study of laser interaction with atomic clusters and preformed plasmas	DST Fast Track (ongoing)	Rs. 15 lacs	Dr. Amol Holkundkar
10	Growth and Characterization of Substrate Supported Transition Metal Nanostructures Useful for Catalytic, Electronic and Sensor Applications	BITS Research Initiation Grant (ongoing)	Rs. 2 lacs	Dr. Subhashis Gangopadhyay
11	Transition Metal Induced Epitaxial Growth and Characterizations of Single layer <i>Graphene</i> : a High-Tech Material for Next Generation.	UGC Start up Grant (approved)	Rs. 6 lacs	Dr. Subhashis Gangopadhyay
12	Preparation and Characterization Thin films of electrochromic polymer and fabrication of smart pixel display	CSIR	Rs.14,1 Lakhs	Dr S. Sindhu
13	Electromagnetic Characterization of Three Dimensional Targets with Plasma Cladding for Stealth Technology Using Recursive Convolution Finite Difference Time Domain Method	BITS-PILANI- SEED GRANT SCHEME	R. 5.2 lacs	Dr. Niladri Sarkar
14	Thermodynamics studies on force induced unzipping DNA in crowded environment	DST Major	Rs. 18.64 lacs	Dr. Navin Singh

In addition to these individual projects (the list in Part A of the annual report) the department has completed UGC-SAP (phase I) in 2014. Department has also completed this year DST FIST scheme.

#### **PUBLICATIONS- RESEARCH ARTICLES, BOOKS, CHAPTERS, CONFERENCE PROCEEDINGS)**

##### **Papers Published in refereed journals:**

1. Experimental and theoretical study: determination of dipole moment of synthesized coumarin-triazole derivatives and application as turn off fluorescence sensor: high sensitivity for iron (III) ions. Sunita Joshi, Santosh Kumari, Rituparna Bhattacharjee, Amrit Sarmah, Rajeev Sakhuja and D. D. Pant. *Sensors and Actuators, B*, 220 (2015) 1266-1278.
2. Estimation of ground and excited-state dipole moments of synthesized coumarin derivative, (S)-1-((7-hydroxy-2-oxo-2H-chromen-4-yl)methyl)-1H-1,2,3-triazol-4-yl) methyl 2-(((9H-fluoren-9-yl) methoxy)

- cabonylamino)-3-phenylpropanoate from a solvatochromic shift and theoretical methods, Sunita Joshi, Santosh Kumari, Rituparna Bhattacharjee, Rajeev Sakhuja and D. D. Pant, *Journal of Molecular Liquids*, 209 (2015) 219-223.
3. Solvent effect on absorption and fluorescence spectra of cinchonine and cinchonidine dications: Estimation of ground and excited state dipole moments by experimental and numerical studies. Ritika Sharma, Sunita Joshi, Rituparna Bhattacharjee, D. D. Pant, *Journal of Molecular Liquids*, 206 (2015) 159-164.
  4. Effect of nanosize micelles of ionic and neutral surfactants on the photophysics of protonated 6-methoxyquinoline: Time-resolved fluorescence study. Tej Varma Y, Sunita Joshi, and D. D. Pant, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 138 (2015) 818-826.
  5. Interaction of quinine sulfate with anionic micelles of sodium dodecylsulfate: A time - resolved fluorescence spectroscopy at different pH, Sunita Joshi, D. D. Pant, *Spectrochimica Acta Part A Molecular Spectroscopy*, 148 (2015) 49-59.
  6. Synthesis, Absorption, and Fluorescence Studies of Coumaryl-Labelled Amino Acids and Dipeptides Linked Via Triazole Ring. Santosh Kumari, Sunita Joshi, S. M. Abdul Shakoore, Devesh S. Agarwal, Siva S. Panda, D. D. Pant, Rajeev Sakhuja, *Australian Journal of Chemistry*, (2015).
  7. Gray to transmissive electrochromic switching based on electropolymerized PEDOT-ionic liquid functionalized graphene films. C. R. Siju & L. Raja & N. C. Shivaprakash & S. Sindhu. *J Solid State Electrochem.* DOI 10.1007/s10008-015-2756-4.2015.
  8. Spectral characterizations and photophysical properties of one-step synthesized blue fluorescent 4'-aryl substituted 2,2':6',2''-terpyridine for OLEDs application, L. Raja, N C Shivaprakash, Sindhu S, *Journal of Luminescence*, Volume 168, December 2015, Pages 145–150
  9. Study of electronic structure, stability and magnetic quenching of CrGen (n=1-17) clusters: A density functional investigation, K. Dhaka, D. Bandyopadhyay, *RSC Advances* 20 (101), 83004-83012
  10. Hydrogen storage in small size Mg<sub>n</sub>Co clusters: A density functional study, R Trivedi, D Bandyopadhyay, *International Journal of Hydrogen Energy*, 40( 2015) 12727-12735.
  11. Amar Singh and Navin Singh, Pulling short DNA with defects on different locations, *Phys. Rev. E*, 92, 032703 (2015)
  12. Amar Singh and Navin Singh, Effect of salt concentration on the stability of heterogeneous DNA, *Physica A: Statistical Mechanics & its Applications*, 419, 328-334 (2015)
  13. Effects of Phase Transition Induced Density Fluctuations on Pulsar Dynamics; P Bagchi, A Das, B Layek & A M Srivastava; *Phys. Lett.* B747, 120, (2015).
  14. Thomson scattering in high-intensity chirped laser pulses, Amol R. Holkundkar, Chris Harvey, and Mattias Marklund, *Phys. Plasmas*, 22, 103103 (2015).
  15. Ultrathin films of TiO<sub>2</sub> nanoparticles at interfaces, Keerti Choudhary, V. Manjuladevi, RK Gupta, P. Bhattacharyya, A. Hazra & S. Kumar, *Langmuir (American Chemical Society)*, Vol. 31 (4), pp 1385–1392, 2015.
  16. Effect of octadecylamine functionalized SWCNTs on the elastic constants and electro-optic response of a liquid crystal, Jitendra Kumar, V. Manjuladevi, R.K Gupta, & S. Kumar, *Liquid Crystals*, Vol 42 (3) pg. 361-369, 2015.
  17. Interaction of graphene with self assembled monolayers, Devanarayanan VP, V. Manjuladevi and R. K Gupta, *Macromolecular Symposia (Wiley)* Vol. 357, pp 23–29, 2015.
  18. Electro-optic and dielectric studies on quantum dot doped nematic liquid crystal, Jitendra Kumar, RK Gupta, S. Kumar & V. Manjuladevi, *Macromolecular Symposia (Wiley)*, Vol. 357, pp 47–51, 2015.
  19. Solvatochromism of tricycloquinazoline based disk-shaped liquid crystal: A potential molecular probe for fluorescence imaging, C. Karthik, V. Manjuladevi, RK Gupta & S. Kumar, *RSC Advances (Royal Society of Chemistry)*, Vol. 5, pp 84592–84600, 2015.
  20. Fast response in TN Liquid crystal cells: Effect of functionalized carbon nanotubes, Jitendra Kumar, V. Manjuladevi, R.K Gupta & S. Kumar, *Liquid Crystals* (in press) Taylor & Francis, 2015.
  21. On the relativistic electron impact K-shell (e,(3-1) e) differential cross sections for atoms, R. Choubisa, *J Phys. B: At. Mol. Opt. Phys* Vol 48 (4), 045201.
  22. Optical Spectroscopy of X-Ray-selected Young Stars in the Carina Nebula, K. Vaidya, W.-P. Chen, & H.-T. Lee, *The Astronomical Journal*, Vol 150, pp 195-205, 2015

23. Graphitic-carbon nitride support for the synthesis of shape-dependent ZnO and their application in visible light photocatalyst, P. Fageria, R. Nazir, S. Gangopadhyay, H. C. Barshilia, and S. Pande, *RSC Adv* 5, 80397 (2015).
24. Synthesis, characterization and catalytic applications of gold nanoparticle based fungal bionanocatalyst A. Bhargava, N. Jain, S. Gangopadhyay, and J. Panwar, *Process Biochem.* 50, 1293 (2015).
25. Study on Metal Nanoparticles Synthesis and Orientation of Gemini Surfactant Molecules Used as Stabilizer, A. K. Tiwari, S. Gangopadhyay, C. H. Chang, S. Pande, and S. Saha, *J. Colloid Interface Sci.* 445, 76 (2015).
26. Effective time-independent analysis for quantum kicked systems, J. N. Bandyopadhyay and T. Guha Sarkar, *Phys. Rev. E* 91, 032923 (2015).
27. Floquet analysis of pulsed Dirac systems: a way to simulate rippled graphene, T. Mishra, T. Guha Sarkar, and J. N. Bandyopadhyay, *European Physical Journal B* 88, 231 (2015).
28. pQCD Approach to Charmonium Regeneration in QGP at the LHC, S. Ganesh and M. Mishra, Accepted for publication in *Nucl. Phys. A* (2015).
29. Unified Description of Charmonium Suppression in QGP medium at RHIC and LHC Energies, Captain R. Singh, P. K. Srivastava, S. Ganesh, and M. Mishra, *Phys. Rev. C* 92, 034916 (2015).
30. A temperature dependent formation time approach for  $\epsilon$  suppression at energies available at the CERN Large Hadron Collider, S. Ganesh and M. Mishra, *Phys. Rev. C* 91, 034901 (2015)
31. On using large scale correlation of the Ly- $\alpha$  forest and redshifted 21-cm signal to probe HI distribution during the post reionization era. Tapomoy Guha Sarkar, Kanan Datta. *Journal of Cosmology and Astroparticle Physics*, 2015, 8, 01 (2015)
32. Ionic liquid dispersed Li<sup>+</sup> ion oxide glasses and glass-ceramics: Assessment of electrical transport and thermal stability, M Rathore, A Dalvi, W Slubowska, A Kumar and J L Nowinski *Solid State Ionics* 282 (2015) 76-81.

#### Conferences attended/papers presented

1. "Sensing of Contaminants in Potable Water Using TiO<sub>2</sub>Functional Film", N. Akshatha, M. Poonia, V. Manjuladevi, R. K. Gupta, P. Shukla, & R. Gupta, International Conference on Emerging Technologies : Micro to Nano 2015, ETMN 2015, Manipal University, Jaipur from 24-25th October 2015. Poster Presentation.
2. "Interaction of Bovine Serum Albumin Protein with Self Assembled Monolayer of Mercaptoundecanoic Acid", M. Poonia, V. Manjuladevi, R. K. Gupta, International Conference on Condensed Matter and Applied Physics, ICC 2015, Bikaner, 30-31st October 2015. Poster Presentation.
3. "Studies on morphology of Langmuir-Blodgett films of stearic acid deposited with different orientation of substrates with respect to compression", Keerti Choudhary, V. Manjuladevi, R. K. Gupta, International Conference on Condensed Matter and Applied Physics, ICC 2015, Bikaner, 30-31st October 2015. Poster Presentation.
4. "Electro-optic switching studies on functionalised SWCNT nanocomposites of OctylCyanobiphenyl", J. Kumar, R. K. Gupta, V. Manjuladevi, 22th National Conference on Liquid Crystals (NCLC-22), December 21-23, 2015, Department of Physics, DIT University, Dehradun. Poster Presentation.
5. "Effective time-independent analysis for quantum time-periodic systems", J. N. Bandyopadhyay, T. Mishra, R. J. Sharma, and T. Guha Sarkar, Workshop on Quantum Correlated Matter and Chaos, 21-26 June, 2015, Max-Planck Institute for the Physics of Complex Systems, Dresden, Germany.
6. "Growth and Characterization of Single Phase Cu<sub>2</sub>O by Thermal Oxidation of Thin Copper Films", S. Choudhary and S. Gangopadhyay, 2nd International Conference on Emerging Technology: Micro to Nano (ETMN 2015), Manipal University, Jaipur from 24-25th October 2015. Poster Presentation.
7. "Formation of Single Phase Cu<sub>2</sub>O by Thermal Oxidation of Thin Copper Films", S. Choudhary and S. Gangopadhyay, International Conference on Nascent Developments in Chemical Sciences, BITS Pilani, Rajasthan 16-18 Oct (2015). Poster Presentation.
8. "Probing Dynamics of Phase Transitions Occurring Inside a Pulsar", Biswanath Layek, "7th International Conference on Physics and Astrophysics of Quark Gluon Plasma (ICPAQGP - 2015)", 1- 6 February 2015, VECC, Kolkata, Poster Presentation.
9. "Unzipping of DNA in presence of molecular crowders", Amar Singh and Navin Singh in the Condensed Matter day 2015 from August 27-29, 2015, at Viswabharti University, Shantiniketan, W.B. (Oral presentation).

10. "DNA under random force", Amar Singh and Navin Singh in XXVII IUPAP Conference on Computational Physics: CCP2015 from Decemebr 02-05, 2015, at IIT Guwahati, (Oral presentation).
11. "Upsilon Suppression at LHC: Temperature dependent formation time approach" S. Ganesh and M. Mishra in an International Conference on Ultra-relativistic Nucleus - Nucleus Collisions (Quark Matter - 2015) held in Kobe, Japan during 27th Sep. 2015 - 3rd Oct. 2015. (Poster Presentation).
12. "Studying the Conductance and Transport in Low-Dimensional Graphene Nano Ribbon under Ballistic Regime." Surender Pratap and Niladri Sarkar, International Conference on Condensed Matter and Applied Physics, ICC 2015, Bikaner, 30-31st October 2015. Poster Presentation.
13. "Application of a Self-Consistent NEGF Procedure to Study the Coherent Transport with Phase Breaking Scattering in Low Dimensional Systems", Surender Pratap and Niladri Sarkar, Micro to Nano 2015, ETMN 2015, Manipal University, Jaipur from 24-25th October 2015. Poster Presentation.
14. "sol-gel synthesized ionic liquid incorporated novel glassy ionic system" by Rajinder Shivran, S. C. Sivasubramanian, Anshuman Dalvi 11th national conference on solid state ionics Tezpur University, 21-23rd December 2015. To be published as a chapter in a book, "Energy storage and conversion: Materials and Devices"
15. 'Excited State relaxation processes of fluorescent molecules in nano-size ionic and neutral micellar systems' by D. D. Pant in 5th International Colloidal Conference, June 21-24, 2015, organized by ELSEVIER, Amsterdam, Netherlands.

#### Conference proceedings:

"Application of the self-consistent quantum method for simulating the size quantization effect in the channel of a nano-scale dual gate MOSFET", Surender Pratap and Niladri Sarkar, *AIP Conf. Proc.* **1665**, 120036 (2015)

#### CHAPTERS in Book:

1. RK Gupta & Manjuladevi V, Title: "Ultrathin Films", Book title: "Comprehensive Guide for Nanocoating Technology", Vol 1: Deposition and Mechanism, Editor: M. Aliofkhaezrai, Publisher: Nova Publishers, USA, 2015.
2. V. Manjuladevi & RK Gupta, Title: "Effect of nanomaterials on physical properties of liquid crystals", Book title: "New Developments in Liquid Crystals Research", Editor: A. T. Petokoska, Publisher: Nova Publishers, USA, 2015.

#### DEPARTMENTAL ACTIVITIES

(Conferences, seminars and workshops, invited talks, significant new equipment/ experimental facility):

#### Workshop/Conference/Event organized in the department

1. The department organized the national school, "*SERC (Main) School on Theoretical High Energy Physics (THEP)*" during November 16, 2015 - December 5, 2015. The school was funded by SERB - DST, Government of India. About 42 PhD students and 12 resource persons participated in the school.
2. The Department organized an in-house annual symposium "Research Scholar Day" on 15 March, 2015 in Lecture Theatre Complex. 22 Research Scholars from CEERI, Pilani and Physics, Chemistry & Mathematics Departments of Pilani Campus presented 19 oral talks and 15 posters on various fields of interdisciplinary nature.

#### Invited Talks given by BITS faculty

1. Dr. Raj Kumar Gupta has delivered an invited talk titled as "Functional Ultrathin Films of Single-walled Carbon Nanotubes", in an International Conference EMN Fall Meeting 2015 held at Las Vegas USA during 16-19th November 2015.
2. Dr. Raj Kumar Gupta has delivered an invited talk titled as "Image Processing in Microscopy", in an International and Interuniversity Workshop on Microscopy held at Mahatma Gandhi University, Kottayam during 6-8th November 2015.
3. Dr. Raj Kumar Gupta has delivered an invited talk titled as "Surface Plasmon Resonance: From Biosensing through Imaging to Dielectric Measurement and Optical Filtering Applications" in World Congress in Microscopy held at Mahatma Gandhi University, Kottayam during 9-11 November 2015.
4. Dr. Raj Kumar Gupta has delivered an invited talk titled as "Organic LED and Applications" in a National Workshop on Efficient Lighting Technology: Recent Development and Future Ahead held at Mody University, Lakshmargarh on 28th November 2015.

5. Dr. V. Manjuladevi has delivered an invited talk titled as "Effects of Functionalized Carbon Nanotubes on Liquid Crystals", in an International Conference EMN Fall Meeting 2015 held at Las Vegas, USA during 16-19th November 2015.
6. Dr Jayendra N Bandyopadhyay has delivered an invited talk titled as "Quantum Coherence in Biological Processes: Case of Avian Magnetoreception", in an International Conference on Current Trend in Condensed Matter Physics 2015 held at NISER, Bhubaneswar during 19-22 February 2015.
7. Dr Jayendra N Bandyopadhyay has delivered an invited talk titled as "Effective Time-independent analysis for Quantum Time-Periodic Systems", in an International Meeting on Quantum Information Processing and Applications 2015 held at HRI, Allahabad during 7-13 December 2015.
8. Dr. Tapomoy Guha Sarkar delivered titled "Cosmology with cross-correlation of the 21 cm signal" at the Raman research Institute Bangalore on 24th June 2015 in the workshop "Cosmology with 21 cm line".
9. Dr. Tapomoy Guha Sarkar delivered a series of lectures at the Indian Statistical Institute Kolkata on Cosmology from 29-31 Dec 2015.
10. Dr Niladri Sarkar delivered a series of advanced lectures on MOSFETs to the ME-Microelectronics students of BITS-Pilani Dubai Campus through Telepresence from BITS-Pilani-Pilani Campus on 3-Nov 2015 and on 15-Dec 2015.
11. Dr. Anshuman Dalvi delivered invited talk "batteries for high temperature and low dimensional applications" in 3<sup>rd</sup> national conference on micro and nano electronic systems and devices-2015 (MINO-2015)
12. Dr. Anshuman Dalvi delivered invited talk "SUPERIONIC SOLIDS: PROMISING FUNCTIONAL MATERIALS FOR ELECTROCHEMICAL ENERGY STORAGE" in National conference on functional Materials NCFM-15 on 27th August, 2015.
13. Dr. Anshuman Dalvi delivered invited talk "Revisiting normal ionic systems: Tailoring electrical transport by ionic liquid dispersion" in 11th National conference on solid state ionics (NCSSI-11) during 21-23rd December, 2015 in Tezpur University, Assam.

#### **Invited talks arranged in the department**

1. Dr. Sebillieu from CNRS, France, delivered a lectures on "Fitting Calculations to Experiment: A 1001 ways to compare two curves", 19th Feb. 2015. He was in BITS, Pilani for one month in connection with the European project "MsNano" to work with Prof. R. Choubisa.
2. The Quest for the Substance of Substance by Prof. Sudhir Raniwala, University of Rajasthan, India

#### **FACULTY DEVELOPMENT, INTERNATIONAL COLLABORATION & INDUSTRY IMMERSION**

Department has several collaborations with different national and internally reputed institutes.

#### **Some of the International Collaborations:**

- 1 Through International Network "European FP7-People-IRSES MsNano", Dr. Choubisa has been collaborating with many researchers from 8 institutes (2 from France, one each from Italy, Germany, Czech Republic, Russia, Japan and China) since Sept., 2012. In this network, Dr. Didier Sebillieu from Universite de Rennes1 visited the Pilani campus for a month during January-February, 2015. Dr. Gangopadhyay visited to Universite de Rennes1 for one and half months during June-July 2015.
- 2 Dr. Amol Holkundkar has been invited by Prof. Mattias Marklund of Chalmers University of Technology, Gothenburg, Sweden for a week (24th Oct 2015 to 31st Oct 2015) to discuss the possible collaborative research projects.

#### **Curriculum Review of M.Sc. Physics**

Department of Physics organized curriculum review of M.Sc. Physics program on 13th October 2015 in TP conference room. The experts were Professor C. Vijayan (IIT, Madras) and Dr. Ravikumar Venkataraman (Dr. Reddy's Lab). Both the experts have appreciated our core physics courses, elective courses and laboratory components offered to the students, however, they have suggested to include some more elective courses.

#### **DISCIPLINE ASSOCIATION WORK HIGHLIGHTS**

##### **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. 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.

*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.

### **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. 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.

Physics Association was involved in 3 events in APOGEE 2015 namely- 'Physics Of The Impossible', 'Ethical Quotient' and 'Cymatics Demonstration'. 'Physics of the impossible' was a Quiz type event consisting of four rounds with participants in teams of 2. The participants were shown seemingly impossible events and asked to explain the physics behind it. Each round consisted of different types of questions like assertion-reasoning, video round and point-bidding system in which teams were asked to bid against each other. The event 'Ethical Quotient' was conducted in collaboration with Biology Association. This was a debating event on ethical topics given to the participants on the spot. A pre-Apogee event was conducted as an elimination round and the finals took place during apogee. Participants were given topics pertaining to ethical issues faced by humanity like whether to give up on some endangered species like panda and tag them as "lost causes". Demonstration was based upon 'Cymatics' or the science of visualizing sound. It exploited the unique properties of non-newtonian fluid to help visualize sound. Coloured milk was also used. The fluids reacted to the vibrations from the speakers producing different patterns on the surface, changing with time and frequency of sound from speakers. Visitors were also asked to try punching and interacting with non-newtonian fluid. Informative charts, videos and pictures related to the science behind the phenomenon were put up in the demonstration room. Apart from these events, Physics Association was also responsible for co-ordinating project abstract submission for Apogee. Two project meets were carried out for this purpose providing guidance and explaining the process.

*Science Day* – The association celebrates Science Day every year on the February 28. An entire day consisting of various competitions including poster presentations, quizzes essays, are organized for school children. Large number of schools in and around Pilani participates in these day-long activities which concludes in prizes for the winners. In addition, every year on the occasion of science day a popular level talk is given by BITS faculty. The basic objective of these popular level talks is to motivate the young minds to pursue higher studies in basic sciences. In 2015, Dr. Amit Verma from Department of Mathematics, BITS Pilani have delivered a lecture on “Fermat's Last Theorem: from Pythagoras to Andrew Wiles” which was received by students very enthusiastically.

*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.

Dr. Tapomoy Guha Sarkar delivered a public lecture on modern cosmology as a part of APOGEE events.

Dr. Anshuman Dalvi delivered first faculty research talk organized by Physics society. Title of his talk was, “ Ionic Superconductivity: Exploring novel materials for energy storage systems” on 17th september, 2015

### **3. Physics Remedial Classes for the first year course, Mechanics Oscillations and Waves**

For the first year students coming from Hindi medium schools, and for those having difficulty in coping with the learning environment at BITS Pilani, the ACC organizes remedial classes in the late evening hours or on Sundays with the help of faculty of the respective departments. In the semester I 2014-2015, about 25-30 remedial classes for the physics course Mechanics Oscillations and Waves, each of an average duration 2 hours, were arranged. Dr. Kaushar Vaidya taught about 12 classes, Dr. Rishikesh Vaidya taught 4 classes, Dr. Manjula Devi taught 4 classes and Dr. Madhukar Mishra taught 4 Classes. Two students of the department, Mr.

Malay Singh (a third year student then) and Mr. Adama Goyal (a fifth year student then), engaged 4-5 classes individually, and helped the faculty as well in their classes.

#### 4. Physics Talks by Embryo Club

The Embryo Club is a forum for on-line, live and interactive lectures, run by students and faculties of BITS-Pilani. It aims to foster strong collaboration of BITS students and BITS faculty with the alumni and friends of BITS Pilani. The club aims to give students an exposure to the cutting edge research areas through lecture series and collaborative projects. The students also get an opportunity to network with Alumni and friends of BITS, who are reputed academicians and industry leaders. Under a highly ambitious project, BITS Connect2.0, BITS has acquired a state of the art telepresence solutions across all campuses. Following are some of the physics talks organized by the Embryo Club during the year 2014-15:

1. Graphene - An exciting two-dimensional material for science and technology by Dr. Mandar Deshmukh, TIFR, India (April 2014)
2. Physics For You by Henry Reich, Creator of educational videos, MinutePhysics available via YouTube, USA (August 2014)
3. 3D Printing with Atoms: An Impossible (or just an Improbable) Dream by Dr Philip Moriarity, The School of Physics and Astronomy, University of Nottingham (September 2014)
4. Search For Extraterrestrial Life by Prof. Wen-Ping Chen, National Central University, Taiwan (October 2014)
5. Exploring Solar System in search of Life and Elusive Material in the 21st century by Dr. Chaitanya Giri, Max Planck Institute for Solar System Research, Germany (Feb 2015)
6. Black Holes, Information Paradox and its resolution by Dr. Samir Mathur, Ohio State University, USA (August 2015)
7. The Quest for the Substance of Substance by Prof. Sudhir Raniwala, University of Rajasthan, India (August 2015)
8. The information about lectures arranged (year-wise) can be found at the website of the club: <http://embryo.bits-pilani.ac.in/>

#### AWARDS AND RECOGNITIONS WON BY FACULTY AND STUDENTS

##### Students who have opted for higher studies

1. Vijay Varma, Ph.D. program at the Caltech, USA
2. Bhavesh Chauhan, Ph.D. program at the Physical Research Laboratory, Ahmedabad
3. Amrit Raj, Ph.D. program at IISc, Bangalore
4. Pramod Ravindra, Ph.D. program at IISc, Bangalore
5. Kshitij Agrawal, Ph.D. program at Max Planck
6. Bhargav Joshi PhD University of Florida
7. Sankalp Gilda PhD University of Florida
8. Deepthi Gorthi University of California at Berkley

##### Significant new equipment/experimental facility installed in the Department

Department has procured several new equipments from different best companies around the globe in order to strengthen our four teaching labs in the department. The instruments are installed and experiments are set-up using approximately Rs. 28 lakhs from departmental CAPEX grant.

Biot Savart's law Experimental set-up

Magnetic Susceptibility

Heating stage temperature sensor with sample holder & accessories, SU003 (NT-MDT, Edgetech Delhi).

Spectrofluorophotometer

Optical fiber reflection probe and accessories (Ocean optics, SINSIL, Vadodara)

Electron Diffraction Setup

Polymer Film Making Equipment (Model : PF -M15)

Voltage Amplifier (Model : 603, Trek)





- 4. Faculty Performance Appraisals:** Performance Appraisal data for 2013-14 & 2014-15 has been collected at all three campuses (institutes level) and are currently under review. Contributions in three key performance areas, namely:- (i) teaching, (ii) research, and (iii) institutional contribution are being assessed. The assessments include self-appraisal, appraisal by the Head of the respective departments in consultation with the respective faculty, and/ or Divisional Dean, which is then followed by a cross campus committee assessment and then by university level committee. On the basis of appraisals, it is proposed to give the feedback soon to the faculty. Goal setting process for Dubai campus and off-campus faculty has been done.
- 5. Promotions:** This year, promotions were made for faculty at Pilani, Goa, Hyderabad, Dubai campuses (70) and off-campus faculty(1). The following table illustrates the details of promotions:

Campus	Recommendations for Promotion as Associate Professor	Recommendations for Promotion as Professor
Pilani Campus	20	2
Goa Campus	12	3
Hyderabad Campus	18	1
Dubai Campus	4	10
Off-campus	1	-
<b>Total</b>	<b>55</b>	<b>16</b>

Among those considered for promotions, there were a few faculty (23) who were falling short of expectations, marginally, and was decided by the committee to consider them for promotions in February 2016, as per details below:

Campus	To be considered for Promotion from Assistant Professor to Associate Professor	To be considered for Promotion from Associate Professor to Professor
Pilani Campus	07	2
Goa Campus	03	--
Hyderabad Campus	09	2
<b>Total</b>	<b>19</b>	<b>04</b>

- 6. Change of superannuation age from 60 to 65:** Superannuation age was extended for 2 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 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 visited the industries as per details below:

S.No.	Faculty's Name	Campus	Department	Industry Visited	Duration of the Visit
1.	Vishal Gupta	Pilani	CSIS	Blue Jeans Networks, Bangalore	22 June to 24 July 2015
2.	V S Shekhawat	Pilani	CSIS	Blue Jeans Networks, Bangalore	22 June to 24 July 2015
3.	Indresh Kumar	Pilani	Chemistry	VerGo Pharma Research, Goa	20 May to 15 July 2015
4.	Surojit Pande	Pilani	Chemistry	Unilever Research Centre, Bangalore, National Aerospace Laboratories, Bangalore	8 June to 16 July 2015

5.	Bibhas Ranjan Sarkar	Pilani	Chemistry	Aditya Birla Group, Mumbai	10 June – 7 July 2015
6.	Pradyumn Chaturvedi	Pilani	EEE	ABB India Ltd., Bangalore (Medium voltage Drivers R & D Division)	6 June to 6 July, 2015
7.	Utpal Roy	Goa	Bio Sciences	Hospital Laboratory of Medical Mycology PGIMER, Chandigarh	22 June to 15 July 2015
8.	Halan Prakash	Goa	Chemistry	National Inst. For Interdisciplinary Sci & Tech (NIIST), Kerala	22 June to 12 July 2015
9.	Ranjit S Patil	Goa	ME	Shri Mahakali Sahakari Sakhar Karkhana Ltd. Sangli, Maharashtra	May 19 – July 16, 2015
10.	Sachin Waigaonkar	Goa	ME	GMI Zarahk Moulders Pvt Ltd, Verna, Goa	June 1 – July 10, 2015
11.	Amrita Priyadarshini	Hyderabad	ME	Rourkela Steel Plant, Sail Rourkela (Orisha)	18th June – 16th July 2015
12.	C Phaneendra Kiran	Hyderabad	ME	Bharat Forge, Pune	June 22 – July 10, 2015
13.	Subhas Ghosal	Hyderabad	Chemistry	Dr. Reddy's Lab, Hyderabad	29 May to 15 July 2015
14.	Raja Raja varma Murari	Hyderabad	Civil	Worely Parsons, Hyd	25 May to 25 June 2015
15.	Sabareesh Geetha Rajasekharan	Hyderabad	ME	TUBE INVESTMENTS INDIA (TII LTD.)	June 01 to June 20, 2015
16.	Kannan Ramaswamy	Physics	Hyderabad	Thermax, Pune	Dec.20 <sup>th</sup> 2015 -10 <sup>th</sup> Jan., 2016

It is proposed to extend this opportunity to faculty at Dubai from next year.

- 8. Exposure of Faculty to Universities Abroad:** Under this scheme, BITS supports faculty members to spend a few weeks at a University abroad. 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. Fifteen faculties from three campuses- Pilani, Goa and Hyderabad utilized this opportunity, as per details given below:

S. No.	Faculty's Name	Department	Campus	University Visited	Duration of the Visit
1	Rajiv Gupta	Civil	Pilani	University of Virginia, Charlottesville, VA, USA	May 19 – July 19, 2015
2	Dheerendra Singh	EEE	Pilani	Florida International Uni.	May 20 – July 20, 2015
3	Rajneesh Kumar	EEE	Pilani	University of Salerno, Salerno, Italy	May 20 – July 20, 2015
4	Manoj Kumar Surajkaranji Soni	Meachanical	Pilani	University of South Florida	June 1 – July 30, 2015
5	Sheth Pratik Nitinchandra	Chemical	Pilani	Oklahoma State University, Stillwater, OK, USA	May 27 - July 24, 2015
6	Smita Raghuvanshi	Chemical	Pilani	Duke University, Durham, NC, USA	June 06 – July 28, 2015
7	Sharad Shrivastava	ME	Pilani	Robert Gordon University, Aberdeen,	May 25 – July 15, 2015

S. No.	Faculty's Name	Department	Campus	University Visited	Duration of the Visit
				UK	
8	Vishal Saxena	Bio Sciences	Pilani	University of South Florida, Tampa, Florida, USA	May 30, 2015 – July 29, 2015
9	Anupam Singhal	Civil	Pilani	Trinity College Dublin (TCD), Dublin, Ireland	May 19 – July 26, 2015
10	Geetha B	Humanities & Social Sciences	Pilani	Georgia Inst. Of Tech., Atlanta	June 28 – July 27, 2015
11	Anjan Chattopadhyay	Chemistry	Goa	University of Heidelberg (Institute of Physical Chemistry, Theoretical Chemistry Group), Heidelberg, Germany	24 <sup>th</sup> may – 10 <sup>th</sup> July 2015
12	Sumit Biswas	Bio Sciences	Goa	Freie Universitat Berlin, Germany	1 <sup>st</sup> June 2015 – 11 <sup>th</sup> July 2015
13	Aruna Malapati	CSIS	Hyderabad	Centre for Mathematics and Computer Science (CWI) Amesterdam, Netherlands	May 25 – July 25, 2015
14	K V G Chandra Sekhar	Chemistry	Hyderabad	University of New South Wales, Sydney, Australia	May 25 – July 5, 2015
15	T S L Radhika	Maths	Hyderabad	MIT, US	May 15 <sup>th</sup> – July 15 <sup>th</sup> , 2015

It is proposed to extend this opportunity to faculty at Dubai from next year.

- 9. Online peerfeedback in Performance Management System PMS:** This year, the online version of Peer Feedback was conceptualized and developed at Pilani Campus. With its immense success at Pilani campus, soon it will be institutionalized for all the four campuses, which is expected to quicken the process.
- 10.** The terms and conditions, eligibility and pay structures of all faculty and staff at Dubai campus was structured and implemented.
- 11.** 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. In order to retain competent and motivated faculty, division has initiated and successfully operationalized few policies and schemes:
- (i) **OPERA Award:** An "OPERA Award" (Outstanding Potential for Excellence in Research and Academics) has been provided to some of the new faculty members, at the time of their appointments, as per details below.

S.No.	Name	Designation	Department	Campus	New/ Existing Faculty
1	Sasikumar Punnekkat*	SPROF	CSIS	Goa	New Faculty
2	Dipankar Pal	PROF	EEE	Goa	New Faculty
3	Sumit Kr. Chatterjee	ASTP	EEE	Hyd	New Faculty
4	Gaurav Singh	ASTP	ME	Goa	New Faculty
5	Arkamitra Kar	ASTP	Civil	Hyd	New Faculty
6	Bahuru Deen A	ASTP	Civil	Pilani	New Faculty
7	Surya Shankar Dan	ASTP	EEE	Hyd	New Faculty

\*Currently Director, Goa campus.

- 12.** As many of these activities fall in line with core human resource management activities, it is also proposed to create a human resource centre / office and appoint human resource manager in the near future, which is under discussion.

## 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 2015 the Practice School programme was operated at 438 stations, with 21 stations hosting both Practice School-I (PS-I) and Practice School-II (PS-II), accommodating 4277 students and 157 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	25 (24)	3 (3)
2.	Design, Development, Consultancy and Software Organization.	155 (176)	49 (30)
3.	National Research Laboratories and other Research centers	32 (33)	29 (26)
4.	Production, Manufacturing and Public Work Units	43 (73)	94 (107)
5.	Publishing Houses, News Agencies and Museums	1 (1)	7 (4)
	<b>Total</b>	<b>256 (307)</b>	<b>182 (170)</b>

In 2015, an integrated practice school allotment for 4277 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 2014-2015	(2038)	2096
PS-II	II Semester 2014-2015	(911)	860
	I Semester 2015-2016	(1139)	1072
<b>PS for Higher Degree</b>	II Semester 2014-2015	(217)	246
	I Semester 2015-2016	(00)	03
<b>Total</b>		<b>(4305)</b>	<b>4277</b>

**Note:-** The figures shown in brackets relate to the year 2014.

### PS-II Assignments: Institute's Contribution to Industrial Development

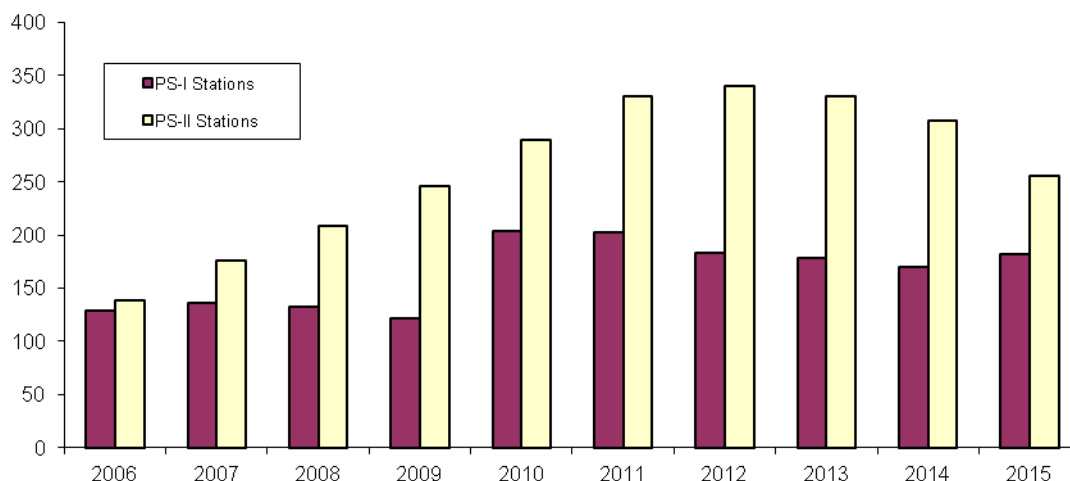
Apart from developing skills in professional judgment, data-handling, documentation, decision making ability, etc., in students, the PS-II assignments also relate to real-life problems of the host organizations. PS-II assignments listed in **Annexure 'A-11'** were completed by the final year students at their respective PS-II stations during the year 2015. 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 2096 students of Pilani (822), Goa (589) & Hyderabad (685) campuses accompanied by 107 faculty members attended Practice School-I and 2181 students attended Practice School-II. The entire Practice School-II operations were supervised by 50 faculty members residing at the respective locations. For the year 2015, 165 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.55,000/- p.m. at Nutanix Technologies India Pvt.Ltd, Bangalore. The average stipend is around Rs.19,000/- 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 81 new PS-II stations (Table 1) and out of pocket allowance was increased at 18 PS-II stations (Table 2).



**Table 1**  
**PS-II Stations Added during the Year 2015**

Sr.No.	PS-II Station	Out of pocket Allowance (Rs. Per Month)
<b>AHMEDABAD</b>		
1.	A.T.E. Enterprises Private Limited, Research & Development	Rs.15,000/-p.m.
<b>BANGALORE</b>		
2.	A.T.E. Enterprises Private Limited, Research & Development	Rs.15,000/-p.m.
3.	Adobe Systems	Rs.30,000/-p.m.
4.	Akira Consultancy Private Limited	Rs.20,000/-p.m.
5.	Avaya India Private Limited	Rs.18,000/-p.m.
6.	Belong.co	Rs.18,000/-p.m.
7.	Bundl Technologies Private Limited(Swiggy)	Rs.20,000/-p.m.
8.	Cadence Design Systems India Pvt Ltd.	Rs.20,000/-p.m.
9.	Cignex Datamatix Technology	Rs.15,000/-p.m.
10.	Cisco Systems (India) Pvt. Ltd.	Rs.45,000/-p.m.
11.	Cypress Semiconductors Tech. India Pvt. Ltd.	Rs.25,000/-p.m.
12.	GargWebtech Pvt. Ltd.	Rs.7,000/-p.m.
13.	Hindustan Unilever Research Centre	Rs.8,000/-p.m.
14.	IFB Automotive Pvt. Ltd.	Rs.15,000/-p.m.
15.	ING Vysya Bank	Rs.15,000/-p.m.
16.	John F Welch Technology Center (GE)	Rs.20,000/-p.m.
17.	Khosla Labs	Rs.15,000/-p.m.
18.	Morgan Stanley Advantage Services	Rs.30,000/-p.m.

Sr.No.	PS-II Station	Out of pocket Allowance (Rs. Per Month)
19.	Myntra.com	Rs.25,000/-p.m.
20.	NextGen PMS Pvt. Ltd	Rs.30,000/-p.m.
21.	Qubole	Rs.35,000/-p.m.
22.	Rovi Corporation	Rs.40,000/-p.m.
23.	Sellerworx Online Services Limited	Rs.15,000/-p.m.
24.	Symantec Software Solutions Pvt. Ltd.	Rs.40,000/-p.m.
25.	Zinnov Management Consulting Pvt. Ltd	Rs.18,000/-p.m.
26.	Zynga Game Network India Pvt. Ltd.	Rs.35,000/-p.m.
<b>CHANDIGARH</b>		
27.	Parexel	Rs.15,000/-p.m.
<b>CHENNAI</b>		
28.	Stayzilla - Inasra Technologies	Rs.35,000/-p.m.
<b>DELHI</b>		
29.	Akosha	Rs.20,000/-p.m.
30.	Amazon Development Center	Rs.30,000/-p.m.
31.	LEA Associates	Rs.8,000/-p.m.
32.	Pantaloons Fashion &Retail Ltd	Rs.10,000/-p.m.
<b>DHARWAD</b>		
33.	Tata Motors	Rs.18,000/-p.m.
<b>GURGAON</b>		
34.	Bain Capability Center Pvt. Ltd	Rs.25,000/-p.m.
35.	Bundl Technologies Private Limited (Swiggy)	Rs.20,000/-p.m.
36.	GlaxoSmithKline	Rs.20,000/-p.m.
37.	Lama Capital Management	Rs.5,000/-p.m.
38.	Mediology Software Pvt. Ltd.	Rs.20,000/-p.m.
39.	Skoda Auto India Pvt. Ltd.	Rs.14,000/-p.m.
40.	Sprinklr	Rs.50,000/-p.m.
41.	ZS Associates	Rs.25,000/-p.m.
<b>HYDERABAD</b>		
42.	Adaequire	Rs.15,000/-p.m.
43.	Bundl Technologies Private Limited (Swiggy)	Rs.20,000/-p.m.
44.	CA Technologies	Rs.25,000/-p.m.
45.	Chitika	Rs.40,000/-p.m.
46.	Cognitive Scale	Rs.30,000/-p.m.
47.	Dupont Knowledge Center	Rs.20,000/-p.m.
48.	Moldtek India	Rs.8,000/-p.m.
49.	Mordor Intelligence	Rs.14,000/-p.m.
50.	Purpletalk	Rs.15,000/-p.m.
51.	SM Silicon India Pvt Ltd	Rs.15,000/-p.m.
52.	Smartrak	Rs.20,000/-p.m.

Sr.No.	PS-II Station	Out of pocket Allowance (Rs. Per Month)
53.	Steelwedge Software Inc.	Rs.20,000/-p.m.
54.	Stellar Software Technologies Pvt Ltd	Rs.10,000/-p.m.
<b>JAIPUR</b>		
55.	CEG Limited	Rs.10,000/-p.m.
<b>JAMSHEDPUR</b>		
56.	Tata Motors	Rs.18,000/-p.m.
<b>KOLKATA</b>		
57.	Pantaloons Fashion &Retail Ltd	Rs.10,000/-p.m.
<b>KUMARAPATNAM</b>		
58.	Grasim Industries Ltd.	Rs.5,000/-p.m.
<b>LUCKNOW</b>		
59.	Tata Motors	Rs.18,000/-p.m.
<b>MUMBAI</b>		
60.	Barclays	Rs.25,000/-p.m.
61.	Bundl Technologies Private Limited (Swiggy)	Rs.20,000/-p.m.
62.	Exponentia data	Rs.25,000/-p.m.
63.	Here Maps - A Nokia Company	Rs.20,000/-p.m.
64.	Housing.com (Locon Solutions Private Limited)	Rs.45,000/-p.m.
65.	Man Infraconstruction Ltd	Rs.5,000/-p.m.
66.	Micro Labs Limited	Rs.9,500/-p.m.
67.	Nomura Services India Pvt	Rs.35,000/-p.m.
68.	Oracle Financial Services Software Ltd. ( OFSS)	Rs.25,000/-p.m.
69.	Tiny Owl Technology Pvt. Ltd.	Rs.50,000/-p.m.
<b>NOIDA</b>		
70.	ARM Embedded Technologies Private Limited	Rs.20,000/-p.m.
71.	Barclays	Rs.25,000/-p.m.
72.	CignexDatamatix Technology	Rs.20,000/-p.m.
73.	Tolexo Online Pvt Ltd	Rs.22,000/-p.m.
<b>PUNE</b>		
74.	Bentley Systems India Pvt Ltd	Rs.18,000/p.m.
75.	Mahle Behr India Engineering Services	Rs.8,000/-p.m.
76.	Marvel India	Rs.25,000/-p.m.
77.	Sokrati Technologies Pvt. Ltd.	Rs.20,000/-p.m.
78.	Tata Chemical Innovation Center	Rs.10,000/-p.m.
79.	ZS Associates	Rs.25,000/-p.m.
<b>TRIVANDRUM</b>		
80.	Leap Consulting	Rs.10,000/-p.m.
81.	Samson and Sons builders and developers	Rs.5,000/-p.m.



**Table 2**  
**Increase in Monthly Stipend at PS-II Stations during the Year 2015**

Sr.No	PS-II Stations	Monthly Stipend / out of pocket allowance	
		During 2014	During 2015
1	Blue Jeans Network India Pvt. Ltd. Bangalore	Rs.25,000/- p.m.	Rs.50,000/- p.m.
2	EnSci - A Unit of Weir Minerals India Pvt. Ltd., Bangalore	Rs.7,000/- p.m.	Rs.10,000/- p.m.
3	ExotelTechcomPvt. Ltd., Bangalore	Rs.5,000/- p.m.	Rs.20,000/- p.m.
4	ILabs, Bangalore	Rs.30,000/- p.m.	Rs.40,000/- p.m.
5	Netapp, Bangalore	Rs.25,000/- p.m.	Rs.30,000/- p.m.
6	Practo Technologies Pvt. Ltd., Bangalore	Rs.20,000/- p.m.	Rs.40,000/- p.m.
7	Satvva Media & Consulting Pvt.Ltd, Bangalore	Rs.9,000/- p.m.	Rs.15,000/- p.m.
8	TAS Analytic Services, Bangalore	Rs.12,000/- p.m.	Rs.15,500/- p.m.
9	TESCO Hindustan Service Centre, Bangalore	Rs.20,000/- p.m.	Rs.25,000/- p.m.
10	Ernst & Young Pvt Ltd., Chennai	Rs.15,000/- p.m.	Rs.15,200/- p.m.
11	Ramco Systems, Chennai	Rs.20,000/- p.m.	Rs.25,000/- p.m.
12	IFB Industries, Goa	Rs.10,000/- p.m.	Rs.15,000/- p.m.
13	Reckitt Benckiser, Gurgaon	Rs.25,000/- p.m.	Rs.30,000/- p.m.
14	MSCI Barra, Quantitative Equity Research, Mumbai	Rs.30,000/- p.m.	Rs.40,000/- p.m.
15	AnovIP, New Delhi	Rs.8,000/- p.m.	Rs.10,000/- p.m.
16	Alliance Infotech.Noida	Rs.14,000/- p.m.	Rs.15,000/- p.m.
17	Avaya India Private Limited, Pune	Rs.15,000/- p.m.	Rs.18,000/- p.m.
18	Tata Motors, Pune	Rs.5,000/- p.m.	Rs.12,000/- 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 COPSIMS for a number of years, PS Instruction Monitoring has now introduced WEPSIMS (Web Enabled Practice School Instruction Monitoring 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. 44,000/- (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, 378 First-Degree thesis projects have been completed at Pilani campus. The list of completed First-Degree thesis during Second Semester 2014-2015 and First Semester 2015-2016 is given in **Annexure 'B1-9'**.

**Higher Degree Dissertation**

During the year, 82 Higher Degree dissertation projects have been completed in Pilani campus. The list of completed Higher Degree Dissertations during Second Semester 2014-2015 and First Semester 2015-2016 is given in **Annexure 'B1-10'**.

**Ph.D. Programme****(a) Award of Ph.D. Degree (viva conducted)**

S.No	ID No	Name	Thesis Title	Year	Discipline	Supervisor
1	2005PHXF415P	Prakash	Biosorption of Heavy Metals and Dyes by <i>scenedesmus</i> sp.MCC26	2015	BIO	SK Verma
2	2009PHXF030P	Satish Kumar Dubey	Computational Modelling and Simulation of Heat Transfer during steel Billet Reheating and Transport with Growth of Oxide Scale	2015	MECHANICAL	P. Srinivas
3	2008PHXF482P	Shvetank Bhatt	Behavioral and Neuropharmacological Screening of Potential Serotonergic (5-HT <sub>3</sub> ) Ligands for co-morbid Depression, Anxiety and Related disorders	2015	PHARMACY	R.Mahesh
4	2008PHXF430P	Naga Vamsi K.Jasti	An Empirical Investigation of Lean Enterprise in Indian Industry	2015	MECHANICAL	RB Kodali
5	2007PHXF434P	Anjali Awasthi	Factors Affecting Mitochondria Number and Distribution in <i>C.elegans</i> Touch Receptor Neurons and its Correlation with Neuronal Behavior	2015	BIO	Sandhya P. Koushika
6	2003PHXF013P	Pankaj Vyas	Software Fault Trees and Software Failure Modes and Effects Approaches for Preliminary Phases of Object Oriented Software Design	2015	CS & IS	RK Mittal
7	2007PHXF403P	Sachin U.Belgamwar	Investigations on Multiwalled	2015	MECHANICAL	NN Sharma
8	2008PHXF018P	Jai Gopal Pandey	Carbon Nanotube Reinforced Coppe	2015	EEE	Chandrasekhar
9	2010PHXF415P	Mr Kashiviswanadharaj	Synthesis of Novel Fused Azaheterocycles	2015	BIO	Bharthi Khungar

S.No	ID No	Name	Thesis Title	Year	Discipline	Supervisor
		u P	by One-pot, Tandem and multicomponent Reactions			
10	2009PHXF010P	P. Shanthi Latha	Study on breast cancer stem cells and their role in anti cancer drug response	2015	BIO	Sunita Saxena
11	2008PHXF427P	Gautam Singhvi	Design and evaluation of oral controlled release tablets of milnacipran hydrochloride	2015	PHARMACY	RN Saha
12	2010PHXF011P	Rajesh Bhatt	Computational investigation on vortex shedding/suppression and aerodynamic characteristics of a square cylinder in presence of an upstream rectangular cylinder under Couette Poiseuille flow	2015	MATHS	DK Maiti
13	2010PHXF040P	L. Dhanurekha	Phenotypic and genotypic methods for rapid detection and drug (first and second line) resistance of tuberculosis	2015	BIO	K.Lily Therese
14	2005PHXF424P	Nirmal Kr. Gupta	Object Oriented Software Quality Estimation Using Maintainability Metric and Genetic Algorithms	2015	CS & IS	Mukesh Kumar Rhil
15	2009PHXF019P	Iyer Gomathy N.	Design and development of small molecule inhibitors targeting copper transporter 1 in copper mediated angiogenesis	2015	BIO	KN Sulochana
16	2007PHXF423P	Amit Kumar Subudhi	In vivo transcriptome analysis of Plasmodium falciparum clinical isolates: Glimpses into molecular events in complicated malaria	2015	BIO	AK Das
17	2010PHXF418P	Vijay Kumar	Wetting behaviour of silicon and dielectric materials attributed to texturing and self assembled monolayer	2015	MECHANICAL	NN Sharma
18	2010PHXF001P	Ashish Kumar Sharma	Design, simulation and analysis of RE-MEMS switches for reconfigurable antennas	2015	EEE	Navneet Gupta
19	2010PHXF038P	Nalini V.	Evaluation of molecular targets in clinical management of Intra	2015	BIO	PR Deepa

S.No	ID No	Name	Thesis Title	Year	Discipline	Supervisor
			ocular tumors (Retinoblastoma and uveal melanoma)			
20	2009PHXF031P	Jaipal A.	Design and evaluation of bioadhesive buccal delivery systems of buspirone hydrochloride	2015	PHARMACY	SY Charde
21	2008PHXF026P	Vadiraj Kurdekar	Design, synthesis and evaluation of Novel Anti-rheumatic agents	2015	PHARMACY	HR Jadhav
22	2009PHXF406P	Vibhu	Studies on Liposomal delivery of dopamine to brain via nasal route	2015	PHARMACY	RN Saha
23	2007PHXF024P	Indukuri Bhaskar Raju	Health care utilization in relation to socio economic status in rural and urban areas of Andhra Pradesh	2015	MGMT	Dr. V.V. Sastry
24	2010PHXF004P	Munesh Rathore	Assessment of Electrical conductivity structure in Li Ion conducting oxide glasses and glass ceramic nanocomposites	2015	PHYSICS	Anshuman Dalvi
25	2007PHXF405P	Ajay Kumar Pani	Design of soft sensors for monitoring and control of cement manufacturing processes	2015	CHEMICAL	HK Mohanta
26	2006PHXF422P	Sunita Bansal	Design and development of scheduling algorithms for Grid computing system	2015	CS & IS	C.Hota
27	2010PHXF410P	Sunita Joshi	Photophysics of fluorescent molecules in micellar systems	2015	PHYSICS	DD Pant
28	2008PHXF013P	Sunil Kumar Goyal	Organizational transformation of Indian Railways through strategic business orientation	2015	MGMT	NVM Rao
29	2005PHXF031P	Anita Shantaram	Ethical Business practices and corporate financial performance : An empirical analysis	2015	MGMT	ML Monga
30	2009PHXF018P	Ferdinamarie S.P.	Genetic study on ocular quantitative traits of glaucoma and myopia in Indian population	2015	BIO	S. Sripriya
31	2010PHXF008P	Amrit Sarmah	Formal and conceptual development of density functional theory (DFT) based reactivity descriptors and their	2015	CHEMISTRY	RK Roy

S.No	ID No	Name	Thesis Title	Year	Discipline	Supervisor
			applications to understand kinetic and thermodynamic aspects of a chemical reaction			
32	2009PHXF441P	Utkarsh Maheshwari	Removal of Metal Ions from Wastewater using Adsorption : Experimental and Theoretical Studies	2015	Chemical	Suresh Gupta
33	2010PHXF409P	Rituparna B.	Development and application of parameters based on Chemical reactivity theory	2015	CHEMISTRY	RK Roy
34	2006PHXF424P	Amit Jain	Studies on RCA analysis for control configuration selection of decentralized multivariable nonlinear chemical processes	2015	CHEMICAL	B.V. Babu
35	2011PHXF042P	Ashok P.	Synthesis, Study of some Novel B-carboline Derivatives as Potential Agents Against HIV and Associated Infections	2015	PHARMACY	S.Murugesan
36	2008PHXF418P	Gitanjali Bhutani	Schemes for self management in wireleass networks for throughput and reliability improvement	2015	CS	MH Kori
37	2010PHXF010P	Muthu V. Sudali	Design, Syngthesis and Pharmacological Evaluation of Novel Phosphodiesterase-4 Inhibitors for their Anti Depressant and Anxiolytic Potential	2015	PHARMACY	R. Mahesh
38	2008PHXF424P	Anil Jindal	Multi-objective design and optimization of a closed loop supply chain network, and assessment of collection methods, product recovery methods and network configurations	2015	Mech.	KS Sangwan
39	2008PHXF002P	G.Muthukumar	Influence of Openings on the Structural Response of RC Shear Walls	2015	Civil	Manoj Kumar
40	2009PHXF443P	Ujjwal Manohar Rao	Impact of Total Quality Management Accreditation and Electronic Medical Records on the outcomes of a healthcare organization	2015	Management	Rajeev Boudhankar

S.No	ID No	Name	Thesis Title	Year	Discipline	Supervisor
41	2008PHXF419P	Sumanta Chakrabarti	Environmental quality assessment of a few selected stretches in a river basin using multi-criteria approaches	2015	Civil	A.P.Singh
42	2008PHXF437P	Reena Bibals	Investigation of Factors Influencing Ambient Release of Metofluthrin from Various Polymeric Substrates	2015	Pharmacy	Debojit Chakrabarty
43	2008PHXF414P	Purva	Analysis of ACGT Cis Elements Across Plant Genomes and its Characterization Using Protein Phosphatase 2C (PP2C) like promoter from Arabidopsis thaliana	2015	BIO	R. Mehrotra
44	2010PHXF003P	Garima Balwani	Design, Characterization and Pharmacokinetic Evaluation of Solid Lipid Nanoparticles of Ganciclovir for Improved Oral Absorption	2015	Pharmacy	RN Saha
45	2009PHXF405P	Ankur Jindal	Behavioural and neuro-pharmacological screening of Phosphodiesterase-4 (PDE4) inhibitors for anti-depressant and anxiolytic potential	2015	Pharmacy	R. Mahesh
46	2007PHXF401P	Nitin Chaturvedi	Techniques to improve the performance of cache memory for multi-core processors	2015	EEE	S.Gurunarayana n
47	2007PHXF014P	Christina Priya Sande	Computational studies on Gas-Solid fluidization of Geldart A particles using two-fluid model	2015	Chem.	Saumi Ray

**(b) Ph.D. Thesis Submitted and Under Process of Evaluation**

S.No	ID No	Name	Title	Discipline	Guide
1	2007PHXF427P	Vinita Kumari	Association study, analysis for genetic and environmental interaction of variants in candidate genes for inflammation (ICAM-1 CFH) and neuroprotection (PEDF, EPO) in type 2 diabetic retinopathy patientsw from south India	BIO	S. Sripriya
2	2010PHXF041P	M.K.Janani	A Clinico-Molecular Biological and Genotypic study on epstein - Barr virus in Chennai population	BIO	J. Malathi

S.No	ID No	Name	Title	Discipline	Guide
3	2011PHXF401P	Madhu Sehrawat	Financial Development, Inflation and Economic Growth in India : Issues and Evidences	Management	A.K. Giri
4	2007PHXF432P	Parikshit Kishore Singh	Design and Implementation of intelligent control schemes for pH neutralization process	EEE	Surekha Bhanot
5	2007PHXF013P	D.C.Kiran	Compiler assisted parallelization and optimization for multicore architecture	CS	S.Gurunarayanan
6	2008PHXF003P	Murli Manohar Pandey	Design and evaluation of mucoadhesive buccal delivery systems of felodipine	Pharmacy	SY Charde
7	2006PHXF421P	Girish Kant	Prediction and Optimization of Machining Parameters for Minimizing Surface Roughness and Power Consumption during Turning of AISI 1045 Steel	Mech.	KS Sangwan
8	2006PHXF410P	Jayashree Mahesh	'Indian' Management Practices in the I.T. Sector - An experimental investigation	Management	Anil K. Bhat
9	2008PHXF004P	N.Mehla	Query Content Aware Strategies for Performance Improvement of Search Engines	CSIS	Poonam Goyal
10	2010PHXF401P	C. Karthik	Studies on Thin Films of Liquid Crystalline Molecules	Physics	Raj Kumar Gupta
11	2008PH29003P	Manoshi Gayen	Revolutionary Approach for Inactivated Vaccine Production and Radioprotection using Mn <sup>2+</sup> Complexes from Deimocous radiodurans	BIO	RK Maheshwari
12	2008PHXF406P	Ashish Runthala	Refinement and Improvement of Template Based Protein Modelling Algorithms	Bio	S.Chowdhury
13	2011PH30049P	K. Shalini	Quantification of Rural Accessibility and Development of a Need-Based Approach for Rural Road Network Planning	Civil	AK Sarkar & AP Singh
14	2010PHXF036P	Rishi Man Chugh	A Study on differential growth-arrest of 3T3 fibroblasts used as feeders for epidermal stem cell propagation	Bio	LK Yerneni
15	2011PHXF402P	CV Jayanthi	Perspectives on Some Aspects of Ethical Awareness in Corporate India - an Empirical Study	Mgt.	U. Dhyani
16	2008PHXF019P	Srilatha Jasty	Identification and Characterization of Human Iris Pigment Epithelial Cells and Ciliary Pigment Epithelial Cells In-vitro for Retinal Stem/Progenitor Properties	BIO	S.Krishnakumar
17	2011PHXF415P	Jitendra Kumar	Design and Analysis of Dielectric Resonator Antenna (DRA) for	EEE	Navneet Gupta

S.No	ID No	Name	Title	Discipline	Guide
			Wideband Applications		
18	2011PHXF412P	Pooja Joshi	Relationship between Macroeconomic Variables and Stock Market Development: Evidences from the Indian Economy	Economics	A.K. Giri
19	2011PHXF034P	Mandeep Singh	Monotone Iterative Techniques for a Class of Nonlinear Boundary Value Problems	Maths	A.K. Verma
20	2009PHXF037P	Priti Jain	Design, Synthesis and Evaluation of Novel Agents to Treat Alzheimer's Disease	Pha	H.R. Jadhav
21	2010PHXF44P	Vimalin Jeyalatha	Prevention of Corneal Limbal Epithelial Cell Death during Collagen Crosslinking and the Pathogenic Mechanisms Involved in Progression of Keratoconus	Bio	J. Malathi
22	2004PHXF021P	Swati D. Keskar	An Innovative Wearable Computing Framework for Early Detection of Cardiac Anomalies	EEE	Rahul Banerjee
23	1996PH29707P	Manoj Kannan	Genetic and Epigenetic of L1 Retrotransposition in Mouse and Man	BIO	David E. Symer
24	2007PHXF431P	A. Anand Kumar	Design and Development of Hybrid Controller for Z-Source Inverter: An Application of Electric Vehicle	EEE	Dheerendra Singh
25	2007PHXF415P	G.Meenakshi Sundaram	MEMS Resonator based Bandpass Filter Design for Wireless Communication Transceiver	EEE	Kamaljit Rangra
26	2007PHXF430P	Srinivasa Reddy K.	High Performance VLSI Architecture for Digital FIR Filter Design	EEE	S.K. Sahoo
27	2008PHXF407P	Vandana Agarwal	Computational Intelligence Based Face Recognition	CSIS	Surekha Bhanot
28	2010PHXF006P	Amar Singh	Thermodynamic Studies on DNA Unzipping	Physics	Navin Singh
29	2003PHXF407P	Ravi S. Reosekar	An Empirical Investigation of Six Sigma Practices in Indian Manufacturing Industry	Mech	S.D. Pohekar
30	2010PHXF026P	Sneh Lata Murotiya	Low-Power High-Speed and Compact Ternary VLSI Circuit Designs using Carbon Nanotube Field Effect Transistors	EEE	Anu Gupta
31	2011PHXF039P	Pallavi Singh	Formulating Suitable Strategies to Improve Public Health Services in India with Focus on Infrastructure and Administration	Pha	Bhaskar Bose
32	2009PHXF020P	Bharath Selvi	Biochemical Mechanisms of Homocysteine and its Role in RETINAL VASCULAR DISEASES	BIO	KN Sulochana



S.No	ID No	Name	Title	Discipline	Guide
33	2010PHXF445P	R.Bhuvanasunder	Structural and Functional Characterization of Human Lysyl Oxidase through Molecular Cloning, Expression <i>In Silico</i> Studies	Bio	KN Sulochana
34	2008PH29001P	Raghavendar Chandran	MicroRNAs as Biomarkers for Mild Traumatic Brain Injury and Post-traumatic Stress Disorders	Bio	R.K. Maheshwari-
35	2009PHXF414P	Arghya Kusum Dhar	Desig, Synthesis and Pharmacological Screening of Potential 5-HT3 Receptor Antagonists for Co-morbid Disorders Like Depression and Anxiety	Pharmacy	R.Mahesh
36	2009PHXF001P	Emil Joseph	Design, Characterization and Evaluation of Polymeric and Solid Lipid Nanoparticulate Systems of Olanzapine for Enhanced Efficacy	Pha	R.N. Saha
37	2006PHXF406P	Ruchika Sharma	Linguistic Deviations in Advertising Messages of Chocolates and Beverages: Its Impact Measurement on the Psychology of Children in India	English	S. Sharma
38	2013PHXF108P	Praveen Kumar M.	Studies on the Role of chlamydia trachomatis Infection in the Pathogenesis of Reactive Arthritis Undifferentiated Spondyloarthritis	Bio	Sangita Rastogi
39	2007PHXF007P	Swarna Kanchan	Evolution of AP Endonucleases: An In-Silico Genomic and Modelling study	BIO	Shibasish Chowdhury
40	2009PHXF444P	Lakshmanan R.	Adoption of Open Source Software in Information Technology Outsourcing Organizations	CSIS	Sundaresan Krishnan Iyer
41	2002PHXF026P	Samir Ramdas Kale	Design of Occupational Health and Safety Management Systems for Viscose Staple Fiber Division, Grasim Industries Limited	Chem. Engg.	Arun Maity
42	2010PHXF039P	Vidhya Srinivasan	Understanding the Role of Adiponectin in Proliferative Diabetic Retinopathy; Design and Development of Therapeutic Molecules	BIO	KN Sulochana

#### 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:** 49 Ph.D. candidates under aspirants, faculty development scheme and students category, were permitted to appear in the Ph.D. qualifying examination in the year 2015.

### CSIR/UGC/DST Fellowship

Council of Scientific and Industrial Research (CSIR) has provided fellowship to 1 JRFs and 2 SRFs to the research scholars of the Pilani campus. DST has provided 2 Inspire fellowships to the research scholars at Pilani campus. The University Grants Commission has provided fellowship to 3 JRF under UGC NET scheme and 49 research fellowships under UGC BSR scheme to the research scholars of the Institute. These research fellows; both JRFs and SRFs are working for their Ph.D. degree in Pilani campus.

### 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, NPMASS, Incozen, Inspire, BRNS, MNRE, UGC, ICMR, TCS etc. There are 43 research scholars in Pilani campus at present in such position.

### Sponsored Research Projects

A total of Two Hundred eleven (211) 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:

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
1.	Synthesis and detailed characterization of 'ship-in-a-Bottle' complexes inside the microporous and mesoporous material	Dr. Saumi Ray	DST	20.00
2.	Syntheses of efficient and pure blue triplet emitting materials for fabrication of white organic light emitting diodes (WOLEDs)"	Dr Inamur R Laskar	DST	22.17
3.	Design and Synthesis of Novel Bioactive Heterocycles as Anticancer	Dr Dalip Kumar	CSIR	13.58
4.	Novel Synthetic Methodologies for Biologically Important Compounds using Lanthanide Triflates as Lewis Acids in Ionic Liquids	Dr. Anil Kumar	UGC	08.77
5.	Development of a novel synthetic route for an anti-HIV drug	Dr. Dalip Kumar, Dr. Anil Kumar	Ranbaxy	11.50
6.	Design, Synthesis And Biological Evaluation of Indole-based Heterocycles as Anticancer Agents	Dr Dalip Kumar	UGC	7.50
7.	Crystal Engineering of Metal-Organic Frameworks using Organic Linkers Derived from Template-Controlled Solid-State Reactions	Dr.Madhushree Sarkar	DST	23.40
8.	An Extensive Computational Development of Multi-reference Coupled-cluster Methods for Electronic Structure Investigations of Big Molecules	Dr.PrashantU. Manohar	DST	22.40
9.	Study on physicochemical and interfacial properties of some mixed micellar systems of novel Gemini and conventional surfactants in water and water-organic solvent mixed media	Dr.Subit K. Saha	A B Group	10.00
10.	Development of Framework for Multi-agent Robotic Systems	Dr.Sudeep Mohan	CAIR (DRDO)	9.50
11.	Design of Modified Release Multi-Unit Particulate Delivery Systems for Fixed-Dose Combination of Artesunate and Amodiaquine for Pediatrics	Dr. Shrikant Y Charde	UGC Major Research Project	10.25
12.	Evaluation of Anti-Diabetic Foot Cream	Dr. R. P. Pareek	TTK LIG Ltd., Chennai	1.00
13.	Pharmaceutical Application Studies of Polymers Manufactured by BASF	Dr. ShrikantCharde	BASF, Mumbai	2.00
14.	Design of novel nasal delivery systems for selected drugs	Prof. R. N. Saha	Torrent Research Centre, Ahmedabad	20.00
15.	Studies on newer use of Carbopols as pharmaceutical excipients	Prof. R. N. Saha	Lubrizol, USA	12.00
16.	Design, Synthesis and Study of Novel	Dr. S. Murugesan	BITS, Pilani	2.00

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
17.	Benzopiperidine analogs as HIV-1 Reverse Transcriptase Inhibitors Aakash Ganga – A Social Enterprise Model for RWH and Agriculture of low water demanding economically important plant	Prof. Rajiv Gupta	Research Initiation Grant Department of Science and Technology, New Delhi	61.96
18.	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Masonry Structures	Prof.S. B. Singh	Aditya Birla Group (ABG)	10.00
19.	Failure and Stability of Laminated Composite Plates with Cutouts	Prof S. B. Singh	K.K. Birla Academy Projects, BITS, Pilani	4.50
20.	A Study on Sludge Minimization during The Treatment of Pickling Effluent and Utilization of Sludge	Dr. AnupamSinghal	ABG	10.00
21.	GIS based Characterization of Ground water in Shekhawati Region of Rajasthan	Dr. AnupamSinghal	DST	18.00
22.	Investigation into the Behavior of Coupling	Dr. DipenduBhunia	BITS Faculty Research Initiation Grant	2.00
23.	Mobilization of Metals from Copper Mine Tailings of Khetri Copper Mine, Rajasthan and their Attenuation by Soil: Groundwater Pollution Implications	Dr. Sanghamitra Kundu	DST	11.27
24.	Dynamic Buckling Responses of Composite Structures	Mr. S. N. Patel	BITS Faculty Research Initiation Grant	2.00
25.	Establishment of National MEMS Design Centers	Prof. N.N. Sharma	National Program on Micro and Smart Systems (HR PARC)	16.7
26.	Indigenization of Lab-on-Chip for UTI Pathogen Detection	Prof. N.N. Sharma (CO-PI)	National Program on Micro and Smart Systems (Bio PARC)	82.51
27.	Development, Design and Engineering of 28-DOF Humanoid to avoid obstacles and handle specified objects in the environment	Dr. B.K. Ruot	Ministry of Information and Technology, (MIT)	45
28.	Flow in Closed Microfluidic Channel	Prof. N.N. Sharma	INUP, IIT, Powai	Equipment usage, and contingency
29.	Design and development of OptofluidicMicropumps	Prof. N.N. Sharma	CEERI-BITS	Equipment usage & Chemicals
30.	Carbon Nanotube from Carbon Black: Subproject of Project OSCAR being carried out in IIT Bombay	Prof. N.N. Sharma	Aditya Birla Group	10
31.	Cardiovascular Disease in Human Population: Mathematical Modeling and Analysis of its Incidence, Risk Factors and Preventive Strategies	Dr. SaiJagan Mohan	MHRD	3
32.	Modeling and Simulation of Viscose Flow through JetPack Assembly	Dr. Pratik N. Sheth	UGC	8.44
33.	Characterization of Bio-oil produced via Pyrolysis of Jatropha Cake Residue	Dr. Suresh Gupta (Co-Invstigator)	Birla Cellulosic Kharach	5.52
34.	Experimental studies of Bio-mitigation of CO <sub>2</sub>	Dr. Pratik N. Sheth	BITS, Pilani	2.00
35.	Determination of Foaming Properties of Aqueous Ethanol Solution Using Industrial Surfactant Sodium Lauryl Sulfate	Dr. Smita Raghuvanshi Mr. Subhajit Majumder(CI)	BITS, Pilani	2.00
36.	Optimization of Complex Chemical	Dr. Pradipta Chattopadhyay	BITS, Pilani	2.00
37.		Dr. Ashish M. Gujarathi	BITS, Pilani	2.00

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
38.	Processes Using Evolutionary Algorithms Nano technology for enhanced utilization of native-phosphorous by plants and higher moisture retention in arid soils	Dr. Jitendra Panwar	Indian Council of Agricultural Research (ICAR), Govt. of India, New Delhi.	3.726 Crores (41.53 Lakhs for BITS Pilani Centre)
39.	Molecular characterization of ACC (1-aminocyclopropane-1-carboxylate) deaminase activity of associative bacteria isolated from plants of desert of Rajasthan	Dr. Prabhat Nath Jha	DBT	41.35
40.	Molecular characterization of <i>Anopheles stephensi</i> gut epithelial peroxidases and their role in modulating immunity against bacterial and fungal antigens	Dr. Sanjeev Kumar	DST	47.18
41.	Characterization of immune signaling pathway in <i>Anopheles</i> mosquitoes	Dr. Lalita Gupta	DST	21.20
42.	Analyzing structural and functional evolutionary links between RubisCO and carbon concentration mechanism proteins	Dr. Sandhya Mehrotra	DST	23.96
43.	Development of surface Plasmon resonance instrument with a novel optical design	Dr Raj kumar Gupta	DST	25.66
44.	Synthesis of Platinum (II) based pure blue emitting triplet harvesting materials and their applications in white organic light emitting diodes as single emissive dopants	Dr Inamur Rehman lashkar	CSIR	20.20
45.	Design and characterization of electrochromic rear view mirrors using conducting polymers	Dr S Sindhu	DST	24.35
46.	Developing a smart crop management system using data analytics	Dr Navneet Goel	IBM	6.75
47.	Studies on cell lines as model for predicting in vitro buccal permeation of various classes of drugs and its correlation with in vivo data	Dr S Y Charde	DST	23.58
48.	Design, synthesis and evaluation of novel tetrahydroisoquinoline analogs as anti-HIV agents	Dr S Murugesan	DST	24.75
49.	Endophytic bacteria mediated phytoremediation of organic pollutants	Dr Parmeela	DST-WoS	25.10
50.	Organo catalysis as green approach for synthesis of pyrrolidine/fused pyrrolidines: towards the synthesis of related alkaloids	Dr Indresh kumar	DST	21.90
51.	Removal of heavy metals from industrial wastewater using biofiltration	Dr Smita Raghuvanshi	UGC	5.50
52.	Dynamics of Biological Species: Some Mathematical Models	Dr. Atasi Patra	DST	10.86
53.	An agent-based tool for prediction, analysis, reporting and dispensing of Climate data	Dr Yash Sharma	UGC	8.85
54.	Design and development of test rig to understand dynamics of nanorobots	Dr N N Sharma	UGC	9.37
55.	Investigation of the effect of carbonation on the properties of concrete	Dr Dipendu Bhunia	DST	34
56.	Steady state measurements of fluorescent in restricted environments	Dr D D Pant	UGC	11.63
57.	Investigations on quark-gluon plasma through quarkonia suppression in QCD	Dr Madhukar Mishra	DST	11.40

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
58.	matter Bio Mems Device for separation of bioparticles	Dr N N Sharma	DBT	20.25
59.	Design Synthesis and evaluation of novel beta secretase inhibitors for the treatment Alzheimer's Disease	Dr Priti Jain	UGC	2.00
60.	Design and Characterization of novel buccal drug delivery system of felodipine	Dr Murali Manohar Pandey	UGC	1.70
61.	A New Distributed Computing Framework for Data Mining	Dr Navneet Goel	DIT	95.00
62.	Transition Metal-Catalysed coupling/reductive coupling of saturated alkyl halide with electron withdrawn alkenes	Dr Paritosh Shukla	UGC	11.95
63.	A Normative Analysis of Selflessness as the Inner Perspectives of Good Life	Dr K N Sachdeva	ICPR	2.00
64.	Study of the indus valley scripts through linguistic and Markov Chanin Methods	Dr Niladri Sarkar	INSA	1.75
65.	Removal of volatile organic compounds from waste streams using biofiltration	Dr Smita Raghuvanshi	DST	14.18
66.	Synthesis of Novel NOS Containing Heterocycles and evaluation of their anticancer activities	Dr Dalip Kumar	DBT	18.80
67.	Phytochemical and metabolic characterization of Prosopsis cineraria pods(Sangri) as potential nutraceuticals	Dr Pankaj Sharma	DST	21.30
68.	Enzymatic kinetic resolution of racemic amidoalkyl naphthols and their derivatives	Dr Santosh Padhi	BITS	2.00
69.	Possible mechanism of attenuation of the cardioprotective and neuroprotective effect of Ischemic preconditioning	Dr Rajeev Taliyan	BITS Faculty Research Initiation Grant	2.00
70.	Organocatalytic cascade towards substituted Pyrrole 3-carboxyaldehydes: A variation in Paal Knorr Pyrrole synthesis	Dr Indresh Kumar	BITS Faculty Research Initiation Grant	2.00
71.	Space time coupled least squares spectral element methods for parabolic problems using parallel computers	Dr Pankaj Biswas	BITS Faculty Research Initiation Grant	2.00
72.	Synthesis and characterization of metal oxide dendrimer encapsulated nanoparticles and electrocatalysis	Dr Surojit Pande	BITS Faculty Research Initiation Grant	2.00
73.	Design and Synthesis of Bile acid nucleosides conjugates linked via amino acids as potential anticancer agents	Dr Rajeev Sakhuja	BITS Faculty Research Initiation Grant	2.00
74.	Design and spectroscopic characterization of novel donor acceptor systems to be used in light energy conversion	Dr Shamik	BITS Faculty Research Initiation Grant	2.00
75.	Analysis of genetic diversity of malaria parasite using genetic and microsatellite markers from Bikaner	Shilpi Garg	BITS Faculty Research Initiation Grant	2.00
76.	Characterisation of genes regulation the polarity of sensory organs of Drosophila	Dr Monalisa Mishra	BITS Faculty Research Initiation Grant	2.00
77.	Awareness, Use and Implication of Web 2.0 for supplementing classroom teaching at graduate level	Dr Virendra Nirban	BITS Faculty Research Initiation Grant	2.00
78.	Cinematic Arts: A critical study of Multidisciplinary aspects of cinema	Dr Sushila Shekhawat	BITS Faculty Research Initiation Grant	2.00
79.	Modelling Modal Shift to Bus Rapid	Dr Shriniwas Arkatkar	BITS Faculty	2.00

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
	Transit System(BRTS) from other modes of travel in Jaipur		Research Initiation Grant	
80.	Condition Monitoring of Dynamic System by Vibration Response Analysis	Dr. Arun Jalan	BITS Research Initiation Grant	2.00
81.	Preparation and characterization of thin films of electrochromic conducting polymer and fabrication of prototype smart pixel displays	Dr. S. Sindhu	CSIR	14.10
82.	Impact of PMGSY Roads on Accessibility in Rural Areas	Dr. A.K.Sarkar	NRRDA	22.63
83.	Molecular studies on extracellular biosynthesis of metal nanoparticles	Dr. Jitendra Panwar	DST-Nano mission	45.50
84.	Development and Usage of Innovative Ductile Composite Materials for Repair and Retrofitting of Concrete and Masonry Structures	Dr. S.B.Singh	DST	23.50
85.	Novel $\alpha$ -Amino, $\alpha$ -Aminoxy and $\alpha$ -Hydrazino acids linked Bio-conjugates: Design, Synthesis and Biological Evaluation	Dr. Rajeev Sakhuja	UGC-Start upgrant	6.00
86.	Size-Dependent Hydrogenation Catalysis with Mono-(Pd and Pt) and Bimetallic (Pd @Pt) Nanoparticles in Quantum Dot Region	Dr. Surojit Pande	UGC-Start up grant	6.00
87.	Implication of Glycogen Synthase Kinase-3 and Histone Deacetylase inhibitor in neurological disorders associated insulin resistance syndrome	Dr. Rajiv Taliyan	UGC-Start up grant	6.00
88.	Enzyme Catalyzed Kinetic Resolution of (a) Racemic Amidoalkyl naphthols and (b) Racemic 1-Amidomethyl-	Dr. Santosh Padhi	UGC Start up grant	6.00
89.	Design of new ionic receptor molecules derived from Schiff Bases: syntheses and their spectroscopic and theoretical characterization	Dr. Shamik Chakraborty	UGC Start up grant	6.00
90.	Facility management using GIS and Genetic algorithm	Dr. Rajiv Gupta	DST	19.99
91.	Exploration of novel ionic liquid-supported sulfonyl reagents for organic synthesis	Dr. Anil Kumar	CSIR	12.76
92.	Understanding the epigenetic regulation in modulating inflammatory response mediated by NF-kb through AT1 and AT2 receptor in type II diabetic nephropathy	Dr. Anil G. Bhanudas	DST	19.41
93.	Esculetin a Therapeutic Intervention Targeted at Cardio-Renal Syndrome in Type-2 Diabetes	Dr. Anil G. Bhanudas	DST	39.66
94.	The role of Hippo signaling pathway components in autophagy regulation in hepatocellular carcinoma	Dr. Rajdeep Chowdhury	DST	24.05
95.	Engineering haliospermum montanum hydroxynitrile lysase for potential synthetic and industrial applications	Dr. Santosh Padhi	DST	25.00
96.	Removal of Heavy metals from industrial wastewater using metallic nanoparticules as absorbents	Dr. Suresh Gupta	DST	21.47
97.	Study of Traffic flow characteristics on expressways	Dr. Srinivas Arkatkar	DST	21.47
98.	Production of hydrogen rich fuel gas from Jatropha residue cake	Dr. Pratik Seth	DST	24.90
99.	Evaluation and enhancement of foam stability of eathonol based aqueous foam using commercial surfactant	Dr. Pradipta Chattopadhyay	DST	25.00

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
100.	sodium lauryl sulfate Design and Development of opinion mining framework	Dr. Yash Sharma	DST	13.26
101.	Design, development and implementation of a building integrated photovoltaic system for rural application	Dr. Rajneesh Kumar	State Innovation council	43.26
102.	Exploring nertoprotective effect and molecular mechanisms of remote limb ischemic post-conditioning against brain stroke	Dr. Rajeev Taliyan	DST	25.0
103.	Characterization of surface errors in machining of thin-walled curved geometries	Dr. Tufan Chand Bera	DST	24.09
104.	Enhancing phytochemical production by the use of elicitors	Dr. Sachi Singh	DST	21.80
105.	Dark energy modeling of cosmic acceleration with observational constraint in Eintein gravity and modified theories	Dr. Suresh Kumar	DST	14.16
106.	Synthesis and characterization of Metal Oxide Core- (Metal) shell nanoparticles in quantum dot region and their applicaton in electrocatalysis	Dr. Surojit Pande	DST	24.93
107.	Design of synthetically tunable azino- fused chromene conjugates as potential organogelators	Dr. Rajeev Sakhuja	DST	24.70
108.	Development of Listening and speaking modules of English languages through multimedia lab for rural students of class XI-XII	Dr. Devika	UGC	4.09
109.	Role of Conserved oligomeric golgi complex (COG7) gene in the morphogenesis of hearing organ in drosophila	Dr. Monalisa Mishra	DST	24.75
110.	Study of awareness, uses and implications of web 2.0 for supplementing classroom teaching at graduate level	Dr. Virendra Nirbaan	UGC	7.89
111.	Transforming language learning with new technologies for enhancing employability of college students from rural background	Dr. Pusph Lata	UGC	8.94
112.	A Mechanistic analysis of the role of pro-inflammatory cytokines in induction of epithelial to mesenchymal transition in hepatocellular carcinoma	Dr. Sudeshna Mukherjee	DST	16.80
113.	Study of Structural Response and Strengths of Thin-Walled FRP Composite Girders	Dr. S.B.Singh	CSIR	14.32
114.	The Study of post-reionization HI distribution using the redshifted signal and Ly forest towards understanding cosmic accelation	Dr. Tapomoy G. Sarkar	DST	10.38
115.	Identifying microRNA signatures associated autophagy induced chemoresistance in hepatocellular carcinoma	Dr. Rajdeep Chowdhury	UGC-Start up grant	6.00
116.	Analysis of hypothetical and putative proteins dual targeted to apicoplast and mitochondria in plasmodium vivax	Dr. Shilpi Garg	UGC Start up grant	6.00
117.	Role of Protein kinase D in eye development of Drosophila	Dr. Monalisa Mishra	UGC Start up grant	6.00
118.	Information transfer during collective motion	Dr. Kunal Bhattacharya	BITS Research Initiation Grant	2.00
119.	Application of Enriched Microbial Biofilte	Dr. Subhazit Mazumder	UGC	2.00

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
	for Metal Detoxification in Industrial Wastewater			
120.	Neuro-pharmacological investigation of novel Quinoxaline Carboxamides: Nove Serotonergic Modulators for their Anti-depressant and Anxiolytic Activity	Dr. Shvetank Bhatt	UGC	2.00
121.	Synthesis, Characterization and applications of Novel Ionic Liquid supported Metal Complexes	Dr. Bharti Khungar	UGC	13.40
122.	Synthesis, Metallochemistry and Reactivities of D-Glucose derived Glycoconjugates	Dr. Ajay Kumar Sah	UGC	9.13
123.	Development and Validation of sustainability framework for manufacturing industries	Dr. Abhijeet Digalwar	UGC	3.22
124.	Recovery of Multiple Metals ions from Industrial Wastewater using Adsorption	Dr. Utkarsh Maheswar	UGC	2.00
125.	Study of native chemical ligation at tryptophan and aspergine sites and its application in peptide synthesis	Dr. Kiran Bajaj	DST	25.50
126.	Experimental Investigation on CO2 based refrigeration system in Trans-critical cycle	Dr. M.S.Dasgupta	DST	27.50
127.	Design of Ionic Liquid linked Benzotriazoles as Useful Synthetic Auxiliaries in Organic Synthesis	Dr. Rajeev Sakhuja	BITS Seed Grant	9.80
128.	A Digital Humanities Approach to Interpret the Visual Culture of Shekhawati Region	Dr. Leela Rani	BITS Seed Grant	13.90
129.	Electromagnetic Characterization of Three Dimensional Targets with Plasma Cladding for Stealth Technology Using Recursive Convolution Finite Difference Time Domain Methods	Dr. Niladri sarkar	BITS Seed Grant	5.20
130.	Investigation & Development of an ICT Driven MIS for Small Milk Producers	Dr. Leela Rani	BITS Seed Grant	3.20
131.	Effect of esculetin on the development of type II diabetic nephropathy	Dr. Anil G. Bhanudas	BITS Research Initiation Grant	2.00
132.	Developing metal Doped Bismuth Vanadate (BIMEVOX) Systems for fuel cell and catalytic applications	Dr. Banasri Roy	BITS Research Initiation Grant	2.00
133.	LCAT and ApoB the two modulators of cholesterol metabolism: are they regulated by HFHS and TNFa	Dr. Prafulla C. Shukla	BITS Research Initiation Grant	2.00
134.	Role of Pro-inflammatory Cytokines in Epithelial to Mesenchymal transition in Hepatocellular carcinoma	Dr. Rajdeep Chowdhury	BITS Research Initiation Grant	2.00
135.	Enzymatic Kinetic resolution of racemic amidoalkyl naphthols and their derivatives	Dr. Santosh padhi	BITS Research Initiation Grant	2.00
136.	Synthesis and characterization of polymeric nanoparticles for applications in oral drug delivery	Dr. Sonal mazumder	BITS Research Initiation Grant	2.00
137.	Understanding and facilitating mentor-protégé relationships: An appreciative inquiry approach	Dr. Rajneesh Choubisa	BITS Research Initiation Grant	2.00
138.	Manufacturing Ultra-light high performance green composites from renewable feedstock	Dr. Subrata Bandhu Ghosh	BITS Research Initiation Grant	2.00
139.	Women at the work place: Investigating gender differences in sciences at higher education institution	Dr. Tanu Shukla	BITS Research Initiation Grant	2.00
140.	Exploring Nothe-East India through the lens of its literary productions	Dr. Kumar Sankar Bhattacharya	BITS Research Initiation Grant	2.00
141.	Growth and characterization of	Dr. Subhashis	BITS Research	2.00



S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
	substrate supported transition metal nanostructures useful for catalytic, electronic and sensor applications Micromodel experiments	Gangopadhyay	Initiation Grant	
142.	demonstrating gravity and capillary dominated immiscible flow of mercury in porous media	Dr. Shibani Khanra Jha	BITS Research Initiation Grant	2.00
143.	Development of ecofriendly nonionic surfactants coupled ultrasonic extraction technology for conophylline, an antidiabetic lead molecule and its comparison with conventional extraction techniques	Dr. Paul Atish Tulshiram	BITS Research Initiation Grant	2.00
144.	A study of Indian university models between 1857 and 1964	Dr Harikrishnan gopinandhan nair	BITS Research Initiation Grant	2.00
145.	Strengthening of Local Soil Using Fly Ash	Dr. Kamallesh Kumar	UGC	2.00
146.	Modeling and Simulation of Metallocene Catalyzed Olefin Polymerization	Dr. Nikhil Prakash	UGC	2.00
147.	Study of Laser interaction with atomic clusters and preformed plasma Development of drivers barriers and key performance indicators for implementation of green manufacturing in indian micro small and medium ceramic enterprises	Dr. Amol Holkundkar	DST-FAST TRACK	15.0
148.	Design of Supplier Development Implementation Framework for Indian Manufacturing Industries	Dr. K.S.Sangwan	UGC	9.91
149.	Characterization of Isoprenoid biosynthetic pathway enzymes from Plasmodium vivax	Dr. Srikanta Routroy	UGC	9.41
150.	Designing, Synthesis and validation of a dehydration stress responsive promoter in plants	Dr. Vishal Saxena	UGC	7.88
151.	Studies on design and characterization of multi-unit controlled release dosage formulation of Milnacipran Hydrochloride, in vitro release mechanism and in vivo pharmacokinetic parameters in animals	Dr. Sandhya Mehrotra	UGC	12.86
152.	Investigations on metal tolerance ability of soil fungi and their potential towards nanoparticle synthesis	Dr. Gautam Singhvi	UGC	1.40
153.	Cinematics Arts : A Critical study of Interdisciplinary aspects with special reference to Literature, Audio Visual and Performance	Dr. Jitendra Panwar	UGC	15.06
154.	An Empirical Study on impact of information and communication technology on productivity in small and medium textile enterprises in Rajasthan	Dr. Sushila Shekhawat	UGC	5.54
155.	Time-resolved Spectroscopy of Fluorescent Molecules in Micellar Systems	Dr. Leela Rani	UGC	6.51
156.	Understanding impact of social learning forms on environmentally sustainable behavior in children	Dr. D.D.Pant	DST	53.00
157.	Characterization of major components of [Fe-S] cluster assembly pathway in plasmodium vivax	Dr. Leela Rani	ICSSR	5.00
158.	Competition between charge transfer	Dr. Shilpi garg	DST	23.00
159.				24.98

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
	and proton transfer processes in some newly designed schiff bases: spectroscopic and theoretical investigations in condensed phase	Dr. Shamik Chakraborty	DST-FAST TRACK	
160.	Effect of partial replacement of cement with marble slurry on concrete	Dr. Anshuman	DST	23.38
161.	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
162.	Thermodynamic studies on force induced transitions in DNA molecule in crowded environment	Dr Navin Singh	DST	18.64
163.	Studies in Laboratory Scale oxygen fired fluidized bed based on co-firing rice husk with coal	Dr Ravi Inder Singh	DST	26.46
164.	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	MNRE	29.39
165.	UGC- Start-up-grant	Dr Sonal Mazumder	UGC	6.00
166.	Design and Synthesis of Heavy metal based aggregation induced emission active complexes and their application in Bio-imaging	Dr Inamur R Laskar	DST	35.90
167.	Modeling of cardio vascular flows and influence of magnetic field on circulation	Dr. Ashish Tiwari	DST	11.63
168.	Rooftop Rainwater harvesting for safe,potable and healthy drinking water and ground water replenishment for BITS Pilani, Pilani campus	Dr. Rajiv Gupta	BITS CORE Project	91.00
169.	Zinc Recovery from Industrial waste using bioleaching	Dr. Suresh Gupta	BITS CORE Project	48.00
170.	Mobile Wireless Sensor Network Based Tracking and Sensing System for Underground Coal Mine	Dr. Anupam Singhal	Ministry of mines	30.38
171.	Exploration, Safety and Security Dynamic buckling analysis of composite structures	Dr. S N Patel	CSIR	8.37
172.	An Impact Assessment study of pradhan mantri gram sadak yojana on gender	Dr. Sanjeev Choudhary	NRRDA	4.92
173.	Studying the impact of anopheles Gut Microbial environment on immunity and plasmodium development	Dr. Lalita Gupta	ICMR	9.83
174.	RNAi screening to study the role of Aedes ATP-binding cassette (ABC) transporters against blood-borne pathogens	Dr. Sanjeev Kumar	DBT	45.78
175.	Heat Transfer augmentation from a square heated cylinder due to rectangular eddy promoter and nanofluids under the incident of couette-poiseuille flow	Dr. Dilip Kumar Maiti	DST	14.28
176.	Role of histone ubiquitination & angiotensin converting enzyme-2 in the development renal fibrosis under type 1 diabetic condition	Dr. Gaikwad Anil Bhanudas	CSIR	20
177.	Development of Botanical based Novel formulation with Mosquito Larvicidal action for indian population	Dr. Paul Atish Tulshiram	DST	12.19

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
178.	Flow through a membrane modeled of Porous cylindrical particles using particle-in-cell approach	Dr. Ashish Tiwari	DST(Indo-Russia)	12.86
179.	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
180.	Nonlinear Singular Differential Equations Arising in real life	Dr. Amit Kr Verma	DST	16.52
181.	Exploring the Antiobesity potential of selected ayurvedic medicinal plants using pancreatic lipase inhibition assay and synergy guided fractionation	Dr. Paul Atish Tulshiram	DST_FAST TRACK	27.30
182.	Combination delivery of small molecules and microRNA for treatment of locally advanced and metastatic breast cancer	Dr. Deepak Chitkara	DST	27.20
183.	Nano-formulation of Lysofylline-fatty acid conjugate for effective treatment of diabetes	Dr. Anupama Mittal	DST	26.90
184.	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 CSR	3.45
185.	German Academic Exchange Programme	Dr. K.S.Sangwan	DAAD	341.00
186.	Investigation on the factors affecting the radiation performance of wireless	Dr. Praveen Kumar A V	BITS Research Initiation Grant	2.00
187.	Innovative use of cutting edge technology in Site-Specific....in Rajasthan	Dr. Dinesh Yadav	BITS Research Initiation Grant	2.00
188.	Women-at-work: The Spatial Negotiations of the "Urban" by Female Domestic Workers in Kolkatta	Dr. Somdata Bhattacharya	BITS Research Initiation Grant	2.00
189.	Catalytic Route to Linear Alkyl Benzenes (LABs) via C-C Coupling Reactions using Transition Metal Catalysts	Dr. Bhibhas Ranjan Sarkar	BITS Research Initiation Grant	2.00
190.	Design, Development, Experimental and CFD modeling of prototype of stripper ash cooler of circulating fluidized bed boilers	Dr. Ravi Inder Singh	BITS Research Initiation Grant	2.00
191.	Design, Development of DSP Controlled Reduced Device Count Multi-level Inverter for Single Phase Applications	Dr. Pradyumn Chaturvedi	BITS Research Initiation Grant	2.00
192.	Design and characterization of enteric coated lipid nanoparticles for anti-HIV drug delivery	Dr. Anil Jindal Brijbhushan	BITS Research Initiation Grant	2.00
193.	Nano-carriers for co-delivery of small molecules and oligonucleotides	Dr. Deepak Chitkara	BITS Research Initiation Grant	2.00
194.	Development and Evaluation of Lipopolymeric Micelles for Drug Delivery	Dr. Anupama Mittal	BITS Research Initiation Grant	2.00
195.	Bio-analytical Method Development and Validation of Racemic Drugs by Dried Blood Spot Technique and Its Application to Pharmacokinetic Studies	Dr. Sunil Kumar Dubey	BITS Research Initiation Grant	2.00
196.	GM Foods, Food Security and WTO: Exploring the Politics of Food in India	Dr. Sunita Raina	BITS Research Initiation Grant	2.00
197.	Development of a framework to	Dr. Srinivas Kota	BITS Research	2.00

S.No.	Project Title	Principal Investigator	Agency	Sanction (Rs. in Lakh)
	manage household solid waste for sustainable development		Initiation Grant	
198.	Food Sense: A Framework for Safe Storage, Preparation and Delivery of Food	Dr. Sundaresan Raman	BITS Research Initiation Grant	2.00
199.	Alternative Epistemologies and Interdisciplinarity of Knowledge: A Philosophical Exploration	Dr. Anupam Yadav	BITS Research Initiation Grant	2.00
200.	Chemical-Looping Combustion in Recirculating Fluidized Bed	Dr. Raman Sharma	BITS Research Initiation Grant	2.00
201.	Bioremediation of waste automobile engine oil	Dr. Amit Jain	BITS Research Initiation Grant	2.00
202.	Women and Equity in Higher Education: A Comparative study of power dynamics in Indian and Dutch Academia	Dr. Sailaja Nanadigama	BITS Research Initiation Grant	2.00
203.	Syngas production by reforming of biogas over Ni-based catalytic monoliths	Dr. Srinivas Appari	BITS Research Initiation Grant	2.00
204.	Preparation and characterization of self emulsifying multi particulate drug delivery system for poorly water soluble drug	Dr. Gautam Singhvi	BITS Research Initiation Grant	2.00
205.	Preparation and characterization of chitosan nanoparticles prepared using a novel micellar system to deliver poorly water soluble drugs	Dr. Aniruddha Roy	BITS Research Initiation Grant	2.00
206.	Development of an automated non-destructive test system for condition evaluation of pavements	Dr. Amit Goel	BITS Additional Cometitive Research Grant	9.45
207.	Development of Nano-carriers for improved Drug delivery	Dr. Deepak Chitkara	BITS Additional Cometitive Research Grant	9.90
208.	Organocatalytic approach towards bioactive important six membered nitrogen heterocycles	Dr. Indresh Kumar	BITS Additional Cometitive Research Grant	8.20
209.	Investigations into issues in Deploying software defined networks on traditional Network infrastructure	Dr. K. Haribabu	BITS Additional Cometitive Research Grant	8.20
210.	Design and Development of an Efficient Power conditioning Unit for photovoltaic Applications	Dr. Pradyumn Chaturvedi	BITS Additional Cometitive Research Grant	9.70
211.	Graphite Carbon nitride(g-C3N4) based semiconductor heterostructures for photocatalysis and electrocatalysis	Dr. Surojit Pande	BITS Additional Cometitive Research Grant	6.95

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 three telepresence rooms in three campuses along with integrated multi-campus interactive lecture delivery and recording support for three 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.

In addition to large number of first degree and master's level students, at present, two full-time doctoral scholars students are working towards their Ph.D. at the SDET UNIT in the area of wearable computing both of whom have won the TCS Doctoral Research Fellowships after joining BITS Pilani.

### **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, Hybridization oven, Gel electrophoresis equipments, UV-Cross linker, Temperature Controlled Water Bath Shaker, Refrigerated Centrifuge, Cold Room, Tissue Culture Room, Plant Biotechnology facility, Semi-automated Green House, Radioisotope handling facilities, Liquid Nitrogen Plant Victor-3 Multichannel counter, Inverted microscope with camera attachment, – 80°C Deep Freezer, etc. We developed Insectory to facilitate research on mosquito borne diseases. In the year 2014 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 workshop entitled “*National Workshop on Molecular Techniques: Cell to DNA (MTCDD-2014)*” was conducted during April 10-12, 2014 at BITS Pilani, Pilani Campus, India by the centre with the support from Biological sciences department.

### **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 etc. has been constructed and a plantation area that uses water from this system developed. A biotechnology complex consisting of a plant tissue culture lab and a greenhouse has been constructed. Rare desert plants like Guggul, Jatropha, etc. being propagated and exploration of new crops like Olive is being explored. Certain other projects which have been initiated are recycling and desalination of gray water for irrigation purpose, assessment of groundwater resource in the

Shekhawati area using remote sensing data and geographical information system, development of aloe vera processing, impact of desertification on nomadic population and vice versa. Several exchange visits of BITS alumni and faculty and BGU/BIDR faculty have taken place. A MoU between the two institutions has been signed. In addition to exchange of ideas and expertise, joint projects are being undertaken. 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 stonewares and vents to show case the energy efficient house to reduce the active load for comfort conditions. An extended roof top with hard sloping are constructed to harness more rainwater and drainages are connected to main tank, which is also covered to reduce the evaporation. It is expected that this summer the revenue will be generated and experimentation will be done to design the micro and macro irrigation system. A good number of International publications are made and a Ph.D. along with number of projects are completed by students.

### **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.

Currently, the CET is in the process of evolving a long-term and near-term blueprint and strategic plan of sustainable dual-purpose large-scale open or partly-closed global instruction delivery for BITS Pilani with a focus on the Open edX based MOOC Platform of our own known as 'Any-Learn' accessible at the URL: <http://any-learn.bits-pilani.ac.in>.

### **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), StartupSphere and Mantra awards. The entire CEL team has been working with their full zeal and has been taking all their projects to next level.

The brief descriptions of the activities done under the major projects by CEL team during 2013 are as:

#### **E-Week 2015**

Center for Entrepreneurial Leadership (CEL), BITS Pilani, Pilani Campus has been awarded the **E-Week India 2015 Premier Award** by National Entrepreneurship Network in its Grand Finale of E Week held on 8th March 2014 at Jaipur.

As per tradition, Entrepreneurship Week 2015, in association with NEN, was managed and organised by CEL team from 14th February to 21st February 2015. E-Week 2015 was a plethora of activities that made the participants think on Entrepreneurial lines. The prime purpose of these was to imbibe the "Startup" culture in all of the students. Keeping up with the spirit of the week, it was hosted by the CEL student team studying in first years so that they can have a proper learning experience under real conditions. Everything, from getting sponsors to marketing the event was handled by this team.

The first event, Logocon was a publicity based event where participants had to design a logo for CEL and post it on Facebook. The logo fetching maximum likes would win. The next social-media based event was Flash which was an online photography contest. Then followed the on-campus events. The inauguration was accompanied by the prelims for Bedrock, an event where students get to manage restaurants on the campus for a day. The next day saw hundreds turn up for an exciting IPL-style cricket auction event, Auctionville. The next event to

follow was Pitch Perfect, a pitching competition with a very interesting twist. The audience were the crowdfunders and they allocated funds to every idea. The person in the audience with the best overall allocation of his given amount was given a prize along with the best pitcher. Next up was Quizzard with several rounds of questions based on many different fields. The week ended with the all star event BedRock.

### Conquest 2015

Conquest is BITS Pilani's international startup conclave, which aims at encouraging the spirit of entrepreneurship in India. Organized by CEL team, its mission is to invite most innovative startups. 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. Conquest has a resplendent application process. Beginning with online registrations followed by mentoring sessions organized throughout the country, the Grand Finale of Conquest is a spectacle where competing startups pitch their ideas to an esteemed panel. **The eleventh edition of Conquest, BITS Pilani's International Startup Conclave was organized on 6th of September at ITC Hotel, Delhi.** Of the Challenge, emerged as winners were Swagene and GameZop with Truck Suvidha taking the award of Pioneer in Marketing.

Conquest was a huge success with **Mr. Jagat Shah** as the Chief Guest. He is a key organiser of Vibrant Saurashtra Initiative and a lead in promotion of Make In India Campaign. The Guest of Honour was **Dr. VN Alok** who is the Coordinator of Centre for Urban Studies in the Indian Institute of Public Administration. **Prof. Ashoke Sarkar**, Director of BITS Pilani, Pilani Campus, also attended and encouraged the student community to continue pursuing their endeavours in entrepreneurship.

**Around 1200 startups registered for Conquest 2015.** The long list of mentors included renowned entrepreneurs and industrialists such as Gautam Gandhi, ex-head New Business Development at Google India/US, Navin Honagudi, Investment Director at Kae Capital, Murali Natrajan, MD, DCB Bank, Greg Moran, CEO and cofounder at Zoomcar and many more. With DCB as its Title Sponsor, other prominent names associated with Conquest 2015 were CitrusPay, Accel Partners, Aditya Birla Bizlabs etc. After an arduous round of screening and networking sessions in New Delhi, Mumbai and Bangalore, 10 best startups made it to the Finale wherein each was grilled by a panel of judges. At the end, it was 'Swagene' that was adjudged the winner of Conquest 2015. Having organized the event with tremendous success, the CEL team is high spirited and ready to raise the bar even further with Conquest 2016.

### 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 year 2015, **Project Saathi** was initiated. Rural Entrepreneurship Division has been involved in the past to help the village areas and rural population in and near Pilani. The aim of project Saathi is to enable and empower the educated unemployed in these regions and help solve all sorts of problems of the fellow citizens. A "Saathi" from a village is selected to be the nexus of this project. This person is equipped with a mobile phone and a basic internet connection. He receives calls from people and notes down their problems which may range from bad growth of crops to health issues during pregnancy. He then surfs online for solutions and government policies for the submitted problems and conveys it back to the community. In the long term, we plan to eliminate the student community from this project from all training, selection and propagation phases. Moreover, the saathi's overtime are expected to form a community and run this in the rural ecosystem in a self sustainable way.

Working with the villagers is still on and the new ideas will take time to take effect in the slow rural community.

### Summer in a Startup (SiS) 2015

SIS or Summer in a Startup is an initiative by CEL, BITS Pilani. It aims to give the students at BITS Pilani the opportunity to intern in a startup during the summers. It seeks to promote startups and encourage 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 7th edition this year, SiS had an outstanding turnout last year with 600+ applications from students. Students are shortlisted on the basis of their CV and final selections are made after a round of Personal Interview (PI). Total 25 startups were brought onboard ranging from inland to international, budding to behemoths, and fashion to tech related. The most commonly offered internships were that of an UI/UX Designer, Software Developer and Web/Android Developer. The most commonly looked for profiles were of people with a fair knowledge of HTML, CSS, PHP, and Python. Communication skills and an aptitude for learning were something for which the startups didn't compromise. While most of the startups were focused on offering tech interns, companies like Zingroo, Towngroove, ProfitBooks gave opportunities to students to explore other areas like market research, business development, by interning in these fields. Most of the startups were looking for third year or more qualified students, while some like Zingroo, SafeCity, SocialCops offered internships for first years as well. 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/-. SiS strives to bring out an entrepreneur in each student, by making him have his own hands on experience in entrepreneurship, by interning in a startup. Students get to discover their passion and interests through SiS.

### StartupSphere

Startup Sphere is the latest project adopted by CEL. Its main aim is 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. Recently, Arpit Jaiswal, Head for Google India's Saas Product was invited to lecture the on campus startups. Startup Sphere provides mentorship needed by freshly sown ideas of the students oblivious to market dynamics. It conducts meets regularly where all BITSians are invited for discussion. The mentor engages and discusses ideas, policies and situations with students, which allow tapping of innovative ideas, leading to mutual nourishment for the young and experienced ones.

Startup Sphere held 5 such meetups and discussed topics like Product Optimization and Idea Validation of hypothetical models. Startup Sphere also publishes a newsletter released by CEL, for propagation of startup culture, within and outside BITS Pilani.

### Mantra Awards 2015

The Mantra awards were instituted by CEL, in 2009, to recognize and reward outstanding students who have demonstrated extraordinary leadership potential and/or entrepreneurial initiative. Anupendra Sharma, co-founder of CEL, Investment Partner at Siemens Venture Capital in Boston, and CEL Alumni Advisor had initiated the creation of the Four '**Mantra Awards**'. The following are the students who are selected for Mantra Awards 2015:

Award	Winner Name	ID No.
Outstanding Leadership Award (Female)	Akshita Agarwal	2011A2TS545P
Outstanding Leadership Award (Male)	Pragun Vinayak	2012A2PS386P
Entrepreneur of the Year	Amitabh Aggarwal	2012A2PS472P
Social Leadership	Saurabh Maurya	2012A7PS055P

### 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 Gymneus Sports Tech Design, selected 7 students to work on their projects in the Mechanical engineering and computer science fields in II sem 2014-15.

Company Gymneus Sports Tech Design has given 1 project in I sem 2015-16. 4 student worked on them.

In the present semester, a company Revel SmartApps 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, Circular Polariscopes, 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.

### **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 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. During the year under review, 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.

### **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 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 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.

### **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.

Its focus is on Web-media, E-learning Support, Networking (wireline and wireless: sensor, mobile and ad-hoc variants), wearable computing, Web-services as current thrust areas. It is involved in the Open-source Moodle LMS based *deployment for on and off-campus requirements of the Institute* in form of the *Nalanda and Taxila portals* on a regular basis.

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.

Recently, CSD has also developed a software for biometric attendance system known as 'e-Attend' that is currently in advance stages of testing and a pilot run is planned shortly across all campuses of the Institute.

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.

Design, development and deployment of the university-wide biometric-based attendance system known as e-Attend, was one of the most recent contributions of the Open Source Software Team at CSD.

## **CENTRES ESTABLISHED WITH STRONG INDUSTRIAL SUPPORT**

### **Embedded Controller Application Centre**

Prof. Surekha Bhanot (Coordinator), Prof. S Gurunarayanan, Mr. Rajiv Ranjan Singh, Mr. Ashish Mishra, Mr. G Sai Sessa Chalapathi .

This Centre was 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 o 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 Pentium machines, Microcontroller Modular Evaluation Systems, Microcontroller Development Systems, Emulators, Assemblers and Cross compilers for various microcontroller families (ARM, ATMEL, Microchip, Cypress, ST Microelectronics, Motorola, etc.) DSP processors, logic analyser and other bench equipments.

Faculty members of the group are involved in research work in areas of Embedded System, Wearable Computing. Faculty has published research work, attended National and International seminars, conferences and invited talks.

Centre has established a PSoC Lab with support from Cypress Semiconductor Corporation. Recently a student project named "Project SmartLAB" has been sanctioned the "Prof. I. J. Nagrath Student Project Fund" by BITS Alumni Shri Brij Bhushan (1964 batch).

The Centre provides support for FPGA based system design and has facility for Xilinx Atlys, Gensys, Zedboard boards and camera interface.

### Center for Innovation, Incubation and Entrepreneurship (CIIE)

In 2015, ED&IPR unit has been restructured and named as **Center for Innovation, Incubation and Entrepreneurship (CIIE)** which is continuously working for streamlining various processes to develop an ecosystem in the campus for promoting innovation and entrepreneurship through academic courses like “Creating and Leading Entrepreneurial Leadership” & “New Venture Creation”; Intellectual property protection; Technology Business Incubator (TBI) activities under PIED Society and Centre for Entrepreneurial Leadership (CEL).

#### Courses

New Venture Creation course for the fourth time was delivered across three campuses simultaneously. There were around 26 teams constituting around 70 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 Organisation course delivered on experiential learning pedagogy is being offered semester after semester for the past more than 10 years.

#### Patent Filing and Protection

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 1 design patent was granted, 1 patent application was filed and 4 **patent** applications by the faculty members are approved for filing in Indian Patent Office.

### Pilani Innovation and Entrepreneurship Development Society (PIED Society)

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 incubates presently working in the PIED Society are as under:

**Sharp Edge Pvt Ltd.** is providing a technology platform for engineering students which seamlessly integrates the traditional chalk & talk method with smart classrooms based on cognitive learning. It enables Professors to use digital resources such as educational animations, assessments and diagrams to make classroom more interactive creating multi-sensory learning for students and help improve their academic performance. Institute’s classrooms are converted into i-classrooms with a projector, CPU, keyboard and pointing device. The Institute has the flexibility to decide its infrastructure without any burden on its financial resources. The solution is flexible to work with the basic CPU+ moveable projector solution to the use of Smart Boards, Pen Tablets, i-pads and other gadgets as per the institute’s discretion.

**My-Ti Technotronics** introduces an innovative sleek design with close to natural approach for typing & writing on a tablet or on paper. Recent success of Samsung Galaxy Note emphasizes this point. We plan to take this as an opportunity for market and provide a productivity centric tablet creating a new market called "utility tablet market".

**Phyzok Learning Solutions LLP** is involved in developing e-solutions content delivery model. It aims at providing customized, cost-effective and highly efficient content delivery systems (CDS) to academia and corporate for Live and web-based content. Their flipped class room model has received appreciation.

**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 turn around 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 .

TBI incubates Sharp Edge Pvt Ltd., My-Ti Technotronics, Snapchai Productions Pvt. Ltd., Paxport Web Services Pvt. Ltd., 3D-IP Semiconductors Private Ltd. and WeMakeScholar have been sanctioned seed grant under the TIDE scheme of Ministry of Communications and Information Technology Department of Electronics and Information Technology.

### The Teaching Learning Centre (TLC), BITS Pilani

Birla Institute of Technology & Science (BITS), Pilani has established new centres, named the Teaching Learning Centre (TLC), at each of its four campuses in Pilani, Goa, Hyderabad and Dubai. The goal of these centres is to establish and foster a culture of excellence in teaching-learning. Although BITS Pilani already has a long and rich tradition of excellence in teaching, for over five decades, it is felt that it cannot afford to remain content with the existing level of excellence. There is also the growing realization of a shift in higher education from instruction paradigm to learning paradigm and the new centres will act as facilitator for this shift.

The TLC in each campus is currently being manned by four nucleus members and a faculty-in-charge to coordinate its activities. There is a university-wide professor-in-charge to coordinate among the TLCs of all four campuses of BITS Pilani.

There are a number of universities both abroad and in India, that have similar centres, and BITS Pilani has taken initial support from some faculty of the National University of Singapore in conceptualizing its own centre.

The TLC is mandated with the following tasks.

- Support professional development of faculty, teaching assistants and technical support staff.
- Encourage research and innovation in teaching-learning
- Develop and support technology enhanced learning
- Reward innovation and excellence in teaching

With the above mentioned mandates, the TLC is envisioned to act as

- a body that enables the agency of both the learner and the teacher
- a platform for the faculty to share their teaching experience and what they consider to be good teaching practices
- a forum for discussing teaching pedagogy and evaluation techniques
- an entity that encourages innovation in teaching-learning methodologies
- an entity that promotes the use of the latest technologies in the teaching-learning process
- a body that addresses the concerns of the students regarding teaching-learning by interacting with the students via the Students' Welfare Division, Student Faculty Council, Academic Counseling Board and Academic Counseling Cell
- an agency that supports individual programmes and departments in evolving learning outcomes that are in tune with the founding vision of BITS Pilani and its expectation from its alums as regards ethical values and professional competencies

an agency for orienting the newly inducted faculty to the BITS philosophy of teaching and evaluation as well as helping tenured faculty in their professional development in teaching.

## **B1.12 CENTRAL FACILITIES REPORT**

### **Central Library**

Library collection reached 2,39,138 volumes and during the year, 1895 new volumes were added to the existing collection in various disciplines of Science, Engineering, Technology, Pharmacy, Management, Humanities and general reading materials.

267 print journals and 33 online databases were subscribed. The online resources now cover more than 16345 e-journals for accessing fulltext articles and databases related to company and industries. We received 1031 PS reports and 55 Theses in print format submitted by the students and Researchers under various study programmes like First Degree, Higher Degree and Work Integrated Learning Programme, Practice School, Special Projects and PhD Degree.

A new University-wide service called Inter-Library Document Request Service (ILDRS) has been introduced in Pilani Library to provide articles/ books requested by faculty members and Research scholars of other campuses i.e Goa Dubai and Hyderabad (which are not available in their libraries).

As a part of MOU with UGC INFLIBNET, the library has provided has provided to all faculty members access to anti-plagiarism software called URKUND. It is now the part of the library portal.

Following are some of the major developments are made during 2014-15:

- Implementation of Koha - Open Source Software as a Library Management System.
- New interactive library portal "infoBITS" has been launched on 7th August 2015 which provides the following services online:
  - Daily News
  - Monthly InfoBITS Bulletins across 13 disciplines
  - Books @MyDesk
  - Lost and Found service
  - BookFinder4U
  - Periodical Finder
- We have installed Entry Exit Software to keep a record of the visitors to the library

- One new heavy duty Scrubbing and vacuum cleaning machine has been acquired to maintain the cleanliness of the library
- An exclusive new Faculty Reading Room has been created in the library
- We have made significant improvements in the signage including a user friendly Book Finders and Journal Finders on the shelves
- New LED Display Unit has been installed in the library to promote library services and resources
- Airconditioning of Hall No.1 is in progress
- RFID Technology implementation is in progress

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:

- Why Do I Love Books? Essay Competition for Students on 24th February 2015
- Celebration of World Book and Copyright Day - A Display of Books & Posters of World Renowned Authors was organized from 23- 30 April 2015
- Celebration of International Yoga Day: A Display of books on Yoga and meditation was organised on 2st June 2015
- A Tribute to Dr. A P J Abdul Kalam - A Display of Books on and by Dr. A.P.J Abul Kalam on 28 July 2015
- Creative Short Story Contest was organized for the students. 77 students participated in creative story writing contest on 31 August 2015
- Celebration of Teachers Day - A Display of Books on Creativity and Innovation in Education and Prize Distribution for the winners of Creative short story contest on 4th September 2015
- Celebration of Hindi Divas - An exhibition of Hindi novels and literature books on 14th September 2015
- Celebration of Engineers' Day: A Display of books on Cyber laws, Disruptive Technology, Technological Development, and Innovation was organised on 15th September 2015
- Seven Orientation and Database training sessions were organized by the library in the last 12 months some in association with Teaching and Learning Centre.

#### **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	2,39, 138
2	Average number of books issued per month	3096
3	Average number of readers visiting the library per month	11500
4	Books added during the year	1895
5	Project Reports, PS Reports added during the year	1031
6	Theses added during the year	55
7	Number of print Journals subscribed	267
8	E journals made available on library site through online databases	16345
9	CD-ROM collection (including VCDs)	2,395
10	Educational Video Cassettes collection	148
11	Total number of reading seats in the library	750
12	Total library area	65,000 sq.ft
13	Library membership	5072

#### **Medical Centre (MedC)**

The medical center is providing good services and facilities with the dedicated services of Medical Superintendent and Physician Dr. R. P. Pareek and his team. There is a Gynecologist & Obstetrician, Dr. Sanjana R. Bhat working fulltime at the Centre. A General Duty Medical Officer from Birla Sarvajani Hospital is

there to assist in the evening hours. Dr. Sanjay Katewa, the dentist is available on every Saturday evening while the ENT specialist, Dr. H. S. Sankhla is available on every Monday and Thursday evening, Dr. Diwakar Pathak, the homeopathic is available on every Tuesday Dr. Karan Beniwal, the pediatricians is available on every Wednesday evenings. Dr. Ramesh P. Jajoo is a visiting an Ayurvedic Consultant.

The center has a well-equipped clinical laboratory with a fully-automated bio chemistry-analyzer for Biochemical tests, fully automated haematological analyzer and fully automated urine analyzer, computerized ECG machine for the diagnosis of heart ailment and an ELISA plate analyzer for the diagnoses of other diseases. The laboratory has upgraded facilities to test glycosylated hemoglobin, which is one of the most important tests for diabetes. A Digital Dental X-ray unit and a basic Physiotherapy unit are located in the centre. The center has a computerized Spirometer, to help in the diagnosis of respiratory problem of the students and staff of the Institute.

During the year around 31049 persons were treated at the Medical Centre and about 4022 persons were tested in the laboratory for various hematological & biochemical tests. Patients utilized the physiotherapy facility and about 800 patients were tested by ECG, Spirometer and Elisa Reader instruments.

A three bed observation room facility for emergency is available in the medical centre and all emergency medicines are also available in observation room.

Four camps were held to make people aware of osteoporosis. Bone Mineral Density (BMD) was measured by ultrasonography unit and computerized analysis was done. Reports with comments were given to all the persons attending the camps. Around 100 people were examined in each camp. These camps were sponsored by pharmaceutical companies.

The new record keeping system is working well after its introduction in the centre in May 2007. All the faculty and staff members with a PSRN have been given ID cards for all members of their family and separate files are maintained to keep the records. The Medical shop in the centre provides the medicines prescribed by the doctors on credit on production of the ID card and this has reduced the cash transaction and paper work. Same process is followed for the Clinical investigations also. Most of the medical center operation is computerized so as to make all the reports and records in digital form.

### **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 30th November 2015 was 2257 consisting of 837 staff members and 1420 students. They were holding 3890 major and 5226 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 2015, the center had 94 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 19<sup>th</sup> March 2015 and Prof G Raghurama, director BITS-Pilani, Pilani Campus was invited as chief guest of the function. 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 2015, BITS Pilani, Pilani campus, as usual practised 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- 24th January), (iii) Ram Navmi- Birthday of Founder Chairman Shri G. D. Birla (28th March), (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 Activities 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 2014-2015	975
First Semester 2015-2016	1553

### **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.10,49,200/- asloan to 105 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.1,13,000/- has been given to 3 staff members 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.

### **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. Student volunteers who worked as reporters in the Unit found the work experience very useful.

(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.

The centre maintains the 128 Port C-DOT EPABX of VFAST Hostel.

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

In-house training for technical staff across the institute in maintenance of lab equipment, PA system, EPBAX, projection system, cable network, lighting systems and computer hardware was organized during June 15-July 3, 2015, 13 nonteaching staff attended the program.

### **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. CAHU continuously endeavors into new areas in order to introduce and enhance the use of computers in the University Administration to minimize manual work and to bring in the efficiency and accuracy in the administration. Students, through academic projects, and the faculty members, have developed the entire software in-house. The academic and technical staff members at CAHU have expertise in software maintenance, management, development, and computer operations, to meet the wide-ranging computerized housekeeping needs of the Institute. The computing resources include HP9000 E35 system, HP rp3440 system with SAN array, HP Proliant DL360G4 and HP ML-350 servers, IBM servers, Pentium/Core2-Duo PC nodes, HP LaserJet8150 and 9050dn, HP Color Laserjet 5550dn printers and other peripherals.

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 the 2015-16 first semester student academic registration was done entirely in the ERP system. Similarly the legacy accounting 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. Currently CAHU is maintaining only Pilani Campus Staff Pay Roll and personal data and Alumni Data Base. Efforts are being made to shift these data also to PeopleSoft ERP system.

Degree processing and printing: 198 degrees (Pilani-65, Goa-25, Dubai-47, and Hyderabad-61) for 76<sup>th</sup> award and 3214 degrees (Pilani-1252, Goa-826, Dubai-329, and Hyderabad-858) for the 77<sup>th</sup> award were printed using the enhanced software. The degrees were made available on time for the convocations held at different campuses during July-September 2015.

### **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 doctoral research. CAL has a spacious area of 2600 sq.ft and an is equipment 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 and High Performance Liquid Chromatography (with auto-sampler and various detectors). Currently it is capable of carrying out research work at all levels including the industrial projects. Recently the laboratory has been upgraded with 400 MHz NMR spectrophotometer (Bruker AVANCE III) equipped with BBFO probe and auto-sampler. Also, the latest addition is Elemental Analyser (vario MICRO cube) for estimating the elemental compositions of organic compounds. 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. Recently, the facility have received the approval for in-housebreeding. The facility maintains the animal species like Rats, Mice, Guinea Pigs, Rabbits and Hamsters. The facility was build 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 anaesthesia machine, electrical cautery and spare air-conditioners are also utilized. The laboratory is upgraded with video documentation system for various animal behavioural 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. Installed the new power capacitor bank to maintain Power factor up to 0.99.
2. Change 82 nos. of street tube light fittings with LED 36 watt fitting, to increase the intensity and lux level as well as cut the power consumption.
3. Change the overhead street light cabling to underground cabling to better performance and fewer shutdowns.
4. Replace old faulty cable of Ram Bhawan & Malviya Bhawan A,B & C and made it underground for better performance .
5. Set all relays at 33 KV Substation as per the load /fault level to perform and sense fault correctly to prevent electrical fault.
6. Rectified NAB building transformer tripping problem by replacing its OTI, as it was malfunctioning resulting to tripping.
7. Checked all 14nos of transformers and done all preliminary checks for safe operation.
8. Change the main power cable for NAB's HVAC system, as it was under size with respect to load.
9. Dressing, tightening and changing of old wiring for safe operation in Institutional Buildings.
10. Checked New Faculty Housing (NFH) transformer & control panel to charge capacitor panel which was not in working condition.
11. Rectification of 11KV main power supply cable, which feed main distribution room, using cable fault locator machine.
12. Installed digital timer in street light feeder pillar for automatic switching on/off of street lights at a specified time.
13. Checked entire campus electrical earthing value to safe and shock proof supply (in the range of 00 to 05 volt) and rectified wherever the earthing value was not in the required range .
14. Installed over current and earth fault relay at heavy and inductive load to minimize the burning of motors at all tube wells.
15. Installed the MPCB at all three phase exhaust fans to prevent the burning and overloading of fans in Messes.
16. Rectified the underground main supply to NAB's Rotunda centre stage, which was faulty for more than one year.
17. Developed SOPs for individual electrical control room/plant section to maintain the smooth operation of equipment.
18. Noticed that DG sets of NAB are undersized during the peak load which was accepted by project Parivartan and one 320KVA DG set will be installed during electrical infra work.
19. Started activities such as daily, weekly & monthly check of equipment for smooth operation.
20. Did AMC for NAB elevators with ThyssenKrupp, the Original Equipment Manufacturer (OEM) for smooth operation.
21. Did the AMC of DG sets with URSS Tech Service Pvt. Limited for smooth operation.
22. All ten storage tanks at wells and 04 bore wells were cleaned.
23. Windows were fixed in all pump rooms.
24. One pump room was constructed for Well no.10.
25. Two new bore wells were made. Chambers were constructed for valves in water distribution network.
26. Replacement of old & leaky pipe lines 1", 2", 3", 4" & 6" – 1200, 800, 460, 160 & 60ft respectively.
27. Repair & replacement of STP water pipe lines 300ft and extension of the network by 1190ft.
28. 18nos new RO system & 07 nos. new water coolers were installed in addition to replacement of 07 defective water coolers in Hostels.
29. AMC for NAB HVAC System was concluded for efficient operations.
30. Extensive maintenance of all the 05 Air Cooling systems was carried to ensure smooth & efficient operation.
31. AMC was finalized for smooth & efficient operations of all the 106nos of Solar water heating system installed in Hostels & Messes.
32. STP Operations were made more effective by cleaning of all tanks, replacement of all diffusers and by making 02 holding tanks.
33. All the 348 fire extinguishers were checked for their working and defective one were replaced & refilling was done as required.
34. Procured one HDPE welding machine for welding of waterline network at New Faculty Housing.

35. Road repair measuring 1,23,00sft by laying pre mix bituminous carpet was carried out.
36. 03 Rooms were renovated as New Chemical store.
37. Construction of car parking for 26 cars near Ram Bhawan.
38. Construction of 295 ft of storm water drainage along road side.
39. Construction of 50 nos of CC pedestals for street light poles.
40. Making of one gate in Meera Bhawan on Meera Marg.
41. Shifting of 03 partition walls in 09th Block of Meera Bhawan to increase number of room in Malviya D.
42. Construction of pump room for well no.10.
43. Water proofing was done for roof and tanks in qtr no.311, 320, 296, 96, 97, 99, 458 & 459.
44. Construction of LPG Gas Bank in FD-III.
45. Raising of compound wall height behind Malviya Bhawan & New Building Store.
46. Plaster of compound wall near VCs house.
47. Construction of toe wall on east of NAB on Krishna Marg for softscape development.
48. Re construction of STP compound wall 150ft in length on south side.
49. Providing & Fixing Pedal operated cover 25nos of Garbage Bins.
50. Retrofitting work of R.C.C. Over Head Tank (OHT) 2,83,00,000ltrs capacity. 51. Providing & Fixing AI Partition in Staff Qtrs -28,30,32 & 34 for converting them into temporary single student accommodation.
51. Repair work of Pre-fabricated S R Bhawan building.
52. Procurement & installation of Signage for NAB, roads, litter bin, Institute washrooms and Offices.
53. Purchase of one covered tractor trailed Garbage trolley for All Nightcanteen (ANC).
54. Procurement of PVC garbage bins 660 liters with open able cover & 80 liters for installation in Hostel & Road side.
55. Procurement 7 installation of Bird Spike to control bird menace in Institute Buildings.
56. Development of softscape on east & south west of NAB near Gandhi Statue.
57. Plantation drive for planting 2000 saplings in the Campus in July & Aug.
58. Development of softscape in Central Park of New faculty Housing.
59. Chicken mesh fixing in New Workshop building to prevent entry of pigeon.
60. Refurbishment of oil paintings in the Main entrance of Central Block.
61. Renovation of toilet in Director's office.
62. Fixing of SS hand railing in the Main Porch.
63. False ceiling work in the VC office.
64. False ceiling work for Music room in NAB.
65. Construction of ramps for specially abled person in SAC, LTC, Akshay, all hostels & messes.
66. Modification of toilet for specially able student in Bhagirath Bhawan.
67. Cleaning of all Overhead tanks in all Bhawan.
68. Internal painting of Accounts & Finance Section.
69. Aluminum partition work in Library for making GMAT Centre.
70. Wooden partition work in room no.2218 for making a laboratory in Mechanical Engg Dept.
71. Made 29 nos. of staff quarters ready for new allotment.
72. Taking over of renovated & augmented Ram Bhawan & Meera Bhawan Old Block from Project Team for operations.

#### **Works in Progress**

1. Replacement of tube light fittings on street light poles with LED fittings.
2. Converting overhead street lighting cable as well main power cable to underground cabling.
3. Rectifying the old 05nos of solar street lights in front of FD- III, which are under shutdown condition for more than 05 years.
4. Smoke detector system of Main Auditorium is to be made operational, as it is under shutdown condition for more than last 05years.
5. Replacing the defective external light fixtures in NAB.

6. Defect rectification of Elevator(Lift) in the Library building, which is non operational for more than last 06years.
7. Connection of treated water line from New STP to existing line.
8. Construction of 31nos of valve chambers in water distribution network.
9. Extension of STP treated water line to SAC, TSF Quarters, Akshay & near Well no.06.
10. Procurement of one electric threading machine.
11. Installation of Ladder for OHT at well no.6.
12. Installation of electric level switches in all water coolers.
13. Procurement of a digital mega machine.
14. Replacement of ACs in VC & Director Office.
15. Leakage rectification in OH water tanks in staff quarters.
16. Replacement of glass with acrylic sheet in Tower Clocks.
17. Installation of Delineators & other road safety devices on roads for channelizing traffic.
18. Procurement of a Shredding machine for green waste disposal.
19. Making BMS of NAB functional.
20. Painting of STP tanks with Black Japan paint.
21. Painting of NAB AC pipelines.
22. Development of softscape on north east of NAB near Patel Statue.
23. Making one bore well.
24. Renovation of room no. 2137 for Remote Lab.
25. Renovation of rooms in VFAST.
26. Repair of damaged/defective terrace of FD-II & III.
27. Repair of Auditorium roof.
28. Procurement of one covered tractor trailed garbage trolley for Meera Bhawan.
29. Procurement of two Manual sweepers for sweeping footpath & parking areas.
30. Complete balance work for LEED certification of NAB.
31. Installation of bird spikes to check pigeon menace in the Institutional Buildings.
32. Rose plantation in front of Central Block & east side of NAB.
33. Procurement of 30feet ladder to facilitate housekeeping work in Library & NAB.
34. Repair of damaged/week Compound wall.
35. Tree trimming on Compound wall on east & west side.
36. Complete development of Central Park in new faculty Housing.
37. Procurement & installation of benches for road side & parks.
38. Procurement & installation cautionary & information boards as per BITS Brand guidelines.

#### **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 4000 types of consumable, 1200 equipments, and 1900 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 , DIT, 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 1200 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 'B-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. EHD 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 2015-2016:

<b>President</b>	-	Akhil Reddy Parvath Reddy
<b>General Secretary</b>	-	Rijul Dutta

#### **Hostel Representatives**

<b>Bhawan</b>		<b>Name</b>
Ashok Bhawan	-	R N S Pavan Kumar
Bhagirath Bhawan	-	Shubham Raj
CVR	-	Prateek Bothra
Dayscholar	-	Anvisha Singh
Krishna Bhawan	-	Paradkar Aditya Rajiv
Malaviya Bhawan (A,B & C)	-	Krishna Kanth
Malaviya Bhawan (D)	-	Lakshya Sharma
Meera Bhawan 12378 and OLD	-	Stuti Maheshwari
Meera Bhawan	-	Mansi Narang
Ram Bhawan	-	Himanshu Gupta
Ranapratap Bhawan	-	Challa Sriharsha
Shankar Bhawan	-	Parikshit Mittal
Sriramanujam Bhawan (CD)	-	Ashwar Gupta
Sriramanujam Bhawan (AB)	-	Puli Bharatha Ratna Deep
Vishwakarma Bhawan	-	Nikhil Malhotra
Vyas Bhawan	-	Shubham Shukla

#### **Secretaries of Clubs**

The following were elected Secretaries for various Clubs and Societies:

ARBITS	Varun Karulkar
Audi Force	Krishna Praneeth
CrAC	Soumyadeep Basu
Dance Club	Tanveesh Inani
DebSoc	Akhilesh Sudhakar
DoLE	Vinayak Awasthi
DoPy	Anirudh Shridhar
DoT	Dhruv Tandon
EDC	Vaibhav Varma
ELAS	Nihar Dasari
Fashion Club	Ashish Kumar Sharma

Firewallz	Jagadeesh Kampara
FMaC	Vedant Sapra + Nipun Jain
Gurukul	Geetika Bagga
HAS	Krishna Bhatnagar
HDC	Aditi Jain
Informalz	Avinash Rao
Lights	Anirudh Gorantala
Matrix	Shaista Hussain
Mime Club	Harshit Mathur
Music Club	Akshat Kothyari
Nirmaan	Akhil Diddiga
NSS	Ashutosh Kumar Singh
	Sai Ram Krishna
OEP	Devina Jain
OHP	Nitisha Saumya
Photog	Devraj Palit
Poetry Club	Priyank Chauhan
RadioAktiv	Utsav Majumder
Ragamalika	Akshay
REC	Avish Vora
Mountaineering Club	Avish Jain
Sounds	Vaibhav Varma
Punjab Cultural Association	Karan Gill
Coding Club	Partho Mukherjee
ADP	Krishna Chaitanya
Controls	Krishna Akhil
DVM	Siddhant Tuli
Sponz	Ojas Malpani
Rec n Acc	Saketh Boddu
PCr	Maheep Tripathi
Stage Controls	Akshansh Deva

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 2015 were

<b>Secretary</b>	-	Shambhavi Malhotra
<b>Joint Secretaries</b>	-	1. Akshat Duvey
	-	2. Govinda Nathani
	-	3. Amolak Singh

The names of the captains for various games/sports are given below:

S.No.	Games / Sports	Name
1	Athletics (boys)	Sumant Bakshi
2	Athletics (Girls)	Akanksha Soni
3	Badminton (Boys)	Priyanshu Bajpai
4	Badminton (Girls)	Varsha Vivek
5	Basketball (Boys)	Shashikant Jangir
6	Basketball (Girls)	Nikita Bisht

S.No.	Games / Sports	Name
7	Carrom	Dishant Sangani Anil
8	Chess	Satchit Varma
9	Cricket	Abhishek Gaurav
10	Football	Kapil Tahilyani
11	Hockey	Digvijay
12	Lawn Tennis (Boys)	Shubhankar
13	Lawn Tennis (Girls)	K Meher Gitika
14	Power Lifting	Gourav Bansal
15	Squash	Rushil Handa
16	Swimming (Boys)	Zalak Shah
17	Swimming (Girls)	Taniya
18	Table Tennis (Boys)	Akhilesh Sudhakar
19	Table Tennis (Girls)	Devanshi Kotak
20	Volleyball (Boys)	Abhishek Bhattad
21	Volleyball (Girls)	Geeta Bansal
22	Taekwon-do (Boys)	Aditya Deshmukh
23	Taekwon-do (Girls)	Aditi Bansal

### Sports Events organized during 2015

#### BITS Open Sports Meet

The BITS Open Sports Meet (BOSM) was conducted successfully from 18<sup>th</sup> to 22<sup>nd</sup> September 2015. As in the past the institute organized an intensive coaching camp from 3<sup>rd</sup> to 22<sup>nd</sup> September 2015. Rajasthan State coaches were invited to prepare Institute's teams in various events. More than 1200 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 results were as follows:

- |                          |   |
|--------------------------|---|
| 1. Athletics (Boys)      | Winner – IIT, Delhi<br>Runner-up – BKBIET                     |
| 2. Athletics (Girls)     | Winner – IIT, Delhi<br>Runner-up – BITS, Pilani               |
| 3. Badminton (Boys)      | Winner – BITS Pilani<br>Runner-up – MDU Rohtak                |
| 4. Badminton (Girls)     | Winner – BITS Pilani<br>Runner-up – MNIT Jaipur               |
| 5. Football (Boys)       | Winner - Sri Venkateshwara College<br>Runner-up – BITS, Dubai |
| 6. Power-lifting         | Winner – BITS, Pilani<br>Runner-up – NIIT                     |
| 7. Hockey (Boys)         | Winner – JNVU<br>Runner-up – TIT & S                          |
| 8. Swimming (Boys)       | Winner – BITS, Pilani<br>Runner-up – NIT Trichy               |
| 9. Swimming (Girls)      | Winner – BITS, Pilani<br>Runner-up – NIT Trichy               |
| 10. Table Tennis (Boys)  | Winner – BITS Pilan<br>Runner-up – Subodh                     |
| 11. Table Tennis (Girls) | Winner – Kanoria<br>Runner-up – BITS Pilani                   |
| 12. Volleyball (Boys)    | Winner – Loyola Academy<br>Runner-up – BKBIET                 |
| 13. Volleyball (Girls)   | Winner – JMC<br>Runner-up – JDMC                              |
| 14. Basketball (Boys)    | Winner – SRCC<br>Runner-up – HANSRAJ                          |



15. Basketball (Girls)	Winner – LNIPE Runner-up – SRCC
16. Cricket	Winner – BITS, Pilani Runner-up – MRCET
17. Chess	Winner – SRCC Runner-up – BITS, Pilani,
18. Tennis (Boys)	Winner – LNIPE Runner-up – St Xaviers Jaipur
19. Tennis (Girls)	Winner – Kanoria College Runner-up – BITS Pilani
20. Carrom	Winner – RAIT Runner-up – BITS, Pilani
21. Squash	Winner – LNIPE Runner-up – BITS, Pilani
22. Taekwondo (Boys)	Winner – BITS, Pilani Runner-up – GOSEDMA
22. Taekwondo (Girls)	Winner – GOSEDMA Runner-up – BITS, Pilani

### The Intra-BITS Sports Tournaments

**I-BOSM '2015** : Pre-BOSM EVENT NAMED i-bosm 2015 was conducted on 22-04-2015. 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 15-10-2015 to 20-10-2015. Around 72 students participated in the league.

### Outstation Participation

Various sports teams consisting 138 students were sent to participate in Sangram '15 a Sports Meet held at IIT Roorkee, during 20<sup>th</sup> to 22<sup>nd</sup> March 2015. 26 students of certain sports went to BKBIET, Pilani to take part in Quasar 2015 from 26<sup>th</sup> to 29<sup>th</sup> October 2015.

### Swimming Club

The Swimming team distinguished itself by its performance in BOSM 2015 winning by 13 Gold, 11 Silver, and 16 Bronze Medals.

### Health Club

The Health Club is equipped with various advanced machines for aerobic and anaerobic exercises. During II Semester 2014-2015, the Health Club had a membership of 800 while in I Semester 2015-2016 it was 933.

### Martial Arts

- ❖ Martial Arts classes are conducted at Students Activity Center in both morning and evening sessions. Around 70 students attended the classes regularly, out of which 25 students were trained in competitive martial arts skills.
- ❖ A martial art camp for specially the girl students to train them in basic self defense and boost their confidence was conducted from 2<sup>nd</sup> -14<sup>th</sup> Feb' 2015. Around 40 girls participated in this camp.
- ❖ Martial arts Taekwondo team (**M and W**) participated in various tournaments nationwide. The details are as follows:
  - All India Inter - *University Taekwondo* (Men & Women) Championship 2014 - 15, **13-17 March 2015, Chennai**, which was organized by Anna University.
 

Participation: Aditya Deshmukh  
Parikshit Joon  
Aditi Bansal  
Aishwarya Chopra
  - **BOSM 2015, 18-22 September 2015 ,Pilani**

Gold: Abhishek Prasad, Aditya Deshmukh , Parikshit Joon, Aditi Bansal  
Aishwarya Chopra, Indu Sharma.Aman agarwal, Devopriya

Silver: Kartik Gandham Vidushi Chitranshi, Rohit soni,

**Rajasthan State Senior Poomse Championship, 28-29 September 2015, Jaipur**Under 30 Individual Men

Gold: Aditya Deshmukh (selected for nationals)

Under 30 Pair

Silver: Aditya Deshmukh

- **Rajasthan State Senior Taekwondo Championship, 9-11 October 2015, Jhunjhunu**

Gold: Abhishek Prasad

Silver: Kartik Gandham, Indu sharma, Vidushi Chitranshi, Udit Totla

Bronze: Parikshit Joon

- **National Poomse Championship, 25-27 October 2015, Vishakhapatnam**

Participation: Aditya Deshmukh

**Hockey Camp**

A camp on learning basic skills of Field Hockey was conducted by Sports Club from 6<sup>th</sup> April 2015 to 11<sup>th</sup> April 2015 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 2015 to 11<sup>th</sup> April 2015 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.

**National Service Scheme**

National Service Scheme Introduction The Birla Institute of Technology & Sciences, BITS Pilani is an all India Institute for higher education. The primary motive of BITS is to “train young men and women able and eager to create and put into action such ideas, methods, techniques and information”. 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 Faculty Coordinator: Dr. Anupam Singhal NSS Program Officers: 1. Dr. Hitesh Dutt Mathur 2. Dr. Umesh Diyani 3. Dr. R.P. Pareek 4. Dr. Sanjana Bhatt 5. Dr. Shibashish Choudhary 6. Dr. Sanjiv Kumar Choudhary 7. Dr. Hari Om Bansal Activities The following is the brief overview of the NSS BITS Pilani activities undertaken during first semester 2015- 2016: 1. Literacy Program NSS School started this semester on 5th of August. With the starting number of 85 kids we have reached a number of 150 students, which in itself is a record. The number of active volunteers this semester was 80. Various workshops were conducted for kids which consisted of sketching, colouring, origami, etc. Every alternate week these workshops were conducted and the other alternate week a test was conducted for every kid. A new system was implemented to keep a record of each student's database, wherein every volunteer was instructed to visit his/her child's home and upload the data on google drive. Also, volunteers started a puzzle system where every alternate day a puzzle was put up on notice board and the children were required to think of a possible solution to it. The children could not take help from the volunteers and were supposed to solve it on their own. The student with maximum correct answers was given a present on the last day of school. 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. A sports day was organized, where games like khokho, kabaddi, football, athletics etc were played in the school and prizes given at the end. The school was closed on 22nd of November. For the next semester it has been planned to organize an informative session by our teachers on career counselling. 2. Computer Literacy Programme (CLP) The Computer Literacy Programme (CLP) was carried out by National Service Scheme, BITS Pilani, in First Semester 2015-16 in Pilani and neighbouring areas, with the locations where the programme was carried out being as follows: A. Pilani Resource Centre, Harinagar The Pilani Resource Centre (PRC), located in the vicinity of the campus, has a well-equipped computer lab with a total of ten 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. Based on earlier experience and results, batches were planned Annual Report 2014 BITS Pilani, Pilani Campus B1-2 to be held six days a week in the form of two slots, viz. one for girl students and students from class 6 and 7, and the other for students of higher classes (including college-going students). The first slot's timings were 5:30 PM to 6:30 PM and the second slot's timings were 6:30 PM to 7:30 PM. But in the middle of the semester the lab has been removed. Since the NGO Pratham has been relocated to Jaipur. From then volunteers managed the classes by taking

laptops to PRC. B. Mandelia School, Pilani The Mandelia School, located at a distance of 1.5 Km from the campus, is another location where computer classes were held. Students of classes 9 and 10 were taught during school hours (in the time slot of 12 PM to 1 PM) thrice a week and were encouraged to attend classes in the evening in PRC so as to learn further. The school's computer lab (equipped with 8 computers) was used for teaching the students in a hands-on manner. The programme had an impact on around 50 students through this slot. C. CLP in NSS School: CLP has also started its classes as a pilot run in NSS School. A total of 4 classes were conducted over the semester which ran very successfully. In the coming semester we are planning to increase the number of classes' manifolds. D. Raila village Raila, a village located around 2 Km from Pilani, is also one of the places where the CLP functioned this semester. 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 were held from 3 PM to 4 PM, thrice a week (after school hours) in the computer lab, and all the residents of the village were open to attend. Around 50 students have had a good exposure to computers through this initiative. The topics covered include the basics of computers, typing, file-handling operations on an OS, MSPaint, MS-Word, and MS-PowerPoint, to an extent. The content was 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 'Tree plantation', health survey, Raila school project, RTE seminar, health workshop etc. In tree plantation camp, 70 saplings were planted in almost in every part of the Gharinda village. 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. Raila school project has been continued to provide children of Raila with firm foundations in every subject along with ethical values. There are three visits per week by the volunteers to the Village. In the coming semester various camps are planned. A Vocational Training Center is planned to be set up in Raila/Gharinda according with basic focus on Sewing & Papad Making. A health camp also will organized in Raila. Annual Report 2014 BITS Pilani, Pilani Campus B1-3

4. Special Events The Events Department organized following events in this semester. A. Blood Donation Camp (7th February 2015- 8 th February 2015) NSS BITS Pilani is involved in conducting Blood donation camp every year in collaboration with Indian Red Cross Society. With aim of spreading awareness, NSS BITS Pilani has been successfully collecting large number of units of blood every year. Last year, there was a collection of more than 800 units of blood. NSS BITS Pilani was also awarded for its outstanding and consistent performance in organising BDC over the year. B. Youth Conference (13th Feb 2015-15th Feb 2015) NSS, BITS Pilani is organizing second Edition of Youth Conference from 13th Feb-15th Feb. It encourages different NSS chapters across the nation to assemble and focus over solving some of the issues plaguing our country. Last year's edition saw over 200 delegates and participants. Second edition promises to be better in terms of quality, content and participation. C. Dhiti (Last week of March, 2015 ) Last event of academic year, Dhiti is organized as a part of Technical Festival of BITS Pilani. It takes place in the form of competition where participants are asked to submit technologically feasible solution to an already existing social problem. Previous editions of Dhiti saw extensive and encouraging participation and are expected to continue in the upcoming year as well. D. Junoon (12th -13th September 2015) The fourth edition of the sports fest for especially abled, Junoon was organized in BITS Pilani – Pilani Campus on 12th and 13th September. The fest saw a participation of over 140 specially abled people from 8 different NGOs. The NGOs based in 5 different locations– Pilani, Jhunjhunu, Chirawa, Jaipur and Delhi were Amla Birla Kendra, Deepalaya, Disha, Koshish, Manovikas, Muskaan, Sambal Seva, Special Olympics Rajasthan. Several events like cricket, basketball, badminton, Bocce, athletics (races, shotput, softball etc.) were hosted. A special event called "Floor Ball" was also organized. The two days event was graced by Mr. Amit Kumar Saroha, Arjuna Award winner and Gold Medalist at Paralympics 2012. A talk was also organized in this occasion where our chief guest delivered a motivating speech to BITSians. The event was inaugurated by the Vice-Chancellor Prof. V. S. Rao. With a decent BITSian participation, the fest saw the fulfilment of its motive. At the end of the event, the NGOs were felicitated by the Director Prof. A. K. Sarkar. E. NSS Oasis Stall (28th Oct – 1st Nov 2015) 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 2015 exhibited products of 17 NGOs like Amla Birla Kendra, Women Synergy, WWF, MESH etc from Delhi, Jaipur and Pilani. F. Seminar on " Ideologies of the Iron Man of India " (31st Oct 2015) A seminar was organized by NSS, BITS Pilani on 31st Oct, 2015 on the occasion of birth anniversary of Sardar Vallabhbhai Patel. Dr. Paritosh Shukla, Assistant Professor from the Dept. of Chemistry, BITS Pilani, delivered a motivating speech to the students who come to NSS School. There were around 100 participants including BITSians and faculty members. Firstly a pledge was administered by one of the students of NSS School. At the end prizes were distributed to students who actively participated in the "Quiz and Essay Writing Competition" organized on this occasion.

#### **OASIS 2015**

BITS Pilani celebrated the 45<sup>th</sup> edition OASIS. Its annual cultural festival from 28<sup>th</sup> October to 1<sup>st</sup> November 2015. This festival, managed entirely by the students, was mainly sponsored by Infoview, SBI, HTC. 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 "around the world in 96 hrs"

The music concerts by Mr. Papon The Local train, Pandit Vishwamohan Bhatt a DJ night by sunburn 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 show case 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 Akhil Reddy, 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 2015**

APOGEE is the Annual international technical festival OF BITS Pilani. With over 8000 students, 100 colleges and 80 technical events, APOGEE 2015 was conducted from 25<sup>th</sup> to 29<sup>th</sup> March 2015. The chief sponsors for the festival included Airtel, MTV India and the Al Fara'a group. 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 Prof. Walter Bender (Founder MIT Media Labs), Divya Narendra (co-founder Harvard Connect and Sumzero), David J Peterson (Linguist), Dr. Bindeshwar Pathak (social worker and founder, Sulabh International) and Shma Chaudhury (acclaimed journalist) gracing the stage and making the event an astounding success. APOGEE 2015 surely took the standard of APOGEE as a festival a few notches higher.

### **INTERFACE 2015**

#### **All India Management Convention, Interface 2015**

38th All India Management Convention, Interface 2015 was organized by the Department of Management of BITS Pilani on 6<sup>th</sup> February to 8<sup>th</sup> February 2015. Interface serves as a platform for students and professionals to come alive with the skills and ideas that are necessary to run the ever dynamic and fast growing industries in India. It's a Pan-India Management Convention where students showcase their exceptional managerial dexterity, innovative business ideas and incomparable entrepreneurial skills. Interface which started as an annual event in 1978 has been running every year with increasing participation from various colleges across the country.

The three days Management extravaganza with the theme, 'Effervescence (Spark/Zeal to compete)' had several events including BodhOpera: Paper presentations(Operations), Great Final: Fiscal policy strategies (Finance) Mind Jolter: Case studies (Finance), Trade Maniac: Online Virtual Trading Event (Finance), Strategic CSR Plan Competition (HR) , Aavishkaar: Case Study Competition (HR), Ad Maniac: Creative advertisements (Marketing), Kaleidoscope: Case study (Marketing), Op-Arena (Operations), OperaGyaan: Workshops(Operations) , Manav Ojas (HR), Come.Save.Resolve(HR), Sarachana : Short Story Competition (Reflexionar), Doodle in a Muddle : Doodle Making (Reflexionar) etc.

Prof. G. Raghurama, Director BITS Pilani, Pilani campus graced the inaugural function. Dr. Chandrashekhar, Senior Scientist (CEERI) was the chief guest and delivered the keynote address. He laid focus on the importance of Management in every field, every possible area including day to day household activities. From the smallest and least important thing to the largest and most important thing cannot excel without proper Management. Our Guest of Honour Mr Divya Joshi (Vodafone corporate zonal affairs head) along with another Corporate veteran Mr. Mohit Chhabra enlightened the students on several corporate strategies specially related to marketing strategies used for proper functioning and growth of businesses.

After the inauguration ceremony, the valedictory ceremony of Interface 2015 turned out to be a mini corporate workshop rather than just being a prize distribution ceremony. Mr Gagan Arora, Chief Executive Officer (PrintVenue) and Mr. Lokesh Sikka, Talent Acquisition Head (Snapdeal) graced the event by sharing their experiences and their young Entrepreneurship talent as the mini workshop was more focused towards entrepreneurship talks. Finally the end of the event came with the felicitation and prize distribution ceremony.

### **RAGAMALIKA**

The year 2015 was really eventful for Ragamalika and saw great experimentation. On Founders' Day the club performed Thyagaraja Aradhana as a tribute to the great composer Thyagaraja. The semester's flagship show was SANGAMAM based on a creative blending of two great classics "The Phantom of the Opera" and "Swan Lake ". The dancers enthralled the audience with their performance. The second semester 2014-15 came to an end with the senti concert of the veteran vocalist of the club, J KrishnaMurthy. The first semester of 2015-2016 began traditionally by inducting fresher's into the club. The newly inducted dancers and musicians showcased their potential through the freshers' concert. Ragamalika started a new tradition of Chamber concerts this year where in the club members put up a professional performance in front of a limited audience showcasing their talent. The club's major production Nritya Ranjani was titled Moksha. The show portrayed the nuances of dance

by sticking to the classical repertoire and the main theme was based on the ultimate end of human life which is salvation. On popular demand, the club organised a concert of Rakshit Prasad, a Mandolin player which was enjoyed by all. Ragamalika collaborated with the team of Oasis, 2015 to organise a jugalbandhi concert of Pandit Vishwa Mohan Bhatt. The first semester then ended with the grand senti concert of the celebrated vocalist of the club, Rohan Shankar.

### **SPIC MACAY**

*No programme was organized during 2015.*

### **MATRIX**

*Second semester 2014-2015*

In the third week of January, MATRIX members attended the Jaipur Literature Festival, which is the largest annual literary congregation in the world. This tradition of attending JLF has been upheld by MATRIX since the year of its inception. This fest offers unparalleled exposure to the world of literature. Enthusiasts attend talks, panel discussions, book introductions by many eminent personalities. A few of the club members got to interact with a few authors on a one on one scale. The club looks forward to attending further editions of the festival.

In March, the club engaged itself in APOGEE, the annual technical festival of BITS, Pilani. Two events were conducted by MATRIX in the fest. The much appreciated MATRIX Mythology Quiz was prepared by Rishabh Agarwal, Rishabh Kaul, and Avinash. Matrix also screened two movies, namely 'Udaan' by Vikramaditya Motwane and Anurag Kashyap and 'The Freedom Writers' by Richard LaGravenese.

On March 17<sup>th</sup>, we conducted a writing workshop 'Writing 101', which was hosted by Dilip D'Souza, an award winning writer and journalist. The event was a huge success with more than hundred participants.

On 21<sup>st</sup> April, a book introduction session was organised. The details of the panel were as follows:

- The Robot Series (Isaac Asimov) - Srungeer Simha
- The Enchantress of Florence (Salman Rushdie) - Camellia Debnath
- The Ocean at the end of the Lane (Neil Gaiman) - Tanayveer Singh Bhatia
- The Last Lecture (Randy Pausch) - Amulya Srivastava

The panel consisted of students in their last semester on campus. This event was eagerly awaited by club members and others alike. This has been a standing tradition of bidding farewell to our beloved seniors.

The semester ended with the Valedictory Ceremony where all the people who were actively involved with the club and its activities were appreciated. It was graced by the presence of faculty members like Dr. Geetha B, Dr. Kumar S. Bhattacharya, Dr. Devika Sangwan, Dr. Sangeeta Sharma and Mr. Tathagato Chakraborty. Many valuable insights were provided by the faculty members present.

### **First Semester 2015-2016**

MATRIX started the semester with the recruitment process which saw a very enthusiastic participation from the first year students. Alongside the recruitment process, a movie screening was conducted. 'The Breakfast Club' was screened. A total of 12 first years were recruited.

The first years in their initiation phase were given a written assignment. They were asked to answer 2 out of 5 questions raised on topics of literature, politics and teenage years. All did a pretty good job with varied opinions and showed great potential in writing.

A few discussion sessions were held by Rishabh Agarwal, Vedant Mishra, Srishti Khatri and Arshad Latif Saikia. The discussions were on the works of Albert Camus, Sartre and Ayn Rand.

On September 5<sup>th</sup>, on the occasion of Teachers' Day, MATRIX collaborated with BITS Library to set up a book exhibition in the library with the theme 'Great Teachers and their works', under which around 200 books were displayed and made available to the students for circulation. This collection consisted of various genres like fiction, philosophy, auto-biography and self help. Members from MATRIX were present in the library taking turns for 4 days helping students pick from these books.

The first external panel was held with the professors pitching in. The introduction panel was done by Mr. Tapomoy Guha Sarkar, Dr. Devika Sangwan and our director Prof. Ashoke Sarkar.

In BOSM, the club conducted two football match screenings and a cricket quiz, which saw enthusiastic participation from students of BITS and other colleges participating in the fest. A total of some 150 participants were seen. The other event that followed was the 'Wheel of Fortune', a literature, cinema, TV-series, anime, comics and manga based entertainment contest. The BOSM coordinator was Avinash.

On October 31<sup>st</sup>, observing National Unity Day, the birth anniversary of Shri Sardar Vallabhai Patel, another book exhibition was set up in the library by the club.

The days preceding Oasis were spent in long hours of planning, work and discussions regarding the upcoming events. In Oasis, MATRIX organized three events and three movie screenings. Triathlon, one of the major

events of MATRIX was attended by around 300 students. It was hosted by Maaz Mombasawala, Eshan Tyagi, Ankit Dube and Arshad Latif Saikia. Movie Quiz was conducted by Neil Dave, Rishabh Agarwal and Sayan Maitra and holding up the benchmark set by its previous version, it was rated to be one of the toughest and excellently researched quiz. The movies that were screened were: 'Dil Chahta Hai', 'Amelie' and 'The Four Lions'. The 'Poetry Slam' saw good participation and had three rounds of judging various aspects of poetry. This event saw a very diverse set of participants from various parts of the country. The Oasis coordinator was Shaista Hussain.

In the month of November the second years reviewed two books 'The Fight Club' and 'The Great Gatsby' for the first year batch to get a feel for reviews. The Great Gatsby was done by Vedant Mishra and Krishna Sai. The writing style of the books had both the classic and post modern forms. The said books were made into movies also; so, the discussion encompassed both the movie versions and the original books.

MATRIX concluded the semester with a valedictory ceremony where the external panelists, Prof. Ashoke K. Sarkar, Dr. Devika Sangwan, Dr. Tapomoy Guha Sarkar and Mr. Tathagato Chakraborty were felicitated for their contributions.

Apart from the above mentioned events, the club had many other informal and internal discussion sessions spanning literature, movies short films and TV-shows. Moreover all the MATRIX books have been catalogued and centralized for easy access.

### **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.

### **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:

<b>Admission year</b>	<b>No. of students</b>
I Year	38
II Year	17
III Year	11
IV Year	14
V Year	02
Total	82

### **Earn While You Learn**

#### **Professional Assistantship**

Fourteen students worked as Professional Assistants during this year, 6 in the Second Semester of 2014-2015 and 8 in the First Semester of 2015-2016. They participated in academic activities like development and

assistance in labs, software development, educational planning etc. This gave them an opportunity of independent thinking and developing a sense of responsibility. The programme is not linked with any academic credit but the participants are paid honorarium for their services.

#### Aditya Birla Group Scholarships

One student, Ms. Saima Rashid (2015A7PS004P) has been awarded the prestigious Aditya Birla Scholarships for the academic year 2015-2016. These scholarships are awarded to meritorious students of Engineering from among those admitted to BITS Pilani and the IIT's at Bombay, Chennai, Delhi, Kanpur and Kharagpur after a rigorous selection process.

#### GE Fund Scholarship Program – 2014 -16

GE Foundation, USA, which is the philanthropic organization of the General Electric Company, has sanctioned two scholarships worth \$ 4000. \$ 2000 each to two students of Second Year B.E.(Hons.) Mechanical and B.E.(Hons.) Computer Science programme in the BITS, Pilani. The scholarships were awarded to Mr. Ishan Sharma, (ID No.2013B3A7789P) and Mr. Akhilesh Sudhakar (2013A7PS173P).

#### Institute of International Education - Avery Dennison Foundation Scholarship Program

Sanctioned four scholarships worth \$ 1300 each to students. The four winners of the Avery Dennison Foundation 'InvEnt' Scholarship Program – 2014-15 are the following:

1. Mr. Harsh Sharma (ID No.2014A4PS405P)
2. Mr. Rishabh Gupta (ID No.2014ABPS855P)
3. Mr. Arnav Kundra (ID No. 2014A3PS240P)
4. Mr. Vasu Sharma (ID No. 2014A4PS374P)

#### Alumni Scholarships

BITS Alumni have instituted several merit-cum-means scholarships. For the First Semester 2014-2015 and Second Semester 2014-2015 the scholarships were awarded to the following students.

Scholarship	I Semester 2014-2015	II Semester 2014-2015
Vamsi Pendyala and Prasanna Kalahasthi Memorial Scholarship	Roshni Chhabra ID No. 2013A1PS661P	Manek Aishwarya Himanshu ID No.2013A8PS361P
S.S. Seshadri Memorial Scholarship	Harsh Kumar ID No. 2012A7PS065P	Vishal Kejriwal ID No. 2012A2PS366P
BITS Alumni Class of 1966-71 Scholarship	Ramya Mittal ID No. 2013A2PS630P	Bugade Vishwajit Babasaheb ID No. 2013A3PS223P
Rakesh Chandra Scholarship	Davinder Pal Singh ID No. 2013A3PS010P	Kunal Dharmasi ID No. 2013B3PS369P
Shantha E. Iyer Scholarship	Bhanu Priya S ID No. 2011B1PS515P	Bhanu Priya S ID No. 2011B1PS515P
	Priya Agarwal No. 2012A2PS517P	Priya Agarwal ID No. 2012A2PS517P
	Neha Agarwal ID No. 2013A1PS493P	Neha Agarwal ID No. 2013A1PS493P
	Vrinda Poddar ID No. 2014B4PS802P	Vrinda Poddar ID No. 2014B4PS802P
Arun Agarwal Scholarship	-	Vyankatesh Sanjay Marathe ID No. 2014B3PS592P

## LIST OF ANNEXURES

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### DETAILS OF ADMISSIONS MADE DURING THE YEAR 2015

**(A) Second Semester 2014-2015**

**Doctoral Programmes**

Ph.D.	31 (13)
<b>Total</b>	<b>31 (13)</b>

**(B) First Semester 2015-2016**

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.(Hons.)			
Chemical	72(12)	353	315
Civil	73(03)	345	312
Computer Science	119(14)	419	378
EEE	97(05)	395	362
Electronics & Instrumentation	66(09)	378	340
Mechanical	91 (00)	403	345
Manufacturing	34(01)	341	308
B. Pharm. (Hons.)	52(24)	298	214
	<b>604(68)</b>		
<b><u>Group B</u></b>			
M.Sc.(Hons.)			
Biological Sciences	51(08)	325	299
Chemistry	57(14)	325	307
Economics	67(07)	362	326
Mathematics	58(08)	358	324
Physics	52(07)	374	319
	<b>285(44)</b>		
<b><u>Group C</u></b>			
M.Sc.(Tech.)			
Gen. Studies	10(04)		
	<b>10(04)</b>		
<b>Total :</b>	<b>899(116)</b>		

**Note:**

- (i) The above list consists of 27(8) students who are admitted under 'International students admissions' at Hyderabad.
- (ii) The above list consists of 22 students who are First rank holders from 16 different central/ state boards admitted under 'direct admission of board toppers' scheme.
- (iii) The above numbers also include 29 admissions of staff children and of BET school students, made under special dispensation consisting of 3 in Bio Sciences, 4 in Chemistry, 4 in Economics, 5 in Mathematics, 3 in Physics and 10 in General Studies.

## 2. Higher Degree Programmes :

M.E.

Biotechnology	11(08)
Chemical Engineering	19(13)
Civil (Structural Engineering)	11(02)
Civil (Transportation Engineering)	11(0)
Civil (Infrastructure Engineering)	6(03)
Computer Science	24(05)
Communication Engineering	10(01)
Design Engineering	13( 0)
Embedded Systems	11(02)
Manufacturing Systems Engineering	11( 0 )
Mechanical Engineering	15(01)
Microelectronics	14(03)
Software Systems	20(09)
MBA	70(00)
M.Pharm.	9(06)
M.Pharm. (Pharmaceutics)	16(06)
M.Pharm. (Pharmaceutical Chemistry)	4(02)
<b>Total</b>	<b>275(61)</b>

## 3. Doctoral Programmes :

Ph.D. 21(04)

## SUMMARY

	II Semester 2014-2015	I Semester 2015-2016
<b>Programmes</b>		
Integrated First Degree Programmes	-	899(116)
Higher Degree Programmes	-	275( 61)
Ph.D.	31(13)	21( 04)
<b>Total</b>	<b>31(13)</b>	<b>1195(181)</b>

**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN  
THE ACADEMIC YEAR 2015-2016 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES  
UNDER VARIOUS PRIORITIES**

**FIRST PRIORITY**

**(i) Pilani Campus:**

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

Programmes* From ↓ To →	A1	A2	A3	A4	A5	A7	A8	AB	Total
B1	12	10	7	7	-	9	5	5	55
B2	6	6	12	4	-	13	7	3	51
B3	9	6	11	9	-	12	9	1	57
B4	4	7	12	8	-	13	5	6	55
B5	5	4	12	16	-	13	4	3	57
<b>Total</b>	36	33	54	44	-	60	30	18	275

**OTHER PRIORITIES**

Programmes* From ↓ To →	A7	B1	Total
A1		1	1
A3	1		1
<b>Total</b>	1	1	2

**NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2015-2016**

Programme	Year of Admission						Total
	2010 and earlier	2011	2012	2013	2014	2015	
<b>I. On Campus Programmes</b>							
A. Integrated First Degree Programmes							
<b>B.E.(Hons.)</b>							
Chemical	0(0)	0(0)	51(11)	62(7)	68(10)	72(12)	253(40)
Civil	0(0)	2(0)	58(7)	57(6)	62(3)	73(3)	252(19)
E.E.E.	0(0)	0(0)	89(14)	98(16)	99(7)	98(6)	384(43)
Mechanical	0(0)	3(0)	79(1)	85(2)	84(1)	91(0)	342(4)
Computer Science	0(0)	3(1)	92(16)	133(15)	128(13)	119(14)	475(59)
Electronics & Instrumentation	0(0)	1(0)	60(11)	67(13)	62(8)	66(9)	256(41)
Manufacturing Engg.	0(0)	0(0)	29(5)	35(6)	40(1)	35(1)	139(13)
<b>B.Pharm.(Hons.)</b>	0(0)	8(2)	25(5)	10(0)	41(19)	53(25)	137(51)
<b>M.Sc.(Hons.)</b>							
Bio. Sciences	1(0)	38(10)	48(15)	48(11)	56(12)	54(10)	245(58)
Chemistry	2(0)	38(7)	42(9)	45(6)	51(13)	56(13)	234(48)
Economics	0(0)	46(8)	53(10)	64(11)	69(11)	70(7)	302(47)
Mathematics	0(0)	43(7)	51(12)	52(12)	63(7)	61(8)	270(46)
Physics	0(0)	42(6)	49(7)	46(9)	60(9)	55(8)	252(39)
<b>M.Sc.(Tech.)</b>							
Information Systems	0(0)	2(0)	60(10)	0(0)	0(0)	0(0)	62(10)
Gen. Studies	0(0)	8(4)	20(10)	16(5)	13(4)	11(4)	68(27)
Finance	0(0)	1(1)	17(6)	0(0)	0(0)	0(0)	18(7)
<b>Sub Total</b>	<b>3(0)</b>	<b>235(46)</b>	<b>823(149)</b>	<b>818(119)</b>	<b>896(118)</b>	<b>914(120)</b>	<b>3689(552)</b>

**Note:** The numbers in brackets indicate number of female students

Programme	Year of Admission						Total
	2010 and earlier	2011	2012	2013	2014	2015	
<b>B. Higher Degree Programmes</b>							
<b>M.E.</b>							
Chemical	0(0)	0(0)	0(0)	1(0)	24(12)	19(13)	44(25)
Computer Science	1(0)	0(0)	1(0)	0(0)	23(13)	24(5)	49(18)
Mechanical	0(0)	0(0)	0(0)	0(0)	14(1)	16(1)	30(2)
Software Systems	0(0)	0(0)	0(0)	2(1)	24(5)	24(10)	50(16)
Microelectronics	3(1)	0(0)	0(0)	0(0)	13(2)	15(3)	31(6)
Communication Engineering	0(0)	0(0)	0(0)	0(0)	12(3)	11(2)	23(5)
Biotechnology	0(0)	0(0)	0(0)	1(0)	14(11)	12(9)	27(20)
Embedded Systems	0(0)	0(0)	0(0)	0(0)	9(3)	12(2)	21(5)
Design Engineering	1(0)	0(0)	0(0)	0(0)	7(0)	13(0)	21(0)
Manufacturing Sys. Engg	0(0)	0(0)	0(0)	0(0)	7(0)	11(0)	18(0)
Civil with Specialisation in Transportation Engg.	0(0)	0(0)	0(0)	0(0)	8(0)	11(0)	19(0)
Civil with Specialisation in Structural Engg.	1(0)	1(0)	0(0)	0(0)	11(3)	11(2)	24(5)
Civil with Specialisation in Infrastructural Systems	0(0)	0(0)	0(0)	0(0)	10(3)	6(3)	16(6)
<b>Master of Business Administration</b>	0(0)	0(0)	0(0)	0(0)	59(17)	70(20)	129(37)
<b>M.Pharm</b>	0(0)	0(0)	0(0)	0(0)	4(2)	9(6)	13(8)
<b>M.Pharm.(with Specializations in Pharmaceutics Chemistry)</b>	0(0)	0(0)	0(0)	0(0)	4(2)	4(2)	8(4)
<b>M.Pharm.(with Specializations in Pharmaceutics)</b>	0(0)	0(0)	0(0)	0(0)	14(4)	16(6)	30(10)
<b>Sub Total</b>	6(1)	1(0)	1(0)	4(1)	257(81)	284(84)	553(167)
<b>C. Ph.D.</b>	102(27)	53(25)	50(26)	76(31)	45(20)	24(6)	353(135)
<b>Total (On Campus)</b>	<b>111(28)</b>	<b>289(71)</b>	<b>874(175)</b>	<b>898(151)</b>	<b>1198(219)</b>	<b>1222(210)</b>	<b>4595(854)</b>

#### SUMMARY

	On-Campus			
	Engg.	Sc.	Hum.	Total
First Degree	2181(236)	1138(242)	370(74)	3689(552)
Higher Degree	373(108)	51(22)	129(37)	553(167)
<b>Total</b>	<b>2554(344)</b>	<b>1189(264)</b>	<b>499(111)</b>	<b>4242(719)</b>
Ph.D.	-	-	-	353(135)
<b>Grand Total</b>				<b>4595(854)</b>

**Note:** The numbers in brackets indicate number of female students.

**STATEMENT OF DEGREES AWARDED**

Degrees	No. of degrees			
	76 <sup>th</sup> Award (04.05.2015)		77 <sup>th</sup> Award (17.07.2015)	
(i) On-campus Programmes				
A. Integrated First Degrees				
<b>B.E.(Hons.)</b>				
Chemical	1 (0)		18 (5)	
Chemical (with PS)	1 (0)		66 (10)	
Civil	3 (0)		13 (2)	
Civil (with PS)	1 (1)		68 (11)	
Computer Science	1 (0)		16 (4)	
Computer Science (with PS)	3 (0)		112 (23)	
EEE	1 (1)		21 (1)	
EEE (with PS)	2 (0)		104 (13)	
Electronics & Instrumentation	1 (0)		7 (0)	
Electronics & Instrumentation (with PS)	1 (1)		70 (14)	
Electronics & Communication Engineering	0 (0)		0 (0)	
Electronics & Communication Engineering (with PS)	1 (0)		0 (0)	
Mechanical	1 (0)		31 (0)	
Mechanical (with PS)	1 (0)		75 (8)	
Manufacturing Engg.	2 (0)		7 (0)	
Manufacturing Engg. (with PS)	0 (0)	20 (3)	37 (4)	645 (95)
<b>B.Pharm.(Hons.)</b>				
<b>B.Pharm.(Hons.)(with Practice School)</b>	1 (0)		18 (9)	
<b>M.Sc.(Hons)</b>				
Bio. Sciences	2 (2)		32 (10)	
Bio. Sciences (with PS)	2 (1)		15 (3)	
Chemistry	1 (0)		30 (6)	
Chemistry (with PS)	1 (0)		10 (6)	
Economics	1 (0)		28 (5)	
Economics (with PS)	0 (0)		24 (8)	
Mathematics	2 (0)		38 (7)	
Mathematics (with PS)	3 (0)		9 (4)	
Physics	1 (0)		42 (4)	
Physics (with PS)	0 (0)	13 (3)	12(1)	240 (54)
<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)	1 (0)		28 (8)	
General Studies	6 (1)		4 (1)	
General Studies(with PS)	0 (0)		11 (6)	
Information Systems	1 (0)		11 (2)	
Information Systems (with PS)	0 (0)	8 (1)	61(16)	115 (33)
<b>Sub Total</b>		<b>44 (8)</b>		<b>1024 (191)</b>

**Note:** The numbers in brackets indicate number of female students.

Degrees	No. of degrees	
	76 <sup>th</sup> Award (04.05.2015)	77 <sup>th</sup> Award (17.07.2015)
<b>B. Higher Degrees</b>		
<b>M.E.</b>		
Civil with specialisation in Structural Engg.	0 (0)	5 (2)
Civil with specialisation in I Structural Engg. (with PS)	0 (0)	9 (2)
Civil with specialisation in Infrastructure Engg.	1 (0)	5 (3)
Civil with specialisation in Infrastructure Engg. (with PS)	0 (0)	6 (2)
Civil with specialisation in Transportation Engg.	0 (0)	4 (2)
Civil with specialisation in Transportation Engg. (with PS)	0 (0)	6 (1)
Chemical with specialisation in Petroleum Engg.	0 (0)	6 (2)
Chemical with specialisation in Petroleum Engg. (with PS)	0 (0)	0 (0)
Chemical	0 (0)	8 (3)
Chemical (with PS)	0 (0)	4 (0)
Computer Science	0 (0)	6 (1)
Computer Science (with PS)	0 (0)	13 (2)
Communication Engineering	0 (0)	1 (0)
Communication Engineering (with PS)	1 (0)	15 (2)
Embedded Systems	0 (0)	0 (0)
Embedded Systems (with PS)	0 (0)	6 (1)
Master of Business Administration	0 (0)	1 (1)
Master of Business Administration (with PS)	0 (0)	49 (18)
Master of Public Health	0 (0)	0 (0)
Master of Public Health (with PS)	0 (0)	0 (0)
Mechanical	0 (0)	8 (0)
Mechanical (with PS)	0 (0)	3 (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)	3 (1)
Software Systems (with PS)	1 (0)	25 (3)
Microelectronics	0 (0)	1 (0)
Microelectronics (with PS)	0 (0)	11 (4)
Biotechnology	0 (0)	7 (3)
Biotechnology (with PS)	0 (0)	8 (6)
Manufacturing Systems Engg.	1 (0)	1 (1)
Manufacturing Systems Engg. (with PS)	0 (0)	8 (0)
Design Engineering	0 (0)	4 (0)
Design Engineering (with PS)	0 (0)	5 (0)
<b>M.Pharm.</b>	0 (0)	2 (1)
<b>M.Pharm.(with PS)</b>	0 (0)	7 (2)
M.Pharm.(with specialization in Pharmaceutics)	0 (0)	1 (0)
M.Pharm.(with specialization in Pharmaceutics) (with PS)	0 (0)	13 (6)
M.Pharm.(with specialization in Pharmaceutics Chemistry)	0 (0)	0 (0)
M.Pharm.(with specialization in Pharmaceutics Chemistry) (with PS)	0 (0)	6 (2)
<b>Sub Total</b>	<b>4 (0)</b>	<b>257 (71)</b>
C. Ph.D.	17 (3)	20 (4)
<b>Total (On Campus)</b>	<b>65(11)</b>	<b>1301 (266)</b>

**Note:** The numbers in brackets indicate number of female students.

## SUMMARY

(i) On-Campus Programmes

Discipline	Engineering			Science			Humanities			Total		
	76 <sup>th</sup>	77 <sup>th</sup>	Total	76 <sup>th</sup>	77 <sup>th</sup>	Total	76 <sup>th</sup>	77 <sup>th</sup>	Total	76 <sup>th</sup>	77 <sup>th</sup>	Total
<b>Integrated First Degree</b>	22(3)	745(121)	767(124)	15(4)	212(50)	227(54)	7(1)	67(20)	74(21)	44(8)	1024(191)	1068(199)
<b>Higher Degrees</b>	4(0)	178(41)	182(4)	-	29(11)	29(11)	-	50(19)	50(19)	4(0)	257(71)	261(71)
<b>Ph.D.</b>	-	-	-	-	-	-	-	-	-	17(3)	20(4)	37(7)
<i>Total</i>	<b>26(3)</b>	<b>923(162)</b>	<b>949(128)</b>	<b>15(4)</b>	<b>241(61)</b>	<b>256(65)</b>	<b>7(1)</b>	<b>117(39)</b>	<b>124(40)</b>	<b>65(11)</b>	<b>1301(266)</b>	<b>1366(277)</b>

**Note:** The numbers in brackets indicate number of female students.



**LIST OF ORGANIZATIONS WHICH CONDUCTED CAMPUS INTERVIEWS**

S.No.	Name of Organization	Number of students		Discipline
		Interviewed	Selected	
1.	Aditya Birla Science & Technology	8	2	ME Chemical
2.	Adobe	13	4	CS, IS
3.	Airtel	6	3	EEE
4.	Amazon Area Manager	9	2	All BE
5.	Amazon IT	21	9	All BE
6.	American Express	3	1	All UG
7.	Anand Automotive	7	3	Mech
8.	Arvind Internet	6	2	EEE
9.	Avaya	10	5	ME
10.	Axis Bank	5	2	All Dual
11.	Axtria Consulting	31	18	AI BE/ME
12.	Bain Capability Centre	11	5	All
13.	Bank of America	9	5	All
14.	Blue Jeans Network	3	1	BE Mech/EEE/Enl
15.	Bosch Limited	8	2	BE Mech/EEE/Enl
16.	Boston Consulting Group	4	2	All BE
17.	CA Technologies	3	2	BE EEE/Enl
18.	Capgemini	19	10	All
19.	Capillary Tech	3	1	CS/IS
20.	CATech	7	3	EEE/Enl
21.	Chalk Studio (OC)	3	1	UG/Circuit
22.	CISCO	12	7	All BE/ME
23.	Cisco - Engineering	13	6	All BE/ME
24.	CISCO- NEC	6	3	All BE/ME
25.	CITI Corp	35	23	CS/IS/EEE/Enl
26.	Clicklabs IT	11	3	CS/IS
27.	Codigami	8	4	CS/EEE
28.	Cognizant	29	10	MBA
29.	CommonFloor	5	3	ALL BE
30.	Coupondunia	6	1	BE/ME CS/IS
31.	Credit Suisse- ORM	27	16	All
32.	CVENT	3	1	All Circuit
33.	Cypress	21	9	All ME
34.	DE Shaw	8	3	CS/IS
35.	Dell	13	7	All
36.	Diamond Consulting	6	3	All BE
37.	Direct i	4	1	CS/IS
38.	Dr. Reddy's Laboratories	9	3	BE Chem, M Pharm (Gen. & Pharmaceuticals)
39.	Earnst & Young (OC)	3	1	MBA
40.	Eaton Technologies (OC)	4	1	ME Embedded, Microelectronics, Mech., Mfg., Chem., SS
41.	eBay / Paypal	21	6	All BE/ME
42.	Edelweiss	17	5	All
43.	Edge Verve	4	2	CS/IS
44.	Edge Verve (Infosys)	5	2	CS/IS
45.	Emaar MGF	9	4	BE Civil
46.	EPIC Systems	7	1	All BE/ME
47.	Ericsson	5	2	EEE/Enl

S.No.	Name of Organization	Number of students		Discipline
		Interviewed	Selected	
48.	Ernst & Young	7	3	All BE
49.	Essex Lake Group	8	2	All BE
50.	Evalueserve	29	14	All BE/ME
51.	Exicom	8	3	BE/ME EEE,E&I,CE
52.	EXL Services	18	10	All BE
53.	ExxonMobil	7	2	Chem
54.	Fair Issac (FICO)	8	3	CS/IS/EEE/EnI
55.	Feedback Infra (OC)	3	2	ME Civil
56.	Fidelity	5	2	Phy/Chem/Math/Bio
57.	Flipkart	39	22	CS/IS
58.	Funtoot	9	4	All BE
59.	Futures First	7	3	All BE/ME/MBA
60.	Goldman Sachs	14	6	CS/IS
61.	GOOGLE India	4	1	CS/IS
62.	Google Mountview	6	2	CS/IS
63.	Grasim Industries	3	1	BE Chemical
64.	Grey Orange Robotics	15	9	All BE
65.	Grey Orange Robotics Analytics	7	3	All BE
66.	Grey Orange Robotics IT	4	1	All BE/ME Circuit
67.	Grey Orange Server Role	7	2	All BE
68.	GSFC	16	11	BE Chem/Mech
69.	Gwynniebee	9	2	All
70.	Harman	17	6	BE/ME EEE,E&I,CE, CS
71.	HERO Motocorp	8	3	BE Mech, Mfg
72.	Hestabit Technologies	5	2	All BE
73.	HILTI	7	3	All BE/MBA
74.	Honda 2W	11	4	BE Mech/Mfg.
75.	Hospira	13	4	ME Che/Mech
76.	Housing SD	8	5	All
77.	HP R&D	4	2	CS/IS
78.	Huawei	7	5	BE EEE,E&I, ME Comm
79.	IBM R&D	4	2	CS/IS
80.	ICICI Bank	8	4	All BE
81.	Idea Cellular	5	2	All
82.	IMS Health	15	7	ME Biotech/Che/M.Pharm
83.	In Mobi	7	3	CS/IS
84.	Indus Insights	9	3	All BE
85.	JMITRA	4	1	MPharm, Pharma. Chem.
86.	Johnson & Johnson (OC)	6	1	MBA
87.	JP Morgan Services	9	3	All
88.	JPMC	13	4	All
89.	L&T ECC	3	1	BE Civil/EEE/EnI, ME Civil/Struc.
90.	Latentview	24	10	All
91.	Lea Associates (CW)	6	4	ME Civil
92.	Lindstrom	3	1	MBA
93.	Linkedin	5	3	CS/IS
94.	Mafoi Analytics (OC)	7	1	MBA
95.	Maruti AIGET (OC)	9	3	Mech.
96.	McKinsey & Co	2	1	All BE
97.	Mehta Group	5	2	BE Manu/EnI
98.	Michelin	3	1	UG/PG Mech, Chem
99.	Microsoft IDC	5	2	CS/IS
100.	Microsoft Redmond	6	2	CS/IS

S.No.	Name of Organization	Number of students		Discipline
		Interviewed	Selected	
101.	Microsoft SMSG	6	2	CS/IS
102.	MU SIGMA	11	7	All BE
103.	My SmartPrice	3	1	All
104.	Myntra	13	9	All
105.	Nagarro	6	4	All BE-ME Circuit
106.	NBC Bearings	5	3	Mech
107.	Nestle	4	1	BE Mech/EEE
108.	National Instruments R&D	3	1	ME Circuit
109.	NirSan Health	6	2	All
110.	Novartis	9	5	All BE
111.	Nvidia	7	4	EEE/EnI
112.	OFSS	3	1	All BE
113.	Opera Consulting	4	2	CS/IS
114.	Opera Solutions	5	2	CS/IS
115.	Oracle	39	30	All BE
116.	Orbees	7	3	All BE
117.	Orient Electric	3	2	BE/ME EEE/Mech.
118.	Orient Electric (CW)	3	1	BE/ME Mech, Electrical and allied
119.	OTIS - UTC	11	7	BE Mech, Manuf, Elect
120.	Pantaloons	3	1	MBA
121.	Persistent	5	2	All BE/ME
122.	Phyzok	6	2	All
123.	PI Industries	5	4	Chem.
124.	Practo	14	10	All
125.	PwC	9	6	All
126.	Qualcomm	15	9	All BE/ME
127.	Quikr	3	1	CS/IS
128.	Raja Software	4	1	BE CS
129.	Rapid BizApps	3	2	All BE
130.	Reckit	5	1	BE Che/BPharm/Chem
131.	RIL	2	1	All BE
132.	S&P Capital IQ (OC)	5	2	BE-ME CS/IS/SS, MBA
133.	Sabre	3	1	All BE
134.	Samsung R&D	20	14	CS/IS
135.	Sandisk	7	4	EEE/CS/IS
136.	SAP	9	4	All BE, ME SS/CS
137.	Schlumberger	5	3	Chem, Mech
138.	Sentiss Pharma	4	2	Chem, Mech
139.	Service Now	3	1	BE CS/EEE
140.	Shell (OC)	7	3	BE/ME Mech/Chem
141.	Smart Analyst	10	7	MPharm
142.	Smartrak	3	1	ME Embedded/EEE
143.	Snapdeal Analytics	15	11	All BE
144.	Snapdeal IT	20	14	All BE
145.	Sokrati BA	9	4	All BE
146.	Sprinkler	17	13	BE/ME CS/IS/SS
147.	Sprinkler	5	3	MBA
148.	Stayzilla	16	12	All BE
149.	Strand Life Sciences	4	1	CS/IS
150.	Synopsis	2	1	BE CS/EEE
151.	Systango	5	3	All BE-ME Circuit, MBA
152.	Tata Advanced Systems	7	4	BE Mech/Mfg/(DD)
153.	Tata Communications	4	2	All BE

S.No.	Name of Organization	Number of students		Discipline
		Interviewed	Selected	
154.	Tata Consulting Engineers	17	12	M.E. Chem., Petro., Mech., Design, Struc, Infra
155.	TATA HOUSING	3	2	BE Civil
156.	Tata Motors	13	9	BE Mech/Mfg.
157.	Tata Steel	3	1	Mech/Chem
158.	Tata Technologies	9	6	ME and BE Mech.
159.	TCS IT	56	45	All UG/PG Engg
160.	TCS IT	15	5	MBA
161.	Tejas Networks	7	3	EEE/Enl
162.	Texas Instruments	5	1	EEE
163.	Thermax	7	2	Mech
164.	Thyssen Krupp	6	3	Mech, EI,Ch
165.	Tiny Owl	5	2	CS/IS
166.	Tolexo	5	3	MBA
167.	Tonbo	6	2	All
168.	Total Environment	9	5	All BE
169.	Total Environment Builders (CW)	5	2	BE Civil
170.	Tresvista Finiserv	10	6	All
171.	UHG	4	2	CS/IS
172.	UOP Honeywell	3	1	Chem
173.	UTC Carrier	5	2	Mech.
174.	Value Edge	11	4	All
175.	Vidyarthi Academy	20	9	All BE
176.	VMware	7	4	All
177.	Vodafone	14	8	All BE xept Pharma
178.	Walmart	17	7	All BE
179.	Wipro Star	14	6	All
180.	Wipro Technologies	9	4	CS/IS
181.	Zinnov	15	8	All
182.	ZS Associates	35	23	All BE
		1688	837	

### Summary

Total No. of companies:	182
Total No. of students interviewed:	1688
Total No. of appointments offered:	837

### 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 2015**

**Second Semester 2014-2015 (January 2014 to May 2014) and First Semester 2015-2016(August 2015 to December 2015)**

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
1	SHUBHAM GUPTA	Avik Chattopadhyay	Simulation of multiple quantum well solar cell
2	SHUBHAM MAURYA	Satish K Dubey	Design of thermoelectric device to harness waste heat energy.
3	SHUBHAM RATHI	Srinivas Kota	Designing a means of transport for the blind and paralyzed.
4	SHUBHI AGARWAL	Vineet Kumar	Digital hardware design for image processing applications
5	SHUKLA PAWAS SANDESH	Rakesh Choubisa	Influence of empty spheres on multiple scattering calculations
6	SIDDHANT PUNDIR	P Srinivasan	Designing of triangular trihedral corner reflectors
7	SIDDHARTH JHAWAR	Ak Sarkar	Comparing the effects on safety and discomfort provided by different designs of speed breakers. Also find the optimum design for the same.
8	SOUMYA SUCHARITA	Mukesh Kr Rohil	Automatic face recognition in group photographs
9	SOURADEEP BHATTACHARYA	Kaushar Vaidya	Study of embedded clusters using 2mass
10	SOURADEEP BHATTACHARYA	Parikshit K Singh	Development of intelligent algorithm using computational intelligence techniques for detection of adulteration in food and beverage items
11	SRINIVAAS.M.B	Ravi Inder Singh	Modeling of automatic gear transmission in maple sim
12	SRISHTI GUPTA	Pratik N Sheth	Modeling and simulation of aqueous phase reforming of biomass
13	SUHANI JAIN	Imlak N Shaik	Currency derivatives and exchange rates : the impact of us fomc statement
14	SUNIL KUMAR	Gajendra S Chauhan	Developing audio-video teaching modules
15	SWAMIL MAHAJAN	Sachi Singh	Design of gan based high brightness led using simulated software.
16	SWAPNIL KHANDELWAL	Shamsher B Singh	Analysis and design of frp laminated beams(t and l beams)
17	SYED ADEEL ZAKI	Dipendu Bhunia	Investigation of the effect of various parameters on the behavior of coupling beam
18	SYED ADEEL ZAKI	Ravi Kant Mittal	Design of earthquake resistant structure
19	TANAY BRIJESH DIXIT	Udayan Chanda	Implementation of machine learning algorithms for the analysis of securities and portfolio optimization
20	TANAYVEER SINGH BHATIA	Srinivas Kota	Design and manufacturing of a phone accessory for document scanning
21	TIRODKAR SUYASH ANANT	Sangita Yadav	Analytics tool for educational institutions and its students
22	TOSHANIWAL MEGHESH SUSHIL	Ms Soni	Incorporating solar energy into a mainstream car
23	TUSHAR TYAGI	P Srinivasan	Natural convection from a cluster of heated horizontal and vertical cylinders
24	TUSHAR TYAGI	Rajesh P Mishra	Study and use of design of experiment (taguchi method and response surface methodology) to solve a sample real world problem and compare results
25	UDIT SHANKAR DASGUPTA	Shibani K Jha	Cfd analysis for fingering of density dependent contaminant transport and groundwater flow
26	UTSAV TIWARY	Shivi Agarwal	Application of fuzzy logic in information retrieval
27	UTTARAN BASAK	Hk Mohanta	Design of a urea production plant

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
28	V V SAI PRANEETH	G Meenakshi Sundaram	Design of ac to dc converter
29	V.ANIERUDH	Rajesh P Mishra	Implementation of toyota production system in the indian healthcare system
30	V.V.SWECHCHA MAYUKHA	Suresh Gupta	Modelling and simulation of different chemical processes
31	VAIBHAV	Shyam Sundar Yadav	Numerical simulation of flow through a wind tunnel diffuser section.
32	VAIBHAV GARG	Anu Gupta	Design and exploration of common mode feedback circuits
33	VAIBHAV KASHYAP	Ashish Mishra	Stock prediction using neural networks
34	VAIBHAV VERMA	Mahesh Angira	Design of ohmic switch for telecommunication using rf mems
35	VARUN JAIN	Ajay Kumar Pani	Modelling of a sulphur recovery unit for output quality prediction using support vector regression
36	VARUN JAIN	P Srinivasan	Determining various parameters and their relationship with respect to the heat affected zone in welding
37	VARUN RAJEEV M	Sk Hafizul Islam	Authentication in wireless sensor networks
38	VATSAL PANWAR	Kaushar Vaidya	Study of embedded clusters using 2mass
39	VED PRAKASH	Virendra Singh Nirban	Software tool for students information management system.
40	VEDANT RAJENDRA MAHULKAR	Parikshit K Singh	Development of intelligent algorithm using computational intelligence techniques for detection of adulteration in food and beverage items
41	VEDANT RAJENDRA MAHULKAR	Rakesh Choubisa	Use of chaos in cryptography
42	VIKAS KATARIA	Gajendra S Chauhan	Developing audio-video teaching modules
43	VIKAS KUSHWAHA	Hk Mohanta	Design of a feed-forward controller for a cstr using neural networks.
44	VIKHYAT KALRA	Satish K Dubey	Design of a thermoelectric device to harness waste heat energy
45	VIPUL	Rajesh Mehrotra	Analysis of wbox region in arabidopsis thaliana
46	VIPUL ARORA	Ak Sarkar	Smart city design .
47	VIPUL ARORA	Dipendu Bhunia	Integrating structural analysis with building information modelling
48	VISHAL	Dipendu Bhunia	Analysis and design of multi-storey residential building
49	VISHAL TRIPATHI	Pratik N Sheth	Modeling and simulation of dae (distributed activation energy) based biomass pyrolysis model.
50	Y SOWMYA	Shivi Agarwal	Designing of gui for fuzzy calculator implementing fuzzy arithmetic
51	YASHODHARA	Gajendra S Chauhan	Increasing awareness among indian citizens about the current pace of environmental destruction and the urgent need for saving environment.
52	PRAVEEN BANSAL	Manoj Kumar	Study and comparison of various codes of steel structures specially wind and earthquake loads
53	PRINCE SINGHAL	Arvind Kumar Sharma	L-s fluidized bed: a systematic analysis.
54	PRITHU MITASH	Murali Palla	Fatigue modelling in metals
55	PURUJIT SINGH CHAUHAN	Parikshit K Singh	Design of embedded instrumentation systems for studying soil nutrients
56	PUSHPAK HOTWANI	Ms Dasgupta	Design of high pressure ejector
57	PVG SAI SUBRAHMANYAM	Rajneesh Kumar	Design of next generation pv modules
58	R ABHISHEK SHANKAR	S Gurunaranan	Designing a fault tolerant circuit on an architecture based on that of fpga and fpa a using the concept of evolvable hardware
59	R.S.VEEARRAGHAVAN	Anu Gupta	Design of class ab amplifiers
60	RACHIT GOEL	Amit Jain	Sensitivity analysis of relative gain array (rga) for decentralized control of chemical processes
61	RAJAT ARORA	Navneet Goyal	Designing of domain specific language for data mining framework (association rules and preprocessing)

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
62	RAJAT JAIN	Arun Kumar Vaish	Emperical verification of black-scholes model
63	RAJAT SHARMA	Murali Palla	Modelling and simulation of crack propagation in materials
64	RAJATH S	Tapomoy G Sarkar	Study of periodically forced 2d quantum mechanical systems using imaginary time propagation
65	RAKSHIT CHAUDHARY	Shyam Sundar Yadav	Numerical simulation of flow through a wind tunnel diffuser section.
66	RAMYA MITTAL	Shamsher B Singh	Analysis and design of frp laminated rectangular beams
67	RAVI GUPTA	Pratik N Sheth	Modeling and simulation of biomass gasifier using aspen plus
68	RICHA SHARMA	Shivi Agarwal	Designing a gui for fuzzy calculation implementing fuzzy arithmetic
69	ROHAN BADLANI	Poonam Goyal	Parallelization of subspace clustering algorithms
70	ROHAN VERMA	Dinesh Yadav	Performance design for site-specific theatre
71	ROHIN ARORA	Rahul Singhal	Design of polygon patch antennas
72	ROHIT AGARWAL	Raman Sharma	Design of a circulating fluidised bed for carbon capture using software packages like matlab or aspen plus.
73	ROHIT GOYAL	Abhishek Mishra	Performance evaluation of task duplication based scheduling
74	ROHIT UPRETI	Sachi Singh	Design of gan based high brightness led using simuled software
75	ROMANCH ARYA	Kuldip Singh Sangwan	Multi-objective optimization of supply chin network
76	ROSHNI CHHABRA	Hk Mohanta	Design of a urea production plant.
77	ROUNAQ DHAR	P Srinivasan	Determining various parameters and their relationship with respect to the heat affected zone in welding
78	RUPESH KUMAR GUPTA	Satish K Dubey	Thermodynamic modeling of trans-critical co2 (r-744) refrigeration system with ejector.
79	S ASHWATH BALAJE	Bhupendra K Sharma	Magneto hydrodynamic analysis of blood flow considering rotation of micro-particles of blood
80	S. RAHUL	P Srinivasan	Study and simulation of friction stir welding and heat affected zone
81	SAAHIL KHETAN	Krishna Muniyoor	Feature set selection for predicting commodity prices
82	SACHIN SAXENA	Rajesh Mehrotra	Genome wide frequency analysis of Ire sequences in arabidopsis thaliana
83	SAHAJ DASOT	Rajesh P Mishra	Designing the green supply chain strategy for a manufacturing company
84	SAHIL DUMIR	Udayan Chanda	Dynamic pricing in a duopolistic market - decision making and pricing strategies using dynamic games
85	SAI VARUN ADDANKI	Sangita Yadav	Price evaluation of options using binomial tree pricing model
86	SAKET SHARMA	Dinesh Yadav	Performance design for pq15
87	SAKSHI BHARGAVA	Chandra Shekhar	Study of nature based optimization technique
88	SALONI CHANDAK	Geetilaxmi Mohapatra	Globalizations impact on economic growth, poverty and income distribution in indian economy
89	SANCHIT BAJAJ	Shamsher B Singh	Seismic resistant design of buildings
90	SANCHIT SAMNANI	Shivi Agarwal	Fuzzy modeling and control for autonomous underwater vehicle
91	SANJEED MOHAMMED H SCHAMNAD	Shamik Chakraborty	Quantum chemical calculations of weak non-covalent interactions
92	SANKET DEY	Hk Mohanta	Design of phosphate fertilizer manufacturing plant
93	SANUJ BHATIA	Surekha Bhanot	Artificial intelligence techniques in pattern recognition
94	SARTHAK TIWARI	Hk Mohanta	Modelling and simulation of the fcc ( fluidized catalytic cracking ) process
95	SARVAGYA BAHADUR	Manoj Kumar	Study and analysis of blast loads on bridges

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
96	SATCHIT VARMA	K S Raju	Design of a mechanism for a wet- and dry-cleaning robot
97	SATYAJIT MOHANTY	Lavika Goel	Hybridisation of gravitational search algorithm(gsa) and biogeography based optimization(bbo).
98	SATYAM JAIN	Vinita Tiwari	Recent trends in terahertz technology
99	SENJALIYA BHAVIN RAJENDRABHAI	Mahesh Angira	Design of multiple throw switch for tele communication application using rf mems technology.
100	SHARTHAK MISHRA	Lavika Goel	Application of biogeography based optimization in grid scheduling.
101	SHASHANK M	Sangita Yadav	Analytics tool for educational institutions and its students
102	SHAURYA MALHOTRA	Navin Singh	Stochastic solution of langevin equation
103	SHIKHAR KEJRIWAL	Arun Kumar Vaish	Verification of black sholes model options valuation of chemical industries traded in india
104	SHIKHIN GARG	Ashish Runthala	Development of an improved protein model assessment scheme
105	SHIVAM BAJPAI	G Muthukumar	Simulation of earthquake resistant design using staad pro
106	SHIVAM BAJPAI	Manoj Kumar	Study and comparison of various codes on steel structures specially wind and earthquake loads
107	SHIVAM BANSAL	Dipendu Bhunia	Integrating structural analysis with building information modelling
108	SHIVAM PADHA	Ravi Inder Singh	Computational analysis of intake manifold designs for multi-cylinder diesel engine to be used in commercial vehicles, using cfd analysis in ansys.
109	SHIVANGI SINGH	Rajdeep Chowdhury	Chips for detection of cancer cells
110	SHIVIN SRIVASTAVA	Lavika Goel	Optimizing the np hard problem of choosing k clusters using swarm intelligence(pso) in k-means++ initialization.
111	SHRADDHA PANWAR	Nv Muralidhar Rao	Analyzing the relationship between corporate governance and corporate performance for indias infrastructure sector.
112	SHREYAS P DIXIT	Hari Om Bansal	Design of fuzzy controller to optimize efficiency of hybrid electric vehicles.
113	SHREYAS SANGHVI	Dinesh Yadav	Performance design for pq15
114	SHRIKHANDE SIDDHESH SATISH	Pradyumn Chaturvedi	Design, simulation and implementation of single phase active power filter
115	SHUBHAM GOYAL	K S Raju	Hardware implementation of sobel operator
116	LOHIA NIKESH SURESH	Ms Soni	Design of novel solar powered radio controlled vehicle
117	MADHAVPREET SINGH SAINI	K K Gupta	Modelling and simulation of autonomous underwater vehicles.
118	MAHESH AGRAWAL	Pratik N Sheth	Modelling and simulation of hydrogen rich gas from coal using aspen plus
119	MANISHA MATHUR	Vineet Kumar	Fpga based hardware implementation of iris segmentation method used in iris bio-metrics
120	MANMEET SINGH	K Hari Babu	Performance evaluation of web servers and remote desktop applications with software defined networking
121	MANMEET SINGH	K Hari Babu	Tuning applications using network feedback from software defined networking
122	MANSI NARANG	Prabhat Nath Jha	Study and analysis of cellulose producing genes in micro organisms.
123	MANSI PANT	Hk Mohanta	Design of phosphate fertilizer manufacturing plant.
124	MAURYA PANKAJKUMAR HOUSLAPRASAD	Srinivas Kota	Design and manufacturing of a phone accessory for document scanning
125	MAYANK GAUTAM	Srinivas Kota	Study of professional and consumer tactics used in the indian e-commerce industry and prediction of their subsequent outcomes in future



S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
126	MAYANK VILAS TOTALE	Devesh Samaiya	Arm cortex m0+ based lpc1114 development board design
127	MEHAK	Shivi Agarwal	Fuzzy modeling and control for autonomous underwater vehicle
128	MOHD. ZIA ARIF	Arun Kumar	Crm framework- development & validation: a case of public and private sector banks in rajasthan
129	MOHIT AGGARWAL	R Gupta	Digital processing of satellite images and its optimization using genetic algorithm for facility management
130	MOHIT GUPTA	Anupam Singhal	To develop an integrated water management model for a given catchment.
131	MOREY AKSHAY KAMALAKAR	Arun Kumar Vaish	Verification of black scholes option pricing model for financial sector in india
132	MUGALODI RAMESHA RAKESH	Jl Raheja	Developing eye gaze tracking algorithm for microsoft kinect.
133	MUKUL ANAND	J N Bandopadhyay	Optimal design of photoreceptor magnetoreception process in birds
134	MUKUL GUPTA	Udayan Chanda	Study of arbitrage opportunities and market efficiencies on sectoral/regional indices
135	MUNDHADA ASHUTOSH AJAY	Mahesh Angira	Design of capacitive switch for telecommunication using rfmems technology
136	MUNOT PRASANNA MANOJ	Rajesh P Mishra	Business process reengineering model for designing and launching a new product in automobile industry.
137	NAMAN GUPTA	Avik Chattopadhyay	Simulation of multiple quantum well solar cell
138	NANDURI PRABHAKAR NARASIMHA	Pradyumn Chaturvedi	Mppt(maximum power point tracking) algorithm development and implementation on mcu scale for p.v. Applications.
139	NANDURI PRABHAKAR NARASIMHA	Shibasish Chowdhury	Implementation of genetic algorithm for protein structure prediction and cross discipline applications.
140	NEHA P JAWALKAR	J N Bandopadhyay	Dna based electronics: study of charge transport
141	NEHA TALESRA	Praveen Goyal	Designing a strategy to improve market share of yepme in india.
142	NEMISH KANWAR	P Srinivasan	Optimization of shell and tube-type heat exchanger, air pre-heater, for compactness and more corrosion durability
143	NIDHI AGGARWAL	Hk Mohanta	Design of ethanol production via indirect gasification and mixed alcohol synthesis of biomass.
144	NIKHIL GUPTA	Ms Dasgupta	Design optimisation
145	NIKHIL MALHOTRA	Subhajt Majumdar	Cost optimization and energy integration analysis for oil refinery
146	NIKHIL SURI	Chandra Shekhar	Study of nature based optimization technique
147	NIKITA CHOUDHARY	A Anand Kumar	Sliding mode control of inverter
148	NIKITA CHOUDHARY	A N Pant	Sliding mode control of inverter
149	NIKITA TANWANI	K J Rangra	Modelling and simulation of design of a gas sensor
150	NIKUNJ AGARWAL	Rajesh P Mishra	Business process re-engineering model for designing and launching a new product in automobile industry.
151	NILAY JAIN	Lavika Goel	Optimizing the np hard problem of choosing k clusters using swarm intelligence (psa) and k means++ initialization.
152	NITIKA SOHANE	Pradyumn Chaturvedi	Design and development of control algorithm for power electronic converter circuits using labview.
153	NITIN SINGLA	Rahul Singhal	Radio (ofdm) over fiber
154	NITURE SWATI UDHAVRAO	Rahul Singhal	Design of tandem led and photovoltaic device
155	NIYATI TIWARI	Krishna Muniyoor	Optimal portfolio selection model
156	PADALIA PINAKIN MANSUKHBHAI	S Gurunarayanan	Designing a fault tolerant circuit on an architecture based on that of fpga and fpaa using the concept of evolvable hardware

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
157	PAJJURI NAVEEN KUMAR REDDY	Asma Rani	Collect and query provenance for a zero information loss database using annotation.
158	PANDAKAR SAMAY PRASHANT	Parikshit K Singh	Development of intelligent algorithm using computational intelligence techniques for detection of adulteration in food & beverage items.
159	PANKAJ KUMAR	Anshuman Dalvi	Design of a mg+2 ion conducting polymer membrane for battery applications.
160	PARAKH SARDA	Dheerendra Singh	Wireless charging for battery of electric vehicles
161	PARTH GARG	Navin Singh	How molecular crowders in cell affect the helix-coil transition in nucleic acids?
162	PAVAN THAKKAR	Dheerendra Singh	Development of speed control algorithm for bldc motor(regenerative braking)
163	PEDDI RAVI TEJA	K Solomon Raju	Design and implementation of mac sub-layer algorithms in tossim.
164	PEDDI RAVI TEJA	Rajneesh Kumar	Estimating and geo-mapping the solar energy potential of a location based on meteorological and geographical parameters.
165	PERLA KISHORE	Ajay Kumar Pani	Modeling of a sulphur recovery unit for output quality prediction using least square support vector regression
166	PILLIGUNDLA PRANNOY	Nitin Chaturvedi	Comparative study of various cache architectures for multi processor systems
167	PIYUSH KUMAR	Girish Kant	New method for calculating safety stock
168	PIYUSH KUMAR	Sharad Srivastava	Microstructural control for quality castings
169	PIYUSH SOOD	Anupam Singhal	To develop an integrated water management model for a given catchment.
170	POTHIREDDY PRANATHI	Rahul Singhal	Designing of polygonal patch antenna
171	PRABODH AGARWAL	Manoj Kannan	Design a android and web application to promote teacher-student interaction in class and provide regular performance analysis
172	PRAGYA CHOPRA	Arvind Kumar Sharma	A systematic design and study of rubens tube
173	PRANAV UTPALLA	Sachi Singh	Design of gan based high brightness led using simulamp software.
174	PRANAY DUBEY	Arun Kumar Jalan	Finite element modelling of gas pipelines
175	PRANJAL AGARWAL	Ravi Inder Singh	Computational analysis of intake manifold designs for multi-cylinder diesel engine to be used in commercial vehicles, using cfd analysis in ansys.
176	PRANJAL DEEP	Mahesh Angira	Design of single pole multiple throw(spm) switch using rf mems technology
177	PRATIK DHAR	Ms Dasgupta	Design optimisation
178	PRATYUSH KAR	Shan Balasubramaniam	Content based image retrieval for shekhawati paintings
179	PRAVEEN BANSAL	G Muthukumar	Simulation of earthquake resistant design using staad pro
180	BANSOD DEVEN GIRISH	K Hari Babu	Designing and implementing a device driver for translating openflow messages to cisco-ios apis
181	BAYIREDDY LEELA MANAS	Shamsher B Singh	Analysis and design of laminated frp i-section beams
182	BHAGAT AMIT VIJAYKUMAR	Udayan Chanda	Role of futures and derivatives market in the financial meltdown of 2008.
183	BHAMBURKAR CHINMAYEE VIJAY	Mahesh Angira	Modeling and simulation of design of a gas sensor(pyro-based).
184	BHARGAV JHA	Rajdeep Chowdhury	Design of chips for detection of cancer.
185	BHAVYA MITTAL	Subhajit Majumdar	Cost optimization and energy integration analysis for sugar industry
186	BHOLE AJINKYA ARUN	Arun Kumar Jalan	Design and application of variable stiffness actuator
187	BONTHALA LAKSHMI ANUSHA	Virendra S Shekhawat	Reliable data streaming over delay torrent networks (dtns)
188	BUGDANI TEJAS ANIL	Jayendra N Bandyopadhyay	Quantum algorithms and cryptography (simulation and applications)
189	CHAITANYA BHATLA	Pratik N Sheth	Design of solar assisted pyrolysis unit

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<b>Design Project</b>			
190	CHANDAK VIVEK SANJAY	Srinivas Kota	Developing a solution for reducing/eliminating the carrying of heavy loads (books/ food/ water etc.) To school by children
191	CHANDRADEO ARYA	Atanendu Sekhar Mandal	Identification of a person using multimodal approach including gait analysis and behavioral traits.
192	CHIRAG BANSAL	Arun Kumar	Crn framework- development & validation: a case of public and private sector banks in rajasthan
193	D. PRITHVI REDDY	Rajneesh Choubisa	Designing the process to understand the online user behaviour & psychological effects of social media & web world on human
194	DEEPANSHU SHARMA	K S Raju	Hardware implementation of sobel operator.
195	DEEPTANU CHAUDHARY	Atanendu Sekhar Mandal	Identification of a person using multimodal approach including gait analysis and behavioural traits
196	DESAI HEM KIRTIKUMAR	Ravi Inder Singh	Computational analysis of intake manifold designs for multi-cylinder diesel engine to be used in commercial vehicles,using cfd analysis in ansys
197	DHARMDEEP SINGH	Ak Sarkar	Transport planning and land use pattern for developing smart cities.
198	DIVYA SHAKTI	Imlak N Shaik	Currency derivatives and exchange rates: the impact of us fomc statement.
199	DIVYA SUNEJA	Nitin Chaturvedi	Cache memory architecture
200	DIVYANSH KHATTAK	P Srinivasan	Thermal analysis for two phase heat transfer phenomena of the collector of a 250kw cw klystron
201	DIVYANSHU CHOUDHARY	Nidhi Chaturvedi	Gan based vertical transistor
202	DIVYANSHU NARANG	Geetilaxmi Mohapatra	Testing wagners law for indian economy: panel data analysis of public expenditure on social sector
203	DNVSSG VARUN	Tanu Shukla	Correlates of communication in medical service
204	DUBE SANDESH SANDEEP	Bijoy Kumar Raut	Application of structural topology optimization techniques for designing of links in stanford manipulator
205	FAIZAN AHEMAD	Devika	Analysis of changes in cinematic adaptation over time and their reasons.
206	G SHARAT CHANDRA	Asma Rani	Collect and query provenance for a zero information loss database using annotation.
207	GAMPA ANIRUDH	Bhupendra K Sharma	Influence of heat and mass transfer on blood flow through a tapered artery with stenosis.
208	GANDHI PREM SRUJALKUMAR	Ravi Kant Mittal	Design of earthquake resistant foundation
209	GARVIT GOEL	Abhijit R Asati	Hardware implementation of transcendental functions.
210	GAURAV GUPTA	Anil Jindal	Design and implementation of model and artificial intelligence algorithms for scm optimization
211	GAURAV MITTAL	Abhijit R Asati	Hardware implementation of transcendental functions.
212	GEETIKA GARG	Pramod Kr Tanwar	Study of implementation of protocol stack in c for low power zigbee networks.
213	GIREEK BANSAL	Abhishek Mishra	Performance evaluation of task duplication based scheduling
214	GODAVARTHI VENKATA SAI CHAITANYA	Srinivas Kota	Development of a solution to empower individuals to check food adulteration
215	GOVIND NARAYAN SHARMA	Mukesh Kr Rohil	Designing a real time feature detection and similarity analysis system for two images
216	GURBEER SANDHU	A Anand Kumar	Sliding mode control of induction motor
217	HARMANDEEP SINGH GILL	Arvind Kumar Sharma	Adsorption in single and multistage fluidised beds.
218	HARSH SHARMA	Parikshit K Singh	Design of embedded instrumentation systems for studying soil nutrients
219	HARSH TRIPATHI	Ajay Kumar Pani	Multi-variate statistical analysis using r

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
220	HARSHIKHA GUPTA	Satyendra Kr Sharma	Identifying and assessing operational risk for retail industry.
221	HARSHIT MATHUR	P Srinivasan	Modelling of heat penetration inside the tissues in case of hypothermia/hyperthermia surgery treatment.
222	HARSHIT RAGHUWANSHI	Pradyumn Chaturvedi	Design, simulation & implementation of single phase active power filter
223	HARSHVARDHAN JHA	R Gupta	Digital processing of satellite images and its optimization using genetic algorithm for facility management
224	ISHAN SHARMA	Nitin Chaturvedi	Design and analysis of 6-bit flash adc using distortion compensating technique
225	ISHAN TYAGI	Surekha Bhanot	Implementation of fuzzy logic in biomedical engineering.
226	JHA NAVNEET BINOY	Anu Gupta	Design of multipliers in sub-threshold region using body-bias technique.
227	KARAN SALUJA	Jl Raheja	Developing eye gaze tracking algorithm for microsoft kinect.
228	KARANBIR SINGH	J N Bandopadhyay	Optimal design of photoreceptor based magnetoreception process in birds
229	KARTHIKAN C	Omvir Chaudhry	Role of private participation in indias economic growth.
230	KARWA CHAITANYA AMOL	P Srinivasan	Design and analysis of super critical boiler tubes.
231	KAUSTUBH SHRIKRISHNA NAWADE	Rk Mittal	Stable walking pattern generation for a bipedal humanoid robot, using reinforcement learning and neuro fuzzy control system.
232	KAZA REVANTH	Satyendra Kr Sharma	Demand variability & production planning
233	KHARBADE ASHLESH SANJAY	Mayuri Digalwar	Energy efficient real time scheduling algorithms for multi core processors.
234	KHUMAAN MALPANI	Dipendu Bhunia	Analysis and design of multi storied commercial building
235	KONDEPATI LEELA KRISHNA	R Gupta	Building information modeling
236	KRISHNA KANT GARG	Virendra S Shekhawat	Multipath routing in mobile adhoc networks
237	KRUTI PRANAV KHAROD	Subhashish Gangopadhyay	Application of the concepts of statistical physics for the construction of a heirarchical network of the stock market
238	KUSHAL JASORIA	Manoj Kannan	Designing white-board animations for biology courses and assessing their impact on student learning
239	LAD OMKAR ASHOK	Vineet Kumar	Hardware implementation of iris segmentation algorithms on fpga.
240	LADDHA ANURAG RAJESHKUMAR	Parikshit K Singh	Design of embedded instrumentation systems for studying soil nutrients
241	LAVISH BHUTANI	Tanu Shukla	Factors affecting organizational development
242	LAVLEEN BHATI	Pratik N Sheth	Modelling and simulation of aqueous phase reforming of biomass
243	LODHA DARSHAN SUSHIL	Virendra S Shekhawat	Controller scalability for sdn networks
244	AAYUSH CHAKRABARTY	Satyendra Kr Sharma	Development of interpretative structural modeling for lean manufacturing system
245	ABHINAV AGARWAL	Atanendu Sekhar Mandal	Facial recognition using information computation techniques
246	ABHINAV GANDOTRA	Rajdeep Chowdhury	Sensors for the detection of cancerous cells
247	ABHINAV GAUR	Anupam Singhal	Comparative study of various classification methods of satellite data/images
248	ABHISHEK BANERJEE	P Srinivasan	Design of a compact cooling system for a klystron
249	ABHISHEK BHATIA	Hk Mohanta	Design of ethanol production via indirect gasification and mixed alcohol synthesis of biomass
250	ABHISHEK GHOSH	Hk Mohanta	Modeling, simulation and control of methyl acetate reactive distillation system
251	ABHISHEK KALANTRI	Vinita Tiwari	Design of optimum transmitter module for high speed optical communication

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
252	ABHISHEK KANODIA	Pc Panchariyan	Investigation of food samples using spectroscopy
253	ABHISHEK MODI	Sangita Yadav	Price evaluation of options using binomial tree pricing model
254	ABHISHEK PADHI	Prasanta Kumar Sahu	Understanding freight trip length distribution for indian cities
255	ABHISHEK SURESH	Amit Jain	Cfd applications to process and plant safety with respect to pressure relief valve.
256	ADIT MAKHIJANI	Anshuman Dalvi	Design & fabrication of mg+2 ion polymer battery.
257	ADITI JOSHI	Omvir Chaudhry	A study on banking crises and moral hazard.
258	ADITI SINGHAL	Abhijit R Asati	Design of digital and analog circuits using cmtfet
259	ADITYA HARIT	Hari Om Bansal	Comprehensive study and development of path finding algorithms
260	ADUSUMILLI SAMATHA	Sunil Kumar Dubey	Physiologically based pharmacokinetic modelling
261	AFREEN GHAURI	Pratik N Sheth	Modeling and simulation of biomass gasifier using aspen plus
262	AGARWAL TANMAY SANJAY	Anu Gupta	Design of multipliers in sub-threshold region using body bias technique.
263	AGASHIWALA KUNJESH DEVANG	Vinod Kumar Chaubey	Modelling of high speed circuits and devices
264	AGRAWAL GAURAV KAILASH	Srinivas Kota	Developing a project to foster creativity and innovation in school going children
265	AIANA GOYAL	Suresh Gupta	Modeling and simulation of different chemical processes
266	AKASH AGRAHARI	Rajesh P Mishra	Implementing a replenishment model for supply chain inventory regulation
267	AKSHAY CHANDRAN	K S Raju	Design of a mechanism for a wet- and dry-cleaning robot
268	AKSHAY SHARMA	Ms Dasgupta	Design of structure for impact absorption
269	AKSHAY VENKATESH	Srikanta Routroy	Analysis of supplier innovation flow in manufacturing environment.
270	AKSHAY VERMA	Nidhi Chaturvedi	Gan based vertical transistor
271	AKSHIT GUPTA	Anupam Singhal	To develop an integrated water management model for a given catchment.
272	AKSHIT SETH	Amol M R Marathe	Dynamical systems theory
273	ALLAMNENI ARAVIND	K Solomon Raju	Design and implementation of mac sub-layer algorithms in tossim.
274	AMIT ARORA	Satyendra Kr Sharma	Study and minimizing the bull whip effect
275	AMIT PAREEK	Vinita Tiwari	Modelling of rzdqpsk encoding scheme for high speed optical communication
276	AMULYA SRIVASTAVA	Surekha Bhanot	Neural networks in mathematical modelling
277	ANAMIKA AGGARWAL	Praveen Kumar A V	Beam dynamics studies of radio frequency (rf) cavities
278	ANAND SARIT	Smita Raghuvanshi	Design of bioreactor for reactive extraction of extracellular components during carbon dioxide mitigation
279	ANAND SHANKAR	Rajesh Mehrotra	Identifying the patterns of gti element in arabidopsis thaliana
280	ANANT MEHROTRA	Amit Goel	To improve baggage handling system in airports and reduce waiting time
281	ANANTHU MAHENDRANATH	Hk Mohanta	Design of advanced controllers for chemical processes
282	ANANTIM RAJ	Ms Soni	Incorporating solar energy into a mainstream car.
283	ANIRBAN ROY	Ms Soni	Design of novel solar powered radio controlled vehicle.
284	ANIRBAN ROY	P Srinivasan	To study the variation in rate of natural convection for a cluster of horizontally placed isothermal cylinders against the relative distances between them.
285	ANIRUDH SRIDHAR	Nv Muralidhar Rao	Analysing the debt-growth dynamics for a developing economy

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
286	ANISH SRINIVAS VASAN	P Srinivasan	Modelling of heat penetration inside tissue subjected to hyper/hypothermia surgery treatment
287	ANKIT SARAF	Srinivas Kota	Identifying product life cycles of different products and establishing relations among them.
288	ANKUSH GUPTA	Ak Sarkar	Smart city design
289	ANKUSH GUPTA	Dipendu Bhunia	Integrating structural analysis with building information modelling
290	ANOOP D GHARDE	K Hari Babu	Simulating a data centre on campus networks in mininet
291	ANSHULA SHARMA	Niladri Sarkar	Optimisation of gate length, electron concentration and channel conductivity of nano-scale mosfet
292	ANUJ BANSAL	Atanendu Sekhar Mandal	Identification of a person using multimodal approach including gait analysis and behavioural traits.
293	ANUJ PAHUJA	Shan Balasubramaniam	Efficient search and retrieval mechanism for tagged and annotated images
294	AQSA INAYAT	Devika	Analysis of changes in cinematic adaptation over time and their reasons.
295	ARDANDI SANDEEP REDDY	P Srinivasan	Analysis of creep failure in boiler tubes of a super critical boiler.
296	ARMAAN GUPTA	Ravi Kant Mittal	Economical design of foundation system
297	ARPIT GUPTA	Krishna Muniyoor	Research design for determining the need for inventory management system in indian context.
298	ARPIT PHANDA	Vandana Agarwal	Evolutionary algorithms in image processing
299	ARYA ROY	Mukesh Kr Rohil	Optimization of real systems by deriving insights from process logs
300	ARYAMAN MANDHANA	Gajendra S Chauhan	Applied psychology in design of print advertisements
301	ASHISH ANAND	Surekha Bhanot	Implementation of ai for medical diagnosis of a class of disease
302	ASTHA GUPTA	Lavika Goel	Artificial bee colony algorithm (abc) and application
303	AVINASH KUMAR SINGH	Krishna Muniyoor	The study of the risk management of insurance industry.
304	AYUSH GARG	Arvind Kumar Sharma	Adsorption in single and multistage fluidized beds
305	AYUSH SAXENA	Ak Sarkar	Smart city design
306	AYUSH SAXENA	Dipendu Bhunia	Integrating structural analysis with building information modelling
307	BANDIKATLA PUNEETH	Rk Mittal	Locomotion of a biped
<b>LABORATORY PROJECT</b>			
1	UTSAV MAJUMDER	Sonal Mazumder	Effect of freeze drying process conditions on stability of polymeric nanoparticles
2	UTSAV MISRA	K Solomon Raju	Exploration of data mining techniques for finger print identification system.
3	V C ROOPANA	R Gupta	Design and development of self purifying concrete for rooftop harvested rainwater
4	V V SAI PRANEETH	A Anand Kumar	Fuzzy logic based dc to ac converter
5	VAIBHAV	Mahanth Prasad	Design and modeling of mems based microphone
6	VANDIT GANDOTRA	Rajesh Mehrotra	Designing of biosensors
7	VANGAPANDU SAI RAKESH MOHAN KRISHNA	Rahul Singhal	Design of ofdm over fiber network
8	VANSHIKA BAONI	Ashish Mishra	Analysis, extraction and display of brain signal using rtos on fpga
9	VARUN BHARDWAJ	K Solomon Raju	Python based gui for wireless sensor networks data
10	VARUN HALDIYA	Ashish Mishra	Analysis, extraction & display of brain signal on rtos using fpga.
11	VARUN RAJEEV M	Abhishek Mishra	Computational difficulty in cryptography

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
12	VASUDEV MITTAL	Anil Kumar Saini	Studying and application of various machine learning algorithms on airline data
13	VIJAY SANKAR. A	Tufan Chandra Bera	Prediction of cutting forces in machining process
14	VIKRANT SHARMA	Arun Kumar Jalan	Finite element modelling and dynamic analysis of solid composite plate
15	VINAYAK MISHRA	Devika	Language lab software for vocabulary and pronunciation
16	VINEET GUPTA	Arun Kumar Jalan	Dynamic analysis of pipeline systems
17	VIPUL	K Solomon Raju	Exploration of data mining techniques for finger print identification system
18	VISAL DATTA RAMISETTI	Pushp Lata	The web 2.0 learner centered teaching material for placement skills
19	VISHAL	Shamsher B Singh	Designing of hybrid frp i-beams
20	VISHAL VARSHNEY	K Solomon Raju	Study and implementation of signal conditioning circuits for various sensors
21	VIVEK HALDIYA	Anil Kumar Saini	Identifying signs of diabetic retinopathy in eye images.
22	VIVEK JAIN	Pradyumn Chaturvedi	Multilevel inverter based renewable energy system
23	VIVEK RATHORE	Vineet Kumar	Hardware implementation of functional blocks used in iris recognition such as template matching
24	VONTELA SHREYA	Sandeep Dhar	Design and fabrication of ingan based leds
25	VRINDA DHARMARHA	Banasri Roy	Preparation of ti02 thin film by sol-gel technique
26	YASH KRIPLANI	Sanjay Singh	Embedded implementation of contrast enhancement algorithm
27	YASHASVI GALAV	Anil Kumar Saini	Studying and applying various machine learning algorithms on existing airlines dataset.
28	YASHITHA JAISWAL	Surojit Pande	Synthesis and characterization of fe2o3/c3n4 nanocomposites and its application in oxygen evolution reaction.
29	YIMKUM I OZUKUM	Shibani K Jha	Model fabrication and experimental studies of flow instabilities in hele shaw chamber
30	SAYYED MUDASSIR ALI SABIR ALI	Tufan Chandra Bera	An investigation on thermal aspect in thin wall machining
31	SHAH PARTHAY BHUPEN	Vineet Kumar	Fpga based hardware implementation of iris segmentation method used in iris bio-metrics
32	SHAH ZALAK K	Ms Dasgupta	To investigate thermodynamics involved in using convergent-divergent type ejector for spot refrigeration instead of nozzle with mainly co2 as working fluid and various other substances like paints.
33	SHAISTA HUSSAIN	S.A. Akbar	Development and simulation of intelligent control for small subsystems of an auv (depth, steering, motion subsystems)
34	SHALEEN MANOCHA	Dipendu Bhunia	Dosage of flyash in improving the mechanical properties of concrete
35	SHARDUL VIKKRAM SINGH	Rakhee	Optimum positioning of base station for cellular networks
36	SHARDUL VIKKRAM SINGH	Sachi Singh	Study and implementation of usb interfacing on zedboard.
37	SHASHVAT TRIPATHI	Arun Kumar Vaish	To develop android/windows/web application for referral system for the banking sector
38	SHASHVAT TRIPATHI	Vinita Tiwari	Study and implementation of wireless intelligent security system.
39	SHIVAM GUPTA	Ajay Kumar Pani	A comparative study of different pid controller tuning methods.
40	SHIVANI DEEPAK CHOUDHARY	Vineet Kumar	Vlsi design and architecture for image and video processing
41	SHREEMALA DHAYAL	Anil Kumar	Copper catalyzed synthesis of imidazo-fused heterocycles

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
42	SHREY HITENDRA SHAH	Jp Misra	Study of simultaneous localization and mapping techniques
43	SHREY RAHEJA	Subrata Bandhu Ghosh	Microstructural investigation and optimisation of process and material parameters for developing 3d printing biocomposites
44	SHREYA	Vineet Kumar	Hardware implementation of functional blocks used in iris recognition.
45	SHREYANS RANKA	Abhijit K Digalwar	Analysis of the simufact software and development of experiments to study forming processes using the software.
46	SHRIPRADA MISHRA	Dalip Kumar	Design and synthesis of azaheterocycles as novel tubulin binding agents.
47	SHRIRAM RAVINDRA ASHIRGADE	Amol M R Marathe	Bifurcation phenomena in a typical non-smooth dynamical system
48	SHRUTI PANDEY	Shuvendu N Patel	Analysis of a multi- storeyed building using staad.pro considering earthquake and wind load.
49	SHUBHAM ABROL	Girish Kant	Numerical simulation of (cold forming + heat treatment) of manufacturing process
50	SHUBHAM AGARWAL	Smita Raghuvanshi	Development of bio-filter column for the removal of chlorinated pollutants from air.
51	SHUBHAM AGRAWAL	Anil Kumar Saini	Studying and applications of various machine learning algorithms on airline data.
52	SHUBHAM AGRAWAL	Archana K K	Design of a novel drug delivery system
53	SHUBHAM BHARADIA	Bibhas Ranjan Sarkar	Studies in surface modification of materials towards ultra-hydrophobicity
54	SHUBHAM JAIN	Pramod Kr Tanwar	Gui development for cross platform applications using qt or python for image processing analysis.
55	SHUBHAM KHANDELWAL	Navneet Goyal	Data provenance : role of graph databases
56	SHUBHAM PRAVIN RATHI	Jitendra Panwar	Antimicrobial activity of silver nanoparticles on gram negative bacterial species
57	SHUBHAM SINGH	Poonam Goyal	Parallelization of shared nearest neighbor(snn) algorithm
58	SHYAM MURTHY	Vinita Tiwari	Analysis of optical wdm networks
59	SIDDHANT SHRIVASTAVA	Avinash Gautam	Experimenting with a team of heterogenous mobile robots
60	SIDDHANT TULI	Poonam Goyal	Image clustering using user feedback and visual concepts
61	SIDDHARTH	Anshuman	Effect of addition of marble dust on soil stabilization
62	SIDDHARTH KAWADIYA	Smita Raghuvanshi	Biofiltration of trichloroethylene (tce), tetra chloro ethylene (pce) in lab scale biofilter column
63	SIDDHARTH RAI	Rahul Singhal	Design of organic light emitting diodes
64	SIDHARTH SIKRI	Poonam Goyal	Parallel framework for subspace clustering algorithms.
65	SIJO VM	Rajesh P Mishra	Production planning and control in manufacturing industry
66	SIJO VM	Tufan Chandra Bera	Process planning and part manufacturing
67	SILABRATA PAHARI	Smita Raghuvanshi	Reactive extraction of products obtained from carbon dioxide mitigation.
68	SIMARPREET SINGH MAMIK	Anupam Singhal	Idling emissions at signalized intersections and mitigation measures to reduce idling fuel losses
69	SNEHA SUMAN	Sonal Mazumder	Synthesis and characterization of fluorescent nanoparticles for bio-medical applications
70	SONALI GUPTA	Sudeshna M Choudhury	Study of dna binding properties of aie dyes.
71	SOPAN PATRA	Vinod Kumar Chaubey	Rfid based application circuits
72	SOUMYA SANDIPA	Shuvendu N Patel	Analysis of a tower using staad.pro
73	SPARSH MAHESHWARI	G Meenakshi Sundaram	Rf mems oscillator design
74	SRABASTI NANDI	Sandhya Marathe	Effects of native prosopis cineraria and non-native prosopis juliflora on visible fauna
75	SRIJAN RASTOGI	Vinod Kumar Chaubey	Rfid based application circuits



S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
76	STEPHANIA ANN MATHEW	Sandeep Dhar	Design and fabrication of ingan based leds
77	SUKRITI KUMAR	Kamlesh Kumar	Fly ash and cement in pilani soil: an experimental study
78	SUMEDH K RAMAPRASAD	Kari Babu Ravi Teja	Design and simulation of voltage reference circuits for cmos circuits
79	SURABHI JAIN	Vishal Gupta	Study and implementation of openflow messages
80	SURAJ DOSHI	Prabhat Nath Jha	Isolation and characterization of cellulose degrading microorganism.
81	SURANA RAHUL MANOJ	Vinod Kumar Chaubey	Study of novel structure of finfets
82	SURAYANS TIWARI	Prashant U Manohar	Study of freezing string method and determination of transition state of a reaction using the method.
83	TADIKONDA BAPIRAJU VAMSI	Atanendu Sekhar Mandal	Mobile based medical diagnosis and assistance application
84	TALWEKAR YASH PUNDALIK	Amol M R Marathe	Limit cycle flutter of airfoils.
85	TANISH ANAND	R Gupta	Evaluation of self compacting concrete with recycled concrete as replacement aggregate
86	TANMAY SHARMA	Hitesh Dutt Mathur	Fuzzy logic based energy management system for a microgrid
87	TATA MAHANTH SAI RAJA	Sunil Kumar Dubey	Analytical method development and validation of candidate drug
88	TATAVARTHI ARCHANA	Nv Muralidhar Rao	Stock market and monetary policy in india:taking evidences from the failures of china, greece and us stock market crashes.
89	TIRODKAR SUYASH ANANT	Sachi Singh	Study and implementation of usb interfacing on zedboard
90	TUSHAR TYAGI	P Srinivasan	Optimizing the cooling system of hybrid solar panels for better efficiency
91	UDIT SHANKAR DASGUPTA	Ravi Kant Mittal	Behaviour of footings resting on improved soil by waste material
92	UPPALA VEERA VENKATA SHRAVAN	Surojit Pande	Synthesis, characterization of au, pt, au-pt nanoparticles on g-c3n4 and their applications in electrocatalysis
93	UTKARSH MISHRA	Pawan Kumar Ajmera	Embedded implementation of contrast enhancement algorithm
94	PRANAV DATTATRAY KULKARNI	Srikanta Routroy	Application of monte carlo simulation method in supply risk analysis
95	PRANAV GUPTA	Navneet Goyal	Mining multi-variate time series data
96	PRANJAL SHARMA	Sonal Mazumder	Physicochemical characterization and heat transfer analysis of nano fluids.
97	PRANSHU KALRA	Devesh Samaiya	Smartphone based multimeter device
98	PRASHANT KIRAN	Shamsher B Singh	To determine the stiffness of frp plates.
99	PRATEEK SAI GAHLOT	Hk Mohanta	Investigation of a novel method to convert heavier petroleum fraction to lighter ones
100	PRATHAMESH D HOSHING	Amit Kumar Verma	Numerical solutions of non-linear pde's
101	PRATIK JAIN	Vineet Kumar	Implementation of face recognition using vhdl
102	PREKSHA AGRAWAL	Saumi Ray	Characterization and study of catalytic activities of zeolite encapsulated ni and pd complexes
103	PRITISH PANI	Abhijit R Asati	Design and simulation of analog integrated circuits using cntfets
104	PRIYA AGARWAL	Dipendu Bhunia	An experimental investigation to determine the depth of carbonation of concrete exposed to accelerated carbonation.
105	PRIYANK RAJ	Anil Gaikwad	Role of epigenetics in the development of liver dysfunction under type ii diabetic conditions
106	PRIYANKA KUKREJA	Yashvardhan Sharma	Acgt cis regulatory element and its role in plant stress regulation.
107	PULKIT KUMAR DUBEY	Sachin U Belgamwar	Electro-thermo-mechanical analysis of mems gas sensor platform
108	PUNEET SHUKLA	Asma Rani	Zero information loss database system
109	PURAV AMIT SHAH	Sundaresan Raman	Image processing algorithms for analyzing natural products

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
110	PVG SAI SUBRAHMANYAM	Amit Goel	Non destructive testing of civil infrastructure using ai techniques
111	R S PRAKRUTH	Rakhee	Optimal base stations location and configuration for cellular mobile networks
112	RAGHAV GUPTA	K Solomon Raju	Exploration of data mining techniques for finger print identification system
113	RAHUL KUMAR BUDHWANI	Pawan Kumar Ajmera	Embedded enhancement of contrast enhancement algorithm
114	RAHUL PRIYADARSHI	Asma Rani	Zero information loss database system
115	RAJA V S K MURTHY TIRUMALASETTY	Raj Kumar Gupta	Finger print recognition
116	RAJAT GREWAL	Avik Chattopadhyay	Study and analysis of novel structure of mosfet.
117	RAJAT PALIWAL	G Meenakshi Sundaram	Rf mems oscillator design
118	RAJAT SHARMA	Manjuladevi V	Sensing applications using qcm
119	RAJDEEP DAS	JI Raheja	Object detection by 3d aspectlets
120	RAO ANKIT SHIVAPRASAD	Banasri Roy	Preparation of tio2 powder by sol-gel technique for biomedical applications
121	RAVINA GOYAL	Kamlesh Kumar	Fly ash mixed pilani soil : an experiment study
122	RIDDHI JAIN	Suresh Gupta	Removal of heavy metals from industrial wastewater using metallic nano-particles as adsorbents
123	RISHABH CHOUDHARY	Ashish Mishra	Object tracking using image processing on fpga.
124	RISHABH JAIN	Smita Raghuvanshi	Defluoridation of drinking water using metallic nanoadsorbents
125	RISHABH SINGH	Navneet Goyal	Detecting malicious websites using machine learning
126	RISHIKA SURYA	Uma S Dubey	To study the anti cancer properties of alpha lactalbumin fatty acid complex.
127	RITIKA	Parikshit K Singh	Simulation of nature inspired alforithms in matlab using optimization
128	ROHAN ARYA	Girish Kant	Paper review & modification of the published paper "numerical analysis of bimetallic extrusion of gear like components" .
129	ROHAN JANGID	Tufan Chandra Bera	Design of a diffuser and fabricating its model using cnc and rapid prototyping(3d printing)
130	ROHAN K MEHTA	K Solomon Raju	Dsp module implementation for s.h.m.
131	ROHIN ARORA	Sachi Singh	Interfacing cc2538 soc with fpga
132	ROHIT BISWAS	Tabir Mishra	Smart outdoor surveillance for threat detection using a standalone device built with microsoft kinect and raspberry pi
133	RONGALI HARISH	P Srinivasan	Thermal cooling enhancement techniques for electronic components
134	ROSHAN MISHRA	Pankaj Kumar Sharma	Purification and characterization of industrially useful plants enzymes
135	RRAHUL BHARDAWAJ	Inamur R Laskar	Characterization of aie active organic molecules and complexes and study of their applications in sensing and mechanochromism
136	RUPANSHI	Lucky Sharan	Mathematical modelling of xpm and fwm in 40 gbps dwdm network
137	S P ARJUN RAM	Avinash Gautam	Task allocation and planning for multi-robot swarms
138	SACHIN KUMAR	Devesh Samaiya	Designing a smartphone based multimeter
139	SACHIN SAXENA	Kuldip Singh Sangwan	Optimization of the forging of aerofoil blade using the finite element method and fuzzy pareto based genetic algorithm
140	SAGAR SHOREY	Kuldip Singh Sangwan	Energy efficiency of machine tools
141	SAHIL SHARMA	Avik Chattopadhyay	Study on novel structure of mosfet
142	SAJAL GUPTA	Ajay Kumar Pani	A comparative study of different pid controller tuning methods
143	SAKAAR KHURANA	Vineet Kumar	Hardware implementation of functional blocks used in iris recognition

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
144	SAMYADEEP BASU	Rajesh Mehrotra	Genome wide analysis of arabidopsis thaliana using data mining techniques.
145	SANAGALA SAI SAMEER	Vishal Gupta	Modifying wireless drivers in linux kernel
146	SANCHIT MITTAL	Atish T R Paul	Study of particulate drug delivery system.
147	SANCHIT SAMNANI	Sachin U Belgamwar	Enhancing the sensing characteristics in mems-based sno2 gas sensors for detection of no2 and nh3 gases
148	SANGANI DISHANT ANIL	Vinod Kumar Chaubey	Modelling of junction-less transistors using matlab and silvaco.
149	SANGOI DHAIRYA PANKAJ	Anil Kumar Saini	Object tracking in a video.
150	SANKET SHAH	S Mohan	Study, simulation and implementation of some algorithms for simultaneous localisation and mapping using a single robot.
151	SARANSH MEHTA	Mahesh Angira	Design of mems technology based logic gates
152	SAUMYA UPADHYAY	Srikanta Routroy	Application of monte carlo simulation method in supply risk analysis
153	SAUMYA Y SAHAI	Anshuman Dalvi	Preparation of li+ ion glass-ceramic nanocomposites containing li+ nasicon nanocrystallites.
154	SAURABH	Abhijit K Digalwar	Analysis of the simufact software and development of experiments to study forming process using the software.
155	SAURABH ANAND	S S Sadistap	Design and development of an advanced adaptive fuzzy neuro algorithm for stable and efficient odor recognition using predeveloped electronic nose system.
156	SAURABH GUPTA	Suresh Gupta	Experimental and theoretical studies for removal of heavy metals/dyes from industrial wastewater using bioremediation
157	SAYONTINI CHOWDHURY	K K Gupta	Digital image processing techniques for face recognition and implementing the algorithm in matlab
158	LAVISH BHUTANI	Kavindra Kandpal	Curvature correction for bgr circuit
159	LOHIA NIKESH SURESH	Arun Kumar Jalan	Finite element modelling and dynamic analysis of solid composite plate
160	MANASWI SANKRITYAYAN	Sonal Mazumder	Modification of silica nanoparticle coatings on glass substrates.
161	MANESH NARAYAN K	Rajesh Mehrotra	Genome wide analysis of cis- regulatory elements using data mining approach in arabidopsis thaliana
162	MANISH KUMAR	Ajay Kumar Sah	Application of sugar containing metal complexes in catalysis.
163	MANMEET SINGH	JI Raheja	Applying map reduce model to process large scale remote sensing images
164	MANSI SINGH	Rakhee	Study of markov chain monte carlo simulation method
165	MANTINDER JIT SINGH	Amit Kumar Verma	Study and design of different type of wavelets and their applications.
166	MAYANK DEEP	JI Raheja	Object detection by 3d aspectlets
167	MAYANK GAUTAM	Rajesh P Mishra	Design an improved fixture for cutting gears using shaper machine.
168	MAYANK GAUTAM	Satyendra Kr Sharma	Vehicle routing problems for perishable goods like dairy
169	MAYANK MISHRA	Anupam Singhal	Idling emissions at signalized intersections and mitigation measures to reduce idling fuel loss
170	MAYUKH BASU	Tabir Mishra	Quality classification of bakery products by using image processing techniques
171	MEGHNA BANSAL	Shan Balasubramaniam	Verify/match combinational and sequential circuits partially or completely for automated testing of examinations
172	MEHAK	Arnab Hazra	Enhancing the sensing characteristics in mems-based sno2 gas sensors for detection of no2 and nh3 gases

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
173	MEHRAN ALI BANKA	Vineet Kumar	Hardware implementation of functional blocks such as feature extraction used in iris recognition.
174	MEHTA SAGAR AJIT	Virendra S Shekhawat	Multi-core processors-task/process scheduling, memory management and consistency modules,energy efficiency, pipelining and optimized cache utilization
175	MENTA VENKATA PUSHPAK TEJA	Parikshit K Singh	Speech recognition for braille system
176	MINAL RAHAR	Dipendu Bhunia	An experimental investigation to determine the depth of carbonation of concrete exposed to accelerated carbonation
177	MODANI SURAJ VIJAY	Anupam Singhal	Analysis of waste water quality drained in village raila and remedial measures.
178	MOHIT AGGARWAL	Gajendra S Chauhan	Power of cognitive psychology in advertisements
179	MOHIT JAIN	Gautam Singhvi	Development of novel drug delivery system
180	MOHIT KATIYAR	Shibani K Jha	Model fabrication and experimental studies of flow instabilities in heleshaw chamber.
181	MOHIT KUMAR SONI	Parikshit K Singh	Design and development of intelligent control schemes for non-linear process
182	MONISHA GOYAL	Vinod Kumar Chaubey	Vehicle safety system
183	MUDDA SWATHI SREE DURGA	Uma S Dubey	Bioinformatic aspects of anti-cancer properties of camel milk
184	MUDIT GANDHI	Anshuman Dalvi	Ionic transport studies on mg++ ions
185	MUNDHADA RAGHAV	Mukesh Kr Rohil	Parallel implementation of feature detection for image registration in ar real time.
186	MUNDHADA VYANKATESH MANOJ	Sangita Yadav	Finite difference methods for partial differential equations
187	NAMAN RAJ BAID	Mukesh Kr Rohil	Real time pose estimation of virtual objects for an ar system.
188	NAMAN SHINGHAL	Pradyumn Chaturvedi	Development of improved power quality converter.
189	NEEL GIRISH AMONKER	Surekha Bhanot	Fuzzy classification and pattern recognition
190	NIKHIL JR	Dheerendra Singh	Comparative study of proportional- integral, sliding mode, & fuzzy logic controller for power converter.
191	NILAY BINJOLA	Jp Misra	Study and simulation of simultaneous localization and mapping techniques
192	NISARG KANANI	Smita Raghuvanshi	Defluoridation of drinking water using graphene oxide based nanoadsorbents
193	NITESH VIJAY	Avinash Gautam	Multi robot area exploration
194	NITIN SINGLA	Vinita Tiwari	Mems based micro mirrors
195	PALLAV JINDAL	Avik Chattopadhyay	Study and analysis of sub-micron mosfets
196	PALLE ABHISHEK REDDY	Shilpi Garg	Cloning and expression of ftsh gene from p.vivex field isolates.
197	PALSHIKAR AJAY PRASAD	Sanchita Bandyopadhyay Ghosh	Fabrication of pcl based nanocomposites using fused deposition modelling (fdm) technique for biological implants
198	PANCHAKARLA SAI KUTUMBA RAO	S Murugesan	In silico design and study of nitrogen containing heterocyclo as anti leishmanial agents
199	PANKAJ KUMAR	Manjuladevi V	Physical characterization studies of liquid crystal nanocomposites.
200	PARAG AGRAWAL	Dheerendra Singh	Performance evaluation of solar powered srm drive for electrical vehicle.
201	PARIKSHIT JOON	Prabhat Nath Jha	Getting hands on laboratory experience while wroking with pathological bacteria.
202	PARIKSHIT MITTAL	Vinita Tiwari	Wireless sensor networks (wsn) and its applications.
203	PARTH GIRISHBHAI SUTARIA	Manoj Kumar	Analysis of concrete filled tubular arches
204	PATANKAR ABHIRAM ARVIND	Sanchita Bandyopadhyay Ghosh	Synthesis of bio-nano fiber and composite for medical application
205	PAVAN CHANDANA	Sunil Kumar Dubey	Application of cloud point extraction technique in pharmaceuticals

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
206	PEDDI RAVI TEJA	Sunita Singhal	Understanding classical distributed systems and algorithms, and developing better and efficient ones for modern cloud computing systems.
207	PEROLLA VINAY KUMAR REDDY	A Anand Kumar	Implementation of pid controllers using fuzzy gain scheduling with dsp.
208	PIYUSH BANSAL	Ravi Kant Mittal	Behaviour of footings resting on improved soil by waste material.
209	PLAKSHA VERMA	Vinod Kumar Chaubey	Vehicle safety system
210	POOJAN PAREKH	Kuldip Singh Sangwan	Statistical analysis of green manufacturing drivers, barriers and key performance indicators.
211	POONAM BRAR	Anshuman	Use of marble dust as filler material in road embankment construction.
212	PORLIKAR SHUBHAM ANAND	Sundaresan Raman	Image processing algorithms for analyzing natural products
213	PRABEEN KUMAR GHADIA	Tufan Chandra Bera	Parametric study of 3d printer or fdm.
214	PRABHDEEP SINGH WALIA	Sunita Singhal	Grid scheduling algorithm implementation
215	PRABHUDESAI GAURAV SANJAY	Sachin U Belgamwar	Design and fabrication of piezoelectric vibrational energy harvesters (veh)
216	PRACHI KUSHWAH	Parikshit K Singh	Simulation of nature inspired algorithms in matlab using optimization
217	PRAJAKTA KIRAN JOSHI	Ajay Agarwal	To design a mems sensor to distinguish diseased cells.
218	PRAJAKTA KIRAN JOSHI	Rajdeep Chowdhury	In silico analysis of novel non-coding rnas regulating genes involved in autophagy/proteosomal degradation pathway
219	PRAJYOT GUPTA	Ashish Mishra	Analysis, extraction and display of brain signals on rtos using fpga
220	PRAKHAR AGARWAL	Vinita Tiwari	Coherent detection associated with digital signal processing for fiber optics communication using machine learning
221	PRAKHAR NEEMA	Pradyumn Chaturvedi	Multi-level inverter based renewable energy system
222	GHAZI AHMED	Pradyumn Chaturvedi	Design of single -phase cascaded multilevel inverter
223	GOGRI ADITYA BHUSHAN	Anil Jindal	Dual channel closed-loop supply chain coordination with a reward driven re-manufacturing policy
224	GOPAL YOGESH BHATT	Anil Jindal	Dual channel closed-loop supply chain coordination with a reward driven re-manufacturing policy
225	GRANDHI S N RATNABHIRAM	Atish T R Paul	Extraction and screening of natural products on pancreatic lipase enzyme for anti-obesity.
226	GRANDHI SAI ABHIRAM	A Anand Kumar	Calculation of speed of induction motor using proximity sensor
227	GUDAPATY NARENDRA KUMAR	Asma Rani	Provenance collection in big data using annotation propagation.
228	GUNJAN KUMAR SINGH	Sanjay Singh	Face detection based on rigid templates
229	HARDIK GUPTA	Girish Kant	Numerical simulation of (cold forming + heat treatment) of manufacturing process
230	HARISANKAR.R	Tufan Chandra Bera	Prediction of cutting forces in machining process
231	HARISH TUNDWAL	Anil Kumar Saini	Object tracking in a video.
232	HARSH LAILER	Shilpi Garg	Cloning and expression of ftsh gene from p. Falciparum
233	HARSH MISRA	Rahul Singhal	Design of organic solar cells
234	HARSH SHARMA	Sanjay Singh	Hlac and hlac-like features for facial expression recognition
235	HARSHIT SHARMA	Smita Raghuvanshi	Co2 mitigation using pure strain of mixed culture
236	HARSHIT SRIVASTAVA	Tufan Chandra Bera	An investigation on thermal aspect in thin walled machining.
237	HARSHITA RAJPUROHIT	Ravi Saini	Vlsi design for image and video processing

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
238	HARSHVARDHAN GUPTA	Avinash Gautam	Multi robot area exploration
239	HEMABH TRIVEDI	P Srinivasan	Yield improvements and analysis of defects and their subsequent reduction in casting process using simulation and numerical analysis
240	HIMANSHU HANSARIA	Raj Kumar Gupta	Realtime language translator using image processing
241	HIMANSHU JAIN	Abhijit K Digalwar	Study and review of mechanisms for transmission of motions in machine tools with focus on hydraulic and mechanical transmission systems.
242	HIMANSHU SHARMA	Tufan Chandra Bera	Designing of the diffuser and fabricating its model using cnc and rapid prototyping(3d-printing)
243	HONRAO AKSHAY SUNIL	Amol M R Marathe	Limit cycle flutter of airfoil
244	ILASHREE	Sanjay Singh	Face alignment software
245	INES KHANDELWAL	Sundaresan Raman	Analysis of time series microscopic data
246	ISHA GOEL	Rajdeep Chowdhury	Altered biochemistry of cancer cells, can we exploit it to treat the disease
247	ISHAN CHUTANI	Navneet Goyal	Age invariant facial recognition
248	ISHAN MOHAMMED B A	Vinita Tiwari	Analysis & modelling of high speed optical link
249	ISHAN TYAGI	Vinod Kumar Chaubey	Implementation of coalitional game theory to have optimum channel capacity in cognitive radio networks.
250	ISUKAPALLI SAI VAMSI KRISHNA	Inamur R Laskar	Design and synthesis of novel aie(agggregation induced emission) active molecules for sensitive and selective detection of analytes.
251	JASHYANT SIKHAKOLLI	Sunil Kumar Dubey	To develop modified release formulation of the candidate drug
252	JASODHARA RAJ	Sonal Mazumder	Phospholipid nano-carriers for aerosol drug delivery.
253	JAYANT AGARWAL	Archana K K	Designing a novel targeted drug delivery system
254	JEET DESAI	Amol M R Marathe	Determination of active vibration control function of a timoshenko beam
255	JEEVAN RENJITH	Murali Palla	Crack propogation simulation in composites
256	JEFFREY GEORGE	Shamik Chakraborty	Study and simulation of hydrogen absorption on carbon nano-tube doped with aluminum and phosphorus using dft
257	JOEL RUBEN ANTONY MONIZ	Poonam Goyal	Using setwise classification to identify and classify images based on image features and accompanying metadata
258	JOHN RAJAN MAVELY	Prabhat Nath Jha	Isolation and characterization of lignin degrading bacteria and fungi
259	JONNALAGADDA SAI KRISHNA	Atanendu Sekhar Mandal	Mobile based medical diagnosis and assistance application
260	JYOTHIR GHOSH	Surojit Pande	Synthesis and characterization of ni nanoparticles and its application in electrocatalysis.
261	JYOTIRMAYA PATRA	Ms Soni	Design and fabrication of energy efficient solar powered uav
262	K MEHER GITIKA	K Solomon Raju	Implementation of the mean square root algorithm in a dsp by using vhdl
263	KAMATH GAURAV NARESH	Girish Kant	Paper review and modification of the published paper-"numerical analysis of bi-metallic extrusion of gear like components"
264	KANCHARLA SURYA MANI DEEPAK	Asma Rani	Provenance collection in big data using annotation propagation
265	KANEKANTI ASHISH KHANNA	Lalita Gupta	Analysis of apolipophorin-3 in anopheles species
266	KAPIL SHRIVASTAVA	Vinita Tiwari	Recent advances in optical networks
267	KARTIK GOYAL	Shamsher B Singh	To determine the stiffness of fiber-reinforced polymer plate
268	KARTIK SIRWANI	Archana K K	Development of novel drug delivery systems
269	KASHISH MALHOTRA	Rahul Singhal	Polygonal patch antenna design

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<b>Design Project</b>			
270	KASHISH MITTAL	Anu Gupta	Exploration of frequency compensation techniques in an opamp
271	KAUSTUBH SHRIKRISHNA NAWADE	Avinash Gautam	Terrain exploration using multiple mobile robots.
272	KAVYA VELISETTI	Shamik Chakraborty	Synthesis and characterization of a schiffs base as an ion sensor and computational study to gain an understanding of the mechanism.
273	KAVYA VELISETTI	Srinivas Kota	Understanding sustainability and developing a framework for the assessment of product life cycle.
274	KHARBADE ASHLESH SANJAY	Sanjay Singh	Face detection based on rigid templates
275	KHUMAAN MALPANI	Shamsher B Singh	Study the structural response of frp beam connected by frp splice plate
276	KIRAN RAMNATH	Kavindra Kandpal	Design of rbb analog signal processing circuits in subthreshold region
277	KOGNTI SRIMOUNIKA	Nv Muralidhar Rao	Stock market and monetary policy in india: taking evidences from the failures of china, greece and us stock market crashes.
278	KOTHA ACHYUTH REDDY	Atanendu Sekhar Mandal	Mobile based medical diagnosis and assistance application
279	KSHITIJ GANDHI	Shibasish Chowdhury	Developing application regarding format change.
280	KSHITIJ AWADHESH KUMAR	Navneet Goyal	Parallelization of graph based data mining algorithms
281	KSHITIJ KANT	Vineet Kumar	Hardware design of iris localization algorithm and its fpga implementation.
282	KSHITIJ SAXENA	Sachi Singh	Study and implementation of usb interfacing on zedboard
283	KUNAL JINDAL	Ak Das	Analysis of microarray data from patients showing complicated and uncomplicated malaria, with a view to identify sexual stage specific transcripts in vivo
284	LAKSHMI SOUMYA AMBADIPUDI	Ravi Saini	Vlsi architecture for image and video processing applications
285	LALWANI SUVESH MANOJ	Banasri Roy	Silica iron oxide nanoparticle coating on metal with cellulose fibre for rust prevention
286	ARCHIT GADHOK	Bharti Khungar	Predicting properties of ionic liquids using machine learning techniques
287	ARCHIT SAXENA	K K Gupta	Application of image mosaicing process on video frames
288	ARITRA DAS	Pradyumn Chaturvedi	Development of fuzzy logic controlled power electronic converters
289	ARPIT BHUTANI	Amit Kumar Verma	Study and design of different type of wavelets and their applications.
290	ARPIT BHUTANI	Suresh Gupta	Removal of heavy metals from industrial waste water using metallic nano-particles as adsorbents.
291	ARPIT GUPTA	Pradyumn Chaturvedi	Home automation
292	ARPIT GUPTA	Vinita Tiwari	Analysis of various nonlinear effect in optical channel
293	ARPIT SHARMA	Atish T R Paul	Development of synergic combinations of natural products for pancreatic lipase inhibition
294	ARPIT TALUKA	Gajanand Gupta	Application of reliability modeling in different mechanical tools and fixtures.
295	ARVIND MOHAN	Kavindra Kandpal	Curvature correction for bgr circuits
296	ASEEM SAXENA	S Mohan	Study and simulation of some terrain exploration algorithms
297	ASHISH DALAL	Cb Gupta	Data analysis & statistical inference
298	ASHISH KUMAR	Subhashish Gangopadhyay	Growth and characterization of metal thin films
299	ASHISH KUMAR YADAV	Tufan Chandra Bera	Parametric study of 3d-printer or fdm
300	ASHOK GEORGE	Tufan Chandra Bera	Process planning and part manufacturing

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
301	ASHUTOSH DOLIYA	Kuldip Singh Sangwan	Predictive modeling and optimization for machining operations
302	ASHUTOSH KUMAR SINGH	Anupam Singhal	Analysis of waste water quality drained in the village raila and the remedial measures.
303	ATISHAY JAIN	S Mohan	Study and implementation of various state-of-the-art algorithms for multi-robot-task-allocation used in area exploration
304	B SAITEJA	Kari Babu Ravi Teja	Design and simulation of voltage reference circuits for cmos circuits.
305	BAJIO RAJU	Shibani K Jha	Model fabrication and experimental studies of flow instabilities in hele-shaw chamber.
306	BALADARI NIKHITA	G Meenakshi Sundaram	Hemts based bio-sensor for cancer detection.
307	BALWAN SHARMISHTHA JAYKUMAR	Abhijit R Asati	Cnt-fet based digital circuit design
308	BANDI KIRTHI	P Srinivasan	Effect of current and voltage on the weldment in electric arc welding
309	BASUDEV CHOUDHURY	Ms Soni	Design and fabrication of energy efficient solar power uav
310	BHARGAV JHA	Avinash Gautam	Area coverage and exploration by ground robots
311	BHARGAVA KARAN VIVEK	Pradyumn Chaturvedi	Design of microcontroller based single phase inverter circuit
312	BHAVAYA GUPTA	K K Gupta	Implementation of object tracking algorithms.
313	BHIMSARIA NIKUNJ LAXMIKANT	Nitin Chaturvedi	Design of ultra-low power asynchronous circuits in hybrid technologies
314	BHOLE AJINKYA ARUN	Bijoy Kumar Raut	In-hand manipulation using extrinsic dexterity of simple hand designs
315	BHUTADA NIKHIL SURESH	Satish K Dubey	Design and development of solar based cooling system for automobiles
316	BODDUPALLI VENKAT AKHIL	A Anand Kumar	Implementation of pid controllers using neural networks with dsp.
317	C ABHILASH REDDY	Rajesh P Mishra	Stochastic inventory modelling for lean manufacturing.
318	CAMELLIA DEBNATH	Rahul Singhal	Speech synthesis using am-fm modelling
319	CHALLA SRIHARSHA	Tba (Biosc)	Anti cancer properties of camel milk
320	CHERUVU PHALANIS	P Srinivasan	Study on phase change material based thermal storage for energy conservation in building architecture
321	CHETAN ANAND	Arun Kumar Jalan	Finite element analysis and modelling of pipeline systems.
322	CHHABLANI CHIRAG	Pradyumn Chaturvedi	Design of 1-phase/3-phase cascaded 3-level inverter
323	CHILUKURI ABHIJIT	Arun Kumar Jalan	Dynamic characteristic analysis of rotor system
324	CHIRAG BATRA	Kuldip Singh Sangwan	Life cycle assessment of ceramic tiles
325	CHITNENI HARISH DATTA	Anil Jindal	Design and evaluation of nano drug delivery system of anti-infective agents.
326	CHITNENI HARISH DATTA	S Murugesan	In-silico design and study of nitrogen containing heterocycles as anti-tb agents
327	DARSHAN S BATHIJA	Arkopal K Goswami	Effect of e-commerce on trip generation.
328	DEEPAK AGARWAL	Devesh Samaiya	Smartphone based multimeter
329	DEVAM JHANWAR	Jitendra Panwar	Antimicrobial activity of silver nanoparticles on gram positive bacterial species.
330	DEVENDRA MITTAL	Shamsher B Singh	To study the post buckling strength of frp laminated beams/plates
331	DHIRAJ KAPGATE	Amit Jain	Automobile lubrication waste oil reuse as a biodiesel/fuel
332	DHRUV AGGARWAL	Tabir Mishra	Quality classification of bakery products by using image processing techniques.
333	DIDDIGA AKHIL	Sanjay Singh	Hlac & hlac like features for facial expression recognition.
334	DIGVEER DE	Vinita Tiwari	Loss classification in dwdm networks using machine learning
335	DIGVIJAY SINGH JODHA	Ravi Inder Singh	Synthesis and testing for bio-fuel and scope of improvement



S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
336	DIVYA PRADEEPKUMAR TAORI	Kavindra Kandpal	Design of high dynamic range cmos image sensors in 180nm technology.
337	EKBOTE ARJUN SHRIDHAR	Anshuman Dalvi	Preparation and characterisation of ltp-polymer composites for lithium ion battery application
338	ESHITA VYAS	Uma S Dubey	To study the anti-cancer properties of alpha-lact-albumin fatty acid complex.
339	GANDHI PREM SRUJALKUMAR	Shibani K Jha	Laboratory scale model development and study for groundwater contamination by mercury
340	GAURAV BANSAL	K Solomon Raju	Python based gui for wireless sensor networks data
341	GAURAV DADHICH	Omvir Chaudhry	Heat wave and meteor shower in indian market
342	GAURAV GHOSH	K K Gupta	Segmentation methods in image processing and analysis
343	GAURAV SINGH DAHIMA	S S Sadistap	Fabric colour matching using image processing and machine learning.
344	GAUTAM SINGHANIA	Sanjay Singh	Face alignment software
345	GAYATRI H BHAT	S Mohan	Study, simulation and implementation of some algorithms for simultaneous localisation and mapping using single robot
346	GEET KALRA	Dipendu Bhunia	Use of waste marble dust as a curing aid for concrete.
347	GEETIKA GARG	Shibasish Chowdhury	Integrating different online biological softwares and databases
348	GEETIKA KAUR BAGGA	Vineet Kumar	Developing algorithms suitable for hardware implementation for iris recognition.
349	GHATTAMARAJU NISCHAY	Tabir Mishra	Smart outdoor surveillance for threat detection using a standalone device built with microsoft kinect and raspberry pi
350	A ANJANA	S Gurunarayanan	Fpga implementation of arithmetic circuits
351	AASTHA AGRAWAL	JI Raheja	3 dimensional size analysis
352	ABHAY TYAGI	Sunil Kumar Dubey	Industry analysis of pharmaceutical and biotechnology market in india.
353	ABHIJEET CHOWDHURY	Shibasish Chowdhury	Understanding mirna-mrna interaction.
354	ABHIJITH PRADEEP	Ashish Mishra	High level synthesis using llvm
355	ABHINAV BAID	Avinash Gautam	Study & implementation of various state of the art algorithms for multi-robot task allocation used in area exploration
356	ABHINAV SETHI	Manoj Kumar	Analysis of concrete filled tubular arches
357	ABHISHEK GUPTA	Hitesh Dutt Mathur	Modelling and fuzzy logic control of dfig based wind energy conversion systems (wecs)
358	ABHISHEK GUPTA	Vinod Kumar Chaubey	Rf-id based application circuits.
359	ABHISHEK JINDAL	Sonal Mazumder	Modification of silica nanoparticle coatings on glass substrates
360	ABHISHEK KUMAR	Banasri Roy	Silica-iron oxide nanoparticle coating on metal with cellulose fibre for rust prevention
361	ABHISHEK KUMAR ROUSHAN	Avik Chattopadhyay	Study and analysis of sub micron mosfets.
362	ABHISHEK RAJ	Surojit Pande	Synthesis and characterisation of carbon nitride(c3n4)/ferric oxide (fe2o3) nano-composite and application in photocatalysis.
363	ABYODAYA AGRAWAL	Shan Balasubramaniam	Algorithms for retrieval of images based on indexing by text annotations and/or image components
364	ADIT MAKHIJANI	Murali Palla	Synthesis of bio-inspired composites.
365	ADITI JAIN	K Solomon Raju	Implementation of mean square root algorithm in vhdl
366	ADITYA AGARWAL	S S Sadistap	Design and development of an advanced adaptive fuzzy neuro algorithm for stable and efficient odor recognition using predeveloped electronic nose system.
367	ADITYA BHATT	Smita Raghuvanshi	Co2 mitigation using pure strain of mixed culture

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
368	ADITYA CHAUHAN	Saumi Ray	Comparison of catalytic activities of zeolites encapsulated cobalt and copper complexes.
369	ADITYA CHAWLA	Dheerendra Singh	Performance evaluation of solar powered srm (switched reluctance motor) drive for electric vehicles.
370	ADITYA MANGLA	Poonam Goyal	Distributed data structures for data indexing to be used in data mining algorithms. (area - concurrent data structures for data mining)
371	ADITYA R PILLAI	K Solomon Raju	Dsp module implementation for s.h.m.
372	AGHOR PRATIK PRASHANT	Amol M R Marathe	Wake oscillator study for a square cylinder
373	AGRAWAL PRACHI ANIL	Anil Kumar Saini	Identifying signs of diabetic retinopathy in eye images.
374	AISHIK DHAR	Rakhee	Optimum positioning of base station for cellular networks.
375	AISHWARYA SHARMA	Saumi Ray	Characterization and study of catalytic activity of zeolite encapsulated nickel and palladium complexes.
376	AKASH AGRAWAL	Pradyumn Chaturvedi	Design of single -phase cascaded multilevel inverter.
377	AKSHAT MATHUR	Ashish Mishra	Analysis,extraction & display of brain signal on rtos using fpga
378	AKSHAT SAXENA	Pramod Kr Tanwar	Implementation of face recognition using vhdl.
379	AKSHAY	K K Gupta	Medical image processing and its implementation using matlab.
380	AKSHAY MADAN	Vinod Kumar Chaubey	Study and fpga implementation of qpsk modulation and demodulation.
381	AKSHAY VENKATESH	Shamik Chakraborty	Study and simulation of hydrogen adsorption on carbon nanotubes doped with aluminium and phosphorus using dft.
382	AMAN TAKIYAR	Nv Muralidhar Rao	An empirical investigation of the link between infrastructure development and economic growth
383	AMARTYA TIWARI	Anil Kumar Saini	Implementation of different classifiers for image processing
384	AMBUJ MEHRA	Ashish Mishra	Fuzzy controller implementation on fpga architectures.
385	AMIT PRATIK SINHA	Deepak Chitkara	Development and in-vitro evaluation of solid lipid nanoparticles loaded with hydrophobic molecule
386	AMITESH RANJAN	Kiran Dc	Llvm
387	AMRITA BHOWMICK	K K Gupta	Recognition of digital logic circuit diagrams
388	ANAND SHANKAR	Uma S Dubey	Testing biocompatibility of ss/tio2 based biomaterial for hard tissue implantation.
389	ANANT KUMAR JAIN	Saumi Ray	Comparison of the catalytic activities of zeolites encapsulated cobalt and copper complexes.
390	ANANTHU MAHENDRANATH	Subhashish Gangopadhyay	Surface nanoscience of metal and semiconductor nanostructures.
391	ANIKET LOHIA	Asma Rani	Provenance capturing in unstructured data.
392	ANIMESH GOYAL	Kuldip Singh Sangwan	Statistical analysis of green manufacturing drivers barriers and key performance indicator
393	ANIRUDH SHARMA	Arkopal K Goswami	A study on the effect of e-commerce on trip generation
394	ANISH BANSAL	Nitin Chaturvedi	Design and analysis of auto adjustable write assist technology for sram
395	ANKIT AGARWAL	Uma S Dubey	Bioinformatics aspect of anti-cancer properties of camel milk.
396	ANKIT GUPTA	Lucky Sharan	Matalb modelling of non-linear effects in high speed dwdm
397	ANKIT RAJ	Banasri Roy	Silica-iron oxide nanoparticle coating on metal with cellulose fibre for rust prevention
398	ANKIT SARAF	Rajesh P Mishra	Design an improved fixture for cutting gears using shaper machine.
399	ANKIT SARAF	Satyendra Kr Sharma	Supply chain risk dashboard

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
400	ANKURJYOTI BORDOLOI	Ravi Inder Singh	Synthesis and testing for bio-fuel and scope of improvement
401	ANMOL SHRIVASTAVA	Amit Jain	Automobile lubrication waste oil reuse as a biodiesel/fuel
402	ANNESH BORTHAKUR	Dipendu Bhunia	Interlocking concrete blocks in construction
403	ANSHITA SRIVASTAVA	Vishal Gupta	Network virtualization
404	ANSHU GUPTA	Sonal Mazumder	Fluorescent nano-particles for bio-medical applications.
405	ANSHUMAN	Hitesh Dutt Mathur	Fuzzy logic based energy management system for a microgrid
406	ANUJ PAHUJA	K K Gupta	Image deblurring using fractal analysis
407	ANUMULA SAI VENKATA REDDY	Madhukar Mishra	Loading and decay of a magneto optical trap
408	ANURAG CHERUVU SREENIVAS	Bharti Khungar	Synthesis, characterization and catalytic application of schiff base metal complex
409	ANURAG GOYAL	Shamsher B Singh	To study the post buckling strength of frp laminated beams/ plates.
410	ANVIT KUMAR MITTAL	Shamsher B Singh	Material characteristics of fiber reinforced polymer
411	APOORV BHARGAVA	Shamsher B Singh	To determine the stiffness of frp plates.
412	ARADHYA SAXENA	Asma Rani	Provenance capturing in unstructured data
413	ARANI BASU	Ashish Mishra	Object tracking using image processing on fpga
<b>READING COURSE</b>			
1	A JYOTSNA	Dipendu Bhunia	Offshore structures – design, construction and maintenance
2	VUDAYAGIRI NAGA ANIRUDDH	Kumar Neeraj Sachdev	A study of fallacies in symbolic logic
3	ARPEET SAHOO	Remica Aggarwal	Genetic algorithms: a study
4	CARUNA BHAT	Remica Aggarwal	Statistics for business analytics
5	CHIRAG GOYAL	Sangita Yadav	Graph colouring and its applications
6	DEEKSHA AWADH DADHICH	Rishikesh Vaidya	A study of the basics of quantum physics and photonics
7	DIVYANSHU JAIN	Arun Kumar	Market analysis of reverse vending machine in india
8	GURANA SANDEEP	Kumar Neeraj Sachdev	A study of different methods for determining validity of arguments
9	JASWANT NAG GANGIREDDY	Sunita Raina	Making of self and society
10	KAKI ALEKHYA	Jyoti	Studying and improving the attitudes towards innovation in employees
11	KANCHARLA SURYA MANI DEEPAK	Kumar Neeraj Sachdev	A study of rules of inference in symbolic logic
12	KONDEPATI LEELA KRISHNA	Satyendra Kr Sharma	Prediction of time and cost overruns in construction projects
13	LOVEPERTEEK SINGH	A K Giri	Game theory
14	MOHIT JAIN	Archana K K	Drug targets in depression
15	MUNDHADA VYANKATESH MANOJ	Pradeep Kr H Keskar	Automorphism groups of projective spaces and designs
16	NEOPHY BISHNOI	Tanu Shukla	Determinants of institutional effectiveness
17	PRIYANK RAJ	R Mahesh	A study in psychopharmacology
18	RAJA V S K MURTHY TIRUMALASETTY	Jyoti	Studying and improving the attitudes towards innovation in employees
19	SAGAR RAHEJA	Satyendra Kr Sharma	Real options for project flexibility
20	SHUBHAM MEHTA	Rajneesh Choubisa	Reading course
21	TAVVA YASWANTH	Kumar Neeraj Sachdev	A study of rules of inference in symbolic logic
22	ANURADHA MISHRA	Tanu Shukla	Psychological processes responsible for conformity in social settings.
<b>SPECIAL PROJECT</b>			
1		Trilok Mathur	Introduction to analytical number theory
2	AAKASH UMESH CHANDRA	Rp Pareek	Ocular manifestations of diabetes and study of currently available treatment options
3	AASTHA SHRIMAL	Rp Pareek	Prevalence of diabetes and the socio-economic aspects of treatment in india.
4	AAYUSH AGGARWAL	Shibasish Chowdhury	Knowledge based decision tress construction related to cancer

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
5	AAYUSH CHAKRABARTY	Anil Jindal	Understanding reverse logistics and its optimization
6	ABHINAV GANDOTRA	Pankaj Kumar Sharma	Update on mind-body medicine
7	ABHISHEK BANSAL	Kiran Dc	Sequential program execution on multiple core architectures
8	ABHISHEK PADHI	Anshuman	Stochastic programming in transportation and logistics
9	ABHISHEK YADAV	Madhukar Mishra	Research on thorium based nuclear reactors.
10	ABYODAYA AGRAWAL	Rajiv Kumar	Community detection in massive and real graphs
11	ADARI BHASKAR	G Muthukumar	Analysis and design of structural elements in high rise structures
12	ADITI SINGHAL	Prabhat Nath Jha	Analysis of efficient cellulolytic and lignocellulolytic enzymes to be used in biofuel industry
13	ADITYA BHATT	Sandhya Marathe	Bio manipulation of polluted water using cost effective eco friendly techniques.
14	ADITYA R PILLAI	Leela Rani	Impact of trade liberalization on employment
15	AFZAL AHMED KHAN	Satyendra Kr Sharma	Risk score card of retail supply chain
16	AGRAWAL ANIKET KAMALKISHORE	Leela Rani	Investigating stakeholder relationships in models for sustainable consumption and living.
17	AGRAWAL SAKET KRISHNAKUMAR	Srikanta Routroy	Study of the advanced methods used for solving engineering optimization problems
18	AKASH PARAKRAM SINGH	Imlak N Shaik	Investor fear gauge index: a case of asia-pacific securities market. [india,japan,china,taiwan,korea and australia]
19	AKSHAT KHANDELWAL	Shivi Agarwal	Study of data envelopment analysis and its applications in real life problems.
20	AKSHAT KOTHYARI	Abhijit K Digalwar	Application of m.c.d.m. Models in lean manufacturing - a review
21	AKSHAT SINGHAL	Dipendu Bhunia	Optimum dosage of fly ash in improving the mechanical properties of concrete.
22	AKSHAY AURORA	Amit Kumar Verma	Elliptic curve cryptography
23	AKSHAY MADAN	G S Sessa Chalapathi	Design and implementation of wireless sensor networks(wsn) time synchronisation protocol
24	AKSHIT GUPTA	Pushp Lata	Gearing up the functioning of municipal schools.
25	AKSHIT SANDOOJA	Avik Chattopadhyay	Study of advanced vlsi devices
26	AMAN KHANDELWAL	Kiran Dc	Sequential program execution on multiple core architectures
27	ANAMIKA AGGARWAL	Rishikesh Vaidya	Special topics in particle physics
28	ANIRUDH SRIDHAR	A K Giri	Financial development and human capital in india
29	ANISHA VERMA	Shivi Agarwal	Study of neural networks
30	ANKIT GOEL	Srikanta Routroy	Development of performance measurement system for lean manufacturing system
31	ANKITA DAIYA	Rajdeep Chowdhury	Identifying components in conditioned media from drug resistant cells
32	ANKUR BHARDWAJ	Uma S Dubey	Study of lung cancer and its therapeutic modalities.
33	ANMOL BANSAL	Madhukar Mishra	Nuclear magnetic resonance and its applications
34	ANOOP KUMAR SHUKLA	Rajneesh Choubisa	Human resource development in startups   an insight into the startup world
35	ANOOP KUMAR SHUKLA	Satyendra Kr Sharma	A graph theoretic approach for measuring performance of lean manufacturing system
36	ANSHU GUPTA	Rajesh Mehrotra	Relation of fox p2 transcription factor with the evolution of speech.
37	ANSHULA SHARMA	Abhijit R Asati	Design of digital and analog circuits using cntfet.
38	ANURAG CHERUVU SREENIVAS	Girish Kant	Formulation of a multi-objective optimization model for push to pull transition

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
39	ANURAG PRASHANTA PODDAR	Amol M R Marathe	Uncertainty and sensitivity analysis of immunological models.
40	APOORV BHARGAVA	Imlak N Shaik	Investor fear gauge index: a case of asia-pacific (india, japan , china, taiwan, korea and australia) securities market.
41	AQSA INAYAT	Murali P	Mobile adhoc networks (manet) using wifi for android platform.
42	ARMANJEET SINGH	Manjuladevi V	Lasers and its applications
43	ASEEM SAXENA	Shibasish Chowdhury	Knowledge based decision tree construction related to cancer
44	ASHISH DALAL	Rajiv Kumar	Probabilistic graphical models
45	ASHISH KUMAR YADAV	Saumi Ray	Encapsulation of transition metal complexes in zeolites
46	ASTHA GUPTA	Yashvardhan Sharma	Spam detection in opinion mining
47	ASTHA SHARMA	Shivi Agarwal	Genetic fuzzy systems
48	ATUL MITTAL	Rajiv Kumar	Matching in graph theory
49	AVESH KUMAR SINGH	Madhukar Mishra	Electric transport in semiconductor material
50	AVIRUDDH JAIN	Rajesh P Mishra	Study and use of design of experiment (taguchi method and response surface methodology) to solve a sample real world problem and compare results.
51	AYUSH JAIN	Shivi Agarwal	Data envelopment analysis and its application in real life problems
52	AYUSH SAXENA	Tanu Shukla	Organizational psychology
53	BALADARI NIKHITA	Surekha Bhanot	Bio-medical signal processing of ecg and ppg.
54	BALKRISHNA SRIVASTAVA	D Bandyopadhyay	Study of masers
55	BANSOD DEVEN GIRISH	Geetilaxmi Mohapatra	Effects of tax changes on economic growth and income inequality : evidence from indian economy
56	BHAGURKAR AKHILESH GIRISH	Satyendra Kr Sharma	How order uncertainty affects transportation: model and strategy
57	BHASKAR SINGHAL	Madhukar Mishra	Study of cosmic rays.
58	BHAVAYA GUPTA	Prabhat Nath Jha	Characterisation of cellulolytic genes
59	C ABHILASH REDDY	Girish Kant	Key performance indicators in strategic sourcing
60	CARUNA BHAT	Omvir Chaudhry	Na
61	CHINTA PATANJALI	Arun Kumar Jalan	Control of mechanical vibrations using shape memory alloy
62	D. PRITHVI REDDY	Ruchika Sharma	Studying the role of motivation and emotions in consumer behaviour using theories of applied psychology
63	DEEPANSHU SINGH	A K Giri	Financial development and human capital in india
64	DHARMENDER NIRBAN	Gautam Singhvi	Targeted drug delivery
65	DIVYANSHU JAIN	Leela Rani	Understanding the role and value chain flow of informal sector in solid waste management
66	DURGA HARINI PANDA	Kiran Dc	Execution of sequential program on mutli core architectures
67	ESHITA VYAS	Bhagavatula Vani	Literature survey to characterize salt tolerant mechanisms in halophytic bacteria. 1) biochemical 2) physiological 3) molecular mechanisms
68	FAIZAN AHEMAD	Murali P	Mobile adhoc networks (manet) using wifi for android platform.
69	GAUTAM D SHAH	Nv Muralidhar Rao	State space modelling of the macro-economy
70	GYAN PRAKASH VERMA	Dipendu Bhunia	3d building designing on 3ds max software and analysis of rcc building on staad pro software
71	HARSHVARDHAN JHA	R Gupta	Digital processing of satellite images and its optimization using genetic algorithm for facility management.

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
72	HIMANSHU JAIN	P Srinivasan	Study of the existing technologies regarding the current exploitation of alternative and renewable sources of energy (solar energy, wind energy, geothermal energy, energy from bio-degradable substances etc.) And challenges pertaining to feasibility to enhance their various applications.
73	INAMDAR ABHISHEK AJIT	Pradeep Kr H Keskar	Linear representations of groups
74	ISHANI SINGH	Srinivas Kota	Study on applying lean principles to healthcare systems.
75	JASHYANT SIKHAKOLLI	Sunil Kumar Dubey	To study the penetration and accessibility of generic drugs in rural population.
76	JASPREET SINGH	Ak Das	Understanding the construction and use of eukaryotic vectors in mammalian cell lines.
77	JASWANT NAG GANGIREDDY	Rajesh P Mishra	To develop a simulation model for a jig design
78	JAYDEEP JHALA	Rajeev Taliyan	Clinical and preclinical updates in multiple sclerosis and amyotrophic lateral sclerosis
79	K. TEJASWI	P Srinivasan	Simulation of nickel based alloys for the construction of high efficiency steam turbines
80	KAMATH GAURAV NARESH	Gajanand Gupta	Study of development of kanbans for lean and just-in-time(jit) production
81	KARTIK GOYAL	Sangita Yadav	Multi-grid method
82	KARTIK SINGHAL	Omvir Chaudhry	A study of impact of taxation on savings and private investment.
83	KARTIK SIRWANI	Archana K K	Co- crystals application in solubility enhancement.
84	KEDIA SAMEER RAJIV	Biswanath Layek	Analysis of goal distributions in football using statistical techniques
85	KHUMAAN MALPANI	Shuvendu N Patel	Bending of laminated and composite shell panels
86	KOKANDAKAR AJINKYA HEMANT	Nv Muralidhar Rao	Some aspects of labour mobility on wages
87	KUNAL	Rajesh P Mishra	Develop a model for estimation of reliability for mechanical components
88	LAD OMKAR ASHOK	G S Sessa Chalapathi	Study and implementation of algorithms in wireless sensor networks.
89	LAVLEEN BHATI	Madhukar Mishra	Qed calculations of elementary particle processes and quantisation of fields
90	LOKVISHRUTT BISHNOI	Rajesh P Mishra	Optimization of labor force for repetitive construction projects
91	LUNAWAT SONIYA RAJENDRA	Rajesh Mehrotra	Detection of contamination in water by enzymatic approach for biomems device
92	MANAN MEHROTRA	Subhashish Gangopadhyay	Scanning tunneling microscope- versatile tool for nanotechnology
93	MAYANK KUMAR	Bhagavatula Vani	Suggesting the design of a green building for the indian climatic conditions
94	MIHIR SHARMA	D Bandyopadhyay	Study of masers
95	MILIND SAH	Manjuladevi V	Lasers and its applications
96	MOHIT AGGARWAL	R Gupta	Digital processing of satellite images and its optimization using genetic algorithm for facility management
97	MOHIT BHARDWAJ	Biswanath Layek	Study the pulsars and its various observational aspects
98	MOHIT GUPTA	Pushp Lata	Gearing up the functioning of municipal schools.
99	MOHIT JAIN	Archana K K	Design of a novel drug delivery system of a selected drug.
100	MUKUL KHEDWAL	Satish K Dubey	Study and implementation of finite volume methods for radiation heat transfer.
101	NANDAN LUTHRA	Tapomoy G Sarkar	Engineering of time independent potential using high frequency forced quantum systems
102	NEELES SHAMBHAJICHE	Nv Muralidhar Rao	State space modelling of the macro-economy
103	NEMANI AKHIL MANISH	Madhukar Mishra	Study of superconductivity and its current applications

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
104	NIDHI AGGARWAL	Omvir Chaudhry	Developing web marketing model and creating statistical data on the basis of analysis of the model
105	NIKHIL JR	Abhishek Mishra	Performance evaluation of local search based task scheduling algorithms for parallel systems.
106	NIKITA TANWANI	Shivi Agarwal	Study of fuzzy data envelopment analysis
107	NIYATI TIWARI	Anil Jindal	Patent analysis of antiobesity drugs.
108	PALAK JAIN	Rakhee	Study of fuzzy reliability of a reliable system.
109	PALLE ABHISHEK REDDY	Prabhat Nath Jha	Comparative analysis of genes of beneficial vs pathogenic bacteria for colonization of plants
110	PANCHAKARLA SAI KUTUMBA RAO	S Murugesan	In-silico identification of novel anti-leishmanial agents
111	PRABHUDESAI GAURAV SANJAY	Sai Jagan Mohan	Study of vortex-induced vibrations (viv)
112	PRAJAKTA KIRAN JOSHI	Shibasish Chowdhury	Primary and secondary structure analysis of mirna-mrna complex.
113	PRATIK DHAR	Girish Kant	Optimization of inventory and process flow in a supply chain
114	PRAVEEN BANSAL	Amit Goel	Fem analysis of an airport runway pavement and model the interface bonding condition between the layers.
115	RACHIT GOYAL	Rajesh P Mishra	Lean manufacturing- its application in manufacturing industries
116	RACHIT JAIN	Madhukar Mishra	Calculation of qed values for bhabha and molar scattering
117	RAHUL TIWARI	Leela Rani	Impact of trade liberalization on employment
118	RAKSHIT CHAUDHARY	Amol Holkundkar	Study of current challenges in laser and ion induced nuclear fusion
119	RAM KARNANI	Geetilaxmi Mohapatra	Econometric analysis of determinants of quality of education
120	RAO ANKIT SHIVAPRASAD	Leela Rani	Investigating stakeholder relationships in models for sustainable consumption
121	RASHI KHANDELWAL	Tapomoy G Sarkar	Dark energy modelling
122	RASHI MATHUR	Bhagavatula Vani	Alkaline tolerance mechanism of cyanobacteria
123	RISHABH AGARWAL JAIN	Raman Sharma	Pre-combustion co2 capture: technical an economical aspects.
124	RISHABH KEDIYAL	Sangita Yadav	Multigrid method
125	RISHABH KUMAR	Uma S Dubey	Testing biocompatibility of ss/tio2 based biomaterial to be used in hard tissue implantations
126	RISHABH SHUKLA	Shivi Agarwal	Study of artificial intelligence
127	RISHIKA SURYA	Bhagavatula Vani	Literature survey to characterize salt tolerant mechanisms in halophytic bacteria.i)biochemical ii)physiological iii)molecular characterization.
128	ROHAN K MEHTA	Biswanath Layek	Critical phenomenon
129	ROHIN ARORA	Sainath Bitragunta	Novel transmission protocol design and analysis for ultra wideband cooperative communication systems
130	ROHIT M TIPNIS	Bhupendra K Sharma	Modelling of biomagnetic micropolar blood flow
131	ROSHAN MISHRA	T Chakraborty	Analysis of process of urbanization in the million plus cities of india
132	ROUNAK KAKWANI	Satyendra Kr Sharma	Logistics service design.
133	RUCHIR DWIVEDI	Rakesh Choubisa	Study of chaos in cryptography
134	S VIVEK	Rajiv Kumar	Applied analysis
135	SAGAR KUMAR CHOURASIA	Sangita Yadav	Boundary element method for partial differential equation.
136	SAHIL GUPTA	Srikanta Routroy	The role of supplier innovation flow in manufacturing supply chain
137	SAHIL PUNCHHI	A K Giri	Analysis of rare macro economic events (disaster)

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<b>Design Project</b>			
138	SAKSHI MARKHEDKAR	Shamik Chakraborty	Study of molecular systems which can mimic the operation of electronic logic gate and circuits.
139	SALONI CHANDAK	Navneet Goyal	Algorithms for dynamic class classification
140	SAMEER TELANG	R Gupta	Applications of 3-d printing in civil engineering
141	SAMISH BEDI	Geetilaxmi Mohapatra	Econometric analysis of determinants of quality of education.
142	SAMRAT DAS	Dipendu Bhunia	3d building designing on 3ds max software and analysis of rcc building on staad pro software
143	SANCHIT SAMNANI	Rakhee	A multi-objective discrete reliability optimization problem for dissimilar-unit standby systems
144	SARANYA DAS	Prabhat Nath Jha	Analysis of efficient cellulolytic and lignocellulolytic enzymes to be used in the bio-fuel industry
145	SHANMUKH DHRONA KANKANALA	Rajesh P Mishra	To develop a simulation model for a jig design
146	SHASHANK BHADORA	Praveen Goyal	Csr disclosure by fmcg companies
147	SHASHANK GUPTA	Rajesh P Mishra	Evaluation of quality at product design/conceptual stage.
148	SHASHANK PANDEY	Jitendra S Rathore	Simulation of a mems platform gas sensor.
149	SHASHANK PANDEY	Prabhat Nath Jha	Comparative analysis of genes of beneficial vs pathogenic bacteria for colonization of plants
150	SHEFALI GUPTA	Madhukar Mishra	To learn how to perform qed calculations .
151	SHIKHAR AGARWAL	Amit Kumar Verma	Study of theory of difference equations
152	SHIVAM BAJPAI	Amit Goel	Fem analysis of an airport runway pavement and model the interface bonding condition between the layers.
153	SHIVAM BANSAL	Umesh Dhyani	International relations and security
154	SIDDHARTH BHATIA	Rajiv Kumar	Orthogonal and box rectangular graph drawings
155	SMARTH KAKKAR	Prasanta Kumar Sahu	An investigation of major indian ports performance
156	SMARTH KAKKAR	Uma S Dubey	Study of lung cancer and its therapeutic modalities
157	SRIGIRIRAJU V P S SAI KRISHNA	T Chakraborty	Analysis of process of urbanization in the million plus cities of india
158	SWARNIM SINGHAL	Shivi Agarwal	Study of fuzzy data envelopment analysis
159	TANAYVEER SINGH BHATIA	Tapomoy G Sarkar	Differential geometry and gauge theories
160	V C ROOPANA	Ajit Pratap Singh	Water resource management system using mathematical modelling and simulation
161	V S V SRAVYA	Priya C Sande	Cfd modelling and simulation of three phase reactor with reacting system
162	VAIBHAV MANCHANDA	Madhukar Mishra	Research on thorium based nuclear reactors.
163	VAIBHAV SINGH	Madhukar Mishra	Decay rate, cross section calculation in particle physics and understanding current experimental data at hadron collider experiment.
164	VARIS KUMAR KALIA	Ak Das	A comparative study of promoter regions from prokaryots and eukaryots
165	VARUN IYER	Amol Holkundkar	Study of current challenges in laser and ion induced nuclear fusion
166	VATSAL GUPTA	Imlak N Shaik	Strategic and financial analysis of the indian oil industry
167	VIPUL ARORA	Umesh Dhyani	International relations and security
168	VIPUL SHARMA	Raman Sharma	A novel co2 cryogenic liquefaction and separation system.
169	VIPUL VAIDYA	J N Bandopadhyay	Study and simulation of various quantum algorithms & complexity
170	VISAL DATTA RAMISETTI	Tanu Shukla	Study on attitude and behavior based social psychology
171	VISHAD BHALODIA	Imlak N Shaik	Strategic and financial analysis of the indian oil industry
172	VISHAL	Shuvendu N Patel	Bending of laminated composite plates



S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
173	VIVEK KUMAR BANSAL	Omvir Chaudhry	Developing web-marketing model and creating statistical data on the basis of analysis of model.
<b>STUDY PROJECT</b>			
1	TRIPATHI NAVNEET VIRENDRA	Pradyumn Chaturvedi	Study of realtime hardware development board dspace ds1104
2	TRIVEDI PRAGYAN PRIYAMEDH	P Srinivasan	Effect on heat transfer inside a nuclear reactor containment due to hydrogen embrittlement and hydrogen diffusion inside the containment.
3	TUSHAR ANUPAM	Madhukar Mishra	Study of nuclear fission and fusion.
4	UDAY JOSHI	Tba (Pha)	To study the various modified release formulations and their components
5	UJJWAL	Rajesh Mehrotra	Plant growth regulators : role in crop production.
6	UPADHYAY GAURAV ARVIND	Yashvardhan Sharma	Design and development of opinion mining framework
7	UTKARSH GUPTA	Hari Om Bansal	Efficient charging of batteries in hybrid vehicles
8	UTPAL SANNYASHI	Kamlesh Kumar	Underground infrastructure: planning, design and construction.
9	UTSAV MISRA	Satyendra Kr Sharma	Developing a risk index for capital budgeting projects using analytical modelling.
10	UTSAV SHUKLA	Utkarsh Maheshwari	Residue upgradation to valuable products
11	V ADITYA	Avinash Gautam	Terrain mapping and exploration using multiple mobile robots
12	V.ANIERUDH	Girish Kant	Modelling and simulation of orthogonal metal cutting process
13	V.V.SWECHCHA MAYUKHA	Ashish Tiwari	Domain decomposition method and their application in physical and biological sciences
14	VAIBHAV AGARWAL	A K Giri	Relationship between corruption and economic growth of india
15	VAIBHAV GARG	Navneet Gupta	Study on electrical performance of zno based thin film transistors(tfts) using various gate insulators.
16	VAIBHAV JAIN	Bibhas Ranjan Sarkar	Application of organic field-effect transistors (ofets)
17	VAIBHAV SINGH	Ajay Kumar Sah	A review on 4,6-o-ethylidene-beta-d-glucopyranosylamine derived glycoconjugates.
18	VAIBHAV SINGH	Anshuman Dalvi	Some studies on low dimensional storage systems
19	VAIBHAV SINGH	Rajeev Taliyan	Study on pathogenesis and management of cancer.
20	VALIVETI VIVEK BHARGAV	Abhijit K Digalwar	Application of optimization techniques in lean manufacturing - " a review "
21	VANAM SAISRI	Rajneesh Choubisa	The impact of stress on employee productivity and its side effects & the factors responsible for occurrence of stress.
22	VANAM SAISRI	Sunita Raina	Middle east conflicts: exploring the role of religion in sectarian violence
23	VANDANA JAIN	Krishna Muniyoor	How could we have prevented "black monday"-24 august 2015.
24	VANGAPANDU SAI RAKESH MOHAN KRISHNA	Rahul Singhal	Multiband ofdm for wifi over optical fiber
25	VARIS KUMAR KALIA	Sai Jagan Mohan	Analyze aerodynamics at transonic, supersonic and subsonic velocities
26	VARUN IYER	Srinivas Kota	Study of supply chain in the oil manufacturing industry
27	VARUN RAJ MAHAJAN	Lucky Sharan	Mathematical modelling of nonlinear optical effects for high speed wdm systems.
28	VARUN RAJEEV M	Sk Hafizul Islam	Design of provably secure digital signature scheme
29	VARUN WACHASPATI J	Pankaj Vyas	Study of early reliability estimation approaches

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
30	VEDANT RAJENDRA MAHULKAR	Nidhi Chaturvedi	Hemts simulation using atlas silvaco(in particular device leakage)
31	VENI LASYA JAMMALAMADAKA	Rajneesh Kumar	A study of sensor technology at basic and advanced level
32	VENKAT ASHRITH J.R	Bahurudeen A	Development of sugarcane bagasse ash blended pervious concrete
33	VENKATA SAI KIRAN CHANUMOLU	Sailaja Nandigama	Sustainable use of mineral resources in india: coal issues concerned with allotment & access of coal mines
34	VENKATA SAI KIRAN CHANUMOLU	Surekha Bhanot	Extraction and processing of electrocardiogram & photo-plethysmography signal
35	VIBHANSHU GROVER	Paritosh Shukla	Combustion kinetics of biodiesel in biodiesel engines and use of kinetics for knock prevention.
36	VIGNESH V S	Geetilaxmi Mohapatra	Infrastructure, economic growth and industry expansion
37	VIKAS JAKHORIA	Arun Kumar	Customer perceived value scale : a case of indian insurance companies
38	VIKRAM SINGH JODAN	P Srinivasan	Energy management
39	VIKSIT SAPRA	Mahesh Angira	Study of robotic kinematics for position control required for shape memory effect monitoring/testing
40	VINAYAK MISHRA	Rajneesh Choubisa	Social anxiety among students
41	VIPUL SHARMA	Shashikant Sadistap	Study of effects of probiotic bacteria's chemical reactions in the gut on human health
42	VIPUL VAIDYA	S Gurunarayanan	Study of cache performance for different multi-core processors.
43	VISHAK REVIRAJ	Rr Mishra	Studies in general theory of relativity and cosmology
44	VISHESH SHARMA	Amit Kumar Verma	Study of wavelet types and their basic applications.
45	VIVEK KISHORE CHOUDHARY	Poonam Goyal	Concurrent knn on r-trees.
46	VIVEK KUMAR	Manoj Kumar	Study of geothermal energy potential in india
47	VONTELA SHREYA	K K Gupta	Water quality measurement sensors.
48	VUDAYAGIRI NAGA ANIRUDDH	Dinesh Yadav	A study of scenography and its design
49	Y SOWMYA	Suresh Kumar	Analysis of cosmological data using cosmomc software
50	YALAMANCHILI SRI GANESH	Shamsher B Singh	Depth of carbonation of concrete
51	YAMBAL MUKUL RATNAKUMAR	G Muthukumar	Influence of wind loads on tall buidings
52	YASH KHANNA	Virendra Singh Nirban	Analysis of social networking sites
53	YASH TYAGI	Sanjay Singh	Cascade support vector machine classification
54	YASHODHARA	Sailaja Nandigama	Study of sustainable development in emerging countries
55	YAYI SRI HARSHA	Jyoti	An exploratory research study on the journey of entrepreneurs
56	YELAGANAMONI KARTHIK RAJA	Rajneesh Choubisa	Psychological interventions
57	YELURI MANIKANTA SATHWIK	A Anand Kumar	Harvesting solar energy in more efficient way
58	YUGANSHU JAIN	Srikanta Routroy	Study of various aspects of agile manufacturing system
59	SHUCHITA BANTHIA	Poonam Goyal	Search results clustering for images using content and context of images
60	SHUKLA PAWAS SANDESH	Nidhi Chaturvedi	Hemts simulations using comsol (in particular, biosensing)
61	SHUKLA YASH SANDEEP	Amit Goel	Autonomous non-destructive testing.
62	SHYAM SUNDAR SANKARAN	P Srinivasan	Simulation of laminar natural convection in an enclosed cavity, with a temperature difference between a set of opposite walls using c programming
63	SIDDHANT RANJAN	Girish Kant	Supply chain management.
64	SIDDHANT AGARWALA	Murali Palla	Fracture mechanics in advanced materials
65	SIDDHANT PUNDIR	Sharad Srivastava	Fluids solid interface in blood vessels

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
66	SIDDHARTH	Ms Soni	Applications of nanotechnology in solar thermal systems
67	SIDDHARTH MEHROTRA	Ms Soni	A growth outlook for solar energy in the indian context
68	SIDDHARTH SHANKAR TRIPATHI	Shamik Chakraborty	Use of quantum mechanical tunnelling to try to explain different biological phenomenons and reactions.
69	SIDDHARTH SHARMA	K Hari Babu	Of design and development of an sdn aware tcp module
70	SIDDHARTH V IYER	Ashish Runthala	Heuristically selecting the best set of correct templates among a pre-screened reliable set to construct an accurate target structure of a protein
71	SIJO VM	Satyendra Kr Sharma	Product design and inventory models
72	SIMARPREET SINGH MAMIK	Amit Goel	Use of nano-particles in pavements
73	SIMRAN KAUR	A K Giri	Role of monetary policy variables in stock market performance
74	SMRITI JOSHI	Niladri Sarkar	In depth study of classical electrodynamics with emphasis on greens function method.
75	SNEHIL ARORA	Vishal Gupta	Application of image processing for graphs
76	SOMA MISHRA	Rishikesh Vaidya	Studies in special topics of quantum mechanics
77	SOMYA GUPTA	Navneet Gupta	Material selection for microsensors and microactuators using madm approach.
78	SONALI KALLANI	Bhagavatula Vani	Mechanisms behind alkaline ph tolerance in cyanobacteria
79	SOPAN PATRA	Ashish Mishra	Power gating and clock gating techniques for processors.
80	SOUMITRA SAXENA	Umesh Dhyani	Why social networking is vital to csr
81	SOURABH BALDWA	Srikanta Routroy	Study of markov decision process in supply chain problem
82	SOURABH BANSAL	K S Raju	High speed video processing algorithms using open cv.
83	SOURADEEP BHATTACHARYA	Nidhi Chaturvedi	Hemt simulations using comsol (in particular, biosensing)
84	SPARSH MAHESHWARI	Kumar Neeraj Sachdev	Is there a universal moral code?
85	SRABASTI NANDI	Lucky Sharan	Simulink modeling of high energy dwdm in presence of non-linearity
86	SRIшти DHAMIJA	Harikrishnan G Nair	The founding mothers and their role in the indian constituent assembly
87	SUBHAM JAIN	Asma Rani	Provenance generation for complex queries
88	SUGGU TARUN REDDY	Shamsher B Singh	Depth of carbonation of concrete
89	SUMAN	Omvir Chaudhry	Design of software to evaluate projects on the basis of npv and irr.
90	SUMANTRA SHARMA	Madhukar Mishra	Study of magneto resistance phenomena such as gmr,tmr,emr and application of gmr in magnetic field sensors and mrams.quantum hall effect and superconductivity.
91	SUMEDH K RAMAPRASAD	Vineet Kumar	Hardware design for image processing blocks
92	SUMI JAIN	Gajendra S Chauhan	New trends in media, how advertising redefines the society.
93	SUNIL KUMAR	Pushp Lata	Readers perception about quality and their interest in local hindi newspapers.
94	SURBHI DADA	Jyoti	Foreign direct investment in entrepreneurial venture
95	SURBHIT JOHRI	Rajesh Mehrotra	Microarray analysis of tgac across arabidopsis thaliana. Please suggest me the procedure for registering for the course.
96	SURENDRA PAL SINGH RATHORE	Yashvardhan Sharma	Design and development of opinion mining framework
97	SURYANSH RASTOGI	Gajanand Gupta	Bayesian networks for mechanical system reliability assessment
98	SUYASH AHUJA	Yashvardhan Sharma	Mining comparative senetences and relations

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
99	SWAMIL MAHAJAN	Bibhas Ranjan Sarkar	Photolithography and photoengraving as a method of manufacturing of cmos integrated circuits
100	SWAPNIL KHANDELWAL	Shibani K Jha	Effect of climate change on rise of sea level and its further consequences
101	SWARAJ DALMIA	Abhishek Mishra	Computational complexity theory
102	SWARN SINGH BHAL	Uma S Dubey	Blood brain barrier and metastasis
103	SUPRIYA AGARWAL	Shan Balasubramaniam	Automatic answer checking application
104	TANAY BRIJESH DIXIT	Nv Muralidhar Rao	Impact of debt-related fiscal policy on economic growth in india
105	TANAYA JHA	A K Giri	Female human capital and economic development in india(state-wise study)
106	TANDON ABHILASH BORTHAKUR	Sanjiv Kr Choudhary	Contemporary issues related to indian geography with special focus on environment and natural hazards.
107	TANHYA CHITLÉ	Ravi Inder Singh	Study and optimization of changing transmission gear ratios on vehicle speed using matlab/simulink
108	TANIYA	Sushila Shekhawat	Transgender portrayal and representation in film
109	TANMAY KULSHRESTHA	Shibasish Chowdhury	Understand dna structure using graph theory
110	TANMAY SHARMA	Rajesh Mehrotra	Genome wide analysis of wrky transcription factors of arabidopsis thaliana
111	TANYA DIXIT	Abhijit R Asati	Design and analysis of analog circuits using cntfet
112	TANYA SRIVASTAVA	Nv Muralidhar Rao	Spatial infrastructure and productivity in india
113	TASKAR SHIVANI SHISHIR	Sunil Kumar Dubey	Technology based solutions to some of the challenges faced by the society.
114	TATA MAHANTH SAI RAJA	Sailaja Nandigama	Sustainable use of mineral resources in india coal issues concerned with allotment and access of coal mines
115	TEJAS BHALLA	Kavindra Kandpal	Analysis of low voltage analog design trends.
116	TEJAS PORWAL	Gajanand Gupta	Implementation of total productive maintainance in indian scenario
117	TEJAS PRAKASH HARNE	Pramod Kr Tanwar	Study of implementation of fast searching algorithms for biometric database and integrating the database with python and sqlite
118	THAKKAR VANDIT ARVINDBHAI	Chandra Shekhar	Metaheuristic approach for solving optimization problems
119	THAMMANA SAI ROHITH	Atanendu Sekhar Mandal	Cloud based medical diagnostics and assistance app
120	THANVI SANKET ASHOK	Vineet Kumar	Sensor interfacing with msp430
121	THUNIKI SRINIVAS REDDY	Leela Rani	Swot analysis and motivation for online v/s offline learning at university level
122	TRIPATHI KARTIK SANJAY	Rajneesh Kumar	Optimization for photo voltaic cells.
123	SARTHAK BISHT	Rajneesh Choubisa	To study the overt behavior shown during self-directed e-learning.
124	SARTHAK GUPTA	Jyoti	Foreign direct investment in entrepreneurial venture
125	SARVESH KESHARWANI	K S Raju	Implementation of fingerprint matching algorithm.
126	SATTI LIKIL REDDY	Shamsher B Singh	Depth of carbonation of concrete
127	SATWIK PRABHU K	Sainath Bitragunta	Development of novel and efficient protocols for green communication systems
128	SATYAM JAIN	Devika	A detailed study on the works of christopher nolan
129	SATYAM JAIN	K K Gupta	Flaw detection in metal plates using ndt
130	SATYANARAYAN PATEL	Atish T R Paul	Patent analysis of anti-obesity drugs.
131	SAUMYA Y SAHAI	Yashvardhan Sharma	Construction of a multilingual text summarizer
132	SAURABH BHARDWAJ	Paritosh Shukla	Removal of organic wastes from water streams
133	SAURABH MAURYA	Raj Kumar Gupta	Context-aware speech-to-text system

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<b>Design Project</b>			
134	SAURABH SHUKLA	K S Raju	Developing a python based gui for efficient performance of building systems, by facilitating building automation.
135	SAURAV DWIVEDI	Murali Palla	Atomistic modelling of failure in materials
136	SAURJYA SARKAR	Anantha Krishna Chintanpalli	Predicted effects of vowels in background noise in auditory nerve.
137	SAYYED MUDASSIR ALI SABIR ALI	Srinivas Kota	Understanding the use of virtual reality in design
138	SEWAKE DEWANSHU CHHAGAN	Rajesh Mehrotra	Designing of biosensors
139	SHABDA	Imlak N Shaik	Healthcare finance in india
140	SHAH VAISHAL HITENDRAKUMAR	Pradyumn Chaturvedi	Piezoelectric energy harvester
141	SHAISTA HUSSAIN	Rajneesh Kumar	Partial shading of voltaic cell
142	SHALAKA SOMANI	Vishal Gupta	Modelling water distribution system using epanet
143	SHALINI MITRA	Avik Chattopadhyay	Nanostructure solar cell
144	SHANMUKH DHRONA KANKANALA	Abhijit K Digalwar	End of line(eol) options for sustainable manufacturing
145	SHANTANU MAHARWAL	Saumi Ray	To study the nickel complexes for the expected sensor properties
146	SHANTANU SHRIVASTAVA	Jp Misra	Study of simultaneous localization and mapping techniques
147	SHARAD YADAV	Rajesh Mehrotra	Analysis of cis regulatory elements and their interaction with transcription factor involved in the abiotic stress tolerance in plants
148	SHASHANK GUPTA	Chandra Shekhar	Study of threshold policies for machine repair problem.
149	SHASHANK M	Amit Goel	Develop an android & web application to enable users to provide feedback on pavement and traffic condition.
150	SHASHWAT CHOPRA	Srikanta Routroy	Analysis of supplier innovation flow in manufacturing environment
151	SHASHWAT SHIVAM JHA	Arvind Kumar Sharma	Equations of state: development and applications
152	SHAURYA MALHOTRA	Madhukar Mishra	Neutrino oscillations and its detection.
153	SHAURYA SINGH	Parikshit K Singh	A review on internet of things for smart cities with special emphasis on grid management, traffic management and noise monitoring
154	SHEFALI GARG	Navneet Goyal	Age invariant face recognition
155	SHEFALI GUPTA	Amit Jain	Reuse of lubrication waste oil from automobiles as a fuel /bio fuel
156	SHELJA GUPTA	Krishna Muniyoor	Stock market volatility
157	SHETTY NIKHIL ACHUTHA	Pramod Kr Tanwar	Gui development for cross platform application using qt or python for image processing analysis.
158	SHIBALIK MOHAPATRA	Avik Chattopadhyay	Study of vlsi design
159	SHIKHAR AGARWAL	A Anand Kumar	Smart grids and renewable energy re-sources
160	SHIKHAR AGARWAL	Devendra Kumar	Numerical solutions of burgers equation
161	SHILPI AGRAWAL	Sharad Srivastava	Buckling of beams and columns
162	SHITIJ MAHAJAN	Rajesh P Mishra	Development of gui for multi-criteria decision model using matlab
163	SHIVAM GUPTA	Ajit Pratap Singh	Ground water modelling in semi arid region of rajasthan
164	SHIVAM GUPTA	Virendra S Shekhawat	Data sharing application design for opportunistic networks.
165	SHIVAM KHANDELWAL	Hari Om Bansal	Selection of battery for improving the performance of plug-in hybrid electric vehicles
166	SHRADDHA PANWAR	Omvir Chaudhry	Impact of financial literacy on the economic development of india.
167	SHRAVAN KRISHNAN	Chandra Shekhar	Monte carlo simulation for different queueing models

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
168	SHRAYAN CHANDA BARMAN	Pramod Kr Tanwar	Study of implementation of fast searching algorithms for biometric database and integrating the database with python and sqlite
169	SHREEMALA DHAYAL	Somdatta Bhattacharya	Women in pink city: urban planning and gender politics in jaipur
170	SHREY RAHEJA	P Srinivasan	Simulation of distortion induced in assemblies of automobiles by spot welding
171	SHREYA KAPOOR	Prabhat Nath Jha	Understanding bacterial immune system: current status and its application.
172	SHREYAS PRANAV	Bahurudeen A	A comprehensive review on the use of sugarcane bagasse ash as a construction material.
173	SHREYAS SANGHVI	Umesh Dhyani	Integration of social media and csr
174	SHREYASH ANAND	Cb Gupta	Study of portfolio optimization
175	SHRIYA JAIN	Rajan Pandey	Modelling impact of macroeconomic variables on volatility of indian stock markets.
176	SHUBHAM AGRAWAL	Rajan Pandey	Modelling volatility in exchange rates
177	SHUBHAM ARORA	Jl Raheja	Real time age-invariant facial recognition using qualcomm vuforia sdk
178	SHUBHAM ARORA	Krishna Muniyoor	Feature-set selection for predicting commodity prices
179	SHUBHAM GUPTA	Murali M Pandey	Transdermal drug delivery system
180	SHUBHAM KHANDELWAL	Geetilaxmi Mohapatra	Women human capital and economic growth: empirical data for indian states.
181	SHUBHAM KHANDELWAL	Vishal Gupta	Communication techniques dealing disaster management
182	SHUBHAM KUMAR	Rajiv Kumar	Clustering algorithms and analysis.
183	SHUBHAM RAHUL NAGARIA	Virendra S Shekhawat	Message communication application development using wi-fi direct.
184	SHUBHAM SHARMA	Yashvardhan Sharma	Abstractive text summarization
185	SHUBHAM SHARMA	Yashvardhan Sharma	Text normalization and transliteration for social media text
186	SHUBHANKAR SRIVASTAVA	Sanjiv Kr Choudhary	Early warning system for epidemic diseases using social media
187	RAJATH S	Shan Balasubramaniam	Partial parsing of context free grammars
188	RAJEEV DUTT MISRA	Mahanth Prasad	Design and modeling of mems based microphone
189	RAJESH KUMAR	Omvir Chaudhry	Design of software to evaluate projects on the basis of npv and irr.
190	RAM KARNANI	A K Giri	Role of derivatives in international financial markets
191	RAMYA MITTAL	Shibani K Jha	Effect of ground water recharge on sea water intrusion in coastal aquifers
192	RANADE ABHISHEK CHANDRASHEKHAR	Bibhas Ranjan Sarkar	Catalytic hydrogenolysis of sugar alcohols
193	RASHI KHANDELWAL	Mayuri Digalwar	Design implementation of energy aware real time scheduling algorithm
194	RAVEENA YADAV	Rajeev Taliyan	Pathogenesis and management of diabetic nephropathy
195	RICKY LOHKAR PRADHAN	Srikanta Routroy	Study various aspects of agile manufacturing systems
196	RISHAB CHAUHAN	Krishna Muniyoor	Effect of investor sentiments in stock price movement.
197	RISHABH AGARWAL	Jl Raheja	Rapists psychological profile generation
198	RISHABH AGARWAL	Niladri Sarkar	In depth study of the negf procedure for nano-scale device simulation.
199	RISHABH BHARDWAJ	Pradyumn Chaturvedi	Study of fuel cell based power generation
200	RISHABH JAIN	Sonal Mazumder	Role of microbes/enzymes in enhanced oil recovery
201	RISHABH JITENDRA CHHABDA	Pawan Kumar Ajmera	Digital signal processing
202	RISHABH KAUL	Anupam Yadav	Studying karl marx's vision of communism and related ideologies.
203	RISHABH SHARMA	Sangeeta Sharma	Advertising strategies in different countries

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<b>Design Project</b>			
204	RISHABH SHUKLA	Kavindra Kandpal	Study of low voltage mosfets.
205	RISHABH SINGH	Rajdeep Chowdhury	What are the unique physio-chemical properties of cancer cells and how to exploit them to detect cancer cells
206	RISHAV GOPLAKA	Gajendra S Chauhan	Power of cognitive psychology in advertisements
207	RISHIKA BEHERA	Vinod Kumar Chaubey	Study and design of graphene transistors
208	RITWIK SUBIR DAS	Sharad Srivastava	Analysis of structural integrity of an aircraft due to fluid –structure interactions using coupled cfd and csd techniques
209	ROHAN SANGHVI	Sachin U Belgamwar	Design of multi-source mems energy harvesting system for automobile
210	ROHAN SHARMA	Ruchika Sharma	Study of applied psychology (business), focusing on recruitment aspects.
211	ROHAN SINGH	Rajesh Mehrotra	Analysis of upregulated genes induced in response to biotic stress
212	ROHAN VERMA	Anupam Yadav	Philosophy of the self
213	ROHIT GOYAL	K Solomon Raju	Database gui implementation using python
214	ROHIT M TIPNIS	Srikanta Routroy	Structural modelling of vegetable supply chain management
215	RONGALI HARISH	Subrata Bandhu Ghosh	Sustainable methods of bio-composite materials
216	RONIL PANCHOLIA	Sundaresan Raman	Identifying sensors for detection of toxicity of food items
217	ROSHAN KUMAR	Rajeev Taliyan	Non pharmacological treatment strategies for the treatment of parkinson disease.
218	ROUNAK KAKWANI	Gajanand Gupta	Maintenance engineering- reliability centered maintenance (rcm) for a manufacturing environment.
219	RRAHUL BHARDAWAJ	Srinivas Appari	In situ catalytic reforming and secondary vapor phase cracking of volatiles derived from the fast pyrolysis of biomass
220	RUPESH KUMAR GUPTA	P Srinivasan	Feasibility study of in-house power generation sources.
221	S. RAHUL	Sai Jagan Mohan	Dimensional analysis and its applications in hydrodynamics
222	SAAHIL KHETAN	Nv Muralidhar Rao	“Understanding, estimating and projecting india’s nominal & real effective exchange rate indices”
223	SADHANA SRINIVASAN	Shyam Sundar Yadav	Study of flows through convergent-divergent nozzle
224	SAGAR KUMAR CHOURASIA	Gajanand Gupta	Stochastic reliability and maintenance modelling for mechanical machine tool.
225	SAHAJ DASOT	Sangeeta Sharma	Study of folklore, folk music and folk dance of rajasthan- from an ethnographic perspective
226	SAHIB SINGH DHANJAL	Tufan Chandra Bera	Cutting force modelling of machining process using matlab
227	SAHIL	Praveen Kumar A V	Microwave filter design for communication applications
228	SAHIL AGGARWAL	Anupam Singhal	Carbon footprinting and sustainability strategy for bits pilani, pilani campus
229	SAHIL DUMIR	Ajay Kumar Pani	Evaluating different methodologies for splitting data - the training set selection problem
230	SAHIL PUNCHHI	Sachin U Belgamwar	Helical coil heat exchanger model for hydrogen storage system
231	SAI CHARAN AGRAHARAM	J N Bandopadhyay	Quantum finite automata
232	SAJAL KHANNA	K S Raju	Development of gui for ibs database management system
233	SAKET SHARMA	Umesh Dhyani	Corporate social responsibility
234	SAKSHAM KHUNTETA	Arnab Hazra	Study of effect of soil moisture on crops
235	SAKSHI BHARGAVA	Sumanta Pasari	Global positioning system and its applications
236	SAKSHI SAHARAN	Navneet Goyal	Age invariant face recognition using machine learning.
237	SALMAN ANJUM	Murali Palla	Nanocomposite materials: a study on their structural features and applications

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<b>Design Project</b>			
238	SALONI CHANDAK	A K Giri	Study of monetary transmission mechanism in india:an emperical evidence
239	SALVI PORWAL	Murali M Pandey	Financial burden of anti-diabetic therapy in a north indian university campus.
240	SAMARTH DIKSHIT	Vishal Gupta	Water distribution system model
241	SAMBHAV JAIN	Rajesh Mehrotra	Plants response to biotic and abiotic stress
242	SAMISH BEDI	Jl Raheja	Extracting joint angles using rgb values and depth values from Kinect.
243	SAMYADEEP BASU	Rajesh Mehrotra	Genome wide analysis of wbox elements in arabidopsis thaliana.
244	SANCHAY DEWAN	Vandana Agarwal	Using ant algorithm for image segmentation
245	SANCHIT MITTAL	Sumanta Pasari	Earthquake insurance and its scope in india.
246	SANJAY REDDY S	Poonam Goyal	Feature selection in images
247	SANKALP PANDEY	Saumi Ray	Study and futuristic applications analysis of carbon nanotubes
248	SANKET SHAH	S Balasubramanian	Formal analysis and verification of systems that safeguard anonymity and privacy.
249	SANYA JAIN	Shan Balasubramaniam	Design and implementation of generic data structures that enable efficient automatic matching for answers (to questions in test) with "pre-defined answers" for specific domains.
250	SARITA KUMARI	Pankaj Kumar Sharma	Exploring plant diversity for medicinal value
251	PALAVALASA ABHINAYA KRISHNA	Remica Aggarwal	Comparison of theoretical price of a product to the market price to identify the impact of market dynamics on pricing.
252	PALSHIKAR AJAY PRASAD	Subrata Bandhu Ghosh	Study of liquid resins which are used currently in sla 3d printing ( stereolithography ) and to find a possible alternative
253	PALVATLA SHASHIKANTH REDDY	Kumar Neeraj Sachdev	Taking baby steps as a philosopher
254	PANCHAKARLA SAI KUTUMBA RAO	Ruchika Sharma	A basic study on the academic concepts and approaches affiliated to four-skills assessment of english language proficiency.
255	PANDAOOKAR SAMAY PRASHANT	Rajan Pandey	Test semi - strong efficient market hypothesis using data from indian stock market.
256	PANDE ADITYA MOHAN	Rajesh P Mishra	Development of gui for multi-criteria decision model using matlab
257	PANKAJ SINGLA	Lucky Sharan	Study of dwdm network operating at 40gbps using different dispersion compensation modules
258	PARTH SUREKA	R Gupta	Scenario building by systems approach
259	PARTHO MUKHERJEE	P Chattopadhyay	Recent developments in foam characterization
260	PARVATHANENI ABHIROOP	Subhashish Gangopadhyay	Blue light emissivity from semiconductor laser.
261	PATEL VARUN AMIT	Bibhas Ranjan Sarkar	Catalytic epoxidation of fatty acid methyl esters (fames)
262	PATHRABE UTKARSH ASHOK	Navneet Goyal	Analyzing videos using machine learning techniques
263	PATIL KSHITIJ MAHESH	Satyendra Kr Sharma	Key performance indicators in strategic sourcing
264	PAVAN R	Rakhee	To study markov chain monte carlo(mcmc) methods for probabilistic graphical models
265	PERLA KISHORE	P Chattopadhyay	Foam characterization techniques
266	PHADKE ROHAN MANOJ	Sk Hafizul Islam	Image encryption
267	PIOUS	Gajanand Gupta	Development of a framework for estimating the reliability of mechanical equipment.
268	PIYUSH BANSAL	Kamlesh Kumar	Underground infrastructure: planning, design and construction.
269	PIYUSH KUMAR	R. Srinivas	Sustainable management of ganga river basin.
270	PIYUSH KUMAR JAIN M	K Hari Babu	A study of protocols on integrating software-defined radios with ip networks.
271	PIYUSH RATHORE	Anil Jindal	Study of supplier risk imposed on a manufacturer.
272	PIYUSH SOOD	Manoj Kumar	Study and analysis of blast loads on bridges



S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
273	POOJA SONI	Jitender Kumar	Introduction to semigroups and its applications.
274	POTHIREDDY PRANATHI	A K Giri	Measuring inflation threshold in india.
275	PRABEEN KUMAR GHADIA	Omvir Chaudhry	A study project on the relationship between progressive taxes and income inequality.
276	PRABHJOT SINGH	Arun Kumar Jalan	Experimental verification of pipeline model.
277	PRABHJYOT SINGH SODHI	JI Raheja	Rapists psychological profile generation
278	PRABHU SINGH HADA	Nv Muralidhar Rao	Smartphone manufacturing ecosystem development
279	PRABODH AGARWAL	K Hari Babu	Integrating existing publisher subscriber systems with sdn for performance and security gains
280	PRANAV DATTATRAY KULKARNI	A K Giri	Analysis of mean and volatility spillovers using bric countries regional and world equity index returns
281	PRANAV JANG BAHADUR	Yashvardhan Sharma	Text mining using machine learning for generating opinion.
282	PRANJAL DEEP	Mahesh Angira	Study of mems based gyroscopes
283	PRANJAL GUPTA	Nv Muralidhar Rao	Macroeconomic effects of public infrastructure investment: evidences from india
284	PRASHANTH BHUSHAN	Sangeeta Sharma	Impact of online advertising on sales
285	PRASOON TRIVEDI	Pramod Kr Tanwar	Design and implementation of biometric authentication algorithms.
286	PRATEEK ARORA	Bahurudeen A	Review on sophisticated characterization techniques
287	PRATEEK BHUTANI	Niladri Sarkar	Study of some important numerical methods in electrodynamics.
288	PRATEEK JAIN	Srikanta Routroy	The role of supplier innovation flow in manufacturing supply chain
289	PRATEEK SAI GAHLOT	Gajendra S Chauhan	Citizen journalism and social change: power of new media
290	PRATIBHA AGRAWAL	G Meenakshi Sundaram	Design and simulation of mems based pierce oscillator
291	PRATIK BHANDARI	Rajneesh Kumar	Optimization for photo voltaic cells
292	PRATIK S	Abhishek Mishra	Local search based energy efficient task scheduling algorithms for multi-core systems
293	PRATYAKSH AGARWAL	Anshuman	Recycling of marble slurry for environmental improvement
294	PRATYUSH KAR	Avinash Gautam	Terrain mapping and exploration using multiple mobile robots
295	PRITYUSH HALDAR	Pradyumn Chaturvedi	Energy generation using photo-voltaic cells
296	PRIYANKA KUKREJA	S Mohan	Study and simulation of real time scheduling algorithms for multicore systems.
297	PRYANSHU ARORA	Rajiv Kumar	Planar graph drawings
298	PULKIT KUMAR DUBEY	Tapomoy G Sarkar	Geometrical optics and physical optics as a prelude to understanding quantum physics
299	PUNEET SHUKLA	Leela Rani	Exploring why online sales fall flat
300	R ABHISHEK SHANKAR	Pradyumn Chaturvedi	Study of different micro controllers for power electronic applications
301	R N S PAVAN KUMAR	Ms Soni	Study and analysis of effect of twisted tape inserts on the performance of absorber tube of parabolic trough collectors.
302	R VAISHNAVI	Sonal Mazumder	Nanotoxicology. Is nanotechnology safe to the environment?
303	RACHIT KUMAR	Hitesh Dutt Mathur	Vehicle to grid application in frequency regulation of microgrid structure
304	RADHIKA GUPTA	Srinivas Kota	Comprehensive study of industrial pollution
305	RAGHAV GUPTA	Subhashish Gangopadhyay	Stm, versatile tool for nanotechnology
306	RAGHAV NAIR	Navneet Goyal	Data provenance - role of graph databases
307	RAGHU RAMI REDDY BALLARY	A Anand Kumar	Space-based solar power
308	RAHUL ANIL KUMAR	Sonal Mazumder	Rheology in medicines
309	RAHUL BANSAL	Anupam Singhal	Macroeconomic study of environment and natural resources

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<b>Design Project</b>			
310	RAHUL BANSAL	Imlak N Shaik	Investors fear and stock returns
311	RAHUL PRIYADARSHI	Leela Rani	Exploring why online sales fall flat
312	RAJA V S K MURTHY TIRUMALASETTY	Jyoti	Assessing a managers self perception about his/her creativity
313	RAJAT JAIN	Satyendra Kr Sharma	Optimizing distribution network
314	RAJATH KANTHARAJ	P Srinivasan	Heat transfer analysis in the cooling system of klystron
315	MAYANK KUMAR	G Muthukumar	Response analysis of frp reinforced concrete structures
316	MEDHA SINGH	Rajeev Taliyan	To study patho-physiology and management of schizophrenia with obsessive compulsive features
317	MEDHA VIDYOTMA	Rajesh Mehrotra	Comparison of cis-regulatory elements involved in amino acid transporters across four plant genomes.
318	MENTA VENKATA PUSHPAK TEJA	Lucky Sharan	Mitigation of non-linear effects in high-speed optical communication systems
319	MIHIR BISWAL	Vishal Gupta	Flowvisor: a network virtualization layer
320	MINAL RAHAR	Anupam Singhal	Study the economic and environment friendliness of green buildings. Analyse the feasibility of green buildings in india.
321	MOHAMMAD ADNAN OQUAISH	Jl Raheja	Web surfing for visually impaired
322	MOHAMMAD SHERAJ	Navin Singh	Fibre-bundle model for polymer stretching.
323	MOHD. IRSHAN	P Srinivasan	Residual life assessment of superheater coils in supercritical boiler
324	MOHIT SALUJA	Devendra Kumar	Numerical solutions of pdes.
325	MOHIT SALUJA	Vishal Gupta	Virtualisation of wireless medium
326	MOHIT SINGH	G S Sessa Chalapathi	Study and implementation of energy efficient real time scheduling algorithms
327	MOHIT SINGH CHANDEL	Rishikesh Vaidya	Introduction to particle physics
328	MONIKA JAISWAL	Rajesh P Mishra	Mass customization in lean environment
329	MONIKA SHARMA	Virendra Singh Nirban	Social media and socializing in indian context.
330	MRIDUL GUPTA	Anil Jindal	Application of monte carlo simulation method in supply risk analysis
331	MUDIT MARDA	K S Raju	Development of gui for ibs database management
332	MUDRIKA SINGHAL	Jitendra Panwar	Role of am fungi against plant pathogens.
333	MUHAMMAD YASIR KHAN	G Muthukumar	Demolition techniques of multi-storied buildings
334	MUKUL	Shyam Sundar Yadav	Numerical study of the interaction between the conducting drops in presence of an electric field.
335	MUKUL KHEDWAL	Madhukar Mishra	Group theory and its applications in particle physics
336	MUNOT PRASANNA MANOJ	Tanu Shukla	Problem solving and decision making psychology
337	MUSKAAN VERMA	Pankaj Vyas	Study of the applications of software fmea(failure modes and error analysis)approaches for different architectural languages
338	NAIK AAKANKSHA ROSHAN	Navneet Goyal	Applications of machine learning and image processing in image retrieval
339	NALLA VIVEK	Asma Rani	Query rewriting to annotate result tuples with provenance information
340	NAMAN GUPTA	Arun Kumar	Case study of jabong.com
341	NAMAN GUPTA	Sainath Bitragunta	Development of novel and efficient protocols for green- communication systems
342	NAMAN MUNOT	Kusum Lata	Search for the parallel universe : to study the working of the large hadron collider (lhc) and state its discoveries so far. Also study about the supersymmetry theory.
343	NAMAN MUNOT	R. Srinivas	Water quality modelling of river ganga using a conventionally available software.

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
344	NAMAN SHINGHAL	Dheerendra Singh	Design of control system for inventory management.
345	NAMAN SHINGHAL	Nv Muralidhar Rao	Smartphone manufacturing ecosystem development
346	NAMAN UDASI	Cb Gupta	Military operations research in quantitative decision making
347	NAMITHA SURESH	Rishikesh Vaidya	Studies in special topics in quantum mechanics
348	NANDAN LUTHRA	Amit Jain	Reuse of lubrication waste oil from automobiles as a fuel/biofuel
349	NAVDEEP TRIVEDI	Srikanta Routroy	Study of supplier risk imposed on a manufacturer
350	NEEL GIRISH AMONKER	Lucky Sharan	Modeling non linearities for high speed dwdm networks.
351	NEEL KASAT	A K Giri	Relation between public debt and economic growth: an empirical analysis
352	NEHA AGARWAL	Nitin Chaturvedi	Internet of things
353	NEHA P JAWALKAR	Navneet Goyal	Implementation of pipeline parallel pattern for distributed memory architecture from a code in a language for data mining
354	NEHA TALESRA	Praveen Goyal	Consumer decision making and csr information: a study of undergraduates and postgraduates.
355	NEKKANTI SRI SESA SAI SANDEEP	Atanendu Sekhar Mandal	Classification of face expressions into real or fake
356	NEMANI AKHIL MANISH	Subhashish Gangopadhyay	Study of growth and characterization of metal thin films.
357	NEMISH KANWAR	Sachin U Belgamwar	Study of various mems gyroscopes for improving their sensitivity and cost effectiveness by varying different parameters such as vibrational amplitude and frequency through design changes
358	NEOPHY BISHNOI	Sangeeta Sharma	Study of modern ways of advertising and its enhancements
359	NERELLA YASHASWI VENKAT	K K Gupta	Study of real time signal acquisition in dsp
360	NIHAL M	Surekha Bhanot	An a.i. Agent learns to play a game
361	NIHAR D	Vinod Kumar Chaubey	Electrical modelling and simulation of tunnel fets
362	NIHAV JAIN	Kiran Dc	Llvm compiler
363	NIKHIL	Sunil Kumar Dubey	Invitro invivo correlation
364	NIKHIL JR	Pradyumn Chaturvedi	Energy storage devices :study/survey
365	NIKHIL KASHYAP	K S Raju	Finger print matching algorithm
366	NIKHIL NAIR	Srikanta Routroy	Study of supplier risk imposed on a manufacturer.
367	NIKHIL VINAY SHARMA	Navneet Gupta	Transport physics and device modelling of polycrystalline zno based tfts.
368	NIKITA TANWANI	Shivi Agarwal	Application of data envelopment analysis in the health care sector
369	NIRALI KANSARA	Pratik N Sheth	Study of cfd applications in fixed/moving bed solid gas reactors
370	NISHCHAY NAGPAL	Ravi Inder Singh	Study of variation in knock in ci engine
371	NITIN LABHISHETTY	Rakhee	To study markov chain monte carlo (mcmc) methods for probabilistic graphical models.
372	NITIN SURI	J N Bandopadhyay	Quantum error correction
373	NIVYA SHARMA	Rajeev Taliyan	To study the link between type 2 diabetes mellitus and brain ischemic stroke.
374	NIYATI TIWARI	Atish T R Paul	Patent analysis of anti obesity products
375	ONKAR ASHISH	Bahurudeen A	Development of sugarcane bagasse ash blended pervious concrete
376	PAJJURI NAVEEN KUMAR REDDY	Pushp Lata	Creating effective website content
377	PAKHLE APOORVA SHRIKANT	Virendra S Shekhawat	Software defined network (sdn) application development
378	PALASH GOEL	Lucky Sharan	Study and simulation of modulation formats for high speed wdm network.

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
379	KAVERI SINGH	Madhushree Sarkar	Removal of uranium from groundwater using ion exchange method.
380	KAVERI SINGH	Utkarsh Maheshwari	Comparative study of various techniques employed for enhanced oil recovery
381	KAZA REVANTH	Dinesh Yadav	Site specific dance
382	KEESARA SAI RAGHAV REDDY	Chandra Shekhar	Study of some nature-inspired optimization algorithms
383	KESHAV RAHEJA	Abhijit R Asati	Study of flip flop architectures
384	KESHAV RAHEJA	Devendra Kumar	Numerical solutions to burgers equation
385	KETAN CHANDAK	Rajiv Kumar	Clustering algorithms and analysis.
386	KHER TANMAYEE ABHIJEET	Srinivas Kota	The impact of 3d-printing on stakeholders
387	KIRTI SINGH	Rajeev Taliyan	Molecular mechanism of hepatic ischemia reperfusion injury.
388	KOGNTI SRIMOUNIKA	Pushp Lata	Developing a framework for teaching coherence, cohesion and writing quality essays
389	KOKANDAKAR AJINKYA HEMANT	A K Giri	Testing money neutrality in developing economy - case of india and china
390	KOKANDAKAR AJINKYA HEMANT	Shan Balasubramaniam	Design and implementation of concurrent data structures for subspace clustering
391	KORADIA NEEL VINODKUMAR	Sangeeta Sharma	Making a short animation film
392	KOTHAKAPU SANTOSH REDDY	Murali Palla	Modeling a growing crack using xfm and/or related techniques.
393	KRISHANU PRANAB BATSYA	Ravi Inder Singh	Study of the development and analysis of disc- braking system
394	KRISHNA KUMAR JOSHI	Jl Raheja	Web surfing for visually impaired
395	KRIT GOYAL	Dheerendra Singh	Design of control system for inventory management
396	KRITI KHANDELWAL	Prabhat Nath Jha	Generation of electricity using microorganisms
397	KRUTI PRANAV KHAROD	Hk Mohanta	Conversion of graphs used for the design of distillation columns in petroleum refining to equations for analytical solutions
398	KSHITIJ BUDHANI	Virendra Singh Nirban	Analysis of events using sentiment analysis of real data from twitter
399	KSHITIJ PRAFULL PANSE	Sanjay Singh	Cascade support vector machine classification
400	KSHITIZ SETHI	Jyoti	Working on execution of business ideas and strategies involved.
401	KUKATLA NIKHIL KUMAR	Rajneesh Choubisa	The impact of stress on employee productivity and its side effects & the factors responsible for occurrence of stress.
402	KUMAR RISHABH	Niladri Sarkar	Study of numerical methods in electrostatics
403	KUNAL GUPTA	Surekha Bhanot	Application of neural networks in mobile robot motion
404	KUNAL PARMANI	Uma S Dubey	Cell signalling via aryl hydrocarbon receptors in cancer cells.
405	KUNAL SOMNATH KASHILKAR	Yashvardhan Sharma	Weather forecasting using multi-agent systems
406	KUNAL TODI	Nv Muralidhar Rao	Risk factors in backbone industries: evidence from indian economy
407	KUSHAL JASORIA	Rajdeep Chowdhury	Sensors for detection of cancerous cells
408	KUSHAL TRIPATHI	Prabhat Nath Jha	Waste degradation by microbes
409	LABDHI KOTHARI	Kuldip Singh Sangwan	Study and analysis of rapid prototyping and its different processes
410	LABDHI KOTHARI	S C Sivasubramanian	Characterization of solid materials
411	LADDHA ANURAG RAJESHKUMAR	Tanu Shukla	Social networking websites and the effects on social relations
412	LAKSHIT AGARWAL	Rajiv Kumar	Hamiltonian cycle and maximum flow in planar graphs
413	LAKSHYA SHARMA	Shilpi Garg	Epigenetic mechanism for gene regulation in plasmodium

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<b>Design Project</b>			
414	LALWANI ACHAL SURESH	Ruchika Sharma	Effects of audio jingles in advertisements on consumer behavior: a cross cultural comparison between india & usa
415	LAVISH BHUTANI	Devika	Analysis of the approach of directors of award winning movies of the last decade
416	LINGAM SATYA PAVAN	Atanendu Sekhar Mandal	Cloud based medical diagnostics and assistance app
417	LOKESH KUMAR	Praveen Goyal	Analyzing the impact of csr on consumer decision making in fmcg products
418	LOKESH KUMAR VERMA	Amab Hazra	Interfacing of figaro gas sensors
419	LOKVISHRUTT BISHNOI	Jitendra S Rathore	A review on fluid structure interaction on flexible wings
420	LOKVISHRUTT BISHNOI	Udayan Chanda	Inter-connectivity of various stock market across the world using spss multiple regression analysis
421	MAAZ MOMBASAWALA	Virendra S Shekhawat	Data dissemination techniques in delay tolerant vehicular networks using mobility patterns.
422	MAHAK DHAMEJA	G Meenakshi Sundaram	Design and simulation of mems based pierce oscillator
423	MAHEEP TRIPATHI	Surekha Bhanot	Development of intelligent algorithms for classification of microbes using e-nose sensors
424	MAITRI SHASTRI	Indresh Kumar	Organic catalysis:amine catalysis-extension to conjugated enamines
425	MANAN KHASGIWALE	Sai Krishna Yaddadi	Identification of diseases in images of leaves and number of fruits in a given tree using image processing
426	MANAN SINGHAL	Rakhee	Study of discrete time queues:application to communication networks
427	MANAV MARYA	Kamlesh Kumar	Effective database design for geoscience professionals
428	MANDAR KHAPEKAR	Amit Goel	Autonomous non-destructive testing
429	MANEK AISHWARYA HIMANSHU	Parikshit K Singh	Intelligent weather system
430	MANGESH VIVEK GAWANKAR	Harikrishnan G Nair	History of engineering education in british india between ca. 1840 and 1890
431	MANGESH VIVEK GAWANKAR	Virendra S Shekhawat	Growth and co-operation in ad-hoc self organizing networks
432	MANINDER GOYAL	P Srinivasan	Heat transfer in concentric and eccentric annular channels
433	MANINDER GOYAL	Sudeshna M Choudhury	Use of nanoparticles for diagnosis and treatment of cancer cells.
434	MANISH KUMAR	Vinita Tiwari	Fbg sensors and their applications.
435	MANIT GUPTA	Rajneesh Choubisa	To study the relationship of digital footprint of a person with his psychological profile
436	MANIT GUPTA	Sundaresan Raman	Classification of images of bacteria/microscopic entities into various classes using image processing.
437	MANSI NARANG	Utkarsh Maheshwari	Comparative study of various types of nano-adsorbents used for efficient removal of heavy metals.
438	MANSI SINGH	Devendra Kumar	Numerical solution of second order boundary value problems
439	MANSI SINGH	Parikshit K Singh	Pressure sensor(s) for intraocular pressure (iop) monitoring
440	MANVI SAXENA	Nv Muralidhar Rao	A comprehensive study of infrastructure financing in india: analysis of infrastructure projects
441	MANYA SETIA	Avinash Gautam	Implementation of some meta-heuristic algorithms for multi-robot task allocation.
442	MAYANK JUNEJA	Sk Hafizul Islam	Applications of chaotic maps in cryptography.
443	GOGRI ADITYA BHUSHAN	Praveen Goyal	Optimal channelization of csr investments for improving the skills of smes
444	GOPAL DHAKAD	Sachin U Belgamwar	Helical coil heat exchanger model for hydrogen storage system

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<b>Design Project</b>			
445	GOPAL YOGESH BHATT	Praveen Goyal	Optimal channelization of csr investments for improving the skills of smes
446	GOVIND KISHORE	Srinivas Kota	Understanding the current energy requirements and generate energy using the suitable methods.
447	GRANDHI NAGA VEERENDRA	Ms Soni	To study the effects of knurling on fins performance
448	GUDDU KUMAR SINGH	Jl Raheja	People counting and gender prediction
449	GUNTAKA SAI CHARAN REDDY	Devendra Kumar	Haar wavelet method for the solution of singularly perturbed boundary value problems arising in the field of science and engineering
450	GUPTA YASH DINESH	Jl Raheja	People counting and gender prediction.
451	GURBEER SANDHU	J N Bandopadhyay	Semiclassical aspects of quantum mechanics
452	HARDIK GUPTA	Sanjay Singh	Cascade support vector machine classification
453	HARDIK MALHOTRA	Surekha Bhanot	Biomedical expert system
454	HARISH TUNDWAL	Shivi Agarwal	Study of real world applications of hybrid neural network.
455	HARKARE AMEYA PRASHANT	Arun Kumar	Crn framework development and validation in e-retail sector.
456	HARNISH NARESH LAKHANI	Jl Raheja	Rapists psychological profile generation
457	HARSH	Bahurudeen A	Service life prediction of reinforced concrete structures
458	HARSH BHALANI	Satyendra Kr Sharma	Inbound freight consolidation: a simulation model
459	HARSH GOYNKA	Geetilaxmi Mohapatra	The impact of foreign direct investment (fdi) on co2 emissions and economic growth : an empirical analysis for india
460	HARSH NIJHAWAN	Arnab Hazra	Nano-material based solid state vapour sensors devices for breath analysis.
461	HARSH SRIVASTAVA	Bahurudeen A	A comprehensive review on various international standards, specifications for quality assurance of concrete ingredients.
462	HARSHIT JAIN	Poonam Goyal	Development of effecient data structures for data mining
463	HARSHIT MATHUR	Sudeshna M Choudhury	Role of long non-coding rnas in emt/tumor metastasis
464	HARSHIT OBEROI	Shilpi Garg	Epigenetic mechanisms for gene regulation in plasmodium
465	HARSHIT SHARMA	Abhijit K Digalwar	A study on disaster response supply chain management
466	HARVISH KAMLESH SONAR	Tufan Chandra Bera	Cutting force modelling of machining process using matlab.
467	HEMABH TRIVEDI	Subrata Bandhu Ghosh	Development and characterization of high performance hybrid bio composites usind fdm
468	HEMANT SINGH NEGI	Murali Palla	Modelling of fracture in materials
469	HIMANSHU DWIVEDI	Praveen Kumar A V	Microwave filter design for communication application
470	HIMANSHU GUPTA	Ms Soni	Studying the solar biog as hybrid systems and exploring the opportunities.
471	HIMANSHU SETIA	G Muthukumar	Influence of fire loading on reinforced concrete and steel structural elements.
472	HIMANSHU SINGH DHONI	Poonam Goyal	Complex queries for images
473	ISHA YADAV	Pankaj Kumar Sharma	Nature vs nurture
474	ISHA YADAV	Paritosh Shukla	Study of the molecules which are used as probes of the cell cycle and have potential cancer therapeutic value.
475	ISHAN SHARMA	Remica Aggarwal	Study of application of six sigma in the indian industries
476	ISHITA KATARIA	Hk Mohanta	Dynamic optimization techniques in chemical engineering
477	ISUKAPALLI SAI VAMSI KRISHNA	Murali Palla	Tough,bio inspired composite materials;study and analysis of their microstructural characteristics.
478	JAMPALA VARUN	Arun Kumar Vaish	Customer relation management

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<b>Design Project</b>			
479	JANGA ROHIT SAI	Sainath Bitragunta	Efficient design & performance analysis of global positioning system
480	JASHYANT SIKHAKOLLI	Sailaja Nandigama	Political economy of availability of generic drugs to lower class people in india.
481	JASKAMAL KAINTH	Amit Kumar Verma	Elliptic curves in cryptography
482	JASPREET SINGH	Anupam Singhal	Macroeconomic study of environment and natural resources
483	JAYANT AGARWAL	Rajan Pandey	Comparative analysis of volatility forecasting models in indian capital markets
484	JAYANTA BHOWMICK	Raman Sharma	Geological storage of co2 as a method of carbon sequestration
485	JAYATI AGGARWAL	Yashvardhan Sharma	Opinion mining framework development
486	JHANA VI SHETH	JI Raheja	Cursor control using eye tracking
487	JOBANPREET SINGH NARANG	K Hari Babu	Devising methods to prevent sybil attacks and prevent their effects.
488	JUHI	Anil Kumar Saini	Feature extraction and implementation of face recognition
489	K.N.SANGEETH	K S Raju	Sensor circuitary development for dust identification on the floor
490	KAILAS NATH.R	K S Raju	Sensor circuitary development for dust identification on the floor
491	KAKI ALEKHYA	Raj Kumar Gupta	Finger print recognition
492	KAMATH GAURAV NARESH	Sandeep Dhar	Study and use of measurement system analysis (gage r&r study) to reduce variations in collected data and solve a real world problem (used in six sigma for quality control).
493	KAMPARA SATYA NAGA JAGADEESH	Sainath Bitragunta	Optimising energy harvesting co-operative cognitive radio communication systems
494	KANEKANTI ASHISH KHANNA	Sandhya Mehrotra	A study on thermodynamics of rubiscos carboxylase/oxygenase activity
495	KAPIL SHRIVASTAVA	Devika	A detailed study on the direction methods of leading hollywood directors of the previous decade with special focus on visuals used by them.
496	KAPIL SHRIVASTAVA	Mahesh Angira	Study of mems-based technology applied in designing of sensors and actuators.
497	KARAN GILL	Amit Kumar Verma	Study of wavelet types and their basic applications
498	KARANBIR SINGH	Rakhee	Delay analysis of fractal traffic passing through network servers
499	KARISHMA PARAKH	Mayuri Digalwar	Study and implementation of energy aware real time scheduling for multi-core processors
500	KARTAVYA KHANNA	Srinivas Appari	A detailed kinetic modelling approach for surface reactions
501	KARTHIK SURESH	Shamik Chakraborty	Study of quantum dots and its applications in led and lasers.
502	KARTHIKAN C	Srinivas Appari	Instu catalytic reforming and secondary vapor phase cracking of volatiles derived from fast pyrolysis of bio-mass.
503	KARTHIKEYA	Mayuri Digalwar	Design and implementation of dynamic voltage and frequency scaling (dvfs) based real-time scheduling algorithms.
504	KARTIK GOEL	Arnab Hazra	To study the effect of soil moisture on crops
505	KARTIKEYA KASHIVA	Rajeev Taliyan	Study of non-pharmaceutical approaches and interventions for treatment and management of mental(neurological) disorders.
506	KAUSTUBH SHARMA	Asma Rani	Provenance generation for complex queries
507	CHITNENI HARISH DATTA	Devika	The impact of basics of script writing techniques
508	CHITTERSU RAGHU VAMSI KRISHNA	Atanendu Sekhar Mandal	Cloud based medical diagnostics and assistance app
509	CHOKSI NEEL DIPESH	Amit Kumar Verma	Study of wavelet types and basic applications.
510	D ACHYUTH MADHAV	Virendra Singh Nirban	Computer mediated communication in higher education
511	DAKSH DUTTA	Banasri Roy	A review on flexible implantable neural probes

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<b>Design Project</b>			
512	DALIA RAJAT SUBHASH	Girish Kant	Application of monte carlo simulation method in supply risk analysis
513	DAMAN ARORA	Anupam Yadav	The study of ethical issues in medical profession
514	DANISH ABDI	Anantha Krishna Chintanpalli	Predicted effects of intensity variation in vowels in the auditory nerve using the computational model
515	DAULAT DAGA	Bibhas Ranjan Sarkar	To study the chemistry of catalytic converter in automobiles.
516	DEEKSHA AWADH DADHICH	Rahul Singhal	Study of automotive gas sensing systems
517	DEEKSHA PRAKASH	Srinivas Kota	Study on after-use processes of electronic equipments
518	DEEPAK MISHRA	Jl Raheja	Walking assistance mobile application for blind persons.
519	DEEPANSHU BHATIA	Sangeeta Sharma	Cadbury dairy milks advertising campaigns in india.
520	DEEVANKSHU GARG	Jl Raheja	Walking assistance mobile application for visually impaired
521	DEEVITA AGARWAL	A K Giri	Role of monetary policy variables in stock market performance
522	DESAI MASOOM KARTIK	Anupam Singhal	Waste water treatment by bioremediation
523	DESHMUKH SHARVARI SATISH	K K Gupta	Study of biomedical sensors for vital parameters
524	DESHMUKH PRANJAL SHAHAJIRAO	Mahesh Angira	Study of robotic kinematics for position control required for shape-memory effect monitoring/testing.
525	DESHPANDE ADWAIT MUKUND	Harikrishnan G Nair	History of technical education in india in the first half of the 20th century
526	DESHPANDE SHARDUL SADANAND	T Chakraborty	Detheorizing the megacity: studying the paradigm shift towards reorienting urban theorization from the global south's perspective.
527	DEVAM JHANWAR	Pankaj Kumar Sharma	Development of teaching aids to effectively explain the concepts of ecology.
528	DEVANSHI SANJIV KOTAK	Nitin Chaturvedi	Study of sram cell architecture
529	DEVASHISH MATHUR	Jl Raheja	Real time age invariant facial recognition using qualcomm vuforia sdk integrated with an android application.
530	DEVENDER SINGH RATHORE	Devika	Oral presentation
531	DEVRAJ PALIT	Rajiv Kumar	Hamiltonian cycles and maximum flow in planar graphs
532	DHAIRIK FULETRA	Girish Kant	Supply chain management
533	DHANUKA MRIDUL DEEPAK	Nv Muralidhar Rao	Understanding,estimating & projecting indias nominal & real effective exchange rate indices
534	DHOBLE SHUBHAM RAJESH	Vineet Kumar	Sensor interfacing with msp430
535	DHRUV AGGARWAL	Virendra S Shekhawat	Self organization based routing for mobile ad-hoc networks
536	DHRUV DAVE	Nv Muralidhar Rao	Ip r, research & development and economic growth in asia
537	DHRUV RASTOGI	Rajiv Kumar	Clustering in general weighted graphs
538	DHRUVA P KALRA	Anupam Singhal	Carbon footprinting and sustainability strategy for bits pilani, pilani campus
539	DHRUVA P KALRA	Sandhya Mehrotra	Analyzing the identified targets for the improvement of photosynthesis.
540	DIVYA JANGIR	Sailaja Nandigama	Dynamics of environmental policy making in india after 1990s
541	DIVYANSH KHATTAK	Murali Palla	Thermal fatigue in metals
542	EESHA DINKAR	Anil Gaikwad	The effects of nano-pollutants on the cardiovascular and respiratory systems.
543	G .V. S.DEDEEPPYA	Sailaja Nandigama	Does online browsing behaviour reflect gender roles? - analysis of gender roles through data mining
544	G SHARAT CHANDRA	Pushp Lata	Creating effective website content.
545	G. NITIN CHAKRAVARTHY	Shamsher B Singh	Blast resistant design of structures using layered and sandwich composites.



S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
546	GAMPA ANIRUDH	Jitendra S Rathore	Modeling and simulation of flagellar propulsion using comsol.
547	GANDHI PREM SRUJALKUMAR	Devika	Feminism and cinema
548	GANDRETI PRASANT SAI	G Muthukumar	Methods of analysis of rc structures
549	GANTA SUJEETH	Jitendra S Rathore	A review on flagellar hydrodynamics and propulsion mechanisms
550	GARGI SHARMA	Yashvardhan Sharma	Abstractive text summarization
551	GARIMA DHANANIA	Rajiv Kumar	Maximal weighted matching in bipartite graphs and multi-commodity network flow
552	GARIMA GUPTA	Kuldip Singh Sangwan	To increase efficiency of machine tools by optimizing its operating conditions and power requirement
553	GARIMA GUPTA	Pankaj Kumar Sharma	Mind-body medicine
554	GARIMELLA VENKATA SRIKANTH	Jyoti	Perception of budding entrepreneurs towards product innovation.
555	GATTANI AKSHAY GOPALKRISHNA	Pawan Kumar Ajmera	Digital signal processing
556	GAURAV AAKAR	A K Giri	Relation between corruption and economic growth of india
557	GAURAV ADWANI	Lucky Sharan	Study and simulation of modulation formats for high speed wdm network
558	GAURAV BANSAL	K S Raju	Finger print matching algorithm implementation
559	GAURAV BANSAL	Rahul Banerjee	Investigation of inter-portability of hypervisor based virtualization and container based virtualization
560	GAURAV BOSE	Jl Raheja	People counting and gender prediction
561	GAURAV DADHICH	K K Gupta	Study of real time signal acquisition in dsp
562	GAURAV MITTAL	Vineet Kumar	Hardware design for image processing blocks
563	GAURAV SHRIVASTAVA	Surekha Bhanot	Bio-medical expert systems
564	GAUTAM SINGH	Praveen Goyal	Consumer decision making and csr information: a study of undergraduate and post-graduate students.
565	GAUTAM SINGHANIA	Chandra Shekhar	Solving optimization problems using ant colony optimization
566	GEETA BANSAL	Sandhya Marathe	Studying logical and mathematical models of animal behaviour
567	GEETANJALI ARUN KUMAR	Rajdeep Chowdhury	Neurotransmitters and cancer
568	GEETIKA KAUR BAGGA	Pradyumn Chaturvedi	Study of opamp circuits
569	GIREEK BANSAL	K Solomon Raju	Database gui implementation using python
570	GIRISH JAMNAPRASAD RATHI	Navneet Goyal	Mining multivariate time series data-algorithmic aspect and application
571	ARJUN DABRA	Rajiv Kumar	Planar graph drawings
572	ARNAV GUPTA	Kavindra Kandpal	Investigation on materials for next generation oxide tft
573	ARNAV JAIN	Satyendra Kr Sharma	A graph theoretic approach for measuring performance of lean manufacturing system
574	ARPEET SAHOO	Sandhya Marathe	Predictive modelling to study impact of invasive species on local biodiversity
575	ARPIT GOYAL	Rajan Pandey	Contribution of local and global factors in influencing volatility in the indian stock market
576	ARPIT GUPTA	Dheerendra Singh	Design of control system for inventory management.
577	ARPIT SHARMA	Subhashish Gangopadhyay	Nano/microscale motors: biomedical opportunities and challenges and self propelled motors
578	ARPIT TALUKA	Sarvesh Satija	Study the determinants of organisational creativity and its long-term impact on overall culture of an organization.
579	ARPIT TALUKA	Srikanta Routroy	A graph theoretic approach for measuring performance of agile manufacturing system
580	ARUN SREYAS PALLE	Ravi Inder Singh	Study and optimization of changing transmission gear ratios on vehicle speed using matlab/simulink

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
581	ARUSHI BHANSALI	Krishna Muniyoor	Effect of investor sentiments in stock price movements.
582	ARVIND MOHAN	Sangeeta Sharma	Role of music in advertising
583	ARYA ROY	Pushp Lata	The need and development of emotional intelligence in work groups for effective leadership
584	ARYAMAN MANDHANA	Ruchika Sharma	Ergonomic analysis of successful product designs
585	ASHIMA AILAWADI	Arun Kumar Vaish	Understanding the dynamics of subsidy and its impact. Identifying ways to synergise the government schemes for subsidy delivery mechanism.
586	ASHISH KUMAR SHARMA	Dinesh Yadav	Stage,model design and lights work
587	ASHUTOSH TRIPATHI	Amol Holkundkar	Study of various models for laser pulse and its implementation towards the dynamics of charge particle.
588	ASHWIN GUPTA	Cb Gupta	A study of portfolio optimization
589	ASHWIN KURUVILLA	R. Srinivas	Studying the relationship between flow and quality of river ganga
590	ASTHA GUPTA	S Mohan	Study and simulation of some cache mapping strategies for multicore processor.
591	AVESH KUMAR SINGH	R Gupta	Optimizing csr fund using impact analysis in different sectors.
592	AVINASH KUMAR SINGH	Imlak N Shaik	Investors fear and stock returns.
593	AVINASH N RAO	Pradyumn Chaturvedi	Study of different microcontrollers for power electronic applications
594	AVINASH RAMACHANDRA ACHARYA	G Muthukumar	Influence of wind loads on tall buildings
595	AVIRUDDH JAIN	Sandeep Dhar	Study and use of measurement system analysis (gage r&r study) to reduce variations in collected data and solve a real world problem.
596	AVISH JAIN	Rp Pareek	Study of metabolic syndrome and related disorders in an urban area of north india
597	AVISH VORA	Saumi Ray	Chemical preparation and applications of graphene nanomaterial
598	AYUSH CHANDRA	Devika	Analysis of the cinematic works of christopher nolan.
599	AYUSH GOYAL	Mahanth Prasad	Design and modeling of mems based microphone by use of optimizing technique to enhance performance and sensitivity.
600	AYUSH JAIN	Srikanta Routroy	Analysis of supplier innovation flow in manufacturing environment
601	AYUSH KATARIA	Poonam Goyal	Development of parallel de novo compiler and bench marking it against the existing compilers
602	AYUSHI AGARWAL	Yashvardhan Sharma	Identifying sarcasm for sentiment analysis
603	AYUSHI BANSAL	Anil Jindal	Study of markov decision process in supply chain problem
604	BAJPAI PRIYANSHU RAVIKANT	Yashvardhan Sharma	Design and development of opinion mining framework
605	BANSOD DEVEN GIRISH	A K Giri	Testing money neutrality in developing economy - case of india and china
606	BAYIREDDY LEELA MANAS	G Muthukumar	Methods of analysis of rc structures
607	BHAGAT AMIT VIJAYKUMAR	Gajanand Gupta	Evaluation of reliability of mechanical equipments.
608	BHAMBURKAR CHINMAYEE VIJAY	Bibhas Ranjan Sarkar	Study of paint manufacturing process and the chemistry behind paints & their formulations.
609	BHANU KHARBANDA	Satyendra Kr Sharma	Supply chain management
610	BHATTAD ABHISHEK SHYAMSUNDAR	Pramod Kr Tanwar	Design and implementation of biometric authentication algorithms.
611	BHAVYA VAID	Chandra Shekhar	Computational analysis of machine interference problem
612	BHAVYA VAID	Sumanta Pasari	Computational framework of probabalistic earthquake hazard assessment

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
613	BHUTADA NIKHIL SURESH	Satyendra Kr Sharma	Developing a risk index for capital budgetary projection using analytical modelling
614	BHUWAN MOHAN	Sainath Bitragunta	Efficient design and performance analysis of global positioning systems
615	BIKRAMJIT SINGH	S S Sadistap	Fabric texture recognition system using fuzzy back-propagation neural networks.
616	BINAY KRISHNA SHIVAM	Srikanta Routroy	Structural modeling of vegetable supply chain management
617	BODDUPALLI VENKAT AKHIL	A Anand Kumar	Study of dc to dc converters
618	BRAJ KISHORE	Jitendra S Rathore	Investigation of the effects of air on the dynamic behaviour of mems devices.
619	BUGADE VISHWAJIT BABASAHEB	Kari Babu Ravi Teja	Design and analysis of cmos voltage regulators for rf energy harvesters.
620	BUGDANI TEJAS ANIL	Abhijit K Digalwar	Sustainable manufacturing in the context of process industries
621	CARUNA BHAT	Omvir Chaudhry	Researching various option strategies and their use in bullish, bearish or neutral markets
622	CHALLA SRIHARSHA	Pankaj Kumar Sharma	A review on consciousness studies
623	CHANDAN SATIJA	Kuldip Singh Sangwan	Application of 3-d printing over conventional manufacturing processes in mass customization
624	CHANDRA BHAN SINGH CHOUHAN	Murali Palla	Atomistic modelling of failure in materials
625	CHARCHIT SHUKLA	Abhijit K Digalwar	Study of existing technologies & equipments use for disabled & elderly people during post disaster management
626	CHEELA ANURAG	Rajneesh Choubisa	The impact of stress on employee productivity and its side effects & the factors responsible for occurrence of stress.
627	CHEELA ANURAG	Vishal Gupta	Wi fi network virtualization
628	CHERAL KHANDEDIYA	Tanu Shukla	Education for school students
629	CHETAN RAJ PANDEY	Omvir Chaudhry	Modelling the impact of oil prices fluctuations on indian stock market
630	CHILLARA VINAY	Murali Palla	Modeling a crack using xfem and/or related techniques.
631	CHIRAG BANSAL	Vishal Gupta	Application of image processing techniques to graphs
632	CHIRAG GOYAL	Mayuri Digalwar	Scheduling algorithms and applications
633	CHIRAG KHATRI	Satyendra Kr. Jain	Analysis of risk and return of project
634	CHIRAG YADAV	Harikrishnan G Nair	The founding mothers and their role in the indian constituent assembly
635	ALLAMNENI ARAVIND	Jyoti	Perception of budding entrepreneurs towards product innovation
636	AMAN AGARWAL	Satyendra Kr Sharma	Role of online hiring cab companies like uber, ola,etc. In peoples life and its effect on automotive industry
637	AMAN BANSAL	R. Srinivas	Analyzing the impact of industrial waste water on water quality of river ganga.
638	AMAN SARYAL	Amit Goel	Use of photocatalyst materials in pavements
639	AMAN TAKIYAR	Nv Muralidhar Rao	An exploratory study on dynamics of global economic power
640	AMANDEEP SINGH MALLAN	Cb Gupta	Military operation research in quantitative decision making.
641	AMISH NEVATIA	Anil Jindal	Optimal code acquisition and re-manufacturing policies uncertainty
642	AMIT ARORA	R Gupta	Optimizing csr funds using impact analysis in different sectors
643	AMIT PAREEK	Udayan Chanda	Growth of indian economy and income inequality
644	AMITABH AGGARWAL	Ravi Kant Mittal	Design of foundation for static and dynamic load
645	AMRITA BHOWMICK	Surekha Bhanot	Biomedical signal processing
646	AMULYA SRIVASTAVA	T Chakraborty	Making of a consumerist world
647	ANAMIKA AGGARWAL	Rr Mishra	Advanced topics in statistical mechanics

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
648	ANAND SAHOO	Kavindra Kandpal	Investigation of high-k dielectrics for enhanced performance.
649	ANAND SHEKHAR	P Srinivasan	Improvement of efficiency of air cooled condensers
650	ANANT ANURAG	Avinash Gautam	Study of algorithms for multi-robot terrain exploration
651	ANANTIM RAJ	Bhupendra K Sharma	Mathematical analysis of arterial blood flow with heat and mass transfer.
652	ANANYA DHAKA	Omvir Chaudhry	Studying the investor behavior through scheduled announcements and their impact on stock prices using event study methodology.
653	ANCHAL GUPTA	Kamlesh Kumar	Effective database design for geoscience professionals
654	ANIKET LOHIA	T Chakraborty	Globalization and urban sprawl- comparative study of expansion and growth of selected million plus indian cities
655	ANIKET SINGH	Rajesh Mehrotra	Role of auxin in embryo development
656	ANIRUDDH GAUTAM	Vineet Kumar	Hardware architecture exploration for iris recognition.
657	ANIRUDDH MISHRA	Arun Kumar	Customer perceived values scale: a case of indian banks
658	ANIRUDH AGARWAL	A K Giri	Option pricing using machine learning techniques
659	ANIRUDH AGARWAL	Tba (Ecofin)	Option pricing using machine learning techniques
660	ANIRUDH AGARWAL	Virendra Singh Nirban	Mordern culture of connectivity: cmc
661	ANIRUDH SHARMA	Satyendra Kr Sharma	Trade-off decisions in projects
662	ANIRUDH SRIDHAR	Murali Palla	Probabilistic fracture mechanics with uncertainty in crack size and orientation using finite element method (fem)
663	ANIRUDH VENU	Tapomoy G Sarkar	Study of su(2) and so(3)groups and its applications in quantum mechanics and other aspects of physics.
664	ANISH DHIMAN	Rahul Singhal	Polymeric optical modulator
665	ANISH NIRAV SHAH	Rajesh Mehrotra	Genome wide analysis of cis-regulatory elements using data mining approach in arabidopsis thaliana.
666	ANISH SRINIVAS VASAN	Ak Das	Study of the molecular, physiological and neurological aspects of alzheimers disease
667	ANKIT BANSAL	Rajesh Mehrotra	Analysis of upregulated genes induced in response to abiotic stress
668	ANKIT BANSAL	Vandana Agarwal	Project communicate
669	ANKIT GOEL	Anil Jindal	Understanding reverse logistics and its optimisation.
670	ANKIT KUMAR	N Mehala	Improving search engine using natural language processing
671	ANKUR DUBEY	Arnab Hazra	To study the effect of moisture on soil nutrients with the help of moisture sensors.
672	ANKUR SHARMA	Navneet Gupta	Selection of electromagnetic interference(emi) shielding materials using computational material technology.
673	ANKUSH KUMAR	R. Srinivas	Analysing the co- relation between the flow and quality of river ganga.
674	ANKUSH SHARMA	Ajay Kumar Pani	Multivariate data analysis using conventional and robust principal component analysis
675	ANMOL BANSAL	Gajanand Gupta	Development of framework for estimating the reliability of mechanical equipment
676	ANMOL BHATIA	Rakhee	Study of discrete time queues:application to communication networks
677	ANMOL RATHI	Shibani K Jha	Ground water contamination
678	ANSHITA SRIVASTAVA	Tanu Shukla	A study of behavioral information in organizational setting.
679	ANSHUMAN	Vineet Kumar	Hardware design for image processing blocks
680	ANUJ AGRAWAL	Abhishek Mishra	Study on efficient production of bio diesel

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
681	ANUJ AGRAWAL	Ms Soni	Study of solar assisted pyrolysis systems.
682	ANUMOLU AKHIL SAI	Anupam Yadav	Impact of national and international politics on social interaction and society
683	ANUMOLU AKHIL SAI	Gajanand Gupta	Reliability modelling for mechanical equipment
684	ANUMULA SAI VENKATA REDDY	Abhijit K Digalwar	Study of sustainable manufacturing in the context of discrete manufacturing
685	ANURADHA MISHRA	Mayuri Digalwar	Study and implementation of energy aware real time scheduling for multi-core processors.
686	ANURAG PALLAPROLU	Tapomoy G Sarkar	Supersymmetric quantum mechanics
687	ANURAG PRAKASH	Lavika Goel	Sentiment analysis of online communities using swarm intelligence
688	ANUSHKA BAONI	Yashvardhan Sharma	Identifying spam for sentiment analysis
689	APOORV VAISH	Sachin U Belgamwar	Application of graphene in batteries
690	APURVA GUPTA	Praveen Goyal	Case writing on workings of a typical self-help group relating to sales and marketing activities following the examples of khedla village near pilani
691	ARADHYA SAXENA	T Chakraborty	Globalization and urban sprawl- comparative study of expansion and growth of selected million plus indian cities
692	ARANAV KACKER	Bijoy Kumar Raut	Reduction of workspace due to failure of actuator in series manipulator.
693	ARCHIT AGGARWAL	Bibhas Ranjan Sarkar	Study of solid state nmr of construction materials, typically cement
694	ARCHIT AGGARWAL	Prasanta Kumar Sahu	Classification of indian airports
695	ARCHIT CHAUDHARY	Vinita Tiwari	Study of statistical and multi-variad data analysis techniques for gas and humidity sensors.
696	ARCHIT GADHOK	Jl Raheja	Real time age invariant facial recognition using qualcomm vuforia sdk integrated with an android application.
697	ARIHANT JAIN	Srinivas Appari	A detailed kinetic modeling approach for surface reactions
698	ARITRA DAS	Nidhi Chaturvedi	Hemts simulation using atlas silvaco (in particular leakage currents)
699	A ESHWAR RAM	Ashish Runthala	Heuristically selecting the best set of correct templates among a pre-screened reliable set to construct an accurate target structure of a protein
700	AAKANKSHA AGARWAL	Virendra Singh Nirban	Cross-cultural communication in modern organizations
701	AAKRITI JHA	Navneet Goyal	Classification of multi-variate time series data
702	AARUSHEE RANGRA	Navin Singh	Study of bio-polymer and mems applications
703	AASHISH KUMAR PASSRIJA	Shilpi Garg	Epigenetic mechanisms for gene regulation in plasmodium
704	AASTHA DEWAN	Hari Om Bansal	Optimal location of fact devices to improve power system stability
705	AAYUSH MULYE	P Srinivasan	Heat transfer through composite materials : an analysis of conduction through an aircraft wing structure (carbon/epoxy composite)
706	ABHAY TYAGI	Nv Muralidhar Rao	Corporate finance analytics using r and advanced excel.
707	ABHI SHARMA	Arvind Kumar Sharma	Cleaning ganga ... !
708	ABHIJEET MANU	Gautam Singhvi	Study of novel methods for calcium determination in blood and milk.
709	ABHIMANYU	Rahul Banerjee	Devising strategies and algorithms for robust and efficient network communication in context of intelligent transportation systems (its), specifically to improve upon existing vanet routing protocols for more reliable communication.
710	ABHINANDAN SAIN	Sk Hafizul Islam	Authentication system for pay - tv
711	ABHINAV GANDOTRA	Vishal Gupta	Architecture for heterogeneous access points visualization
712	ABHINAV GAUR	Surojit Pande	Study of flywheel batteries and its applications

S No	Name of the student	Faculty Name	Project title
<b>Design Project</b>			
713	ABHINAV MISHRA	Geetilaxmi Mohapatra	The impact of foreign direct investment (fdi) on co2 emissions and economic growth : an empirical analysis for india
714	ABHISHEK	Arun Kumar	Crn framework development and validation in indian insurance sector
715	ABHISHEK BANSAL	Deepak Chitkara	Cancer nano therapeutics from bench to bedside
716	ABHISHEK DIXIT	Nv Muralidhar Rao	An exploratory study on various economic models of development.
717	ABHISHEK GOEL	Amit Goel	Autonomous non-destructive testing
718	ABHISHEK GUPTA	Rajneesh Kumar	Mathematical modelling of photovoltaic system
719	ABHISHEK KUMAR JHA	G Muthukumar	Analysis of frp reinforced concrete structure.
720	ABHISHEK MITTAL	Murali M Pandey	Buccal mucosa as a route for systemic drug delivery .
721	ABHISHEK SAHU	Amit Goel	Autonomous non-destructive testing
722	ADARI BHASKAR	Shamsher B Singh	Depth of carbonation of concrete
723	ADITI GUPTA	Poonam Goyal	Topical clustering using nlp techniques
724	ADITI SINHA	Omvir Chaudhry	Analyzing the efficiency of indias public sector.
725	ADITYA MANGLIK	Surekha Bhanot	Implementation of neural networks based solutions for the travelling salesman problem.
726	ADITYA RAKESH KULKARNI	Shyam Sundar Yadav	Numerical study of the interaction of a drop with an interface between a conducting and dielectric fluid in presence of an electric field.
727	ADITYA SANJAY RUIA	Satyendra Kr Sharma	Supply chain management value stream mapping ezee enterises
728	ADITYA SINGH	P Chattopadhyay	Latest trends in foam based applications
729	ADITYA UKARANDE	Pradyumn Chaturvedi	Study and simulation of switching losses in power electronic converters
730	ADITYA VENKATARAMANI	Udayan Chanda	Methods for option pricing and derivatives
731	AFZAL AHMED KHAN	Satyendra Kr Sharma	Cost and risk trade-off in supply chain management systems
732	AFZAL AHMED KHAN	Somdatta Bhattacharya	Unearthing the dark side :exploring the hollywood villain
733	AGASHIWALA KUNJESH DEVANG	Avik Chattopadhyay	Nanostructure solar cell
734	AGHOR PRATIK PRASHANT	Tapomoy G Sarkar	A study of hamilton-jacobi theory, physical optics and quantum mechanics
735	AGRAWAL ANIKET KAMALKISHORE	Krishna Muniyoor	Study of various types of risks involved in startup businesses and their survival in the market
736	AGRAWAL MITESH RAJENDRAKUMAR	Asma Rani	Query rewriting
737	AGRAWAL SAKET KRISHNAKUMAR	Omvir Chaudhry	Analysis of the business model of a global financial services firm
738	AGRAWAL SAKSHI DEVENDRA	Sanjay Singh	Adaboost for facial feature selection
739	AIRSON	Somdatta Bhattacharya	Imbibing of morals values through primary education
740	AISHWARYA CHOPRA	Anshuman	Partial replacement of cement with a blend of marble slurry and fly ash.
741	AISHWARYA NALWAYA	Hari Om Bansal	Vehicle to grid technology
742	AISHWARYA SINGH	Hitesh Dutt Mathur	Vehicle to grid application in power grids
743	AKASH AGRAHARI	Anil Rai	Rasas and bhavas (sentiments) in music
744	AKASH AGRAWAL	Vinita Tiwari	Comparative study of various modulation schemes for optical communication.
745	AKASH KUMAR SHAHI	Rajeev Taliyan	In vivo, in vitro models of huntingtons disease: recent developments in cell lines and animal models
746	AKASH PODDAR	Asma Rani	Qwery rewriting
747	AKASH SHARMA	Jl Raheja	Extracting joint angles using rgb values and depth values from kinect.
748	AKERSHIT AGARWAL	Sachin U Belgamwar	Study of actual disturbance reduction control(adrc) in a vibratory gyroscope and find its application in other sensors.

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<b>Design Project</b>			
749	AKKALA NAGA VENKATA DURGA SANTOSH	Sainath Bitragunta	Optimising energy harvesting co-operative cognitive radio communication systems
750	AKRITI SRIVASTAVA	Smita Raghuvanshi	Studies on reactive extraction of extra cellular products obtained during mitigation of co2
751	AKSHANSH DEVA	Kumar Neeraj Sachdev	Exploratory literature review of key works in hindu philosophy: an analysis done along politics, ethics, society, arts and culture
752	AKSHANSH DEVA	Tanu Shukla	Determinants of positive psychology in education
753	AKSHANSH JAIN	T Chakraborty	How smart the smart cities are? Tracking the urban development and management of smart-cities in india.
754	AKSHAT DUBEY	Vinita Tiwari	Study of statistical and multi-variad data analysis techniques for gas and humidity sensors.
755	AKSHAT MISHRA	Shilpi Garg	Identification of microorganisms to rectify liquefaction of soil.
756	AKSHAY	Chandra Shekhar	A study of nature based optimization technique and its application.
757	AKSHAY AURORA	K Hari Babu	Performance of spdy protocol in different server designs
758	AKSHAY GOYAL	Uma S Dubey	Nanotechnology in cancer biology
759	AKSHAY JADIYA	Bhagavatula Vani	Use of algae in electricity generation
760	AKSHAY VENKATESH	Murali Palla	Probabilistic fracture mechanics with uncertainty in crack size and orientation using finite element method (fem)
761	AKUL BAJAJ	Bhupendra K Sharma	Mathematical modelling of blood flow through arteries in the presence of stenosis.
762	ALANKRIT KHARBANDA	Gajendra S Chauhan	A study of adblock and its ethics.

**NEW COURSES INTRODUCED IN THE YEAR 2015**

**New / Modified Courses:**

<b>S.No.</b>	<b>Course No.</b>	<b>Course Title &amp; Description</b>	<b>L</b>	<b>P</b>	<b>U</b>
1.	CE G544	Fracture Mechanics of Concrete Structures	3	1	4
2.	ECON F344	Models in Operations Management	3	0	3
3.	ECON F345	Behavioral Economics	3	0	3
4.	ECON F418	Quantitative Analysis of International Trade	3	0	3
5.	EEE G547	Device Drivers	3	2	5
6.	HSS F355	Dictatorship, Democracy & Development	3	0	3
7.	HSS F356	Social Movements and Protest Politics	3	0	3
8.	HSS F399	Introduction to American Literature	3	0	3
9.	MST F331	Materials Characterization	3	1	4
10.	MST F332	Materials Processing	3	0	3
11.	MST F333	Introduction to Biomaterials	3	0	3
12.	MST F334	Materials for Catalytic applications	3	0	3
13.	MST F335	Coating and Thin film technology	3	0	3
14.	MST F336	Glass Technology	3	0	3
15.	MST F337	Materials for Energy Applications	3	0	3
16.	MST F338	Materials and Alloys	3	0	3
17.	MST F339 3	Polymer Materials		3	0
18.	PHY F345	Quantum Mechanics for Engineers	3	0	3
19.	PHY G512	Advanced Quantum Field Theory	3	0	3



## SPECIAL LECTURES DELIVERED BY INVITED SCHOLARS

1. Dr. T. Narendar, Principal Scientist, CSIR-CDRI, Lucknow, India
2. Dr. Bhuvanewswari Sridhar, Head-API R&D, Hospira Healthcare India Pvt. Ltd (Pfizer Company),
3. Dr. Ravi Kumar Namball, Director - Formulations R&D, Hospira Healthcare India Pvt. Ltd (Pfizer Company)
4. Dr. Ian A. Cliffe, Vice-president and Head, (Chemistry) Daiichi Sankyo India Pharma Pvt. Ltd, Gurgaon, india.
5. Prof. Munawar A. Shaik, Associate Professor, IIT Delhi on 13<sup>th</sup> August, 2015. The topic of the presentation was "Planning and scheduling of Batch and Continuous Process Operations". The talk covers different mathematical programming approaches for modeling and solution of process planning & scheduling problems for chemical batch and continuous process operations with applications in refinery petrochemicals, polymers, pulp & paper, bio-pharmaceuticals, pipeless plants, and fast moving consumer goods (FMCG) manufacturing. The talk was attended by faculty members, PhD scholars and students from graduate and postgraduate programmes.
6. Dr. B V Babu, Vice Chancellor of Galgotias University, Greater Noida on 19<sup>th</sup> September, 2015. The topic of the presentation was Evolutionary Computation.
7. Prof. Man Mohan Sharma, Former Director, ICT, Mumbai on 1<sup>st</sup> October 2015. The topic of the presentation was "Innovations in Chemical Industries". This Lecture was telecast across all campuses (Pilani, Hyderabad and Dubai) through our Tele presence facility to be followed by question- answer session from the audience.
8. Dr. M.O. Garg, Director, IIP Dehradun, CSIR, interacted with Students to provide latest ongoing project details in the field of Chemical and Petroleum Engineering.
9. Dr. Siddhartha Mukherjee, Director-Technology, Air Liquide Global E &C Solutions India Pvt. Ltd. Delivered a talk on September 12, 2015 on the topic of "The Role of a Chemical Engineer in Process Industry".
10. Dr. Radhakrishna G. Pillai, Assistant Professor, Bldg. Tech. & Constr. Mgmt. Division, IIT Madras
11. Prof. S. Velmurgan, Scientist F and Head Traffic Engineering and Safety Division, Central Road Research Institute (CRRRI) New Delhi

**LIST OF FIRST DEGREE THESIS COMPLETED DURING THE YEAR 2015****Second Semester 2014-15**

S.No	ID No	Name	Title	Supervisor
1.	2011B1A1836P	Sarthak Tiwari	Globally Linearizing Control(GLC) of a pH neutralization Process	Dr. Hare Krishna Mohanta
2.	2011B1A1858P	Anurag Prasad	MiRNA -MRNA Binding Site Prediction using Machine Learning and its application in Chemical Engineering	Shibasish Chowdhary
3.	2011B1A1869P	Rashi Mathur	Bioleaching of heavy metals	Dr. Suresh Gupta
4.	2011B1A1871P	Anubhav Das	Selection of the optimum process for the conversion of short residue into useful product using ASPEN plus	Dr. Utkarsh Maheshwari
5.	2011B2A1711P	Naman Sharma	Aspen Plus Simulation of Crude distillation Unit	Dr. Raman Sharma
6.	2011B2A1738P	Pragya Chopra	Computational study of Hydrogen Bonding Clusters	Dr. Tapan K. Ghanty
7.	2011B3A1576P	Rahul Tiwari	Computational Fluid Dynamics Study of Bio - Reactors	Dr. Partik N Sheth
8.	2011B3A1437P	Aniket Agrawal	Economics of Pollution Control Techniques	Dr. Smita Raghuvanshi
9.	2011B4A1712P	Arpit Bhutani	Synthesis and characterization of Co3O4/C3N4 nano composites for Oxygen Evolution Reaction.	Dr. Surojit Pande
10.	2011B4A1727P	V V Swechcha Mayukha	Process Control	Dr. Hare Krishna Mohanta
11.	2012A1PS406P	Khantesh Agrawal	Synthesis of Metal oxide adsorbent for deflouridation.	Dr. Bharti Khungar
12.	2012A1PS422	Saketh Boddu	Process Dynamics & Control	Prof. Raghunathan Rengasamy
13.	2012A1PS444P	Vidushi Dwivedi	Nanotechnology - Carbon nanotube functionalization	Dr. SK Musharaf Ali
14.	2012A1PS456P	Anand Sarit	Ion Conducting Polymers for Battery Applications	Dr. Anshuman Dalvi
15.	2012A1PS458P	Srishti Gupta	Formulation in Personal Care Products	Ruchi Mittal
16.	2012A1PS460P	Vrinda Dharmarha	Quantum dot nanoparticles as biosensors in cancer diagnosis	Dr. Sonal Mazumdar
17.	2012A1PS513P	Basudev Choudhury	Ion Conducting Polymers for Battery Applications	Dr. Anshuman Dalvi
18.	2012A1TS378P	Sudeep Mukherjee	Process designing , Modelling and simulation in ASPEN Plus	Dr. Partik N Sheth
19.	2012A1TS440P	Rajat Shrinet	Modelling and Simulation in chemical processes	Dr. Suresh Gupta
20.	2012A1TS424P	Soumya Mittal	Defluoridation of Drinking Water using Hybrid Material Adsorbent	Dr. Bharti Khungar
21.	2010B1A2225P	Monika Jain	Reduction of heavy metals in khetri copper complex mine tailings using blue green algae	Dr. Amupam Singhal
22.	2010B1A2245P	A.S.Rathre	use of microorganisms to decrease heavy metal ion concentration in khetri copper mine tailings	Dr. Anupam Singhal
23.	2010B1A2366P	Rajat Sethi	Design of seismic-resistant	Dr. Ravi Kant Mittal

S.No	ID No	Name	Title	Supervisor
			foundations in liquefiable soil	
24.	2010B1A2463P	Pururaj Singh	Environmental aspects of FRP (Fiber Reinforced Polymers) in Concrete Structure Strengthening	Prof. S. B. Singh
25.	2010B1A2750P	Nisha	Improving load carrying capacity of marginal soil using waste plastic chips and geogrids	Dr. Ravi Kant Mittal
26.	2010B1A2773P	Harshit Sharma	Energy balance of a building with respect to various geographical locations and developing efficient performance models	Dr Amit Goel
27.	2010B2A2196P	Himanshu Shara	Treatment Of Pilani Water By Using Different Bio-Adsorbents	Dr. Anupam Singhal
28.	2010B2A2304P	K Bhargavdutt	Environmental Quality Assessment in Shekhawati Region of Rajasthan	Dr. A. P. Singh
29.	2010B3A2444P	Indrajit Haridas	Response of ECC Strengthened Masonry Beams	Prof. S. B. Singh
30.	2010B4A2731P	Abhishek Sharma	FRP Strengthened Masonry Structures	Prof. S. B. Singh
31.	2010B5A2641P	Harsh Khandelwal	Mathematical modeling of non-point source pollution of river Yamuna	Dr. A.P. Singh
32.	2010B5A2670P	Shubham Lal	Improving load carrying capacity of marginal soil using waste tire chip and geo-grids	Dr. Ravi Kant Mittal
33.	2010B5A2680P	Agni Pushp	Bio Sorption Of Iron From Pickling Liquor By Algae	Dr. Anupam Singhal
34.	2011A2TS455P	Devanaboyina Vishal	Product development of a device for the automation of Malaria detection from Blood Sensors with Focus on Image acquisition	Prof. Anil Kumar Dr. Jyoti
35.	2011A2TS497P	Mitali Gupta	Direct Shear Testing of Coal Dust Mixed Local Soil, Under Dry & Saturated Conditions	Dr. Kamallesh Kumar
36.	2011A2TS390P	P Kiran	Comparison of Plagiarism Detection Tools	Prof. AP. Singh & Dr. K Hari Babu
37.	2011A2TS539P	Naman	Study the Concrete Filled Tubes and their comparison with RCC columns	Dr. Manoj Kumar
38.	2011A7PS111	Kothur Sachith Sri Ram	Natural Language Processing	Yashvardhan Sharma
39.	2011C6TS601	Puneet Jolly	Framework For Food Safety	Sundaresan Raman
40.	2011C6TS706	Jatavallabhula Krishna Murthy	Task Allocation Algorithms For Load Balancing In Multi-Robot Systems	Sudeept Mohan
41.	2011C6TS702	Gourav Kumar	Study And Implementation Of Some Terrain Mapping And Exploration Algorithms By Multi-Robot System	Avinash Gautam
42.	2010B4A7698	Olive Chakraborty	Studies On Elliptic Curve Suitable For Bilinear Pairing	SK Hafizul Islam
43.	2011C6PS735	Nagandla Sai Bhargav	Qualitative Analysis Of Factors Related To Marginalization In Organizational Settings	Dr. Tanu Shukla
44.	2011C6PS803	Pottimuthi Laxman	Design And Development Of Sdn Aware Gnutella Network	K Hari Babu
45.	2011C6TS780	Patodi Shubham Rajendra	Implicit Parallelism For Multiple Architecture	Kiran D C
46.	2011A7PS126	Sidharth Chaturvedi	Compiler Visualization	S Balasubramaniam
47.	2010C6B1558	Debanshu Sinha	Design And Development Of A	S. Balasubramaniam

S.No	ID No	Name	Title	Supervisor
			Sdn-Aware P2p Framework	
48.	2011A7PS007	Chinthakayala Bharath Kumar	Age Invariant Face Recognition	Navneet Goyal
49.	2011A7PS872	Shruti Gupta	Automatic Detection and Translation of Parallel Pattern	S. Balasubramaniam
50.	2010B3A4547P	Sohaam Shah	Markov Process Application to Credit Risk Migration	N V M Rao
51.	2010B3A3655P	Aakriti Goel	Micro Small and Medium Enterprises	Prof. Charan Singh N V M Rao
52.	2010B4A4708P	Devanshi Mittal	Monetary Valuation of Indian Oil and gas reserves	Omvir Chaudhry
53.	2011A3TS175P	Nikhil Kumar Singh	Socio-Economic Impact of Pervasive Computing : An Exploratory Analysis	Omvir Chaudhry
54.	2010B3A2564P	Siddhant Bhardwaj	Backwardation and Contango effects in the Indian Derivative Market	A.K. Vaish
55.	2010B3A3636P	Gautam Bothra	Investment Climate Index for Indian States	A K Giri
56.	2011B3TS622P	Jayant Choudhary	Benefits and Limitations of Balanced Scorecards	Remica Aggarwal
57.	2011A3TS100P	Arvind Biswal	Smart Grid	Dr. Hitesh Dutt Mathur
58.	2010B3A3377P	Karan Raj Singh	VLSI Design	Dr. Anu Gupta
59.	2010B1A8293P	Amit Mathur	Positive Organisational Culture : Management	Dr.Sarvesh Satija
60.	2010B2A8729P	Tripti Rawal	Sem Instrumentation: Chemistry	Dr. Surojit Pandey
61.	2010B4A8679P	Ashutosh Gupta	Digital Signal Processing, DSP processors	Mr. Srinivas K Reddy
62.	2010B3A8554P	Sadras Shiva Kumar	Digital Adders Implementation In Virilog and Signal Signal Processing	Mr. Srinivas K Reddy
63.	2010B5A8634P	Yuvraaj Kumar	Image Processing	Dr. K K Gupta
64.	2010B5A8623P	Kaustav Majhi	Opto electroics, electronic devices	
65.	2011A8PS285P	Rishi Kumar	Mathematics	Amit Kumar Verma
66.	2010B1A8329P	Anuj Gupta	Image processing	Dr. K K Gupta
67.	2010B5A3553P	Aditya Joshi	Digital Image Processing	Dr. K K Gupta
68.	2010B2A3694	Anurag Sahgal		Dr. K K Gupta
69.	2010B4A8637P	S.Ananthapadmanabhan	Design Project- Face detection using opencv on FPGAs.	Ashish Mishra
70.	2011A8PS345P	Vaibhav Agarwal	Security in Web Applications	Dr. Prateek Saxena Dr. Ananth Krishna
71.	2011A3PS723P	Tanuj Sen	Power Electronics	Dr. Vivek Agarwal, Dr. Rajneesh Kumar
72.	2010B4A3660P	Amogh Sakedo	Embedded/Digital VLSI	Mr. Subind Dr. Abhijit Asati
73.	2011A3PS153P	Himanish Ganjoo	DSP	Dr. Tirthankar Roy Choudhary Dr. Raneesh Kumar
74.	2011A3PS212P	S Arun	Computer architecture and Reliable Embedded Systems	Dr.-Ing Muhammad Shafique Mr Nitin Chaturvedi
75.	2010B5A3649P	Apoorv Jindal	Nanoelectronics	Prof. Mandar M.

S.No	ID No	Name	Title	Supervisor
				Deshmukh Dr. Anshuman Dalvi
76.	2010B5A3429P	Sankalp Gilda	Helioseismology of large-scale data flows Solar Dynamics Observatory (NASA)	Dr. S.P. Rajaguru Prod. D. Bandyopadhyay
77.	2011A3PS148P	Srinivas Gopal V	Computer Architecture, ASIC design	Dr. S K Nandy Mr Nitin Chaturvedi
78.	2011A3PS032P	S Balasubramanian	Computer Architecture and Operating Systems	Dr. S K Nandy Mr Nitin Chaturvedi
79.	2010B2A3511P	V Hariharasudhan	Computer Architecture	Dr. S K Nandy Dr. Avik Chattopadhyay
80.	2011A8PS357P	Divya nsh Anuj	Dynamically Reconfigurable Architecture	Dr. S K Nandy Dr Abhijit Rameshwar Asati
81.	2011A8PS323P	Eshan Bhatia	Dynamically Reconfigurable Parallel Computing Architecture	Dr. S K Nandy Dr Abhijit Rameshwar Asati
82.	2011A8PS368P	B Vignesh	Computer Architecture, Multi-core processor design	Dr. S K Nandy Dr Abhijit Rameshwar Asati
83.	2010B5A3657P	Ramprasad M Nambisan	Analog Circuit Design	Dr. Bhaskar Mitra Dr. Praveen Kumar A.V
84.	2010827P	Mehak Mittal	Microelectromechanical Systems	Dr. K.L. Srivastava Dr. Sailaja Nandigama
85.	2010B3A3655P	Aakriti Goel	Finance theory	Dr. Charan Singh Prof. NVM Rao
86.	2010B3A3522P	Vipul Agarwal	Study of Urban Primary Govt. Schools: Humanities	Dr. Ursula Renold Dr. Sudarshan
87.	2011C6PS735P	N Bhargav	Determinants of Marginalisation in Higher Education	Tanu Shukla Sundaresan Raman
88.	2010B1A3645P	Neeti Pokharna	Organizational Leadership & Commitment: An Exploration	Tanu Shukla
89.	2011A2TS545P	Akshita Agarwal	Gated Communities and the city: A study of DLF Gurgaon	T Chakraborty
90.	2010B1A8827P	Mehak Mittal	Unearthing the Horizon of Pre-Primary Education	K.L. Srivastava S Nandigama
91.	2010B5A8430P	A.V. Raghavan		Geetha B
92.	2010B5A7814P	Ankit Singh	Success story of Filpkart	Sangeeta Sharma
93.	2010B2A7778	Arkeksh Jaiswal	Neuro Marketing : Theories & Practices	Ruchika Sharma
94.	2011D2PS088P	Neha Gupta	CSR and Corporate Houses	Sangeeta Sharma
95.	2011D2TS705P	Prashant Bika	The Study of New Advertising Strategies through different Media	Sangeeta Sharma
96.	2012A8TS224P	Akshansh Deva	Study of E-CRM Practices by E-commerce Giants in India	Dr. Arun Kumar Dr. Jyoti
97.	2011B1A4855P	Binay Krishna Shivam	Analysis of Modern Aggregators using Mathematical Models and their Impact on Consumer Behavior	Dr. Jyoti Dr. Arun Kumar
98.	2011B4A2607P	Shashank M	Analysis of Modern Aggregators using Mathematical Models and their Impact on Consumer Behavior	Dr. Jyoti Dr. Arun Kumar
99.	2010B2A1286P	Ashutosh Sharma	Analysis of New Delhi Airport with a Queuing Theory Perspective	Udayan Chanda
100.	2010B5A1654P	Manan Bhatia	Impact of Network Externalities and Churn Analysis of Indian Telecom Market	Udayan Chanda

S.No	ID No	Name	Title	Supervisor
101.	2012A8TS345P	Tanay Dixit	A Comprehensive study of Security Valuation and Portfolio Design Using Machine Learning Techniques	Udayan Chanda
102.	2011B3TS622P	Jayanat Choudhary	Balanced Scorecard Approach & its applications	Dr. Remica Aggarwal
103.	2012A3TS193P	Arpeet Sahoo	Measuring the User Experience	Dr. Remica Aggarwal
104.	2011B3PS527P	Divyanshu Jain	Understanding The Role And Value Chain Flow Of Informal Sector In Solid Waste Management	Leela Rani
105.	2010B2A4768P	Rohan Desai	Retail location decisions using an integrated DEMATEL-ANP method	Satyendra Sharma
106.		Siddhartha	Supply chain security	Satyendra Sharma
107.		Ayush Agarwal	Modeling R & D project risks	Satyendra Sharma
108.	2010B1A2804P	Shail Pillay	Employee Job Satisfaction, Job Commitment and Job Involvement in relation with Employee Branding	Dr. Sarvesh Satija
109.	2010B5A8619P	Payal Panigrahy	The role of Psychological Capital in relationship with Creative Climate and Creative Performance	Dr. Sarvesh Satija
110.	2010B1A8293P	Amit Mathur	Study of Positive Organizational Culture And Practices in Tata Sons Using Case Research Methodology	Dr. Sarvesh Satija
111.	2011B4TS510P	Venktesh	Nonlinear Differential Equations of Fractional Order	Mr. Juan J. Nieto Dr. Amit K. Verma
112.	2010B4A7668P	Sumit Sharma	Enhanced Mail Search Mail Experience	Mr. B. Ashok Rakhee
113.	2011B4TS678P	Ritesh	Risk Adjusted Project Cost Determination Using Bayesian Belief Networking	S. K. Sharma and Chandra Shekhar
114.	2011B4TS707P	Harsh Sharma	Investigating effect of inventory over stocking on financial performance of the firm in Automobile Industry	Imlak N. Shaikh Dr. Shivi Agarwal
115.	2010B4A4708P	Devanshi Mittal	Monetary Valuation of Indian Oil and Gas Reserves	Prof. C. B. Gupta
116.	2010B4A8736P	Ritesh Bhatia	Sensitivity Analysis of Reliability Measures of Machining System	Dr. Chandra Shekhar
117.	2010B4A7710P	Asyush Agarwal	Optimization of service rendering cost in the queueing system	Dr. Chandra Shekhar
118.	2010B4A8674P	Akshay Agarwal	Reliability Prediction of Machine Repair Problem	Dr. Chandra Shekhar
119.	2011B4TS297P	Divya Jangir	Application of Data Envelopment Analysis with Undesirable and Desirable Outputs in Real Life	Dr. Shivi Agarwal
120.	2010B4A4615P	Deepak D.	Hybrid Intelligent Algorithms	Dr. Shivi Agarwal
121.	2010B2A7766P	Abhinav Ravi	Fuzzy Analysis of Machine Repair Problem	Dr. Chandra Shekhar
122.	2009A5AB901P	Utkarsh Yadav	Vehicle routing Problems: State of art Review and future Research	Satyendra Sharma
123.	2010B1A4763P	Venkatesh Ganesan	Counting Euler Tours on Undirected Bounded Tree width Graphs	Samir Dutta
124.	2010B1A4820P	Aman Khurana	Autonomous Balancing Bicycle Bot	B .K.Rout

S.No	ID No	Name	Title	Supervisor
125.	2010B1A4829P	Aarushi Bhargava	Life assessment of components of ultra supercritical Power Plant	P.Srinivasan
126.	2010B1AB360P	Prakhar Patni	Multivariate Analysis of supply development impediments using cluster and canonical analysis	Srikanta Routroy
127.	2010B1AB425P	Deshpande Shaunakraj Mukund	Relation between crude oil prices and OVX (Volatility Index)	Imlan N. Shaikh
128.	2010B1AB798P	Kanchita P Kundargi	Bench marking for supplier development	Srikanta Routroy
129.	2010B2A4364P	Anjal Khan	Application of parameter optimization technique of dynamic experiment	B.K.Rout
130.	2010B2A4458P	Kommavarapu Raghavendra	Modeling of Reliability in Product development process	R.P. Mishra
131.	2010B2A4768P	Rohan Desai	Retail Location Decision Using an Integrated Dematel - ANP Method	Satendra Sharma
132.	2010B2A4799P	Pranjal Jain	Reliability analysis of Mechanical components using marker chain	gajanand Gupta
133.	2010B3A4617P	Rahul Chandnani	Data uploading & dispensing application using android for use their monitoring systems	Yashvardhan Sharma
134.	2010B3A4624P	Peeyush Kumar	Design of closed loop supply chain	B.K.Rout
135.	2010B3AB642P	Dushyanth Srihari Gummalam	Lean Manufacturing: Best Practices in the Automobile Industry	R. P. Mishra
136.	2010B4A4681P	Bajaj Jash Shailendra	Human Detection Based on Explicit Skin Color Space Thresh holding and minor Motion	M.S.Dasgupta
137.	2010B4AB607P	Pratik Bhagchandani	benchmarking for Agile Manufacturing system	Srikanta Routroy
138.	2010B4AB671P	Shahade Ketan Gajananrao	Reliability Modeling of Mechanical Equipment	R.P. Mishra
139.	2010B4AB678P	Rohit Joshi	Study and Research of Hybrid Vehicles Technology in India	Ravi Inder Singh
140.	2010B5A4677P	Prateek Singhvi	Reliability Modeling for Mechanical Equipment	gajanand Gupta
141.	2010B5AB442P	Sista Aditya	Supply Chain Optimization Using A.T. Techniques	K.S.Sangwan
142.	2010B5AB644P	Bang Siddharth Vasant	Development of Framework for Analyzing Global Supply Chain Security: A case study of Different Industries	Satyendra Sharma
143.	2010B5AB665P	Saripally Aditya Bharadwaj	Numerical Study Of Effective Thermal Conductivity Of Composites	Sachin U. Belgamwar
144.	2011A4TS093P	Akshay S Menon	Product Development of a device for the Intimation of malasia Detection from Blood Smears-with Focus on Image Processing Involved	Sai Siva Gorthi
145.	2011A4TS130P	Ritvik Vasani	Product Development of a device for the Intimation of malasia Detection from Blood Smears-with Focus on making an automated stage	Sai Siva Gorthi
146.	2011A4TS151P	Mohit Kumar	Development of Bio-ceramic Scaffolds using a Novell Integrated Approach of Additive manufacturing and Starch Consolidation	S.B.Ghosh
147.	2011A4TS152P	Prithvijit Mukherjee .	Study of Viscous Fingering	Sai Jagan Mohan

S.No	ID No	Name	Title	Supervisor
			Instability in porous media flows	
148.	2011A4TS221P	Raghav Agarwal .	On some aspects of contact angle hysteresis	Satish Kumar Dubey
149.	2011A4TS232P	Rachit Bhargava .	Design of traffic light and traffic sign detection system for autonomous vehicles	K Madhawa Krishna
150.	2011A4TS233P	Saket Nihal .	a comparative study on Pre-Gushed thin walled structure	M.S.Dasgupta
151.	2011A4TS238P	Divyanshu Jain .	Study and Modeling of Heat transfer Process in Foil	Sai Jagan Mohan
152.	2011A4TS239P	B Naveen .	evaluating the impact of link's cross section on the manipulator's performance	B.K.Rout
153.	2011A4TS241P	Mohammad Atif	Reduced order modeling of flow past cylindrical Bluff bodies	Amol M. Marathe
154.	2011A4TS244P	Anurag Nandi	Variation of elastic modulus with thickness of CuZr metallic glass nano plate	Murali Palla
155.	2011A4TS265P	V.Krishna Kumar	Design of Government supported healthcare supply chain for generic medicine	Srikanta Routroy
156.	2011A4TS269P	Vijay Jain	An Indirect method for mass production of customized ceramic components	K.S.Sangwan
157.	2011A4TS280P	Shaurya Kaushal	immune response to Mycobacterium Tuberculosis	Amol M. Marathe
158.	2011A4TS289P	Aditya Pande	Design and development of sequential & Concurrent data stouchrun for data indeping in data missing	Srinivas Kota
159.	2011A4TS303P	Abhishek Kumar .	instabilities in a rotating Pipe flow	Sai Jagan Mohan
160.	2011A4TS313P	Ankit Kumar Rout .	Application of fuzzy logic ISM and Graph Theory in supply chain	Srikanta Routroy
161.	2011A4TS336P	Jammalamadaka Mani Sai Suryate .	Mathematical Modeling and Computational analysis of Blood Flow	Sai Jagan Mohan
162.	2011A4TS474P	S Srivignesh .	Automated 3D modeling from 2D images followed by rapid prototyping	M.S.Dasgupta
163.	2011A4TS499P	Siddhansh Agarwal .	Orientation Order in Suspensions of Micro swimmers	Sai Jagan Mohan
164.	2011A4TS507P	Nibir Pathak .	Study of Non Fourier heat conduction	Sai Jagan Mohan
165.	2011ABTS463P	Dharap Mihir Satish .	Design optimization of a gearbox	R.P. Mishra
166.	2011ABTS471P	Hemang Chawla .	Gesture based human robot interaction	B.K.Rout
167.	2011A5TS120P	Akash Taneja	Design and Study of novel nitrogen containing heterocycles as Antitubercular agents	Dr. S. Murugesan
168.	2011A5TS895P	KrishnaMohan Raja	Design and Study of novel nitrogen containing heterocycles as Anti-HIV agents	Dr. S. Murugesan
169.	2011A5TS879P	Revant Gupta	Invitro screening for antioxidant and anticholinesterase activity of medicinal plants used for Alzheimer type dementia	Dr. Rajeev Taliyan
170.	2011A5TS504P	N. Nitin Sai Chandra Anisetty	Investigation of natural product based reactive oxygen species inhibitors	Dr. Atish T. Paul
171.	2011A5PS200P	Shreyansh Jain	Understanding the transmission of acoustic and ultrasonic waves in	Prof. William Taylor



S.No	ID No	Name	Title	Supervisor
			order to assess the mechanical properties of bone and its pathological factors	
172.	2009B5A5548P	Soumyadipta Ray	Some studies on Li <sup>+</sup> ion conducting composite polymer electrolytes	Dr. Anshuman Dalvi
173.	2010A3B5136P	G. Bhavna Deepthi	Estimation of Dark matter content in nearby dwarf galaxies and Upgradation of the Ooty Radio Telescope	Dr. Jayram Chengalur
174.	2010B5A1580P	Hemant Singh	DNA, RNA and other nuclei acids melting	Dr. Navin Singh
175.	2010B5A1581P	Adamyia Prakhar Goyal	Gravitational Waves in Einstein's Gravity	Dr. Sanjay Jhingan
176.	2010B5A1643P	Bhisham Vashistha	Cosmological Gravitational Waves	Dr. T.G. Sarkar
177.	2010B5A1651P	Soumyakanti Das	Projection method for nanostudies in a square cavity	Dr. Dilip K Maiti
178.	2010B5A1654P	Manan Bhatia	Impact of Network Externalities and C* Analysis of Indian Telecom Market	Dr. Udayan Chanda
179.	2010B5A1664P	Ankush Gupta	Comparison of various options for synthesis of Dimethyl Ether using simulation	D. Utkarsh Maheshwari
180.	2010B5A3429P	Sankalp Gilda	Helioseismology of Large Scale Flows in the Solar Interior	Dr. S. P. Rajaguru
181.	2010B5A3499P	Rahul Anand	Using VPR Synthesis tools for Partial Reconfiguration	Mr. Ashish Mishra
182.	2010B5A3530P	Vivek Sharma	Studies in the Flavour Sector in the framework of Supersymmetry	Dr. Rishikesh Vaidya
183.	2010B5A3540P	Yashvardhan Srivastava	Study and characterization of metal surface	Dr. Srijata Dey
184.	2010B5A3649P	Apoorv Jindal	Electronic Transport in Semiconducting and Superconducting Nanowires	Dr. M. Deshmukh
185.	2010B5A3658P	Tushar Rathi	Study on hydrophobic effect using self assembled monolayers	Dr. R. K. Gupta
186.	2010B5A3659P	Anurag Kankanala	Synthesis and characterization of glass ceramic system prepared by eternal dispersion of Li <sup>+</sup> NASICON nanoparticles	Dr. Anshuman Dalvi
187.	2010B5A3672P	Adbhut Gupta	Conductance in molecules at low dimensions	Dr. R. K. Gupta
188.	2010B5A7533P	Sagar Uprety	Topological Quantum Computing	Dr. J. N. Bandyopadhyay
189.	2010B5A7536P	Nithin P Saji	Computational Study of Blood Flow through Arteries	Dr. Bhupendra K Sharma
190.	2010B5A8427P	Bhargav Joshi	Dark matter astroparticle Physics	Dr. T.G. Sarkar
191.	2010B5A8619P	Payal Panigrahi	Role and Psychological Capital in relationship with Creative Climate and Creative Performance	Dr. Sarvesh Satija
192.	2010B5AB665P	Aditya Bhardwaj	Residual Stress Analysis of Fiber Reinforced Composites	Dr. Mahapatra
193.	2011B5TS775P	Kshitij Agrawal	Detector Development and Simulation	Dr. Subhasis Chattopadhyay
194.	2011B5TS849P	Amit Chotia	Computational aspects of Nuclear Fission and Nuclear Fusion	Dr. Madhukar Mishra
195.	2011B1PS756P	Kaushik Renganaath K	Transcription isoform & function	Lars.M.Steinmetz
196.	2010B1A4339P	Shilpa Naik	Investigating the mechanism enabling a one-wing flap in Flies	Prof Namrata Gundiah
197.	2011B1A8841P	Siddharth Sabharwal	To study sharpness in RNA secondary structure with the help	Dr.Basudeb Datta

S.No	ID No	Name	Title	Supervisor
			of mathematical model	
198.	2011B1TS843P	Puneet Bhadrecha	Visualizing patterns in Biology: A study of the microworm	Dr Nagarjuna
199.	2010B1A1760P	Radhika Joshi	Anticancer properties of human milk	Uma S. Dubey
200.	2010B1A4413P	Hatim Mansoor Gandhi	Graph theory based categorization of DNA structures	Dr Shibashish Chowdhary
201.	2010B1AB425P	Shaunakraj Deshpande	To analyse relation between crude oil and ovx volatility index, using evidence from CBOE USO	Dr.Imlak Shaikh
202.	2010B1A884P	Sameer Anand	Vix as gold price indicator. evidence from world gold markets.	Dr.Imlak Shaikh
203.	2010B1A3645P	Neeti Pokharna	Role of Work Commitment and related determinants in Higher Education	Dr Tanu Shukla
204.	2010B1A8293P	Amit Mathur	Study of positive organizational culture and practices in TATA sons using case related methodology	Dr Sarvesh Satija
205.	2010B2A8729P	Tro[to Rawal	Synthesis & Characterization of Modified Graphitic Carbon Nitride	Dr.Surojit Pande
206.	2010B2A1702P	Tanmoy Nayak	Computational study of proton transfer interaction between carboxylae groups of sialidase inhibitors and arginine.	Dr.Shamik Chakraborty
207.	2010B2A8785	Aditi Kanthalia	Detailed characterization and catalytic study of planer nickel and copper base complexes in Encapsulatin Zeolite-Y	Dr.Saumi Ray
208.	2011B2TS856P	Aishwarya	Design and Synthesis of Bile acid Conjugates of Biological Importance	Dr.Rajeev Sakhuja
209.	2011B2TS808P	Vishakha Gupta	Design and Synthesis of Bisindole Heterocycles as Anticancer Agents	Dr.Dalip Kumar
210.	2010B2A5251P	Harshit Gupta	Synthesis of Aggregation Induced Emission active furogenic molecules for application in chemosensing.	Dr.I R Laskar
211.	2010B2A7793P	Agam Kapur	Application of Artificial Neural Networks	Dr.Shivi Agarwal
212.	2010B2A7766P	Abhinav R.	Operations Research Quering Theory Fuzzy Logic	Dr.Chandra shekhar

#### I Semester 2015-16

S.No	ID No	Name	Title	Supervisor
1.	2011B3A1374P	Ankit S. Rao	Preparation of Fe-TiO <sub>2</sub> via sol gel technique gor biomeical applications	Dr. Banasri Roy
2.	2011B2A1748P	Ishwarpreet Singh Boparai	Chemical looping combustion modeling in aspen plus	Dr. Raman Sharma
3.	2011B2A1623P	Siddhath Kawadiya	Bofilters for remediation of air	Dr. Marc Deshusses
4.	2012A1PS462P	Piyush Chauhan	Biofuels and biocatalysis	Mr. Kulbir Singh Chauhan
5.	2012A1TS434P	Ananthu Mahendranath	Nanofluids	Prof. T. Pradeep
6.	2012A1TS487P	G. Anoj Winston	Combustion Engineering & Thermodynamic Modelling in IC Engines	Prof. Thomas Esch
7.	2012A2PS407P	Siddharth	Analysis and Design of Energy	Prof. Anshuman

S.No	ID No	Name	Title	Supervisor
			Efficient Building	
8.	2011B5A2659P	Sameer Telang	3-D Printing of Concrete	Prof. Rajiv Gupta
9.	2012A2PS518P	Shubham Mehta	Lateral Load Response of RC Shear-core Framed Structure	G Muthukumar
10.	2011B5A2639P	Anirudh Sharma	Water Management at BITS Pilani Using Scenario Development	Prof. Rajiv Gupta
11.	2012 A2TS386P	Pragun Vinayak	Modelling Propensity to shift to Bicycle as Commute mode using Multivarriate Analysis	Prof. A K Sarkar
12.	2012A2PS376P	Abhishek Padhi	Predictive Modelling of Slump and Compressive Strength of High Performance Concrete	Manoj Kumar Yashvardhan Sharma
13.	2012A2TS441P	Satyam Parashar	Strength Response of Flyash Mixed Pilani Soil	Kamalesh Kumar
14.	2012A2TS528P	Akshay Singh Bhisht	Hill road Accident Mitigation: A Case Study	Amit Goel
15.	2011B1A2828P	Varis Kumar Kalla	To Study aerodynamic properties and to optimize drag, inertic and lift and vortices on a model	Rajiv Gupta
16.	2011B5A2626P	Shivam Gupta	Principal Component Analysis and assesment of Ground Water quality: A case study of jhunjhunu District	Ajit Pratap Singh
17.	2012A2TS542P	Bartik Pandel	Effect of Paste Content on Vertical Sorptivity of Cement Mortars	B Bhattacharjee Manoj Kumar
18.	2011B4A7331	Abhishek Modi	Design Of Parallel Data Structures For Data Mining Algorithms	Poonam Goyal
19.	2011B4A7680	Siddharth Bhatia	Automatic Detection And Translation Of Parallel Patterns For A Domain Specific Language For Data Mining	Shan Balasubramaniam
20.	2011B4A7861	Atul Mittal	Study Of Graph/Frontier Based Online Terrain Coverage Algorithms	J. P. Misra
21.	2012A7PS030	Arjun Krishna Vasisht	Thin Server Architecture For The Internet Of Things.	Yashvardhan Sharma
22.	2012A7PS033	Krishna Kant Garg	Effect Of Multi Topology Routing On Tcp Performance	Virender Shekhawat
23.	2012A7PS037	Mohgaonkar Neeraj Mohan	Effective Distribution And Organization Of Drama Data For Retrieval	Dinesh Yadav Mayuri Digalwar
24.	2012A7PS088	Shreyansh Bajaj	Computation And Machine Learning For Financial Forecasting	Mukesh Kumar Rohil
25.	2012A7PS116	Ashutosh K R Pandey	Formal Modeling And Specification Of Properties Of Cloud Computing	Shan Balasubramaniam
26.	2012C6PS202	Surabhi Jain	Wireless Networks	Vishal Gupta
27.	2012C6PS300	Kukatla Nikhil Kumar	Delay Tolerant Networks	VirendraS. Shekhawat
28.	2012C6PS654	Garimella Venkata Srikanth	Development Of Architecture For A Delay Tolerant Network In Disaster & Emergency Situations	Virendra S. Shekhawat
29.	2012C6PS696	Shantanu Prakash	Optimized Routing Protocol For Vehicular Delay Tolerant Networks Using Machine Learning Techniques	Virendra S Shekhawat
30.	2012C6PS701	Yogesh Sharma	Information & Communication Technology: Applications In Governance & Security Issues.	Sanjiv Kumar Chaudhary
31.	2012C6PS723	A Sravan Kumar Reddy.	Design And Implementation Of A Framework For Tracking End Systems Using Software Defined Networking	K. Hari Babu
32.	2012C6PS775	Anshita Srivastava	Understanding Protocols For Wireless Lan Drivers	Vishal Gupta

S.No	ID No	Name	Title	Supervisor
33.	2012C6TS374	Aniket Mishra	Reliability Analysis of Vertical Queues with server breakdown & Repairs	R.P. Mishra and Pankaj Vyas
34.	2009HS12399	Divyansh Bhatia	Text Analytics	N. Mehala
35.	2013H103092	Kiran V S	Manet Communication In Using Android Testbed	Murali P
36.	2013H103099	Vijayent Kohli	Study of machine learning approaches for weather prediction	Yashvardhan Sharma
37.	2013H103102	Pravin Mahadeorao Gahukar	Design And Development Of A Java Based Simulator For Energy Aware Real Time Scheduling Algorithm On Multi-Core Processors	Mayuri Digalwar
38.	2013H103105	Subhankar Deb	Cache Architecture In Multi-Cores	Sudeept Mohan
39.	2013H103109	Chaudhari Hrishikesh Shivajirao	Body Area Networking/Computer Networks	Rahul Banerjee
40.	2013H112188	Akanksha Bhatnagar	Implementation of Academic Processes in ERP Framework	K Haribabu
41.	2013H112192	Prerna Kaushik	Parallel Framework For Clustering Algorithms	Poonam Goyal
42.	2013H112195	Kartikey Singh	Study Of Agent Based Terrain Coverage	J.P. Misra
43.	2011B3A3751P	Neelesh S	Impact of Human capital on Economic Development: Evidences from Panel data analysis on Indian States.	Geetilaxmi Mohapatra
44.	2011B3A7393P	Mohd. Zia Arif	Response of Stock Markets to Monetary Policy: Asian Stock Market	A K Giri
45.	2011B3A7509P	Priyanka Kukreja	Determining the Option Pricing Model using Machine Learning	A K Giri
46.	2011B3A7791P	Chirag Bansal	The effects of Gold and Oil price on Stock returns of BRICS Nations.	A K Giri
47.	2011B3A8600P	Rohit Saxena	An Exploratory Analysis of the Indian Startup Industry	N V M Rao
48.	2011B3A7591P	Toshi Gupta	India-China Trade Analysis	N V M Rao
49.	2012A3TS203P	V V. Saipraneeth		N V M Rao
50.	2011B3A8544P	Shashvat Tripathi	A Report on Critical Analysis of Startups in Healthcare	A.K. Vaish
51.	2011B3A3582P	Nikita Choudhary	Reasons and Valuation Effects of a Stock Split	A.K. Vaish
52.	2011B3A3491P	Ayush Aggarwal	Project Risk Management of R&D projects	Satyendra Sharma
53.	2011B3A3606P	Pothireddy Pranathi	Design and Analysis of Hexagonal Dual Slotted Patch Antenna	Dr. Rahul Singhal
54.	2011A8PS307P	Rushil Gupta	Braille Electronic Reader	Mr. Parikshit Kishore Singh
55.	2012A3PS005P	Astha Thakur	Performance analysis and design of a node architecture with shared TOWCS and SHAM FDLs	Dr.V.K.Chaubey Ms.Vinita Tiwari
56.	2011B1A3742P	Naduri Prabhakar Narasimha	Circuit design optimization using genetic algorithms	Dr.V.K. Chaubey
57.	2012A8PS327P	S.P Arjun Ram	Sensor Position control modeling with application to surveillance UAV teams	Dr. Surekha Bhanot
58.	F2011B5A8620P	Kshitij Saxena	Optimal PMU location using Genetic Algorithm	Dr. Hitesh Dutt Mathur
59.	2012A8PS237P	Varad Gautam	A Study of device driver architecture for graphics hardware on linux	Mr. Ashish Mishra

S.No	ID No	Name	Title	Supervisor
				Dr. A. Asati
60.	2011B5A3616P	Ambuj Mehra	Compiler Design for Backend code generation	Mr. Ashish Mishra Dr. A. Asati
61.	F2012203P	V.V.Sai Praneeth	An Explanatory Analysis on Socio Economic Impact of Pervasive Computing	Dr. NVM Rao Mr. Rakesh Rajan
62.	2012A3PS213P	Navkaran Singh	Impact of CSAT on Civil Service Aspirants	Dr. Rajneesh Choubisa Dr. Tanu Shukla
63.	F2012277P	Prakhar Agarwal	Load Forecasting for demand response prediction on 10T based smart meters	Dr. Surekha Bhanot Dr. Kumar Padmanabh
64.	F2012007	P V G Sai Subrahmanyam	Modeling and Simulation of Reliability Parameters of a Solar PV Module for Futuristic Design	Dr. Rajneesh Kumar
65.	2012A3PS144P	Akshay Madan	Time Synchronization Protocols	Mr. Chalapathi
66.	2011B1A3827	Ashutosh Vishwakarma	Digital Logic Synthesis and application of optimization algorithms	Dr. A. Asati
67.	2012A3PS126P	Pranet Verma	Microcluster Maintenance in Data Streams	Mr. Ashish Mishra Dr. Poonam Goyal
68.	2012A8TS345P	Tanay Dixit	Application of Machine Learning in Portfolio Design	Dr. Udayan Chanda
69.	2012A8TS224P	Akshansh Deva	Study of E-CRM Practices by E-commerce Giants in India	Dr. Arun Kumar Dr. Jyoti
70.	2012A3PS193P	Arpeet Sahoo	Measuring the user experience	Dr. Remica Aggarwal
71.	2012A3TS081P	Annem Rushyant Reddy	Study of BITS Mess and Society for students mess services and development of a strategic audit	Dr. Raghunathan
72.	2012A3TS162P	K.S. Keerthi Reddy	Value Chain of indigenous handicrafts in Jaipur	Dr. Sailaja Nandigma
73.	2012A3TS169P	A Krishna Akhil Kumar	Gandhi in South Africa and the Question of Race*	Dr. Hari Nair
74.	2011B1A3853P	Aseem Saxena	Object Search and Frontier Based Exploration on a mobile Robot	Dr. Madhava Krishna Mr. Chalapathi
75.	2012A3PS112P	VSRM Krishna	Adaptable higher order modulation schemes for optical networks	Dr. E. Shivleela Dr. Rahul Singhal
76.	2011B1A3853P	Aseem Saxena	Object Search and Frontier Based Exploration on a mobile Robot	Dr. Madhava Krishna Mr. Chalapathi
77.	2012A3PS112P	VSRM Krishna	Adaptable higher order modulation schemes for optical networks	Dr. E. Shivleela Dr. Rahul Singhal
78.	2011D2TS596P	Ravindra Singh	Editing techniques in the movies of James Cameron	Dr. Devika
79.	2011D2TS194P	Sumit Saini	Use of Internet and its Impact on Academic Performance	Dr. V.S. Nirban
80.	2012C2TS788P	Daman Arora	Factors affecting Consumerism: An Exploratory Study	Dr. Tanu Shukla
81.	2011D2TS387P	Amrit Vashistha	Debt, Defaults and Governance	Mr. Jayadev M. and Dr. A. K. Giri
82.	2011A4TS001P	Amal Kalita	Documentary Film on Auroville	Mr. Sasikanth Somu Dr. Kumar Sankar Bhattacharya
83.	2011B4A1642P	Saurabh Gupta	Application of DEA in Supply Chain Management	Dr. Shivi Agrawal
84.	2011B4A1712P	Arpit Bhutani	Application of DEA in Education Sector	Dr. Shivi Agrawal
85.	2011B4A3597P	Nerella Yashaswi Venkat	Analytical and Numerical Solution of Bossiness Equation	Dr. Amit K. Verma

S.No	ID No	Name	Title	Supervisor
86.	2011B4A3662P	Abhishek R	Study of planar graph drawings and rectangular dual	Dr. Rajiv Kumar
87.	2011B4A3715P	Rishabh Kediyal	Channel assignment using graph theory	Dr. P. H. Keskar
88.	2011B4A3721P	Rishabh Shukla	Delay analysis of fractal traffic passing through network servers	Dr. Rakhee
89.	2011B4A4566P	Gampa Anirudh	Theoretical analysis of metallic nano particles on blood flow through stenosed arteries with permeable walls	Dr. B. K. Sharma
90.	2011B4A7646P	Snehil Arora	Planar graph drawings and Hamiltonian cycles in planar graphs	Dr. Rajiv Kumar
91.	2011B4A7664P	Sai Varun Addnki	Algorithms for community and cluster detection in graphs	Dr. Rajiv Kumar
92.	2011B4A7710P	Aishik Dhar	Study of Optimal base station , location and configuration for cellular mobile network	Dr. Rakhee
93.	2011B4A2607P	Shashank M	Modern Supply chains and mathematical analysis of its enablers	Dr. Jyoti
94.	2011B4A8699P	Mantinder Jit Singh	Load forecasting for demand response using IOT based smart meters	Dr. Shivi Agarwal
95.	2011B4A7658P	Akshay Aurora	Traffic engineering in software defined networking	Dr. K. Hari Babu
96.	2011B4A7708P	Astha Sharma	Multi-Channel tissue image Segmentation Analysis	Dr. Sangita Yadav
97.	2011B4A7795P	Divyanshi Goyal	Dynamic routing algorithms in software defined networking	Dr. K . Hari Babu
98.	2011B5A4681P	Rajat Sharma	Road Profile Estimation	M.S.Dasgupta
99.	2012A4PS063P	Ajinkya Bhole	Computer Vision, Robot Mechanisms and Control, Probabilistic Robotics	Sachin U.Belgamwar
100.	2011B4AB718P	Shashank Gupta	Mechanical Design Tribology	R.P.Mishra
101.	2012A4PS294P	Varun Sharma	Microfluidic Approaches in the Production of Artificial Cells	Sachin U. Belgamwar
102.	2011A4PS001P	Amal Kalita	Documentary Film making on Auroville	K. Sankar Bhattacharya
103.	2012ABTS625P	Harsh Khandelwal	Sustainability in open social manufacturing system	K S Sangwan
104.	2012A4TS238P	Tanmayee Kher	Life cycle assessment of recycled 3-D filament	K S Sangwan
105.	2012A4TS003P	Bable Ashutosh M	Thermal Analysis of thin wall machining	T.C.Bera
106.	2012A4TS342P	C.Abhilash Reddy	Analysis of enablers of green steel supply chain in India	Srikanta Routroy
107.	2012A4TS181P	G.Vamsi Krishna	Performance Analysis of green steel supply chain	Srikanta Routroy
108.	2011A4TS286P	Himanshu Sanghi	Rectangular drawings and Rectangular duals of planar graphs	J.S Rathore
109.	2011A4TS304P	Rohan Shankar	Improvement of Responsiveness and Efficiency of IC Engine	P.Srinivasan
110.	2011B4A4693P	Anantim Raj	To study the various parameters involved in the design of an airless tyre	Arun K. Jalan
111.	2011B4A4394P	Shrey Raheja	Improvement of Responsiveness and Efficiency of IC Engine	P.Srinivasan
112.	2011B5A4563P	Pankaj K. Maurya	Biomimetics as a design methodology	Srinivas Kota
113.	2012A4PS211P	Keshav Venkatraman	Firms' performance measurement	Imlak Shaikh

S.No	ID No	Name	Title	Supervisor
114.	2011B3A4617P	Sahil Punchhi	The Development of kinematic and kinetic multi segment foot models for gait analysis.	Arun K. Jalan
115.	2011B2A5764P	Vaibhav Singh	Research and Development in Product Management Division of a Pharmaceutical Industry	Mr. Murali Monohar Pandey
116.	2012A5TS945P	Grandhi Ratnabhiram	Extraction and Isolation of Pancreatic Lipase Inhibitor from <i>Polyalthia longifolia</i> (seeds)	Dr. Atish T. Paul
117.	2012A5TS245P	Priyank Raj	Neuropsychopharmacological Screening of 5HT3 receptor modulators for depression and related disorders	Prof. R. Mahesh
118.	2012A5C6885P	Garima	Partial Parallelization of denovo Genome Assembler	Dr. Poonam Goyal Dr. Anil Gaikwad
119.	2011A5TS891P	D. Varun	Big Pharma Business Strategies and Government Policies for Middle East Crisis in MENA Markets	Dr. K. Haribabu Mrs. Priti Jain
120.	2012A5TS908P	Saumya	Awareness and Practice of Rational Use of Drugs in an Urban Community	Prof. Manoj Kumar Jha Prof. Hemant R. Jadhav
121.	2011B5A1636P	Kruti Kharod	Power Law of Market Returns and wealth distribution in economies with ideal gas like markets.	Joshya Jacob
122.	2011B5A3663P	Asish Kumar	Physics @Heavy-ion Collisions	Madhukar Mishra
123.	2011B5A4444P	Tanayveer Singh Bhatia	Turbulence in Astrophysical Fluids	B. Mukhopadhyaya,
124.	2011B5A4638P	Mukul Khedwal	Effect of Strong Magnetic Field on Heavy Quarkonia (Heavy Flavour Physics)	Madhukar Mishra
125.	2011B5A4671P	P. Abhiroop	Study of Solitons in water and plasma and computing the results	Rakesh Choubisa
126.	2011B5A7581P	Saumya Y Sahai	Analysis of Spectroscopic Data	R. K. Gupta
127.	2011B5A7635P	Rashi Khandelwal	A Study of Embedded Star Clusters	Kaushar Vaidya
128.	2011B5A8362P	Manan Mehrotra	Some studies on magnesium IOM polymers	Anshuman Dalvi
129.	2011B5A8624P	Steffie Ann Thayil	Studying extra dimension models with multileptons	Sourabh Dube
130.	2011B5TS412P	Kartik Dokania	A Study & Analysis of the Forces affecting Fluid Flow	Amol Holkundkar
131.	2011B5TS649P	Sudeep Patro	Transition Metal oxides: Growth and characterizations	S. Gangopadhyay
132.	2012B5TS990P	Parth Garg	Attitude Determination of low-earth-orbit Satellites using GPS; differential GPS and Integer ambiguity resolution	H B Hablani
133.	2011B1A1878P	Anshu Gupta	Image guided drug discovery	Dr.P.Dalko,
134.	2011B1A8867P	Bhargav jha	Guidance of autonomous vehicles	Dr.Tal Shima
135.	2012B1TS952P	Ankita Daiya	Chromatin regulation of DNA damage repair pathway in radiation resistant glioblastoma	Dr.Shilpee Dutt
136.	2011B1A1858P	Anurag Prasad	Application of machine learning techniques on recognition of biological system	Shibasish Chowdhury
137.	2011B1AB840P	Bhanu Kharbanda	Machine Learning tools for prediction miRNA-mRNA interaction	Rajdeep Chowdhury
138.	2011B1A2875P	Jaspreet Singh	Stress response in nicotiana tabacum	Rajesh Mehrotra

<b>S.No</b>	<b>ID No</b>	<b>Name</b>	<b>Title</b>	<b>Supervisor</b>
139.	2011B1A7731P	Vipul	Skewed distribution of W-Box and related sequences in arabidopsis thaliana	Rajesh Mehrotra
140.	2011B1AB816P	Sachin Saxena	Structural shape optimization of biomedical instruments	Rajesh Mehrotra
141.	2011B1A3818P	Saranya Das	Molecular dynamics simulation on RNA structure	Shibasish Chowdhury
142.	2011B1A3860P	Aditi Singhal	Molecular dynamics simulation on RNA structure	Shibasish Chowdhury
143.	2011B1A4696P	Prateek Jain	Bioinformatics approach to cancer biology	Uma S Dubey
144.	2011B1AB859P	Anand Shankar	Study of Anti cancer properties of milk	Uma S Dubey
145.	2011B1A7515P	Bhanupriya	Role of micro RNA in regulating the proliferation of hair stem cell	Shibasish Chowdhury
146.	2011B1A1869P	Rashi Mathur	Biodiesel production from micro algae	S K verma
147.	2011B2A1711P	Naman Sharma	Peunt advancement in Paperboard Production	Dr. B. Khungar
148.	2011B2A3778P	Pranav Utpalia	Synthesis characterization and Catalytic Application of Nano Materails	Dr.Bibhas R. Sarkar
149.	2011B2A3789P	Akshit Johri	Synthesis of Anti Cancer Agents	Dr.P. Shukla
150.	2011B2A4811P	Chintan Singhvi	Catalysis and detail characterisation of host-guest systems	Dr.Saumi Ray
151.	2011B2A7743P	Abhinandan Sain	Design and Development of Interactive User Friendly visualisation and Learning Tools	Dr.Shamik Chakraborty
152.	2011B2A7744P	Sanjeed Md. H Schamnad	Computational Chemistry	Dr.Shamik Chakraborty
153.	2011B2A7810P	Shefali Garg	Encapsulatin of Transistion Metals Compress inot Prous Materails	Dr.Saumi Ray
154.	2011B2AB745P	Uppala Veera Venkata Shravan	Nano-Materials Synthesis for Hydrogen Evolution Reactions	Dr.Surojit Pande
155.	2011B2A7794P	K V D S Kalyan	Structural Determination using Spectroscopy and Expert Systems (ANN)	Dr.B Khungar
156.	2011B2A1738P	Pragya Chopra	Computational Innestigation of Structure Function Relation in Proteins Inhibitor Complexes	Dr.Shamik Chakraborty



**LIST OF HIGHER DEGREE DISSERTATIONS COMPLETED DURING THE YEAR 2015**

**Second Semester 2014-15**

S.No	ID No	Name	Title	Supervisor	Department
1.	2013H101018P	Shravan Pradeep	Synthesis and characterisation of Mn <sup>2+</sup> and Fe <sup>3+</sup> doped ZnS quantum dots for photo catalytic degradation of malachite gram and methyl orange	Dr. Sonal Mazumder	Chemical Engg.
2.	2013H101019P	SakshiBatra	Experimental and theoretical study of removal of dyes from waste wter using bioremediation	Dr. Suresh Gupta	Chemical Engg.
3.	2013H101023P	Prathyusha Naini	Synthesis and characterization of Ni-Sn/CO <sub>2</sub> nano catalyst systems for hydrogen production	Dr. B. Roy	Chemical Engg.
4.	2013H101024P	Kalyanee Kishor Ambatkar	Experimental study for the removal of heavy metals from waste water using bioremediation	Dr. Suresh Gupta	Chemical Engg.
5.	2013H101028P	Pande Pratik Dattaprakash	CFD simulation of downdraft gasifier using ANSYS software	Dr. P. N. Sheth	Chemical Engg.
6.	2013H101029P	Soumya Chowdhury	Analysis of generated foam using aqueous detergents	Dr. P. Chattopadhyay	Chemical Engg.
7.	2013H132031P	Nori Uma Madhuri	Development of Nano-particles by chemical methods for the recovery of heavy metals from water	Dr. Suresh Gupta	Chemical Engg.
8.	2013H132032P	Kuldeep Kuhar	Modeling and simulation of fluidized bed for chemical looping combustion	Dr. Raman Sharma	Chemical Engg.
9.	2013H132033P	H Sai Raghu Ram	Chitosan encapsulated Zn <sub>(1-x)</sub> M <sub>(x)</sub> S (M=Mn <sup>2+</sup> (g)Fe <sup>3+</sup> )(x=0,2,4,6,8) QDs for fluorescent labelling of sulphatereducing bacteria	Dr. Sonal Mazumder	Chemical Engg.
10.	2013H132034P	Nimisha K. R.	Modeling and simulation of biomass gasifier	Dr. P. N. Sheth	Chemical Engg.
11.	2013H132036P	A.K. Ashwath	Study on calcination of petroleum coke in rotary calciner	Dr. S.K. Das Prof. AK Sharma	Chemical Engg.
12.	2014H101020P	MadanaVenkata Sai Teja	Application of advanced controllers to a fluid catalytic cracker	Dr. H. K. Mohanta	Chemical Engg.
13.	2014H101027P	VenkataVijayan S.	Optimization of aquoris foam performance using mixed-alcohol system	Dr. P. Chattopadhyay	Chemical Engg.
14.	2014H132030P	Vijay Singh	Synthesis & characterization of undoped/Cl <sub>2</sub> F-doped TiO <sub>2</sub> for biomedical application	Dr. B. Roy	Chemical Engg.
15.	2008HD44749P	Parnika Shrivastava	Environmental Impact Assessment of Industrial Clusters in Central India using Fuzzy Decision Analysis.	Dr. A.P. Singh	Civil
16.	2013H130065P	Vidhi Vyas	Determination of delay and LOS at the unsignalised	Prof. A.K. Sarkar	Civil

S.No	ID No	Name	Title	Supervisor	Department
			intersection.		
17.	2013H130068P	Ganumpally Mekala Jahnvi	Measuring and Maximizing The Utilization of Park and Ride Facility.	Prof. A.K. Sarkar	Civil
18.	2013H130069P	Raunak Mishra	Capacity Estimation of Weaving Section. A case study in NHs.	Prof. A.K. sarkar	Civil
19.	2013H130072P	Vasagiri Naga Shilpa	Effective utilization of copper Ore Tailings for the construction of low cost Pavement	Prof. A.K. Sarkar	Civil
20.	2013H130074P	Vishnu Prasad Rajan	Reducing Delay at signalized Intersection using Dynatrac Signals.	Dr. Arkopal K Goswami	Civil
21.	2013H143054P	Praveen Oggu	Analysis of Skew Bridges.	Dr. Manoj Kumar	Civil
22.	2013H143055P	Ranjitha B.	Flexural and shear response of functionally graded beams	Dr. S.B. Singh	Civil
23.	2013H143056P	Vasanth Keshav	Analysis of Shear Walls with Openings.	Dr. Manoj Kumar	Civil
24.	2013H143057P	Akshay Rao Hoshing	Blast Resistant Structures	Dr. Manoj Kumar	Civil
25.	2013H143059P	Aditi Chauhan	Blast Resistance of FRP Retrofitted Masonry Structures.	Dr. S.B. Singh	Civil
26.	2013H144039P	Shivraj Singh Rathore	Sustainability Assessment of Housing in Urban Area using Multi-criteria Approach	Dr. A.P. Singh	Civil
27.	2013H144042P	Patil Richa Tatoba	Study of ECC Strengthened Masonry Structures	Dr. S.B. Singh	Civil
28.	2013H144043P	Gayam Akshara	Blast Resistant Structures	Dr. Manoj Kumar	Civil
29.	2013H144045P	K.Sandeep	Development of Decision Supporting System for Emission Control Due to Rural Road Traffic Using HDM-4	Dr. A.P. Singh	Civil
30.	2013H144046P	Puppala Harish	Quantification of Accessibility to Basic Needs in Rural Areas.	Dr. A.K. Sarkar	Civil
31.	H2013124085P	VikasKalwani	Signal Processing/Audio Filtering	K.K Gupta,	EEE
32.	H2013123155P	SahilSukheja	study of non conventional devices	Dr. Avik Chattopadhyay	EEE
33.	H2013124091P	Nitish Kumar	Modelling of advanced wireless communication standards	Dr. K.K Gupta	EEE
34.	H2013124075P	Sidharth Poonia	Cognitive RadioO	Dr. K.K. Gupta	EEE
35.	2013H149290P	Mansi Saini	Investment Banking Industry - Rise of Boutique Investment Banks that render Merger and Acquisition Advisory	Dr. Jyoti	Management
36.	2013H106139P	Pranoy Suresh Nambiar	Phase Field Modelling of High Temperature Deformation of Phase Separating alloy	Murali Palla	Mech. Engg.
37.	2013H106140P	Kotecha Maulik Chhabilkumar	A study of hidden variable damage tracking method	Amol M. Marathe	Mech. Engg.
38.	2013H106141P	Amitabh Kumar	Crack propagation behavior of Bio-Based composite material by considering plastic behavior of material	Murali Palla	Mech. Engg.
39.	2013H106142P	DiwanKetan	Heat receiver optimization of	M.S.Soni	Mech. Engg.

S.No	ID No	Name	Title	Supervisor	Department
		Anil	shuffler dish collector		
40.	2013H106143P	Yash Srivastava	Chaotic motions of out of plane vibrations of a wind turbine blade	Amol M. Marathe	Mech. Engg.
41.	2013H106144P	Mahadule Swapnil Sitaram	Modelling and simulation of water cooled gas cooler for trans-critical CO2 refrigeration system	M.S.Dasgupta	Mech. Engg.
42.	2013H106147P	Praveen Kumar Rao	Simulation of CO2 (R744) transcritical CO2 refrigeration cycle; Indian Context.	Satish Kumar Dubey	Mech. Engg.
43.	2013H106149P	Bitty Varghese	Thermal Design & two phase flow analysis of Ejector for transcritical CO2 refraction cycle.	Satish Kumar Dubey	Mech. Engg.
44.	2013H141113P	Arpit Khandelwal	Effective Modules and Crack propagation behavior of Bio-Based composite Material	MuraliPalla	Mech. Engg.
45.	2013H141115P	Chobharkar Amit Satishrao	Prediction & Optimization of machining parameters to minimize surface roughness using RSM	Girish Kant	Mech. Engg.
46.	2013H141117P	Rajkumar Shufen	Study and Implementation of Active Vibration Control by using Smart Material	Arun Kumar Jalan	Mech. Engg.
47.	2013H141120P	Pushpaj Kumar	Multi performance optimization for different surface roughness characteristics using grey relation analysis coupled with principle component analysis	Girish Kant	Mech. Engg.
48.	2013H142132P	Anita Sharma	Role of enablers and barriers in TPM implementation in India	R.P.Mishra	Mech. Engg.
49.	2013H146221P	C.S.S. Adhokshaja	Formulation and evaluation of a nanoparticulate delivery system of selected drugs	Ms. Archana K Kakkar	Pharmacy
50.	2013H108199P	Surbhi Mediratta	Design, characterization and evaluation of NDDS for CNS acting agents	Dr. Sunil Kumar Dubey	Pharmacy
51.	2013H108202P	Shreyash Bagal	To study expression of Ang II (AT1 & AT2) receptors, oxidative stress & fibrotic markers in aorta of Type II diabetic rats	Dr. Anil Gaikwad	Pharmacy
52.	2013H1129004P	Renuka Vyawahare	Study of novel transcription factors in mice embryonic stem cells	Dr.P Chandrasekhar	Bio
53.	2013H129007P	DivyaVaswani	Effect of herbal extracts on the melanisation of mosquito eggs	Sanjeev Kumar	Bio
54.	2013H129009P	Sukalpa Mandal	Predicting miRNA target	R. Chowdhury	Bio
55.	2013H129010P	Shishir Singh	Elucidating variations within proteins of cyanobacteria....	S. Chowdhury	Bio
56.	2013H129013P	Brijesh Kumar	Genome wide analysis of PP2C gene in four plant...	Rajesh Mehrotra	Bio
57.	2013H129014P	Kanka Ayan Sasmal	To charecterize a hypothetical protein from PV involved in 16s rRNA processing	Shilpi Garg	Bio
58.	2013H129016P	Vandhana C	Role of condition media in acqusition of chemokines.....	S. Mukherjee	Bio

**I Semester 2015-16**

S.No	ID No	Name	Title	Supervisor	Department
1.	2014H101017P	Nitin Krishna Sai L	Cold Model Study of Re-circulating Fluidized Bed	Dr. Raman Sharma	Chemical
2.	2014H101018P	Garima Verma	Development of an Efficient System for De fluoridation of drinking water using Nano-adsorbent.	Dr. Smita Raghuvanshi	Chemical
3.	2014H101019P	T. Princy Sharon	Modeling and Simulation of various chemical engineering systems.	Dr. Suresh Gupta	Chemical
4.	2014H101020P	Amrita Preetam	Experimental and theoretical studies of dye from industrial waste water using bioremediation.	Dr. Suresh Gupta	Chemical
5.	2014H101021P	Nadkarni Shradha Mangesh	Use of Nano-adsorbent for treatment of industrial wastewater.	Dr. Suresh Gupta	Chemical
6.	2014H101022P	Ramesh Kumar	Super hydrophobic glass coating for automobile application.	Dr. Sonal Mazumder	Chemical
7.	2014H101023P	Dhrumil Gandhi	Implementation of Advance controller in PCT-40 using lab view.	Dr. H. K. Mohanta	Chemical
8.	2014H101024P	Annie C. Jenifer	Detailed kinetic modeling of reforming of coke oven gas.	Dr. H. K. Mohanta	Chemical
9.	2014H101025P	Snehal Banore	Removal of heavy metals from industrial waste water using bioremediation process.	Dr. Arvind K. Sharma & Dr. Suresh Gupta	Chemical
10.	2014H101026P	SachinTomar	Cold model study of recirculating fluidized bed (RCFB) reactor.	Dr. Raman Sharma	Chemical
11.	2014H101027P	D. N. S. Hemanth Kumar	Modeling and simulation of biomass gasification using ASPEN Plus.	Dr. Pratk N. Sheth	Chemical
12.	2014H101028P	Ketan Jangir	Foam characterization of higher chain alcohols with anionic surfactant sodium lauryl sulfate.	Dr. Pradipta Chattopadhyay	Chemical
13.	2014H101029P	Bhawna Singh	Processing and characterization of bulk textured BIMEVOX for intermediate temperature (K600°C) SOFCr application.	Dr. Banasri Roy	Chemical
14.	2014H101030P	S. V. Siva Krishna	Reactive extraction of products obtained from CO <sub>2</sub> mitigation.	Dr. Smita Raghuvanshi	Chemical
15.	2014H101031P	Akanksha Pathak	Developing of metal doped bismuth Veradale nano catalyst system for the production of hydrogen form ethanol.	Dr. Banasri Roy	Chemical
16.	2014H101032P	Manish Chauhan	Characterization and optimization studies of high chain alcohols aqueous foam by using different foaming agents and additive.	Dr. Pradipta Chattopadhyay	Chemical

S.No	ID No	Name	Title	Supervisor	Department
17.	2014H101033P	Anamika Tiwari	Development and characterization of zinc doped titanium oxide for biomedical applications.	Dr. Banasri Roy	Chemical
18.	2014H101034P	Chelikani Sowmya	Modeling and simulation of liquid-solid fluidized bed for adsorption process.	Dr. Arvind K. Sharma	Chemical
19.	2014H101035P	Ashish K. Deewangan	Synthesis and characterization of dmj polymer nanoparticles.	Dr. Sonal Mazumder	Chemical
20.	2014H101036P	Harshvardhan Singh	A Comparative study of the effect of training set design techniques on data driven model of different industrial data sets.	Dr. H. K. Mohanta	Chemical
21.	2014H101037P	Indu Sharma	Modelling and simulation of fixed bed downdraft gasifier using ANSYS FLUENT.	Dr. Pratk N. Sheth	Chemical
22.	2014H101038P	Sunil Varkey	NMEOR nanoparticle based microbial enhanced oil recovery	Dr. Sonal Mazumder	Chemical
23.	2014H101039P	Harshal J. Dongre	Removal of TCE and PCE using bio-filtration technique.	Dr. Smita Raghuvanshi	Chemical
24.	2014H101040P	Suman Choudhary	Modelling & Simulation of fixed bed Pyrolysis of Jatropha de-oiled cake.	Dr. Pratk N. Sheth	Chemical

## LIST OF EQUIPMENTS PROCURED DURING THE YEAR 2014-2015

Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
<b>Biological Sciences</b>	
1. Mini-Protean Tetra Cell	
2. Concentrator plus, complete System	
3. Deep Freezer -20C	
4. Deuterium Lamp for Jasco (2)	
5. Compound Microscope (5)	
6. Biosafety Cabinet	
7. Autoclave Steam Sterilizer	
8. Submarine III, Gel	
9. One Time Service for Olympus Microscope and accessories	
<b>Chemical Engineering</b>	
1. Recalculating Fluidized Bed	
2. Benchtop Freeze Dryer	
3. Colony Counters microprocessor & digital	
4. Distilled Water Setup	
5. Orbital Shaking Incubator	
6. Ultrasonic Processor	
7. Auto Desiccators Cabinet	
8. HPLC Pump	
<b>Chemistry</b>	
1. Low Temp. Reaction Bath with Magnetic Stirrer	
2. Thermo Scientific Advance Protocol Oven	
3. Acid Digestion Vessel	
4. 6 KVA UPS	
5. Open Frame Power supply	
6. UV Spectrophotometer(2)	
7. Conductivity Meter	
8. Micro Centrifuge	
9. Analytical column	
10. Monomode system for reaction(2)	
11. Recirculating Cooler	
12. Accessoires for Fluoromax-4 Spectrofluorometer	
13. Electrode Kinetics	
14. Magnetic Stirrer with Heating(2)	
15. Master Node	
<b>Civil engineering</b>	
1. Natural ventilated Poly House	

Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
2. Multiparameter Sonde	
3. Tublor Fermentor	
4. Angularity Number Apparatus	
5. SDS Kit	
<b>Computer and peripherals:</b>	
1. HP Switch (3)	SDET,CSIS
2. HP laptop (4)	CHEM,IPC,AFU
3. HP Desktops (2)	CAHU
4. HP Server (5)	MATHS
5. HP Tower Workstations(23)	MATHS
6. HP LaserJet printer (3)	MATHS,EMU,CSIS
7. Macbook Pro 15 inch(3)	MATHS,IPC
8. Macbook Pro 13.3 inch (6)	CSIS,CHEM,MATHS, EMU
9. Canon Printers (5)	WILPD
10. Asus laptop (1)	WILPD
11. Dell laptops (83)	IPC,SDET,CSIS,AFU,
12. Dell Optiplex Mini Tower (4)	MATHS
13. Dell Desktop (1)	CSIS
14. Laptops Dell Latitude (200)	EEE
15. Lenovo Desktop (1)	CSIS
16. Wireless Access Point (82)	CSIS
17. AP license for controller (150)	IPC
18. Expansion slots (9)	IPC
19. AC power cable (18)	IPC
20. Copper transceiver modules (72)	IPC
21. Gigabit Ethernet Optics (18)	IPC
22. Hard disk (4)	IPC
23. Juniper Network Products (1)	CHEM
24. 3 KVA UPS (2)	IPC
25. Active Components (2)	IPC
26. Passive Components (11)	IPC
27. IBM Servers (3)	IPC
28. e-Health Sensor Platform Complete Kit (2)	SDET
29. Dual Lamp Module of Projector	CSIS
30. OBU (On Board Equipment) LocoMate™ Standard (2)	SDET
31. 42U Rack Frame and accessories (3)	CSIS
<b>COMPUTER SOFTWARE</b>	
1. CST Software	EEE
2. ANSYS Academic Software	EEE
<b>Electrical engineering:</b>	
3. Platinum Stock Product	

**Name of Equipment****Used for Courses/Thesis/Dissertation  
Computational/Administrative Work**

4. TMS 320 eZd sp F28335 board
5. SEMIKRON MAKE (2)
6. 4-leg inverter (3)
7. IGBT power module
8. Conductivity Meter and current probe (3)
9. Oscilloscope and current probe (1,2)
10. Solar PV Emulator
11. Pi B+ Scientific Kit (5)
12. Microwave Vector Network Analyzer
13. Modular Solar Array Simulator Mainframe
14. Power Module (2)
15. 3 level clamp (2)
16. Microwave Analog Signal Generator
17. Digital Storage Oscilloscope (13)
18. Compact Microwave
19. Pulse Generator (10)

**Mechanical Engineering**

1. Prototype of Stripper ash Cooler
2. Universal lathe machine
3. Soluble Support Material Cartridge
4. REC 20 with tracking & Structure
5. Sonicator
6. Steam Jet Venturi Ejector
7. Multiple Power Supply (2)

**Pharmacy**

1. 4-Gel Vertical Electrophoresis System
2. Air Conditioners (2)
3. High Pressure Homogenizer
4. Deep Freezer -20C(2)
5. Vacuum Pump
6. Set Valve with O-ring
7. Rotary Evaporator
8. Coating Machine
9. Eppendorf Centrifuge
10. Flame Photometer
11. Modular Compact Polarimeter
12. Differential Scanning Calorimeter
13. Physiological Pressure Transducer
14. Progard Pre-treatment Pack
15. Booster Pump Variable Drive (2)

**Physics**



Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
1. Shimadzu Spectrofluorophotometer	
2. Shimadzu Balance	
3. 2 KVA Make Eaton UPS	
<b>Other</b>	
1. Portable Transceiver (29)	SS
2. Auto Scrubber Drier	VFAST
3. Hematology Analyzer	MEDICAL CENTRE
4. RO Water Purifier (5)	WILPD
5. Asynchronous Motor Generator System setup	WILPD
6. Concrete Mixer	EMU
7. Welding Machine Set	EMU
8. Voltas Water Cooler (7)	EMU
9. RO Water Purifier (6)	EMU
10. Cube Cutter	EMU
11. Automatic Blaine Apparatus	EMU
12. TZA-7000 DP	IU
13. Wireless Display Device Model (2)	IU
14. Ampli Speaker (15)	IU
15. Rechargeable Battery and Charger 9V, mobiles (10)	IU
16. IP Camera	SS
17. Hitachi Projectors (2)	IU
18. LCD Projectors (8)	IU

**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, dis-infection	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	Advances in Optimization and Simulation of Low Density Polyethylene (LDPE) Tubular Reactor	Nova Science Publishers, USA	2010

S.No.	Author	Title	Publisher	Year
	Chemistry and Chemical Engineering)			
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 Thermodynamics	Engineering Tata McGraw Hill, Bombay	1973
24.	Choudhari, Roy T.	Applied Thermodynamics	Engineering Tata McGraw Hill, Bombay	1973
25.	Gupta, S.P.	Quantum Biology	New Age, New Delhi	1997
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 New Delhi	Hall, 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

S.No.	Author	Title	Publisher	Year
<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. Sharan, S.N. Ranjan, R. Kumar, S.	Signals and Systems	Tata McGraw Hill, New Delhi	2001
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 Rejuvenation without medicines	Oxford University Press	2008
69.	Khare, R.P., Dixit, R.K.	[English translation of ' <i>Bina Aushadhiyon ke Kayakalp</i> ' (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 ' <i>Sunsan ke Sahachar</i> ' (in Hindi) by Pt Shriram Sharma Acharya – Translation by V. A. Shivshankaran]	Shri Vedmata Gayatri Trust, Shantikunj, Haridwar	2008

S.No.	Author	Title	Publisher	Year
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, Sharma, Sangeeta	Technical Communication: Principles and Practice	OUP, New Delhi	2004
80.	Raman, Meenakshi [Ed.]	English Language Teaching	Atlantic Publishers and Distributors Ltd, New Delhi	2004
81.	Raman, Meenakshi, Singh, Prakash	Business communication.	Oxford University Press	2006
82.	Lata, Pushp Sanjay Kumar	Communicate or Collapse	Prentice Hall of India, New Delhi	2007
83.	Krishna, M., Sharma Sangeeta	Frozen Ripple	Future Publishers, Howrah	2007
84.	Sarangi, J., Mishra Vinod	Explorations in Australian Literature	Sarup and Sons, New Delhi	2007
85.	Raman, Meenakshi Sharma, Sangeeta	Technical Communication – Principles and Practice. For Gujarat Technological University	OUP, New Delhi.	2008
86.	Raman, Meenakshi Sangeeta Sharma	Technical Communication: English Skills for Engineers	OUP, New Delhi.	2009
87.	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
88.	Pushp Lata and Sanjay Kumar	Communication Skills	Oxford Higher Education	2011
89.	Chauhan Gajendra S.	Soft Skills- An integrated approach to maximize personality (Coauthor)	Wiley: New Delhi.	2015
90.	Sharma Sangeeta,	Technical Communication-Principles and Practice (Coauthor)	Third Edition. OUP: New Delhi.	2015
91.	PushpLata	Co-author, <i>Communication Skills</i> ,	Second Edition, New Delhi: Oxford University Press (OUP),	2015
92.	Sharma Sangeeta	Soft Skills- An integrated approach to maximize personality. Coauthor	Wiley: New Delhi.	2015
<b>Engineering</b>				
93.	Nagrath I.J., Madan Gopal	Systems : Modelling and Analysis	Tata McGraw Hill, New Delhi	1982
94.	Nagrath I.J., Madan Gopal	Control Systems Engineering (Second Ed.)	Wiley Eastern, New Delhi	1982
95.	Subramanian, K.R.V., Kadayam, S.R.	System Simulation: An Introduction to GPSS	CBS Publishers, New Delhi	1992

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96.	Gupta, A.	Systems Analysis	CBS, New Delhi	1993
97.	Bansal, R.C., Bhatti, T.S., Kothari, D.P.	Small Hydro Power System	Dhanpat Rai and Company	2004
98.	Ghosh, S.	Control Systems: Theory and Applications	Pearson Education	2004
99.	Gupta, Rajiv, Nagrath, I.J.	Introduction to Systems	New Age International Publishers	2005
100.	Ghosh, S.	Network Theory: Analysis and Synthesis	Prentice Hall of India	2005
<b>Humanistic Studies</b>				
101.	Prakash, Nirupama, Dash, Motilal	Conflict Resolution: Peace Development	Jain Brother, New Delhi	2004
102.	Dash, Motilal, Dhyani, Umesh	Entrepreneurship Culture	Allied Publishers, New Delhi	2005
103.	Sachdev, K.N.	Ethics: A Virtue Theoretic Approach	Adhyayan Publishers & Distributors, Delhi	2005
104.	Sachdev, K.N., Maharana, S.K.	Perspectives on Indian Ethics	Icon Publishers, New Delhi	2007
105.	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
106.	Prakash, Nirupama	Safe motherhood in globalized world	Routledge, London	2009
<b>Instrumentation</b>				
107.	Anand, M.M.S.	Electronic Instruments and Instrumentation Technology	Prentice Hall, New Delhi	2004
<b>Mathematics/Physics</b>				
108.	Bose, R.K., Joshi, M.C.	Methods of Mathematical Physics	Tata McGraw Hill, New Delhi	1984
<b>Mathematics</b>				
109.	Krishnamurthy, V., Mainra, V.P., Arora, J.L.	Introduction to Linear Algebra	Affiliated East-West Press Pvt. Ltd., New Delhi	1976
110.	Pant, J.C.	Project Management: CPM, PERT, CERT with Linear Programming (Third Ed.)	Jain Brothers, New Delhi	1994
111.	Patnaik, R.K.	Calculus - Differential and Integral	CBS Publishers, New Delhi	1994
112.	Pant, J.C.	Introduction to Optimization: Operations Research (Fifth Ed.)	Jain Bros., New Delhi	2000
113.	Prasad, Devi	Introduction to Numerical Analysis	Narosa, Publishing House	2005
114.	Johnson, R.A., Gupta, C.B.	Miller and Freund’s Probability and Statistics For Engineers	Pearson Education, New Delhi	2005
115.	Prasad, Devi	Elementary linear algebra.	Narosa Publishing House	2006
116.	Ganesh, M.	Introduction to fuzzy sets and fuzzy logic.	Prentice-Hall of India	2006
117.	Mishra, B.N., Mishra, B.K.	Optimization: linear programming	Ane Books	2006
118.	Dubey, Balram	Introductory Linear Algebra	Asian Books, New Delhi	2007
119.	Gupta, C.B.	Quantitative Methods	Asian Books, New Delhi	2007
120.	Sathpathi, D.K., Mishra, B.K.	Mathematical Modeling	Ane Books India, New Delhi	2007

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122.	Gupta, C.B., Mallik, K.	Engineering Mathematics-I	New Age Publications, New Delhi	2008
123.	Gupta, C.B., Mallik, K.	Engineering Mathematics-II	New Age Publications, New Delhi	2008
124.	Gupta, C.B.	Application of Optimization in Operations Research	IK International Publishing house Pvt. Ltd., New Delhi	2008
125.	Sharma, B.K.	A Text Book of Engineering Mathematics II	Asian Books Pvt. Ltd., New Delhi	2008
126.	Gupta, C.B.	Advanced Mathematics	NAIL, New Delhi	2009
127.	Krishnamurthy, V.	Combinatorics - Theory and Applications	East-West Press Pvt. Ltd., New Delhi. Also repub- lished by Ellis Horwood, U.K.	1985, 1986
128.	CB Gupta, SR Singh and Sandeep Kumar	Advanced Discrete Structure	IK International, New Delhi	2010
129.	DS Chauhan, KN Singh, Paresh Vyas, Rakesh Pandey, Subhash Yadav, Trilok Mathur	Beez Ganita (Algebra)	Vardhman Mahaveer Open University, Kota	2010
130.	SP Goyal, AK Goyal, Vimlesh Soni, Sunil Saxena, Trilok Mathur	Sammishra Vishleshan (Complex Analysis)	Vardhman Mahaveer Open University, Kota	2010
131.	Gupta, Kantesh, Garg, Atul, Shekhawat, K.S., Shekhar Chandra, and Goswamy, Pranay	<i>Differential Equations, Calculus of Variations and Special Functions</i>	Vardhaman Mahaveer Open University, Kota	2010
132.	Gupta, C.B., Singh S. R. and Kumar, Mukesh	Engineering Mathematics	Tata MCGraw Hill Education, New Delhi	2015
<b>Management Studies</b>				
133.	Dhyani, Umesh, Dash, Motilal, Kumar, Arya	Grass Roots Entrepreneurship-Strategy for Development	Jain Book Agency	2004
134.	Sharma, Sangeeta, Singh, Raghuveer	Advertising: Planning and Implementation.	Prentice-Hall of India	2006
135.	Anubhavananda Swami, Kumar, Arya	Management with Difference	Ane Books India, New Delhi	2007
136.	Bhat, Anil, Kumar, Arya	Management – Principles, Processes and Practices	OUP, New Delhi.	2008
137.	Chaudhary, Omvir & Singh, Prakash	Principals of Management	New Age International Publishers	2011
138.	<i>Mechanical Engineering</i>			
139.	Vaishwanar, R.S., Lakshmi-narayanan, V.	A Textbook of Practical Geometry (Ninth Ed.)	Jain Brothers, New Delhi	1992
140.	Mittal, R..K, Nagrath, I.J.	Robotics & Control	TMH	2003
141.	Parasar, B.S.N., Mittal, R.K.	Workshop Practice	Prentice Hall of India	2003
142.	Mittal, R.K., Sharma, N.N.	Emerging Mechanical Technology	RPS Press, Chennai	2007
143.	Prakash, Ravi	Nondestructive Testing Techniques	New Age Int. Publishers, New	2007

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144.	Parashar, B.S.N.	Cellular manufacturing systems	PHI, New Delhi	2009
<b>Pharmacy</b>				
145.	Parimoo, P.	Textbook of Medicinal Chemistry	CBS, New Delhi	1995
146.	Mithal, B.M.	Textbook of Pharmaceutical Formulation (Sixth Ed.)	Vallabh Prakashan, New Delhi	1997
147.	Mithal, B.M.	Textbook of Forensic Pharmacy (Tenth Edition)	Vallabh Prakashan, New Delhi	1998
148.	Parimoo, P.	Pharmaceutical Analysis	CBS, New Delhi	1998
149.	Mithal, B.M., Saha, R.N.	Handbook of Cosmetics	Vallabh Prakashan, New Delhi	2000
150.	Sriram, D. Yogeeswari, P.	Medicinal Chemistry	Pearson Education, New Delhi	2007
<b>Physics</b>				
151.	Srivastava, Rajesh & Choubisa, Rakesh	Atomic and Molecular Physics	Narosa Publishing House	2011
<b>Science &amp; Technology</b>				
152.	Mitra, C.R., Mandke, Parimal	S & T in Action	Prentice Hall, New Delhi	1988
153.	Mitra, C.R., Mandke, Parimal	Managing S&T – Conceptual Design of Management Tasks	Wiley Eastern Ltd, New Delhi	1989
<b>Finance</b>				
154.	Machiraju, H.R.	Working of Stock Exchanges in India	Wiley Eastern, New Delhi	1994
155.	Machiraju, H.R.	Principles and Practice of Merchant Banking	Wiley Eastern, New Delhi	1994
156.				
<b>B. Other Than Text Books</b>				
157.	Misra, S.D.	Amarakosh with Krishnamitra's Commentary in Sanskrit	Indira Prakashan, Patna	1972
158.	Sharma, R.C.	An approach to King Lear	McMillan, Madras	1975
159.	Mehta, H.C.	Science and Society in the University	Jain Bros., New Delhi	1976
160.	Prasad, S.N.	Studies in Gunedhya	Choukhamba Or-ientalia, Varanasi	1977
161.	Gaur, V.P.	Mahatma Gandhi : A study of his Message of Non- violence	Sterling, New Delhi	1977
162.	Krishna Mohan (Ed.)	Higher Education – A BITS Experiment	BITS, Pilani	1977
163.	Tewary, V.K.	Mechanics of Fibre Composites (International Edition)	Wiley Eastern, New Delhi John Wiley, New York	1978
164.	Prasad, S.N.	Katha Sarit Saagar Tatha Bhartiya Sanskriti	Choukhamba Or-ientalia, Varanasi	1978
165.	Krishna Mohan, Chatterjee, B.	A Practice Book of English Structure & Composition	Ram Prasad & Sons, Agra	1978
166.	Misra, S.D.	Advait Vedantamen Abhasavada	Indira Prakashan, Patna	1979
167.	Srivastava, G.P., Tiwari, S.Y.	Special Relativity (Hindi)	Rajasthan Hindi Granth Akadami, Jaipur	1979
168.	Mandke, V.V.	BITS Practice School, A case study in Industry- University Collaboration	BITS, Pilani	1980
169.	Krishna Mohan (Ed.)	Practice School: A New Concept in Higher Education	BITS, Pilani	1980



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171.	Prasad, S.N.	Kalyanamalla's Anangaranga on Indian Erotics	Choukhamba Ori-entalia, Varanasi	1982
172.	Sharma, R.C. (Ed.)	Modern India, Shifting Perspectives, in honour of Dr. C.R. Mitra	S. Chand & Co., Delhi	1982
173.	Gulati, R.R.	Monochrome & Coloured Television	Wiley Eastern, New Delhi	1983
174.	Chaturvedi, P.D.	Language through Literature	Parshad Prakashan, Delhi	1986
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176.	Misra, S.D.	Modern Researches in Sanskrit	Dr. Veermani Pd. Upadhyaya Felicitacion Volume, Indira Prakashan, Patna	1987
177.	Gaur, V.P.	Studies on Nehru	Sterling Publishers, New Delhi	1987
178.	Rai, R.S., Mehrotra, R.C.	Elements Old & New (in Hindi)	N.C.E.R.T.	
179.	Rai, R.S.	Elements – Old & New	NCERT, New Delhi	1990
180.	Rai, R.S.	Applications of Nuclear Radiations	NCERT, New Delhi	1990
181.	Chaturvedi, P.D., Krishna Mohan, Pathak, S.N. (Ed.)	An Improbable Achievement – BITS – A profile of Change	Wiley Eastern Ltd., New Delhi	1990
182.	Krishnamurthy, V.	Culture, Excitement and Relevance of Mathematics	Wiley Eastern Publications, New Delhi	1990
183.	Krishnamurthy, V.	Ten Commandments of Hinduism	Wiley Eastern	1994
184.	Misra, S.D.	Madhya-Siddhanta Kaumudiderpana	Krishnadas Academy, Varanasi	1996
185.	Gupta, S.P.	A practical guide to the construction of low cost Typhom Resistant Housing (Second Ed.)	Building & Social Housing Foundation. Coalville, UK	1997
186.	Gupta, S.P.	Disaster mitigation in Asia and the Pacific	Asian Development Bank, Manila Philippines	1997
187.	Srivastava, R.C., Saha, S.K., Jain, A.K.	Thermodynamics	Prentice Hall of India	2004
188.	Sharma, Sangeeta, Singh, Raghuvir (Guest Ed.)	International Journal of Communication (Vol. 14)	Bahri Publications, New Delhi	2004
189.	Raman, Meenakshi [Ed.]	Critical Perspective in American Literature	Atlantic Publishers and Distributors Ltd., New Delhi	2005
190.	Raman, Meenakshi, Sharma, Sangeeta, Mishra, Binod [Ed.]	Communicating at Work Shifting Paradigms and Emerging Trends	Jain Brothers, New Delhi	2005
191.	Mishra, Binod [Ed.]	Existential Concern in Novels of Mulk Raj Anand	Adhyayan Publishers & Distributors, Delhi	2005
192.	Ghosh, S.	Control Systems for the JNTU	Pearson Education	2005
193.	Sachdev, Kumar Neeraj	Ethics: A Virtue-theoretic Approach	Adhyayan Publishers & Distributors, Delhi	2005

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195.	Srivastava, R.C. Nagappa, A.N.	Surface Activity in Drug Design	Elsevier	2005
196.	Dash, S.S.	Pricing in the Telecommunication Sector in India.	Academic Excellence, Delhi	2006
197.	Mishra, Binod, Kumar, Sanjay (Ed.)	Indian Writings in English.	Atlantic Publishers, New Delhi	2006
198.	Raman, Meenakshi	New Dimensions of English Poetry: Impact of Science and Technology.	Indus Valley Publishers, Jaipur	2006
199.	Mishra, Binod	Explorations in Australian literature.	Sarup & Sons Publishers, New Delhi	2006
200.	Mishra, Binod	Critical Response to Feminism.	Sarup & Sons Publishers, New Delhi	2006
201.	Mishra, Binod	Grammar in Use (A series of three books for Class VI, VII and VIII)	Arvind Publications, Meerut.	2006
202.	Ghosh, Smarajit	Signals and systems	Pearson Education	2006
203.	Fatmi, S.N.	Social Ecology and Agrarian Classes	Icon Publications, New Delhi	2006
204.	Modak, Pintu, Pareek, R.P.	Exercise and Diabetes Cardiovascular Disease and Obesity.	Jain Brothers, New Delhi	2006
205.	Gupta, S.P., Gupta, R.R. (Ed.)	QSAR and Molecular Modeling Studies in Heterocyclic Drugs I	Springer Verlag, Berlin	2006
206.	Parashar, B.S.N.	Elements of Manufacturing Processes	Prentice Hall of India	2006
207.	Modak, Pintu	Stretch and relax	Khel Sahitya Kendra, New Delhi	2009
208.	Krishna Mohan, Meenakshi Raman	Advanced Communicative English	TMH, New Delhi	2009
209.	Raman, Meenakshi	Soft Skills: Cornerstone of Professional Success	Jain Brothers, New Delhi	2009
210.	Raman, Meenakshi, Sangeeta Sharma	Communication skills for Mumbai University	OUP, New Delhi	2009
211.	Raman, Meenakshi, Sangeeta Sharma	Professional Communication for UPTU	OUP, New Delhi	2009
212.	Raman, Meenakshi, Sangeeta Sharma	Communicative English for BPUT	OUP, New Delhi	2009
213.	Sharma, Sangeeta	Pester power effect of advertising on Children	CIPS, Jaipur	2009
214.	Sharma, Sangeeta & Binod Mishra	Communication Skills for engineers and scientists	PHI, New Delhi	2009
215.	Mishra, Binod & Gajendra S. Chauhan	Communication in a globalised world	Authors Press, New Delhi	2009
216.	Lata, Pushp & Sanjay Kumar	Communicate to conquer	PHI, New Delhi	2009
217.	Raman, Meenakshi & Sharma, Sangeeta	Technical Communication	Oxford Higher Education	2011
218.	Geetha, B. & Sarwal, Amit	Exploring Science Fiction	SSS Publications, New Delhi	2011
219.	Modad, Pintu & Debnath, KK	Science of Sports Training: A Comprehensive Approach	Sports Publications, New Delhi	2011
220.	Swami	Ethics in Management -	ANE Books Pvt Ltd	2014

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	Anubhavananda & Arya Kumar	Insights from Ancient Indian Wisdom 2nd Edition		
221.	Leonard.S.Bobrow and Navneet Gupta	Foundation of Electrical Engineering: Asian Edition	Oxford University Press, New Delhi	2013
<b>C. Books/Book chapter</b>				
222.	Jagadeesh Anmala	Mixing and Bimolecular Reactions in Heterogeneous Porous Media Flows: Transport, Mixing and Reactions	LAP Lambert Academic Publishing, Germany	2010
223.	Jagadeesh Anmala	Rainfall-Runoff Modeling Using Artificial Neural Networks and Physically-based Model: Theory, Simulation, and Results	LAP Lambert Academic Publishing, Germany	2010
224.	D. Sriram, P. Yogeewari	Medicinal Chemistry	Pearson Education, II edition	2010
225.	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
226.	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
227.	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
228.	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
229.	Vishal Saxena, Manoj Kannan, Shilpi Garg	Genetic Engineering Techniques, Course BIO C418		213
230.	R N Saha, Garima Balwani, Vibhu	Transmucosal Drug Delivery: Role of Nanoparticulate Systems	Studium Press LLC, USA	2014
231.	Pandey A, Kulkarni YA and Gaikwad AB	Curcumin: The epigenetic therapy (Chapter-6)	Elsevier	2015
232.	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	2015
233.	Yogesh A. Kulkarni, Mayuresh S. Garud, Manisha J. Ozaa, Anil Bhanudas Gaikwad	Diabetes, diabetic complications and Flavonoids (Chapter-5)	Elsevier	2015
234.	Kalyani H. Barve, Yogesh A. Kulkarni, Anil Bhanudas Gaikwad	Nutraceuticals Therapeutic Agents for Inflammation (Chapter-7)	Elsevier	2015
<b>Other Publications</b>				
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
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8. Bhat, A.K. India vs China- some lessons in economic development, Money Matters, pp. 18-20, 2005
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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
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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

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  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
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  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
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**LECTURE NOTES PREPARED BY EDUCATIONAL DEVELOPMENT DIVISION**

S.No. Course No.	Course Title	Title of Notes	Author(s)/Editor(s)
AAOC C212	Social Engineering II	Principles of Economics	V.P. Rao
AAOC C312	Operations Research	Operations Research	S.Venkateswaran and others
AAOC C322	Systems	Mode of Engg Systems by Bond Graph	R. Gupta
AAOC C341	Numerical Analysis	An Introduction to Numerical Analysis	Devi Prasad
AAOC C351	Instru Methods of Anal	Laboratory Manual for Instrumental Methods of Analysis	R. Mahesh and others
BIO C241	Microbiology	Laboratory Manual for Microbiology	Saby John,
PHA C241			S. Ramachandran
BIO C331	Biophysics	Aspects of Biophysics	S.P. Gupta
BIO C331 & CHEM C341	Biophysical Chemistry	Biophysical Chemistry	Nelashish Nandi
BIO C341/ PHA C452	Microbiology	Laboratory Manual for Microbiology	Y. Shivaji, S.K. Verma, U. Roy
BIO C414	Genetic Engineering	Laboratory Manual for Genetic Engineering	Suman Kapur, A.K. Das
BIO G631	Membrane Liposome Technique	Liposome Technology	V.N. Sharma
BIO G 641	Plant Cell and Tissue Culture Technology	Laboratory Manual for Plant Cell and Tissue Culture Technology	Jitendra Panwar, Rajesh Mehrotra, K. Krithika
BIO G 642	Experimental Techniques	Laboratory Manual for Experimental Techniques	Vishal Saxena and Others
BITS C319	Negotiation Skills and Techniques	Negotiation Skills and Techniques	Bhaskar Bose, S. Anitha
BITS C488	Services Management System	Introduction to Outsourcing BPO and KPO	Usha Manjunath
MBA C488			
BITS G512	Object Oriented Programming	An Introduction to Object Oriented Programming	K.R.V. Subramanian
BITS G619	Professional Practice	Professional Practice (Supp. Notes)	Krishna Mohan and others
BITS G624	Comp. Base Simulation & Modelling	Comp. base Simulation & Modelling	K.R.V. Subramanian
BITS G659	Technical Communication	Technical Communication	Meenakshi Raman and others
CDP C323	Function & Work Stock Exchange	Stock Exchanges in India	H.R. Machiraju
CE G531	Environmental Conservation	Environmental Conservation	S.K. Singh and others
CHE C351/ CHE C341/ CHE 441	Heat Transfer Operations/ Selected Chemical Engineering Operations/ Process Control	Chemical Engineering Lab. Manual	R.K. Gupta
CHE C351/ CHE C441/ CHE C431	Heat Transfer Operations/ Process Control/ Selected Chemical Engineering Operations	Chemical Engineering Laboratory Manual	B.V. Babu and Others
CHE C441	Process Control	Process Control	R.P. Vaid
CHE C473	Advanced Process Control	Advanced Process Control	H. K. Mohanta & Others
CHE G541	Process Plant Simulation	Process Plant Simulation	B. V. Babu & Others
CHE G513	Environmental Management System	Environmental Management System	B.V. Babu, S.D. Manjare
CHE G541	Process Plant Simulation	Process Plant Simulation	B.V. Babu
CHE G551	Fluidisation Engineering	Advanced Separation Techniques	R.K. Gupta and others

S.No. Course No.	Course Title	Title of Notes	Author(s)/Editor(s)
CS C321	Computer & Programming	Assembly Language Programming for MC68030 Based Computers	K.R.V. Subramanian
CS C331	Computer Organisation	Digital Systems Design	P.S.V.S.K. Raju
CS/EEE/ INSTR C391	Digital Electronics & Computer Organization	Lab Manual for Digital Electronics & Computer Organization	G. Raghurama, S. Gurunaryanan
DE G611	Dynamics and Vibration	Advanced Dynamics for Engg.	N.N. Sharma
EA C411	Robotics	Robotics & Control	I.J. Nagrath, R.K. Mittal
EA C415	Introduction to MEMS	Introduction to MEMS NNMDC	N.N. Sharma
EA C421	Genetic Engineering	Genetic Engineering: A Lab. Manual	Utpal Roy and others
EA C422	Fibre Optics and Optoelectronics	Fibre Optics and Optoelectronics	R.P. Khare
EA C451	Internetworking Technology	Internetworking Technology	Rahul Banerjee
EA C452	Mobile Telecom. Networks	Mobile Telecom. Networks	J. Garrell
EA C463	Neural Networks & Appl.	Neural Networks & Application Laboratory Manual for Simulation	L. Behera
EA C476	Power Apparatus and Networks	Experiments on Power Apparatus and Networks	S. Roy
EA C482	Fuzzy logic & Appl.	Introduction to Fuzzy sets & Fuzzy logic	M. Ganesh
ECON C312	Money Bank & Inter Trade	Monetary Economics	G.P. Avasthi
ECON C321	Macroeconomics	Macroeconomics (Concept Methods & Models)	G.P. Avasthi
EEE C364/ INSTR C364	Analog Electronics	Analog Electronics	L.K. Maheshwari
EEE C371	EM Energy Conversion	Electric Machines-Lab. Manual	I.J. Nagrath
EEE C372	Circuits and Signals	Signals and Systems (Pts I & II)	I.J. Nagrath
EEE C382	Communication Systems	Laboratory Manual for Comm. Sys.	S. Balasubramanian and others
EEE C383	Communication Systems	Lab Manual for Communication Systems	S. Balasubramanian and others
EEE C391	Digital Electronics & Computer Orga.	Digital Electronics & Computer Orga.	G. Raghurama
EEE C391	Digital Electronics & Computer Orga.	Introduction to Computer Org. (Supp. Notes)	G. Raghurama, TSB Sudarshan
EEE C415	Digital Signal Processing	Laboratory Manual for Digital Signal Processing	Shikha Tripathi and Others
EEE C433/ EEEG581	EM Field & Waves, RF & Microwaves	Smith Charts	Hema Singh
EEE G 542	Power Electronics Converters	Laboratory Manual of Power Electronics	H.V. Manjunath Dheerendra Singh
EEE G 546	Systems Simulation Laboratory	Laboratory Manual for Power Electronic Systems Simulation on PSCAD/EMTDC	S. Roy
EEE G581	RF & Microwaves	Microwave Experiments	S. Balasubramanian and others
EEE G581	RF and Microwave Engineering	Laboratory Manual for RF and Microwave Engineering	S. Balasubramanian, Hema Singh
ENGG C212	Introduction to Systems	An Introduction to Systems	I.J. Nagrath and others
ENGL C121	English Lang. Skills I	Developing English Language Skills	Krishna Mohan et. Al
ENGL C342	Science Writings	Science Writings	M. Banerji
ENGL C353	Effective Public Speaking	Effective Public Speaking	Pushplata, Meenakshi Raman
ES C112	Thermodynamics	Thermodynamics Tables, Figures and Charts	Adopted from Book
ES C222	Energy Conversion	Basic Electrical Engineering	I.J. Nagrath
ES C241	Electrical Sciences-I	Basics of PSPICE (Suppl. Notes)	M.M.S. Anand
ES C241	Electrical Science I	Sinusoidal Forcing Function Response and Rectifiers	M.M.S Anand
ES C252	Electronics	Electronics – Analog & Digital	I.J. Nagrath

S.No. Course No.	Course Title	Title of Notes	Author(s)/Editor(s)
ES C263	Microprocessor Programming and Interfacing	Laboratory Manual for Microprocessor Programming and Interfacing	J.P. Mishra, S. Mohan, S. Gurunarayanan
ET C311	Selected Technologies	Selected Technologies	Jessil A.C.
ET C312	Tech. and Energy Assessment	Energy Efficiency and DSM application for Indian Industry	M. Ramachandran
FIN C311	Merchant Banking	Merchant Banking (Principles & Practice)	H.R. Machiraju
FIN C322	Project Finance	Project Finance	H.R. Machiraju
HSS C 313	Critical Analysis of Literature and Cinema	Introduction to Film Appreciation	Geetha B.
HSS C314	Print and Audio Visual Advertising	Print and Audio-Visual Advertising	Sangeeta Sharma
HUM C321	App of Indian Music	An Approach to Sangeet	R. Roy
HUM C341	Comp. Indian Literature	Comp. Indian Literature	S. Mitra and others
HUM C342	Graphic Art	Graphic Arts	A.P. Rastogi
HUM C382	Sankara's Thoughts	Sankara's Thoughts	S.D. Mishra
INSTR C312	Industrial Instrumentation & Control	Process Control – Issue and Application	Surekha Bhanot
INSTR C354	Instrumentation Technology	Electronics Instruments & Instr. Tech.	M.M.S. Anand and others
INSTR C355	Electronics Instru-ments & Instrumenta-tion Technology	Experiments in Instrumentation (Lab. Manual)	M.M.S. Anand, Rajesh Purohit
INSTR C381	Transducers and Measurement Systems	Measurement Science- Concepts and Applications Vol. I and II	Surekha Bhanot
INSTR C312	Industrial Instrumentation & Control	Process Control-Issues and Application Vol I & II	Surekha Bhanot
IS C472	Geographical Information System	Computing Aspects of Geographical information system	Rajiv Gupta
MATH C121	Finite Mathematics	Topics in Finite Maths	J.C. Pant
MATH C131	Calculus	Calculus (Supplementary notes)	R.K. Patnaik
MATH C151	Linear Algebra	Supp. Notes to Linear Algebra	V. Krishnamurthy and others
MATH C211	Complex Variable	Laplace Transform	V.P. Mainra, B. Singh
ME C331	Transport Phenomena II	Transport Phenomena II Lab. Manual	R.K. Mittal
ME C331	Transport Phenomena-II	Data Book for Heat Transfer Applications (Supplementary Notes) Part I & II	M. Srinivas R.K. Mittal
ME C332	Steam & Gas Turbine	Steam & Gas Turbine	G. Singh
ME C332	Prime Movers and Fluid Machines	Laboratory Manual for Prime Movers and Fluid Machines	S.S. Deshmukh M.S. Soni
ME C342	Production Techniques	Lab. Manual for Production Technique	G. Harinarayana
MEL G631	Physics and Modelling of Microelectronics devices	Lab. Manual for MOSFET characterization	Anu Gupta
MF C314/ MFC 313	Metal forming & Machining	Metal Forming & Machining Lab Manual	P. Srinivas & A. digalwar
MSE G531	Concurrent Engineering	Concurrent Engineering	K.S. Sangwan
MSMS C311	History & Dev of Museums	History & Dev of Museums	P. Mandke
MSMS C312	Museum Management	Museum Management	P. Mandke and others
MSMS C321	Exhibits & Presentation	Exhibits & Presentation	M.K. Kashiramka
MSMS C322	Profess Skills & Tech I	Profess Skills & Tech I	S. Kundu
MSMS C331	Museum Edu & Ext Services	Museum Edu & Ext Services	S. Kundu
MST G511	Nondestructive Testing Techniques	Nondestructive Testing Techniques	Ravi Pakash
PHIL C221	Symbolic Logic	Intro to Symbolic Logic	B.K. Neema
SOC C211	Dyna. Of Social Change	Dynamics of Social Change	N. Prakash and others
STD C312	Science Communication	Science Communication	M. Banerji
STD C322	R&D Management	Management of R&D (Supp. Notes)	T.S.K.V. Iyer



S.No. Course No.	Course Title	Title of Notes	Author(s)/Editor(s)
		(Jan. 95)	
TA C111	Engg. Graphics	Engg. Graphics & CAD	A.P. Rastogi and others
TA C111	Engineering Graphics	Engineering Graphics with AUTOCAD	D.M. Kulkarni, A.K. Sarkar
TA C112	Workshop Practice	Manual Workshop Practice	G. Harinarayana
TA C112	Workshop Practice	Elements of Manufacturing Process	B.S.N. Parashar and others
TA C112	Workshop Practice	Workshop Practice (Suppl. Notes)	B.S.N. Parashar and others
TA C112	Workshop Practice	Practical Manual for Workshop Practice	R.K. Mittal, B.K. Rout
TA C112	Workshop Practice	Practical Manual for Workshop Practice	K.S. Sangwan and others
TA C152	Computer Programming I	Introduction to Comp. UNIX Algo. & Flowchart	Usha V. Subramanian and others
TA C162	Computer Programming I	Computer Fundamentals	Usha V. Subramanian
TA C211	Measurement Techniques I	Measurement Tech. I	Bioscience Faculty
TA C211	Measurement Techniques I	Measurement Tech. I	Chemistry Faculty
TA C211	Measurement Techniques I	Laboratory Manual for Chemistry Measurement Techniques I	Chemistry Group Faculty
TA C211	Measurement Techniques I	Measurement Tech. I	Physics Faculty
TA C211	Measurement Techniques I (Physics)	Measurement Techniques I (Physics)	Physics Group Faculty
		Observations and Results	
TA C211	Measurement Techniques I	Laboratory Manual for Physics Measurement Techniques I: Observations and Results	Physics Group Faculty
TA C 211	Measurement Techniques I	Laboratory Manual for Physics Measurement Techniques I: Theory	Physics Group Faculty
TA C211	Measurement Technique-I	Lab Manual for Physics MT- I Observations and Results	Suresh Ramaswamy and others
TA C222	Measurement Techniques – II	A Lab. Manual for Measurement Techniques-II	K.E. Raman and others
TA C222	Measurement Techniques-II	Measurement Techniques-II (Supplementary Notes)	A. Sarkar & others
TA C222	Measurement Techniques-II	Measurement Techniques-II (Supplementary Notes)	A. Sarkar and others
TA C231	Business Communication	Business Communication	M. Raman and others
TAC 211	Measurement Technique-I	Lab Manual for Physics MT-I	Suresh Ramaswamy and others
TOC C215	Language Lab Practice	Language Lab Practice Lab Manual	Devika Sangwan
		Office Practices	
	Office Practices	Lectures Notes for Work-integrated Trade Certificate Training Programme	M.M.S. Anand

## SENIOR OFFICERS AT PILANI CAMPUS

### University Wide:

- Vice-Chancellor:** Prof. V.S Rao (Acting)  
**Registrar:** Prof. M.M.S. Anand  
**Chief Financial Officer:** Mr. Manoj Fitkariwala  
**Dean, Academic Research (Ph.D. Programme):** Prof. Sanjay Kumar Verma  
**Dean, Academic and Resource Planning:** Prof. S. Balasubramaniam  
**Dean, Admissions:** Prof. S. Gurunaryanan  
**Dean, Faculty Affairs:** Prof. R. Mahesh  
**Dean, International Programmes and Colloboration:** Prof. Suman Kapur  
**Dean, Practice School:** Prof. Niranjan Swain  
**Dean, Sponsored Research and Consulting:** Prof. Sunil Bhand  
**Dean, Work Integrated Learning Programmes:** Prof. S. Gurunaryanan

### Campus Wide:

- Director:** Ashoke Kumar Sarkar  
**Dean, Administration:** Prof. S.C. Sivasubramanian  
**Dean, Instruction:** Prof. S. Gurunaryanan  
**Associate Dean, Academic and Resource Planning:** Prof. Hitesh Datt Mathur  
**Associate Dean, Academic Registration and Counselling:** Prof. Bijay Kumar Rout  
**Associate Dean, Academic Research:** Prof. Hemant Ramanlal Jadhav  
**Associate Dean, Admissions:** Prof. Hari Om Bansal  
**Associate Dean, Faculty Affairs:** Prof. Anshuman Dalvi  
**Associate Dean, Instruction:** Prof. Srikanta Routroy  
**Associate Dean, International Programmes and Collaboration:** Prof. Dalip Kumar  
**Associate Dean, Practice School:** Prof. P. Srinivasan (*Pilani Campus*)  
**Associate Dean, Practice School:** Prof. (Ms.) S. Sindhu (*Off-campus Centre at Bangalore*)  
**Associate Dean, Sponsored Research and Consulting:** Prof. Sanjeev Kumar (*Pilani Campus*)  
**Associate Dean, Student Welfare Division:** Prof. Kumar Neeraj Sachdev (*Pilani Campus*)  
**Associate Dean, Work Integrated Learning Programmes:** Shri K. Venkatasubramanian (*Pilani Campus*)  
**Associate Dean, Work Integrated Learning Programmes:** Prof. Anil Kumar (*Pilani Campus*)  
**Associate Dean, Work Integrated Learning Programmes:** Prof. G. Venkiteswaran, (*Off-campus Centre at Chennai*)

## UNIT CHIEFS

<u>UNIT</u>	<u>NAME</u>
1. Centralised Purchases	Prof. N.V. Muralidhar Rao
2. Computer Assisted Housekeeping	Prof. S.C. Sivasubramanian
3. Estate Management	Prof. Anshuman
4. General Administration	Prof. M.M.S. Anand
5. Information Processing Centre	Prof. Janardan Prasad Misra
6. Instrumentation	Prof. Surekha Bhanot
7. Placement	Prof. Mani Sankar Dasgupta
8. Publications & Media Relations	Shri Giridhar M. Kunkur ( <i>Officiating</i> )
9. Software Development & Educational Technology	Prof. Rahul Banerjee

## HEADS OF DEPARTMENTS

<u>DEPARTMENT</u>	<u>NAME</u>
1. Biological Sciences	Prof. Rajesh Mehrotra
2. Chemical Engineering	Prof. Suresh Gupta
3. Chemistry	Prof. Anil Kumar
4. Civil Engineering	Prof. Manoj Kumar
5. Computer Science & Information Systems	Prof. Rahul Banerjee
6. Economics & Finance	Prof. Arun Kumar Giri
7. Electrical & Electronics Engineering & Instrumentation	Prof. Anu Gupta
8. Humanities & Social Sciences	Prof. Gajendra Singh Chauhan
9. Management	Prof. Anil Kumar Bhat
10. Mathematics	Prof. Chandra Shekhar
11. Mechanical Engineering	Prof. Bijay Kumar Rout
12. Pharmacy	Dr. S. Murugesan
13. Physics	Prof. Debi Datt Pant

## FACULTY-IN-CHARGE/OFFICIAL

<u>CENTRE/SECTION/ENTITY</u>	<u>NAME</u>
1. Accounts & Finance Section	Shri Satyen Sharma (Head)
2. Alumni Affairs	Prof. Hari Om Bansan (Faculty-in-charge)
3. Centre for Innovation, Incubation & Entrepreneurship Development	Dr. Jyoti (Faculty-in-charge)
4. Educational Technology Support (SDETU)	Dr. Virendra Singh Shekhawat (Faculty-in-charge)
5. Infant Care Center	Prof. Poonam Goyal (Faculty-in-charge)
6. Institute Functions	Dr. Sarvesh Satija (Faculty-in-charge)
7. Library	Shri Giridhar M. Kunkur (Librarian)
8. Medical Centre	Dr. R.P. Pareek (Faculty-in-charge)
9. Pay Roll Processing (CAHU)	Dr. Yashvardhan Sharma (Faculty-in-charge)
10. Projection Systems and Instrumentation Services (IU)	Dr. Karunesh Kumar Gupta (Faculty-in-charge)
11. Publicity and Branding	Dr. Gajendra Singh Chauhan (Faculty-in-charge)
12. Reprography Section	Dr. Virendra Singh Nirban (Faculty-in-charge)
13. Security Section	Shri Kishore Singh (Chief Security Officer)
14. Societal Development	Prof. Sangeeta Sharma (Faculty-in-charge)
15. Teaching Learning Centre	Prof. Rajesh Mehrotra (Faculty-in-charge)
16. Transport Services Section	Dr. Abhijit K. Digalwar (Faculty-in-charge)
17. Workshop	Prof. Kuldip Singh Sangwan (Faculty-in-charge)

## CHIEF WARDEN

Prof. Shibasish Choudhury

## WARDENS

### BHAWAN

1. Ashok & Bhagirath
2. Gandhi & Krishna
3. Meera
  
4. Malviya - A,B,C
5. Ram & Malaviya - D
6. Rana Pratap & C.V. Raman
7. Shankar
8. Srinivasa Ramanujan
9. Vishwakarma
10. Vyas

### NAME

Dr. Rajesh Prasad Mishra  
Dr. Amit Kumar Verma  
Prof. (Ms.) Surekha Bhanot  
Prof. (Ms.) Kusum Lata  
Dr. Sachin U Belgamwar  
Dr. Dipendu Bhunia  
Dr. R. Raghunathan  
Dr. Arun Kumar Jalan  
Dr. Virendra Singh Shekhawat  
Mr. Jitendra Singh Rathore  
Dr. Sunil Jumar Dubey

## NON-RESIDENT WARDENS

### BHAWAN

1. Ashok
2. Bhagirath
3. Day Scholars
4. Gandhi
5. Krishna
6. Malaviya
  
7. Meera
8. Shankar
9. Vishwakarma
10. Vyas

### NAME

Dr. Anshuman Dalvi  
Dr. Abhijeet K. Digalwar  
Dr. Ravi Kant Mittal  
Dr. Manojkumar Surajkarani Soni  
Dr. Sheth Pratik Nitinchandra  
Prof. Navneet Gupta  
Dr. Suresh Gupta  
Dr. Paritosh Shukla  
Prof. (Ms.) Poonam Goyal  
Prof. Jitendra Panwar  
Dr. Virendra Singh Nirban  
Dr. Yashvardhan Sharma

## LIBRARIAN

Shri Giridhar M. Kunkur

## HEAD, ACCOUNTS & FINANCE

Shri Satyen Sharma

BITS Pilani

# annual report 2015

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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

1. Prof. Sasikumar Punnekkat (Director)
2. Prof. Ashwin Srinivasan (Deputy 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.

	Integrated First Degree Programmes	Higher Degree Programmes	Doctoral Programmes (PhD)	Total
Second Semester 2014- 2015	-	-	FT - 07(01) PT – 03 (00)	<b>10(01)</b>
First Semester 2015-2016	643(62)	36(13)	FT - 13(05) PT – 13(03)	<b>705(83)</b>

*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 2014-2015, 230 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 2014-2015, 11 students ((i) Within same tier :9; (ii) Integrated First Degree to Higher Degree : 0, (iii) Higher Degree to Ph.D.: 0) was permitted to transfer.

### B2.4 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 examination days)
Second Semester 2014-2015	12 Jan 15	16 May 15	76
First Semester 2015-2016	1 Aug 15	14 Dec 15	81
Summer Term 2014-2015	22 May 15	16 July 15	48

### B2.5 COURSES OFFERED

The number of courses, offered during the year 2014 is as follows:

	Number of Courses offered
Second Semester 2014-2015	306
First Semester 2015-2016	292
Summer Term 2014-2015	3

During the year, the following new courses were introduced.

Sr.No	Comp code	Course No	Course Title
1	021435	BIO F419	MOLECULAR EVOLUTION
2	022168	BIO G561	ADV RECOMBINANT DNA TECH
3	020202	BIO G632	TRANSGENIC TECHNOLOGY
4	020203	BIO G642	EXPERIMENTAL TECHNIQUES
5	021336	BITS F364	HUMAN COMP INTERACTION
6	021770	BITS F418	INTRO TO BIOMED ENG
7	022167	BITS G661	RESEARCH METHODOLOGY I
8	021213	CHE F418	MODEL & SIMU IN CHE ENGG
9	021203	CHE F419	CHEMICAL PROCESS TECH
10	022146	CHE G552	ADVANCED TRANSPORT PHENOMENA
11	021579	CHEM F328	SUPRAMOLECULAR CHEMISTRY
12	021582	CHEM F330	PHOTOPHYSICAL CHEMISTRY
13	021578	CHEM F414	BIO & CHEMICAL SENSORS
14	020736	CHEM G551	ADV ORGANIC CHEMISTRY
15	020937	CHEM G553	ADV PHYSICAL CHEMISTRY
16	022036	CHEM G556	CATALYSIS
17	021324	CS F424	SOFTWARE FOR EMBEDDED SYS
18	020507	CS G513	NETWORK SECURITY
19	022006	CS G524	ADV COMPUTER ARCHITECTUR
20	022108	CS G527	CLOUD COMPUTING
21	021551	ECON F413	FINANCIAL ENGINEERING
22	021567	ECON F422	FUNT & WORK STOCK EXCHAN
23	021065	FRE N102T	TECHNICAL FRENCH
24	020127	GER N102T	TECHNICAL GERMAN
25	021174	GS F312	APPLIED PHILOSOPHY
26	021137	GS F322	CRITI ANAL OF LIT & CINE
27	021603	HSS F222	LINGUISTICS
28	021604	HSS F335	LITERARY CRITICISM
29	021605	HSS F336	MODERN FICTION
30	021929	HSS F399	INTRODUCTION TO AMERICAN LITER
31	021479	MATH F353	STATISTICAL INFER & APP
32	021480	MATH F421	COMBINATORIAL MATHS
33	021921	MATH F422	NUM MTHD FOR PARTIAL DIFF EQ
34	021880	MATH F456	COSMOLOGY
35	021476	MATH F471	NONLINEAR OPTIMIZATION



Sr.No	Comp code	Course No	Course Title
36	021477	MATH F481	COMMUTATIVE ALGEBRA
37	022143	MATH G521	APPLIED FUNCTIONAL ANALYSIS
38	021620	ME F412	PROD PLAN & CONTROL
39	020741	ME G511	MECHANISMS & ROBOTICS
40	020322	ME G512	FINITE ELEMENT METHOD
41	021495	PHY F412	INTRO TO QUAN FIELD THEO
42	021496	PHY F413	PARTICLE PHYSICS
43	021506	PHY F423	SPECIAL TOP IN STAT MECH
44	021507	PHY F424	ADVANCED ELECTRODYNAMICS
45	021509	PHY F426	PHY OF SEMICONDUCTOR DEV

## 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 2014-2015	2804
First Semester 2015-2016	2840
Summer Term 2014-2015	590

Details of Registration of students for the Second Semester 2014-2015 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 2014-2015	I Semester 2015-2016
1.	Total number of students under the purview of ACB at the beginning of the semester	108	85
2.	No. of students declared out of its purview at the end of the semester	50	42
3.	No. of students who left the Institute during the semester	0	1
4.	No. of new students who came under the purview of ACB at the end of the semester	27	50
5.	Total No. of students under the purview of ACB during the next semester	85	90

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****(a) Award of Degrees**

During the year, a total of 871 students graduated. The details on the award of degrees are given below.

	Number of degrees awarded
77 <sup>th</sup> Award (vide Board of Governors meeting) 77.1 held on 03.07.15 77.2 held on 03.07.15 77.3 held on 08.07.15	823(126) 2(0) 1(0)
78 <sup>h</sup> Award (vide Board of Governors meeting) 78.1 held on 26.9.15 78.2 held on 26.9.15	1(0) 2(1)
78 <sup>th</sup> Award 78.3 held on 30.11.15 78.4 78.3, 78.4 (subject to approval from vide Board of Governors meeting in its next meeting)	3(0) 22(2)
<b>Total:</b>	<b>851(129)</b>

Statistical details of these degrees are given in 'Annexure B2-5, Annexure B2-6'

**(b) Award of Medals**

For Academic Year 2014-2015

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 2014-2015 in the following table:

S.N.	ID.No.	Name	Sex	CGPA Obtained	Position Obtained	Type of Medal to be Awarded
Integrated First Degree Programmes (No. of students: 608)						
1	2011A8PS005G	MUTHKHOD SHRIDEVI SHARANGOWDA	F	9.81	DISTINCTION	GOLD
2	2011A7PS003G	POOJA MALIK	F	9.78	DISTINCTION	SILVER
3	2011A1PS426G	ZANTYE MANALI SUNIL	F	9.63	DISTINCTION	BRONZE

**B2.9 CAMPUS INTERVIEWS AND PLACEMENT****SEMESTER II 2014-15**

Number of companies which conducted campus interviews	101
No of interviews	4868
No of offers made	496

**SEMESTER I 2015-16**

Number of companies which conducted campus interviews	35
No of interviews	2270
No of offers made	142

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 2015): **16**

<b>Senior Professors, Professors</b>	00
<b>Associate Professors</b>	05
<b>Assistant Professors</b>	11
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**Head of the Department: Dr. Judith M. Braganca**

**Contact details (email): judith@goa.bits-pilani.ac.in**

**Number of PhD Scholars: 40**

**Number of Project Fellows : 4**

**Ph.D. Thesis awarded during the year: 04**

1. Mr. Chandrasekhar Chanda defended his Ph.D thesis titled Studies on Anticoagulant Toxins from Indian Cobra Venoms. He worked under the supervision of Prof. Dibakar Chakrabarty.
2. Ms. Salgaonkar Bhakti Balkrishna defended her Ph. D. Thesis titled “Synthesis of Polyhydroxyalkanoates by Halophilic Archaea and Bacteria and their Osmoadaptation”. She worked under the supervision of Prof. Judith Braganca.
3. Mr. Ram K defended his proposal “Microon - A Tool for Identification and Validation of Oncomirs” He worked under the supervision of Dr. Sumit Biswas.
4. Ms. Naik Kshipra Sudhakar defended her Ph. D. Thesis titled “Chemical Synthesis and Characterization of Nanostructured TiO<sub>2</sub> Based Composites: Studies on their Potential Biomedical Applications”. She worked under the supervision of Prof. Meenal Kowshik.

**Ph.D. Thesis Submitted during the year: 01**

1. Ms. Archana Sharma submitted her thesis titled ‘An Advanced Three -Dimensional Macroporous Polymeric Matrix for Tissue Engineering Applications’. She worked under the supervision of Prof. Vijayashree Nayak

**A. Sponsored Research activities:****(i) Ongoing projects: 16**

1. Anasuya Ganguly, CSIR, Role of environmental toxins in kidney related diseases of Canacona Taluka, Goa :10 lacs.
2. Dibakar Chakrabarty, Anticoagulant and Platelet Aggregation Inhibitors from Indian Cobra Venoms [BT/PR5713/BRB/10/1112/2012]” funded 36.544 Lacs .by DBT To Dibakar Chakrabarty, Angshuman Sarkar and Sukanta Mondal.
3. Vijayashree Nayak, Study on EMT regulation through TGF $\beta$ /SMADs in gall bladder disease, DST SERB, Rs .37,90,000
4. Arnab Banerjee, Regulation of hypothalamic gonadotropin, SERC, New Delhi. 3 years. SERC, New Delhi.
5. Indrani Talukdar, Alternative splicing in signal transduction and disease: A genome wide approach, DST-FT. DST-FT. Rs. 20,00,000.
6. Kundan Kumar, Identification and characterization of abiotic stress responsive With NoLysine (WNL) kinase in rice (*Oryza sativa* L.) DST-FT. 3 years. Rs. 22,65,000.
7. Malabika Biswas, Cloning and characterization of the promoters, 3 years. BRNS. Rs.23,99,719

8. Veeky Baths, Protein-ranking and novel intervention strategies against mycobacterium tuberculosis using graph theory and bioinformatics resources, 3 years . DST-FT. Rs. 8,60,000
9. Sumit Biswas, Studies on Putative GGEEF/Sensory Box Domain Protein of Vibrio Cholerae, 3 years. DST. Rs. 21,80,000.
10. Kudan Kumar, Identification and characterization of abiotic stress responsive With No Lysine (WNK) kinase in rice (*Oryza sativa* L.). Funding agency (Science & Engineering Research Board) under DST Fast Track scheme.
11. Veeky Baths, Protein Ranking and Novel Intervention Strategies against *Mycobacterium tuberculosis* using Graph Theory and Bioinformatics Resources. DST FASTTRACK SCHEME
12. Utpal Roy DST-Pilot project (SB/SO/HS-15/2013): Purification and characterization of a promising antifungal peptide (with special reference to *Candida albicans* and *Cryptococcus neoformans*) produced by a Wild- type Bacillus sp.
13. Srikanth Mutnuri, Empowered septic tank as decentralized wastewater treatment system” funded by DBT BIRAC Bill & Mellinda Gates foundation, 67 lakhs.
14. Utpal Roy, DST-WOS Sponsored “Microbial Diversity and Biotechnological Potentials of selected polar microorganisms” 17.65 lakhs.
15. Srikanth Mutnuri, Biotransformation of Phosphogypsum by sulphate reducing bacteria, DBT, 5.8 lakhs.
16. Srikanth Mutnuri, Development and Demonstration of two decentralized wastewater treatment plants, BITS Core WWE, 32 lakhs.

**(ii) Projects sanctioned during the year: 04**

1. Utpal Roy, DST-Pilot project (SB/SO/HS-15/2013): Purification and characterization of a promising antifungal peptide (with special reference to *Candida albicans* and *Cryptococcus neoformans*) produced by a Wild- type Bacillus sp., 11 lakhs.
2. Angshuman Sarkar, Study the effect of quinacrine (QC) on Rho like small-GTPase and apoptosis in human lung and breast cancer cell line cultured in vitro. Funding Agency: DBT Cancer Biology Special Project, 25 lakhs.
3. Veeky Baths, Home automation and smart wheel chair based on Electroencephalography (EEG) signals produced in brain, DST, 39 lakhs.
4. Indrani Talukdar, Role of alternate splicing modulators in differentiation of embryonic stem cells into specific lineages, BITS Additional Competitive grant, 8 lakhs.

**(iii) Projects completed this year: 08**

1. Nimali Prabhu, Magnetobatic bacteria: bioresource of nanomagnets, 27 lakhs, DST.
2. Vijayashree Nayak, A new novel biodegradable polymer scaffold for cartilage tissue engineering. BRNS, DAE, 3 years Rs.23,34,700.
3. Sumit Biswas, Physicochemical characterization of the primary sigma factor of Vibrio cholera, 3 years. DBT. Rs. 7,97,000.
4. Judith Braganca, Screening and Characterization of Hydrolytic extremo-enzymes from Halophilic archaea having biotechnological potential. BITS Seed Grant, 11 lakhs.
5. Anasuya Ganguly, Tissue engineering of human placental stem cells into a functional pancreas, DST: 22.14 lacs .
6. Angshuman Sarkar, Study the effect on nanoparticles on protein synthesis and expression of small GTPases, 21.1 lakhs.
7. Vijayashree Nayak, Association of chronic infection between S. typhi and Gall bladder Cancer, Aditya Birla Group, 10 lakhs.
8. Anasuya Ganguly, Testing novel and existing materials for manufacturing Tissue Engineered Heart Valves (TEHVs), Aditya Birla Group, 20 lakhs.

**B. Publications: 15**

1. Jigni Pathan, Ansie Martin, Rajdeep Chowdhury, Dibakar Chakrabarty, Angshuman Sarkar(2015) Russell's viper venom affects regulation of small GTPases and causes nuclear damage, Toxicon 108, 216-225, 2015

2. Pai PP, Ranjani SSS, Mondal S. PINGU: Prediction of eNzyme catalytic residues using seqUence information PLoS ONE10:e0135122, 2015.
3. Bhakti B. Salgaonkar and Judith M. Bragança. Biosynthesis of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) by Halogeometricumborinquense strain E3. International Journal of Biological Macromolecules 78:339-346. (10.1016/j.ijbiomac.2015.04.016).
4. Pallavee Srivastava, Edarapalli VR Nikhil, Judith M Bragança, Meenal Kowshik. Anti-bacterial TeNPs biosynthesized by haloarchaeon *Halococcus salifodinae* BK3 Extremophiles, DOI: 10.1007/s00792-015-0767-9 2015.
5. Subhadeep Banerjee, Anjan Chattopadhyay, Arnab Banerjee, Meera Haridas, Praveen Saini, Moitreyi Das, Mahesh S. Majik, Yogesh Kr. Maurya. Synthesis and photophysical characterization of quasi push-pull dicyanodibenzodioxins and their anti-tumor activity against glioma cell line C6. Bioorganic & medicinal chemistry letters: 25(4):753-7.
6. Priyanka Dwivedi, Vijayashree Nayak, Meenal Kowshik. Role of gold nanoparticles as drug delivery vehicles for chondroitin sulfate in the treatment of osteoarthritis Biotechnology Progress, doi: 10.1002/btpr.2147 2015.
7. M Monsoor Shaik and Meenal Kowshik. Novel melt-down neutralization method for synthesis of chitosan-silver scaffolds for tissue engineering applications Polymer Bulletin, DOI 10.1007/s00289-015-1522-1, 2015.
8. Chakrabarti P, Biswas S. Analysis of interactions and dissection of interfaces involved in rna-protein recognition. Protein ProteinPeptlett. 2015 DOI:10.2174/0929866522666150115112654.
9. Kothandan R, Biswas S. Identifying micrnas involved in cancer pathways using support vector machines Computational biology and chemistry, 2015 apr;55:31-6
10. Mir MA, Arumugam M, Mondal S, Rajeswari HS, Ramakumar S, Ajitkumar P. Mycobacterium tuberculosis Cell Division Protein, FtsE, is an ATPase in Dimeric Form Protein J. 34:35-47. 2015.
11. Saddhe A.A. and Kumar, K In silico identification and expression analysis of MscS like gene family in rice Plant Gene 1:8-17, 2015.
12. Bhakti B. Salgaonkar, Deepthi Das and Judith M. Bragança. Resistance of extremely halophilic archaea to zinc and zinc oxide nanoparticles. Applied Nanoscience (DOI 10.1007/s13204-015-0424-8). 2015.
13. Kshipra Naik, Pallavee Srivastava, Ketaki Deshmukh, M Monsoor S, and Meenal Kowshik, "Nanomaterial-Based Approaches for Prevention of Biofilm-Associated Infections on Medical Devices and Implants, Journal of Nanoscience and Nanotechnology, 15, 10108-10119, 2015.
14. G. Mishra, G. Bacher, Utpal Roy, Sunil Bhand. A label free impedemetric immunosensor for detection of E.coli in water. SCIENCEJET 4:76-83 2015.
15. Manuka, R. Saddhe, A. A. and Kumar, K. Genome-wide identification and expression analysis of WNK kinase gene family in rice. Computational Biology and Chemistry 59:56-66. 2015.

### C. Conferences attended/papers presented: 26

1. Chandrasekhar Chanda, Angshuman Sarkar, Dibakar Chakrabarty, A Thrombolytic and Anti-Adhesive Metalloprotease from Indian Monocled Cobra Venom, Fifth Annual Conference of the Toxinological Society of India, Little Flower Hospital and Sree Narayana Institute of Medical Sciences, Kochi, Kerala, 21 & 22 November, 2015.
2. Jigni Sayeda Pathan, Angshuman Sarkar and Dibakar Chakrabarty, REGULATION OF SMALL GTPASES AND NUCLEAR DAMAGE CAUSED BY RUSSELL'S VIPER VENOM (RVV), Trends in Cell and Molecular Biology (TCMB), 2015-An International Conference, Department of Biological Sciences, BITS Pinali, K K Birla Goa Campus, 19-21 December, 2015.
3. Gautam Krishnan, Utpal Roy, Sam C Joy, Natesh, Siddarth T ,Rohit Shivkumar , Cloning and Expression of Antigenic proteins of Pathogenic organisms: Special focus on Mycobacterial Family (Paper) , National Tuberculosis Conference NATCON, Mumbai, India , Tuberculosis Association of India , Feb 6-7,2015.
4. Pallavee Srivastava, Judith M. Braganca, Meenal Kowshik, Haloarchaea and metallic nanoparticles synthesis (Oral Presentation), One day state level seminar on 'Archaea: Microbes of third domain of life, Dept of Microbiology, P.E.S.,s Ravi S. Naik College of Arts and Science, Sep 28 2015.
5. Pallavee Srivastava, Judith M. Braganca, Meenal Kowshik, Anti-proliferative Selenium nanoparticles biosynthesized by Halococcus salifodinae BK18 (Poster presentation), One day state level seminar on 'Archaea: Microbes of third domain of life, Dept of Microbiology, P.E.S.,s Ravi S. Naik College of Arts and Science, Sep 28 2015.

6. Archana Sharma, Sumrita Bhat, Vijayashree Nayak and Ashok Kumar, Polyethylene glycol (PEG) and Carrageenan Cryogel Matrices for Soft Tissue Engineering Applications, BIOTECH 2015 IIT,Kanpur, India, International Conference, IIT Kanpur, 13th to 15th March,2015.
7. Ansie Martin and Angshuman Sarkar, Evaluation of metal nano-oxide stress in building a Nano QSAR model for prediction of toxicity, 23rd International Conference Current Trends in Computational Chemistry (CCTCC), JACKSON UNIVERSITY; USA, Nov 2015.
8. A Martin, S Hazra, N NGhosh, A Sarkar, DEVELOPMENT OF A QSAR MODEL TO PREDICT METAL NANO-OXIDE TOXICITY ON ALVEOLAR CELLS, Trends in Cell and Molecular Biology (TCMB), 2015-An International Conference, 2015-Dec 19-21st, 2015.
9. G Ravindran, D Chakrabarty and A Sarkar, CADMIUM INDUCED CYTOTOXICITY: A CELL SPECIFIC STRESS RESPONSE? Trends in Cell and Molecular Biology (TCMB), 2015-Dec 19-21st, 2015.
10. Joseph Fernandes, G Chhabra A Banerjee, Glucagon like peptide 1 analogue, liraglutide, controls adipogenesis by regulating adipokine profile, National Conference on Reproductive Health Challenges: Issues and Remedies (NCRHC-2015), Indian Society for the Study of Reproduction and Fertility (ISSRF), 11-13 September, 2015.
11. Vijayashree Nayak, Priyanka Dwivedi, Study of different delivery modes of chondroitin sulphate using microspheres and cryogel scaffold for application in cartilage tissue engineering, Advances in Functional Materials, Stony Brook University, New York, USA June 29 to July 3,2015.
12. Priyanka Dwivedi, Vijayashree Nayak & Meenal Kowshik, Gold nanoparticles as drug delivery vehicle for chondroitin sulphate to treat arthritis, Advances in Functional Materials, Stony Brook University, New York, USA, June 29 to July 3,2015.
13. Yogesh Walwalkar and Vijayashree Nayak, Evaluating a novel bacterial isolation and enumeration method-an approach to lab on paper, International conference on biotechnology (BIOTECH2015) IIT, Kanpur, 13th March-15th March 2015.
14. Yogesh Walwalkar and Vijayashree Nayak, Bile in regulating small ncRNA expression in Salmonella Typhi –A factor for chronic infection within gallbladder??" DAE-BRNS Life Sciences Symposium-2015 (LSS-2015), BARC, Mumbai, Feb3-5,,2015.
15. Yogesh Walwalkar and Vijayashree Nayak, EMT regulation and S.typhi association in gall bladder carcinoma, Cancer Research: from Bench to the Bedside". Hotel Clerks Amer, Jaipur, Indian Association of Cancer Research (IACAR), Feb 19-21,2015.
16. Priyanka Dwivedi, Sumrita Bhat, Vijayashree Nayak and Ashok Kumar, Study of different delivery modes of chondroitin sulphate using microspheres and cryogel scaffold for application in cartilage tissue engineering, International conference on biotechnology (BIOTECH2015), IIT,Kanpur, 13th March-15th March 2015.
17. Kanishka Tiwary, Yogesh Walwalkar and Vijayashree Nayak, Understanding the motile to sessile shift in S.typhi during bile stress, International conference on biotechnology (BIOTECH2015), IIT,Kanpur, 13th March-15th March 2015.
18. Tannishtha Saha and Vijayashree Nayak DNA damage assay on selenium based drug on A549 cell lines in vitro, International conference on biotechnology (BIOTECH2015), IIT,Kanpur, 13th March-15th March 2015.
19. Faiza Nazar and Vijayashree Nayak, Effect of selenium based drug on lung carcinoma cells, International conference on biotechnology (BIOTECH2015), IIT, Kanpur, 13th March-15th March 2015.
20. Priyadarshini P. Pai and Sukanta Mondal, Identification of catalytic residues in enzymes using support vector machines, 2015 NextGen Genomics, Biology, Bioinformatics and Technologies (NGBT) Conference, HICC, Hyderabad, INDIA, October 1-3, 2015.
21. Priyadarshini P. Pai and Sukanta Mondal, Advances in Computational Identification of Protein Interaction Sites, BIT's 6th World Gene Convention, BIT Group Global Ltd., Information Research Center of International Talent, China State Administration of Foreign Experts Affairs,Qingdao, China, November 13-15, 2015.
22. Priyadarshini P. Pai and Sukanta Mondal, Prediction of RNA-interacting proteins and sites for therapeutics and drug discovery, Trends in Cell and Molecular Biology (TCMB), 2015-An International Conference, Department of Biological Sciences, BITS-Pilani, K. K. Birla Goa Campus, December 19-21, 2015.

23. Deepthi Das and Judith Braganca, Screening and characterization of haloarchaea from indian salt pans for the production of hydrolytic enzymes One day state level seminar on 'Archaea:Microbes of third domain of life' Dept of Microbiology, P.E.S.,s Ravi S. Naik College of Arts and Science.Sep 28, 2015.
24. Bhakti Salgaonkar and Judith Braganca, Utilisation of commercial and agro-industrial wastes as substrates for the biosynthesis of polyhydroxyalkanoates by extremely halophilicarchaea One day state level seminar on 'Archaea:Microbes of third domain of life' Dept of Microbiology, P.E.S.,s Ravi S. Naik College of Arts and Science Sep 28, 2015.
25. Bhakti Salgaonkar and Judith Braganca, Biosynthesis of a Potential Biodegradable Food Grade Polymer by Extremely HalophilicArchea for Flexible Packaging First International Conference on Advances in Food Science and TechnologyInstitute for Holistic Medical Sciences, Kottayam. November 20 -22, 2015.
26. Kabilan Mani and Judith M. Braganca. Archaeal and Bacterial diversity of Solar Salterns of Goa: A MetagenomicStudy One day state level seminar on 'Archaea:Microbes of third domain of life' Dept of Microbiology, P.E.S.,s Ravi S. Naik College of Arts and Science.Sep 28 2015.

#### **D. Books Published/Edited during the year:**

##### **(i) Chapters in books: 06**

1. Dibakar Chakrabarty And Chandrasekhar Chanda, Snake Venom Disintegrins, Snake venoms (Springer), DOI 10.1007/978-94-007-6648-8\_14-1.
2. Utpal Roy, Ravinder Kumar, Sanjeev Kumar, and Anil K. Puniya, Enzymes in Milk, Cheese, and Associated Dairy Products, Enzymes in Food and Beverage Processing, (CRC Press), page 327-338.
3. Dibakar Chakrabarty and Akriti Rastogi, Hemotoxic Activity Of Jellyfish, Clinical toxinology in Asia Pacific and Africa (Springer), DOI 10.1007/978-94-007-6386-9\_3.
4. Pai PP and Mondal S, Computational approaches for animal toxins to aid drug discovery, Toxinology. Toxins and Drug Discovery, (Springer), doi: 10.1007/978-94-007-6726-3\_20-1.
5. Pallavee Srivastava and Meenal Kowshik, Biosynthesis of Nanoparticles from Halophiles, Halophiles: Biodiversity and Sustainable Exploitation. (Springer), 6 145-159.
6. Kumar, K. and Mosa, K. Ion Transporters: A Decisive Component of Salt Stress Tolerance in Plants, Managing Salt Tolerance in Plants, Molecular and Genomic Perspectives (CRC Press, Taylor & Francis Group), ISBN 978-1482245134.

#### **E. Conferences, Seminars & Workshops conducted: 2**

1. International Conference on Trends in Cell and Molecular Biology 2015 (TCMB 2015)' held at BITS Pilani K K Birla Goa Campus, Goa, India from 19-21<sup>st</sup> December, 2015. This conference brought together biochemists, molecular biologists, cell and developmental biologists, computational biologists to a common platform to share their research and find global partners for future collaborations. Major sponsoring agencies were DBT, SERB (DST), ICMR, BRNS.
2. The 2<sup>nd</sup> International Conference on TerraPreta Sanitation and Decentralized Wastewater System was held at Birla Institute of Technology and Science Pilani, K K Birla Goa Campus from 19<sup>th</sup> - 20<sup>th</sup> November 2015. The conference brought together researchers, scientists and professionals working in the field of Terra preta sanitation and other decentralized wastewater systems. Major sponsoring agencies were German technical Cooperation (GIZ), DST and DBT.

#### **F. Invited Talks given by BITS faculty: 08**

1. Srikanth Mutnuri delivered an invited talk on "Anaerobic co digestion of different substrates" at 2nd National Biogas Convention 2015: Current and Emerging Trends in Indian Biogas and Bio-Fertilizer Development, Sep 15 – 16<sup>th</sup> 2015 at IIT New Delhi, India.
2. Srikanth Mutnuri delivered an Invited talk on ANAEROBIC DIGESTION OF SEPTAGE AND FOOD WASTE – A WASTE TO ENERGY PROJECT IN NASHIK" AD Technology and Microbial Ecology for Sustainable Development 3-6 February, 2015, Chiang Mai, Thailand.
3. Arnab Banerjee gave an invited talk at the National Conference on Reproductive Health Challenges: Issues and Remedies (NCRHC-2015) New Delhi.
4. Meenal Kowshik delivered an invited talk in the International Conference on Green Nanotechnology and its role in Sustainable Agriculture, at Sam Higginbottom Institute of Agriculture, Technology and Science, Allahabad, March 2015.

5. Sumit Biswas delivered an invited talk on Structural variability and flexibility in Nucleotides, Department of Biotechnology, Nagaland University, February 2015.
6. Sumit Biswas delivered an invited talk at the International Work Conference on Bioinformatics and Biomedical Engineering, University of Granada, Spain, April 2015.
7. Sumit Biswas delivered an invited talk: Cholera, Cancer and Paraphernalia, Max Delbruck Zentrum fur Molecular Medicine, Berlin, Germany, in June 2015
8. Indrani Talukdar delivered an Invited for a talk titled " A tale of Tesk1 (and other barrier kinases) in somatic cell reprogramming" at NCCS Pune in Oct 2015.
9. Dibakar Chakraborty delivered an invited talk on "A Thrombolytic and anti-adhesive metalloprotease from indianmocoled Cobra venom" at 5th Annual Conference of the Toxinological Society of India, Nov 21-22, 2015 at Kochi.

**G. Invited talks arranged in the department: 5**

1. Dr. Hemanta K. Majumdar, Director- Grade Scientist of CSIR at Indian Institute of Chemical Biology, Kolkata. The title of his talk: " Kinetoplast DNA, DNA Topoisomerases and Drug development against Leishmaniaparasite ". Presented on, 26th June, 2015.
2. Dr. Shohini Ghosh Roy, Visiting Assistant Professor, Framingham State University, Massachusetts, USA. The title of her talk: "Nitrogen metabolism in marine phytoplanktons: evolution and controls". Presented on July 14, 2015.
3. Dr. Swapna Immani, from University of Texas at Austin (Dept. of Neuro-biology). The title of her talk: "Interplay between electrical activity and bone morphogenetic protein signaling regulates spinal neuron differentiation" Presented on : 20<sup>th</sup> August, 2015.
4. Dr. Subhdeep Sarker, from the University of Veterinary Medicine, Vienna, Austria. Title of his talk: "To be, or not to be two sites: that is the question about antidepressant binding!" Presented on 17<sup>th</sup> November 2015.
5. Dr. Himansu Sekhar Nanda, from the King Abdullah University of Science and Technology, Saudi Arabia. The title of his talk: "Controlled insulin delivery from collagen scaffolds of controlled pore structure for skin tissue regeneration". Presented on 4<sup>th</sup> December 2015.

**H. Awards and recognitions won by faculty and students: 2**

1. Archana Sharma was awarded the second best poster award during 5<sup>th</sup> Annual International Conference on Advances in Biotechnology (BIOTECH 2015) 13-15<sup>th</sup> March 2015 at Indian Institute of Technology Kanpur, India.
2. Priyanka Dwivedi was awarded the second best poster award during the 5<sup>th</sup> Annual International Conference on Advances in Biotechnology (BIOTECH 2015) I.I.T Kanpur.

**I. Faculty Development, International Collaboration & Industry Immersion**

1. Dr. Utpal Roy visited the Department of Medical Microbiology, PGIMER, Chandigarh, during Summer 2015 under the industry immersion scheme.
2. Dr. Sumit Biswas visited FreieUniv, Berlin, during summer 2015 under the University immersion scheme.

**J. Significant new equipments/experimental facility added during the year:**

1. UV Visible spectrophotometer.
2. -80°C Freezer.

**K. Departmental association/club activities:** Department seminars delivered by students and faculty.



**B2.10.2 Department: Chemistry**

Number of faculty members (as on 31 December 2015): 17

<b>Senior Professors, Professors</b>	02
<b>Associate Professors</b>	07
<b>Assistant Professors</b>	7 + 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:** 19**Number of Project Fellows :** 04 (including one RA)**No. of Post Doctoral Scientists:** 01**Ph.D. Thesis awarded during the year:** 03**Ph.D. Thesis Submitted during the year:** 03 (one has already defended the final Ph.D thesis viva)**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>
Dr. P. Bhavana	An Investigation on Derivatives of meso Tetrathienylporphyrin as dye sensitized Solar cells 02(0076)/12/EMR-II 3 years	17,11,080	CSIR
Dr. Mainak Banerjee Coinvestigator: Dr. Rahul Banerjee (NCL, Pune)	Synthesis of metal-organic-porous material based efficient chiral heterogenous catalysts by post synthetic modification and their applications in asymmetric reactions 02(0075)/12/EMR-II 3 years	22,25,580	CSIR
Dr. N. N. Ghosh Prof. Sunil Bhand Dr. C. K. Mitra UK counterpart Prof. Paul Antony Milner, University of Leeds	Development and characterization of nanomaterials for biosensors and biocatalysis INT/DST/INT/UK/P-41/2012 2 years	26,32,000	UKIERI-DST
Dr. Tanmoy Mondal	Nonadiabatic molecular processes on threefold electronic degeneracies DST/INSPIRE Faculty Award /2013 5 years	35,00,000	DST- Inspire
Dr. N.N. Ghosh Coinvestigator: Dr.	Preparation of Magnetically Separable, Mesoporous TiO <sub>2</sub> Catalyst and Study of		CSIR

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Mainak Banerjee	their Catalytic Properties 02(0147)/13/EMR-II 3 years	19,04,800	
Dr. N.N. Ghosh	Development of polymer-ferrite (and/or grapheme) nanocomposites having high thermal stability and microwave absorption property for Radar Absorbing Coating Application ERIP/ER/1305004/M/01/1523 3 years	14,59,000	DRDO
Dr. Subhadeep Banerjee	Development of $\beta, \beta'$ -edge fused $\pi$ -elongated donor-acceptor porphyrin possessing Near-IR optical spectra SB/FT/CS-085/2013 3 years	22,60,000	DST-FT
Dr. N.N. Ghosh Coinvestigator: Dr. P. Parameswaran	Investigations on microstructures of hard-soft ferrite nanocomposites and influence of microstructures on their properties CSR/Accts/2014-15/671 3 years	263400	UGC-DAE
Dr. Arunashree Panda Mentor: Dr. R. N. Behera	Chalcogen containing azomethine macrocycles and bicycles: synthesis, characterization, metal complexes and theoretical investigations of nature of intramolecular interactions between divalent chalcogen and nitrogen atoms SR/WOS-A/CS-04/2014 (G) 3 years	17,10,000	DST WOS
Prof. Sunil Bhand Coinvestigator: Prof A P Koley Mr Gautam Bacher PCs: Dr. V K Suri Dr. R. Balasubramaniam Shivam Mishra Ashwin Rathod (ALL from 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 3 years	2413800	BRNS
Prof. Sunil Bhand	Bio- Sensory Computing for Detection of Pesticide in Tea. DR-22(5)/XIIPlan Project/Bio-sensor/2015 3 months	5,50,000	Tea Board, India
Dr. Venkatesan S.Thimmakonda	Structures and energetics of C7H2 and C9H2 Isomers:Quantam Chemical studies SERB/F/3698/2015-16 3 years	23,23,000	SERB, New Delhi

**(ii) Projects sanctioned during the year\*:**

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Prof. Sunil Bhand Coinvestigator: Mr. Gautam Bacher Principal Collaborator: Mr. Vishal Dhamgaye (RRCAT, Indore) Dr. G. S. Lodha (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	RRCAT indore and UGC DAE consortium Indore

\*Other 3 sanctioned projects of this year are mentioned under the ongoing projects and not mentioned here.

**(iii) Projects approved during the year: NIL****(iv) Projects completed this year:**

Name of Investigator	Title of Project and duration	Amount sanctioned (Rs)	Funding Agency
Dr. Raghunath Behera	Study of effective interactions in charged colloidal suspensions 01(2513)/11/EMR-II, 3 years	10,81,080	CSIR
Dr. R. N. Panda	Synthesis and characterization of binary and ternary transition metal nitrides SR/S1/PC/0063/2010 3 years, Extension upto 11-5-15	18,95,000	DST
Prof. Sunil Bhand NFBSFARA/PHT-4007/2013-14 Dr. Y S Rajput, NDRI, Karnal Prof. Sudhir Chandra, IIT, Delhi	Imprinted polymer for sensing and removal of selected antibiotic and pesticide residue 2 years (Extension till 31-3-15)	6060500 (BITS share out of total 139.68410 lakhs consortium project)	NFBSFARA, ICAR
Dr. Anjan Chattopadhyay Co-Pi: Dr. Mainak Banerjee	Spectroscopic investigation of the properties of low lying electronic states of some chemopreventive retinyl nitrones and comparison of their light-induced properties with retinyl iminium ions 01(2681)/12/EMR-II 3 years	12,64,830	CSIR
Co-PI: Dr. Anjan Chattopadhyay	Photophysical studies of some selected DNA		CSIR

PI: Dr. Sujit Kumar Ghosh (VNIT, Nagpur)	damage reactions 37 (1493)/11/EMR-II 3 Years		
Dr. Ranjan Dey	Prediction of thermodynamic, thermophysical, transport, thermoacustical and excess properties of binary, multicomponent liquid mixtures and ionic liquids (RTIL's) 01(2682)/12/EMR-II 3 years	10,12,830	CSIR

### B. Publications: 54

1. Debabrata Moitra, Subhenjit Hazra, Barun Kumar Ghosh, Manoj Kumar Patra, Raj Kumar Jani, Sampat Raj Vadera, Narendra Nath Ghosh, "A facile low temperature method for the synthesis of  $\text{CoFe}_2\text{O}_4$  nanoparticles possessing excellent microwave absorption properties" RSC Advances 5, 51130–51134 (2015).
2. Bhanudas Naik, Subhenjit Hazra, Dayananda Desagani, Barun Kumar Ghosh, Manoj Kumar Patra, Sampat Raj Vadera, Narendra Nath Ghosh "Preparation of magnetically separable  $\text{CoFe}_2\text{O}_4$  supported Ag nanocatalysts and catalysis reaction towards decolorization of variety of dyes" RSC Advances 5, 40193–40198 (2015).
3. Subhenjit Hazra, Hrishikesh Joshi, Barun Kumar Ghosh, Asif Ahmed, Timothy Gibson, Paul Millner and Narendra Nath Ghosh "Development of a novel and efficient  $\text{H}_2\text{O}_2$  sensor by simple modification of a screen printed Au electrode with Ru nanoparticle loaded functionalized mesoporous SBA15" RSC Advances 5, 34390- 34397, (2015).
4. Subhenjit Hazra, Barun Kumar Ghosh, Manoj Kumar Patra, Raj Kumar Jani, Sampat Raj Vadera, Narendra Nath Ghosh "A Novel 'One-Pot' Synthetic Method for Preparation of  $(\text{Ni}_{0.65}\text{Zn}_{0.35}\text{Fe}_2\text{O}_4)_x-(\text{BaFe}_{12}\text{O}_{19})_{1-x}$  nanocomposites and Study of their Microwave absorption and Magnetic properties" Powder Technology 279, 10–17 (2015).
5. Mayank Pandey, Girish M Joshi, Kalim Deshmukh, Narendra Nath Ghosh, N Arunai Nambi Raj, "Electrical conductivity, optical properties and mechanical stability of 3, 4, 9, 10-Perylenetetracarboxylic Dianhydride based organic semiconductor" Journal of Physics and Chemistry of Solids (doi:10.1016/j.jpccs.2015.01.002 Accepted 2015).
6. Bhanudas Naik, Subhenjit Hazra, Desagani Dayananda, V. S. Prasad, and Narendra Nath Ghosh "Preparation of  $\text{TiO}_2$  Nanoparticle Loaded MCM-41 and Study of Its Photo-Catalytic Activity Towards Decolorization of Methyl Orange" Journal of Nanoscience and Nanotechnology (doi:10.1166/jnn.2015.10904) 15, 6669- 6674 (2015)).
7. Subhenjit Hazra, Barun Kumar Ghosh, Manoj Kumar Patra, Raj Kumar Jani, Sampat Raj Vadera, Narendra Nath Ghosh, " 'One-Pot' Synthetic Method for preparation of  $(\text{NiFe}_2\text{O}_4)_x-(\text{SrFe}_{12}\text{O}_{19})_{1-x}$  nanocomposites and their Microwave absorption properties" Journal of Nanoscience and Nanotechnology (doi:10.1166/jnn.2015.10491) 15, 6559- 6567 (2015).
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9. Desagani Dayananda, Venkateswara R. Sarva, Sivankutty V. Prasad, Jayaraman Arunachalam, Padmanabhan Parameswaran, Narendra N. Ghosh, "Synthesis of MgO nanoparticle loaded mesoporous  $\text{Al}_2\text{O}_3$  and its defluoridation study" Applied Surface Science 329, 1-10 (2015).
10. Barun Kumar Ghosh, Subhenjit Hazra, Bhanudas Naik, Narendra Nath Ghosh, "Preparation of Cu nanoparticle loaded SBA-15 and their Excellent Catalytic Activity in Reduction of Variety of Dyes" Powder Technology 269, 371–378 (2015).

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12. Desagani Dayananda, Venkateswara Rao Sarva, Sivankutty Vadakkethonippurathu Prasad, Jayaraman Arunachalam, Narendra Nath Ghosh "A simple aqueous solution based chemical methodology for preparation of mesoporous alumina: Efficient adsorbent for defluoridation of water" *Particulate Science and Technology* 33: 8–16 (2015).
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14. Praveen Saini and Anjan Chattopadhyay "Revealing the active role of the terminal CNO moiety in the photochemical oxaziridine conversion process of some chemopreventive retinyl nitrones through hybrid QM:QM and QM:MM ONIOM calculations" *Chem.Phys.Lett.* 633 6 (2015).
15. Praveen Saini and Anjan Chattopadhyay "A comprehensive spectroscopic investigation of  $\alpha$ -(2-naphthyl)-N-methylnitron: A computational study on photochemical nitron-oxaziridine conversion and thermal E-Z isomerization processes" *RSC Advances* 5 22148 (2015).
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21. Vikash Kumar, Amrita Chatterjee and Mainak Banerjee, "A mild and efficient route to 3-vinylchromones in aqueous micellar media" *Synthetic Communications*, 45 2364-2377 (2015).
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26. Shankar B. Dalavi and Rabi N. Panda, "Magnetic properties of nano-structured Co and Ni synthesized by modified NaBH<sub>4</sub> reduction route" *Part. Sci. Technol.* 33(1), 97-101 (2015).
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28. Shankar B. Dalavi, M. Manivel Raja and Rabi N. Panda, "Magnetic properties of Ni nanoparticle embedded in silica matrix (KIT-6) synthesized via novel chemical route", *AIP Conf. Proc.* 1665, 050071 (2015).

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38. Himank Kumar, Vinod Devaraji, Rangaraj Prasath, Manojkumar Jadhao, Ritika Joshi, Purushothaman Bhavana, Sujit Kumar Ghosh, "Groove binding mediated structural modulation and DNA cleavage by quinoline appended chalcone derivative" *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 151 605–615 (2015).
39. Himank Kumar, Vinod Devaraj, Ritika Joshi, Manojkumar Jadhao, Piyush Ahirkar, Rangaraj Prasath, Purushothaman Bhavana, Sujit Kumar Ghosh, "Antihypertensive Activity of a Quinoline Appended Chalcone Derivative and its Site Specific Binding Interaction with Relevant Target Carrier Protein" *RSC Advances*, 5 65496-65513 (2015).
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41. Zigmee T. Bhutia, Geethika P, Anurag Malik, Vikash Kumar, Amrita Chatterjee, Biswajit Gopal Roy and Mainak Banerjee "In situ mechanochemical synthesis of nitrones followed by 1,3-dipolar cycloaddition: a catalyst-free, "green" route to cis-fused chromano[4,3-c]isoxazoles" *RSC Advances*, 5 99566–99572 (2015).
42. Kaley N. M., Panda A. and Behera R. N. "Computational study of E...N (E = Se/Te) Intramolecular Interactions in Diaryl Dichalcogenides: Effect on E–E Bond Strength and Antioxidant Activity" In: Rene, E.R., Bhattarai, S., Nancharaiyah, Y. V. and Lens, P.N.L. (eds.), *Proceedings of the 4th International Conference on Research Frontiers in Chalcogen Cycle Science & Technology*, Delft, The Netherlands, May, pp: 3-9 (2015).
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44. Gokulakrishnan Subramanian, Akhil Mohammed, Halan Prakash "Determination of persulphates using N, N- diethyl-p-phenylenediamine as colorimetric reagent: Oxidative coloration and degradation of the reagent without bactericidal effect in water" Available online *Chemical Engineering Journal*, 28 October 2015, Volume 286, 15 February 2016, Pages 223–231.

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46. Atul Sharma, Akhtar Hayat , Rupesh K. Mishra, Gaëlle Catanante, Sunil Bhand and Jean Louis Marty "Titanium Dioxide Nanoparticles (TiO<sub>2</sub>) Quenching Based Aptasensing Platform: Application to Ochratoxin A Detection" Toxins 7(9), 3771-3784; doi:10.3390/toxins7093771 (2015).
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50. Pranali P Naik, Geetesh Kumar Mishra, Bengt Danielsson, Sunil Bhand "Android integrated urea biosensor for public health awareness" Sensing and Bio-Sensing Research 3:12-17 (2015).
51. Rupesh K. Mishra , Gustavo A. Alonso, Georges Istamboulie, Sunil Bhand, Jean-Louis Marty "Automated flow based biosensor for quantification of binary organophosphates mixture in milk using artificial neural network" Sensors and Actuators B: Chemical 208:228-237 (2015).
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53. Geetesh K Mishra, Gautam Bacher, Utpal Roy, Sunil Bhand "A label free impedemetric immunosensor for detection of Escherichia coli in water" Sci. Lett. J. 4: 76 (2015).
54. Bhagaban Behera, Souvik Pal, Lizy Kanungo, Sunil Bhand, Sudhir Chandra "Synthesis and characterization of ZnO-ZnAl<sub>2</sub>O<sub>4</sub> whiskers and their application in biosensors" Sci. Lett. J. 4: 102 (2015).

#### Patents:03

1. Bhand Sunil, Chandra Sudhir, Pandya Hardik, Tiwari Ruchi, Mishra Rupesh Kumar, "Analyte Sensor Chips" Filed as US Patent application No. 14/404362. Application is published US Patent Publication No. US2015/0290612 on Oct. 15, 2015.
2. Dr. Vinok Kumar Suri, Dr. R. Balasubramanian. Mr. Shivam Mishra, Ms. Shrinkhla Ghildiyal, Mr. Girish Pai, Dr. D. S. Joshi, Dr. Mansee Rathore , Dr. Sunil Bhand, Mr. Souvik Pal. Title : A micro-trench based biochip device for screening of infectious diseases using Gold nano-particles / nano-coating - [Indian Patent Application No. 3620/MUM/2015 dated 23-Sep-2015] - Jointly by BARC, MGM Mumbai and BITS Pilani.
3. Bhand Sunil, Chandra Sudhir, Pandya Hardik, Bacher Gautam, Kanungo Lizy "Device for detection and analysis of Mycotoxins" Filed as UK Patent application number 1517725.6 (7 Oct. 2015).

#### C Conferences attended/papers presented: 34

1. Shankar B. Dalavi and Rabi N. Panda, "Development of novel chemical methods for synthesis of Co and Ni nanoparticles and studies on their magnetic properties", 'National Conference on Frontiers in Chemical and Material Sciences (FCMS)', Shivaji University, Kolhapur, 16-17<sup>th</sup> January 2015.
2. Shankar B. Dalavi and Rabi N. Panda, "Enhancement Of Magnetic Moment In Co-Ni Alloy Nanoparticles Dispersed In Silica Matrix Synthesized By Novel Chemical Route", 'International Conference on Magnetic Materials and Applications (ICMAGMA-2015)', VIT University, Vellore, 2-4<sup>th</sup> December 2015.
3. Ranjan Dey, Hrishikesh Joshi, Kratika Kukreja and Akanksha Saini, "TRANSPORT, OPTICAL INTERFACIAL AND THERMODYNAMIC PROPERTIES OF BINARY AND TERNARY LIQUID MIXTURES", 19th Symposium in Thermophysical Properties, 20th - 26th June, 2015, Colorado University, Boulder, Colorado, USA.
4. Ranjan Dey and Akankhsa Saini, "Comparative study of thermodynamic and related properties of ketone+aromatic amines at three temperatures" RSC- CRSI National Symposium , 5th - 8th Feb, 2015, NCL Pune, Pune, India.

5. Ranjan Dey, Karan S Raghuvanshi, Aditya Harshvardhan and Akanksha Saini, "Acoustical Thermophysical and excess Properties of binary and higher order liquid mixtures", International Symposium on Ultrasonics, 22nd - 24th Jan, 2015 Nagpur University, Nagpur, India.
6. Ranjan Dey, T Srinivas Krishna, B. Munibhadrayya, "Volumetric and Acoustical study of 1-Butyl-3-methylimidazolium bis(trifluoromethylsulfonyl)imide with N-methyl-2-pyrrolidinone", NFCFA- 2015 in association with RSC, BITS Pilani KK Birla Goa Campus, Goa, 18<sup>th</sup>- 19<sup>th</sup> December, 2015.
7. Ranjan Dey, Shashwat Verma and Aditya Harshvardhan "Viscometric studies of Binary and Higher order Liquid Mixtures employing Predictive and Correlative Models" NFCFA- 2015 in association with RSC, BITS Pilani KK Birla Goa Campus, Goa, 18<sup>th</sup>- 19<sup>th</sup> December, 2015.
8. Akanksha Saini, Hardik Hingorani and Ranjan Dey, "A New Approach for predicting Viscosity of Binary and Multicomponent Liquid Mixtures", NFCFA- 2015 in association with RSC, BITS Pilani KK Birla Goa Campus, Goa, 18<sup>th</sup>- 19<sup>th</sup> December, 2015.
9. Kartikeya Tiwari, Aditya Prakash Pandey and Ranjan Dey, "Acoustical and Refractometric Studies of binary and Higher order liquid Mixtures", NFCFA- 2015 in association with RSC, BITS Pilani KK Birla Goa Campus, Goa, 18<sup>th</sup>- 19<sup>th</sup> December, 2015.
10. Venkatesan Thimmakonda, "Molecules in laboratory and in space", National Conference on "Frontiers at the Chemistry – Allied Sciences Interface", March 13-14, 2015, University of Rajasthan, Jaipur, India.
11. Banerjee, S.; Chattopadhyay, A.; Banerjee, A.; Haridas, M.; Saini, P.; Das, M.; Majik, M. S.; Mauyra, Y. Kr. 'Synthesis and photophysical characterization of quasi push-pull dicyanodibenzodioxins and their anti-tumor activity against glioma cell line C6': Invited speaker and resource person at UGC Sponsored National Seminar on Recent and Emerging Advances in Chemical Science, REACS-2015 on 8th and 9th January 2015 at All Saints College, Thiruvananthapuram, India.
12. Vikash Kumar, Amrita Chatterjee and Mainak Banerjee, D-Glucose Derived Novel Gemini Surfactants: Synthesis and Study of Their Surface Properties, Interaction with DNA, and Cytotoxicity, Biomaterials-2014, International conference organized by IIT-Delhi-and ENEA Rome ITALY, at IIT Delhi, October 27-30, 2014.
13. Zigmee T. Bhutia, Amrita Chatterjee and Mainak Banerjee, Grinding in a mortar-pestle: A simple, eco friendly a versatile route for the synthesis of *Heterocycles*, ICGC-2015, Goa University, Goa, 22<sup>nd</sup>-24<sup>th</sup> January, 2015.
14. Zigmee T. Bhutia, Anurag Malik, Geethika P., Amrita Chatterjee and Mainak Banerjee, Grinding in a mortar-pestle: A simple and eco-friendly route for the synthesis of cis-fused chromano[4,3-c]isoxazoles via intramolecular nitrene cycloaddition, 17th RSC-CRSI symposium at NCL, Pune Feb. 5-8, 2015.
15. Zigmee T. Bhutia, Amrita Chatterjee and Mainak Banerjee, Grinding in a mortar-pestle: A simple, eco-friendly and versatile route to the synthesis of Heterocycles", NFCFA2015, BITS Pilani KK Birla Goa Campus, Goa, 18<sup>th</sup>- 19<sup>th</sup> December, 2015.
16. Amrita Chatterjee, Chemical sensors for biologically/environmentally important analytes, Biomaterials-2014, International conference organized by IIT-Delhi-and ENEA Rome ITALY, at IIT Delhi, October 27-30, 2014.
17. Diprati G. Khandare, Mainak Banerjee and Amrita Chatterjee, Fluorescence "Turn-on" detection of dissolved CO<sub>2</sub> in water with Aggregation-induced emission active tetraphenylethylene, 17th RSC-CRSI symposium at NCL, Pune Feb. 5-8, 2015.
18. Diprati G. Khandare, Mainak Banerjee and Amrita Chatterjee, A Highly Fluorescence "Turn-on" Type Chemodosimeter for selective detection of Perborate Ion, 17th RSC-CRSI symposium at NCL, Pune Feb. 5-8, 2015.
19. Diprati G. Khandare, Mainak Banerjee and Amrita Chatterjee, Aggregation Induced Emission Based Turn-On Type Tetraphenylethylene Chemodosimeter for Detection of Mercury Ion, International conference, NDCS 2015, October 16-18, 2015, BITS Pilani, Rajasthan.
20. Vikash Kumar, Amrita Chatterjee and Mainak Banerjee, Tetraphenylethene - Based Water Soluble Fluorescent Probes having Aggregation Induced Emission (AIE) Characteristics for BSA, DNA Detection and their Quantitation, International conference, NDCS 2015, October 16-18, 2015, BITS Pilani, Rajasthan.
21. Uday Kumar Padidela, Tarun Khanna and Raghu Nath Behera, "Structure and properties of model colloidal suspensions: Molecular Dynamics Simulation Study". One Day State Level Seminar on



- Advances in Colloid Chemistry, sponsored by UGC and organised by Department of Chemistry, Parvatibai Chowgule College of Arts and Science, Margao, Goa, Feb 14, 2015. (Second Prize)
22. N. M. Kaley, A. Panda and R. N. Behera, (2015) Computational study of E...N (E = Se/Te) Intramolecular Interactions in Diaryl Dichalcogenides: Effect on E–E Bond Strength and Antioxidant Activity, 4th International Conference on Research Frontiers in Chalcogen Cycle Science & Technology, Delft, The Netherlands, May 28 – 29, 2015.
  23. A. Panda and R. N. Behera, Theoretical Investigation of Gluthathione Peroxidase like Activity of some Conformationally Restricted Dichalcogenides, 4th International Conference on Research Frontiers in Chalcogen Cycle Science & Technology, Delft, The Netherlands, May 28 – 29, 2015.
  24. Uday Kumar Padidela and Raghu Nath Behera, Integral equation studies of model colloidal suspensions: Comparison of different closure approximations, National Conference on NEW FRONTIERS IN CHEMISTRY – FROM FUNDAMENTALS TO APPLICATIONS (NFCFA 2015), BITS, Pilani - K. K. Birla Goa Campus, December 18-19, 2015.
  25. Sharma A., Hayat A, Mishra R.K., Catanante G, Bhand S and Marty J.L.. Aptamer Assay: a nanomaterial based sensing platform for detection of food toxin. Presented at 11th workshop on biosensors and bioanalytical microtechniques in environmental and clinical analysis, 26-30 Sep 2015 Regensburg Germany. (both oral and poster presentation by Atul Sharma).
  26. Sharma A., Hayat A, Mishra R.K., Catanante G, Bhand S and Marty J.L.. Aptamer Assay: a novel sensing strategy for detection of target analyte using nanomaterials based sensing platform for detection of food toxin. Presented at XXth Transfrontier meeting of sensors and biosensors TMSB-2015, Oct 1&2 2015 Perpignan France.
  27. Rupesh K Mishra, Atul Sharma, Akhtar Hayat, Sunil Bhand and Jean-Louis Marty. OTA biosensing in real matrix using folding based electrochemical aptasnsor. (voted and awarded as one of the top 20 excellent poster presentation at 15th International Symposium on Electroanalytical chemistry, (15th ISEAC) Aug. 13-16 2015 at Changchun, China.
  28. Narendra Nath Ghosh "Our Venture on Development of Novel Synthetic Routes for Preparation of Variety of Nanostructured materials: Magnetic Nanoparticles, Advanced Nanocatalysts, Graphene oxide based nano-composites" National Conference on New Frontiers in Chemistry From Fundamental to Applications (NFCFA 2015) BITS Pilani, KK Birla Goa Campus, 18 -19 December 2015.
  29. Madhurya Chandel, Harshit Sinha, Harshdeep Singh Hora, Barun Kumar Ghosh, Debabrata Moitra, Narendra Nath Ghosh "Synthesis of magnetic separable CuFe<sub>2</sub>O<sub>4</sub> and RGO@CuFe<sub>2</sub>O<sub>4</sub> nanocatalysts for reduction of various synthetic dyes." National Conference on New Frontiers in Chemistry From Fundamental to Applications (NFCFA 2015) BITS Pilani, KK Birla Goa Campus, 18 -19 December 2015.
  30. Anjan Chattopadhyay "Exploring the Nitrone-Oxaziridine photo-conversion path through computational studies" NFCFA 2015, BITS-Pilani, K.K.Birla Goa Campus on Dec 18-19, 2015.
  31. Anjan Chattopadhyay attended the Spin Chemistry Meeting (SCM 2015) held at Saha Institute of Nuclear Physics, Kolkata, between 15<sup>th</sup> and 20<sup>th</sup> March 2015.
  32. Riddhish Pandharkar and Anjan Chattopadhyay, "Computational Investigations on the Charge Transfer Excited States of Some Fluorescent Push-Pull Systems" at NFCFA 2015, BITS-Pilani, K.K.Birla Goa Campus, 18-19 Dec 2015, (Won the second best poster award).
  33. Praveen Saini and Anjan Chattopadhyay, "Computational investigations on the photochemical oxaziridine conversion and thermal *E-Z* isomerization processes of *N*-methyl retinyl nitrone" at NFCFA 2015, BITS-Pilani, K.K.Birla Goa Campus, 18-19 Dec 2015.
  34. Praveen Saini and Anjan Chattopadhyay, "Effects of electron-donating and electron-withdrawing groups on the photochemistry of conjugated N-substituted open-chain nitrones" at 17<sup>th</sup> CRSI National Symposium in Chemistry, Department of Chemistry, NCL, Pune 2015.

**C. Books Published/Edited during the year: NIL**

**D. Conferences, seminars & workshops conducted: 02**

1. "NEW FRONTIERS IN CHEMISTRY - FROM FUNDAMENTALS TO APPLICATIONS" (NFCFA2015) [December 18-19]. Funding agencies: DST, DRDO, BRNS, Royal Society of Chemistry-India, DSTE-Goa, Syngenta, TCI chemicals etc.
2. A technical session entitled "Chemistry & Industry- An Outlook" was organized on 22-08-15. The session focused on various aspects including current trends in Research & Development, safety

aspects, environment in chemical laboratories, various opportunities for chemists in a chemical industry including Job Opportunities. Speakers: 1. Dr. Kamlesh Pai Fondekar, Head, Technology and Engineering division Syngenta India Pvt. Ltd.; 2. Dr. Vidyadhar Jadav, HOD, VERGO Organics, Goa.

#### **E. Invited Talks given by BITS faculty: 04**

1. Dr. Ranjan Dey, on Lecture Series on Electrochemistry at Bundelkhand University, 15-16th May, 2015 Jhansi, U.P. to Ph.D. and M.Phil. students.
2. Dr. Mainak Banerjee, on "Dissertation for Chemistry Students" at the Department of Pharmaceutical Chemistry, D. M. College, Goa University, Goa.
3. Dr. Mainak Banerjee, on "Green and sustainable methods for the formation of pharmacologically important heterocyclic systems" at Association of Chemistry Teacher's convention at Chowgule College, Goa University, Goa, 25-02-15.
4. Dr. Halan Prakash delivered an invited lecture on "Photochemistry and Advanced Oxidation Processes: Photochemical activation of persulphates for environmental applications, in the Second National Seminar on Recent advances in Photochemistry (NSPC 2015), 3/12/2015. UGC supported conference held at St. Michael's College, Cherthala, Kerala.

#### **G. Invited talks arranged in the department: 07**

1. Lecture by Prof. J. M. Lehn, Nobel Laureate Dr. Jean-Marie LEHN, Université de Strasbourg, France (February 21, 2015).
2. Lecture by Prof. Ivo Leito, University of Tartu, Estonia, on 12<sup>th</sup> February, 2015.
3. TP Lecture by Nobel Laureate Prof. Robert Curl, Rice University (organized by students), on Feb, 5, 2015.
4. Invited Lecture by Dr. N. N Rao, Chief Scientist, Wastewater Technology Division, CSIR-National Environmental Engineering Research Institute (CSIR-NEERI), title AOPs for Environmental Applications, on 26th, Oct, 2015.
5. Dr. Rampal Pandey of H S Gour University, Sagar, M.P., India on 27th September, 2015.
6. Prof Jean-Louis Marty, University of Perpignan France, delivered a talk on Aptamers and nanomaterials.
7. Invited Prof. C. T. Aravindakumar, MG University, Kerala, to deliver lecture on "Advanced Oxidation Processes for the degradation of Environmental Pollutants" (1<sup>st</sup> April, 2015).

#### **H. Awards and recognitions won by faculty and student**

- Prof. Sunil Bhand has been appointed Senior Editor for the Journal "Science Advances Today".
- Prof Bhand is also a DBT expert committee member in the area of Biosensor for the period 2015-16.
- Dr Geetesh Mishra has been awarded Post-Doctoral Fellowship from Sabanci University Turkey to work in the interdisciplinary area of Microdevices for clinical analysis funded by TUBITAK project.
- Mr. Atul Sharma working under the supervision of Prof Sunil Bhand and co-Supervised by Prof J-L Marty from University of Perpignan France completed successfully 1 year Erasmus Mundus doctoral fellowship tenure at France.
- Mr. Uday Kumar Padidela, under supervision of Dr. R. N. Behera, has been awarded second prize at the One Day State Level Seminar on Advances in Colloid Chemistry for a poster organised by Department of Chemistry, Parvatibai Chowgule College of Arts and Science, Margao, Goa on 14th February 2015.
- Prof Sunil Bhand invited as expert committee member (Biosensors) for assessment of promotion of BARC Scientists 2015.
- Prof Bhand acted as reviewer for IEEE Sensors, Biosensors and Bioelectronics, Analytica Chimica Acta, J. Agri Food and Chemistry, Talanta etc.
- Dr. Halan Prakash invited as member of the RSC Advances reviewer's panel, RSC, UK.
- Dr.. Halan Prakash as reviewer for Chemical Engineering journal, New Journal of Chemistry, Journal of Separation Science, and Water and desalination.

- Dr. Subramanian Gokulakrishnan has been awarded Dr. Kothari Postdoctoral Fellowship from UGC, India to work in the area of Advanced Oxidation Process at the Department of Chemical Engineering, Indian Institute of Science, Bangalore, with Professor Girdhara Madras.
- Dr. Halan Prakash acted as external examiner to review the Ph.D thesis, and conduct Ph.D viva voce examination, submitted to Anna University, Chennai, India.
- Dr. Narendra Nath Ghosh received Newton Research Collaboration Programme award by The Royal Academy Of Engineering (UK) 2015. Collaboration with Prof G F Fernando, University of Birmingham, UK.
- Dr Narendra Nath Ghosh has received Outstanding Reviewer Status: Awarded by Materials Chemistry and Physics, An International, Interdisciplinary Journal on Science, Characterisation and Processing of Advanced Materials, publish by Elsevier.
- Dr Narendra Nath Ghosh has received Top Cited Author for 2010 : By Powder Technology (Impact Factor: 2.349) for the paper "P P Sarangi, B Naik, S R Vadera, M K .Patra, C Prakash and N N Ghosh\*, Synthesis and Characterization of Pure Single phase Ni-Zn Ferrite Nanopowders By Oxalate Based Precursor Method, Powder Technology 203, 348-353 (2010)".
- Dr. Narendra Nath Ghosh acted as external examiner to review a Ph.D thesis submitted to University of Madras, India.
- Dr Narendra Nath Ghosh has been appointed as Editorials board member of Science Letters Journal.
- Dr Narendra Nath Ghosh acted as reviewer for the international journals: Chemical Engineering Journal, Journal of the American Ceramic Society, Materials Chemistry and Physics, Physical Chemistry Chemical Physics, Catalysis Communications, Colloids and Surfaces A: Physicochemical and Engineering Aspects, Surface and Coatings Technology, Chemical Engineering Science, Journal of Hazardous Materials etc.
- Dr. Narendra Nath Ghosh acted as external examiner to review a MRes (Master of Research) thesis submitted to University of Birmingham, UK.
- Dr. Ranjan Dey reviewed papers for Journal of Chemical Thermodynamics, Journal of Molecular Liquids, Journal of Solution Chemistry, Journal of Indian Chemical Society.
- Dr. Mainak Banerjee has been recently selected as a Member of Royal Society of Chemistry (MRSC).
- Dr. Mainak Banerjee has been introduced in the League of Extraordinary Chemists by TCI chemicals in their e-News Letter (Volume 13).
- Mr. Zigmee T. Bhutia has received DST-Inspire Fellowship for pursuing PhD.
- Dr. Amrita Chatterjee has been recently selected as a Member of Royal Society of Chemistry (MRSC).
- Dr. Amrita Chatterjee reviewed several papers of Royal Society of Chemistry such as Chem. Comm., RSC Adv., Anal. Methods etc., of Elsevier Talanta, Sensors and Actuators B, of Wiley Interscience journal Luminescence.
- Dr. Venkatesan Thimmakondur had been awarded "Certificate of Reviewing" in May 2015 by the Editors of Chemical Physics in recognition of the review made for the journal.
- Mr. Riddhish Pandharkar, under supervision of Dr. Anjan Chattopadhyay has been awarded the second prize for a poster at NFCFA 2015, BITS-Pilani, K.K. Birla Goa Campus 18-19 Dec 2015.

#### **I. Faculty Development, International Collaboration & Industry Immersion**

- Dr. Anjan Chattopadhyay visited (May-July) the Institute of Physical Chemistry, Theoretical Chemistry group, University of Heidelberg, Germany for some collaborative research work with Prof. Dr. Horst Koppel under the University Immersion Program of BITS-Pilani.
- Dr. Halan Prakash visited NIIST, Trivandrum (June-July, 2015) under the Industry Immersion Program of BITS-Pilani.
- Dr. Raghunath Behera and Dr. Narendra Nath Ghosh visited University of Tartu, Estonia as a part of the invited delegates (15<sup>th</sup> -19<sup>th</sup> November 2015) to discuss about the future collaboration and to strengthen the ongoing EACH program.
- Dr. Narendra Nath Ghosh and Dr. Halan Prakash have been offered to visit University of Tartu, Estonia, in the year 2016, for teaching assignments under the EACH program.

- Dr. Narendra Nath Ghosh visited University of Leeds, School of Biomedical Science UK, 12<sup>th</sup> October 2015 to 28<sup>th</sup> October 2015: Invited by Professor Paul Millner for collaborative research related to DST-UKIERI project. Visit was sponsored by: DST-UKIERI project grant.
- Dr. Narendra Nath Ghosh visited University of Leeds, School of Biomedical Science UK, 09 March to 19<sup>th</sup> March 2015: Invited by Professor Paul Millner for collaborative research related to DST-UKIERI project. Visit was sponsored by: DST-UKIERI project grant.
- Dr Gerard F Fernando, Professor University of Birmingham, UK visited department of Chemistry at BITS Pilani KK Birla Goa Campus during 7<sup>th</sup> December 2015- 14<sup>th</sup> December 2015. Dr. Narendra Nath Ghosh invited him as a collaborator in the Newton Fund Research Award project and hosted him.
- Department has been involved as a part of the MoU's signed with the University of Limoges (France) and University of Perpignan (France). Department has also been involved in the initiation of MoU signed with University of Tartu, Estonia.

**J. Significant new equipments/experimental facility added during the year**

1. Atomic Force Microscope (Model: NTEGRA prima, NT-MDT Ireland) procured with support under DST-FIST to the Department of Chemistry BITS Pilani KK Birla Goa Campus (50:50) has been installed successfully. The equipment has capability for both solid samples and liquid cell.
2. Also, the following softwares have been procured with support under DST-FIST to the department: Sigmaplot 13, ChemBioOffice Ultra 14, Wien2k, Molpro, Gaussian 09 & Gaussview.
3. IBM Systems X3500 M4 Server with Single Intel Xeon E5 2620v2 Six (Hexa Core) Core 2.10 GHz Processor.
4. Electro chemical work station (Model: IVIUMSTAT, Ivium Technologies - Netherlands).
5. UV VIS NIR Spectrophotometers (Model: UV 770 & UV 730, Jasco Japan).
6. HPLC, Agilent Singapore (with Biology dept.), To be installed.
7. Susceptibility Balance, MSB-Auto, SHERWOOD SCIENTIFIC LTD, UK (order placed).
8. RO water system, Sartorius.
9. Rotary Evaporator, Heidolph Instruments, Germany.

**K. Departmental association/club activities: Department seminars delivered by students and faculty :**

**Talks given by the Research Scholars**

- Mr. Gokulakrishnan Subramanian, Research Scholar, Title: Activation of persulphate for water remediation.
- Mr. Shankar Balu Dalavi, Research Scholar, Title: An introduction to nanoscience and nanotechnology.
- Mr. Dayananda D, Research Scholar, Title : Chemistry of fluoride and its health effects.
- Mr. Uday Kumar Padidela, Research Scholar, Title : Molecular Dynamics Simulation of Colloids.
- Mr. Dipratn G. Khandare, Research Scholar, Title : Aggregation induced emission base chemodosimeters for the selective detection of Ascorbate and Pb<sup>2+</sup> ions.
- Ms. Akanksha Saini, Research Scholar, Title : Acoustical, thermophysical and excess properties of binary and multicomponent higher order liquid mixtures.
- Mr. Praveen Saini, Research Scholar, Title: Alkaloids From *Tabernaemontana coronaria*.
- Ms. Aruna Chandra Singh, Research Scholar, Title : Migraine: Epidemiology and Treatment.
- Ms. Pragnya P Mishra, Research Scholar, Title : Fine particle magnetism in nano materials .
- Mr. Zigme Thupden Bhutia, Research Scholar, Title : Catalyst-free reactions in/on-Water Name:
- Mr. Srimanta Halder, Research Scholar, Title : Effect of porphyrinic meso- substituents on photovoltaic performance".

- Mr. Arun Prusty, Research Scholar, Title : Scanning Tunneling Microscopy Principle
- Mr. Vikash Kumar, Research Scholar, Title : RESEALED ERYTHROCYTES: A PROMISING DRUG CARRIER.
- Ms. Priyadarshini Parakh, Research Scholar, Title : Visible light water disinfection using [Ru(bpy)<sub>2</sub>(phenanthroline)](PF<sub>6</sub>)<sub>2</sub>·2H<sub>2</sub>O and [Ru(phenanthroline)<sub>3</sub>]Cl<sub>2</sub>·2H<sub>2</sub>O complexes and their effective adsorption onto activated carbon.

### B2.10.2 Department: Chemical Engineering

Number of faculty members (as on 31 December 2015): 14

<b>Senior Professors, Professors</b>	03
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	05
<b>Lecturers</b>	04
<b>Non-tenure track Adjunct Professor Honorary Visiting Professor</b>	01 01

**Head of the Department: Prof. Saibal Ganguly**

**Contact details (email):** saibalganguly@goa.bits-pilani.ac.in

**Number of PhD Scholars:** 06 (full time), 02 (part time)

**Number of Project Fellows :** 01

**No. of Post Doctoral Scientists :** 00

**Ph.D. Thesis awarded during the year:** 00

#### F. Sponsored Research activities:

##### (i) Ongoing projects: 4

Name of the Investigator	Title of the project and duration	Amount sanctioned (Lakhs)	Funding Agency
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)	132.97	Centre for High Technology (CHT)
Saroj Sundar Baral, Co-PIs: Vaibhav Gaud (IIT Guwahati), P. V. Rao (NIT Warangal)	Development of efficient bioleaching process for the metal recovery from spent catalyst (3 years)	26.56	Department of Biotechnology
Asima Shaukat	Rheological dynamics of polymer – layered silicate/ graphene nano-composites (3 years)	35 (7 lakhs per year)	INSA INSPIRE, DST
Jegatha Nambi Krishnan	Ion selective sensor for heavy metal ion detection in water medium	15 (5 years)	BITS Pilani (OPERA Award)

##### (ii) Projects sanctioned during the year: 01

Name of the Investigator	Title of the project and duration	Amount sanctioned (Rs.)	Funding Agency
Srinivas Krishnaswamy	Experimental and Simulation Studies on Coke Mitigation in Petroleum Refinery Systems, 3 years .	132.97 lakh	Centre for High Technology (CHT)

(iii) Projects approved during the year (new): 1 additional competitive grant

(iv) Projects completed this year: 01

Name of the Investigator	Title of the project and duration	Amount sanctioned (Rs.)	Funding Agency
Srinivas Krishnaswamy K.N. Ponnani (Co-PI)	High - efficiency energy conversion in steam boilers using unmixed combustion	31.05 (Thermax) (DST) and 4.00 (Thermax)	DST / Thermax Ltd. Pune

**B. Publications: 14**

1. Manjuri K. Koley , Amrita Chatterjee, Anjan Chattopadhyay, Periakaruppan T. Manoharan , and Aditya P. Koley "Spectroscopic studies for the changes of a Cr(II) compound in solution triggered by the deprotonation of an aqua ligand", Journal of Coordination Chemistry, Taylor & Francis, Vol. 68, No. 12, 2065–2095, (2015)
2. S. S. Baral, Kaustubh Singh, Prabudh Sharma, "The potential of sustainable algal bio-fuel production using CO<sub>2</sub> from thermal power plant in India", Renewable and Sustainable Energy Reviews, 49, 1061–1074 (2015)
3. S. Bhagavathula, S. R. Ramanan, S. K. Kim and Jegatha Nambi Krishnan, "Fabrication of Electroless Plated Nano Porous Gold Film for Heavy Metal Ion Detection in Sensor Applications", Advanced Materials, Tech Connect Briefs, 1, 277-278 (2015)
4. PS Dash, SK Sriramoju, K Kargupta, PK Banerjee, S. Ganguly, "Characterization of chemically beneficiated Indian Coals" International Journal of Coal Preparation and Utilization, Taylor & Francis (online 21/2/2015)
5. Khuram Maqsood, Azmi B.M. Shariff, Saibal Ganguly, "Synthesis of Energy Efficient Cryogenic Distillation Networks for Maximum Methane Recovery from Natural Gas with Carbon Dioxide and Heavy Hydrocarbons" Journal of Applied Sciences, 15, 3, 492-499 (2015)
6. Mousumi Mitra, Chiranjit Kulsri, Krishanu Chatterjee, Kajari Kargupta, Saibal Ganguly, Dipali Banerjee, Shyamaprosad Goswami, "Reduced graphene oxide-polyaniline composites—synthesis, characterization and optimization for thermoelectric applications", RSC Advances, Royal Society of Chemistry, 39, 5, 31039-31048, 2015
7. Shubhanwita Saha, Saibal Ganguly, Dipali Banerjee and Kajari Kargupta, "Novel bimetallic graphene-cobalt-nickel (G-Co-Ni) nano-ensemble electro-catalyst for enhanced borohydride oxidation", International Journal of Hydrogen Energy, 40, 4, 1760-1773, 2015
8. A. Shaikat, A Sharma, YM Joshi, "Dynamics of Soft Glassy Materials under Tensile and Squeeze Flow Fields", Nanoscale and Microscale Phenomena, 261-305 (2015)
9. V. Dhanya Ram, C. Rajapandiyam and M. Chidambaram, "Steady State Gains Identification and Control of Multivariable Unstable Systems", Chemical Engineering Communication, 202:151–162 (2015)
10. V. Dhanya Ram and M.Chidambaram, "On-line Controller Tuning for Critically Damped SOPTD Systems", Chemical Engineering Communication, 202:1, 48-58 (2015)
11. V. Dhanya Ram and M.Chidambaram, "Simple method of designing centralized PI controllers for multivariable systems based on SSGM", ISA Transactions, 56, 252-260 (2015)
12. V. Dhanya Ram and M. Chidambaram, "Closed loop Identification of Two Input Two Output Critically Damped Second Order Systems with Delay", Indian Chemical Engineer, 1-22 (on-line 15/8/2015)
13. V. Dhanya Ram and M.Chidambaram, "Identification of Centralised Controlled Multivariable Systems", Indian Chemical Engineer, 1-15 (on-line 02/07/2015)
14. Rajagopal Vellingiri, Dmitri Tseluiko and Serafim Kalliadasis, "Absolute and convective instabilities in counter-current gas-liquid film flows", Journal of Fluid Mechanics, 763, 166-201, (2015).

**Patents: 00**

**C. Conferences attended/papers presented: 12**

- 1 H.M. Mouna, Gurav Parag, S.S. Baral, "Bioleaching of Nickel from spent Fluid Catalytic Cracking catalyst by *Aspergillus Niger*", SCHEMCON 2015, MIT Pune India, 12 - 13<sup>th</sup> Sep. 2015

- 2 Suprabhat Bhagavathula, Joshi Manasi Satchit, Sutapa Roy Ramanan and Jegatha Nambi Krishnan, "Fabrication and characterization of Nanoporous Gold film Electrode", International Conference on New Frontiers in Chemical, Energy and Environmental Engineering (INCEEE-2015), NIT Warangal, India
- 3 S. Bhagavathula, S. R. Ramanan, S. K. Kim and J. N. Krishnan, "Fabrication of Electroless Plated Nano Porous Gold Film for Heavy Metal Ion Detection in Sensor Applications", Tech Connect World Innovation Conference and Expo (NanoTech-2015), Gaylord National Resort and Convention Center, National Harbor, Washington, D. C., U. S. A., 2015
- 4 Potti Sanjay Sambhu, Jayant Singh Sidhu, Srinivas Krishnaswamy, K N Ponnani and Jegatha Nambi Krishnan, "Fluidized Bed Design in Electronic Grade Silicon Manufacture", International Conference on New Frontiers in Chemical, Energy and Environmental Engineering (INCEEE-2015), NIT Warangal, India.
- 5 Ravi Teja, Sampatrao Manjare, Debopama Debnath and Arnika Jain, "Modeling and Simulation of PBI based High Temperature Proton Exchange Membrane Fuel Cell", 5<sup>th</sup> International Conference on Advanced in Energy Research, IIT Bombay Mumbai, 15<sup>th</sup> -17<sup>th</sup> December 2015.
- 6 Shashwat Bansal and Sampatrao D Manjare, "Theoretical Investigation on the performance of Multicomponent Distillation Column for the Separation of Hydrocarbon Mixture using Inside Out Approach", published in the proceedings of *68th Annual Session of Indian Institute of Chemical Engineers, "CHEMCON 2015"* held at IIT Guwahati, December 27-30, 2015
- 7 Probal Guha, Tanmay Netke, Sampatrao D. Manjare, "Mathematical Modeling of Bitumen and Oil Shale Extraction Using Supercritical Fluid" published in the proceedings of International Conference on Advances in Chemical Engineering held at NIT Suratkal, December 20-22, 2015
- 8 Vaishnavi Unde and Srikanth Mutnuri, "Indigo production in a fed batch bioreactor using aqueous-solvent two phase system" ICEBB-2015 - 17<sup>th</sup> International conference on emerging Biosensors and Biotechnology organized by WASET-World Association of Science, Engineering and Technology at Deira, Dubai, UAE 24-25<sup>th</sup> November 2015.
- 9 Amol Deshpande, Srinivas Krishnaswamy, Krishnaswamy Ponnani, "Experimental studies on unmixed combustion: packed bed reactor technology for heat transfer applications", AIChE Annual Meeting 2015 Proceedings at Salt Lake City, Utah, USA, November 8 – 13, 2015.
- 10 Manjuri K. Koley, Omprakash Chouhan, Sumit Biswas, Aditya P. Koley "DNA binding studies of some monomeric mixed ligand Cu(II) complexes containing N<sub>2</sub>S(thiolate)Cu core and heterocyclic aromatic base adducts" Nascent Developments in Chemical Sciences: Opportunities for Academia –Industry Collaboration (NDCS-2015) at BITS Pilani Oct 16-18, 2015.
- 11 Asima Shaukat, Johan Mattsson, Daniel Read, Peter Olmsted, "Rheological Dynamics of entangled multiple-inverted cis-polyisoprene solution under steady shear", Soft Matter Young Investigators Meet (SMYIM 2015) at Pondicherry, Dec 17 - 19 2015.
- 12 Devdutt Sharma and Asima Shaukat, "Rheological behavior of polymer–clay nanocomposites" National Conference on New Frontiers in Chemistry - From Fundamentals to Applications (NFCFA2015) at BITS Pilani, K K Birla Goa Campus, held on 18-19 December, 2015.

**D. Books Published/Edited during the year: None**

**E. Conferences, seminars & workshops conducted: 01**

COMSOL Multiphysics 5.1 Workshop, 14<sup>th</sup> Aug, 2015 at Department of Chemical Engineering BITS Pilani Goa Campus

**F. Invited Talks given by BITS faculty: None**

**G. Invited talks arranged in the department: 03**

1. "Innovations in Chemical Industries", by Professor Man Mohan Sharma, Former director ICT Mumbai, on 1<sup>st</sup> October 2015.
2. "Fluid Flow and Particle Transport in Evaporating Droplets", by Professor Anugrah Singh, Department of Chemical Engineering IIT Guwahati, on 4<sup>th</sup> April 2015.
3. "High pressure technology and experimentation: Introduction and Phase Behaviour in Systems Containing supercritical CO<sub>2</sub>", by Dr. Philip Jeager, Hamburg University of Technology, on 21<sup>st</sup> December 2015.

**H. Awards and recognitions won by faculty and student**

1. Mr. Amol Deshpande became **Senior Member** of **AIChE** (Membership no : 9900944133)

- Ms. Mouna; IChE Awards for the Year 2015 - Late Lakshmi Nandakumar Award of the Institute for best presentation in Schemcon 2015 by a Lady Student

**I. Faculty Development, International Collaboration & Industry Immersion**

- Participant in the TLC workshop at BITS Pilani KK Birla Goa campus conducted by QAA team of Mission 2015 team of BITS Pilani in July 2015.

**J. Significant new equipments/experimental facility added during the year:**

- DST-FIST laboratory developed in the department.
- Following instruments have been added: (i) Micro Carbon residue Tester, (ii) Cyclograph, (iii) High Performance Liquid Chromatography (HPLC), (iv) PILODIST vapor-liquid equilibrium rig (v) High pressure view chamber (vi) Anton Paar Rheometer (vii) Tribometer – Four ball tester (viii) Reverse Osmosis unit (ix) Plasma cleaner
- Following computational facilities has been added: (i) 3650 M4, Intel Xeon E5 (Hexa Core) IBM Server (ii) Minitab software

**K. Departmental association/club activities:**

- The Goa regional Centre of the Indian Institute of Chemical Engineers (IChE) has been restructured and established at the department of Chemical Engineering (Chairman: Prof. Saibal Ganguly, Vice Chairman: Prof. Srinivas Krishnaswamy, Honorary Regional Secretary: Dr. S. S. Baral )
- IChE Student Chapter is being formed under the Goa Regional Centre.
- Department seminars delivered by students and faculty : 07
- Mr. Amol Deshpande: Experimental studies on unmixed combustion – packed bed reactor technology for heat transfer applications
- Dr. Dhanya Ram V.: Identification and Control of Linear Multi Input Multi Output Systems
- Mr. Amol Deshpande Micro-pulsed differential reactors: a viable alternative for estimating kinetics of gas-solid reactions
- Dr. Rajagopal Vellingiri: Droplet spreading over chemically heterogeneous substrates
- Prof. Saibal Ganguly: Hybrid Cryogenic Distillation network based optimal carbon capture and purification of natural gas
- Mr. Suprabhat Bhagavathula, final year B. E (Hons.): Fabrication and characterization of electroless plated nanoporous gold film
- Mrs. Vaishnavi Unde: Indigo production in a fed batch bioreactor using aqueous-solvent two phase system.

**Other activities:**

- Curriculum review by Prof. V. G. Gaikar (ICT, Mumbai), Prof. S. Pushpavanam (IIT Madras), Mr. Arvind Kaushik (Head, Thermal Engineering Group, L&T) and Mr. P. V. Balaramakrishna (Head, Chemical Engineering Group, L&T).
- Departmental visit by University of Mauritius and Memorial University, Canada
- Department visit and interaction with faculty by Prof Ashok Bhaskarwar, Department of Chemical Engineering, IIT Delhi.
- Department visit by Dr. Philip Jeager, Hamburg University of Technology, Germany.



**B2.10. 4 Department: Computer Science & Information Systems**

Number of faculty members (as on 31 December 2015): 22

<b>Senior Professors, Professors</b>	03
<b>Associate Professors</b>	03
<b>Assistant Professors</b>	04
<b>Lecturers</b>	11
<b>Visiting Faculty</b>	01

**Head of the Department: Dr. B. M. Deshpande**

**Contact details:** *bmd@bits-goa.ac.in*

**Number of PhD Scholars:** 21

**Ph.D. Thesis Submitted during the year:** 01

**A. Sponsored Research activities:**

Total number of Sponsored Projects in the department: 06. Details are given below.

**(i) Ongoing projects:**

- a. Dr. S.K. Sahay, Neutron Stars as a Source of Potential Continuous Gravitational Wave Emitter.  
BRNS funded project - Sanctioned Amount: 17 Lakhs
- b. Addressing Challenges in Application Development for Heterogeneous Computing Platform for Speedup and Power Efficiency  
Science and Engineering Research Board (SERB), Govt of India - Sanctioned Amount: 37.55 Lakhs  
Principal Investigator: Prof. Santonu Sarkar
- c. Implementation of Wireless Sensor Network for Process Monitoring of GAIL's Pipeline  
GAIL sponsored project – Sanctioned Amount 98.78 Lakhs  
Faculty member(s) proposing research  
Principal Investigator: K. R. Anupama  
Co-investigator(s): (i) Lucy Gudino, (ii) Neena Goveas

**(ii) Projects sanctioned during the year :**

- a. A Cost-Effective Approach of Making Software Dependable  
Accenture Technology Labs - Sanctioned Amount: 16 Lakhs  
Principal Investigator: Prof. Santonu Sarkar
- b. Home automation and smart wheel chair based on Electroencephalography (EEG) signals produced in brain.  
Cognitive Science Research Initiative (CSRI) of DST - Sanctioned Amount: 39 Lakhs  
Principal Investigator: Dr. Veeky Baths  
Co-investigator(s): Prof. Bharat Deshpande.
- c. Applications of High Performance Computing to Software Engineering and Data Analytics  
Additional Competitive Research Grant - Sanctioned Amount - 14 Lakh  
Principal Investigator: Prof. Ashwin Srinivasan

**(iii) Projects completed this year:**

Design and Implementation of High Performance Energy Efficient Scheduling Algorithms for Multiprocessor / Multicore Hard Real – Time Systems

Institute Seed Grant – Sanctioned Amount 18 Lakhs

Faculty member(s) proposing research

Principal Investigator: Biju K R

Co-investigator(s): B.M. Deshpande

**B. Publications:(Journals).**

1. Abhinandan H. Patil, Neena Goveas, Krishnan Rangaraja,"Test Suite Design Methodology using Combinatorial Approach for Internet of Things Operating System" Journal of Software Engineering and Applications, DOI:10.4236/jsea.2015.87031, Vol.8 No.7.
2. Abhinandan H. Patil, Neena Goveas, Krishnan Rangarajan,"Re-architecture of Contiki and Cooja Regression Test Suites using Combinatorial Testing Approach" ACM SIGSOFT Software Engineering Notes, Volume 40 Issue 2, March 2015 Pages 1-3.
3. R.K. Roul, Ashish Nanda, Viraj Patel and S.K. Sahay,"Extreme Learning Machines in the field of Text Classification"International Journal of Computer & Information Science, IEEE (DOI: 10.1109/SNPD.2015.7176204), Proceedings SNPD, Japan, 2015.
4. Abhilash Thekkilakattil, Radu Dobrin, Sasikumar Punnekkat,"The Limited-preemptive Feasibility of Real-time Tasks on Uniprocessors", Real-Time Systems: The International Journal of Time-Critical Computing Systems ,June 2015, Volume 51, Issue 3, pp 247-273.
5. Kaalia, R., Kumar, A., Srinivasan, A. and Ghosh, I,"An Ab Initio Method for Designing Multi-Target Specific Pharmacophores using Complementary Interaction Field of Aspartic Proteases".Molecular Informatics Volume 34, Issue 6-7, pages 380–393, June 2015.
6. N Tiwari, S Sarkar, U Bellur, M Indrawan,"Classification Framework of MapReduce Scheduling Algorithms"ACM Computing Surveys Volume 47 Issue 3, April 2015 Article No. 49.
7. A Roy, S Sarkar, R Ganesan, G Goel,"Secure the Cloud: From the Perspective of a Service-Oriented Organization"ACM Computing Surveys Volume 47 Issue 3, April 2015 Article No. 41.
8. R.K.Roul and Sanjay K. Sahay,"K-Means and Wordnet based Feature selection Combines with Extreme Learning Machines for Text Classifications" ICDCIT 2016, accepted for publication in LNCS Springer.
9. R.K. Roul, Ashish Nanda, Viraj Patel and Sanjay K. Sahay,"Extreme Learning Machines in the field of Text Classification".IEEE Xplore, DOI: 10.1109/SNPD.2015.7176204, SNPD 2015; Also published in IJCIS, Vol. 16, No. 3, p. 34, 2015.
10. Tirtharaj Dash,"A study on intrusion detection using neural networks trained with evolutionary algorithms",Soft Computing, 2015; DOI 10.1007/s00500-015-1967-z; Publisher: Springer. (accepted, in press).
11. Sanjay K. Sahay and Ashu Sharma,"Grouping the executables to detect malwares with high accuracy",Accepted for publication in Elsevier Procedia CS, ICISP, 2015.
12. Ashu Sharma and Sanjay K. Sahay,"Improving the detection accuracy of unknown malware by partitioning the executables in groups",Accpeted for publication in Springer, ICACCT, 2015.
13. Aruna Govada, Bhavul Gauri and Sanjay K. Sahay,"Distributed Multi Class SVM for Large Data Sets".ACM Digital Library, PP. 54-58, IS-WCI, 2015.
14. Aruna Govada, Bhavul Gauri and Sanjay K. Sahay,"Centroid Based Binary Tree Structured SVM for Multi Classification".IEEE Xplore, DOI: 10.1109/ICACCI.2015.7275618, ICACCI, 2015.
15. Aruna Govada, Pravin Joshi, Sahil Mittal, and Sanjay K. Sahay,"Hybrid Approach for Inductive Semi Supervised Learning using Label Propagation and Support Vector Machine". Springer, LNAI, Machine Learning and Data Mining in Pattern Recognition, Vol. 9166, p. 199, ICMLDM, 2015.

**C. Conferences attended/Papers presented:**

1. Srinivasan, A. Bain, M. Vatsa, D. and Agrawal, S,"Identification of transition models of biologicals systems in the presence of transition noise".25th International Conference on Inductive Logic Programming.
2. Mohit, Y. Hassan E. Shroff, G. Agarwal, P. and Srinivasan,"A. Patterns in Multi-Sensor Data from the Industrial Internet". PReMI 2015.

3. Divyansh Khanna, Rohan Sahu, Veeky Baths and Bharat Deshpande, "Comparative Study of Classification techniques (SVM, Logistic Regression and Neural Networks) to predict the prevalence of Heart Disease" 7th International Conference on Machine Learning and Computing (ICMLC 2015), March 19-20, 2015 in Florence, Italy, pp. 414-419.
4. Aruna Govada, Pravin Joshi, Sahil Mittal, Sanjay Kumar Sahay, "Hybrid Approach for Inductive Semi Supervised Learning Using Label Propagation and Support Vector Machine". 11th International Conference, MLDM 2015 Hamburg, Germany, July 20-21, 2015. LNAI 9166: pp 199-213.
5. Aruna Govada, Bhavul Gauri, Sanjay.K.Sahay, "Distributed Multi-Class SVM for Large Data Sets". Rd ACM International Symposium on Women in Computing & Informatics, Kochi, Kerala, Aug 10-13, 2015. Pages 54-58.
6. Aruna Govada, Bhavul Gauri, Sanjay.K.Sahay, "Centroid Based Binary Tree Structured SVM for Multi Classification". 4th IEEE International Conference on Advances in Computing, Communications and Informatics, Kochi, Kerala, Aug 10-13, 2015 pp 258 - 262.
7. R.K. Roul, Ashish Nanda, Viraj Patel and S.K. Sahay, "Extreme Learning Machines in the field of Text Classification", 16th ACIS/IEEE conference on Software Engineering, Networking, Parallel Computing and Distributed Computing, pp 1-7.
8. Neethu Bal Mallya, Geeta Patil and Biju Raveendran, "Way Halted Prediction Cache: An Energy Efficient Cache Architecture for Embedded Processors" Proceedings of the 28th International Conference on VLSI design, pp 65 - 70.
9. Sreejith, V.; Suriyadeepan, R.; Anupama, K.R.; Gudino, L.J., "High Bandwidth Data Streaming in Sensor Network with Mobile Nodes" Accepted for the proceedings of IEEE- ICC 2015.
10. Sreejith, V.; Anupama, K.R.; Gudino, L.J.; Suriyadeepan, R., "A fast exploration technique in WSN for partition recovery using mobile nodes", Twenty First National Conference in Communications (NCC), pp.1-6, Feb. 27 2015-March 1 2015 doi: 10.1109/NCC.2015.7084923.
11. V. Sreejith, K. R. Anupama, Lucy J. Gudino, and R. Suriyadeepan, "Partition Discovery and Connectivity Restoration in WSN using Mobile Relays" In Proceedings of the 2015 International Conference on Distributed Computing and Networking (ICDCN '15). ACM, GOA January - 2015, Article 36, 9 pages. DOI=10.1145/2684464.2684487 (Nominated for Best paper award).
12. Rob Davis, Abhilash Thekkilakattil, Oliver Gettings, Radu Dobrin, Sasikumar Punnekkat, "Quantifying the Exact Sub-Optimality of Non-Preemptive Scheduling (Dec 2015) The 36th IEEE Real-Time Systems Symposium (RTSS'15).
13. Abhilash Thekkilakattil, Rob Davis, Radu Dobrin, Sasikumar Punnekkat, Marko Bertogna, "Multiprocessor Fixed Priority Scheduling with Limited Preemptions" (Nov 2015) Accepted for The 23rd International Conference on Real-Time Networks and Systems (RTNS'15).
14. Stephan Baumgart, Joakim Fröberg, Sasikumar Punnekkat, "Enhancing Model-Based Engineering of Product Lines by Adding Functional Safety", (Oct 2015) Accepted for International Workshop on Modelling in Automotive Software Engineering (MASE'15).
15. Ayhan Mehmed, Sasikumar Punnekkat, Wilfried Steiner, Giacomo Spampinato, Martin Lettner, "Improving Dependability of Vision-Based Advanced Driver Assistance Systems Using Navigation Data and Checkpoint Recognition", (Sep 2015) Accepted for International Conference on Computer Safety, Reliability & Security (SAFECOMP 2015).
16. Rob Davis, Oliver Gettings, Abhilash Thekkilakattil, Radu Dobrin, Sasikumar Punnekkat, "What is the Exact Speedup Factor for Fixed Priority Pre-emptive versus Fixed Priority Non-pre-emptive Scheduling?" (Jul 2015) The 6th International Real-Time Scheduling Open Problems Seminar (RTSOPS'15).
17. Omar Jaradat, Iain Bate, Sasikumar Punnekkat, "Using Sensitivity Analysis to Facilitate The Maintenance of Safety Cases", (Jun 2015) The 20th International Conference on Reliable Software Technologies (Ada-Europe-2015)- pp 162-176.
18. Wilfried Steiner, Ayhan Mehmed, Sasikumar Punnekkat, "Improving Intelligent Vehicle Dependability By Means of Infrastructure-Induced Tests", 1st Workshop on Safety and Security of Intelligent Vehicles (SSIV 2015), p 147 - 152.
19. Omar Jaradat, Iain Bate, Sasikumar Punnekkat, "Facilitating the Maintenance of Safety Cases" (Jun 2015) The 3rd International Conference on Reliability, Safety and Hazard - Advances in Reliability, Maintenance and Safety (ICRES-ARMS'15).
20. Marina Gutiérrez, Wilfried Steiner, Radu Dobrin, Sasikumar Punnekkat, "A Configuration Agent based on the Time Triggered Paradigm for Real-Time Networks"

(May 2015) -- Best Paper Award 11th IEEE World Conference on Factory Communication Systems (WFCS'15), pp 1 - 4.

21. Ramprasad Joshi and Vandana Palsane. De-skilling of hi-tech labour in India. In 36th Annual Conference of the International Working Party on Labour Market Segmentation (IWPMS), Athens, 22-24 June 2015 - "Long term trends in the world of work and effects of the economic crisis: Policy challenges and responses. Panteion University of Social and Political Sciences", Athens, 2015.
22. Ramprasad Joshi and Anshul Ravichander, "Queues with unit length times". In 3rd Meeting on Statistics. Department of Statistics, Athens University of Economics and Business, Athens, 2015.
23. Sunit Singh, Ramprasad Joshi, and Harsh Kohli, "Optimal route searching in networks with dynamic weights using flow algorithms". In Proceedings of the CICN 2015, to appear. IEEE, 2015.
24. Sreejith, V.; Anupama, K.R.; Gudino, L.J.; Suriyadeepan, R., "High bandwidth data streaming in sensor network with mobile nodes", Accepted in IEEE International conference on Control, Communication and Computing India 2015 (IEEE ICCCI 2015).

#### Posters:

1. Jyotsna A. Kulkarni, K. R. Anupama and Neena Goveas, "Efficient Wireless Network Services for Civil Structure Health Monitoring ", CoCoNet'15, Trivandrum, December 16-19, 2015.
2. Anshuli Patil, Prasad Talasila, Neena Goveas and Bharat Deshpande, "A Study of ISP Networks at Indian IXPs" COMSNETS 2015.
3. Sourabh Gawande, Prasad Talasila, Amrita Suresh, Neena Goveas and Bharat Deshpande, "Timelapse of AS-Level Topology Graphs Using BGP Advertisements", COMSNETS 2015.
4. Dhruv Shekhawat, Sukanto Guha, Prasad Talasila, Neena Goveas and Bharat Deshpande, "Illustrative Analysis of Throughput Variations for Indian Broadband Users", COMSNETS 2015.

#### D. Books Published/Edited during the year: Nil.

#### E. Conferences, seminars & workshops conducted

- 16th International Conference on Distributed Computing and Networking, organised & hosted by BITS Goa from 4 June 2015 to 6 June 2015. Source of funding: Google, Accenture, TCS, IBM & DEITY.
- ACM India Annual Event 2015 jointly organised with Goa University, ACM Goa Chapter at BITS Goa from 5th February to 7th February 2015. Source of funding: ACM India , Persistent Systems.

#### F. Invited Talks given by BITS faculty: Nil.

#### G. Invited talks arranged in the department:

- Prof. Umesh Bellur from IIT Bombay, delivered a talk on Research Problems in Virtualized Data Centers on 28/01/2015.
- "Embedded System research at Mälardalen University, Sweden" by Professor Hans Hansson, Mälardalen University, Sweden 21st October 2015.
- "Paradise Lost, Regained and Lost Again" by Professor M.V. Deshpande, formerly Head of the Department of Mathematics, IIT-Bombay on 01 October 2015.
- "Data Analytics for Personalized Services and Transforming Lives" by Dr. Manish Gupta (Vice President, Xerox Corporation) on 19th November 2015.
- "Brain Inspired Computing" by Dr. Raghav Singh from IBM Research, 5th November 2015.

#### H. Awards and recognitions won by faculty and students

- Marina Gutiérrez, Wilfried Steiner, Radu Dobrin, Sasikumar Punnekkat, "A Configuration Agent based on the Time Triggered Paradigm for Real-Time Networks" (May 2015) -- **Best Paper Award** 11th IEEE World Conference on Factory Communication Systems (WFCS'15), pp 1 - 4.
- V. Sreejith, K. R. Anupama, Lucy J. Gudino, and R. Suriyadeepan, "Partition Discovery and Connectivity Restoration in WSN using Mobile Relays" In Proceedings of the 2015 International Conference on Distributed Computing and Networking (ICDCN '15). ACM, GOA January - 2015, Article 36 , 9 pages. DOI=10.1145/2684464.2684487 (**Nominated for Best paper award**).
- Prof. Bharat Deshpande, Invited by Microsoft Research to attend Microsoft Annual Summit at Seattle, USA.

#### I. Faculty Development, International Collaboration & Industry Immersion

#### J. Significant new equipments/experimental facility added during the year:

**Research lab with the following facilities was setup:**

1. 50 state of art computers with the necessary software.
2. Cloud computing facility.
3. Monosek Network Analyser.
4. Pervasive devices for applications in wireless sensor device.
5. FPGA Kits for Hardware reconfiguration.
6. Multimedia Equipment
7. Real Time Operating Systems like VxWorks, QnX.
8. HiPC Server (For University-wide Computation Service)

IBM x3650 (Intel Xeon 5, 2GHz, 32 GB, 2-Processor, 16-core, 4TB RAID 5) Head Node with RHEL6.2 and 5 IBM x3550 (Intel Xeon 5, 2GHz, 32 GB, 2-Processor, 16-core diskless) Compute Nodes; MPI on IB backbone and ethernet connectivity. 650 MFLOPS tested, nominal 1TFLOPS.

**K. Departmental association/club activities:**

**Center of Technical Education (CTE)** which meet the demands of students to be trained in specific technologies. Around 5 courses were offered in each semester. Over 300 students registered for these courses.

**B2.10.5 Department: Economics**

Number of faculty members (as on 31 December 2015): **09**

<b>Senior Professors, Professors</b>	None
<b>Associate Professors</b>	<b>1</b>
<b>Assistant Professors</b>	<b>6</b>
<b>Lecturers</b>	<b>1</b>
<b>Visiting Faculty</b>	<b>1</b>

**Head of the Department: Dr. Aswini Kumar Mishra**

**Contact details: 0832-2580-258**

aswini@goa.bits-pilani.ac.in

**Number of PhD Scholars: 13**

**Ph.D. Thesis Submitted during the year: None**

**A. Sponsored Research activities:****(i) Ongoing projects:**

**Project Title:** Mining Closure, Economic Disruption & Local Level Sustainability: A Case Study of Goa, India

**Principal Investigator- Dr. Aswini Kumar Mishra; Co PI- Dr. Debasis Patnaik**

**Funding Agency-**ICSSR, New Delhi

**Funding Amount-** Rs.9 lakhs

**Project Duration-**2 years

**(ii) Projects completed this year**

**Project Title:** A Study on Usage and Impact of Information and Communication Technology (ICT) in Secondary Schools

**Principal Investigator: Dr. Ch V V S N V Prasad; Co-PI-Dr Debasis Patnaik**

**Funding Agency:** BITS SEED GRANT

**Funding amount:** Rupees 7.5 Lakhs

**Project Duration:** 2 years

**B.1. Publications in Journals (No.10)**

1. D Patnaik (Jan-June2015)-Understanding the Forward and Backward Linkages in Banking Sector: Application of Input-Output Method-Journal of Banking, Information, Technology and Management-Vol-12. No-1; pp-110-113- Pub in Aug 2015.
2. Mridula Goel 'Economic Integration and Factor Flow Mobility,' (Co-Authored with Ramith Padaki,), Journal of Economic Cooperation and Development (JECD) Vol.36 No.4, (ISSN 1308-7800) Scopus Listed, 2015.
3. Prasad, Ch.V.V.S.N.V., Lalitha, P., & Srikar, P. V. N. (2015): Barriers to the Use of Information and Communication Technology (ICT) in Secondary Schools: Teacher's Perspective, Journal of Management Research, Vol. 7:2, 190-208.
4. 'Budget of Change! How is it?' Mulyayan, Vol.2 Issue 8, ISSN-2347-6168, July, 2014, Kolkata.
5. 'Governance, State, Control and West Bengal', Mulyayan, Vol.2 Issue 10, ISSN-2347-6168, December 15, 2014, Kolkata.
6. 'Parent's Choice Function for Ward's School Continuation in Rural India: A Case Study in West Bengal', co-authored with Shrabani Mukherjee -Working Paper-106/June 2015 (Peer double blind reviewed), Madras School of Economics, Chennai, India.
7. Anoop S Kumar: Explaining Financial Crisis by Fractal Market Hypothesis: Evidences from Indian Equity Markets, Hyperion Journal of Econophysics and new economy (With B Kamaiah).
8. A. K. Mishra, Jigar N. Gadhia, N Kubendran and Makara Sahoo 'Trade Flows between India and other BRICS Countries: An Empirical Analysis using Gravity Model in Global Business Review (A Sage Publication) in Vol. 16(1), pp.107-122 (February 2015).
9. A. K. Mishra and Ganesh Rao 'Analysing Anti-Competitive Behaviour: The Case for Indian Telecom Industry', in *Science, Technology and Society* (A Sage Publication) in Vol. 20 (1), pp.21-43 (March 2015).
10. D Patnaik Understanding the Forward and Backward Linkages in Banking Sector: Application of Input-Output Method-Journal of Banking, Information, Technology and Management-Vol-12. No.1; pp-110-113(Aug 2015).

**B.2. Books Published/Edited/Chapters in Books during the year(No.2):**

1. 'Understanding Technical Progress in Indian Industry in an Input-Output Framework' authored by Debasis Patnaik and Dushyant Tiwari in the book titled "Indian Economy and Economic reforms in Inter-Industry Frameworks: Studies of Newly Emerging Sectoral Impacts"and edited by V V N Somayajulu, published by Himalaya Publishing house, pp-219-227.ISBN-978-93-5202-527-5.
2. A. K. Mishra 'Social Security for Elderly: Issues & Evidences', in Paltasingh, T. and R. Tyagi (eds.) **Caring for the Elderly: Social Gerontology in the Indian Context**, New Delhi: Sage Publications (2015)

**B.3. Conference Proceedings (Full-length Paper only) (No.2):**

1. International Conference on Evidence Based Management 2015 (ICEBM2015) held on 20-21 March 2015 at BITS Pilani (Pilani Campus), titled An Investigation of International and Domestic Tourist Satisfaction with Goa: Implications for Destination Marketing. (Pinky Pawaskar, co-author Dr. Mridula Goel).
2. *Income Inequality and Economic Divisions in India: Some Issues and Empirics* (A.K.Mishra & Viral M Parmar) at 34th Annual Conference of Indian Association for Research in National Income & Wealth (IARNIW) at Indira Gandhi Institute of Development Research, Mumbai, during November 20-21, 2015.

**C. Presentations in Seminar/Conference/Workshop(No.8):**

1. Debasis Patnaik delivered a three (3) hour lecture Series on Industrial economy of India to Japanese Students as Resource Person and Invited Speaker by Department of Economics, Goa University on 12 Dec2015.

2. Debasis Patnaik Presented a paper in absentia in Luneberg(Germany on Nov 25-27) in "Conference on corporate audit, accounting and governance" on Oil Price Volatility Across Selected Countries (joint paper).
3. *Income Inequality and Economic Divisions in India: Some Issues and Empirics* (A..Mishra Viral M Parmar) at 34th Annual Conference of Indian Association for Research in National Income & Wealth (IARNIW) at Indira Gandhi Institute of Development Research, Mumbai, during November 20-21, 2015.
4. International Conference on Evidence Based Management 2015 (ICEBM 2015) held on 20-21 March 2015 at BITS Pilani (Pilani Campus), titled An Investigation of International and Domestic Tourist Satisfaction with Goa: Implications for Destination Marketing. (Pinky Pawaskar, co-author Dr. Mridula Goel).
5. Annual International Research Conference at Symbiosis Institute of Management Studies (SIMS) (SIMSARC-15), held on 11th December, 2015, titled Improving the efficacy of destination marketing strategies: a structural equation model for leisure travel (Pinky Pawaskar, co-author Dr. Mridula Goel).
6. Anoop S Kumar (With B Kamaiah) Volatility spill over between asian equity markets: A wavelet approach, 21<sup>st</sup> Biannual conference of the AIEFS, University of Hyderabad, August 3-4,2015.
7. Anoop S Kumar (With Yazir P) Spot and Forward Exchange Rate in India: The Forward Rate Unbiased Hypothesis (FRUH), IPE Int'l conference on Trade and Exchange rate Policies in the context of WTO and Preferential Trading Agreements (PTAs): Challenges before Emerging economies, during September 28-29,2015.
8. Anoop S Kumar (With Yazir P) An Inquiry into the Dynamics of Inequality from the Perspective of Caste at National Seminar on Poverty, Inequality and Health in India with Special Reference to North-East India, NEHU Shillong, India, during 8-10 October, 2015.

**D. Talks/Seminar/Conference Organized by the Department(No.5):**

1. 'State Owned Enterprises & Possibilities of Collaboration with Institutes of Higher Learning' by Dr. Madhukar Gupta (Additional Secretary, Department of Public Enterprises, Ministry of Heavy Industries, Govt. of India) on December 29th 2015.
2. Guest Lecture on Nov 2<sup>nd</sup> 2015 by Prof Babu Aiholi, Faculty, Deptt of Economics, Goa University who spoke on "Technical Analysis".
3. Recruitment Talk by J –PAL on 7<sup>th</sup> Oct 2015.
4. Workshop on 'EURAXESS- Funding and Networking Opportunities in Europe' Goa, on 25th September 2015.
5. RBI 'OUTREACH PROGRAMME' on Sept 11, 2015.

**E. Significant new equipment / experimental facility added during the year:**

Subscription of new databases like EPWRDITS, INDIASTAT, CMIE, etc.

**F. Departmental association/club activities(No.2).**

1. Economics Association Organized a Teqflix event in association with Quark bringing a speaker Dr. Reetike Khara for the event on 7 Feb, 2015.
2. Union Budget Presentation by the Economics Department for the entire campus and it was successful in its first year itself. The budget presentation was given by Dr. Debdulal Thakur on 11 March, 2015.

**B2.10.6 Department: EEE and E&I****Department: Electrical, Electronics and Instrumentation Engineering**

Number of faculty members (as on 31 December 2015): 27

<b>Senior Professors, Professors</b>	04
<b>Associate Professors</b>	00
<b>Assistant Professors</b>	11
<b>Lecturers</b>	12
<b>Professor Emeritus</b>	01

**Head of the Department:** Prof M K Deshmukh**Contact details:** mkd@goa.bits-pilani.ac.in**Number of PhD Scholars:** 19(08 Lecturers +07 Full time students + 04 Part Time)**Ph.D. Thesis Submitted during the year:** 01**A. Sponsored Research activities:**

1. "Pilot Project on Implementation of Wireless Sensor Network for Process Monitoring of GAIL's Pipeline", Prof. K.R.Anupama, Principal Investigator, in collaboration with GAIL India (Ltd), Bhiwadi, Rajasthan.(February, 2015- August, 2017).
2. "FPGA Based Fuzzy Logic Pico motor Controller for Laser Beam Pointing Stability Correction", A Amalin Prince, Principal Investigator, DAE-BRNS, July 2015, project duration of two years.

**B. Publications:**

The faculty of the department published papers in international/national refereed journals during the year.

1. Manish Goswami, Piyush Joshi, D. Pal, "Design of quadrature amplitude modulation-based DC offset cancellation circuit", International Journal of Electronics Letters (ahead of print, featured in forthcoming issues) International 2015.
2. C. Balakrishna Moorthy, M.K.Deshmukh "A new approach to optimise placement of wind turbines using particle swarm optimisation" International Journal of Sustainable Energy, Vol. 34, No. 6, pp. 396-405, 2015 International 2015.
3. Mishra G. K., Bacher G., Roy U., Bhand, S, "A label free impedemetricbimmuno sensor for detection of Escherichia coliin water", Science Letters Journal, 2015.
4. Balaji Venkat, Pranav Kabra, Saieesh P, Chittaranjan Hota, Raghurama G: "Cooperative Spectrum Sensing in Cognitive Radios using Perceptron Learningfor IEEE 802.22 WRAN" Elsevier -Procedia Computer Science, Vol 54 (2015), pp.14-23 International 2015.
5. Pravin Mane, Nishil Talati, Ameya Riswadkar, Ramesh Raghu, C.K. Ramesha, "Stateful-NOR based reconfigurable architecture for logic implementation", Microelectronics Journal, Volume 46, Issue 6, pp. 551-562 International 2015 .
6. Nitin Sharma, A.S. Madhukumar, "Genetic Algorithm Aided Proportional Fair Resource Allocation in Multicast OFDM Systems", IEEE Transactions on Broadcasting, Vol. 61(1), pp: 16-29, 2015.
7. Nitin Sharma, Alagan Anpalagan, "Differential evolution aided adaptive resource allocation in OFDMA systems with proportional rate constraints", Applied Soft Computing 34, pp. 39 -50 International 2015.

**C. Conferences attended/papers presented:**

1. Prince A.A., Vineeth K. A : "Framework for Remote and Adaptive Partial Reconfiguration of SoC Based Data Acquisition Systems under Linux", 10th IEEE International Symposium on Reconfigurable Communication-centric Systems-on-Chip (ReCoSoC 2015), June 29th - July 1st 2015, Bremen, Germany .



2. Prince A.A. and Mishra S.: "Multi-Mode Electronic Stethoscope Implementation and Evaluation Using Dynamic Reconfigurable Design", 5th IEEE International Advanced Computing Conference (IACC 2015), pp. 228-232, June 12th - 13th 2015, Bangalore.
3. K. Chandram, K. Soujanya, "Detection and Quantification of Harmonic Emissions in Doubly Fed Induction Generator Using Discrete Wavelet Transform", First International Conference on Recent Developments in Control, Automation and Power Engineering, 12-13 March 2015 AMITY University, IEEE.
4. Prince A.A., Verma P.K., Jayakumar C., Raju D., "Efficient Architecture for Real Time Implementation of Hilbert Transform in FPGA", 15 IEEE International Conference on Electrical, Computer and Communication Technologies (ICECCT), pp. 1-5, March 5th -7th 2015, Coimbatore.
5. Dhongdi Sarang C; Anupama K.R.; Gudino Lucy J. : "Review of protocol stack development of Underwater Acoustic Sensor Network (UASN)", Underwater Technology (UT), 2015 IEEE, pp.1,17, 23-25 Feb. 2015; Place -NIOT, Chennai, India.
6. Dhongdi S.C., Anupama K.R.; Agrawal R.; Gudino L.J., "Simulation and test bed implementation of TDMA MAC on Underwater Acoustic Sensor Network", Communications (NCC) 2015 Twenty First National Conference, vol.no., pp.1,6, Feb. 27 -March 1 2015, Place- IIT Bombay, Mumbai, IEEE.
7. Mane P.S.; Talati N.; Riswadkar. A.; Jasani. B.; Ramesha C.K. : "Implementation of NOR Logic Based on Material Implication on CMOS FPGA Architecture", 28th International Conference on VLSI Design (VLSID), 2015, pp.523-528, 3-7 Jan. 2015.
8. Sampath M, Mane P.S, Ramesha C.K., "Hybrid CMOS-memristor based FPGA architecture", 2015 International Conference on VLSI -Systems Architecture Technology and Applications (VLSI-SATA), pp.1-6, 8-10 Jan. 2015.
9. N. Robinson and A. P. Vinod, "Bi-directional Imagined Hand Movement Classification using Low Cost EEG-based BCI", Proc. of International Conference on Systems, Man and Cybernetics, Oct. 2015, Hong Kong. IEEE.
10. Robinson, A.D. Zaidi, M. Rana, A. P. Vinod, C. Guan, N. Birbaumer, R. Sitaram, "Real-time fNIRS-BCI system for subject independent pattern classification of overtand covert movements", Real-time Functional Imaging and Neuro feedback Conference, Feb. 2015, Gainesville, Florida. IEEE.
11. C. Balakrishna Moorthy, Ankur Agarwal, M.K. Deshmukh, "Artificial Intelligence Techniques for Wind Power Prediction: A Case Study", International Conference on Soft Computing in Applied Sciences & Engineering (ICSCASE-2015) 23-24 July 2015.
12. Anupama, K.R.; Shenoy, Meetha.V.; CH.S. Sankhar Reddy., "BSwarm robot — A low cost mobile wireless sensor research platform using COTS products", International Conference on Signal Processing, Informatics, Communication and Energy Systems SPICES-EB 19-21, 2015, Calicut-India, IEEE 2015.
13. Anupama K.R.; Reddy Ch.S.S.; Shenoy Meetha.V, "FlexEye - A flexible camera mote for sensor networks", in Signal Processing and Integrated Networks", SPIN 2015, International conference on Signal Processing and Integrated Networks, 19-20 Feb-2015-Noida, India, IEEE.
14. Sreejith V.; Anupama K.R.; Gudino L.J. Suriyadeepan. R, "A fast exploration technique in WSN for partition recovery using mobile nodes", Twenty First National Conference in Communications 27th Feb – 1st March –IIT, Bombay, IEEE 2015.
15. Sreejith V, K.R Anupama, Lucy J Gudino, R Suriyadeepan, "A Fast Area Exploration in Wireless Sensor Network using Mobile Nodes", COMSNETS, International Conference on Communication Systems and Networks, 2015.

**D. Books Published/Edited during the year: book chapter published**

1. Nitin Sharma, A. Anpalagan, M. Obadiah, Modelling and Simulation of Computer Networks and Systems, Elsevier, 2015, Evolutionary Algorithms for Wireless Network Resource Allocation, pp 629- 652.

**E. Patents: 01**

1. Multi-Parameter Cross Layer Dynamic - Hierarchical Wireless Sensor Network for Monitoring of Cross Country Gas Pipelines, Process Plants and Customers. K.R. Anupama, Neena Goveas, Lucy Gudino, Barathy S. Provisional Patent Filed: AppNo. TEMP/E-1/13846/2015-MUM.

**F. Conferences, seminars & workshops conducted:**

1. Advances in Robotics, July 02<sup>nd</sup> -5<sup>th</sup> 2015, in collaboration with Robotics Society of India.
2. Workshop on "Advanced Programming Techniques in MATLAB" By Ms. Loren Shure, Ph.D., MathWorks Technical Ambassador at MathWorks, USA, (24- Jul-2015).
3. Workshop on "Modern Underwater Systems", Conducted with NIO, Goa (29<sup>th</sup> – 30<sup>th</sup> August 2015).

**G. Invited Talks given by BITS faculty:**

1. M.K. Deshmukh on "Renewable Energy System" at Rajiv Gandhi College of Engg and Research at Nagpur, (Sept 11<sup>th</sup>-12<sup>th</sup>, 2015).

**H. Invited talks arranged in the department:**

1. "Evolution and Advancement in Electrical Machines and Drives" By Prof. Dr. K. R. Rajagopal, FNAE, SMIEEE IIT, Delhi (17 Apr 2015).
2. "World in 2030 and Disruptive Potential of Solar PV and Electric Vehicles", By Dr. Kailash Shrivastava, ABB Sweden, SMIEEE, (26 Sept 2015).

**I. Awards and recognitions won by faculty and students: Nil.**

**J. Faculty Development, International Collaboration & Industry Immersion:**

1. MoU with National Institute of Wind Energy Technology (NIWE), Chennai, February 19<sup>th</sup> 2015.
2. MoU with National Institute for Oceanography, Panjim, Goa, 2015.

**K. Significant new equipments/experimental facility added during the year:**

1. National Instruments: Compact RIO Power Monitoring System: NI Programmable remote access power measurement and analysis system cRIO-9012 Real-Time PowerPC Controller for CompactRIO with accessories.
2. National Instruments: Software Defined Radio- USRP 2922 Bundle: Tunable center frequency from 400 MHz to 4.4 GHz covering cellular, GNSS, WiFi and L band radar.
3. ENA Series Network Analyzer 2-port Test Set 110 KHz to 15 GHz.

**L. Departmental association/club activities/workshop attended:**

1. Short Term Course on "Advances in VLSI Signal Processing", Indian Institute of Technology, Kharagpur, January 02<sup>nd</sup>-06<sup>th</sup>, 2015, attended by A Amalin Prince.
2. "Marine Robotics Course", conducted by CSIR-NIO, at Panjim, January 27<sup>th</sup>-31<sup>st</sup> 2015, attended by Sarang Dhongdi, Narayan. S Manjarekar.
3. One week "National workshop on Nature inspired computing and Applications", held at MNIT Jaipur, April 2<sup>nd</sup>-6<sup>th</sup> 2015, attended by Meetha .V .Shenoy.
4. INUP Hands-on Training on "MEMS Cantilever and Micro Nano Characterization Technique", Centre of Nano Science and Engineering, Indian Institute of Science, Bangalore, May 21<sup>st</sup>-29<sup>th</sup>, 2015, attended by R.Femi.

**B2.10.7 Department: Humanities and Social Sciences**

Number of faculty members (as on 31 December 2015): 17

<b>Senior Professors, Professors</b>	1
<b>Associate Professors</b>	3
<b>Assistant Professors</b>	7
<b>Lecturers</b>	2
<b>Visiting Faculty</b>	4

**Head of the Department: Meenakshi Raman****Contact details(email):** mraman@goa.bits-pilani.ac.in**Number of PhD Scholars:** 13 (lecturers 2 + Full time 5 + Part time 6)**Ph.D. Thesis Submitted during the year:** NIL**A. Sponsored Research activities:**

Total number of Sponsored Projects in the department: 02 Details are given below.

**(i) Projects Sanctioned this year : 2**

Principal Investigator : DR. R P. Pradhan

Funding Agency : ICSSR

Amount : 15 Lacs

Title : Agenda 2020: India's Maritime Infrastructure, Governance &amp; Naval Diplomacy

**(ii) Land dispossession for a golf Course in Tiracol Goa.**

PI : Solano Da Silva

CO Pls: Prof. Alito Siqueira and Prof. Peter R. deSouza.

Fundng Agency : Centre for the Study of Developing Societies (CSDS),Delhi

Amount :Rs. 85,000/-

Sanctioned in : June 2015

Duration : 3 months

**(ii) Ongoing Projects : 4**

1	Land dispossession for a golf Course In Tiracol Goa	Centre for the Study of Developing Societies (CSDS), Delhi	Solano Da Silva, Prof. Alito Siqueira and Prof. Peter R. deSouza.	Rs. 85,000/-	June - October 2015
2	"Mining Closure, Economic Disruption & Local Level Sustainability; A Case Study of Goa, India"	ICSSR	PI: Dr.Aswini Mishra, Economics, BITS Goa. Co-Pls: R P Pradhan & Debasis Pattnaik.	Rs. 9,00,000/-	Started in Oct 2014 (duration 2 years)
3	Literature as an Instrument of Social Change : A Study of Reader Response to Dalit Literature	UGC	K A Geetha	Rs. 8,26,400	Project approved in 2014 but fund yet to be released by UGC
4	Cross Cultural Communication : An empirical analysis of Cross Cultural Communication Variables in Indian Industries and Academia	Major UGC Project	Basavadatta Mitra	Rs. 6,50,000/-	2013-2015

(iii) **Projects completed this year:**(a) **Research Initiation Grant : BITS Pilani (1.85Lacs)**

Topic : Frontier as Tourist Construct in the Postmodern Novels of Ishmael Reed,

E.L. Doctorow, Cormac McCarthy, and Thomas Pynchon.” ( August 2013)

Principal Investigator : Dr. Nilak Datta

Completed and report submitted in August 2015

(b) **Consultancy Project**

Topic : Analysis of Stakeholders in Dr.Salim Ali Bird Sanctuary, Chorao, Goa

Pls: Dr.Rayson Alex and Solano Da Silva

Agency : German Development Corporation (GIZ)

Duration : 5 months (Aug 2014-Jan. 2015)

Amount : 2.6 Lacs

**B. Publications:****International Journals**

S.No.	Faculty	Title	Journal Details
1	B.Geetha (Coauthored with Sukanya Mondal).	Reconstructing Memory in Orhan Pamuk's Istanbul: Memories and the City	The Atlantic Lterary Review, Vol. 15, No. 4. April 2015
2	Bhattacharya Amitendu	“Keki N. Daruwalla and This Craft of Verse”	The IUP Journal of Eglsh Studies, March 2013 (Vol X, No. 1). Pp. 70-78. [ISBN: 9770973372008]
3	Raman, Meenakshi (Co-author with Anjani Srikanth)	Importance of employability skills in information technology muntinational companies	Asian Journal of Management Research, Volume 6 Issue 1, 2015, Pp. 277-285
4	Raman, Meenakshi	Developing a task-based approach for teaching scientific and technical writing	English. International Journal of Humanities in Technical Education. Vol. I Issue I Jan. 2015. Pp. 13-28.
5	Cheruvath, Reena and Medha Tripathi	Secondary school teachers perception towards corporal punishment: A case study in India	The Clearing House: A Journal of Educational Strategies, Issues and Ideas, Routledge Publication. Vol 88(4). Pp 127- 132
6	Cheruvath Reena	Does attending classes help foster human values in college stduents?	Active Learning in Higher Education, Sage Publication (Accepted for publication)
7	Cheruvath Reena	Engineering, Technology and Science disciplines and gender difference: A case study among Indian students	European Journal of Engineering Education, Routledge publication (Accepted)
8	Data, Nilak	Under Western Eyes: Tourist Gazes in recent Postcolonial Indian Fictions	The IACLALS Journal: Indian Association for Commonwealth Literature and Language Studies, Eds. Pp. 196-206
9	Geetha.K.A.	Not a Literature of Lament: An Analysis of Emerging Themes and Trends in Contemporary Tamil Dalit Literature	IUP Journal of English Studies, Vol X, No. 3. Sep 2015 50-58
10	Geetha.K.A. and Priyanshu Gupta	Cultural in Context: Divergences in Rural and Urban Consumers' Behavior	International Journal of Communication. Vol 25 no1-2 Jan –Dec 2015

**National Journals**

Sr. No.	Faculty	Title	Journal details
1	Bhattacharya, Amitendu	"A Little More Than Sex, Scotch and Scholarship: My Reminiscences of the Man Called Khushwant Singh"	Lokaratna: Journal of the Folklore Foundation, March 2015 (Vol. VIII).Pp.265-279. [ISSN: 2347-6427]
2	Mascarenhas, Layla	"The Portrayal of Women in The Adventures of Tintin Comic Series"	Kruti - the peer-reviewed multidisciplinary research journal with ISSN 2349-8358. vol 1(2) July 2015.Pp.37-41
3	Pradhan, R.P.	Indian Shipping Industry: Potentials & Prospects Institute Marine Engineers, Marine Engineers Review	Journal of The Institute of Marine Engineers, Vol.9, Issue 6, May 2015. P.47

**C. Books Published/Edited during the year:**

Sr. No.	Faculty	Title	Journal details
1	Raman, Meenakshi & Sangeeta Sharma	Technical Communication. Third Edition	New Delhi: OUP 0-19-945749-2
2	Raman, Meenakshi & Sangeeta Raman	Fundamentals of Technical Communication	New Delhi: OUP 0-19-945747-6

**Chapters in Books**

1. Raman Meenakshi. Using lexical Approach to Teaching Nuances of Business Meetings in ESP Classrooms. 2015. Language Teaching and Literary Studies: Approaches and Perspectives., Ed. JastiAppa Swami and others.2015. New Delhi : Prestige Books International. ISBN 978-93-82186-61-8. Pp.66-79.
2. Reena Cheruvalath. 2015. Teaching ethics to engineering students in India: Issues and challenges, in *Contemporary Ethical Issues in Engineering* (Ed.) Satya Sundar Sethy, IGI Global Publishing, USA. pp.121-13.
3. Reena Cheruvalath. 2015. Finding virtues in trash in City's Edge in *Glocal Perspectives on Eco-documentary* (Eds.) Rayson K Alex and Susan, Mac Million Publishers, UK.

**D. Conferences attended/papers presented: (India)**

1. R P Pradhan; "Land, Labour & Agrarian Productivity: India's Million Mutiny in Making", 19<sup>th</sup> Indian Political Economy Association Annual Conference, Goa University, Goa, 4-5th December 2015.
2. Upadhyay, S and Upadhyay, N. (2015). SIRPD: Spiritual Intelligence and Research Performance Dimension Framework in Higher Education. Proceedings of International Conference on 'Research and Business Sustainability' ICRBS - 2015 4th-6<sup>th</sup>December,2015, Delhi,India. Amitendu Bhattacharya The Enigma of Nirad C. Chaudhuri" at the International Conference on "Landmarks in Indian and World Literatures" organized by the Indian Society for Commonwealth Studies (ISCS) in collaboration with the Osmania University Centre for International Programmes (OUCIP, formerly the American Studies Research Centre), Hyderabad, from 26 to 28 November 2015.
3. Amitendu Bhattacharya , "A Poets' Poet: Revisiting Kabir Through the Translations by Rabindranath Tagore and Arvind Krishna Mehrotra" at the three-day International Conference on "Words Words Words: The Future of Literary Writing", organized by the Department of English Literature, The English and Foreign Languages University, Hyderabad, from 25 to 27 November 2015.

4. Rayson K Alex. Defining Ecofilm: Beyond an Anthropocentric Approach International Conference on "Media and Communication Studies". Amity University, Rajasthan 20-22 November 2015.
5. Reena Cheruvalath, Social Policy in Higher Education: Linking education and social needs International South Asian Conference on Social Policy in Higher Education: Challenges and Possibilities Center of Education, University of Delhi, 19th to 21st November 2015.
6. Reena Cheruvalath Teachers' Character Development in Higher Education settings, National Conference, IITM, August 29-30, Chennai, 2015.
7. Mascarenhas Layla. "The Role of a Teacher in Higher Education Settings" National Conference, IITM, August 29-30, Chennai, 2015.
8. Sushant Kishore "From Rajghat to India Gate: Sites of State Sovereignty and Public Dissent" Researching the Contemporary Conclusive Workshop. Center for the Study of Developing Societies (CSDS) New Delhi, 27-29 August, 2015.
9. Anoop George World and Values: Addressing De-contextualisation. International Conference at Don Bosco university, Assam, Guwahati, Jointly organised by the Hubei University China on the theme "Asian Values and Human Future", July 7-9, 2015.

#### Conferences Abroad (4)

1. **Pradhan RP**, "India's Reluctant War with Indians: Cost Analysis of Naxal Violence & Governance Dividend" 09-11 Oct. 2015, Asia Pacific Peace Research Institute (APPRA), Kathmandu, Nepal.
2. **Pradhan RP**, "Cooperating in the Seas: ASEAN Region Maritime Security, Naval Diplomacy & Game Theory", 3-4 Oct, 2015, Thammasat University, Bangkok, Thailand.
3. **Pradhan RP**, "India, Colombia and Philippines: Left Wing Terrorism Lost and Found, 26 - 29 May, 2015, Tbilisi State University, Tbilisi, Georgia, Central Asia.
4. **Raman Meenakshi** and Anjani Srikanth Koka. 18-20 September 2015. Bangkok, Thailand. The Ever-increasing Demand for Soft Skills at Workplace: A Study on IT professionals' Perspectives.
5. **Upadhyay, S.**, Upadhyay, N., and Pinto, S (2015). Spiritual Intelligence and Organisational Effectiveness Ecosystem. Proceedings of International Conference on Technology and Business ICTB - 2015 23rd -25th March, 2015, Dubai.
6. **Gnanabharathi**, The Transglobal flows and Tribal Literatures of Indian context(s), 5th Lisbon summer school for the study of culture of Lisbon Consotium, 22-27 June 2015 jointly organized by the Catholic university of Portugal and Lisbon university.

#### E. Conferences, seminars & workshops conducted : 3

##### The department organized two conferences:

Organized a 3-day conference "tiNai Ecofilm Festival and National Conference on Celebrating Landscapes and Waterscapes" 8-10 October 2015. ( Coordinators: Rayson K Alex and Reena Cheruvalath. About 75 participants and 25 papers. ICSSR 2 L sponsorship.

Organized a three-day IACLALS Annual Conference on "Space, Place, Travel, Displacement, Exile" during 12-14 February 2015. ( Organizing Secretary : Nilak Datta; Coordinators: Geetha, Amitendu, Basavadatta; 100 participants; 80 papers ; Sponsors : ICSSR, Axis bank, VMSIHE).

##### F. Invited Talks given by BITS faculty:

##### Meenakshi Raman

1. Conducted two-day workshop "Pragmatic Strategies for Professional Communication" for students and "Enhancing the Impact of Classroom Teaching" for teachers at ADAMAS UNIVERSITY, Kolkata . 3-4 October 2015.

- As a resource person, conducted two sessions on “Good English for Research Reporting” on 28 July 2015 at the UGC –Human Resource Development Centre of the Goa University.

**G. Invited talks arranged in the department: Nil.**

Speaker	Affiliation	Topic	Date/s
Prof. Nityanand Pandey	Professor and Head of Dept. of Educaiton, Assan Central University, Silchar	Employee motivation and excellence in education	October 2015
Dr. Jose Carlos Tiago de Oliveria	Department of Mathematics, University of Evora, Portugal	Tribute to Bal Chandra Luitel	April 2015
Dr. Amritjit Singh	Langston Hughes Professor of English, Ohio University, USA	The Frontier and the American Imagination: A Retrospective View	April 2015
Prof. Barbara Harriss-White	Emeritus Professor of Development Studies, University of Oxford	Globalisation, Development and the Metabolic Rift	Feb 2015
Prof. Jia Haitao	Professor, Dept of Political Science and International Relations, Jinan University, China	Sino-Indian relations: Implications for South Asia	Feb 2015
Dr. Munmun Jha	Professor, HSS, IIT Kanpur	Religious Traditions and Human Rights Gandhi, Ambedkar and Nehru in Human Rights Framework	29-30 Jan 2015
Dr. S.V.Srinivas	Professor, Azim Premji University	Culture and Rights; Studying Culture	28-29 Jan. 2015
Mr. Atul Singh	Founder and Editor-in-Chief, Fair Observer	Socratic Seminar: The moral limits of markets.	27 Jan. 2015

**H. Awards and recognitions won by faculty and students:**

- Meenakshi Raman has been appointed as a Member of the Board of Studies-English of the Goa University (letter GU/Acad-PG/01/BoS-English/4769 dated 9.3.2015) for a 3-year period. ( 9.3.2015 to 9.3.2018).
- R P Pradhan has been appointed by 2006/07-2011: Common Wealth Fellowship as the Member Expert for Economics for Common Wealth Fellowship M. Sc. & Ph. D. Programme, Ministry of Human Resource, (MHRD), Govt. of India.
- Rayson K Alex was appointed as a member of the Jury for Vatavaran, a prestigious environment film festival organized by Government of India.
- Reena Cheruvalath has been appointed as a Member of Board of Studies, Goa University for Philosophy.
- Pushkar has been listed in an article in Forbes India (Jan. 2015) as one of India’s 24 thinkers “who best explain a rapidly-changing India to the world (and the world to India)”.
- Solano Jose Da Silva has been appointed as a Member of Board of Studies, Goa University for Political Science.

Sl. No.	Speaker	Topic	Date
1	Dr. Belinda Viegas-Muller Psychiatrist and author	A reading of her book "The Cry of the Kingfisher"	6 <sup>th</sup> October 2015
2	Dr. Jose Carlos Oliveira Dept.of Mathematics, University of Evora, Portugal	A Tribute to Bal Chandra Luitel	30 <sup>th</sup> April 2015
3	Prof. Amritjit Singh Langston Hughes professor of English, Ohio University, USA.	The Frontier and the American Imagination: A Retrospective View.	16 <sup>th</sup> April 2015
3	Mr. Solano Da Silva Faculty, HSS	Planning and Land-use change in Goa	4 <sup>th</sup> April 2015
4	Mrs.Layla Mascarenhas Faculty, HSS	Discovering One’s Identity after Personal Encounters with the Divine in Three <i>Amar Chitra Katha</i> Comics and some Biblical Parallels.	19 <sup>th</sup> March 2015

Sl. No.	Speaker	Topic	Date
5	Jia Haitao, Professor of Political Science, Jinan University, China	Sino-Indian relations : Implications for South Asia.	11 Feb. 2015
6	Prof. Barbara Harriss-White	Globalisation, Development and the Metabolic Rift	28 <sup>th</sup> February 2015
7	Prof. S. V. Srinivas	Worth of a Film Star	29 <sup>th</sup> January 2015
8	Dr. Munmun Jha Prof., IIT Kanpur	Religious Traditions and Human Rights Gandhi, Ambedkar and Nehru in Human Rights Framework	29-30 Jan. 2015
9	Mr. Atul Singh Founder and Editor-in-Chief, Fair Observer	Socratic Seminar : The moral limits of markets.	27 Jan. 2015

#### I. Faculty Development, International Collaboration & Industry Immersion:

**Prof. Geetha B** visited Ivan Allen College, School of Literature, Media and Communication, Georgia Institute of Technology, Atlanta. June-July 2015 (4 weeks) under University Immersion Programme of the Institute.

**Mr. Solano Jose Da Silva** was invited to be an external expert on a project called the Language of the Becoming City initiated by the Royal Institute of Art, Stockholm. The project reflects on urban transformations across four urban spaces: Södertälje, Sweden; Goa, India; Cape Town, South Africa and Rio, Brazil. As part of fieldwork this project he visited Stockholm and Södertälje, Sweden from 27th May - 6th June 2015.

**J. Significant new equipments/experimental facility added during the year:** Nil.

**K. Departmental association/club activities:**

#### Department Seminars and Distinguished lectures

##### B2.10.8 Department: Mathematics

Number of faculty members (as on 31 December 2015): 15

Senior Professors, Professors	00
Associate Professors	02
Assistant Professors	11
Lecturers	02
Adjunct Faculty	01

**Head of the Department:** Dr Prasanna Kumar N

**Number of PhD Scholars:** 09 (4 FT+3PT+2L)

**Ph.D. Thesis Submitted during the year:** NIL

**A. Sponsored Research activities:**

**(i) Ongoing projects:**

- Project Title: Studies on neighborhood magic graphs  
Principal Investigator: Dr. T. Singh  
Sponsor: Department of Science & Technology, Govt. of India.  
Amount: Rs. 12.69360 Lakhs (2013-)
- Project Title: Establishment of Scientific computation Laboratory  
Principal coordinator: Dr. Dhanumjaya  
Sponsor: DST-FIST  
Amount: Rs.37.5 Lakhs (2014-)



(ii) **Projects sanctioned during the year: Nil**

**B. Books Published/Edited during the year:**

**Faculty Members joined: NIL**

**Invited lectures/talks delivered by faculty members:**

1. (Dr. P. Dhanumjaya) Delivered an Invited talk on *Orthogonal Cubic Spline Collocation Methods for one-dimensional Helmholtz equation with discontinuous data* in UGC Sponsored National Level Conference on Applied Mathematics: Numerical Analysis, Algebra and Computational Mathematics held at Gudleppa Hallikeri Degree College, Haveri, Karnataka State during 30-31 January 2015.
2. (Dr. P. Dhanumjaya) Delivered an Invited talk on *Orthogonal Cubic Spline Collocation Methods for one-dimensional Parabolic Interface Problems* in the International Conference on Computational Partial Differential Equations held at South Asian University, New Delhi during 28-30 December 2015.
3. (Dr. Tarkeshwar Singh) Delivered an invited talk on *d-Distance Neighborhood Magic Graphs* in the National Conference in Graph Theory and its Applications (NCRTGTA-2015) organized by Department of Mathematics, Mangalore University, Mangalore during Feb.5-6, 2015.
4. (Dr. Tarkeshwar Singh) Delivered an invited lecture on *Some Neighborhood Magic Graphs* in National Conference on Discrete Mathematics and its Applications organized by Department of Mathematics, Manonmaniam Sundarnar University, Tirunelveli, Tamil Nadu during July 15-17, 2015.
5. (Dr. Anil Kumar) Delivered a talk on *Lectures on different computational method in Advanced level workshop on "Computational Methods for Control Problems"* during March 16 to March 21, 2015 held at Department of Mathematics, IIST Trivandrum and Mar Ivanios College, Trivandrum.
6. (Dr. Anil Kumar) Delivered a talk on *Lectures on different computational method in Advanced level workshop on "Computational Methods for Control Problems"* during March 16 to March 21, 2015 held at Department of Mathematics, IIST Trivandrum and Mar Ivanios College, Trivandrum.
7. (Dr. Anil Kumar) Delivered a talk on *Numerical Methods for Solving Integral Equations* in Advanced level Workshop on Integral Equations—Solvability Analysis and Application which was held at Department of Mathematics, Jaypee University of Information Technology, Waknaghat, Solan (H.P.) during October 19 to October 25, 2015.
8. (Dr. Anil Kumar) Delivered a talk on *Mathematics using Matlab* in The training program "Making Mathematics Easy for students" organized by Department of Applied Science, National Institute of Technical Teachers' Training and Research (NITTTR), (Under Ministry of Human Resource Development, Govt. of India), Ext. center Goa during October 26 to October 30, 2015.

**B. Research Publications:**

• **Journals (International)**

1. Pradeep and S. Thangavelu, Mixed norm estimates for the Riesz transforms associated to Dunkl harmonic oscillators, *Annales Mathématiques Blaise Pascal - Cedram*, 22 no. 1 (2015), p. 89-120. doi: 10.5802/ambp.347. (Impact Factor: 0.28).
2. Pradeep and S. Thangavelu, Mixed norm estimates for the Riesz transforms on SU(2), *Publicacions Matemàtiques*, 60 (2016), 171-190. (Impact Factor: 0.91) DOI: 10.5565/PUBLMAT60116 06.
3. Pradeep and Thangavelu, Sundaram, Mixed norm estimates for the Riesz transforms on the Heisenberg group, *Monatshefte für Mathematik*, 178 (2015), no. 3, 361-388. (Impact Factor: 0.647) (<http://dx.doi.org/10.1007/s00605-015-0790-z>).
4. Alpesh M. Dhorajia, Total graph of the ring  $Z_n \times Z_m$ , *Discrete Mathematics, Algorithms and Applications*, Vol. 7, No. 1 (2015).
5. Alpesh M. Dhorajia, Equality of linear and symplectic orbit (Appendix), *Journal of Pure and Applied Algebra*, 219 (2015) 5363–5386.
6. Prasanna Kumar, On an inequality involving the complex polynomial and its derivative, *Lobachevskii Journal of Mathematics*, 36(2), 154-159, 2015.
7. P. N. Kumar, On the generalizations of polynomial inequalities in the complex domain, *Journal of Contemporary Mathematical Analysis*, 50(1), 14-21, 2015.

8. P. Dhanumjaya, Finite Element Methods for one-dimensional fourth-order semilinear partial differential equation, *International Journal of Applied and Computational Mathematics*, DOI 10.1007/s40819-015-0068-0 (Springer), 2015.
  9. Manoj Pandey, Evolution of weak discontinuities in non-ideal magnetogasdynamic equations, *International Journal of Applied and Computational Mathematics*, DOI 10.1007/s40819-015-033-y, Springer, 2015.
  10. Manoj Pandey, Lie symmetries and exact solutions of shallow water equations with variable bottom, *International Journal of Nonlinear Sciences and Numerical Simulation*, (IJNSNS), DOI 10.1515/ijnsns-2015-0093.
  11. Jessica Pereira, Singh T. and Arumugam S., A new measure for gracefulness of graphs, *Electronic Notes in Discrete Mathematics*, 48 (2015) 275-280.2.
  12. Jessica Pereira, Singh T. and Arumugam S., On  $(k, d)$ -Skolem graceful graphs, *Electronic Notes in Discrete Mathematics*, 48 (2015) 81-88.
  13. Sanjukta Krishnagopal, Sakshi Pratap, and Bijil Prakash, Image encryption and steganography using chaotic maps with a double key protection, *Advances in Intelligent Systems and Computing*, 336 (2015), pp 67-78.
  14. Amit setia, Bijil Prakash and AS Vatsala, Numerical solution of fourth order fractional integro-differential equation by using Legendre wavelets, *Neural, Parallel, and Scientific Computations* 23 (2015) 377-386.
  15. Smrutirekha Debata, Milu Acharya and G. C. Samanta, An inventory model for perishable items with quadratic trapezoidal type demand under partial backlogging, *International Journal of Industrial Engineering Computations*, 6, 185-198 (2015).
  16. Amit Setia, Vaishali Sharma, and Yucheng Liu. Numerical solution of Cauchy singular integral equation with an application to a crack problem. *Neural, Parallel, and Scientific Computations*, 23 (2015) 387-392.
  17. T. Singh, Jessica Periera and S. Arumugam, On  $(k,d)$ -Skolem graceful graphs, *Electronic Notes in Discrete Mathematics*, 48(2015), 81-88.
  18. T. Singh, Aloysius Godinho and S. Arumugam, On S-magic graphs, *Electronic Notes in Discrete Mathematics*, 48(2015), 267-273.
  19. T. Singh, Jessica Periera and S. Arumugam, A new measure for gracefulness of graphs, *Electronic Notes in Discrete Mathematics*, 48(2015), 275-280.
  20. Prabal Paul, Counting zero-free sequences, *Journal of Combinatorics and Number Theory*, Accepted for publication.
  21. C. Samanta, and B. Mishra, Anisotropic cosmological model in presence holographic dark energy and quintessence, *Iranian Journal of Science and Technology*, Accepted for publication.
  22. C. Samanta, and B. K. Bishi, Universe described by Kaluza-Klein space time with viscous modified cosmic chaplygin gas in general relativity, *Iranian Journal of Science and Technology*, Accepted for publication.
  23. G. C. Samanta, and B. K. Bishi, Geometry of the universe described by bianchi type-III space time in presence of wet dark fluid (WDF), *Iranian Journal of Science and Technology*, Accepted for publication.
- **Journals (National) : Nil**
  - **Proceedings in Conferences**
    1. Bijil Prakash, Amit Setia, "Numerical solution and error analysis of Fredholm integro-differential equations using Legendre and Block pulse functions", In proceedings of 4th Annual International Conference On Computational Mathematics, Computational Geometry & Statistics(CMCGS 2015), Singapore, 26-27 January .
    2. Kratarth Goel, Raunaq Vohra, and J.K. Sahoo, Modeling Temporal Dependencies in Data Using a DBN-LSTM, *Proceedings IEEE International Conference on Data Science and Advanced Analytics (DSAA-2015)*, IEEE Explore, 36678, 1-4, 2015 which held during October 19-21, 2015, at Paris, France.
    3. J.K. Sahoo and Mayank Goel, *Proceedings 4th International Conference on Advances in Engineering Sciences and Applied Mathematics (ICAESAM'2015)*, 5-9, 2015 which held during December 8-9, 2015, at Kualalumpur, Malaysia.

4. G. C. Samanta: Five dimensional mesonic string cosmological models, 4<sup>th</sup> Int'l Conference on Advances in Engineering Sciences & Applied Mathematics (ICAESAM'2015), Dec. 8-9, 2015, Kuala Lumpur (Malaysia).
5. Tarkeshwar Singh, Manoj Kumar Singh and Dharm Raj Singh, A hybrid heuristic algorithm for Euclidean traveling salesman problem, IEEE Proc. International Conference on Computing, Communication and Automation (ICCCA 2015) (2015), pp. 767-772.
6. S. Arumugam, T. Singh, Veeky Baths and M. Indumathi, Graph theoretic concepts in the study of biological networks Accepted in Springer (Nov. 2015).

### C. Paper presentations in International/National Conferences:

#### P. Dhanumjaya

1. UGC Sponsored National Level Conference on Applied Mathematics: Numerical Analysis, Algebra and Computational Mathematics held at Gudleppa Hallikeri Degree College, Haveri, Karnataka State during 30-31 January 2015.  
Title of the talk: Orthogonal Cubic Spline Collocation Methods for one-dimensional Helmholtz equation with discontinuous data.
2. International Conference on Computational PDE-2015 held at TIFR-CAM, Bangalore during 21-23 December 2015.  
Title of the talk: Orthogonal Cubic Spline Collocation Methods for the Helmholtz Equation with Discontinuous Coefficients.

#### Jessica Pereira

1. Jessica Pereira, Singh T., Arumugam S., On  $(k, d)$ -hooked Skolem graceful graphs, National conference on discrete mathematics and its applications, organized by department of mathematics, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India, July 15-17, 2015.

#### Bijil Prakash

1. "Numerical solution and error analysis of Fredholm integro-differential equations using Legendre and Block pulse functions", In 4th Annual International Conference On Computational Mathematics, Computational Geometry & Statistics (CMCGS 2015), held in Singapore from 26<sup>th</sup> to 27<sup>th</sup> January 2015 .

#### J. K. Sahoo

1. Presented a paper entitled Estimation of Learning Function from Sparse Data Using Optimization Technique at 4th International Conference on Advances in Engineering Sciences and Applied Mathematics (ICAESAM'2015) during December 8-9, 2015, Kuala Lumpur, Malaysia.

#### G. C. Samanta

1. International conference attended at Saha Institute of Nuclear Physics, Kolkata from 28th Jan-2015 to 30<sup>th</sup> Jan-2015 for paper presentation.  
Title of the paper: Geometry of the universe described by wet dark fluid in  $f(R, T)$  theory of gravity.
2. 4<sup>th</sup> International Conference on Advances in Engineering Sciences and Applied Mathematics (ICAESAM' 2015) attended at Kuala Lumpur (Malaysia), Dec. 8-9, 2015 for paper presentation.  
Title of the paper: Five dimensional mesonic string cosmological models.

#### Amit Setia

1. The paper entitled "Numerical solution of Cauchy singular integral equation with an application to a crack problem" is presented at the conference "The seventh international conference on Dynamic systems and applications & The fifth international conference on Neural, parallel, and scientific computations" held at Atlanta, U.S.A., MAY 27 - 30, 2015.
2. The paper entitled "Numerical solution of fourth order fractional integro-differential equation by using Legendre wavelets" is presented at the conference "The seventh international conference on Dynamic systems and applications & The fifth international conference on Neural, parallel, and scientific computations" held at Atlanta, U.S.A., MAY 27 - 30, 2015.

#### Anil Kumar

1. Participated in 8<sup>th</sup> International congress on *Industrial Congress and Applied Mathematics* (ICIAM-2015) held at China National Convention Center Beijing, China from August 10 to August 14, 2015.

**D. Workshops Attended:****P. Dhanumjaya**

1. MOOC Workshop organized by BITS-Pilani Hyderabad Campus on 10<sup>th</sup> July 2015.

**Anil Kumar**

1. Indo-European Study Group Meeting on Industrial Problems (IESGMIP-2015) held at M. S. University of Baroda, Vadodara, Gujarat during January 5 to January 9, 2015. During the meeting, worked on "*Optimal Placement of Cooling Fans in Power Transformer Radiators*".
2. Workshop on "Advanced Programming Techniques in MATLAB" held at BITS Pilani – KK Birla Goa Campus, Goa on July 24, 2015.

**Manoj Kumar Pandey**

1. Workshop on Effective Teaching & Learning, July 18-20, 2015 held at K K Birla Goa Campus.

**Himadri Mukherjee**

1. Euraxes info session 2015, workshop held at BITS-Pilani Goa Campus.
2. Number Theory and Cryptography, workshop at BITS-Pilani Goa Campus .

**Amit Setia**

1. National Workshop on "How to write Research Projects" held at NIT, Goa, on 8th July, 2015.

**E. Books Published/Edited during the year: Nil.****F. Conferences, seminars & workshops conducted in the department:**

1. Organized a workshop on Number Theory and Cryptography from December 15 to December 17, 2015.
2. Co-organized one-day University level Curriculum Review Meet with Department of Mathematics, BITS Pilani Pilani campus on 28th July, 2015. Prof. A. K. Pani, Senior Professor, Department of Mathematics, IIT Bombay was one of the experts present over here and the second expert Prof. G. Rangarajan, Professor, Department of Mathematics, IISc, Bangalore was present in Pilani. The meeting was held via telepresence and mathematics faculty from all the four campuses participated in it.
3. Co-organized a workshop on "Advanced Programming Techniques in MATLAB" on July 24, 2015 in collaboration with EEE, Mechanical and Physics. Dr. Loren Shure, Mathworks technical ambassador delivered three lectures during the event.
4. Organized in collaboration with IIT Bombay, an "Advanced Level Training Program on Differential Equations" from May 25 to June 14, 2015.

**G. Invited talks arranged in the BITS:****H. Invited talks arranged in the department:**

1. October 15, 2015, Prof. Veerappa Gowda, Dean, TIFR-Centre for Applicable Mathematics, Bangalore delivered a lecture on "Hyperbolic Conservation Laws".
2. October 12-16, 2015, Prof. Veerappa Gowda, Dean, TIFR-Centre for Applicable Mathematics, Bangalore delivered lecture Series on "Numerics for Hyperbolic Partial Differential Equations".
3. October 10, 2015, Prof. Sudhir R Ghorpade, Professor and Head, Department of Mathematics, Indian Institute of Technology, Bombay delivered a talk on "Affine Grassmann Codes: An Introduction".
4. October 10, 2015, Dr. Fernando Pinero, Postdoctoral Fellow, Department of Mathematics, Indian Institute of Technology, Bombay delivered a talk on "An Introduction to Coding Theory with Emphasis on Reed-Muller Codes".
5. August 20, 2015, Prof. G. Raghurama, Former Director, BITS-Pilani Pilani campus, conferred the department level, Ahlfors seminar award -2015 to Dr. Dhanumjaya P. and Dr. Manoj Kumar Pandey and delivered a short inspiring speech.
6. June 9, 2015, Professor Amiya Kumar Pani (FNASc, FASc), Institute Chair Professor, Department of Mathematics, IIT Bombay delivered a talk on "Scientific Computing: A New Way of Looking at Mathematics".
7. April 17, 2015, Prof. S. Arumugam, Director, National Center for Advanced Research in Discrete Mathematics, Kalasalingam University, Tamil Nadu delivered a talk on "Cellular Manufacturing Problem - A Graph Theoretic Approach".

8. February 20, 2015, Prof. Graeme Fairweather, Mathematical Reviews, American Mathematical Society, Ann Arbor, Michigan, U.S.A. delivered a talk on "Ethical and Responsible Conduct of Research".
9. February 9, 2015, Dr. Raghav Kulkarni, Postdoctoral Fellow, Center for Quantum Technology, National University of Singapore, delivered a talk on "Evasiveness and the distribution of prime numbers".
10. February 5, 2015, Prof. Venkata Sundarananda Putcha, Associate Professor, CR Rao Advanced Institute of Mathematics, Statistics and Computer Science, University of Hyderabad Campus, delivered a talk on "Discrete Linear Sylvester Repetitive Process".
11. January 17, 2015, Prof. Peter Beelen, Professor and Head, Department of Applied Mathematics and Computer Science, Technical university of Denmark, delivered a talk on "An Introduction to the Decoding of Reed-Solomon Codes".
12. January 17, 2015, Prof. Sudhir R. Ghorpade, Professor and Head, Department of Mathematics, Indian Institute of Technology Bombay, delivered a talk on "Polynomial Systems over Finite Fields and Linear Error-Correcting Codes".
13. January 5, 2015, Prof. Richard A Zalik, Professor, Department of Mathematics and Statistics, Auburn University, USA, delivered a talk on "Nonlinear Jeffcott Equations".

**I. Achievements/Awards by the Faculty members:**

1. P. Dhanumjaya won Ahlfors Seminar Award 2015, for best seminar presentation in the Mathematics Department, BITS-Pilani, K K Birla Goa Campus.
2. Manoj Kumar Pandey, Ahlfors Seminar-Award 2015, for best seminar presented at the department.
3. B. Pradeep Awarded as Young Scientist, by Dr K V Rao Scientific Society, Hyderabad for the year 2014-2015.

J. 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.

**K. Significant new equipments/experimental facility added during the year: nil**

**L. Departmental association/club activities:**

MATHLETS –Departmental students association organized Department Day on April, 12, 2015.

**M. Any other information:**

**Dr. P. Dhanumjaya and Dr. Mayank Goel** have developed digital content for a WILP course on "Essential Calculus" during the year 2015.

**B2.10.09 Department: Mechanical Engineering**

Number of faculty members (as on 31 December 2015) :

<b>Senior Professors, Professors</b>	01
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	06
<b>Lecturers</b>	04
<b>Visiting Faculty</b>	01

**Head of the Department:** Dr.Shibu Clement

**Contact details:** shibu@goa.bits-pilani.ac.in

**Number of PhD Scholars:** 10

**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: 05**

1. Experimental Investigations of Rotational Moulding Process Using Nano-Scale Fumed Silica Composites.(PI: SachinWaigaonkar).
2. Rotational Moulding of LLDPE using Nano scale Fumed Silica Composites, MHRD / UGC, INR 6 Lakhs. (PI: SachinWaigaonkar).
3. FIST Project under the thrust area of Polymer and Composite Material Processing, Machine Dynamics & Vibration Lab , DST/BITS Pilani Goa Campus, INR 80 Lakhs.
4. M. Srikanth, Shibu Clement, SachinWaigaonkar Development and Demonstration of Two centralized wastewater treatment plants Water, Water and Energy Management under center of excellence, BITS Pilani (PI: MSrikanth ).
5. Flow investigation through  $\mu$ ED-milled metallic micro channels, DST Fast Track Scheme for Young Scientist, INR 23 Lakhs. (PI: G. Karthikeyan).

**(ii) Projects sanctioned during the year: 3**

1. Computational and Experimental Investigations on Fluid Dynamics and Heat Transfer Characteristics of Two Phase Flow in Atmospheric Circulating Fluidized Bed Heat Exchanger with Novel Designs of Distributor Plate, (INR 27.66 Lakhs, DST, PI: Ranjit S Patil).
2. ROLL ON- ROLL OFF CHALLENGE OF C130J AIRCRAFT- LOCKHEAD MARTIN CO. USA (\$25000) (PI: P M Singru).
3. Effect of Novel Design of Cyclone Separator on Heat Transfer Characteristics of Pressurized Circulating Fluidized Bed Heat Exchanger, (BITS Pilani, Additional Competitive Research Grant), PI: Ranjit S Patil.

**(iii) Projects completed this year: 1**

1. Experimental Wear Analysis of an Artificial Hip Implant Materials using Advanced Tribometer Customized for Bio- Tribological Studies Co-Funded by: Aditya Birla Sci & Technology Center (ABSTC), Mumbai, DUCOM Instruments Bangalore, Department of Sci & Technology (DST), Delhi. (PI: D.M.Kulkarni / Anant Kulkarni).

**B. Publications: 16**

S.No.	Authors	Title of the Publication	Journal	Vol	Issue	Page	Month of Publication	Year of Publication
1	Singh, Gaurav and Hopkins, Jonathan B.	General selection of lattice shape in ductile-reinforced brittle structures for increased stiffness	Composite Structures		131	325-332		2015
2	GirishChandran V and SachinWaigaonkar	Rheological and Dynamic Mechanical Characteristics of Linear Low Density Polyethylene (LLDPE) –Fumed Silica Nano Composites for Rotational Molding	Polymer Composites					
3	GirishChandran V and SachinWaigaonkar	Mechanical Properties and Creep Behavior of Rotationally Moldable Linear Low Density Polyethylene- Fumed Silica	Polymer Composites					
4	Chaudhari, V. V., Kulkarni, D. M.	Influence of Loading Rate on Fracture Behaviour of Extra Deep Drawn Steel Sheets	Fatigue and Fracture of Engineering Materials and Structures, 38,			851- 859		2015
5	Raghavendra D. Naik&Pravin M. Singru	Stability of a Nonlinear Quarter-Car System with Multiple time-Delays”	International Journal of Acoustics and Vibration	20	2	90-94		2015
6	V Vijayaraghavan, A. Garg, C.H Wong, K. Tai, Pravin M. Singru”	Investigation of Mechanical Strength of 2-D Nanoscale Structures using a Molecular dynamics based computational intelligence approach	International Journal of Modern Physics Letters B. 29, 1450242 (2015) [18 pages] DOI: 10.1142/S0217979214502427					
7	Vijayaraghavan, V., Garg, A., Wong, C.H., Tai, K., Singru, M. Pravin, Gao L and Sangwan S. K	A Molecular Dynamics Based Artificial Intelligence Approach for Characterizing Thermal Transport in Nanoscale Material	ThermochimicaActa.	594		39-49		
8	A. Garg , V. Vijayaraghavan ,Jasmine Siu Lee Lam , Pravin M Singru, Liang Gao	“A Molecular Simulation Based Computational Intelligence Study of a 2 Nanomachining Process with Implications on its Environmental 3 Performance	Swarm and Evolutionary Computation. ( <a href="http://www.sciencedirect.com/science/article/pii/S2210650215000115">http://www.sciencedirect.com/science/article/pii/S2210650215000115</a> )	21		54–63	April	2015
9	NikileshKrishnakumar, Vishal Jain , Pravin M. Singru	“Development of predictive model for vibro-acoustic condition monitoring of lathe	Journal of Vibroengineering, paper no 15679					
10	AkhiGarg, V Vijayaraghavan, Kang Tai, Pravin M Singru, Vishal jain, Nikilesh Kumar	Model Development based on Evolutionary framework for condition monitoring of a lathe machine	Measurement (accepted on April 3, 2015)					
11	V. Vijayaraghavan, A. Garg, P.M	“Formulation of Energy Consumption model for Manufacturing by	Measurement. (accepted on June 17, 2015)					

S.No.	Authors	Title of the Publication	Journal	Vol	Issue	Page	Month of Publication	Year of Publication
	Singru and L. Gao	Combined Evolutionary computing Approach						
12	MeghanathPrabhu, SachinWaigaonkar, Regina Dube	Anaerobic co-digestion of food waste and septage – A waste to energy project in	Carbon – Science and Technology					
13	A Garg, V Vijayaraghavan, C H Wong, K Tai, K Sumithra, K Sumithra, Pravin M. Singru, Leehter Yao	Application of artificial intelligence technique for modeling elastic properties of 2-D nanoscale material	Molecular simulation	41	14	1143-1152		2015
14	A Garg, V Vijayaraghavan, K Tai, Pravin M. Singru, L. Gao and K.S. Sangwan	An ensemble evolutionary approach in evaluation of surface finish reduction of vibratory finishing process	Engineering Computations	32	5	1214 - 1229		2015
15	Kiran Mali and PravinSingru	Determination of modal constant for fundamental frequency of perforated plate by Rayleigh's method using experimental values of natural frequency	International Journal of Acoustics and Vibration	20	3	177-184		2015
16	PL.Ramkumar, AnuraagRamesh, ParamPrabhuAlvenkarc, NekiPateld	Prediction of heating cycle time in Rotational Moulding	Materials Today: Proceedings	2		3212 – 3219		2015

**C. Conferences attended/papers presented:16**

SI. No.	Authors	Title of Paper	Conference Name	Location	Date, Month and Year
1	SachinWaigaonkar and GirishChandran	Effect of Fumed Silica Nanocomposites on Linear Low Density Polyethylene (LLDPE) used for Rotational Moulding of Plastics	35th Australian Polymer Symposium	Royal Academy of Chemical Engineers, Australia	12-15 July 2015
2	Kiran C.P. and Shibu Clement	X-abilities and attributes based decision making in evaluation and selection of a turbine blade material	ICMIE 2015	Singapore	21st-23rd March, 2015
3	Gaurav Singh	Superiority of triangular lattice in ductile-reinforced brittle structures	International Conference on Fatigue, Durability and Fracture Mechanics	IISc Bengaluru	28th-30th May, 2015
4	Gaurav Singh	Underestimation of crack growth rate due to negligence of timescale effect during transient hydrogen cracking	60th Annual Congress of the Indian Society of Theoretical & Applied Mechanics	MNIT Jaipur	16th-19th December, 2015
5	Samarth Mathur, AyushRaizada, PravinSingru and RadhikaVathsan	Experimental acoustic analysis of SarasvatiVeena	17th National and 2nd International conference on Machines and Mechanisms, 2015	IIT Kanpur	16th-19th December, 2015



Sl. No.	Authors	Title of Paper	Conference Name	Location	Date, Month and Year
6	PravinSingru, AyushRaizada and Vishnuvardhan Krishnakumar	A study of various methods for system identification of continuous systems	17th National and 2nd International conference on Machines and Mechanisms, 2015	IIT Kanpur	16th-19th December, 2015
7	Vishal V. Patil, Ranjit S. Patil	Influence of Addition of Butanol in Neem Seed Oil Methyl Ester Diesel Blend In A Diesel Engine	17th ISME Conference on Advances in Mechanical Engineering, IIT Delhi, 3rd-4th October 2015.	IIT Delhi	3rd-4th October 2015.
8	R. Jain, M. Dasar, P. A. Kulkarni, R. S. Patil	Investigation on Fluid Dynamic Characteristics of Square Barrel Wall Fins on Efficiency of A Cyclone Separator	5th International Conference on Advances in Energy Research (ICAER 2015), IIT Bombay, 15th-17th December, 2015	IIT Bombay	15th-17th December, 2015
9	V. V. Patil, R. S. Patil, G. Karthikeyan	Experimental Investigations on Rubber Seed Oil Methyl Ester by Varying the Load Conditions and Compression Ratio in a Diesel Engine	5th International Conference on Advances in Energy Research (ICAER 2015), IIT Bombay, 15th-17th December, 2015	IIT Bombay	15th-17th December, 2015
10	V. V. Patil, R. S. Patil	Effects of Partial Addition of Butanol in a Rubber seed Oil Methyl Ester Diesel Blend	5th International Conference on Advances in Energy Research (ICAER 2015), IIT Bombay, 15th-17th December, 2015	IIT Bombay	15th-17th December, 2015
11	Vishal V. Patil, Ranjit S. Patil, G. Karthikeyan	Effect of Addition of Butanol in Sunflower Oil Methyl Ester Diesel Blend in a Diesel Engine	23rd National Heat and Mass Transfer Conference and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference IHMTC2015, ISRO Thiruvananthapuram, 17th-20th December, 2015.	ISRO Thiruvananthapuram	17th-20th December, 2015.
12	Ranjit S. Patil, PinakeswarMahanta, Vishnu Kumar	Experimental Investigations on Drying in Rotary Fluidized Bed With Static Geometry	23rd National Heat and Mass Transfer Conference and 1st International ISHMT-ASTFE Heat and Mass Transfer Conference IHMTC2015, ISRO Thiruvananthapuram, 17th-20th December, 2015.	ISRO Thiruvananthapuram	17th-20th December, 2015.
13	PL.Ramkumar, AnuraagRameshb, ParamPrabhuAlvenkarc, NekiPateld	Prediction of heating cycle time in Rotational Moulding	4 th international confrence on material processing and characterization (ICMPC 2015), Hydrabad	Hydrabad	14-15 March, 2015
14	Kulkarni A C &Kulkarni D M	Wear Depth Distribution at Articulating Surfaces of Hip Prosthesis using Non-Contact Interferometer	International Conference on Biomechanics and Implant Design	Florida, USA	July 27-29, 2015
15	Keya Ghonasgi, KalpitBakal, , Kiran D. Mali	A Parametric Study On Free Vibration of Multi-Perforated Rectangular Plates	The 12th International Conference on Vibration Problems (ICOVP- 2015)	IIT Guwahati	14-17 December, 2015
16	Rohit S. Lad, Nishant R. Chokhani, Anish D. Shah, and Kiran D. Mali	Effect of Added Patches of Mass on Free Vibrations of A Thin Homogeneous Rectangular Plate	The 12th International Conference on Vibration Problems (ICOVP- 2015)	IIT Guwahati	14-17 December, 2015

**D. Books Published/Edited during the year: 09**

	Name of publication/Name of the book	
1	Journal of Precision Engineering	One paper reviewed by Gaurav Singh
2	ASME's International Mechanical Engineering Congress and Exposition (IMECE) held in Houston, USA, Nov-13-19,2015.	Four papers reviewed by PM singru
3	17th National and 2nd International conference on Machines and Mechanisms, 2015	Four papers reviewed by PM singru
4	Journal of Advances in Vehicle Engineering	One paper reviewed by PM singru
5	Transactions on Engineering Technologies -2014, Book published by Springer	Chapter 19 by Ranjit S Patil
6	Journal paper reviewed for International Journal of Manufacturing Technology and Management	Paper reviewed by PL.Ramkumar
7	Reviewed three chapters of book titled "Principles in computer aided engineering" from oxford university press	3 chapters reviewed by PL.Ramkumar
8	One chapter published in book titled "Advanced Polymeric Materials" from apple academic press publisher	1 Chapter published by PL. Ramkumar
9	One paper reviewed for Journal of Manufacturing Technology Management during 2015	Varinder Singh

**E. Conferences, seminars & workshops conducted:2**

S. No.	Title	Date	Description
1	Two days workshop on Recent Trends in Automobiles for Students and Faculty Members of BITS Pilani –Goa Campus	10-11th October 2015	It was comprehensive workshop where each student have got a live demonstration on engines. Recently used technologies in the automobiles by different automobiles companies like CRDI, VGT, EGR, ECUs etc have been focused. It is conducted Medhaavi Center for Automotive Research. Dr. Ranjit S Patil – Department of Mechanical engineering was a faculty co-ordinator.
2	One day Workshop on Effective Teaching and Learning for TA's and Research Scholars at BITS Pilani KK Birla Goa Campus	11/29/2015	This was organized by Teaching Learning Centre of the institute and Dr. Varinder Singh from the Department of Mechanical Engineering Department contributed to it

**F. Invited Talks given by BITS faculty: 1**

Sl. No.	Authors	Host	Title	Date
1	Ranjit S Patil	S. G. Balekundri Institute of Technology affiliated to Visvesvaraya Technological University (VTU) Belgaum	Research Methodologies in Engineering Sciences	13th July 2015

**G. Invited talks arranged in the department:05**

S.No.	Speaker	Topic	Date
1	Dr. AkshatAgarwal, Thermal Management Group, Bell Labs (Alcatel-Lucent), Dublin, Ireland	Experimental and Computational Research Prospects in Fluid Mechanics	7/8/2015
2	Dr. Xuhai Tang, Associate Professor, Department of Civil Engineering, Wuhan University, China	Three dimensional simulations for rock fragmentation and discontinuities in porous material	14/10/2015

S.No.	Speaker	Topic	Date
3	Mrs. Rohini Devi, Retired Associate Director, DRDO, Hyderabad	Composite materials and design features, processes, actual methods of manufacturing, testing, product development of polymer and high temperature composites with in situ testing. (Applications in Defence Technologies)	17/11/2015
4	Dr. L Venkatakrishnan, Head, Experimental Aerodynamics Division, National Aerospace Laboratories (NAL), Bangalore	Challenges in Computational and Experimental Aerodynamics including Studies in Intake Aerodynamics	21/11/2015
5	Dr. Deepak Kumar, Regional Applications Manager, TSI-India, Bangalore	Introduction to Hot Wire Anemometry and Laser based diagnostics tools for Experimental Fluid Mechanics	26/11/2015

#### H. Awards and recognitions won by faculty and students: 02

Sl. No.	Name	Association/Society member
1	Ranjit S Patil	INSA Visiting Scientist Fellow Award by INSA
2	Ranjit S Patil	OPERA (Outstanding Potential for Excellence in Research and Academics) Award by BITS Pilani

#### I. Faculty Development, International Collaboration & Industry Immersion: 03

1. Faculty Development: Teaching Learning Seminar (3-day) - attendance by 3 faculty - P M Singru, SachinWaigaonkar and Gaurav Singh.
2. Industry Immersion by Ranjit S Patil, worked on Energy Conservation and Co-generation in Sugar Factories at SSK Kawathemahankal Sugar Factory, Sangli, Maharashtra during summer term of 2014-2015.
3. Industry Immersion by SachinWaigaonkar, at GMI ZarahakMouldersPvt.Ltd. Goa during summer term of 2014-2015.

#### J. Significant new equipments/experimental facility added during the year:2015

Significant equipment added during this year is as follows:

S.No.	Particulars
1	Orifice meter ,Venturimeter, Nozzle meter ,Turbine flow meter and Rotameter Set-Up (S.S. Tanks) Closed circuit - Specifications enclosed. (CMP/ EFM-2)
2	Major Losses & Minor Losses set up(S.S. Tanks) Closed circuit - Specifications enclosed. (EFM-4 )
3	Bernoulli's Apparatus (S.S. Tanks) Closed circuit - Specifications enclosed. (FM-6 )
4	Reynolds's Apparatus (S.S. Tanks) Closed circuit - Specifications enclosed. (FM-7 )
5	Impact of Jet on Vanes (S.S. Tanks) Closed circuit - Specifications enclosed. (FM-9 )
6	Pitot tube setup (Air Media) - Specifications enclosed. (FM-15)
7	Free & Forced Vortex flow apparatus (S.S. Tanks) Closed circuit - Specifications enclosed. (FM-18 )
8	Say bolt Viscometer (FL-4 )
9	Redwood Viscometer (FL-5 )
10	Torsion Viscometer (FL-6 )
11	Calibration of Pressure and Vacuum gauges (Dead weight pressure gauge tester). (CMP/ IL-1 )
12	Study and calibration of LVDT transducer for displacement measurement. (IL-3 )
13	Calibration of strain gauge for strain measurement (IL-4 )
14	Desktop System - Optiplex 9020 mini Tower (DELL)

S.No.	Particulars
15	WIND TUNNEL made out of Teakwood and BWT Plywood, Test Section Size:- 600mm X 600mm X 2000mm Maximum Speed: 50 mtr/sec, Contraction ratio: 12, Honey comb L/D: 8, 22kw AC Motor with controller, Total length of the tunnel 12 mtr Approx. Power for motor is 3phase, 440 volts, 50HZ, 22KW, 65Amp MCB. With * Projection type manometer* Inclined Multitube manometer (30 tubes) * Pitot Static tube 600mm movement* Traverse backlash free - X, Y & Z 600mm movement
16	Supporting Accessories for Wind Tunnel: 1) Smoke generator with smoke rake – Qty. 01 No. 2 a) Single axis stepper motor controller with hand held command and display unit including PC side software to control the units from PC through hand held command & display unit – Qty. 01 No. b) Additional Stepper Motor Controller for different axis – Qty. 02 Nos.
17	Computerized calibration of thermocouple set up for Calibration of thermister, RTD, J and K type thermocouples. (CMP/ CIL-2)
18	Electronic Weighing Scale – Capacity 100 kg. (Platform Weighing Scale (SWIP 100), “SWISSER” brand, Accuracy - 10gm, LED display with battery backup, Plan size – 600 mm x 600 mm)
19	LPG Conversion Kit with standard Accessories
20	Air / Gas Ratio Regulator (WESMAN 7218-1)
21	Integral Orifice Plate assembly with meter run
22	Computerised Producer Gas Based S.I Engine with Provision for Changing the Compression Ratio and Spark Time(As per Attached Data Sheet)Crank Angle Resoluation 1 or 0.5 deg with Electronic Governor woodward or Equivalent
23	Electronic Governor woodward or Equivalent
24	High Pressure 2 Stage Regulator with Flame Arrestor
25	CNG Conventional Kit
26	Academic TAH Licence for MATLAB
27	DSA3217/16Px-10"H2O 16-channel Pressure module
28	PDM1500 Power Distribution module with 10 ft cable
29	155829-1 combination RS232 and external trigger cable (Required for IP address configuration)
30	155385-1 Scanivalve Software Development kit for LabView2009
31	Hand-Arm and Whole Body Exposure Measurement & Analyzer System
32	Mini station For Fuel Gas (0-10 bar)
33	Octave Analysis and Sound Level Meter module of EDM software (SLM) - (Part No. DSA-11-C08)
34	Time Waveform Recording. Record time streams up to sampling frequency of 102.4 kHz for all channels, module of EDM software (Part No. DSA-20-C08)

#### K. Departmental association/club activities:

The following students association has arranged different activities under following categories.

##### (i) MESA

- Organized a workshop on Spud Gun Making and RC Car basics in association with Quark.
- Managed Mortar Kombat (Spud Gun Challenge) and Burnout (RC Car Race) events in Quark.
- Organized the first Department Day celebration of Mechanical Engineering Department on 11th April, 2015.
- Dr. JayantShreedhar (A BITS Pilani Graduate and Global Head of Biologicals Manufacturing at CiplaBiotec) was invited as chief guest for the opening session of the Department Day.
- About 100 students from Navy Children School were invited on department day. A workshop tour and a quiz were organized for the school students.

6. Total of 5 events were organized for students on Department Day. Events included Design Challenge, Quiz, Simulation Challenge, Design and Build Open Showcase and Coding Challenge.
7. Fresher's Orientation session for 2015 batch students was organized.
8. MESA elections for the post of Coordinator and Secretary were conducted for the academic year 2015-16
9. A workshop on PTC Creo was organized for 2014 batch student.
10. A workshop on IC Engine Control systems was organized in association with SAE.

**(ii) Society of Automotive Engineering (SAE)**

1. Team Grease Monkeys – Baja of SAE BITS Goa successfully completed the manufacturing of first ever BAJA vehicle of the campus on Feb. 10, 2015.
2. Team Grease Monkeys – Baja participated in the main event of SAE BAJA India 2015 at Indore, and managed to bag an overall 2nd rank among the new participating teams.
3. Induction for the new team of BAJA was conducted. A new team comprising of 22 members was formed.
4. The newly formed team for BAJA completed their design for the 2nd BAJA Vehicle of campus by May 2015.
5. The team participated in the virtual event of SAE BAJA India 2016 held at Chandigarh. The team successfully cleared the virtual event, being eligible to participate in the final Main Event, with an overall rank of 42 among 300+ participating teams.
6. The Team is currently manufacturing their 2nd Baja Vehicle, which is expected to be completed by 20th Jan. 2016.
7. Unveiling and showcase session of first BAJA Vehicle 'The Erste' outside B-dome was organized.
8. Club inductions were held. 100 students were inducted into the club.
9. A two day Workshop on IC Engine Control System was organized under guidance of Dr. R. S Patil and in Association with MESA.
10. The student formula team has completed the Design of their 2nd Formula Vehicle and have started working on the manufacturing phase.
11. Thanks for the continued support of Department of Mechanical Engineering, Dr. Shibu Clement, Dr. R. S. Patil, Director Dr. SasikumarPunnekkat and Workshop Staff, SAE club has received approval for construction of a new lab room for the club.

**(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 20 member team of undergraduate students from discipline such as Mechanical, EEE, ENI is formed to participate in National round of Robocon held at Pune in March 2016.
3. Problem statement 2016 is "Clean Energy Recharging the World". The team has to build two robots; Eco Robot and Hybrid Robot. The team is working from August 2015 in ERC.
4. The team is making efficient use of Machining tools in workshop such as lathe, mill etc. and 3D printer for their manufacturing needs.
5. For design and 3D modeling purposes, SOLIDWORKS 14 is being used which is sponsored by DassaultSystèmes.
6. The team is making use of electro-pneumatic actuation, omni-directional wheeled motion, BLDC motors, various sensors like laser, RGB, Proximity and Image processing etc. to build and test robots.
7. The team secured 30th rank out of 90 participating teams in 2015.

**(iv) Aerodynamics Club**

1. Induction of 50 new club members through a written test and interviews.
2. Conducted various lectures on "Basics of Flight" and "RC Flying", open to all students.
3. Constructed a Y-Hexamulticopter called the "Cicada" and took various aerial shots of the campus.
4. Conducted various flying sessions to teach the art of flying to the members.

5. Organized a guest lecture on RC flying and Electronics by Mr. ParateekKhullar and Mr. AneeshLawande, who are professional RC flyers.
6. Successfully organized a three day workshop on Building RC Planes, where every team made an RC plane from scratch.
7. Presented an "All Terrain FPV Head Tracker" for 3 days at the Tech-fest held at IIT Bombay, with at least 50,000 views.

### **B2.10.10 Department: Physics**

**Number of faculty members (as on 31 December 2015): 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. Toby Joseph Contact details: toby@goa.bits-pilani.ac.in Number of PhD Scholars: 12**

**Ph.D. Thesis Submitted during the year: 1**

#### **A. Sponsored Research activities:**

**Total number of Sponsored Projects in the department: 08.** Details are given below.

##### **(i) Ongoing projects:**

1. **Project title:** Improving the energy conversion efficiency of Solar Cells using Spin Caloritronics

**Principle Investigator (PI):** E.S.Kannan

**Co-PI:** None

**Funding agency:** Department of Science and Technology

**Funding amount:** 22 Lakhs

**Project Duration** - 3 Years, Started Date: 25/11/13

2. **Project Title:** Magnetotransport in magnetic tunnel junctions

**Principal Investigator:** Dr. Ram Shanker Patel

**Co-investigator:** None

**Funding Agency:** Department of Science and Technology, Govt. of India, under Nano mission program

**Funding amount:** Rs. 52.65 Lakhs

**Project Duration:** 4 years, Started Date: 3/9/2012

3. **Project Title:** Photoluminescence Studies on Undoped and transition Metal Doped ZnO Nanoparticles

**Principal Investigator:** Teny Theresa John

**Co-investigator:** None

**Funding Agency:** Department of Science & Technology, Govt. of India

**Funding amount:** Rs. 22.34 Lakhs

**Project Duration:** 3 years+ 6 months (extended), Started Date: 9/8/12

4. **Project Title:** Aspects of some astrophysical systems like supernovae and Neutron stars in the light of new physics

**Principle Investigator (PI):** Dr. Prasanta Kumar Das

**Co-PI:** Dr. T. K. Jha and Dr. C. Sharma

**Funding agency:** DAE, BRNS, Govt. of India

**Funding amount:** Rs. 17.51 Lakhs

**Project Duration:** 3+1(extended) years, Starting date: 27<sup>th</sup> May, 2011 and date of completion is 31<sup>st</sup> October, 2015.

**5: Project Title:** Probing new physics at high energy colliders

**Principle Investigator (PI):** Prasanta Kumar Das

**Funding agency:** CSIR, Govt. of India

**Funding amount:** Rs. 13.50 Lakhs

**Project Duration:** 3 years, starting date: 15<sup>th</sup> January, 2013

**6. Project Title:** Searching for new physics beyond the standard model

**Principle Investigator (PI):** Chandradew Sharma

**Funding agency:** BITS PILANI (Research Initiation Grant)

**Funding amount:** Rs. 2 Lakhs

**7. Project Title:** SEARCHING FOR NEW PHYSICS IN B MESON DECAY

**Principle Investigator (PI):** Chandradew Sharma

**Funding agency:** BRNS, DAE, Govt.

**Funding amount:** Rs. 18.02 Lakhs

**Project Duration:** 3 years, Started Date 30-10-13

**8. Project Title:** Neutron stars as a source of potential continuous gravitational wave emitter

**Principal Investigator Co-investigator:** T. K. Jha & S. K. Sahay

**Funding Agency:** BRNS

**Funding amount:** Rs. 17 Lakhs

**Project Duration:** 3 years, Started date: 14/08/2013

**(ii) Projects sanctioned during the year**

**1. Project Title:** Observational Signals of Quantum Gravity in CMB

**Principal Investigator:** Kinjal Banerjee

**Funding Agency:** SERB

**Funding amount:** Rs. 3.24 Lakhs

**Project Duration:** 3 years

**(iii) Projects completed this year: (Nil)**

**1. Project Title:**

**Principal Investigator:**

**Co-investigator: Funding Agency:**

**Funding amount:**

**Project Duration:**

**B. Publications:****Journals / Publications (National / International)**

1. Chandradew Sharma and Kinjal Banerjee, A Study of Correlations in the Stock Market, *Physica A: Statistical Mechanics and its Applications*, 432 (2015) International. arXiv:1504.05844 [q-fin.ST].
2. J. Selvaganapathy, Prasanta Kumar Das (BITS - Goa) and Partha Konar (PRL, Ahmedabad), Search for associated production of Higgs boson with Z boson in the NCSM at linear colliders, *International Journal of Modern Physics (IJMP) A* 30:1550159, 2015.[e-Print: arXiv:1509.06478].
3. Akshat Agha, Sahil Gupta and Toby Joseph, Particle Sliding on a turntable in the presence of friction, *American Journal of Physics*, Vol. 83, No. 2, 2015.
4. Andre Dankert, M. Venkata Kamalakar, Abdul Wajid, R. S. Patel, and Saroj P. Dash, Tunnel magnetoresistance with atomically thin two-dimensional hexagonal boron nitride barriers, *Nano research (Springer)*, Vol. 8, Page 1357. Year 2015.
5. PANDA collaboration (involves P N Deepak and A V Kulkarni), Experimental access to Transition Distribution Amplitudes with the PANDA experiment at FAIR, *European Physical Journal A* 51, 107 International 2015.
6. A. Venkatesan, Raj Nanalal Patel, and E. S. Kannan, Reduced Graphene Oxide for Room Temperature Hydrogen Storage Application, *Advanced Materials Research*, 1086, 91. International 2015.
7. Satya Sainadh U, Sandhya S N, Radhika Vathsan and Andal Narayanan, Weak Value Amplification in Resonance Fluorescence, *Current Science Special Section on Quantum Measurements*, Vol 109, Issue 11, Dec 2015.

**C. Conferences attended / papers presented (National / International)**

1. Spin Hall Effect Measurement Techniques, Dhavala Suri and R. S. Patel, poster presented at Workshop on current Trends in Frustrated Magnetism, organized by ICTP Italy and JNU New Delhi at JNU New Delhi, February 2015.
2. Workshop on High Energy Physics Phenomenology(WHEPP)-XIV during the period 3rd December,2015-14th December,2015.

**D. Books Published / Edited during the year:**

1. "Introduction to Quantum Physics and Information Processing", Radhika Vathsan, Published by CRC press, July 2015.

**E. Conferences, seminars & workshops conducted**

1. The Physics department of BITS-Pilani K K Birla Goa campus organized the "XXIX SERC Main school in Theoretical High Energy Physics" during the period 20th December ,2014 – 8th January,2015- a 20 days long activity. About 40 PhD students and 12 Professors from several IIT,IISc,NIT, Research Institutes and Universities spanned all over India participated in this school . Some of the departmental PhD scholars and few undergraduate Physics students also took part in this school. Four courses (i) Flavor Physics, (ii) Wilsonian Renormalization Group and Effective Field Theory, (iii) Application of Effective Field Theory and (iv)Introduction to Anomalies in Quantum Field Theory in the area of Theoretical High Energy Physics were taught by eminent scientists. Coordinated by Drs. Prasanta Kumar Das(School Director), Gaurav Dar, C.Sharma, V. Sunil Kumar, Kinjal Banerjee, Madhu K, Tarun Kr. Jha, P.N.Deepak, and their teams made the school a success.
2. NGPE-2015 Part C (An examination in experimental skill) was conducted this year at Department of Physics, BITS – Pilani, KKB Goa Campus, Zuarinagar Goa on Sunday, June 7, 2015. Prof. Arun V Kulkarni was designated as Examination Superintendent and Prof. Rajendra from Carmel College, Nuvem Goa as Local coordinator respectively for the said examination. Out of the top twenty – six students, (among 102 National Toppers) who qualified for this examination, only twenty reported for the Part C. The National toppers are selected from about 375 students who were above cut off from among over 10000 students who have answered NGPE Parts A and B on January 25, 2015 throughout the country at 236 centers.

**F. Invited Talks given by BITS faculty:****Papers presented/ Invited Talks in conferences/ Workshop/ School:**

1. Prasanta Kumar Das was invited by the Physics department,Indian Statistical Institute,Kolkata in May, 2015 to give a talk over there based on his recent work on "Noncommutative phenomenology".
2. Tarun Kumar Jha, Invited Talk on the WORKSHOP on "Light from the dark side of the Universe", BHU, Varanasi (17 - 20 March, 2015).



3. Tarun Kumar Jha, Invited talk delivered at the Nuclear Physics Meet, Institute of Physics, Bhubaneswar; (26 - 30 June, 2015).
4. R. S. Patel [Invited Speaker] Tunneling Magnetoresistance with Thin Hexagonal Boron Nitride Barriers. A cluster of topical meetings on Current Trends in Condensed Matter Physics, National Institute of Science Education and Research (NISER), Bhubaneswar. February 19 - 22, 2015.
5. E. S. Kannan, Invited Guest Lecture, PSGR Krishnamaal College of Women, Pelamedu, Coimbatore on September 3rd, 2015. Topic: Nanotechnology - Lessons from Nature.

**G. Invited talks arranged in the department:**

1. Prof. Mukhopadhyay [Ex-Head of Solid state division BARC] visited the Institute in may 2015. He delivered Lecture on "Structural and Dynamical Transition in Condensed Matter".
2. Prof. Dharam Vir Ahluwalia [ PhD Texas A&M University] Visited the Institute on 24th November, 2015. He delivered lecture on "Neutrino oscillations and Dark matter".
3. Dr. Bipash Das Gupta, An eminent Astronomy expert and Senior Scientific officer at M.P. Birla Institute of Fundamental Research, Visited Institute on 5th October 2015. He gave a talk on the topic "Astronomy and its Applications".
4. Prof. S. N. Kaul, F. N. A., F. A. Sc., C. Phys., F. Inst. P (London), University of Hyderabad, Fascinating world of manganites, 29th September, 2015.
5. Prof. Rajendra Singh, Physics department, IIT Delhi, Fabrication and characterization of GaN based nano pillars for nanoscale device applications, 24th October, 2015.

**Physics Department Seminar Series (Faculties and Students)**

**Topic : Review of Non-commutative Standard Model theory: Construction, Impediment and Retrieval**

Speaker : Mr. J. Selvaganapathy [Research Scholar BITS-Goa]

Date : 21/11/2015

**Topic : Chasles' Theorem: An elementary geometrical proof**

Speaker : Toby Joseph [Assistant Professor, BITS-Goa]

Date : 7/11/2015

**Topic : Science behind Science Fiction**

Speaker : Dr. E. S. Kannan [Assistant Professor, BITS Goa]

Date : 14/11/2015

**H. Awards and recognitions won by faculty and students:**

**I. Faculty Development, International Collaboration & Industry Immersion:**

1. A. V. Kulkarni and P. N. Deepak are part of an international collaboration, acronymed PANDA (antiProton ANnihilations at DArmstadt), which proposes to use the new research Facility for Antiproton and Ion Research (FAIR) at GSI in Darmstadt.
2. Prof. Gil-Ho Kim, SKKU Advanced Institute of Nanotechnology - Collaborative work - MoS<sub>2</sub> based field effect transistor & Hydrogen sensors.
3. Prof. J.-C. Portal - CNRS-LNCMI, Grenoble High Magnetic Field Laboratory - Collaborative work - Ratchet based Microwave detection system.
4. Dr. Ram Shanker has collaboration with Prof. S. P. Dash, Chalmers University of Technology, Department of Microtechnology and Nanoscience, SE 41296, Goteborg, Sweden on Spin polarization in novel 2d materials.

**J. Significant new equipments / experimental facility added during the year:**

1. Air cooled vacuum pumping system with rotary pump and exhaust mist filter (Make: Indian High Vacuum Pumps). The system is used for creating high vacuum ( $\sim 10^{-6}$  mbar) inside the cryostat for low temperature photoluminescence measurements.

**K. Departmental association / club activities****Physics Club Activities:**

The Physics Society organised the following talks/lectures.

1. In August 2015, Prof. Jeremy Kasdin, Professor and Vice Dean of the School of Engineering and Applied Sciences at Princeton University gave a talk on technologies for imaging Extrasolar Rocky Planets from Space, via telepresence.
2. Ashwin Krishnan, a Physics and Math dual degree student, gave a series of lectures on Quantum Mechanics for beginners.
3. Raj Kunkolienkar, a Physics student, gave a series of talks on LaTeX.
4. Raj Kunkolienkar gave a talk on Big Bang cosmology in March for students.
5. Kushagra Nigam, fourth year Physics student, gave a few lectures on introductory MATLAB.

A major project undertaken by the Physics Society is The **CoRSAP(Cosmic Ray Shielding Aluminium vs. Polyethylene)**, a Balloon project. The payload is designed to facilitate scientific experiments at altitudes of 20km or less. The launch is currently facilitated by TIFR-Hyderabad.

In September the students of the Physics Society also organized an interactive session cum dinner at the Visitor's Guest House on campus, which involved both the faculties and students of the physics department.

**B2.11 DIVISION / UNIT/ CENTRE-WISE ACTIVITY****Alumni Affairs Division:****Distinguished Alumnus Award 2015:**

"BITS Pilani Distinguished Alumnus Award" in 2015 to the following alumni:

- **Prof. Bharat Bhushan**, Director, Nanoprobe Laboratory for Bio- & Nanotechnology & Biomimetics, The Ohio State University
- **Mr. Manoj Saxena**, Founder, Exterprise and Webify Inc.,

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

**Mantra Awards 2015:**

The Center for Entrepreneurial Leadership (CEL) along with Alumni Affairs Division and BITSAA International instituted the Mantra Awards. The Mantra awards were to recognize and reward outstanding students who have demonstrated extraordinary leadership potential and/or entrepreneurial initiative. This year's awards were given to the following:

1. **Mantra Award for Outstanding Leadership:** Anadi Rakesh
2. **Mantra Entrepreneur of the Year Award:** Prakhar Sharma
3. **Mantra Award for Social Leadership:** Sanskriti Dawle
4. **Mantra Innovator of the Year Award:** Aman Srivastava

**BITSians Day:**

The third edition of 'BITSians Day' was celebrated on 7<sup>th</sup> of August, 2015.

**Embryo & On-campus Lectures:**

Alumni Affairs Division of BITS Pilani K K Birla Goa Campus has organized 9 Embryo & On-campus talks from August – December, 2015. Details are as follows:

S. No	Name of the Alumn(us)i	Topic	Date
1	Dr. Robert Waggoner	The Science And Potential Of Lucid Dreaming	8/18/2015
2	Kushal Khandelwal	What to expect from MS/PHD program in US/EU.	8/22/2015
	Animesh Srivastava		
	Arnav Goel		
3	Karan Gaikwad	A Career in Mobile Gaming	8/28/2015
4	Ajay Chaturvedi	Alumni Summit	8/30/2015

S. No	Name of the Alumn(us)i	Topic	Date
	Nikita Bharadia		
	Anugula Rakesh Reddy		
	Harish Sivaramakrishnan		
	Akash Gupta		
	Jenish Mehta		
	Garv Malik		
5	Adwait Gandhe Parth Bhogate	Building your Profile for Higher Education after BITS	9/1/2015
6	Justice Markanday Katju	Old Customs Vs New Ideologies	9/10/2015
7	Vishal Saraswat	Applications Of Public Key Cryptography	9/10/2015
8	Raghavendra Singh	Brain Inspired Computing	10/5/2015
9	Gaelen Pereira	Career Prospects For Electrical & Electronics Master Grads In US	9/15/2015

**Alumni Visits:**

S. No	Name	Batch	Profession	Purpose of visit
1	Varun Anand	2008	Entrepreneur	On-campus Talk
2	Karan Gaikwad	2006	Software Designer	
3	Ajay Chaturvedi	1991	Entrepreneur	Alumni Summit
4	Nikita Bharadia	2008	MBA	
5	Anugula Rakesh Reddy	2002	Politician	
6	Harish Sivaramakrishnan	1998	Musician	
7	Akash Gupta	2008	Entrepreneur	
8	Jenish Mehta	2005	Post-Graduate	
9	Garv Malik	2011	Comedian	
10	Raghavenda Singh	1989	Brain Inspired Computing Expert	On-campus Talk
11	Satish Sankaralingam	Microelectronics(2005)	Circuit Designer(Intel)	Professional
12	Danish	CS(2015)	Research Fellow(IISc)	IT Training Placement
13	Pranav Ramarav	CS(2015)	Research Fellow(Microsoft Research)	
14	Mansi gupta	CS(2015)	Software Engineer(Linkedin)	
15	Deepak Gopinath	CS(2014)		
16	Akhilesh Anandh	CS(2015)		
17	Shruti Rijhwani	CS(2015)	Research Fellow(Microsoft Research)	
18	Konark Pandey	EEE(2006)	Brand Manager (TOI)	
19	Jayanth Sridhar	MSc Bio (1988)	Engineering Management	Collaboration
20	Anant Kamath	EEE (2011)	Entrepreneur	Campus Visit
21	Aditya Chintawar	EEE (2008)	Entrepreneur	Personal

**Alumni Summit:**

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 first ever **Alumni Summit 2015** on the **30th of August 2015**. It was a first of its kind event and witnessed speakers who had established themselves in various fields of life. They reminisced about their life back at the BITS campuses and their journey thereafter. Seven speakers were invited to take the stage:

- Anugula Rakesh Reddy- a BJP Youth Wing politician and the founder of Nirmaan
- Akash Gupta- the founder of Grey Orange Robotics
- Jenish Mehta- a Graduate Student at California Institute of Technology
- Ajay Chaturvedi- the founder of HarVa and a published Author
- Nikita Bhardia- an MBA from IIM Ahmedabad and the founder of Udaan
- Harish Sivaramakrishnan – the lead singer of the band Agam
- Garv Malik- a stand up comedian and founder of OpenMics.

**Prof. Suresh Ramasamy Memorial Award 2015:**

The project idea "HITCH: An interactive platform that facilitates communication, remote control and local positioning/tracking system for mobile devices" done by the students: Akshay Sonandkar, Yash Bardapurkar and Vandan Phadke was selected for Prof. Suresh Ramaswamy Memorial Award 2015-16.

**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 Praneet Bhatia, Aman Srivastava, Sanskritie Dawle and Ankur Omar 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.

**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. In the last year since its inception for 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. An edX Workshop was conducted at the Goa Campus on 22<sup>nd</sup>-23<sup>rd</sup> July, 2014, convened by the Dean ARP, Prof. Shan Balasubramaniam, from Pilani Campus to enlighten the faculty members about edX courses and the mode of delivery and various aspects related to this teaching platform and pedagogy. As an outcome four courses were proposed and one course was delivered partly on the edX platform in the Blended format in the second semester 2014-15. 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. As a follow up to the edX Workshop conducted at Goa Campus on July, 2014, the next Workshop was conducted at Hyderabad Campus in the month of July 2015 to review the progress made and also to update the faculty nominated from the various Departments attending the workshop about the new tools and technologies available.

As a consequence, a First year Course in Physics, PHYS F111- Mech Oscillations and Waves, was delivered in the Online mode. Few more courses are in various stages of preparation for the upcoming semester/ academic year.

**CURRICULUM REVIEWS HELD AT GOA CAMPUS:**

The following Curriculum Reviews were conducted for the academic year 2015-16.

- Curriculum Review for Mathematics Department was conducted on 28th of July, 2015 at K K Birla Goa Campus. Prof. Amiya K. Pani, an expert from Department of Mathematics, IIT Bombay and Prof. Govindan Rangrajan from IISc. Bangalore, had visited our campus.
- Curriculum Review for Economics Department was conducted on 11th of August, 2015 at K K Birla Goa Campus. The External Experts who were invited to carry out the Review included Prof. Prabhat Patnaik- JNU New Delhi, Prof. B Kamaiah, from University of Hyderabad and Mr. Kiran M Patil from Industry.
- Curriculum Review for Chemical Engineering Department was conducted on 9th of September, 2015 at K K Birla Goa Campus. Experts visited our campus were, Prof V G Gaikar, ICT Mumbai, Mr. Arvind Kaushik, L&T Mumbai, Mr. P B V Balaramakrishna, L&T- Mumbai and Prof. S Pushpavanam from IIT Madras, Chennai.

- Curriculum Review for Mechanical Engineering Department was conducted on 24th of November, 2015 at K K Birla Goa Campus. The Team of External Experts who visited our campus comprised of Prof. V K Jain, IIT Kanpur, Prof. S.K. Som from IIT Kharagpur, Prof. Kurien Issac of Indian Institute of Space Science and Technology and one Expert from the Industry, Mr. Gajanan K Sadekar from L&T Heavy Engineering, Larsen & Toubro Limited.

#### ACADEMIC RESEARCH DIVISION

First Degree Thesis off Campus list Second Semester 2014-2015

S.No	Name of the student	ID No	Place of thesis work
1	Himadree Kaushik	2010B3A1591G	ICRIER, New Delhi
2	Raj Nanalal Patel	2010B5A4540G	TIFR, Mumbai
3	Surhud Khare	2011A8PS334G	CREST TECHNOLOGY, PUNE
4	Nichin K.S	2011A3PS201G	IST, PORTUGAL
5	Neisarg Dave	2011A3PS020G	GRAM POWER INC, JAIPUR
6	Naveen Joshua	2011A3PS154G	ReGen power tech pvt ltd, Chennai, India
7	Chirag Deepak Agrawal	2010B4A7507G	TELECOM PARISTECH- CNRS LTCl, France
8	Arya Kumar Pruthviraj Mohanty	2010B4A4534G	IIPS, MUMBAI
9	Aniket C. Mane	2010B4A4130G	Paris Descartes University, France
10	Tawri Krutika Rajeev	2011B4PS576G	NUS, SINGAPORE
11	Vivek Pahwa	2011A8PS386G	CARNEGIE MELTON UNIVERSITY, RWANDA,
12	Praneet Bhatia	2011A3PS208G	IIT, INDORE
13	M.S Suraj	2011A3PS033G	UNIVERSITY OF ZARAGOZA, SPAIN
14	Snehal Jain	2011A1PS037G	IIT KANPUR
15	Ankit Vikrant	2010B4A7548G	ICTS-TIFR, Mumbai
16	Sunny Guha	2010B5A8191G	HRI, ALLAHABAD
17	Thejas H C	2010B5A4651G	TIFR CENTRE FOR INTERDISCIPLINARY SCIENCES, Germany
18	Gauri Bhagwantrao Jagatap	2010B5A3518G	TIFR, MUMBAI
19	Vishal Pathak	2010B5A3098G	HRI, ALLAHABAD
20	Abhinandan Jain	2010B5A8436G	THE INSTITUTE OF MATHEMATICAL SCIENCES, CHENNAI
21	Aman Srivastava	2010B4A4543G	IIT, DELHI
22	Soni Pratik Pramod	2010B4A7324G	NUS, SINGAPORE
23	Gurdeep Singh	2010B1A3672G	Universitat Heidelberg, Germany
24	M.S. Manojit	2010B1A4622G	University of California, Davis USA
25	Malhar Aras	2010B1A3011G	McKinsey&Company, Gurgaon
26	Vibhav Joshi	2010B1A3665G	Neocube Technology Solutions Pvt Ltd, Bangalore
27	Vaibhav Bajaj	2010B2A4566G	CSIR, National Laboratory NPL, Delhi
28	Tomy Cherian	2010B2A4563G	Aalto University, Finland
29	Kushal Khandelwal	2010B2A8631G	HCI/IWR University of Heidelberg
30	Akhil Pratap Singh	2010B5A3522G	IISER, Kolkatta
31	Jalaj Maheshwari	2011A4PS224G	IIT GANDHINAGAR
32	Tanay Choudhary	2011A4TS286G	Technische Universitat, DARMSTADT, Germany

S.No	Name of the student	ID No	Place of thesis work
33	Vikram Pradhan	2010B1A4620G	IIT , MUMBAI
34	Ishaan Hari Markale	2010B4A4509G	IIT MUMBAI
35	Vishal Jain	2011A4PS264G	NANYANG TECHNOLOGICAL UNIVERSITY, SINGAPORE
36	Nikilesh Krishnakumar	2011A4PS220G	NANYANG TECHNOLOGICAL UNIVERSITY, SINGAPORE
37	Kshitij Ranganath	2011A4PS173G	ISRO, BANGALORE
38	Shreyas Gadgin Matha	2010B3A8283G	Abdul Latif Jameel Poverty Action Lab
39	Anuradha Daswani	2011A1PS428G	Makerkart 3D printing Services, pvt ltd, Rajasthan
40	Athma M Ram	2010B4A7360G	IIT, Madras
41	Salil Kapur	2011A7PS138G	MICROSOFT RESEARCH LAB, BANGALORE
42	Arvind Prakash	2011C6PS625G	IIT MADRAS
43	Sappadla Prateek Veeranna	2011A7PS130G	TECHNISCHE UNIVERSITAT DRAMSTADT, Germany
44	Anand Krishnan P	2010B4A7392G	IIT BOMBAY
45	Sumedh K Ghaisas	2011A7PS126G	REYKJAVIK UNIVERSITY,Iceland
46	Nasrin Jaleel	2011A7PS444G	MICROSOFT RESEARCH INDIA, BANGALORE
47	Kratarth Goel	2011A7PS105G	UNIVERSITY OF MONTREAL, Canada
48	Kaustubh Dhole	2010B1A3202G	Tata Institute of fundamental Research Mumbai
49	Aniruddha Sonde	2011A8PS321G	GMRT, NCRA-TIFR, Pune
50	Raghu Nayyar	2010B1A4658G	IIT, Bombay
51	Ravi Garg	2010B1A7664G	National University of Singapore
52	Aditi Dudy	2010B4A7506G	Institute of Mathematical Science, Chennai
53	Siddarth Kotwal	2010B2A8610G	Robert Bosch GmbH, Bamberg, Germany
54	Akshay Surendra	2010B5A3331G	Centre for Wilidlife studies, Bangalore
55	Shivalik Sen	2010B2A8653G	University of Maryland, College Park. USA

**First Degree Thesis on Campus list Second Semester 2014-2015**

S.No	Student Name	ID No	Faculty Name	Organization
1	Tanmay Shidhore	2010B5A4520G	Dr. Shibu Clement	Bits Pilani K.K Birla Campus
2	Ardra Singh	2010B5A3494G	Dr. A. Amalin Prince	Bits Pilani K.K Birla Campus
3	Sudhanshu Maheshwari	2010B3A3579G	Dr. Debasis Patnaik	Bits Pilani K.K Birla Campus
4	Kunal Arora	2011A1PS155G	Dr. S.S. Baral	Bits Pilani K.K Birla Campus
5	Anadi Rastogi	2011C6PS034G	Mr.TSRK Prasad	Bits Pilani K.K Birla Campus
6	Pravin Joshi	2011C6PS522G	Dr. Biju K. Raveendra	Bits Pilani K.K Birla Campus
7	Sahil Mittal	2011C6PS520G	Dr. Biju K. Raveendra	Bits Pilani K.K Birla Campus
8	Shashwat Bansal	2011A1PS369G	Dr. S. D. Manjare	Bits Pilani K.K Birla Campus
9	Kunal Baweja	2011A7PS029G	Dr. S.K Sahay	Bits Pilani K.K Birla Campus
10	Gokul Krishna	2011A7PS004G	Dr Pushkar	Bits Pilani K.K Birla Campus

11	Motheram Abhinav Saikrishna	2011B3A1385G	Dr. Puskar,Co-guide-Swagat Mishra	Bits Pilani K.K Birla Campus
12	S.M Abhenandhan	2010B4A4625G	Dr. G. Samantha	Bits Pilani K.K Birla Campus
13	Kalola Meet Govindbhai	2011A4PS272G	Dr. Ranjit S. Patil	Bits Pilani K.K Birla Campus
14	Niraj Suhas Kasar	2011A4PS257G	Dr.Varinder Singh	Bits Pilani K.K Birla Campus
15	Rajat Jain	2011A4PS188G	Dr. Ranjit S. Patil	Bits Pilani K.K Birla Campus
16	Rajarshi Ghosh	2011A3PS074G	Dr. Veeky Baths	Bits Pilani K.K Birla Campus
17	Sahil Babbar	2011B4PS579G	Dr. Bijil Prakash (CoGuide: Dr. R. P. Pradhan)	Bits Pilani K.K Birla Campus
18	Patibandla Navya	2011A3PS240G	Dr. Veeky Baths	Bits Pilani K.K Birla Campus
19	Swapnil Gupta	2010B4A1611G	Dr. Shibu Clement	Bits Pilani K.K Birla Campus
20	Pandramish Vishal	2010B5A3497G	Mr. Praveen Mane	Bits Pilani K.K Birla Campus
21	Ishan Katyal	2010B2A8638G	Dr. Amrita Chatterjee	Bits Pilani K.K Birla Campus
22	Someshwar Prasad Dash	2010B5A8489G	Dr. Chandradew sharma	Bits Pilani K.K Birla Campus
23	Shobhit Srivastava	2010B5A8414G	Dr.Tarun kumar jha	Bits Pilani K.K Birla Campus
24	Shakari Kaushal Nitin	2010B4A4629G	Mr. Bijil prakash	Bits Pilani K.K Birla Campus
25	Praveen Sharma	2010B1A3526G	Dr. Chandradew Sharma	Bits Pilani K.K Birla Campus
26	Rohan Saxena	2010B1A7667G	Dr. Chandradew Sharma	Bits Pilani K.K Birla Campus
27	Ishan Mehta	2010B4A8605G	Dr J K Sahoo	Bits Pilani K.K Birla Campus
28	Nitish Phanse	2010B2A4572G	Dr. D. M. Kulkarni	Bits Pilani K.K Birla Campus
29	Sunit Singh	2010B4A3585G	Mr. Ram Prasad Joshi	Bits Pilani K.K Birla Campus
30	Abhishek Kumar	2010B5A7490G	Dr. S.K Sahay	Bits Pilani K.K Birla Campus
31	Aditya Harshavardhan	2010B2A7603G	Dr. Ranjay Dey	Bits Pilani K.K Birla Campus
32	Yatharth Narang	2011A8TS357G	Dr. Debasis Patnaik (Co-guide: S. Dhaked)	Bits Pilani K.K Birla Campus
33	Amrithesh Kumar	2011A3PS178G	Dr.Chandram karri	Bits Pilani K.K Birla Campus
34	Rohit Kumar	2011A3TS203G	Dr. P.M Singru (C-Guide: Dr.N. Manjarekar)	Bits Pilani K.K Birla Campus
35	Harsha Koneru	2011A3PS176G	Dr. Gaurav Dar	Bits Pilani K.K Birla Campus
36	M. Shanmukha Ranganath	2011A3PS120G	Dr. Neena Goveas	Bits Pilani K.K Birla Campus
37	Nikita Mirchandani	2011A3PS157G	Ms.Meetha Shenoy	Bits Pilani K.K Birla Campus
38	Akshay Hemant Mohgaonkar	2010B2A4634G	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
39	Chaitanya Bhatt	2010B3A1487G	Dr. R.P Pradhan	Bits Pilani K.K Birla Campus
40	Surabhi Tiwari	2011B5PS389G	Dr. Arun V Kulkarni	Bits Pilani K.K Birla Campus
41	Nishant Varma	2010B5A8492G	Dr. S.K .Sahay	Bits Pilani K.K Birla Campus
42	Aman Kesari	2010B3A1209G	Dr. Aswini Kumar Mishra	Bits Pilani K.K Birla Campus
43	Anjali Srivastava	2010B1A4482G	Dr. Dibakar Chakraborty	Bits Pilani K.K Birla Campus
44	Saurav Raj	2010B1A8108G	Dr Sukanta Mondal	Bits Pilani K.K Birla Campus

45	Rajan Hardaha	2010B2A3635G	Mr. Swagat kishore mishra	Bits Pilani K.K Birla Campus
46	Parth Goel	2011A4PS206G	Dr. Veeky Baths	Bits Pilani K.K Birla Campus
47	Dhruv Khandelwal	2011A4PS182G	Dr. Debasis Patnaik	Bits Pilani K.K Birla Campus
48	Yash Vardhan Choudhury	2010B1A4636G	Dr. D.M.Kulkarni	Bits Pilani K.K Birla Campus
49	Siddharth Agrawal	2010B2A4642G	Dr. Basavadatta Mitra	Bits Pilani K.K Birla Campus
50	Shrey Grover	2011A4PS285G	Dr. Jagatha Nambi Krishnan	Bits Pilani K.K Birla Campus
51	Anupam Verma	2011A4PS195G	Dr. Veeky Baths	Bits Pilani K.K Birla Campus
52	Siddharth Ranjan Khare	2010B1A4491G	Dr. G. Karthikeyan	Bits Pilani K.K Birla Campus
53	Mritunjay Srivastava	2010B4A8616G	Dr. Chandram Karri	Bits Pilani K.K Birla Campus
54	Akshay Bharaduraj	2011A8PS132G	Dr. Debasis Patnaik (CO-guide: Mr. Shankar)	Bits Pilani K.K Birla Campus
55	Kumar Mayank	2010B3A1571G	Dr. S. S. Baral	Bits Pilani K.K Birla Campus
56	Karandikar Aditya Ravindra	2010B5A4498G	Dr. R.P. Pradhan	Bits Pilani K.K Birla Campus
57	Abhyudit Jain	2010B1A1643G	Dr. S.D. Manjare	Bits Pilani K.K Birla Campus
58	Kartik Krishnan Sreedhar	2011A3PS099G	Dr. Kinjal Banerjee	Bits Pilani K.K Birla Campus
59	Kushagra Nigam	2010A3B5174G	Dr. Krinjal Banerjee	Bits Pilani K.K Birla Campus
60	Kapil Deep	2011C6PS597G	Dr. R.P Pradhan	Bits Pilani K.K Birla Campus
61	Neil Merchant	2010B4A8581G	Ms. Pinky Pawaskar	Bits Pilani K.K Birla Campus
62	Aannesha Satpati	2011A8PS324G	Dr. Bharat Deshpande	Bits Pilani K.K Birla Campus
63	Anubhav Chaturvedi	2011A7PS079G	Dr. Raviprasad Aduri	Bits Pilani K.K Birla Campus
64	T Sri Krishna Yasawi	2010B5A3405G	Dr. Toby joseph	Bits Pilani K.K Birla Campus
65	Aneesh Nambiar	2010B4A8354G	Dr. Prabal Paul	Bits Pilani K.K Birla Campus
66	Kashish Dullet	2009A7TS169G	Mr. Ramprasad Joshi	Bits Pilani K.K Birla Campus

**First Degree Thesis on Campus list First Semester 2015-2016**

S.No	Student Name	ID No	Faculty Name
1	Siddharth Parmar	2012A1PS520G	Dr. Srinivas Krishnaswamy
2	Rishabh Mishra	2012A1PS410G	Dr. Srinivas Krishnaswamy
3	Aniket Uday Sawant	2012A1PS675G	Dr. Sutapa Roy Raman
4	Shreesh Katyayan	2012A4PS160G	Dr. Mridula Goel
5	Debopamaa Debnath	2012A1PS447G	Dr. S.D MANJARE
6	Hardik Shah	2012A4PS341G	Dr. Shibu Clement
7	Parth Chaturvedi	2012A4PS288G	Dr. Varinder Singh
8	Swastic	2012A1PS543G	Dr. Jagatha Nambi Krishnan
9	Yash Sharma	2012A4PS269G	Dr. Mridula Goel
10	Kaustuv Mohanty	2012A4PS158G	Dr. Mridula Goel
11	Arpit Sarda	2012A7PS068G	Dr. Rajorshi Sen Gupta



12	Hargun Singh Oberoi	2011B4A4090G	Dr.Sachin Waigaonkar
13	Hancel P.V	2012A4PS002G	Dr P.M SINGRU
14	Ayush Raizada	2012A4PS298G	Dr P.M SINGRU
15	Akshay Sundar	2012A4PS028G	Dr P.M SINGRU
16	Bhavul Gauri	2011B4A7439G	Dr.Ashwin Srinivasan
17	Bhargav Vishwanath	2011B3A4530G	Dr. Aswini Kumar Mishra
18	Vishnuvardhan Krishnakumar	2012A4PS195G	Dr P.M SINGRU
19	Prathik K	2012A4PS162G	Mr. A.C. KULKARNI
20	Chintan Sohani	2012A4PS315G	Dr. D.M. Kulkarni
21	Saurabh Amarnath Mahindre	2011B2A3658G	Dr. Sukanta Mondal
22	Divyansh Khanna	2011B4A7474G	Dr. Bharat M Deshpande
23	Shivank Mehra	2011B5A8292G	Dr. Radhika Vathsan
24	Tushar Gupta	2012A3PS229G	Dr. Debasis Patnaik
25	Saurabh Varkhede	2012A8TS396G	Mr. Pravin Mane
26	Anmol Kumar Sinha	2012A3PS225G	Dr. Narayan Suresh Manjarekar
27	Rajesh Tilwani	2012A8PS343G	Dr. M. K. Deshmukh

**First Degree Thesis Off Campus list First Semester 2015-2016**

S.No	Name of the student	ID No	Place of thesis work
1	Mudit Badlani	2011B3A1262G	PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, JABALPUR (M.P.)
2	Abhishek Saikia	2011B3A1372G	IIM , SHILLONG
3	Ganesh Rao	2011B3A3323G	ABDUL LATIF JAMEEL POVERTY ACTION LAB (J-PAL) SOUTH ASIA AT IFMR, Chennai
4	Abhinav Gupta	2011B2A7611G	NUS, SINGAPORE
5	Neelmani	2012A7PS104G	ESI FOR NEUROSCIENCE IN COOPERATION WITH MAX PLANCK SOCIETY, FRANKFURT, Germany
6	Devarshi Bhatt	2012A7PS097G	IIT, BOMBAY
7	Nidhi Angle	2012A7PS018G	IISc
8	Dhruv Shekhawat	2012A7PS110G	DEPT OF INFORMATION TECHNOLOGY, UNIVERSITY OF BRESCIA VIA BRANZE, ITALY
9	Anshu Aviral	2011B5A7289G	HONG KONG POLYTECHNIC UNIVERSITY, HONG KONG
10	Anirudh Nigania	2012A7PS128G	NUS, SINGAPORE
11	Raunaq Vohra	2011B4A8521G	TU, BERLIN, Germany
12	Ankur Agrawal	2011B4A4400G	IIIT, HYDERABAD
13	Gangapuram Amit Jamadagni	2011B4A3620G	FUDAN UNIVERSITY, CHINA
14	Jimmy M Morzaria	2011B4A7200G	UNIVERSITY OF OTTAWA, CANADA
15	Adheesh Bhatia	2011B4A3535G	ELTROPY INDIA PVT LTD, BANGALORE
16	Joshi Hrishikesh Ravindra	2011B2A4589G	NANYANG TECHNICAL UNIVERSITY, SINGAPORE
17	Sanjukta Krishnagopal	2011B5A4438G	TECHNISCHE UNIVERSITAT, BERLIN, GERMANY

S.No	Name of the student	ID No	Place of thesis work
18	Vishakha Gupta	2011B5A3258G	TIFR, MUMBAI
19	Nishanth Chandrasekar	2011B5A3365G	IISc , BANGALORE
20	Shubham Maheshwari	2011B5A3295G	IISc , BANGALORE
21	Tushar Nagarajan	2011B5A7432G	IISc , BANGALORE
22	Aman Ahuja	2012C6PS595G	CARNEGIE MELLON UNIVERSITY, PITTSBURGH
23	Ravi Agrawal	2012A7PS046G	DESIGN FOR USE CONSULTING PVT LTD, GURGAON, HARAYANA
24	Jaya Tiwari	2011B4A4554G	IIT, KANPUR
25	Balasubramanian V	2012A4PS143G	NTU, SINGAPORE
26	Soham Patkar	2012A4PS215G	IIIT, HYDERABAD
27	Aum Jadhav	2012A4PS347G	IIIT, HYDERABAD
28	Rachna Shetty	2012A4PS254G	RWTH AACHEN, GERMANY
29	Ujash D Shah	2012A4TS134G	UNIVERSITY OF BRITISH COLOMBIA, CANADA
30	Anmol Shrivastava	2012A4PS121G	IIT, BOMBAY
31	Pinaki Acharya	2012A4PS239G	IIT, KANPUR
32	Akshay Pai Raikar	2011B2A4651G	IIIT, HYDERABAD
33	Keya Ghonasgi	2011B4A4604G	IIT, BOMBAY
34	Aditya Kandaswamy Aiyer	2011B5A4412G	TIFR CENTRE FOR INTERDISCIPLINARY SCIENCES, HYDERABAD
35	Sundar Ganesh	2011B5A4313G	IISc, BANGALORE
36	Shriniket Jakati	2011B5A4459G	JCB INDIA PVT LTD, PUNE
37	Madhuri R Iyer	2011B4A4467G	RWTH AACHEN, GERMANY
38	Badrinath Balasubramaniam	2012A4PS051G	IIT, BOMBAY
39	Anirudh Ravichandran	2011B4A3556G	RYERSON UNIVERSITY, TORONTO, CANADA
40	Harshita Mangal	2012A3PS131G	IIT, DELHI
41	Vaishnavi Narayanan	2011B4A8547G	NUS, SINGAPORE
42	Prakhar Bhardwaj	2012A1TS484G	SCHOELLER WATER GmbH, GERMANY
43	Shashwat Koranne	2011B5A1388G	UNIVERSITAT LEIPZIG, GERMANY
44	Siddhant M Lambor	2012A1PS775G	DRDO, PUNE
45	Krutarth Jhaveri	2012A1PS418G	NUS, SINGAPORE
46	Siddharth Jadhav	2012A1PS509G	NUS, SINGAPORE
47	Akhil Arora	2012A1PS437G	HERIOT-WATT UNIVERSITY, UK
48	Pai Raikar Prahars Pravin	2012A4PS012G	IIT, BOMBAY
49	Prافل Golani	2012A8PS285G	IISER, THIRUVANANTHAPURAM
50	Trishala Neeraj	2012A8TS340G	UNIVERSITY OF VIRGINIA, USA
51	Rohit Agrawal	2012A8PS267G	NUS, SINGAPORE
52	Sajal Chakravarty	2012A8PS394G	IIT, KANPUR
53	Mrinalini Padmanabhan	2012A8PS680G	NUS, SINGAPORE
54	Ishan Khurjekar	2012A8PS283G	UNIVERSITY OF PUNE(SPPU), PUNE
55	Manpreet Kaur	2012A3PS687G	IIT-BHU, VARANASI

S.No	Name of the student	ID No	Place of thesis work
56	Aditi Kulkarni	2012A3PS161G	Carnegie Mellon University
57	Nishil Talati	2012A3PS155G	UNIVERSITY OF MICHIGAN, ANN ARBOR
58	Gohel Jay Nilesh	2012A3PS202G	BARC, MUMBAI
59	Ahmad S Jauhar	2012A3PS100G	IIT, BOMBAY
60	Vedika Agarwal	2012A3PS237G	GEORGIA INSTITUTE OF TECHNOLOGY, GEORGIA
61	Mandar Vinayak Gogate	2012A8PS749G	ENSTA PARISTECH, FRANCE
62	Mihika Himanshu Dave	2012A3PS163G	NTU, SINGAPORE
63	Shardul Atul Bhusari	2011B1A4666G	GRONINGEN UNIVERSITY, NETHERLANDS
64	Manasi Prashant Kane	2011B1A8460G	EPFL STI, SWITZERLAND
65	Ashish Baghudana	2011B1A7575G	TECHNISCHE UNIVERSITAT MUNCHEN, GERMANY
66	Aditya Khanduri	2011B1A3679G	ONGC, DELHI
67	Divya Verma	2011B1A8678G	IISc, BANGALORE
68	Prajwal V P	2011B5A3096G	NCRA-TIFR, PUNE
69	Raj Sinai Kunkolienkar	2012B5PS234G	HRI, ALLAHABAD
70	Poojita Thukral	2012A8PS287G	STEVENS INSTITUTE OF TECHNOLOGY, NEW JERSEY, USA
71	Maitreya Naik	2012A8PS272G	DELFT UNIVERSITY OF TECHNOLOGY, NETHERLAND
72	Thamatam Nipun	2011B3A8495G	LABORATORY FOR ELECTRO OPTICS SYSTEMS (LEOS) ISRO, BANGALORE
73	Arun Prakash Gandhi	2010B3A3461G	Price Water House Coopers, Mumbau

### Second Semester 2014-2015 M.E. (BITS G629T) 'DESSERTATION

S.No.	ID No.	Name of student	Topic	Supervisor	Place
1.	2013H140059G	Jyoti Rana	Distributed/ Network Biomimetic Swarms	Dr. Anupama K. R.	Bits Pilani K.K Birla Campus
2.	2013H140052G	Venkatachala Sarma	Localization and Terraun mapping in single/Distributed Biomimetic	Dr. Anupama K. R.	Bits Pilani K.K Birla Campus
3.	2013H140053G	Anant Bhushan N.	Optimization in Cognitive Radio Networks	Dr. Nitin Sharma	Bits Pilani K.K Birla Campus
4.	2013H140062G	Vineeth Kartha	Reconfigurable Computing Algorithms	Dr. Amalin Prince	Bits Pilani K.K Birla Campus
5.	2009HS12191G	Neethu Bal Mallya	Implementation of Energy-Efficient Scheduling Algorithms for MC/MP Hard Real-Time Systems	Dr. Biju K. Raveendran	Bits Pilani K.K Birla Campus
6.	2013H101016G	Lekshmi Ajit Kumar	Rheological Dynamics of Polymer-Layered Silicate Clay Nanocompositions	Dr. Asima Shaukat	Bits Pilani K.K Birla Campus
7.	2013H101017G	Roshni Gopal	Kinetics of gas-solid and gas-liquid reactions	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
8.	2013H101010G	Parag Vinayak Gurav	Bio-leading of metals from spent FCC catalyst using Aspergillus	Dr. S. S. Baral	Bits Pilani K.K Birla Campus

S.No.	ID No.	Name of student	Topic	Supervisor	Place
9.	2013H101018G	Vivek Sharma	Selection of bioleaching process for metal recovery from spent catalyst using decision making method	Dr. S. S. Baral	Bits Pilani K.K Birla Campus
10.	2013H101011G	Manasi Satchit Joshi	Surface modification studies on gold film for sensor Applications	Dr. Jegatha Nambi Krishnan	Bits Pilani K.K Birla Campus
11.	2013H101013G	Laxmi P. Yergude	Development of blend ultrafiltration membranes modified with nanoparticles	Dr. Srinivas Krishnaswamy	Central salt and Marine Chemicals Research Institute, Gujrat
12.	2013H129007G	Faiza Nazar	Thyroid Stimulating Hormone gene expression	Dr. Vijayashree Nayak	Bits Pilani K.K Birla Campus
13.	2013H141022G	Umesh Waghmode	Modeling & Simulation of fracture process zone for different thickness specimens	Dr. Vikas Chaudhari	Bits Pilani K.K Birla Campus
14.	2013H141023G	Piyush Patel	Evaluation of fracture toughness parameters using cohesive zone modelling	Dr. Vikas Chaudhari	Bits Pilani K.K Birla Campus
15.	2013H112045G	Suryadeepan R.	Cross Layer Architecture for Mobile Wireless Sensor Networks	Mr. Sreejith V.	Bits Pilani K.K Birla Campus
16.	2013H101015G	Sheshank	Rheological behaviour of polymer graphene nano composites	Dr. Asima Shaukat	Bits Pilani K.K Birla Campus
17.	2013H101012G	Allampalli Satya Sai Pavan	Corrosion resistant coatings using graphene - A study	Dr. Sutapa Roy Ramanan	Bits Pilani K.K Birla Campus
18.	2009HS41111G	Anuraag Ramesh	Contact stresses analysis using finite element methods	Dr. D.M Kulkarni	Bits Pilani K.K Birla Campus
19.	2013H141025G	Prabhu Alvenkar Param A/S Pandurang	effect of thickness on mode I crack propogation in GYFM using mesh free methods	Dr. D.M Kulkarni	Bits Pilani K.K Birla Campus
20.	2013H140051	Shreesha Vitthala K. A.	Data Acquisition System	Dr. Anita Agrawal	Bits Pilani K.K Birla Campus
21.	2013H129002G	Tannishtha Saha	Antineoplastic and DNA damage assay of anti-cancer drugs against cancer cell lines	Dr. Meenal Kowshik	Bits Pilani K.K Birla Campus
22.	2013H129005G	Kanishka Tiwary	Study of biomarkers (e.g. TGFBR2) in the proporsion of Gall Bladder Cancer	Dr. Vijayashree Naik	Bits Pilani K.K Birla Campus
23.	2013H129001G	Kanika Bhatnagar	Optimization of the production parameters of antifungal substance by Bacillus sp and its partial purification	Dr. Utpal Roy	Bits Pilani K.K Birla Campus

S.No.	ID No.	Name of student	Topic	Supervisor	Place
24.	2013H141026G	Prashant Dadarao Zodge	Creep & TTS studies of Thermoplastic materials using DMA	Dr. Sachin Waigaonkar	Bits Pilani K.K Birla Campus
25.	2013H129003G	Swapnil Vinod Punyapwar	biochemical analysis of available land races of rice in goa	Dr. Kundan kumar	Bits Pilani K.K Birla Campus
26.	2013H129006G	Navodita Bhatnagar	Biogas slurry management	Dr .Srikanth Mutnuri	Bits Pilani K.K Birla Campus

**First Semester 2015-2016 M.E. (BITS G629T) "DESSERTATION"**

S.No.	ID No.	Name of student	Topic	Supervisor	Place
1.	2014H101009G	Mohit Tiwari	Optimizing biogas generation from waste water using anaerobic digestion	Dr. S. S. Baral	Bits Pilani K.K Birla Campus
2.	2014H101015G	Narendra Chundi	keres and phase equilibrium studies on clathrate hydrate systems	Dr. Srinivas Krishnaswamy	Bits Pilani K.K Birla Campus
3.	2014H101011G	M. Dileep	Heavy metals removal from waste water using different adsorbent	Dr. S. S. Baral	Bits Pilani K.K Birla Campus
4.	2014H101012G	Hariom	Waste water treatment using advanced oxidation process	Dr. S. D. Manjare	Bits Pilani K.K Birla Campus
5.	2014H101013G	Geeta Dasila	Synthesis and characterization of hydroxyapatite base nano fertilizers for controlled release	Dr. Sutapa Roy Ramanan	Bits Pilani K.K Birla Campus
6.	2014H101010G	Anubha Deo	preparation of clay and graphene polymer nano-composites and determination of rheological properties	Dr. Asima Shaukat	Bits Pilani K.K Birla Campus

## CATEGORY-WISE DISTRIBUTION OF Ph.D. STUDENTS ON ROLLS DURING THE YEAR 2015

S.No.	CATEGORY	NO. OF STUDENTS ON ROLL	
		II Sem 2014-2015	I Sem 2015-16
1.	Staff	31	30
2.	Staff (Pre-Ph.D course work)	01	0
3.	Research Scholars	117	141
<b>GRAND TOTAL</b>		<b>149</b>	<b>171</b>

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

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2014-15	17	17	17	0
I Sem. 2015-16	14	14	12	2
<b>Total</b>	<b>31</b>	<b>31</b>	<b>29</b>	<b>2</b>

## II. Statistical Information for Faculty Development Scheme

Sem.	Permitted to Appear in Quali. Exam.	Appeared	Passed	Failed
II Sem. 2014-15	0	0	0	-
I Sem. 2015-16	1	1	1	-
<b>Total</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</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		7		24

Discipline wise Break-up		Discipline wise Break-up	
EEE	1	Biosciences	9
		Chemistry	0
		Chemical	1
		EEE	3
		Mathematics	2
		Mechanical	0
		CSIS	2
		Lang. & Hum.	3
		Management	0
		Pharmacy	0
		Physics	1
		Econ. & Fin.	3
		Civil	0
			<b>24</b>

**COMMUNITY WELFARE**

Faculty in charge: Prof. Radhika Vathsan, Department of Physics.

The Community Welfare Unit facilitated the following activities during the calendar year 2015.

As always, 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 available since last year. 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 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 provided with all necessary facilities (toys, activities, educational material, infrastructure etc.). In addition, campus children are exposed to a variety of activities such as drawing, dance, karate, violin, roller-skating and mental arithmetic, for which classes by professionals are being conducted.

The Student Activity Center has a designated as Music/Yoga/prayer hall that is being well utilized by the whole campus community for 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, are also being conducted, both for the students as well as other campus residents.

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 and students were organized.

Srutilaya, the Indian Classical Music and Dance Society of the campus, also organized a variety of events. In February the alumni came over to offer their tribute to Prof Suresh Ramaswamy in Sradhdha 2015. On 1<sup>st</sup> March Strutilaya organized Tyagaraja Aradhana, a musical Homage to the saint-composer. On April 16 and 17 they organized a lecture-demonstration series on the Art and Science of Music by Shri S Balachander, a veena artiste. On October 3<sup>rd</sup> and 4<sup>th</sup>, we organized "Sursangam", a music and dance festival including famous artistes like Vidushi Joti Hegde (Rudra Veena), Pdt Sanjay Pant (pakhawaj), Vidwan Manasa Nayana (Carnatic Vocal), Vid. Lalan Desai (Bharatanatyam) and Vidushi Aparna Shastri (Dhrupad). They also organized a talk on "Evolution of North Indian Musical Instruments" by Mr. Jonathan Barlow (Musicologist) on 17 November.

International Yoga Day was observed on 21 June with a lecture demonstration session by Sri Namdev Chopdekar and a live yoga session in the SAC.

Quark 2015, the Annual International Technical and Innovation festival, was held from 6-8 February. A preceding program TEDx was also organized on 25 January 2015.

Waves 2015, the annual students' intercollege cultural festival was celebrated from 6-8 November 2015.

Campus greening and sustainable waste management was initiated. Dustbins were put up at additional spots all round the campus. A plan to segregate and recycle garbage was also initiated. Students started a project on campus green waste management, recycling and urban farming.

Student volunteers under the banner of Abhigyaan organized a "Joy of Giving" week and a collection drive for donating used clothes and other articles to orphanages and old age homes.

### **Centre for Innovation, Incubation and Entrepreneurship**

On June 1, 2015 the Institute set up the Center for Innovation, Incubation & Entrepreneurship ( CIIE) as an integrated structure for academic and incubation activities related to entrepreneurship in BITS Pilani. CIIE is led by Prof Srinivas Krishnaswamy , as cross campus Professor Incharge . He is supported by the Faculty Incharges in each campus: Dr. Jyoti Tikoria at Pilani, Prof. Mridula Goel at Goa, Dr. Chandu Parimi at Hyderabad and Prof. Srinivasa Rao at Dubai.

CIIE aims to promote innovation led entrepreneurship in BITS Pilani campuses. The key focus areas for the Center are Intellectual Property development, Technology Transfer and Commercialization and fostering Start ups. CIIE proposes to work closely with alumni and industry to provide support to BITS students and faculty as they innovate and create products and build start ups.

Our vision is to inspire BITSians to play a prominent role in leading diverse entrepreneurial activities in the country and make a significant contribution in global entrepreneurial innovation.

To promote entrepreneurial thinking among the BITSian community and create business leaders in all spheres of life is our mission statement. To achieve this one of our key initiatives at the BITS, Pilani K K Birla Goa Campus is to organize an E-Summit called 'Coalescence'. The aim of the event is to provide a platform for entrepreneurship ideas to receive funding and mentorship from renowned incubators and accelerators and to provide an opportunity to interact with some successful entrepreneurs in various fields.

Coalescence 2015 also includes the third edition of its annual conference, ACT 3.0.( Aspire Create and Transform) . ACT 3.0 was a showstopper, attended by over 2000 students and guests; it had famous persons from diverse fields sharing their knowledge and experiences. They included:

1. A.Muruganantham-Inventor,Social Entrepreneur, listed by 'Time' as 100 most influential People in 2014
2. Vijay Nair- Founder ,Only Much louder
3. TVF Pitchers – Players from the Internet based web series on start up challenges
4. Taapsee Pannu- Actress and Entrepreneur
5. Rajat Kapoor. National award Winning Actor, director and writer
6. Hussain zaidi- Investigative journalist, Indian Express
7. Rahul Yadav- Co Founder, Housing.com

Besides workshops on ' How to build a business plan", ' The Art of Pitching', Hackathons and the ACT Conference the summit invites budding start ups to exhibit their skill and vision on a global stage and get a chance to be mentored by top entrepreneurs of their field. The B-Plan event is at the core of the E-Summit; it is aimed at helping the brightest, the boldest and the most exciting young minds in India, get inspired to prosper. The B-Plan competitions are judged by incubator professionals from across the country and winning ideas receive both funding and mentoring . The incubators which partnered with us in 2015 : CIBA(Goa), Leading Angels( Mumbai), Unitus( Bangalore), Ah! Ventures( Bangalore, 91Springboard( New Delhi).

### **INTERNATIONAL PROGRAMMES AND COLLABORATION DIVISION**

The objectives of the International Programmes and Collaborations division are as follows

- Identify and collaborate with 2 or 3 universities for large scale, high impact student and faculty exchange (100 students and 25 faculty members in 3-4 years)
- Work with other divisions to facilitate projects funded by international agencies
- In this Regard, MoU was signed after delegation visit to partner university on both the sides.
- Two co operations are currently active
- Associated Partner in *Erasmus Mundus* Joint Master Degree (JMD) programme

#### **Excellence in Analytical Chemistry (EACH).**

Partner in Erasmus + programme. Fully funded programme for 1 student visit for 5 months and 1 faculty visit for 7 days to Univ of Tartu and 1 faculty visit for 7 days and two students for 5 months each to Goa campus.

MoUs were also signed with

- University of Perpignan
- University of Limoges, France
- University of NewCastle, Australia



- University of Tunghai, Taiwan
- The Great St.Petersburg Polytechnic University, Russia

#### **Dr. Vince Cable**

#### **Member of Parliament, UK**

Secretary of State for Business, Innovation and Skills, UK

addressed students / faculty on 11<sup>th</sup> October 2014

The Ambassador of France,

H.E. Mr François Richier gave a talk on “Climate Change” on 27<sup>th</sup> April 2015

Department of Economics and International Programmes and Collaboration division of BITS

Pilani K K Birla Goa campus jointly organized EURAXESS Information Session on Friday 25<sup>th</sup> September 2015 at BITS-Pilani, K K Birla Goa Campus. The Objectives of the event were

The speakers were Dr.Vivek Dham EU Delegation to India, Dr.Srini Kaveri Director - CNRS Dr.Sandrine Maximilien, Scientific Attache - Emabssy of France Dr.Arhets Phillippe,Scientific Attache - Emabssy of France Mrs.AinhitzeBB, Country Coordinator Euraxess

158 participants attended

Collaboration with Labfab

- Goa campus in collabroation with French Embassy hosted Mr. Nicolas Hutchet who has a prosthetic hand developed at Labfab, France. He participated in Students Tech Festival – Quark
- Mechanical Engineering Department developed a prosthetic hand in collaboration with Labfab, France
- Thomas Meghe, Research Engineer from Labfab, France was invited for further discussions
- Associate Dean IPCD and Mr. Thomas Meghe attended a brainstorming session at French Embassy, Mumbai.

#### **French Embassy interested to collaborate with us on developing Labfab.**

#### ***PRACTICE SCHOOL:***

During SEM II, 2014-15 and SEM I, 2015-16 587 first degree students and 32 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. Anita B Agarwal.

During summer term 2015, total of 589 students went to 182 PS-1 stations from the Goa campus. A total number of 18 faculty members & 17 student co-instructors accompanied the students for PS-1. Total no. of stations opened by Goa campus students are 8.

#### **PS 1-2015 Faculty Members**

SR.NO	PSRN	FACULTY NAME
1	72	V.V.S.N.V. Prasad
2	114	Sanjay Kumar Sahay
3	310	Saroj S. Baral
4	348	Teny John
5	381	Vijayashree Nayak
6	416	Jajati Keshari Sahoo
7	420	Geetha K A
8	432	Narayan Suresh Manjarekar
9	500	Kundan Kumar
10	507	Shailendra Kumar Dhakkad
11	543	Debdulal Thakur

SR.NO	PSRN	FACULTY NAME
12	556	Arnab Banarjee
13	565	Ravi Prasad Aduri
14	600	A Baskar
15	604	Rajorshi Sengupta
16	622	Dileep Kumar Gupta
17	624	Metilda Sagaya Mary N
18	628	Anoop Kumar

**PS-1-2015 Student Co-Instructors**

Sr. No	ID	NAME
1	2012A4PS326G	SREENAND.S
2	2012B1A4594G	ANURAAG GUPTA
3	2012A4PS222G	V V V RAMESH
4	2012B2A1611G	VIPUL GOYAL
5	2014H129006G	VAISHNAV PARTH HITARTHBHAI
6	2012B2A4613G	KARTIKEYA TIWARI
7	2011PHXF405G	SHAMANTH N
8	2014H129002G	SUNDARAM .S
9	2011PHXF012G	MEGHANATH PRABHU
10	2012A4PS174G	DESAI ABHISHEK ASHOK
11	2012B1A1699G	PRANJAL SINGHAL
12	2012B1A4702G	ATUL ASHOK KUMAR
13	2012A7PS041G	RUSHIKESH KULKARNI
14	2012PHXF016G	YOGESH D WALWALKAR
15	2014H129004G	ARUN SIDDHARTH
16	2012B4A8768G	T P VISHNUVARDHAN
17	2012A1PS426G	LAKSHMI SARADHI REDDY

**PUBLICATIONS DIVISION:**

The Publications Division published the BITScan Semester Newsletter Issue 9 and 10 and the Convocation Proceedings 2015 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 was also updated regularly with current events. Various student achievements, campus events and significant research projects were published in local and National media.

Prof. Meenakshi Raman and Prof. Judith Braganca visited the Jamnabai Narsee School in Mumbai and gave a presentation on the salient features of BITS Pilani education system, BITSAT & Admission, PS, Placement, Vision-Mission on 27th October 2015.

Prof. Judith Braganca attended the BITS Value Proposition workshop on 29th August 2015 at Hyderabad Campus.

**PUBLIC RELATIONS:**

Public Relations office coordinated following events:

S.No.	Topic	Date	Requested by
1	Expert and Candidates for Interview	01st -11th Jan 2015	Dean Office
2	Prof. Lakshminarayanan Samavedham, Director, Centre for Development of Teaching and Learning (CDTL) , NUS, Singapore -Given a talk	04th -08th Jan 2015	Dr. R S Patel
3	VC Visit	05th-06th Jan 2015	Director's Office
4	Hon'ble Governor of Goa Smt. Mridula Sinha & Mrs. Madhu Jain -We Care Film Festival 2015	19th -23th Jan 2015	Prof. Meenakshi Raman
6	Admiral Arun Prakash, Chief guest -Tedex 2015	24th -26th Jan 2015	Director's Office
7	Annual Technical Festival -Quark 2015	6th -08th Feb 2015	Director's Office
8	Conference "IACLALS ANNUAL CONFERENCE ON SPACE, PLACE, TRAVEL, DISPLACEMENT AND EXILE"	11th -15th Feb2015	Prof. Meenakshi Raman
9	Annual Sport Fest -Spree 2015	13th-15th March 2015	Director's Office
10	Expert and Candidates for Interview	28th April -1st May 2015	Dean Office
11	ERP Meeting	20th -22nd May 2015	Director's Office
12	Advanced Level Training Program, by Mathematics Dept.	25th May- 14th June 2015	Prof. P Dhanumjaya
13	Spiritual Function -Shiv Yog Shivir 2015	22nd May-26th June 2015	Director's Office
14	Finance Office Meeting	17th -21st June 2015	Mr. S Baskar, Head-Accounts
15	Advances In Robotics Conference-2015	01st-05th July 2015	Dr. N. Manjarekar
16	Expert and Candidates for Interview	19th -24th July 2015	Dean Office
17	Convocation 2015	08th August 2015	Director's Office
18	Coalescence- 2015 Conference	04th-07th Sept 2015	Dr. Mridula Goel
19	EURAXESS Conference-2015	24th-25th Sep 2015	Dr. Debdulal Thakur
20	Classical Musical Festival, Sursangam-2015	01st-05th Oct 2015	Dr. Radhika V
21	tiNai Ecofilm Festival-2015	06th -09th Oct 2015	Dr. Rayson Alex

**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 450 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. 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 house keeping 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 2015, these services (Koha OPAC and the repository) are accessible only while connected to the Campus intranet. In future, Internet connectivity will be offered.

### Server Migration: Koha

The Library rendered standard services like issuing of books, attending to reference queries etc., through the online LibSys Library Management software system. In 2012-13, a high-level decision was made to switch to some other software system, preferably an open-source one, in order to obtain freedom of customization and expansion of services which was absent in the former system. This decision was arrived at after repeated requests to the vendors of LibSys failed to elicit an encouraging response to our needs and wants. And then in synchronism with the tradition in BITS, faculty members and students were roped in to facilitate the migration. A survey of library management software systems used by the best libraries in Goa was made, and online communities were consulted, to zero in on LibLime Koha as the replacement. Through the combined efforts of them and the Library staff, successful migration to Koha was accomplished in July 2014. It is a matter of pride, among the community of library professionals, that we have achieved this without a single data entry remade manually. The decision and the choice of Koha was vindicated as soon as it was implemented: students enthusiastically responded to the new OPAC services and began making community sharing effort. The Library staff also expressed appreciation for the ease and flexibility of use of the new system, after the initial period of learning. Among all the BITS, Pilani Campuses, our Campus has been the first to accomplish this.

### Acquisition and circulation

The Library collection has reached 35200 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 **76** Indian Journals and **13** Foreign Journals in print, 17 online journals, 6 digital library packages for researchers of different disciplines. Print journal numbers have declined slightly, from 82 and 22 respectively for Indian and foreign journals, while the online resources have gone up. This is a shift the Library is making deliberately, in unison with the trend and preference among the users. 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 1342 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.

## (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	

No.	Make	Configuration	Number	Area of utilization	
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	49		
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	28		
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 Compaq DX2700	Intel Core 2 Duo Processor,1GB RAM,80GB HDD	56		
12	HP Pavilion P6730IN	Intel Core i3 Processor,4GB RAM,1TB HDD, DVD ROM	2		
13	IBM Thinkcentre	Intel Pentium 4 Processor,250MB RAM, 40GB HDD, CD-RW ROM	100		
14	Lenovo G510	Intel Corei5 Processor,4GB RAM,500GB HDD	22		Faculty members and Staff members for carrying out their academic teaching and research work
15	LenovoThinkPad EdgeE430	Intel Core i3 Processor,4GB RAM,500GB HDD	5		
16	Dell Latitude E5430	Intel Core i3 Processor,4GB RAM,500GB HDD	18		
17	Dell Vostro 1550	Intel Core i3 Processor,4GB RAM,500GB HDD	31		
18	Dell Vostro 2420	Intel Core i3 Processor,4GB RAM,500GB HDD	9		
19	Dell Vostro 3550	Intel Core i3 Processor,4GB RAM,500GB HDD	60		
20	Dell Vostro 3500	Intel Core i3 Processor,4GB RAM,500GB HDD	25		
21	HP Tablet PC	Intel Core i3 Processor, 2GB RAM, 500GB HDD	4		
22	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	DELL	2	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2003
2	DHCP	DELL	2	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2003
3	LDAP	DELL	1	[DELL PowerEdge T410, Quad Core	Cent OS

Sl. No.	Server	Make	Qty	Configuration	OS
				2.26 GHz 8 GB RAM, 500 GB HDD]	
4	Cisco Works	DELL	1	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 2000
<b>Communication Servers</b>					
1	Web Server	DELL IBM	3	[DELL PowerEdge T410, Quad Core 2.26 GHz 8 GB RAM, 500 GB HDD] [IBM x3650 M4 Dual Processors(6 Core),128GB RAM, 3TB Hard Disk]	Windows 2003
2	Call Manager	Cisco	2	1 GB RAM, 40 GB HDD	Windows 2000
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, ...)	DELL	1	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows XP2
4	Pro-E	DELL	1	[DELL Optilex 755,Core 2 Duo 2.33GHZ, 2 GB RAM,160GB HDD]	Windows 8
5	Course Management (Moodle)	DELL	1	[DELL PowerEdge T410, Quad Core 2.0 GHz,8GB RAM, 500 GB HDD]	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]	22	Windows 8 and Linux Office 2010, AutoCAD Modelsim, Xilinx		
	Dell Optiplex 9020 [Intel Corei7, 4th Gen, 8GB RAM, 1TB HDD]	50			
	Lenovo Edge73 [Intel Core i7,8GB RAM,500GB HDD]	28			
Central Computing Lab, Zone II	Dell Optiplex 3010 [Intel Core i3 / i5, 8GB RAM,500GB/1TB HDD]	60	Windows 8 and Linux, Office 2010, AutoCAD Modelsim, Xilinx		
	Dell Optiplex 990 [Intel Core i3,4GB RAM,500GB HDD]	40			
Central Computing Lab,	Dell Optiplex 390 [Intel Core i3,8GB	40	Linux		

Sl. No.	Server	Make	Qty	Configuration	OS
	Zone III			RAM,500GB HDD] Dell Optiplex 380 / 360 / 330 / 755 [Intel Core 2 Duo, 2GB RAM,320GB HDD]	60
<b>(D) Operating System and Software Licenses</b>					
	Windows			Windows 8	250
	Windows			Windows Server Standard 2008 / 2010	10
	Seqrite			Seqrite End point Security	600
	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	200 Mps	GWave (150) Vodafone (50)
02	Institute Building, Staff Quarters	100 Mbps	Vodafone (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.	30 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)**

(III) 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 2015 are as follows:

S.No.	Particulars
1	All Geared Precision Lathe Machine, ( 06 Nos.)with Standard Accessories. Bed Length - 1830, Centre Height - 177, Spindle bore - 42, Admit Between Centres - 1000
2	Heavy Duty Shaping Machine, 18" with accessories
3	Universal Milling Machine, With Standard Accessories
4	Hydraulic Hand Pallet Truck, 2.5 Ton Cap
5	Hydraulic Floor Crane, 1000 Kg
6	TIG Welding Machine 200 Amps
7	Dehumidifier - Cap. 30 ltr
8	Digital Weighing Balance (Accuracy 0.01gm, Max Capacity - 500gm)
9	UPS 5 KVA, For 1Hour Backup
10	UPS 7.5 KVA, For ½ Hour Backup

**(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	9 Nos. / 84 cumec



Central Facilities	Installed Size/Capacity
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 three of 5 KW each and power generated from solar and wind is fed to street light.
Solar Water Heater	47 nos of solar water heater are installed 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 Main Building

Three new labs are constructed for Physics, Chemistry and Biology near Wing C with a carpet area of 150 Sq m each. Scholar student area has been created to carry out their theoretical research work.

The Biology and EE labs are developed to accommodate research and academic purpose

### B2.14 MAJOR EQUIPMENTS ACQUIRED DURING THE YEAR

SNo.	Asset Description	Location	Rate	Qty	Amount
1	APC 6 KVA online UPS SRC6KUX1	CC-117 ARCD	117750	1	117750
2	Dell Desktop Precision T1700MT sr no.Dzdg32/7 ordg32 and 23IN LED p2414h 23.08" monitor	Reconfig lab-A205 and Microelectronics lab CC-123 qty-1 each	99645	2	199290
3	Dell Desktop Optiplex 9020 MT	WSMET for students project	92,537	3	277610
4	Dell Ins 3647/G3250/4GB/500GB/win8. 1 SL/20 desktop	Chemistry Lab	33,810	4	135240
5	Lenovo Desktop EDGE 73 core 17,8gb	CC-219	49,600	36	1785600
6	HP Laserjet 725DN-MONO CNCXG91D6Q	A-307 Embedded system lab	239925	1	239925
7	HP Laserjet Mfp-M12128fn	CC-123 & A-204 qty.1 each	14,700	2	29400
8	HP Laser Jet 1005 M 1005 Printer CNH8G8CG8	ARD office B-307	11750	1	11750
9	HP Laserjet M775 DN CNXH2V8GN	Project General Manager B-202	330,750	1	330750
10	HP Printer Mfp226Dn	SWD- B-102	24,465	1	24465

SNo.	Asset Description	Location	Rate	Qty	Amount
11	Dell Vostor Laptop	CC-123	48,300	2	96600
12	ME087HN/A-iMac-21" Quad-core i5 2.9GHz	CS&I Office A-200	205,800	1	205800
13	HP Laser Jet M 1005 Printer CNH8g5z327	CC store	11750	1	11750
14	HP 1005MFP Laserjet Printer	Chemistry Lab	13,650	1	13650
15	Laser Jet Pro200 M251n colour printer (HP) sr no. VNC3J03208	Director's Office	22995	1	22995
16	Lenovo 90B7000 PDC	Chemistry Lab	26,400	1	26400
17	Lenovo Desktop Edge-73	CS&I Office A-200	50,925	17	865725
18	Lenovo Desktop	CS&I Office A-200	54,810	5	274050
19	UPS Distribution board	CS&I A-200	90,253	1	90253
20	600va UPS Power safe	CC store -121	1450	10	14500
21	600va UPS Power safe	CC-123, qty-6 & A-204 qty-2	1,450	8	11600
22	600va UPS Power safe	Chemistry Lab	1,575	2	3150
23	Numeric 30KVA HPE UPS FMI (3PH-1PH) 100AH*30nos quanta batteries with stand	CS&Is A-200	525,631	1	525631
24	Offline UPS 1 KVA	CC-123, & A-204 qty-1 each	3,950	2	7900
25	E-Gel Imager W/UV Light Base with syer filter	Bio Lab C-104	478266	1	478266
26	Electracomet DC power supply range 200V 500mA constant voltage or constant current modes with MOSFETs	Bio Lab C-101	55575	1	55575
27	Air Jacket -Multiskan Go without Cuvette	Advance Bio Lab	444834	1	444834
28	Essae Electronic Weighing Scales Model FB200	C-112	36135	1	36135
29	Orbital Shanking Incubator Model-LSI 125R	C-106	160450	1	160450
30	Minilys homogenizer (06404 200 RD000	C-104	234725	1	234725
31	Thermo Scientific Forma Direct Heat CO2 Incubators with high temperature Decontamination & HEPA Filtration	Advance Bio Lab	353257	1	353257
32	Digital PH Meter with unbreakable combined electrode PH meter with built in electronic buffer model EQ610	Chemistry Lab- C-114	9261.56	3	27784.68
33	Digital conductivity Meter with built in STD conductance range uS to 200ms in six auto ranges 230V Model EQ 667unbreakable combined electrode PH meter with built in electronic buffer model EQ610	Chemistry Lab- C-114	9313.5	3	27940.5
34	Sartorius Balance BSA224S-CW sr no.31390565	Chemistry Lab- C-114	89951	1	89951

SNo.	Asset Description	Location	Rate	Qty	Amount
35	Ultrasonic Cleaner type bath Cap 3.5 ltr.,	Chemistry Lab- C-114	18428	1	18428
36	Mild steel GI fume hood with GI steel under cabinet having overall size 1200mmL*900mmW*2740mmH with exhaust blower	New Chemistry Lab	290340	1	290340
37	Vacuum Pump Rotovac valve Tec 230v 50/60hz	Chemistry Lab- C-114	131437	1	131437
38	HEI VAP Value Digital G3 230V 50/60HZ in plug	Chemistry Lab- C-114	185064	1	185064
39	Chiller Rota Chill 230v/50HZ	Chemistry Lab- C-114	134012	1	134012
40	TLC weiving chamber with short wave254NM long wave 365NM with light source	Chemistry Lab- C-114	6598	1	6598
41	CCS-100/202 Optical closed cycle variable temerature cryogenic system	MT -1 Physic Lab B-108	1361795	1	1361795
42	Celestron CGE Pro 925 HD	MT -1 Physic Lab B-113	1806431	1	1806431
43	AC	New Lab Physics,Chemistry,Bio	1299216	1	1299216
44	Metal sample tube with syrine seotum	A-107	5795	5	28974
45	celfrost Half Freezer Half Chiller with 2 additional racks model:CFCC300	PET Lab A-105	29862	1	29862
46	T25 Digital S 22 ultra- Turrax make-IKA	A-107	176963	1	176963
47	RF Plasma Cleaner with Quartz sample tray size 50mm dia	A-106	337500	1	337500
48	Laboratory Rheometer with temp control sr no. 80717966	A-107	480781	1	480781
49	Water purification system make: Bio age equipment services	A-105	419484	1	419484
50	Programable syringe pump specify voltage 2 syringe cat Bs 900-2	A-105	138199	1	138199
51	Battery Charger 24V/12V	Dynalab near PCC-3	42750	1	42750
52	F28035 Piccolo Experimenter's kit	Power Electronics Lab EEE & EI depart	11078	4	44310
53	NI Programmable remote access power measurement and analysis system	Instrumentation Lab A-203	1003569	1	1003569
54	C6713 DSP starter kit TMS320C6713	Embedded system lab A-307	221550	1	221550
55	Philips 65" LCD Touch display along with wireless dongle HD wifi streamer	Director's cabin B Wing 405	226688	1	226687.5
56	Philips 65" LCD Touch display along with wireless dongle HD wifi streamer	Deputy Director'	226687	1	226687
57	Panasonic Projector model PT TW331R L shaped mount	LT-1 to 4	78430	4	313720

SNo.	Asset Description	Location	Rate	Qty	Amount
58	Apple Iphone 6 plus 64 Gb silver	Director	72995	1	72995
59	Motorola CP 1180/GP 328 plus UHF portable Handheld set	Auditorium	9000	5	45000
60	Motorola CP1180/GP 328 plus UHF Portable Handheld sets along with standard accessories	Security Gate	9400	25	235000
61	Aquaguard Pure chill 120 Pss	Auditorium	75000	1	75000
62	Wireless Lapel Microphone with headfreeport	LT-2	13125	1	13125
63	Spekers Nexo PS15L R2	Auditorium	186039	4	744155.4
64	Spekers Nexo PS15R R2	Auditorium	186039	4	744155.4
65	Subwoofer Nexo LS18E	Auditorium	167072	2	334144.7
66	Amplifier nexo NX Amp 4*4	Auditorium	631179	1	631179.4
67	Flying Hardware Nexo VNT-TTC	Auditorium	34023	8	272184.9
68	UPS Power safe 1KVA vp11414428ps,27ps	Chemistry Lab	4,095	2	8190
69	Powersafe 1 KVA offline UPS	Workshop CNC lab	3750	20	75000
70	LED TV 32" modle 32LY340C sr no. 411OLYZ007506 & 2590	Qtr-A-168 & Director's cabin	23000	2	46000
71	LED FHD commerical 42" TV	CH-1 & CH-4 coman room	42,490	2	84980
72	Solar street Light	Residences steet	39,933	14	559056
73	3 star -1 TR Hi wall split ac	WS-106 & 108	32073	1	32073
74	3 star -2 TR Hi wall split ac Make Blue star	WS- 108	39735	2	79470
75	online Ups System with Battery sm20kpm cps sm series	CC UPS Room	609,000	1	609000
76	Numeric 30KVA HPE UPS FMI (3PH-1PH) 100AH*30nos quanta batteries with stand	CS&Is A-200	525,631	1	525631
77	IBM server X3650-7915C5A Dual Processors 6 core	Server Room CC-119	414,466	4	1657866
78	IBM server X3650-7915C5A Dual Processors 6 core	Server Room CC-119	226,433	1	226432.5
79	Wireless Dongle	Conference room & Auditorium	32550	2	65100
80	4TB External Expansion HDD Sr no, NA4NNNYA	WILP Office Studio	12,443	1	12443
81	Netowing system	Ch-1,SAC,Shopping comples,	564,285	1	564285
82	Panasonic Projector model PT LW-330	Class room A-207 & A-603	47150	2	94300
83	UPS 3KVA online powersafe with 6nos 26 H batteries	Chemical Eng. Lab A-106	47,250	1	47250
84	APC 6 KVA online UPS SRC6KUX1 with batteries rack & interlinks	Chemistry Lab	117,750	1	117750
85	2 star -1.5 TR Hi wall split ac Make Blue star with 4kVA V-guard stabilzer	SWD B-102	37500	2	75000

SNo.	Asset Description	Location	Rate	Qty	Amount
86	3TR mega split Ac Blue star with accessories	A-200	76333	3	229000
87	CPU2006/v1.2	CC office	13,776	1	13776
88	WindSim 6/network enabled	Microelectronics Lab CC-123 EEE Lab	295,773	1	295773
89	Windows-8	CS&Is A-200	12,338	5	61687.5
90	Microsoft Office 2013 FPP	CS&Is A-200	12,863	5	64312.5
91	Corded vocal microphone shure PG-58	Auditorium	2049.6	6	12297.6
92	Corded vocal microphone shure SM-58	Auditorium	6525.75	2	13051.5
93	Corded instrumnet microphone shure SM87	Auditorium	6008.1	2	12016.2
94	wireless vocal microphone shure SVX	Auditorium	17325	2	34650
95	Di Box-BSS	Auditorium	7927.5	4	31710
96	Drum Mic set AKG Groove pack	Auditorium	16275	1	16275
97	Top loading digital balance with lcd display	Bio Gas Plant Dr M Srikanth	26438	1	26438
98	Leap Motion Controllers	Computer science A-418	6861	3	20583.75
99	42U server rack frame 800*1000 steel rack	CS & IS A-200	158007	1	158007
100	17U network rack	CS & IS A-200	616722	1	616722
101	Deep Freezer Model CHF50A make blue star cap -500ltrs	A & C Mess	32,000	2	64000
102	Solar Photovoltaic panels with fixed tilt up structure with other accessroies	PCC_3	259716	1	259716
103	Aluminium Melting Furance Melting capacity 15kg	Workshop	168863	1	168863
104	Orifice meter , Venturimeter, Nozzle meter ,Turbine flow meter and Rotameter Set-Up (S.S. Tanks) Closed circuit - Specifications enclosed. (CMP/ EFM-2)	Workshop	145,043	1	145042.9
105	Major Losses & Minor Losses set up(S.S. Tanks) Closed circuit - Specifications enclosed. (EFM-4 )	Workshop	117,134	1	117133.5
106	Bernoulli's Apparatus (S.S. Tanks) Closed circuit - Specifications enclosed. (FM-6 )	Workshop	60,945	1	60944.63
107	Reynolds's Apparatus (S.S. Tanks) Closed circuit - Specifications enclosed. (FM-7 )	Workshop	58,768	1	58767.7
108	Impact of Jet on Vanes (S.S. Tanks) Closed circuit - Specifications enclosed. (FM-9	Workshop	60,945	1	60944.63

SNo.	Asset Description	Location	Rate	Qty	Amount
	)				
109	Pitot tube setup (Air Media) - Specifications enclosed. (FM-15)	Workshop	57,279	1	57278.63
110	Free & Forced Vortex flow apparatus (S.S. Tanks) Closed circuit - Specifications enclosed. (FM-18)	Workshop	78,358	1	78357.5
111	Say bolt Viscometer (FL-4)	Workshop	13,174	1	13174.08
112	Redwood Viscometer (FL-5)	Workshop	16,336	1	16336
113	Torsion Viscometer (FL-6)	Workshop	37,546	1	37546.27
114	Calibration of Pressure and Vacuum gauges (Dead weight pressure gauge tester). (CMP/IL-1)	Workshop	82,165	1	82165.2
115	Study and calibration of LVDT transducer for displacement measurement. (IL-3)	Workshop	17,931	1	17930.7
116	Calibration of strain gauge for strain measurement (IL-4)	Workshop	35,861	1	35861.4
117	Computerized calibration of thermocouple set up for calibration of thermistrer RTD j and k type thermocouples	Workshop	188925	1	188925
118	Wind tunnel with accessoires	IC Engineering Lab	2692788	1	2692788
119	Swisser Brand electronic weighing system	IC Engineering Lab	11904	1	11904
120	Panther all graded precision lathe machine Model 1350/2 with accessories	Workshop	339818	2	679636
121	Omega heavy duty shaping machine	Workshop	246920	1	246920
122	Universal Milling machine esteam brand model Eum1320A with knuth quality	Workshop	1063294	1	1063294
123	Wind stream make hybride power generated system of 1 kw system	Security Gate	185000	1	185000
124	ABC new store pressunrd ABC dry power fire fitting system	Security main Bld	1688	30	50625
125	Li 4278 Blue tooth scanner	Library	23625	2	47250
126	Numeric 5KVA UPS system with Dc power pack sr no. II141109146	Chemical Eng. Lab A-106	96500	1	96500
127	Numeric UPS HP Max 3 KVA with battery bank(12V,28AH)	LT-1 to 4	49130	4	196518
128	Aquaguard Pure chill 120 Pss	Auditorium	75000	1	75000
129	3mts square trussing with licking pin set	Auditorium	58000	5	290000
130	Lighting controller titan mobile	Auditorium	400000	1	400000
131	Parcans Par-64	Auditorium	5281	12	63377.14

SNo.	Asset Description	Location	Rate	Qty	Amount
132	Parcans Bulbs	Auditorium	5619	24	134854.3
133	Dimmer Pack 6 pack 2ke IES	Auditorium	36781	2	73562.86
134	DMX splitter LBT DP81	Auditorium	19366	1	19366.43
135	LED Par Can 3W elite	Auditorium	10591	10	105914.3
136	Casio Electronic Keyboard CTK 2200 with case nylon with foam padding L38(96.5cm)*B15	community welfare division	7614.94	5	38074.7
137	Magnum keyboard stand X type K109	community welfare division	1387.5	6	8325
138	Laney audiohub amp AH80,80W kickback cabinet	community welfare division	19570	1	19570
139	Webcam Logitech Camera BCC950	Mechincal Engg. Dept	13125	1	13125
140	CCTV Camera	Security gate qty-5 & Basement qty-3	7811	8	62486.96
141	STATA/IC 13 educational vol 7 user with download link	A-302	168,968	1	168968
142	OMR answer sheet form reader & quation paper generator teaching feedback	Prof.DMK	30,000	1	30000
143	Autodesk AutoCAD LT 2015 New SLM Box pack	Project Manager-Mr Dhamal	94,500	1	94500
144	E view 8 standard edition	Economics Dept -B-310	36,124	1	36124
145	state of india per logine	Physic Lab A-302	134,832	1	134832
146	Cap EX IP & state of india per logine	Physic Lab A-302	101,124	1	101124
147	Windsim 6.2	Microelectronics lab 123	148522	1	148522
148	Cadence EDA rools research bundle 10user	Microelectronics lab 123	2371960	1	2371960
149	Monosek real time network packet processing network protocol analyzer system host system & Embedded linux (20 users)	CS&Is A-200	#####	1	1338750
150	Smartnet 8*5*NBD cisco 5508 series wireless solution with controller WIFI	14 Hostels	#####	1	3231632
151	Iviumstat Electrochemical Workstation	Chemistry Lab- C-108	1046416	1	1046416
152	One plus one 64GB sandstone black	Deputy Director'	22698	1	22698
153	Moto E Mobile phone sr no, 353322068433987	Placement Unit A-114	11,798	1	11798
154	Nokia Lumia 730 mobile phone sr 35716806630	Placement Unit A-114	13,299	1	13299
155	LPG conversion kit with standard accessories	IC Engineering Lab	12000	1	12000
156	AVL Digas 444 with 5 gas analyser with diesel application probe and accy	IC Engineering Lab	141561	1	141561

SNo.	Asset Description	Location	Rate	Qty	Amount
157	Computerised producer gas based S I engine with provision for changing the compressor & ratio & spark time electronic governor woodward	IC Engineering Lab	600000	1	600000
158	Apple imac ME086HN/A Laptop	CS & IS A-200	161330	1	161330
159	Paper Shredder GS 15 CD	Director	12932	2	25864
160	Gaussian 09 64 bit with Gauss View-5	C-108	137,076	1	137076
161	Wien2k	Chemistry lab kept in server room	16,278	1	16278
162	Sigmaplot 13 software 5 user	C-108	75,000	1	75000
163	Chembiosoft ultra	C-108	119,676	1	119676
164	Desk Jet Ink advantage 3545 All-in one printer sr.no.CN4671333p	B-307	6,510	1	6510
165	Cannon Pixama MG 5670wireless colour printer	BITSAA Office	7,037	1	7037
166	HP laserjet M1136 MFB	BITSAA Office	11,500	1	11500
167	Wind river workbench 3.3 tools for Vxworks 6.9 (GTP)	server room	779645	1	779645
168	Dell Laptop 17 5th gen	A-413	72000	1	72000
169	RH010594 Red hat enteroruse Linux server standard 1-2 sockets	A-413	134832	1	134832
170	IBM 1TB sata HDD	server room	32000	1	32000
171	IBM server X3650-7915C5A Dual Processors 6 core 128GB rAM/3TB HDD	seed Grand project K R Biju Server Room CC-119	414,466	1	414466
172	IBM server X3650-7915C5A single Processors 6 core32GB RAM/500GB HDD	seed Grand project K R Biju Server Room CC-119	210,473	1	210473
173	Vacuum oven	Process engineering & technology lab	74700	1	74700
174	Power Safe 600VA VP-081518113AR	C-105	1450	1	1450
175	Iball Barcode scanner	Placement Unit A-113	2150	2	4300
176	Powersafe 1000VA Eco UPS	A-102	4462	1	4462
177	Pheostat Single Barrel 145 Ohms	EEE A-204	2328.5	2	4657
178	AC voltmeter	EEE A-204	1215	4	4860
179	Seagate 1 TB External HDD	CC-117 ARCD	5040	1	5040
180	Clinical Centrifuge cap 4*15ml	C-112	5444	1	5444
181	Microwave Oven 20PM1S(51381501150000061)	C-106	5750	1	5750
182	Microwave Oven 20PM1S	Qtr-D-98	5750	1	5750
183	Powder coated 30*30 cm box tube table stand frame with top	Chemistry lab	5862	1	5862



SNo.	Asset Description	Location	Rate	Qty	Amount
	granite supported with 12 mm marine plywood to kept the instrument of AFM				
184	TVS star bar code scanner	Computer centre	2950	2	5900
185	Microwave Oven 20PM1S	Qtr-D-98	6401	1	6401
186	CCTV Camera( outside of security gate)	Security Gate	6500	1	6500
187	Modesty Panel for 1500*600 table size 1200*450	Finance Office B-104	3313	2	6626.24
188	DC Voltmeter	EEE A-204	1164.33	6	6986
189	Seagate 1 TB External HDD	Placement Unit A-113	7000	1	7000
190	Wattmeter LPF	EEE A-204	2430	3	7290
191	Wattmeter UPF	EEE A-204	2430	3	7290
192	Dol Starter Contractor	EEE A-204	4556	2	9112
193	Pheostat Single Barrel 300 Ohms	EEE A-204	1923.8	5	9619
194	Fabric Magnetic screen 1050*300(12mm thick MDF clad with fabric and mounted on chrome studs	Finance Office B-104	1870	6	11221.86
195	HP Printer 126ne,s/n CNB6H56133	A-206-1 (EEE dept0	11637	1	11637
196	Over head storage openable shutters wall mounted 900*360*450	Finance Office B-104	5878	2	11756.24
197	Fabrication of Ractor	SCEO -A-102	11813	1	11812.5
198	1 seater Linear non sharing 1500*600mm table top	Finance Office B-104	12023	1	12023
199	wesman air gas ratio regulator	Mechincal Engg. Dept	12057	1	12057
200	Mini station for Fuel gas (0-10 bar)	IC Lab	12472	1	12472
201	CCTV Camera	VGH Reception	12988	1	12988
202	Pheostat Single Barrel 250 Ohms	EEE A-204	6784	2	13568
203	Seagate backup plus 4TB USB 3 hard-disk	Placement Unit A-114	14018	1	14018
204	High pressure 2 stage regulator with flame arrestor	Mechincal Engg. Dept	15656	1	15656
205	Powersafe 2KVA UpS with 2nos Ext Batteries	A-102	17850	1	17850
206	Digital Weighing Balance acc0.01gm cap 500gm	Workshop	18000	1	18000
207	Crompton High Flow wass mounting fan	SECO PET Lab	1926.8	10	19268
208	Intergal orifice plate assembly with meter run	IC Engineering Lab	10000	2	20000
209	Bosch Demolition Hammer GSH 5X	Mainteanace Dept.	20000	1	20000
210	Blue star1.5 Ton 3 star F HI wall	Chemistry lab	23262	1	23262

SNo.	Asset Description	Location	Rate	Qty	Amount
	split ac				
211	Fire Alaram System	server room	23288	1	23288
212	Powder coated 30*30 cm box tube table stand frame with top granite supported with 12 mm marline plywood	A-102	11800	2	23600
213	Z962-18" wall Mounted Fan Almonard	SAC	4145.66	6	24873.96
214	Saw Chain	Horticulture	25000	1	25000
215	System Control Panel	pCC_3 Hybride system	25200	1	25200
216	Nikon Digital Camera with accessories	PRO Office B-209	25700	1	25700
217	Minitab 17 academic single user	Chemical Engg Lab A-103	26439	1	26439
218	Hand Pallet Truck 2.5 TON capacity	workshop	14625	2	29250
219	Mobile Pedestal 2 drawer & 1 filling cabinet	for PHD Students Library	5878.2	5	29391
220	Blue star 1 Ton 3 star split AC Model 3HW12FC	CC-201	30500	1	30500
221	Fabric Magnatic screen size 1050*300mm	for PHD Students Library	2138	15	32062.95
222	Dehumidifier cap 30 ltr.(make white wasing house)	Workshop	34448	1	34448
223	Office chair black	ARC	7500	5	37500
224	Dell Desktop Inspiron AIO 3048	A-114(PS Division)	37789	1	37789
225	Cng Conversion Kit	IC Engineering Lab	38000	1	38000
226	Motorized exercise/jogging cycle	SAC & GYM	19000	2	38000
227	HP Laserjet M1005(CNH8H2C75L,9,CNH8 H1844V	CC-121	13025	3	39075.99
228	HP Laserjet M425dn laser Aio Duplex	Placement Unit A-113	40000	1	40000
229	Equibath Refrigerated Circulating Bath CE certified	A-102	41828	1	41828
230	Blue star 2 Ton 3 star split AC Model no. 3HW24FBO	workshop-WS-112	42000	1	42000
231	Lenevo TFT 18.5" S/N 8ML 1253F 1ON3924 with Windows 7	C-112	42624	1	42624
232	Dell Vostro 3800 with Window 7 professional	A-102	44363	1	44362.5
233	RH00101594 Redhat enterprise linux server standard	Server A-200	44944	1	44944
234	Gas Cylinder cage/shed 4.75mt*1.8mt*.1.80mt	Behind A-103	45450	1	45450
235	CP plus 2mp IP Dome camera professional with Poe ,8 channel NVR & 2TB	LT -1,2,3,4	11398.25	4	45593

SNo.	Asset Description	Location	Rate	Qty	Amount
	surveillance HDD				
236	Hydraulic floor crane 1000kG	Workshop	45749	1	45749
237	Apple Mac mini dual core i5/2.6 GHz 1TB Laptop	Directors Chamber	46990	1	46990
238	2 seater Linear non sharing 1500*600mm table top	Finance Office B-104	24047	2	48093.74
239	NI USB 6008 12 Bit 10 Ks/s Multifunction DAQ with accessory Kit	EEE-A-203	24055.5	2	48111
240	HDCVT CCTV Camera	Outside security gate	12435	4	49740
241	Blue star make HW split 2 ton 3 star split AC	Dynamic Lab(Mechanical Dept.)	50560	1	50560
242	SS Chaptti Puffer Plate with Puffer	A & C Mess	27140	2	54280
243	Agri Fog sprayer TS35(WHO)	Horticulture	54500	1	54500
244	Table E1 L 12060 1 seater liner non sharing 1200*600mm	for PHD Students Library	10955	5	54773
245	Dice make Task Chair Visitors chair	ARC	5500	10	55000
246	CCTV Camera	C-104 qty-3 & C-105 qty-2	11076.2	5	55381
247	Fire Alarm System	Library	57431	1	57431
248	Mobile Pedestal 2 Drawer & 1 filling cabinet	PHD Scholar in 1st floor Library	5878.1	10	58781
249	Blue star make 1 OT on 3 star split AC Model no. 3HW12FC	CC-121(centre lab & computer service centre)	30500	2	61000
250	AC/DC Module single user CPU locked License	Dynamic Lab WA-110	61914	1	61914
251	Heat Transfer Module single user	Dynamic Lab WA-110	61914	1	61914
252	Structural Mechnics Module single user	Dynamic Lab WA-110	61914	1	61914
253	200amps TIG welding power source machine	Workshop	31500	2	63000
254	Lenovo Desktop H-30-50 core i7 4790,8GB,1TBDVDRW card reader wifi graphics	SCEO Lab Chemical Dept.	64500	1	64500
255	Pressure vessel 1m3 made of MS with FRP coating and pressure gauge and pressure switch	Bio Gas Plant Dr M Srikanth	65300	1	65300
256	Dell Laptop 7548 touch	A-114(PS Division)	67071	1	67071
257	Elliptical Cross Trainer	SAC & GYM	33999	2	67998
258	LiveLink for PTC pro/ engineer single user	Dynamic Lab WA-110	68210	1	68210
259	APG25MHz 120MS2 ch Arbitrary function genergatro Gwinstek AFG 2225	A-205 EEE dept	34253	2	68506
260	Bluestar Water Cooler Model SDLX480	Hostel AH_6/FT3 & AH-3	34500	2	69000

SNo.	Asset Description	Location	Rate	Qty	Amount
261	Visitor chair bodyline VA 2	PHD Scholar in 1st floor Library	4916.26	15	73743.9
262	Windographer Ver.4 Professional Edition 1 license	Micro Electronics Lab EEE Lab	77675	1	77675
263	CCTV Camera	Computer centre	12988.42	6	77930.52
264	Table Tennis table(stag)	SAC & GYM	26000	3	78000
265	Wolfram System Modeler Network server standard and increment	C-107	80000	1	80000
266	NC98SR Floor standing server rack 42U/80,,W/100mm D	server room	41281	2	82562
267	Blue star make HW split AC 1.5 TR 3 star	CC-121(centre lab & computer service centre	44260	2	88520
268	Nikon D7200/18-140mm camera	Auditorium	89000	1	89000
269	SS Chaptti Puffer Plate with Puffer	A & C Mess	51278.5	2	102557
270	On Line UPS System 5KVA/120VDC	Workshop	103000	1	103000
271	On Line UPS System 7.5KVA/144VDC	Workshop	106000	1	106000
272	AFG 50 Mhz 200MS 1 ch Arbitrary function generator GW instek AFG 3051	A-205 EEE dept	108482	1	108482
273	Gas Cylinder	Mechincal Engg. Dept	10890	10	108900
274	1 seater linear non sharing 1200*600mm table	PHD Scholar in 1st floor Library	10954.7	10	109547
275	Apple I PAD Air 2, 64GB,WIFI Cellular with stuffcool riser case	Placement Unit A-113	55200	2	110400
276	Tread mill cysle motorized	SAC & GYM	117000	1	117000
277	DSO 100MHz,1Gs/S,2ch) Digital storage Oscilloscope GW InstekGDS 1102A-U	A-205 EEE dept	39225	3	117675
278	Molpro for single designated Mac or Linux workstation non commercial use parallel execution 4 pack	C-108	123436	1	123436
279	Piezo Motor Driven Linear stage 12mm travel with motor controller	B-109	126079	1	126079
280	3650 M4,Intel Xeon E5 (Hexa Core ) IBM server	A-103	127493	1	127493
281	DSA-11-C08 ,DSA-20-C08 Octave analysis and SLM and long time waveform recording	Mechanical Engg. Lab WA- 110/3	131250	1	131250
282	Power meter aLM 10 power meter	for Research workCS & IS A-200	137400	1	137400
283	3" Air Cooled Vacuum Pumping system with rotary pump exhasut mist filer	MT -1 Physic Lab B-109	165972	1	165972
284	1000KVAR APFC panel	STP	166500	1	166500
285	Dell Optiplex 9020 I5-4790 mini	Woarkshop	65609	3	196828

SNo.	Asset Description	Location	Rate	Qty	Amount
	tower desktop				
286	SS Cabinet MOC SS304,16 Swg recttube rect tube	A-102	202500	1	202500
287	Comsol Multiphysics -CFD module single user	Chemical Engg Lab A-103	204345	1	204345
288	Solar Inverter/Charger XW out put power 4.5 KVA	pCC_3 Hybride system	258300	1	258300
289	Iviumstat Electrochemical Workstation	Chemistry Lab- C-108	1319406	1	1319406
290	IBM server X3650-7915C5A with accessories	Chemistry Lab- C-108	287386	1	287386
291	Dell Optiplex 3020 MT	EEE Dept.	59850	5	299250
292	PV Module with MPPT solar charge		20665	15	309980.9
293	Dell Desktop optiplex 3020MT	B-113	31500	10	315000
294	Water Purification system for producing Type 3 water 8 i/h with front bottom mounted display	Chemistry lab	333753	1	333753
295	206-25400-58 Shimadzu UV VIS Spectrophotometer Model UV-1800	C-105	388500	1	388500
296	AFG3021C Arbitrary Function Generator	EEE dept	394423	1	394423
297	ProDyn Models -advance training solutions'	Chemical Engg dept	398449	1	398449
298	Dell Optiplex 9020 I7-4790 mini tower desktop	Woarkshop	80428	6	482567.4
299	Usage of ISI Emerging markets (EMIS Service) data software	Economics Dept	487912	1	487912
300	Dell Projector 1510x	A-507,508,603,604,C-403,404,501,504, & 2nos CC-219 & Studio Room	42500	12	510000
301	DSA3217/16Px-10"H2O 16 Channel Pressure Model SN-10212	IC Lab	559394	1	559394
302	Hand arm and whole body exposure measurement & analyzer system	WA-110 Dynamic lab	576450	1	576450
303	WS C-3650-24ps-L cisco catalyst 3650 24 port data 4*1g Uplink Lan Base	Various location	127050	5	635250
304	Trnsys software Ver.17 edu.10 user license all 14 tess components	EEE dept.	654458	1	654458
305	LED Solar street light Luminary with PPR Battery box	Childern park-13nos,F qtr-5nos,PCC-3&4 qtr-1 each near A&C mess	32550	24	781200
306	IBM server 3650 with accessories	Computer centre CC-119	828933	1	828933
307	Cadence EDA rools research bundle 10user	Microelectronics lab 123	2371960	1	2371960

SNo.	Asset Description	Location	Rate	Qty	Amount
308	Pilodist Vapour liquid equilliburm	Chemical Engg. Lab	872430	1	872430
309	Mahindra Scor DC Turbo SLX 2.6 CRD 2WD	Maintance	935,059	1	935059
310	NI SDR USRP 2922 with accessories	EEE-A-201 Digital Communication	997500	1	997500
311	Academic Tah Licence for Matlab	Server room CC-119 for EEE, Mechanical,Physic,Mathematic	1188677	1	1188677
312	High Pressure View chamber	A-102	1333896	1	1333896
313	WS C-3650-24TS-L cisco catalyst 3650 24 port data 4*1g Uplink Lan Base	Various location	101850	20	2037000
314	Dell Optiplex 9020 MT	Central Computer Lab CC-219	54776	50	2738800
315	Dell Latitude E5450/5450 CTO	CC store (for Faculty Member)	49815	69	3437238
316	Automic force microscope	IMA LAB Chemistry Lab- C-207	3687195	1	3687195
317	Bio gas plant	Bio Gas Plant Dr M Srikanth	1525308	1	1525308
318	MEMS + for Matlab	RIG project	727660	1	727660
319	Four Ball Tester(Base)LUB/0002/BA/0001	RIG project	750000	1	750000
<b>Total cost of Equipment</b>				<b>Rs. 83968431</b>	

### **B2.15 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVAL**

SAC Promotes 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 dependents in the campus. Daily training in football and cricket is conducted for the institute team.

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 latest machines and other equipment. The gymnasium functions strictly under the guidance of a trainer for safety measures.

Up gradation of Badminton court has been done and New Squash court has been constructed and it is used by the students and staff as per the SAC timings.

#### **SPREE 2015**

- The Institute's Cricket team won the finals; Badminton and Chess
- Carrom Team was runner ups in SPREE 2014.
- The football team won the GFA All Goa 3rd Division League and got promoted to 2nd division. The team was also runner up in SPREE 2015
- BITS, Pilani - K. K. Birla Goa Campus were overall Champions in SPREE 2014 national sports festival.

#### **OPEN TOURNAMENT**

- The Basketball team was runner-up in the All Goa Inter Collegiate Basketball Open Tournament organized by Don Bosco Oratory Panjim, in October 2014. The Tennis team won the Open Championship at Panjim, organized by Gasper Dias.
- One of our students Master Ramdas won the U-19 All Goa Badminton Tournament organized by Margao Club, and Hargun Oberoi won Cross Country championships.
- TENNIS; Rachit Aiyappa won the Open Tennis Tournament conducted by Panjim Gymkhana.
- Sidharth Mohan won the All Goa open Squash tournament October 2015.
- Institute Badminton team won the All Goa Badminton tournament conducted by Chicalim sports complex in October 2015.

**STATE REPRESENTATION**

- Shiv Sharma represented Goa U-22 State Cricket team in South Zone P. Ramchandra Rao Trophy 2014-15.

**Award of Scholarship to Students**

INSTITUTE'S MERIT & MCN SCHOLARSHIP	516	40441647
STUDENT AID FUND FINANCIAL ASSISTANCE	7	196900
SCH FROM BITSAA INTERNATIONAL	7	158700
OTHER SCHOLARSHIP	8	457150
<b>TOTAL :</b>	<b>538</b>	<b>41254397</b>

**Note :**

- Students are also in receipt of scholarship like INSPIRE, KVPY, NTS

**Teaching Learning Centre**

The Institute had set up Teaching Learning Centres (TLC) at its four campuses at Pilani, Dubai, Goa and Hyderabad in June, 2015 to carry out research on innovative teaching pedagogy, collection of good practices of teaching learning and disseminate such practices among the faculty, conduct intensive teaching workshops and invite experts from India and abroad to deliver lectures on relevant topics. In the year of inception, the following activities have been carried out through TLC.

1. A workshop on effective teaching and learning was organized during 18<sup>th</sup>-20<sup>th</sup> July, 2015 at KK Birla Goa Campus with initiatives from Mission 2015- QAA imperative team wherein faculty members associated with newly constituted Teaching Learning Centre's from Pilani, Dubai, Goa and Hyderabad campuses participated.
2. The Teaching Learning Centre (TLC) at BITS Pilani KK Birla Goa Campus developed its website during the first semester, 2015-16, wherein links to number of useful resources for enhancing teaching-learning processes at the institute were also provided.
3. Guest lecture was organized through Tele Presence classroom when Prof. Karmalkar from IIT Madras visited BITS Pilani Pilani Campus on Sep 24, 2015. It was attended by a large audience at KK Birla Goa Campus.
4. An intensive teaching workshop for TA's and PhD scholars was organized on Nov 29, 2015. Around 55 participants attended the workshop.

**Activities Planned for rest of the academic year 2015-16**

1. Intensive teaching workshop (ITW) for new faculty members during Jan 4-6, 2016.
2. TLC plans to bring out a new-letter wherein the teaching innovations brought out by faculty members will be recorded and shared for the purpose of deeper and sustained discussions towards continuous improvement in teaching learning processes.
3. Organizing guest lectures from learned members of faculty to enhance the level of excellence in teaching-learning environment.

## LIST OF ANNEXURE

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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.	623	Sasikumar Punnekkat	Computer Science & Information System/ Director	Director	Sr. Professor
2.	620	Ashwin Srinivasan	Computer Science & Information System/ Deputy Director	Deputy Director	Sr. Professor
3.	95	Sunil Bhand	Chemistry/Sponsored Research and Consulting Division	Dean	Professor
4.	6	D. M. Kulkarni	Mechanical Engineering/General Administration/Faculty Affairs	Dean/Associate Dean	Professor
5.	7	M. K. Deshmukh	EEE & E & I	HOD	Professor
6.	367	Meenakshi Raman	Humanities & Social Sciences	HOD	Professor
7.	52	Judith Maria Braganca	Biological Sciences / Media & Publicity	HOD/FIC	Associate Professor
8.	636	Saibal Ganguly	Chemical Engineering	HOD	Associate Professor
9.	77	Prasanna Kumar	Mathematics	HOD	Associate Professor
10.	78	Bharat M. Deshpande	Computer Science & Information System	HOD	Associate Professor
11.	120	Toby Joseph	Physics	HOD	Assistant Professor
12.	180	Shibu Clement	Mechanical Engineering / Workshop	HOD/Ex-Officio	Associate Professor
13.	85	Anjan Chattopadhyay	Chemistry	HOD	Associate Professor
14.	338	Ashwini Kumar Mishra	Economics	HOD	Assistant Professor
15.	3	Aditya P. Koley	Chemistry/Instruction Division	Associate Dean	Professor
16.	10	Neena Goveas	Computer Science & Information System/ Academic Registration & Counseling Division	Associate Dean	Associate Professor
17.	80	Srikanth M.	Biological Sciences/International Programmes and Collaborations	Associate Dean	Associate Professor
18.	104	Raghunath A. Ratabole	Physics/ Work Integrated Learning Programme.	Associate Dean	Associate Professor
19.	108	K. R. Anupama	EEE & E & I /Practice School Division	Associate Dean	Professor
20.	122	Ranjan Dey	Chemistry/Academic Resource Planning	Associate Dean	Associate Professor
21.	237	Prasanta Kumar Das	Physics/Academic Research Division	Associate Dean	Associate Professor
22.	185	Sampatrao Dagu Manjare	Chemical Engineering/ Admissions	Associate Dean	Associate Professor
23.	83	J. V. Rao	Computer Science & Information System / Student Welfare Division/ CAHU	Associate Dean /FIC	Associate Professor
24.	68	Srinivas Krishnaswamy	Chemical Engineering/ Centre for Innovation, Incubation & Entrepreneurship (CIIE)	PIC	Professor
25.	328	Mridula Goel	Centre for Innovation, Incubation & Entrepreneurship (CIIE)	FIC	Associate Professor
26.	62	Radhika Vathsan	Physics/Community Welfare	FIC	Assistant Professor

S.No.	GPSRN	Name	Department/ Facility	Activity	Designation
27.	82	Veeky Baths	Biological Sciences/ Alumini Affairs	FIC	Assistant Professor
28.	107	A . Amalin Pirnce	EEE & E & I/ Placement	FIC	Assistant Professor
29.	56	Varinder Singh	Mechanical Engineering / Teaching Learning Centre	FIC	Assistant Professor
30.	371	K.R.Biju	Computer Science/Computer Centre	FIC	Assistant Professor
31.	333	Ramesha C.K	EEE & E & I/Student Welfare Division	Chief Warden	Assistant Professor
32.	9	Anand K. Patil	Purchase & Stores & Estate	IC	Estate Manager
33.	50	Anuradha Voolapalli	Library	IC	Deputy Librarian
34.	230	Raghavendra K.M.	Medical Centre	IC	Chief Medical Officer
35.	505	Nikhil Dixit	Public Relations	IC	Public Relation Officer
36.	214	Anjali Dixit	General Administration	IC	Assistant Registrar
37.	612	S Baskar	Finance	IC	Head Accounts

#### NAME OF WARDENS OF GOA CAMPUS

S.No.	GPSRN	Name	Hostel	Activity
1	333	Ramesha C.K	CH3	Chief Warden Cum Warden
2	64	Anita B Agarwal	CH5	Warden
3	107	Amalin A Prince	AH1	Warden
4	114	Sanjay K Sahay	CH6	Warden
5	122	Ranjan Dey	AH2	Warden
6	211	P. Bhavana	CH4	Warden
7	318	Halan Prakash	AH5	Warden
8	362	Chandradew Sharma	AH4	Warden
9	363	Mainak Banerjee	AH3	Warden
10	414	Angshuman Sarkar	CH1	Warden
11	416	Jajati Keshari Sahu	CH2	Warden
12	482	Ranjit S Patil	AH6	Warden
13	556	Arnab Banerjee	AH8	Warden
14	565	Ravi Prasad Aduri	AH7	Warden

**DETAILS OF ADMISSIONS MADE DURING THE YEAR 2015****(a) Second Semester 2014-15****Doctoral Programmes:**

Ph.D.	10(01)
	<hr/>
	10(01)
	<hr/>

**(b) First Semester 2015-2016****1. Integrated First Degree Programmes**

	No. of students joined	BITSAT Cut-off scores	
		Highest	Lowest
<u>Group A</u>			
B.E. (Hons.)			
Chemical	76(06)		
Computer Science	100(10)		
Electrical & Electronics	83(10)		
Electronics & Instrumentation	84(08)		
Mechanical	73(01)		
	<hr/>		
	<b>416(35)</b>		
	<hr/>		
<u>Group B</u>			
M.Sc. (Hons.)			
Biological Sciences	44(04)		
Chemistry	44(06)		
Economics	47(05)		
Mathematics	47(09)		
Physics	45(03)		
	<hr/>		
	<b>227(27)</b>		
	<hr/>		
<u>Group C</u>			
M.Sc.(Tech.)			
Information Systems			
	<hr/>		
<b>Total :</b>	<b>643(62)</b>		
	<hr/>		
	<hr/>		

**2. Higher Degree Programmes :**

M.E.

Biotechnology	05(03)
Chemical Engineering	08(05)
Design Engineering	00(00)
Microelectronics	07(01)
Embedded Systems	08(00)
Software Systems	00(00)
Computer Science	08(04)

<b>Total</b>	<b>36(13)</b>
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**3. Doctoral Programmes :**

Ph.D. – Full Time	13(05)
Ph.D. – Part Time	13(03)

**SUMMARY**

	II Semester 2014-2015	I Semester 2015-2016
<b>On-Campus Programmes</b>		
Integrated First Degree Programmes	-	643(62)
Higher Degree Programmes	-	36(13)
<b>Total</b>	-	679(75)
<b>Doctoral Programmes</b>		
Ph.D. Full Time	07(01)	13(05)
Ph.D. Part Time	03(00)	13(03)
<b>GRAND TOTAL</b>	10(01)	705(83)

**STATEMENT SHOWING THE NUMBER OF CANDIDATES WHO HAVE BEEN PERMITTED IN THE  
ACADEMIC YEAR 2014-2015 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	7	10	6	5	3	5	1	5	42
B2	4	3	6	9	1	6	6	2	37
B3	6	4	5	7	1	7	6	4	40
B4	4	4	8	6	1	12	5	2	42
B5	3	3	12	5	5	6	6	1	41
Total	24	24	37	32	11	36	24	14	202

**OTHER PRIORITIES**

Programmes* From ↓ To →	A2	A7	AB	B1	B4	C6	C7	Total
A3		1		1	1			3
A5			2				2	4
A7				1				1
B3							3	3
B4							2	2
B5					1	2	3	6
C6	1	1						2
D2							1	1
Total	2	2	2	2	2	2	11	22

**(ii) K.K. Birla Goa Campus:****FIRST PRIORITY (Dual Degree)**

(From Group 'B' to Group 'A' Programmes) &amp; A to B Programmes

Programmes* From ↓ To →	A1	A3	A4	A7	A8	B1	B2	B3	B4	B5	Total
B1	4	9	6	5	6						30
B2	9	11	3	3	6						32
B3	9	11	14	14	12						60
B4	4	12	8	25	4						53
B5	5	15	13	8	10						51
A1						1					1
A3				1						1	2
A8										1	1
Total	31	58	44	56	38	1	0	0	0	2	230

**OTHER PRIORITIES (Transfer)**

Programmes* From ↓ To →	A1	A3	A4	A7	A8	B1	B2	B3	B4	B5	Total
A1											0
A3											0
A4				1							1
A7											0
A8				2							2
B1								2	1		3
B2								1	2		3
B3											0
B4				1							1
B5				1							1
Total	0	0	0	5	0	0	0	3	3	0	11

**(iii) Hyderabad Campus:****FIRST PRIORITY**

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

Programmes* From ↓ To →	A1	A2	A3	A4	A5	A7	AA	Total
B1	3	2	3	1	2	3	5	19
B2	3	1	6	6	2	4	5	27
B3	4	3	8	4	1	8	11	39
B4	2	6	8	7	3	12	4	42
B5	5	6	5	9	0	1	6	32
Total	17	18	30	27	8	28	31	159

**OTHER PRIORITIES**

Programmes* From ↓ To →	A2	B2	B5	Total
A5	1	1	1	3
A3			1	1
Total	1	1	2	4

**(iv) Dubai Campus:****OTHER PRIORITIES**

Programmes* From ↓ To →	A7	A8	Total
A1	1		1
AA		1	1
Total	1	1	2

**\*Legend:**

A1: B.E.(Hons.) Chemical,

A2: B.E.(Hons.) Civil,

A3: B.E.(Hons.) Electrical &  
Electronics,

A4: B.E.(Hons.) Mechanical,

A5: B.Pharm.(Hons.),

A7: B.E.(Hons.) Computer Science,

A8: B.E.(Hons.) Electronics and  
Instrumentation,AA: B.E.(Hons.) Electronics &  
Communication,

AB: B.E.(Hons.) Manufacturing,

B1: M.Sc.(Hons.) Bio. Sciences,

B2: M.Sc.(Hons.) Chemistry,

B3: M.Sc.(Hons.) Economics,

B4: M.Sc.(Hons.) Mathematics,

B5: M.Sc.(Hons.) Physics,

C2: M.Sc.(Tech.) General Studies,

C6: M.Sc.(Tech.) Information  
Systems,

C7: M.Sc.(Tech.) Finance.

**NUMBER OF STUDENTS REGISTERED****Second Semester 2014-2015**

Programme	Year of Admission							Total
	2007	2009	2010	2011	2012	2013	2014	
<b>A. Integrated First Degree Programmes</b>								
<b>B.E. (Hons)</b>								
Chemical			2(0)	51(8)	53(13)	66(11)	52(6)	224(38)
EEE	1(0)		2(0)	78(12)	78(11)	83(12)	99(12)	341(47)
Mechanical		1(0)	1(1)	79(0)	78(1)	77(2)	74(4)	310(8)
Computer Science		1(0)	1(0)	79(10)	82(15)	91(10)	94(12)	348(47)
Electronics & Instrumentation				79(14)	78(13)	84(16)	64(6)	305(49)
<b>M.Sc. (Hons)</b>								
Biological Science			38(7)	32(10)	35(13)	30(5)	32(5)	167(40)
Chemistry			30(2)	34(6)	32(9)	31(5)	35(5)	162(27)
Economics			41(10)	40(9)	34(7)	47(4)	57(7)	219(37)
Mathematics		1(0)	35(3)	39(10)	37(6)	43(4)	55(10)	210(33)
Physics			32(4)	36(7)	29(3)	36(4)	54(4)	187(22)
<b>M.Sc. (Tech)</b>								
Information Systems			1(0)	49(13)	43(10)			93(23)
<b>Total</b>	<b>1(0)</b>	<b>3(0)</b>	<b>183(27)</b>	<b>596(99)</b>	<b>579(101)</b>	<b>588(73)</b>	<b>616(71)</b>	<b>2566(371)</b>

**B. Higher Degree Programmes**

Programme	Year of Admission		
	2013	2014	Total
<b>M.E.</b>			
Biotechnology	7(5)	7(4)	14(9)
Design Engg.	10(1)		10(1)
Embedded System	13(2)	5(1)	18(3)
Software Systems	9(2)		9(2)
Chemical Engg.	9(5)	6(2)	15(7)
Microelectronics	10(2)	7(1)	17(3)
Computer Science		8(2)	8(2)
<b>Total</b>	<b>58(17)</b>	<b>33(10)</b>	<b>91(27)</b>
<b>Grand Total</b>			<b>2657(398)</b>



**First Semester 2015-2016**

Programme	Year of Admission								2015	Total
	2007	2008	2009	2010	2011	2012	2013	2014		
<i>A. Integrated First Degree Programmes</i>										
<b>B.E.(Hons.)</b>										
Chemical					1(1)	53(13)	65(11)	51(6)	76(6)	246(37)
EEE	1(0)				2(0)	77(10)	83(12)	98(12)	83(10)	344(44)
Mechanical			1(0)	2(0)	3(0)	78(1)	77(2)	72(4)	73(1)	306(8)
Computer Science					2(1)	82(15)	91(10)	99(14)	100(10)	374(50)
Electronics & Instrumentation					1(0)	77(13)	83(16)	62(6)	84(8)	307(43)
<b>M.Sc. (Hons)</b>										
Biological Science					32(10)	35(13)	30(5)	29(4)	44(4)	170(36)
Chemistry				1(0)	34(6)	32(9)	32(5)	32(5)	44(6)	175(31)
Economics				1(0)	39(9)	34(7)	47(4)	60(7)	47(5)	228(32)
Mathematics					37(9)	36(6)	43(4)	55(10)	47(9)	218(38)
Physics					33(6)	29(3)	36(4)	53(3)	45(3)	196(19)
<b>M.Sc. (Tech)</b>										
Information Systems				1(0)		43(10)				44(10)
<b>Total</b>	1(0)		1(0)	5(0)	184(42)	576(100)	587(73)	611(71)	643(62)	2608(348)

*B. Higher Degree Programmes*

Programme	Year of Admission		
	2014	2015	Total
<b>M.E.</b>			
Biotechnology	7(4)	5(3)	12(7)
Design Engg.			
Embedded System	5(1)	8(0)	13(1)
Software Systems			
Chemical Engg.	6(2)	8(5)	14(7)
MicroElectronics	7(1)	7(1)	14(2)
Computer Science	8(2)	8(4)	16(6)
<b>Total</b>	<b>33(10)</b>	<b>36(13)</b>	<b>69(23)</b>

**Grand Total****2677(371)**

## C. PhD Programmes

PhD Programmes	Year of Admission										Total
	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Sem 2 14-15	1(0)	2(0)	7(3)	9(4)	21(10)	18(8)	19(9)	48(19)	22(5)		147(58)
Sem 1 15-16	1(0)	2(0)	5(2)	8(3)	16(9)	17(8)	19(9)	48(19)	21(4)	26(8)	163(62)
Summer term 14-15					1(0)						1(0)
<b>Grand Total</b>	<b>2(0)</b>	4(0)	12(5)	17(7)	38(19)	35(16)	38(18)	96(38)	43(9)	26(8)	311(120)

## Summer Term 2014-2015

Programme	Year of Admission				
	2011	2012	2013	2014	Total
Chemical			66(11)		66(11)
EEE		2(0)	82(12)	1(0)	85(12)
Mechanical			75(2)		75(2)
Computer Science			90(10)		90(10)
Electronics & Instrumentation	1(0)	2(0)	83(16)		86(16)
<b>M.Sc. (Hons)</b>					
Biological Science			29(5)		29(5)
Chemistry			31(5)		31(5)
Economics			47(4)		47(4)
Mathematics		3(0)	41(3)		44(3)
Physics			35(4)		35(4)
<b>M.Sc. (Tech)</b>					
Information Systems		1(0)			1(0)
<b>Total</b>	<b>1(0)</b>	<b>8(0)</b>	<b>579(72)</b>	<b>1(0)</b>	<b>589(72)</b>

Annexure 'B2-5'  
(2 Pages)  
Ref. AR 2015, Page No.B2-4

### STATEMENT OF DEGREES AWARDED

Degrees	No. of degrees	No. of degrees
	77th Award 03.07.15, 03.07.15, 08.07.15	78th Award 26.9.15, 26.09.15
<i>(i) Integrated First Degree</i>		
<b>B.E.(Hons.)</b>		
Chemical	13(2)	
Chemical (with Practice School)	61(7)	
Electrical and Electronics	27(3)	
Electrical and Electronics (with Practice School)	88(18)	1(0)
Mechanical	28(0)	
Mechanical (with Practice School)	86(2)	
Computer Science	24(3)	
Computer Science (with Practice School)	96(19)	
Electronics and Instrumentation	24(1)	
Electronics and Instrumentation (with Practice School)	89(14)	
<b>M.Sc.(Hons.)</b>		
Biological Sciences	16(1)	
Biological Sciences (with Practice School)	22(6)	
Chemistry	11(0)	
Chemistry (with Practice School)	18(2)	
Economics	7(1)	
Economics (with Practice School)	34(9)	
Mathematics	20(2)	
Mathematics (with Practice School)	19(2)	
Physics	19(3)	
Physics (with Practice School)	15(2)	
<b>M.Sc.(Tech.)</b>	10(1)	
Information Systems		
Information Systems (with Practice School)	38(11)	
<b>Sub Total</b>	<b>765(109)</b>	<b>1(0)</b>

*(ii) Higher Degree***M.E.**

Chemical Engineering	8(4)
Software Systems	2(1)
Microelectronics	
Biotechnology	6(5)
Embedded Systems	5(1)
Design Engineering	5(0)
Chemical Engineering(with Practice School)	1(1)
Software Systems (with Practice School)	7(1)
Microelectronics(with Practice School)	10(2)
Biotechnology (with Practice School)	1(0)
Embedded Systems (with Practice School)	8(1)
Design Engineering (with Practice School)	5(1)

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*Sub Total*      58(17)

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PHD

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3(0)                      2(1)

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**Total**      826(126)                      3(1)

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**SUMMARY**

<b>Award</b>	<b>77<sup>th</sup> Award</b>	<b>78<sup>th</sup> Award</b>	<b>Total</b>
Integrated First Degree	765(109)	1(0)	766(109)
Higher Degree	58(17)		58(17)
PHD	3(0)	2(1)	5(1)
<b>Total</b>	<b>826(126)</b>	<b>3(1)</b>	<b>829(127)</b>

**Note:** The numbers in brackets indicate number of female students.

**78<sup>th</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)	0	1	1	2(1)
B.E.(Hons.)(Chemical)	0	0	1	1(0)
B.E.(Hons.)(Electrical and Electronics)(with Practice School)	0	1	2	3(0)
B.E.(Hons.)(Electrical and Electronics)	0	1	2	3(1)
B.E.(Hons.)(Mechanical)(with Practice School)	0	0	2	2(0)
B.E.(Hons.)(Mechanical)	0	2	1	3(0)
B.E.(Hons.)(Computer Science)(with Practice School)	0	1	0	1(0)
B.E.(Hons.)(Computer Science)	0	1	1	2(0)
M.Sc.(Tech.)(Information Systems)(with Practice School)	0	1	1	2(0)
M.Sc.(Hons.)(Physics)	0	1	0	1(0)
M.Sc.(Hons.)(Chemistry)( with Practice School)	0	0	1	1(0)
M.Sc.(Hons.)(Economics)	0	1	0	1(0)
<b>Sub - Total</b>	<b>0</b>	<b>10</b>	<b>12</b>	<b>22(2)</b>
Ph.D.				<b>3(0)</b>
<b>TOTAL</b>				<b>25(2)</b>

Note: Numbers in brackets indicate total females

Annexure 'B2-7'  
(5 Pages)  
Ref. AR 2015, Page No.B2-4

**LIST OF THE ORGANISATION WHICH CONDUCTED CAMPUS INTERVIEWS**  
**LIST OF THE COMPANIES VISITED SEMESTER II, 2014-15**

SR#	COMPANY VISITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
1	[24]7 ILABS	15	2	ET
2	ACCENTURE	40	1	CO
3	ADEAQUARE	10	1	IT
4	AKOSHA	51	1	CO
5	ALFA LAVAL	54	6	CH
6	ALLIANCE INFOTECH	10	1	IT
7	AMAZON	240	27	IT
8	APPSPIRE	12	1	OT
9	APTEAN	44	1	IT
10	ARUBA NETWORKS	10	3	IT
11	ARVIND INTERNET	8	2	IT
12	BARCLAYS TECHNOLOGY CENTER	36	13	IT
13	BHARTI SOFT BANK	6	2	IT
14	BIS RESEARCH	5	1	CO
15	BITMAPPER	40	3	ET
16	BROADCOM INDIA PVT LTD , BANGALORE	10	1	ET
17	CAPILLARY TECHNOLOGIES	40	4	IT
18	CARWALE (AUTOMOTIVE EXCHANGE PVT. LTD.	15	4	IT
19	CHAMBAL FERTILIZERS	15	1	CH
20	CISCO	64	2	ET
21	CITIUS	10	0	IT
22	CODIGAMI	20	4	IT
23	CONCEPT2SILICON	35	4	ET
24	CREDIT SUISSE	25	4	BF
25	DELOITTE	52	2	CO
26	DERRICK PETROLEUM	30	1	MF
27	EMC	60	8	IT
28	ERICSSON R&D	20	1	IT
29	EXPICIENT	23	3	IT
30	FIAT	35	3	MF
31	FIORANO TECHNOLOGY	54	4	IT
32	FLIPKART	50	3	IT
33	FRACTAL ANALYTICS	50	4	CO
34	FUNTOOT	29	4	IT
35	GLOBAL ANALYTICS	53	2	IT

SR#	COMPANY VISITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
36	GOLDMAN SACHS	77	5	BF
37	GRASIM INDUSTRIES	25	3	CH
38	GREEVES COTTON	26	2	MF
39	GREY ORANGE ROBOTICS	172	9	ET
40	HEALTHCARE TECHNOLOGY INNOVATION CENTRE (HITC)	15	1	OT
41	HIKE	40	4	IT
42	HINDALCO	25	3	CH
43	HONEYWELL	20	3	CH
44	HOUSING	322	5	IT
45	HP	43	4	IT
46	HUMAN CAPITAL SOLUTION	14	1	CO
47	IDEAS SAS	10	1	CO
48	INFORMATICA BUSINESS SOLUTIONS	30	2	IT
49	INFOSYS	30	25	IT
50	INMOBI	35	2	IT
51	INTUIT IDC	50	4	IT
52	ITC INFOTECH	53	5	IT
53	J P MORGAN INVESTMENT BANKING	129	9	BF
54	JDA SOFTWARES	15	1	IT
55	JSW	25	6	MF
56	KPMG	40	5	CO
57	LEXINNOVA	80	6	IT
58	MAHLE BEHR INDIA LTD	15	1	MF
59	MEDIA IQ DIGITAL	40	10	IT
60	MERCEDES BENZ	30	2	MF
61	MICHELIN TYRES	24	0	MF
62	MICKENSY KNOWLEDGE CENTER	58	0	CO
63	MORGAN STANLEY	103	12	BF
64	MU-SIGMA	55	21	CO
65	MYNTRA	61	6	IT
66	NOKIA SIEMENS	66	7	IT
67	NVIDIA	35	2	ET
68	ORACLE	89	24	IT
69	ORBEES CONSULTING	28	3	CO
70	PRACTO	100	5	IT
71	PRAJ INDUSTRIES	19	3	MF
72	PURPLE SQUIRREL	40	1	CO
73	PWC	30	1	CO
74	RAJA SOFTWARE	30	1	IT

SR#	COMPANY VISITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
75	RAMCO	50	12	IT
76	RECKITT BENCKISER	60	2	CH
77	REFLEXIS SYSTEMS	39	5	IT
78	SABRE		9	IT
79	SALESFORCE	10	1	IT
80	SAPIENT	42	6	IT
81	SECURE METERS	53	5	ET
82	SHELL	30	1	CH
83	SOKRATI	35	3	CO
84	STAYZILLA	66	2	IT
85	TAS ANALYTICS	15	2	CO
86	TATA MOTORS	31	18	MF
87	TATA TECHNOLOGIES	50	9	MF
88	TEJAS NETWORKS	33	4	ET
89	TENSILICA	30	2	ET
90	TEXAS INSTRUMENTS	55	5	ET
91	THINK & LEARN	25	1	OT
92	THOROGOOD	161	5	CO
93	TINY OWL	50	2	IT
94	TONBO IMAGING PVT LTD	20	1	ET
95	ULTRA TECH CEMENT	15	3	MF
96	VIRTUSA	43	17	IT
97	VIZURY	44	2	IT
98	VM WARE	83	2	IT
99	WALMART	149	11	IT
100	ZS ASSOCIATES	254	36	CO
101	ZUARI INDUSTRIES	20	1	CH

**Summary**

Total No. of Companies: 101

Total No. of Students Interviewed: 4868

Total No. Appointments offered including multiple offers: 496

**Legend:**

IT: Information Technology, CH: Chemical, MF: Manufacturing, CO: Consulting, ET: Electronics, BF: Banking Finance, EL: Electrical.

IT- Compulsory for Computer Science / Information System and Optional for Electricals and Electronics / Electronics & Instrumentation, CH- Chemical, MF - Mechanical, CO - open for all, ET - Electrical and Electronics / Electronics & Instrumentation.



**LIST OF THE COMPANIES VISITED SEMESER I, 2015-16**

SR.#	COMPANY VISITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
1	MATHWORKS	20	3	IT
2	EPIC SYSTEMS	48	0	IT
3	CAPITAL ONE	64	1	CO
4	ENDURANCE INTERNATIONAL GROUP	81	4	
5	FLIPKART	107	5	IT
6	AMAZON	95	7	IT
7	LINKEDIN	28	2	IT
8	EBAY	60	2	IT
9	PAYPAL	53	2	IT
10	GREY ORANGE ROBOTICS	58	9	ET
11	D E SHAW	76	3	IT
12	MORGAN STANLEY	81	3	BF
13	JOHNSONS CONTROL INDIA PVT LIMITED	71	4	
14	CROWDFIRE	32	0	0
15	HOUSING	35	0	IT
16	TEXAS INSTRUMENTS	98	3	ET
17	QUALCOMM	78	4	
18	GROFERS	53	6	0
19	CISCO	52	12	ET
20	ORACLE INDIA	59	6	IT
21	NETAPP	13	1	
22	BARCLAYS	7	2	IT
23	VYUTI	19	0	
24	SABRE TRAVEL TECHNOLOGY	36	3	IT
25	ZS ASSOCIATES	65	8	CO
26	MOBSTAC (OFF CAMPUS)	10	1	
27	ORBITZ	15	1	IT
28	POLARIS	21	6	
29	SEARCE	9	3	0
30	PATHPARTNER	30	1	
31	FIORANO	23	1	IT
32	MU SIGMA	82	4	CO
33	SYSTEMANTICS	33	0	ET
34	RAO IIT ACADEMY	15	5	OT
35	TATA MOTORS	18	7	MF
36	L & T CONSTRUCTION	35	3	MF
37	GENERAL MOTORS	30	2	MF
38	AVANTI LEARNING CENTRE	18	3	CO
39	FREESCALE SEMICONDUCTORS	50	0	
40	INTEL	18	1	IT

SR.#	COMPANY VISITED	NUMBER OF STUDENTS		SECTOR
		INTERVIEWED	OFFERS	
41	EATON	7	0	MF
42	AAYUJA	19	1	S&M
43	TATA ADVANCED	9	3	MF
44	BIOLOGICAL E. LIMITED	28	0	BIO
45	CODE NATION	49	0	IT
46	COMMENCE MINT	11	0	OT
47	COUPON DUNIA	13	0	IT
48	GE INDIA TECHNOLOGY CENTRE	13	0	ET
49	GOOGLE	10	0	IT
50	GROWNOUT	15	0	IT
51	HISTOGENETICS INDIA PVT. LTD.	15	2	IT
52	HYUNDAI MOTORS INDIA LTD	7	0	MF
53	KAYAKO	11	0	IT
54	KLA TENCOR	15	0	ET
55	LAVA INTERNATIONAL	20	0	ET
56	PWC ACTUARIAL SERVICES	25	0	BF
57	ROHM SEMICONDUCTOR	4	0	ET
58	SOCIAL COPS	20	0	IT
59	TATA TECHNOLOGIES	27	0	MF
60	URBAN RESTRO	6	0	IT
61	WRIG NANOSYSTEMS PVT. LTD.	25	0	CH/BIO
62	ZOROOMS	30	0	CO
63	MICROSOFT IDC	45	1	IT
64	INTUIT	35	4	IT
65	UOP HONEYWELL	15	3	CH

**Summary**

Total No. of Companies: 65  
Total No. of Students Interviewed: 2270  
Total No. Appointments offered: 142

**Legend:**

IT: Information Technology, CH: Chemical, MF: Manufacturing, CO: Consulting, ET: Electronics, BF: Banking Finance, EL: Electrical.

IT- Compulsory for Computer Science / Information System and Optional for Electricals and Electronics / Electronics & Instrumentation, CH- Chemical, MF - Mechanical, CO - All Specialization, ET - Electrical and Electronics / Electronics & Instrumentation.

**LIST OF FIRST DEGREE THESIS COMPLETED DURING THE YEAR 2015****Second Semester 2014-15**

S. No.	Name	Topic	Supervisor
1	Himadree Kaushik	Enhancing India's Participation In Global Value Chains	Dr. Saon Ray
2	Raj Nanalal Patel	Fabrication And Measurements Of Nanomechanical Drum Resonators	Dr. MANDAR DESHMUKH
3	Surhud Khare	Design , Manufacture And Testing Of A High Quality Phase Coherent Audio Amplifier And Electrostatic Loudspeaker System	Dr. Vinaykumar Anand Achwal
4	Nichin K.S	Optical Communications With Applications To Multiple Underwater Vehicle Motion Control	Dr. Antonio M. Pascoal
5	Neisarg Dave	Cost Optimization For Data Collection In Remote Rural Areas Using RF Mesh Networks	Dr. Yashraj Khaitan
6	Naveen Joshua	SCADA Systems And Cloud Computing In Renewable Energy	Dr. Ramakrishna P
7	Chirag Deepak Agrawal	Signal Processing And Visualization Of Neuroscience Data In A Web Browser	Prof. Alexandre Gramfort
8	Arya Kumar Pruthviraj Mohanty	Use Of Statistics To Solve Real Life Problems	Prof. Laishram Ladusingh
9	Aniket C. Mane	Local Score Optimization In Weighted Graphs Of Bounded Tree Width	Dr. Etienne Birmete
10	Tawri Krutika Rajeev	Isoperimetric Irregularity Theory And Applications	Prof. Xu Xingwang
11	Vivek Pahwa	Analysis Of Cognitive Radios	Prof. Timothy X Brown
12	Praneet Bhatia	Design And Analysis Of SRAM Cells And Peripheral Circuitry	Dr. Santosh Kumar Vishvakarma
13	M.S Suraj	Obtaining Light Field Information From Transient Light Transport	Dr. Diego Gutierrez
14	Snehal Jain	Development Of VTOL Micro Aerial Vehicle	Dr. Abhishek
15	Ankit Vikrant	Black Holes In String Theory	Dr. Pallab Basu
16	Sunny Guha	Topics In String Theory	Prof. Ashoke sen
17	Thejas H C	Diffusion Inside Porous Solids	Prof. Rama Govindrajan
18	Gauri Bhagwantrao Jagatap	Selected Topics In Quantum Information Theory	Dr. Naresh sharma
19	Vishal Pathak	Resurgence Theory In QFT	Dr. Anirban Basu
20	Abhinandan Jain	Dynamics Of Agent Based Models Of Financial Markets	Dr. Sitabhra sinha
21	Aman Srivastava	Solving Linear Simulataneous Equations Over Prone Field	Dr. R.K Sharma
22	Soni Pratik Pramod	Implementation Of Homomorphic Encryption In Web Stacks	Dr. Prateek Saxena
23	Gurdeep Singh	Molecular Mechanisms In Mutation Of Protein Interfaces	Prof. Robert B. Russell

S. No.	Name	Topic	Supervisor
24	M.S. Manojit	Regulation Of Breast Cancer Cell Signalling Bby LRIG Protein	Dr. Colleen Sweeney
25	Malhar Aras	Understanding How It Is Applied Across Sectors (E.G.Healthcare )And What Are The Trends And Best Practices In Managing IT	Dr. Gaurav Kalani
26	Vibhav Joshi	Analysis Of Sales And Irategy For POC Bimedicals Device Stertups In India Forgetting Medium Small Clinics	Dr.Pranay Agrawal
27	Vaibhav Bajaj	Biocompalitable Nanoilsructured Materials For Biosensing Applications	Dr. A. M. Biradarar
28	Tomy Cherian	Dynamics Dissipative Self Assembly	Prof. Olli Ikkala
29	Kushal Khandelwal	Histopathological Image Analysis Using Machine Learning	Prof. Fred Hamprecht
30	Akhil Pratap Singh	Error Correction In A Quantum Network	Dr. Prasanta K. Panigrahi
31	Jalaj Maheshwari	Area Of Dynamics , Fluid Structure Interaction	Prof. Murali damodaran
32	Tanay Choudhary	LEG Prosthetic Design And Locomotion Biomechanics	Prof. Andre Seyfarth
33	Vikram Pradhan	Microstereolithography Of Biocompatible Materials	Prof P.S Gandhi
34	Ishaan Hari Markale	Measurement And Analysis Of Pulsating Jet Flow	Dr. Amit Agrawal
35	Vishal Jain	Guided Waves In Helical Beams	Prof. Yufeng Zhou
36	Nikilesh Krishnakumar	Guided Waves In Helical Beams	Prof. Yufeng Zhou
37	Kshitij Ranganath	Determination Of Black Body View Factor By Various Methods	Dr. Abhijit Avinash Adoni
38	Shreyas Gadgin Matha	Building Environmental Regulation That Enables Growth	Dr. ANANT SUDARSHAN
39	Anuradha Daswani	Alternative Filaments For SLA 3D Printer	Dr. Anugrah Sharma
40	Athma M Ram	Determining Chronatic Number Through A Polynomial Time Algorithm	Prof. Ram R
41	Salil Kapur	Automated Workflow Compliance Analysis	Dr. Saikat Guha
42	Arvind Prakash	Semi Supervised Learning	Dr. B Ravindran
43	Sappadla Prateek Veeranna	Using Semantic Similarity And Relatedness Measures For Multilabel Classification	Prof. Johannes Funkranz
44	Anand Krishnan P	New Frontiers In Smart Energy And Its Applications In Buildings	Prof. Krithi Ramamritham
45	Sumedh K Ghaisas	General Game Playing	Dr. Stephan Schiffel
46	Nasrin Jaleel	Mobile Application Analytics	Dr. Venkat Padmanabhan
47	Kratarth Goel	Deep Learning Algorithm	Prof. .Yoshua Bengio
48	Kaustubh Dhole	Games In Queues	Prof. Sandeep Juneja
49	Aniruddha Sonde	Characterization Of Broadband Feeds For GMRT	Mr. Bandari Hanumanth Rao
50	Raghu Nayyar	Keyboard Layouts For Multilingual (Indian) Typefaces	Dr. Girish Dalvi

S. No.	Name	Topic	Supervisor
51	Ravi Garg	Computational Wellness	Prof. Chua Tat Seng
52	Aditi Dudy	Coping With NP-Hardness	Dr. Saket Saurabh
53	Siddarth Kotwal		
54	Akshay Surendra	Modeling Human-Wildlife Interactions In Indian Forest Grassland And Surub Systems	Dr. Krithi Karanth
55	Shivalik Sen	A Distributed Systems Approach To Ubiquitous Analytics	Prof. Niklas Elmqvist
56	Tanmay Shidhore	Heat Transfer In Nano Fluids	Dr. Shibu Clement
57	Ardra Singh	Design And Implementation Of SVD In FGPA	Dr. A. Amalin Prince
58	Sudhanshu Maheshwari	AI Modeling Of Gaps In Cognition Processess For Skill Aquation	Dr. Debasis Patnaik
59	Kunal Arora	Bioleaching Kinetics For The Removal Of Metal From Spentfcc Catalyst	Dr. S.S. Baral
60	Anadi Rastogi	Multicriterion Optimization In Multimodal Transport Networks	Mr.TSRK Prasad
61	Pravin Joshi	Design Of Efficient Memory Management Scheme For Heterogenous Distributed Systems	Dr. Biju K. Raveendra
62	Sahil Mittal	Design Of Efficient Scheduling Algorithm For Heterogeneous Distributed Systems	Dr. Biju K. Raveendra
63	Shashwat Bansal	Theoretical And Experimental Investigation Of Multicomponent Distillation	Dr. S. D. Manjare
64	Kunal Baweja	Web Security Vulnerability Finding Tools	Dr. S.K Sahay
65	Gokul Krishna	Data In Human Rights	Dr Pushkar
66	Motheram Abhinav Saikrishna	Study And Analysis Of Marrian Concepts Of Inequality To Contemporary World	Dr. Puskar,Co-guide-Swagat Mishra
67	S.M Abhenandhan	Analysis Of Some Inventory Models Under Various Demand And Deteration	Dr. G. Samantha
68	Kalola Meet Govindbhai	Investigations On Heat Transfer Characteristics Of Power Generating Unit	Dr. Ranjit S. Patil
69	Niraj Suhas Kasar	Identification Of Drivers Of Green Supply Chains Using Interpretive Structural Modelling	Dr.Varinder Singh
70	Rajat Jain	CFD Simulations On Finned Cyclone Separator Of CFB Boiler	Dr. Ranjit S. Patil
71	Rajarshi Ghosh	Graph Theoritic Approach To Modelling And Analysing Biological Systems	Dr. Veeky Baths
72	Sahil Babbar	Mising Stastical Methods Doing A Comperative Vertical Assesment Of Assault Riffer	Dr. Bijil Prakash (CoGuide: Dr. R. P. Pradhan)
73	Patibandla Navya	Brain Computer Interfacing	Dr. Veeky Baths
74	Swapnil Gupta	Heat Transfer In Nano Fluids	Dr. Shibu Clement
75	Pandramish Vishal	Comparison Of Simulation Results And Mathematical Models For Amplifiers	Mr. Praveen Mane
76	Ishan Katyal	Design And Synthesis Of Tetraphenyl-Ethylene Based Chemodosimeter And Its Sensing Applications	Dr. Amrita Chatterjee

S. No.	Name	Topic	Supervisor
77	Someshwar Prasad Dash	Investigation Of Stochastic Processes In Detail And Thereafter Modelling Financial Markets And Financial Derivatives Based On The Theory Of Stochastic Processes	Dr. Chandradew sharma
78	Shobhit Srivastava	Neutron Star Mass And Radius Measurement	Dr.Tarun kumar jha
79	Shakari Kaushal Nitin	Study Of Numerical Solutions Of Integro-Differential Equations Using Lwelets	Mr. Bijil prakash
80	Praveen Sharma	Financial And Biological Problems Based On Statistical Mechanics	Dr. Chandradew Sharma
81	Rohan Saxena	Understanding The Volatility & Distribution Of Indian Financial Market Using Stastical Mechanics And Scientific Computing	Dr. Chandradew Sharma
82	Ishan Mehta	Monte Carlo Simulations And Its Applications	Dr J K Sahoo
83	Nitish Phanse	Analysis Of Effect Of Thickness On Fracture Toughness In Plane Stress And Plane Strain Zone	Dr. D. M. Kulkarni
84	Sunit Singh	Modularity Of Graphs And Network Optimization Problems On Search	Mr. Ram Prasad Joshi
85	Abhishek Kumar	A Study Of Metamorphic Malware For The Development Of Anti-Malware	Dr. S.K Sahay
86	Aditya Harshavardhan	Molecular Interaction Studies For Binary And Multicomponent Liquid Mixtures Using Thermodynamic , Excess And Transport Properties	Dr. Ranjay Dey
87	Yatharth Narang	Alpha Ideation And Testing	Dr. Debasis Patnaik (Co-guide: S. Dhaked)
88	Amritesh Kumar	Hybrid Algorithm For Electricity Price Force Casting In Deregulated Power Market	Dr.Chandram karri
89	Rohit Kumar	Development Of Microgrid And Lighting Systems On A Disaster Management Site	Dr. P.M Singru (C-Guide: Dr.N. Manjarekar)
90	Harsha Koneru	Dynamics Of Biological Neurons Through Simulations Of Model Equations	Dr. Gaurav Dar
91	M. Shanmukha Ranganath	Wifi Based Communications Using Raspberry Pi For Images	Dr. Neena Goveas
92	Nikita Mirchandani	Design And Implementation Techniques For Localization In Mobile Sensor Networks	Ms.Meetha Shenoy
93	Akshay Hemant Mohgaonkar	Lab Investigation Of Reactive Char Removal Processes From Biomass Gasification	Dr. Srinivas Krishnaswamy
94	Chaitanya Bhatt	Water Wars In Asia	Dr. R.P Pradhan
95	Surabhi Tiwari	Calculation Of Cross Sections For Pio Nucleus Scattering At Intermediate Energies	Dr. Arun V Kulkarni
96	Nishant Varma	Applications Of Fft In The Search Of Gravitational Waste Signal	Dr. S.K .Sahay
97	Aman Kesari	Natural Disasters And The Risk Of Impoversighment Evidence From India	Dr. Aswini Kumar Mishra

S. No.	Name	Topic	Supervisor
98	Anjali Srivastava	Hemotoxic Agents From Jellyfish And Starfish	Dr. Dibakar Chakraborty
99	Saurav Raj	Identification Of Metal Ion Binding Sites In Proteins	Dr Sukanta Mondal
100	Rajan Hardaha	Improving Productivity Of Fish And Rice For Improvement Of Goan Economy Using Cobb-Douglass Function	Mr. Swagat kishore mishra
101	Parth Goel	Market Analysis Through Machines Clearing And Collaborative Analysis Tools	Dr. Veeky Baths
102	Dhruv Khandelwal	Delineating The Supply Chain Of A Technology For Green Marketing	Dr. Debasis Patnaik
103	Yash Vardhan Choudhury	Effect Of Thickness On Fracture Behaviour In LEFM & GYFM Zone	Dr. D.M.Kulkarni
104	Siddharth Agrawal	Situation And Policy Analysis Of Environmental Instruments In India	Dr. Basavadatta Mitra
105	Shrey Grover	Design And Development Of A Microfluidic Platform For Water Treatment Applications	Dr. Jagatha Nambi Krishnan
106	Anupam Verma	Market Analytics Through Machine Learning And Other Collaborative Analytics Tools	Dr. Veeky Baths
107	Siddharth Ranjan Khare	Optimizing Scheduling Of Operations In A Manufacturing Plant	Dr. G. Karthikeyan
108	Mritunjay Srivastava	Control Strategies For DFACT Devices For Power Quality Improvement	Dr. Chandram Karri
109	Akshay Bharaduraj	Green Technology Marketing In Indian Technology Companies	Dr. Debasis Patnaik (Co-guide: Mr. Shankar)
110	Kumar Mayank	Performance Of Amperometric Membrane Biosensors In Waste Water Management	Dr. S. S. Baral
111	Karandikar Aditya Ravindra	Economic And Social Impact Of FIFA World Cup And Olympics On The Host Nation	Dr. R.P. Pradhan
112	Abhyudith Jain	Multivariate Process Monitoring For RISR Assessment In Chemical Industry	Dr. S.D. Manjare
113	Kartik Krishnan Sreedhar	Modeling Neutron Stars	Dr. Kinjal Banerjee
114	Kushagra Nigam	Quantification Of Dissipative Systems	Dr. Kinjal Banerjee
115	Kapil Deep	Analysis Of Chinese Labour Market	Dr. R.P Pradhan
116	Neil Merchant	Statistical Analysis Of Communication Channels In Fast Moving Consumer Goods	Ms. Pinky Pawaskar
117	Aanessa Satpati	Recommendation Systems	Dr. Bharat Deshpande
118	Anubhav Chaturvedi	Analysis Of Machine Learning Techniques In Epileptic Seizure Prediction	Dr. Raviprasad Aduri
119	T Sri Krishna Yasawi	Ry-Density Functional Theory In The Pursue & Periodic Substrate Potential	Dr. Toby Joseph
120	Aneesh Nambiar	Advanced Topics In Cryptography	Dr. Prabal Paul
121	Kashish Dullet	Study Of Stability Of Financial Markets And Its Relation To Modularity In Dependency Graph	Mr. Ramprasad Joshi

## I Semester 2015-16

S.No.	Name	Topic	Supervisor
1	Mudit Badlani	Social Impact Of Colonial Economy And Resulting Cultural Perspectives In The Writing Of Pg Wodehouse	Dr. Mamta Anand
2	Abhishek Saikia	Causal Relationship Between Gdp And Socio Economic Variables In India, 2000-2014	Prof. Keya Sengupta
3	Ganesh Rao	Impact Of Computer Adaptive Learning On Children's Education (Ical) Project	Dr.Surpreet Kaur
4	Abhinav Gupta	Improving Deep Neural Network For Robust Automatic Speech Recognition	Dr. Sim Khe Chai
5	Neelmani	Machine Learning Approaches For The Analysis Of Neural Connectivity Patterns	Prof. Wolf Singer
6	Devarshi Bhatt	Analysing Software Application Characteristics To Estimate The Gpu Readiness	Prof.R.K Shyamsundar
7	Nidhi Angle	Protein Interactions And Dynamics	Dr. Debnath Pal
8	Dhruv Shekhawat	Performance Analysis Of Flow Matching Algorithms On Multi Core Platforms	Dr. Francesco Gringoli
9	Anshu Aviral	Coordination And Computation In Distributed Intelligent Memes	Dr. Jiannong Cao
10	Anirudh Nigania	LEVERAGING INDOOR USER MOBILITY TO IMPROVE Wifi PERFORMANCE	Dr. Ben Leong
11	Raunaq Vohra	Theory And Applications Of Deep Learning	Prof. Klaus-Robert Muller
12	Ankur Agrawal	Design, Modelling And Control Of Compliant Robot For Rough Terrain Navigation	Dr.Suril V Shah
13	Gangapuram Amit Jamadagni	Boundary Condition And Defects Of Levin Wen Type Models And Their Experimental Signatures Through Categorical Framework	Dr. Ling-Yan Hung
14	Jimmy M Morzaria	Distance In Directed Hypergraphs	Dr.Mateja Sajna
15	Adheesh Bhatia	Development, Analysis And Applications Of A Quantitative Methodology For Assesing Customer Feedback/Satisfaction	Dr. Tajender Pal Singh
16	Joshi Hrishikesh Ravindra	Development Of Novel Nanosystems For Bioimaging And Drug Delivery	Dr. Yanli Zhao
17	Sanjukta Krishnagopal	Control Of Self Organising Nonlinear Systems: Theoretical Methods And Concepts Of Application	Prof. Eckehard Schoell
18	Vishakha Gupta	Study Of Graphene Based Spintronic Devices	Prof .Mandar Deshmukh
19	Nishanth Chandrasekar	MODELLING Of Gamma Rhythm	Dr. Supratim Ray
20	Shubham Maheshwari	Black Holes In String Theory	Dr. Chethan Krishnan
21	Tushar Nagarajan	Machine Learning Techniques For Protein Design	Dr. Abhilash Mohan
22	Aman Ahuja	Dynamic Network Analysis	Dr .Kathleen Carley
23	Ravi Agrawal	The Process Of User Experience Design For Mobile Applications	Dr. Nishant Jain
24	Jaya Tiwari	Finite Element Stimulation On Very Long Carbon Nanotubes	Prof. Sumit Basu
25	Balasubramanian V	Energy Efficiency For Air Conditioning And Mechanical Ventilation On Ntu Campus	Dr. Jatin Narotam Sarvaiya



26	Soham Patkar	Motion Planning And Control Of A Humanoid Robot With Articulated Torso	Dr. Suril V Shah
27	Aum Jadhav	Motion Planning And Control Of Quadruped Robot	Dr. Suril V Shah
28	Rachna Shetty	Numerical Methods For Flow Simulations	Mr. Julian Kollermeier
29	Ujash D Shah	Biomass Steam Gasification In A Pilot Dual Fluidized Bed Reactor : Heat And Mass Balance Analysis	Prof. Xiaotao Bi
30	Anmol Shrivastava	To Develop A Solar Tracking Device Using Matlab	Prof. Siddhartha P Duttgupta
31	Pinaki Acharya	Mechanics Of Free Vibration Of Bluff Body	Dr. A .K .Saha
32	Akshay Pai Raikar	On Capture Of Tumbling Orbiting Objects	Dr. Suril V Shah
33	Keya Ghonasgi	Mechanical Analysis Of A Bipedal Robot	Dr. P. Seshu
34	Aditya Kandaswamy Aiyer	Particles In Turbulence Flow	Prof. Rama Govindrajan
35	Sundar Ganesh	Computational Fluid Dynamics - Large Eddy Simulations And Their Applications	Prof. Joseph Mathew,
36	Shriniket Jakati	P381 Wls (Earth Movers)	Mr. Jagadeesh Subramanian
37	Madhuri R Iyer	Multiscale Modelling Of Connective Tissues For A Patient Specific Scenario	Dr. Kevin Linka,
38	Badrinath Balasubramaniam	Cfd Solver Development For A Droplet Impact And Evaporation On A Solid Surface	Dr. Rajneesh Bhardwaj
39	Anirudh Ravichandran	Radio Resource Allocation And Optimization For 5g Wireless Systems	Dr. Alagan Anpalagan
40	Harshita Mangal	Design Of Sonar Signal Processing Algorithm And Their Experimental Validation In An Underwater Tank Facility	Prof. Arun Kumar
41	Vaishnavi Narayanan	Bio Inspired Vision Guidance For Uav Landing	Dr. YU Haoyong
42	Prakhar Bhardwaj	Researching And Designing A Portable And Pay As You Go Water Treatment Systems For Students In Indian Universities	Dr. Richard Mueller
43	Shashwat Koranne	Hydroisomerization Of Long Chain Alkanes Over Bifunctional Molecular Sieve Catalysis	Prof. Roger Glaser
44	Siddhant M Lambor	Rheology Of Composite Propellant	Dr. Arvind Kumar
45	Krutarth Jhaveri	Investigation Of Light Induced Degradation In Crystalline Silicon Wafer Solar Cells	Dr. Joel Li
46	Siddharth Jadhav	Aerodynamics Of Airfoil Morphing By Mfc Actuators	Dr. Marco Debiasi
47	Akhil Arora	Modelling Of Free Surface Dominated Flow Using Sph	Dr. Yeaw Chu Lee
48	Pai Raikar Praharsh Pravin	Modelling Of Surface Condenser	Dr. Kanna Iyer
49	Prafful Golani	Nanoscale Resonators In 2d Electron Systems For Spintronics	Dr. Madhu Thalakulam
50	Trishala Neeraj	A Study Of Sensing Strategies For Mobile Smartphones	Dr. Matthew Gerber
51	Rohit Agrawal	Protocol Development For Underwater Communication Networks	Dr. Mandar Chitre
52	Sajal Chakravarty	Applications Of Lasers In Visual Aids For Navigation	Dr. Utpal Das

53	Mrinalini Padmanabhan	Fabrication And Characetrisation Of Multicrystalline Silicon Wafer Solar Cells	Dr. Joel Li
54	Ishan Khurjekar	Intelligent Fusion Mechanism For Multi Modal Bometric Solution For Security Application	Dr. Aditya Abhyankar
55	Manpreet Kaur	Machine Learning In Natural Language Processing	Dr. Anil Kumar Singh
56	Aditi Kulkarni	Human-Robot Intraction For An Assisitive Mobile Robot Interacting With Blind Adults	Dr. M. Bernardine Dias
57	Nishil Talati	Logic Design Using Energy Memory Technologies	Prof. Pinaki Mazunder
58	Gohel Jay Nilesh	Seismic Noise Modelling And Cancellation For Online Detection Of Event Onset	Dr. S Mukhopadhyay
59	Ahmad S Jauhar	Signal Processing In Wireless Communication	Dr. S.N Merchant
60	Vedika Agarwal	Constrained Optimization Techniques For Image Segmentation	Dr. Anthony J Yezzi
61	Mandar Vinayak Gogate	Parallel Simulation Of Deep Neural Architectures And Application To Classification Problems	Dr. Alexander Gepperth
62	Mihika Himanshu Dave	Implementation Of Fundamental Stages Of Experiential Learning Theory In Machine Learning	Prof. E.R Meng Joo
63	Shardul Atul Bhusari	Enhanced Alginate Based Tissue Engineering Scaffolds	Dr. Patrick Van Rijn
64	Manasi Prashant Kane	Neuromusculoskeletal Modelling And Simulation Of Rat Hind Limb	Prof. Silvestro Micera
65	Ashish Baghudana	Biological Text Mining For The Prediction Of Protein Nucleic Acid Interaction	Dr. Juan Miguel Cejuela
66	Aditya Khanduri	Fraework For Aggregation Of Real Time Operational Parameters From Diverse Sources To A Centralised System For Analysis And Its Implementation Strategies In Ongc	Dr. Satyajit Das
67	Divya Verma	Study Of Elephant-Human Conflict Using Molecular Tools	Prof. Raman Sukumar
68	Prajwal V P	Studying Pulsars With The Wideband Gmrt Systems	Prof. Yashwant Gupta
69	Raj Sinai Kunkolienkar	Advanced Topics In Quantum Field Theory	Prof. Anshuman Maharana
70	Poojita Thukral	Myoelectriccontrol Of A Multidimensional Prosthetic Hand	Dr. Ramana Kumar Vinjamuri
71	Maitreya Naik	Efficient Wireless Communications For Multi-Robot Coordination And Control	Dr. Manuel Mazo Jr
72	Thamatam Nipun	Area Mems Based Inertial Sensors Design And Febrication	Dr. Jiju John
73	Arun Prakash Gandhi	Market Risk Management In India	Dr. Nikhil Pandey
74	Siddharth Parmar	Frontend Development And Design For Virtual Lab Simulator	Dr. Srinivas Krishnaswamy
75	Rishabh Mishra	Backend Development For Virtual Lab Simulator	Dr. Srinivas Krishnaswamy
76	Aniket Uday Sawant	Fabrication And Characterization Of Anti Corrosion Films Of Oxides, Graphene And Mixed System	Dr. Sutapa Roy Raman
77	Shreesh Katyayan	Analysis Of Supply Chain Management Strategies	Dr. Mridula Goel
78	Debopamaa Debnath	Modelling Of Effect Of Flow Field Design On High Temperature Pem Fuel Cell	Dr. S.D MANJARE

79	Hardik Shah	Experimental Study On Heat Exchanger Using Nano Fluids	Dr. Shibu Clement
80	Parth Chaturvedi	Optimization Of Resources In An Industrial Environment Using Simulation Tools	Dr .Varinder Singh
81	Swastic	Modified Nanosphere Lithography- Investigation Of Gold Nanostructure Arrays	Dr .Jegatha Nambi Krishnan
82	Yash Sharma	Supply Chain Management In Manufacturing Industries	Dr.Mridula Goel
83	Kaustuv Mohanty	Study On Push And Pull Forces In Supply Chain Management	Dr.Mridula Goel
84	Arpit Sarda	Statistical Analysis Of Portfolio Diversification Models For Growth Of Private Equity In India	Dr.Rajorshi Sen Gupta
85	Hargun Singh Oberoi	Research In Trans-Radial Prosthesis	Dr.Sachin Waigaonkar
86	Hancel P.V	Study Of Accoustics Of Musical Instruments Using Its Accoustic Signatures	Dr P.M SINGRU
87	Ayush Raizada	Experimental Analysis Of Magneto-Rheological Damper	Dr P.M SINGRU
88	Akshay Sundar	Acoustic Analysis Of Membrane Type Musical Instruments	Dr P.M SINGRU
89	Bhavul Gauri	Integration Of Probabilities And First Order Logic	Dr.Ashwin Srinivasan
90	Bhargav Vishwanath	Assesing Competitiveness Of States With Respect To The Make In India Initiative	Dr. Aswini Kumar Mishra
91	Vishnuvardhan Krishnakumar	Condition Monitoring Of Bearings	Dr P.M SINGRU
92	Prathik K	Estimation Of Wear Of A Contact Pairing Material Using Test Rig	Mr. A.C. KULKARNI
93	Chintan Sohani	3d Contact Stress Analysis Across Articulating Surfaces Of Hip Joint	Dr. D.M. Kulkarni
94	Saurabh Amarnath Mahindre	Towards Unveiling Biochemical Function: Computational Identification Of Residues On Proteins	Dr. Sukanta Mondal
95	Divyansh Khanna	Parallel Approach To Search Algorithm For Discrete Optimization Problems	Dr. Bharat M Deshpande
96	Shivank Mehra	Entanglement In Quantum Systems	Dr. Radhika Vathsan
97	Tushar Gupta	Techno-Economic Analysis Of Energy Storage Systems	Dr. Debasis Patnaik
98	Saurabh Varkhede	Arithmetic Circuits- Analysis Of Performance	Mr. Pravin Mane
99	Anmol Kumar Sinha	Closed Loop Monitoring And Control Of Dc Machines Over Local Area Network	Dr. Narayan Suresh Manjarekar
100	Rajesh Tilwani	Innovations For Implementation Of Smart Grid	Dr. M. K. Deshmukh

**LIST OF HIGHER DEGREE DISSERTATIONS COMPLETED DURING THE YEAR 2015****Second Semester 2014-15**

1	Jyoti Rana	Distributed/ Network Biomimetic Swarms	Dr. Anupama K. R.
2	Venkatachala Sarma	Localization and Terraun mapping in single/Distributed Biomimetic	Dr. Anupama K. R.
3	Anant Bhushan N.	Optimization in Cognitive Radio Networks	Dr. Nitin Sharma
4	Vineeth Kartha	Reconfigurable Computing Algorithms	Dr. Amalin Prince
5	Neethu Bal Mallya	Implementation of Energy-Efficient Scheduling Algorithms for MC/MP Hard Real-Time Systems	Dr. Biju K. Raveendran
6	Lekshmi Ajit Kumar	Rheological Dynamics of Polymer-Layered Silicate Clay Nanocompositions	Dr. Asima Shaukat
7	Roshni Gopal	Kinetics of gas-solid and gas-liquid reactions	Dr. Srinivas Krishnaswamy
8	Parag Vinayak Gurav	Bio-leaching of metals from spent FCC catalyst using Aspergillus	Dr. S. S. Baral
9	Vivek Sharma	Selection of bioleaching process for metal recovery from spent catalyst using decision making method	Dr. S. S. Baral
10	Manasi Satchit Joshi	Surface modification studies on gold film for sensor Applications	Dr. Jegatha Nambi Krishnan
11	Laxmi P. Yergude	Development of blend ultrafiltration membranes modified with nanoparticles	Dr. Srinivas Krishnaswamy
12	Faiza Nazar	Thyroid Stimulating Hormone gene expression	Dr. Vijayashree Nayak
13	Umesh Waghmode	Modeling & Simulation of fracture process zone for different thickness specimens	Dr. Vikas Chaudhari
14	Piyush Patel	Evaluation of fracture toughness parameters using cohesive zone modelling	Dr. Vikas Chaudhari
15	Suryadeepan R.	Cross Layer Architecture for Mobile Wireless Sensor Networks	Mr. Sreejith V.
16	Sheshank	Rheological behaviour of polymer graphene nano composites	Dr. Asima Shaukat
17	Allampalli Satya Sai Pavan	Corrosion resistant coatings using graphene - A study	Dr. Sutapa Roy Ramanan
18	Anuraag Ramesh	Contact stresses analysis using finite element methods	Dr. D.M Kulkarni
19	Prabhu Alvenkar Param A/S Pandurang	effect of thickness on mode I crack propagation in GYFM using mesh free methods	Dr. D.M Kulkarni
20	Shreesha Vitthala K. A.	Data Acquisition System	Dr. Anita Agrawal
21	Tannishtha Saha	Antineoplastic and DNA damage assay of anti-cancer drugs against cancer cell lines	Dr. Meenal Kowshik
22	Kanishka Tiwary	Study of biomarkers (e.g. TGFBR2) in the proporsion of Gall Bladder Cancer	Dr. Vijayashree Naik
23	Kanika Bhatnagar	Optimization of the production parameters of antifungal substance by Bacillus sp and its partial purification	Dr. Utpal Roy

24	Prashant Dadarao Zodge	Creep & TTS studies of Thermoplastic materials using DMA	Dr. Sachin Waigaonkar
25	Swapnil Vinod Punyapwar	biochemical analysis of available land races of rice in goa	Dr. Kundan kumar
26	Navodita Bhatnagar	Biogas slurry management	Dr .Srikanth Mutnuri

**I Semester 2015-16**

1	Mohit Tiwari	Optimizing biogas generation from waste water using anaerobic digestion	Dr. S. S. Baral
2	Narendra Chundi	kinetics and phase equilibrium studies on clathrate systems	Dr. Srinivas Krishnaswamy
3	M. Dileep	Heavy metals removal from waste water using different adsorbent	Dr. S. S. Baral
4	Hariom	Waste water treatment using advanced oxidation process	Dr. S. D. Manjare
5	Geeta Dasila	Synthesis and characterization of hydroxyapatite base nano fertilizers for controlled release	Dr. Sutapa Roy Ramanan
6	Anubha Deo	preparation of clay and graphene polymer nano-composites and determination of rheological properties	Dr. Asima Shaukat

BITS Pilani

# annual report 2015

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**Part B3: Hyderabad Campus**

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### B3.1 SENIOR OFFICERS AND APPOINTMENTS

#### (a) Senior Officers

- Prof. V S Rao, Director and Senior Professor, BITS Hyderabad Campus and Acting Vice Chancellor, BITS Pilani Campus
- Prof. G Sundar, Director and Senior Professor - Off Campus Programs & Industry Engagment
- Prof. M B Srinivas, Dean - Administration
- Prof. Suman Kapur, Senior Professor, Dean, International Programmes and Collaboration Division (University Wide)
- Prof. Niranjan Swain, Dean, Practice School Division; (University Wide)

#### (b) New appointments

- Mr. Rajiv Tandon, Chief Operations Officer, WILP
- Ms Sunitha Suresh, Sr. Manager – Accounts & Finance has been re-designated as Head - Accounts and Finance
- Mr. Shantanu Bagchi, Senior IT Manager, WILP
- Mr. Sundeep Yadav, Marketing and Brand Creation Manager, WILP
- Mr. Shinde Amol Bhanudasrao Lata, General Manager, WILP
- Mr. Justin George Koottala, General Manager, WILP
- Mr. Gaurav Gaba, General Manager, WILP
- Mr. K Bharathananda Srinivas, General Manager, WILP
- Mr. Samudrala Srinivasa Chakravarthy, Estate Manager
- Mr. Kenadi Chadalavada, Facility Manager

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 2014-'15</b>	-	-	-	-	-	-	12	8	-	-	<b>12(8)</b>
<b>First Semester 2015-'16</b>	<b>683</b>	<b>113</b>	<b>60</b>	<b>21</b>	<b>7</b>	<b>3</b>	<b>15</b>	<b>10</b>	-	-	<b>765(147)</b>
<b>Grand Total</b>											<b>777(155)</b>

### B3.3 DUAL DEGREE AND TRANSFERS

During the Year 2015, a total no of 177 students (out of 178 offers : Priority 1 – 177, Other Priorities - 1) were permitted to pursue concurrently two first degrees under the Dual Degree scheme as per details given **Annexure 2** (Part B1).

#### TRANSFERS:

During the Year 2015, a total no of **15** students (10 transfers + 5 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 **Annexure 2** (Part B1).

#### VERTICAL TRNASFERS:

During the year 2015, Five (**5**) students were permitted to transfer from First Degree to Higher degree and **0** students were 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 2014-2015	13.01.2015	02.05.2015	88
First Semester 2015-2016	02.08.2015	28.11.2015	93
Summer Term 2014-2015	22.05.2015	11.07.2015	45

### B3.5 COURSES OFFERED

The number of courses, offered during the year 2015 are as follows:

	Number of Courses Offered
Second semester 2014-2015	344
First Semester 2015-2016	344
Summer Term 2014-2015	26

During the year the following new courses are added

Second semester 2014-2015	20
First Semester 2015-2016	12

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 2014-2015	3193
First Semester 2015-2016	3302
Summer Term 2014-2015	804

Details of Registration of students for the First Semester 2014-2015 are given in **Annexure 4 (Part B3)**.

### B3.7 ACADEMIC AND PROFESSIONAL COUNSELLING

#### II Semester 2014-2015

There were 59 students under the purview of the Academic Counselling Board (ACB) at the beginning of the First Semester 2014 – 2015. At the end of First Semester 2014 – 2015, 38 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. 30 new cases came under the purview of ACB at the end of First Semester 2014 - 2015. The total number of students who are under the purview of ACB at the beginning of Second Semester 2014-2015 is 51.

#### I Semester 2015-2016

There were 51 students under the purview of the Academic Counselling Board (ACB) at the beginning of the Second Semester 2014 – 2015. At the end of Second Semester 2014 – 2015, 24 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. 30 new cases came under the purview of ACB at the end of Second Semester 2014 - 2015. The total number of students who are under the purview of ACB at the beginning of First Semester 2015-2016 is 55.

		II Semester 2014-15	I Semester 2015-16
1.	Total number of students under the purview of ACB at the beginning of the semester	59	51
2.	No. of students declared out of its purview at the end of the semester	38	24
3.	No. of students who left/transfer the Institute during the semester	0	2
4.	No. of new students who came under the purview of ACB at the end of the semester	30	30
5.	Total No. of students under the purview of ACB during the next semester	51	55

### B3.8 AWARD OF DEGREES

Convocation was conducted on Sunday 26<sup>th</sup> July, 2015, Chief Guest Hon'ble Dr. Karan Singh, Member Parliament and the Vice Chancellor Dr. B N Jain have participated in the Convocation of the campus for award of various degrees (First Degree, Higher Degree and Ph.D) to 748 students who have qualified in second semester 2014-15.

#### LIST OF INTEGRATED FIRST DEGREE PROGRAMMES FOR AWARD OF MEDALS

S.NO.	NAME and ID NO	Sex	CGPA Obtained	Position Obtained	Type of Medal to be Awarded
1	ANUPRIYA GAGNEJA 2011A7PS545H	F	9.83	FIRST	GOLD
2	PRATYUSH MAHAPATRA 2011A3PS042H	M	9.77	SECOND	SILVER
3	SHYAM KRISHNA SHENOY A 2011A4PS001H	M	9.73	THIRD	BRONZE

During the year, a total of 748 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 Degrees</b>							
1	Chemical Engineering	39					<b>39</b>
2	Civil Engineering	34					<b>34</b>
3	Electrical & Electronics Engineering	79					<b>79</b>
4	Mechanical Engineering	69					<b>69</b>
5	B. Pharmacy	24					<b>24</b>
6	Computer Science Engineering	89					<b>89</b>
7	Electronics & Communication Engineering	88					<b>88</b>
8	Biological Sciences		25				<b>25</b>
9	Chemistry		31				<b>31</b>
10	Economics		45				<b>45</b>
11	Mathematics		39				<b>39</b>
12	Physics		34				<b>34</b>
13	Information Systems			55			<b>55</b>
<b>Sub-total</b>							<b>651</b>

S.No	Programmes	B.E. (Hons.)	M.Sc. (Hons.)	M.Sc. (Tech.)	H.D.	Ph. D	Total
<b>Higher Degrees</b>							
14	M.E. Computer Science				6		<b>6</b>
15	M.E. Biotechnology				9		<b>9</b>
16	M.E. Electronics & Control				11		<b>11</b>
17	M.E. Embedded Systems				14		<b>14</b>
18	M.E. (Civil with specialization in Structural Engineering)				10		<b>10</b>
19	M.E. Mechanical				5		<b>5</b>
20	M.E. Design Engineering				7		<b>7</b>
21	M.E. (Mechanical with specialization in Thermal Engineering )				12		<b>12</b>
22	M. Pharm. (with specialization in Pharmaceutics)				8		<b>8</b>
23	M. Pharm. (with specialization in Pharmaceutical Chemistry)				2		<b>2</b>
<b>Sub-total</b>							<b>84</b>
24	<b>Ph. D.</b>					<b>13</b>	<b>13</b>
<b>Grand Total</b>		<b>422</b>	<b>174</b>	<b>55</b>	<b>84</b>	<b>13</b>	<b>748</b>

### B3.9 CAMPUS INTERVIEWS AND PLACEMENT

Number of companies which conducted campus interviews	156
No of interviews	9656
No of offers made	524

The discipline-wise statistics and the list of organizations which conducted campus interviews during the year are given in **Annexure 5 (Part B3)**.

## Department-wise report

**B3.10.1 Biological Sciences****Number of faculty members**

<b>Senior Professors, Professors</b>	02
<b>Associate Professors</b>	02
<b>Assistant Professors</b>	06
<b>Lecturers</b>	00
<b>Visiting Faculty</b>	00

**Head of the Department: Prof. Suman Kapur**

**Contact details: 91-4066303563; skapur@hyderabad.bits-pilani.ac.in**

**Number of PhD Scholars: 37 students**

**a) Sponsored Research activities:****Ongoing projects**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Development of indigenous POC device micro-channel/fluidic device for estimation of lipid profile in human plasma/serum	Prof. Suman Kapur	NPMASS-DRDO	46.67	2013-2015
2	A point of Care (POC) device for detection of antibiotic sensitivity of uropathogens in human urine	Prof. Suman Kapur	DBT-BIRAC	45	2014-2016
3	Project cooperation between School of Innovation, design and Engineering, Mälardalens högskola and Birla Institute of Technology and Science-Pilani	Prof. Suman Kapur (Co-PI)	The Swedish Council for Higher Education	80000 SEK	2015-2016
4	AC impedance measurement on two dimensional origami structures of various shapes	Prof. Suman Kapur (Co-PI)	CSIR	22.3	2013-2016
5	Adenovirus-delivered RNAi as an antiviral strategy against dengue.	Prof. Swaminathan	DBT	59.7	2014-2017
6	Consequences of cellular crowding on structure stability and folding of a TIM barrel protein	Dr Ramakrishna Vadrevu	DST	37.37	2012-2015
7	Microbial lipase catalyzed production of ester intermediates for various processing applications in pharmaceutical and food industries	Dr. Jayati ray Dutta	UGC	13	2014-2017
8	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.	Dr. Sankar Ganesh	CORE, BITS grant	50	2014-2019
9	Novel biomarker responses to validate acute toxicity of engineered nanoparticles and their physicochemical interactions in earthworm as a model bio indicator of nano (eco) toxicology.	Dr. Sankar Ganesh	DBT	14	2012-2015
10	Novel molecular mechanism involving adenosine and adenosine receptors in acceleration of alcohol induced hepatic	Dr. Palash Mandal	CSIR	24.7	2012-2015

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
	fibrosis				
11	Role of adipose in ethanol-induced tissue injury	Dr. Palash Mandal	DST	25	2013-2016
12	Delineating the impact of plant growth promoting rhizobacteria on plant polyamine metabolism: novel insights into plant-PGPR interactions	Dr. Sridev Mohapatra	DST	25	2013-2016
13	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
14	Development of a cost-effective membrane and DNA chip-based detection of mutations with multiple drug-resistance tuberculosis	Dr Kommu NagaMohan	DST	69.16	2014-2017
15	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
16	Automated Detection of abnormal copy number variants in human diseases	Dr Kommu NagaMohan	DBT-BIRAC	49.9	2014-2016
17	Application of micro-environment property descriptor to explore free energy changes in amyloidogenic protein aggregation	Dr. Debashree Bandyopadhyay	UGC-BSR	5.4	2013-2015

#### Projects sanctioned during the year

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	Project cooperation between School of Innovation, design and Engineering, Mälardalens högskola and Birla Institute of Technology and Science-Pilani	Prof. Suman Kapur (Co-PI)	The Swedish Council for Higher Education	80000 SEK	2015-2016
2	Automated Detection of abnormal copy number variants in human diseases	Dr Kommu NagaMohan	DBT-BIRAC	49.9	2014-2016

#### Publications: Papers in peer reviewed journals

- Uma Shukla Dubey, Manohar Lal, Anyaa Mittal, Suman Kapur, Therapeutic potential of Camel Milk, Emirates Journal of Food and Agriculture (accepted)
- Pavan Kumar Mujawdiya and Suman Kapur Mangiferin: A potential natural molecule for management of metabolic syndrome, International Journal of Pharmacy and Pharmaceutical Sciences (Special Issue: Drugs from Nature) 2015, Vol 7 (1): 9-13.
- Anthony F. Santoro, M.A., Sonia Suchday, Amina Benkhokha, B.S., Natasha, Ramanayake, Suman Kapur, Adverse Childhood Experiences and Religiosity/Spirituality in Emerging Adolescents in India, 2015, Psychology of Religion and Spirituality, Online First Publication, June 29, 2015 <http://dx.doi.org/10.1037/rel0000038>
- Sharma P, Banerjee R, Narayan KP (2015) Mineralocorticoid receptor mediated liposomal delivery system for targeted induction of apoptosis in cancer cells. Biochimica et Biophysica Acta (BBA) - Biomembranes (In press) IF: 3.88

- 5 Sharma P, Banerjee R, Narayan KP (2015) Data for stable formulation of steroid hormone receptor-targeted liposomes for cancer therapeutics". Data-in-Brief (accepted).
- 6 Harini Venkata, Nishank Reddy, Imran Khan and Palash Mandal (2015). Effect of alcohol on adipose tissue. *Adipocyte* (In press).
- 7 Anthony F. Santoro, M.A., Sonia Suchday, Amina Benkhokha, B.S., Natasha, Ramanayake, Suman Kapur, Adverse Childhood Experiences and Religiosity/Spirituality in Emerging Adolescents in India, 2015, *Psychology of Religion and Spirituality*, June 29, <http://dx.doi.org/10.1037/rel0000038>
- 8 Shivani Gupta, DV Padmavathi, Apoorva Verma and Suman Kapur, Garlic: An effective functional food to combat the growing antimicrobial resistance, 2015, *JTAS*, Vol. 38 (2) 271 – 278
- 9 R. Sood, R. Raut, P. Tyagi, P. K. Pareek, T. K. Barman, S. Singhal, R. K. Shirumalla, V. Kanoje, R. Subbarayan, R. Rajerethinam, N. Sharma, A. Kanaujia, G. Shukla, Y. K. Gupta, C. K. Katiyar, P. K. Bhatnagar, D. J. Upadhyay, S. Swaminathan, N. Khanna. *Cissampelos pareira* Linn: Natural source of potent antiviral activity against all four dengue virus serotypes. *PLoS Neglected Tropical Diseases* 9(12): e0004255, 2015.
- 10 L. Tripathi, S. Mani, R. Raut, A. Poddar, P. Tyagi, U. Arora, A. de Silva, S. Swaminathan, N. Khanna. *Pichia pastoris*-expressed dengue 3 envelope-based virus-like particles elicit predominantly domain III-focused high titer neutralizing antibodies. *Frontiers in Microbiology* 6:1005, 2015.
- 11 R. Raut, H. Beesetti, P. Tyagi, I. Khanna, S. K. Jain, V. U. Jeankumar, P. Yogeewari, D. Sriram, S. Swaminathan. A small molecule inhibitor of dengue virus type 2 protease inhibits the replication of all four dengue virus serotypes in cell culture. *Virology Journal* 12: 16, 2015.
- 12 Rahul C. N, Shiva Krishna K, Meera M, Sandhya Phadke, Vidya Rajesh, "Characterization of sequence diversity in *Plasmodium falciparum* SERA-5 from Indian isolates, *Asian Pacific Journal of Tropical Disease*, 5 (Suppl.1), (2015), 80 - 84.
- 13 T. Sathvika, Manasi, Vidya Rajesh, N. Rajesh, "Microwave assisted immobilization of yeast in cellulose biopolymer as a green adsorbent for the sequestration of chromium." *Chemical Engineering Journal* , 279, (2015), 38 – 46.
- 14 Manasi, Vidya Rajesh, N. Rajesh, "An indigenous *Halomonas BVR1* strain immobilized in crosslinked chitosan for adsorption of lead and cadmium" *International Journal of Biological Macromolecules*, 79, (2015), 300 – 308.
- 15 C.N. Rahul, K. Shiva Krishna, M. Meera, Sandhya Phadke, Vidya Rajesh, "*Plasmodium vivax*: N-terminal diversity in the blood stage SERA genes from Indian Isolates" *Blood Cells, Molecules and Diseases*, 55, (2015), 30 – 35.
- 16 Madhu Poornima Mamidala, Mahesh Kumar Kalikiri, Praveen Kumar P. T. V., N Rajesh, Om Sai Ramesh Vallamkonda, Vidya Rajesh, "Consanguinity in India and its association with Autism Spectrum Disorder", *Autism Research*, 8, (2015), 224 – 228.
- 17 Imran Khan, Jayati Ray Dutta and Ramakrishnan Ganesan, Enzymes's action on materials: Recent trends, *Journal of Cellular Biotechnology*, (accepted) 2015.
- 18 Sita Ramyasree Uppada and Jayati Ray Dutta, Immobilization and kinetic study of lipase enzymes from *Lactobacillus plantarum* and *Lactobacillus brevis*, *International Journal of ChemTech Research*, 8 (2), 2015, pp. 680-685.(Impact factor 0.9)
- 19 Abhinav Dubey, Rajashekar Varma Kadumuri, Garima Jaipuria, Ramakrishna Vadrevu,\* and Hanudatta S. Atreya\*. Rapid NMR assignments of proteins using optimized combinatorial selective unlabeled, *ChemBioChem*. Accepted 2015
- 20 Dibyendu Rakshit, P. Sankar Ganesh, Santosh Kumar Sarkar *Choreotrich ciliate tintinnid (Protozoa: Ciliophora) in a tropical meso-macrotidal estuary, eastern part of India*, *Regional Studies in Marine Science*, Elsevier, 2015.
- 21 Ranju Chowdhury, Paulo J. C. Favas, J. Pratas, M. P. Jonathan, P. Sankar Ganesh, Santosh Kumar Sarkar Accumulation of trace metals by mangrove plants in Indian Sundarban Wetland: Prospects for phytoremediation, *International Journal of Phytoremediation*, 2015. (IF: 1.466)
- 22 K.N. Mohan Stem cell models to investigate the role of DNA methylation machinery in development of neuro psychiatric disorders. *Stem cells International* (In press). 2015
- 23 Saxena S, Gowdhaman K, Kkani P, Vennapusa B, Rama Subramanian C, Ganesh Kumar S, Mohan KN, Improved Multiplex Ligation-dependent Probe Amplification (i-MLPA) for rapid copy number variant (CNV) detection. *Clinica Chimica Acta* (450: 19-24). 2015

- 24 McGraw S, Zhang JX, Farag M, Chan D, Caron M, Konermann C, Oakes CC, Mohan KN, Plass C, Pastinen T, Bourque G, Chaillet JR, Trasler JM, Transient DNMT1 suppression reveals hidden heritable marks in the genome. *Nucleic Acids Res.* (43: 1485-97), 2015
- 25 Bandyopadhyay, D "Cystine Functions cluster around similar micro-environment clusters from diverse protein crystal structures", *Eur. Biophys J* (2015) **44** (suppl 1): S50

#### Patents Filed

1. P.K. Bhatnagar, C. K. Katiyar, N. Khanna, D. J. Upadhyay, S. Swaminathan, K. Srinivas, N. Sharma, A. Kanaujia, R. Sood, S. Singhal, G. Shukla, R. Duggar, P. K. Pareek, Y. Singh, S. Khan, and R. Raut. Use of *Cissampelos Pareira* Extracts for Treating Dengue". 11520/DELNP/2015 (Patent)
2. Low Cost Point of Care Device for the detection of blood glucose levels, patent application no. 1646/DEL/2014
3. PCT for Low Cost Point of Care Device for the detection of blood glucose levels, PCT No. PCT/IN2015/000251
4. Design patent application no. is 267834, dated 01-12-2014
5. An invention relating to a ready to use kit, microbiological testing apparatus and a method for rapid detection, identification & classification of pathogens in a biological sample and their susceptibility to anti-microbial agents, patent application no. 2195/DEL/2015.

#### b) Conferences attended/papers presented:

S. No	Authors	Title	Details of the conference	National/International	Year
1	Shivani Gupta and Suman Kapur	Bio prospecting of un-explored marine sources for production of HMG Co-Reductase Inhibitor	9th American Biotechnology Congress being held from Aug. 31-Sept. 02, 2015, Orlando, FL, US	International	2015
2	Suman Kapur	Epidemiology in Health care Management	22-24 <sup>th</sup> December ICHTR at Manipal University	International	2015
3	Suman Kapur	Turning research into tools: Emerging Technology Platforms in Point of care Diagnostics	Industry Institute Conference on Challenges in Product Development of Medical Implants and Devices at IEST Shibpur in December 18-19 <sup>th</sup> , 2015	National	2015
4	Suman Kapur	RightBiotic: A point of Care (POC) device for detection of antibiotic sensitivity in uropathogens	Conference on social innovation, Pune International Centre 17 <sup>th</sup> Nov 2015, Pune	National	2015
5	Suman Kapur	RightBiotic: A point of Care (POC) device for detection of antibiotic sensitivity in uropathogens	Indo-UK workshop on Anti-microbial Resistance held at Delhi on 8-10 <sup>th</sup> October 2015	International	2015
6	Suman Kapur	Turning research into tools: Emerging Technology Platforms in Immuno-diagnostics & Therapy	EVIOC held at Mahabalipuram from 15-16th September 2015	International	2015
7	Manjot Kaur, Rupak Kumar, DV Padmavathi, Shivani Gupta, Anuradha Pal and Suman Kapur,	Bacterial Strains for Morpholine Degradation: An Adaptation and Screening Strategy	International conference on Advances in Agricultural, Biological and Environmental Sciences (AABES-2015) held on July22-23rd, in London (GBR)	International	2015
8	Sonia Suchday, Suman Kapur, Sribash Saha, Carlos Marquez, Amina Benkhokha, and Natasha Ramanayake,	Psychological profile of urban adolescents with elevated blood pressure in India,.	American Psychosomatic Society meeting in Texas in March 2015	International	2015

S. No	Authors	Title	Details of the conference	National/International	Year
9	S. Gurjar, M. Mahajan, S. Kapur,	Triphala and its constituents alters gut microbiota in high fat diet induced obese mice,	2nd International Congress of Society for Ethno-pharmacology, India, held in Nagpur in February 2015	International	2015
10	Daipayan Ghosh, Sridev Mohapatra	PGPR-mediated modulation of proline metabolic gene expression in arabidopsis thaliana under drought stress	International Plant Physiology Conference held at New Delhi from 11 <sup>th</sup> -14 <sup>th</sup> December 2015	International	2015
11	Sharma P and Narayan KP	Eplerenone associated liposomal delivery system for targeted induction of apoptosis and inhibition of metastasis	14th FAOBMB Congress and 84th Annual Meeting of SBC (I) Current Excitements in Biochemistry and Molecular Biology for Agriculture and Medicine, Hyderabad, India 27 – 30. 2015	International	2015
12	Ravichand Palakurti, Ramakrishna Vadrevu	Abelson Tyrosine Kinase, a new Enzyme target for Alzheimer's Disease: Exploring multiple e-pharmacophore modeling, virtual screening, selectivity assessment for potential inhibitors	The 29 <sup>th</sup> Annual Symposium of The Protein Society, Barcelona, Spain, July 22-25	International	2015
13	Ramakrishna Vadrevu, Jagadeesh Gullipalli, Rajashekar Kadumuri, Srividya Subramanian Koushik Chandra, Hanudutta Atreya	Molecular crowding effects on the native and equilibrium intermediate state of a 29 kDa TIM Barrel protein	The 29 <sup>th</sup> Annual Symposium of The Protein Society, Barcelona, Spain, July 22-25	International	2015
14	G. Jagadeesh, K. Raja Shekar Varma & Ramakrishna Vadrevu	Consequences of crowding on the native and equilibrium intermediate state of a 29 kDa TIM barrel protein	Gordon Research Conference, Holderness NH United States June 14- 19	International	2015
15	U. Sita Ramyasri & Jayati Ray Dutta	Microbial Lipase mediated ester synthesis for its industrial application	2 <sup>nd</sup> International Conference and Exhibition on Biotechnology, (BRIGHTICE), Leonia, Hyderabad, Aug, 3-4	International	2015
16	Debashree Bandyopadhyay	Cystine Functions cluster around similar micro-environment clusters from diverse protein crystal structures	European Biophysical Society Meeting (EBSA2015), Dresden Germany, 18 <sup>th</sup> to 22 <sup>nd</sup> July, 2015	International	2015
17	Akshay Bhatnagar and Debashree Bandyopadhyay	Microenvironment based functional preferences of Cystine residues in high resolution protein crystal structures	Indian Biophysical Society Meeting, February 14 <sup>th</sup> to 17 <sup>th</sup> , 2015, New Delhi, India	National	2015
18	R. Raut, H. Beesetti, P. Tyagi, I. Khanna, S. K. Jain, V. U. Jeankumar, P. Yogeeswari, D. Sriram and S. Swaminathan	A small molecule inhibitor of dengue virus type 2 protease inhibits the replication of all four dengue virus serotypes in cell culture	SIPRA 2015-National Symposium on Innovative Pharma Research, July 2, 2015, SIPRA Labs, Hyderabad	National	2015
19	R. Sood, N. Khanna and S. Swaminathan	Search for dengue drugs.	4 <sup>th</sup> Mol. Virology Meeting, April 16-17, 2015, Rajiv Gandhi Centre for Biotech.	National	2015



S. No	Authors	Title	Details of the conference	National/International	Year
			Thiruvananthapuram, Kerala		
20	K. Naga Mohan, G. Kavitha, S. Sonal, V. Bhavyasri, A.L. Beaudet and J.R. Chaillet	Unusual DNA methylation signatures and transcriptional activity of the BCOR locus in the human active X chromosome	Keystone symposium on DNA Methylation, March 29-April 3 15, Keystone, Colorado	International	2015
21	Siva Prasad Bitragunta Sankar Ganesh Palani	Effect of TiO <sub>2</sub> nanoparticles on trace element homeostasis: An inquiry into metallomics in earthworm, <i>Eisenia foetida</i>	4 <sup>th</sup> Young Environmental Scientists Meeting, Petnica Science Centre, Belgrade, Serbia, Europe, 2015	International	2015
22	B. Siva Prasad, P. Sankar Ganesh	TiO <sub>2</sub> nanoparticle induced cytotoxicity & genotoxicity in earthworm coelomocytes: Effects on trace metals, antioxidant enzymes and DNA	National Conference on Natural Therapeutics for Cancer, Diabetes and Renal Diseases, Visakhapatnam, 2015	National	2015
23	B. Siva Prasad, P. Sankar Ganesh	An integrated analytical approach to monitor TiO <sub>2</sub> nanoparticles in sewage water: An early warning for safety assessment of engineered nanomaterials in aquatic environment	102 <sup>nd</sup> Indian Congress, Mumbai, India, Jan-2015	National	2015
24	C.N.Rahul, Shiva Krishna K, Vidya Rajesh	Structural modelling of Plasmodium vivax blood stage Serine Repeat Antigens (PvSERA)	CIDSCON 2015 - 5th Annual Conference of Clinical Infectious Diseases Society, ND, 21 <sup>st</sup> -23 <sup>rd</sup> Aug. 2015	National	2015
25	Manasi, Vidya Rajesh, N. Rajesh	A graphene oxide microbe combination as an effective adsorbent for the remediation of zinc	Int. conference on Frontiers in Biol. Sc., NIT, Rourkela, 22 <sup>nd</sup> - 24 <sup>th</sup> Jan. 2015	International	2015
26	T.Sathvika, Vidya Rajesh, N. Rajesh	A novel fungal biopolymer combination as an adsorbent for effective removal of hexavalent chromium	International conference on Frontiers in Biol. Sc., NIT, Rourkela, 22 <sup>nd</sup> -24 <sup>th</sup> January 2015	International	2015
27	R. Raut, H. Beesetti, P. Tyagi, I. Khanna, S. K. Jain, V. U. Jeankumar, P. Yogeewari, D. Sriram, S. Swaminathan	A small molecule inhibitor of dengue virus type 2 protease inhibits the replication of all four dengue virus serotypes in cell culture	SIPRA 2015-National Level Symposium on Innovative Pharma Research, July 2, 2015, SIPRA Labs, Hyderabad	International	2015

**c) Invited Talks given by BITS faculty:**

- 1) Suman Kapur, Epidemiology in Health care Management presented at ICHTR at Manipal University held on 22-24th December 2015
- 2) Suman Kapur, Turning research into tools: Emerging Technology Platforms in Point of care Diagnostics presented at Industry Institute Conference on Challenges in Product Development of Medical Implants and Devices at IEST Shibpur in December 18-19th, 2015.
- 3) Suman Kapur, RightBiotic: A point of Care (POC) device for detection of antibiotic sensitivity in uropathogens, presented at 5th Annual Conference of the Clinical Infectious Diseases Society (CIDSCON) 2015, held at Gurgaon from 21-23 August 2015
- 4) Suman Kapur, Role of technology in eye care, invited talk delivered at ESO's International Vision Science and Optometry Conference (EIVOC), August 14 - 16, 2015, held at Mahabalipuram, India.
- 5) Suman Kapur, Turning research into tools: Emerging Technology Platforms For Point Of Care Devices For Diagnosis, invited talk delivered at International Conference on Advances in Micro/Nanotechnologies (ICAMB-2015) held on 7th and 8th August 2015 at PSG Institute of Advanced Studies, Coimbatore, India

- 6) Suman Kapur, Turning research into tools: Emerging Technology Platforms in Immunodiagnostics & Therapy, invited talk delivered at 2nd International Conference on Biotechnology and Pharmaceutical Sciences, held on 3rd and 4th of August at Leonia International Centre for Exhibitions & Conventions, Hyderabad, India
- 7) Suman Kapur, Keynote lecture "Role of sophisticated instruments in herbal drug development", delivered at the National Seminar on Quality, Safety and Efficacy of Ayurvedic drugs, held on 23rd - 24th May, 2015 at Chittrakoot, India.
- 8) Suman Kapur, Shivani Gupta and Anuradha Pal, RightBiotic: A point of Care (POC) device for detection of antibiotic sensitivity of asymptomatic UTI in Pregnant Women, 2014, to be presented at 14th World Congress on Public Health, Kolkata, India being held from 11-15 February 2015.
- 9) Blesson Memana Abraham and Suman Kapur, Employing Information and Communication Technologies to Strengthen the Adolescent Health Program in India to be presented at 14th World Congress on Public Health, Kolkata, India being held from 11-15 February 2015.
- 10) P. Sankar Ganesh, Entrepreneurship - A paradigm shift in higher education, National Higher Education Conclave, Governance and Quality systems in Higher Education, Coimbatore, November 2015.
- 11) P. Sankar Ganesh, Entrepreneurship as a tool for faculty development, National Summit on Quality in Education, Attaining Institutional Excellence through Teacher Empowerment, Bangalore, September 2015.

**d) Invited talks arranged in the department:**

S. No.	Speaker	Affiliation	Title
1	Dr. Sunita Patel (8 <sup>th</sup> April, 2015)	TIFR, Hyderabad Campus	Crystalline protein
2	Dr. Anil (1 <sup>st</sup> April, 2015)		Biomedical Nanotechnology: An interphase of Biomedicine and Nanosciences
3	Dr. Kartick Shah (17 <sup>th</sup> March, 2015)	Postdoc, MIT, USA	Rapid production and screening of HIV specific anti-body
4	Dr. Syam Nukavarapu (12 <sup>th</sup> Feb, 2015)	Assistant Professor, University of Connecticut, USA	Tissue Engineering and Regenerative Medicine: From concept to reality
5	Dr. Srinivasa Rao Uppalapati (3 Feb, 2015)	DuPont PIONEER	Exploiting chemical signaling in plant microbe interactions for crop protection: are we there yet?
6	Prof. Sonia Suchday, (14 <sup>th</sup> Jan, 2015)	Professor, Dyson College of Art and Science, Pace University, New York, USA	Public health

**v. Conferences / International teaching and Training workshop organized**

**Highlights of WIGH 2015 held from 7<sup>th</sup> January to 16<sup>th</sup> January 2015 at Hyderabad campus**

- The program was inaugurated on the 8.1.15 by Padamshree Dr. K. SubbaRaou, Director Research, KIMS and KMERF, Hyderabad.
- 37 participants
- 33 resource persons including faculty from BITS Pilani, Hyderabad campus, Pace University, USA, Apollo Hospitals, Hyderabad, Apollo Institute of Medical Sciences and Research, Hyderabad, Delhi University, New Delhi, Medici Institute of Medical Sciences, The George Institute of Global Health and Central Research Institute for Unani Medicine.
- Two full day intensive workshops in Healthy living
- The program ended with a valedictory function graced by Prof. V. S. Rao, Director BITS Pilani, Hyderabad Campus.

**e) Awards and recognitions won by faculty and students**

Prof. Suman Kapur: One among the 100women achievers selection, GOI	(2015)
Prof. Suman Kapur: Awardee at WEQ	(2015)
Prof. Suman Kapur: Mentor of the RightBiotic team CII-DST	(2015)
Prof. Suman Kapur: Mentor of the RightBiotic team Winner TiE Hyderabad	(2015)
Prof. Suman Kapur: Mentor of the GYTI award winning team	(2015)
Prof. Suman Kapur: Photon Research Award	(2015)

Mr. B Siva Prasad, Young Scientist Award from **Society of Toxicology-India** (STOX-India), Nov 2015

Dr. Sankar Ganesh: Got International Travel Award from Society of Environmental Toxicology and Chemistry (**SETAC)-Europe** to present a research paper in 4<sup>th</sup> Young Environmental Scientist (YES) meeting at Belgrade, Serbia, February 2015

**f) Faculty Development, International Collaboration & Industry Immersion**

Project cooperation between School of Innovation, design and Engineering, Mälardalens högskola and Birla Institute of Technology and Science-Pilani	Prof. Suman Kapur (Co-PI)	The Swedish Council for Higher Education	80000 SEK	2015-2016
Promoter of a start-up company named Xcellence in Bio Innovations and Technologies to commercialize the technology for rapid test for culture and sensitivity test for uropahogens.	Prof. Suman Kapur (PI)	Department of Biotechnol. SPARSH scheme	Rs 50L	2015-2017
Collaboration with HOD, Dept. of Chemistry, SV University, Tirupathi	Dr. K. Pranav Narayan (PI)	DST	Under review	

**g) Significant new equipment experimental facility added during the year:**

- New Laboratory: Stem Cell and Plant Biotechnology,
- New Laboratory: Environmental Biotechnology
- New Laboratory: Virology Laboratory

**h) Departmental association/club activities:**

No of lectures arranged; 10 Lectures; with lectures by expert in during ATMOS.

**i) Major maintenance, renovations or new construction reports:**

- Renovation of Microbiology lab, Animal Tissue culture lab and cold room
- Structural Biology Lab
- Functional Cold room

**j) Major equipment acquired during the year:**

- a) FPLC,
- b) Bio-Spectro photometer (NANO DROP),
- c) Cooling Centrifuge, freeze Dryer,
- d) Shaker incubator (0-60<sup>o</sup>C) 250 RPM,
- e) Laboratory Refrigerator (Delicase),
- f) -20 Refrigerator – 2 no's,
- g) -80 Refrigerators – 1 No,
- h) Phospho imager and
- i) Rotary Evaporator with cold water circulator.

**B3.10.2 Chemical Engineering****I. Number of faculty members**

Senior Professors, Professors	----
Associate Professors	2
Assistant Professors	6
Lecturers	1
Visiting Faculty	---

**Head of the Department:** Dr. Ramesh Babu Adusumalli

Contact details: 040 - 66303-554; E-mail: ramesh.babu@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** Eight Ph.D. Scholars and four Project fellows

**II. Sponsored Research activities**

Department has eight ongoing projects worth Rs. 2.3 crores funded by various funding agencies such as DBT, DST, CSIR, BIPP-BIRAC, DRDO and BITS-Pilani. Department has 12 PhD students/project fellows working on these projects.

**Ongoing projects:**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Development of Synthetic Resin Product	Prof. Srikanta Dinda	DST	22	Aug. 2013 (36 months)
2.	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)
3.	3-D Printer Filaments that are Biomaterial-Based and Eco-Friendly	Dr. Karthik Chethan V.	BIRAC	34	June 2014 (18 months)
4.	Biofuels from lignocellulosic biomass waste: Biosolubilization and biomethanation of Lignin	Dr. Asma Ahmed	DST	24.1	July 2014 (36 months)
5.	Nano-scale Characterization of Human Hair Fibres by using Indentation Technique	Dr. Ramesh Babu Adusumalli	DST	26.62	Aug. 2014 (36 months)
6.	Bioconversion of Coal Rejects to Biogas and Humic Acid	Dr. Asma Ahmed (Ardee Hi-Tech Pvt. Ltd., Vizag, A.P)	DBT	6 (total cost: 45)	Sept. 2015 (12 months)
7	Characterization of Fibre / Matrix interface in Advanced Composites	Dr. Ramesh Adusumalli, Dr. Karthik Chethan (Dr. Jalaiah)	ASL (DRDO)	9.96	Aug. 2015 (12 months)
8	Studies on CO <sub>2</sub> Capture from Flue Gases using Regenerable Solid Adsorbents	Prof. Srikanata Dinda	CSIR	24	Oct. 2015 (36 months)

**III. Publications**

1. B Sreenivasulu, D V Gayatri, I.Sreedhar and K V Raghavan. A Journey into the Process and Engineering Aspects of Carbon Capture Technologies. *Renewable and Sustainable Energy Reviews* 2015, 41, 1324-1350.
2. B. Sreenivasulu, P. Suresh, I Sreedhar and K V Raghavan. Development Trends in the Porous Adsorbents for Carbon Capture. *Environmental Science and Technology* 2015, 49(21):12641-61.
3. D V Gayatri and I Sreedhar. Kinetics of solid acid catalyzed toluene nitration using incremental identification method. *Reaction Kinetics, Mechanisms and Catalysis* 2015, 114 (1), 251-263.
4. Appala Naidu U and Srikanta Dinda. Development of Ketonic Resin by Polymerization Reaction: A Critical Review. *Polymer* 2015, 61, 204-212.
5. Srikanta Dinda, N.C. Pradhan and A.V. Patwardhan. Development of Synthetic Ketonic Resin, *Chemical Engineering Communications*, 2015, 202, 1036-1040
6. Srivatsan Ramesh, K. Venkata Ratnam and Balaji Krishnamurthy. An Empirical rate constant based model to study capacity fading in lithium ion batteries. *International Journal of Electrochemistry*, 2015, <http://dx.doi.org/10.1155/2015/439015>
7. Srivatsan Ramesh and Balaji Krishnamurthy. A mathematical model to study the capacity fading in lithium ion batteries-formation and dissolution reactions. *Journal of Electrochemical Society*, 2015,162(4), A 545.
8. Saksham Phul, Abhishek Deshpande and Balaji Krishnamurthy. Modeling the effect of potential drop across the SEI layer on the performance of lithium ion batteries. *Electrochimica Acta*, 2015,164, 281.
9. Abhishek Deshpande, Saksham Phul and Balaji Krishnamurthy. A generalized mathematical model to study capacity fading in lithium ion batteries-Effect of Solvent and lithium transport. *Journal of Electrochemical Science and Engineering*, 2015, 5(3), 10.5599/jese.197.
10. Sashank Srinivasan and V. K. Surasani. CFD Analysis of Effects of Surface Fouling on Wind Turbine Airfoil Profiles. *International Journal of Energy and Power Engineering*, 2015, 4(5), 1-11
11. Aditya C. Koli, Preeti B. Subhedar, Sirisha Pamidipati and Vilas G. Gaikar. Mathematical Model for Reactive Recovery of Invertase by Chemical Permeabilization of Baker's Yeast. *Journal of Chemical Technology and Biotechnology*, 2015, DOI: 10.1002/jctb.4716

**IV. Book Published: Chapter in Books**

Srikanta dinda, Nihit Bandaru, Radhev Paleti. Development of Epoxide Material from Vegetable Oil, *Chemical and Bioprocess Engineering*, ISBN-9781771880770, CRC Press (Taylor & Francis Group), 2015.

**V. Conferences attended/papers presented**

1. Chandrakala K, Bibhu Prasad T, Karthik Chetan V, R.B. Adusumalli. Trend Setting Innovations in Chemical Sciences and Technology -Applications in Pharma Industry -2015 (TSCST- API 2015) organised by Centre for Chemical Sciences & Technology (CCST) at JNTUH Hyderabad, 16<sup>th</sup> to 18<sup>th</sup> December, 2015, 54-55 (ISBN: 978-83-82829-48-5).
2. Chandrakala K, Shubham Mishra, Sakshi Khandelwal, Pushkar Prasun, Karthik Chetan, R.B. Adusumalli. Nanoindentation Studies on Human Hair Fibers. *Chemference* 2015, 5-6 December, 2015, IIT Hyderabad.
3. Jakob Schwiedrzik, Rejin Raghavan, Markus Rüggeberg, R.B. Adusumalli, Johann Michler, Tanja Zimmermann. Identification of In Situ Lignin Strength Based on Micropillar Compression and Micromechanical Modeling of Wood Cell Walls. *Nanomechanical Testing in Materials Research and Development. An ECI Conference Series*, October 4-9, 2015, Albufeira, Portugal.
4. Madhuri. P, Nikhil Sai.V, Bipin Chakravarthy, Pradhyumna. K, Shyam.A, Adusumalli R.B. Characterization of Subabul Pulp after Kraft Cooking and Bleaching. *Chemference* 2015, 5-6 Dec. 2015, IIT Hyderabad.
5. Kumar Gaurav, Prashant Sharma, Garv Malik, Shivani Surisetty S V, R.B. Adusumalli, Murari R. R. Varma. Study of Suspended Particulate Matter in an Educational Institute in Suburban Region, India. *Proceedings of the International Conference on Advances in Chemical Engineering*, NITK Surathkal, Karnataka, India, Dec 20-22, 2015
6. Madhuri. P, Nikhil Sainath V, Bipin Chakravarthy, R.B. Adusumalli. Characterization of Subabul Heartwood & Sapwood after Kraft Cooking. *Proceedings of the International Conference on Advances in Chemical Engineering*, NITK Surathkal, Karnataka, India, Dec 20-22, 2015.

7. D.Purnima, Sai Sushma Illuri. Coir as impact modifier in Polypropylene: A comparative study between PP/EPDM blends and PP/Coir Composites. Proceedings of International Symposium on Polymer Science and Technology, Indian Association of Cultivation Science, Kolkata, India, Jan 23-26, 2015.
8. D.Purnima, Sagarika Talla. Thermal Properties of Polypropylene hybrid composites. Proceeding of Fourth International Conference on Natural Polymers and Biomaterials (ICNP 2015), Mahatma Gandhi University, Kottayam, Kerala, 10-12 April 2015.
9. B Sreenivasulu, I Sreedhar, K V Raghavan, B Mahipal Reddy. High Temperature Carbon Capture using Limestone doped with Flyash. SusChemE - an International Conference, ICT Mumbai, Oct 2015.
10. B Sreenivasulu, K V Raghavan, I.Sreedhar. Sustainable Carbon Capture-Research Status and Challenges. Carbon Capture Utilization and Storage Workshop, IIT Mumbai, June 2015.
11. B. Sreenivasulu, J Deepika, I Sreedhar, K V Raghavan. A Critical Review on the Advances in the Materials for Carbon Capture, National Conference - Chemix 2015, NIT, Nagpur, March 28-29, 2015.
12. I. Sreedhar, Bibha Nayak and Sneha Daliya. Experimental and Kinetic Study of Biodiesel Synthesis from Palm and Ethanol. Proceedings of International Conference on Emerging Researches in Engineering Science and Technology (ICEREST 2015), Coimbatore, March 12-14, 2015.
13. Sashank Srinivasan, V. K. Surasani. CFD Analysis of Effect of Surface Fouling on Wind Turbine Airfoil Profiles. International Conference on Energy Systems and Developments ( ICESD2015), February 11-13, 2015, Pune, India.
14. Trishishi Raychoudhary, V. K. Surasani. Retention of surface modified-NZVI particle in porous media and its implication: Assessment with the help of 1-D transport model. 7<sup>th</sup> International Conference on Porous Media and Annual Meeting, 18-21 May, 2015, Padua, Italy.
15. Appala Naidu Uttaravalli, Srikanta Dinda. Synthesis of Resin from Cyclohexanone for Adhesive Applications. IISF-2015, 4-8 December, 2015, IIT Delhi.
16. Srikanta Dinda, Nikhil S. Reddy V., Appala Naidu U. Development of bio-based epoxide from plant oil. Proceedings of the International Conference on Advances in Chemical Engineering, Dec 20-22 December-2015, NITK Surathkal, India.
17. Appala Naidu U., Srikanta Dinda, Pravallika K. Studies on Synthesis of Ketonic Resin from Cyclohexanone for Paint Applications. APA 2015, 29-31 October 2015, pp-116, Rajkot, India.

#### VI. Invited Talks given by BITS faculty:

1. Dr. Karthik Chethan. V delivered a talk on "Development of 3D Printable Biobased Filaments for Biomedical Applications" in a Conference, Challenges in Product Development of Medical Implants and Devices, December 18-19, 2015, IEST, Shibpur, West Bengal.
2. Dr. Karthik Chethan. V delivered a talk on "3D Printing and its Biomedical Application" in an Academic program 3D Printing – Biomedical Applications, May 2, 2015, Global Hospitals, Hyderabad.
3. Dr. Ramesh Adusumalli delivered a talk on "Micromechanics of Composites" in an International Conference and Exhibition on Reinforced Plastics (ICERP 2015), Hitex Exhibition Centre, Hyderabad, Jan. 29-31, 2015.
4. Dr. Vikranth Kumar Surasani delivered a talk on "Drying of Capillary Porous Media: Pore Network Drying Simulations", Aditya Birla Science and Technology Pvt Ltd, Navi Mumbai, 16 July 2015.

#### VII. Invited talks arranged in the department:

1. Innovations in Chemical Industries by Prof. M.M. Sharma, 01/10/2015 (from Telepresence Goa)
2. Pulp and paper manufacturing and effluent treatment by Mr. Radhamohan, GM at Sirpur Paper Mills, Sirpur-Khagaznagar, 19/01/15
3. Synthesis of metal nanocomposites by Professor Sanjeev Kumar Gupta from IISc Bangalore, 27/02/15.
4. Environmental Protection Strategies in Oil and Gas Industry by Dr. Syed Naimathulla, Senior Environmental Engineer, Qatar Petroleum, 12/08/15
5. Characterization of coatings and films by Dr. Ravi Chandra Gundakaram, Centre for Materials Characterization and Testing, International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad, 30/10/2015
6. Study of mechanical properties at the sub-micron scale by Dr. Ravi Chandra Gundakaram, (ARCI), Hyderabad, 19/11/2015

**VIII. Awards and recognitions won by faculty and students**

1. Mr. A. Sai Darshan, a student of the fourth year done his summer internship at Institute of Energy and Process Systems Engineering, TU Braunschweig, Germany under Prof. Dr. Ing. Ulrike Krewe through DAAD (German academic exchange service) summer fellowship (Summer 2015).
2. Ms. Niteesha Devulapally, a student of the fourth year done her summer internship at the University of Alberta Edmonton, Canada, through the MITACS Globalink Program in summer 2015.
3. Mr. Srivastan Ramesh received B.V. Raju Memorial Award for Outstanding Student from BITS Pilani Hyderabad campus. He received a certificate and a cash prize of Rs. 2500 from Indian Institute of Chemical Engineers (IICHE-HRC), July 2015.
4. Ms. Sarayu M, a student of the fourth year was awarded the Winter Research Scholarship to perform an internship at the Queensland Alliance for Agriculture and Food Innovation (QAAFI), University of Queensland, through the Winter Research Program, University of Queensland, Australia (Summer 2015).

**IX. Faculty Development, International Collaboration & Industry Immersion**

1. Dr. Vikranth Kumar Surasani was invited to work at Aditya Birla Science and Technology Company (ABSTC) Private Ltd., Mumbai for a period of two months (19.05.15– 16.07.15). After mutual understanding, an agreement was also signed with ABSTC Mumbai in Aug. 2015.
2. New program - Minor in Materials Science and Engineering was introduced in 2015. It is a collaborative program of four departments (Chemical, Mechanical, Physics and Chemistry)
3. Dr. Asma Ahmed is working on a collaborative project with Ardee Hi Tech Pvt. Ltd, Vizag, Andhra Pradesh and supported by BIRAC. Title of the project is Bioconversion of Coal Rejects to Biogas and Humic Acid.

**X. Significant new equipments/experimental facility added during the year.**

Reid vapour pressure acquired in 2015 is primarily used to measure the reid vapour pressure of petroleum products like gasoline and naphtha. The apparatus is used for lab experiment of M.E courses.

Bioreactor units (Sartorius) were donated by Dr. Reddy's Laboratories to the institute, for which two glass bioreactors of 5 L capacity were fabricated and installation was completed in 2015. These reactors are fully automated with pH, dissolved oxygen, agitation, and temperature control along with pumps for feeding and product removal. These reactors can be used for fermentation studies in the areas of biofuels and biochemicals, bioremediation and biopharmaceutical production. The apparatus is used for lab experiment.

Rotary Microtome (Leica) acquired in 2015 as part of the DSC project is used to prepare fine (thin) sections for detail analysis of a sample surfaces. Samples are sectioned (sliced) using tungsten carbide blade or diamond knife. Sample surface or sliced sections can be viewed using optical microscopy, SEM and Transmission electron microscopy (TEM). The smooth running hand wheel can be used for manual sectioning if required. Section thickness range is between 500 nm – 100  $\mu$ m. The apparatus is used for lab experiment.

Rotary pulp digester is used to produce pulp from wood and agro-biomass. Temperature of 160-180  $^{\circ}$ C, pressure of 10 Kg/cm<sup>2</sup> is used to cook approx. 3 Kg of lignocellulosic biomass. It has the capacity of 10 litre, 180 degree rotation during cooking and sample collection during reaction are the main advantages. The apparatus is used for lab experiment.

**XI. Departmental association/club activities:**

Apart from the invited talks mentioned above, two industry visits to Granules India Pvt. Ltd., Gagillapur, Hyderabad (06<sup>th</sup> Feb. 2015, 28<sup>th</sup> Aug. 2015) and one visit to Nuclear Fuel Complex, Moulali, Hyderabad (17<sup>th</sup> December 2015) were organized. The students also organized a fresher's' party to welcome the first year students and also released the magazine 'Equilibria' in April 2015. Association of Chemical Engineers (ACE) was actively involved in ATMOS – Annual Technical Fest of BITS Pilani Hyderabad Campus, 09-11, October 2015. As part of The ATMOS, students and faculty were actively involved in conducting Quiz, Paper presentation, technical games such as Canonwars, Workshops such as Petroleum Refining Process, Aspen Plus Process Modeling and Prototyp3D-Sculpting the future one layer at a time.

**XII. Major maintenance, renovations or new construction reports:**

CRE lab partition (D 228), construction of platforms and cup boards in D 212 and Process control lab D226.

**XIII. Major equipments acquired during the year:**

Benchtop Fermenter, Rotary Microtome (Leica), Tray Fermenter, Photobioreactor, Rotary Pulp Digester, Injection & Compression moulding, Ultrasonic processor, Fixed and Fluidized bed reactor (Chemito), High end desktop for modelling studies (HP), Refrigerated Centrifuge, Reid vapour pressure, Karl fisher titrator, Water bath, Moisture analyser and Vacuum oven.

**B3.10.3 Chemistry****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>3</b>
<b>Associate Professors</b>	<b>5</b>
<b>Assistant Professors</b>	<b>7</b>
<b>Lecturers</b>	<b>-</b>
<b>Visiting Faculty</b>	<b>-</b>

**Head of the Department:** Dr. Anupam Bhattacharya

Contact details: anupam@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 23

**Sponsored Research activities:**

**Ongoing projects**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Photocurable organic-inorganic hybrid precursors for the fabrication of metal oxide micro/nanostructures	Ramakrishnan Ganesan	DST	26 lakhs	2013-2016
2.	Development of suitably customized polymers and clay based adsorbents for the effective removal of chromium from e-waste	N Rajesh	DST	43 lakhs	2013-2016
3	Localization of flexible polymer chains on chemically heterogeneous surfaces	K Sumithra	CSIR	9 lakhs	2013-2016
4	Synthesis of modified TosMIC & BetMIC for use as key reagents in the synthesis of boronated heterocycles	Anupam Bhattacharya	CSIR	18.10 lakhs	2013-2016
5	Synthesis and Biological Activity of Various Triazoles as Effective Antifungal Agents	KVG Chandra Sekar	DBT	19.6 lakhs	2012-2015
6	Structure Based Rational Design and Synthesis of Mycobacterium tuberculosis inhibitors	KVG Chandra Sekar	DST	22 lakhs	2014-2017
7	Ultracold Chemistry in the early universe	Subhas Ghosal	DST	21.6 lakhs	2012-2015
8	Finding Aggregation-induced emission active materials : design, synthesis and photophysical studies of sterically hindered triarylethenes and Tetraarylethenes	Manab Chakravarty	DST	38.38	2014-2017
9	Laboratory investigation and field application towards the effective defluoridation of water using appropriately tailored sorbents	N.Rajesh	DST	26.67	2012-2016
10	Towards metalloneurochemistry inside a niosome : a fluorescence spectroscopy approach	Amit Nag	DST	24.98	2014-2017
11	Photocatalytic NO <sub>x</sub> abatement: From Mechanism and Materials	Sounak Roy	DST	24.48	2014-2017



SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
	Properties to Catalytic Performance				
12	Investigation of magneto-optical effect in composite magneto-plasmonic nanostructures for sensing applications	Balaji Gopalan as (Co-PI)	DST	33.2	2013-2016
13	Investigation of magneto-optical effect in composite magneto-plasmonic nanostructures for sensing applications	Krishnan Rangan (Co-PI)	DST	33.2	2013-2016
14	Investigation of the folding of Cysteine-rich Neurotoxins in Ionic Liquid by Molecular Dynamics Simulation and Quantum Mechanical Calculations	Durba Roy	DST	25.28	2015-2018

**Projects sanctioned during the year**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	Investigation of the folding of Cysteine-rich Neurotoxins in Ionic Liquid by Molecular Dynamics Simulation and Quantum Mechanical Calculations	Durba Roy	DST	25.28	2015-2018

**Publications:**

1. T.Sathvika, Manasi, Vidya.Rajesh, N.Rajesh, Prospective application of Aspergillus species immobilized in sodium montmorillonite to remove toxic hexavalent chromium from wastewater, RSC advances, 5, 2015, 107031-107044.
1. Manasi, Vidya Rajesh, N. Rajesh, An indigenous Halomonas BVR1 strain immobilized in crosslinked chitosan for adsorption of lead and cadmium, Int. J. Biol.Macromol. 79, 2015, 300–308.
2. M. Barathi, A. Santhana Krishna Kumar, N. Rajesh, Aluminium hydroxide impregnated macroreticular aromatic polymeric resin as a sustainable option for defluoridation, J. Environ. Chem. Eng 3, 2015, 630–641.
3. T. Sathvika , Manasi, Vidya Rajesh, N. Rajesh, Microwave assisted immobilization of yeast in cellulose biopolymer as a green adsorbent for the sequestration of chromium, Chem. Eng. J. 279, 2015, 38–46.
4. A. Santhana Krishna Kumar, Shivani Sharma, R. Sudheer Reddy, M. Barathi, N.Rajesh , Comprehending the interaction between chitosan and ionic liquid for the adsorption of palladium, Int. J. Biol. Macromol. 72, 2015, 633-639.
5. Shivani Sharma, M.Barathi, N.Rajesh , Efficacy of a heterocyclic ligand anchored biopolymer adsorbent for the sequestration of palladium, Chem. Eng. J. 259, 2015, 457-466.
6. T. Vikramaditya, M. Saisudhakar, K.Sumithra. Electronic structure of  $\alpha$ -oligothiophenes with various substituents; Journal of Molecular Structure (Elsevier), 2015, 1081, 114–123.
7. T. Vikramaditya, M. Saisudhakar, K. Sumithra. The adsorption of glycine in non-ionic and zwitter-ionic states on intrinsic and functionalized semi-conducting carbon Nanotubes; Journal of computational and theoretical Nanoscience (American Scientific Publishers), 2015, 12, 1-7.
8. T. Vikramaditya, M. Saisudhakar, K. Sumithra. A PBC-DFT study of electronic properties of substituted Polythiophenes, Journal of Physical Organic Chemistry (Wiley), 2015, 28, 695.
9. G. Pallikonda, R. Santosh, S. Ghosal, M. Chakravarty. n-BuLi-Triggered Phospha-Brook Rearrangement: Efficient Synthesis of Organophosphates from Ketones and Aldehydes, Tetrahedron Lett. 2015, 56(24), 3796.
10. G. Pallikonda, S. Maloth, K. K. Satish, M. B. Z. Khalid, A. R. Kumar, S. Ghosal, M. Chakravarty. New  $\omega$ -ketovinyl phosphonates: inexpensive synthesis, isomerization studies and route for functionalized 1,3-butadienes Tetrahedron. 2015, 34, 5538.

11. C. B. Verma, A. Singh, G. Pallikonda, M. Chakravarty, M. A. Quraishi, I. Bahadur, E. E. Ebenso. Aryl sulfonamidomethylphosphonates as new class of green corrosion inhibitors for mild steel in 1 M HCl: Electrochemical, surface and quantum chemical investigation. *J Mol. Liq.* 2015, 209, 306.
12. Ranga Santosh and Subhas Ghosal. Quantum mechanical rate coefficient of formation of HD molecule at ultracold temperatures: its importance in interstellar cooling *Journal of Atomic Molecular Condensate and Nano Physics*, - accepted 2015..
13. Nagarjuna R, Challagulla S, Alla N, Ganesan R, Roy Sounak. Synthesis and characterization of reduced-graphene oxide/TiO<sub>2</sub>/Zeolite-4A: A bifunctional nano composite for abatement of methylene blue, *Materials and Design* DOI: 10.1016/j.matdes.2015.07.116.
14. Challagulla S, Nagarjuna R, Ganesan R, Roy Sounak. Role of Solvents on Photocatalytic Reduction of Nitroarenes by Sol-Gel Synthesized TiO<sub>2</sub>/Zeolite 4A, *Journal of Porous Materials* 22 (2015) 1105-1110.
15. Roy Sounak, Madras, G. PhotoCatalytic NO<sub>x</sub> abatement: An Overview, *Current Organic Chemistry* DOI: 10.2174/1385272819666150603235429.
16. Nagarjuna, R, Roy Sounak, Ganesan R. Polymerizable sol-gel precursor mediated synthesis of TiO<sub>2</sub> supported zeolite-4A and its photodegradation of Methylene blue, *Microporous and Mesoporous Materials* 211 (2015) 1-8.
17. Roy Sounak, *Materials for catalysis: Connecting Academia to Industry*, *Journal of Catalysts and Catalysis* 2 (2015) 1-3.
18. Akula, M.; Yadagiri, T.; Davis, C.; Jha, M. and Bhattacharya, A. Synthesis of 4-substituted oxazolo[4,5-c]quinolines by direct reaction at the C-4 position of oxazoles, *Organic and Biomolecular Chemistry*, 2015, 13, 2600-2605.
19. Akula, M.; Yadagiri T.; Naq, A. and Bhattacharya, A. Selective detection of fluoride using fused quinoline systems: effect of pyrrole. *RSC Advances* 2015, 5, 57231.
20. Mahalakshmi Naidu, K., Rudresh Naik, G., Chandra Sekhar, K.V.G. Design, synthesis and biological evaluation of 5-(2-(4-(substitutedbenzo[d]isoxazol-3-yl)piperazin-1-yl)acetyl)indolin-2-one and 5-(2-(4-substituted piperazin-1-yl)acetyl)indolin-2-one analogues as novel anti-tubercular agents. *Arab. J. Chem.* 2015. doi:10.1016/j.arabjc.2015.02.025.
21. Mahalakshmi Naidu, K., Nagesh, H.N., Singh, M., Sriram, D., Yogeewari, P., Chandra Sekhar, K.V.G. Novel amide and sulphonamide derivatives of 6-(piperazin-1-yl)phenanthridine as potent Mycobacterium tuberculosis H37Rv inhibitors. *Eur. J. Med. Chem.* 2015, 92, 415-426.
22. Nagesh, H.N., Suresh, N., Bhanu Prakash, G.V.S., Gupta, S., Rao, J.V., Chandra Sekhar, K.V.G. Design, synthesis and biological evaluation of novel phenanthridinyl piperazine triazoles via click chemistry as anticancer agents. *Med. Chem. Res.*, 24, 523-532.
23. Durba Roy and L. Madhavkrishnan. Scrambling of Disulfide Bond Scaffolds in neurotoxin AulB: A Molecular Dynamics Simulation study. *Peptide Science (Wiley)*, 2015, DOI: 10.1002/bip.22799

**Conferences attended/papers presented:**

- M.Barathi, A.S.K. Kumar, N.Rajesh, A macroporous polymeric adsorbent impregnated with Al<sup>3+</sup> for effective fluoride adsorption, International conference on green chemistry, catalysis, energy and environment, 22-24 January 2015, Goa University
- T.Manasi, V.Rajesh, N.Rajesh, A Graphene Oxide-microbe combination as an effective adsorbent for the remediation of zinc, 2nd International Conference on Frontiers in Biological Sciences (InCoFIBS-2015), 22-24 January 2015, NIT Rourkela
- T.Sathvika, Manasi, V.Rajesh, N.Rajesh A novel fungal-biopolymer combination as an adsorbent for the effective removal of hexavalent chromium, 2nd International Conference on Frontiers in Biological Sciences (InCoFIBS-2015). 22-24 January 2015, NIT Rourkela
- Shivani Sharma, N. Rajesh, Chitosan grafted  $\beta$ -cyclodextrin as an efficient adsorbent for palladium and its application in catalyst recovery, BRNS-AEACI symposium on current trends in Analytical Chemistry (CTAC 2015) 26-29 May 2015, BARC, Mumbai
- Shivani Sharma, N.Rajesh, Graphene oxide-sulfur ligand combination to study the adsorption of palladium from spent catalyst, International conference on Nascent developments in chemical sciences, BITS Pilani, 16-18, October, 2015, Pilani.
- T.Sathvika, Manasi, Vidya Rajesh, N.Rajesh, Rhizobium species immobilized in MWCNT for effective adsorption of chromium, National conference on new frontiers in chemistry (NFCFA 2015) 18-19, December, 2015, BITS Pilani, KK Birla Goa campus

- Ranga Santosh, Subhas Ghosal and Krishnan Rangan, Heteroleptic Ruthenium Complex – Synthesis, Characterization and Spectroscopic Studies, Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration" (NDCS-2015), October 16-18, 2015, BITS Pilani, India.
- Krishnan Rangan, V. R. Pooja, Synthesis and characterization of oxalato bis (phenanthroline) nickel(II) complex, 17<sup>th</sup> CRSI Symposium & 9<sup>th</sup> CRSI-RSC Symposium in Chemistry, February 5-8, 2015, NCL, Pune, India.
- M. Sai Sudhakar, T. Vikramaditya and K. Sumithra, Electronic Structure Calculations of Linear and Cyclic Isothianaphthenes, International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration, Electronic Structure Calculations of Linear and Cyclic Isothianaphthenes, NDCS-2015 16-18 October 2015
- K. Sumithra attended the conference Physical and Biophysical Chemistry Theory and Experiment (PBCTE 2015) organized by Department of Chemistry, IIT Bombay. December 4-6, 2015.
- Manab Chakravarty "Acid Mediated Synthesis of 1-Naphthyl(aryl)methylphosphonates: New Source for Naphthylarylketones" International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration (NDCS-2015) October 16-18, 2015
- Ravikiran Nagarjuna, Swapna Challagulla, Ramakrishnan Ganesan and Sounak Roy, 'Polymerizable sol-gel synthesis of reduced graphene oxide/TiO<sub>2</sub>/Zeolite-4A, its characterization and photodegradation of methylene blue' International Conference on Nascent Developments in Chemical Sciences (NDCS), conducted by BITS Pilani, Pilani Campus in 2015.
- Swapna Challagulla, Ravikiran Nagarjuna, Ramakrishnan Ganesan and Sounak Roy, 'Highly efficient and recoverable TiO<sub>2</sub>/Fe<sub>3</sub>O<sub>4</sub> catalysts for photoreduction of Cr(VI) ions in aerobic environment', National Conference on New Frontiers in Chemistry - From Fundamentals to Applications, conducted by BITS Pilani, Goa.
- Ramakrishnan Ganesan, Invited oral presentation on 'Sol-gel based direct nanoimprinting of oxides – A universal approach!' by in National Conference on Chemistry of Chalcogens, organized by Defence Institute of Advanced Technology (DIAT), Pune in 2015. Campus in 2015.
- S. Pawar, M. Akula, S. Labala, Vamsi K. Venuganti, A. Bhattacharya and A. Nag, "Surfactant sensitized fluorescence sensing of Zn<sup>2+</sup> in water and its application in bioimaging" in the "17th CRSI National Symposium in Chemistry" held at National Chemical Laboratory-Pune, India in February, 2015.
- Durba Roy, Disulfide Scrambling in Neurotoxic Peptides" at the 5th Indian Peptide Symposium at JNCASR, Jakkur, Sept 24-25, 2015.
- Yadagiri Thigulla, Mahesh Akula, Balaram Ghosh and Anupam Bhattacharya, "Synthesis and anti-cancer activity of 1, 4-disubstituted imidazo[4, 5-c]quinolines", International Conference on Nascent Developments in Chemical Sciences: Opportunities for Academia-Industry Collaboration (NDCS-2015), BITS-Pilani, Pilani, October 16-18, 2015.

#### Invited Talks given by BITS faculty:

- N.Rajesh , Comprehending the interaction between heavy metals and tailored adsorbent materials for environmental remediation, World Congress and Expo on Nanotechnology and Material Science, April 13-15, 2015, Dubai.
- N.Rajesh, Application of customized biopolymer based materials as green adsorbents for environmental remediation, UGC National Conference on Nanoscience for sustainable development Feb 23, 2015, at Dr. Ambedkar College, Nagpur.
- N.Rajesh, A journey towards understanding the interaction of toxic metal ions with polymeric adsorbents., International conference on Green chemistry, catalysis, energy and environment Jan 22-14, 2015 Goa University, Goa.
- N.Rajesh, Solid Phase extraction for chromium speciation using customized green adsorbents, National conference on analytical science and technology, Sep 24-26, 2015, Kerala.
- N.Rajesh, Speciation of chromium using sustainable adsorbent materials-An overview, National conference on new frontiers in chemistry (NFCFA 2015) Dec 18-19, 2015, BITS Pilani KK Birla Goa campus.
- K Sumithra, "Low Dimensional Carbon Nanomaterials" in a UGC sponsored workshop at New Bhavan's College, Hyderabad. March, 2015.
- J. Subbalakshmi, "Optical, Non-linear Optical and Semiconducting molecular materials based on organic donor, acceptor molecules and polyionic polymers" in the "First International conference on Advanced Materials for Power Engineering (ICAMPE 2015) 11-13 December, at M.G. University, Kottayam, Kerala.

- Durba Roy, "Studying a neurotoxic peptide through multilayer ONIOM model", Practical Session on 23<sup>rd</sup> Dec, 2015 in winter school on "Computational Chemistry" organized by UGC Networking center of School of Chemistry, University of Hyderabad.
- Durba Roy, "Study of disulfide bond scrambling in animal venoms through MD simulation" UGC-Refresher course, Academic Staff College, University of Hyderabad, 17<sup>th</sup> July, 2015.

**Invited talks arranged in the department:**

- "Designs of Hydrogen-Bonding Molecular-Assembly Nanostructures and Ferroelectric Responses", Prof. Tomoyuki Akutagawa, Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Sendai, Japan, 28<sup>th</sup> January, 2015.
- "Development of Self-Healing Polymer Composites and Photoinduced Ring Opening Metathesis Polymerization", Dr. Suresh Sriram from NALCO, Illinois, USA, 31<sup>st</sup> March, 2015.
- "Self-organization in the realm of Chemical and Biological Physics", Dr. Pushpita Ghosh, Center for Theoretical Biological Physics, Rice University, USA, 7<sup>th</sup> July, 2015.
- "Minimizing Recombination in Quantum Dot Solar Cells", Dr. Pralay K Santra, Department of Chemical Engineering, Stanford University, USA, 27<sup>th</sup> August, 2015.
- "Design of Catalysts for Energy and Environmental Applications", Prof. Benjaram M Reddy, Inorganic and Physical Chemistry Division, CSIR- Indian Institute of Chemical Technology, 9<sup>th</sup> October, 2015.
- "Microwave Plasma Atomic Emission Spectrometry (MP-AES): A New Analytical Tool for Geochemical, Mineral Exploration and Environmental Sciences", Dr. V Balaram, Scientist Emeritus, CSIR - National Geophysical Research Institute, 27<sup>th</sup> October, 2015.
- "Green Catalysis, Green Concept and Green Tool for organic synthesis", Prof. Brindaban C Ranu, Indian Association of Cultivation of Science, Jadavpur, Kolkata, 12<sup>th</sup> November, 2015.

**Awards and recognitions won by faculty and students**

- Prof. N. Rajesh- Invited as Dissertation examiner for Monash University, Australia.
- S. Pawar, M. Akula, S. Labala, Vamsi K. Venuganti, A. Bhattacharya and A. Nag; poster: "Surfactant sensitized fluorescence sensing of Zn<sup>2+</sup> in water and its application in bioimaging" in the "17th CRSI National Symposium in Chemistry" held at National Chemical Laboratory-Pune, India in February, 2015. S. Pawar won 'Royal Society of Chemistry (RSC) fellowship' as a best poster award.

**Faculty Development, International Collaboration & Industry Immersion**

Prof. N. Rajesh participated in a three day workshop as a core member of Teaching Learning Centre, BITS at BITS Goa campus during July 2015.

Prof. KVG Chadra Sekar visited University of New South Wales, Australia under the university immersion scheme during summer 2015 (June-July 2015). The visit provided unparalleled opportunities to learn and share best practices related to curriculum development, teaching, and research at both the undergraduate and graduate levels.

The visit also helped in fostering research collaboration with Prof. Naresh Kumar, University of New South Wales, in the development of organic molecules for Quorum sensing.

Dr. Subhas Ghosal participated in industry immersion for 8 weeks in Dr. Reddy's Lab, Hyderabad. He worked on the project titled 'Molecular modelling of long chain molecules bonding on metal oxide nano particles'.

**Significant new equipments/experimental facility added during the year:**

Anton Paar Microwave synthesizer

Confocal Raman microscope

Shimadzu UV-Vis-NIR spectrometer

**Departmental association/club activities:**

Alchemy association had organised the following events during ATMOS 2015 (Annual Techno Management Fest, BITS Pilani Hyderabad campus).

1. 'Paper presentations',
2. 'CHEMHUNT',
3. 'Chemistry: Sorcery or Science'

**Major maintenance, renovations or new construction reports:**

A new "spectroscopy" laboratory came up in the chemistry department. The laboratory is separated in two parts by a partition. One part consists of wet lab, sitting area & related instruments like spectrofluorometer etc. The other part is a dark room for performing LASER based applications.

A new Materials Chemistry Lab (B110) came up this year. The lab has two fume hoods to facilitate materials synthesis. The lab is equipped with a nitrogen glove box and a Gas Chromatograph (GC) to support the materials synthesis and catalysis.

**Major equipments acquired during the year:**

Photoreactor + Online GC

Confocal Raman microscope

Shimadzu UV-Vis-NIR spectrometer

Shimadzu IR spectrometer

Anton Paar Microwave synthesizer

Hitachi Fluorescence Spectrophotometer F-7000

**B3.10.4 Civil Engineering****Number of faculty members**

<b>Senior Professors, Professors</b>	2
<b>Associate Professors</b>	4
<b>Assistant Professors</b>	7
<b>Lecturers</b>	1
<b>Visiting Faculty</b>	0

**Head of the Department:** Dr. Jagadeesh Anmala

**Contact details:** 040-66303545, **Email:** jagadeesh@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 10

**k) SPONSORED Research activities:****Ongoing projects**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	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 19.00 Lakhs)	1(November 2013- October 2016)
2	Multicriterion Analysis for Ranking of Various General Circulation Models to Study Water Resources of India	Prof. K Srinivasa Raju Prof. D. Nagesh Kumar	CSIR	16.22	(November 2012 - October 2015)
3	Fourier Analysis and Development of Two-Dimensional Finite Element Schemes for Shallow Water Equations & Transport-related Systems	Dr. Jagadeesh anmala	DST	(INR 11.00 Lakhs)	(July 2012 – July 2015)

**l) Publications:**

1. Dhruv Sood, Digambar Kumbhar, P. N. Rao (2015), An Experimental Study on Fly-ash Based Cement Composite Panels Reinforced with Varying Number Mesh Layers, International Journal of Futuristic Trends in Engineering & Technology.
2. D.V.Morankar, K.Srinivasa Raju and A.Vasan (2015) Optimal Reservoir Operation Considering Conjunctive Use of Water Resources, i-manager's Journal of Civil Engineering, Vol.5, No.3, pp.38-44
3. Shishir Gaur, K.Srinivasa Raju, D.Nagesh Kumar and D.Graillot (2015) Multiobjective Fuzzy Optimization for Sustainable Groundwater Management using Particle Swarm Optimization and Analytic Element Method. Hydrologic Processes, Wiley InterScience, Vol.29, No.19, pp.4175-4187. DOI:10.1002/hyp.10441.
4. K.Srinivasa Raju and D.Nagesh Kumar (2015) Ranking General Circulation Models for India Using TOPSIS, Journal of Water and Climate Change, IWA Publishing, UK, Vol.6, No.2, pp. 288-299. DOI:10.2166/wcc/2014.074.
5. Rathish Sathyabama Arumugam, Vishal Garg, V. Vinayaka Ram, Aviruch Bhatia, (2015) Optimizing roof insulation for roofs with high albedo coating and radiant barriers in India, Journal of Building Engineering, Science Direct, Volume 2, pp. 52–58.
6. Abhijeet S. Gandage, V. Vinayaka Ram, A. B. Yaswanth, P. Kumar Thota, and Sankalp Gupta (2015), Thermal Conductivity Studies for Self-Consolidating Concrete with Sand and Fly Ash Variation, ACI Materials Journal, Vol. 112, No.06. pp. 709-721, Nov-Dec.
7. Jagadeesh Anmala, R. H. Mohtar 2015, Cauchy solution of the Kinematic Wave Shallow Water Equations using Square Grid Finite Element Method, ASCE, Journal of Hydrologic Engineering, 20(12), 04015042, DOI: 10.1061/(ASCE)HE.1943-5584.0001241.
8. Jagadeesh Anmala, O.W.Meier, A.J. Meier and S.Grubbs 2015, A GIS and an Artificial Neural Network Based Water Quality Model for a Stream Network in Upper Green River Basin, Kentucky, USA, ASCE, Journal of Environmental Engineering, 141(5), 04014082, DOI: 10.1061/(ASCE)EE. 1943-7870.0000801.

**m) Conferences attended/papers presented:**

1. Sunu Cecil Edem, M. Padmavathi, V Padmavathi and P N Rao (2015), Seismic stability Analysis of Earth Filled dam- A Model study of the Left Embankment of Nagarjuna sagar Dam, India, International Conference on Land Slides and Slope Stability, 27-30<sup>th</sup> Septemebr, Bali, Indonesia.
2. Dhruv Sood, Digambar Kumbhar, and P. N. Rao, Flexural Testing of Fly ash based Cement Composite Panels Reinforced with Varying Number of Mesh Layers, UKIERI concrete congress, 2-5 November 2015, NIT, Jalandhar, India
3. Manjeeth Kolli, Shiva Kumar Patlolla and Neelakanteswarar Rao Paturu “An experimental Investigation on Engineered Cement Concrete reinforced with Glass and Recron-3s Fibers”, International conference on Innovations in Structural Engineering, 14-16 December, 2015. Organized by Osmania University, Hyderabad.
4. Dhruv Sood, Digambar Kumbhar, and P. N. Rao “ An Experimental study on Fly- ash based self-compacting Ferro cement Concrete”, International conference on Innovations in Structural Engineering, 14-16 December, 2015. Organized by Osmania University, Hyderabad.
5. K.Srinivasa Raju and D.Nagesh Kumar, Application of Data Envelopment Analysis for Ranking of Irrigation Subsystems, HYDRO 2015 International, 20th International Conference on Hydraulics, Water Resources and River Engineering, December 17-19, 2015, Roorkee, India, HYD-338.
6. K.Srinivasa Raju, D.Nagesh Kumar, Fuzzy Approach to Rank Global Climate Models, 5th International Conference on Fuzzy and Neural Computing (FANCCO 2015), December 17-19, 2015, Hyderabad, India.
7. V.Swathi, Sai Veena, K.Srinivasa Raju, Urban Growth Simulation: A Case Study, Proceedings of 2nd Two Day National Conference on Water, Environment and Society (NCWES), July 30-31, 2015, Hyderabad, India, pp. 612-616.
8. D.V.Morankar, K.Srinivasa Raju, A.Vasan, Optimal Integrated Water Resources Management for Khadakwasla Complex Reservoir, Proceedings of i-Manager's International Conference on Engineering and Technologies (IICET 2015), April 10-11, 2015, Trivandrum, India, pp.101-106.
9. Tripathi, Satyendra and A Vasan, *Social Equity Impacts of Optimal Water allocation for Irrigation Management: Drivers and Implications*, Proceedings of the International Conference on Managing Critical

Resources: Food, Energy and Water organized by the Centre for Development and Environment Policy (CDEP), Indian Institute of Management Calcutta, Kolkata, India, April 9-11, 2015.

10. Ganbavale Mandar. P., Ankit Jain, Vasana A., and Kalyana Rama J, *Sustainable design of RC building portal frame through CO<sub>2</sub> emission optimization using Cuckoo Search Algorithm*, Proceedings of the International Conference on Sustainable Energy and Built Environment, Organized by School of Mechanical and Building Sciences, VIT, Vellore in associate with ASCE India Section, March 12-13, 2015.
11. Aaron D Vaz., and Vasana A, *Topology Optimization using Bi-directional Evolutionary Structural Optimization*, Proceedings of the International Conference on Sustainable Energy and Built Environment, Organized by School of Mechanical and Building Sciences, VIT, Vellore in associate with ASCE India Section, March 12-13, 2015.
12. K., Rajitha; M.M, Prakash Mohan; Varma, Murari R.R, Effect of cirrus cloud on normalized difference Vegetation Index (NDVI) and Aerosol Free Vegetation Index (AFRI): A study based on LANDSAT 8 images, *Advances in Pattern Recognition (ICAPR)*, 2015 Eighth International Conference on , vol., no., pp.1,5, 4-7 Jan. 2015. [\\_http://dx.doi.org/10.1109/ICAPR.2015.7050710](http://dx.doi.org/10.1109/ICAPR.2015.7050710)
13. Kumar Gaurav, Prashant Sharma, Garv Malik, Shivani Surisetty S V, R.B. Adusumalli and Murari R. R. Varma *Study of Suspended Particulate Matter in an Educational Institute in Suburban Region, India* Proceedings of the International Conference on Advances in Chemical Engineering, NITK Surathkal, India – Dec 20-22, 2015
14. Raychoudhury, T., Sursani, V. K, Retention of surface modified-NZVI particle in porous media and its implication, Interpore, 7<sup>th</sup> International conference on porous media, May 18-21, Padova, Italy.
15. Sarana Hasanth K, Vasana A, Kalyana Rama J S, *Optimizing the strength characteristics of Self Compacting Concrete using ANN and Genetic Algorithm*, UKIERI Concrete Congress 2015, NIT Jalandhar, Nov 2-5, 2015.
16. Darshan Puajara, M Santosh Kumar, Kalyana Rama J S, Experimental study on the effect of Recycled Aggregates on the strength characteristics of GGBS based Geopolymer Concrete, UKIERI Concrete Congress 2015, NIT Jalandhar, Nov 2-5, 2015.
17. Bharat Reddy R, Sai Gopi Nihal, Taneja A, Kalyana Rama J S, *Comparative Study on the Lateral load Resistance of Multi-storied Structure with Bracing Systems*, International Conference on Sustainable Technologies in Building & Environment (ICSTBE-2015), Chennai, 15-17 July 2015.
18. Arkamitra Kar, Indrajit Ray, Udaya B. Halabe, Avinash Unnikrishnan, and Ben Dawson-Andoh, MICROSTRUCTURAL CHARACTERIZATIONS OF ALKALI-ACTIVATED FLY ASH AND/OR SLAG BINDER SYSTEM, UKIERI CONCRETE CONGRESS, Nov 2 - 5, 2015. Place: NIT Jalandhar, Punjab, India.
19. Naveen James, & Sitharam, T. G, Macro-Level Assessment of Seismically Induced Landslide Hazard for the State of Sikkim, India Based On GIS Technique, *International Symposium on Geohazards and Geomechanics ISGG2015 - Conference Series: Earth and Environmental Science (Vol. 26, No. 1, p. 012027)*. IOP Publishing. doi:10.1088/1755-1315/26/1/012027.

**n) Invited Talks given by BITS faculty:**

**Prof PN Rao-**

1. Delivered Key note address for National conference on “Recent Trends in Civil Engineering”, 20<sup>th</sup> Feb., 2015, organized by GITAM, Hyderabad.
2. Delivered Key note address for National conference on "Water proofing technologies in construction industry", 28<sup>th</sup> Feb., 2015, organized by CMR CET, Hyderabad.
3. Delivered Key note address for All India Seminar on “The Integrated Design Approach for Better Buildings“, 30<sup>th</sup> June, 2015, organized by The Institute of Engineers (INDIA), Hyderabad.

**Prof Raju-**

- Delivered Invited Lecture on Global Climate Models and Water Resources Planning: Case Study, Workshop on Urban Flooding, National Institute of Technology, Warangal, December 10, 2015.

- Delivered Invited Lecture on Challenges in Urban Flood Modeling: Case Study of Hyderabad, Training Program on Urban Flood Management: Technology Driven Solutions, Birla Institute of Technology and Science-Pilani, Hyderabad Campus, November 21, 2015.
- Delivered Invited Lecture on Flood Modeling and Probability Assessment, Training Program on Urban Flood Management: Technology Driven Solutions, Birla Institute of Technology and Science-Pilani, Hyderabad Campus, November 20, 2015.
- Delivered Invited Lecture on Preparation of Research Proposals, One day Faculty Development Program on Research Proposals-Funding Agencies, Opportunities and Methodologies, CMR College of Engineering and Technology, Hyderabad, November 14, 2015.
- Delivered Invited Lecture on Introduction to Artificial Neural Networks and its Application in Water Resources Engineering, One day Workshop on Advances in Water Resources Engineering (AWARE 2015), RVR & JC College of Engineering, Guntur, September 26, 2015.
- Delivered Invited Lecture on Multicriterion Decision Making in Water Resources: Critical Perspective, Indian Institute of Technology, Hyderabad, September 22, 2015.
- Delivered Invited Lecture on Engineering Challenges for Knowledge Era, as part of 48th Engineers Day Celebrations, Hyderabad Metro Water Supply and Sewerage Board Engineers Association, Hyderabad, September 15, 2015.
- Delivered Invited Lecture on Studies on Performance Evaluation of an Irrigation System as Part of AICTE Sponsored 1 week National Workshop on Participatory Irrigation Management (PIM-2005), VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, May 29, 2015.
- Delivered Invited Lecture as Part of Hands on Session on Statistical Package for Social Sciences (SPSS), Workshop on Research Methodology, Department of Civil Engineering, Birla Institute of Technology and Science (BITS), Pilani-Hyderabad Campus, April 4, 2015.
- Delivered Keynote Lecture on Advanced Modeling Techniques for Reservoir Operation, Three Day National Workshop on Efficient Use of Available Water Resources For More Crop Per Drop (EUAWR-2015), VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, March 18, 2015.
- Delivered Keynote Lecture on Multicriterion Decision Making in Water Resources Planning, National Conference on Recent Trends in Civil Engineering, GITAM University, Hyderabad Campus, February 20, 2015.

#### **Prof Vasan-**

- Delivered an invited lecture on “*Advanced Modeling Techniques for Water Resources Planning & Management*” during the three day workshop on “Efficient Use of Available Water Resources for More Crop per Drop” organized by the Department of Civil Engineering, VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad, March 18-20, 2015.

#### **Dr Murari-**

- Delivered a talk on *Green Building Rating Systems* at National Seminar on Recent Development in building Materials and Technologies (NSRDBMT - 2015) at Gandhigram Rural Institute, Tamilnadu on 28th March 2015.

#### **Mr Kalyana Rama J-**

- Delivered a guest lecture on "Importance of management in construction industry" at Bharath University, Chennai during July 2015.

#### **o) Invited talks arranged in the department:**

#### **p) Awards and recognitions won by faculty and students**

Prof K S Raju has received following awards/recognitions.

- Associate Editor, ISH Journal of Hydraulic Engineering, Taylor & Francis, U.K



- Outstanding Reviewer, Journal of Hydrologic Engineering, American Society of Civil Engineers (ASCE), USA for the year 2014
- Elsevier Reviewer Recognition from the Editors of Advances in Water Resources in Recognition of the Review made for the Journal
- Best paper award for the paper entitled Optimal Integrated Water Resources Management for Khadakwasla Complex Reservoir (Session-III), i-Manager International Conference on Engineering and Technologies (IICET-2015), held at Trivandrum, India during April 11-12, 2015. Co-authors for the paper are D V Morankar and A. Vasan
- Dr. Arkamitra Kar has received 2015 BITS OPERA award

**q) Faculty Development, International Collaboration & Industry Immersion**

- Dr. Murari R R Varma has participated in Faculty Development Workshop(FDW) 2015 - An initiative Indian School of Business (ISB), Hyderabad in collaboration with Andhra Pradesh Society of Knowledge Networks held on 7th and 8th February, 2015
- Prof Jagadeesh Anmala took part as a PS-I faculty at Servomax, India Pvt. Ltd and Lexicon Infotech Ltd., Hyderabad from May 22<sup>nd</sup> to July 16<sup>th</sup> 2015.
- Dr. Murari R R Varma took part in Industry immersion programme at Worley Parsons India, Hyderabad Office from May 25 to June 25 2015.

**r) Significant new equipments/experimental facility added during the year:**

- Rolling Thin Film Oven Test (RTFOT, for simulating the short term aging of bituminous binders) has been added to the Highway Material Testing Laboratory.
- Under the DST-FIST grant we have procured the following:
  - 1) 250 kN Actuator from MTS, 2) Hydraulic Power Pack System for Structures Laboratory
- Fume hood for Environmental Laboratory
- Air quality monitoring equipment (Dust sampler) for Environmental Laboratory
- Teaching Aid Models have been added in Structures Laboratory for mechanics of solids and structural analysis.

**s) Departmental association/club activities:**

Prof K S Raju and Prof A Vasana have organized the following workshop-

- Workshop on Research Methodology, Centre of Excellence in Water Resources Management, Department of Civil Engineering, Birla Institute of Technology and Science, Pilani-Hyderabad Campus, April 3-4, 2015 (Sources of funding: National and institute support); Meant for research scholars; Prof D Nagesh, Indian Institute of Science, Bangalore delivered an invited lecture.

**t) Major maintenance, renovations or new construction reports:**

**u) Major equipments acquired during the year:**

- Rolling Thin Film Oven Test (RTFOT, for simulating the short term aging of bituminous binders) has been added to the Highway Material Testing Laboratory.
- Under the DST-FIST grant we have procured the following:
  - (1) 250 kN Actuator from MTS, (2) Hydraulic Power Pack System for Structures Laboratory
- Fume hood for Environmental Laboratory
- Air quality monitoring equipment (Dust sampler) for Environmental Laboratory
- Teaching Aid Models have been added in Structures Laboratory for mechanics of solids and structural analysis.

**B3.10.5 Computer Science and Information Systems****I. Number of faculty members**

<b>Senior Professors, Professors</b>	<b>1</b>
<b>Associate Professors</b>	<b>3</b>
<b>Assistant Professors</b>	<b>3</b>
<b>Lecturers</b>	<b>5</b>
<b>Visiting Faculty</b>	<b>2</b>

**Head of the Department: Prof N L Bhanu Murthy**

**Contact details: 040 – 6630-3558 Email:bhanu@hyderabad.bits-pilani.ac.in**

**Number of PhD Scholars: 11**

**Sponsored Research activities:**

**Ongoing projects:**

<b>SL No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount (Lakhs)</b>	<b>Duration</b>
1	Automated Detection of Security and Privacy Threats in Peer-to-Peer Networks	Prof. Ch. Hota	DIT	61.95	2012-2015
2	Design and Development of Digital Forensic Tools for Cloud IaaS	Dr. Geethakumari	DIT	54.96	2014-2016
3	Lightweight Code Self-verification for Internet of Things (IoT) Devices	Prof. Ch. Hota	DeitY-NWO	48.00	2015-2019

**Projects sanctioned during the year**

<b>SL No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount</b>	<b>Duration</b>
1	Lightweight Code Self-verification for Internet of Things (IoT) Devices	Prof. Ch. Hota	DeitY-NWO	48.00	2015-2019

**Publications: Journals:**

- Game-theoretic strategies for IDS deployment in peer-to-peer networks, Pratik Narang, and Chittaranjan Hota, Information Systems Frontiers, Springer, Vol.17, Issue 5 (2015), pp. 1017-1028.
- Advances in secure knowledge management in the big data era, Chittaranjan Hota, Shambhu Upadhyaya, and Jamal Nazzal Al-Karaki, Information Systems Frontiers, Springer, Vol.17, Issue 5 (2015), pp. 983-986.
- P. Purkayastha, A. Malapati, P. Yogeeswari, D. Sriram, A review on GABA/Glutamate pathway for therapeutic intervention of ASD and ADHD, Curr. Med. Chem. 2015 published online on 9th Feb 2015.
- P. Purkayastha, R. Alokam, A. Malapati, D. Sriram, P. Yogeeswari, Structural models for the design of PKMzeta inhibitors with neurobiological indications. Mol. Informatics 2015, In Press.
- P. Purkayastha, A. Rallapalli, N.L. Bhanu Murthy, A. Malapati, P. Yogeeswari, D. Sriram, Effect of feature selection on kinase classification models in SpringerBriefs in Applied Sciences & Technology, 2015, 6, 81-86.
- Digambar Powar, Saibharath, Dr. Geethakumari, "Real-time digital forensic triaging for cloud data analysis using MapReduce on Hadoop framework", International Journal of Electronic Security and Digital Forensics, Inderscience Publishers, Vol. 7, Issue No. 2, pp. 119-133, 2015.
- A Novel Revenue Optimization Model to address the operation and maintenance cost of a Data Center: Snehanshu Saha; Jyotirmoy Sarkar; Anand MN, Avantika Dwivedi; Nandita Dwivedi;; Ranjan Roy, Bidisha Goswami; Journal of Cloud Computing: Advances, Systems and Applications; Springer (In Press).

- Dhruv Sharma, Kayiram Kavitha and R Gururaj. "Estimating Node Density for Redundant Sensors in Wireless Sensor Network". Sensor Networks and Data Communications. ISSN: 2090-4886 SNDC, an open access journal, Volume 4 • Issue 2 • 1000127. Dec 2015.

#### **Conferences attended/ papers presented:**

- Analysis of Floating Index Caching Technique for P2P Overlay Index Propagation, K Haribabu, and Chittaranjan Hota, 16th International Conference on Distributed Computing and Networking (ICDCN 2015), Jan 2015, Goa.
- Scalable HoneyPot Architecture for Identifying Malicious Network activities, S Gokul Kannan, and Chittaranjan Hota, The 2nd International Research Conference on Emerging Information Technology and Engineering Solutions (EITES 2015), Feb 2015, Pune, IEEE, CPS, pp. 27-31, ISBN:978-1-4799-1838-6, IEEE Xplore.
- Heuristic-based Real-time P2P Traffic Identification, Jagan Mohan Reddy, and Chittaranjan Hota, The 2nd International Research Conference on Emerging Information Technology and Engineering Solutions (EITES 2015), Feb 2015, Pune, IEEE, CPS, pp. 38-43, ISBN:978-1-4799-1838-6, IEEE Xplore.
- Cooperative Spectrum Sensing in Cognitive Radios using Perceptron Learning for IEEE 802.22 WRAN, Balaji Venkat, Pranav K, Saieesh P, Chittaranjan Hota, and Raghurama G, Eleventh International Multi Conference on Information Processing, Elsevier Procedia-Computer Science, Vol:54 (2015), pp. 14-23.
- Behavior-based P2P Traffic Identification using Fuzzy Approach, Jagan Mohan Reddy, Chittaranjan Hota, and M Rajarajan, IEEE International Conference on Applied and Theoretical Computing and Communication Technologies, Davangere, Karnataka, Oct 2015, IEEE Xplore.
- Quality of Service Enforcing Centrally Optimized Routing for Delay Tolerant Networks, Abhishek Thakur, and Chittaranjan Hota, 18th International Symposium on Wireless Personal Multimedia Communications (WPMC), 13th-16th Dec 2015, Hyderabad.
- K. Muthukumar, A. Choudhury, N. L. Bhanu Murthy, "Mining Github for novel change metrics to predict buggy files in software systems", Proceedings of International Conference on Computational Intelligence & Networks, (CINE 2015), Jan 12-13, 2015, Bhubaneswar, India
- Muthukumar Kasinathan, Akhila Rallapalli and Neti Lalita Bhanu Murthy, "Impact of feature selection techniques on bug prediction models", ISEC'15 Proceeding of 8th India software engineering conference, pages 120 – 129, Feb 18-20, 2015, Bangalore, India.
- D Radha Rani and G Geethakumari, "An Efficient Approach to Forensic Investigation in Cloud Using VM Snapshots", Proceedings of the IEEE International Conference on Pervasive Computing (IEEE ICPC 2015), January 8 – 10, 2015, India, Proceedings in IEEE Explore.
- B K S P Kumar Raju and G Geethakumari, "A Digital Forensic Model for Introspection of Virtual Machines in Cloud Computing", Proceedings of the IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems 2015, (IEEE SPICES 2015), February 19-21, 2015, India, Proceedings in IEEE Explore.
- Meera G and G Geethakumari, "A Provenance Auditing Framework for Cloud Computing Systems", Proceedings of the IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems 2015, (IEEE SPICES 2015), February 19-21, 2015, India, Proceedings in IEEE Explore.
- Meera G, B K S P Kumar Raju and G Geethakumari, "A strategy for enabling forensic investigation in cloud IaaS", Proceedings of the 2015 IEEE International Conference on Electrical, Computer and Communication Technologies, – IEEE ICECCT 2015, March 05-07, 2015, India, Proceedings in IEEE Explore.
- S. Saibharath and G Geethakumari, "Cloud Forensics: Evidence Collection and Preliminary Analysis", Proceedings of the IEEE International Advanced Computing Conference, IEEE IACC 2015, June 12-13, 2015, India.
- S. Saibharath and G Geethakumari, "Pre processing of Evidences from Cloud components for effective forensic analysis", Proceedings of the Fourth IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015, August 10-13, 2015, India. (Received the Best Paper Award)
- BKSP Kumar Raju and G Geethakumari, "A Trigger based Introspection Approach for Cloud Incident Handling", International Journal of Big Data Intelligence (IJBDI), Inderscience Publishers, 2015.
- K.P Krishna Kumar and G Geethakumari, "Information Diffusion Modelling to Counter Semantic Attacks in Online Social Networks", Proceedings of the Ph.D. Forum of IEEE ADCOM 2015 International Conference, September 18 – 20, 2015, India. Proceedings to appear in the IEEE Explore.

- Dr. G. Geethakumari, Tutorial Speaker at the IEEE ICACCI 2015 International Conference, 10- 13 August, 2015.
- Digambar Powar and G Geethakumari, "Digital Forensic Architecture for Cloud Computing Systems: Methods of Evidence Identification, Segregation, Collection and Partial Analysis", Accepted at the Third International Conference on INformation systems Design and Intelligent Applications-INDIA-2016. Proceedings in the "Advances in Intelligent Systems and Computing (AISC) series" Springer.
- Agrima Srivastava and G Geethakumari, "Determining privacy utility trade-off for Online Social Network data publishing", Proceedings of the IEEE INDICON 2015, December 17 – 20, 2015, India. Proceedings to appear in the IEEE Explore.
- Agrima Srivastava and G Geethakumari, "A framework for improving privacy strength of Online Social Network user profile", Proceedings of the Grace Hopper Celebration India (GHCI) 2015 conference, December 2 – 4, 2015.
- B K S P Kumar Raju, Meera G and G Geethakumari, "Cloud Forensic Investigation: A sneak peak into acquisition", Proceedings of the Symposium on Emerging Topics in Computing and Communications (SETCAC'2015), December 16 - 19, 2015, India.
- Prof. M. Anand Narasimhamurthy, Mining massive databases for computation of scholastic indices - Model and Quantify 'internationality' of peer-reviewed journals: A Technical Report--Gouri Ginde, Snehanthu Saha, Chitra Balasubramaniam, Harsha R.S, Archana Mathur,BS Dayasagar, Anand M N; 4th national Conference on Scientometrics and Internet Of Things(SIoT), pp 1-26, September 2015.
- Ms. Prafulla Kalapatapu, U.Dubey, Aruna.M. "Playlist generation based on user perception of songs" in proceedings of IEEE International Conference on Signal processing and communication engineering systems (SPACES' 15), with IEEE Catalog Number: CFP1568Z-ART ISBN: 978-1-4799-6109-2 (pp. 44-47), January , 2015, KLU.
- Krishnamurthy Padmanabhan, Tejas Nagendra, Dr. Aruna Malapati, Suresh Gokarakonda, "Video Analytics using Apache Spark", Third International Conference On Business Analytics and Intelligence, Indian Institute of Management Bangalore 17th to 19th December 2015
- Prof. Ch. Hota, attended Intel India Academic Forum (IAF 2015) at New Delhi during Oct 8th-9th, 2015. This year's IAF theme was on Internet of Things, Bigdata analytics, and Cyber security.
- Dr. G. Geethakumari, 4th International Conference on Big Data Analytics-2015, December 15-18, 2015, India.
- Ms. Prafulla Kalapatapu, attended workshop on selected topics in Data Sciences (STCDS-2015) at NIT Rourkela, from Dec 14 to Dec 17, 2015.
- Ms. Prafulla Kalapatapu, participated and presented research work in International wide Data Science researchers Meet-up conducted at NIT, Rourkela on Dec 18, 2015.

#### **Invited Talks given by BITS faculty:**

- Prof. Ch. Hota, invited talk on "IT Security: Separating Myths from Reality" at 14th Indo-Italian workshop on "IT: Education, Research, and Industry" at B.M Birla Science Centre, Hyderabad during 5th-6th Nov 2015.
- Prof. Ch. Hota, invited Plenary talk on Big Data Analytics at 2nd International Research Conference on Emerging Information Technology and Engineering Solutions, Symbiosis International University, Pune during 20th-21st Feb 2015.
- Prof. Ch. Hota, invited speaker at First DST-BDI workshop on curricula design for Big-data on 28th Feb-1st Mar 2015 at CRRao AIMSCS, University of Hyderabad, Hyderabad.
- Prof. Ch. Hota, invited talk at First Indo-dutch meet on Collaborative research in the area of Pervasive Computing at IIT, Delhi on 20th August 2015. The title of the talk was "Light-weight code-self verification for IoT devices".
- Prof. Ch. Hota, invited talk on "Data analytics for Security" at Chaitanya Bharathi Institute of Technology, Hyderabad on 30th Sept 2015 at the National level student symposium
- Prof. Ch. Hota, invited talk on "Big Data analytics for throttling network threats" at "International workshop on Cloud and Bigdata security" at Nanyang Technological University (NTU), Singapore during 21st-22nd Sept 2015. Travel was funded by Naval research, USA.
- Prof. Ch. Hota, invited talk on "IT Security: Separating Myths from Reality" at 14th Indo-Italian workshop on "IT: Education, Research, and Industry" at B.M Birla Science Centre, Hyderabad during 5th-6th Nov 2015.

- Mr. K.C.S. Murti, a talk on "real time systems and networking" at D.L.R.L., Hyderabad, Dec-9th., 2015.
- Mr. Digambar Powar, delivered a guest lecture on "Cloud Computing & Allied Areas" at Vasavi College of Engineering, Hyderabad, July, 2015.
- Mr. Digambar Powar, delivered a guest lecture on the topic "Architecting software for the cloud", sponsored by DST-SERB, at Guru Nanak Institutions Technical Campus (GNITC), Hyderabad, Sept' 2015.
- Dr. Aruna Malapati delivered guest talk on "Analytics driven approaches for handling batch jobs" at Centrum Wiskunde & Informatica (CWI) on 19/6/2015.
- Dr. Aruna Malapati delivered guest talk on "Analytics driven approaches for handling batch jobs" at Vrije Universiteit Amsterdam 25/6/2015
- Prof. R. Gururaj delivered talk on "Data Management and Cloud", at CBIT Hyderabad on 5th Jan, 2015.
- Prof. R. Gururaj delivered a lecture on "Cloud-hosted Databases: Challenges and Opportunities" on 19th of December 2015, at Gokaraju Rangaraju Institute of Engineering and technology (GRIET), Hyderabad.

**Invited talks arranged in the department:**

- "Dr. Prateek Saxena from National University of Singapore (NUS), Singapore delivered talk titled "Computer Security: The Science of Adversarial Reasoning" on 28th Sept 2015.
- Prof. N.L. Bhanu Murthy, delivered a lecture on topic "What fits bugs well?" , on 10<sup>th</sup> August, 2015.
- Dr. M. Aruna, delivered a lecture on "Transportation research at Centrum Wiskunde & Informatica (CWI)", on 24<sup>th</sup> August, 2015.

**Awards and recognitions won by faculty and students**

- Pranava Rama Rao, Siddharth Dash and K. Muthukumaran under supervision of Prof. N.L. Bhanu Murthy won ADTRAN 2015 Senior Design Showcase award.
- Dr. Geethakumari & S. Saibharat received best paper award for their research paper "Pre processing of Evidences from Cloud components for effective forensic analysis" at IEEE International Conference on Advances in Computing, Communications and Informatics (ICACCI-2015).
- Kodali Naveen, Third Year student, received MITACS Global link scholarship to do summer intern at Canada.
- Aditya Chandrasekhar, Third Year student, received Viterbi-India Scholarship for summer internship at USA.
- Tejas Nagendra and Siddharth Dalmia, Third Year students, received DAAD scholarship to do summer intern at Germany and France.

**Faculty Development, International Collaboration & Industry Immersion:**

- Dr. Aruna visited Centrum Wiskunde & Informatica (CWI), Netherlands during June-July, 2015 as part of university immersion.

**Significant new equipment/experimental facility added during the year:****Departmental association/club activities:**

- ATMOS Events – Guest Talks/Workshops/Competitive Programming
- Paper presentation in ATMOS
- Advanced C workshop
- Freshman Orientation and Farewell for outgoing students

**Major maintenance, renovations or new construction reports****Major equipments acquired during the year:**

**B3.10.6 Electrical and Electronics Engineering****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>2</b>
<b>Associate Professors</b>	<b>3</b>
<b>Assistant Professors</b>	<b>10</b>
<b>Lecturers</b>	<b>6</b>
<b>Visiting Faculty</b>	<b>2</b>

**Head of the Department:** Prof. Y. Yoganandam

**Contact details:** 40 6630 3569

**Email:** yogi@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 15

**v) Sponsored Research activities:****Ongoing projects**

<b>SL No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount (Lakhs)</b>	<b>Duration</b>
1	OPERA Research Grant	Surya Shankar Dan	BITS	15,00,000	5 years
2	RIG	Souvik Kundu	BITS	2	2 years
3	OPERA Research Grant	Prasant Kumar Pattnaik	BITS Pilani	15	5 years
4	Microfluidic-diffusivity-meter: CO2 diffusivity sensor during carbon sequestration in the oil-reservoirs	Sanket Goel	DST-SERB	23 lakhs	3 years
5	Microfluidic Enzymatic Biofuel Cell	Sanket Goel	DST (Indo-Korea)	24 lakhs (with IIT Kanpur)	3 years
6	Algorithms for Narrow Beam Emitter Location (ANABEL)	Prof. Yoganangam.	Defense Electronics and Research Labs (DLRL)	Rs. 9.95 Lakhs	9 Mo

**Projects sanctioned during the year**

<b>SL No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount</b>	<b>Duration</b>
1	OPERA Research Grant	Surya Shankar Dan	BITS	15,00,000	5 years
2	RIG	Souvik Kundu	BITS	2	2 years
3	OPERA Research Grant	Prasant Kumar Pattnaik	BITS Pilani	15	5 years
4	Algorithms for Narrow Beam Emitter Location (ANABEL)	Prof. Yoganangam.	Defense Electronics and Research Labs (DLRL)	Rs. 9.95 Lakhs	9 Mo

**w) Publications:**

1. Shashank Solomon, and Runa Kumari, "Aperture Coupled Cylindrical Element Log Periodic Dielectric Resonator Antenna array for X Band", IEEE India International Conference INDICON- 2015, Jamia Millia Islamia New Delhi, India, 17-20 Dec. 2015.

2. Shashank Solomon, and Runa Kumari, "Aperture Coupled Rectangular Element Log Periodic Dielectric Resonator Antenna array for X Band", IEEE Applied Electromagnetics Conference, AEMC- 2015, IIT Guwahati, India, 18-21 Dec. 2015.
3. Shashank Solomon, and Runa Kumari, "Slotted Dielectric Resonator Antenna for Broadband Applications", IEEE Global Conference on Communication Technologies, GCCT- 2015, Kanyakumari, India, Apr 2015.
4. Soumya J., K. Naveen Kumar, Santanu Chattopadhyay, "Integrated Core Selection and Mapping for Mesh based Network on Chip Design with Irregular Core Sizes", Journal of Systems Architecture, Elsevier, vol. 61, no. 9, pp. 410-422, October 2015.
5. Sandeep Dsouza, Soumya J, Santanu Chattopadhyay, Integrated Mapping and Synthesis Techniques for Network-on-Chip Topologies with Express Channels, ACM Transactions on Architecture and Code Optimization, vol. 12, no.4, November 2015
6. (From BITS Pilani affiliation only) S. R. Gollu, R. Sharma, G. Srinivas, S. Kundu, D. Gupta, Incorporation of silver and gold nanostructures for performance improvement in P3HT: PCBM inverted solar cell with rGO/ZnO nanocomposite as an electron transport layer, Organic Electronics, Vol. 29, pp. 79 - 87, 2016. (Impact Factor of Organic Electronics journal: 3.827).
7. Vellaluru Neeharika and Prasant Kumar Pattnaik, "Optical MEMS Pressure Sensors incorporating Dual Waveguide Bragg Gratings on Diaphragms", Accepted for publication in IEEE Sensors Journal., DOI: 10.1109/JSEN.2015.2482944
8. M. Balasubramanian, U. Poornalakshmi and Prasant Kumar Pattnaik, Temperature insensitive waveguide grating based SOI MOEMS Accelerometer, Workshop on recent Advances in Photonics 16-17 Dec 2015, IISc Bangalore, India.
9. Shweta M, Manoranjan Kumar, Prasant Kumar Pattnaik and K. Narayan, Modeling and Simulation of Opto-fluidic based Mach-Zehnder Interferometer for Biosensing Application", Workshop on recent Advances in Photonics 16-17 Dec 2015, IISc Bangalore, India.
10. U. Poornalakshmi, M. Balasubramanian, K. Narayan and Prasant Kumar Pattnaik, "Tunable SU-8 Waveguide Grating Filter using Electrostatic Actuation for DWDM Optical Network", International conference on Microwave Optical and Communication Engineering, 18-20 December 2015, IIT Bhubaneswar, India.
11. Sharath M, Saikat Chakraborty, Prasant Kumar Pattnaik and Narayan K, "Modelling and Analysis of Microfluidic Micromixer for Lab-On-a-Chip(LoC) Application", IEEE INDICON 2015, 17-20 December 2015 Jamia Millia Islamia, New Delhi, India.
12. Jatin Kashyap, Nagesh Samyuktha, K.Narayan and Prasant Kumar Pattnaik, "Design and Simulation of a novel 3D MEMS Fabrication/Micro cutting facility by Thermally Actuated MEMS device", Paper ID: 1114, IEEE TENCON 2015, "1-4 November 2015, Macau, China.
13. Nagesh Samyuktha, Pattanshetti Maneesha, B.R. Sreelakshmi, Prasant Kumar Pattnaik and K.Narayan," Application of MEMS based Capacitive Pressure Sensor for Continuous Monitoring of Glucose", Paper ID 344, IEEE TENCON 2015, "1-4 November 2015, Macau, China.
14. M. Balasubramanian, U. Poornalakshmi, Somya Agarwal and Prasant Kumar Pattnaik SU-8 Waveguide grating based silicon Micromachined moems accelerometer, ISSS national Conference on Smart materials, Structures and Systems, 23-25 September 2015, Kochi, Kerala, India.
15. U. Poornalakshmi, M. Balasubramanian and Prasant Kumar Pattnaik, "Tunable Waveguide Grating Filter using Electrostatic Actuation for DWDM Optical Network", IEEE International Conference on Photonics IPC 2015, 4-8 October 2015, Virginia, USA
16. Prasant Kumar Pattnaik, Y.V.D Rao and Jatin Kashyap, "A novel 3D MEMS Fabrication/Micro cutting facility by Thermal Actuated MEMS device, ISSS national Conference on Smart materials, Structures and Systems, 23-25 September 2015, Kochi, Kerala, India.
17. U. Poornalakshmi, Somya Agarwal, M. Balasubramanian and Prasant Kumar Pattnaik, "Grating Based MEMS Tunable Filter for WDM Optical Network", 11th International Conference on Laser and Electro-optic Pacific Rim CLEO-PR2015, 24-28 Aug 2015, Bushan, Korea.
18. M. Balasubramanian, U. Poornalakshmi, Somya Agarwal and Prasant Kumar Pattnaik, "Waveguide Grating Based SOI MOEMS Accelerometer, IEEE International Conference on Optical MEMS and Nanophotonics 2015, 2-6 August, Jerusalem, Israel.
19. Asha K, Suryanarayan N K, Narayan K and Prasant Kumar Pattnaik, "Design and Modeling of Microfluidic Channel using Dielectric Planar Waveguide using COMSOL Multiphysics", Third International Conference on Emerging Research in Computing, Information, Communication and Applications, ERCICA-2015", 31 July-01 August, 2015, NMIT Bangalore, India.

20. Vellaluru Neeharika and Prasant Kumar Pattnaik, "Temperature Insensitive Optical MEMS Accelerometer" Photonics North 2015, 9-11 June 2015, Ottawa, Ontario, Canada.
21. Poorna Lakshmi U, Balasubramanian M and Prasant Kumar Pattnaik, "MEMS Tunable Optical Filter", International Conference on Optoelectronics and Photonics Materials (ICOPMA 2015), 27-28 February 2015, SASTRA University, Thanjavur, India.
22. Rajendra Prasad Shukla, Subhash Chandra and Prasant Kumar Pattnaik, Simulation of mechanical properties of the movable nanowire for high speed nonvolatile Nano electromechanical (NEMS) memory devices, International Conference on "Futuristic Trends in Computational analysis and Knowledge management", ABLAZE 2015, 25-27 February 2015, Amity University, Greater Noida, India.
23. Rajagopalan V, Piro EP. Disparate voxel based morphometry (VBM) results between SPM and FSL softwares in ALS patients with frontotemporal dementia: which VBM results to consider? BMC Neurol. 2015 Mar 13;15:32. doi: 10.1186/s12883-015-0274-8
24. Kundu, S., Maurya, D., Clavel, M., Zhou, Y., Halder, N. N., Hudait, M. K., Banerji, P., Priya, S., (2015), Integration of lead-free ferroelectric thin films on HfO<sub>2</sub>/Si (100) for high performance non-volatile memory applications, Nature Scientific Reports, Nature, Vol. 5, pp. 8494.
25. Kundu, S., Clavel, M., Chen, B., Song, H. -C., Hudait, M., Sanghadasa, M., Priya, S., (2015), Lead-free epitaxial ferroelectric material integration on semiconducting (100) Nb-doped SrTiO<sub>3</sub> for low-power ferroelectric memory and efficient ultraviolet ray detection, Nature Scientific Reports, Nature, Vol. 5, pp. 12415.
26. Hudait, M., Clavel, M., Zhu, Y., Goley, P., Kundu, S., Maurya, D., and Priya, S. (2015), Integration of SrTiO<sub>3</sub> on Crystallographically Oriented Epitaxial Germanium for Low-power Device Applications, ACS Applied Materials and Interfaces, ACS, Vol. 7, pp. 5471.
27. Halder, N. N., Biswas, P., Banerji, P., Kundu, S., Sarkar, K., and Choudhury, A., (2015), Photovoltaic conversion of visible spectrum by GaP capped InP quantum dots grown on Si (100) by metalorganic chemical vapor deposition, Applied Physics Letters, AIP, Vol. 106, pp. 012103.
28. Chen, B., Xiaojia, Z., Mengjin, Y., Zhou, Y., Kundu, S., Shi, J., Zhu, K., Priya, S., (2015), Interface band structure engineering by ferroelectric polarization in perovskite solar cells, Nano Energy, Elsevier, Vol. 13, pp. 582. (Impact Factor: 10.211).
29. Gollu, S. R., Sharma, R., Kundu, S., Gupta, D., (2015), Incorporation of SiO<sub>2</sub> dielectric nanoparticles for performance enhancement in P3HT:PCBM inverted solar cells, Organic Electronics, Elsevier, Vol. 24, pp. 43 - 50.
30. Kundu, S., Halder, N. N., Banerji, P., Priya, S., (2015), Reliability of Passivated and Unpassivated High-k dielectric/GaAs Metal-Oxide-Semiconductor Capacitors, Integrated Ferroelectrics, Taylor & Francis (UK), Vol. 166, pp. 197 - 205.
31. Rajagopalan V, Piro EP. Brain Parenchymal Fraction: A Relatively Simple MRI Measure to Clinically Distinguish ALS Phenotypes BioMed Research International Volume 2015 (2015), Article ID 693206, 6 pages
32. <http://dx.doi.org/10.1155/2015/693206>
33. Alivelu M Parimi, et.al "Fuzzy logic based Control for IPFC for Damping Low Frequency Oscillations in Multimachine Power System" "IEEE IAS ICPS/PCIC" Hyderabad Conference, Nov. 19-21, 2015
34. Vishnu Charan, Alivelu M Parimi "Placing IPFC at Multiple Generator Connected Grid for Reducing Short Circuit Current" "IEEE IAS ICPS/PCIC" Hyderabad Conference, Nov. 19-21, 2015
35. M.T.L.Gayatri, Alivelu M Parimi, AV Pavan Kumar, "Reactive Power Compensation in Microgrids using Custom Power Devices" "IEEE IAS ICPS/PCIC" Hyderabad Conference, Nov. 19-21, 2015
36. I. Elamvazuthi, H. J. Leea, J. C. Nga, H. L. Songa, Y. X. Tionga, A.M. Parimi and A.K. Swain "Implementation of a New Engineering Approach for Undergraduate Control System Curriculum using a Robotic System" 2015 IEEE International Symposium on Robotics and Intelligent Sensors (IRIS 2015), Langkawi, Malaysia, 18-20 Oct, 2015.
37. M. T. L. Gayatri, Alivelu M. Parimi, A. V. Pavan Kumar, "Application Of Dynamic Voltage Restorer in Microgrid for Voltage Sag/Swell Mitigation," 2015 IEEE Power, Communication and Information Technology Conference (PCITC), 15-17th Oct. 2015, Bhubaneswar, India.
38. M.T.L.Gayatri and A. M. Parimi "Reactive power compensation in microgrids-A survey paper" accepted in 2015 IEEE International Conference On Computation Of Power, Energy, Information And Communication, April 22<sup>nd</sup> and 23<sup>rd</sup> 2015.



39. R. Nittala, A. M. Parimi, K. Uma Rao, "Mitigation of Voltage Sag/Swell with CSI-IDVR", 2015 IEEE International Conference on Recent Developments in Control, Automation and Power Engineering (RDCAPE), 12-13 March, Noida 2015
40. AV Pavan Kumar, Alivelu M Parimi, K Uma Rao, "Investigation Of Small PMSG Based Wind Turbine For Variable Wind Speed", 2015 IEEE International Conference on Recent Developments in Control, Automation and Power Engineering (RDCAPE), 12-13 March, Noida, 2015
41. R. Nittala, A. M. Parimi, K. Uma Rao, "Comparing the Performance of IDVR for Mitigating Voltage Sag and Harmonics with VSI and CSI as Its Building Blocks", 978-1-4799-1823-2/15/ ©2015 IEEE, IEEE SPICES, 19-21 February, Kerala, 2015.
42. AV Pavan Kumar, Alivelu M Parimi, K Uma Rao, "Implementation of MPPT Control Using Fuzzy Logic in Solar-Wind Hybrid Power System", 978-1-4799-1823-2/15/\$31.00 ©2015 IEEE, IEEE SPICES, 19-21 February, Kerala, 2015.
43. Sanket Goel\* and Prasoom Dwivedi, Considerations and Conceptualisation of Solar Business Model in India: lessons on Technology Transfer learnt from Germany, International Journal of Technology, Policy and Management (Inderscience), Vol 8, No 1, 61-81, January 2015, IF 0.8.
44. Venkateswaran PS, Diwakar Kashyap, Ajay Agarwal and Sanket Goel\*, Computational Analysis of a Microfluidic Viscometer and its application in the Rapid and Automated Measurement of Biodiesel Blending under Pressure Driven Flow, accepted for publication with the Journal of Computational and Theoretical Nanoscience (American Scientific Publishers), July 2014, IF 1.03.
45. Sonal Singh, Shikha Jain, Venkateswaran S Pedinti, Avanish K Tiwari, MR Nouni, Jitendra K Pandey and Sanket Goel\*, Hydrogen: A Sustainable Fuel for Future of the Transport Sector, Renewable and Sustainable Energy reviews (Elsevier), Vol 8, p. 623-633, 2015, IF 5.51.
46. Diwakar Kashyap, Venkateswaran PS, Prabhat K Dwivedi, Young H Kim, Gyu M Kim, Ashutosh Sharma, and Sanket Goel\*, Recent Advances in the Development of Enzymatic Biofuel Cells (EBFCs), International Journal of Nanoparticles (Inderscience), Vol 8, p. 61-81, 2015, IF 0.7.
47. Diwakar Kashyap, Chulmin Kim, Sung Yeol Kim, Young Ho Kim, Gyu Man Kim, Prabhat Dwivedi, Ashutosh Sharma, and Sanket Goel\*, Multi Walled Carbon Nanotube and Polyaniline Coated Pencil Graphite based Bio-cathode for Enzymatic Biofuel Cell, International Journal of Hydrogen Energy (Elsevier), Vol 40, p. 9515-9522, 2015, IF 2.93.
48. Diwakar Kashyap, Raghvendra Singh Yadav, Venkateswaran PS, Jitendra K. Pandey, Prabhat Dwivedi, Ashutosh Sharma, Pushan Ayyub, Sanket Goel\*, Fabrication of Vertically aligned Copper Nanotubes as a Novel Electrode for Enzymatic Biofuel Cells, Electrochimica Acta (Elsevier), Vol 167, p. 213-218, 2015, IF 4.09.
49. Sung Deuk Choi, Jin Ho Choi, Young Ho Kim, Sung Yeol Kim, Prabhat Dwivedi, Ashutosh Sharma, Sanket Goel and Gyu Man Kim, Enzyme immobilization on microelectrode arrays of CNT/Nafion nanocomposites fabricated using hydrogel microstencils, Microelectronic Engineering (Elsevier), Vol 141, p. 193-197, 2015, IF 1.34.
50. Sanket Goel\*, Venkateswaran PS, Rahul Prajesh, and Ajay Agarwal, Rapid and Automated Measurement of Biofuel Blending using a Microfluidic Viscometer, Fuel (Elsevier), Vol 139, p. 213-219, 2015, IF 3.41.
51. Diwakar Kashyap, Prabhat Dwivedi, Ashutosh Sharma, and Sanket Goel\*, Application of Electrochemical Impedance spectroscopy in Bio-fuel characterization: A Review, Journal of Hydrogen Energy (Elsevier), Vol 39, p. 20159-20170, 2014, IF 2.93.
52. Apurva Kumari and Subhendu Kumar Sahoo. "Fast Single Image and Video Deweathering using Look-Up-Table Approach." Accepted on Sept 2015 in AEU-International Journal of Electronics and Communications (Elsevir).
53. Reddy, Kotha Srinivasa, and Subhendu Kumar Sahoo. "An approach for FIR filter coefficient optimization using differential evolution algorithm." AEU-International Journal of Electronics and Communications (Elsevir) 69.1 (2015): 101-108.
54. Ganesh Kumar G and Subhendu Kumar Sahoo "Power-Delay Product Minimization in High-Performance Fixed-Width Multiplier" accepted at International Conference on IEEE Region 10 (IEEE-TENCON 2015) to be held from 1-4 November 2015 in Holiday Inn, Sands Cotai Central Cotai Strip, Macau.
55. Ganesh Kumar G and Subhendu Kumar Sahoo, "Implementation of A High Speed Multiplier for High-Performance and Low Power Applications" Accepted and will be presented in VDAT-2015 to be held at Ahmedabad, 26-29 June 2015.

56. Apurva Kumari, S.K Sahoo, "Real Time Visibility Enhancement for Single Image Haze Removal" Accepted and will be presented in International Conference on Image and Signal Processing-2015 to be held at Bangalore in the month of August 2015.
57. Rasmita Sahoo, Subhendu Kumar Sahoo and Krishna Chaitanya Sankisa, "Design of an Efficient CNTFET using Optimum Number of CNT in Channel Region for Logic Gate Implementation" in IEEE International Conference on VLSI Systems, Architecture, Technology and Applications (VLSI – SATA 2015) to be held in Bangalore from January 8 – 10, 2015.
58. Apurva Kumari, Sidharth Sahdev and S.K Sahoo, "Improved Single Image and Video Dehazing Using Morphological Operation" in IEEE International Conference on VLSI Systems, Architecture, Technology and Applications (VLSI – SATA 2015) to be held in Bangalore from January 8 – 10, 2015.

**x) Conferences attended/papers presented:**

1. Paper presented by Dr Runa Kumari in IEEE Applied Electromagnetics Conference, AEMC- 2015, IIT Guwahati, India, 18-21 Dec. 2015.
2. Paper presented by Dr. Prasant Kumar Pattnaik in CLEO-PR-2015 Conference during 24-28 Aug 2015 at Busan, South Korea.
3. Young Ho Kim, Bong Keun Kang, Sung Suk Oh, Jong-ryul Choi, Sanket Goel, Jeong-Woo Sohn, Preparation and characterization of pH sensing hydrogel microarrays with PEG/MMT Nanocomposites, for Nano S&T conference to be held in Xian, China during September 24-26, 2015.
4. Venkateswaran Pedinti Sankaran, Abhishek Sharma, Ajay Agarwal and Sanket Goel, 3D Printed Lab-on-a-chip Microviscometer for various Biochemical Applications, accepted for oral presentation at 15 IEEE International Conference on Environment and Electrical Engineering, held in Rome, Italy, 10-13 June 2015.
5. Kartik Arunachalam, Venkateswaran, P.S., and Sanket Goel, Examination of Smart Grid Architectures, Technology Demonstrations, Demand Response and their relevance in the Indian Context, India Smart Grid Week, India Smart Grid Forum, Bangalore-India. 2015.

**y) Invited Talks given by BITS faculty:**

1. Delivered a talk by Dr Runa Kumari on "Design of Dielectric Resonator Antennas" in Short Term Course on "Design & Simulation of Antennas and Microwave Devices (DSAMD-2015)" held during 3rd June to 10th June 2015 conducted at National Institute of Technology, Rourkela.
2. S. Kundu, Heterogenous Integration of Ferroelectric oxides on semiconductor for emerging memory device applications, IIT Guwahati.
3. Sanket Goel- 3D printed Microfluidic/Lab-on-a-chip for various Biochemical applications, during Fluidics HD, Indo-UK workshop at CSIR-CEERI, Pilani, Aug 2015.
4. Sanket Goel- Microfluidics and Nanomaterials for Energy Applications, Nanotechnology and Advanced Materials Workshop and Summer School (EEA/Norway grants), Central European Institute of Technology, Brno University of Technology, Brno, Czech Republic, 22 June 2015.
5. Sanket Goel- New devices and materials for Energy Applications, Faculty of Chemistry and Chemical Engineering, University of Maribor, Maribor, Slovenia, 19 June 2015.
6. Sanket Goel- Micro/Nano technology for Energy Applications, Innovation Center, Bundelkhand University, Jhansi, India, 24 April 2015.
7. Sanket Goel- Microfluidic devices for rapid, automated and self-sustainable enzymatic biofuel cell (EBFC), Kyungpook National University, Daegu, Korea, 10 March 2015.
8. Sanket Goel- Microfluidic devices: perspectives and pathways Medical Device Development Center Daegu-Gyeongbuk Medical Innovation Foundation (DGMIF) Cheombok-ro 80, Dong-gu, Daegu, 11 Mar 2015.
9. Sanket Goel- Carbon Sequestration and Enhanced Oil recovery (EOR) – New approaches and pathways, Indian Institute of Technology, Guwahati (ABB-IITG Workshop on Enhanced Oil Recovery, Integrated Operations, Safety), 19 Feb 2015.
10. Sanket Goel- India's Energy Security: Challenges, Policies and Opportunities, Babasaheb Bhimrao Ambedkar University (A Central University) - DST Centre for Policy Research, School for Environmental Sciences, BRIDGES 2015, 16 Jan 2015.
11. Delivered invited talk by Dr. S. K. Sahoo at Gujarat technological University on 10th April 2015 on "Recent Trends on Multiplier Architecture" during research week 2015.

**z) Invited talks arranged in the department:**

- Dr. Chandra Sekhar, Director, CEERI, Pilani, Former Director, NPL delivered a talk on "Microelectronics - Beyond and Besides Moore's Law" on 7th August 2015.

- Dr. Pramod Kumar Meher of NTU Singapore, eminent Research Scientist delivered an invited talk on "Mapping Algorithm to Architecture for Constraint-Driven Systems" on 28th February, 2015
- Dr. Avinash K. Sinha, Head School of Energy Science and Engineering and Professor Department of Electrical Engineering, IIT Kharagpur has delivered a talk on "SMART GRID" on 20th August 2015.
- Prof. Gyu Man Kim, Professor and Head, Mechanical and Aerospace Engineering, Kyungpook National University, Daegu, Korea, Applications of microsphere microcarriers prepared using microfluidic chips, 20 Nov 2015.
- Dr. Young Ho Kim, Senior Researcher, Medical Device Development Center, Daegu Gyeongbuk Medical Innovation Foundation, Daegu, Korea, Micropatterned Nanocomposites for Miniaturized Chip Devices, 20 Nov 2015.

**aa) Awards and recognitions won by faculty and students**

1. OPERA award 2015
2. RIG grants to Dr. S. Kundu, 2015 from BITS-Pilani (Hyderabad Campus).
3. Distinguish Reviewer, 2015 to Dr. S. Kundu by IEEE EDS.
4. OPERA award was granted to Dr. Prasant Kumar Pattnaik in 2015 for five years
5. Sanket Goel - Fulbright fellowship under 2015-16 Fulbright- Nehru International Education Administrators (IEA) Program
6. Sanket Goel - reviewer of the DST, TSD Program (Government of India) grant applications, and several journals from Elsevier, IEEE and APS.

**bb) Faculty Development, International Collaboration & Industry Immersion**

1. Dr. S. Kundu applied for prestigious Indo-US BASE Fellowship (offered by IUSSTF) through proposal and if get awarded, three months research will be carried out at Virginia Tech, USA.
2. Dr. S. Kundu made research collaboration with Virginia Tech, USA and his joint project proposal (worth Rs. 60 Lakhs for 3 years) with Virginia Tech is currently under-review at MNRE, Govt. of India.
3. Dr. S. Kundu submitted project proposal for 'additional research grants' (worth Rs. 10 lakhs) at BITS-Pilani for setting up semiconductor devices laboratory.
4. Dr. S. Kundu made collaboration with IIT-Bombay. From BITS-Pilani (Hyderabad campus), Dr. Kundu published one solar cells paper in prestigious 'Organic Electronics' international journal.
5. Sanket Goel – with IIT Kanpur on Fuel Cell, Nanomaterial Characterization
6. Sanket Goel – with CSIR-CEERI, Pilani on Microfluidics, MEMS
7. Sanket Goel – with Kyungpook National University, Korea, on Microfluidics, Microfabrication
8. Sanket Goel – with with the Penza State University (PSU), Penza, Russia on Nanotechnology for CO2 sequestration

**cc) Significant new equipments/experimental facility added during the year:**

1. Developed campus-wide remote access facility for the computational research in VLSI Laboratory.
2. Dept. of EEE is currently focusing for setting up interdisciplinary electronic devices laboratory with Dept. of Physics and Dept. of Chemistry, at BITS-Pilani (Hyderabad Campus). Dr. S. Kundu is leading for setting up the lab and they already ordered one spin coater, vacuum pump and one hot plate for developing thin films for the applications in solar cells, non-volatile memory devices, and other electronic device related research. They are currently in a process to push project proposals to DST, Govt. of India for further external funding to enrich the lab facilities in addition with the departmental and institutional supports.

**dd) Departmental association/club activities:**

- Recruitment drive by Dr. C.P. Ravikumar, Director of Technical Talent Development, Texas Instruments in India.
- Interactive session on career in core companies by students placed in Intel, Synopsys, Cisco, Texas instruments, Shoretel, Nokia.
- Four Image Processing workshop Series by Dr.P.K.Thiruvikraman covering basics using Matlab.
- The 10th Armenian Microelectronics Olympiad for students wishing to pursue a career in MEC and Analog Systems contest at Bitsian Level ,organised by PHoEnix Association
- Talk on Smart Grid Systems by IIT Prof. Dr. Avinash Sinha in late August.

- First ever drone workshop and competition at BITS HYD “The Quadcopters” Enabling students to grab huge prizes at many National College Fests.
- Conducted 4 Pre Atmos workshops and 10 Atmos Events and continuously endeavour for better Technical culture on campus.
- Project Exhibition in Association with ARC for ATMOS 15.
- Workshop “Internet of Things” by Mr.Vishweswaran from National Instruments
- Workshop on “Augmented Reality” by Sensifil technologies, Delhi based startup.
- “Know your campus- Quiz”, an idea that gave up spark to young minds of fellow bitsians on Electricity consumption.
- IDEA Innovation Contest enabling students to show up their ideas with proper prototyping and these projects made to display during the upcoming fests.

**ee) Major maintenance, renovations or new construction reports:**

- Power system lab

**ff) Major equipments acquired during the year:**

#	Item	Qty.(Nos.)
1	LEM Current Transducer, LA 55 P, Make: GLOBETEK	25
2	LEM Voltage Transducer, LV 25 P, Make: GLOBETEK	25
3	Intrumentation & Control Trainer, Model: KE-ICT, Make: Kencraft	5
4	Virtual Reality Head mounted display, Make: Sony	1
5	1-PH Inductive Load 10Amps, 50Hz Continuously variable Make: HSK Enterprises	3
6	Load Bank 3-Ph,440V 15 Amps 10KW having 10 steps of 330W/phase Make: HSK Enterprises	5
7	Rheostat 5Amps/70 Ohms, Make: HSK Enterprises	8
8	Microcontroller based SRM with drive, Make: Power Lab Instruments	1
9	Microcontroller based PMSBLDC with drive, Make: Power Lab Instruments	1
10	Microcontroller based STEPPER MOTOR with drive Make: Power Lab Instruments	1
11	3-phase converter Rectifier logic Circuit, Make: Physitech	22
12	ACE 1103_PX4CLP_USB ACE Kits (Advanced Control Education Kit 1103), Make: DynaFusion	1
13	3-phase converter Rectifier logic Circuit, Make: Physitech	22
14	Tripple Channel DC Regulated Power Supply Make: Scientific	22
15	PSCAD Software, Make: NAYAK POWER SYSTEMS	25 Users
16	DSA Tools, Make: NAYAK POWER SYSTEMS	25 Users
17	3-PH IGBT BASED INVERTER STACK, MD B6C1 600/415-15F(4 LEG), Make: SEMICRON	5
18	3-phase 3 winding Transformer, capacity 2.2 KVA Make: DEVI ELECTRONICS	1
19	DC Shunt motor coupled to 3 Phase Alternator Motor: 5 HP-220 volts DC, Speed: 1500 RPM. Alternator: 3 KW- 3 Ph, 6 wire. Make: DEVI ELECTRONICS	1
20	IDMT Characteristics of Over Current Relay Electro Mechanical Type Relay 7051. Make : Alstom.,	1
21	Static/Electro Magnetic differential Relay Make : Alstom., 7054B/7053A.	1
22	Microprocessor based Static Relay UV/OV 7052B/7053B Make : L&T Ltd.,	1

#	Item	Qty.(Nos.)
23	TRANSMISSION LINE SIMULATOR Electrical Power Transmission Line Training System Artificial Transmission line 3Phase Bench Model. Make: DEVI ELECTRONICS	1
24	Current Transformer Test Set: Standard Cts of Different Ratio., CTs under test of Various Ratio., Make: DEVI ELECTRONICS	1
25	Potential Transformer Test Set Phase Angle Transformer. Transformer Turns Ratio Meter, Potential Transformer of Different Voltage Ratio (Standard)., Make: DEVI ELECTRONICS	1
26	Simulation of string of Insulators for determination of voltage distribution and string efficiency: Make: DEVI ELECTRONICS	1
27	Mentor Graphics Software, Make: Trident	20 Users
28	Netsim Software, Make: Tetcos	30 Users
29	Isotropic Antenna, Make: Synergy Systems	1

### B3.10.7 Economics and Finance

#### Number of faculty members

Senior Professors, Professors	1
Associate Professors	1
Assistant Professors	5
Lecturers	0
Visiting Faculty	3

Head of the Department: RAMANA SONTI

Contact details: Office: 040-66303652 Email: ramana@hyderabad.bits-pilani.ac.in

Number of PhD Scholars: 4

#### gg) Sponsored Research activities:

##### Ongoing projects :

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
NA					

##### Projects sanctioned during the year

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
NA					

#### hh) Publications:

1. C H Yaganti & A "Branded Retail Stores:Economic Analysis and Environmental issues of Agriculture produce Marketing. Ed Volume: Small Experiments in Sustainability, 2015.
2. Pathak D C & Srijit Mishra (2015): "Poverty Estimates in India: Old and New Methods, 2004-05", in Poverty and Public Policy, vol.7, issue 1, pp.44-63, Wiley.
3. Sudatta Banerjee and Amrita Roy, 2015 "Determinants of Female Autonomy across Indian States", Journal of Economics, Business and Management, Vol. 3, No. 11, pp. 1037-1040.
4. Swati Alok , Jayasree Raveendran , Anil Kumar Jha , (2015) "Process conflict management among Indian software employees: prediction of conflict handling intention in fast changing global IT market using the theory of planned behaviour", Journal of Indian Business Research, Vol. 7 , No-2, pp140-168.

**ii) Conferences attended/papers presented:**

1. C H Yaganti and B Kamaiah "Forex derivatives Markets and Risk management in India", International Conference on International trade and Exchange rates held at Institute of Public Enterprises, Sep 28-29, 2015.
2. C H Yaganti and B Kamaiah "Hedging using cointegration and Hedging Effectiveness of Futures Markets, 21st Biennial Conference 2015-AIEFS held at University of Hyderabad, Aug 03-04, 2015.
3. Swati Alok, "A study of Lean Adopting Practices among Indian Manufacturing Employees: A Case study at Awarpur Cement Works", International Conference on Evidence Based Management (ICEBM) at BITS-Pilani, Pilani Campus, March 20-21, 2015

**jj) Invited Talks given by BITS faculty:**

- Dr. Durgesh Chandra Pathak: Invited lecture in 'International Seminar on Poverty and Deprivation in South Asia' at BHU-Varanasi (09/03/2015 to 11/03/2015). Also was discussant for a technical session.
- Prof. Ramana Sonti: Technical lecture at IIIT, Hyderabad & IEEE Communications Society, Hyd chapter on "Shannon meets Nash" -- on game theory applications across economics and communications.

**kk) Invited talks arranged in the department:**

- Discussion on Union Budget 2015, March 10, 2015, with participants Prof K Nageshwar (Osmania U.) and Prof Krishnamurthy Subramanian (Indian School of Business).
- Workshop on 18.04.2015 : Research Methodology in Social Sciences was conducted giving insight into ANOVA, SPSS and other Research Techniques. (Profs Indrakant, G Ramakrishna, and Uday Bhate)
- Talk on "Financial Inclusion", by Prof Bhagwan Chowdhry, University of California, Los Angeles
- Lecture on "Risk Management in Finance" by Imran Syed, Risk Analyst at Credit Suisse India

**ll) Awards and recognitions won by faculty and students****Faculty (Nil)****mm) Faculty Development, International Collaboration & Industry Immersion**

1. **Aditya Birla India Centre Research Workshop** : It provided a platform to initiate a discussion between professors of London Business School and BITS faculty & students. It showcased the latest India-related research and provide collaborative research opportunity and openings . It was conducted by London Business School professors- Prof Naufel Vilcassim, Professor Rajesh Chandy and Professor Vikrant Vig in the areas of marketing and finance.
2. **Significant new equipments/experimental facility added during the year:**
  - Department has procured STATA software and CMIE Prowess data
3. **Departmental association/club activities:** Economics Association
  - Youth Money Olympiad
  - ATMOS'15 Events:
    - The Court Room
    - Policy Dilemma
    - Brotomer
    - DSIJ Virtual Stock Market Challenge
    - Economics Paper Presentation
    - Guest Lecture by Prof. Tarun Jain titled "Letting the briber go free?"
    - Guest Lecture by Prof. K. Bindumadhavan on CFA/FRM.
    - The Great Indian Developmental Debate : "Development vs Growth"
  - Blog : De-economist
4. **Major maintenance, renovations or new construction reports:**
5. **Major equipments acquired during the year:**

**B3.10.8 Humanities and Social Sciences****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>1</b>
<b>Associate Professors</b>	<b>2</b>
<b>Assistant Professors</b>	<b>5</b>
<b>Lecturers</b>	<b>1</b>
<b>Visiting Faculty</b>	<b>1</b>

**Head of the Department: M.G.Prasuna**

**Contact details: prasuna@hyderabad.bits-pilani.ac.in**

**Number of PhD Scholars: 3**

**Sponsored Research activities: Completed projects:**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Challenging the Representation of Women in Matrilineal Communities of Kerala through Selected Fiction	Dr.Maya Vinai	RIG	Rs.2,00,000	2 years
2.	Climate Change, Market and Livelihoods	Dr.Sajja Srinivas	RIG	Rs.2,00,000	2 years
3.	Effects of Mantras on Human Mind, Life and Performance	DR.Aruna Lolla	RIG	Rs.2,00,000	2 years

**Ongoing Projects**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	Self and Social Exclusion: Representation of Parsi community in Theatre and Films	Dr.M.G.Prasuna	UGC	Rs.7,28,600	3 years
2	Using CEFR based bi-lingual rating scales to improve the writing ability of ESL learners	Dr.Santosh Mahapatra	British Council	Rs,1,48,000	1 year

**Publications:**

- Arup Maharatna. 'The Demography of Social Stratification in India' In: Sáenz, Rogelio, Embrick, David G., Rodríguez, Néstor P. (Eds.) *International Handbook of the Demography of Race and Ethnicity*, Springer. 2015.
- Arup Maharatna. 'On the Neo-Liberal Paradigm of Higher Education: an Apprehensive Note' . SSRN (Social Science Research Network, 2015.
- Arup Maharatna. 'Corruption and Immorality: An Illustration', *Mainstream* LIINo.34, 2015.
- Arup Maharatna. 'Evading Enlightenment', *The Statesman*, Nov 12, 2015. (Daily Newspaper, Kolkata/Delhi)
- Maya Vinai & M.G.Prasuna. 'Re-Mapping the Anxieties of the Gulf Diaspora : A Study of Benjamin's Goat Days'. *South Asian Review*. Volume 36, Number 2, 2015.
- M.G.Prasuna and Maya Vinai. 'Theatre Art Techniques for Professional Development'. *Humanities and Social Sciences Review* , Volume 3, Number 4, 2015.
- Sunny Jose & K.S.Hari. 'Progress in Reducing Child Undernutrition: Evidence from Maharashtra'. *Economic and Political Weekly*, Vol. 50, No. 3 ,2015.

- Jayashree Hazarika & Maya Vinai. 'Representation of the Middle Class in the works of Vikram Seth'. *The Quest* .Vol.29.2 ,2015.
- Jayashree Hazarika & Maya Vinai. 'A Comparative Study of the Works of Anita Nair and Vikram Seth'. *The IUP Journal of English Studies*. Vol.10.3 , 2015.
- Maya Vinai & Jayashree Hazarika'. Re-assessing the Kerala Model Woman in Fiction: An interview with author Jaishree Misra'. *Asiatic: IIUM Journal of English Language and Literature*. Volume 9.1,2015.
- Santosh Kumar Mahapatra. 'Training Language Learners to Use Feedback: An Action Research at BITS Pilani, Hyderabad' - *FORTELL* ,Issue No. 31, 2015.

#### Chapters in Book

- Santosh Kumar Mahapatra.'Using web 2.0 tools for teacher professional development: a case study' - in "Innovation in English Language Teacher Education" edited by George Pickering and Professor Paul Gunashekar and published by British Council, 2015.
- Srinivas Sajja and Shamu Tharu (eds.)'Displacement and Livelihoods: Distant Fruits of Development in KSEZ' in 'Small Experiments in Sustainability'. New Delhi: Trans-Knowledge Book Company.2015.

#### Book Published

- Srinivas Sajja and Shamu Tharu (ed.) ' Small Experiments in Sustainability'. New Delhi: Trans-Knowledge Book Company. 2015.

#### Conferences attended/papers presented:

- Arup Maharatra presented a paper titled 'On the Perils of Reforms in Higher Education on the Neo-Liberal Lines' at the International Seminar on Financing of Higher Education organized by National University of Educational Planning and Administration, New Delhi during 23-25 February, 2015.
- Sunny Jose presented a paper on "Is Female Empowerment a Measurable Concept?: A Review of Empirical Studies from India" in a seminar on Demographic Challenges in India: Current Scenario and Future Direction, organized by Institute of Economic Growth, New Delhi on 9<sup>th</sup> July 2015.
- Santosh Kumar Mahapatra presented a paper on 'Assessment Literacy: addressing local needs'. at Localization of Teaching and Testing in Hindi and other Indian Languages - a national conference organized by National Testing Services, Central Institute of Indian Languages and Department of Linguistics, Banaras Hindu University in November 2015.
- Santosh Kumar Mahapatra presented a paper on 'Using web 2.0 tools for teacher professional development: a case study'. At the Fifth International Teacher Educators Conference, organized by British Council in Hyderabad (February-March 2015).
- Santosh Kumar Mahapatra presented a paper on 'Michael West's Bilingualism and His Teaching Materials: An Evaluative Study'. at the One-day Symposium on the Historiography of English Education in India conducted by the Centre for English Language Studies, University of Hyderabad (January 29, 2015)
- Aruna Lolla presented a paper on "The Effect of the Mantras on the Human Mind, Personality and Life" at the 2nd Annual International Conference on Humanities & Arts in a Global World at Athens, Greece, 3-6 January 2015.
- Biswanath Dash presented a paper on "Early Warning System and Last Mile Connectivity: A Case Study of Cyclone Hudhud" in the Second World Conference on Disaster Management held at Anna University, Visakhapatnam 19-21<sup>st</sup> November 2015.
- Srinivas Sajja presented a paper on 'Structural Empowerment and Democratic Decentralisation: Case studies from Telangana' in RC 03 Economy, Polity and Society, 41st All India Sociological Conference, organized by Indian Sociological Society at KIIT University, Bhubaneswar, Dec.27-29, 2015.
- Sunny Jose presented (an invited) paper on "Inequality in Nutrition in India" in a national workshop on "Inequality in India" organised by the Institute for Sustainable Development and Governance, Trivandrum, Centre for Budget and Governance Accountability, New Delhi and Oxfam India, 28-29 January 2015.
- Maya Vinai presented a paper on ' Negotiating faith and culture: Lives and world-view of boatmen in Banaras' in a seminar titled "Framing India through Perspectives from Elsewhere" at Indian Institute of advanced Studies (IIAS), Shimla on 27-29 July, 2015.
- Maya Vinai presented a paper titled 'Challenging Matrilineal Identities Lost in Space and Time: A cross examination of Kerala women through the representations from selected Indian English Fiction' at the National Conference organized by IIT-Roorkee and Sahitya Academy ,21-22 March, 2015.



- Maya Vinai presented a paper titled 'Re-Imagining the narratives of the Gulf Diaspora in Literature' at the 15th Annual South Asian Literary Association Conference, Vancouver, B.C, Canada, 6-8th Jan, 2015.
- Shamuel Tharu presented a paper on "Constitutional and operational Challenges posed by NCTC" at the International conference on "Federalism and Governance in a Globalising World: Issues and Challenges" University of Delhi, 23<sup>rd</sup> February 2015.
- Shamuel Tharu presented a paper on "Human rights aspects of counter terrorism" at a National seminar on "Human rights in the 21<sup>st</sup> Century" University of Delhi, 29<sup>th</sup> March 2015.

#### **Invited Talks given by BITS faculty:**

- M.G.Prasuna was invited as a resource person for a Refresher Course on 'Soft Skills and Personality Development' at *UGC Academic Staff College, Osmania University*, held on 21/9/15.
- Sunny Jose was invited to deliver a guest lecture on "Logic and Reasoning" and "How to Publish" in a Research Methodology Course for PhD scholars organised by the *Centre for Economic and Social Studies*, Hyderabad, 16-25 November 2015.
- Srinivas Sajja was invited to speak on 'Institutional reforms in Irrigation Management: A review of Policy and Implementation issues in Telangana and Andhra Pradesh' at the *National Workshop on Participatory Irrigation Management* at VNRVJIT, Hyderabad, 28th May, 2015.
- Biswanath Dash presented a talk on 'Cyclone Risk Mitigation: Evacuation during Hudhud' delivered during the training program on Flood and Cyclone Risk Mitigation and Management organized by *Government of Andhra Pradesh held at MCR HRD Institute*, Hyderabad, 9<sup>th</sup> Dec. 2015.
- Biswanath Dash presented a talk on 'Mainstreaming Disaster Risk Mitigation in Large Projects: NCRMP' delivered during the training program on Mainstreaming Disaster Risk Reduction and Climate Change Adaptation organized by *Govt. of Andhra Pradesh sponsored by UNDP, held at MCR HRD Institute*, Hyderabad, 29<sup>th</sup> Dec. 2015.
- Santosh Mahapatra gave an invited special lecture on "Assessment Literacy: addressing local needs" in the session on "Localization of Teaching and Testing in Hindi and other Indian Languages" – at the National conference organized by *National Testing Services, Central Institute of Indian Languages and Department of Linguistics, Banaras Hindu University*, November 2015.
- Shamuel Tharu gave a guest lecture on "Left Wing Extremism and Its Implications for National Security" at 31<sup>st</sup> Senior Officers' Study Period, *College of Air Warfare*, Hyderabad 16th April 2015.

#### **Invited talks arranged in the department:**

- Dr. Balmukund Pandey, National Organizing Secretary, All India Historical Collection Project, New Delhi, gave a talk on 'Contemporary Indian History' on 18<sup>th</sup> August, 2015.
- The Department organized a workshop, in association with NSS, on 'Leveraging Corporate Social Responsibilities' by Farhan Pettiwala president ENACTUS INDIA, Aluminus Harvard School of Business on 31<sup>st</sup> Jan 2015.
- The Department organized a workshop on "The Art of Mind Control" in collaboration with Bhagavadgita Service Club, Hare Krishna Movement on Feb 7, Saturday, 2015.
- The Department organized guest talks and weekly sessions on Bhagavad Gita and personality development from Feb. to Dec. 2015 with speakers from Hare Krishna Mission and ISKON, Hyderabad.
- Prof. Mohan Ramanan, Department of English, University of Hyderabad, delivered a lecture on 'Spiritual Basis of Indian Nationalism' on 11 April, 2015.

#### **Awards and recognitions won by faculty and students:**

- Srinivas Sajja has been elected as Co-convenor to RC03 (Economy, Polity and Society) of All India Sociological Society for 2 years (2016-17) at the All India Sociological Conference held in KIIT University, Bhubaneswar 27-29 Dec 2015.

#### **Faculty Development, International Collaboration & Industry Immersion**

##### **International Collaboration:**

- Sunny Jose participated as a lead resource person and external expert in training the National Statistical Committee of Republic of Kyrgyzstan on Time Use Data Analysis, organised by the UN-ESCAP at Bishkek, Kyrgyzstan during October 19-24, 2015.
- Santosh Kumar Mahapatra participated in a webinar - The Future of English Language Teaching - organized by The English Language Centre, Regent's University London on October 26, 2015.

**Significant new equipments/experimental facility added during the year: NIL**

**Departmental association/club activities: NIL**

**Major maintenance, renovations or new construction reports: NIL**

**Major equipments acquired during the year: NIL**

**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>12</b>
<b>Lecturers</b>	<b>2</b>
<b>Visiting Faculty</b>	<b>2</b>

**Head of the Department:** Dr. Y . V. Daseswara Rao

**Contact details:** 040-66303551

**Email:** yvdrao@hyderabad.bits-pilani.ac.in

**Number of PhD Scholars:** 19

**i. Sponsored Research activities:****Ongoing projects**

Sl. No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Formability study on constrained groove pressed extra deep drawn (EDD) steel sheets	Prof. Amit Kumar Gupta	UGC	34.20	2014-2016
2.	Design and development of an interactive decision support system for regional energy management	Prof. Sandip S. Deshmukh	UGC	6.00	2014-2016
3.	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. Sandip S. Deshmukh (Co-PI)	BITS Pilani	62.0	2014-2017
4.	Novel Minimal-Solid Lubricant Mixture Application Method For Performance Improvement in Turning	Prof. N S K Reddy	SERC, DST	34.86	2013-2016

**Projects sanctioned during the year**

Sl.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1	Develop and Test Certain 3D Printing Technologies to Produce Innovative Limbs at Affordable Costs for the Disabled in India.	Prof. Srinivasa Prakash Regalla	BIRAC, DBT	47.65 lakhs	2015-2016
2	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 lakhs	2015-2017
3	Characteristics and modeling of Tornado-Induced Wind Loading on Low-Rise Buildings	Dr. Sabareesh G R	NSFC, China	Financial support for laboratory experiments, international travel, and overseas stay in china to conduct experiments (\$10K)	2015-2018
4	Development of an integrated approach for modelling and management of micro grid operations	Prof. Sandip S. Deshmukh	Additional Competitive Research Grant, BITS	9 lakhs	2015- 2017

Sl.No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
			Pilani		
5	Heat transfer modeling of cold water mist at the cutting zone using FSI model in machining of turbine blade materials	Dr. C. P. Kiran	Additional Competitive Research Grant, BITS Pilani	9 lakhs	2015- 2017
6	Structural health monitoring of wind turbines using a comprehensive condition monitoring scheme, Vibration Signature Analysis, Acoustic Emission Analysis and Lubricating Oil Analysis	Dr. Sabareesh G R	Additional Competitive Research Grant, BITS Pilani	8.5 lakhs	2015- 2017

ii. **Journal Publications:**

- 1) R.K. Desu, H.N. Krishnamurthy, A Balu, A.K. Gupta, SK Singh (2015), "Mechanical properties of Austenitic Stainless Steel 304L and 316L at elevated temperatures", Journal of Materials Research and Technology (online –published).
- 2) Kotkunde, N., Srinivasan, S., Krishna, G., Gupta, A.K. and Singh, S.K. (2015), "Influence of Material Models on Theoretical Forming Limit Diagram Prediction for Ti-6Al-4V Alloy at Warm Condition" (accepted)
- 3) Kotkunde, N., Krishna, G., Shenoy, S.K., Gupta, A.K. and Singh, S.K. (2015), "Experimental and theoretical investigation of forming limit diagram for Ti-6Al-4 V alloy at warm condition", International Journal of Material Forming, Publisher: Springer (Online-published).
- 4) Kurra, S., Rahman, N.H., Regalla, S.P. and Gupta, A.K. (2015), "Modeling and optimization of surface roughness in single point incremental forming process", Journal of Materials Research and Technology, Publisher: Elsevier Science (Online-published).
- 5) Kurra, S., Rahman, N.H., Regalla, S.P. and Gupta, A.K. (2015), "Parametric study and multi-objective optimization in single-point incremental forming of extra deep drawing steel sheets", Journal of Engineering Manufacture (Online-published).
- 6) Gupta, A.K., Sharath Chandra, G., Raghuram, K.D. and Balu, A. (2015), "Optimization of turning parameters by integrating genetic algorithm with support vector regression", International Journal of Advanced Manufacturing Technology, Publisher: Springer, Vol. 77(1-4), pp. 331-339.
- 7) Uma Maheshwera Reddy Paturi, Suresh Kumar Reddy Narala (2015), "On a novel solid lubricant technique: A study on the tribological characteristics under dry slide condition", Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology.
- 8) Uma Maheshwera Reddy Paturi, Suresh Kumar Reddy Narala (2015), "Constitutive flow stress formulation for aeronautic aluminum alloy AA7075-T6 at elevated temperature and model validation using finite element simulation", Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications.
- 9) A Marques, Suresh Kumar Reddy Narala, AR Machado, Rakesh Kumar Gunda, Saravan Kumar Josyula, RB Da Silva and MB Da Silva (2015), "Performance assessment of MSQL:Minimum quantity solid lubricant during turning of Inconel 718", Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture.
- 10) Nikhil T, Shreyas M, Jeevan J, Karthik Teja M (2015), "Predicted and Measured Thermal Profiles During Friction Stir Welding Process of Aluminium-alloy", International Journal of Applied Engineering Research.
- 11) Kurra, S., & Regalla, S. P (2015), "Multi-objective optimization of single point incremental sheet forming using Taguchi based grey relational analysis", International Journal of Materials Engineering Innovation, 6(1), 74-90.
- 12) Hussaini S. M, Singh S. K., and Gupta A. K (2015), "Development of Experimental and Theoretical Forming Limit Diagrams for Warm Forming of Austenitic Stainless Steel 316", Journal of Manufacturing Processes, Volume 18, pp. 151–158.
- 13) Nitin Kotkunde, M. Prasad, A. Arote, AK. Gupta (2015), "Experimental and numerical study of formability for EDD steel", Materials Today: Proceedings, Volume 2, Issues 4–5, pp. 3770–3777.

**iii. Conferences attended/papers presented:**

- 1) R. Parameshwaran, Y.V.D. Rao, "Fluid-structure interactions and flow induced vibrations: A review", 12th International Conference on Vibration Problems, IIT Guwahati, December 2015 (Accepted)
- 2) Prashant Kumar Pattnaik, Y.V.D. Rao, Jatin Kashyap, "A novel 3D MEMS Fabrication/Micro cutting facility by Thermal Actuated MEMS device", ISSS National Conference on MEMS Smart Materials, Structures and Systems September 23-25, 2015, Kochi, India.
- 3) Swagatika Mohanty, Srinivasa Prakash Regalla & Y.V.D. Rao. "Multi-stage and Robot Assisted Incremental Sheet Metal Forming: A Review of the State of Art and Comparison of Available Technologies", AIR '15, July 02 - 04, 2015, Goa, India.
- 4) Kotkunde, N., Madhava P.T., Abhijeet A. and Gupta, A.K., (2015), "Experimental and numerical study of formability for EDD steel", 4th International Conference on Materials Processing and Characterization (ICMPC 2015), Mar 14-15, 2015.
- 5) Kotkunde, N. and Gupta, A.K., (2015), "Analysis of Forming Limit Diagram for Ti-6Al-4V Alloy", 4th International Conference on Materials Processing and Characterization (ICMPC 2015), Mar 14-15, 2015.
- 6) Satya Suresh V.V.N., Regalla S.P., Gupta, A.K. and Padmanabhan, G., (2015), "Weld line shift in the case of Tailor welded blanks subjected to differential strengths with respect to TIG and Laser welding", 4th International Conference on Materials Processing and Characterization (ICMPC 2015), Mar 14-15, 2015.
- 7) Abhishek Goyal, Jyoti Gautam and Jeevan Jaidi (2015), "A Computational Fluid Dynamics Study on Stall Controlled Wind Turbines," Global Conference on Renewable Energy (GCRE 2015) Conference, 19-21 October 2015, NIT Patna, Bihar, India. (accepted)
- 8) Sreesankaran M Namboothiri and Jeevan Jaidi (2015), "Solar Refrigeration and Air Conditioning: A Newfangled Review," Global Conference on Renewable Energy (GCRE 2015) Conference, 19-21 October 2015, NIT Patna, Bihar, India. (accepted)
- 9) Dileep M. Paul, Manjunath P, Rinu Thomas and Jeevan Jaidi (2015) "A Review on Power-To-Gas Energy Storage Technology," Global Conference on Renewable Energy (GCRE 2015) Conference, 19-21 October 2015, NIT Patna, Bihar, India. (accepted)
- 10) Manjunath P, Dileep M. Paul, Rinu Thomas and Jeevan Jaidi (2015), "Incineration: A Comprehensive Review," Global Conference on Renewable Energy (GCRE 2015) Conference, 19-21 October 2015, NIT Patna, Bihar, India. (accepted)
- 11) Nikhil T, Shreyas M, Jeevan J, Karthik Teja M, "Predicted and Measured Thermal Profiles During Friction Stir Welding Process of Aluminium-alloy," International Conference on Advances in Materials and Mechanical Engineering (ICAMME-2015), 8-9 May 2015, E.G.S. Pillay Engineering College, Nagapattinam, Tamilnadu, India. (accepted)
- 12) Aditya Shah and Jeevan Jaidi (2015), "A Comparative Study on Heat Transfer Enhancement using Phase-change Material: High gravity conditions vs. internal fins," International Conference on Polygeneration (ICP-2015), February 18-20, 2015, Anna University, Chennai, India.
- 13) Jithin P, Dileep M Paul, Rinu Thomas, Manjunath P and Jeevan Jaidi (2015), "District Heating: A Technological Review," International Conference on Polygeneration (ICP-2015), Anna University, Chennai, February 18-20, 2015.
- 14) Anthony Hargreaves, Vicky Cheng, Sandip Deshmukh, Matthew Leach, Koen Steemers, 'Forecasting the regional cost effectiveness of energy efficiency and decentralized supply scenarios for reducing the carbon dioxide emissions of dwellings'. Sustainable Thermal Energy Management International Conference (SusTEM2015), at Newcastle University, UK, 7-8th July, 2015
- 15) Sandip Deshmukh and Adesh Jinturkar, "Real Option Based Analysis of Renewable Energy Technology Options", International Conference on Polygeneration at Anna University, Chennai February 18-20, 2015
- 16) Kiran C.P. and Shibu Clement (2015): X-abilities and attributes based decision making in evaluation and selection of a turbine blade material, ICMIE 2015, Mar 21-23, 2015, Singapore.
- 17) Sailendu Biswal, G.R.Sabareesh, "Design and development of a wind turbine test rig for condition monitoring applications" IEEE International Conference on Industrial Automation and Control, Pune, India, May 2015.
- 18) Sailendu Biswal, Jithin George, G.R.Sabareesh, "Fault Size Estimation Using Vibration Signatures in a Wind Turbine Test-Rig", 12th International Conference on Vibration Problems, IIT Guwahati, December 14-17, 2015.

- 19) Nikhil T, Sagar I, Chaitanya C, Chandrhas T, Sabareesh GR, "Design and Development of a Test-Rig for Determining Vibration Characteristics of a Beam", 12th International Conference on Vibration Problems, IIT Guwahati, December 14-17, 2015.
- 20) Swati Soni, Praveen K. Mishra, Ragamadhuri Nallam and Jeevan Jaidi, "Effect of Fin Surface Roughness and Array of Grooves on Heat Transfer Enhancement," 23<sup>rd</sup> National Heat and Mass Transfer Conference and 1<sup>st</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference, 17-20 December, 2015, Thiruvananthapuram, India.
- 21) Amrita Yelikar, Ragamadhuri Nallam and Jeevan Jaidi, "Computational Fluid Dynamics Study and Validation of Rushton Turbine Impeller," 23<sup>rd</sup> National Heat and Mass Transfer Conference and 1<sup>st</sup> International ISHMT-ASTFE Heat and Mass Transfer Conference, 17-20 December, 2015, Thiruvananthapuram, India.
- 22) Kshitiz Gupta, Shubham Maurya, Vikhyat Kalra and Satish Kumar Dubey, ISHMT ASTFE Conference IHMTC2015, IHMTC 2015-990, ISRO Thiruvananthapuram, India.
- 23) P Srinivasan and Satish K Dubey, "Internalising the External Cost of Electricity Generation- An Approach for the Economic Viability of Renewable Energy Based Power Generation. 5th International Conference on Advances in Energy Research 2015, IIT Bombay 15-17 December 2015.

**iv. Invited Talks given by BITS faculty:**

- 1) Invited talk by Dr. Sabareesh G R on the topic- "Experimental Wind Pressure estimation on structures in extreme wind events like tornado" at Department of Civil Engineering, Beijing Jiatong University, Beijing, China on 15th July 2015.
- 2) Invited talk by Dr. Sabareesh G R on the topic- "Extreme Wind Events-Laboratory Scale Simulation and analysis of low-rise structures" at State Key Laboratory for Disaster Risk Reduction, Tongji University, Shanghai, China on 13th July 2015.
- 3) Seminar by Dr. Sabareesh G R on "Fundamentals of Vibration Analysis and Machinery Vibration" to 30 Graduate Engineering Trainees at Shanthi Gears Limited on June 18th, 2015.
- 4) Invited talk by Dr. Sabareesh G R on the topic- "Fluid Structure Interaction- Design Issues and Challenges" at the 2nd International Conference on Emerging areas in Technology and Sciences, Saintgits College of Engineering, Kottayam, Kerala, 2nd May 2015.
- 5) Prof. Y. V. D. Rao delivered an invited lecture on Robotics in Dental applications at Army Dental college, Secunderabad on 16<sup>th</sup> August 2015.
- 6) Prof. Y. V. D. Rao conducted an interactive lecture session at Vasavi college of Engineering, Hyderabad about the course Engg Mechanics on 29<sup>th</sup> July 2015.

**v. Invited talks arranged in the department:**

- 1) Romesh C. Batra, Ph.D., D.Sc.(Honoris Causa) Clifton C. Garvin Professor Department of Biomedical Engineering and Mechanics, Affiliate Professor of Mechanical Engineering, Aerospace and Ocean Engineering, and Material Science and Engineering Virginia Polytechnic Institute and State University Blacksburg, delivered a lecture on 14<sup>th</sup> Aug. 2015 at BITS Hyderabad.
- 2) A guest lecture was delivered by Prof. Bale V Reddy, Chair Professor-ME, University of Ontario, Canada on 28<sup>th</sup> Aug. 2015.
- 3) Prof. Ram D. Sriram, Chief of the Software and Systems Division, Information Technology Laboratory, at the National Institute of Standards and Technology (NIST), USA came to BITS and delivered lecture in Seminar hall on Network-Centric Manufacturing on 11<sup>th</sup> Dec. 2015.

**vi. Awards and recognitions won by faculty and students:**

- 1) Prof. N S K Reddy: UOIT, Canada, Visiting Researcher Fellowship (May 2015-July 2015).
- 2) Prof. S. P. Regalla was session chair at 4th International Elsevier Conference on Materials Processing & Characterization.
- 3) Dr. Sabareesh Geetha Rajasekharan was session chair at 2nd International Conference on Emerging Trends in Technology and Sciences, April 30-May 2, 2015.

**vii. Faculty Development, International Collaboration & Industry Immersion:**

- 1) Dr. Sabareesh G R, Research Collaborator from India in the joint project with, Tongji University, China, and Tokyo Polytechnic University, Japan. Dr. Sabareesh G R visited Tongji University, Shanghai, China under this scheme as a visiting researcher from June 28, 2015 to July 18, 2015 for performing experiments on tornado induced loads on buildings.
- 2) Dr. C. P. Kiran undergone industry immersion at Bharat Forge Limited, Pune and Kalyani center for technology innovation during 22<sup>nd</sup> Jun-10<sup>th</sup> Jul 2015.

- 3) Dr. Amrita Priyadarshini undergone industry immersion at Rourkela Steel Plant (RSP) SAIL from 18<sup>th</sup> June to 15<sup>th</sup> July, 2015.
- 4) Dr. Sabareesh G R undergone industry immersion at Shanthi Gears Limited (A unit of M/s Tube Investments India Ltd), Coimbatore from June 9 to June 20, 2015

viii. **Significant new equipments/experimental facility added during the year:**

Sl.No.	Name of the Lab	Equipment Ordered	Amount (Rs.)
1	Dynamics Lab	Electric Strain Gauge	2,800
2	Department	Design Project Items (Shaker Table)	50,952
3		Design Project, Polariscope	1,34,680
4	HT Lab	Convection Drying Machine	9,30,911
5		Radiant Transfer Experiments	8,36,086
6	IC Lab	DPM 800 with Pressure Sensor adaptor & Tooling Device	12,25,110
7		Test Rig for Evaluating alternate fuels	7,54,749
8	MT Lab	Micro Meter & Hot Mounting Machine	82,200
9		Grid Making Machine	20,475
10		Digital Density Meter	2,64,600
11		Programmable Muffle Furnace	2,43,247
12		Creep Testing Machine	24,38,210
13	RACE Lab	Steam Power Plant	24,35,874
14	Robotics Lab	Mechatronics System Development Kit	7,64,174
15		Mechatronics System Development Kit Accessories	42,520
16		SMC Pneumatics Kit (Accessories)	1,96,367
17	Tribology Lab	Weighing Balance Machine	1,38,071
18		Humidity Control System for Scratch Tester	2,99,999
19	Hydraulics Lab	Modular Air Flow Bench	6,70,521
20		Boundary Layer Apparatus	1,54,956
		<b>Total</b>	<b>1,16,86,502</b>

ix. **Departmental association/club activities:**

1. Workshop on Innovations in Waste, Water and Energy Technologies for Rural Development on 13<sup>th</sup> & 14<sup>th</sup> July 2015: BITS Pilani, Hyderabad Campus and National Institute of Rural Development & Panchayati Raj, Ministry of Rural Development, Government of India.
2. PLMSS (Product lifecycle modeling, simulation and synthesis) during 15<sup>th</sup>–17<sup>th</sup> Dec. 2015: This conference is being organized jointly by ASL, Hyderabad and BITS-Pilani, Hyderabad Campus.
3. Visit to BHEL Ramachandrapuram on 28th Oct. 2015: This visit is for ME, BE 3<sup>rd</sup> and 4<sup>th</sup> year students.
4. Guest lecture on Six Sigma and Lean Sigma Philosophy and applications in the Industry was given by Mr. Sai Prabhala, Lean & Six Sigma certified, PMP Professional, Lean Sigma Green Belt from Arizona State University and Six Sigma Green Belt from General Electric on 22nd Apr. 2015.
5. Korean team visit to campus and interaction with Mechanical Engineering Faculty 20<sup>th</sup> Nov. 2015.
6. Meeting with Dr. Ramachandran (Former Director of BITS Pilani, Dubai campus) on 8<sup>th</sup> Mar. 2015.
7. Prof. P. N. Rao (retired from IIT Delhi) interacted with faculty members of Mechanical Engg. Dept. in the month of July 2015.
- 8.

**x. Major maintenance, renovations or new construction reports:**

- 1) Aluminium partition for Creep Testing Machine (Approx. Cost: Rs. 62,000/-)
- 2) Dark Room for NDT Test (Approx. Cost: Rs. 80,000/-)

**xi. Major equipments acquired during the year:**

(Created based on the expenditures of more than 5 lakh)

Sl. No.	Machine	Amount (Rs.)
1	Creep Testing Machine	24,38,210
2	Steam Power Plant	24,35,874
3	DPM 800 with Pressure Sensor adaptor & Tooling Device	12,25,110
4	Convection Drying Machine	9,30,911
5	Radiant Transfer Experiments	8,36,086
6	Mechatronics System Development Kit	7,64,174
7	Test Rig for Evaluating alternate fuels	7,54,749
8	Modular Air Flow Bench	6,70,521

**B3.10.10 Mathematics****Number of faculty members**

Senior Professors, Professors	1
Associate Professors	4
Assistant Professors	11
Lecturers	0
Visiting Faculty	0

Head of the Department: Dr. Bivudutta Mishra

Contact details: Tel: 040-66303532 Email: bivu@hyderabad.bits-pilani.ac.in

Number of PhD Scholars: 04

*\*Department of Mathematics has been supported under DST-FIST grant of Rs. 49.00 Lakhs*

**nn) Sponsored Research activities:****Ongoing projects**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Study on cosmological models of the universe with wet dark fluid in alternative theories of Gravitation	Bivudutta Mishra	UGC	1.9	2014-16
2.	Bianchi type cosmological models in modified theories of gravitation	Bivudutta Mishra	SERB-DST	11.088	2014-17

**Projects sanctioned during the year**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
1.	Construction of arbitrary tensor networks using cross approximation	N. Kishore Kumar	NBHM	2.83	2015-2018

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount	Duration
2.	Spectral element methods for elliptic and parabolic interface problems in $R^2$ on parallel computers.	N. Kishore Kumar	NBHM	13.59	2015-2018

**oo) Publications:**

1. B.Mishra, P.K.Sahoo & Srikanth Suresh, Non-existence of perfect dark energy fluid in Bianchi type-IV space time, *Astrophysics and Space Science*, 358(7), 1-3, 2015.
2. B.Mishra, P.K.Sahoo & Ch.B. Siddarth Varma, Dark Energy Cosmological Model for Bianchi Type III space-time with perfect fluid, *International Journal of Pure and Applied Mathematics*, 99 (1), 109-121, 2015.
3. S.K. Tripathy, D. Behera & B.Mishra, Unified dark fluid in Brans-Dicke theory, *The European Physical Journal C*, 75:149, 1-11, 2015.
4. P.K. Sahoo & B. Mishra, Higher Dimensional Bianchi Type-III universe with strange quark matter attached to string cloud in general relativity, *Turkish Journal of Physics*, 39, 43-53, 2015.
5. P.K. Sahoo, B.Mishra & S.K. Tripathy, Kaluza-Klein cosmological model in  $f(R; T)$  gravity with  $\lambda(T)$ , *Indian Journal of Physics*, DOI: 10.1007/s12648-015-0759-8., 2015.
6. S.K.J. Pacif & B.Mishra, FLRW non-singular cosmological model in general relativity, *Research in Astronomy and Astrophysics*, 15(12), 2141-2150, 2015.
7. S.K. Tripathy, B. Mishra, G.K. Pandey, A.K. Singh, T. Kumar & S.S. Xulu, Energy and momentum of Bianchi type  $V_h$  Universe, *Advances in High Energy Physics*, Article ID 705262, 1-8, 2015.
8. B.Mishra, P.K. Sahoo & S. Tarai, Non-static cosmological model in  $f(R,T)$  gravity, *Astrophysics and Space Science*, 359 (15), 2015.
9. B. Mishra & S.K. Tripathy, Anisotropic dark energy model with a hybrid scale factor, *Modern Physics Letter A*, 30(36), 1550175(1-13), 2015.
10. D. Ghosh & D. Chakraborty, A Method for Capturing the Entire Fuzzy Non-dominated Set of a Fuzzy Multi-criteria Optimization Problem, *Fuzzy Sets and Systems*, 272, 1 – 29, 2015.
11. Jagan Mohan Jonnalagadda, Analysis of a System of Nonlinear Fractional Nabla Difference Equations, *International Journal of Dynamical Systems and Differential Equations*, 5(2), 149 – 174, 2015.
12. N.Shobanadevi & J.Jagan Mohan, Analysis of Discrete Mittag – Leffler Functions, *International Journal of Analysis and Applications*, 7(2), 129 – 144, 2015.
13. Jagan Mohan Jonnalagadda, Analysis of Nonlinear Fractional Nabla Difference Equations, *International Journal of Analysis and Applications*, 7 (1), 79 – 95, 2015.
14. J.Jagan Mohan, Variation of Parameters for Nabla Fractional Difference Equations, *Novi Sad Journal of Mathematics*, 44(2), 149 – 159, 2015.
15. K. Venkatratnam, B. Krishnamurthy & S. Ramesh, An Empirical Rate Constant Based Model to Study Capacity Fading in Lithium Ion Batteries, *International Journal of Electrochemistry* (accepted for publication), 2015.
16. K. Venkatratnam, P. Raja Sekhara Rao & P .Lalitha, Delay Independent Stability of Co-operative and Supportive Neural Networks, *Nonlinear Dynamics and Systems Theory*, 15 (2), 184–197, 2015.
17. M. Kumar, P. Powduri & A. Reddy , An RGB image encryption using diffusion process associated with chaotic map, *Journal of Information Security and Applications*, 21, 20-30, 2015.
18. P.K. Sahoo & M. Sivakumar, LRS Bianchi type-I cosmological model in  $f(R,T)$  theory of gravity with  $\Lambda(T)$ , *Astrophysics and Space Science*, 357(1):60, 1-12, 2015.
19. P. K. Sahoo, K.L. Mahanta, D. Goit, A.K. Sihna, S.S. Xulu, U.R. Das, A. Prasad & R. Prasad, Einstein energy-momentum complex for a phantom black hole metric, *Chinese Phys. Lett.* 32(2), 020402, 2015.



20. Madhu P Mamidala, M. Kalikiri, Praveen K. PTV, OmSai R. Vallamkonda, Rajesh N & Vidya Rajesh, Consanguinity in India and its association with Autism Spectrum Disorder, *Autism Research*, 8 (2), 224-228, 2015.
21. T Raja Rani, T S L Radhika & Rajendar P, Comparison of HAM and Numerical solutions for a free convection problem with variable fluid properties, Heat source / sink and Radiation, *Journal of Information and Optimization Sciences* (accepted for publication), 2015.
22. T S L Radhika & T Raja Rani, Pulsatile flow of micropolar fluid in an elastic tube – a model developed for estimating arterial stiffness, *Asian Journal of Mathematics and Computer Research* (accepted for publication), 2015.
23. T S L Radhika, Aditya A, Rohit P, Comparison of ham and exact solutions for the problem of couple stress fluid flow in a circular pipe, *American Journal of Applied Mathematics And Mathematical Sciences* (accepted for publication), 2015.
24. T S L Radhika, T K V Iyengar, Stokes flow of an incompressible couple stress fluid past a porous spheroid, *Indian Journal of Mathematics and Mathematical Sciences* (accepted for publication), 2015
25. T K V Iyengar, T S L Radhika, Stokes Flow Of An Incompressible Micropolar Fluid Past A Porous Spheroid, *Far East Journal of Applied Mathematics*, 90 (2), 115-147, 2015.
26. T K V Iyengar, T S L Radhika, Couple Stress Fluid Past A Porous Spheroidal Shell With Solid Core Under Stokesian Approximation, *Journal of Scientific research and reports*, 6 (1), 43-60, 2015
27. D. Ghosh and D. Chakraborty, Analytical Fuzzy Plane Geometry III, *Fuzzy Sets and Systems* (accepted for publication), 2015.

**pp) Conferences attended/papers presented:**

1. S. K. Vishwakarma, presented paper on "On Love type wave in an anisotropic layer over an orthotropic half space" at the 7th National conference on wave mechanics and vibration, organized by department of Applied Mathematics, ISM Dhanbad during Dec 21-23, 2015.
2. D. Ghosh, presented paper on "Newton Method for Solving Interval Optimization Problems" at the 9th International conference of IMBIC, Kolkata during Dec 21-23, 2015.
3. P. K. Sahoo, presented paper entitled "Anisotropic Bianchi type III cosmological model in  $f(R, T)$  gravity" at the International Conferences on General Relativity (ICGR-2015), Dept. of Mathematics, Sant Gadge Baba Amravati University, Amravati, India, during Nov 25-28, 2015.
4. B.Mishra, presented paper entitled "Pressure Anisotropy and Dark Energy Cosmological Models in Scale Invariant Theory" at the 8<sup>th</sup> International Conference on Industrial and Applied Mathematics (ICIAM-2015), CNCC, Beijing, China during Aug 10-14, 2015.
5. J. Jagan Mohan, presented paper on "Solutions of Fractional Nabla Difference Equations - Existence & Uniqueness in "at the International Conference on Difference Equations and Applications (ICDEA - 2015)", Bialystok Institute of Technology, Poland during July19 – 25, 2015.
6. P.T.V. Praveen Kumar, presented paper entitled "Optimization of Culture Variables for the production of a Cytotoxic Yellow Pigment from *Streptomyces Griseoaurantiacus* JUACT01 Using Response Surface Methodology" at the International Conference ICMBAA-2015, Department of Applied Mathematics, Aligarh Muslim University, India during June 4- 6, 2015.
7. A. Ramu, presented paper entitled "Similar solutions of spherical shocks waves – effect of viscosity" at the International Conference ICMBAA-2015, Department of Applied Mathematics, Aligarh Muslim University, India during June 4- 6, 2015.

**qq) Invited Talks given by BITS faculty:**

1. A. Nemili, delivered a talk on "Discrete Adjoint based Optimal Active Separation Control on High-Lift Configurations", 7th Symposium on Applied Aerodynamics and Design of Aerospace Vehicles (SAROD 2015) at Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram, India during Dec 2-5, 2015.
2. B. Mishra, delivered an invited talk entitled "Dark Energy Cosmological Model with Hybrid Scale Factor", International Conference on General Relativity, Department of Mathematics, S.G.B. Amravati University, Amravati during Nov. 25-28, 2015.

3. B. Mishra, delivered an invited talk on "Cosmological Model with Dark Energy in Scale Invariant Theory" at the International Conference on Mathematical Sciences (ICMS-2015), Department of Mathematics, S.V. University, Tirupati during Jul 13-15, 2015.
4. Sumit K. Vishwakarma, delivered a talk on "Rayleigh surface waves in orthotropic medium" at Harbin Engineering University, Harbin China on June 26, 2015.
8. A. Ramu, delivered a talk on "Similarity solution to shock waves" at the International Conference ICMBAA-2015, Department of Applied Mathematics, Aligarh Muslim University, India during June 4- 6, 2015.
9. A. Ramu, delivered a talk on "Non-linear waves and application" at the UGC sponsored national level seminar on recent advances in Mathematics and Applied Mathematics, Bahavan's new science college, Hyderabad in August, 2015.

**rr) Invited talks arranged in the department:**

1. Prof. Kumaresan, University of Hyderabad, delivered a talk on "Geometry and the Implicit function Theorem", on March 09, 2015.
2. Prof. V. Kannan, University of Hyderabad, delivered a talk on "Beauty of Mathematics" on August 24, 2015.

**ss) Awards and recognitions won by faculty and students.**

**tt) Faculty Development, International Collaboration & Industry Immersion**

1. Dr. N. Kishore Kumar visited Max-planck Institute for Mathematics in the Science, Leipzig, Germany during May 18, 2015 to July 03, 2015 for research in collaboration on "tensor and decomposition".
2. Dr. Sumit Kumar Vishwakarma visited Harbin engineering university, Harbin, china during May 25-July 11, 2015 for research in collaboration on "Seismic wave propagation".
3. Dr. Manish Kumar visited University of Central Florida, Orlando, USA during July 12-16, 2015 for research in collaboration on "Image Processing and Image Encryption".

**uu) Significant new equipments/experimental facility added during the year:**

**vv) Departmental association/club activities:**

AXIOM, departmental association organized following events in 2015:

*Date:* 9th Oct 2015

*Event name:* Mathefia (An event to solve problems from various discrete math like combinatorics, Boolean, logic and recurrence relations)

*Event name:* Paper Presentation (Presenting papers on various interesting topic)

*Date:* 10th Oct 2015

*Event name:* Cubing Atmosphere (Nine categories of cubing competitions in association with World Cube Association)

*Event name:* nCrypton ( A cryptography event with problems based on the classical ciphers used in World War 2)

*Date:* 11th Oct 2015

*Event name:* Boxed-In (With box puzzles like sudoku, kakuro etc.)

*Event name:* Logica (Mental ability event with problems from reasoning, geometric patterns and probability.)

**ww) Major maintenance, renovations or new construction reports:**

**xx) Major equipments acquired during the year:**

**B3.10.11 Pharmacy****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>02</b>
<b>Associate Professors</b>	<b>03</b>
<b>Assistant Professors</b>	<b>05</b>
<b>Lecturers</b>	<b>00</b>
<b>Visiting Faculty</b>	<b>00</b>

**Head of the Department:** Shrikant Y Charde

Contact details: 040 66303637

**Number of PhD Scholars:** 35

**Sponsored Research activities:****Ongoing projects:**

1	Drug discovery of inhibitors of the Protease of Peripheral Macrophages and Microglial cells in spinal cord for the treatment of neuropathic pain	Prof. P Yogeewari	DST, New Delhi	3978300	2012-2015
2	Transcutaneous delivery of macromolecules using layer-by-layer assembly to treat skin conditions	Dr. Vamsi Krishna Venuganti	DST, New Delhi	2300000	2012-2015
3	Design and synthesis of pharmacophoric hybrids as potential leads for the treatment of neuropathic pain	Prof. P Yogeewari	CSIR, New Delhi	2028000	2012-2015
4	Investigation of Natural Coumarinolignans and Their Newer Synthetic Analogs as Cyclooxygenase (COX-2) and Tumor necrosis factor (TNF- $\alpha$ ) inhibitory agents in Rheumatoid Arthritis	Dr. Sajeli Begum	CSIR, New Delhi	2102000	2012-2015
5	Development and analysis of novel inhibitors against M. tuberculosis GlmU.	Prof.D.Sriram	CSIR, New Delhi	3956820	2012-2015
6	Structure based rational design and synthesis of inhibitors for various Enzymes of HIV	Prof.D.Sriram	DBT, New Delhi	5617400	2012-2015
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, New Delhi	6192000	2014-2017
8	Non -Invasive Delivery of siRNA to treat Melanoma	Dr. Vamsi Krishna Venuganti	DBT, New Delhi	2284800	2014-2017
9	Enzymes from Purine and Pyrimidine Biosynthetic pathway as targets for the development of Mycobacterium tuberculosis drugs	Prof. P. Yogeewari	DBT, New Delhi	4822990	2014-2017
10	Cell Penetrating Peptide Octa-Arginine anchored, Multifunctional poly(amidoamine)Dendrimer to Promote delivery of chemotherapeutics in cancer	Dr. Swati Biswas	DBT, New Delhi	3703695	2014-2017

11	Design, Characterization and Pharmacokinetic Evaluation of Nanocarriers for Antiretroviral Drug Delivery in the Effective Treatment of HIV/AIDS	Prof. Punna Rao	DST, New Delhi	2310000	2012-2015
12	Development of new antiepileptic leads to suppress hippocampal leads to suppress hippocampal epileptic seizures	Prof. P. Yogeewari	DST, New Delhi	774000	2012-2015
13	Transcutaneous delivery of liposomesirna complex to treat skin cancer	Dr. Vamsi Krishna Venuganti	DST, New Delhi	2926000	2013-2016
14	Development of Novel Compounds for the Treatment of Neural Complications of Diabetes	Prof. P. Yogeewari	DST, New Delhi	604000	2014-2017
15	D - a-Tocopherol conjugated co-polymer based micelles for improved delivery of chemotherapeutics with reversal of multiple drug resistance	Dr. Swati Biswas	DST, New Delhi	2240000	2014-2017
16	Structured-based Design of Orphan Nuclear Receptor Modulators to treat Diabetes and its complications by targeting RORalpha and Rev-erbalpha	Prof. P. Yogeewari	ICMR, New Delhi	2161600	2014-2016
17	Studies on Cell Lines as Model for Predicting In Vitro Buccal Permeation of Various Classes of Drugs and its Co-relation with In Vivo Data.	Prof. Shrikant Yashwant Charde	DST New Delhi	2400000	2012-2015
18	Daewoong Pharmaceutical Co., Ltd	Prof. Shrikant Yashwant Charde & Prof. Punna Rao Ravi	Daewoong Pharmaceutical Co., Ltd, Hyderabad	527080	2014-2015

#### Projects sanctioned during the year

S. No	Title of Project	Name of PI	Year of Sanction	Funding Agency	Amount in Rs.
1	Mycobacterium tuberculosis acetyl coenzymes a carbonylase inhibitors: stucture based drug design, synthesis and biological evaluation	Prof. D. Sriram	2015	DST-Indo Polish	1189000
2	Turnor targeted nanomedicines for Photodynamic therapy	Dr. Swati Biswas	2015	DST-Indo-Belarus	958000
3	Pharmacological evaluation of novel double stranded RNA dependent rotein kinase (PKR) inhibitors for diabetic cardiomyopathy	Dr. Arti Dhar	2015	CSIR	716000
4	UK-India Centre for Advanced Technology for Minimization of indiscriminate use of Antibiotics (UKICAT-MA)	PI - Dr. Prashant Garg (LVPEI), Co-PI - Venkata Vamsi (BITS Hyderabad)	2015	DBT - MRC	3500000
5	Design synthesis and biological evaluation of Mycobacterium tuberculosis serine/theonine protein kinase B (PknB) inhibitors	Prof. D. Sriram	2015	DST	2761000

S. No	Title of Project	Name of PI	Year of Sanction	Funding Agency	Amount in Rs.
6	Role of double stranded RNA dependent protein kinase (PKR) in hypertension Mechanism and prevention	Dr. Arti Dhar	2015	DST	2604000
7	Aripiprazole Sustained Release Injectable Depot Formulation	Dr. Swati Biswas Dr. Balaram Ghosh	2015	Daewoong Pharmaceuticals	2200000
8	Design and Development of Isoform Selective HDAC3 Inhibitors for the Enhancement of Long-term Memory	Dr. Balaram Ghosh	2015	Additional Competitive Grant, BITS Pilani	900000
9	Regulation of IL-1beta in neuropathic pain: role of NALP3 inflammasome, histone deacetylase and xanthine oxidase.	Dr. Onkar Kulkarni	2015	Additional Competitive Grant, BITS Pilani	1000000
10	Evaluation of Novel Pharmacological Interventions Targeted at Methylglyoxal in Diabetic Cardiomyopathy	Dr. Arti Dhar	2015	Additional Competitive Grant, BITS Pilani	1000000

#### Publications:

- Discovery of novel lysine  $\gamma$ -aminotransferase inhibitors: An intriguing potential target for latent tuberculosis. P.B. Devi, J.P.S. Devi, S.S. Kakan, S. Saxena, V.U. Jeankumar, V. Soni, H.S.A. Raju, P. Yogeewari, D. Sriram. *Tuberculosis (Edinb)*. 95, 786-794, 2015.
- Depletion of M. tuberculosis GlmU from Infected Murine Lungs Effects the Clearance of the Pathogen. V. Soni, S. Upadhayay, P.S. Devara, G. Samla, A. Singh, P. Yogeewari, D. Sriram, V.K. Nandicoori. *PLoS Pathog*. 11(10): e1005235, 2015.
- The Small Molecule Indirubin-3'-Oxime Inhibits Protein Kinase R: Antiapoptotic and Antioxidant Effect in Rat Cardiac Myocytes. M.P. Udumula, B. Medapi, I. Dhar, A. Bhat, K. Desai, D. Sriram, A. Dhar. *Pharmacology*. 97, 25-30, 2015.
- Structural Models for the Design of PKMzeta Inhibitors with Neurobiological Indications P. Purkayastha, R. Alokam, A. Malapati, D. Sriram, P. Yogeewari. *Mol. Inf*. 34, 665-678, 2015.
- Targeting NAMPT for Therapeutic Intervention in Cancer and Inflammation: Structure-Based Drug Design and Biological Screening. V.K. Pulla, D.S. Sriram, V. Soni, S. Viswanadha, D. Sriram, P. Yogeewari. *Chem Biol Drug Des*. 86, 881-894, 2015.
- Sugar-boronate ester scaffold tethered pyridyl-imine palladium(ii) complexes: synthesis and their in vitro anticancer evaluation. E.R. Reddy, R. Trivedi, A.V. Sarma, B. Sridhar, H.S.A. Raju, D. Sriram, P. Yogeewari, N. Nagesh. *Dalton Trans*. 44, 17600-17616, 2015.
- One-pot synthesis of new triazole-Imidazo[2,1-b][1,3,4]thiadiazole hybrids via click chemistry and evaluation of their antitubercular activity. J. Ramprasad, N. Nayak, U. Dalimba, P. Yogeewari, D. Sriram. *Bioorg. Med. Chem. Lett*. 25, 4169-4173, 2015.
- Design of novel dispirooxindolopyrrolidine and dispirooxindolopyrrolothiazole derivatives as potential antitubercular agents. C. Mhiri, S. Boudriga, M. Askri, M. Knorr, D. Sriram, P. Yogeewari, F. Nana, C. Golz, C. Strohmann. *Bioorg Med Chem Lett*. 25, 4308-4313, 2015.
- Antinociceptive properties of the aqueous and methanol extracts of the stem bark of *Petersianthus macrocarpus* (p. Beauv.) Liben (Icycythidaceae) in mice. F.D.T. Bomba, B. A. Wandji, B.N. Piegang, M.D. Awouafack, D. Sriram, P. Yogeewari, A. Kamanyi, T.B. Nguelefack. *J. Ethnopharmacol*. 174, 66-73, 2015.
- Design and Biological Evaluation of Furan/Pyrrrole/Thiophene-2-Carboxamide Derivatives as Efficient DNA GyraseB Inhibitors of *Staphylococcus aureus*. R. Janupally, B. Medapi, P. B. Devi, P.S. Devara, V.U. Jeankumar, P. Kulkarni, P. Yogeewari, D. Sriram. *Chem Biol Drug Des*. 86, 918-925, 2015.
- 4-Aminoquinoline Derivatives as Novel *Mycobacterium tuberculosis* GyrB Inhibitors: Structural Optimization, Synthesis and Biological Evaluation. M. Brahmam, P.S. Devara, J. Renuka, J.P.S. Devi, P. Yogeewari, D. Sriram. *Eur. J. Med. Chem*. 103, 1-16, 2015.

12. Design and synthesis of novel quinoline-aminopiperidine hybrid analogues as Mycobacterium tuberculosis DNA gyrase B inhibitors. B. Medapi, J. Renuka, S. Saxena, J.P.S. Devi, R. Medishetti, P. Kulkarni, P. Yogeeswari, D. Sriram. *Bioorg. Med. Chem.* 23, 2062-2078, 2015.
13. Enabling the (3 + 2) cycloaddition reaction in assembling newer anti-tubercular lead acting through the inhibition of the gyrase ATPase domain: lead optimization and structure activity profiling. V.U. Jeankumar, R.S. Reshma, R. Janupally, S. Saxena, J.P.S. Devi, B. Medapi, P. Kulkarni, P. Yogeeswari, D. Sriram. *Org. Biomol. Chem.* 13, 2423-2431, 2015.
14. Exploring the gyrase ATPase domain for tailoring newer anti-tubercular drugs: hit to lead optimization of a novel class of thiazole inhibitors. V.U. Jeankumar, S. Kotagiri, R. Janupally, P. S. Devara, J.P.S. Devi, R. Medishetti, P. Kulkarni, P. Yogeeswari, D. Sriram. *Bioorg. Med. Chem.* 23, 588-601, 2015.
15. Design and development of novel Mycobacterium tuberculosis L-alanine dehydrogenase inhibitors. S. Saxena, G. Samala, J.P.S. Devi, P.B. Devi, P. Yogeeswari, D. Sriram. *Eur. J. Med. Chem.* 92, 401-414, 2015.
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17. Development of 2-amino-5-phenylthiophene-3-carboxamide derivatives as novel inhibitors of Mycobacterium tuberculosis DNA GyrB domain. S. Saxena, G. Samala, J. Renuka, J.P.S. Devi, P. Yogeeswari, D. Sriram. *Bioorg. Med. Chem.* 23, 1402-1412, 2015.
18. Structure based virtual screening as a tool for the identification of novel inhibitors against Mycobacterium tuberculosis 3-dehydroquinate dehydratase. G.O. Petersen, S. Saxena, J. Renuka, V. Soni, P. Yogeeswari, D.S. Santos, C.V. Bizarro, D. Sriram. *J. Mol. Graph. Model.* 60, 124-131, 2015.
19. A Review on GABA/Glutamate Pathway for Therapeutic Intervention of ASD and ADHD. P. Purkayastha, A. Malapati, P. Yogeeswari, D. Sriram. *Curr. Med. Chem.* 22, 1850-1859, 2015.
20. Pyridoxal-phosphate dependent mycobacterial cysteine synthases: Structure, mechanism and potential as drug targets. R. Schnell, D. Sriram, G. Schneider. *Biochim. Biophys. Acta.* 1854, 1175-1183, 2015.
21. New indole-isoxazolone derivatives: Synthesis, characterisation and in vitro SIRT1 inhibition studies. N. Panathur, N. Gokhale, U. Dalimba, P.V. Koushik, P. Yogeeswari, D. Sriram. *Bioorg. Med. Chem. Lett.* 25, 2768-2772, 2015.
22. Synthesis and biological evaluation of phaitanthrin congeners as anti-mycobacterial agents. A. Kamal, B.V. Reddy, B. Sridevi, A. Ravikumar, A. Venkateswarlu, G. Sravanthi, J.P.S. Devi, P. Yogeeswari, D. Sriram. *Bioorg. Med. Chem. Lett.* 25, 3867-3872, 2015.
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27. Design and synthesis of novel carbazole tethered pyrrole derivatives as potent inhibitors of Mycobacterium tuberculosis. G. Surineni, P. Yogeeswari, D. Sriram, S. Kantevari. *Bioorg. Med. Chem. Lett.* 25, 485-491, 2015.
28. Synthesis and biological evaluation of new imidazo[2,1-b][1,3,4]thiadiazole-benzimidazole derivatives. J. Ramprasad, N. Nayak, U. Dalimba, P. Yogeeswari, D. Sriram, S.K. Peethambar, R. Achur, H.S. Kumar. *Eur. J. Med. Chem.* 95, 49-63, 2015.

29. Synthesis and anti-mycobacterial activity of 2-chloronicotinaldehydes based novel 1H-1,2,3-triazolybenzohydrazides. P. Suman, C. Dayakar, K. Rajkumar, B. Yashwanth, P. Yogeewari, D. Sriram, J.V. Rao, B.C. Raju. *Bioorg. Med. Chem. Lett.* 25, 2390-2394, 2015.
30. Structure-based design of diverse inhibitors of Mycobacterium tuberculosis N-acetylglucosamine-1-phosphate uridylyltransferase: combined molecular docking, dynamic simulation, and biological activity. V. Soni, P. S. Devara, D. Sriram, Nandicoori, OSDD Consortium, S. Kumar, V.K. Sriram, Nandicoori, P. Yogeewari. *J. Mol. Model.* 21, 174, 2015.
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32. Synthesis, molecular docking and anti-mycobacterial evaluation of new imidazo[1,2-a]pyridine-2-carboxamidederivatives. G. Jose, T.H.S. Kumara, G. Nagendrappa, H.B. Sowmya, D. Sriram, P. Yogeewari, J.P.S. Devi, T.N.G. Row, A.A. Hosamani, P.S.S. Ganapathy, N.Chandrika, L.V. Narendra. *Eur. J. Med. Chem.* 89, 616-627, 2015.
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34. Discovery of Rimonabant and its potential analogues as anti-TB drug candidates J. M. Gajbhiye, N. A. More, M. D. Patil, R. Ummanni, S. S. Kotapalli, P. Yogeewari, D. Sriram, V. H. Masand. *Med. Chem. Res.* 24, 2960-297, 2015.
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37. Effect of Feature Selection on Kinase Classification Models. P. Purkayastha, A. Rallapalli, N. L. Bhanu Murthy, A. Malapati, P. Yogeewari, D. Sriram. *Comput. Intell. Med. Inform. SpringerBriefs in App. Sci. Tech.* 81-86, 2015.
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57. Current trends in using polymer coated gold nanoparticles for cancer therapy Muddineti OS, Ghosh B, Biswas S.. *Int Journal of Pharmaceutics.*, 2015, 484 (1-2), 252-267. (IF. 3.650).
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#### Conferences attended/papers presented:

1. Gaus, A., Mishra, R.K., Alokam, R., Singhal, S.M., Sriram, D., Yogeewari, P., Evaluation of 2,6-diaminopyrimidines as novel Rho kinase inhibitors using animal models of treatment of neurological disorders. 66th Indian Pharmaceutical Congress: India- Pharmacy of the World, 23-25 January 2015, Hyderabad.
2. Gangadhar, M., Alokam, R., Sriram, D, Yogeewari, P, MG2, a novel semicarbazone derivative, reduces neuropathic pain by inhibiting the expression levels of neuroinflammatory mediators. 2015 Keystone Symposia: C8: Pathways of Neurodevelopmental Disorders, 16-20 March 2015, California, USA.
3. Invited lecture: Polymeric nano-micellar systems for the delivery of chemotherapeutic drugs in cancer. Swati Biswas, International Conference on Nanostructured polymeric materials and polymer nanocomposites at Mahatma Gandhi University, Kottayam, India, November, 13-15 th November, 2015.
4. Short invited lecture: Development of transferrin functionalized poly(ethylene glycol)/poly(lactic acid) copolymeric micelles as a potential delivery system. Preeti Kumari, Balaram Ghosh, Swati Biswas. International Conference on Nanostructured polymeric materials and polymer nanocomposites at Mahatma Gandhi University, Kottayam, India, November, 13-15 th November, 2015.
5. Poster: Omkara Swami Muddineti, Preeti kumari, Balaram Ghosh, Swati Biswas. Vitamin E-Conjugated Lipid Based Polymeric Micelles for Improved Delivery of Chemotherapeutics in Cancer, 42nd Annual Meeting & Exposition of the Controlled Release Society, Edinburgh, Scotland, July 26-29, 2015.
6. Poster: Omkara Swami Muddineti, Balaram Ghosh, Swati Biswas. D- $\alpha$ -tocopherol conjugated co-polymer based polymeric micelles for improved delivery of chemotherapeutics with reversal of multiple drug resistance. International Symposium on "Nanotechnology & Cancer Theranostics" (ISNACT-2015) held in I.I.T. Bombay, February 19-21, 2015.
7. 5. Development of Isoform Selective HDAC3 inhibitors as Long-Term Memory Enhancers: Prakruti Trivedi, Swati Biswas, Balaram Ghosh; 66th Indian Pharmaceutical Congress at Hyderabad, 23rd to 25th January 2015.
8. 6. Preparation, characterization and in vitro evaluation of methoxy polyethylene glycol-poly(lactide) (MPEG-PLA) polymeric micelles as nanocarrier for the delivery of chemotherapeutic drug curcumin in cancer: Preeti Kumari., Prit Lakhani., Balaram Ghosh., Swati Biswas; 66th Indian Pharmaceutical Congress at Hyderabad, 23rd to 25th January 2015.
9. 7. One step Synthesis, characterization, stability and PEGylation of polymer stabilized gold nanoparticles for chemotherapeutics: Omkara Swami M., Srinivas Ajarapu, Balaram Ghosh, Swati Biswas; 66th Indian Pharmaceutical Congress at Hyderabad, 23rd to 25th January 2015.
10. Gaus, A., Mishra, R.K., Alokam, R., Singhal, S.M., Sriram, D., Yogeewari, P, Evaluation of 2,6-diaminopyrimidines as novel Rho kinase inhibitors using animal models of treatment of neurological disorders. 66th Indian Pharmaceutical Congress: India- Pharmacy of the World, 23-25 January 2015, Hyderabad, India.
11. Gangadhar, M., Alokam, R., Sriram, D, Yogeewari, P, MG2, a novel semicarbazone derivative, reduces neuropathic pain by inhibiting the expression levels of neuroinflammatory mediators. 2015 Keystone Symposia: C8: Pathways of Neurodevelopmental Disorders, 16-20 March 2015, California, USA.
12. Bobesh, K.A., Renuka, J., Sridevi, J.P., Yogeewari, P., Sriram, D, Substitution of the N-linked aminopiperidine class with piperazine moiety to the mycobacterial gyrase domain to reduce the hERG toxicity profile. National Conference on Drug Discovery and Development in Chemistry- Applications in Pharma Industry (DDDC-2015), 14-15 September 2015, Tirupati, India.
13. Brahmam, M., Renuka, J., Sridevi, J.P., Yogeewari, P., Sriram.D, Development of novel quinolone p-phenylenediamine hybrid analogues mycobacterial DNA gyrase inhibitors to improve the cardio safety profile. National Conference on Drug Discovery and Development in Chemistry- Applications in Pharma Industry (DDDC-2015), 14-15 September 2015, Tirupati, India.
14. Srilakshmi, R.R., Sridevi, J.P., Yogeewari, P., Sriram, D, Design, Synthesis and Biological evaluation of Benzothiazole derivatives as Mtb Lysine aminotransferase Inhibitors. National Conference on Drug Discovery and Development in Chemistry- Applications in Pharma Industry (DDDC-2015), 14-15 September 2015, Tirupati, India.
15. Srikanth, R., Alokam, R., Gangadhar, M., Susruth, J., Sriram, D, Yogeewari, P, Design, Synthesis and Pharmacological evaluation of novel 1,3,5-triazine-2,4,6-triamine derivatives as potent and selective A2A adenosine receptor antagonists in the treatment of epilepsy. 7th Asian Association of Schools of Pharmacy (AASP) Conference, 30 October-2 November 2015, Taipei, Taiwan.

16. Bobesh, K.A., Reshma, S.R., Nikhila, M., Yogeewari, P, Sriram, D, N-Benzyl-3,3-dimethoxyhexahydro-2H-furo[3,2-b]pyrrol-6-yl) methanesulfonamides as mycobacterial DNA gyrase inhibitors. Conference on Drug Discovery and Development: Global scenario-Indian Perspective, 20-21 November 2015, NIPER, Hyderabad.
17. Reshma, S.R., Shalini, S., Yogeewari, P, Sriram, D, Development of quinoline derivatives as potent Mtb lysine aminotransferase inhibitors targeting latent tuberculosis. Conference on Drug Discovery and Development: Global scenario-Indian Perspective, 20-21 November 2015, NIPER, Hyderabad.
18. Brahmam, M., Bobesh, K.A., Mikila, M., Reshma, S.L., Sriram, D, Yogeewari, P, Development of 1,2,3-triazolo quinoline hybrid analogues as mycobacterial DNA gyrase inhibitors. Conference on Drug Discovery and Development: Global scenario-Indian Perspective, 20-21 November 2015, NIPER, Hyderabad.
19. Shubham, D., Alokam, R., Srikanth, R., Piyush, B., Sriram, D, Yogeewari, P, Targeting orphan nuclear receptor RORA as a therapeutic option for Autism Spectrum Disorder. International Conference on "Cutting edge Pharmacology: Contemporary Issues and Future Challenges" & 48th Annual Conference of Indian Pharmacological Society, 18-20 December 2015, Rajkot, Gujarat.
20. Raut, P.P., Charde, S.Y., Adhokshaja CSS, and Supekar A.P., Modified Release Pellets for Stomach Site Specific Delivery of Levodopa and Carbidopa Combination. 14th International Symposium on Advances in Technology and Business Potential of New Drug Delivery Systems, Mumbai, India, 2015.
21. Raut, P.P., and Charde, S.Y. , Formulation and Optimization of Gastroretentive Delivery System for Levodopa and Carbidopa Combination Using Response Surface Methodology. AAPS-NUS 10th PharmSci @Asia Symposium, Singapore 2015.
22. Raut, P.P., and Charde, S.Y, Design of Modified Release Multi Particulate Drug Delivery System for Antiparkinson's Drugs. 5th International Conference and Exhibition on Pharmaceutics & Novel Drug Delivery Systems. Dubai, UAE, 2015.
23. Charde, S.Y., and Raut, P.P, Design of Modified Release Multi-Particulate Floating Drug Delivery System for Levodopa and Carbidopa Combination Based on a Multilayer Structure. Accepted for presentation at the 42nd Annual Meeting and Exposition of the Controlled Release Society, Edinburgh, Scotland, 2015.

**Invited Talks given by BITS faculty:**

P. Yogeewari	Distinguished Speaker and Panelist at "Drug Discovery Conference: Showcasing India's Innovation Pipeline" BIOASIA2015 on 3rd February 2015, HICC, Hyderabad
P. Yogeewari	Invited Speaker on "Research Ethics, IPR and Research Funding Opportunities" delivered at the 2-day "Research Methodology Workshop" organized by Centre of Excellence in Water Resource Management, BITS-Pilani, Hyderabad campus on 3-4 April 2015, Hyderabad, India.
P. Yogeewari	Speaker and Panelist at "Multi-Disciplinary Research (MDR) Talks" organized by BITS EMBRYO, BITS-Pilani, Hyderabad campus on 10th April 2015, Hyderabad, India.
P. Yogeewari	Invited Speaker on "Sponsored Research Grants: Importance and Logisitcs" delivered for Research Methodology Workshop as a part of the 1st Telangana Association of Oral and Maxillofacial Surgeons of India, 21 August 2015, Hyderabad, India.
P. Yogeewari	Invited Speaker on "Leveraging Multiple Crystal Structures for Efficient Structure-based Drug Design: An Insight with Case Studies" delivered at theUGC sponsored Short term course on "In-Silico Drug discovery and structure-based drug design in pharmaceutical chemistry", 2 Nov 2015 till 7 Nov 2015, at Centre for Pharmaceutical Sciences, IST, JNTUH, Hyderabad, India
Swati Biswas	Invited speaker on " Polymeric nanomicellar systems for the delivery of chemotherapeutic drugs in cancer" in the conference " Nanostructured Polymeric Materials and Polymer Nanocomposites" during 13-15 th November, 2015 at Kottayam, kerala
Balaram Ghosh	Key note speaker: "Global Prospect of Pharmaceutical Sciences" on 9th April 2015 at MLR institute of Pharmacy, Hyderabad 500 043
Shrikant Charde	Invited Talk on Novel Approaches for Drug Delivery in Bioadhyayan 2015 Organized on January 24, 2015.

**Invited talks arranged in the department:**

- Presenter: Dr. Rajeev Raghuvanshi, Vice President, Differentiated Formulation R&D, Dr. Reddys Laboratories, Hyderabad  
Title of talk: Innovation in Pharma Industry: What Ails us and Responsibility of Educational Institutions  
Date: February 02, 2015
- Presenter: Prof. Krishna Iyer, Professor, Bombay College of Pharmacy  
Title of talk: Drug Metabolism and Pharmacokinetics  
Date: September 21, 2015

**Recognition of Department**

The Tata Trusts, Mumbai identified Department of Pharmacy, BITS Pilani Hyderabad Campus as premier Pharmacy School in India actively involved in teaching and research. The trust decided to offer merit fellowship worth Rs. 1 Lakh per annum to one meritorious students of each year of B. Pharm and M. Pharm.

Bristol Meyers Squibb, a reputed US based Pharmaceutical company, recognized research excellence of Department and have decided to sponsor fee of one M. Pharm student for the entire duration of programme (approximately 4.05 lakhs).

**Faculty Development, International Collaboration & Industry Immersion**

Faculty members of Department are collaborating with

- Rutgers The State University of New Jersey, New Jersey Medical School, Newark, New Jersey, USA
- Instituto Nacional de Ciencia e Tecnologia em Tuberculosis, MCT/CNPq, Porto Alegre, Brazil
- Faculty of Medicine of Porto, Porto, Portugal
- Bogomoletz Institute of Physiology National Academy of Science, Ukraine
- Pasteur Institute, University of Lille, France
- Karolinska Institute, Stockholm, Sweden
- University of Saskatchewan, Canada
- Freie University, Berlin, Germany
- University of Texas Southwestern Medical Center, USA
- Institute of Medical Biology Polish Academy of Sciences, Poland
- Federal University of Pará, Belém, Brazil
- University of KwaZulu-Natal, Durban, South Africa
- Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS), Porto Alegre, RS, Brazil
- Porto University, Portugal
- Bogomoletz Institute of Physiology, Kiev, Ukraine
- Belarusian State University, Belarus

**Significant new equipment/experimental facility added during the year:**

Following major equipment were added to various laboratories of the Department during the year.

Name of Equipment/ instrument	Make & model
Cryostat	Leica CM1520, Leica Microsystems
Inverted fluorescence microscope	Leica Dmi8, Leica Microsystems

**Departmental association/club activities:**

Pharmaceutical association came up with three issues of PROBE magazine during the year 2015. This is a magazine that provides first degree, higher degree and PhD students an opportunity to wise their views on various scientific topics. Association conducted a freshmen orientation program for newly admitted B. Pharm and M. Pharm students.

**Major maintenance, renovations or new construction reports:**

Central Animal Facility was inaugurated in the year 2015. The newly constructed state of art facility occupies around 1000 sq feet area. The facility became fully operation in the month of September 2015. The facility has separate housing facility for rats, rabbits and mice. One room for experimentation on animals and surgery has been made in the facility.

**B3.10.12 Physics****Number of faculty members**

<b>Senior Professors, Professors</b>	<b>01</b>
<b>Associate Professors</b>	<b>02</b>
<b>Assistant Professors</b>	<b>10</b>
<b>Lecturers</b>	<b>-</b>
<b>Visiting Faculty</b>	<b>-</b>

**Head of the Department:** Dr. Aravinda N. Raghavan

**Contact details:**

**Email:** [raghavan@hyderabad.bits-pilani.ac.in](mailto:raghavan@hyderabad.bits-pilani.ac.in)

**Phone:** 040-66303530

**Number of PhD Scholars:**

**Full Time:** 08

**Part-Time:** 02

**yy) Sponsored Research activities:**

Department has Six ongoing projects worth of 1.3 crore INR funded by funding agencies such as CSIR and DST.

**Ongoing projects**

<b>SL No</b>	<b>Project Name</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Sanctioned Amount (Lakhs)</b>	<b>Duration</b>
1	AC Impedance Measurement of Structures of various shapes.	Prof. Souri Banerjee	CSIR	22.26	2013-2016
2	Development of magneto impedance sensor for Bio cells detection.	Dr. V. Satya Narayana Murthy	DST	22.68	2012-2016
3	Investigation of Magneto-optical effects in composite magneto-plasmonic nanostructures for sensing application	Prof. Kannan Ramaswamy	DST	32.70	2013-2016
4	Study of De coherence and Entanglement in Non Linear Systems and Their Application	Dr.KVS Shiv Chaitanya	DST-FT	14.16	2013-2016
5	Gravitational waves from oscillations and instabilities in neutron stars	Dr. Sarmistha Banik	DST-Young Scientist	14.76	2014-2017
6	Probing the dense interiors of neutron stars via gravitational waves	Dr. Neelam Dhanda Batra	DST Women Scientist	24.03	2015-2018

**Projects sanctioned during the year**

SL No	Project Name	Principal Investigator	Funding Agency	Sanctioned Amount (Lakhs)	Duration
1.	Probing the dense interiors of neutron stars via gravitational waves	Dr. Neelam Dhanda Batra	DST Women Scientist	24.03	2015-18

**zz) Publications:**

1. P.Char, S. Banik, D. Bandyopadhyay “ Comparative study of hyperon equations of state in supernova simulations ” The Astrophysical Journal, 809 116, 2015
2. Smruti Smita Lenka, S. Banik, B. Hareesh Gautham “ Nucleosynthesis in neutron star crust ” 10.15415/jnp.2015.22009
3. P.Char, S. Banik “ Comparison of Hyperonic Equations of State for Core Collapse Supernovae Simulations” Recent Trends in the Study of Compact Objects(RETCO-II): Theory and Observation, ASI Conference Series, 2015, Vol. 12
4. M. Naveen Kumar, K.V.S.Shiv Chaitanya, Bindu A. Bambah “ Quantum Entanglement in Coupled Lossy Waveguides Using SU(2) and SU(1, 1) Thermo-Algebras “ In press Journal of Modern Physics 2015
5. K.V.S. Shiv Chaitanya, S. Sree Ranjani, Prasantha K. Panigrahi, R Radhakrishnan and V. Srinivasan “Exceptional Polynomials and SUSY Quantum Mechanics “ Pramana,DOI: 10.1007/s12043-014-0882-7; 2015
6. B. Rajesh Kannan and B. Harihara Venkataraman “Structural and dielectric properties of strontium bismuth samarium tantalate layered perovskites “Ferroelectric Letters, 42 (2015) 18-26 [Publisher : Taylor and Francis]
7. Rahul Nigam “ Tri-generative Stochastic Model of Population Growth “ Journal of Advances in Mathematics, ISSN 2347-1921, Vol 10, No. 2, March 2015
8. Sandeep Aashish and Asrarul Haque “Average Lorentz self-force from electric field lines “ Eur. J. Phys. 36 (2015) 055012
9. A. K. Kapoor “Shape invariant rational extensions and potentials related to exceptional polynomials “ *Int. J. Mod. Phys. A* 30, 1550146 (2015)
10. A. K. Kapoor “ Shape invariant potentials in higher dimensions “ *Annals of Physics* 359 (2015) 125–135

**aaa) Conferences attended/papers presented:**

1. S.P.Vimal, G.Bharat, P.Vinod, Arshdeep Singh Takkar, P.K.Thiruvikraman “ Natural vs. Manmade scene classification using statistics of straight lines “ All India Seminar on Space, Defence and Industrial Applications organized by the Institution of Engineers at Hyderabad, July 10-11, 2015.
2. Nitin Suresh, S.P.Vimal and P.K.Thiruvikraman “Automated Image Enhancement using a modified Sigmoid function” All India Seminar on Space, Defence and Industrial Applications organized by the Institution of Engineers at Hyderabad, July 10-11, 2015.
3. R. Aravinda Narayanan “ Measuring Nanoscale Internal Stress Relaxation to understand unique thermomechanical properties of Polymer Nanocomposites” Conference on Natural Polymers, Bio-Polymers, Bio-Materials, their Composites, Nanaocomposites, Blends, IPNs, Polyelectrolytes and Gels: Macro to Nano Scales (ICNP – 2015): April 10-12, 2015, Kottayam, Kerala, India
4. Sruthi,V, Manav Shah, Anirudh Ramesh, Apoorva Agarwal, Shahela, Devesh, Hari Krishnan,Kannan Ramaswamy “ Light Trapping in Thin Silicon Substrate: Exciting Insights from Aluminum versus Gold Nanoplasmonics Simulations ” Surface Plasmon Photonics (SPP-7) Jerusalem, Israel; 2015
5. S. Banik “Hyperon equation of state and core collapse supernova simulations “Nuclear Physics Meet at Institute of Physics, Bhubaneswar, India, June 2015.
6. Rahul Nigam “Decay of Dyonic Black Holes” BRCORP, Kathmandu, Nepal; 2015
7. Rahul Nigam “Role of Magnetic Field in Structure Formation” Massive Galaxies, AAO, Sydney; 2015
8. B. Rajesh Kannan and B. Harihara Venkataraman “Trivalent Rare Earth Ion Doped Layered Ferroelectric Oxide Ceramic Materials for Electronic Storage Device Applications 8<sup>th</sup> International conference on Materials for Advanced Technologies of Materials Research Society of Singapore, Singapore; 2015

9. B. Rajesh Kannan and B. Harihara Venkataraman “Electrical Properties of Barium Bismuth Samarium Niobate Ferroelectrics for Non-Volatile Random Access Memory Device Application” National Conference on Materials for Energy Conversion and Storage, VIT Chennai, India.; 2015
10. Meenakshi. V “Micro and Nanoscale Patterning using benchtop lithography” National Conference on current trends in soft matter, Central Univ. of Tamil Nadu, Thiruvavur; 2015
11. Y. V. Subba Rao, R. Aravinda Narayanan and Meenakshi. V “Fabrication and Characterization of PVDF microfilms for microfluidic applications” International conference on Recent Advances in Nanoscience and Nanotechnology; 2015

**bbb) Invited Talks given by BITS faculty:**

1. Dr. Sarmistha Banik delivered a talk on "Hyperon equation of state and core collapse supernova simulations" at Nuclear Physics Meet, Institute of Physics, Bhubaneswar, India, June 2015.
2. Dr. Sarmistha Banik delivered a talk on “Nucleosynthesis in decompressed Neutron stars crust matter” at AAPCOS, Saha Institute of Nuclear Physics, Kolkata, India, October 2015.
3. Dr. Rahul Nigam delivered a Talk on “Role of Magnetic Field in Galaxy Formation” at Most Massive Galaxies and their Precursors, Sydney, Australia, Feb, 2015
4. Dr. Meenakshi V delivered a talk in National conference on current trends in soft condensed matter held at Central University of Tamil Nadu, Thiruvavur, 19-20 March 2015 on “Micro and Nanoscale Patterning using benchtop lithography”.
5. Dr. Aravinda N. Raghavan delivered a talk on “*Measuring Nanoscale Internal Stress Relaxation to understand unique thermomechanical properties of Polymer Nanocomposites*”, Fourth International Conference on Natural Polymers, Bio-Polymers, Bio-Materials, their Composites, Nanocomposites, Blends, IPNs, Polyelectrolytes and Gels: Macro to Nano Scales (ICNP – 2015): April 10, 11 & 12, 2015 at Mahatma Gandhi University, Kottayam, Kerala, India.
6. Dr. KVS Shiv Chaitanya delivered a talk at Harish Chandra Research Institute (HRI) Young Quantum 15 Feb 24 - 27 (2015) on “Entanglement in two-site Bose Hubbard Model”.

**ccc) Invited talks arranged in the department:**

1. “Bringing stars down to a lab” by Prof. M. Krishnamurthy, Tata Institute of Fundamental Research, Mumbai, February 28, 2015.

**ddd) Awards and recognitions won by faculty and students:**

1. Ms. Shruthi.V, a fourth year student received travel grant 25,000 INR from BITSAA International.

**eee) Faculty Development, International Collaboration & Industry Immersion**

1. Dr. Rahul Nigam visited to IUCAA as Associate (19<sup>th</sup> July 2015 - 25<sup>th</sup> July 2015)
2. Dr. Sarmistha Banik visited to IUCAA as Associate (May 2015 – June 2015)

**fff) Significant new equipment/experimental facility added during the year:**

1. Atomic-force microscopy (AFM) is a high-resolution imaging instrument which can resolve images at the scale 0.01 nm. Using AFM, it is possible to measure the roughness of a sample surface at a high resolution, to distinguish a sample based on its mechanical properties (for example, hardness and roughness), resolve magnetic domains, and perform a microfabrication of a sample (for example, an atomic manipulation). The apparatus is being used by M.Sc. (Hons.) Physics and research students.
2. Delta mode system with AC and DC current source and nano voltmeter is used to measure low voltages and currents at nano level. The apparatus is being used by M.sc. (Hons.) Physics and research students.
3. PCO's edge 4.2 LT camera system designed for users who require highest quantum efficiency, best 16 bit dynamic range, long exposure times and extremely low readout noise. Scientific CMOS image sensors enable new application areas for scientific imaging, including structured illumination and localization microscopy, dynamic processes in fluorescence microscopy, high contrast imaging in 3D metrology, particle image velocimetry, digital pathology, and a myriad of other imaging solutions. The apparatus is being used by M.Sc. (Hons.) Physics and research students.

**ggg) Departmental association/club activities:**

1. Dr. Rahul Nigam gave Pre-Atmos talk -The Physics of Sci-fi Movies in October 2015
2. Dr. Sashideep Gutti takes care of Physics Association activities.

**hhh) Major maintenance, renovations or new construction reports: Nil**

**iii) Major equipments acquired during the year:**

1. Atomic Force Microscope (AFM)
2. Delta Mode System with AC and DC current source Nano voltmeter
3. PCO's edge 4.2 LT Camera

**B3.11 DIVISION/UNIT/CENTER-WISE ACTIVITY HIGHLIGHTS****Director's International Visits and awards**

Prof V S Rao, Director, BITS Pilani, Hyderabad campus had visited USA during June/July 2015:

June 21: Met Mr Jayan Ramakutty, the Chairman of BITSAA International and Mr Rohit Koul, CEO, BITSAA International Leadership at San Jose

June 22: Visit to NASA. Met MS Jessica Koehne from AMES Research, NASA and Mr. Meyya Meyyappan, Director of the Lab to explore opportunities for BITS to send students to NASA.

July 8: Visited San Jose State University, San Jose, California and met the Deans along with Dr Krishna Saraswat (Stanford) & Prof Diyakant Agarwal (UCSB)

July 8: Met Mr Krishna Sudhir at Abbott Labs for a possible PS station opening and/or research collaboration.

**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 **19** faculty members and **169** research scholars, pursuing Ph. D. programs in identified thrust areas.

There are 18 research projects funded by various National and International funding agencies for about Rs.2,53,16,268. Details of approved research projects are enclosed in **Annexure 6**(Part B3).

**Ph.D. Qualifying Examination**

Ph.D. qualifying examination was conducted at Hyderabad campus during the two semesters of (Feb and Sep) 2015. **33** 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 450 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 has migrated to KOHA Library Management Software for all its housekeeping activities from LIBSYS. 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.

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.

**Acquisition Section**

The Library has a collection of 28100 volumes and 3560 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 4100 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)
- IEEE Explore
- Science Direct
- ACM
- SciFinder
- We are also an Associate Member of INFLIBNET and subscribed to the following Journals:
- JSTORE
- IOP (Institute of Physics)
- Nature

**Journals:** Presently the Library subscribes to 82 printed journals 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 November 2015. 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

### Library Statistics

The Library collection is growing steadily. The following table shows some of the significant statistical data:

1	Current library holdings	28100
2	Average number of books issued per day	165
3	Average number of readers visiting the library per day	940
4	Books added during the year	3560
6	Number of print Journals subscribed	82
7	E journals made available on library site	4110
8	CD-ROM Collection	1255
9	Educational Video/DVD Collection	102
10	Total number of reading seats in the library	450
11	Library membership	4050

### 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



Master CAM software 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 housed in 1800 sqm built up area comprises of the following sections: Machine shop, Welding, Electroplating, Fitting, Smithy, Sheet Metal, Carpentry, Foundry, Metrology & CAM Lab. Major equipment include Vertical Machining Center (Bridgeport VMC GX600), 9 Lathes, 2 Shapers, 1 Radial Drilling Machine, 1 Universal Milling Machine with indexing attachment, 1 Cylindrical Grinding Machine with internal grinding attachment, 1 Tool and Cutter Grinder, 1 Pedestal Grinder, 1 Surface Grinder (HMT make), 1 Slotting Machine, 1 Open-Hearth Furnace for Smithy, 1 Gas-Fired Furnace for Foundry, 5 Wood-Working Lathes, 2 Arc-Welding equipment (1 Rectifier & 1 DC Welding Generator), 1 Oxy-Acetylene gas welding equipment, 1 Gauge Planner for wood works, Electroplating setup for zinc coating, Power Hacksaw and Metrology instruments. In addition, 1 CNC Lathe (HMT make), 1 Wire-cut EDM, 1 Hydraulic Press with 40 ton capacity and 1 TIG Welding equipment.

#### 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 centre. We have a fully functional medical diagnostics lab in the medical centre that came into operation from November 2015.

The community celebrated a week long Ganesh Puja and Diwali in the new stage in Children's Park. The celebrations ended with cultural performance from kids and adults in the community. The Independence Day and Republic Day celebrations in the campus were also organized by the CWU. Professionals visit the campus to teach musical instruments, classical Dance, keyboard and Yoga. A Zumba demo session by a trained professional was organized for staff and students. Community also actively contributed to organizations like YUVA in their clothes collection drive for old-age homes and orphanages. Children's day was organized by CWU in the children's park with lots of games and fun time for kids. For the first time, Sports and games competition were organized for the community members in the campus.

#### B3.12 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS

The campus has been bustling with activities of various clubs and associations in which students actively participated.

##### Clubs:

The following established clubs have accelerated their activities by organizing various events and competitions on campus.

<ul style="list-style-type: none"> <li>• Astronomy Club</li> <li>• Bulls n Bears club</li> <li>• Crux Club</li> <li>• Dance Club</li> <li>• Dramatics Club</li> <li>• Shades Club</li> </ul>	<ul style="list-style-type: none"> <li>• English Language Activities Society (ELAS)</li> <li>• Journal Club</li> <li>• Music Club</li> <li>• Photography Club</li> <li>• Quiz Club</li> <li>• VFX Club</li> </ul>	<ul style="list-style-type: none"> <li>• Automation and Robotics Club</li> <li>• Martial arts Club</li> <li>• Media Arts and Design Club</li> <li>• Remote Control Club</li> <li>• Film Making Club</li> </ul>
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Apart from these clubs, there are regional associations which depict their unique culture and tradition through various regional celebrations. Also, the advent of societies has given students to work on their interests in an informal setting.

##### Scholarships:

During academic year 2015-16 the following scholarships are awarded to the students of Hyderabad campus and the number of students who received are as follows:

Institute Merit Scholarships – 162 students

Institute Merit Cum Need Scholarships – 1240 students

BITSAA (Ashok Agarwal) Scholarship – 2 Students

##### Social and Environmental Activities:

There are many social organizations actively working on campus like NIRMAAN, SCIO, YUVA (Youth under visionary action), HOPE and ENACTUS.

We have various events/camps organised on campus like Govt. school adoption, Swach Bharat, Cloth Donation, Tree Plantation, Blood Donation, Campus Clean Up programs, Career Planning, Medical Camps, Campus Tour for School Students.

#### **SCIO 2015:**

Veda

##### **1. VEDA 3.1**

Veda 3.1 was conducted on January 18<sup>th</sup>, 2015 to guide the students of classes 11<sup>th</sup> and 12<sup>th</sup> from various high schools and junior colleges of Hyderabad. Prof. V.S Rao, Director, BITS – Pilani, Hyderabad Campus inaugurated the event, which included Dr. Sankar Ganesh, Assistant Professor, BITS – Pilani, Hyderabad Campus, Dr. Sabareesh Geetha Rajasekharan, Assistant Professor, BITS – Pilani, Hyderabad Campus and Mr. Krishna Kodali, Faculty In-charge, Scio Foundation who highlighted the importance of choosing careers in Sciences, Engineering and Finances. The event saw a turnout of around 110 students.

##### **2. Veda 4.0**

Veda 4.0 was inaugurated on October 4<sup>th</sup>, 2015 by Shri S. Mohapatra, Executive Director (Production), BrahMos Aerospace, Ms A. Jayashree, Director, Institute of Science and Technology, JNTUH, Mr. T. Muralidharan, Chairman, TMI Group and Prof. V.S Rao, Director, BITS – Pilani, Hyderabad Campus. The speakers of the event included Prof. P K Thiruvikraman, Associate Professor, BITS – Pilani, Hyderabad Campus who spoke about careers in Sciences, Dr. Sabareesh Geetha Rajasekharan, Assistant Professor, BITS – Pilani, Hyderabad Campus who spoke about careers in engineering specifically mechanical and manufacturing engineering, Dr. Chandu Parimi, Assistant Professor, BITS – Pilani, Hyderabad Campus who spoke about career in civil engineering, and Dr. Tathagata Ray, Assistant Professor, BITS – Pilani, Hyderabad Campus who threw light on a career in computer sciences. Nearly 700 students from classes 11<sup>th</sup> and 12<sup>th</sup> actively participated in the career counselling sessions.

##### **3. Veda 4.1**

Veda 4.1 was organised on November 15<sup>th</sup>, 2015. The event targeted around 300 students from the classes 11<sup>th</sup> and 12<sup>th</sup>. Career counselling sessions were conducted by Prof. S P Regalla, Professor, BITS – Pilani, Hyderabad Campus from the department of Mechanical engineering, Prof. Kannan Ramaswamy, Associate Professor, BITS – Pilani, Hyderabad Campus from the Physics department, Dr. Aivelu Manga Parimi, Assistant Professor, BITS – Pilani, Hyderabad Campus from the Electronics department, and Dr. P Sankar Ganesh, Assistant Professor, BITS – Pilani, Hyderabad Campus from the department of Biological Sciences. Students were enthralled with the interaction with eminent faculty from the campus.

##### **4. Vidya - Government Residential High School, Keesara, Hyderabad:**

Vidya was organized at the Government Residential High School, Keesara, Hyderabad on January 25<sup>th</sup>, 2015. Scio's volunteers interacted with nearly 85 students discussing about various career prospects they could choose to pursue.

##### **5. Vidya - St. Gabriel High School, Bollaram**

Scio conducted an event at St. Gabriel High School, Bollaram on March 5<sup>th</sup>, 2015 benefiting around 120 students. Students and teachers were inquisitive about different options in store for them.

##### **6. Vidya - Gowtham Model School, A S Rao Nagar, Hyderabad:**

Gowtham Model school at AS Rao Nagar, Hyderabad was visited by Scio on August 27<sup>th</sup>, 2015. Around 85 students actively interacted with Scio's volunteers raising queries on different career options they could choose.

##### **7. Vidya – Sarojini Naidu Memorial School, West Maredpally, Hyderabad:**

On August 27<sup>th</sup>, 2015 Scio conducted a counselling session at Sarojini Naidu Memorial School. Around 75 students actively interacted with Scio's volunteers raising queries on different career options they could choose.

##### **8. Vidya - Aum Sai Saraswathi High School, Safilguda, Hyderabad:**

A Vidya event was conducted at Aum Sai Saraswathi High School, Safilguda on August 27<sup>th</sup>, 2015 benefitting around 80 students. Teachers and students beamed with interest as Scio's volunteers provided a broad perspective of various career options available to them.

##### **9. Vidya - Sri Chaitanya Junior College, Madhapur, Hyderabad:**

Scio visited Sri Chaitanya Junior College, Madhapur on September 27<sup>th</sup>, 2015 and interacted with students of classes 11<sup>th</sup> and 12<sup>th</sup> highlighting different options in engineering and sciences available to them.

##### **10. Vignan : Aga Khan Academy**

Educational trip was conducted for the students from Aga Khan Academy on November 22<sup>nd</sup>, 2015 to the BITS-Pilani, Hyderabad Campus. The students were fascinated to see various engineering and science departments,

and the laboratories associated to them. A one on one interaction about different branches available and the future prospects involved were discussed with them.

### **Pearl - 2015**

Pearl'15, the annual National Cultural Festival of BITS Pilani, Hyderabad campus has entered the 5<sup>th</sup> edition with a theme of Mythology. With headlining acts by Vishal Shekar and Xandria, Pearl has now become a fest of National repute. With almost 5200 students participating in it, Pearl is one of the most sought festivals in India hosted from March 14<sup>th</sup> - March 16<sup>th</sup> 2015.

The headlining acts were:

1. International Rock Show by Xandria for the first time in India.
2. Bollywood Show by Vishal Shekar.
3. Classical Performance by Aarushi Mudgal.
4. Coke studio night by Advaita.
5. Film star fame Mr. Nani and Ms. Akshara Hasan were the guests during the Fest.
6. DJ night by Nikil Chinappa VH1 Supersonic.
7. Glitterati fashion show.
8. Arts and deco constructed 13" Trojan horse with a theme Mythology.

### **Convocation-2015:**

Hyderabad campus Convocation was conducted on 26.07.2015, Chief Guest Padma Vibhushan, Dr. Karan Singh, Member of Parliament , Rajya Sabha , Vice Chancellor Prof. B.N.Jain have participated in the Fourth Convocation of the campus for award of various degrees [First Degree (651 Students), Higher Degree (84 Students) & Ph. D (13 Students)] who have qualified at the end of II Semester 2014-15.

Ms. Anupriya Gagneja, 2011A7PS545H, Mr. Pratyush Mahapatra , 2011A3PS042H and Mr. Shyam Krishna Shenoy A , 2011A4PS001H were the winners of the gold, silver and bronze medal.

### **NIRMAAN:**

Nirmaan is a constructive citizen movement for an empowered India, thereby making the world a better place to live in. Nirmaan was founded on 12<sup>th</sup> February, 2005 by a group of BITS-Pilani University students with a passion for humanity and to fulfill our responsibility towards our less privileged brothers & sisters.

Nirmaan BITS Hyderabad chapter now undertakes three verticals namely School Adoption Programme (SAP), Livelihood Initiatives, Community Development Initiatives. It also organises a unique annual festival named 'Ignite'.

### **Ignite- All round Education Project**

It is an education project aimed at providing value-based education to the under-privileged. Extending from schools, orphanages to a cluster of houses we were able to reach out to kids of different backgrounds and bridge the quality gap in education by adding a more practical component to it. We are able to reach 750 under privileged students in an academic year.

### **National Service Scheme (NSS):**

Three units of National Service Scheme are functional in BITS-Pilani, Hyderabad Campus (BPHC). Currently there are 300 volunteers consisting of 174 male and 126 female students. The Chairman of NSS team is the Director, Prof. V. S. Rao and Mr. Shamuel Tharu and Dr. N Kishore Kumar served as the Programme Coordinator.

NSS has adopted the government school at Thumkunta. It teaches their academics for both English medium and Telugu medium students. In addition to this NSS volunteers are teaching English & personality development for classes 8<sup>th</sup> and 9<sup>th</sup> students. The units conduct a continuous year round teach-and-inspire program in the school.

In addition to this a series of programmes have been held to keep the students engaged in socially useful work.

On 9<sup>th</sup> December 2015 (Anti-corruption Day) debates focusing on how corruption undermines democracy and the rule of law, leads to human rights violations, distorts markets, erodes quality of life and allows organized crime, terrorism and other threats to human security to flourish were held.

On 26<sup>th</sup> November 2015 to commemorate the Heroes of Mumbai attacks on the occasion of National Constitution Day a meeting and discussion was held.

On the International Day of Tolerance (16<sup>th</sup> November 2015) a group meditation session was conducted.

On 14<sup>th</sup> November 2015 sweets were distributed to less fortunate children on the occasion of Children's Day.

In order to involve more students in engaging with social and environmental issues, on 12<sup>th</sup> November 2015 NSS conducted a program call Cracker for a cause asking students to pledge small changes they would make in order to improve quality of life for humanity. It was a success with many students and faculty participating.

On 15<sup>th</sup> & 16<sup>th</sup> October 2015 the NSS bi-annual Blood donation drive was conducted with over 120 units of blood donated to the Red Cross society earning the Appreciation of the Governor of Telangana.

NSS volunteers helped conduct and participated in large number in the Blind fold walk conducted on World Sight Day (4<sup>th</sup> October 2015). Citizens from all walks of life participated and appreciated the students efforts.

On 25<sup>th</sup> September 2015 on the occasion of NSS Day a wide range of cultural activities were performed by students to promote the appreciation of diversity among them.

On 22<sup>nd</sup> September 2015 over 30 saplings were planted with an almost 90% survival rate in the annual tree plantation drive.

On 21<sup>st</sup> September 2015 on the occasion of World Peace Day student debates were conducted on a range of issues. A large number of students participated.

Over 75 students participated in the Swacch Bharath Program in Thumkunta Village on 15th August 2015. A street play promoting sanitation and clean living was also performed and well received.

On 22<sup>nd</sup> & 23<sup>rd</sup> January 2015 the annual VIHANG SPORTS AND CULTURAL PROGRAM FOR SCHOOL CHILDREN was conducted with over 7 schools participating in the sports and cultural events as well as counselling and careering guidance interactions that were held over two days.

### **Sports Activities:**

#### **ARENA 2015:**

ARENA '15, National wide third Sports Festival was conducted from February 5<sup>th</sup> to 8<sup>th</sup> 2015 Mr. Krishna Prasad Chigurupati & Mrs. Uma Chigurupati have participated in the inaugural of the event with participation of more than 100 colleges in various events like FOOT BALL, BASKET BALL, CRICKET, HOCKEY, VOLLEY BALL, THROW BALL, KABADDI, TENNIS, BADMINTON, CHESS, CAROM, TABLE TENNIS, BILLIARDS, DUATHLON & ATHLETICS.

ARENA is the annual sports festival of BITS-Pilani Hyderabad campus was launched to bring out the sporting spirit in students from different parts of the country, and to create an opportunity for them to take part in various sporting disciplines, over a period of Four days. Arena'15 saw around 3000 participants from all across the nation participating in many indoor and outdoor sports events, held for both boys and girls. There was a footfall of 4500. The fest offered a comprehensive entertainment and sportive atmosphere, not only competitions but also extravagant entertainment and professional shows.

#### **BPHC vs IITH**

This year also witnessed a bilateral Sports event with the IIT-Hyderabad team, an event on campus. BITS had a satisfactory performance with six victories in six events. IIT-Hyderabad was quite impressive with their fair play in all the events.

#### **BPHC vs ICFAI, H**

A bilateral Sports event with ICFAI-Hyderabad team, was conducted on campus. BITS had a satisfactory performance with three victories in three events. ICFAI-Hyderabad was quite impressive with their fair play in all the events.

### **STUDENT ACTIVITY CENTER:**

The SAC consists of State-of-the-art GYM for Boys and Girls. The Boys section is equipped with strength gaining single and multi-sections machines, electrical trainers and treadmills. While the Girls section consists of Cardio Fitness machines, including electrical trainers and treadmills.

Two Badminton courts was refurbished with LED Lighting & Anti skid painting on maple wood flooring, 5 Table Tennis tables, 16 carom boards, 30 chess sets and 3 Pool Tables are also available in the SAC.

Apart from indoor games Two Basketball courts with newly constructed spectator gallery, Two Tennis acrylic cushion surface courts are also available with chain link fencing and flood lights & newly constructed Cricket ground.

#### **LA LIGA:**

We have also had our own football league LA LIGA. With a huge participation, it helped in spreading football culture on campus.

#### **RIXA-15**

The Annual Inter Bhawan Sports Festival of BITS-Pilani, Hyderabad campus commenced on March.2015 saw the participation of students in different sports like Cricket, Football, Carom, Volleyball, Athletics etc. Budh

Bhawan and Malaviya Bhawan registered success by standing first in this event. This was an event which had inclusive participation, with the sporting culture on campus getting a shot in the arm.

#### **SPORTS ACTIVITIES:**

Students have shown great enthusiasm in making use of the sports facilities provided in the campus. Each hostel has facilities for indoor games like Table-Tennis, Chess and Caroms. There are two shuttle badminton courts and grounds for Volley-ball, Foot-ball, Hockey, Cricket, Throw Ball and Lawn Tennis. Physical Education Department of SWD has been conducting Inter bhawan friendly matches (RIXA- Inter Bhawan Championship).

#### **Cultural Activities:**

Renaissance 2015:

For the first time, An Inter Bhawan Cultural Competition was conducted from 19<sup>th</sup> November to 27<sup>th</sup> November. With a huge participation, the competitive spirit was evident from the enthusiasm from the students. The Culturals ensured that the extracurricular factor was well covered with the academics on campus.

#### **Shangri-La 2015:**

The Auditorium was put to its fullest use with its grandeur on display as it displayed the campus by hosting the Dance Night, Music Night and the Theatre Night on three different days. The Arena Trailer, Verba Maximus Trailer and the Pearl Theme was released as part of the Grandest Shangri La 2015.

Other Events:

- On the occasion of Republic Day and Independence Day, BPHC RUN was conducted on 26.01.2015, 15.08.2015 for 2.7k & 5.4k in various Categories.
- Mahatma Gandhi Jayanti conducted on 02.10.2015.
- Students represented Hyderabad Campus at different youth festivals like OASIS, WAVES, SAARANG and MOOD INDIGO and won prizes in various categories.
- Important community festivals like Vasanth Panchami, Lohri, Pongal, Ugadi, Sri Rama Navami, Ganesh Chaturthi, Durga Puja, Diwali, Janmastami, Mahavir Jayanthi and Christmas were celebrated by the students with great enthusiasm. Various cultural activities were organized as part of the festivities.
- Journal Club release Journals during PEARL, ATMOS & ARENA and other major events.

### **B3.13 MAJOR MAINTENANCE, RENOVATIONS OR NEW CONSTRUCTION REPORTS**

**I. Construction:** Nil

**II. Renovation and Maintenance:**

1. Most of the street lights are replaced with LED bulbs to save energy.
2. Hostels (2nos) , E type housing, Shopping complex and medical Centre has been repainted outside.
3. The natural drain has been fully constructed and completed.
4. The basement/cellar spaces under SAC have been developed.
5. The basketball court has been provided with visitors' gallery.
6. 46 additional rooms have been constructed in the LGF level in Gandhi Bhavan Hostel.
7. Two new labs 1. Infectious diseases lab & 2. Animal house for biology department has been developed.

### **B3.14 MAJOR EQUIPMENT'S ACQUIRED DURING THE YEAR:**

During 2015 a lot of new equipment has been added to support academics, research and development. Details as per **Annexure 7** (Part B3).

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### ADMINISTRATIVE BODIES

#### The names and designations of senior officers of Hyderabad campus

##### Dean(s)

1.	Prof. M B Srinivas	Dean, Administration
2.	Prof. Suman Kapur	Dean, International Programmes and Collaborations Division (University Wide)
3.	Prof. Niranjan Swain	Dean, Practice School Division

##### Associate Dean(s)

1	Prof. Souri Banerjee	Faculty Affairs
2	Prof. Vidya Rajesh	Academic Research
3	Prof. P Yogeewari	Sponsored Research and Consulting
4	Prof. P K Thiruvikraman	Academic and Resource Planning
5	Dr. 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 Vasan	Instruction
10	Prof. Morapakala Srinivas	Academic Registration and Counselling
11	Prof. Sandip Shridharrao Deshmukh	Student Welfare

##### Head of Departments

S.No.	Faculty Member	Discipline
1.	Dr. A. Ramesh Babu	Chemical Engineering
2.	Prof. Jagadeesh Anmala	Civil Engineering
3.	Prof. Y. Yoganandam	EEE
4.	Prof. Y. V. Daseswara Rao	Mechanical Engineering
5.	Prof. Shrikant Yashwant Charde	Pharmacy
6.	Prof. N. L. Bhanu Murthy	C S & I S
7.	Prof. Suman Kapur	Biological Sciences
8.	Dr. Anupam Bhattacharya	Chemistry
9.	Prof. M.G. Prasuna	Humanities & Social Sciences
10.	Prof. Ramana Sonti	Economics & Finance
11.	Prof. Bivudutta Mishra	Mathematics
12.	Dr. Aravinda N Raghavan	Physics

**Faculty-in-Charges**

1.	Prof. Chittaranjan Hota	Information Processing Centre
2.	Prof. Y V Daseswara Rao	Maintenance & Engineering Services
3.	Dr. V Vamsikrishna Venuganti	Educational Hardware
4.	Dr. Chandu Parimi	Centre for Innovation, Incubation and Entrepreneurship (CIIE)
5.	Dr. Balaji Krishnamurthy	Placements
6	Dr. Meenakshi Vishwanathan	Community Welfare
7	Prof. P K Thiruvikraman	Teaching Learning Centre (TLC)

**Other In-charges**

SI.No.	Name	In-charge
1	Prof. R. Krishnan	Central Analytical Laboratory
2	Dr. Vikranth Kumar Surasani	Central CAD Laboratory
3	Mr. M S Uday Kumar	Publications & Media Relations
4	Prof. N. Suresh Kumar Reddy	Workshop
5	Dr. Raja Raja Varma Murari	Student Activity Center
6	Prof. P. N. Rao	Alumni Affairs
7	Prof. Chittaranjan Hota	Website
8	Prof. Srikanta Dinda	Occupational Safety & Health Administration (OSHA)
9	Dr. Meenakshi Vishwanathan	SPICMACAY
10	Mr. M S Uday Kumar	Library

**Co-ordinators**

SI.No.	Name	In-charge
1	Dr. N Kishore Kumar	National Service Scheme
2	Prof. K S Raju	Centre of Excellence in Water Resources Management

**Hostel Resident Wardens**

S.No	Name	Hostel
1	Dr Kumar Pranav Narayan	Chief Warden & Warden , Krishna Bhawan
2	Dr. Phaneendra Kiran Chaganti	Budh Bhawan
3	Prof. Sanket Goel	Gandhi Bhawan
4	Dr KVG Chandra Sekhar	Vyas Bhawan



S.No	Name	Hostel
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	Ms. D. Purnima	Malaviya Bhawan (Girls)

**Hostel Non-Resident Wardens**

SI.No	Name	Hostel
1	Dr. Sashideep Gutti	Budh Bhawan
2	Dr. Kannan Ramaswamy	Shankar Bhawan
3	Dr. Kurra Suresh	Vyas Bhawan
4	Dr. Subhash Goshal	Malaviya Bhawan & Krishna Bhawan
5	Dr. Alivelu Manga Parimi	Malaviya Bhawan (Girls)
6	Dr. T S L Radhika	Meera Bhawan
7	Dr. Srikanta Dinda	Ram Bhawan
8	Dr. Sounak Roy	Gandhi Bhawan

**Hostel Superintendent**

SI.No	Name	Hostel
1	Mr. Haridas	Krishna Bhawan, Shanker & Ram Bhawan

**Asst. Hostel Superintendents**

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	Ms. L. Vijitha (Office Assistant)	Meera Bhawan

**DETAILS OF ADMISSIONS MADE DURING THE YEAR 2015****(A) Integrated First Degree Programmes at Hyderabad Campus:**

FIRST DEGREE - 2015 (Branchwise Break up)	*** Final count		
	Total	Male	Female
B.E.(Hons.): Chemical (A1)	56	42	14
B.E.(Hons.): Civil (A2)	51	48	3
B.E.(Hons.): Electrical and Electronics (A3)	73	52	21
B.E.(Hons.): Mechanical (A4)	68	63	5
B.Pharm.(Hons.) (A5)	21	8	13
B.E.(Hons.): Computer Science (A7)	144	129	15
B.E.(Hons.): Electronics & Instrumentation (A8)	37	23	14
B.E.(Hons.): Electronics and Communications (AA)	80	62	18
B.E.(Hons.): Manufacturing (AB)	32	32	0
M.Sc.(Hons.): Biological Sciences (B1)	23	23	0
M.Sc.(Hons.): Chemistry (B2)	28	23	5
M.Sc.(Hons.): Economics (B3)	33	29	4
M.Sc.(Hons.): Mathematics (B4)	33	26	7
M.Sc.(Hons.): Physics (B5)	30	28	2
<b>Totals</b>	<b>709</b>	<b>588</b>	<b>121</b>

\*\*\* 1) Includes: 679 - BITSAT students, 27 - International students , 1 - Board Topper (A7) & 2 - Special Dispensation candidates (B3, B5), 2) Excludes: 17 withdrawn students.

**(B) Higher Degree Programmes:**

HIGHER DEGREE - 2015 (Break up)	*** Final Count		
	Total	Male	Female
M.E Biotechnology [HB]	8	1	7
M.E Chemical [HL]	6	2	4
M.E Civil (with specialization in Structural Engg.) [HT]	8	5	3
M.E Communication Engineering [CN]	8	4	4
M.E Computer Science [HC]	7	7	0
M.E Design Engineering [HD]	7	7	0
M.E Embedded Systems [HE]	4	4	0
M.E. Mechanical with specialization in Thermal Engg. [HH]	7	7	0
M.Pharm with specialization in Pharmaceuticals [HU]	5	2	3
<b>Totals</b>	<b>60</b>	<b>39</b>	<b>21</b>

\*\*\* The above list excludes one (1) withdrawn student from M.Pharm.

**(C) Higher Degree (3 Year Integrated) Programme:**

	Total	Male	Female
M.E. in Computer Science (with specialization in Information Security)	7	4	3

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

Second Semester, 2014- '15	Full-time		Part-time
	Total	Female	
Biological Sciences	1	1	0
Chemical Engg.	3	2	0
Chemistry	3	2	0
Civil Engg.	1	1	0
CS & IS	0	0	0
EEE	0	0	0
Humanities & Social Sciences	0	0	0
Economics & Finance, Mgmt.	0	0	0
Mathematics	1	0	0
Mechanical Engg.	0	0	0
Pharmacy	3	2	0
Physics	0	0	0
<b>Grand Total</b>	<b>12</b>	<b>8</b>	<b>0</b>

First Semester, 2015- '16	***Full-time		Part-time
	Total	Female	
Biological Sciences	2	2	0
Chemical Engg.	1	1	0
Chemistry	0	0	0
Civil Engg.	0	0	0
CS & IS	1	0	0
EEE	0	0	0
Humanities & Social Sciences	1	1	0
Economics & Finance, Mgmt.	1	1	0
Mathematics	2	1	0
Mechanical Engg.	2	1	0
Pharmacy	2	1	0
Physics	1	0	0
<b>Grand Total</b>	<b>13</b>	<b>8</b>	<b>0</b>

\*\*\* List excludes one (1) withdrawn student from Civil Dept.

**DUAL DEGREES :**

During the Year 2015, a total no of 177 students (out of 178 offers : Priority 1 – 177, Other Priorities - 1) were permitted to pursue concurrently two first degrees under the Dual Degree scheme as per details given below.

**Priority 1:**

	A1	A2	A3	A4	A5	A7	A8	AA	AB	Total
B1	2	3	3	1	0	4	2	3	5	23
B2	5	3	4	4	0	6	4	3	1	30
B3	5	3	7	5	0	20	3	7	1	51
B4	2	4	5	8	0	12	0	8	0	39
B5	0	5	7	3	0	6	2	6	4	33
<b>Total</b>	14	18	26	21	0	48	11	27	11	<b>176</b>
<b>B5A4</b> : Offers given – 4, Offers taken – 3, Offers rejected – 1 (Excluded)										

**Other Priorities:**

	A1	A2	A3	A4	A5	A7	A8	AA	AB	B1	B2	B3	B4	B5	Total
A1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A8	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1
AA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	-	-	-	-	-	-	-	1	-	-	<b>1</b>

**TRANSFERS:**

During the Year 2015, a total no of **15** students (10 transfers + 5 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.

	A1	A2	A3	A4	A5	A7	A8	AA	AB	Total
A1	-	-	-	-	-	-	-	-	-	0
A2	-	-	-	-	-	-	-	-	-	0
A3	-	-	-	-	-	1	-	-	-	1
A4	-	-	-	-	-	1	-	-	-	1
A5	-	-	-	-	-	-	-	-	-	0
A7	-	-	-	-	-	-	-	-	-	0
A8	-	-	-	-	-	1	-	4	-	5
AA	-	-	-	-	-	-	-	-	-	0
AB	-	-	-	-	-	-	-	1	-	1
B1	-	-	-	-	-	-	-	-	-	0
B2	-	-	-	-	-	-	-	-	-	0
B3	-	-	-	-	-	1	-	-	-	1
B4	-	-	-	-	-	-	-	-	-	0
B5	-	-	-	-	-	1	-	-	-	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>10</b>

**B-B Transfers**

	B1	B2	B3	B4	B5	Total
B1	-	-	-	-	-	0
B2	-	-	1	1	1	3
B3	-	-	-	-	-	0
B4	-	-	1	-	-	1
B5	-	-	-	1	-	1
<b>Total</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>5</b>
<b>A2 to B3 : Offers given – 1, Offers taken – 0, Offers rejected – 1 (Excluded)</b>						

**VERTICAL TRANSFERS:**

During the year 2015, Five (5) students were permitted to transfer from First Degree to Higher degree and 0 students were permitted to transfer from Higher Degree to Ph.D. Programme at Hyderabad Campus.

**LIST OF NEW COURSES INTRODUCED DURING THE YEAR 2015**

<b>Second semester 2014-2015</b>		
<b>Sl.No.</b>	<b>COURSE NO.</b>	<b>COURSE NAME</b>
011377	BIOT F422	NANOBIOTECHNOLOGY
011853	BITS F345	INFORMATION LAW CYBER LAW
011512	BITS F385	INTRO TO GENDER STUDIES
011379	BITS F467	BIOETHICS & BIOSAFETY
010847	CHE G522	POLYMER TECHNOLOGY
011569	CHEM F223	COLLOID & SURFACE CHEM
011923	ECON F315	FINANCIAL MANAGEMENT
011875	ECON F435	MARKETING RESEARCH
011889	EEE F245	CONTROL SYSTEMS LABORATORY
011900	EEE F246	ELEC & ELECTRONIC CIRCUITS LAB
011523	GS F325	JOURNALISM
011603	HSS F222	Linguistics
011150	HSS F226	POST MODERNISM
011611	HSS F228	Phonetics & Spoken English
011904	HSS F238	SPORTS AND SOCIETY
011834	HSS F342	ADV COMMUNICATIVE ENG
011330	MATH F441	DISCRETE MATHS STRUC
011881	MATH F444	NUMERICA SOLUTIONS TO ODE
011286	ME F452	COMPOSITE MATERIAL & DES
011868	ME F484	AUTOMOTIVE TECHNOLOGY
<b>First semester 2015-2016</b>		
<b>Sl.No.</b>	<b>COURSE NO.</b>	<b>COURSE NAME</b>
011861	BITS F218	GENERAL MATHEMATICS III
012002	CHE G523	MATH METHODS IN CHEM ENG
012084	CHE G528	INTO TO NANO SCI & TECH
010010	CHE G617	PETRO REFINERY ENGG
012032	CHE G622	ADV CHEMICAL ENGG THERMO
011857	CS F469	INFORMATION RETRIEVAL
011901	EEE F478	POWER SYSTEMS LAB
011172	GS F234	DEVELOPMENT ECONOMICS
011351	INSTR F432	MEDICAL INSTRUMENTATION
011881	MATH F444	NUMERICA SOLUTIONS TO ODE
011498	PHY F415	GEN THEO OF REL & COSMO
011500	PHY F417	EXPT METHODS OF PHYSICS

**NUMBER OF STUDENTS REGISTERED DURING THE YEAR 2015**  
**ACADEMIC REGISTRATION AND COUNSELLING DIVISION**

**FIRST SEMESTER 2015 – 2016**

DISCIPLINE	2007	2009	2010	2011	2012	2013	2014	2015	Sub Total		
Research Scholars	1	7	13	42	31	59	20	14	187	187	Ph.D
A1 - BE (Hons.) Chemical				1	36	48	41	60	186		
A2 - BE (Hons) Civil					37	47	52	52	188		
A3 - BE (Hons.) EEE					70	77	72	75	294		
A4 - BE (Hons.) Mechanical					58	63	64	69	254		
A5 - B. Pharm (Hons.)				4	9	2	9	21	45		
A7 - BE (Hons.) Computer Science				2	89	120	146	146	503		
A8 - BE (Hons.) Electronics & Instrumentation					40	38	29	39	146		
AA - BE (Hons.) ECE				1	82	83	85	81	332		
AB - BE (Hons.) Manufacturing					33	39	33	33	138		
B1 - M.Sc. (Hons.) Biology			4	32	23	30	23	25	137		
B2 - M.Sc. (Hons.) Chemistry				34	25	27	28	28	142		
B3 - M.Sc. (Hons.) Economics			3	37	38	42	53	34	207		
B4 - M.Sc. (Hons.) Mathematics			2	39	35	46	40	34	196		
B5 - M.Sc. (Hons.) Physics				29	31	31	35	30	156		
C6 - M.Sc. (Tech) Information Systems				1	50				51		
<b>Sub-total (FD)</b>			9	180	656	693	710	727	2975	2975	FD

DISCIPLINE	2007	2009	2010	2011	2012	2013	2014	2015	Sub Total		
H 101 - ME (Chemical Engineering)								8	8		
H 103 - ME (Computer Science)							8	7	15		
H 124 - ME (Communication Engineering)								9	9		
H 129 - ME (Biotechnology)							8	8	16		
H 140 - ME (Embedded System)							7	4	11		
H 141 - ME (Design)							7	7	14		
H 143 - ME (Structural)							7	8	15		
H 146 - M.Pharm (Pharmaceutics)							6	6	12		
H 148 - ME (Thermal)							6	8	14		
H 313 - ME (Information Security)						10	9	7	26		
<b>Sub-total (HD)</b>						10	58	72	140	140	HD
<b>TOTAL</b>	1	7	22	222	687	762	788	813	3302		

**BITS, PILANI - HYDERABAD CAMPUS**  
**ACADEMIC REGISTRATION AND COUNSELLING DIVISION**  
**SECOND SEMESTER 2014 - 2015**

DISCIPLINE	2006	2007	2008	2009	2010	2011	2012	2013	2014	Sub Total		
Research Scholars	1	1		9	15	48	35	60	18	187	187	Ph.D
A1 - BE (Hons.) Chemical						37	36	48	42	163		
A2 - BE (Hons) Civil					1	32	37	47	52	169		
A3 - BE (Hons.) EEE						74	70	77	73	294		
A4 - BE (Hons.) Mechanical					2	65	58	63	65	253		
A5 - B. Pharm (Hons.)					3	22	9	2	9	45		
A7 - BE (Hons.) Computer Science				1	1	88	89	119	141	439		
A8 - BE (Hons.) Electronics & Instrumentation							40	38	34	112		
AA - BE (Hons.) ECE					1	83	82	83	80	329		
AB - BE (Hons.) Manufacturing							33	39	34	106		
B1 - M.Sc. (Hons.) Biology					28	32	23	30	23	136		
B2 - M.Sc. (Hons.) Chemistry					29	35	25	27	31	147		
B3 - M.Sc. (Hons.) Economics					43	40	38	42	52	215		
B4 - M.Sc. (Hons.) Mathematics					39	40	36	46	39	200		
B5 - M.Sc. (Hons.) Physics				1	32	30	31	31	36	161		
C6 - M.Sc. (Tech) Information Systems						55	50			105	2874	FD
H 103 - ME (Computer Science)								5	8	13		
H 129 - ME (Biotechnology)								9	8	17		
H 140 - ME (Embedded System)								8	7	15		
H 141 - ME (Design)								7	7	14		
H 143 - ME (Structural)								10	8	18		
H 146 - M.Pharm (Pharmaceutics)								8	6	14		
H 147 - M.Pharm (Pharmaceutical Chemistry)								2		2		
H 148 - ME (Thermal)								12	6	18		
H 240 - ME (Embedded Systems) WP							1			1		
H 313 - ME (Information Security)								10	10	20	132	HD
	1	1	0	11	194	681	693	823	789	3193		



**BITS, PILANI - HYDERABAD CAMPUS**  
**ACADEMIC REGISTRATION AND COUNSELLING DIVISION**

**SUMMER TERM 2014 - 2015**

DISCIPLINE	2009	2010	2011	2012		2013		2014	Sub Total		
				On Campus	In PS I	On Campus	In PS I				
Research Scholars	1	1	1	1				0	4	4	Ph.D
A1 - BE (Hons.) Chemical				2		1	47		50		
A2 - BE (Hons.) Civil				1			47	2	50		
A3 - BE (Hons.) EEE				9			76	3	88		
A4 - BE (Hons.) Mechanical				2			62	1	65		
A5 - B. Pharm (Hons.)							2	1	3		
A7 - BE (Hons.) Computer Science				2	1	2	114	1	120		
A8 - BE (Hons.) Electronics & Instrumentation				3	1		38		42		
AA - BE (Hons.) ECE				6			80	5	91		
AB - BE (Hons.) Manufacturing				2			39	1	42		
B1 - M.Sc. (Hons.) Biology				5			30		35		
B2 - M.Sc. (Hons.) Chemistry				2			27		29		
B3 - M.Sc. (Hons.) Economics				16			42		58		
B4 - M.Sc. (Hons.) Mathematics			2	3			45		50		
B5 - M.Sc. (Hons.) Physics			4	14			29	1	48		
C6 - M.Sc. (Tech) Information Systems				9	1				10	781	FD
H 313 - ME (Information Security)							10	9	19	19	HD
<b>GRAND TOTAL</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>77</b>	<b>3</b>	<b>13</b>	<b>678</b>	<b>24</b>	<b>804</b>		

**LIST OF ORGANIZATIONS WHICH CONDUCTED CAMPUS INTERVIEWS**  
**Placement Companies Jan-Dec 2015**

S.No	Name of the Company	Offers	CTC	No. of interviews
1	ACCENTURE	15	8	130
2	ACCOLITE	2	10	163
3	ADVENTZ	3	4.3	36
4	AKOSHA	1	10	22
5	ALTAIR ENGINEERING	1	5	1
6	AMAZON	19	27	340
7	ANAND AUTOMOTIVE LIMITED	2	4.5	1
8	APPS ASSOCIATES	1	4.5	2
9	APTEAN	1	8	66
10	ARM BANGLORE	2	4	1
11	ARUBA	6	12.1	90
12	ARVIND INTERNET	1	8	1
13	ASHOK LEYLAND	3	4	5
14	ATOS ORIGIN	1	3.3	20
15	AUROBINDO PHARMA	1	3.6	5
16	BARCLAYS	4	8	103
17	BEEHYV	2	5.5	43
18	BLUE JEANS	2	10	1
19	BROADCOM	1	7	1
20	CA TECHNOLOGY	2	12	1
21	CAPGEMINI	10	4.5	37
22	CISCO	3	11.9	66
23	CITIUSMINDS	0	7.5	8
24	CODENATION	0	24	45
25	CONVERGYS	7	6	24
26	CREDIT SUISSE	8	8	1
27	CROWD CHAT	2	10	73
28	D.E. SHAW	1	18.5	114
29	DELOITTE	4	5.58	80
30	DIRECTI - APPLICATION ENGINEER	0	14.3	128

S.No	Name of the Company	Offers	CTC	No. of interviews
31	DIRECTI - OPERATIONS ENGINEER	1	14.3	90
32	DIRECTI - SOFTWARE ENGINEER	0	26.8	116
33	DR. REDDY'S	0	4.56	5
34	DREAM GAINS FINANCIALS		5	8
35	EATON	1	7.9	14
36	EBAY	4	25.25	68
37	EMC	7	13.54	198
38	ENDURANCE INTERNATIONAL GROUP	4	15.39	132
39	ENTRANSYS	12	6.5	54
40	EPIC SYSTEMS	0	UG-\$ 1,13,492	95
41	ERICSSON	1	10	1
42	FACTSET	3	7.65	58
43	FIBERLINK	1	8.5	1
44	FIORANO	3	6.75	23
45	FIORANO SOFTWARE TECHNOLOGIES PVT. LTD	1	6.75	31
46	FLIPKART	13	15	304
47	FRACTAL ANALYTICS	3	6	129
48	FREESCALE SEMICONDUCTORS	3	10.31	25
49	FUNTOOT(R&D)	2	7	71
50	FUTURES FIRST	3	9.2	281
51	GE		5.5	11
52	GENPACT	1	5	1
53	GENYMEDIUM	2	4.5	45
54	GLOBAL ANALYTICS	3	10.2	70
55	GOLDMAN SACHS	2	13	96
56	GOOGLE	2	50	37
57	GRACE DAVISION	1	5	16
58	GRAPHIM INDUSTRIES LTD	1	4.34	23
59	GREY ORANGE INDIA PVT LTD	9	14	550
60	GROFERS	8	14	223
61	GSK	1	3.5	1
62	HACKERRANK	0	11.5	139
63	HINDALCO	1	4.5	17
64	HISTOGENETICS	3	5	36

S.No	Name of the Company	Offers	CTC	No. of interviews
65	HOST ANALYTICS	1	8	30
66	HSBC	1	7.5	1
67	HYUNDAI MOBIS	2	6	20
68	HYUNDAI MOTORS		6.5	49
69	IDEA CELLULAR	2	5	17
70	IMOMENTOUS MOBILE SOLUTIONS PVT LTD	2	5	24
71	INFORMATICA BUSINESS SOLUTIONS	2	9.4	16
72	INSIDE VIEW	1	9	1
73	INTEL	1	9	1
74	INTEL TECHNOLOGIES PVT. LTD - PILANI	3	11.99	45
75	INTELLECT DESIGN ARENA (A POLARIS GROUP COMPANY)	4	5	27
76	ITC INFOTECH	5	5.5	25
77	JORD INTERNATIONAL	1	5	1
78	JP MORGAN INVESTMENT BANKING(JPMIB)	2	6	1
79	KNOLSKAPE SOLUTIONS PRIVATE LIMITED	1	7	68
80	KUSTOM MADE	1	10	170
81	L & T	3	5	147
82	L & W CONSTRUCTION	2	6	40
83	LATENT VIEW	6	4.5	70
84	LAVA INTERNATIONAL		5.5	16
85	LEAD IT GROUP	2	15	33
86	LEXINNOVA	1	6	1
87	MARKSANS PHARMA		4	4
88	MATHWORKS	0	12	6
89	MCKINSEY	0	11.7	41
90	MERCEDES BENZ	1	6	1
91	MICROSOFT	10	18	78
92	MORGAN STANLY	4	16.75	124
93	MSCI	1	8	1
94	MUSIGMA	16	4.5	157
95	MY SMART PRICE	8	19	263
96	N R B BEARING	1	4.5	5
97	NAGARRO SOFTWARE	4	5	18

S.No	Name of the Company	Offers	CTC	No. of interviews
98	NAVYUG INFOSOLUTIONS PVT. LTD	0	10	83
99	NET CRACKER	7	6	44
100	NETAPP	2	14.14	70
101	NETSKOPE SOFTWARE INDIA PVT. LTD.	1	6.5	1
102	NEXT EDUCATION	9	8.4	154
103	NOKIA SIEMMENS	19	6.25	65
104	NOVARTIS		5	5
105	NVIDIA	4	10	1
106	ORACLE INDIA	44	12	600
107	ORBEES	3	6	59
108	PAY PAL	5	27	85
109	PEOPLE INTERACTIVE INDIA PVT LTD (SHAADI.COM)	0	7	31
110	PERKIN ELMER	1	3.8	12
111	PHILIPS		6	16
112	PHOENIX IT	3	5	16
113	POKARNA	2	6	10
114	POLYCOM	2	9	1
115	PRACTO	10	20	288
116	PRAJ INDUSTRIES	0	4.3	2
117	PUBMATIC	1	4	34
118	PWC ACTUARIAL SERVICES	1	5	30
119	QUALCOMM	10	15.03	113
120	RAMCO	4	5.5	18
121	REAL IMAGE	1	8	79
122	RECKITT BENCKISER	1	8.3	1
123	REFLEXIS	4	5.25	22
124	ROLLS ROYCE INDIA LTD		6.35	9
125	S&P CAPITAL IQ		8	7
126	SAAVAN MEDIA	3	10	131
127	SABRE HOLDINGS	4	7.5	1
128	SECURIFI	1	8	29
129	SHORETEL TELECOMMUNICATIONS	4	10	28
130	SILICONIMAGE	2	10	1
131	SKF	2	4.25	22

S.No	Name of the Company	Offers	CTC	No. of interviews
132	SMARTTRAK(OFF CAMPUS)	1	6	1
133	SOKRATI BOGOLIK SOFTWARE	0	5.6	35
134	STAYZILLA	6	17	180
135	SYNAPTICS	1	6.5	26
136	SYNOPSIS INDIA PVT LTD	4	10.98	72
137	TATA ADVANCED SYSTEMS	3	3.93	16
138	TCS	13	3.34	38
139	TEKZENIT	3	6	28
140	TEXAS INSTRUMENTS	3	13.89	131
141	THINK TANKERS INNOVATIVE SOLUTIONS	1	4.5	20
142	THORGOOD	5	11	217
143	TMEIC(TOSHIBA)	2	4.75	24
144	UNITED ONLINE	1	6.5	1
145	URBAN RESTRO		6	23
146	UURMI	2	5.5	23
147	VIRTUSA	9	5	40
148	VOLTEO	3	6	47
149	VYUTI SYSTEMS PRIVATE LIMITED	0	6.3	18
150	WALMART	11	19	293
151	WELLS FARGO INDIA SOLUTIONS	7	8	87
152	WIPRO	4	5	6
153	WORKS APPLICATION	1	32.19	62
154	ZOMATO	1	22	108
155	ZOOM CAR	1	12	1
156	ZUTI ENGINEERING SOLUTIONS	3	5	13
	<b>TOTAL</b>	<b>524</b>		<b>9656</b>

Branch	% Placed	Total Students	Placed Students	Job Offers	MAX(LPA)	AVG(LPA)	MIN(LPA)
Registered Students	<b>72.50</b>	<b>651</b>	<b>472</b>	<b>524</b>	<b>50</b>	<b>9.47</b>	<b>3.18</b>
B.E. Chemical	<b>55.81</b>	43	24	30	10.25	5.89	3.18
B.E. Civil	<b>53.57</b>	56	30	30	15.25	6.67	3.18
B.E. CSE	<b>92.91</b>	127	118	132	50	14.57	4.5
B.E. ECE	<b>80.95</b>	105	85	94	17	7.59	4
B.E. EEE	<b>78.35</b>	97	76	86	20	8.18	4
M.Sc. IS	<b>80.85</b>	47	38	39	27	10.68	4.5
B.E. Mechanical	<b>69.23</b>	78	54	61	15.25	6.22	3.18
B. Pharmacy	<b>56.25</b>	16	9	9	27	8.44	3.5
B.E. Electronics and Instrumentation	<b>64.29</b>	14	9	10	12	8.53	5
B.E. Manufacturing	<b>70.00</b>	10	7	8	13	5.59	3.18
M.Sc (Hons.) Chemistry	<b>0.00</b>	1	0	0	0	0	0
M.Sc (Hons.) Maths	<b>0.00</b>	1	0	0	0	0	0
M.Sc (Hons.) Physics	<b>100.00</b>	1	1	4	4	4	4
M. Pharm	<b>0.00</b>	5	0	0	0	0	0
M.E. Bio Technology	<b>0.00</b>	7	0	0	0	0	0
M.E. Computer Science	<b>100.00</b>	7	7	7	16.75	11.29	6.75
M.E. Design	<b>0.00</b>	6	0	0	0	0	0
M.E. Embedded Systems	<b>85.71</b>	7	6	6	15.03	10.52	5.5
M.E. Information Security	<b>60.00</b>	10	6	6	14.3	8.13	3.34
M.E. Structural	<b>0.00</b>	7	0	0	0	0	0
M.E. Thermal	<b>33.33</b>	6	2	2	7.9	5.62	3.34

'Annexure B3-6'

(5 Pages)

Ref. AR 2015, Page No. B3-64

## RESEARCH PROJECT GRANTS

S.No	Title of the Project	Principal Investigator	Funding Agency	Department	Sanctioned Amount	Duration	Sanctioned Date
1	Daewoong Pharmaceutical Co., Ltd	Dr. Srikant Charde & Dr. Punna Rao Ravi	Daewoong Pharmaceuticals Co.,Ltd	Pharmacy	527080	1 year	01.01.2015
2	Construction of arbitrary tensor networks using cross approximation techniques	Dr. N.Kishore Kumar	NBHM	Mathematics	289500	3years	01.01.2015
3	Bioconversion of Coal Rejects To Biogas And Humic Acid	Dr. Asma Ahmed	DBT-BIRAC	Chemical Engineering	600000	3years	14.01.2015
4	Mycobacterium tuberculosis acetyl coenzymes a carbonylase inhibitors: structure based drug design, synthesis and biological evaluation	Prof. D. Sriram	DST-Indo Polish	Pharmacy	1189000	2years	22.04.2015
5	Tumor targeted nanomedicines for Photodynamic therapy	Dr. Swati Biswas	DST-Indo-Belarus Joint S & T Project	Pharmacy	958000	2years	20.05.2015
6	Algorithms for Narrow Beamwidth Emitter Location(Anabel)	Prof. Yoganandam	DLRL-Consultancy	EEE	994948	9months	03.03.2015
7	Studies on CO <sub>2</sub> capture from flue gases using regenerable solid adsorbents	Dr. Srikanta Dinda	CSIR	Chemical Engineering	666000	3years	18.06.2015
8	Pharmacological evaluation of novel double stranded RNA dependent protein kinase (PKR) inhibitors for diabetic cardiomyopathy	Dr. Arti Dhar	CSIR	Pharmacy	716000	3years	02.06.2015
9	PARALLAX:Lightweight Code Self-verification for Internet of Things (IoT) Devices	Prof. C. Hota	DeitY	Computer Science and Information Systems	3830000	4years	02.07.2015
10	UK-India Centre for Advanced Technology for Minimization of indiscriminate use of Antibiotics (UKICAT-MA)	PI - Dr. Prashant Garg (LVPEI), Co-PI – V Vamsi Krishna	DBT - MRC	Pharmacy	3500000	3years	11.08.2015



S.No	Title of the Project	Principal Investigator	Funding Agency	Department	Sanctioned Amount	Duration	Sanctioned Date
11	Characterisation of Fibre/Matrix Interface in advanced composites	Dr. Ramesh Babu A	DRDO/CARS	Chemical Engineering	996360	1year	17.08.2015
12	Spectral element methods for elliptic and parabolic interface problems in R2 on parallel computers	Dr. N Kishore Kumar	NBHM	Mathematics	1359100	3years	09.10.2015
13	Aripiprazole sustained release injectable depot formulation	Dr. Swati Biswas	Daewoong Pharmaceuticals	Pharmacy	859480	1year	01.09.2015
14	Comprehensive intelligent ARI Monitor for early detection of pneumonia in rural areas of Medchal Mandal, AP	Prof. MB Srinivas	ICMR	EEE	795000	3years	01.10.2015
15	Using CEFR based Bilingual Rating Scales to improve the writing ability of ESL learners: A Multiple case study	Dr. Santosh Kumar Mahapatra	British Council	Humanities & Social Sciences	148000	1year	19.10.2015
16	Investigations of folding of Cysteine-rich Neurotoxins in Ionic Liquids by Molecular Dynamics simulation and Quantum Mechanical calculations	Dr. Durba Roy	DST-SERB	Chemistry	2522800	3years	16.09.2015
17	Role of double stranded RNA dependent protein kinase (PKR) in hypertension: Mechanism and prevention	Arti Dhar	DST-SERB	Pharmacy	2604000	3years	02.12.2015
18	Design and synthesis & biological evaluation of Mycobacterium tuberculosis serine/threonine protein kinase B(PknB) inhibitors	Prof. D. Sriram	DST	Pharmacy	2761000	3years	11.09.2015

**APPROVED PROJECTS DURING JANUARY - DECEMBER 2015****Details of the Sponsored Projects****Prof. Shrikant Charde:**

1. Title of the Project: Daewoong Pharmaceuticals Co., Ltd.
2. Sponsoring agency: Daewoong Pharmaceuticals Co., Ltd.
3. Status: On-going
4. Objectivity: Solubility investigation, comparative PK study at small animal model and final human PK study

**Dr. N. Kishore Kumar**

1. Title of the Project: Construction of arbitrary Tensor Networks using cross approximation techniques
2. Sponsoring agency: NATIONAL BOARD OF HIGHER MATHEMATICS
3. Status: On-going
4. Objectivity: The construction of arbitrary tensor network using cross approximation techniques is the aim of this project. Development of the algorithm for higher dimensions ( $d > 4$ ) and detailed study of the error in the approximation will be considered.

**Dr. Asma Ahmed**

1. Title of the project: Bioconversion Of Coal Rejects To Biogas And Humic Acid
2. Sponsoring Agency: DBT-BIRAC (BIPPS Scheme)
3. Status: Ongoing
4. Objectivity: : Characterization of coal rejects, biodegradation and biomethanation of coal rejects.

**Prof. D. Sriram**

1. Title of the Project: Mycobacterium tuberculosis acetyl coenzymes a carbonylase inhibitors: structure based drug design, synthesis and biological evaluation
2. Sponsoring agency: DST-Indo Polish
3. Status: On-going
4. Objectivity: In this application we propose a collaborative effort to develop inhibitors of enzymes that have been shown to be essential for the survival, virulence, and antibiotic resistance of Mycobacterium tuberculosis using rational design based on protein structure. The proposal builds on the expertise of the Indian research group in target-based drug design, using Pharmacophore and Quantum mechanical modeling studies for the design of inhibitors, and the experience of the Polish group in mycobacterial genetics and enzymology. Primary focus for inhibitor design will be mycobacterial enzymes from Mycolic acid biosynthesis acetyl-CoA carboxylase (ACC) like AccE5 (Rv3281) and AccD6 (Rv2247) but also other enzymes from these pathways shall be explored and characterized as potential targets for inhibitor design. Mycobacterium tuberculosis causes more human deaths than any other single infectious organism, with an estimated eight million new tuberculosis cases and two million fatalities each year. Given the current backdrop of emerging multi drug resistant tuberculosis (MDR-TB), tuberculosis treatment is entering a challenging era, where effective control requires the identification of new drugs and novel drug targets. Mycolic acids and multimethyl-branched fatty acids are found uniquely in the cell envelope of pathogenic mycobacteria. Acyl-CoA carboxylases commit acyl-CoAs to the biosynthesis of these unique fatty acids.

**Dr. Swati Biswas**

1. Title of the Project: Turnor targeted nanomedicines for Photodynamic therapy
2. Sponsoring agency: DST-Indo-Belarus joint S & T project
3. Status: On-going
4. Objectivity: To develop nanoparticles-encapsulated photodynamic agent to address poor pharmacokinetic issues of PDT agents.

**Prof. Yoganandam**

1. Title of the Project: Algorithms for narrow beamwidth emitter location (ANABEL)
2. Sponsoring agency: DLRL (Consultancy Projects)
3. Status: On-going
4. Objectivity: To develop algorithms for the location of surveillance radars with narrow beam width.

**Dr. Srikanta Dinda**

1. Title of the Project: Studies on CO<sub>2</sub> capture from flue gases using regenerable solid adsorbents
2. Sponsoring agency: CSIR
3. Status: On-going

4. Objectivity: The first objective of the project is to develop a low-cost and efficient adsorbent for the capture of CO<sub>2</sub> from large amount flue gas sources like refinery, power plant and rayon industry flue gases. The other objective is to develop/ design a process for the adsorption of CO<sub>2</sub> using the in-house developed adsorbents.

**Dr. Arti Dhar**

1. Title of the Project: Pharmacological evaluation of novel double stranded RNA dependent rotein kinase (PKR) inhibitors for diabetic cardiomyopathy
2. Sponsoring agency: CSIR
3. Status: On-going
4. Objectivity: To correlate pathogenic process of diabetic cardiomyopathy (DCM) with changes in PKR expression in cardiomyocytes and the related signal pathways. To investigate the mechanisms underlying the role of PKR in the development of DCM. To investigate the potential of small molecule PKR inhibitors and examine their effectiveness in the prevention of development of DCM.

**Prof. C Hota**

1. Title of the Project: PARALLAX : Lightweight Code Self-verification for Internet of Things( IoT) Devices
2. Sponsoring agency: Deity
3. Status: On-going
4. Objectivity: The Internet of Things (IoT) is the network of physical objects (things) embedded with electronics, software, sensors and connectivity modules to enable these objects to achieve greater value and service by exchanging data with other connected devices. The IoT paradigm has been emerging for decades, with origins in factory automation, and embedded systems. The fascinating opportunities available through the usage of IoT today, could take any developing country's economy to a larger sustainable economy by reducing food wastage, reducing energy consumption etc. Along with massive deployment of IoT systems come massive problems. The operation of IoT devices in non-controlled, possibly hostile environments puts the dependability and reliability of IoT systems at stake. More specifically, adversaries may tamper with the devices, intervene their communication channels or clone the devices, to instrument (engineer) the data gathering and overall operation of IoT systems to their own interest. The key idea of this proposal is to use the advanced exploitation technique of Return Oriented Programming (ROP), not as an offensive mechanism, but rather as a defensive weapon, to protect programs running in hostile and possibly resource constrained IoT environments against tampering by adversaries. Specifically, our code verification approach will protect code running on IoT devices by overlapping ROP gadgets (ROP chain) within the code. These translated functions will implicitly verify the integrity of the protected code, by malfunctioning if the ROP gadgets are tampered with, effectively acting as self-verifying code.

**Dr. Vamsi Krishna Venuganti**

1. Title of the Project: UK-India Centre for Advanced Technology for Minimization of indiscriminate use of Antibiotics (UKICAT-MA)
2. Sponsoring agency: DBT-MRC
3. Status: On-going
4. Objectivity: The core programme will enhance our current programme by creating a 2nd generation of polymers that can not only detect bacteria and differentiate between Gram-positive and Gram-negative but also provide a visible signal. Rapid provision of cost-effective diagnosis will allow rapid initiation of the correct treatment of infections. This is a key strategy in combating antibiotic resistance because by providing more specific diagnosis at the point of care, without the need for laboratory facilities, medical professionals can tailor the treatment appropriately.

**Dr. Ramesh Babu**

1. Title of the Project: Characterization of Fibre/Matrix Interface in Advanced Composites
2. Sponsoring agency: DRDO/CARS
3. Status: On-going
4. Objectivity: This projects aims to understand the sizing and surface characteristics of carbon fibres and determination of micro and macro level mechanical properties of Carbon-Epoxy and Carbon-Phenolic Composites. The main objective is to improve the bonding between carbon fibre and thermoset resins.

**Dr. N. Kishore Kumar**

1. Title of the Project: Spectral element methods for elliptic and parabolic interface problems in R<sup>2</sup> on parallel computers
2. Sponsoring agency: NATIONAL BOARD OF HIGHER MATHEMATICS
3. Status: On-going

4. Objectivity: Developing the nonconforming spectral element methods for elliptic interface problems with singular solutions and parabolic interface problems with smooth interfaces on parallel computers is the main goal of this project.

**Dr. Swati Biswas**

1. Title of the Project Aripiprazole sustained release injectable depot formulation
2. Sponsoring agency: Daewoong Pharmaceuticals Co., Ltd.
3. Status: On-going
4. Objectivity: To develop an injectable sustained release depot formulation for an anti-depressant drug

**Prof. M.B.Srinivas**

1. Title of the Project: Comprehensive intelligent ARI Monitor for early detection of pneumonia in rural areas of Medchal Mandal, AP
2. Sponsoring agency: ICMR
3. Status: On-going
4. Objectivity: : Comprehensive intelligent ARI Monitor for early detection of pneumonia in rural areas of Medchal Mandal, AP

**Dr. Santosh Mahapatra**

1. Title of the Project: Using CEFR based Bilingual Rating Scales to improve the writing ability of ESLlearners: A Multiple case study
2. Sponsoring agency: British Council
3. Status: On-going
4. Objectivity: : To improve the writing ability of ESLlearners: A Multiple case study

**Dr. Durba Roy**

1. Title of the Project: Investigations of folding of Cysteine-rich Neurotoxins in Ionic Liquids by Molecular Dynamics simulation and Quantum Mechanical calculations
2. Sponsoring agency: DST-SERB
3. Status: On-going
4. Objectivity: This project is aimed at understanding the scaffolding effect and scrambling of disulfide bonds in venom peptides. Suitable design of reaction conditions for the commercial synthesis of these peptides from linear precursors by minimizing the population of non-native disulfide bond isoforms is the point of focus.

**Dr. Arti Dhar**

1. Title of the Project: Role of double stranded RNA dependent protein kinase (PKR) in hypertension: Mechanism and prevention
2. Sponsoring agency: DST-SERB
3. Status: On-going
4. Objectivity: To correlate pathogenic process of hypertension with changes in PKR expression in aorta/vascular smooth muscle cells and the related signal pathways. To investigate the mechanisms underlying the role of PKR in the development of hypertension. To investigate the potential of small molecule PKR inhibitors and examine their effectiveness in the prevention of development of high carbohydrate induced hypertension.

**Prof. D. Sriram**

1. Title of the Project: Design and synthesis & biological evaluation of Mycobacterium tuberculosis serine/threonine protein kinase B(PknB) inhibitors
2. Sponsoring agency: DST
3. Status: On-going
4. Objectivity: Tuberculosis (TB) is one of the most common infectious diseases known to man. About 32% of the world's population (1.9 billion people) is infected with TB. Drugs for treating tuberculosis (TB) have been available for over half a century, and yet the incidence of disease worldwide continues to rise year by year. Every year, approximately 8 million of these infected people develop active TB, and almost 2 million of these would die from the disease, a life lost to TB every 15 seconds. Co-infection with human immunodeficiency virus is driving the increase in incidence, and the cause of death in 31% of AIDS cases can be attributed to TB. Our group is working in the area of anti-tubercular drug discovery for past ten years and we have identified many potential hits for MTB enzymes. The present study would involve the design of newer leads based on computer-aided drug design tool employing structure-based drug design and to develop pharmacophoric models and the synthesis of designed for inhibition of potential MTB enzyme PknB.

'Annexure B3-7'

(10 Pages)

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**List of Equipment procured in the year 2015**

SI No	Item Description	Qty	Bill Amount	End user	Ledger Folder
1	Anesthesia System with Accessories	01 No	USD 6100	Dr Vamsikrishna Venuganti	Equipment
2	Ultrasonic Processor 130 Watt	01 No	USD 4190	Chemical Engg	Equipment
3	Table Rack 19" 18U/1000 with front glass door and rear door	01 No	25,000.50	Biological Sciences	Equipment
4	Didital Multimeter 4.5 Digit Digital ,Model: KM8045 PHY-105FAR 0.5Hz to 5MHz Function Generator	02 Nos 02 Nos	35,700.00	Physic	Equipment
5	Weighing Machine Model: DS-451, Cap: 150 Kg.	01 Nos	27,480.00	Central Workshop	Equipment
6	Digital Hand Operated Bulge Testing System ( Complete with Accessories)	01 Set	303,750.00	Central Workshop	Equipment
7	Rotery Digester with digital temperature Indicator cum controller Range:50°C to 200°C, Cap: 15 Lts	01 No	350,000.00	Chemical Engg	Equipment
8	WALKIE TALKIE Model: Kenwood PKT03	6 No	48,090.00	ESD	Equipment
9	Mixed Domain Oscilloscope Mod:MDO3012 Arbitrary Function Generator Mod: MDO3012 MDO3AFG 16 Digital Channels Mod: MDO3012 MDO3MSO Increase spectrum Analyzer Frequency to 3 GHz Mod: MDO3012 MDO3SA	01 No 01 No 01 No 01 No	566,527.50	BITS Sand Box Lab	Equipment
10	1 Midi and 2 mini gel electrophoresis setups	04 Nos	139,990.20	Dr K Nagamohan	Equipment
11	COD Analysisi System	01 No	141,039.96	Dr P Sankar Ganesh	Equipment
12	GP BioUrja System	01 No	2,000,000.00	Dr P Sankar Ganesh	Equipment
13	Ice Cube Machine Model: CB425 with Bin, Make: SPA Italy	01 No	155,791.00	Chemistry Dept	Equipment
14	Digital CMOS Camers with Measure Soft Ware Model: ARTCAM Adapter adapter with Reductionlense	01 No	144,900.00	Chemical Engg	Equipment
15	Jasco Double Beam Spectrometer Model: V-670	01 Set	JPY 1850000	CAL Lab	Equipment
16	Elix 10 Essential S Kit	01 No	EURO 8900	CAL Lab	Equipment
17	CO2 Incubator water jacketed Dual IR CO2 Sensor 200 Lts Cap Model: W200IR	01 No	USD 5780	Prof D Sriram	Equipment
18	Study of Oscillats	02 Nos 02 Nos 02 Nos 02 Nos 02 Nos 06 Nos	33,540.15	Physic	Equipment

SI No	Item Description	Qty	Bill Amount	End user	Ledger Folder
19	Coupled Oscillating Retord Stand with T Clamp	02 Nos 02 Nos 01 No 01 No 01 No 02 Nos	55,201.13	Physic	Equipment
20	Single Solid Door Upright Freezer (1-BSF345) & Single Door upright showcase coolers (3-FKG400) inc digital Display	04 Nos	190,000.16	Prof S Swaminathan	Equipment
21	Variac & Isolation Transformer	01 No	52,080.00	Mission 2015	Equipment
22	Oculus VR Development Kit DK2-V1-BDL (Virtual Reality Head set for Gaming & Case)	01 No	34,985.58	EEE	Equipment
23	HP Laptop Pavilion 15-PO77TX Core i5-4210OU/8GB/1TB/15.6"/NVIDIA G Force 840M 2GB/Win 8.1/Bag	10 Nos	497,499.98	P S Division	Laptop
24	LEM Current Transducer LA55P LEM Voltage Transducer LV25P	25 Nos 25 Nos	127,438.50	EEE	Equipment
25	Epson EB-G6550WU Projector	01 No	354,999.99	ESD	Equipment
26	Scratch Test/Base (SUR/0001/BA/0001)	01 No	835,850.00	Mechanical Engg	Equipment
27	Mitutoyo Advanced Portable Surface Roughness Tester SJ-411 4MN Inc/MM Manual Column Stand SJ-400 Adapter for Cylinder Measurement	01 No 01 No 01 No	478,663.50	Central Workshop	Equipment
28	Mini Submarine Electrophoresis unit-133794 Vacuum Pump	01 No 01 No	166,195.95	Prof S Swaminathan	Equipment
29	Water Distillation Unit	01 Nos	56,525.00	Chemical Engg	Equipment
30	Xerox WC 7830 Colour MFP Printer Under FSMA	01 No	383,250.00	WILP	Printer & Scanner
31	Fluride Meter Model: FL700 with Carry case	01 No	33,939.95	Dr Trishikhi Raychoudhury	Equipment
32	ACE1103_PX4CLP_USB: ACE Kits	01 No	1,186,875.00	EEE	Equipment
33	Gas Analyzer Flow Meter & Data Acquisition Digital Mass Flow Meter Model: MF-5700 HMI Cermate Technologies Display & Software	01 No 01 No	71,400.00	Chemical Engg	Equipment
34	Conventional Universal Milling Machine Model:UF-2Fitted with Coolent equipment & Machine SI No: 587	01 No	1,420,030.00	Central Workshop	Equipment
35	Shaping Machine, Sagar Make, Model 18" Long with Accessories	01 No	398,917.60	Central Workshop	Equipment
36	Canon IR 2002N Digital Copier with Stabilizer- 2KVA and Acce	01 No	79,999.50	Placement	Equipment
37	Increment Borer 250mm/10" Core Dia 4.3mm 2 thread Make: Haglof, Sweden Borer Starter Make: Haglof, Sweden	01 No 01 No	24,617.50	Chemical Engg	Equipment
38	DM Water Plant Model: DM600/100	01 No	36,067.50	Chemistry Dept	Equipment
39	Canon EOS 5D Mark III Camera Kit (24-105f/4L IS USM) Canon Macro Photo Lens MP-E65 F/2.8 1-5X Manfrotto 190XB (ALUTRIPOD BLK,W/OHEAD)	01 No 01 No 01 No 01 No 01 No	1,061,160.66	ESD	Equipment

SI No	Item Description	Qty	Bill Amount	End user	Ledger Folder
	LEXAR PRO CF 64GB 1066X Battery-Pack LP-E6 Lexar 25in 1Card RDR USB 3.0				
40	Server IBM X 365M4 server 7915N5A IBM 300GB SFF 10K HDD 90Y8877 IBM 8GB Ram 00D5036 IBM Serveraid M5100 Series Card 81Y4484	01 No 01 No 03 Nos 01 No	314,980.00	CAD Lab	Server
41	DSC Measuring Unit	01 No	93,783.38	CAL Lab	Equipment
42	Minor Equipment Spares, Blot Modue Plates Etc	01 No	49,495.95	Prof S Swaminathan	Equipment
43	HP Z640 WorkstationIntel Xeon E5, 1TB, 32GB RAM, 2GB Graphics,DVD- RW,Win8.1.HP 202 G2 DesktopIntel Core i5, 500GB,4GB Ram, DVD-RW, Win8.118.5" HP TFT Monitors	01 No02 Nos02 Nos	428,085.00	Chemical Engg	Equipment
44	MacBook Pro MGX92HN/A 13",Dual-Core i5,256GB,8GB,Iris Graphic MacBook Pro(MD101HN/A) 13", Dual-Core i5, 500GB,4GB,HD Graphic	01 No 01 No	195,000.00	IPC	Laptop
45	Force Dynamometer	01 Set	1,589,669.55	Central Workshop	Equipment
46	Liberty Lite Tripod Screen 120" (RL) Liberty Classic Manto 54x96 110" Manual (MW) Screen	05 Nos 03 Nos	56,949.99	ESD	Equipment
47	Hand Operated injection Moulding Machine Hydraulic Operated Compression Moulding Machine	01 No 01 No	461,435.00	Chemical Engg	Equipment
48	2.4G CT6B 6-Channel Transmitter+Receiver (R6B) Bio Medical Sensor Robomart quad copter combo pack with 6 channel transmitter and receiver Gopro Hero4 black Intex cloud FX OS firefox 1.3 smart mobile phone Assorted screws nuts bolts etc Robotic arm edge by owi robotics	2 Nos 5 Nos 1 No  1 No 2 Nos 2 Nos 1 No	102,131.10	BITS Sand Box Lab	Equipment
49	Supply of BITS Sand Boxx Lab Material 191 Items ie(Development Boards, Sensors, Modern, Digital IC's, Mechanical Machines, Electrical Equipment)	-	952,941.00	BITS Sand Box Lab	Equipment
50	Ice Flaking Machine Cap: 30 Kgs/24Hrs	01 No	128,812.50	Biological Sciences	Equipment
51	HP Office Pro X576 DW MF Printer	01 No	52,250.00	P S Division	Printer & Scanner
52	Blue Star Deep Freezer Model: CHF500	02 Nos	55,999.66	Biological Sciences	Equipment
53	ETAON 9145-6000HXL-6KVA On-Line Double Conversion UPS with 20 Nos12V/26AH Batteries with Accessories	01 set	101,325.00	IPC	Equipment
54	Leica RM2255 Basic Instrument	01 No	1,386,518.00	Dr Ramesh Babu A	Equipment
55	Canon MF 4870 DN Printer	01 No	25,200.00	ERP Office	Printer & Scanner
56	Binocular Microscope	01 No	41,580.00	Biological	Equipment

SI No	Item Description	Qty	Bill Amount	End user	Ledger Folder
	Make: Olympus Model: CH20i			Sciences	
57	Cables 2" Casing 1" Casing 1" Flexible Pipe	08 Boxes 120Mts 240 Mts 20 Mts	60,900.00	IPC	Networking
58	Deep Freezer Make: Blue Star Model: CHF500	02 Nos	57,499.66	Biological Sciences	Equipment
59	Mac Book Pro Intel Core i5, 4GB DDR3 Ram, 128GB SSD HDD 13"Display HP Pavillion 15-P207TX Note Book, 5th Gen i7, 8GB Ram, 1TB HDD, 2GB Graphic Card Segate BackupPlus 4TB HDD External D	01 No 01 No 01 No	212,011.00	Dr G Geetha Kumari	Laptop
60	Laminar Air Flow Horizontal Size: 2'x2'x2'	02 Nos	88,200.00	Biological Sciences	Equipment
61	Canon MF 4870 DN Printer	01 No	25,200.00	Directors Office	Printer & Scanner
62	Water bath with Digital Display Model: LC-11 (A)	01 No	42,000.00	Pharmacy Dept	Equipment
63	BIO-RACA Fermenter	01 Nos	314,875.00	Biological Sciences	Equipment
64	Mini Submarine Unit , Basic Buffer Tank	01 No	37,881.06	Biological Sciences	Equipment
65	Instrumentation & Control Trainer	05 Nos	1,518,750.00	EEE	Equipment
66	Ph Meter, Model: Tutor-1, Make: Eutech	01 No	38,010.00	Biological Sciences	Equipment
67	Laptop HP 15-p207TX (i7 5th Gen/8GB/1TB/2GB/Win-8/15") RAM 8GB DDR-3 Transcend	01 No 01 No	70,050.00	Dr N Kishore Kumar	Laptop
68	Stagepass 600i 600Watt Portable PA System	01 Set	94,170.53	ESD	Equipment
69	Autoclave Vertical with Fully Automatic & Accessories	01 No	151,515.00	Biological Sciences	Equipment
70	KENT ROTM Water Purifier Model: KENT ELITE	01 No	31,000.00	Biological Sciences	Equipment
71	Compressor airconditionr 2 ton	01 No	194,363.75	Audiorium ESD	Equipment
72	Drying Oven	01 No	68,013.00	Biological Sciences	Equipment
73	Autoclave Horizontal	01 No	265,650.00	Biological Sciences	Equipment
74	Opus 669 Handheld Microphone	01 Set	48,090.00	IPC	Equipment
75	Spectralab Karl Fisher Titrator Model: MA 101C	01 No	168,750.00	Chemical Engg	Equipment
76	Panasonic PT-EZ580 Projector	01 No	287,500.00	ESD	Equipment
77	Desktop PC With Display Port Output, Dell 21/24" Full HD LED Display, Dell E2414H Full HD Video Camera Canon XF205 Compact Flash Memory Card, Sandisk 64GB UHS-1 SDHC Memory Card, Sandisk 32GB Tripod Stand for Camcoder, Manfrotto MVK500A Balancing Adapter Plate, Manfrotto 501P LON Full HD Document Camera , Lumensa PS751	01 No 01 No 01 No 03 No 01 No 02 No 01 No 01 No 01 No 01 No 01 No	1,020,790.40	WILP	Equipment



SI No	Item Description	Qty	Bill Amount	End user	Ledger Folder
	Gosneck Microphone, Shure MX418 Wireless Lapel Microphone, Shure PGX Series Shielded Twisted Pair Cable 475MHz 24AWG, SF/UTP, SI 19" Equipment Rack, Integrator				
78	Orbital Shaking Incubator, CIS-24BL Cap: 9Lts Servo Controlled Voltage Stabilizer, VS-02	01 No 01 No	168,682.50	Biological Sciences	Equipment
79	Essae GDT 810 for Bell Buzzer Essae GDT series master with display Essae GDT 57mm Clock with Green Display ESSAE GDT-100MM Green	01 No 02 Nos 10 Nos 04 Nos	131,860.00	ESD	Equipment
80	Beam Mould, 10mm x 100mm x 500mm Specimens	06 Nos	44,587.13	Civil Engg	Equipment
81	Supply of 2500 Lts Hot water Storage Tank-01 Solar Panels-20 MS Support Stand for Tank & Collectors Component Kit-1	01 No	350,000.00	Maintenance Division	Equipment
82	EPSON Projector EB-1975W	02 Nos	287,594.23	ESD	Equipment
83	5 Star AC make: Blue Star Make	02 Nos	110,000.00	CAL Lab	Equipment
84	Electro-Chemical Machining Mode: Electro-M	01 No	940,500.00	Central Workshop	Equipment
85	Nozel Performance Test Model Compressible Flow Range Nozel Pressure Distribution Model	01 No 01 No 01 No 01 No	GBP 16,835 INR 16,27,197	Mechanical Engg	Equipment
86	Modular Air Flow Bench Boundary Layer Apparatus Radiant Transfer Experiments Rotating fatigue Machine Mild steel Fatigue Specimen Aluminium Fatigue Specimen Brass Fatigue Specimen VDAS B (Bench Mounted Version) Spring Testing Apparatus SM110	01 No 01 No 01 No 01 No 10 Nos 10 Nos 10 Nos 01 No 01 No	GBP 25,558.70 INR 24,07,680	Mechanical Engg	Equipment
87	Rei Vapor Pressure Bath, 4 Unit	01 Nos	USD 9,164 INR 72,156	Chemical Engg	Equipment
88	Chromatography System	01 No	USD 43,500 INR 27,18,918	CAL Lab	Equipment
89	Esco Microprocessor Controlled Airstream Class type A2 Biological Safety Cabinet	02 Nos	USD 16500 INR 10,31,381	Prof S Swaminathan	Equipment
90	Vibration Isolation Free Optical Table Air Compressor Packing, Transp & Inst	01 No 01 No	238,375.00	Chemistry Dept	Equipment
91	Bio Spectrometer Fluorescence with MicroCuvette	01 No	446,250.00	Biological Sciences	Equipment
92	LAB Model for Rotational Moulding Machine EN-200 Wireless Temperature Sensing Device PLC Control panel for EN-200	01Set	1,266,590.00	Central Workshop	Equipment
93	1-Phase inductive Load 10AMP, 50Hz Continuously Variable Lload Bank 3-Phase, 440V 15AMPs Rheostate 5Amps/70 OHMS	03 Nos 05 Nos 08 Nos	302,175.00	EEE	Equipment
94	Water Coler, Make: Blue Star, Model: SDLX680	03 Nos	109,500.00	SWD	Equipment

SI No	Item Description	Qty	Bill Amount	End user	Ledger Folder
	4kva Voltage Stabilizer	03 Nos			
95	Commercial Multi Gym 4 Station AF 8802	01 No	294,210.00	SWD SAC	Equipment
96	Air Curtain, Model: WAC 3000 Air Curtain, Model: WAC 4000	01 No 01 No	38,357.50	Biological Sciences	Equipment
97	Projector Panasonic PT-LX300EA S1	01 No	70,000.00	Central Workshop	Equipment
98	Cryoseal LN2 Containers 35Lts with accessories	01 set	37,445.00	Prof D Sriram	Equipment
99	Cryoseal LN2 Containers 1x47 IN50 with accessories	01 set	92,757.00	Biological Sciences	Equipment
100	3 phase, 3 Winding transformer trainer DC Shunt motor coupled to 3 phase alternator IDMT Characteristics of over current Relay charecteristics of % Biased differential relay charecteristics of static UV/OV Relay string of insulators Efficiency	01 No 01 No 01 No 01 No 01 No	741,387.53	EEE	Equipment
101	EVATOR rotary vaccum Evaporator Diaphragm variable Vaccum Pump EQUIVAC Chilled Watter circulator Vacuum Regulator	01 No 01 No 01 No 01 No	248,123.95	Biological Sciences	Equipment
102	Moisture Balance MOC63U, 60-0.001Gms Make: Shimadzu	01 No	124,057.50	Chemical Engg	Equipment
103	Canon Printer MF8580CDW	01 No	76,000.05	Prof K S Raju	Equipment
104	Brand New CO2 Cylinder Cap: 31kg with gas CO2 regulator Make: Esab	04 Nos 02 Nos	62,350.00	Prof S Swaminathan	Equipment
105	SCMOS Digital camera , Type PCO.EDGE 4.2 2048x2048 Pixel Alongwith Accessories	01 No	USD 15000	CAL Lab	Equipment
106	Confocal Micro Raman mapping System	01 No	USD 65000 INR 4150461	Chemistry Dept	Equipment
107	iPad Air 2 WiFi 64GB	01 No	51,800.00	Placements	Equipment
108	Surveillance Cameras SNCDH120, adaptor & Installation	04 Nos	210,957.80	ESD	Equipment
109	Storage Server 8channel,linux, 3TB 2HDD SATA, 42" monitor , Inst	01 No	200,000.00	ESD	Equipment
110	Amplifiers Australian Moniotr Model 1202P Shure Lapel MIC Make SVX 14/CL Shure Hand Held MIC Make : SVX 24/PG58 Crow Amplifier Model : XTI 6002	1 6 5 1	395,597.50	ESD	Equipment
111	Tower Safety Cabinet Model: 6010LEGS	01 No	129,939.00	Chemistry Dept	Equipment
112	Bench-Top Fermenter Microbial Cultivation Autoclavable	02 Nos	1,680,000.00	Chemical Engg	Equipment
113	Surface Roughness Tester -1 no's Optional Accessories -1no's	1	136,468.50	Dr C P Kiran	Equipment
114	Dell Inspiron 15 7548 Laptop 5th Gen Intel Core i7, 16GB RAM, 1TB HDD, 4GB AMD, 15.6FHD Touch, Windos 8.1	01 Nos	90,290.00	Prof K S Raju	Equipment
115	Height Gauge Adaptor(MM) Surface Roughness Tester	01 No 01 No	136,468.50	Dr C P Kiran	Equipment

SI No	Item Description	Qty	Bill Amount	End user	Ledger Folder
116	Vaccum Oven - LMVO-24	01 No	58,429.00	Chemical Engg	Equipment
117	Ceiling Fans 1200mm Sweep Make: Crompton	200 Nos	350,370.00	Ele Maintenance	Equipment
118	Refrigerator 285 Lts Make: LG, Model: LG.302RPZL	01 No	26,900.00	Pharmacy Dept	Equipment
119	MD B6CI 600/415-15F(4LEG) 3 PH IGBT Based Inverter Stack	5	241,500.00	EEE	Equipment
120	Freez Dry;er LFD BT-104	1	USD 4795 INR 304079	Biological Sciences	Equipment
121	Cooled Shaking Incubatore LCSIO - 202 With Clamp LP-202, LP-23,LP-204 and LP- 205	1	256430	Biological Sciences	Equipment
122	Gas Chromatography system Model Auto GC	1 set	555,325.00	Dr Sounak Roy	Equipment
123	Bench Centrifuge R-8C Rotor R-83 Rotor R+84 Mini Centrifuge RM-02 Plus	1 1 1 1	14676 3788 2367 7575	Prof Swaminathan	Equipment
124	N910 Note Samsaug Mobile	1	35,500.00	Placements	Equipment
125	Sihimadzu Precision Electronc Analytical Balance	1	137,025.00	Mechanical Engg	Equipment
126	I Mac Desktop computer ME087HN/A	1	105,000.00	Opera grant Project	Equipment
127	Lenova Think Centre Edge 73 Desktop	1	27,700.00	DST Project	Equipment
128	Panasonic PT-LX270EASI DLP Projector	1	56,500.00	WILP	Equipment
129	Dr Aquaguard classic water purification systems	3	26,970.00	SWD Hostels	Equipment
130	Anerobic Digester Plant Setup	01 Set	152,102.31	Dr Asma Ahmed	Equipment
131	Server Blade-IBM HS23 Intel Xeon E5 2609 v2, (quadCore), 1x8GB/Open Bay,1TB SATA,3 Years on site warenty	01 No	143,000.00	Central Library	Equipment
132	HP Laserjet Enterprise M806x+	01 No	418,000.00	ARCD	Equipment
133	HITACHI Consumables for Double Beam Spectrophotometer UV Solution Program Communication Cable	1	JPY 110680 INR 60,255	Chemical Engg	Equipment
134	Radware Linkproof 1008 On demand Switch Active Key for Bandwidth Management	1	1,050,000.00	IPC	Equipment
135	Brand New gas Cylinders with GasNitrogenOxygenBrass RegulatorArgon	01 No01 No01 No01 No	41,875.00	Dr Sounak Roy	Equipment
136	Gear Pump (1 HP 1440 RPM Flame Proof) First Aid Kit with Box(Wooden)	01 No 05 Nos	29,952.50	Ele Maintenance	Equipment
137	"Weiber" Fume Hood (ACM-1212FH)mild steel L1800xD915XH2300	01 No	331,206.00	Civil Engg	Equipment
138	Transmission Line Simulator kit Current Transformer Test Set Kit Potential Transformer test Set Kit	01 No 01 No 01 No	1,239,176.30	EEE	Equipment
139	Brand New Gas Hydrogen Cylinder 10% H2 (Hydrogen) in Helium (47Ltr W.C )	01 No	24,150.00	Dr Sounak Roy	Equipment
140	Robotic Dental Drilling Drilling Machine	01 No	69,825.00	Dr Y V D Rao	Equipment

SI No	Item Description	Qty	Bill Amount	End user	Ledger Folder
141	CANON MF 226 DN Printer SI No: (91)9540B021(92)AA(21)RVJ04635	01 No	24,500.00	EHD	Printer & Scanner
142	Dell E2016 19.5" Monitor Dell Power Edge T110 II Server Intel Xenon E3 Processor, 16GB (4x4GB), 1TB SATA Hard drive, DVD RW Drive, No OS	01 No 01 No	96,688.11	Instruction Division	Equipment
143	EPSON EB X-18 LCD Projector Liberty-Lite Screen 84"D(50"x67")	01 No 01 No	41,998.60	Physics	Equipment
144	Scanning Probe microscope - Solver NANO	01 No	USD 38000, INR 2428467	Physics	Equipment
145	Shimadzu UV VIS NIR Spectrophotometer	01 No	USD 46500 INR 2920766	Chemistry Dept	Equipment
146	Centrifuge 5430R with Acce	01 No	411,075.00	Biological Sciences	Equipment
147	Creep & Ruptur Testing Machine	01 No	USD 36500, INR 1643624	Mechanical Engg	Equipment
148	Brand New Notrogen Gas Cylinder Brand New Zero air Cylinder Two stage Regulator	01 No 01 No 02 No	38,200.00	CAL Lab	Equipment
149	48 Port Manageble Switch 24 Port 10/1000 GB Switch Web View	04 Nos 02 Nos	105,094.52	IPC	Equipment
150	1.5TR High Speed Wall Split AC, 5 Star, Model: 5HW18SA, Bluestar Make	01 No	43,800.00	CAL Lab	Equipment
151	Pulverizer Sowbhagya Atta Kneader, Cap: 20 Kgs Sowbhagya Tilting Grinder, Cap: 20 Kgs SS Storage Rack (45X18X72) Dosa Plates (Bhatti)	02 Nos 02 Nos 02 Nos 02 Nos 02 Nos	466,640.00	SWD Mess	Equipment
152	HP LAPTOP 15-AC124TX NOTE BOOK (CORE i5 5TH Gen,4GB/1TB/Win10, 2GB Graph/15.6 Inch Screen)	18 Nos	841,500.00	WILP	Computers
153	Supply if Exhaust Fan (355Dia) Cap: 700- 900CFM	01 No	40,318.00	Chemistry Dept	Equipment
154	4.5Kg Vintex Brand New Fire Extinguisher Trnsportation	06 Nos Ls	46,200.75	Maintenance Division	Equipment
155	Dell Precision Tower 7910 XCTO Base Xenon Processor, 512 (16x32GB)DDR, 4TB SATA, 23.8" Screen	01 Nos	1,451,423.00	Prof Jeevan Jaidi	Server
156	Organ Bath System (OB-2D) Micromanioulator for Organ Bath	01 Nos 01 Nos	25,850.00	Pharmacy Dept	Equipment
157	Power Press, Cap:30 Tons, VIVEK Brand "C" Type, with standard accessories,	01 No	402,570.00	Central Workshop	Equipment
158	Power Hammer 3Phase, 3HP	01 No	260,400.00	Central Workshop	Equipment
159	Dell Precision T1700MT Xenon Processor E3-1241,	01 No	110,775.00	SWD	Server
160	HP Z440 Work Station	01 No	142,800.00	Civil Engg	Equipment
161	Refrigerator, Model: ECG-1100A	01 No	190,000.00	Biological Sciences	Equipment
162	Homogenizer Vortex Mixer	01 No 01 No	148,854.00	Pharmacy Dept	Equipment
163	Analtical Balance	01 no	71,993.00	Pharmacy Dept	Equipment
164	Rockyvacuum Pump	02 No	37,138.50	Chemistry Dept	Equipment
165	Hedalp Platform	01 no	375,150.00	Dr Swati Biswas	Equipment
166	Mini Protean Tetra Cell, Mini Transblot	01 No	601,576.00	Dr K Nagamohan	Equipment

SI No	Item Description	Qty	Bill Amount	End user	Ledger Folder
	Model: Powerpac HCP				
167	Avaya 1608 IP Phone	08 Nos	61,190.00	WILP	Equipment
168	Diluent for Medicin 20lts Lyse for Medonic 5lts Controls (Low, High, Normal) Calibration	01 Box 01 Box 01 Box 01 Box	50,531.25	CWD	Equipment
169	HP Proliant ML10 Tower server (Intel Xeon E31220V2, 4GB RAM(3) 1TB SATA RAID HP Note Book (MN: 015TU, 4GB Ram, 1TB HDD, Win 8.1) Norton 360 TM Multi Devices 1year Protection Kaspesky Internet Security 1year Lice	01 No 01 No 01 No 01 No	127,912.74	Dr Geetha Kumari	Equipment
170	Submersable Wast Water Pump Model: SMC-1M-18DT	02 Nos	54,000.00	Ele Maintenance	Equipment
171	Desktop 280 G1 MT (L1R25PT) Intel Corei5 4th Gen, 8GB RAM/1TB,/DOS/LED 18.5" Backlit Monitor HP	04 Nos	174,300.00	Civil Engg	Computers
172	Split AC 1.5 ton, 5 Star rating, Make: Blue star	01 No	43,800.00	Maintenance Division	Equipment
173	Lenovo Laptop (Quad Core/4GB/500GB/15.6/Win8.1)	01 No	24,650.00	Maintenance Division	Equipment
174	Canon MF 226 DN Printer	01 No	24,500.00	Humanities & Social Sciences	Printer & Scanner
175	Fluorescence Spectrophotometer Model: F 7000 Make Hitachi NST 5J10004	01 No	JPY 110680 INR 1652006	Dr Amit Nag	Equipment
176	Custom Made Photobioreactor, design, fabrication and installations	01 set	322,459.00	Dr Asma Ahmed	Equipment
177	HE SPL Rolling thin Film Over Test	1	506,250.00	Civil Engg	Equipment
178	Hot Air Oven	01 No	104,186.00	Dr Manab Chakravary	Equipment
179	Refrigerator 255 Lts, Make: LG, Model: LG282 SWCM Microwave Oven 28 Lts, Make: LG Model: LG-C 28883	01 No 01 NO	36,700.00	Placements	Equipment
180	instrumentation & Control Trainer Kit	LS	1,518,750.00	EEE	Equipment
181	UP-Gradation of Automatic Universal Machine	01 No	418,725.00	Civil Engg	Equipment
182	MIG Welding Machine with Accessory	01 Set	400,000.00	Central Workshop	Equipment
183	Micrometer 25-50mm Hot Mounting Press	01 No 01 No	82,701.00	Mechanical Engg	Equipment
184	Multi Touch USB Interactive Unit (Micro 7090 UST)	03 Nos	129,171.99	ESD	Equipment
185	DELTA MODEL SYSTEM @ 220V AC/DC Current Source & Nanovoltmeter	01 Nos	735,000.00	Physics	Equipment
186	Brand New CO2 Cylinder with Gas Brand NewZero air Gas Cylinder with gas & Regulator	01 No 01 No	38,725.00	CAL Lab	Equipment
187	Single Cavity for hand Injuction Moulding 2 cavity for Compressor moulding	01 No 01 No	55,650.00	Chemical Engg	Equipment
188	Column Plan Fitting	01 Nos01 Nos	37,196.25	Dr Trishikhi Raychoudhury	Equipment

SI No	Item Description	Qty	Bill Amount	End user	Ledger Folder
189	Biometric Fingerprint & Card Reader System	LS	85,000.00	SWD	Equipment
190	NI Products	01 NO	535,390.00	Dr Sabereesh	Equipment
191	Concentration Plus Complete System with integrated Diprime Vacuum Pump	1	409,500.00	Biological Sciences	Equipment
192	SS Idly box 240 Idly cap with Steamer	03 Nos	226,710.00	SWD Hostels	Equipment
193	Dell OpTIPLEX 3020 MT BTX Base	40 Nos	1,312,367.00	IPC	Desktop
194	Brand New Gas Cylinder with Regulator Syn Gas (calibration Gas 20%, Carbonmonoxide 30%, Hydrogen 50%) Zero Air Cylinder Refilling of N2 Gas	01 Nos 01 Nos 01 Nos	45,025.00	Chemical Engg	Equipment
195	Laptop lenovo Z51	01 no	60,990.00	Dr Debdas Gosh	Laptop
196	Dell OpTIPLEX 3020 MT BTX Base	12 nos	32,809.17	IPC	Desktop
197	Dell E2715H: Dell 27" Screen LaCie d2 Quadra V3 4TB External Hard Disk MicroftARC TousWD 1TB Hardisk Multimedia Spaakars Creative SBS AD355 2.1 Pen Drives 16GB Sandisk HP 16GB DDR4 2133 RAM Intensity Pro 4K	01 No 02 Nos 01 No 01 No 01 No 10 Nos 01 No 01 No	116,497.50	WILP	Equipment
198	Ambient Fine Dust Sample	01 No	219,589.00	Civil Engg	Equipment
199	Dell Vostro 15 3558 Laptop	12 Nos	373,452.00	IPC	Laptop
200	Dell Precision T1700MT Dell Optiplex 9020	01 Nos 02 Nos	216,300.00	ARCD	Desktop
201	3D Coordinate Measuring Machine Make: Spectra,	01 Nos	1,757,250.00	Central Workshop	Equipment
202	HP 240G4 Laptop	04 Nos	160,000.00	ERP	Laptop
203	Submersable Wast Water Pump Model: SMC-1M-18DT	02 nos	54,000.00	Maintenance Division	Laptop
204	LED Street Light Fitting	100 Nos	606,243.00	Ele Maintenance	Equipment
205	Geer Box Housing	01 No	22,271.00	Dr Sabereesh	Equipment
206	Tripple Channel DC Regulated Power Supply Model: PSD3304	22 Nos	269,610.00	EEE	Equipment
207	Micrometer 0-25mm	01 No 01 No	28,560.00	Mechanical Engg	Equipment
208	Dell Precision Tower 5810 BTX Base Intel Xeon E5-1607v3 Processor(Four Core),8GB RAM, 500GB ATA Hard drive, win10 Pro	01 Nos	120,054.00	Dr Anasua Guharay	Computer
209	Hunidity Control System	01 No	299,999.00	Mechanical Engg	Equipment
210	Steam Power Plant Test Rig	01 No	2,435,874.38	Mechanical Engg	Equipment
211	Canon IR Advance C 3320 Digital Photo Color Copier with Network	01 No	220,500.00	Project (Construction)	Printer & Scanner
212	Panasonic PT-LX300EA S1	01 No	43,000.00	Project (Construction)	Equipment
213	Canon Printer Image Class MF8210 CN	01 No	40,000.00	Project (Construction)	Printer & Scanner
214	Digital Density Material Model: MS205DU	01 No	264,600.00	Mechanical Engg	Equipment
215	Dell Precissn Tower 5810 XCTO Base	1 No	152,083.98	Dr N Anil	Equipment

**LIST OF FIRST DEGREE THESIS COMPLETED DURING THE YEAR 2015****Second Semester 2014-15**

S.No.	Name	Topic	Supervisor
1	Shivangi Nath	Association between genotypes and phenotypes in metabolic syndromes	Dr. K. Naga Mohan
2	Salem Akshith Anand	Use of mechanical and micro fluidic methods for separation of cellular components of blood	Prof. Suman Kapur
3	Nayani Rijul	Material characterization of carbon fiber composites	Dr. Ramesh Babu
4	Sashank. S	Finite element analysis of Burger's equation using discontinuous galerkin methods	Dr. Vikranth kumar surasani
5	Raghavan,Adharsh	Shaped Nanocatalysis	Dr. R. Krishnan
6	Tibrewal,Aditya	Avifauna mapping using GIS in kosi river basin	Dr. Tathagata Ray
7	Pujith,Pamulapati	A study on carbon sequestration by forest using satellite data	Dr.K.Rajitha
8	Rethwik,Gona	Traffic forecasting	Dr. Vinayak ram
9	Shubham Walia	Experimental studies on self compacting concrete incorporating sustainable materials	Kalyana Rama JS
10	Abraham Tim Zachariah	Comparison of nature-inspired optimisation algorithms (for Reservoir optimisation)	Dr. Vasana
11	Ajay Vizhalil Perumal	Experimental studies on concrete incorporating sustainable materials	Ms. Kalyan Rama J S
12	Alluri Yugesh	Development of hydrologic models in Matlab	Dr. K.Srinivasa Raju
13	Gali Lakshmana Ravi Raj	Analysis and design of a high rise structural system incorporating various bracings using lateral load resistance techniques	Dr. P.N.Rao
14	Gorthy Sarath Chandra	Hydrological application of satellite earth gravity measuring mission	Dr. Murari Verma
15	Mayank Dharwa	Applications of Artificial neural networks in hydrology	Dr. A . Jagadeesh Anmala
16	Rupesh Yadav	Performance of Engineered cementitious composites	Dr. P. N. Rao
17	Singhvi Rishabh	Mass housing - Permanent shuttering	Dr. A. Vasana
18	Tummuri Teja Srinivas Ganesh	Decision support system for multi criteria decision making an integrated approach	Prof. K.S.Raju
19	R.S. Ramprasaath	Automatic attribute based curriculum learning for improving classification accuracy	Dr. Bhanumurthy
20	Ruthvik Majety	To design an out of order execution process based on RISCv architecture	Dr. K.C.S. Murthy
21	Sudheer Vazrapu	Forecasting foreign exchange rates with neural networks	Dr. ABHISHEK THAKUR
22	Tripathi Sourabh	Health informatics using machine learning	Dr. Chittarajan Hota
23	U.Z. Zaman Ahsan	Privacy aspects in Internet of things	Dr. K.C.S. Murthy
24	Ankesh Kumar	Development of framework for extraction and analysis of motion from the video	Mr. Abhishek Thakur
25	C.K. Shriram	Applications of machine learning in software engineering	Dr. N.L. Bhanumurthy
26	Golatkhar Mohanish Vilas	Noise identification and reduction in bug prediction (in the field of machine learning)	Dr. N.L. Bhanumurthy
27	I.A.S.V.S.N. Bhaswant	Playlist generation using music information retrieval	Ms. Prafulla K.
28	Kolanpaka Ravikiran	Implementation of join algorithms in postgre SQL	Dr. Gururaj
29	M. Vishaal	Role of power-law distribution in machine learning	Dr. N.L. Bhanumurthy
30	Muppani Prudhvi	Building detection and modeling from airborne LiDAR point cloud	Mr. C.R. Prasanna
31	Prasenjeet Biswal	Transport protocol in the real world	Dr.Chittaranjan Hota
32	Prayag Singh	Software analytics	Dr. N.L. Bhanumurthy
33	R. Pranav	Developer Information Assistant	Dr. N.L. Bhanumurthy
34	Raghavender Sahdev	Place recognition system for localization of mobile robots	Dr. Aruna Malapati

S.No.	Name	Topic	Supervisor
35	Robin Kumar Nayak	Self-code verification on IOT devices	Dr.Chittaranjan Hota
36	Sagar Anand	Spectrum sensing in cognitive radio networks	Dr.Chittaranjan Hota
37	Saksham Sahai	Data Visualization	Dr. Aruna Malapati
38	Sidhant Panda	Data Visualization	Dr. Aruna Malapati
39	Snehansu Pradhan	What -if analysis of batch job systems	Dr. Aruna Malapati
40	Suri Srinivasa Prakash	software bug prediction	Dr N.L. Bhanumurthy
41	Rohit. J. Yagnesh	Equity research portfolio management and empirical analysis from a global financial view point	Dr. Ramana Sonti
42	Prasanth,Akkiraju	Principles and issues in Govt. budgeting: a study of budget 2015-16	Dr. C.H. Yaganti
43	Puntambekar Rohit	Applied Econometrics	Dr. C.H. Yaganti
44	Kumar M. Lexman	Panel data analysis of automobile sectors among the 'BRICS' nations	Dr. P. Lalitha
45	Potturu Varun	Macro impact of microfinance across India	Dr. P. Lalitha
46	Manda Gowtham Kumar Reddy	An analysis an trade among SAARC nations using gravity model and panel data analysis	Dr. P. Lalitha
47	Bharatula Ram Nidhish	Impact of scale and selection effect on India and its trading Partners	Dr. Archana Srivastava
48	Varun Chowdary Yellina	Impact of intension and extension margin on India and the BRIC Economics	Dr. Archana Srivastava
49	Amit Gantasala	Pestel and porters analysis of the Indian pharmaceutical industry	Dr. lalitha
50	Chetan D.	Mobile operating systems, the disruptive technologies (Android)	Dr. P. Lalitha
51	Kausthubh Annam	Performance evaluation of mutual funds in India	Dr. Ramana sonti
52	Rithvik Srinivas	Quantitative equity portfolio management	Dr. Ramana sonti
53	Vamsi Mohan Gampa	Economic reforms in India liberalization (1991-2000) : Impact on manufacturing sector	Dr. Hanumanth Rao
54	Neeharika Vellaluru	Evaluation of thickness dependence on work function of materials	Dr. Prasant Kumar Pattnaik
55	Abhijith Reddy Rachala	Design of efficient VLSI multipliers	Dr. Syed ErshadAhmed
56	Abhinav Reddy Vangala	Probabilistic computing for image processing	Prof. M.B. Srinivas
57	H.N.R. Karthik T.	Early detection of brain tumour	Dr. Prabhakar
58	Krishna Ravuru Murali	Silicon photonic devices for communication systems	Dr. Prasant kumar pattanaik
59	M Nayer Mahesh	Micro semi smart fusion board for PMBL motor control	U.M. Rao
60	Bodala Yasheela Prasad	Optimization of routing protocols in underwater networks(UNET)	Dr. Y. Yoganandam
61	Kachare Priyanka Avinash	Efficient usage of scarce IEEE 802.11 radio resources in dense urban unplanned environments- Neighbor discovery & interference graph creation	Dr. Y. Yoganandam
62	Mulugu Rohith	Cooperative spectrum sensing in cognitive radio	Dr. Y. Yoganandam
63	Sidharth Sahdev	Vowel interaction techniques	Dr. R. Venkateshwaran
64	Solomon Shashank John Peter	Design and analysis of log periodic dielectric resonator antenna array with aperture coupled feeding for broadband applications	Dr. Runa Kumari
65	Srijan Kumar Sharma	Through wall imaging using radio frequency	Dr.Y. Yoganandam
66	Vuppala Siddartha	Scanning tunneling spectroscopy of disordered superconductors	Prof.Souri Banerjee
67	Krishnadeep Rao Padakanti	A Socio-political study of shameerpet village	Shamuel Tharu
68	Siddharth Lenka	Analyzing advertisements	Dr. Santosh Kumar Mohapatra
69	H. Venkata Srikarthik Pendyala	Mathematical modelling of human circulatory systems	Dr. T.S.L. Radhika
70	Jain Gautam	Analysis of E-commerce industry using game theory	Dr. D.K. Satpathi
71	Naresh Kumar Veeram	A study on removal of noise in medical images	Dr.Akhilad Iqbal
72	Dinesh Kumar Yedlapalli	Automation of steps involved in sample preparation for UTI Machine	Dr. N. Suresh Kumar Reddy
73	Madhura Prashant Athale	Assessment of mechanical soundness of graniofacial implant superstructures	Dr. A.K. Gupta
74	Sai Sameer. P.	Simulation of manufacturing of organic solar photo voltaic cells	Prof.S.P.Regalla



S.No.	Name	Topic	Supervisor
75	Nilesh Kalyani Parth	Feasibility of modularity in vehicle design and construction	Dr.S.S. Deshmukh
76	Gupta Samarth	Design, Analysis & Optimization of piston using FEA	Dr.S.S. D eshmukh
77	Maheswara Reddy Malepati	Design, Analysis & Optimization of piston cylinder using FEA	Dr.S.S. Deshmukh
78	Raghu Nandan Pratoori	Formability tests on constrained groove pressed EDD sheets	Dr. A.K.Gupta
79	Rani Srishti	Finite element analysis of composite material pylon for transtibial prosthetic for superipr strength and flexibility	Dr. Regalla
80	Singh Chavan Jaideep	Modular vehicle architecture	D.S.S. Deshmukh
81	M Manoj Kumar Reddy	Energy modelling and optimization for microgrid	Mr. Khalid Anwar
82	A Shushanth	Development of model for simulating ground resonance in helicopter	Dr. Y.V.D. Rao
83	V.Vishwanth Kumar	Comparative analysis of wind machine theories and numerical experimentation of wind machine performance	Dr. G. R.Sabareesh
84	Bagannagari Vikaskumar Reddy	Aero-elastic instability of surface modified cylinders	Dr. Sabareesh
85	Chennu Vinodh Reddy	Optimization of process parameters during wire cut EDM of titanium alloy and mild steel	Dr. N. Suresh Kumar Reddy
86	P Vivekh	Design and development of flat plate collector based solar water heater systems with aluminium tubes	M. Srinivas
87	Shrinivas Shashikant Kulkarni	Design and process planning for a FDM type low cost 3D printer for composite material component manufacture	Dr. S.P. Regalla
88	Tejveer Simha Maddukuri	Test on constrained groove pressed EDD steel sheets	Prof. A.K.Gupta
89	Saideep Suryakant,Choudhary	Study of usage of traditional medicines by diabetic patients	Dr. Sajeli Begum
90	Indraneel Chatterjee	Optimization of networking of FG's from GDC	Dr. Shrikant Charde
91	Vyom Gaipal	Development of PLGA nanoparticles loaded with histone deacetylase inhibitor for sustained anticancer activity	Dr. Swati Biswas
92	J.R. Trishaal	Design and evaluation of transmucosal delivery systems for candidate drug	Dr. Shrikant Charde
93	Nikhil Peter Jose	Comparative study of consumer behaviour towards branded and generic drugs	Dr. Shrikant Charde
94	Abdul Saboor Mohammed	Wireless single arm ECG monitoring system	Dr. Kannan Ramaswamy
95	Gangwar Manushree	High Dynamic Range Imaging	Dr. Thiruvikraman
96	Vikramaditya Pagadala	Wireless communication using matrix theory	K.V.S. Shiv Chaitanya
97	Ankit Sanjiv Tendulkar	Classification of images using image entropy	Dr. P.K. Thiruvikraman
98	Harikrishnan V.	FDTD simulations for graphene plasmonics	Dr. Kannan Ramaswamy
99	Panda Avinash	Investigation of magneto optical effects in composite magneto plasmonic nano-structures for sensing applications	Dr. Kannan Ramaswamy
100	Varun Chappidi	Quantum entanglement	Dr.K.V.S Shiv Chaitanya
101	Shantanu Korada	Economics - Financial Engineering	Dr. Rahul Nigam
102	Amandeep Singh Bakshi	Morphology dependent resources in microsphere	Dr. Sashideep Gutti
103	Sanyam Garg	Human attention recognition	Dr. Thiruvikraman
104	Francis E. Hains	Quantum field theory on curved space time	Dr. Sashideep Gutti

**I Semester 2015-16**

1	Manjyot Kaur	Treatment of waste water from textile industry	Prof. Suman Kapur
2	P. Shiva Kumar	An experimental investigation to find out the efficacy of microbes in cement etc., how they are beneficial in improving the characteristics of cement/concrete	Dr. Kumar Pranav Narayan
3	K. Vasundhara	Evaluation and rating of intervention options available for autism spectrum disorders & other neurodevelopmental disorders in India	Prof. Vidya Rajesh

4	G. Ganesh Sai Chaitanya	Communication of biotechnology to various socio-economic classes of society based upon their views on genetically modified crops.	Dr. Debashree Bandyopadhyay
5	Bhamidipati Sameera	Isolated compounds for targeted drug therapeutics	Dr. Kumar Pranav Narayan
6	Gupta Rohan Sunil Kumar	Study of stages of cell division in defected (cancerous) cells and normal cells through digital image processing	Dr. Jayati Ray Dutta
7	Naman Bafna	Digital image study of stages in cell division (normal and cancerous)	Dr. Jayati Ray Dutta
8	Sarayu Murali	Synthesis of value added products from microalgal biomass produced from nitrogenous waste water effluent	Dr. P. Sankar Ganesh
9	Khyati Agarwal	To prepare suitable adsorbent matrix to capture toxic ions from textiles industry effluent	Prof. Suman Kapur
10	Mallela Sreenath	Sustainable development of India using renewable energy based technologies	Dr. Asma Ahmed
11	Siddharth Maheshwari	Study on recycling potential of solid and liquid residues emanating from anaerobic digestion	Dr. D. Purnima
12	Deepika Jonnalagadda	Modeling and simulation of wet granulation of API in fluidized bed granulator	Dr. Vikranth Kumar Surasani
13	Jatin Agarwal	Quantifying language to measure firms fundamental	Dr. Srikanta Dinda
14	Bibhu Prasad Tipathy	Characterization of human hair	Dr. A. Ramesh Babu
15	Yash Pratap Singh	Effect of constraint groove pressing on properties of EDD steel	Prof. A.K. Gupta
16	Samayamantula M.K. Praneeth	Design and simulation of wind rotor for low power applications	Prof. Jeevan Jaidi
17	Krishna Chaitanya Sankisa	Separation of graphine oxide nano materials using gel-electrophoresis	Dr. Balaji Gopalan
18	Banda Ravi Teja	Surface enhanced Raman Spectroscopy of organic molecules	Dr. Amit Nag
19	G.M. Sai Rama	Thermodynamic and microscopy studies of urea zein protein composites	Dr. Kathik Chetan
20	Sanket S. Kalekar	Analysis of behaviour of conotoxins in ionic liquids from molecular dynamics simulation perspective	Dr. Durba Roy
21	L. Madhavkrishnan	simulations of peptide aggregates at mesoscopic levels	Dr. Durba Roy
22	Anil Kumar G.G.K.	Design of infrared based gas leak detecting device	Dr. Subhas Ghosal
23	Rudresh Gajanan Naik	Molecular dynamic simulation for nanoscale computational fluid dynamics	Dr. Subhas Ghosal
24	Guddati Dhruva Samhith	Characterization of polyaniline blends	Dr. Syed Mujahed Hussaini
25	Lori Shah	Synthesis and characterization of PANI-PSS blends	Prof. J. Subbalakshmi
26	Shirode Abhidnya Abhay	Molecular dynamic simulations for nanoscale computational fluid dynamics	Dr. Subhas Ghosal
27	Srashti Rajput	Supported photocatalysts	Dr. Ramakrishnan Ganesan
28	Kolli Venkata Manjeeth	Laboratory investigation on the stress strain modelling equations of different types of concrete	Prof. P.N. Roao
29	Kota Sarana Hasanth	Numerical studies on reinforced beams using damage plasticity and smeared cracked models	Mr. Kalyana Rama J. S.
30	Kartikey Singh	Partial impregnation of Bitumen in porous concrete-experimental investigations	Prof. Vinayak Ram
31	Vem Anirud Reddy	Flood plain mapping using HEC-RAS	Prof. K.S. Raju
32	S. Sai Veena	Urban flood model using storm water management model	Prof. K.S. Raju

33	Sai Sravani Aluru	Numerical study on perforated steel beams	Dr. Chandu Parimi
34	Swarna Sai Gopi Nihal	Numerical studies on time history analysis of high rise structures with different lateral load resisting systems	Mr. Kalyana Rama J S
35	Varun Mehul Sanghavi	Improving accessibility by designing a feeder network system for the Hyderabad Metro Rail	Prof. A. Vasan
36	D Madhukiran	Application of artificial neural networks in predicting of water quality	Prof. Jagdeesh Anmala
37	M Sathwik Koushal	Prediction of water quality assessment parameters by statistical analysis morphometric analysis and GIS	Prof. Jagdeesh Anmala
38	B. Kiran Kumar reddy	Non-linear finite element analysis of plain concrete beam	Prof. P.N. Rao
39	Garvit Kandpal	Vehicle detection by frame difference and their classification	Mr. C.R. Prasanna
40	Gunjit Kandpal	Vehicle detection by frame difference and their classification	Mr. C.R. Prasanna
41	Shaik Narfeemullah Baig	Simulation of attacks in the cloud environment and identification of traces in the artefacts	Dr. Geetha Kumari
42	Srikar Mokkaapati	Voice based data analytics	Dr. Aruna Malapati
43	Dilip K.V.S.R	Information retrieval from voice-based data	Dr. Aruna Malapati
44	A Dhanvi Sriram	Comparison of multi-objective optimization algorithms in software bug prediction	Dr. N.L. Bhanu Murthy
45	Praveen Venkateswaran	Improving, monitoring and event management in enterprise IT systems	Dr. Aruna Malapati
46	K. Charishma Bhavani	Topics in algebraic graph theory	Dr. N.L. Bhanu Murthy
47	Shubham Singal	10T Test-Bed	Prof. C. Hota
48	Arpit Sharma	Bug prediction modelling using multi-objective particle swarm optimization	Dr. N L Bhanu Murthy
49	Aditya Bhatia	Evaluation of defect projection models for open source projects	Dr. N L Bhanu Murthy
50	Akash Raj K.N	Modelling the distribution of software bugs and application of genetic algorithms for feature selection	Dr. N L Bhanu Murthy
51	Gunjesh Kumar	Robust distributed spectrum sensing in cognitive radio networks	Prof. C Hota
52	D. Sai Krishna	Portfolio optimization	Aruna Malapati
53	Aashutosh Goyal	An econometric analysis of volatility of commodity indices	Dr. C.H.Yaganti
54	B.V. Plahari Reddy	An analysis of inflation in India-an econometric approach	Dr. C.H.Yaganti
55	Soumya Malayanur	Econometric analysis of volatility of Nifty Index	Dr. C.H.Yaganti
56	S.L. Abhishek Yenumula	Factors effecting intensive and extensive margins of trade	Dr. Archana Srivastava
57	Amrita Dasgupta	Applications of cost-sensitive artificial neural networks	Dr. N.L. Bhanu Murthy
58	Jagannathan Dinesh	Growth of selection and scale effect : A gravity model approach	Prof. Ramana Sonti
59	Dikshant Patel	Development of an augmented reality head mount display for remote surveillance using live video streaming	Dr. Alivelu Manga Parimi
60	Pranjal Kumar	Statistical shape analysis of neural magnetic resonance imaging in amyotrophic lateral sclerosis	Dr. Venkateswaran Rajagopalan
61	Amit Chawla	Applications of delay tolerant networks to rural scenario	Mr. Abhishek Thakur
62	Sambit Kumar Acharya	Algorithms on natural language processing	Dr. Aruna Malapati

63	Vasi Reddy Vikas	Wind energy conversion systems using Double Fed Induction Generator	Prof. Bhuvanewari
64	Goutham Naga Srivatsav Varanasi	Wind energy conversion systems using a permanent magnet synchronous generator	Prof. Bhuvanewari
65	Amarsh Vutukuri	A study of material related simulations in computer generated imagery and advancements in film technology	Dr. Venkateswaran Rajagopalan
66	Devesh Ramcharan Jain	Development of an ultra low cost retinal imaging device	Dr. Venkateswaran Rajagopalan
67	Damineni Satya Phani Rahul	Automation of dental implementation procedure	Dr. Alivelu manga Parimi
68	Apurva Jain	Design and simulation of a solar powered DC home with grid and battery back-up	Prof.G. Bhuvanewari
69	Vivek Manu Kakani	Study of privacy in internet of things	K. C. S. Murti
70	Pratishtha Shukla	A coalitional formation approach in game theoretic modeling applied to cognitive radios	Dr. D.K. Satpathi
71	G. Rishikesh	Mathematical modelling of computer virus	Dr. D.K. Satpathi
72	Hemant Arora	Numerical solutions to compressible fluid flow using discretization techniques	Prof. A. Ramu
73	Avinash K Aman	Study on the cosmological model of the universe in modified theory of gravity	Prof. Bivudutta Mishra
74	Gaddam Kartheek	Epidemic analysis and mathematical modelling of HINI (influenza) virus with vaccination	Dr. Jaganmohan
75	Sai Priya	Modelling of factors affecting girls enrolment in India	Dr. K. Venkat Ratnam
76	Mayur Hampiholi	Understanding graph spectral techniques and famous results	Dr. Jaganmohan
77	Rajeswary N.	Singular Integral operators	Dr. A. Michael Alphonse
78	Kalamkar Jay Sachin	Finite element analysis of UTM testing of aluminium alloy AA6082	Dr. Amritha Priyadarshani
79	Tushar Rajangaonkar	Use of Taguchi analysis and genetic algorithm for optimization of cutting forces and surface roughness in turning operation	Dr. Amritha Priyadarshani
80	E. Sravanthi	Investigations of biofuels as IC engine fuels	Prof. M. Srinivas
81	Chittabathuni Sai Chaitanya Reddy	Experimental stress analysis	Dr. G.R. Sabareesh
82	G. Pranay Raj	Flame holding in Ramjets	Prof. N.S.K Reddy
83	S. Anvesh Krishna	Numerical and analytical studies on biaxial stretching of extra deep drawing steel using bulge test	Prof. A.K. Gupta
84	Sai Sudeep Dwarka	Application of compliant mechanism and topology optimization to the design of below knee prosthetics	Prof. S.P. Regalla
85	Tripuraneni Siva Prasad	On-line remote condition monitoring of wind turbine test/rig system using wireless technology	Dr. Sabareesh
86	Vishal Ramesh	Development of a universal greenness index for a building through multi-criteria decision making of its life-cycle parameters	Prof. M. Srinivas
87	Sagarika Talla	Prediction & manipulation of drop size distribution of emulsion using population balance equation models for high-pressure homogenization	Dr. Vikranth Kumar Surasani
88	Shuvham Agarwal	BPHC drug management portal	Prof. P. Yogeewari
89	Karasani Visishta	Impact of advertisement on the usage of over the counter drugs	Prof. A. Sajeli Begum

90	Vaishak P.	Causal structures of Kerr-Newmann spacetime	Dr. Sashideep Gutti
91	Pavani D.	Faraday rotation enhancement of metal coated Fe <sub>3</sub> O <sub>4</sub> core-shell nano particles; a theoretical approach	Prof. Kannan Ramaswamy
92	Sandeep Aashish	Radiation reaction as a non-conservative force	Dr. Asrarul Haque
93	Sudharsan Ghonge	Development of bilinear coupling veto pipeline for the search of transient gravitational wave signals	Dr. Rahul Nigam
94	Saurav Agarwalla	Synthesis of 2D DNA origami structure by stapling to investigate its electrical properties as a function of varying concentration and AT-GC pairs	Prof. Souri Banerjee
95	Yadlapalli Venkata Nitin Mythreya	Enhancement in mixing in micro fluidic channels using obstacles	Dr. Meenakshi
96	Rairkar Aditya Sanjeev	Viscosity of suspensions	Dr. Arvind Raghavan
97	Suraj R. Rajpal	Design of probabilistic adders	Mr. Syed Ahmed
98	B Hareesh Gautham	Study of structure formation in universe using N-body simulation	Dr. Rahul Nigam
99	Piyush Sanjay Jain	Effectiveness of simulated annealing in solving the travelling salesman problem	Prof. Thiruvikaraman
100	E. Karthik	Design of probabilistic adders	Mr. Syed Ahmed
101	V.V. Raghunandhan	The study of deformation parameters of rotating neutron stars	Dr. Sarmistha Banik
102	Chilukuri Samanth	Micromagnetic simulations of spin transfer torque on CoFeAlSi square nanostructures	Dr. V S N Murthy
103	Gavane Ajinkya Sudhir	Quantitative analysis of Gait using Kinect	Dr. Tathagata Ray
104	Nikhil Agarwal	Design and optimization of heat exchangers	Dr. Souri Banerjee

**LIST OF HIGHER DEGREE DISSERTATIONS COMPLETED DURING THE YEAR 2015****Second Semester 2014-15**

1	Joshi Asim Sandeep	Applications of bioprocess technology for the treatment of organic wastes	Dr.P Sankar Ganesh
2	Neha Rajput	Syudy of phyto compounds antibacterial and anti cancer activity	Dr. K.P. Narayan
3	Swasti Dhagat	Degradation of indoor air VOC's (Volatic oraganic compounds)	Dr. Jayati Ray Dutta
4	B Megha Sravani	Analysis of urinary biomarkers in autistic individuals	Prof. Vidya Rajesh
5	Tarana Arman	Study of induction of metallothionein protein due to chromium induced stress	Prof. Vidya Rajesh
6	Shah Diti Ajay	A study on some aspects of the interaction between <i>pseudomonas putida</i> strain AKMP7 and <i>Arabidopsis thaliana</i> under drought conditions	Dr. Sridev Mohapatra
7	Anishima Kabra	PEG precipitation and DNA purification for sequencing	Prof. Suman Kapur
8	Jitendra Pant	Nitric oxide releasing materials for biomedical applications	Prof. Suman Kapur
9	Ankitha C	Investigation of the molecular mechanisms of subcellular targeting of the effects proteins of the <i>slmonella</i> pathogenicity island 2-encoded type III secretion system	Prof. Suman Kapur
10	Dhruv Sood .	An experimental study on green ferro cement concrete	Prof. P.N.Rao
11	Kothapally Ritesh Kumar Reddy	Study on behaviour of slabs subjected to impact loading	Mr. Kalyan Rama J.S.
12	Mandar Pandurang Ganbavale	Precast permanenet shuttering - novel approach towards mass housing systems	Prof. A. Vasan
13	Gayathri S	Flyash based Geopolymer concrete	Prof. Vinayak Ram
14	Pujara Darshan Himmatbhai	Experimental study on the effect of recycled aggregates on the strength characteristics of based geopolymer concrete	Mr. Kalyan Rama J.S.
15	Sangeet Sharma	Topology optimization (multi objective optimization of components of building)	Dr. Chandu Parimi
16	Digambar Ananda Kumbhar	Strengthening of flexral member with GFRP sheets - Experimental & analytical investigation	Prof. P.N. Rao
17	Manusani Santosh Kumar	Setting time, strength of low calcium flyash based geopolymer concrete	Mr. Kalyan Rama J.S.
18	Bhupesh Singla .	Effect of infill will on stiffness due to lateral load in high rise buildings	Dr. Chandu Parimi
19	Saibharath S .	Pre processing of evidences from cloud components for effective forensic analysis	Dr. Geetha Kumari
20	Jayati Shukla .	Logarithmic enverter	Dr. Syed Ershad Ahmed
21	Ashwin Srivastava	Internet of things and its applications	Prof. M.B. Srinivas
22	Poorva Sharma .	Design , analysis and simulation of an improved power quality multiple output SMPS for personal computers	Prof. Bhuvaneswari
23	Sailendu Biswal .	Strength evaluation and prograssive damage analysis of synthetic fiber reinforced composite	Prof. S.P.Regalla
24	Ingle Sagar Ramesh .	Analysis of composite structures for shock	Mr. Syed Mujahed Hussaini

25	Mohata Shreyas Subhash .	Tolerance design of missile sub-assemblies using jaguchi's approach	Mr. Syed Mujahed Hussaini
26	Syed Adil .	Design for manufacture and assembly	Mr. Syed Mujahed Hussaini
27	Tilakpure Nikhil Ashok .	Analysis of composite structures for random response	Mr. Syed Mujahed Hussaini
28	Rayudu Nithin Manohar Chowdary .	Evaluation of strength prograssive damage analysis of natural fiber reinforced composite	Prof. S.P.Regalla
29	Rinu Thomas .	Performance improvement of IC engine in spark ignition engine with petrol and biofuel(alcohol)	Prof. Jeevan Jaidi
30	Ashish Saxena .	Experimental study on heat exchange with nanofluid	Dr. N. Jalaiah
31	Manjunath P .	Experimental investigation and analysis of C.E. engine using diesel and biofuel mixtures	Prof. Jeevan Jaidi
32	Dileep Mathews Paul .	Numerical analysis of combustion in Gas turbines and its performance improvement	Prof. Jeevan Jaidi
33	Jatin Kashyap .	microelectromechanical system thermal actuator	Dr. P.K. Patnaik
34	Amrita Balasaheb Yelikar .	CFD based process optimimization of BQR 15 flotation cell and scale - up for larger cells	Prof. Jeevan Jaidi
35	Pranay Vijayrao Nimje .	Investigation on performance of spark-ignition engine using biofuels	Prof. M. Srinivas
36	Somanath Mohan Nirali .	Investigation on performance of CI ingine using biofuels	Prof. M. Srinivas
37	Mir Quoseena	Genotype to phenotype association in RA patients	Prof. Suman Kapur
38	Komal	Anaerobic digestion of food waste and characterization of the digestate obtained	Dr. P. Sankar Ganesh
39	Wadgaonkar Madhumangesh Prakesh	Dissolution method development and mini validation by UPLC of the candidate drug	Prof. Punna Rao
40	Bafna Piyush Anil Kumar	Effect of drug solubility rate of dissolution with various particle sizes and polymorphic forms of candidate drug	Dr. Swati Biswas
41	Sawant Kalyani Shashikant	Stability indicating assay method development and minivaldiation by HPLC or UPLC of candidate drug tablets	Dr. Swati Biswas
42	Anumula Manasa	Formulation and evaluation of candidate drug	Prof. Shrikant YashwantCharde
43	Rishabh Bahl	Site specific drug delivery	Prof. Punna Rao
44	Prit M Lakhani	Pharmacokinetic evaluation of DRL sub - Lingual Formulations in animal model and first in human dose prediction using PK modelling	Prof. Punna Rao

I Semester 2015-16 :

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BITS Pilani

# annual report 2015

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**Part B4: Dubai Campus**



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**BITS PILANI, DUBAI CAMPUS****B4. HIGHLIGHTS FOR THE YEAR 2015**

1. On 17<sup>th</sup> January 2015, Dr. Jyotirmay Mathur, MNIT, Jaipur, delivered a lecture on Earth Air Tunnel Cooling System.
2. On 18<sup>th</sup> January 2015, sports events were organized for BITS Pilani, Dubai Campus (BPDC) faculty and staff.
3. On 22<sup>nd</sup> February 2015, Mr. T.P. Anand, Motivaluate Consulting & Training FZ LLC delivered lecture on Business Planning & Strategies.
4. On 3<sup>rd</sup> March 2015, Mr. Jayan Ramakutty, CEO, BITSAA International had an interactive session on Internships and Business Proposals.
5. From March 6-7, 2015, "Devil's Advocate" was organized by the Public Speaking and Literary Club.
6. On 8<sup>th</sup> March 2015, Social and Environment Club organized the Women's Day at BITS Pilani-Dubai Campus.
7. On 8<sup>th</sup> March 2015, Prof. Ramesh Karri, Pricipal Investigator, CRISSP-AD, New York University delivered a talk on Inter Disciplinary Studies in Security and Privacy: Opportunities for Practice School at Cyber Security Research Centre at New York University.
8. On 8<sup>th</sup> March 2015, Mr. Prem Talreja, CEO, Fabricnet.com delivered lecture on Entrepreneurial Start-ups: Venture Capital Funding.
9. From March 16-19, 2015, "ENGINuity 2015" an Inter collegiate Tech fest was held in BPDC. Several events, such as, paper presentation, model making, coding challenges, just a minute, parliamentary debate and business challenges were conducted.
10. From March 17-21, 2015, throw ball (girls), football, cricket, volleyball, basketball, badminton, table tennis, squash, tennis, swimming and athletics (boys and girls) teams participated in GMU Sports Festival Inter University Tournament organized by Gulf Medical University. BITS Pilani, Dubai Campus won the Overall Championship.
11. On 19<sup>th</sup> March 2015, Dr. Sonal Mazumder, Assistant Professor, Chemical Engineering Dept., BITS Pilani, Pilani Campus, delivered a lecture on Comparative Study of Polysaccharide-Drug Nano Particles for Oral Drug Delivery.
12. On 19<sup>th</sup> March 2015, Ms. Tanvi Bhatt, Euphoria Consulting, delivered a lecture on Start-ups.
13. On 22<sup>nd</sup> March 2015, Prof. A.P. Arora delivered a lecture on Marketing Research.
14. From March 22-25, 2015, table tennis, squash and tennis (boys and girls) teams participated in AUS Racket Inter University Tournament organized by American University of Sharjah and secured winners position in table tennis (girls & boys) and badminton, Runners up in tennis boys.
15. From March 26-28, 2015, a workshop was conducted by Dr. Dinesh Yadav on Art of Directing, organized by the Dance Club.
16. On 4<sup>th</sup> April 2015, Dr. Swapan Purkait, Nettech, Kolkata, India, delivered a talk on Network Management.
17. On 5<sup>th</sup> April 2015, Mr. Somnath Mitra, Program Manager IBM, delivered a lecture on WEB3.0 Technology.
18. On 7<sup>th</sup> April, 2015, on the occasion of World Health Day, an Exhibition on Healthy Living was organized which was inaugurated by Director, Prof R.N. Saha at the Institute. The exhibition was supported by - Social and Environment Club, Art club, Photography Club, Public Speaking & Literary Club and Sports Club of BPDC.
19. On 12<sup>th</sup> April, 2015, Dr. Vidya Rajesh, Associate Professor and Associate Dean ARD, BITS Pilani, Hyderabad Campus delivered a talk on Molecular Insights on Human Diseases: Malaria and Autism Spectrum Disorders.
20. On 12<sup>th</sup> April 2015, Prof. N. Rajesh, Professor, Dept. of Chemistry, BITS Pilani, Hyderabad Campus, delivered a talk on Green Adsorbents for Heavy Metal Clean up from Industrial Waste Water.
21. On 13<sup>th</sup> April 2015, Dr. Sasikumar Punnekkat, Director, BITS Pilani, K K Birla Goa Campus, delivered a talk on Dependable Software Engineering and Embedded Systems using the tele-presence class room facilities.

22. On 13<sup>th</sup> April, 2015, the Social and Environment club of BPDC organized SPECTRUM, a fun festival for the special needs children at the sports complex.
23. From April 14-16, 2015, "JASHN 2015", an Inter college cultural festival was organized by the various clubs of BITS Pilani, Dubai Campus with events like dance, drama, music, literary and art to name a few.
24. From April 15-17, 2015, BPDC participated in GETEX, a Gulf Education and Training Exhibition held at Dubai International Exhibition and Convention Centre, Dubai.
25. On 4<sup>th</sup> May 2015, Dr. Srikanta Dinda, Assistant Professor, Chemical Engineering Dept., BITS Pilani, Hyderabad Campus, delivered a talk on Significance of Ozone for Degradation Studies.
26. On 4<sup>th</sup> May 2015, Dr. Era Poddar delivered a talk on Ergonomic Principles for Automobiles organized by Mechanical Engineering Association (MEA).
27. From May 4-8, 2015, Hostel Week "Recharge" was celebrated in the Dubai Campus. Fun activities like 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.
28. On 5<sup>th</sup> May, 2015, Prof. Naufel Vilcassim, Prof. Rajesh Chandy, Prof. Vikrant Vig from Aditya Birla Centre conducted a TP Classroom symposium from Hyderabad Campus on Business, Finance, Marketing and Entrepreneurship.
29. From May 5-6, 2015, BPDC in Association with ADIB (Abu Dhabi Islamic Bank) had organized a Financial Education Awareness Program for the benefit of students. Total 92 students participated and vouchers worth AED 1500 were distributed to the students.
30. On 6<sup>th</sup> May 2015, Dr. K. N. Ponnani, Professor, Department of Chemical Engineering, BITS Pilani, Goa Campus, delivered a talk on Significance of Ozone for Degradation Studies.
31. On 7<sup>th</sup> May 2015, Mr. Amit Sinha, Project Manager, Gulf Metal Foundry, UAE, delivered a talk on Quality Control in Manufacturing Industries - A Practical Perspective.
32. On 7<sup>th</sup> May 2015, Mr. Anbalagan Kandasamy, Founder, Marketing Partner, Proleed, delivered a talk on HVAC Industry and Its Basics.
33. On 11<sup>th</sup> May 2015, MEA, BPDC organized a workshop on Robotics.
34. On 13<sup>th</sup> May 2015, the "DIRO's Tea Party", a farewell party to the graduating batch was organized by the Alumni Cell. The event began with department photographs being clicked with the respective department faculty. A programme was then organized in the Institute Auditorium to bid farewell to the graduating students. Around 320 students of the graduating batch and faculty attended the ceremony.
35. On 21<sup>st</sup> June 2015 more than 30 faculty and staff participated in the International Day of Yoga and Blood Donation Camp held at Al Wasl Football ground, Al Jaddaf, Dubai.
36. On 5<sup>th</sup> September 2015, the "Convocation 2015" was held at BITS Pilani, Dubai Campus. Amidst great pride and honor, 375 students of Ph.D., Postgraduate and Undergraduate programmes of BITS Pilani, Dubai Campus were awarded Engineering Degrees. The Chief Guest for the occasion was Dr. Eesa Mohammed Bastaki, President, University of Dubai. He is an outstanding scientist and technologist. Dr. Eesa Mohammed Bastaki, inspired and motivated the students to move further ahead in their academic and professional fields. He also congratulated BITS Pilani, for stepping up to the 3rd position amongst Indian Universities as per the 'India Today' Magazine. Delivering the convocation address, the acting Vice Chancellor, Dr. V.S. Rao, congratulated the achievement of the graduating students. Prof. Dr. R.N. Saha, Director, BITS Pilani, Dubai Campus, congratulated both the graduating students and their parents for this remarkable achievement.
37. On 6<sup>th</sup> September 2015, Ashok Deshpande, Founding Chair, Berkeley Initiative in Soft Computing (BISC) - UC Berkeley CA. and former Deputy Director of (NEERI)/CSIR India) delivered a talk and had an interactive session on Fuzzy Logic is Not Fuzzy.
38. On 10<sup>th</sup> September 2015, the Fresher's Welcome Party named "Ice-Breakers" was organized by the senior students of the Institute to welcome the new batch of students of 2015. The event began with students of the new batch breaking ice blocks with a sledge hammer. Dance and music performances by the senior students entertained the gathering and encouraged the students of the new batch to display their skills on stage voluntarily.
39. On 13<sup>th</sup> September 2015, Social & Environment Club organized a blood donation camp and around 60 units of blood were donated.
40. On 15<sup>th</sup> September 2015, Chemical Engineering Students Association, BPDC organized an interactive session on Innovation Processes, New Product Development by Mr. Devarun Ghosh, Brand Innovation & Marketing Design, Marico Middle East & Africa.

41. On 22<sup>nd</sup> September 2015, Sub Committee of Examination Committee for Dubai Campus was formed with following members: Dr. R. N. Saha, Director (Chairman); Dr. A Somasundaram, Associate Dean, ARC; Dr. K. Kumar, Associate Dean, Instructions; Prof. D. J. Shariff and Prof. T. G. Thomas.
42. On 29<sup>th</sup> September 2015, EEE Department, BPDC organized a technical talk on High Performance IC Design by Mr. Saroj Rout, (BITS Pilani Alumni), PhD Research Candidate of Tufts University, Medford, MA, USA.
43. On 30<sup>th</sup> September 2015, Student Council election was held. Following students were elected: Akshan Mehta (President), Swaminathan C. (Vice President) and Shreya Jain (General Secretary). Faisal Khan was nominated as Ex officio member. Day scholar representatives and Hostel representatives were also elected on that day.
44. On 1<sup>st</sup> October 2015, Man Mohan Sharma, Former Director, ICT Mumbai, Recipient of Padma Bhushan (1987) and Padma Vibhushan (2001), Fellow of Royal Society, London and Fellow of INSA, delivered a talk on Innovations in Chemical Industries.
45. On 1<sup>st</sup> October 2015, Mr. Phanindra Sama, Founder of RedBus.in, Mr. Jaswinder Singh Chadha, President and CEO of Atria, Dr. Nayana Somaratna, Co-founder at Medical Joyworks, had an interactive session in Auditorium on How to become a successful entrepreneur - Entrepreneurial Journey.
46. From October 7-14, 2015, The Social and Environment Club of BPDC started its activity for the current academic year with DAAN Utsav celebration. Under the umbrella of the DAAN UTSAV "the joy of giving week" several events were hosted which included, Dandiya Night, the Institute clean up drive, a thanks giving day for the supporting staff, cloth collection drive and a day of interaction with special needs children.
47. On 7<sup>th</sup> October 2015, Microsoft Tech Club, BPDC conducted a session on Introduction to the Microsoft Student Partner program, Imagine Cup, Dreams park and Career opportunities at Microsoft.
48. On 11<sup>th</sup> October 2015, on the occasion of World Mental Awareness Health Day, the Social & Environmental Club, BPDC with Mana Maali conducted a campaign of "Living Inside Out" sticker distribution.
49. On 13<sup>th</sup> October, 2015, Prof. R. N. Saha, the Director of BPDC, inaugurated the "Music Room" for the use of Trebel, the music club of BPDC.
50. On 19<sup>th</sup> October, 2015, the ACM Students Chapter of BPDC conducted a competition "Beg Borrow or Steel".
51. On 20<sup>th</sup> October, 2015, Heart Fullness "Meditation" a self development program for students and faculty held at BPDC.
52. From October 21-22, 2015, "SPARKS 2015", an Intra-college event was organized by the Dance Club, the Drama Club and the Music Club. 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 were conducted.
53. On 29<sup>th</sup> October 2015, Dr. Jaspri, Zuleka Hospitals, UAE delivered a lecture on breast cancer and the measures that has to be taken to reduce the risk.
54. On 4<sup>th</sup> November 2015, Mr. Thierry Driver - Director of Tableau Academic Program delivered a lecture on Emerging trends in Data Science and Business.
55. On 5<sup>th</sup> November 2015, "ETHNIC DAY" was organized to celebrate the "FOUNDATION DAY" of BITS Pilani, Dubai Campus. Students dressed up in ethnic wear on the day and a cultural event was organized in the Institute Auditorium.
56. On 11<sup>th</sup> November 2015, Dr. Sanjay Tiwari, US Fulbright Fellow, Ex Visiting Academic Cambridge University, ICTP Italy Senior Associate and UGC Research Awardee, SAARC Fellow had an interactive talk on Opto Electronics & Photonics.
57. On 12<sup>th</sup> November 2015 evening, Diwali Festival Celebration was organized in BPDC. Director, Faculty and Staff and their family members participated in the event. Various cultural programmes like singing, dancing were held on the occasion.
58. On 16<sup>th</sup> November 2015, Mr. Yatheendra Pai, Sales Manager, Siemens had an interactive talk on HVAC and Building Management Systems and Career Opportunities.
59. From November 17-20, 2015, badminton, table tennis, volleyball, throw ball, cricket and tennis (boys and girls) teams participated in Manipal Inter University Tournament, Dubai.
60. On 19<sup>th</sup> November 2015, football, cricket, volleyball, basketball, badminton and athletics (boys and girls) teams participated in DIAC Cup Inter University Tournament organized by Dubai International Academic

- City student hub. BPDC basket ball girls, badminton girls and athletics teams turned out to be the runner ups for their respective events.
61. On 23<sup>rd</sup> November 2015, Padmashri Dr. D. Balasubramanian, Ph D, Director of Research at LV Prasad Eye Institute, AP, India had an interactive talk on Sampling and Biostatistics Analysis for Developing Strategies for Prevention of Curable Eye Diseases.
  62. On 24<sup>th</sup> November 2015, Dr. Siddhartha Sarkar, Director & HOD, IILM, College of Engineering and Technology, Noida, India delivered a lecture on Start-up Entrepreneurs: Issues and Challenges.
  63. On 24<sup>th</sup> November 2015, Mr. Somnath Mitra, Business Intelligence Delivery Lead, Xchanging Technologies, Gurgaon, India delivered a lecture on Enterprise Resource Planning.
  64. On 24<sup>th</sup> November 2015, Dr. Siddhartha Sarkar, Officiating Director & HOD, IILM, College of Engineering and Technology, Greater Noida, India delivered a talk and interactive session on Start-up Entrepreneurs: Issues & Challenges.
  65. On 24<sup>th</sup> November 2015, Mr. Shibu Davies, General Manager - Certification, HSE, MS Training & Lab, TUV Middle East delivered a talk and interactive session on Process Management.
  66. On 25<sup>th</sup> November 2015, Dr. Bansari Roy, Professor, Chemical dept, BITS Pilani, Pilani Campus, India delivered a talk and interactive session on Hydrogen production from Bio mass.
  67. On 26<sup>th</sup> November 2015, Mr. Prashant Agarwal, Managing Director, Pragati Brands Consultants, Dubai delivered an interactive session on Irresistibly Irrational: Entrapments in Decision Making.
  68. On 29<sup>th</sup> November 2015, Ms Anjana Kamath, Senior Business Development Manager and Ms Geetha Nayak, Managing Partner, Design Infinity LLC – Dubai delivered a motivational talk.
  69. From December 6-9, 2015, the 13<sup>th</sup> BITS Sports Festival (BSF 2015) held at BITS Pilani, Dubai Campus. Mr. Pullela Gopichand, Coach, Indian National Badminton Team, and Prof. VS Rao, Acting Vice Chancellor were the Chief Guest and Guest of Honour for the Prize distribution ceremony respectively. The Athletics Overall Championship and BSF 2015 Overall Championship trophy were won by BITS Pilani, Dubai Campus.
  70. On 8<sup>th</sup> December 2015, CISCO Network Academy and BITSAA International organized CISCO Networking Academy Orientation Session.
  71. From December 13-14, 2015, “TECHNOFEST” was held. “Just a Minute” was organized by literary club. Photography club also conducted a few events followed by numerous events from mechanical side like model making and others by ASME, ASHRAE. Various coding events were also conducted by the ACM.
  72. On 15<sup>th</sup> December 2015, Dr. Amrish Kamboj, Chief Operating Officer/Pathologist, Eastern Clinical Laboratories, Dr. Rajarathinam Ayyanar, Specialist Neurologist, Zulekha Hospita, Dr. Fatima Al Hashimi, Head of the Administration and Education Unit, Dubai Cord Blood and Research Center, Pathology and Genetics Department, Latifa Hospital Dubai Health Authority and Dr. Antony Thomas, Premier Diagnostics and Medical Centre, Dubai had one day interactive session on “Diagnostics and Healthcare” with a Focus on Expo 2020.
  73. On 21<sup>st</sup> December 2015, BPDC Library Committee comprising of the following members Dr K N Sheshadri, Prof. Neeru Sood, Dr Nidhi Bhandari, Dr. Siddhaling Urolagin, Dr. Muthalagu Raja, Dr. Suhel Ahmed Khan, Dr. Mubeena, and Dr. Vincent Shanthakumar was reconstituted.
  74. On 21<sup>st</sup> December 2015, Mr. Rishav Jalan, ID No. 2013A7TS183U was nominated as a Member of the Senate of the Institute by the Chancellor for a term of one year.
  75. On 22<sup>nd</sup> December 2015, BITS Pilani, Dubai Campus and SPIC MACAY organized an enthralling Sitar and Tabla Jugalbandi at BITS Pilani, Dubai Campus Auditorium which featured Pundit Shubendra Rao in Sitar and Shri Harshad Kanetkar accompanying him in Tabla.

## 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. Dr. D. J. Shariff, Deputy Registrar

(Details are given in Annexure B4-1)

## B4.2 ADMISSIONS

Admissions were made twice during the year 2015, in January 2015 for the second semester 2014-2015 and in August 2015 for the first semester 2015-2016 (Details are given in Annexure B4-2). The admission summary is given below:

	Integrated First Degree Programmes	Higher Degree Programmes	Doctoral Programmes (Ph.D.)	Total
Second Semester 2014-2015	06 (03)	12 (02)	04 (01)	22 (06)
First Semester 2015-2016	443 (161)	23 (04)	07 (04)	473 (169)

Number of female students is given in brackets.

## B4.3 DUAL DEGREES AND TRANSFER

### (a) Dual Degree

During the academic year 2014-2015, 1 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 2014-2015, 6 students were permitted to transfer within First degree. (Details are given in Annexure B4-3).

## B4.4 ACADEMIC CALENDAR

During the Calendar year 2015, the second semester 2014-2015 started on 01.02.2015 and ended on 03.06.2015. The first semester 2015-2016 started on 01.09.2015 and ended on 10.01.2015. The second semester 2014-2015 PS II started on 02.02.2015 and ended on 15.07.2015. The Summer Term 2014-15 started on 08.06.2015 and ended on 05.08.2015. Also PS I started on 08.06.2015 and ended on 05.08.2015. The first semester 2015-2016 PS II started on 05.08.2014 and ended on 10.01.2015.

	Starting Date	Ending Date	Number of Instruction days
Second Semester 2014-2015	01/02/2015	03/06/2015	87
Summer term 2014-2015	08/06/2015	05/08/2015	42
First Semester 2015-2016	01/09/2015	10/01/2016	87



## B4.5 REGISTRATION OF STUDENTS

The registration for the second semester 2014-15 was held on 1st February 2015 and that of the first semester 2015-16 was held on 1st September 2015. In on-campus programmes, 1765 (587) students were registered in the first semester 2015-2016. Details of registration for the first semester 2015-2016 are given in Annexure B4-4.

	Number of students registered
Second Semester 2014-2015	1637(524)
Summer Term 2014-2015	353(114)
First Semester 2015-2016	1765(587)

## B4.6 ACADEMIC COUNSELING BOARD (ACB)

During the year 2015, 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 2014- 2015	II Semester 2014- 2015
1. Total number of students under the purview of ACB at the beginning of the semester	101	123
2. No. of students declared out of its purview at the end of the semester	16	54
3. No. of students who left the institute during the semester	1	8
4. No. of students who came under the purview of ACB at the end of the semester	39	45
5. Total No. of students under the purview of ACB during the next semester	123	106

### 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 2015, 376 degrees were awarded as given below: Statistical details of these degrees are given in Annexure B4-5, B4-6 and B4-7.

	Number of Degrees Awarded
76 <sup>th</sup> Award (vide Board of Governors meeting - 18 <sup>th</sup> February 2015)	47(15)
77 <sup>th</sup> Award (vide Board of Governors meeting - 9 <sup>th</sup> July 2015)	329 (103)
<b>Total</b>	<b>376(118)</b>

**B4. 7.2 Award of Medals****(i) Institute Medals for Academic Year 2014-2015**

List of students for award of medals from amongst the students graduated at the end of first semester, second semester and summer term 2014- 2015.

S.No.	ID.No.	Name	Sex	CGPA Obtained	Position Obtained	Type of Medal to be Awarded
<b>Integrated First Degree Programmes (No. of students: 328)</b>						
1.	2011A7TS175U	Sana Zakir Hussain	F	9.99	(FIRST)	GOLD
2.	2011A4PS061U	Mohamed Atyab	M	9.97	(SECOND)	SILVER
3.	2011AAPS292U	Jennifer D'Souza	F	9.95	(THIRD)	BRONZE

**(ii) 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 2015 graduating batch, the Director's medals were awarded to the following students:

S. No.	ID. No.	NAME	SEX
1.	2011A4PS061U	Mohamed Atyab	M
2.	2011A7PS177U	Swathi Sampath	F
3.	2011A7PS247U	Iyer Aiswarya Rajesh	F

**(iii) 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 2015:

S. No.	ID. No.	NAME	SEX	CGPA	DIVISION
<b>First Degree</b>					
1.	2011A7TS175U	SANA ZAKIR HUSSAIN	F	9.99	DISTINCTION
<b>Higher Degree</b>					
1.	2012H141009U	BHATNAGAR PRANAV RAVINDRA	M	9.80	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, 71 organisations conducted campus interview and made offers to students (Details are given in Annexure B4-8).

Number of companies which conducted campus interviews	71
No. of students interviewed	227
No. of offers made	115

**Employed / Higher Studies of Graduates during the Year 2015**

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	14	10	2	2
Chemical	18	10	6	2
Computer Science	72	48	14	10
Electronics & Communication	80	51	13	16
Electrical & Electronics	35	24	5	6
Electronics & Instrumentation	8	6	1	1
Mechanical	97	62	12	23
Total	324	211	53	60

**B4.9 COURSES OFFERED**

The number of courses offered during the year 2015 is as follows:

	Number of courses offered
Second Semester 2014- 2015	202
Summer Term 2014 - 2015	10
First Semester 2015 – 2016	209

**B4.9.1 Project-oriented Courses**

During this year 2015, 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:

Sl. No.	Course No.	Course Title	No. of Students	
			II Sem. 2014-15	I Sem. 2015-16
1	BIOT F266	STUDY PROJECT	12	2
2	BIOT F366	LABORATORY PROJECT	4	6
3	BIOT F367	LABORATORY PROJECT	4	3
4	BIOT F376	DESIGN PROJECT	4	2
5	BIOT F377	DESIGN PROJECT	0	1
6	BIOT F491	SPECIAL PROJECT	3	1
7	CHE F266	STUDY PROJECT	6	6
8	CHE F366	LABORATORY PROJECT	6	4
9	CHE F376	DESIGN PROJECT	4	6
10	CHE F491	SPECIAL PROJECT	3	0
11	CHEM F491	SPECIAL PROJECT	3	1
12	CHEM F366	LABORATORY PROJECT	6	1

Sl. No.	Course No.	Course Title	No. of Students	
			II Sem. 2014-15	I Sem. 2015-16
13	CS F266	STUDY PROJECT	20	10
14	CS F366	LABORATORY PROJECT	6	7
15	CS F376	DESIGN PROJECT	35	36
16	CS F377	DESIGN PROJECT	7	9
17	CS F491	SPECIAL PROJECT	9	4
18	DE G522	DESIGN PROJECT	0	4
19	ECE F266	STUDY PROJECT	9	10
20	ECE F366	LABORATORY PROJECT	4	1
21	ECE F376	DESIGN PROJECT	9	17
22	ECE F377	DESIGN PROJECT	0	6
23	ECE F491	SPECIAL PROJECTS	2	1
24	EEE F266	STUDY PROJECT	12	12
25	EEE F366	LABORATORY PROJECT	5	0
26	EEE F367	LABORATORY PROJECT	7	1
27	EEE F371	DESIGN PROJECT	4	3
28	EEE F376	DESIGN PROJECT	25	18
29	EEE F491	SPECIAL PROJECT	2	4
30	HSS F266	STUDY PROJECT	31	33
31	INSTR F266	STUDY PROJECT	1	1
32	INSTR F366	LABORATORY PROJECT	1	1
33	INSTR F367	LABORATORY PROJECT	0	1
34	INSTR F376	DESIGN PROJECT	0	6
35	INSTR F377	DESIGN PROJECT	0	1
36	INSTR F491	SPECIAL PROJECT	1	0
37	MATH F266	STUDY PROJECT	6	5
38	MATH F376	DESIGN PROJECT	12	12
39	MATH F377	DESIGN PROJECT	0	7
40	MATH F491	SPECIAL PROJECT	2	2
41	ME F266	STUDY PROJECT	11	23
42	ME F366	LABORATORY PROJECT	17	9
43	ME F376	DESIGN PROJECT	37	29
44	ME F377	DESIGN PROJECT	4	2
45	ME F491	SPECIAL PROJECT	2	3
46	PHY F266	STUDY PROJECT	0	1
47	PHY F366	LABORATORY PROJECT	0	1

### B4.9.2 New courses

During the year 2015, 22 new courses were offered.

Sl.No.	ComPCODE	Course No.	Course Name	Enrolled
1	2101	BITS E661	RESEARCH METHODOLOGY I	05
2	1379	BITS F467	BIOETHICS AND BIOSAFETY	18
3	559	BITS G560	PRACTICE SCHOOL	08
4	1213	CHE F418	MODEL & SIMU IN CHE ENGG	09
5	270	CHE G512	PETRO REFIN & PETROCHEM	09
6	1669	CHEM F366	LABORATORY PROJECT	01
7	1713	CHEM F491	SPECIAL PROJECT	01
8	144	DE G522	DESIGN PROJECTS	04
9	1397	ECE F418	MOD COMMUNICATION TECH	08
10	324	EEE G512	EMBEDDED SYSTEM DESIGN	03
11	1542	FIN F315	FINANCIAL MANAGEMENT	67
12	1161	GS F244	REPORT & WRITE FOR MEDIA	75
13	1609	HSS F328	HUMAN RESOURCE DEVELOP	94
14	1745	INSTR F367	LABORATORY PROJECT	01
15	1763	MATH F377	DESIGN PROJECT	07
16	1801	MBA C489	ENTERPRISE RESOURCE PLAN	20
17	741	ME G511	MECHANISMS & ROBOTICS	17
18	744	MEL G631	PHY & MO OF MICROEL DEV	02
19	1666	PHY F266	STUDY PROJECT	01
20	1683	PHY F366	LABORATORY PROJECT	01
21	2109	SS G527	CLOUD COMPUTING	10
22	430	SS G562	SOFTWARE ENGG & MANAGEMT	18

### B4.10 INSTITUTIONAL ACTIVITIES

#### B4.10.1 Convocation 2015

Amidst great pride and honor, 375 students of Ph.D. Postgraduate and Undergraduate programmes of BITS Pilani, Dubai Campus, were awarded Engineering Degrees. The 12<sup>th</sup> Convocation ceremony was conducted in BITS Pilani, Dubai Campus located in the Academic City and was attended by Members of the Board of Governors, Members of the Senate, Industry Partners, BITS Alumni, Faculty Members and friends and parents of the graduating students.

The Chief Guest for the occasion was Dr. Eesa Mohammed Bastaki, President, University of Dubai. He is an outstanding scientist and technologist. His efforts towards encouraging entrepreneurship, funding R&D projects and university scholarships and implementing ICT initiatives are tremendous. Dr. Bastaki is the recipient of several prestigious awards.

During this joyous event the degrees were conferred to students 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. Including this, nearly 3750 students have graduated from BITS Pilani, Dubai Campus till date.

Delivering the convocation address, the acting Vice Chancellor, Dr. V.S. Rao, congratulated the achievement of the graduating students. He also highlighted the achievements of the BITS Pilani's four campuses together with the growing number of Graduate, Post Graduate and Ph.D students. He highlighted the pioneering role of BITS in offering programs to nearly 20,000 industry professionals. He also discussed the Institute's innovative action plan of business incubators, MOOC courses, Center for Research Excellence and so on to take BITS to the position of the top technical institute of Asia.

Dr. Eesa Mohammed Bastaki, in his convocation address, inspired and motivated the students for moving further ahead in their academic and professional fields. He also congratulated BITS Pilani, for stepping up to the 3<sup>rd</sup> position amongst Indian Universities as per the 'India Today' Magazine. He appreciated the efforts of BITS in

contributing immensely to the knowledge intensive workforce of Dubai and the world over. Dr. Bastaki highlighted the plan of improvement for educational institutes as the following- “to improve the pedagogical learning delivery system, Engineering and Business disciplines are considered to be the backbone of entrepreneurship and innovation, smart learning initiatives in addition to sustainable development. It is important to note that the key elements of sustainable development are: Leadership, Education, Research & Business Development, Entrepreneurship & Innovation, ICT Infrastructure and Future Trends.” His speech was received with great joy by the students.

Prof. Dr. R.N. Saha, Director, BITS Pilani Dubai Campus, congratulated both the graduating students and their parents for this remarkable achievement. He also highlighted the achievements and initiatives of BITS Pilani, Dubai Campus in various fields. During his report he revealed the growth plan of expanding program offerings, research and community outreach activities, faculty strength and student placement. He emphasized the growing R&D activity in the form of MOUs, funded research, international conferences and so on. He announced the various national and international awards received by students of BITS at external forums. He also announced the awardees of the gold, silver and bronze medals for academic excellence and ‘DIAC Academic Excellence Award’.

The academic year 2014-15 saw an impressive placement scenario. 70 companies visited the campus to recruit these graduates. 18 companies of the BITS Practice school program hired the students soon after their internship. Some of the companies are Emerson, Bosch, Petrofac, Proserv ME, Easa Saleh Al Gurg Group to name a few. Alumni of BITS are employed in more than 1000 prestigious companies around the world such as Microsoft, Oracle, Siemens, L&T, Schlumberger, McDermott among global corporations. Several graduates have obtained admission to Masters programmes at highly reputed institutions such as Stanford, Harvard, Cornell, Carnegie Mellon etc. Many graduates are also successful entrepreneurs.

#### **B4.10.2 Workshops and Conferences**

- Dr. R Gomathi Bhavani organized one day workshop on “Power engineering and Industry Practices” on 10<sup>th</sup> December 2015 in collaboration with Twinvey Electric Consultancy, Dubai and DNJ Energy L.L.C., Dubai. The lectures by industry experts were supplemented with the following indoor/outdoor demonstrations: CT magnetizing curve, Relay test, Contact resistance measurement of circuit breakers, Wenner method.
- Dr R Swarnalatha organized one day workshop on “Biomedical Instrumentation and Applications” at BITS Pilani, Dubai Campus on 11<sup>th</sup> December, 2015. The session talks were on “Recent Advances in Instrumentation for Dialysis” and “Reverse Osmosis and Applications”. The workshop also had hands on experience in clinic.
- Chemical Engineering Students Association (ChESA) organized a one day technical interaction on “Engineering Problems solving Using EXCEL” by Chemical faculties (Dr Nidhi, Dr Gulyani, Dr Nishant & Dr Prakash), on 12<sup>th</sup> December 2015. The workshop was a tremendous success and saw enthusiastic participation. All attendees were handed a certificate of participation.
- Mechanical Engineering Association (Adviser: Faculty advisor: Dr.C.Mallika Parveen) organized the following workshops:
  - Robotics through ADAMS (May, 2015)
  - Smart Engineer Workshop (November, 2015)
  - COMSOL workshop (December, 2015)
  - Arranged field trips to Perfect tool, Dubai refreshment and Gulf metal foundry
  - Arranged the invited talks by Mr. Amit Sinha on Quality control & Era Poddar on Ergonomics
- A short term course on Network Management was conducted at CS Dept during November 20-21, 2015 and 46 students of BPDC attended the same. The professional experts from NETTECH, Kolkata, Dr. Swapan Purkait and Ms. Sunanya Shetty imparted hands on training to the students on Network Management and Ethical Hacking.
- The institute organized a two day Science and Technology workshop for school students on December 20-21, 2015. The workshop was organized to motivate school students towards science and technology. The workshop was designed to provide hands on experience and exposure to the engineering laboratories.

#### **B4.11 FACULTY PROFILE**

There are 89 Faculty/ Academic staffs in BITS Pilani, Dubai Campus at the end of the first semester 2015-2016. Out of these, 66 are Lecturer and above, and 23 are Lab Instructors and Technical Assistants. Out of these 66 teaching faculty, 62 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, 18 Professors, 14

Associate Professors, 25 Assistant Professors, 5 Senior Lecturers, 2 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 1:19.83. 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>94</b>
(ii)	Percentage of teaching staff working for Ph.D.	<b>6</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 99 contributions which include 35 in various international Journals and 66 in various Conferences. 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. Neeru Sood has been appointed as Sectional President of the Microbiologist Society, India for Dubai, UAE.
2. Dr. Trupti Gokhale has been appointed as Sectional Co-ordinator of the Microbiologist Society, India for Dubai, UAE.
3. Prof. Shazi Shah Jabeen has been appointed as Associate Editor of New Frontier, International Journal of Humanities and Social Sciences. (Print ISSN: 2394 - 8221).
4. Dr. A.S. Rao has been appointed as Member of the Editorial Board - Journal of Global Entrepreneurship Research, a Springer Open Journal. Reviewed 3 papers as on 15 June 2015.
5. Dr. A.S. Rao has been awarded Certificate of Recognition as 'Outstanding Reviewer' and 'Session Chair' by ICSB, USA during the Annual conference held at Dubai during 6-9 June, 2015.
6. A Bronze Award and AED 25,000 were received by Dr. R. N. Saha and Dr. Anand Kumar on behalf of BITS Pilani Dubai Campus for Emirates Energy Award on 18<sup>th</sup> October, 2015 at Armani Hotel, Dubai.
7. Prof. Shazi Shah Jabeen received the Best Paper Award of International Conference on Education and Information Technology 2015 for her research paper entitled 'Effectiveness of Online Language Learning' at World Congress on Engineering and Computer Science 2015 organized by the International Association of Engineers held at the University of California, Berkeley (San Francisco) on October 22, 2015.
8. Prof. Shazi Shah Jabeen chaired a session at World Congress on Engineering and Computer Science 2015 organized by the International Association of Engineers held at the University of California, Berkeley (San Francisco) during October 21-23, 2015.
9. Dr Anand Kumar was invited as Coordinator of Judging Panel for Software Engineering Projects as part of IEEE UAE Day 2015 hosted by Petroleum Institute, Abu Dhabi on 16 May 2015. Dr Jagadish Nayak also accompanied as a member of the Judging Panel for Software Engineering Projects.
10. Dr. Mary Lourde R. served as a Program Committee member of IEEE International Symposium on Nanoelectronics and Information Systems iNIS 2015, to be conducted in December 2015, at Indore, India and reviewed five technical research papers during August 2015 for the Symposium.
11. Dr. Mary Lourde R., has obtained the "Best Paper Award" as a co-author. The paper was presented at IEEE International Symposium on Nanoelectronics and Information Systems iNIS 2015, to be conducted in December 2015, at Indore, India.
12. The conference paper presented by Parth Anand Berde and R. Gomathi Bhavani, Investigation of Energy savings potential for a University in Dubai, International Conference on National Capacity Building Strategy for Sustainable Development and Poverty Alleviation, Dubai, UAE, May 26-28, 2015 has won the Best paper award.
13. During IEEE AGM, held at Kempinski, Mall of the Emirates on 21<sup>st</sup> March 2015, Dr Anand Kumar received award on behalf of Director and BPDC for largest SB membership in IEEE UAE
14. Dr Anand Kumar was appointed by Director to Editorial Board of Research Steering Committee (comprising of BPDC, Heriot Watt, Hult, RIT, Middlesex and Manipal). This is an initiative of KHDA. This Editorial Board has met regularly to plan publication of regular research.

15. Dr Anand Kumar was invited as a judge for Robotics and AI for Good. He reviewed submissions to shortlist for semifinals and finals.
16. A Ph.D. scholar from CS Dept, Joseph George, delivered the key note speech on "Innovative Strategies for improving patient care" at Healthcare Innovation Congress, on May 10-11, 2015, at Crown Plaza Hotel, Dubai, UAE. He is the Head of Information Technology at Rashid Centre for Diabetes and Research (RCDR), Ministry of Health UAE

## **B4.12 SPECIAL LECTURES, INVITED LECTURES**

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)

- Padmashri Dr. D. Balasubramanian, Ph D, Director of Research at LV Prasad Eye Institute, AP, India had given an interactive talk on Sampling and Biostatistics Analysis for Developing Strategies for Prevention of Curable Eye Diseases on 23<sup>rd</sup> November 2015.
- Mr. Jayan Ramankutty, CEO, BITSAA International had delivered an Interactive session on Internships & Business proposals 3<sup>rd</sup> March, 2015.
- Prof. Charles Matthews, Professor, University of Cincinnati, USA made an Exploratory visit 9<sup>th</sup> June, 2015 to BPDC Campus regarding Study Abroad program from UC, USA.
- Prof. Ramesh Karri, Principal Investigator, CRISSP-AD, NEW YORK UNIVERSITY delivered A Talk On "Inter Disciplinary Studies In Security And Privacy: Opportunities For Practice School At Cyber Security Research Centre At New York University on 8<sup>th</sup> March, 2015.
- Ashok Deshpande Founding Chair: Berkeley Initiative in Soft Computing (BISC) - UC Berkeley CA. and former Deputy Director of (NEERI)/CSIR India gave a talk and interactive session on "Fuzzy logic is Not Fuzzy" on Sep 6, 2015
- Mr. Devarun Ghosh, Brand Innovation & Marketing Design, Marico Middle East & Africa, had interactive session on " Innovation Processes, New Product Development" on 15<sup>th</sup> September, 2015.
- Mr. Saroj Rout, founder of Mixignal Innovations LLC, Vice President of Woodlands Bullion Company, PhD Research Candidate of Tufts University, Medford, MA, USA given a talk on High performance on IC design 25<sup>th</sup> September, 2015.
- "How to become a successful Entrepreneur - Entrepreneurial Journey" given by Mr. Phanindra Sama, Founder of RedBus.in, Mr. Jaswinder Singh Chadha, President & CEO of Axtria and Dr. Nayana Somaratna, Co-founder at Medical Joyworks on 1<sup>st</sup> October, 2015.
- Man Mohan Sharma, Former Director, ICT Mumbai, Recipient of Padma Bhushan (1987) and Padma Vibhushan (2001), Fellow of Royal Society, London and Fellow of INSA had given a talk on Innovations in Chemical Industries 1<sup>st</sup> October, 2015.
- Mr. Thierry Driver - Director of Tableau Academic Program delivered a talk on Emerging trends in Data Science and Business on Nov 4, 2015
- Mr. Prashant Agarwal, Managing Director, Pragati Brands Consultants, Dubai -An Interactive session on "Irresistibly Irrational : Entrapments in Decision Making" on Nov 26, 2015
- Dr. Sanjay Tiwari, US Fulbright Fellow, Ex Visiting Academic Cambridge University, ICTP Italy Senior Associate and UGC Research Awardee SAARC Fellow had an Interactive talk on Opto electronics & Photonics on 11<sup>th</sup> November, 2015.
- Prof. Hijazi T. Syed, Dean, College of Business Administration visited BPDC on 3 March 2015 as an External Examiner for Ms. Aqila's Viva Voce Examination. He had also interacted with HSS department faculty members and shared his experiences / expertise.
- Dr. Mohan Jain, Adjunct Professor -Dept. Agricultural Sciences, University of Helsinki, Finland had given a talk on "Applications Of Tissue Culture On Crop Improvement And Conservation Of Genetic Diversity In Tropical Plants" And Biotechnology And Induced Mutations In Crop Improvement" on 2<sup>nd</sup> and 5<sup>th</sup> April 2015.

## **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. Neeru Sood gave a virtual lecture on " Sustainable Agriculture - approaches/techniques and challenges" at a One Day International Conference For Students On Modern Aspects Of Microbial Science organized by Department of Microbiology, Shri Shivaji College of Arts, Science and Commerce, Akola, India in joint venture with Microbiologist Society, India on 2<sup>nd</sup> January 2015.
2. Dr. Trupti Gokhale gave a virtual lecture on "Development of Biosensors" at a National Seminar on 'Biotechnology for Better Tomorrow' on 26<sup>th</sup> February 2015 at Gogate-Jogalakar College, Ratnagiri, India
3. Dr B G Prakash Kumar delivered an invited talk entitled "Current Developments in Mass Production of Microalgae for Industrial Applications", at symposium on current perspectives and challenges in chemical engineering and technologies, May 14th, 2015, Salalah College of Technology, Salalah, Oman.
4. Dr. Anand Kumar & Dr Trupti Gokhale made two Presentations at Higher Education Summit, January 13-14, 2015: about 70 students from a variety of schools in Northern Emirates (predominantly non-Indian) at each presentation. The Higher Education Summit was organized by Kaushal Bakshish, Director – Marketing & PR, and her team at The Young Vision. Initiative of Nahid Afshan and team.

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 DEPARTMENTWISE REPORTS

### B4.14.1 Department: Chemical Engineering

Number of faculty members (as on 31st December 2015)

Senior Professors, Professors	-
Associate Professors	02
Assistant Professors	02
Lecturers	-
Visiting Faculty	-

**Head of the Department:** Dr. B G Prakash Kumar

**Contact details:** prakash@dubai.bits-pilani.ac.in

**Number of PhD Scholars:** NIL

**Ph.D. Thesis Submitted during the year:** NIL

**A. Sponsored Research activities:** NIL

**B. Publications:** NIL

**C. Conferences attended/papers presented:**

- J. Alamelu Mangai, Bharat B. Gulyani, A Predictive Data Mining Model for Customer Response in Bank Telemarketing, Proceedings of International Conference on Evidence Based Management ICEBM, BITS PILANI, Pilani Campus, March 20th 2015, Volume 2, Page 656 - 661
- Dr Nidhi Bhandari Participated in Industry Day workshop on 10th April 2015 at the BITS Pilani, Hyderabad campus, India.
- Dr B G Prakash Kumar is a team member for CAMPUS LIFE for mission 2014-16, BITS Pilani, Dubai Campus, Growth Plan.

**D. Books Published/Edited during the year:** NIL

**E. Conferences, seminars & workshops conducted:**

Chemical Engineering Students Association (ChESA) organized a one day technical interaction on "Engineering Problems solving Using EXCEL" by Chemical faculties (Dr Nidhi, Dr Gulyani, Dr Nishant & Dr Prakash), on 12th Dec, 2015. The workshop was a tremendous success and saw enthusiastic participation. All attendees were handed a certificate of participation.

**F. Invited Talks given by BITS faculty:**

Dr B G Prakash Kumar delivered an invited talk entitled "Current Developments in Mass Production of Microalgae for Industrial Applications", at symposium on current perspectives and challenges in chemical engineering and technologies, May 14th, 2015, Salalah College of Technology, Salalah, Oman.

**G. Invited talks arranged in the department:**

- Interactive session with Mr. DEVARUN GHOSH, on Brand Innovation & Marketing Design -Marico Middle East & Africa, Innovation Processes , New Product Development, Tuesday, 15th September , 2015.
- Interactive session on 'Comparative study of polysaccharide-drug nanoparticles for oral drug delivery, Dr Sonal Mazumder, Assistant Professor, Chemical Engineering Dept., BITS PILANI, Rajasthan, 19th March, 2015.
- Chemical Engineering Department arranged for the first Telepresence Interactive on "Introduction to Petroleum Refining", Dr Srikanta Dinda, Assistant Professor, Department of Chemical Engineering, BITS Pilani, Hyderabad Campus, 4th May, 2015
- Interactive session through telepresence on "Significance of ozone for degradation studies" by, Dr K.N. Ponnani, Department of Chemical Engineering, BITS Pilani, Goa Campus, 6th May, 2015. The session was highly informative and opened up possibilities of future research by students in this area. Research activities are initiated using Ozone generator.
- Interactive session through telepresence on "Hydrogen production through biomass" by Dr. Banasri Roy, Professor, Department of Chemical Engineering, BITS Pilani, Pilani Campus, 25th November, 2015.

**H. Awards and recognitions won by faculty and students:**

- Optimization Of Inclination And Mixing Conditions For Tubular Photobioreactor For Mass Production Of Microalgae, Radhika Narain; Subramanian Ramachandran; B. G. Prakash Kumar, participated in "Current Trends in Biotechnology", held at Manipal University-Dubai Campus, March 18- 19, 2015, Won best poster award.
- Prakash Kumar B G delivered an invited talk entitled "Current Developments in Mass Production of Microalgae for Industrial Applications", at symposium on current perspectives and challenges in chemical engineering and technologies, May 14th, 2015, Salalah College of Technology, Salalah, Oman.

**I. Faculty Development, International Collaboration & Industry Immersion:**

Industry Interaction carried out on waste water treatment technology in Hitech Industries FZE, Jebel Ali, Dubai, during June 2015 to Aug 2015.

**J. Significant new equipments/experimental facility added during the year:**

The following equipments were procured for Chemical Engineering Department:

CO<sub>2</sub> Analyzer, pH/mV/ISE/TDS/Salinity/DO meter, Digital Anemometer, Air compressor (capacity 200 lit), Multi-Thermometer (digital), Solar Power Meter , Photo bioreactor, Specific Gravity Hydrometers, Glass Viscometer, Ozone generator

**K. Departmental Association/Club activities:**

1. ChESA (Chemical Engineering Students Association) and AIChE (American Institute of Chemical Engineers) Student Chapter members committee for 2015-16.
2. Chemical Engineering Department organized an orientation session for freshmen (1<sup>st</sup> year chemical engineering students) on September 2015.
3. AIChE Office Bearers had a video conference with their AIChE sister chapter members from University of Utah, U.S.A.
4. Events such as 'Formulate This' & 'The BIG Split' were held by ChESA during Technofest (December 13-14, 2015) with the goal of spreading awareness of the diversity of Chemical Engineering.
5. An industrial visit to Perfect Polymers, in RAK FZ was arranged by the Third Year Chemical Engineering students on 4<sup>th</sup> March, 2015 for familiarization with modern polymer production process in plants.
6. Third year chemical engineering students arranged a visit for the second and third year chemical engineering students to MASDAR Institute, Abu Dhabi on 30<sup>th</sup> October 2015.
7. MS Excel Workshop was arranged on the 12<sup>th</sup> December, 2015 by ChESA. The students were given hands on experience in solving a wide range of chemical engineering problems in Basic process calculation, fluid dynamics, Thermodynamics etc.
8. AIChE sister chapter match with Brigham Young University was confirmed on 21<sup>st</sup> December, 2015. Networking with sister chapter will commence from January every month and reports on the meeting will be sent to AIChE.

**B4.14.2 Department: Electrical & Electronics Engineering**Number of faculty members (as on 31<sup>st</sup> December 2015)

Senior Professors, Professors	03
Associate Professors	02
Assistant Professors	08
Lecturers	00
Visiting Faculty	01
Adjunct Professor	00

**Head of the Department:** Dr. Adhir Baran Chattopadhyay**Contact details:** chattopadyay@dubai.bits-pilani.ac.in**Ph.D. Thesis Submitted during the year:** 01**Number of PhD Scholars:** 13 (9 Full Time, 3 Part Time and 1 Off campus)**Ph.D. Proposal Submitted during the year:** 04**A. Sponsored Research activities:**

1. Ongoing projects: Nil
2. Projects sanctioned during the year: Nil
3. Projects completed this year: NIL

**B. Publications:**

1. Dipti Razdan and A.B. Chattopadhyay, "Some Aspects of Analysis of a Micromirror", Research Journal of Applied Sciences, Engineering and Technology 10(6): June, 2015, ISSN: 2040-7459; e-ISSN: 2040-7467 Maxwell Scientific Organization, 2015, pp 652-662.
2. Vasudevan, A.K., Anand Kumar, R.K. Mittal, "Technology Diffusion: A Case of Cloud Computing in India", Chapter in Developing Country Perspectives on Public Service Delivery, Editors: Gurtoo, Anjula, and Williams, Colin, Page 57-77, Springer, 2015.
3. Pranavi Macharla, Jagadish Nayak, "Wireless Communication Networks: Advancement to 4G", International Journal of Advances in Engineering & Technology (IJAET), Volume 8 Issue 2, pp. 30-37, Apr. 2015
4. Parth Anant Berde and R. Gomathi Bhavani, "Investigation of Energy savings potential for a University in Dubai", Journal of Emerging Trends in Engineering and Applied Sciences, Vol. 6, No. 7, ISSN: 2141-7024, pp. 231-235, 2015.
5. Bulbul, B. and Swarnalatha, R. 2015. "Smart Home Automation System Using AVR Microcontroller", International Journal of Advanced Technology in Engineering and Science, Vol.4, No. 2, pp.234-242.
6. Vilas H. Gaidhane, Y. V. Hote, V. Singh, "Image focus measure based on polynomial coefficients and spectral radius," Signal, Image and Video Processing (Springer) 2015
7. Vilas H. Gaidhane & Yogesh V. Hote (2015): A New Approach for Stability Analysis of Discrete Systems, IETE Technical Review.

**C. Conferences attended/papers presented:**

1. Sharma, A.; Capoor, G.K.; Chattopadhyay, A.B., "Advanced Aircraft Electrical Systems to enable an All-Electric Aircraft," International Conference on Electrical Systems for Aircraft, Railway, Ship Propulsion and Road Vehicles (ESARS), 2015 (IEEE sponsored), IEEE Xplore Digital Library, Conference Proceeding; pp.1-6; 3-5 March 2015, Aachen, Germany.
2. Sreeja Rajendran, Mary Lourde R, "FinFET and their application as load switches in Micromechatronics", Proc.of IEEE International Symposium on Nanoelectronics and Information Systems iNIS 2015, at Indore, India December 2015.
3. Swati Sinha, TVC Sarma, Mary Lourde R., "Simulation of Clutter & RFI in Wind Profiler Power Spectra", Proc. Of 2nd URSI-REGIONAL CONFERENCE IN RADIO SCIENCE, INC-URSI, INSA, Jawaharlal Nehru University, New Delhi, November 2015,
4. Swati Sinha, TVC Sarma, Mary Lourde R., "Doppler Profile Estimation of MST Radar Data Using Multi-parameter Cost Function", Proceedings of IEEE International Conference on Radar, Antenna,

- Microwave, Electronics and Telecommunications (ICRAMET 2015), Bandung, Indonesia, 2015, pp 50-54.
5. Arati Ajay, Mary Lourde R, " VLSI implementation of an improved multiplier for FFT computation in Bio-medical Applications", Proceedings of International Symposium on VLSI (ISVLSI 2015) at Montpellier, France, July 2015.pp. 68 - 73
  6. Navnith Ravindran, Mary Lourde R., "An Optimum VLSI Design of a 16-BIT ALU" proceedings of the International conference on "Information & Communication Technology Research ICTRC 2015" organised by Khalifa University (KUSTAR), Abu Dhabi, UAE, May 2015.pp. 52-55
  7. Sreeja Rajendran, Mary Lourde R, " Modelling and optimization of a cantilever based DNA sensor" Proceedings of IEEE International Conference on Electrical, Electronics, Signals, Communication and Optimization (EESCO) - 2015, India, January 2015, pp. 1-4
  8. Rangapriya Parthasarathy, Heiko Hengen, Jagadish Nayak, "Development of 3D Scanning Algorithms", 4th IEEE International Conference on Communication and Signal Processing, April 2-4, 2015, India
  9. A Rangapriya Parthasarathy , Kalaichelvi .V, Swaminathan Sundaram,"A Novel Fuzzy Logic Model for Multiple Gas Sensor Array" .,IEEE International Conference on Communication and Signal Processing, , pp.1159-1162, Adhiparasakthi Engineering College, Melmaruvathur,India., April 2-4, 2015
  10. Arvind Desikan.,V.Kalaichelvi., "Design for a Semi-Active Preview Suspension system using Fuzzy-Logic Control and Image Processing Techniques"., The 5th Annual IEEE International Conference on CYBER Technology in Automation, Control and Intelligent Systems., Shenyang, China, June 8-12,2015.
  11. Vishank Bhatia .,Kalaichelvi V., Karthikeyan R., "Application of a Novel Fuzzy Logic Controller for a 5-DOF Articulated Anthropomorphic Robot"., IEEE International Conference On Research In Computational Intelligence and Communication Networks., kolkatta .,Nov 20-22,2015.
  12. Vishank Bhatia.,Ganesh Ram R.k, Kalaichelvi V, Karthikeyan R., "Application of Model Predictive Controller for 2DOF Robot Manipulator"., 10th International Symposium on Mechatronics and its Applications., American University of Sharjah., Dec 8-10.,2015.,
  13. Neenu Sivanand, Srinivasan S V, Gomathi Bhavani, Physical Level IC Implementation for Speed Control of Three Phase Induction Motors, 4th International Symposium on Next Generation Electronics (IEEE ISNE 2015), Taipei, Taiwan, May 4-6, 2015, organized by National Taiwan University of Science and Technology and IEEE Electron Devices Society, IEEE Taipei Section.
  14. Swarnalatha, R. and Prasad, D.V. "Detection of Sleep Bruxism based on EEG Hilbert Huang Transform", 5th International Conference on Biomedical Engineering and Technology (ICBET 2015), Seoul, South Korea, 10-11 March, 2015.
  15. Ashwini, K., Swarnalatha, R., Prasad, D.V., Abdul Razak." Design and Analysis of MEMS Cantilever for Pyroelectric Energy Conversion using COMSOL Multiphysics" , IEEE International Conference on Electrical, Computer and Communication Technologies, Coimbatore, Tamil Nadu, India , 5 - 7, March, 2015.

**D. Books Published/Edited during the year: NIL**

**E. Conferences, seminars & workshops conducted:**

1. The EEE department and Dr. R Gomathi Bhavani as Coordinator have organized one day workshop on "Power engineering and Industry Practices" on 10-DEC-2015 in collaboration with Twinvey Electric Consultancy, Dubai and DNJ Energy L.L.C., Dubai. The lectures by industry experts were supplemented with the following indoor/outdoor demonstrations: CT magnetizing curve, Relay test, Contact resistance measurement of circuit breakers, Wenner method.

**F. Invited Talks given by faculty: Nil**

**G. Invited talks / technical visits arranged by the department:**

1. Y V Hote, Assistant Professor, IIT Roorkee, has delivered a Talk on Control Techniques and Their Applications, on 13 DEC 2015
2. Saroj Rout( Ph D Scholar- Electrical and Computer Engineering, Tufts University , Medford MA, U.S.A ) has delivered a lecture on High Performance IC Design. Date of Lecture: 29 September 2015.
3. Dr Sanjay Tiwari (Head of the Department of Electronics and InstrumentationPt. Ravisankhar Shukla university, Raipur, Chattisgarh –India) has delivered a lecture on PHOTONICS and its applications Date of Lecture: 11<sup>th</sup> November 2015.

**H. Awards and recognitions won by faculty and students**

1. Dr Anand Kumar made two Presentations at Higher Education Summit (13 Jan 2015 and 14 Jan 2015): about 70 students from a variety of schools in Northern Emirates (predominantly non-Indian) at each

- presentation. The Higher Education Summit was organized by Kaushal Bakshish, Director – Marketing & PR, and her team at The Young Vision. Initiative of Nahid Afshan and team.
2. Al Bayt Mitwahid Top 15 (Submission pertained to business venture around Quinoa production in the UAE): Angad Oberoi, Rajarshi Sinha. Faculty Mentors: Dr Anand Kumar, Dr Ramachandran.
  3. Preparatory Workshop by Dr. Naji Al Mahdi, (Director, The National Institute for Vocational Education, KHDA) at the New Sharjah Chamber of Commerce and Industry, 5-9 pm, 7 March 2015. Attended by Angad Oberoi, Rajarshi Sinha and Dr Anand Kumar. Students made the final Presentation on 8 April 2015, 400-900 pm.
  4. Dr Anand Kumar conducted student survey and feasibility study jointly with Prof Suman Kapur (Dean IPCD), Rohit Koul (CEO, BITSAA International) and Jayan Ramankutty (Chairman, BITSAA International) on collaboration with San Jose State University to send BITS Pilani students to enroll in summer in Silicon Valley during summer of 2015.
  5. Dr Anand Kumar worked for introducing minors at Dubai which envisage feasibility to offer Minors in Finance and Materials Science Engineering at BPDC.
  6. Dr Anand Kumar coordinated International Programmes & Collaborations Division's (in the capacity of Acting IPCD In Charge for Dubai Campus) for 4-campus Open House over TP to brainstorm on faculty exchange and research collaborations with foreign universities on April 16, 2015 330-430 pm DXB time.
  7. Dr Anand Kumar compiled the documents Emirates Energy Award Application in response to invitation to resubmit, 15 March 2015. A Bronze Award/AED 25K received 18 Oct 2015 at Armani Hotel, Dubai
  8. Dr Anand Kumar developed moderation process for assessments at BPDC for submission to KHDA. Prof Thomas led the team and Dr Somasundaram was the other team member. Moderation Process accepted by UQAIB (Nov 24, 2015).
  9. IEEE BPDC SB (Ankita Srivastava) Organized CodeBlitz as part of Enginuity 2015. Over 60 students participated in this non-competitive event held on 16 March 2015.
  10. IEEE AGM, Kempinski, Mall of the Emirates, 21 March 2015. Dr Anand Kumar received award on behalf of Director and BPDC for largest SB membership in IEEE UAE.
  11. Workshop on Introduction to Innovation Entrepreneurship by Dr Keith Jones. Organized by IEEE UAE prior to IEEE UAE AGM (21 March 2015). Ayush Chordia attended this workshop.
  12. Dr Anand Kumar was invited as Coordinator of Judging Panel for Software Engineering Projects as part of IEEE UAE Day 2015 hosted by Petroleum Institute, Abu Dhabi on 16 May 2015. Dr Jagadish Nayak also accompanied as a member of the Judging Panel for Software Engineering Projects.
  13. IEEE XTreme Programming Contest was held from 4 am, 24 October to 4 am, 25 October. 12 student teams from BPDC participated with the best global rank of about 150. Although the official results are yet to be announced, BPDC teams obtained 5 of the top 10 ranks in the UAE. Drs Santhosh and Anand Kumar were proctors for this competition. The BPDC SB officer team worked out the logistics (food, drinks, WiFi connectivity and power outlets) to support the 24 hour event.
  14. 24 student teams participated in the Code Blitz event organized jointly by IEEE SB and Microsoft Tech Club during Enginuity.
  15. One IDR proposal "Measuring Climatic Change impact with special reference to Health, Infrastructure , and Socio-economy" submitted by Dr Anand Kumar as Co-PI along with Prof Rajiv Gupta as PI Ministry of Forest Environment and Climate Change for funding. Team Lead for Information Management Subsystem.
  16. Dr Anand Kumar was appointed by Director to Editorial Board of Research Steering Committee (comprising of BPDC, Heriot Watt, Hult, RIT, Middlesex and Manipal). This is an initiative of KHDA. This Editorial Board has met regularly to plan publication of regular research newsletters (Research Connect@Dubai).
  17. Dr Anand Kumar was a co-author in the chapter entitled Technology Diffusion: The Case of Cloud Computing in India published in Developing Country Perspectives on Public Service Delivery, Springer, Editors Anjula Gurtoo, Colin Williams, June 2015 (<http://link.springer.com/book/10.1007%2F978-81-322-2160-9>) (ISBN: 978-81-322-2159-3 (Print) 978-81-322-2160-9 (Online)).
  18. Revised proposal submitted to DelTy (Department of Electronics, New Delhi) (Feb 2015): Dr Anand Kumar was a PI in this proposal.
  19. Invited to review ICT Fund Proposal Center of Information, Communication and Networking Education and Innovation (ICNEI) at American University of Ras Al Khaimah (AURAK): currently in progress.

20. Dr Anand Kumar coordinated the delivery of BITS F419 Management of Cross Cultural Engineering Teams course that has been offered a second time on Dubai Campus during I Sem, 2015-16. The first delivery of this course during I Sem 2014-15 was Webex based while the current delivery was TP based. The course is delivered out of University of Southern California and has students from USC, Aachen University (Germany) and Qatar University participating in the course along with BITS Pilani, Dubai Campus. The course offers unique pedagogy, delivery and assessment methods.
21. Dr Anand Kumar was invited to judge for Robotics and AI for Good. Reviewed 5 submissions in Nov 2015 to shortlist for semifinals and finals.
22. By invitation, Dr Anand Kumar is an Advisor to Eukti Learning as of August 2015 (<http://www.euktilearning.com/>).
23. Dr. Mary Lourde R., served as a Program Committee member of IEEE International Symposium on Nanoelectronics and Information Systems iNIS 2015, to be conducted in December 2015, at Indore, India and reviewed five technical research papers during August 2015 for the Symposium
24. Dr. Mary Lourde R., served as a Technical Review Committee member for International Conference on Radar Antenna Microwave Electronics and Telecommunication 2015 - ICRAMET 2015, conducted in October 2015, and has done peer blind review of four technical research papers for the conference during July - August 2015.
25. Dr. Mary Lourde R., serving as an International Program Committee member of International Conference PESTSE- 2016, India, to be conducted in January 2016.
26. Dr. Mary Lourde R., has obtained the "Best Paper Award" as a co-author. The paper was presented of IEEE International Symposium on Nanoelectronics and Information Systems iNIS 2015, to be conducted in December 2015, at Indore, India
27. As an UAE ICT Fund reviewer, Dr. Mary Lourde R. reviewed a research project proposal worth AED 2 million in January 2015 and the report is submitted to the ICT Fund committee.
28. Dr.V.Kalaichelvi reviewed was the reviewer for ICTACT Journal on Soft Computing (IJSC) from October 2015 onwards and reviewed one article on ATHENS SEASONAL VARIATION OF GROUND RESISTANCE PREDICTION USING NEURAL NETWORKS
29. The conference paper presented by Parth Anand Berde and R. Gomathi Bhavani, Investigation of Energy savings potential for a University in Dubai, International Conference on National Capacity Building Strategy for Sustainable Development and Poverty Alleviation, Dubai, UAE, May 26-28, 2015 has won the Best paper award.
30. Swarnalatha R: Reviewed four papers titled as " A Review on Visual Brain Computer Interface"," Predictive Analysis on Electronic Health Records (EHRs) using Hadoop and Hive", " Cardiac Arrhythmia Detection Using Ballistocardiogram Signal" and " Medical Decision Support System for the Missing Data using Data Mining" for the IEEE International Conference on Electrical, Computer and Communication Technologies at SVS College of Engineering, Coimbatore, Tamil Nadu, India during 05 - 07, March 2015.
31. Dr.V.Kalaichelvi reviewed four papers titled as " A New Method for Model Order reduction of Linear Interval Systems based on Impulse Energy", " Modelling and Level Control of Non-linear Single Tank Using Sliding Mode Control Strategy", " CLOSED LOOP CONTROLLER DESIGN FOR POWER SYSTEM USING TIME MOMENT MATCHING TECHNIQUE", " State Observer Design for a Three Phase Induction Machine using Row Reduced Echelon method of Pole Placement" for the IEEE International Conference on Electrical, Computer and Communication Technologies at SVS College of Engineering, Coimbatore, Tamil Nadu, India during 05 - 07, March 2015.
32. Dr.Sunil Thomas , the then lecturer successfully defended the PhD thesis entitled," Modeling and Simulation of Synchronous Motor with Emphasis on Aspects of Stability" on 13th December 2015 in the institute and subsequently he was awarded the PhD degree(provisional) by the university.

#### **I. Faculty Development, International Collaboration & Industry Immersion**

1. Dr.Mary Lourde R has attended a workshop on "Interdisciplinary Research on Robotics, sensors, materials and Instrumentation – 2015", at BITS PILANI HYDERABAD CAMPUS, during 2-3, November 2015.
2. Dr.V.Kalaichelvi attended workshop for IDR held at BITS Pilani, Hyderabad Campus from 2.11.2015 to 3.11.2015.
3. Dr .R Gomathi Bhavani arranged a training session for the students enrolled in Comp Based Control Sys (elective) course and took them to the Process Systems & Solutions division at Emerson Process Management, Jebal Ali on 7th April 2015. The students, after being addressed by Mr. David Kraft, Vice President, Industrial Automation, were taken to the factory and exposed to the state-of-the art Industrial Control practices.

4. Dr R Swarnalatha attended Effective Teaching & Learning Workshop organized by Quality Assurance & Assessment of BITS Pilani conducted at KK Birla Goa Campus, 18-12 July, 2015.
5. Dr R Swarnalatha attended a workshop on "Finite Element Modeling Using COMSOL Multiphysics held at BITS Pilani Dubai Campus on December 1, 2015.

**J. Significant new equipments/experimental facility added during the year: NIL**

**K. Departmental Association/Club activities:**

Dr R Swarnalatha, the faculty advisor for AOEE has organized the below events,

1. Organized the Fast and the Curious event during Enginuity on 16 March 2015. A total of 57 teams took part in the competition, with many of them coming from other colleges and universities.
2. Organized two batches of students visiting Al Khaleej Sugar, Jebal Ali Freezone- on the 4<sup>th</sup> and 18<sup>th</sup> of April, 2015. They described themselves as one of the most extremely efficient plants in the region, importing raw sugar primarily from Brazil and some proportion from India.
3. Association of Electronic Engineers organised an Article Writing Competition in the last week of April 2015 where students could submit their articles for the online magazine, eUpdate maintained by the association. A good number of entries were received.
4. Association of Electronic Engineers organised PSPICE workshop on May 2<sup>nd</sup>, 2015 in which 30 students participated. The students got hands on experience in PSPICE Software under the guidance of Dr. Jagdish Nayak, Assistant Professor, EEE Department. The workshop concluded with a competition where students were required to solve two questions using the software.
5. An orientation session was conducted for the newly joined First Year students where they were introduced to the EEE Department on 14<sup>th</sup> September 2015. AOEE and the faculties welcomed the students to the EEE family.
6. Organised BITS students to participate and showcase their projects to industry experts for RTECH exhibition held during 26 to 28<sup>th</sup> September 2015.
7. Organised C# and App development Sessions by Microsoft Intern -Don Joe Martin IIIrd Year ECE student. Nearly 100 students registered to learn App Development taught. Subsequent online and offline sessions were held and also a competition to put those newly acquired skills to task.
8. Organised a Site Visit to Emerson on 11<sup>th</sup> and 12<sup>th</sup> November, 2015 where nearly 45 students and faculties visited the facilities at Emerson, Jebel Ali. Students got the opportunity to learn about the instrumentation and control and working techniques from first-hand experience.
9. A talk by Dr. Sanjay Tiwari was organised on 11<sup>th</sup> November 2015, who is a US Fulbright Fellow, Ex Visiting Academic Cambridge University, ICTP Italy Senior Associate and UGC Research Awardee SAARC Fellow. His topic being Opto electronics & Photonics.
10. Organised a technical competition event for technofest 'Mind Spark' with fifty participants on 14<sup>th</sup> December 2015.
11. The eUpdate for AOEE saw successful completion of Fourth Volume go live this semester with 6 issues in total having two to three articles based on Electronics every week. The online magazine maintained by the association with articles varying from the Birth and Death Anniversaries of famous scientists who changed the course of electronics as we know today to the latest research going on in the field of electronics.
12. The Association has also developed their own website (<http://eupdate.weebly.com/>) that has been divided into various sections- eUpdate, Gallery, Formats, Tutorials, and an About and Contact Us page. Under eUpdate, readers can view the previous issues of eUpdate from the several past volumes. Formats are aimed to guide students on how to write IEEE Papers, Project reports as well as Practice School reports.
13. The Facebook Like page of The Association (<https://www.facebook.com/pages/Association-of-Electronic-Engineers/640182549337170>) was managed by the team actively and posted the links to the eUpdate articles, along with announcing what competitions and workshop and other activities that the Association conducted. This was effective in helping spread the word and popularize the activities of the Association, since a Facebook is a social platform used by nearly all students.

14. The Association has their own Youtube channel. The YouTube channel contains the Digital Design lab experiment videos along with a video recognizing the members and faculty heads of the Association. (<https://www.youtube.com/channel/UCPXEi3yEOMTtzqYqvjiWduA/feed>) The future plan of this YouTube Channel is to also include video lectures too for guiding students in their theory subjects.
15. Orientation of 1st year students of EEE, ECE and EIE programs was held on 14th September 2015 at the institute auditorium.

**16. Team IFOR activities**

- i. An interactive session was arranged by Dr.V.Kalaichelvi on Feb 10th 2015. Mr.Satish Ramachandran., ROV Technical Manager at Horizon Geosciences United Arab Emirates., Oil and Energy visited our IFOR lab and discussed in the research topic of Marine robotics like OV – Remotely Operated Vehicle, Autonomous Operated Vehicle, Control system design hardware and software design etc. He also suggested an idea of using Radar technology and each surface object which will communicate with specific address to the drone and their COG (Centre of Gravity) can be updated time to time with respect to the speed and movements.
- ii. Faculty In-charge Dr.V.Kalaichelvi along with IFOR team student Participated in GETEX exhibition held on 11th April 2015 (from 5.30P.M to 9.30P.M) at Saeed Halls, Dubai International Convention and Exhibition Centre and demonstrated about UAV drone prototype and team IFOR activities.
- iii. In the month of July 2015, Faculty In-Charge Dr.V.Kalaichelvi went to Star Cements Company and showed videos of IFOR team activities and gave an idea of implementing UAV for mining applications. Also further interactive session was arranged by Dr.V.Kalaichelvi along with Star Cements and she took IFOR Team Leader Mr.Syed Zeeshan Ahmed and he had presented about application of UAV for mining applications. This interactive session was held in the month of July 2015 at Ral Al kaimah plant in star Cements. The company was very much impressed with activities of IFOR team. One research proposal was submitted by IFOR team along with Faculty Incharge Dr.V.Kalaichelvi and awaiting for the response.
- iv. In the GITEX Technology Week from 18th to 22nd October 2015, Team IFOR was invited by Etisalat to the Prime Minister's stall to showcase their 2014's Drones for Good award winning drone and to discuss how drones can improve people's lives and solve issues through latest technology. With 2015 being the UAE's Year of Innovation, Team IFOR demonstrated to an international audience how UAE is a global hub for technological innovation
- v. Faculty In-charge Dr.V.Kalaichelvi along with IFOR team student Mr.Saptadeep Debnath (II year ECE) participated in Seminar on Autonomous Drones on Sep 29<sup>th</sup> 2015 during RTEX Exhibition.
- vi. Team Ifor comprising of Ayanava Sarkar (3rd Year, Computer Science), Saptadeep Debnath (2nd Year, Electronics and Communication) and Shrey Iyenger (3rd Year, Computer Science), were WINNERS at the inaugural Drones for Good University Challenge. Further, in the final, they were given 45 minutes to extend their existing idea to monitor crowd during a post football match parade of the winning team. Initially, they were chosen as one of the six finalists from a pool of over 50 other teams from various other colleges. In the final, the teams had to come up with a full technical and feasible solution of the problem statement, of "Monitoring a Football Match using an Unmanned Aerial Vehicle. A panel of 5 judges, all part of UAE Mars Mission, 2021 from the Mohammed Bin Rashid Space Centre (UAE Space Agency) evaluated the presentations of all the finalists and judged Team IFOR as the winners of the inaugural Drones for Good University Challenge. They were awarded a trophy as well as a cash prize of AED 7000.

TEAM IFOR is proud to have qualified to the semi-final stage of the UAE Drones For Good Award's National Competition which is to be held in the month of Feb2016. Their submission was selected out of an applicant pool of several hundred highly competitive entries. UAE Drones For Good will be publicizing Team IFOR's submission video as part of their media and PR campaign of the award and on their website.



**B4.14.3 Department: Mechanical**

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

Senior Professors, Professors	03
Associate Professors	01
Assistant Professors	04
Lecturers	-
Visiting Faculty	-

Head of the Department: Dr.R.Karthikeyan

Contact details: rkarthikeyan@dubai.bits-pilani.ac.in

Number of PhD Scholars: 05

Ph.D. Thesis Submitted during the year: NIL

**A. Sponsored Research activities:**

Total number of Sponsored Projects in the department: 01

1. Ongoing projects: NIL
2. Projects sanctioned during the year: NIL
3. Projects completed this year: NIL

**B. Publications:**

1. M. Thiagarajan, P. Dhandapani, C. Periasamy, Thermal Radiation Effect On Unsteady Hydromagnetic Convective Flow Past A Heated Stretching Sheet With Free Stream Pressure Gradient, United States of America Research Journal, Vol. 5, No. 1, 2015
2. M Sivapragash, PR Lakshminarayanan, R Karthikeyan, M Hanumantha,, Flow stress modeling of as cast and welded ZE41A magnesium alloy at elevated temperature, International Journal of Applied Engineering Research, 10 (8), 2015, p201
3. V. Chandrasekaran, D. Kanagarajan, R. Karthikeyan, "Electro Discharge Machining of WC/Ni Mixed Ceramic", Applied Mechanics and Materials, Vols. 813-814, pp. 309-316, Nov. 2015.

**C. Conferences attended/papers presented:**

1. Vishank Bhatia .,Kalaichelvi V., Karthikeyan R.,, Application of a Novel Fuzzy Logic Controller for a 5-DOF Articulated Anthropomorphic Robot, IEEE International Conference On Research In Computational Intelligence and Communication Networks, Kolkatta, India
2. Vishank Bhatia.,Ganesh Ram R.K, Kalaichelvi V, Karthikeyan R, Application of Model Predictive Controller for 2DOF Robot Manipulator, IEEE International Symposium On Mechatronics and Its Applications, Sharjah, UAE
3. C.Periasamy and Satish Kumar, FEA Analysis and Structure of the Solid Rocket Booster and external Tank, 2nd International Conference on Innovative Trends in Science , Engineering and Management 2015, 25-26, Feb 2015, Dubai, UAE
4. C.Periasamy and Viswa Venkat Mounish Vadlapudi, Solar Roadways and its Application in UAE, ASME Power & Energy 2015,11-13, May, 2015, Dubai, UAE
5. Udayakumar Rajamanickam, Anshul Singhal, and Miller Jothi, FRP Mold and Panel Manufacturing for FSAE Body Panel and Driver Seat', SAE Proceedings 2015-01-0727, Year: April 2015, USA

**D. Books Published/Edited during the year:** NIL

**E. Conferences, seminars & workshops conducted:** NIL

**F. Invited Talks given by BITS faculty:** NIL

**G. Invited talks arranged in the department:**

1. Mr.Anbalagan, Proleed, An Invited Talk On 'HVAC Industry & Its Basics' (ASHRAE), 7.5.15

2. Dr.Jyotirmay Mathur, MNIT, Jaipur, Presented An Invited Talk On 'Earth Air Tunnel Cooling System' (MEA), 27.1.15
3. Dr.Era Poddar, Ergo Era,, Presented An Invited Lecture On 'Ergonomic Principles For Automobiles' (MEA), 4.5.15
4. Mr.Amit Sinha, Gulf Metals Foundry, Dubai, Presented A Lecture On ' Quality Control In Manufacturing Industries' (MEA), 7.5.15
5. Mr. Meesam, LARSA, Dubai, Robotics Workshop - MSC Adams (MEA), 11.5.2015
6. Mr Yatheendra Pai (Sales Manager Siemens Building Technology), Introduction of working of a Building Management System (ASHRAE), 26.11.2015
7. Mr. M.J. Paleja- Chief Executive at L&T Wuxi, Manufacturing & Quality Control at L&T Wuxi, China (MEA), 11.9.2015

#### **H. Awards & Recognitions Won By Faculty & Students**

1. Shreyas Nayak won second place in NASA SCARE CROW CONTEST, USA (15.6.15)
2. Mohd. Atyab & Arjun Arya won first place in middle east in ASHRAE STUDENT Design competition-2015 (1.6.2015)
3. Anomitra Banerjee is selected as Student Liason officer by ASME International Gas Turbine Institute, (June 2015)
4. Anomitra Banerjee is is awarded the ASME SAC Student Travel Award at The Turbo Expo 2015, USA

#### **I. Faculty Development, International Collaboration & Industry Immersion:**

Dr.R.Karthikeyan and Dr.R.Udayakumar attended Inter Disciplinary Research workshop organized by BITS Pilani, Hyderabad in November 2015.

#### **J. Significant new equipments/experimental facility added during the year:**

MSC ADAMS software, Pin on disc wear tester and VCR Engine were added to the existing lab facilities.

#### **K. Departmental Association/Club activities:**

(i) ASME Student Chapter (Faculty advisers: Dr.MVN.Sankaram & Dr.C.Mallikarveen)

- Fabtech Industrial Trip (18th February 2015)
- Mechathlon 2.0 (16-18th March 2015)
- Synergy (1st-9th April, 2015)
- Avishek Goel, IV year Mechanical Engineering Student got elected as the Regional Vice Chairperson of Middle East and Africa (UAE Region) for the Academic year 2014-15.

(ii) ASHRAE Student Chapter (Faculty adviser: Dr.R.Udayakumar)

- Organized TRASH PANIC TECHNOFEST (11/30/14)
- Organized the invited lectures by Proleed & Siemens

(iii) SAE Student Chapter (Faculty adviser: Dr. N.K.Millerjothi)

- Participated FASE competition in Italy
- Participated SAE BAJA competition in USA

(iv) Mechanical Engineering Association Adviser: (Faculty adviser: Dr.C.Mallikarveen)

- Organized the following workshops:
- Robotics through ADAMS (May 2015)
- Smart Engineer Workshop (November, 2015)
- Comsol workshop (December 2015)
- Arranged field trips to Perfect tool, Dubai refreshment and Gulf metal foundry
- Arranged the invited talks by Amit sinha on Quality contro & Era Poddar on Ergonomics

**B4.14.4. Department: Computer Science**

Number of faculty members (as on 31 DECEMBER 2015)

Professors	02
Associate Professors	-
Assistant Professors	04
Senior Lecturers	04
Lecturer	01

**Head of the Department:** Dr. B. Vijayakumar**Contact details:** vijay@dubai.bits-pilani.ac.in**Number of Ph.D. Scholars:** 10 (7 On-campus; 3 Part-Time)**Ph.D. Thesis Submitted during II Semester 2014-2015:** 01**Ph.D. Thesis Submitted during I Semester 2015-2016:** 01**A. Sponsored Research activities: 4**

Total number of Sponsored Projects in the department:

- Dr. R. Anandkumar (EEE) Principal Investigator and Co-Investigators Dr. B. Vijaya-kumar (CS), Dr. Jagadish Nayak(EEE) and Dr. Sundaresan Raman(EEE) have submitted a proposal to DEITY (Dept. of Electronics and Information Technology, India) on 03 Feb. 2015. Total Budget Outlay Proposed: INR 77,48,851.44 (US\$ 129,238.78) Project Name: VIDEO PROCESSING and CODEC REQUIREMENTS for IETF WebRTC. Duration: 3 years.
- Dr. B. Vijayakumar (CS), PI and co-investigators Dr. R. Anandkumar (EEE), Dr. V. Srinivasa Rao (HSS) and Dr. Aqila (HSS) have submitted a proposal to "Grand Challenges Explorations" of MELINDA GATES Foundation on May 13, 2015. Total Budget Outlay Proposed: US\$ 100,000. Project Name: Explore New Ways to Measure Delivery and Use of Digital Financial Services. Duration: 2 years.
- Dr. B. Vijayakumar, Dr. S. Vadivel, Dr. V. Santhoshkumar, Mr. Nandkumar, Dr. M. Madijagan, Dr. Sujala D Shetty and Dr. R. Jagadish Nayak (EEE) submitted a short-term consultancy proposal to International Centre for Biosaline Agriculture (ICBA) Dubai in Feb. 2015. Total Budget Outlay Proposed: AED 95,000. Project Areas: Web portal interface for ERP project, Web portal with content management, Custom GIS, Mobile based game application for ICBA awareness. Duration: to be decided after further discussion with ICBA.
- Dr Sujala D. Shetty (Co investigator) is a team member for the project proposal, "Measuring Climatic change Impact with special reference to Health Infrastructure and Socio Economy", submitted to Ministry of Environment, Forest and climate change during II semester 2014-15. Dr Anand Kumar was the Co-PI in this submission Total Budget Outlay Proposed: INR 141.83 lakhs. Duration: 3 years.

**B. Publications:**

1. "Spatial Data Analysis on the Cloud", Sana Zakir Hussain, Sujala D. Shetty, International Journal Of Geomatics And Geosciences, Volume 5 Issue 6. 2015, pp. 20-23.
2. Bharat B Gulyani, J Alamelu Mangai and Arshia Fathima, An Approach for Predicting River Water Quality using Data Mining Technique, Advances in Data Mining: Applications and Theoretical Aspects, Petra Perner, Springer Lecture Notes in Computer Science, Vol 9165, pp 233-243.
3. Malavika Karthik Vasudevan, M Madijagan, Tina Francis, Framework for a Heart Rate Monitor, IJACSci (International Journal Advanced Computer Science), Vol. 5, No. 04, April, 2015, ISSN: 2251-6379, pp. 364-366.

**C. Conferences attended/papers presented:**

1. Tina Francis, M. Madijagan, B Vijayakumar, "Privacy Issues and Techniques in E-Health Systems", Proc. of Int. Conference ACM SIGMIS CPR 2015, Newport Beach, California June 4-6, 2015, pp. 113-115.
2. Nithya.K, B. Vijayakumar, Architectural Design for Allocation, Storage and Retrieval of Distributed Multimedia Data, Proceedings of the International MultiConference of Engineers and Computer Scientists 2015, IMECS 2015, March 18 - 20, 2015, Hong Kong, pp. 184-188.
3. Gaurav Madan, Yashasvi Vedula, Anubha Varshney, Ranoo Sharma, B Vijayakumar, "eAttendance System for Academic Institutions", Proceedings of the International MultiConference of Engineers and Computer Scientists 2015, IMECS 2015, March 18 - 20, 2015, Hong Kong, pp. 382-386.

4. Dev Dua, Sujala D. Shetty, Lekha R. Nair, Applying Scalable Machine Learning Techniques on Big Data Using a Computational Cluster, The 16th International Conference on Internet Computing and Big Data, July 27-30, 2015, Las Vegas, USA, pp. 17-23.
5. Dev Dua, Sujala D. Shetty, Lekha R. Nair, Development of a distributed cryptographic system employing parallelized CTR mode encryption", 10th International Conference on Internet and Web Applications and Services, 21 - 26 June 2015 / Belgium, Brussels, pp. 41-45.
6. Susanna S Henry, Vijay Kumar, V. Santhosh Kumar, Gurwinder Singh. Protocol Verification of Translation in Mobile Internet Protocol version 4 and 6. 2015 8th International Conference on Advanced Computer Theory and Engineering (ICACTE 2015). Web site: <http://www.icacte.org>. Germany, Berlin, 13-14 August 2015. Also published in special issue in Journal of Computers Volume 11, Issue No. 2, March 2016, pp. 149-158.
7. Mahendra Singh Thakur, Dr M Madijagan. "Selection of Sensor Architecture and Design of Sensor Framework for Blade Server and Data Centre Cooling System". International Conference on Artificial Intelligence, Energy and Manufacturing Engineering (ICAEME'2015) Jan.7-8, 2015 Dubai (UAE). <http://iieng.org/siteadmin/upload/6440E0115015.pdf>, pp. 18-21.
8. Bhavya Thakur, Aroul Murugan, Mahendra Singh Thakur. "Design and Development of a Self Propelled Electricity Generator on a Cloudy Hill Top". International Conference on Artificial Intelligence, Energy and Manufacturing Engineering (ICAEME'2015) Jan. 7-8, 2015 Dubai (UAE). <http://iieng.org/siteadmin/upload/5653E0115016.pdf>, pp. 22-25.
9. Pratik Sen and S.Vadivel, Introduction to fast indexing method for images in database, International Conference on Digital Image Processing, ICDIP 2015 Apr 9, 2015 - Apr 10, 2015, Los Angeles, USA, pp. 102-106.
10. C. Tamilselvi, B. Vijaya Kumar, Cloud to Device Messaging with Voice Notification Using GCM, Proceedings of the World Congress on Engineering and Computer Science 2015 Vol I WCECS 2015, October 21-23, 2015, San Francisco, USA, pp. 168-173.
11. Joseph George, Member, IAENG, B. Vijay Kumar, V. Santhosh Kumar, Data Warehouse Design Considerations for a Healthcare Business Intelligence System, Proceedings of the World Congress on Engineering 2015 Vol I WCE 2015, July 1 - 3, 2015, London, U.K., pp. 308-311.

**D. Books Published/Edited during the year: -**

**E. Conferences, seminars & workshops conducted: -**

A short term course on Network Management has been conducted at CS dept., during 2 NOV - 21 NOV, 2015 and 46 students of BPDC attended the same. The professional experts from NETTECH, KOLKATA Dr. Swapan Purkait and Ms. Sunanya Shetty imparted hands on training to our students on Network Management and Ethical Hacking.

The CS department conducted a Workshop for 17 school students from UAE, on 21<sup>st</sup> December, 2015. The details are as follows:

No.	ACTIVITY	Organizing Faculty
1	Play Computer Based Animation - The Towers Of Hanoi Using Recursion ; Play Hangman: Word Guessing Game	Dr. VIJAYA KUMAR
2	Play Tic Tac Toe Game; Slide Show On Gpu Card With Real World Application	Dr. SANTHOSH KUMAR
3	Hands On Experience: Developing A Website Using Wordpress	Dr. SIDDALING
4	Hands On Experience: Capture And Display Of Mouse Events Using Java Applet	Dr. VADIVEL

**F. Invited Talks given by BITS Faculty / Students**

A Ph.D. scholar at Computer Science Department, BPDC since 2014, Joseph George and who is also the Head of Information Technology at Rashid Centre for Diabetes and Research (RCDR), Ministry of Health UAE. Joseph George delivered the key note speech on "Innovative Strategies for improving patient care" at Healthcare Innovation Congress, on 10-11 May 2015, at Crown Plaza Hotel, Dubai, UAE.

**G. Invited talks arranged in the department:**

The following invited talks have been arranged in the CS department.

1. Prof. Ramesh Karri, from New York University delivered a talk on "Inter Disciplinary Studies in Security and Privacy: Opportunities for Practice School at Cyber Security Research Centre at New York University Abu Dhabi", on 08/03/2015.
2. Dr. Swapan Purkait, NETTECH, KOLKATA, delivered a talk on "NETWORK MANAGEMENT " on 19/03/2015.
3. Mr. Somnath Mitra, Program Manager, IBM, New Delhi, delivered a talk on "Web 3.0 Technology", on 5/4/2015.
4. Dr.Sasikumar Punnekkat, Director, BITS Pilani, K K Birla Goa Campus, delivered the talk on "Dependable Software Engineering and Embedded Systems" using the Tele-presence Class Room facilities on 13th April 2015, Monday at 3.45 pm-5 pm.
5. Professor Ashok Deshpande, PhD (Engg & Technology) (Founding Chair: Berkeley Initiative in Soft Computing (BISC) - UC Berkeley CA., Former Deputy Director: National Environmental Engineering Research Institute 5(NEERI)/CSIR India), delivered the talk on "Fuzzy logic is Not Fuzzy!" on 6 Sep 2015, at Auditorium from 10.15-11.15 am.
6. Mr. Somnath Mitra, Business Intelligence Delivery Lead, Xchanging Technology, Gurgoan, India, delivered a talk on "Enterprise Resource Planning", on 24/11/2015.

#### H. Awards and recognitions won by faculty and students

1. The annual inter university "Crossfire" Debating Championship was held at Skyline University College, Sharjah, on the 18th of February 2015. 8 Universities from across the UAE participated in the Debating Championship. Mohamed Atyab, a final year B.E Mechanical Engineering student and Varun Sharma, a third year B.E Computer Science student represented BPDC at the event. Mohamed Atyab won the Runner Up - Best Speaker (Against the motion) award at the competition.
2. CS Students from BPDC participated at The Microsoft Hackathon competition on 28th March 2015 at the Microsoft Office, Internet City. The students were awarded Nokia Lumia 1520 for their performance in the event. The student details are given as follows:  
Alok Rajiv – 2nd year, Naman Kamra – 1st year, Pradheepan Raghavan – 2nd year Rishav Jalan – 2nd year, Saugaat Allabadi – 1st year, Shaurya Sood – 1st year Ritwik D'Souza – 1st year.
3. 'LOXLEY' team comprising of four students from Bits Pilani, Dubai Campus have emerged victorious in the final round of Business Case Study Challenge held by Middlesex University on 23 Feb. 2015, to take home a whopping cash prize of Dhs. 10,000 and a magnificent trophy. The students are Mihika Shivkumar (year II), Varun Sharma (year III CS), Matthew Abraham (Year III) and Sean D'Rosario (Year IV). The Harvard Business Review case study for this year's competition was titled: Emirates Airline: Connecting the Unconnected. 31 teams comprising of 119 students from 18 universities across the country competed at the Middlesex University Business Case Study Challenge. The teams had to undergo three grueling rounds consisting of written presentations, oral presentations and Q&A sessions spread over a period of one month. Of the 31 teams three teams reached the final round. The teams were judged by experts from the industry and academia. Panel members included senior managers from Emirates group, Al Futtaim Logistics and Du among others. Emirates Airlines is the main sponsor for this event. Our engineering students have proved that they possess business skills too. (photograph attached)
4. On the 1st of May 2015, two students from the Computer Science Department of BITS Pilani Dubai Campus, **Alok Rajiv** and **Lakshay Arora** participated in a 48 hour hackathon competition at The Cribb, Al Quoq organized by Turn8. Their idea "iBOX" a physical cloud storage, was chosen as the best idea in the competition and they would be receiving a seed capital of AED 100,000/- for the same. Business strategists and experts mentored the team to pitch the idea to Venture Capitalists and Angel Investors. The idea was selected by a panel of experienced investors to win the competition and incubate and accelerate the business with a funding of 100,000 AED along with shared office infrastructure and mentorship from top-investors.
5. Dr. Alamelu Mangai, Sr. Lecturer of CS dept. has guided her project student Ms. Shajitha Seyed Ismail of III year CS and their project entitled "Automated Detection of Diabetic Retinopathy using Image Processing Technique" has **won the first place in the** Third U.A.E Under Graduate Students Research Competition - **UGSRC - 2015 - Step up Shabab**, that was held on 21st May 2015 at Abu Dhabi University. The competition was held under the patronage of H.E. Sheikh Hamdan Bin Mubarak Al Nahyan, the minister of Higher Education and Scientific Research in coincidence with the UAE's classification of the year 2015 as the "**Year of Innovation**". The competition included about 348 research submissions in different disciplines from around 1000 students across U.A.E. BITS has sent 15 students this year for UGSRC [Shajitha, Raunak, Aishwarya Iyer and Nabnita, Ayanava Sarkar are the CS students and 10 more students from different streams]. The categories in the competition include CS, EEE, MECH, Maths, Physics, Chemistry, IT, Education. All of our students were in placed in Top Ten in all the categories.

6. DEWA Mobile Application Master Competition, June 2015:
  - a) A team of 7 CS students Prateek Marathe, Sahil Shakir, Rohit Ravishankar, Zoheb Hynus, Isra Abbasi, Rahul Kumar, and Jubin Daniel James participated from BITS DUBAI CAMPUS in DEWA app master competition and secured the second position.
  - b) A team of 6 CS students Ankita Srivastava, Himadri Pathak, Varshali kumar, Subu Avudai, Likitha Satish and Ankit Bansal participated from BITS DUBAI CAMPUS in DEWA app master competition and secured the third position.
7. DECODE DUBAI: 48 hour HACKATHON COMPETITION, June 2015 A team of 5 final year students all from CS Department Dinesh Balani, Mihir Rai, Dev Dua, Vijit Katta and Mohammed Muzzamil participated in DECODE DUBAI and developed an application that will motivate people to save electricity. This team won the first prize. The organizers will be incubating our students for 5 months to polish their idea and they will be further participating in World finale Of "Smart City App hack" to be held in Barcelona, Spain in month of November 2015.
8. Computer Science Juniors from BITS Pilani - Dubai Campus, Alok Rajiv and Rishav Jalan won the 3rd Place at the RTA Innovative App Development Challenge. The students made an RTA app that enabled people/travellers navigate within Dubai using RTA public Transport like Tram, Bus and Metro. The app included also features such as searching stores inside metro stations, adding NOL cards on the app and tracks their balances among other things. The Material Design based app was made on the Android platform and Python Cloud Services supported by the RTA's APIs. His Excellency Sheikh Mattar Al Tayer, Director General and Chairman of the Board of Executive Directors of the RTA awarded the team a cheque of AED 40,000/- for their achievement at a ceremony held during the Gitex Technology Week 2015.
9. Gulf Programming Contest (GPC) - 2015: Three teams from BPDC participated in the Gulf Programming Contest which was held in American University in Dubai on March 26th 2015. The GPC is an annual event where universities from the entire middle east including Qatar, Kuwait, Oman, Saudi Arabia and the U.A.E participate. This year too there were 41 teams participating. The competition is an intensive 5 hour programming competition. The winners of the top ten positions are finally announced. Three of our students from second year Computer Science Alok Rajiv, Ayush Duttgupta and Rishav Jalan bagged the sixth position. The second team comprised of Arvind Somasundaram, Akash Kadel and Akash Mundra. And the third team comprised of Mohammed Sahil, Mohammed Sulaiman and Shashwat. These teams have also performed very well. The members of these teams were selected after a thorough screening process. The faculty for the three teams were Dr .Sujala D. Shetty, Dr S. Jeyalatha and Dr. Alamelu Mangai.

#### **I. Faculty Development, International Collaboration & Industry Immersion:**

Dr. Madiagan is the Lead faculty for research and training collaborations with DELL, CISCO, Middle East, during the period 2014-15. CISCO has setup a Networking Lab at BPDC to work in the following areas: Software Defined Networks & Application Centric Infrastructure. Training for Certification Courses for DELL and CISCO are being planned in the near future.

##### **CISCO Sponsored Network Lab:**

The Cisco sponsored networking research lab is 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 hard copy and soft copy material to help the students to learn and start the practical training on Cisco hardware devices. This Cisco lab will lead the students to achieve the Cisco certifications and software defined Network projects.

Prof. Vadivel is the Lead faculty for research collaboration with ESRI Sharjah, to work in the following areas from I sem 2014-15:

- a) Hadoop based distributed processing for ARCGIS server and ArcGIS desktop: Dr S. Vadivel, Dr. Sujala D Shetty.
- b) Image search based on Meta data and feature selection: Dr. Jagadish Nayak and Dr. B. Vijayakumar.

Dr. Sujala D. Shetty reviewed four papers for the 12<sup>th</sup> IEEE India International Conference INDICON2015, held during 17<sup>th</sup> to 20<sup>th</sup> December 2015 in Jamia Millia Islamia, New Delhi, India.

Dr. Sujala D. Shetty acted as the judge at the Interschool Science Exhibition conducted by DPS, Dubai in June 2015.

**J. Significant new equipments/experimental facility added during the year:**

- A new Computer Science Dept's laboratory (Software Systems Laboratory) has been setup during June-Aug. 2015. The lab has come up in room no. 332, adjacent to the present Computer Programming Lab. (Room 333). The System Configuration includes:  
75 Desktop Computer Systems each having configuration as follows: i7-4770 Processor with Monitor, 8GB RAM, 1 TB HDD, 1 DVD Drive, Intel Graphics Card, WiFi, KBD, Mouse.  
1 LCD Projector and 1 TV Display
- The existing CP Lab in Room 333 has been additionally equipped with 8 more Desktop Computer Systems in August 2015. Now the total number of Computer Systems in CP lab is 78.

**K. Departmental Association/Club activities:****1. Microsoft Tech Club:**

FACULTY IN-CHARGE - Dr. S. Vadivel

PRESIDENT – Dev Dua

VP & WEB LEAD – Rahul Kumar

TECH LEAD – Rishav Jalan, Nitya Mohini Harve

CURRENT MEMBER STRENGTH = 216

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.

**Hackathon at Microsoft Office (Internet City):** 7 Microsoft Tech Club students participated in hackathon at Microsoft and were awarded Nokia Lumia 1520 each for their performance in the event.

**Droidcon sponsored by Microsoft:** 7 Microsoft Tech Club students attended the Droidcon conference worth 300\$ per attendee for free and along with free transportation.

**Sessions (6):**

- **Session 1:** Discussion with tech club members and understanding what they want to learn.
- **Session 2:** Session on AppStudio App Development without coding
- **Session 3:** App Development Hackathon #1. Helping all users build their first app.
- **Session 4:** App Development Hackathon #2. Helping all publish the apps they made to windows store.
- **Session 5:** Session on Game Development with Unity
- **Session 6:** Continuation of first session on Game Development with Unity

**Events in Enginuity (2):**

**CodeBlitz:** In association with IEEE. Code debugging competition.

**Frynapse:** Virtual scavenger hunt competition.

**2. Linux Users Group:** The Linux Users group actively organized and collaborated events with other clubs and associations. The registrations were free and open to all BPDC students. Series of Presentations were held during 2015 covering the topics UBUNTU LINUX Installation and Configuration & Software Tools under LINUX. Our Core members took active part in Organizing Committee for TECHNOFEST 2015 and ENGINUITY 2015. The group also provided resource material on UNIX Commands and Editor for first year students.

**3. BPDC ACM Student Chapter:** Ms. Susanna S Henry is the the Faculty Advisor. for ACM chapter at BPDC. The ACM members took active part in organizing ENGINUITY 2015.

**B4.14.5 Department: BIOTECHNOLOGY**

Number of faculty members (as on 31 December 2015)

Senior Professors, Professors	03
Associate Professors	02
Assistant Professors	-
Lecturers	-
Visiting Faculty	-

**Head of the Department: Dr. Trupti Gokhale****Contact details:** trupti@dubai.bits-pilani.ac.in**Number of PhD Scholars: 6****A. Sponsored Research activities:**

- Ongoing projects: Collaborative project on** "An assessment of the potential of cultivating feedstock crops for biodiesel production in the United Arab Emirates" with **ICBA**.
  - PI Dr. Rajiv Gupta, Co-PIs: Dr. Sunil Bhand, Dr. Utpal Roy, Dr. Neeru Sood, Dr. Trupti Gokhale**  
Roof top rainwater harvesting for safe, potable, and healthy drinking water and ground water replenishment for BITS Pilani, Pilani campus. Sponsored by CoE: Water, Waste and Energy management, BITS Pilani for a period of 5Years, with total amount Rs. 91lakhs
  - PI: Dr. Suresh Gupta, Co-I: Prof. S. K. Verma, Dr. Anupam Singhal, Dr. S. Ramachandran**  
Zinc Recovery from Industrial Waste using Bioleaching; Sponsored by CoE: Water, Waste and Energy management, BITS Pilani for a period of 5Years, with total amount; Rs. 48.00 Lakh.
- Projects sanctioned during the year:** NIL
- Projects completed this year:** NIL

**B. Publications:**

- Pranay Sood, Neeru Sood and Trupti Gokhale (2015) "Microwaves: An Alternative Bacterial Sterelization Technique?" GSTF Journal of Biosciences Vol 3, No. 2, DOI: 10.5176/2251-3140\_3.2.52, <http://dl6.globalstf.org/index.php/jbio/article/view/1352>
- Aiyer SSC, Ramachandran S, Thirumavalavan KC and Prakash kumar BG (2015) A review of solar photocatalytic degradation of wastewater using advanced oxidation processes, Jr. of Industrial Pollution Control, 31(2): 301-313

**C. Conferences attended/papers presented:** Following papers were presented in the international conferences by the department faculty/ staff/PhD scholar in the year 2015

- Gayathri Ganesh, Neeru Sood, Trupti Gokhale, 'Isolation Of Copper Resistant Bacteria And Fungi For Synthesis of Copper Nanoparticles ' International Conference Next Generation Computing and Communication Technologies 2015 organized by Zelus Events, 22nd & 23rd April 2015, Dubai, UAE.
- RadhikaNarain, Subramanian Ramachandran, B. G. Prakash Kumar (2015) Optimization of inclination and mixing conditions for tubular photobioreactor for mass production of microalgae, participated in "Current Trends in Biotechnology, presented at Manipal University-Dubai Campus, March 18- 19, Dubai.
- S K Verma, Suresh Gupta, Anupam Singhal and S Ramachandran (2015) Role of stress-induced protein in bioremediation of heavy metals in National Conference on Sustainable Water Resources Management: Challenges& Opportunities, 20-21 January, RD University Jabalpur.
- Menon, K., Alisha Anne Maben, Trupti Swarup Gokhale, S. Ramachandran & Sood, N. (2015). Phytochemical Screening of Anti-microbial Citrullus colocynthis Schrad extracts. The 2nd Middle East Molecular Congress and Exhibition (p. In Press). Istanbul: Frontiers Publications.
- Neeru Sood, Kiran Menon & S Rajeshwari (2015). Investigating candidate Crops for cultivation in the UAE. Issue 1(pg21).Research connects @Dubai Newsletter.

**D. Books Published/Edited during the year:**

**Ramachandran S, P Sankar Ganesh, Sivasubramanian V and Prakash Kumar B G, (2015) Current Developments in Mass Production of Microalgae for Industrial applications. In Environmental Sustainability Using Green Technologies, Edited by V. Sivasubramanian. CRC Press. ISBN 9781498753050**



**E. Conferences, seminars & workshops conducted:**

One day Interactive session with industry experts on "**Diagnosics and Healthcare with Focus on Expo 2020**" on 15<sup>th</sup> December 2015. Experts invited were,

1. **Dr. Amrish Kamboj**, Chief Operating Officer and Pathologist, Eastern Clinical Laboratories, Dubai, UAE.
2. **Dr. Rajarathinam Ayyanar**, Specialist Neurologist, Zulekha Hospital, Dubai, UAE.
3. **Dr. Fatma Al Hashimi**, Head of the Education and Administration Unit of the Dubai Cord Blood and Research Centre, Latifa Hospital, Pathology and Genetics Department of the Dubai Health Authority
4. **Dr. Anthony Thomas**, Medical Director, Premier Diagnostic and Medical Centre, Dubai, UAE

**F. Invited Talks given by BITS faculty:**

1. **Dr. Neeru Sood** gave a virtual lecture on " Sustainable Agriculture - approaches/techniques and challenges" at a One Day International Conference For Students On Modern Aspects Of Microbial Science organized by Department of Microbiology, Shri Shivaji College of Arts, Science and Commerce, Akola, India in joint venture with Microbiologist Society, India on 2<sup>nd</sup> January 2015.
2. **Dr. Trupti Gokhale** was invited to deliver a counseling talk on 'Introduction to Biotechnology' at the Higher Education Summit organized by The Young Vision on 13<sup>th</sup> -14<sup>th</sup> January 2015.
3. **Dr. Trupti Gokhale** gave a virtual lecture on "Development of Biosensors" at a National Seminar on 'Biotechnology for Better Tomorrow' on 26<sup>th</sup> February 2015 at Gogate-Jogalakar College, Ratnagiri, India

**G. Invited talks arranged in the department:**

1. Dr. Mohan Jain, Adjunct Professor -Dept. Agricultural Sciences, University of Helsinki, Finland delivered an interesting talk on "Applications Of Tissue Culture On Crop Improvement And Conservation Of Genetic Diversity In Tropical Plants" And Biotechnology And Induced Mutations In Crop Improvement" on 2<sup>nd</sup> and 5<sup>th</sup> April 2015.
2. Dr. Vidya Rajesh, Asso. Prof and Asso. Dean ARD, BITS Pilani Hyderabad Campus, presented an interesting talk on "Molecular Insights On Human Diseases: Malaria And Autism Spectrum Disorder" on 12<sup>th</sup> April 2015.
3. Interactive session with Padma Shri Dr. D. Balasubramanian, L.V. Prasad Eye Institute, Hyderabad, India on 23<sup>rd</sup> November 2015.

**H. Awards and recognitions won by faculty and students**

1. Ms. Gayathri Ganesh won an award for Best Presentation for her paper 'Isolation of Copper Resistant Bacteria and Fungi for Synthesis of Copper Nanoparticles ' at the International Conference Next Generation Computing and Communication Technologies 2015 organized by Zelus Events, on 22nd & 23rd April 2015, Dubai, UAE.
2. Dr. Neeru Sood has been appointed as Sectional President of the Microbiologist Society, India for Dubai, UAE.
3. Dr. Trupti Gokhale has been appointed as Sectional Co-ordinator of the Microbiologist Society, India for Dubai, UAE.

**I. Faculty Development, International Collaboration & Industry Immersion:****Faculty Development:**

1. Dr. Trupti Gokhale was invited to deliver a counseling talk on 'Introduction to Biotechnology' at the Higher Education Summit organized by The Young Vision on 13<sup>th</sup> -14<sup>th</sup> January 2015.
2. Dr. Neeru Sood attended the annual Campus Conversation event to share updates, discuss new ideas and directions for higher education in Dubai, on Sunday 11<sup>th</sup> of October 2015, at Emirates Aviation University, Dubai International Academic City. The theme of this Campus Conversation was EXPO 2020.
3. Dr. Neeru Sood attended an interaction session on Research Study Qudurat, an informational meeting with team Aon Hewitt session on 12th October, 2015 at Dubai International Academic City.
4. Dr. Neeru Sood attended Official Launch of new brand identity: Dubai Science Park, formerly known as DuBiotech and EnPark and release ceremony of Innovation in Life Sciences -An emerging markets Perspective, a Dubai Science Part commissioned report from Economist Intelligence Unit on 26th October, 2015

**Industry Immersion:**

1. Dr. Neeru Sood, Dr. Trupti Gokhale and Dr. Ramachandran along with Mr. Abdul Razak Sohail visited Eastern Clinical Laboratories, Dubai, UAE on 5th November 2015. The discussions lead to a collaborative initiatives and introduction of a new PS station for the Biotechnology Department.
2. MEDCARE Hospital, Dubai was introduced as a new PS station for the Biotechnology Department.

**J. Significant new equipments/experimental facility added during the year:**

1. The following equipments were purchased this year in the Biotechnology department:
2. Olympus Fluorescence Microscope BX53 with phase contrast, dark field and camera attachment (1nos)
3. QSONICA sonicator system with micro probe (1nos).
4. Student compound microscopes (21 nos)
5. Sartorius Analytical balance (1 nos)
6. Vortex mixers (3 nos)

**K. Departmental Association/Club activities:**

1. The Chimera club of the department organized an event at TECHNOFEST on 16<sup>th</sup> March 2015.
2. Dr. Mohan Jain, Adjunct Professor -Dept. Agricultural Sciences, University of Helsinki, Finland delivered an interesting talk on "Applications Of Tissue Culture On Crop Improvement And Conservation Of Genetic Diversity In Tropical Plants" and "Biotechnology And Induced Mutations In Crop Improvement" on 2<sup>nd</sup> and 5<sup>th</sup> April 2015.
3. Dr. Vidya Rajesh, Asso. Prof and Asso. Dean ARD, BITS Pilani Hyderabad Campus, presented an interesting talk on "Molecular Insights On Human Diseases: Malaria And Autism Spectrum Disorder" on 12<sup>th</sup> April 2015.
4. Chimera club arranged a visit for the 3rd year students to IFFCO, Al Ain, on 23<sup>rd</sup> April 2015.
5. Visit to Barakat Foods, by 3<sup>rd</sup> year and 4<sup>th</sup> Year Biotechnology students in March 2015
6. Organized COMSOL Multiphysics Workshop for a hands on experience in using the COMSOL software on 1<sup>st</sup> December 2015.
7. The Chimera club of the department organized an event at TECHNOFEST on 13<sup>th</sup> - 14<sup>th</sup> December 2015.
8. Organized a one day Interaction with industry experts on "Diagnostics and Healthcare with Focus on Expo 2020" on 15<sup>th</sup> December 2015.

**Student Achievements:****Competitions:**

1. Gayathri Ganesh presented a paper on, "Copper Resistant Bacteria and Fungi and Synthesis of Copper Nanoparticles" at Under Graduate Student Research Competition, Abu Dhabi University, held on 21 May 2015.
2. Prarthana Clare, Hydari Masuma, Akshay Deshpande, Adonis D'mello, Presented a paper on 'Design and Development of compact tubular Photobioreactor for mass production of Microalgae using treated waste water' at Undergraduate Student Research Competition Abu Dhabi University, held on 21 May 2015.
3. Srishti Singh presented a paper on 'Multimarker Approach in Detection of Cardiovascular Diseases' at the Undergraduate Student Research Competition Abu Dhabi University, held on 21 May 2015.
4. Ms. Gayathri Ganesh presented a paper on 'Isolation of Copper Resistant Bacteria and Fungi for Synthesis of Copper Nanoparticles' at the Student Paper Presentation Contest held in conjunction with ICNGCCT 2015 organized by Zelus Events, on 22nd & 23rd April 2015, Dubai.

**Student Development:**

1. Ms Srishti Singh attended the 4<sup>th</sup> Winter Institute in Global Health 2015, a health-care workshop jointly organized by BITS Pilani - Hyderabad Campus, PACE university, New York and the Apollo Hospitals at BITS Pilani - Hyderabad Campus from Jan 8, 2015 to Jan 16, 2015.
2. Srishti Singh visited Dr Sunil Bhand's lab at BITS Pilani, K.K. Birla Goa campus for a period of one month in July 2015 to work on the project sponsored by CoE: Water, Waste and Energy management, BITS Pilani.
3. Kiran Menon visited BITS Pilani, Pilani Campus from 13-17 July 2015 to work in the Analytical Chemistry laboratory of Chemical Engineering Department towards her thesis work.
4. Gayathri Ganesh visited Dr Meenal Kowshik's lab at BITS Pilani, K.K. Birla Goa campus for a period of one month in July 2015 to work on synthesis of nanoparticles and cell tissue culture.

**B4.14.6 Department: General Sciences**Number of faculty members (as on 31<sup>st</sup> December 2015)

Senior Professors, Professors	03
Associate Professors	08
Assistant Professors	06
Lecturers	-
Visiting Faculty	-

**Head of the Department:** Dr. Maneesha**Contact details:** maneeshadubai@bits-pilani.ac.in**Number of PhD Scholars:** 2**Ph.D. Thesis Submitted during the year:** Nil**A. Sponsored Research activities:**

Total number of Sponsored Projects in the department: NIL

**B. Publications:**

1. P.Vivek, R. Roopkumar, P. Murugakoothan, Synthesis, growth, optimization, bulk SR method growth, fabrication of indigenous optically transparent and anisotropic studies on guanidinium L-mono-hydrogen tartrate (GuHT) single crystal for nonlinear optical device applications, Journal of Crystal Growth 412 (2015) 40-48
2. KD Choudhury, B Karmakar, M Das, TK Datta, An inventory model for deteriorating items with stock-dependent demand, time-varying holding cost and shortages, OPSEARCH (Springer) Vol 52 (1), 55-74, 2015.
3. Kavita S. Jerath, N.K.M iller Jothi, S. Karthiyayini and Akshay Sharma, Forecast Analysis of Potential and availability in Renewable Energy, International Journal of Environ. Sc. and Dev. Vol 6, No 5, May 2015
4. Shrey Iyengar, Kaarthiyayini Sridhar and Kavita S. Jerath, Analysis of elastic constants of Fe<sub>2</sub>B from X-Ray Diffraction technique, International Journal of Emerging Technology and Advanced Engineering - Volume 5, Issue 1, January 2015 ( ISSN 2250 – 2459 ).
5. Suhel Ahmad Khan and Jia-Wei Chen, Gap Functions and Error Bounds for Generalized Mixed Vector Equilibrium Problems, J. Optim Theory Appl. Volume 166, Issue 3, pp 767-776 Springer Publication 2015.
6. Suhel Ahmad Khan and Jia-Wei Chen, Gap function and global error bounds for generalized mixed quasi variational inequalities, Applied Math Computation, Elsevier Publication (USA), Vol 260, 1, Pages 71–81
7. Suhel Ahmad Khan, Auxiliary problem and algorithm for a generalized mixed equilibrium problem, Journal of the Egyptian Mathematical Society, Elsevier Publication (USA) Volume 23, Issue 1, Pages 155- 160
8. Suhel Ahmad Khan, Farhat Suhel & SK Srivastava, Auxiliary Principle Technique and Algorithm Aspect for Mixed Equilibrium problems, Journal of Nonlinear Analysis and Optimization: Theory & Applications Volume 5, Issue 2, Pages 61-70, 2015.
9. K. Kumar & Elavarasi Marindra, A study on the Motivational Dynamics and Socio Cultural Background of Women Entrepreneurs in the United Arab Emirates, International Journal of Arts and Entrepreneurship, Vol. 4, Issue 4, 236-257, 2015
10. Seba S. Varghesea,b, Sunil Lonkara, K.K. Singh, Sundaram Swaminathanb,\*, Ahmed Abdalad, Recent advances in graphene based gas sensors, Sensors and Actuators B 218 (2015) 160–183, 2015.
11. M.Santhi, P.E.Kumar and B.Muralidharan, Removal of Malachite Green Dyes By Adsorption onto Activated Carbon – MnO<sub>2</sub> – Nanocomposite – Kinetic Study and Equilibrium Isotherm Analyses, IOSR

Journal of Applied Chemistry (IOSR-JAC) e-ISSN: 2278-5736. Volume 8, Issue 4 Ver. I. (Apr. 2015), PP 33-41, 2015. <http://www.iosrjournals.org/> DOI: 10.9790/5736-08413341

12. Vijayakumar.S, Morvin Yabesh J.E., Prabhu .S, Manikandan.R., Muralidharan B, Quantitative ethnomedicinal study of plants used in the Nelliampathy hills of Kerala, India Journal of Ethnopharmacology, 2015, 161:238-254

**C. Conferences/ Workshop attended/papers presented:**

1. S.Baskaran, and Mohammed Sabin, A Statistical Analysis Of Relationship Between Gdp And Residential House Prices In Dubai, UAE Undergraduate Student Research Competition Abu Dhabi University, Abu Dhabi, 21-05-2015
2. S.Baskaran, and Jeffin George, A Statistical Study Of Retail Online Transactions And Their Impact On Business Organization In UAE, UAE Undergraduate Student Research Competition, Abu Dhabi University, Abu Dhabi, 21-05-2015
3. Vinayak Dhingra, Hardeep Kumar, K.K.Singh, Lamellar grating Interferometer FTIR spectroscopy and its applications: A review, IEEE Nano 2015, Rome
4. Moudgil, Akshay; Singh, K.K.; Swaminathan, Sundaram, MEMS based Design and Analysis of a Biosensor for Detection of Hepatitis Virus, IEEE Nano 2015, Rome
5. N.K.Manju nath, B. Muralidharan, J.Ethiraj, Preparation & characterization of gas diffusion layer for PEM fuel cell, National Conference On Applied Science and Humanities , Organized by K. S. School of Engineering and Management, Bengaluru - 560062, Karnataka, India, 5<sup>th</sup> May, 2015
6. J. Ethiraj , A.Nagarajan, B.Muralidharan, Natural dye obtained from Bougainvilleae bracts and its dyeing properties for safer environment, National Conference On Applied Science and Humanities , Organized by K. S. School of Engineering and Management, Bengaluru - 560062, Karnataka, India, 5<sup>th</sup> May, 2015

**D. Books Published/Edited/ Reviewer/ Examiner during the year: NIL**

**E. Conferences, seminars & workshops conducted:**

BITS Pilani Dubai campus organized a two day Science and Technology workshop for school students on 20th and 21st December 2015. The workshop was organized to motivate the school students towards science and technology. The workshop was designed to provide hands on experience and exposure to the engineering laboratories.

17 students from 6 different schools of UAE participated in the workshop. The students worked in five different laboratories and learnt from electronics and mechanical engineering to computer science, chemical and Biotechnology. They learnt from computer animation and web page development to flying an unmanned Aerial vehicle, viewed tiny microbes under the microscope and saw the making of a robotic arm.

Sports activities like basket ball, foot ball, chess and badminton kept them occupied during their evening stay in the hostel. The workshop was a fun filled experience for the students.

**F. Invited Talks given by BITS faculty: NIL**

**G. Invited talks arranged in the department:**

Prof. N. Rajesh, Professor, Dept. of Chemistry, BITS Pilani Hyderabad Campus

"Green adsorbents for heavy metal clean up from industrial waste water" dated 12 April, 2015.

**H. Awards and recognitions won by faculty and students: NIL**

**I. Faculty Development, International Collaboration & Industry Immersion:**

Department of General Sciences in association with PS Division is coordinating with D-Link for Industry Immersion and setting up a Lab in BITS Dubai campus.

**J. Significant new equipments/experimental facility added during the year: NIL**

**K. Departmental Association/Club activities: NIL**

**B4.14.7. Department: Humanities & Social Sciences**

Number of faculty members (as on 31 December 2015)

Senior Professors, Professors	01
Associate Professors	01
Assistant Professors	02
Senior Lecturers	01
Lecturers	01
Visiting/ Adjunct Faculty	04

**Head of the Department:** Dr. A. Srinivasa Rao**Contact details:** drsrinivas@dubai.bits-pilani.ac.in**Number of PhD Scholars:** Nil**Ph.D. Thesis Submitted during the year:** Nil**A. Sponsored Research activities:** NIL**Ph.D. Thesis Submitted during the year:** Nil**Sponsored Research activities:** NIL**B. Publications:**

1. Lajwanti, Kishnani "Elements of Suspicion and Thrill in Sidney Sheldon's –The Other Side of Midnight" International Journal of Research on English Language Teaching Studies, February 2015. <http://www.ijelts.com/table-of-content-february-2015-31> Volume 3 (1) Pages 24-28
2. Shazi Shah Jabeen, Zakia Sadique and Mohammed Ayesha Towheed 'Clarity in Communication: An Imperative', Journal of Humanities and Social Sciences, 2015 Vol. 1, No. 1, pp. 18-24.
3. Rao, A.S. "Impact of Transformational Leadership on Team Performance - empirical study in U.A.E." Measuring Business Excellence, Emerald Publishers, June 2015 (SCOPUS Listed & ABDC 'B' Category Journal) Emerald Publishers Vol.19, No.4 Pages 30-56
4. Aqila, R. Growth of Islamic banking in GCC: Journey and beyond International Journal of Financial Services Management, IJFSM 2015, Inderscience Publishers Vol 8 No 2
5. Aqila, R. & Anomitra B. An Essay to returns to scale of Banks in UAE. Asian Journal of Management Science and Education. Published by Leena Luna Publishers, Japan, 2015 Vol 4 No1, January 2015 Page Nos. 43-50
6. Aqila, R. Growth of Islamic banking in GCC: Journey and beyond International Journal of Financial Services Management, IJFSM 2015, Inderscience Publishers Vol 8 No 2,

**C. Conferences attended/papers presented:**

1. Mubeena, I. and Maneesha, "Analysis of written business communication competency in the hotel industry of Dubai", International Conference of Academic Disciplines, Harvard Medical College, 25-30 May, 2015, Boston, Massachusetts.
2. Rao, A.S. " Entrepreneurial Growth : An Empirical Study on 'Issues & Challenges being faced by Micro level Women Entrepreneurs in UAE Region" McGill International Conference Feb 28 - March 1, 2015 at UAE University, Al Ain
3. Lajwanti, Kishnani "Comparative Study on Anxiety among Sports and Non-sports Personnel in India and UAE" Global Conference on Business Management and Social Sciences 24-25th April 2015, Dubai, Abasyn University (Scopus Indexed Journal Publication)
4. Lajwanti, Kishnani "Cry The Peacock –In Search of her Own Identity" International Conference on Science Technology and Society STS and ISBN NO:81-902565- 6-4 Page Nos-541-544. 21-22nd March 2015, at the Organized by Christian College Indore
5. Shazi Shah Jabeen and Aqila R. 'Factors Influencing Education Decision Making Process', Proceedings of 21st Century Academic Forum Conference at Harvard University, 8-10 March, 2015 at Harvard University, Boston, USA, pp. 208-220.
6. Ria K. and Shazi Shah Jabeen. 'Corporate Social Responsibility Audit: An Exploratory Study' 21st Century Academic Forum Conference at Harvard University, Boston, USA, 8-10 March, 2015, HRD-701.

7. Aqila R. and Lajwanti Comparative analysis of anxiety among sports and non-sports personnel in UAE and India. Global Conference on Business Management and Social Sciences. 24-25 April, 2015 in Dubai
8. Aqila R. Role of Supply chain management in the success of Entrepreneurs. International Conference on Evidence Based Management 2015 (ICEBM2015) 20-21 March 2015 at BITS Pilani, Pilani campus
9. Ajay Jesse Thomas and Shazi Shah Jabeen. 'Effectiveness of Online Language Learning', Proceedings of World Congress on Engineering and Computer Science 2015 (WCECS 2015) organized by the International Association of Engineers (IAENG) , University of California, Berkley (San Francisco), USA, 21-23 October, 2015, pp. 297-301
10. Pushkala M. Analysis of Differences in Managerial Perception of Current CSR Initiatives as against Future Expectations. International Conference on Organization and Management organised Abu Dhabi University, November 22-23, 2015
11. Aastha Bhardwaj, Bhavi Bhavesh Thakker and Shazi Shah Jabeen. ' Corporate and Social Responsibility in Small and Medium Enterprises: Perspectives and Implementation', 4th Annual Research Conference, Abu Dhabi University, Abu Dhabi, UAE, 26 November 2015.

**D. Books Published/Edited during the year: Nil**

**E. Conferences, seminars & workshops conducted: NIL**

**F. Invited Talks given by BITS faculty: NIL**

**G. Invited talks arranged in the department:**

1. On 22<sup>nd</sup> February 2015, Mr. T.P. Anand, Motivaluate Consulting & Training FZ LLC delivered lecture on Business Planning & Strategies.
2. On 3<sup>rd</sup> March 2015, Mr. Jayan Ramakutty, CEO, BITSAA International delivered an Interactive session on Internships & Business proposals.
3. Prof. Hijazi T. Syed, Dean, College of Business Administration visited BPDC on 3 March 2015 as an External Examiner for Ms. Aqila's Viva Voce Examination. He had also interacted with HSS department faculty members and shared his experiences / expertise.
4. On 8<sup>th</sup> March 2015, Mr. Prem Talreja, CEO, Fabricnet.com delivered lecture on Entrepreneurial Start-ups: Venture capital funding.
5. On 19<sup>th</sup> March 2015, Ms. Tanvi Bhatt, Euphoria Consulting delivered a lecture on Start-ups.
6. On 22<sup>nd</sup> March 2015, Prof. AP Arora delivered a lecture on Marketing Research.
7. On 5<sup>th</sup> April 2015, Mr. Somnath Mitra, Program Manager IBM delivered a lecture on WEB3.0 Technology.
8. On 5<sup>th</sup> May, 2015, Prof. Naufel Vilcassim, Prof. Rajesh Chandy, Prof. Vikrant Vig from Aditya Birla Centre delivered a TP Classroom lecture from Hyd campus on Symposium on 'Business, Finance, Marketing and Entrepreneurship'
9. From May 5-6, 2015, BPDC in Association with ADIB (Abu Dhabi Islamic Bank) had organized a Financial Education Awareness Program - organized for the benefit of students. Total 92 students participated and vouchers worth AED 1500 were distributed to the students.
10. Prof. Charles Matthews, Professor, University of Cincinnati, USA made an Exploratory visit 09-06-2015 to BPDC Campus regarding Study Abroad program from UC, USA.
11. On 1<sup>st</sup> October 2015, Mr. Phanindra Sama, Founder of RedBus.in, Mr. Jaswinder Singh Chadha, President & CEO of Axtria, Dr. Nayana Somaratna, Co-founder at Medical Joyworks, had an interactive session in Auditorium on How to become a successful Entrepreneur - Entrepreneurial Journey.
12. On 6<sup>th</sup> October 2015, Mr. T.P. Anand, Strategy Advisor at Motivaluate Consulting & Training FZ LLC, delivered a lecture on Business Plan and Strategies.
13. On 24<sup>th</sup> November 2015, Dr. Siddhartha Sarkar, Director & HOD, IILM, College of Engineering and Technology, Noida, India delivered a lecture on Start-up Entrepreneurs: Issues & Challenges.
14. On 26<sup>th</sup> November 2015, Mr. Prashant Agarwal, Managing Director, Pragati Brands Consultants, Dubai delivered an interactive session on "Irresistibly Irrational: Entrapments in Decision Making".
15. Prof. Charles Matthews, Professor, University of Cincinnati, USA made an Exploratory visit 09-06-2015 to BPDC Campus regarding Study Abroad program from UC, USA.

**H. Awards and recognitions won by faculty and students:**

1. Dr. A. Srinivasa Rao, HOD-HSS has been appointed as Faculty Incharge - CIIE (Centre for Innovation, Incubation & Entrepreneurship) for BITS Pilani, Dubai campus.

2. Dr. Lajwanti Kishnani, Assistant Professor - HSS has been appointed as 'Nucleus Member' at Dubai campus for 'Teaching Learning Centre'(TLC).
3. Prof. Shazi Shah Jabeen has been appointed as Associate Editor of New Frontier, International Journal of Humanities and Social Sciences. (Print ISSN: 2394 - 8221).
4. Prof. Shazi Shah Jabeen reviewed 9 papers for the 4th Annual International Conference on Language, Literature and Linguistics (L3) 2015, held on 8-9 June, Singapore, organized by Global Science and Technology Forum, Singapore.
5. Prof. Shazi Shah Jabeen reviewed 10 abstracts for the Second European Business and Management Conference held in Brighton, UK in July, 2015. Acknowledged as one of the Senior Reviewers by the Organizing Committee of the conference for this contribution.
6. Dr. A.S. Rao reviewed 14 papers for the 60th ICSB (International Conference on Small Businesses) Conference, held on 6-9 June at Dubai, organized by U.A.E. University.
7. Dr. A.S. Rao has been appointed as Member of the Editorial Board - Journal of Global Entrepreneurship Research, a Springer Open Journal. Reviewed 3 papers as on 15 June 2015.
8. Dr. A.S. Rao has been awarded Certificate of Recognition as 'Outstanding Reviewer' and 'Session Chair' by ICSB, USA during the Annual conference held at Dubai during 6-9 June, 2015.
9. Prof. Shazi Shah Jabeen received the Best Paper Award of International Conference on Education and Information Technology 2015 for her research paper entitled 'Effectiveness of Online Language Learning' at World Congress on Engineering and Computer Science 2015 organized by the International Association of Engineers held at the University of California, Berkley (San Francisco) during October 21-23, 2015.
10. Prof. Shazi Shah Jabeen chaired a session at World Congress on Engineering and Computer Science 2015 organized by the International Association of Engineers held at the University of California, Berkley (San Francisco) during October 21-23, 2015.

#### I. Faculty Development, International Collaboration & Industry Immersion:

##### 1. Faculty Development

Prof. Shazi Shah Jabeen attended DIAC Education Forum 2015 on the topic 'Dubai Plan 2021 - A Smart and Sustainable City', organized by Dubai International Academic City, Dubai, UAE on 10 June 2015.

##### 2. Industry Immersion

Prof. Shazi Shah Jabeen along with Dr. Prakash Kumar visited Hitech Industries FZE, Dubai, UAE on 15 and 17 May 2015. The discussions led to collaborative initiatives and introduction of a new PS station for the Chemical Engineering Department.

#### J. Significant new equipments/experimental facility added during the year: NIL

#### K. Departmental Association/Club activities:

1. Association : CEL Report for the year 2015 is appended below

##### CEL Report - 2015:

1. Following lectures have been organized from CEL, Dubai campus :

S. No.	Name	Topic	Date
1	Mr. T.P. Anand, Motivaluate Consulting & Training FZ LLC	Business Planning & Strategies	22-02-2015
2	Mr. Jayan Ramankutty, CEO, BITSAA International	Interactive session on Internships & Business proposals	03-03-2015
3	Mr. Prem Talreja, CEO, Fabricnet.com	Entrepreneurial Start-ups : Venture capital funding	17-03-2015
4	Ms. Tanvi Bhatt, Euphoria Consulting	Start-ups	19-03-2015
5	In Association with ADIB (Abu Dhabi Islamic Bank)	Financial Education Awareness Program - organized for the benefit of students. Total 92 students participated and vouchers worth AED 1500 were distributed to the students.	5-6 May 2015

**Mantra Awards - 2015**

Following Faculty have been appointed as Panel Members for selection of the Mantra Awards 2015. The Panel members have followed criteria for selecting the Awardees.

1.	Dr Anand Kumar	- Dean, ARP	Convener
2.	Dr A Srinivasa Rao	- HSS Dept.	Member
3.	Dr Neeru Sood	- Dean, ARD	Member
4.	Dr Udayakumar	- Mech. Dept.	Member
5.	Dr Prakash Kumar	- Chemical Dept.	Member
6.	Dr Geetha	- General Sciences	Member
7.	Dr Sujala Shetty	- CSE Dept.	Member

Following 4 (four) students have been awarded for different categories:

1) Outstanding Leadership (Female)	: Aiswarya Iyer
2) Outstanding Leadership (Male)	: Anshul Singhal
3) Social Leadership	: Varun Sharma
4) Entrepreneurship	: Nitin Bhalla

**EI Innovation Challenge 2015:**

Two teams from BPDC have come to Finals in the Emirates Islamic Business Innovation Challenge 2015. They have been awarded Certificates by the Emirates Islamic Bank Authorities.

**2. Club Activity: NIL****3. In-house publications:**

- a) Two issues of the in-house publications of Dubai Campus were released during the year:
  - i. @bitsdubai (Institute's newsletter) - Volume 11 Issue 1 (2014 - 2015)
  - ii. @bitsdubai (Institute's newsletter) - Volume 11 Issue 2 (2014 - 2015)
  - iii. Perspectives@bitsdubai (Institute's journal) - Volume 3 Issue 1 (2014 - 2015)

**B4.15 DIVISION/ UNIT/ CENTERWISE ACTIVITY HIGHLIGHTS****B4.15.1 Academic Research Division****Recommended for the Award of Ph.D. Degree:**

S. No.	Name	Title
1	Aqila Begum	A study of comparative growth and performance of Islamic banking and finance and conventional banking in the United Arab Emirates
2.	Sunil Thomas	Modelling and simulation of synchronous motor with emphasis on aspects of stability

**Ph.D. Thesis Submitted and Under Process of Evaluation:**

S. No.	Name	Title
1	Susila S	Design and Implementation of agent for Web service selection using QoS Metrics & performance analysis of REST and SOAP services.
2	Susanna Sajoni Henry	Protocol Verification in Coexistence Phase of Mobile Internet Protocol

**Research Contributions through Higher Degree Dissertations:**

A total of 26 M.E. and M.B.A. Dissertation Projects were carried out over a period from January 2015 to December 2015 of which 1 student was from 2012-13 admitted batch while remaining 25 students were from the batch admitted during the Academic Year 2013-14; from The list is given in Annexure B4-13



**Research Contributions through First Degree Theses:**

A total of 38 students completed their first-degree theses during both the semesters of the calendar year 2015. Besides faculty members of the Institute, scientists from R & D labs and other professionals also supervise the thesis work. The complete list is given in Annexure B4-14.

**Research Publications by Faculty, Staff and Students:**

There were a total of 101 contributions which include 35 in various international Journals and 66 in various Conferences. 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. A team from BITS Pilani, Dubai Campus participated in the 12th edition of the TAPMI Quiz on the Beach (QOTB) international qualifiers held first ever at Dubai during January 2015.
2. Varun Ashok and Sai Rahul won the Second Prize in a Short Film competition conducted by The Community Development Authority (CDA) in Jan 2015. This competition is targeted towards university students in the UAE in order to increase their awareness in human rights values.
3. Mohamed Atyab, a final year Mechanical Engineering student and Varun Sharma, a third year Computer Science student represented BPDC at the annual inter university "Crossfire" Debating Championship was held at Skyline University College, Sharjah, on the 18th Feb 2015. Mohamed Atyab won the Runner Up - Best Speaker (Against the motion) award at the competition. Eight Universities from across the UAE participated in the Debating Championship.
4. LOXLEY team comprising of four students (Mihika Shivkumar, Varun Sharma, Matthew Abraham and Sean D'Rosario) from BPDC have emerged victorious in the final round of Business Case Study Challenge held on 23rd Feb 2015 conducted by Middlesex University to take home a whopping cash prize of Dhs. 10,000 and a magnificent trophy.
5. A student's team consisting of five students (Yashaan Cooper, Vishank Bhatia, Saugaat Allabadi, Swapnil Mittal and Rewant Verma) participated and achieved 6th position out of 44 teams in the iARC( International Autonomous Robotics Challenge) a prestigious Robotics competition in Techkriti 2015 held during 19th - 22nd Mar 2015 conducted by IIT Kanpur event.
6. A student's team consisting of five students (Yashaan Cooper, Swapnil Mittal, Rishab Kinerkar, Siddhant Gupta and Aditya Poonia) participated and achieved 4th position out of 10 teams in the Image Processing Robotics competition in Techkriti 2015 held during 19th - 22nd Mar 2015 conducted by IIT Kanpur event.
7. Three teams from BPDC participated in the Gulf Programming Contest which was held in American University in Dubai on 26th March 2015. The GPC is an annual event where colleges from the entire Middle East including Qatar, Kuwait, Oman, Saudi Arabia and the U.A.E participate. This year there were 41 teams participating. This was an intensive 5 hour programming competition. Three of our students from second year Computer Science Alok Rajiv, Ayush Duttgupta and Rishav Jalan bagged the sixth position.
8. The team of students (Alok Rajiv, Naman Kamra, Pradheepan Raghavan, Rishav Jalan, Saugaat Allabadi, Shaurya Sood, and Ritwik D'Souza) from BPDC participated at The Microsoft Hackathon competition on 28th March 2015 at the Microsoft Office, Internet City. The students were awarded Nokia Lumia 1520 for their performance in the event.
9. BPDC students participated in Microsoft Imagine Cup 2015 held during April 2015 which is the world's premier technology program and competition for students to learn, build and compete with innovative tools, platform and services. This year, the challenge featured three categories that included Gaming, Innovation and World Citizenship. BPDC students were placed one among the top six finalists.
10. Third year Mechanical Engineering student Mr. Anomitra Banerjee has been selected as Student Liaison Officer of The Student Advisory Committee of ASME International Gas Turbine Institute at New York. He will now be coordinating student committees across the globe and plan further actions for ASME. This selection was made in April 2015.
11. Mr. Anomitra Banerjee has been selected to receive an award for excellence in engineering and his continued contributions to ASME IGTI. He has been one of the very few to be given The SAC Travel Award of 2000 USD to travel to Canada yet again to attend ASME Turbo Expo 2015 and receive this award. This selection was made in April 2015.
12. On the 1st of May 2015, two students from the Computer Science Department of BITS Pilani Dubai Campus, Alok Rajiv and Lakshay Arora participated in a 48 hour hackathon competition at The Cribb, Al Quoq organized by Turn8. Their idea "iBOX" a physical cloud storage, was chosen as the best idea in the competition and they would be receiving a seed capital of AED 100,000/- for the same.

13. Shajitha Seyed Ismail of III year CS won the first place in the Third U.A.E Under Graduate Students Research Competition - UGSRC - 2015 - Step up Shabab that was held on 21st May 2015 at Abu Dhabi University. The competition included about 348 research submissions in different disciplines from around 1000 students across U.A.E.
14. BPDC team lead by Arjun Arya has won the prestigious DEWA CONSERVATION AWARD held in May 2015 in the university category in Dubai.
15. Mr Shreyas C Nayak third year Mechanical Engineering student won the best idea prize in an online SPACE IDEA CONTEST 2015 conducted by NASA, USA on 15-06-2015. This competition was conducted by NASA for their ongoing SPACE SHUTTLE PROGRAM. He is the one of the 10 best idea winners selected among 1,350 participants all over the world. He received a certificate of appreciation from NASA, recognizing outstanding contribution which is a significant value in the advancement of their Aerospace Technology program
16. Mr Shreyas C, .Nayak, III year Mechanical student have been ranked #2 among top 10 best idea winners in the BEST IDEA competition on NASA ONGOING PROJECT MASS ROVER "SCARE CROW" conducted on 15-06-2015. About 1350 students participated all over the world. Only 2 best ideas out of 10 were selected by NASA. In this connection, with this prestigious achievement NASA selected him for the Space Summer Internship Program during June 2016-August 2016 at NASA Johnson Space Center in Huston, Texas. The internship program is fully funded by NASA with Financial aid of 5600\$ along with free boarding and lodging along with Airfare.
17. Alumni of Birla Institute of Technology and Science, Pilani Dubai, Varun Vohra and Aditya Anand will lead product teams at Practo which was published on 9th July 2015 in The Hindu Newspaper. They will help Practo tap the enterprise space with products focused around hospitals and diagnostic centers. Practo which already lists over 8,000 hospitals on its platform aims to reach to 20,000 hospitals by the end of this year.
18. Ram Arun Castro, an alumnus of 2005-2009 batch, always had a yen for acting, and trained for two years with the New York Film Academy and acted in a Tamil movie called 'Oattathoodhuvan' yet to be released. This movie is set in 1854, when the British set up a rudimentary postal department to handle official communication, which was then opened up for public use.
19. Mr Anomitra Benerjee, final year Mechanical Engineering student has been selected as the student delegate from the ASME DISTRICT-J (MENA Region) to attend ASME's Student Leader Training Conference (SLTC). ASME selected him as he created a history by winning OGOPA (Old Guard Oral Presentation Award) for the first time in the whole District-J. The SLTC will be held during 14-15 November 2015 at ASME's annual International Mechanical Engineering Congress and Exposition (IMECE) which is taking place in Houston, Texas, USA.
20. A team of two third year students of the Computer Science Department from BITS Pilani Dubai Campus– Alok Rajiv and Rishav Jalan won the 3rd Place at the RTA Innovative App Development Challenge. The Challenge was conducted by Roads and Transport Authority (RTA), Dubai. UAE. His Excellency Sheikh Mattar Al Tayer, The Director General of the RTA awarded the team a cheque of AED 40,000/- for their achievement at the GITEX Technology Week 2015 held during 16th to 20th October 2015.
21. Pranay Adeepali, I Year Mechanical Engineering Student won the second prize in senior section of the SCRABBLE Championship held in UAE.
22. On the function held on 18th November 2015 BITS Pilani, Dubai Campus EMIRATES ENERGY AWARD 2015 in recognition for achievement in the field of Academic Programs in Energy Efficiency and Renewable Energy from his Highness Ahmed Bin Saeed Al Maktoum, Chairman - Dubai Supreme Council of Energy, Government of Dubai.
23. The TEAM IFOR (Intelligent Flying Object for Reconnaissance) of BITS Pilani, Dubai Campus, comprising: Ayanava Sarkar (3rd Year, Computer Science), Saptadeep Debnath (2nd Year, Electronics and Communication) and Shrey Iyenger (3rd Year, Computer Science) were the WINNERS at the inaugural Drones for Good University Challenge held on 25 November 2015 and they were awarded a trophy as well as a cash prize of AED 7000. Initially, they were chosen as one of the six finalists from a pool of over 50 other teams from various other colleges. In the final, the teams had to come up with a full technical and feasible solution, of the problem statement, of "Monitoring a Football Match using an Unmanned Aerial Vehicle". Further, in the final, they were given 45 minutes to extend their existing idea to monitor crowd during a post football match parade of the winning team. A panel of 5 judges, all part of UAE Mars Mission, 2021 from the Mohammed Bin Rashid Space Centre (UAE Space Agency) evaluated the presentations of all the finalists and judged Team IFOR as the winners of the inaugural Drones for Good University Challenge.
24. Varun Sharma (4th year CSE) and Matthew Abraham (4th year ECE) from BITS Pilani Dubai Campus along with their team won the prestigious Abu Dhabi University Technopreneur 2015 Competition for their idea, Taufir. The final round competition was held on 26 November 2015 was an accelerator program to help technology based entrepreneurs to take their first step towards initiating their

innovative ventures. They received seed funding as capital from the highly reputed Khalifa Fund and Abu Dhabi University so as to work towards a successful startup. They will also be kept in incubation for a period of 8 months with support from some of the best mentors in the country.

25. The American University of Dubai's debate took place on December 5, 2015. The topic for the debate was "Space exploration is worth the global focus and resource allocation". The team from BITS Pilani Dubai Campus comprised of Shraddha Shetty of 1st year ECE and Poorva Parande of 2nd year ECE speaking for the topic and Abirami Baalaji of 2nd year CSE and Parth Berde of 4th year EEE speaking against the topic. Shraddha went ahead to win the Best For speaker in the debate, and the others got the opportunity of being a part of this prestigious debate and gained valuable experience.

**During the year 2014-15, 8 students underwent FD Thesis & 1 student underwent Dissertation at off-campus locations:**

1. Geet Krishna Capoor at Department of Aeronautics and Astronautics, Massachusetts Institute of Technology - USA
2. Abhishek Ravichandran at NORTHWESTERN UNIVERSITY, CHICAGO, USA
3. Aalap Diraj Shah at UNIVERSITY OF FREIBURG, GERMANY
4. Sreekaavya K And Aashna Mittal at SAP Training & Development Institute, DUBAI
5. Dev Dua at MICROSOFT, DUBAI
6. Ganesh Ram R K at PETROLEUM INSTITUTE, ABUDHABI
7. Prashast Srivastava at BITS, PILANI - HYDERABAD, INDIA
8. Akshay Moudgil at CEERI Pilani

**The following students and research scholars have secured the positions in the conferences/workshops:**

Research scholars/ students	Conference	Position secured / Prizes won
Ms. Gayathri Ganesh	International Conference Next Generation Computing and Communication Technologies 2015	Best Paper Presentation
Radhika Narain	Current Trends in Biotechnology held at Manipal University-Dubai Campus, March 18-19, 2015	Best poster award
Parth Anand Berde	International Conference on National Capacity Building Strategy for Sustainable Development and Poverty Alleviation	Best paper award

**Consultancy: NIL**

#### **B4.15.2 Professional Body Activities**

##### **IEEE Student Branch:**

1. IEEE BPDC SB (Ankita Srivastava) Organized CodeBlitz as part of Enginuity 2015. Over 60 students participated in this non-competitive event held on 16 March 2015.
2. IEEE AGM, Kempinski, Mall of the Emirates, 21 March 2015. Dr Anand Kumar received award on behalf of Director and BPDC for largest SB membership in IEEE UAE.
3. Workshop on Introduction to Innovation Entrepreneurship by Dr Keith Jones. Organized by IEEE UAE prior to IEEE UAE AGM (21 March 2015). Ayush Chordia attended this workshop.
4. Dr Anand Kumar was invited as Coordinator of Judging Panel for Software Engineering Projects as part of IEEE UAE Day 2015 hosted by Petroleum Institute, Abu Dhabi on 16 May 2015. Dr Jagadish Nayak also accompanied as a member of the Judging Panel for Software Engineering Projects.
5. Dr Anand Kumar coordinated with 8 BPDC student volunteers for the IEEE Stand at WETEX 2015 (21-23 April 2015).
6. Students were invited to submit applications for the positions of IEEE SB Chair, Vice Chair, Treasurer, Secretary and WIE Chair. After careful scrutiny of the applications and interview by a faculty panel with Dr Anand Kumar as Convener, the following selections were made: Nishant Vijay (Chair), Alok Rajiv (Vice Chair), Arvind Desikan (Activities Chair), Ayush Dattagupta (Treasurer), Shaswat Anandan (Secretary) and Lauren Fernandes (WIE Chair). The selections were made in September 2015.
7. IEEE Membership Drive Orientation (8 October 2015): The Students were briefed on the basic organizational structure of the IEEE and the benefits of membership. The various IEEE standards and divisions were outlined. The achievements of the previous BPDC student participants of IEEE XTreme.

The students were also exposed to the access and use of IEEE XPIore. As of 24 October 2015, IEEE BPDC SB had 148 registered members.

8. IEEE XTreme Programming Contest was held from 4 am, 24 October to 4 am, 25 October. 12 student teams from BPDC participated with the best global rank of about 150. Although the official results are yet to be announced, BPDC teams obtained 5 of the top 10 ranks in the UAE. Drs Santhosh and Anand Kumar were proctors for this competition. The BPDC SB officer team worked out the logistics (food, drinks, WiFi connectivity and power outlets) to support the 24 hour event.
9. 24 student teams participated in the Code Blitz event organized jointly by IEEE SB and Microsoft Tech Club during Enginuity.
10. As IEEE BPDC SB Counselor and Faculty-in-Charge, Dr Anand Kumar participated in IEEE UAE Student Activities Committee (SAC) Meetings in reviewing the specifications for the Software Engineering Project, Common Design Project and Engineering Design Project and interacting with Zero Ohm on an Industry Project.

#### ACM Student Chapter

Ms. Susanna S Henry is the Faculty Advisor for ACM chapter at BPDC. The ACM members took active part in organizing ENGINUITY 2015.

#### SAE

- A Team under the Leadership of Mr. Samba Vishweshwar had participated in the SAE / BAJA Competition held In Oregon, USA, May 22-29, 2015.
- Formula SAE under the Leadership of Mr. Anshul Singhal participated in the Forumula SAE Competition held In Italy, September 11-14, 2015.

#### Microsoft Tech club

Details mentioned in B4.12.4.K

#### Linux Users Group (LUG)

The Linux Users group actively collaborated and organized events with other clubs and associations. The registrations were free and open to all BPDC students. Series of Presentations were held during 2015 covering the topics UBUNTU LINUX Installation and Configuration & Software Tools under LINUX. Our Core members took active part in Organizing Committee for TECHNOFEST 2015 and ENGINUITY 2015. The group also provided resource material on UNIX Commands and Editor for first year students.

#### B4.15.3 Center for Entrepreneurial Leadership (CEL):

Alredy mentioned above in B4.15.3

#### B4.15.4 PRACTICE SCHOOL

##### Practice School Programme

During the calendar year 2015, the Practice School Programme was operated at 127 stations, with 25 stations hosting both Practice School –I (PS-I) and Practice School – II (PS-II), accommodating 640 students and 53 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)	00 (02)
2.	Design, Development, Consultancy and Software Organization.	30 (21)	29 (27)
3	Trading	08 (06)	04 (07)
4	Production, Manufacturing and Maintenance	34 (35)	45 (57)
5	Other	00 (01)	11 (06)
	<b>Total</b>	72 (63)	89 (99)

With the present annual PS intake of 640 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 2014 is given in parenthesis.)

PS-I	Summer Term 2015	(369) 324
PS-II	II Semester 2014-2015	(141) 148
PS-II	I Semester 2015-2016	(152) 168
<b>Total</b>		<b>(662) 640</b>

### PS-II Assignments: Institute's Contribution to Industrial Development

#### 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 2015.

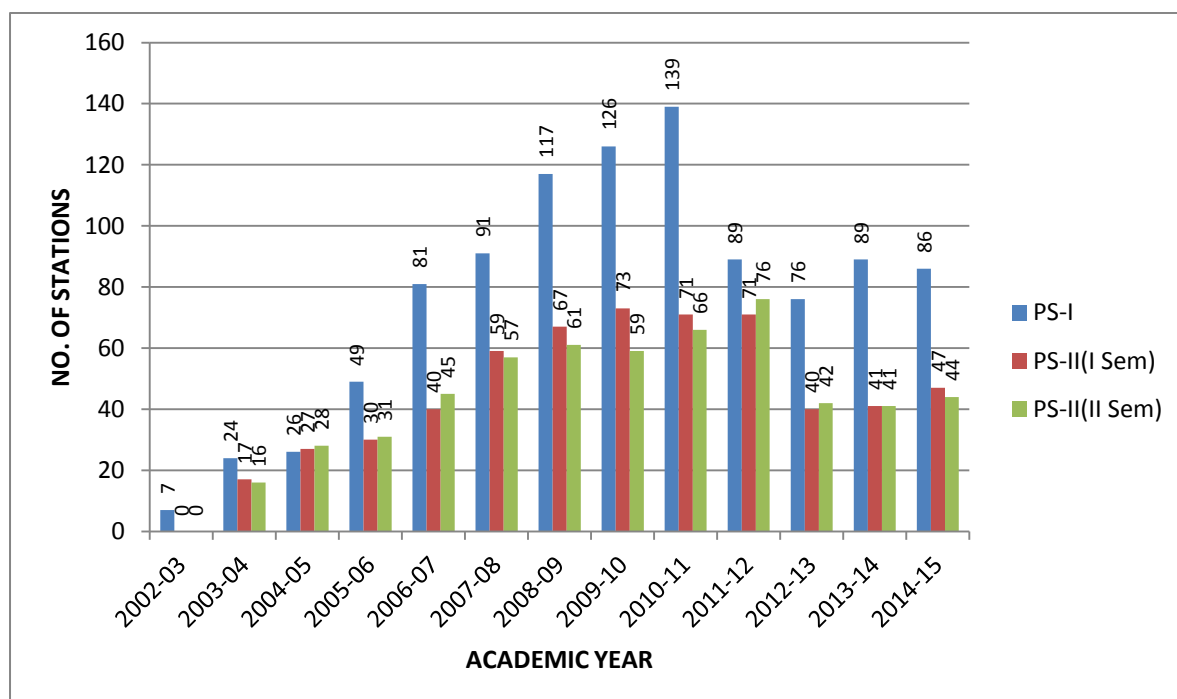
These assignments have been implemented to fulfil the ongoing production, modernization, design, development and research needs of the participating industries; thus, directly contributing to the requirements of industrial R & D.

#### 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 2015**

SI. No	PS-II Stations	Monthly stipend/out of pocket allowance in AED
1.	ABB, Dubai	1800
2.	Adapt Middle East, Dubai	1000
3.	Al Abbas Group, Dubai	500
4.	Al Tamimi, Dubai	1000
5.	Azbil Corporation, Dubai	800
6.	Central Motors & Equipment (BOSCH), Sharjah	2000
7.	D-Link ME, Dubai	1500
8.	Doxnation, Dubai	1000
9.	Elfit Arabia, Ajman	1000
10.	Emerson Process Mgt. FZE, Dubai	2000
11.	Energy Automation, Dubai	1300
12.	ESRI, Sharjah	3700
13.	Gateway Computers LLC, Dubai	1000
14.	ICT Health LLC, Dubai	3000
15.	Intercoil International LLC, Dubai	2000
16.	Johnson Controls, Dubai	1000
17.	KPTAC Technologies, Dubai	5000
18.	L & T Electrical & Automation, Dubai	2000
19.	L& T Hydrocarbon, Sharjah	1500
20.	Lavish Livings, Ajman	1500
21.	Lucy Switchgear FZE, Dubai	1500
22.	Medcare Hospital, Dubai	1000
23.	Metadata Technologies FZ LLC, Dubai	1000
24.	MSD, Dubai	1500
25.	Olive Technologies, Dubai	1000
26.	Proserv Middle East, Dubai	1000
27.	Protiviti, Dubai	1500
28.	Redcube Systems LLC, Dubai	1000
29.	Sanbook Quality Consultancy, Dubai	500
30.	Scientechnic, Dubai	1000
31.	Siemens, Dubai	3400
32.	Steinweg-Sharaf FZCO, Dubai	1500
33.	Thyssenrupp, Dubai, Abu Dhabi	1500
34.	Time Electro & Contracting, Abu Dhabi	1500
35.	Topnet Distribution FZCO, Dubai	1000
36.	YallaSpree, Dubai	750
37.	Zio Technologies LLC, Dubai	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 14,840 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 remains open from 7.30 AM to 10.00 PM on all working days and 10.00 AM to 10.00 PM on Saturdays. The Library service is extended till Midnight during all the evaluation components including comprehensive examinations. The Library is open on Fridays for 2 hours and closed on national holidays.

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 Online Public Access Catalogue (OPAC) is accessible across the campus and users can search the resources and check their account. High speed Wi-Fi facility has been provided in the Library. Browsing computers have been replaced with higher version. New discussion room for students and new faculty reading room are launched. Lighting migrated from traditional to LED. High end cameras have been installed. Improved the Library interior with new signage, paintings and portraits. Provided more property desks for students.

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 around 18,250 books. The collection of the library is growing continuously on a regular basis. Around 1,600 new volumes of books were added to the existing collection during the year in major disciplines of engineering and sciences. The new titles include emerging areas like Communication Engineering, Nanotechnology, Artificial Intelligence, Biochemical Engineering, Bioinformatics, Software Engineering, Robotics, Energy Engineering, Data and Web Mining, Business and Management. New case study collection on management and engineering courses were acquired. The Library procures good number of Fictions and General Aptitude books such as TOEFL, GRE, SAT, IELTS. Books on Islam and Arabic are also added. The Library added around 300 volumes of textbooks to the book bank collection.

#### **E-resources**

1. The Library caters the users' needs with the collection of 4779 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 Library has digitized the question papers of all examinations from 2014 onwards available from the new library online catalogue (<http://weblibrary:8080/AutoLib/index.jsp>). The question papers from 2003 till 2013 are available at library portal through on and off-campus (<http://library.bits-dubai.ac.ae/lib/quest.htm>).
3. The Library subscribes to e-papers of "The Times of India", "The Economic Times" and "The Hindu".
4. The Library holds 4000 free e-books.

#### **Reference Section**

1. The Library procured latest editions of Encyclopedias, Dictionaries and Hand books on core disciplines of Engineering, Technology, General Sciences and General Knowledge.
2. The Library subscribes to print version of 45 international journals, 47 magazines and 4 local newspapers.
3. The Library has back volumes of about 340 journals which were subscribed since the inception of Dubai Campus.
4. Library has more than 1350 CD-ROMs on engineering courses and there are 5 computer terminals exclusively meant for the accessing these.
5. Library has 375 thesis reports, 665 project reports and 1950 practice school reports submitted by students are available for reference.

6. Library has 200 EDD notes which were prepared and published by Education Development Division (EDD) from BITS Pilani, India.
7. 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. The Library has Wi-Fi facility within the library which enables the users to use their laptops for internet browsing / project / thesis work.
2. Library provides photocopy, printing, scanning and binding facilities to the patrons.
3. 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.
4. Useful articles, news, newspapers clippings related to education are being displayed on the library notice board for the benefit of students and faculty.

#### 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	18,250
2	Average number of books circulated per day	130
3	Books added during the year 2015	1600
4	Number of print periodicals subscribed	100
5	Online Databases made available on library site	5
6	CD-ROM collection	1350
7	Total no of back volumes of journals	340
8	Total no. of Reports (Thesis and Project Reports)	1040

#### Library Staff Achievements:

1. Library Staff members Dr. K N Sheshadri, Mr. R. Sivakumar and Mr. K. Jayachandran attended the American Library Association International conference held at Sharjah, Expo Centre, Sharjah, UAE on 10th-12th November 2015.
2. Sheshadri, K N; Manjunatha, K; Shivalingaiah, D. (2015): "Perceived features and their relevance to initiate a consortium of technical libraries in UAE". International Journal of Library Science, 13(2), p. 1-17.
3. Sheshadri, K N; Manjunatha, K; Shivalingaiah, D. (2015): "Growth and development of technical education in UAE". Middle Eastern & African Journal of Educational Research, Issue no. 14, p. 20-30.
4. Sheshadri, K N; Manjunatha, K; Shivalingaiah, D. (2015): "Status of technical institutions in UAE". Indian Journal of Higher Education, 5(1), p 10-21.
5. Library Staff and Committee Members visited Sharjah International Book Fair held at Expo Centre, Sharjah, UAE during 4th-14th November 2015 and purchased books for Library.

#### 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.

#### B4.16.3 Laboratories

The Institution's laboratories are of international standards and they have grown from 2 to 30 in the last 14 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
3.		Genetic Engineering
4.		Microbiology
5.		Industrial Microbiology
6.	Chemical Engineering	Chemical Engineering I
7.		Chemical Engineering II
8.	Chemistry	Chemistry
9.	Computer Science	Computer Programming
10.		Object Oriented Programming
11.		Computer Architectures
12.		Microprocessors Programming & Interfacing
13.		Software Systems Laboratory
14.	Electrical and Electronics	Electro Mechanical Energy Conversion
15.		Digital Electronics And Computer Organization
16.		Analog Electronics
17.		Communication Systems
18.		Digital Signal Processing
19.		Power Electronics
20.		Introduction to MEMS
21.	Electronics and Instrumentation	Process Control
22.		Electronic Instruments & Instrumentation Technology
23.		Virtual Instrumentation
24.	Mechanical	Workshop Practice
25.		Prime Movers And Fluid Machines
26.		Engineering Graphics
27.		Production Techniques
28.		Computer Aided Design
29.		Heat Transfer
30.		Mechanical Engineering
31.	Physics	Physics

#### B4.16.4 Engineering Services

##### 1. Communication and allied facilities

*The following facilities are available for the benefit of students and staff:*

##### IT Infrastructure Facilities and Support Services

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.

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.

The data centre equipped with the following servers and Network components.

### Servers

HP DL 380 series new generation

HP Storage serve (SAN)

QNAP NAS for Backup

### Network Components

Cisco Core switches Nexus series

Cisco Edge switches

Cisco Firewall

Cisco Prime system

Cisco Wireless controller

Cisco Network admission control and access control system

Cisco IP Telephony system

Panasonic IP camera setup

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.

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.

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 Bndl/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
6	CISCO IDENTITY SERVICES ENGINE, SNS-3415-K9 (ISE Server)	1	Cisco IOS
7	Cisco Prime Server, PRIME-NCS-APL-K9	1	Cisco IOS

8	Cisco ASA Firewall, ASA5585-S20-K9	2	Cisco IOS
9	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
10	Cisco Edge switches- WS-C2960X-48FPD-L	3	Cisco IOS
11	Sonicwall NSA 5600 Series	2	Wan optimization
12	Cisco AIR-CT5760, AIR-CT5760 (H/A)	2	Cisco IOS
13	Cisco Unified Communication System, UCS-BE-6000	1	Vcenter
14	Cisco Voice Gateway ,CISCO2901/K9	1	Cisco IOS

#### B4.17 PROCUREMENT AND MAINTENANCE

Facility Management Department is in-charge of Procurement, Maintenance and modification of the infrastructure and facilities in the campus. Procurement actions are initiated by the FM Department after the approval by the Purchase Committee, with respect to new equipment, spares, consumables, repairs and modifications of the existing equipments. Any modifications to the infrastructure are taken up by FM Department as per the approval of the Director, BITS Pilani, Dubai Campus.

During the year 2015, the following jobs of up-gradation / repairs of the existing facilities were done.

1. Procurement of 300 chairs for Auditorium
2. Procurement and fixing of 10000 Gallons water tank 4 Nos. for irrigation water storage
3. Replacement of all the chalk boards with marker whiteboards
4. Painting all common area for institute and hostel
5. Installation of shade in front of cafeteria
6. Installation of 10 Nos. solar street light near girls hostel
7. Procurement of 102 Desktops for various laborataties.
8. Procurement of 25 Laptops for faculty and administrative officers.
9. Procurement of 1 LED Televisions 32".

#### 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.

S. No	Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
1	Olympus Fluorescence Microscope BX53 with phase contrast, dark field and camera attachment (1nos)	BIOTECHNOLOGY LABS
2	Student compound microscopes (21nos)	
3	Vortex mixers (3 nos) nnn	
4	Sartorius Analytical balance (1 no)	
5	QSONICA sonicator system with micro probe (1nos).	
7	MSC ADAMS software, Pin on disc wear tester and VCR Engine were added to the existing lab facilities.	MECHANICAL LABS
8	CO2 Analyzer	CHEMICAL ENGINEERING LAB
	pH/mV/ISE/TDS/Salinity/DO meter	
	Digital Anemometer	
	Air compressor (capacity 200 lit)	

S. No	Name of Equipment	Used for Courses/Thesis/Dissertation Computational/Administrative Work
	Multi-Thermometer (digital)	
	Solar Power Meter	
	Photo bioreactor	
	Specific Gravity Hydrometers	
	Glass Viscometer	
	Ozone generator	
10	Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz, Ether Link 10/100 DVD Combo	Computer Programming Lab and Staff
11	HP Pavilion 15-N221SE, Processor Intel® Core (TM) i-7, 8GB RAM, Windows 8.1, 2GB Graphic card	Faculty and Staff
12	CISCO IP Telephone	Faculty and Staff
13	IP CCTV Camera	Academic block and hostel block

#### **B4.19 STUDENTS ACTIVITIES, ACHIEVEMENTS, SCHOLARSHIPS, CULTURAL AND ACADEMIC FESTIVALS**

##### **STUDENT COUNCIL**

President	Akshan Mehta
Vice President	Swaminathan.C
General Secretary	Shreya Jain
Ex Officio Member	Faisal Khan

##### **DAY SCHOLAR REPRESENTATIVES**

1st Year	Anushka Mallya
2nd Year	Albin Raju
3rd Year	Rohit Raveendran
4th Year	Shashwat Mishra

##### **HOSTEL COMMITTEE**

Block A	Goutham Manikonda
Block B	Karan Madan
Block C	Akash Mundra
Block D	Tahseen Khan
Block G	Pallavi Tipparaju

##### **CLUBS**

Dance (GROOVE)	Menaka Menon
Art (ARTEX)	Harleen Sohal
Social & Environment (MAKE A DIFFERENCE)	Ankita Srivastava
Drama (PARIBHASHA)	Monica Chatterjee
Public Speaking & Literary Club (EXPRESSIONS)	Mathew Abraham
Photography (REFLEXIONS)	Muniprakash
Music (TREBLE)	Jason Tarun
Sports	Tanya Tyagi
Design (Oh, Crop!)	Sidharth Lahoti
Fashion Club (Allure)	Dhara Prajapati

## STUDENT ACTIVITIES

BITS Pilani, Dubai Campus encourages student to meet each other in a friendly atmosphere to conduct professional/scientific activities such as institute-wide technical festival, Technofest and also to participate in scientific and professional bodies of international repute such as Student Branch of IEEE, SAE, ASHRAE, Dot-Net, Linux Users Group. 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 2015:

- 1. Social & Environment Club:** The Social & Environment club organized events with the sole aim of sensitizing students about their responsibility towards environment and community. Some of the activity taken up by the club in the year 2015 included awareness programme, blood donation camp, clean up drive, English classes for the support staff, recycling of paper, cans and tetra packs, fund raising events for charity, program for special needs children etc. Students were involved in making paper bags to replace the plastic bags used in the campus. The club started off by raising awareness for saving water and electricity through the collage making competition for Energy Conservation. The team from BITS Dubai Campus won the Dubai Electricity and Water Authority (DEWA) best conservation team award. They also raised awareness for environment on the Earth Day, which included paper bag making competition, a debate, a quiz and a documentary. They also organized a blood donation camp on the 13th September 2015 which saw a huge participation. Daan Utsav was celebrated and the funds raised were used to prepare "Bag of Love" for the security guards, the cleaning and maintenance staff. English classes for the security guards, cleaning and maintenance staff and hostel attendants were conducted year round. The institute cleanup drive had more than 80 student volunteers who collected trash from every nook and cranny of the campus. This helped them to understand the magnitude of waste generated in a day and the kind effort that is required to clean the wastes. Everyone may not have enough love and compassion to give, but everyone will have some used clothes hence through the clothes collection drive used cloths in good conditions were collected and donated to the Red Crescent Society. During the thanks giving lunch, 73 supporting staff members including the cleaning staffs, the security guards and the hostel staffs were provided free lunch. The last event conducted for the Daan utsav was a day with the students of Special Needs Foundation, Karama. BPDC volunteers were given an opportunity to interact with the children and staff from the foundation and student volunteers interacted with the special needs children through games, balloon bending, songs and face-painting events. The Pink day, breast cancer awareness campaign was also conducted by the club during this semester. Spectrum an event was organized for special needs children. Children from three special needs school were invited and the special needs children were involved in fun gawe and many other activities. On 21st June 2015 more than 30 faculty and staff participated in the International Day of Yoga and Blood Donation Camp held at Al Wasl Football ground, Al Jaddaf, Dubai. In commemoration of World Mental Health Awareness Day on October 10<sup>th</sup> 2015, The Social & Environment Club in collaboration with Mana Manali, organized "Living Inside Out", an awareness campaign, on Anxiety. Mana Maali (BITS-Stanford Initiative) aims to create healthier minds in college campuses.
- 2. The Public Speaking and Literary Club:** The club organized three events during JASHN 2015, namely "Devil's Advocate", which saw a turnout of four universities and JAM where three universities participated. The club also held the first interuniversity ever Model United Nations in the university and it was a huge success. It was held on March 6<sup>th</sup> and 7<sup>th</sup> of 2015. First of its kind in BITS Pilani, Dubai Campus, the conference showed a participation of over 50 delegates from 8 universities. It consisted of three comities including a Security Council, General Assembly and the Human Rights Council. Devil's Advocate an Inter College event was organized by the club during Jashn, 2015. The event saw over 15 teams with 3 universities participating. JAM a Panel game in which the contestants are challenged to speak for one minute without hesitation, deviation or repetition on any subject that comes up on the cards was also organized by the club. QUILL AND PARCHMENT (ONLINE EVENT) an online literary festival was held, students were asked to send in a short story and a "haiku" or a Japanese style poem with three lines and a 5-7-5 syllables per line. The event was a success and saw a large number of entries.
- 3. Dance Club:** Dance club won many laurels at various inter university competitions. BPDC team bagged first place in Eastern and Western category at the Inter-university Dance Competition at Jashn'15 organized by BITS Pilani, Dubai Campus. They won first Position in Group Dance at Vaudeville 2015 organized by Institute of Management and Technology, first Position in Group Dance, Carnival 2015 organized by Manipal University Dubai, first Position in Showdown-Western, Jashn 2015 at Bits Pilani Dubai Campus. The members of the club performed for Diro's Tea Party 2015, BITSAA Gurudakshana 2015, Ethnic Day 2015 and Ice breakers 2015.
- 4. Drama Club:** The Drama club, Paribhasha, hosted 4 events in the year 2015. Two events, "Proscenium" and "Impulse" were held during JASHN 2015. In Proscenium teams staged a 20 minute play and impulse had 3 rounds, "Ring zap", "Pantomime" and "Mad Ad". During SPARKS 2015 a new event Clash of classics was organized. Other events like "Impulse" were also held. A work shop was conducted by Dr Dinesh Yadav on Art of Directing and was organized by the club from 26<sup>th</sup> to 28<sup>th</sup> March 2015.
- 5. Art Club:** The Art Club "Shades" has been active in every major event in 2015. It was responsible for the art work and decoration for Jashn and Enginuity. Props were provided for various events like impulse and

street play. Also the club worked alongside the crew of the Arabian night's musical. Later in the semester, they were responsible for the Art work and decoration of Diro's tea party. Apart from that the Valentine's Day celebration and black tie event was also decorated by the club. The BSF 2015, Technofest and ethnic day decorations were also done by the club.

6. **Music Club:** The Music club organized various activities during Jashn 15, Eastern and western solo singing, duet singing and Battle of the bands. "Music Lessons" was an initiative to encourage an understanding among students that music is not only for those with talent but also for those who enjoy it and would love to learn it. This initiative received a lot of enthusiasm from the members. The music room was refurbished with new equipment such as Keyboard, Drums, Guitar Amplifiers, Mixer and Speakers. Sparks Music Events happened from 21-22 October 2015, with singing events, instrumental and Battle of the Bands. The Judges for the Singing events were reputed local artists, Moses, Miriam Thomas, Amogh Dasguru and for the Battle of the Bands, Sharon Sabastian, Akash Rai and Advait Vaidya. The club participated in Pink Day on 30 October 2015 an event which was organized in association with the Make a Difference Club. On 5th November 2015, Music club gave 3 performances for the Ethnic Day program. The club ended the year on a high note by organizing a caroling event on 22 December 2015. This event was a grand success and was done for the Spirit of Christmas.
7. **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 the year 2015, sports club organized the following sports activities:-
  - Inter-Year Boxing Championship and Annual sports day, Inter-Year Prize Distribution Ceremony: On 20th May 2015 organized Mega event Boxing Finals followed by sports awards ceremony for the academic year 2014 - 2015. 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. Saha presided the ceremony as the chief guest and gave away the prizes.
  - Inter-University Tournaments:
    - 19th November 2015, BITS Pilani, Dubai Campus Football, Cricket, Volleyball, Basketball, Badminton and Athletics (Boys and Girls) teams participated in DIAC Cup Inter University Tournament organized by Dubai International Academic City student hub.
    - March 17-21, 2015, BITS Pilani, Dubai Campus Throw ball (Girls), Football, Cricket, Volleyball, Basketball, Badminton, Table Tennis, Squash, Tennis, Swimming and Athletics (Boys and Girls) teams participated in GMU Sports Festival Inter University Tournament organized by Gulf Medical University and BPDC teams won the Overall Championship.
    - From March 22-25, 2015, BPDC Badminton, Table Tennis, Squash and Tennis (Boys and Girls) teams participated in AUS Racket Inter University Tournament organized by American University of Sharjah and secured winners position in Table tennis (Girls & Boys) and Badminton, Runners up in Tennis boys.
    - From November 17-20, 2015, Badminton, Table Tennis, Volleyball, Throw ball, Cricket and Tennis (Boys and Girls) participated in Manipal Inter University Tournament.
    - From November 17-20, 2015, Badminton, Table Tennis, Volleyball, Throw ball and Cricket teams participated in Manipal Inter University Tournament.
  - BITS Sports Festival (BSF) was also organized by the club from Dec 6-9 2015.
8. **ENGINuity 2015:** An inter college tech fest was held from 16th of March 2015 to 19<sup>th</sup> March 2015. Various events were conducted by the technical associations and clubs of BITS Pilani Dubai Campus. Paper presentation, model making, coding challenges, Just a Minute, Parliamentary Debate and Business challenges were held as part of Enginuity 2015. A football quiz, Game of halves for the football fans was organized. A corporate event Battle of Strategies was also organized. Various colleges from across the UAE participated in the tech fest. On the final day of the event an award ceremony was organized to distribute medals and certificates to the winners of the various events. Code Blitz a programming, Fast and Curious an EEE event and the big Spilt, a Chemical Engineering competition was also held. **Bquizzed 2015** the biggest inter university quiz completion in UAE was held during Enginuity2015
9. **JASHN 2015:** An Inter college cultural festival 'JASHN 2015' was held during 14<sup>th</sup>-16<sup>th</sup> April 2015. The festival started with an opening act Arabian Nights 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 Herriot 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.

- 10. Hostel Week Celebrations 2015:** Hostel Week “Recharge” was celebrated in the Dubai Campus between the 4th to 8th May 2015, with a lot of fanfare. 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.
- 11. Farewell Party:** The ‘DIROS Tea Party’, a farewell party to the passing batch was organized by the Alumni Cell on 13th of May 2015. 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 Dr. Rafiuddin and the music club entertained the gathering. A lot of fun games were arranged and gift vouchers were awarded to the winners of the games. A 15 kg cake was cut by the students. The farewell ended with a dinner and on an emotional note.
- 12. Welcome Party:** The Fresher’s Welcome Party named “Ice-Breakers” was held on 10th September 2015. It was organized by the senior students of the college to welcome the new batch of students of 2015. The event began with students of the new batch breaking ice blocks with a sledge hammer. 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.
- 13. BITS Sports Festival 2015:** The Closing Ceremony of the 13<sup>th</sup> edition of the BITS Sports Festival took place on December 9<sup>th</sup> 2015 with the esteemed presence of Mr. Pullela Gopichand, Chief Coach- Indian Badminton Team who was the Chief Guest. Prof. VS Rao, Acting Vice Chancellor, BITS Pilani also graced the occasion as the Guest of Honour of the event. The event began with ‘Flag Down’ ceremony preceded by the Chief Guest and the Guest of Honour, along with the Sports Club Members. 5 days of sportsmanship, fun, and fervour- BITS Pilani, Dubai Campus successfully organized the 13th edition of the BITS Sports Festival this year. The fest kick started with a series of matches between 27 Universities across the UAE. The last day of the event was on December 9, Wednesday where all the finalists competed against each other to bag the winner title in the 14 categories of sports. The events organized were Throw ball (Girls), Football (Boys), Cricket (Girls & Boys), Volleyball (Girls & Boys), Basketball (Girls & Boys), Badminton (Girls & Boys), Table Tennis (Girls & Boys) and Chess (Girls & Boys). BPDC teams won the Overall Championship.
- 14. SPARKS 2015:** Sparks 2015, an intra-college cultural event was held during 21-22 October, 2015. 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 fest 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. A food stall was also set up by the Student Council to tickle the taste buds of the students.
- 15. Ethnic Day:** 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 2015 at the campus. Students dressed up in ethnic wear on the day and an event was organized in the auditorium from 2:00 PM to 4:00 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.
- 16. Technofest 2015:** Technofest was held from 13th to 14th December 2015. Events were held like Just a Minute, etc by Literary club. Photography club also conducted a few events followed by numerous events from mechanical side like Model making and others by ASME, ASHRAE. Various coding events were also conducted by the ACM. The event concluded with paper presentation.
- 17. The Astronomy Club:** The astronomy club was started during the first semester, 2015-2016. The club organized an orientation for the students, on 19<sup>th</sup> October 2015. The first bi-weekly session was held on 2<sup>nd</sup> November 2015 and a group discussion took place on astronomy on 8<sup>th</sup> November 2015. The second bi-weekly session was held on 23<sup>rd</sup> November 2015. The club hosted a discussion round on Star death on 15<sup>th</sup> December 2015.
- 18. Design Club:** In October 2015 the event Graphic Design 101 was held. During which a Series of Graphic Design Workshop were Conducted by the club. It included basic learning of various softwares of Adobe

Creative Cloud. In November a Photo Walk 201 was held. It was a learning experience for all photographers of BITS Pilani, Dubai Campus. 14 students attended the event and learnt various tips and tricks into photography. A photo book consisting of photos clicked by the photographers of BITS Pilani, Dubai Campus at the Photo Walk 2015 was released by the Director, BITS Pilani, Dubai Campus. The club has been contributing in many other events such as: Graphic Design & Illustration done for various events organized by ACM - BITS Pilani, Dubai Campus, Team IFOR, ASME, Sports Club, Drama club, Astronomy Club, Quiz Club, Fashion club and the Editorial Board - BITS Pilani, Dubai Campus.

- 19. Photography club:** The club covered events like Jashn, Sparks, Recharge, Bits Sports Festival, Ingenuity, Technofest, and they covered Talk and workshops coverages for all the disciplines. During Jashn '15' two events "PIXELS" and "FIRST CUT". Reflexions Orientation for Freshers Batch of 2015-2019 was held on 8th October 2015. Workshops on General Photography and Image Editing Tutorials by student's from Reflexions Club was held on 6th November 2015. They covered TedX. Videography was held in BITS-PILANI, Dubai Campus (10th December 2015) and a Photowalk on Jabal Jais mountain "A NIGHT AT THE TOP".

## ACHIEVEMENTS AND COMMENDATIONS

### AWARDS AND ACHIEVEMENTS

1. Team from BPDC won the 'Conservation Award for a Better Tomorrow 2014-15' organized by DEWA.
2. Two teams from BPDC secured second and third position in the DEWA App Master Competition 2015.
3. BPDC students won the Student Design Competition and Old Guard Oral Presentation Competition at ASME SPDC District-J finals in Lebanon.
4. BPDC Students have been a success story with their big win at the Middlesex Business Case Study Challenge.
5. Two teams from BPDC won the First and Second place in the Debate competition organized by the Student Council of the Manipal University, Dubai Campus during the Annual Intercollegiate Cultural Festival- CARNIVAL 2015, held on April 22nd and 23rd, 2015.
6. Optimization Of Inclination And Mixing Conditions For Tubular Photobioreactor For Mass Production Of Microalgae, Radhika Narain; Subramanian Ramachandran; B. G. Prakash Kumar, participated in "Current Trends in Biotechnology", held at Manipal University-Dubai Campus, March 18- 19, 2015, and won best poster award.
7. TEAM IFOR is proud to have qualified to the semi-final stage of the UAE Drones For Good Award's National Competition which is to be held in the month of February 2016. Their submission was selected out of an applicant pool of several hundred highly competitive entries. UAE Drones For Good will be publicizing Team IFOR's submission video as part of their media and PR campaign of the award and on their website.
8. Shreyas Nayak won second place in NASA SCARE CROW CONTEST, USA on 15th June, 2015.
9. Mohd. Atyab & Arjun Arya won first place in Middle East in ASHRAE STUDENT Design competition- 2015 on 1st June 2015.
10. Anomitra Banerjee was selected as Student Liason officer by ASME International Gas Turbine Institute, in June 2015.
11. Anomitra Banerjee was awarded the ASME SAC Student Travel Award at The Turbo Expo 2015
12. The annual inter university "Crossfire" Debating Championship was held at Skyline University College, Sharjah, on 18th February 2015. 8 Universities from across the UAE participated in the Debating Championship. Mohamed Atyab, a final year B.E Mechanical Engineering student and Varun Sharma, a third year B.E Computer Science student represented BPDC at the event. Mohamed Atyab won the Runner Up - Best Speaker (Against the motion) award at the competition.
13. CS Students from BPDC participated at The Microsoft Hackathon competition on 28th March 2015 at the Microsoft Office, Internet City. The students were awarded Nokia Lumia 1520 for their performance in the event.
14. 'LOXLEY' team comprising of four students from Bits Pilani, Dubai Campus have emerged victorious in the final round of Business Case Study Challenge held by Middlesex University on 23th February 2015, to take home a whopping cash prize of Dhs. 10,000 and a magnificent trophy. The students were Mihika Shivkumar (year II), Varun Sharma (year III CS), Matthew Abraham (Year III) and Sean D'Rosario (Year IV).
15. On 1st May 2015, two students from the Computer Science Department of BITS Pilani Dubai Campus, Alok Rajiv and Lakshay Arora participated in a 48 hour hackathon competition at The Cribb, Al Quooq



organized by Turn8. Their idea "iBOX", a physical cloud storage, was chosen as the best idea in the competition and they received a seed capital of AED 100,000/- for the same.

16. DECODE DUBAI: 48 hour HACKATHON COMPETITION, June 2015, A team of 5 final year students all from CS Department Dinesh Balani, Mihir Rai, Dev Dua, Vijit Katta and Mohammed Muzzamil participated in DECODE DUBAI and developed an application that will motivate people to save electricity. This team won the first prize. The organizers will be incubating the students for 5 months to polish their idea and they further participated in World finale Of "Smart City App hack" held in Barcelona, Spain in month of November 2015.
17. Computer Science Juniors from BITS Pilani - Dubai Campus, Alok Rajiv and Rishav Jalan won the 3rd Place at the RTA Innovative App Development Challenge.
18. Gulf Programming Contest (GPC) - 2015: Three teams from BPDC participated in the Gulf Programming Contest which was held in American University in Dubai on 26th March 2015. The GPC is an annual event where universities from the entire Middle East including Qatar, Kuwait, Oman, Saudi Arabia and the U.A.E participate. This year too there were 41 teams participating. The competition is an intensive 5 hour programming competition. Three of BPDC students from second year Computer Science Alok Rajiv, Ayush Duttgupta and Rishav Jalan bagged the sixth position.
19. Ms. Gayathri Ganesh won an award for Best Presentation for her paper 'Isolation of Copper Resistant Bacteria and Fungi for Synthesis of Copper Nanoparticles ' at the International Conference Next Generation Computing and Communication Technologies 2015 organized by Zelus Events, on 22nd & 23rd April 2015, Dubai, UAE.
20. Prarthana Clare, Hydari Masuma, Akshay Deshpande, Adonis D'mello, Presented a paper on 'Design and Development of compact tubular Photobioreactor for mass production of Microalgae using treated waste water' at Undergraduate Student Research Competition Abu Dhabi University, held on 21 May 2015.
21. Srishti Singh presented a paper on 'Multimarker Approach in Detection of Cardiovascular Diseases' at the Undergraduate Student Research Competition Abu Dhabi University, held on 21 May 2015.
22. Ms. Gayathri Ganesh presented a paper on 'Isolation of Copper Resistant Bacteria and Fungi for Synthesis of Copper Nanoparticles 'at the Student Paper Presentation Contest held in conjunction with ICNGCCT 2015 organized by Zelus Events, on 22nd & 23rd April 2015, Dubai.

## SCHOLARSHIPS

### Financial Assistance to Students

695 students received financial assistance of AED 4,793,175/- under different categories for the Academic Year 2014-15, the details of which are given below:

S.No	Particulars	Students Nos.	Amount in AED
1	Institute Merit Scholarship	553	3,603,500
2	Higher Degree and Doctoral Scholarship	73	516,300
3	Need-based Scholarship (Physically challenged, Bereaved family discount)	13	153,125
4	Others (Staff, Siblings, Sports, Special Concessions)	56	520,250
	<b>Total</b>	695	4,793,175

## EARN WHILE YOU LEARN

63 students worked as Professional Assistants in 2014-15. They participated in various academic activities like assistance in labs, software and other developmental work. This gave them an opportunity of independent thinking and developing a sense of responsibility. The programme is not linked with any academic credit but the participants were paid honorarium for their services and certificates from the Director, Dubai Campus.

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**SENIOR OFFICERS OF THE INSTITUTE****DIRECTOR**

Prof. Dr. R. N. Saha

**DEANS**

DIVISION	NAME
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	Dr. A. Somasundaram
2. Academic Research	Dr. Neeru Sood
3. Academic Resource Planning	Dr. Anand Kumar
4. Instructions	Dr. K. Kumar

**DEPUTY REGISTRAR**

Dr. D. J. Shariff

**HEAD OF THE DEPARTMENTS**

<u>DEPARTMENT</u>	<u>NAME</u>
1. Chemical	Dr. B. G. Prakash
2. Electrical and Electronics	Dr. A. B. Chattopadhyay
3. Mechanical	Dr. Ram Karthekeyan
4. Computer Science	Dr. B. Vijakumar
5. Biotechnology	Dr. Trupthi Swaroop Gokhale
6. Mathematics and Science	Dr. Maneesha
7. Humanities and Management	Dr. A. S. Rao

**INCHARGES**

1. Facilities Management	Dr. K. K. Singh
2. Laboratories	Dr. A. R. Abdul Rajak

**HOSTEL WARDENS**

	<u>NAME</u>
Chief Warden	Dr. Santhosh Kumar

BLOCK

A	Mr. N. A. Venkatesh
B	Mr. Harold Franklin
C	Dr. Santhosh Kumar
D	Mr. Anuj Kumar
G	Dr. S. Karthiyayini

**DETAILS OF THE ADMISSIONS MADE DURING THE YEAR 2015****I. First Semester 2015-2016****Admission to Integrated First Degree Programmes**

B. E. (Hons.)	
Biotechnology	: 31(25)
Chemical Engineering	: 44 (24)
Electrical and Electronics Engineering	: 40 (15)
Mechanical Engineering	: 140 (09)
Electronics and Instrumentation Engineering	: 05 (02)
Computer Science	: 148 (66)
Electronics and Communication Engineering	: 35 (20)

**Admission to Higher Degree Programmes**

M. E.	
Microelectronics	: 02 (00)
Design Engineering	: 09 (00)
Software Systems	: 04 (02)
Biotechnology	: 00 (00)
M.B.A	: 08 (02)
Ph.D	: 07 (04)
	<hr/>
TOTAL	: 473 (169)

**II. Second Semester 2014-2015****Admission to Integrated First Degree Programmes**

B. E. (Hons.)	
Biotechnology	: 00 (00)
Chemical Engineering	: 01 (00)
Electrical and Electronics Engineering	: 04 (02)
Mechanical Engineering	: 00 (00)
Electronics and Instrumentation Engineering	: 00 (00)
Computer Science	: 00 (00)
Electronics and Communication Engineering	: 01 (01)

**Admission to Higher Degree Programmes**

M. E.	
Microelectronics	: 00 (00)
Design Engineering	: 03 (00)
Software Systems	: 04 (01)
Biotechnology	: 00 (00)
M.B.A	: 05 (01)
Ph.D	: 04 (01)
	<hr/>
TOTAL	: 22 (06)

**SUMMARY**

	II Semester 2014-2015	I Semester 2015-2016
Integrated First Degree Programmes	06 (03)	443 (161)
Higher Degree Programmes	12 (02)	23 (04)
Ph.D	04 (01)	07 (04)
Total	22 (06)	473 (169)

**STATEMENT SHOWING THE NUMBER OF CANDIDATE WHO HAVE BEEN PERMITTED IN THE ACDEMIC YEAR 2014-2015 TO PURSUE VARIOUS DUAL DEGREE PROGRAMMES UNDER VARIOUS PRIORITIES**

Programmes* From ↓ To →	A4	TOTAL
A3	1	1
TOTAL	1	1

**\*Legend :**

A1: B.E. (Hons.) (Chemical Engineering) (With Practice School)

A3: B.E. (Hons.) (Electrical &amp; Electronics Engineering) (With Practice School)

**LIST OF CANDIDATES WHO HAVE BEEN PERMITTED TO TRANSFER WITHIN THE FIRST DEGREE IN II SEMESTER 2014 – 2015**

S.NO.	ID NO	NAME	PERMITTED TO TRANSFER	
			FROM	TO
1	2014A4PS010U	Mohammed Sahil K R	MECH	CS
2	2014A7PS094U	Amrithaa Seshadri	CS	ECE
3	2014A7PS116U	Jitin Reddy Shabadu	CS	EIE
4	2014A7PS376U	Bachchhav Aditya Swapnil	CS	CHE
5	2014A9PS192U	Chandhini Muthukumar	BIOT	CHE
6	2014AAPS163U	Reeny J	ECE	EIE

**NUMBER OF STUDENTS REGISTERED IN SECOND SEMESTER 2014 - 2015**

PROGRAMME	Year of Admission					Total
	2010 and earlier	2011	2012	2013	2014	
<b>A. Integrated First Degree Programmes</b>						
<b>B.E. (Hons.)</b>						
CHE	-	20 (6)	26 (15)	27 (13)	44 (18)	117 (52)
EEE	-	38 (12)	48 (18)	45 (19)	41 (12)	172 (61)
MECH	2 (0)	111 (4)	101 (4)	101 (5)	136 (8)	451 (21)
CS	3 (0)	76 (25)	99 (40)	104 (35)	138 (51)	420 (151)
EIE	1 (0)	9 (5)	6 (5)	12 (2)	12 (9)	40 (21)
BIO		14 (12)	16 (14)	13 (11)	22 (14)	65 (51)
ECE	3 (0)	81 (39)	72 (33)	65 (29)	57 (30)	278 (131)
<b>Sub Total</b>	9 (0)	349 (103)	368 (129)	367 (114)	450 (142)	1543 (488)
<b>B. Higher Degree Programmes</b>						
<b>M.E.</b>						
Software Systems	-	-	-	8 (5)	12 (4)	20 (9)
Microelectronics				8 (4)	-	8 (4)
Biotechnology	-	-	-	-	-	-
Design Engineering	-	-	-	7 (0)	7 (0)	14 (0)
Master of Business Administration	-	-	1 (0)	10 (5)	11 (2)	22 (7)
<b>Ph.D.</b>	2 (1)	2 (1)	2 (2)	16 (9)	8 (3)	30 (16)
<b>Sub Total</b>	2 (1)	2 (1)	3 (2)	49 (23)	38 (9)	94 (36)
<b>Total (On Campus)</b>	11 (1)	351 (104)	371 (131)	416 (137)	488 (151)	1637 (524)

Number of female students is given in brackets.

**NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2015 - 2016**(As on 03<sup>rd</sup> October 2015)

PROGRAMME	Year of Admission					Total
	2011 and earlier	2012	2013	2014	2015	
<b>A. Integrated First Degree Programmes B.E. (Hons.)</b>						
CHE	1 (0)	26 (15)	27 (13)	45 (18)	44 (24)	143 (70)
EEE	2 (0)	47 (18)	46 (19)	41 (12)	40 (15)	176 (64)
MECH	14 (0)	101 (4)	99 (5)	134 (8)	140 (10)	488 (27)
CS	8 (1)	99 (39)	102 (35)	134 (50)	148 (66)	491 (191)
EIE	2 (0)	6 (5)	12 (2)	13 (9)	5 (2)	38 (18)
BIO	-	16 (14)	13 (11)	21 (13)	31 (25)	81 (63)
ECE	3 (0)	72 (33)	64 (29)	56 (29)	35 (20)	230 (111)
<b>Sub Total</b>	30 (1)	367 (128)	363 (114)	444 (139)	443 (162)	1647 (544)
<b>B. Higher Degree Programmes</b>						
<b>M.E.</b>						
Software Systems	-	-	8 (5)	11 (4)	4 (2)	23 (11)
Microelectronics	-	-	8 (4)	-	2 (0)	10 (4)
Biotechnology	-	-	-	-	-	-
Design Engineering	-	-	7 (0)	6 (0)	9 (0)	22 (0)
Master of Business Administration	-	-	10 (5)	11 (2)	8 (2)	29 (9)
<b>Ph.D.</b>	4 (3)	3 (2)	13 (7)	7 (3)	7 (4)	34 (19)
<b>Sub Total</b>	4 (3)	3 (2)	46 (21)	35 (9)	30 (8)	118 (43)
<b>Total (On Campus)</b>	34 (4)	370 (130)	409 (135)	479 (148)	473 (170)	1765 (587)

Number of female students is given in brackets.



**STATEMENT OF DEGREES AWARDED**

Degrees	No. of degrees	
	76 <sup>th</sup> Award (18 <sup>th</sup> February 2015)	77 <sup>th</sup> Award (09 <sup>th</sup> July 2015)
<b><i>B.E. (Hons.)</i></b>		
Chemical	0	1(0)
Chemical (with PS)	0	18(6)
Electrical & Electronics	0	1 (0)
Electrical & Electronics (with PS)	2(0)	34(11)
Computer Science	0	11(4)
Computer Science (with PS)	1(0)	63(22)
Electronics & Instrumentation	0	2(1)
Electronics & Instrumentation (with PS)	0	6(4)
Mechanical	0	8(0)
Mechanical (with PS)	2(0)	89(4)
Biotechnology	0	5(3)
Biotechnology (with PS)	0	9(9)
Electronics & Communication	0	4(3)
Electronics & Communication (with PS)	2(0)	76(35)
<b>Sub Total</b>	<b>7(0)</b>	<b>327(102)</b>
<b><i>Higher Degree</i></b>		
M.E. (Software Systems)	11(2)	0
M.E. (Microelectronics)	17(8)	0
M.E. (Biotechnology)	3(2)	0
M.E. (Design Engineering)	4(0)	0
Master of Business Administration	3(1)	1(0)
<b>Sub Total</b>	<b>38(13)</b>	<b>1 (0)</b>
<b>Ph. D.</b>	<b>2(2)</b>	<b>1(1)</b>
<b>Total</b>	<b>47(15)</b>	<b>329 (103)</b>

**SUMMARY**

	76 <sup>th</sup> Award (18 <sup>th</sup> February 2015)	77 <sup>th</sup> Award (9 <sup>th</sup> July 2015)	Total
<b>Integrated First Degrees</b>	7(0)	327(102)	334(102)
<b>Higher Degree</b>	38(13)	1 (0)	39(13)
<b>Ph. D.</b>	<b>2(2)</b>	<b>1(1)</b>	3(3)
<b>Total</b>	<b>47(15)</b>	<b>329 (103)</b>	<b>376(118)</b>

**76<sup>th</sup> AWARD OF DEGREES APPROVED BY THE 173<sup>rd</sup> MEETING OF 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	0	0
B.E. (Hons.) (Chemical) (with Practice School)	0	0	0	0
B.E. (Hons.) (Mechanical)	0	0	0	0
B.E. (Hons.) (Mechanical) (with Practice School)	0	0	2	2
B.E. (Hons.) (Computer Science)	0	0	0	0
B.E. (Hons.) (Computer Science) (with Practice School)	0	0	1	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	0	0	0
B.E. (Hons.) (Electrical and Electronics) (with Practice School)	0	0	2	2
B.E. (Hons.) (Electronics & Communication Engineering)	0	0	0	0
B.E. (Hons.) (Electronics & Communication Engineering) (with Practice School)	0	0	2	2
<b>Sub Total</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>7</b>
M.E. (Software Systems)				11
M.E. (Microelectronics)				17
M.E. (Biotechnology)				3
M.E. (Design Engineering)				4
Master of Business Administration				3
<b>Sub Total</b>				<b>38</b>
<b>Ph.D. Degree</b>				2
<b>Total</b>				<b>47</b>

**77<sup>th</sup> AWARD OF DEGREES APPROVED BY THE 174<sup>th</sup> MEETING OF THE BOARD OF GOVERNORS**

<b>Programme</b>	<b>Dist.</b>	<b>I</b>	<b>II</b>	<b>Total</b>
B.E. (Hons.) (Chemical)	0	1	0	1
B.E. (Hons.) (Chemical) (with Practice School)	0	12	6	18
B.E. (Hons.) (Mechanical)	2	2	4	8
B.E. (Hons.) (Mechanical) (with Practice School)	8	41	40	89
B.E. (Hons.) (Computer Science)	3	5	3	11
B.E. (Hons.) (Computer Science) (with Practice School)	10	33	20	63
B.E. (Hons.) (Biotechnology)	0	4	1	5
B.E. (Hons.) (Biotechnology)(with Practice School)	1	6	2	9
B.E. (Hons.) (Electronics and Instrumentation)	0	0	2	2
B.E. (Hons.) (Electronics and Instrumentation) (with Practice School)	0	4	2	6
B.E. (Hons.) (Electrical and Electronics)	0	1	0	1
B.E. (Hons.) (Electrical and Electronics) (with Practice School)	3	16	15	34
B.E. (Hons.) (Electronics & Communication Engineering)	1	0	3	4
B.E. (Hons.) (Electronics & Communication Engineering) (with Practice School)	7	34	35	76
<b>Sub Total</b>	<b>35</b>	<b>159</b>	<b>133</b>	<b>327</b>
M.E. (Software Systems)				0
M.E. (Microelectronics)				0
M.E. (Biotechnology)				0
M.E. (Design Engineering)				0
Master of Business Administration				1
<b>Sub Total</b>				<b>1</b>
<b>Ph.D. Degree</b>				1
			<b>Total</b>	<b>329</b>

**LIST OF ORGANISATIONS WHICH CONDUCTED CAMPUS INTERVIEWS AT  
BITS PILANI, DUBAI CAMPUS**

No.	NAME OF ORGANISATION	NUMBER OF STUDENTS INTERVIEWED	SELECTED	DISCIPLINE
1.	Affle	2	0	CS,ECE
2.	Al Faraa Group	35	7	MECH,EEE,EIE
3.	Al Futtaim	4	0	EEE,ECE,EIE,MECH
4.	Al Ghurair Group	8	0	CS,ECE, MECH, EIE
5.	AlShaya Group	8	2	MECH,EEE,EIE
6.	Arab Expert Engineering Consultant	2	1	MECH, M.E. (DESIGN ENGG.)
7.	ASP Access Floors	4	1	MECH
8.	Atkins Global	3	1	MECH
9.	Axis Digital Media	4	1	ALL STREAMS
10.	Azbil	2	0	ECE,EEE,EIE
11.	BPG group	12	0	ALL STREAMS
12.	Candela Technologies FZC	4	0	EEE,ECE,EIE
13.	Caparo Middle East	13	2	Mech, EEE, EIE, ECE
14.	Centena Group	6	0	BIOT
15.	Cerebra	12	4	CS,ECE
16.	Citius Mind	5	0	CS, ECE
17.	Cosmos Star Consultants	6	2	ALL STREAMS
18.	Dabur International	5	2	MECH, EEE
19.	DBA Infotech	3	0	CS,ECE
20.	DigitasLBI	8	0	CS,ECE
21.	Doxnation	4	0	CS,ECE
22.	Easa Saleh Al Gurg	6	2	MECH,EEE,EIE
23.	TTE (Technical and Trading)	4	0	EEE,ECE
24.	ECSME	8	0	CS,ECE
25.	Elji	7	0	MECH,CHE
26.	ETA Ascon	35	11	EEE, ECE
27.	Fast Lane	3	0	MECH
28.	FG Wilson/ Juno Enterprises	15	3	MECH, EEE, EIE, ECE
29.	Fittpass	3	0	CS,ECE
30.	FlyDubai	3	1	CS,ECE
31.	Fosroc	4	0	CHE
32.	Fractual Systems	7	1	ALL STREAMS
33.	Gateway Computers	12	1	ALL STREAMS
34.	Grundfos	2	0	MECH, EEE

No.	NAME OF ORGANISATION	NUMBER OF STUDENTS INTERVIEWED	SELECTED	DISCIPLINE
35.	IntraForm	5	3	ALL STREAMS
36.	Jengan	10	3	MECH,EEE
37.	Johnson Controls	2	1	ECE,EEE
38.	Kershaw Lenord	7	0	CHE
39.	L&T Electrical & Automation	52	5	EEE, ECE, EIE
40.	MAB Facilities Management	2	0	EEE
41.	MEAPTASHI FZC	3	1	MECH
42.	Morgan Advanced Materials	4	0	CHE, MECH,EEE
43.	MuSigma	21	4	ALL STREAMS
44.	NworX	10	4	CS,ECE
45.	Pacific Controls	8	4	MECH,EIE
46.	Paramount Computers	3	2	CS,ECE
47.	Paramount Group	6	0	ALL STREAMS
48.	Petrofac	4	2	MECH
49.	PolarisMe	10	1	CS,ECE
50.	Prolead	4	0	MECH
51.	Prophecy	10	0	ALL STREAMS
52.	Protiviti Middle East (Abu Dhabi)	4	0	MECH,EIE
53.	RDK International	28	5	ECE,EEE,EIE
54.	Redington Gulf	4	1	ALL STREAMS
55.	Safehead	3	1	ALL STREAMS
56.	Scan Technology	5	1	CS,ECE
57.	Schlumberger	5	1	CS
58.	Schnider Electric	4	1	ECE,EEE,EIE
59.	Skylog International	4	0	CS,ECE
60.	Systemic	4	1	ECE,EEE,EIE
61.	Taghleef Industries	3	0	CHE
62.	Tatweer	12	1	CS,ECE
63.	Thomsun	4	0	ALL STREAMS
64.	Timetraverse	2	0	CS,ECE
65.	TUV Reinland	2	1	MECH, M.E. (DESIGN ENGG.)
66.	Unique Computers Systems LLC	6	0	CS,ECE
67.	Unity Infotech	6	0	CS,ECE
68.	VeriPark	8	2	CS,ECE
69.	Yalla Spree	5	1	ALL STREAMS
70.	Zomato	2	1	ALL STREAMS
71.	Zumtobel	8	1	ECE,EEE,EIE

<b>Pre Placement Offers (PPO)</b>			
72.	Amsa Renal Care	1	BIOT
73.	Arab Experts	2	ECE,CS,MECH
74.	Central Motors (Bosch)	1	MECH
75.	Dodsal	2	MECH
76.	Emerson FZE	2	MECH
77.	Evanssion FZCO	2	CS
78.	Intercoil	1	MECH
79.	Kingsmen	2	MECH
80.	Larsa Scientific	1	EEE
81.	Levtech	1	CS
82.	Medcare	1	BIOT
83.	Proserv	2	MECH
84.	Protiviti	4	MECH
85.	Sciencetech	1	EEE
86.	Silex	1	ECE
87.	Tyco	1	MECH

### Summary

Total No. of Companies:	71
Total No. of students interviewed:	227
Total No. of appointments offered:	115
Total No. Of PPO Companies:	18
Total No. of PPO:	25

### \*Legend

CHE: Chemical, CS: Computer Science, EEE: Electrical & Electronics, EIE: Electronics & Instrumentation, MECH: Mechanical, BIOT: Biotechnology, ECE: Electronics & Communication, PPO: Pre Placement Offer

<b>List of First Degree Projects - Second Semester 2014-2015 (February 2015 to June 2015)</b>				
<b>S.No.</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
1.	Aalap Dhiraj Shah	Application of machine learning on robotics	Sujala Deepak Shetty	DP
2.	Abhimanyu Dabas	Logistics and supply chain management	Priti Bajpai	DP
3.	Adwitya Shiv Aggarwal	Study of real life situation using linear programming	Priti Bajpai	DP
4.	Ajitesh Janaswamy	Design of cloud computing environment	Muthaiyan Madijagan	DP
5.	Akash Kadel	Image processing & object tracking	Susila .S	DP
6.	Akshan Paresh Mehta	Microscale modeling of rubber based nano composites	Karthikeyan .R	DP
7.	Akshay Deshpande	Design and Optimization of photobioreactor for carbon capture and biomass utilization	Ramachandran .S	DP
8.	Akshay Kumar	Robotic Vehicle operated by a T.V. Remote	Anand Kumar	DP
9.	Akshay Sharma	Monitoring and Control aspects of Aircraft Electrical Sysyems	Sunil Thomas	DP
10.	Alakananda Anil Kumar	Composition of web service	Susila .S	DP
11.	Ali Ahmadi Najafabadi	Electronic intensification of solvent molecules of environmental importance	Rusal Raj Francis	DP
12.	Anand Krishnasarma	Just in time (JIT) supply chain management (SCM)	Mallika Parveen	DP
13.	Angad Kundra	Website design for ARCD	Jeyalatha	DP
14.	Angad Singh Oberoi	Design of Titanium dioxide electrode Nanotube based Lithium ion battery anode	Ramados Roop Kumar	DP
15.	Animesh Bhasin	Using machine learning: determine the diagnosis & cure patient by analysing his / her symptoms	Sujala Deepak Shetty	DP
16.	Anirban Musib	Statistical entity extraction from WEB	Alamelu Mangai	DP
17.	Aniruddh Sharma	Design a MEMS retinal scanner in COMSOL	Anand Kumar	DP
18.	Anirudh Seth	Platform game development using game maker pro	Sujala Deepak Shetty	DP
19.	Anjali Prakash	Image Processing and classification algorithm to detect cancerous cells in the confocal microscope images	Jagadish Nayak	DP
20.	Ankita Srivastava	Design and implementation of Irish recognition	Vadivel .S	DP
21.	Ankur Aggarwal	Parallel computing in search engines	Santhosh Kumar Vasudevan	DP
22.	Anomitra Banerjee	Some aspects of Heat Exchanger and Boiler control in Thermal Power Plant	Adhir Baran Chattopadhyay	DP
23.	Anubha Varshney	Software architectural model for batch image processing using pipes & filters	Vijayakumar .B	DP
24.	Anurag Beju	Design & Development of B2B E-com models in emerging markets	Aqila Rafiuddin	DP
25.	Anurag Reddy Ramireddy	Development of inventory models	Tapan Kumar Datta	DP
26.	Apoorva Srivastava	Distribution methods for naive bayes classification of retinal fundus images	Alamelu Mangai	DP
27.	Arbaaz Arif	Application of Partail Differential equation in Electrical and Communication techniques	Suhel Ahmad Khan	DP
28.	Archit Mehta	Applications of Laplace transformation	Suhel Ahmad Khan	DP
29.	Aru Singhal	Design of a biosensor for detection of Stenotrophomonas	Gokhale Trupti Swarup	DP
30.	Arush Gupta	Optimization of supply chain using mathematical modelling	Priti Bajpai	DP
31.	Arvind Desikan	An Intelligent Control System for a PV Module under Partially Shaded Condition	Kalaichelvi	DP
32.	Arvind Somasundaram	Parallelizing data mining algorithms over a cluster	Alamelu Mangai	DP
33.	Baalaganapathy Manohar	Design analysis of SI engines components using ANSYS software	Miller Jothi .N.K	DP
34.	Bansal Ankit Rakesh	Design & Implementation of mobile based GIS	Vadivel .S	DP
35.	Cheryl Jesline D Souza	Computer vision based hand gesture recognition using artificial neural network	Vilas Haridas Gaidhane	DP
36.	Daga Abhinav Amit	Layout of production management in automobile industries	Mallika Parveen	DP
37.	Divya Raghunathan	Condition monitoring of machine tools and machining processes using internal sensor signals	Venkatanaga Sankaram .M	DP

<b>List of First Degree Projects - Second Semester 2014-2015 (February 2015 to June 2015)</b>				
<b>S.No.</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
38.	Fawas Ismail Attapurath	Designing an efficient walkway	Muthaiyan Madijagan	DP
39.	Ganesh Ram R K	Image processing & object tracking for an UAV	Santhosh Kumar Vasudevan	DP
40.	Gaurav Madan	implementation of LMS using MOODLE for BPDC	Vijayakumar .B	DP
41.	Gazi Zargamuddin Farooqui	MEMS Gyroscopes A design Project on MEMS in Navigation and Gaming	Anand Kumar	DP
42.	Geet Krishna Capoor	Power distribution in a multi engine aircraft	Sunil Thomas	DP
43.	Gupta Prateek Subhash Chand	Modification of IC engines	Gangadhar Naranje	DP
44.	Halbe Kunal Suhas	Design of an Optimal Cooling Solution for Workstations and Servers	Surendra Kumar	DP
45.	Harshil Kaushik Patel	Optimization of a Baja chasis	Venkatanaga Sankaram .M	DP
46.	Himanshu Dabas	Metadata & content analysis (Object Querying)	Vijayakumar .B	DP
47.	Isha Srivastava	A new ensemble method for regression by classification	Alamelu Mangai	DP
48.	Jain Abhishek Anilkumar	Benchmarking of E-commerce logistics	Gangadhar Naranje	DP
49.	Jatin Chopra	Case study using project management software	Priti Bajpai	DP
50.	Jayalakshmi Jain	Multi - Target prediction for chemical process	Alamelu Mangai	DP
51.	Johan Joseph Graison	Optimization of manufacturing processes using game theory	Mallika Parveen	DP
52.	Jubin Daniel James	QOS for WEB servers	Susila .S	DP
53.	Juweria Anam	Exploring the use of an anternative medicine for cancer treatment	Gokhale Trupti Swarup	DP
54.	Kartikay Vikrant Singh	Photonic effect of nano particle in solar cells : Design and analysis of forward scattering in solar cells	Ramadoss Roop Kumar	DP
55.	Kritika Karthikeyan	Analysis of doubly-fed induction generator	Adhir Baran Chattopadhyay	DP
56.	Kuvam Behl	Energy optimization through solar panels versus conventional methods	Maneesha	DP
57.	Likitha S	Design an implementation of Finger print recognition	Vadivel .S	DP
58.	Mahmood Ponmadathil Aboobacker	Design of a 2 stroke enigne using catia software	Susanna Sajoni Henry	DP
59.	Manasa Suresh	Development of smart cities - India perspective	Periasamy .C	DP
60.	Manisha Kakwani	Building Data and Control Path of a Processor in VHDL	Anand Kumar	DP
61.	Md Samiuddin Shakir	Simulation and modelling of 3 phase synchronous motor	Adhir Baran Chattopadhyay	DP
62.	Mir Anwar Ali	ME F376ing of photovoltaic cell to meet the power demand for BPDC	Miller Jothi .N.K	DP
63.	Mohamed Atyab	Effective manage of HVAC system for a three storeyed college building in compliance with ASHRAE codes and standards	Surendra Kumar	DP
64.	Mohamed Saif Nasar	Design of a four stroke engine using CAD	Susanna Sajoni Henry	DP
65.	Mohammed	Industrial Virtualization	Sujala Deepak Shetty	DP
66.	Mohammed Fahad	State variable model of 3 phase synchronous machine	Adhir Baran Chattopadhyay	DP
67.	Mohammed Ibrahim Ali	Analysis of Power System Performance with doubly fed induction motor load.	Adhir Baran Chattopadhyay	DP
68.	Mohammed Ikram Zaid	Oil and gas well ME F376;	Venkatanaga Sankaram .M	DP
69.	Mohammed Shaha Buddin	Adaptive filter implementation in DSP processors	Jagadish Nayak	DP
70.	Mohammed Zulfikar	Simulation Studies on Modeling and Controller Design for a DC-DC Buck Boost Converter	Kalaichelvi	DP
71.	Nabeel Nisam	Characterization of MEMS FTIR spectrometer	Krishna Kumar Singh	DP
72.	Nagarjuna Anup Hegde	Cell Phone Detector	Mary Lourde .R	DP
73.	Nirupama Manjunatha Dixit	Design and simluation of a microcantilever based biosensor for diagnosis of lung cancer	Neeru Sood	DP
74.	Nishant Vijay	FPGA Implementation of Multiplier	Abdul Razak .A.R	DP
75.	Nutakki Manikanta	Design and Analys of a wind turnnel blades for domestic usage	Venkatanaga Sankaram .M	DP
76.	Pamidi Bava Tarak Krishna	Design of DC power supplies for Low power	Vilas Haridas Gaidhane	DP



<b>List of First Degree Projects - Second Semester 2014-2015 (February 2015 to June 2015)</b>				
<b>S.No.</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		application		
77.	Pandey Divyanshu Yatish	Study and Design of a chiller plant	Surendra Kumar	DP
78.	Parth Anant Berde	Integration of Hardware and Software in a Building management system	Gomathi Bhavani .R	DP
79.	Prakhar Nair	Electronic structure calculations of CO <sub>2</sub> with some absorbants	Rusal Raj Francis	DP
80.	Pranav Menon	Investigation of variation in performance of a electro thermal thruster with aerospike nozzle	Surendra Kumar	DP
81.	Pranav Mohan Parki	Design and Analysis of Structural appliance in construction Industry	Venkatanaga Sankaram .M	DP
82.	Prashast Srivastava	Implementation of decision tree algorithms using different node impurity measures	Alamelu Mangai	DP
83.	Pruthvi Pratik Thakkar	Application of lean manufacturing in fast moving consumer goods industry	Mallika Parveen	DP
84.	Pulin Bhalotia	Unsteady 2 dimensional heat conduction problems with homogeneous and non homogeneous boundary conditions	Baskaran .S	DP
85.	R Suryasarvajith	optimization of aerodynamics for different vehicle structures	Periasamy .C	DP
86.	Rahul Kumar Rajeev	Game development using unity engine	Sujala Deepak Shetty	DP
87.	Rajveer Singh Gandhi	Open source GIS development	Vadivel .S	DP
88.	Ranoo Sharma	Metadata / content based retrieval for video or cad objects	Vijayakumar .B	DP
89.	Reema Deepak Thakur	Portfolia optimmization using data analysis technique(mean - variance analysis) using MATLAB	Tapan Kumar Datta	DP
90.	Reeva Deepak Bhatkal	Comparitive analysis of parameter selection methods for predicting customer behaviour in direct marketing	Alamelu Mangai	DP
91.	Rithvic Emmila	simulation of twin turbo chargers for diesel engine power automobiles.	Udayakumar	DP
92.	Rochal Saxena	Mapping of an Unknown Indoor Environment using SLAM on Robots	Kalaichelvi	DP
93.	Ruchi Mukeshkumar Sodwadia	Simulation of Electric Power system using MATLAB	Gomathi Bhavani .R	DP
94.	Ruchika Negi	Password based security lock system using MATLAB	Gomathi Bhavani .R	DP
95.	Sachi Thakkar	Software defined network (SDN)	Muthaiyan Madijagan	DP
96.	Sachin Nath	Password based door lock using 8051 Microcontroller	Santhosh Kumar Vasudevan	DP
97.	Sagar Dipak Zinzuvadiya	Productions and operations management - production planning and control	Mallika Parveen	DP
98.	Sahil Shakir Mohamed	Response time measurement of WEB services	Susila .S	DP
99.	Sakhmuri Maruti Sai Dhiraj	Design and Analysis of a Formula SAE Suspension Geometry	Udayakumar	DP
100.	Saurabh Chhabra	Analysis of economics factors that affect the demand in automobile industry	Maneesha	DP
101.	Serrao Ninoshka Ronald	Design and Implementation of Fire Alarm System	Kalaichelvi	DP
102.	Shaik Kashif Ahmed	CISCO - cloud computing - application centris infrastructure	Muthaiyan Madijagan	DP
103.	Shankar Achintya Lahiri	WEB application development	Santhosh Kumar Vasudevan	DP
104.	Shannon Lincoln Fernandes	Molecular entropy calculating based on quantum mechanics	Rusal Raj Francis	DP
105.	Shantanu Chandra	Diagnosis aid in Oral cancer using TreeBoostData Mining Technique	Jeyalatha	DP
106.	Shetty Aishwarya Balakrishna	Compter Aided Design &Analysis of a boiler in steam power plants	Venkatanaga Sankaram .M	DP
107.	Shibani Nasser	Smart Grid technology for power system applications	Gomathi Bhavani .R	DP
108.	Shiven Jain	Lean manufacturing and six sigma	Mallika Parveen	DP
109.	Shreyas Shirish Patwardhan	Design and implementation of modern management techniques to optimize benefits from capital investment in process industries	Prakash Kumar .B.G	DP
110.	Shubhangi Gupta	Design and Analysis of interaction of DNA with single valved Carbon nano Tube(CNT) using VASP	Swaminathan .S	DP

<b>List of First Degree Projects - Second Semester 2014-2015 (February 2015 to June 2015)</b>				
<b>S.No.</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
111.	Siddharth Swami	Development of a program to determine hidden performance parameter of a gas turbine	Venkatanaga Sankaram .M	DP
112.	Sidharth S Warriar	Enhancement of Variable frequency drives by using PLCs and improving individual components	Sunil Thomas	DP
113.	Sivasankaran Durga Prasanth	Stress analysis of suspension system using ansys	Periasamy .C	DP
114.	Smile Dudee	Manufacturing and supply chain management of FSAE manufacturing.	Mallika Parveen	DP
115.	Soumya Saxena	Design and Analysis of Hydrcarbon storage tanks	Venkatanaga Sankaram .M	DP
116.	Subramanian Seshadri C Aiyer	Numerical integration of mutual convection heat transfer in square cavities with linearly varying temperatures	Kumar .K	DP
117.	Subulekshmi A	Design and Implementation of an algorithm for Speech Recognition	Jeyalatha	DP
118.	Swathi Sampath	Forecasting company stock prices using artificial neural networks	Pushkala Muralidharan	DP
119.	Swathy Sreekumar	QOS for WEB servers	Susila .S	DP
120.	Syed Zeeshan Ahmed	Application of Intelligent Controller for Unmanned Aerial Vehicle	Kalaichelvi	DP
121.	Syeda Afrah Shamail	Design & implementation of web portal	Santhosh Kumar Vasudevan	DP
122.	T Pallavi	Modeling and analysis of electrical properties of nano-wires using VASP tools	Swaminathan .S	DP
123.	Tahseen Ahmad Khan	Impact of quality control as an effective tool in product standardization	Mallika Parveen	DP
124.	Taranjeet Singh	Study of a real life situation using regression analysis	Priti Bajpai	DP
125.	Tooshank Sharma	Simulation of convective diffusion process in controlled drug release system for Biomedical Application.	Swaminathan .S	DP
126.	Usama Nizam	ME F376 and stress analysis of a crane hook; Effect of material management on production planning process; Numerical simulation of passive augmented heat transfer for process cooling.	Bharat Bhushan Gulyani	DP
127.	Vadlapudi Viswa Venkat Mounish	A case study on building automation system for BPDC	Venkatanaga Sankaram .M	DP
128.	Vaibhav Kasturia	SPAM Filtering using Data Mining Techniques	Santhosh Kumar Vasudevan	DP
129.	Vakul Goyle	Power Electronic Converters and plug ins for Hybrid Electric Vehicles	Adhir Baran Chattopadhyay	DP
130.	Varshali Kumar	Performance & comparison of implementation of voice over ip protocols	Vadivel .S	DP
131.	Varun Balasubramanyam	Value stream mapping	Gangadhar Naranje	DP
132.	Vignesh Kannan	Hydraulic circuit simulation for cable pulling winch	Karthikeyan .R	DP
133.	Vignesh R	Analysis of an aircraft prototype with a double vertical axis propeller	Periasamy .C	DP
134.	Vinayak Dhingra	Design and Simulation of MEMS based bio sensors	Krishna Kumar Singh	DP
135.	Vineeth Krishna	High Efficiency analysis of an interior permanent magnet synchronous machine with double layered permanent magnet rotor.	Sunil Thomas	DP
136.	Viraj Gadde	Optimization of supply chain management for automobile industries	Mallika Parveen	DP
137.	Vishaal Gopal	multiphase flow	Periasamy .C	DP
138.	Vishal Chandrakant Sawant	Cloud based Application development in PHP	Nand Kumar	DP
139.	Vishank Bhatia	Modeling & Control of a Robot Manipulator Using Intelligent Techniques	Kalaichelvi	DP
140.	Vishnu Pradeep	Design and Analysis of Mechanisms Under High Gravitational Field	Venkatanaga Sankaram .M	DP
141.	Vishwajit Pureti	Effective utilisation of biogas for thermal application;	Miller Jothi .N.K	DP
142.	Yashasvi Vedula	Component development for open EDX platform	Vijayakumar .B	DP
143.	Zeba Rahman	Computer Operated Laser Engraver	Susanna Sajoni Henry	DP
144.	Nuzhat Fatima	Analysis of PH and temperature tolerance of microalgae	Dawood Jalaluddin Shariff	LP

List of First Degree Projects - Second Semester 2014-2015 (February 2015 to June 2015)				
S.No.	Name	Topic	Instructor	Type
145.	Aarti Swaminathan	Analysis of chlorophyll content and potassium leakage in salinity-stress induced varieties of barley ( <i>HORDEUM VULGARE</i> )	Neeru Sood	LP
146.	Abrar Ahmed	Design & implementation of user friendly home automation system	Mary Lourde .R	LP
147.	Alisha Annie Maben	Phytochemical screening of medicinal compounds from <i>Citrullus colocynthis</i> plant extracts	Neeru Sood	LP
148.	Alok Rajiv	Cloud based software application: development & deployment	Nand Kumar	LP
149.	Amogha Visveswara Subramanya	Effect of welding speed on mechanical strength of two joint sheets of aluminium;	Periasamy .C	LP
150.	Ashutosh Sharma	Study of different techniques for data warehousing	Santhosh Kumar Vasudevan	LP
151.	Ashwani Agrawal	Design Of Home Automation Protocol	Mary Lourde .R	LP
152.	Bony Sabu	EEG Analysis using Hilbert Transform	Prasad .D.V	LP
153.	Celeste Sakhile	CISCO - cloud computing - application centris infrastructure	Muthaiyan Madijagan	LP
154.	Chavali Bhavana Bharadwaj	Analysis of Anti microbial properties in Microalgae	Dawood Jalaluddin Shariff	LP
155.	Deolalkar Kshiti Mangesh	Modelling analysis of Nano wire based sensors	Swaminathan .S	LP
156.	Devansh Raj Kanchan	SCADA application in transportation management and manufacturing industry	Swarnalatha .R	LP
157.	Gayathri Ganesh	Heavy metal resistance in <i>Stenotrophomonas maltophilia</i> and <i>Bacillus</i> Sp.	Gokhale Trupti Swarup	LP
158.	Hathiramani Akash Sumeru	Study of Kalina process and thermodynamic optimization	Udayakumar	LP
159.	Hemant Gogna	Null	Muthaiyan Madijagan	LP
160.	Jane Rishanti	Estimation of volatile organic compounds adsorbed in clothes	Geetha	LP
161.	Jibin Jeffrey Dhanaraj	Lift and Drag force measurement of aerodynamic body in wind tunnel	Periasamy .C	LP
162.	K Esvar	Non-Destructive testing of welded specimens	Karthikeyan .R	LP
163.	Kartik Sanghi	Analysis of foundry Quality control to reduce scrap and metal rejection for optimizing production	Surendra Kumar	LP
164.	Lakshay Arora	CLOUD based software application: development & deployment	Nand Kumar	LP
165.	Manal	Design and study of antenna	Abdul Razak .A.R	LP
166.	Mani Dhupar	Optimization of batch reactor operations	Swarnalatha .R	LP
167.	Manisha Kakwani	Implementation of alu and fft algorithm in xilinx spartan-3A FPGA	Jagadish Nayak	LP
168.	Mir Ateeb Ali	Impact strength analysis of Tig welded specimens	Karthikeyan .R	LP
169.	Mohammed Zulfikar	FPGA implementation of DC-DC converter (Buck-Boost)	Abdul Razak .A.R	LP
170.	Naraayani Swaminathan	Vector Control of AC Servo drives	Mary Lourde .R	LP
171.	Nesan Prakasam G	Reduction of NOx Emissions from Internal Combustion engines	Udayakumar	LP
172.	Nikhat Fatima	Analysis on the effect of physico-chemical properties of filamentous microalgae.	Jalaluddin Shariff .D	LP
173.	Nitish Anand	Microstructural analysis of heat treated die steel	Karthikeyan .R	LP
174.	Pathik Balana	Working and Modelling of a Shell and Tube Heat Exchanger	Swarnalatha .R	LP
175.	Patil Neha Nitin	Mining logistics optimization using MATLAB	Karthikeyan .R	LP
176.	Prarthna Michael Clare	Growth Kinetics of <i>S. platensis</i> Using Carbon Source Enriched Media	Ramachandran .S	LP
177.	Rohan Umesh Kunte	Analysis of Energy consumption for cooling at BPDC	Surendra Kumar	LP
178.	Rohini Alla	Wavelet based fractal Analysis of Sleep EEG	Prasad .D.V	LP
179.	Satya Kumar Babu Gopi	Cloud computing - application centric infrastructure	Muthaiyan Madijagan	LP
180.	Shah Dharit Bhupen	Control and design of distillation	Swarnalatha .R	LP
181.	Shweta Prem	Estimation of BPA using UV spectrometer	Geetha	LP
182.	Sneha Sreedharan	Estimation of heavy metals on sea water	Geetha	LP
183.	Srihari Srivathsan	Methods of improving the efficiency of the waste heat recovery system of a cement factory	Udayakumar	LP

<b>List of First Degree Projects - Second Semester 2014-2015 (February 2015 to June 2015)</b>				
<b>S.No.</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
184.	Srinivasan Pari	Design and Analysis of a diffuser with shock	Surendra Kumar	LP
185.	Sulaiman Abdul Rehman	Realization of Performance improvement factors of an Impulse Turbine.	Surendra Kumar	LP
186.	Sumeet Singh Sethi	Impact strength analysis of tool steel	Karthikeyan .R	LP
187.	Swathi Murali	Analysis of flavanoid & Phenolic content and water relations in <i>Hordeum vulgare</i> in response to salinity	Neeru Sood	LP
188.	Syed Jawad Ali	Finger Print based security systems	Abdul Razak .A.R	LP
189.	Vichare Devyani Sandesh	Simulation of Level Control Process using PID controller tuning	Swarnalatha .R	LP
190.	Viraj Gadde	Experimental investigation on petrol engine fueled with biogas for power generation	Miller Jothi .N.K	LP
191.	Vishaal Gopal	Wear mechanism maps for die steel	Karthikeyan .R	LP
192.	Zubin Razak	Wear resistance of tool steel	Karthikeyan .R	LP
193.	E.Revanth Reddy	Null	Muthaiyan Madijagan	LP
194.	Aashna Virmani	Supply Chain Management	Gangadhar Naranje	SOP
195.	Abhishek Ashish Hastak	IPv6 analysis, implementation and deployment issues	Susanna Sajoni Henry	SOP
196.	Abrar Ahmed	Impact of recent technological developments in supply chain management	Pushkala Muralidharan	SOP
197.	Aiman Rab	Study of Heavy Metal Resisatance in Microalgae	Dawood Jalaluddin Shariff	SOP
198.	Aisha Sanjeev Dangi	BUSINESS COMMUNICATION FOR MARKETING	Mubeena Iqbal	SOP
199.	Akash Mundra	Study of security models of the private cloud deployment	Nand Kumar	SOP
200.	Akella Dheeraj	HRM practices in an orgn in UAE	Srinivasa Rao	SOP
201.	Akshay Deshpande	Peptide Nucleic Acid (PNA) and their applications in molecular diagnostics	Gokhale Trupti Swarup	SOP
202.	Akshey Aggarwal	Effects of media and mode on communication	Lajwanti	SOP
203.	Ali Ahmadi Najafabadi	HRM practices in a mid sized orgn.	Srinivasa Rao	SOP
204.	Anirudh Pradeep Jhavar	Impact of advertizing on consumers in the mobile and laptop industry	Lajwanti	SOP
205.	Anjana Prasanna Iyengar	Culture management and its various effects	Lajwanti	SOP
206.	Arbaaz Arif	Commercial daylighting system as a means of energy conservation.	Gomathi Bhavani .R	SOP
207.	Ariya Nandakumar	Study on the antibiotic sensitivity of <i>Stenotrophomonas maltophilia</i>	Gokhale Trupti Swarup	SOP
208.	Asad Shabbir Husein	Detection of cancer tumours and severity using image processing techniques	Jagadish Nayak	SOP
209.	Asees Inder Singh	Revenue and logistics management	Tapan Kumar Datta	SOP
210.	Ashish Gupta	A comparative study on the working capital management for various industries	Aqila Rafiuddin	SOP
211.	Ashwin Madhusudan	Production and operations management- Enterprise resource planning	Gangadhar Naranje	SOP
212.	Ayesha Siddeeka	Applications of enzymes in the industry towards clean technology	Gokhale Trupti Swarup	SOP
213.	Ayush Dattagupta	Study of graph algorithm related to shortest patt	Somasundaram Arumugam	SOP
214.	Ayush Mathur	Software Testing using C1 Test Methodology for Communication Protocols	Susanna Sajoni Henry	SOP
215.	Baalaganapathy Manohar	Marketing strategy of airtel in india	Pushkala Muralidharan	SOP
216.	Bhargav Reddy G	Content Based Image Retrieval	Santhosh Kumar Vasudevan	SOP
217.	Chaithanya Nannapaneni	Micro level entrepreneurship/smes	Srinivasa Rao	SOP
218.	Das Sharma Amartya	Study & analysis of labarotary development manual for oops lab	Santhosh Kumar Vasudevan	SOP
219.	Dharaben Yogeshkumar Prajapati	A Study on chemistry of some cosmetics and methods of their safe degradation	Muralidharan .B	SOP
220.	Divya Raghunathan	Social responsible investing vs. sin stock	Pushkala Muralidharan	SOP
221.	Gary Simethy George	Comparative study on the salinity of processed food and its negative impact on health	Geetha	SOP
222.	Gauthmi Haresh Ahir	Studies on Microalgal pigments and Autoflourescence	Ramachandran .S	SOP
223.	Gubbala Sourya Sriharsha	Performance evaluation in a supply chain management	Aqila Rafiuddin	SOP

<b>List of First Degree Projects - Second Semester 2014-2015 (February 2015 to June 2015)</b>				
<b>S.No.</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
224.	Haroon Sultan	Tracking Objects using Video Image Processing in MATLAB	Vilas Haridas Gaidhane	SOP
225.	Himanshu Dabas	Multiple regression and its applications in real life situations	Maneesha	SOP
226.	Hingar Aayush Mahavir	Marketing cloud and its strategies	Shazi Shah Jabeen	SOP
227.	Hiral Pankaj Patwa	Study & analysis of art gallery problem & related theorems	Somasundaram Arumugam	SOP
228.	Iyengar Madhav Narasimhan	Study of architectural models of the cloud based application hosting	Nand Kumar	SOP
229.	Jason Abraham Philip	Study of applications of expert system in Non Destructive Testing (NDT) of welding process	Gangadhar Naranje	SOP
230.	Johan Joseph Graison	Reliability Centered Maintenance	Karthikeyan .R	SOP
231.	Juweria Anam	Media formulation and optimization for carbon capture and sequestration using photobioreactor	Ramachandran .S	SOP
232.	K Eswar	Alternate fuels from waste end-products and industrial waste	Udayakumar	SOP
233.	Kanwar Tushar Punj	Analysis of Registration, Agent Discovery and Routing in IPV4 and IPV6 Addressing,	Susanna Sajoni Henry	SOP
234.	Kapil Bansal	Kinematics of lead transfer in human body	Suhel Ahmad Khan	SOP
235.	Kartikay Vikrant Singh	Study of effects of abenomics on japanese economy	Maneesha	SOP
236.	Kritika Karthikeyan	Modeling and Simulation of DC Distributed Power Systems	Sunil Thomas	SOP
237.	Manal	Role stress among female employees	Aqila Rafiuddin	SOP
238.	Mehvish	Graphene oxide based nano devices for gas sensor application	Swaminathan .S	SOP
239.	Mihika Shivkumar	Use of technologies in learning activities	Shazi Shah Jabeen	SOP
240.	Mir Anwar Ali	Team communication and its emerging trends	Mubeena Iqbal	SOP
241.	Mohamed Atyab	Efective Treatment of sewage water incorporating Renewable Energy	Miller Jothi .N.K	SOP
242.	Mohammed Fahad	Analysis of Electronic Properties Reduced Graphene oxide based Nano sensors.	Swaminathan .S	SOP
243.	Mohammed Shaha Buddin	Financial state of SMES in DUBAI	Shazi Shah Jabeen	SOP
244.	Mugdha Sunil Polimera	Application of Intelligent techniques in Astrophysics	Kalaichelvi	SOP
245.	Nasreen Farhana Zakkir	Study of Antenna Arrays	Abdul Razak .A.R	SOP
246.	Nazish Khan	Study & analysis of laboratory development manual for OOP Lab for OOP LAB	Vijayakumar .B	SOP
247.	Nikita Krishna	Human resource and cultural management	Lajwanti	SOP
248.	Nonidh Yadav	Evolution of technology in cinema	Lajwanti	SOP
249.	Omair Shafiq Hurzuk	Study of membrane technology in wastewater tretment	Bharat Bhushan Gulyani	SOP
250.	Pandya Nakul Amrish	Numerical investigation on natural convection heat transfer in cavities	Kumar .K	SOP
251.	Parimi Sai Sindhura	A comparative study of agression level amongst sports and non-sports students	Aqila Rafiuddin	SOP
252.	Parvathy B	Study of phytochemicals and toxins in filamentous cyanobacteria	Dawood Jalaluddin Shariff	SOP
253.	Peechara Rochana Rao	A study on Robotic Surgery – The science for today and tomorrow	Prasad .D.V	SOP
254.	Poorvank Sharma	Optimization of heat dissipation in braking system via air duct channeling	Udayakumar	SOP
255.	Prashant Vemulapalli	Relationship between communication ability and professional success	Mubeena Iqbal	SOP
256.	Priya Mehta	Performance analysis of equity schemes of sbi mutual funds	Pushkala Muralidharan	SOP
257.	Priyankar Ray	Globalization of cinema(functional aspects in techniques of hollywood direction)	Lajwanti	SOP
258.	Priyansh Jalan	Corelation between emotional intelligence and overall performance	Shazi Shah Jabeen	SOP
259.	Pulkit Yadav	Study of different graph algorithms	Somasundaram Arumugam	SOP
260.	Puneet Khirwar	Study of working fluids for Kalina Cycle	Udayakumar	SOP
261.	Raaed Nazeer Mayan	Study on Flexible A.C. Transmission (FACTS) in power systems	Adhir Baran Chattopadhyay	SOP

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<b>S.No.</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
262.	Radhika Narain	Studies on Novel Delivery Systems for Biological Substances	R N Saha	SOP
263.	Ranoo Sharma	Querying & managing large database via mobile APP	Sujala Deepak Shetty	SOP
264.	Raunak Gedam	Automation, reproducibility of data analysis, intelligent adaptive systems for health care informatics	Muthaiyan Madijagan	SOP
265.	Reeva Deepak Bhatkal	Study of use of civicrm in various organaization	Santhosh Kumar Vasudevan	SOP
266.	Revathy Krishnakumar	Study of phytochemicals and toxins in Microcystis sp	Dawood Jalaluddin Shariff	SOP
267.	Rohan Shanker Kapdi	HRM practices in a mid sized orgn.	Srinivasa Rao	SOP
268.	R Priya	Quality control snd ISO certification in Biotech industry	Gokhale Trupti Swarup	SOP
269.	Rohit Saluja	Wireless Transfer of Battery Power	Anand Kumar	SOP
270.	Sahibjit Singh	Comparitive Study of Game Development Strategies	Santhosh Kumar Vasudevan	SOP
271.	Sahil Khanna	Market research on fashion industry	Srinivasa Rao	SOP
272.	Sankar Shrinath Sharma	Hybridization of solar thermal power plants for developing nations	Periasamy .C	SOP
273.	Satvik Balaji	Bioremediation of Waste Waters using Genetically Engineered Microalgae	Ramachandran .S	SOP
274.	Saurabh Chhabra	Applications of Near Field Communications	Ramadoss Roop Kumar	SOP
275.	Serrao Ninoshka Ronald	Shale Gas Evolution and it's impact on OPEC countries	Aqila Rafiuddin	SOP
276.	Shah Maurya Mukeshbhai	Production of ethanol from waste fruits: A review	Prakash Kumar .B.G	SOP
277.	Shahithra Gowthaman	Microwave Imaging Techniques for Breast Cancer Detection	Mary Lourde .R	SOP
278.	Shajitha Seyed Ismail	Automated detection of hard and soft excudates from fundus image using image processing techniques	Jagadish Nayak	SOP
279.	Shikhar Sanjaykumar Singh	Study of analytical models of the private cloud based application development	Nand Kumar	SOP
280.	Shilpa Acca Philip	Determining the stage of breast cancer Malignant based on cancer size on mammogram Image basis	Jagadish Nayak	SOP
281.	Shreya Naha	Correlation between emotional intelligence and leadership styles	Shazi Shah Jabeen	SOP
282.	Sidhant Nain	Study on status of water treatment plants in India	Muralidharan .B	SOP
283.	Smruti Naik	Microalgae as a Source of Bioactive compounds for Pharmaceutical Applications	Ramachandran .S	SOP
284.	Snatika Sarkar	Advancement in applicability of carbon nanotubes in progressive fuel cells	Vijaya Ilango	SOP
285.	Soumya Saxena	Contract management in I&t analysis	Pushkala Muralidharan	SOP
286.	Sri Rahul Challagulla	VLSI on Microcontroller	Anand Kumar	SOP
287.	Srinivasan Akshaya	A survey of DM applications in bio-informatics	Alamelu Mangai	SOP
288.	Sulaiman Abdul Rehman	Condition monitoring of vibrations made in elevators and escalators	Venkatanaga Sankaram .M	SOP
289.	Sushant Gayawal	To study & understand fundamental concepts of computer communication thru' N /W PROG in JAVA	Susanna Sajoni Henry	SOP
290.	Swasti Krishnamoorthy	Virtual Instrumentation and its applications	Swarnalatha .R	SOP
291.	Swetha Sathyavarithakurup	Cloud computing - application centric infrastructure	Muthaiyan Madijagan	SOP
292.	Syeda Mudabbera Fatima	Use of differential equations in state variable modelling for its application in control system engineering	Baskaran .S	SOP
293.	Tooshank Sharma	Differential equations and the parachute problem	Suhel Ahmad Khan	SOP
294.	Umera Fathima Irfan	ECG Analysis using Wavelet Transform	Swarnalatha .R	SOP
295.	Vadlapudi Viswa Venkat Mounish	Sustainable energy : Solar roadways and its application in UAE	Periasamy .C	SOP
296.	Varun Sharma	Analysis of bid data to optimize business processes	Vadivel .S	SOP
297.	Vinayak Dhingra	Wire harness management and power calculation for the entire circulatory of Formulas SAE race car	Sunil Thomas	SOP
298.	Vinit Dharamshibhai Bediya	Product quality management in manufacturing unit	Pushkala Muralidharan	SOP
299.	Yeshasvi Mahadev	The reduction of co2 emissions utilising non carbon based energy sources	Geetha	SOP
300.	Dhawani Gaur	Redefining communication	Lajwanti	SOP
301.	Shefana Sheriff	Non Linear Analysis of EEG Signals at various sleep	Prasad .D.V	SOP

<b>List of First Degree Projects - Second Semester 2014-2015 (February 2015 to June 2015)</b>				
<b>S.No.</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
		stages		
302.	Vignesh Raj.T	VLSI implementation of Random number generator	Abdul Razak .A.R	SOP
303.	Aditya Poonia	Movement of an Aerial Robot in an indoor space using optical flow	Anand Kumar	SP
304.	Angad Singh Oberoi	Plasmonic Organic Solar Cell employing different nano particle assemblies	Anand Kumar	SP
305.	Anjana Prasanna Iyengar	Biodegradation of surgical polymers and other wastes	Muralidharan .B	SP
306.	Ankur Aggarwal	Study of a transportation network	Priti Bajpai	SP
307.	Anubha Varshney	Big data application implementation on hadoop	Sujala Deepak Shetty	SP
308.	Deolalkar Kshiti Mangesh	Low power design using finFETS	Anand Kumar	SP
309.	Ishita Roy	Applications of Nanobiotechnology in the treatment of cancers	Gokhale Trupti Swarup	SP
310.	Jatin Chopra	today's processors & CPU	Susila .S	SP
311.	Manasa Suresh	A benchmarking analysis of Renewable Energy policies in Indian context	Surendra Kumar	SP
312.	Mohammed	Cloud computing as a service for secure file sharing for large organization	Vadivel .S	SP
313.	Mohammed Suhail Kader	Weather monitoring and forecasting using Labview Software	Swarnalatha .R	SP
314.	Mugdha Sunil Polimera	Application of Digital Image Processing in Astronomy	Jagadish Nayak	SP
315.	Nalini Angelica De Souza	Mobile app development using open source programming (HTML)	Vijayakumar .B	SP
316.	Nikita Krishna	Biodegradation of polymers - natural and synthetic	Muralidharan .B	SP
317.	Pranav Menon	DESIGN ANALYSIS OF BLENDED WINGLET USING SPLIT WINGLET CONFIGURATION	Udayakumar	SP
318.	Prarthna Michael Clare	Medical Applications of Nanobiotechnology	Gokhale Trupti Swarup	SP
319.	Prashant Vemulapalli	Power Electronics Technology for Induction Cooking	Mary Lourde .R	SP
320.	Shah Aanchal Snehal	To analyse the data and use various regression models and algorithms using R-PROG Language	Vadivel .S	SP
321.	Shravan Kartik Chopra	Game design & development	Sujala Deepak Shetty	SP
322.	Sidhant Nain	Studies on development of lubricants and greases	Bharat Bhushan Gulyani	SP
323.	Srishti Singh	Design and Stimulation of a microcantilever based sensor for detection of Atherosclerosis	Neeru Sood	SP
324.	Swathi Sampath	Monte carlo analysis and its applications in finance	Tapan Kumar Datta	SP
325.	Syeda Afrah Shamail	Design & implementation of an algorithm using data mining techniques in health sector	Jeyalatha	SP
326.	Vaibhav Kasturia	Implementing machine learning algorithms on BIG DATA	Sujala Deepak Shetty	SP
327.	Vineeth Krishna	Tri-level GTO converter pair used for high power induction drives	Adhir Baran Chattopadhyay	SP
328.	Yashasvi Vedula	Design and implementation of a Health Care Emergency notification system	Jeyalatha	SP
329.	Yeshasvi Mahadev	Production of renewable energy from deep ocean currents	Mary Lourde .R	SP

<b>List of First Degree Projects First Semester 2015-2016 (September 2015 to January 2016)</b>				
<b>S.No.</b>	<b>Name</b>	<b>Topic</b>	<b>Instructor</b>	<b>Type</b>
1.	Menaka Menon	Design And Modeling of Photo-Bioreactor Using Simulation Tools	Shariff	DP
2.	Reshma Babu	Comparison of Different Tuning Methods For Ph Neutralization in Textile Industry	Swarnalatha	DP
3.	Nimila Ashraf	Design of Caustic Soda Production Plant	Muralidharan	DP
4.	Omair Shafiq Hurzuk	To Optimize The Design Of A Process Plant For The Production Of Mtb From Methanol And Iso-Butylene	Nidhi Bhandari	DP
5.	Dharaben Yogeshkumar Prajapati	Design And Assimilation of Petroleum Plants By Using SCADA System	Swarnalatha	DP
6.	Apurva Kumar	Feasibility Studies on Production of Alternative Fuels	Gulyani	DP
7.	Shubhankar Dumka	Game Development Using C#	Vijayakumar	DP

List of First Degree Projects First Semester 2015-2016 (September 2015 to January 2016)				
S.No.	Name	Topic	Instructor	Type
8.	Himsha Sood	Designing of The Green Cloud Environment	Madiajagan	DP
9.	Swetha Sathyavarithakurup	A Model For Predicting Customer Loyalty Using RFM And Data Mining	Alamelu Mangai	DP
10.	Rashi Mohnot	A Study on Garch Applications In Financial Markets	Aquila	DP
11.	Marathe Prateek Chandrashekhar	Ai In Mobile Game Development	Sujala Shetty	DP
12.	Raunak Gedam	Software Architecture Design For Batch Image Processing Using Pipes & Filters	Vijayakumar	DP
13.	Celeste Sakhile	Software Architecture Design For Batch Image Processing Using MVC Pattern	Vijayakumar	DP
14.	Manan Sharma	Statistical Analysis of Socio-Economic Data For UAE Using R And TABLEAN	Siddhaling Urolagin	DP
15.	Ali Asgar Amar	Web Application Development For Hostel Complaint Mgmt System	Santhoshkumar	DP
16.	Varun Sharma	SME E-Commerce Business Model Management	Pushkala	DP
17.	Kale Atharva Abhay	Performance Analysis of Students Using K++ Means Clustering	Alamelu Mangai	DP
18.	Nitya Mohini Harve	Designing GUI For Implementing Image Processing Algorithms	Santhoshkumar	DP
19.	Anant Khurana	Feasible Security Issues And Solutions For Cloud Deployment	Nandkumar	DP
20.	Hemant Gogna	Development of Architectural Specifications For Software Systems With Change Requirements	Vijayakumar	DP
21.	Omar Ismail	Andorid App Development Using Andoid Studio	Santhoshkumar	DP
22.	Ayush Mathur	Web Site For Academic Activites In College	Siddhaling Urolagin	DP
23.	Isra Zoeb Ali Abbasi	Design of Framework For Retrieval of Audio Data Using Meta Data And Content From The Web	Vijayakumar	DP
24.	Mohammed Zoheb Hynus	Design of A Framework For Retrieval of Video Data Using Metadata And Content From The Web	Vijayakumar	DP
25.	Ahlaam Sulfikar	Logistics Supply Control Implementation Using Java	Madiajagan	DP
26.	Jaison Tarun Titus	Design of A Framework For Multimedia Composition System	Vijayakumar	DP
27.	Seethal George Jose	Big Data Analysis For Streaming Data	Sujala Shetty	DP
28.	Vinu Polly	Database Security Implementation	Sujala Shetty	DP
29.	Avani Gupta	Analyzing The Performance of Students Using Data Mining Techniques	Alamelu Mangai	DP
30.	Khoja Zaidali Haiderali	Student center Mobile App on IOS	Sujala Shetty	DP
31.	Lakshay Arora	Cloud Based Software Application Development And Deployment	Nandkumar	DP
32.	Siddharath Gupta	Design of Weather Monitoring System Using At Mega32 Microcontroller	Susila	DP
33.	Parekh Vineet Vyomesh	Design And Implementation Of E-Commerce Store Front For Client-Side Implementation Using Java script For University Students Database	Susanna	DP
34.	Alok Rajiv	Design And Implementation of Cloud Based Communication For Remote Smart Devices Computations	Madiajagan	DP
35.	Pradheepan Raghavan	Student center Mobile App On Windows	Sujala Shetty	DP
36.	Priyansh Jalan	Co-Relation Between Emotional Intelligence And Overall Performance	Vadivel	DP
37.	Rishav Jalan	User Availability Check For Mobile Calls	Vadivel	DP
38.	Praveen Kumar Chandra Mohan	Design And Implementation Of A Student Based Website Using PHP	Susanna	DP
39.	Ayush Gulati	Feature Matching Using Open CV	Sujala Shetty	DP
40.	Sourav Banerjee	Design And Implementation of A Student Based Web Portal Using Html And CSS	Susanna	DP
41.	Kimya Dhade	Cloud Application Development For Sports	Nandkumar	DP
42.	Shaleena Shaji	Simulation of Robot Manipulator Using SIM Mechanics	Kalaiselvi	DP
43.	Richa Kheskani	RF Id Security Access	Abdulrajak	DP
44.	Venus Naresh Bhatia	Design And Study Home Automation	Abdulrajak	DP
45.	Bindia Harish	Discrimination Study Of Circuit Breakers	Chattopadyay	DP
46.	Shaima Yakoob	Design Of A Main Distribution Board For A Tower	Mary Lourde .R	DP



List of First Degree Projects First Semester 2015-2016 (September 2015 to January 2016)				
S.No.	Name	Topic	Instructor	Type
47.	Shafi Abdullah Nayaf Shafi Akhtar	Armature Reaction Of A three Phase Synchronous Motor Without Current Source Inverter	Chattopadyay	DP
48.	Sankalp Sethi	VHDL Implementation Of An Arm Based DSP Processor	Anandkumar	DP
49.	Akash Kadel	Pattern Recognition Using Machine Learning Techniques	Kalaiselvi	DP
50.	Rafid Ahmed Jukaku	Autonomous Mobile Robot Using ATMEGA	Jagadish Nayak	DP
51.	Christina Susan Girish	Microcontroller Based Tele-remote For Controlling Home Appliances	Susanna	DP
52.	Hanna Zehara	Detection Of Lung Cancer Using Image Processing Techniques	Raja	DP
53.	Nipin Pradeep Kumar	Implementation Of RFID Attendance System Using 8051	Susanna	DP
54.	Manal	Scaling From MEMS To NEMS	KK Singh	DP
55.	Lauren Alisha Fernandes	Lighting Design And Evaluation of Luminaire Systems Using MATLAB	Gomathi	DP
56.	Aditya Pandey	Designing A Cost Effective Anti Theft Alarming System	Jagadish Nayak	DP
57.	Ayanava Sarkar	Detecting Stages Of HAUSTORIUM Via Image Processing	Kalaiselvi	DP
58.	Rambhia Aakash Nitin	Design And Develop Letter Box Counter	Jagadish Nayak	DP
59.	Palak Lad	Design Of An Emergency Shutdown System For Oil & Gas Industry Using SCADA	Swarnalatha	DP
60.	Ihtisham Qasim Kalimullah	Prosthesis Using Embedded Control Systems - Instrumentation Aspects	Chattopadyay	DP
61.	Alan Chacko	Prosthesis Using Embedded Control Systems - Simulation Aspects	Chattopadyay	DP
62.	Mohammed Shamroukh	Prosthesis Using Embedded Control Systems- Biomechanical Aspects	Chattopadyay	DP
63.	Sripavathi S Bhattathiri	Design Of Binary Multiplier Using VHDL And Their Applications	Vilas	DP
64.	Thejas Rathan	Stability Margin Analysis For Filter Design	Vilas	DP
65.	Omaina Yasmin	Solving Of One Dimensional Heat Equation Using MATLAB	Suhel A. Khan	DP
66.	Bindia Harish	Graph Network Theory – Small World Problems	Somasundaram	DP
67.	Iyer Sowbhagyalakshmi C	Analysis Of POES Pendulum Using MATLAB	Suhel A. Khan	DP
68.	Kevin Raj	Case Study Of Kalman Filter using MATLAB	Suhel A. Khan	DP
69.	Svetlana Jose	Supply Chain Management & Optimization	Priti Bajpai	DP
70.	Shankar Achintya Lahiri	Asymmetric Ciphers	Priti	DP
71.	Anantha Krishnan	Estimation of Critical Path Using C Program	Maneesha	DP
72.	Mathew Abraham	Big Data And Its Applications	Maneesha	DP
73.	Swapnil Mittal	Optimization Of Traffic In Networking Systems	Kumar	DP
74.	Parvathaneni Venkata Durga Satyasai	Mathematical Modeling Of Rational Behavior For Business	Datta	DP
75.	Akhil Cherukumalli	Game Theory Mechanism Design	Datta	DP
76.	Salman Nazeerudeen	Applications Of Forecasting Techniques By Using C	Suhel A. Khan	DP
77.	Jaikaran Walia	Study And Design Of S Steam Drum	Santhoshkumar	DP
78.	Ishita Gupta	Detailed Energy Conservation Audit On Lighting In Bits Pilani Dubai Campus	Millerjothi	DP
79.	Joel Lanzil	Design And Analysis Of Gearbox In An Automobile	Mallika Parveen	DP
80.	Mohamed Aqeel Niamathullah	Deformation Analysis Of A Brake Disc Used In Cars	Sankaram	DP
81.	Nitish Anand	Design And Load Stress Analysis Of SEGWAY	Sankaram	DP
82.	Syed Aamiruddin	Comparative Analysis Of Thin & Thick Cylinders	Sankaram	DP
83.	Clayton Firmino Fernandes	Stress Analysis Of WELDMENT Joint Using ANSYS	Sankaram	DP
84.	Cleetus Bolton Cardozo	Quality Audit For OSC Dubai	Mallika Parveen	DP
85.	Aashna Virmani	Design And Analysis Of Chassis For F1 Cars	Mallika Parveen	DP
86.	Vivek Unnithan	Design And Analysis Of Non Powered Glider	Udaya Kumar	DP
87.	Zubin Razak	Design And Development Of A Hybrid Suspension System	Udaya Kumar	DP
88.	Kartik Sanghi	Analysis & Optimization Of Wire Drawing Process	Karthikeyan	DP
89.	Jeffin George	Design And Analysis Of Biomass Gasifiers Using	Millerjothi	DP

List of First Degree Projects First Semester 2015-2016 (September 2015 to January 2016)				
S.No.	Name	Topic	Instructor	Type
		Waste Seed		
90.	Mohammed Sabin	Design And Analysis Of Wheel Rim	Periasamy	DP
91.	Rohan Umesh Kunte	Facility Layout Planning Using Arena	Karthikeyan	DP
92.	Victor D Cruz	Wear Rate Simulation And Wear Mechanism Maps	Karthikeyan	DP
93.	Rohan Shanker Kapdi	Design Of Wind Turbine Blade	Vishal Naranje	DP
94.	Raghvendra Borcar	Design Analysis Of Steering Systems In Automobiles	Udaya Kumar	DP
95.	Ajay Kumar	Design And FEA Analysis On Airfoil	Periasamy	DP
96.	Sumit Gupta	Design Optimization Of Centrifugal Compressor Blades	Udaya Kumar	DP
97.	Harry Paul Thattil	Stress Analysis On A Spur Gear Drive	Sankaram	DP
98.	Daniel Joswin Sequeira	Micro Structural Analysis Using RVE	Karthikeyan	DP
99.	Rahul Dahiya	Analysis Of Wind Turbine To Optimize Wind Power	Vishal Naranje	DP
100.	Mihika Shivkumar	The Bloom Of 3-D Printing In The Medical Field.	Periasamy	DP
101.	Sharankumar R	Design Of Windmill Blade Using ANSYS	Periasamy	DP
102.	Patel Ketul Arvindbhai	Study On Performance And Emission Characteristics Of Biodiesel Using NANO Particle	Millerjothi	DP
103.	Shyam Krishnan	Design And Analysis Of Centrifugal Pump Used In Sugar Refinery Plant	Sankaram	DP
104.	Deepan Goyal	Designing Of Waste Gate To Minimize Turbo Lag In IC Engines	Millerjothi	DP
105.	Juan Jaics	Design of air Intake For A Single Cylinder Engine	Kavita Jerath	DP
106.	Amel Noushad	Speed Controlled Dc Motor Using Neural Network	Swarnalatha	DP
107.	Fathima Jameel	Design Of Wireless Networks By Software	Abdulrajak	DP
108.	Mohammed Arfaz Ayoob	Wireless Home Automation	Abdulrajak	DP
109.	Sruthi Rahim	Implementation Of Fir And Iir Filters	Shazia	DP
110.	Rochal Saxena	Mitigation Of Interference In LDACS System	Raja	DP
111.	Kapil Bansal	Designing And Modeling A Chemical Sensor	Anandkumar	DP
112.	Parth Gadhavi	Design of RF Circuits	Abdulrajak	DP
113.	Rhea Riaz	Sinusoidal Parameter Estimation Using Adaptive Filters	Shazia	DP
114.	Chitra Karamchandani	Radio Over Fiber Technology In Future Network Connections	Roopkumar	DP
115.	Manas Kapoor	Performance Investigation For Different Modulation Techniques In WCDMA	Gomathi	DP
116.	Friedrich Samuel	Implementation Of RFID Based Systems	Gomathi	DP
117.	Divya Dileep Menon	Application Of Fiber Optics In Space Research And Medical Field	Roopkumar	DP
118.	Rohan Khanna	Multi resolution Mobile Vision System For Plant Leaf Disease Diagnosis	Vilas	DP
119.	Sahil Mulchandani	Wireless Energy Transfer	Karthiyayini	DP
120.	Vignesh Raj.T	Remotely Controlled Android Based Notice Board	Raja	DP
121.	K Vinitha Reddy	Design Of Fire Alarm Control Using Fuzzy Logic	Jagadish Nayak	DP
122.	Sidharth S Warriar	Using NFC Concept(RFID)To Enhance Parking System In Dubai	Shazia	DP
123.	Christina Susan Girish	Android Based App Development For Academic Information System	Jagadish Nayak	DP
124.	Nipin Pradeep Kumar	Android Based App Development For Academic Information System	Jagadish Nayak	DP
125.	Akshay Kumar	Control Of A Robotic Vehicle Using A Mobile Phone	Mary Lourde	DP
126.	Archit Mehta	Application Of Partial Differential Equations In Electronics And Communications	Suhel A. Khan	DP
127.	Mathew Abraham	Analysis And Pricing Of Credit Derivatives In MATLAB	Raja	DP
128.	Rahul Kumar Rajeev	Pattern Recognition Using KNN & Naïve Bayes In Python	Santhoshkumar	DP
129.	Sahil Shakir Mohamed	Design And Study Of Cryptography Algorithms	Madijagan	DP
130.	Shajitha Seyed Ismail	Cloudlet Implementation Of Simple Chat Server And Client	Vadivel	DP
131.	Angad Kundra	Design And Implementation Of Facial Recognition Software	Jayalatha	DP
132.	Akshita Angara	Web Based Hospital Management System	Vadivel	DP

List of First Degree Projects First Semester 2015-2016 (September 2015 to January 2016)				
S.No.	Name	Topic	Instructor	Type
133.	Shreya Jain	Tele monitoring Progression Of Parkinson's Disease Using Machine Learning Algorithms	Sujala Shetty	DP
134.	Aman Singh Bhati	Wireless Power Transfer	Karthiyayini	DP
135.	Ayush Dattagupta	Soap Based Web Service For Fingerprint Verification And Security	Vadivel	DP
136.	Anjali Prakash	GSM Based Mobile Robot	Jagadish Nayak	DP
137.	Arvind Desikan	Control Aspects Of A Quad copter With Real-Time Implementation	Kalaiselvi	DP
138.	Vishank Bhatia	Application Of Computational Intelligence In Robotics	Kalaiselvi	DP
139.	Maria Sneha Miranda	Experimental Analysis And Simulation Study Of A Nonlinear Chemical Process	Kalaiselvi	DP
140.	Arush Gupta	The Mathematics Behind Google's Search Engine Page Rank	Priti Bajpai	DP
141.	Kevin Raj	A Case Study On Airline Companies	Datta	DP
142.	Shafi Abdullah Nayaf Shafi Akhtar	Analysis Of NYKA Steel Pvt Ltd, Mumbai India	Priti Bajpai	DP
143.	Tooshank Sharma	Solving One Dimensional Heat Equation Using MATLAB	Baskaran	DP
144.	Kapil Bansal	A Study Of Financial Market Instruments Using Black-Schools Model	Baskaran	DP
145.	Pawan Kumar Sharma	Statistical Analysis Of Efficiency Contribution Of Market Mechanism To The Welfare Of Consumers And Producers Using SPSS	Baskaran	DP
146.	Vignesh Raj.T	Solving One Dimensional Integrals Using C	Baskaran	DP
147.	Sagar Dipak Zinzuvadiya	Design And Optimization Of Radiators In Automobiles	Udaya Kumar	DP
148.	Harshil Kaushik Patel	Robotic Manipulator Control	Karthikeyan	DP
149.	Aru Singhal	Designing A Biosensor Using Hybridization Technique	Trupti Gokhale	DP
150.	Shaikh Faisal Zaman	Antimicrobial Resistance Among Biofilm Forming Bacteria In Domestic Environments	Ramachandran	DP
151.	Swathi Murali	An Introduction To Forensic Psychology And Character Profiling	Ramachandran	DP
152.	Anoop Aravindakshan Pillai	Spectro photometric Determination Of Dissolved Oxygen In Effluents	Geetha	LP
153.	Menaka Menon	Estimation Of Potassium Content In Dry Fruits	Geetha	LP
154.	Nikita Chotwani	Antioxidant Profiling Of Teas	Geetha	LP
155.	Elma Fay Rodrigues	Studies On Characterization Of Edible Oils	Vijaya Ilango	LP
156.	Shreyas Shirish Patwardhan	Estimation Of Vitamin C Content In Ziziphus Jujuba (Jujube, Baer) At Various Stages Of Ripening And To Study Effect Of Processing On Vitamin C Contentll	Geetha	LP
157.	Suhan Attavar	Design And Implementation Of Cloud	Madiajagan	LP
158.	Anirudh Seth	Efficient Automated Finger Print Identification System	Vadivel	LP
159.	Jubin Daniel James	Creating Prototype Of An SDN	Madiajagan	LP
160.	Marathe Prateek Chandrashekhar	Prototype Designing Of APIC To Control The Flow In The Existing Network	Madiajagan	LP
161.	Shankar Achintya Lahiri	Web Application Development For Hostel Complaint Mgmt System	Santhoshkumar	LP
162.	Anantha Krishnan	Design And Implementation Of Passport Release Software	Santhoshkumar	LP
163.	Joel Lanzil	Design And Fabrication Of Braking System For An Automobile	Vishal Naranje	LP
164.	Aashna Virmani	Wear Resistance Of Die Steel Material	Karthikeyan	LP
165.	Baalaganapathy Manohar	Micro-structural Analysis Of Die Steel	Karthikeyan	LP
166.	Victor D Cruz	Heat Loss Regeneration Using Rankine Cycle	Udaya Kumar	LP
167.	Sagar Dipak Zinzuvadiya	TIG Welding Of SS	Karthikeyan	LP
168.	Joseph Jeyasurya J	Measurement Of Flow Characteristics Of Aerodynamic Bodies	Periasamy	LP
169.	Swaminathan C	Measurement Of Lift And Drag Of Modified Aircraft Wing.	Periasamy	LP
170.	K.Venkatesh Prabu	Product Innovation Using Sensor Technology.	Periasamy	LP
171.	Juan Jaics	Incorporating Forced Induction In A Naturally Aspirated Engine And Required ECU Remapping	Udaya Kumar	LP

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S.No.	Name	Topic	Instructor	Type
172.	Shrey Iyengar	Study And Comparison Of Efficiency Of Different Kinds Of Solar Concentrators	Kavita Jerath	LP
173.	Abhishek Mahajan	Simulation Of Hearing Impairment For Speech Perception Studies	Thomas	LP
174.	Abdul Latif Shaikh Salim	Implementation Of Lab view Based Scada System For Real-Time Industrial Automation	Kalaiselvi	LP
175.	Abhishek Mahajan	EMG- Sensor Design And Signal Analysis	Swarnalatha	LP
176.	Palak Lad	Modeling And Control Of A Temperature Process By Utilizing Experimental Analysis	Kalaiselvi	LP
177.	Satvik Balaji	Isolation And Characterization Of Biofilm Forming Bacteria From Domestic Environment	Ramachandran	LP
178.	Prashanth Srinivasan	Studies Of Antibiotic Resistance In Microbial Biofilm Communities	Ramachandran	LP
179.	Majida Moossa Assainar	Analysis Of Water Samples For VBNC E.Coli From Southern Emirates Of UAE	Trupti Gokhale	LP
180.	Afarose Bagam Faazil	Analysis Of Water Samples For VBNC E.Coli From Northern Emirates Of UAE	Trupti Gokhale	LP
181.	Shweta Biswal	Detection Of Heavy Metal In The Environment Using Photo bacterium	Trupti Gokhale	LP
182.	Ariya Nandakumar	Study On Gene Expression In Stenotrophomonas In Terms Of Antibiotic Resistance	Trupti Gokhale	LP
183.	Ashvriya	Synthesis Of Metal Nanoparticles Using Photobacterium Species	Trupti Gokhale	LP
184.	Ayesha Siddeeka	Study On The Microorganisms To Remediate Hydrocarbon And Pesticide Pollution	Trupti Gokhale	LP
185.	Pramya Pradeep Kumar	Study On The Ability Of Microorganisms To Remediate Heavy Metal Pollution	Trupti Gokhale	LP
186.	Ansh Vaghela	Enhancing The Performance Of Photo voltaic Panel By Cooling Systems	Gulyani	SOP
187.	Parth Gadhavi	Study Of Optical And Chemical Sensors	Gulyani	SOP
188.	Rekhapalli Sri Shreya	Source ,Effect And Treatment Of Pharmaceutical Pollutants In Water	Geetha	SOP
189.	Tanisha Varalwar	Recent Advances In Green Chemistry And Clean Chemistry For Chemical Process Industries	Saha	SOP
190.	Thomas Varghese	Green Energy And Production Of Green Energy	Nidhi Bhandari	SOP
191.	Mohammed Ahmed Mahboob	Renewable And Non-Renewable Sources Of Energy	Nidhi Bhandari	SOP
192.	Rahul Kumar Rajeev	Performance Analysis Of Image Compression Techniques	Kalaiselvi	SOP
193.	Swathy Sreekumar	Vehicle Tracking System Using Gps	Siddhaling Urolagin	SOP
194.	Alakananda Anil Kumar	Quality Control Measures Of Analyzing Customer Transaction Data	Alamelu Mangai	SOP
195.	Ali Asgar Amar	Study Of Cloud Security Using Fuzzy Logic And Neural Networks.	Nandkumar	SOP
196.	Hingar Aayush Mahavir	Design And Development Of A Mobile Chatting App	Sujala Shetty	SOP
197.	Erica Kohli	Smart Life Using Cloud Based Pervasive Computing	Madijagan	SOP
198.	Aishma Raghu	Implementation And Analysis Of Algorithms And Tools Of Cyber Security In Cloud Computing Model	Jayalatha	SOP
199.	Vansh Chopra	Facial Detection And Recognition In A Crowd Environment	Vadivel	SOP
200.	Ayush Gulati	Feature Matching Using Open CV	Sujala Shetty	SOP
201.	Mohit Gupta	CFD In Conceptual Aircraft Design	Kavita Jerath	SOP
202.	Ishan Dafaria	Some Aspects Of Resonant Converters	Chattopadyay	SOP
203.	Parth Anant Berde	A Comparative Study On Smart Grid Power Systems	Sunil Thomas	SOP
204.	Anjali Prakash	Image Processing Techniques In Quality Control Of Sheet Metal	Vishal Naranje	SOP
205.	Kavya Jayan	3d Printing For Micro-system Devices	Anandkumar	SOP
206.	Sankalp Sethi	To Study Various Applications Of Direct Digital Synthesizer In Clocking CKTS	Shazia	SOP
207.	Shane Roldao Mascarenhas	A Study On Linear Induction Motor And Its Applications	Sunil Thomas	SOP
208.	Tanya Mittal	Application Of Nanotechnology In Medicine For	Roopkumar	SOP

List of First Degree Projects First Semester 2015-2016 (September 2015 to January 2016)				
S.No.	Name	Topic	Instructor	Type
		Cancer Treatment		
209.	Nidadavolu Mani Sasi Rekha Chowdary	Construction Of Molecular Electronic Switch Using Gaussian	Anandkumar	SOP
210.	Aamir Jamal Ahsan Jamal	Study Of Solar Energy Projects In Saudi Arabia And U.A.E.	Kavita Jerath	SOP
211.	Chavi Chhabra	Analog Modulation Techniques In Wireless Communication	Raja	SOP
212.	Bhavani Sankar Nishanth	Wireless Sensor And Actor Network	Raja	SOP
213.	Ruby Bansal	Effect Of Windmills On Environment.	Kavita Jerath	SOP
214.	Shefana Sheriff	Modern Techniques In Disease Diagnosis	Raja	SOP
215.	Arush Gupta	Activity Based Costing Versus Traditional Costing For A Manufacturing Firm	Maneesha	SOP
216.	Rohan Umesh Kunte	Impact Of Oil Prices On The Gdp Of Indian Economy.	Baskaran	SOP
217.	Pulin Bhalotia	An Analysis Of The Optimization Of Labour And Raw Materials In A Manufacturing Plant For Profit Increase.	Priti Bajpai	SOP
218.	Pawan Kumar Sharma	A Study On Use Of Laplace Equations In Control Systems	Suhel A. Khan	SOP
219.	Rami Yasser Yehiya	Study Of Cryogenics Of Polymersc	Vincent Shantha Kumar	SOP
220.	Pulkit Bhalotia	Study Of Compresses Air Driven Engine	Sankaram	SOP
221.	Cleetus Bolton Cardozo	Study Of Design Methodologies Of Pressure Vessels Used In Oil & Gas Industry	Sankaram	SOP
222.	Vivek Unnithan	Applications Of Non-Newtonian Fluids In Industry And Military Fields	Mallika Parveen	SOP
223.	T Avinash	Review Of Nanotechnology In Renewable Energy	Karthiyayini	SOP
224.	Kartik Sanghi	Energy Efficiency In A Foundry Unit	Mallika Parveen	SOP
225.	Pandey Divyanshu Yatish	Study Of Fibre Reinforced Polymer Composites In Automotive Applications And Seat Design	Vincent Shantha Kumar	SOP
226.	Jeffin George	Quality Management Systems - Iso 9001-2008	Mallika Parveen	SOP
227.	Sheetanshu Sharma	Study Of Life Cycle Management Of Mobile Phones	Vishal Naranje	SOP
228.	Chaitanya Jain	Study Of Supply Chain For Wind Mill Industry	Vishal Naranje	SOP
229.	Clyde Marshal Crasto	Performance Evaluation Of Vehicles Using Multi-Criteria Analysis	A P Singh	SOP
230.	Halbe Kunal Suhas	Study Of Incremental Sheet Metal Forming Process	Vishal Naranje	SOP
231.	Unindra Kumar Das	Study Decision Support System For Conditioning Monitoring And Diagnosis Of Press Tool	Vishal Naranje	SOP
232.	R. Gowtham Raj	Study And Designing Of Gearbox	Vincent Shantha Kumar	SOP
233.	Susmit Nannapaneni	Analysis Of Ultrasonic Velocity Of Binary Liquid Mixtures By Various Theoretical Model	Karthiyayini	SOP
234.	Midhun George	Up Gradation Of HVAC Systems In Green House Using Evaporative Coolers In Middle East Climatic Conditions	Millerjothi	SOP
235.	K Nikkhil Raj Agrawal	Selection Of Engineering Materials In Product Design Using MCDM Techniques	A P Singh	SOP
236.	Aditya Garg	Selection Of Engineering Materials In Product Design Using MCDM Techniques	A P Singh	SOP
237.	Arshad Kallarakkal Thaza	Energy Conservation Water And Electricity In BPDC	Millerjothi	SOP
238.	Lavanya Aggarwal	Harnessing The Solar Energy In UAE	Karthiyayini	SOP
239.	Sadjyot Biswal	Development Of Aerodynamics Of A Formula Sae Car	Millerjothi	SOP
240.	Shreyas Nayak C	Study Of Various Aspects Of Airomobile Car	A P Singh	SOP
241.	Ekasjyot Singh Barara	Sustainability Of Solar Energy In Uae	Karthiyayini	SOP
242.	Prabhat Sharma	Desalination Of Water Using Solar Energy	Kavita Jerath	SOP
243.	Surabhi Baid	Study On VLSI Routing	Abdulrajak	SOP
244.	Sidharth S Warriar	Study Of The Use Of Brainwaves To Manipulate A Robot	Anandkumar	SOP
245.	Athanatu Aziz Mahruz	Developing Application Using Scada Software	Abdulrajak	SOP
246.	Bharat Monavarthi	Application Of Quantum Dot Gates Nonvolatile Memory Image Segmentation	Vilas	SOP
247.	Anjali Preetha Velayudhan	Routing Using Cisco Switches	Abdulrajak	SOP
248.	Narayanan Rama Chandran	Design Of Radar Speed Tracking System.	Susanna	SOP
249.	Anamika Lamba	Study Of Analog Circuits For Gaussian Function	Vilas	SOP
250.	Kinza Tania	Stability Analysis Of Discrete System	Vilas	SOP

List of First Degree Projects First Semester 2015-2016 (September 2015 to January 2016)				
S.No.	Name	Topic	Instructor	Type
251.	Paras Dhawan	Use Of SCADA In Building Systems And Automation	Gomathi	SOP
252.	Tushar Vatsa	Non Linear System Identification	Shazia	SOP
253.	V Pavankumar	Data Mining Framework For Target Marking	Aquila	SOP
254.	Mahmood Ponmadathil Aboobacker	Case Study Of CSR Practices By Companies	Mubeena	SOP
255.	Nimila Ashraf	HRM Practices In Mid Sized Organization In UAE	Srinivasa Rao	SOP
256.	Nikita Chotwani	Hindi Film Industry And Its Journey	Lajwanti	SOP
257.	Ishan Dafaria	Crisis Communication	Mubeena	SOP
258.	Ishita Gupta	Marketing Strategies Of Universities In The UAE	Pushkala	SOP
259.	Raghav Kanotra	Benchmark Indices Of Indian Economy:-A Comparative Analysis Of SENSEX And NIFTY	Pushkala	SOP
260.	Siddhant Gupta	Sme Entrepreneurs : Problems & Challenges Faced In UAE	Srinivasa Rao	SOP
261.	Himsha Sood	Social Media And Youth Behavioural Norms :A Detailed Study.	Lajwanti	SOP
262.	Rashi Mohnot	Electronic Trading, Volatility And Stock Price Behaviour	Pushkala	SOP
263.	Manan Sharma	Analysis And Forecasting Of Business Trends In Shipping Industry Using Bi Tools	Pushkala	SOP
264.	Anant Khurana	Development Of App Using Android Studio	Pushkala	SOP
265.	Satya Kumar Babu Gopi	A Study On Business Models	Aquila	SOP
266.	Jasmine Elizabeth Jacob	Micro Level Entrepreneurship In Abu Dhabi	Srinivasa Rao	SOP
267.	Sruthi Rahim	Impact Of Advertising On Consumer Behavior : A Psychological Approach	Aquila	SOP
268.	Nidhi K C	Impact Of Corporate Social Responsibility On The Company And Its Stakeholders	Pushkala	SOP
269.	Upanyas	Sustainability Of Educational Institutes In Higher Education	Aquila	SOP
270.	Archit Mehta	Marketing Applications In A Mid-Sized Organization In UAE	Srinivasa Rao	SOP
271.	Rhea Riaz	Analysis Of Mergers And Acquisitions In Business Transition	Aquila	SOP
272.	Akurati Parthasri	Leadership Practices In Mid Sized Organizations In UAE	Srinivasa Rao	SOP
273.	Uppalapati Chaitanya Kumar Varma	HRM Practices In Mid-Sized Organizations In Uae	Srinivasa Rao	SOP
274.	Saheel Iqbal	Sensationalism In Broadcasting Of News On Indian News Channels	Lajwanti	SOP
275.	Abdul Muqet	A Study On Social Intelligence Of Profession College Students	Aquila	SOP
276.	Angad Kundra	Study Of Animations Created For Phonetics	Shazi	SOP
277.	Khushboo Mahesh Agarwal	Innovations In Environmental Management	Shazi	SOP
278.	Sief Addeen Ahmad Aref Abdelrazeq	The Effect Of Halal On Environment Sustainability	Shazi	SOP
279.	Sidharth Lahoti	Venture Capital Funding In SMES	Shazi	SOP
280.	Shreya Jain	The Dynamics Of Cell Phone : How Communication Technology Affect Our Connectivity To Society	Lajwanti	SOP
281.	Aaryan Puru Jindal	Marketing In A Digital World	Shazi	SOP
282.	Ashima	Writing Styles And Tropes In Dystopian Literature	Mubeena	SOP
283.	Kimya Dhade	Student Experiences At Internship	Mubeena	SOP
284.	Nivetha Gunaseelan	Study Of Directives In English And Tamil	Shazi	SOP
285.	Aastha Bhardwaj	Corporate Social Responsibility In SMES	Shazi	SOP
286.	Aru Singhal	Sunlight Harvesting Systems Using Fibre Optics For Photobioreactor Applications.	Ramachandran	SOP
287.	Swathi Murali	Stem Cell Therapy In Regenerative Medicine And Treatment Of Neuro Degenerative, Psychological And Autism Spectrum Disorder	Shariff	SOP
288.	Baalaganapathy Manohar	Fluid Flow Analysis Of XLPE Extruders For Cable Industries	Periasamy	SP
289.	Deepak Koruthu Thomas	Quality Management In Aviation Industries	Mallika Parveen	SP
290.	Mohammed Sabin	Application Of TQM In Industries In The UAE	Mallika Parveen	SP

List of First Degree Projects First Semester 2015-2016 (September 2015 to January 2016)				
S.No.	Name	Topic	Instructor	Type
291.	Anirudh Sharma	Sensors For Bio-Medical Applications	Mary Lourde .R	SP
292.	Ishana Avinash Rajguru	Studies Of Treatment Of Medical Waste	Vijaya Ilango	SP
293.	Nahdi Khan	Multimedia Query Formulation And Execution In A Multi Campus Environment	Vijayakumar	SP
294.	Shajitha Seyed Ismail	A Predictive Data Mining Model For ETO	Alamelu Mangai	SP
295.	Kshitij Gupta	Dynamic Responsive Website Designing	Nandkumar	SP
296.	Aspiya A S	Design Of Embedded Multiprocessor System	Susanna	SP
297.	Shaleena Shaji	Steady State Stability Analysis Of A Synchronous Motor Fed By Bus.	Chattopadyay	SP
298.	Arvind Desikan	Design Aspects Of Direct Memory Access Controller	Anandkumar	SP
299.	Siddhartha Isukappalli	Renewable Energy For A Smart City	Mary Lourde	SP
300.	Dhruv Chandra	Energy Efficient LED Luminaries	Mary Lourde	SP
301.	Abdul Latif Shaikh Salim	Real Time Analysis Of A Fabrication Company Using Project Management Software	Priti Bajpai	SP
302.	Tooshank Sharma	Study Of Various Parameters Involved In Double Pendulum Using Differential Equation	Suhel A. Khan	SP
303.	Radhika Narain	Preparation And Characterization Of Nanoparticles Of Biological Substances	Saha	SP

**Special Lectures by Invited Scholars – 2015**

S.No.	Name	Topic	Date
1	Dr.Jyotirmay Mathur, MNIT, Jaipur,	Earth Air Tunnel Cooling System	January 17, 2015
2	Mr. T.P. Anand, Motivaluate Consulting & Training FZ LLC	Business Planning & Strategies	February 22, 2015
3	Mr. Jayan Ramankutty, CEO, BITSAA International	Interactive session on Internships & Business proposals	March 03, 2015
4	Prof. Ramesh Karri, Pricipal Investigator, CRISSP-AD, NEW YORK UNIVERSITY	Delivered A Talk On "Inter Disciplinary Studies In Security And Privacy: Opportunities For Practice School At Cyber Security Research Centre At New York University	March 8, 2015
5	Mr. Prem Talreja CEO, Fabricnet.com	Entrepreneurial Start-ups : Venture capital funding	March 8, 2015
6	Ms. Tanvi Bhatt, Euphoria Consulting	Start-ups	19-Mar-2015
7	Dr. Sonalmazumder, Assistant Professor, Chemical Engineering Dept., BITS PILANI, Rajasthan.	Comparative Study Of Polysaccharide-Drug Nano particles For Oral Drug Delivery	March 19, 2015
8	Prof. AP Arora, MDI, Gurgaon	Marketing Research	March 22, 2015 to April 4, 2015
9	Dr. Swapan Purkait, Nettech, Kolkata, India	A talk on Network Management	April 4, 2015
10	Mr. Somnath Mitra, Program Manager, IBM, New Delhi	A talk on Web 3.0 Technology	April 5, 2015
11	Dr. Vidya Rajesh, Asso. Prof And Asso. Dean ARD, BITS Pilani Hyderabad Campus,	A talk on Molecular Insights On Human Diseases: Malaria And Autism Spectrum Disorder	April 12, 2015
12	Prof. N. Rajesh, Professor, Dept. Of Chemistry, BITS Pilani Hyderabad Campus	A talk on Green adsorbents for heavy metal clean up from industrial waste water	April 12, 2015
13	Dr.Sasikumar Punnekkat, Director, Bits Pilani, K K Birla Goa Campus,	Delivered Talk On "Dependable Software Engineering And Embedded Systems" Using The Tele-Presence Class Room Facilities	April 13, 2015
14	Dr. Srikanta Dinda, Assistant Professor, Chemical Engineering Dept., Bits Pilani, Hyderabad.	A talk on Significance Of Ozone For Degradation Studies	May 4, 2015
15	Dr.Era Poddar, Ergo Era,	A talk on Ergonomic Principles For Automobiles (Organized By MEA)	May 4, 2015
16	Prof. Naufel Vilcassim, Prof. Rajesh Chandy, Prof. Vikrant Vig From Aditya Birla Centre	TP Classroom lecture from Hyd campus on Symposium on 'Business, Finance, Marketing and Entrepreneurship'	May 5, 2015
17	In Association with ADIB (Abu Dhabi Islamic Bank)	Financial Education Awareness Program - organized for the benefit of students. Total 92 students participated and vouchers worth AED 1500 were distributed to the students.	5-6 May 2015
18	Dr. K. N. Ponnani, Professor, Department Of Chemical Engineering , BITS Pilani, Goa Campus	A talk on Significance Of Ozone for degradation Studies	May 6, 2015



19	Mr. Amit Sinha, Project Manager, Gulf Metal Foundry, Uae	A talk on Quality Control In Manufacturing Industries - A Practical Perspective	May 7, 2015
20	Mr. Anbalagan Kandasamy, Founder, Marketing Partner, Proleed	A talk on HVAC Industry & Its Basics	May 7, 2015
21	Prof. Charles Matthews, Professor, University of Cincinnati, USA	A talk on regarding Study Abroad program from UC, USA	June 9, 2015
22	Ashok Deshpande Founding Chair: Berkeley Initiative in Soft Computing (BISC) - UC Berkeley CA. and former Deputy Director of (NEERI)/CSIR India)	Talk and interactive session on "Fuzzy logic is Not Fuzzy"	Sep 6, 2015
23	Mr. Devarun Ghosh, Brand Innovation & Marketing Design, Marico Middle East & Africa.	Interactive session on " Innovation Processes,New Product Development"	Sep 15, 2015
24	Mr. Saroj Rout, founder of <u>Mixignal Innovations LLC</u> , Vice President of <u>Woodlands Bullion Company</u> , PhD Research Candidate of Tufts University, Medford, MA, USA.	A talk on High performance on IC design	Sep 25, 2015
25	Man Mohan Sharma, Former Director, ICT Mumbai, Recipient of Padma Bhushan (1987) and Padma Vibhushan (2001), Fellow of Royal Society, London and Fellow of INSA.	A talk on Innovations in Chemical Industries	Oct 1, 2015
26	Mr. Phanindra Sama, Founder of RedBus.in, Mr.Jaswinder Singh Chadha, President & CEO of Axtria, Dr. Nayana Somaratna, Co-founder at Medical Joyworks	How to become a successful Entrepreneur - Entrepreneurial Journey	Oct 1, 2015
27	T.P.Anand, Strategy Advisor at Motivaluate Consulting & Training FZ LLC	Business Plan and Strategies	Oct 6, 2015
28	Dr. Jaspir, Zuleka Hospitals, UAE	breast cancer and the measures that has to be taken to reduce the risk	Oct 29, 2015
29	Mr. Thierry Driver - Director of Tableau Academic Program	Emerging trends in Data Science and Business	Nov 4, 2015
30	Dr. Sanjay Tiwari, US Fulbright Fellow, Ex Visiting Academic Cambridge University ,ICTP Italy Senior Associate and UGC Research Awardee SAARC Fellow	Interactive talk on Opto electronics & Photonics	Nov 11, 2015
31	Mr. Yatheendra Pai, Sales Manager, Siemens	Interactive talk on HVAC and Building management systems and career opportunities	Nov 16, 2015
32	Padmashri Dr. D. Balasubramanian, Ph D, Director of Research at LV Prasad Eye Institute,AP, India	Interactive talk on Sampling and Biostatistics Analysis for Developing Strategies for Prevention of Curable Eye Diseases	Nov 23, 2015
33	Dr. Siddhartha Sarkar, Director & HOD, IILM, College of Engineering and Technology,Noida, India	Start-up Entrepreneurs: Issues & Challenges	Nov 24, 2015
34	Mr. Somnath Mitra, Business Intelligence Delivery Lead, Xchanging Technologies, Gurgaon, India	Enterprise Resource Planning	Nov 24, 2015
35	Dr. Siddhartha Sarkar, Officiating Director & HOD, IILM, College of Engineering and Technology, Greater Noida, India.	Talk and interactive session on "Start-up Entrepreneurs: Issues & Challenges"	Nov 24, 2015
36	Mr. Shibu Davies, General Manager - Certification, HSE, MS Training & Lab, TUV Middle East.	Talk and interactive session on "Process Management"	Nov 24, 2015
37	Dr. Bansari Roy, Professor, Chemical dept, BITS Pilani, Pilani Campus, India	Talk and interactive Hydrogen production from Bio mass	Nov 25, 2015

38	Mr. Prashant Agarwal, Managing Director, Pragati Brands Consultants, Dubai	An Interactive session on "Irresistibly Irrational : Entrapments in Decision Making"	Nov 26, 2015
39	Ms Anjana Kamath, Senior Business Development Manager & Ms Geetha Nayak, Managing Partner, Design Infinity LLC – Dubai.	A Motivational talk by two women architectural engineers	Nov 29, 2015,
40	Dr. Amrish Kamboj, Chief operating Officer/ Pathologist, Eastern Clinical Laboratories. Dr. Rajarathinam Ayyanar Specialist Neurologist, Zulekha Hospital 11:15am-12:30pm Session 3:  Dr. Fatima Al Hashimi, Head of the Administration and Education Unit, Dubai Cord Blood And Research Center, Pathology and Genetics Department, Latifa Hospital Dubai Health Authority.  Dr. Antony thomas, Premier Diagnostics and medical centre, Dubai.	One day Interaction on Diagnostics and Healthcare with a Focus on Expo 2020	Dec 15, 2015
41	Dr. Mohan Jain, Adjunct Professor -Dept. Agricultural Sciences, University of Helsinki, Finland	1. Applications Of Tissue Culture On Crop Improvement And Conservation Of Genetic Diversity In Tropical Plants  2. Biotechnology And Induced Mutations In Crop Improvement"	2 & 5, April 2015

### LIST OF FACULTY MEMBERS WHO ATTENDED VARIOUS CONFERENCES AND PRESENTED PAPERS – 2015

#### Conference Proceedings

SNo.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
1	Mahendra Singh Thakur, Dr. M Madijagan.	“Selection of Sensor Architecture and Design of Sensor Framework for Blade Server and Data Centre Cooling System”	International Conference on Artificial Intelligence, Energy and Manufacturing Engineering (ICAEME'2015)	<a href="http://iieng.org/site/admin/upload/6440E0115015.pdf">http://iieng.org/site/admin/upload/6440E0115015.pdf</a>	January 7-8 2015 Dubai (UAE).
2	Bhavya Thakur, Aroul Murugan, Mahendra Singh Thakur.	“Design and Development of a Self Propelled Electricity Generator on a Cloudy Hill Top”.	International Conference on Artificial Intelligence, Energy and Manufacturing Engineering (ICAEME'2015)	<a href="http://iieng.org/site/admin/upload/5653E0115016.pdf">http://iieng.org/site/admin/upload/5653E0115016.pdf</a>	January 7-8, 2015 Dubai (UAE).
3	S. Parija, S Shazia Hasan	A modified adaptive Filtering algorithm for identification of a Denamic system	IEEE Conf. EECOSO-2015	ISBN:978-1-4799-7676-8	Jan 24-25th ,2015
	P.Raiguru, B.K. Sarap, Shazia Hasan	Performance analysis of Direction of Arrival estimation using model based approach	IEEE Conf. EECOSO-2015	ISBN:978-1-4799-7676-8	Jan 24-25th ,2015
4	Sreeja Rajendran, Mary Lourde R	Modelling and optimization of a cantilever based DNA sensor	IEEE International Conference on Electrical, Electronics, Signals, Communication and Optimization (EESCO) - 2015	pp. 1-4	January 2015
5	Sharma, A.; Capoor, G.K.; Chattopadhyay, A.B	Advanced Aircraft Electrical Systems to enable an All-Electric Aircraft	International Conference on Electrical Systems for Aircraft, Railway, Ship Propulsion and Road Vehicles (ESARS), 2015 (IEEE sponsored)	pp.1-6	3-5 March 2015 , Aachen, Germany
6	Akshay Moudgil, Shyam Sumukh S R, and Sundaram Swaminathan	Modelling of a Nano-Sensor for N2O Gas adsorption on Gallium and Phosphorus doped GNRFT	International Conference on Electrical, Computer and Communication Technologies (IEEE ICECCT 2015)	-	March 5 - 7 2015,Coimbatore, India
7	Ashwini. K., Swarnalatha, R., Prasad ,D.V., Abdul Razak	Modelling of a Nano-Sensor for N2O Gas adsorption on Gallium and Phosphorus doped GNRFT	International Conference on Electrical, Computer and Communication Technologies (IEEE ICECCT 2015)	pp 1 -4	March 5 - 7 2015,Coimbatore, India
8	Shazi Shah Jabeen, Aqila Rafiuddin	Factors Influencing Education Decision Making Process	21st Century Academic Forum Conference at Harvard University	pp. 208-220	March 8-10 2015 at Harvard University, Boston, USA
9	Ria Kottamurickal, Shazi Shah Jabeen	Corporate Social Responsibility Audit: An Exploratory Study	21st Century Academic Forum Conference at Harvard University	HRD-701	March 8-10 2015 at Harvard University, Boston, USA

SNo.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
10	Swarnalatha, R. and Prasad, D.V	Detection of Sleep Bruxism based on EEG Hilbert Huang Transform	5th International Conference on Biomedical Engineering and Technology (ICBET 2015)	pp 33 - 39	Seoul, South Korea, 10-11 March, 2015
11	Srinivas, R., Bhakar, P. and Singh, Ajit Pratap	Groundwater Quality Assessment in some selected area of Rajasthan, India Using Fuzzy Multi-Criteria Decision Making Tool	International Conference on Water Resources, Coastal and Ocean Engineering (ICWRCOE'15)	1023-1030	March 12-14 2015 , National Institute of Technology Surthkal, Mangalore, India
12	Nithya.K, B. Vijayakumar	Architectural Design for Allocation, Storage and Retrieval of Distributed Multimedia Data	International MultiConference of Engineers and Computer Scientists 2015, IMECS	pp. 184-188	March 18 - 20, Hong Kong
13	Gaurav Madan, Yashasvi Vedula, Anubha Varshney, Ranoo Sharma, B Vijayakumar	eAttendance System for Academic Institutions	International MultiConference of Engineers and Computer Scientists 2015, IMECS	pp. 382-386	March 18 - 20, Hong Kong
14	J. Alamelu Mangai, Bharat B. Gulyani	A Predictive Data Mining Model for Customer Response in Bank Telemarketing	Proceedings of International Conference on Evidence Based Management ICEBM	Volume 2, Page 656 - 661	March 20 2015, BITS PILANI, Pilani Campus.
15	Aqila R, Anomithra, Anurag.	Role of Supply chain management in the success of Entrepreneurs.	International Conference on Evidence Based Management 2015 (ICEBM2015)	-	March 20-21 2015 at BITS Pilani, Pilani campus
16	Vipul Parmarthi, Lajwanti Kishnani and Moin Siddique	Anita Desais- "Cry The Peacock –In Search of her Own Identity"	International Conference on Science Technology and Society	ISBN NO:81-902565- 6-4 Page Nos-541-544	March 21-22 2015,Indore (India)
17	Shalini K., Sarkar, A. K. and Singh, Ajit Pratap	Impact of PMGSY roads on Rural Accessibility: A case study in Rajasthan	National Seminar on 'Geoinformatics Applications in Rural Development, 26-27 March, 2015	-	March 26-27 2015, NIRDPR, Hyderabad
18	A Rangapriya Parthasarathy , Kalaichelvi .V, Swaminathan Sundaram	A Novel Fuzzy Logic Model for Multiple Gas Sensor Array	IEEE International Conference on Communication and Signal Processing	pp. 1159-1162	April 2-4, 2015, Melmaruvath ur,India
19	Rangapriya Parthasarathy, Heiko Hengen, Jagadish Nayak	Development of 3D Scanning Algorithms	IEEE International Conference on Communication and Signal Processing	pp. 1239 - 1242	April 2-4, 2015, Melmaruvath ur,India
20	Pratik sen and Dr.vadivel	,"Introduction to Fast Indexing Method for Images in Database",	International Conference on Digital Image Processing (ICDIP 2015)	-	April 9- 10,2015,Los angels, USA
21	Aquila Rafiuddin, Sindhu, Lajwanti Kishnani	"Comparative Study on Anxiety among Sports and Non-sports Personnel in India and UAE	Global Conference on Business Management and Social Sciences 2015	Under progress	April 24-25 2015,Dubai (UAE)
22	Udayakumar Rajamanickam, Anshul Singhal, and Miller Jothi	FRP Mold and Panel Manufacturing for FSAE Body Panel and Driver Seat	SAE, Year: April 2015	Proceedings 2015-01-0727	April 2015, USA
23	Raghav Gupta and Sundaram Swaminathan,	Modeling and Simulation of Piezoelectric based Micro Cantilever Systems	IEEE 4th International Symposium on Next-Generation Electronics	-	May 4-6 2015, Taipei, Taiwan

SNo.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
		for Prostate Specific Antigen	(ISNE 2015		
24	Akshay Moudgil, Shyam Sumukh S R, and Sundaram Swaminathan,	Modelling of a Sensor for Gas adsorption on P and Ga doped GNR FET	IEEE 4th International Symposium on Next-Generation Electronics (ISNE 2015	-	May 4-6 2015, Taipei, Taiwan
25	Neenu Sivanand, Srinivasan S V, Gomathi Bhavani	Physical Level IC Implementation for Speed Control of Three Phase Induction Motors	IEEE 4th International Symposium on Next-Generation Electronics (ISNE 2015	pp 297 - 302	May 4-6 2015, Taipei, Taiwan
26	V. Naranje, H.M.A. Hussein, S. Kumar	"Die Block Design selection for blanking die and die block segmentation	5th National Conference on Recent Advances on Manufacturing (RAM -2015)		May 15-17 2015, SVNIT, Surat, India
27	Dr. R. Mary Lourde	International Conference on the theme "Towards smarter Cities" organised	Information & Communication Technology Research Forum ICTRF 2015	Workshop	May 17-19 2015 Abu-Dhabi
33	Lajwanti Kishnani and Saheel Iqbal	"The Irony of the Indian Education System potryaed in the novel of Chetan Bhagat :Five Point Someone"	International Conference held at Manipal University Dubai	Under progress	May 21 2015
34	I.Mubeena, Maneesha,	"Analysis of written business communication competency in the hotel industry of Dubai",	International Conference of Academic Disciplines, Harvard Medical College,	-	May 25-30 2015, Boston, Massachusetts,
35	A.S. Rao,	" Entrepreneurial Growth : An Empirical Study on 'Issues & Challenges being faced by Micro level Women Entrepreneurs in UAE Region"	McGill International Conference	-	Feb 28 - March 1, 2015 at UAE University, Al Ain
36	Navnith Ravindran, Mary Lourde R	An Optimum VLSI Design of a 16-BIT ALU	Information & Communication Technology Research ICTRC 2015" organised by Khalifa University	pp. 52-55	May 2015,
37	Tina Francis, M. Madijagan , B Vijayakumar	Privacy Issues and Techniques in E-Health Systems	Proc. of Int. Conference ACM SIGMIS CPR 2015	pp.113-115	June 4-6, Newport Beach, California
38	Arvind Desikan.,V.Kalachelvi	Design for a Semi-Active Preview Suspension system using Fuzzy-Logic control and Image Processing Techniques	The 5th Annual IEEE International Conference on CYBER Technology in Automation, Control and Intelligent Systems	pp.191-196	June 8-12, 2015
39	Dev Dua, Sujala D. Shetty, Lekha R. Nair	Developement of a distributed cryptographic system employing parallelized CTR mode encryption	10th International Conference on Internet and Web Applications and Services	-	June 21 - 26, 2015 Belgium, Brussels
40	Akshay Moudgil, K.K. Singh, Sundaram Swaminathan,	"MEMS based Design and Analysis of a Biosensor for Detection of Hepatitis Virus",	15th IEEE International Conference on Nanotechnology IEEE NANO 2015,	-	July 27-30 2015, Rome, Italy
41	Dev Dua, Sujala D. Shetty, Lekha R. Nair	Applying Scalable Machine Learning Techniques on Big Data Using a Computational Cluster	The 16th International Conference on Internet Computing and Big Data	-	July 27-30, 2015, Las Vegas, USA
42	Arati Ajay, Mary	VLSI implementation of	Proceedings of	pp. 68 - 73	Montpellier,

SNo.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
	Lourde R	an improved multiplier for FFT computation in Bio-medical Applications	International Symposium on VLSI (ISVLSI 2015)		France, July 2015.
43	Susanna S Henry, Vijay Kumar, V. Santhosh Kumar, Gurwinder Singh.	Protocol Verification of Translation in Mobile Internet Protocol version 4 and 6.	8th International Conference on Advanced Computer Theory and Engineering (ICACTE 2015)	http://www.icacte.org	August 13-14 2015 Germany, Berlin .
44	Sebamai Parija,P. K. Dash, Shazia Hasan	Identification Of Non-linear Dynamic Systems Using Smooth Variable Structure Filter	IEEE Power, Communication and Information Technology Conference (PCITC)2015	ISBN: 978-1-4799-7455-9	Oct15-17 2015
45	Sarita Nanda, Shazia Hasan, S. S Pujari, P. K. Dash	A Fast Hybrid Adaptive Filter For Parameter Estimation Of Non Stationary Sinusoid Under Noise	IEEE Power, Communication and Information Technology Conference (PCITC)2015	ISBN: 978-1-4799-7455-9	Oct15-17 2015
46	Shazi Shah Jabeen, Ajay Jesse Thomas	Effectiveness of Online Language Learning	World Congress on Engineering and Computer Science 2015 (WCECS 2015) organized by International Association of Engineers (IAENG)	pp. 297-301	October 21-23 2015, University of California, Berkley (San Francisco), USA
47	Vishank Bhatia ., Kalaichelvi V., Karthikeyan R.,	Application of a Novel Fuzzy Logic Controller for a 5-DOF Articulated Anthropomorphic Robot	IEEE International Conference On Research In Computational Intelligence and Communication Networks	pp.208-213	Nov 20-22,2015, Kolkatta, India
48	Pushkala M.	Analysis of Differences in Managerial Perception of Current CSR Initiatives as against Future Expectations.	International Conference on Organization and Management organised	pp. 206	November 22-23 2015, Abu Dhabi University
49	Aastha Bhardwaj, Bhavi Bhavesh Thakker, Shazi Shah Jabeen	Corporate and Social Responsibility in Small and Medium Enterprises: Perspectives and Implementation	4th Annual Research Conference	-	November 26 2015, Abu Dhabi University, Abu Dhabi, UAE
50	Swati Sinha, TVC Sarma, Mary Lourde R	Simulation of Clutter & RFI in Wind Profiler Power Spectra	URSI-REGIONAL CONFERENCE IN RADIO SCIENCE, INC-URSI, INSA	-	November 2015, Jawaharlal Nehru University New Delhi,
51	Nabanita De and V.Kalaichelvi	Object Recognition Using Machine Learning Techniques	10th Annual workshop on Women in Machine Learning 2015	-	December 7 2015.,Montreal Canada
52	Vishank Bhatia.,Ganesh Ram R.k, Kalaichelvi V, Karthikeyan R.,	Application of Model Predictive Controller for 2DOF Robot Manipulator	10th International Symposium on Mechatronics and its Applications.,(IEEE xplore)	pp.1-5 (IEEE Xplore)	Dec 8-10.,2015,American University of Sharjah,UAE
53	Srinivas, R. and Singh, Ajit Pratap	Sustainability analysis of a stretch of Ganga river using fuzzy multi-criteria decision making approach	Hydro 2015 International: 20th International Conference on Hydraulics, Water Resources and River Engineering	Paper No. TS27:REFH-HYD-030	December 17-19 2015, IIT Roorkee, India

SNo.	Author(s)	Title of the Paper	Conference	Proceedings Pages/ Paper ID.	Date & Place
54	Mulchandani, H.K, and Singh, Ajit Pratap	Prediction of live storage of water resources using neural network time series model, case study on Mettur dam	20th International Conference on Hydraulics, Water Resources and River Engineering, 2015	Paper No. TS29:WR- HYD-030	December 17-19 2015, IIT Roorkee, India
55	Mishra, Raunak and Singh, Ajit Pratap and Sharma, Antriksh and Sarkar, A.K.	Short Term Traffic Prediction Using Monte Carlo Simulation	3rd Conference of Transportation Research Group of India (CTRG 2015)	Paper No. SIM: 515	December 18-20 2015 in Kolkata, India
56	Mishra, Dewal and Wagale, M. and Singh, Ajit Pratap and Sarkar, A. K.	Evaluation of Bus Route Operations Using Fuzzy AHP	3rd Conference of Transportation Research Group of India (CTRG 2015)	Paper No. TEPP- I: 568	December 18-20 2015 in Kolkata, India
57	Narayan, K Siddharth and Ajit Pratap Singh, M. Wagale, Sarkar, A. K.	Development of a Pavement Management system for rural roads using HDM-4	3rd Conference of Transportation Research Group of India (CTRG 2015)	Paper No.PER: 606	December 18-20 2015 in Kolkata, India
58	Sreeja Rajendran, Mary Lourde R	FinFET and their application as load switches in Micromechatronics	IEEE International Symposium on Nanoelectronics and Information Systems iNIS 2015	pp. 152 - 157	December 2015, Indore , India
59	Sathish Kumar R.S, C.Periasamy,	" FEA Analysis and Structure of the Solid Rocket Boosyer and External Tank",	Second International Conference on Innovative Trends in Science, Engineering and Management 2015.	-	Dubai, 2015
60	Swati Sinha, TVC Sarma, Mary Lourde R	Doppler Profile Estimation of MST Radar Data Using Multi-parameter Cost Function	IEEE International Conference on Radar, Antenna, Microwave, Electronics and Telecommunications (ICRAMET 2015)	pp 50-54	Bandung, Indonesia
61	S.Baskaran, and Jeffin George,	A Statistical Study Of Retail Online Transactions And Their Impact On Business Organization In Uae, Uae	Undergraduate Student Research Competition, Abu Dhabi University,	-	May 21 2015, Abudhabi, UAE
62	Vinayak dhingra, Hardeep Kumar, K.K.Singh,	Lamellar grating Interferometer FTIR spectroscopy and its applications: A review	IEEE Nano 2015 , Rome	-	2015
63	N.K.Manju nath, B. Muralidharan, J.Ethiraj	Preparation & characterization of gas diffusion layer for PEM fuel cell	National Conference On Applied Science and Humanities	-	May 5 2015, Bengaluru, Karnataka, India
64	J. Ethiraj , A.Nagarajan, B.Muralidharan,	Natural dye obtained from Bougainvllae bracts and its dyeing properties for safer environment	National Conference On Applied Science and Humanities	-	May 5 2015, Bengaluru, Karnataka, India

**LIST OF RESEARCH PUBLICATIONS – 2015****Journal Publications**

SNo.	Author(s)*	Title of the Publication	Journal	Vol No., Issue No., Year	Page Nos.
1	Sana Zakir Hussain, Sujala D. Shetty	Spatial Data Analysis on the Cloud	International Journal Of Geomatics And Geosciences, 2015	Vol-5, Issu-6	
2	C. Periasamy, M. Thiagarajan, P. Dhandapani,	Thermal Radiation Effect on Unsteady Hydromagnetic Convective Flow Past a Heated Stretching Sheet with Free Stream Pressure Gradient	United States of America Research Journal(USARJ), 2015	.Vol.5, No.1, 2015	49 -56
3	Devyani Vichare and Lajwanti Kishnani	Elements of Suspicion and Thrill in Sidney Sheldons-The other Side of Midnight	International Journal of Research on English Language Teaching Studies	Volume 3 (1) February 2015	Pages 24-28.
4	Pranay Sood, Neeru Sood and Trupti Gokhale	Microwaves: An Alternative Bacterial Sterilization Technique?	• 28-Aug-15	JBio Vol.3 No.2	
5	Seba S. Varghese, Sunil Lonkar, K.K. Singh, Sundaram Swaminathan, Ahmed Abdala,	Recent advances in graphene based gas sensors, Sensors and Actuators B	(2015)		218 pp160–183,
6	Pranavi Macharla, Jagadish Nayak	Communication Networks: Advancement to 4G	International Journal of Advances in Engineering & Technology (IAET)	Volume 8 Issue 2, Apr. 2015	p. 30-37
7	A.K. Vasudevan, Anand Kumar, R.K. Mittal,	Technology Diffusion: A Case of Cloud Computing in India", Chapter in Developing Country Perspectives on Public Service Delivery	Springer,	Springer, 2015.	Page 57-77
8	Aqila R, Anomitra B.	An Essay to returns to scale of Banks in UAE.	Asian Journal of Management Science and Education. Published by Leena Luna Publishers, Japan, 2015	Vol 4 No1, January 2015	Page Nos. 43-50
9	Lajwanti Kishnani	"Elements of Suspicion and Thrill in Sidney Sheldon's –The Other Side of Midnight "	International Journal of Research on English Language Teaching Studies, February 2015. <a href="http://www.ijelts.com/table-of-content-february-2015-31">http://www.ijelts.com/table-of-content-february-2015-31</a>	Volume 3 (1)	Pages 24-28
10	A.S.Rao,	"Impact of Transformational Leadership on Team Performance - empirical study in U.A.E."	Measuring Business Excellence, Emerald Publishers, June 2015	Vol.19, No.4	Pages 30-56
11	Dipti Razdan , A.B. Chattopadhyay	Some Aspects of Analysis of a Micromirror	Research Journal of Applied Sciences, Engineering and Technology	10(6): June, 2015 , ISSN: 2040-7467Maxwell	pp 652-662.



SNo.	Author(s)*	Title of the Publication	Journal	Vol No., Issue No., Year	Page Nos.
				Scientific Organization, 2015	
12	A.K.Vidyarthi, Ajit Pratap Singh, and Shrivastava. P	Environmental Impact Assessment of Industrial Clusters in Central India Using Fuzzy Decision Analysis	Int. J. Industrial Pollution Control	Vol. 31, Issue 2, 2015	pp. 215-223
13	Ajit Pratap Singh, Srinivas, R., Kumar, S. and Chakrabarti S.	Water quality assessment of a river basin under Fuzzy Multi-Criteria Framework', Int. J. Water, Volume 9(3), 226-247	International Journal of Water	Vol. 9, Issue 3, 2015	pp. 226-247
14	Parth Anant Berde and R. Gomathi Bhavani	Investigation of Energy savings potential for a University in Dubai	Journal of Emerging Trends in Engineering and Applied Sciences	Vol. 6, No. 7, ISSN: 2141-7024, 2015	pp. 231-235
15	K.Shalini, A.K.Sarkar, Ajit Pratap Singh, and S.S. Arkatkar	Quantification of Accessibility to Health Facilities in Rural Areas	J. Case Studies on Transport Policy, Elsevier	Vol. 3, Issue 3, 2015	pp. 311-320
16	Chakrabarti S., Ajit. Pratap Singh, Kumar. S	Assessment of Air Quality in Haora River Basin	Pollution Research	Vol. 34, Issue 2, 2015	pp. 425-432
17	Bulbul. B and Swarnalatha. R	Smart Home Automation System Using AVR Microcontroller	International Journal of Advanced Technology in Engineering and Science	Vol.3, No. 2,	pp.234-242
18	Shazi Shah Jabeen, Zakia Sadique and Mohammed Ayesh Towheed	Clarity in Communication: An Imperative	Journal of Humanities and Social Sciences, 2015	Vol. 1, No. 1, March 2015	pp. 18-24
19	Aqila. R.	Growth of Islamic banking in GCC: Journey and beyond International	Journal of Financial Services Management, IJFSM 2015, Inderscience Publishers	Vol 8 No 2, 2015	
20	Vilas H. Gaidhane, Y. V. Hote, V. Singh	Image focus measure based on polynomial coefficients and spectral radius	Signal, Image and Video Processing (Springer)	Vol. 9, Issue - 1, 2015	203 - 211
21	Vilas H. Gaidhane & Yogesh V. Hote	A New Approach for Stability Analysis of Discrete Systems	IETE Technical Review	Vol. 34, No. 1, 2015	1 - 6
22	M Sivapragash, PR Lakshminarayanan, R Karthikeyan, M Hanumantha V.	Flow stress modeling of as cast and welded ZE41A magnesium alloy at elevated temperature	International Journal of Applied Engineering Research,	2015	10 (8), 2015, p201
23	Chandrasekaran, D. Kanagarajan, R. Karthikeyan,	"Electro Discharge Machining of WC/Ni Mixed Ceramic",	Applied Mechanics and Materials,	2015	Vols. 813-814, pp. 309-316,
24	P.Vivek, R.Roopkumar, P.M urugakoothan,	Synthesis, growth, optimization, bulk SR method growth, fabrication of indigenous optoelectronic and anisotropic studies on	Journal of Crystal Growth	2015	40-48

SNo.	Author(s)*	Title of the Publication	Journal	Vol No., Issue No., Year	Page Nos.
		guanidinium L-monohydrogen tartrate (GuHT) single crystal for nonlinear optical device applications			
25	KD Choudhury, B Karmakar, M Das, TK Datta,	An inventory model for deteriorating items with stock-dependent demand, time-varying holding cost and shortages	OPSERACH (Springer)	2015	Vol 52 (1), 55-74, 2015.
26	Kavita S. Jerath, N.K.M iller Jothi, S. Karthiyayini and Akshay Sharma	Forecast Analysis of Potential and availability in Renewable Energy,	International Journal of Environ. Sc. and Dev.	2015	Vol 6, No 5, May 2015
27	Shrey Iyengar, Kaarthiyayini Sridhar and Kavita S. Jerath,	Analysis of elastic constants of Fe <sub>2</sub> B from X-Ray Diffraction technique,	International Journal of Emerging Technology and Advanced Engineering	2015	V 5, Issue 1, January 2015 ( ISSN 2250 – 2459 )
28	Suhel Ahmad Khan and Jia-Wei Chen	Gap Functions and Error Bounds for Generalized Mixed Vector Equilibrium Problems	J. Optim Theory Appl.	2015	V 166, Issue 3, pp 767-776 Springer Publication 2015
29	Suhel Ahmad Khan and Jia-Wei Chen,	Gap function and global error bounds for generalized mixed quasi variational inequalities,	Applied Math Computation, Elsevier Publication (USA)	2015	Vol 260, 1 , Pages 71–81
30	Suhel Ahmad Khan,	<u>Auxiliary problem and algorithm for a generalized mixed equilibrium problem,</u>	Society, Elsevier Publication (USA)	2015	<u>Volume 23, Issue 1, Pages 155-160</u>
31	Suhel Ahmad Khan, Farhat Suhel & SK Srivastava,	Auxiliary Principle Technique and Algorithm Aspect for Mixed Equilibrium problems	Journal of Nonlinear Analysis and Optimization: Theory & Applications	2015	Volume 5, Issue 2, Pages 61-70, 2015.
32	K. Kumar & Elavarasi Marindra	A study on the Motivational Dynamics and Socio Cultural Background of Women Entrepreneurs in the United Arab Emirates,	International Journal of Arts and Entrepreneurship,	2015	Vol. 4, Issue 4, 236-257, 2015
33	Seba S. Varghesea,b, Sunil Lonkara, K.K. Singh, Sundaram Swaminathan B.A. Ahmed Abdalad,	Recent advances in graphene based gas sensors,	Sensors and Actuators B 218	2015	(2015) 160–183,
34	M.Santhi, P.E.Kumar and B.Muralidharan	Removal of Malachite Green Dyes By Adsorption onto Activated Carbon – MnO <sub>2</sub> – Nanocomposite – Kinetic Study and Equilibrium Isotherm Analyses,	IOSR Journal of Applied Chemistry (IOSR-JAC) e-ISSN: 2278-5736.	<a href="http://www.iosrjournals.org/">http://www.iosrjournals.org/</a> DOI: 10.9790/5736-	Volume 8, Issue 4 Ver. I. (Apr. 2015), PP 33-41, 08413341
35	Vijayakumar.S, Morvin Yabesh J.E., Prabhu .S, Manikandan.R., Muralidharan B	Quantitative ethno medicinal study of plants used in the Nelliampathy hills of Kerala	India Journal of Ethnopharmacology	2015	2015, 161:238-254

**List of Higher Degree Dissertation Completed during 2015**

During the 2015, Higher Degree dissertation projects have been completed. The list of completed Higher Degree dissertations during Second Semester 2014-2015 is given in below

**Second Semester 2014-2015 (Feb 2015 to June 2015)**

S.No.	Name	Topic	Supervisor
1.	Satish Kumar P	Setting Up A New Business Venture In UAE - Benefits & Challenges	Mrs. Pushkala Muralidharan

**Higher Degree Dissertation**

During the 2015, Higher Degree dissertation projects have been completed. The list of completed Higher Degree dissertations during First Semester 2015-2016 is given in below

**First Semester 2015-2016 (Sept 2015 to Jan 2016)**

S.No	Name	Topic	Supervisor
1	Mayura Sarvesh Khanapurkar	Application Design And Development Using Tableau	Dr. M. Madijagan
2	Sarath Saleem	Big Data Visualization	Dr. Sujala D Shetty
3	C.R. Ramachandran	Design And Implementation Of Architectural Framework To Access The Application Software From A Remote Environment	Dr. M. Madijagan
4	Thatikonda Vinay Kumar	Software Architecture Design, Implementation And Testing Using Reflection Pattern For Document Management System	Dr. B. Vijayakumar
5	Anisha K	Design And Simulation Of Implantable Pacemaker Electrode And Scope Of Cmos/Nems Low Power Implementation In Implantable Pacemaker	Dr K.K. Singh
6	M. Asif	Sensors For Bio-Medical Applications	Dr. Mary Lourde
7	Nikhil N Deshmukh	Fpga Implementation Of FFT With Cordic Algorithm	Dr Abdul Razak
8	Thaker Mrugesh Jitendrabhai	Asic Design And Verification Of Sdram Controller	Dr. Jagadish Nayak
9	Akshay Moudgil	Mems Based Biosensor System For Virus Detection	Dr K.K. Singh
10	Faisal M Aslam	Explore The Impact Of Fire Dynamics Study On Oil And Gas Industries By Development Of Simulation	Dr. N. K.Miller Jothi
11	Samba Vishweshwar	Analysis & Simulation Of 3dof Planar Manipulator	Dr. Ram Karthikeyan
12	Krishna Kumar. R.	Design Of Retractable Air Wing With Flexible Composite Materials	Dr. Vishal Naranje
13	Renish K R	Energy Conservation In Utility Distribution	Dr. R. Udayakumar
14	Jatanshu Chawla	Design And Analysis Of Pressure Vessels Used In The Oil & Gas Industry	Dr.Sankaram
15	Arun Menon P	Design Of Air Lift Bearing.	Dr.C.Periasamy
16	Arun Bose	Fabrication Of Air Lift Bearings	Dr. Mallika Parveen

<b>S.No</b>	<b>Name</b>	<b>Topic</b>	<b>Supervisor</b>
17	Rishank Vats.	Micro Level Entreprises In Uae : Growth Patterns	Dr. Srinivasa Rao
18	Rosemol Pappachan.	Dms And Digitization In U.A.E.	Dr.Sujala D Shetty
19	M.R. Aneesh Kumar.	Sme / Micro Level Entrepreneurs : Issues & Challenges In U.A.E.	Dr. Srinivasa Rao
20	Sreevidya V.L.	Case Study Of Supply Chain Management In A Larage E-Commerce Company	Dr. Sujala D Shetty
21	Arshiya Begum.	Application Of Information Technology In Accounting	Ms. Aqila R
22	Vivek. A.	Conflicts In Multinational Organization : Analysis O F Various Factors Its Effects And Potential Resoulution Options	Ms. Aqila R
23	Divya Keerthika M.	Business Proposal For A Start-Up Manufacturing Facility	Ms. Pushkala M.
24	Hari Prasad A.	Human Resource Management Practices In Mid Sized Organizations In U.A.E.	Dr. Srinivasa Rao
25	Venkata Mounika Sikharam	Modes Of Financing A Start-Up In Uae & India - Study & Comparative Analysis	Ms. Pushkala M.

**List of First Degree Thesis****Second Semester 2014-2015 (Feb 2015 to June 2015)**

S.No	Name	Topic	Supervisor
1	Prabhmehar Singh	Corrosion Protection in Offshore Oil & Gas Platforms	Dr. B. Muralidharan
2	Faraz Luqman Bilgrami	Design and Simulation of Solar-Powered Electric Grid using MATLAB - Simulink	Dr. Adhir B. Chattopadhyay
3	Yash Jayesh Shah	Study of Microstructure and Production of Ti6Al4V using Power Metallurgy	Dr. N.K. Miller Jothi
4	Yogin Ramesh Pambhar	Tribological Behavior of Die-Steel	Dr. R Karthikeyen
5	Aviral Talwar	Design & Analysis of Magnetic Induction Brakes	Dr. M.V.N.Sankaram
6	Ishan Mehra	Design of Automated Aerodynamic Drag Reduction System used in Automotive Racing Vehicles	Dr. C.Periasamy
7	Sana Zakir Hussain	Cloudlet Based Face Recognition	Dr. S. Vadivel
8	Sreekaavya K	Software License Audit and Compliance	Dr. Alamelu Mangai
9	Dev Dua	Architectural and Performance Analysis of Cross-Platform Mobile Applications Developed Using XAMARIN	Dr. Sujala D. Shetty
10	Raunaq Paul	Contextual Data handling in a Distributed Computing Environment (Cloud)	Dr. M Madijagan
11	Abhishek Ravichandran	Quantifying Uncertainty in a Sensorimotor Reaching Task	Dr. Sujala D. Shetty
12	Aishwarya Jain	Stock Price Predication using Machine Learning Techniques	Dr. V. Santhosh Kumar
13	Faraaz Zaman	Development and Coding of Gaming Applications on a Mobile Device	Ms. Susanna Henry
14	Akshay Srivastava	Empirical Decomposition of EEG to Determine the onset of Epilapsy	Dr. D.V.Prasad
15	Adonis Jacob D'mello	Selection of Nano-particle Carriers for the Encapsulation of Industrially used Enzyme - Amylase	Dr. Neeru Sood
16	Amees Darji	Selection of Nano-particle Carrier for the Encapsulation of Industrially used Enzyme Cellulase	Dr. Trupti Gokhale
17	Elavarasi Marindra Rajasekar	A Study on the Motivational Dynamics and socio-cultural Background of Women Entrepreneurs in the UAE	Dr. K. Kumar
18	Cherlakola Nitish Reddy	Adoption of Green Building Practices	Dr. R Gomathi Bhavani
19	Aashna Mittal	ERP Implementation of SAP HANA	Dr. S. Jeyalatha

**First Semester 2015-2016 (Sept 2015 to Jan 2016)**

S No	Name	Topic	Supervisor
1	Manisha Kakwani	Design Of An Energy Efficient And High Performance Floating Point Unit For A Processor	Dr. M. Madijagan
2	Balaji Premraj Prithvi	Micro Structural Analysis Of Heat Treated Die Steel	Dr. Vishal Naranje
3	Ramees Abdul Salam	Design & Analysis Of Car Control System	Dr. M.V.N Shankaram
4	Vishnu Sunil Nair	Net Power Neutrality For BPDC	Dr. Perisamy

S No	Name	Topic	Supervisor
5	Madhu Nagarajan	Engineering Concepts In Industrial Product Design - A Case Study Of Car Seal	Dr. Mallika Parveen
6	Sahibjit Singh	Design of a Content Based Recommender System For Search Application	Dr. B Vijaya Kumar
7	Snatika Sarkar	A Chemical And Pathogen Analysis Of Grey Water Treated By Different Methods And Determination Of Its Range Of Applications After Treatment	Dr. B B Gulyani
8	Subramanian Seshadri C Aiyer	Optimization Of Macro Nutrient Kinetics For CO <sub>2</sub> Sequestration In Nostoc Caldicola	Dr.B.G.Prakash Kumar
9	Geet Krishna Capoor	Air Craft Design Methodology And Sustainability To Enable An Electric Aircraft	Dr. A.B Chatopadhyay
10	Sakhamuri Maruti Sai Dhiraj	Design And Analysis Of A Formula SAE Suspension System	Dr.N.K.Miller Jothi
11	Janak Nambiar	Topology Optimization Of A Space Frame Chassis	Dr. R. Udayakumar
12	Ganesh Ram R K	Condition Monitoring And With Multi Agent Mechanism For External Non Contact Smart Inspection Of Buried Pipelines	Dr. Ram Karthikeyan
13	Likitha S	Intelligent Text Analysis And Classification System Using Machine Learning	Dr. Siddhaling Urolagin
14	Aalap Dhiraj Shah	Bootstrapping Localization Using Depth Information	Dr. Sujala D. Shetty
15	Prashast Srivastava	Lightweight Code Self Verification For Internet Of Things (IOT) Devices	Dr. Alamelu Mangai
16	Sushant Gayawal	Design And Implementation Of Workflow For A Web Application	Dr. V.Santhosh Kumar
17	Burde Prerana Kamath	Big Data Machine Learning Comparative Analysis Of R, Rspark And Pyspark On Amazon Web Services	Dr. Sujala D. Shetty
18	Srishti Singh	Screening Of Microbial Biodiversity In The United Arab Emirates	Dr. Neeru Sood
19	Gayathri Ganesh	Synthesis Of Metal Nano-Particles Using Stenotrophomonas Maltophilia And Bacillus Subtilis.	Dr. Trupti Gokhale

Annexure B4-15  
(3 pages)**DETAILS OF DISTRIBUTION OF PS I STUDENTS AND FACULTY OVER PRACTICE SCHOOL- I STATIONS DURING THE SUMMER TERM 2014-2015 (08.06.2015 – 05.08.2015)**

S.No.	Station	No. of Students	No. of Faculty
<b>e. Stations in United Arab Emirates (UAE)</b>			
<b>la. Stations at Abu Dhabi</b>			
1.	Automech Engineering Co. LLC	2	1
2.	DBA Infotech	3	1
3.	Denholm Yam Contracting Company	4	1
4.	Global Enterprises Trading Co. LLC	3	1
5.	Jazeera Emirates Power	2	1
6.	Maricon Electromechanical Contracting & Trading LLC	1	1
7.	Protiviti	2	1
<b>lb. Stations at Ajman</b>			
8.	Elfit Arabia*	2	1
9.	Lavish Livings International FZE	5	1
<b>lc. Stations at Dubai</b>			
10.	Al Abbas Group	5	1
11.	Al Ghandi Elelctronics*	4	1
12.	Al Khaleej Sugar	2	1
13.	Al Shirawi Enterprises LLC	3	1
14.	Automation & Power Solutions Project Est.	6	1
15.	BITS IT Solutions LLC	5	1
16.	Cluttons	2	1
17.	Constellation Marine Services	3	1
18.	Crude Energy	4	1
19.	Eastern Biotech and Life Sciences FZ LLC	3	1
20.	Emerson Process Management FZE*	3	1
21.	Emirates Aviation	6	1
22.	Emirates Glass LLC	3	1
23.	Energy Automation System Inc *	5	1
24.	ETA Mechanical & Electrical*	5	1
25.	ETA Star Portal LLC*	8	1
26.	Euro Forge Middle East Trdg LLC	3	1
27.	FedEx Express	5	1
28.	Fujisoft Technology LLC*	5	1
29.	Globelink West Star Shipping LLC	3	1
30.	Granteq	3	1
31.	Grundfos	5	1
32.	Gulf Wireless and Television Co. LLC	4	1
33.	Hitech Industries FZE	2	1
34.	Hitech Power Solutions LLC	4	1
35.	Intercoil International LLC*	6	1
36.	Interplast Co. Ltd.	3	1
37.	Kingsmen Middle East LLC*	3	1
38.	Levtech Consulting*	3	1

S.No.	Station	No. of Students	No. of Faculty
39.	Metadata Technologies FZ LLC	3	1
40.	Miltec Rugged Computing Solutions LLC	4	1
41.	MSD*	3	1
42.	Paramount Computer Systems FZ LLC*	2	1
43.	Protiviti*	5	1
44.	Q-People	2	1
45.	RAS Infotech Ltd.	3	1
46.	Roto Packing Materials Ind. Co. LLC	3	1
47.	Sanbook Quality Consultancy	8	1
48.	Scan Technology LLC	5	1
49.	Sciencetech*	2	1
50.	Screen Check ME FZ LLC	3	1
51.	Steinweg-Sharaf FZCO	5	1
52.	Spira Power Gasket Manufacturing LLC	3	1
53.	Systecnic Solutions LLC	3	1
54.	TechRobotix FZCO	3	1
55.	Telematics	4	1
56.	Topnet Distribution FZCO*	2	1
57.	Trans Gulf Electro Mechanical LLC*	3	1
58.	Trust Contracting LLC	6	1
59.	Twinvey Electric Consultancy	2	1
60.	Wizard Interiors and Design LLC	4	1
61.	Young & Mubeen Controls*	4	1
62.	Zio Technologies LLC*	2	1
<b>Id. Stations at Ras Al-Khaimah</b>			
63.	RAK Ceramics	4	1
<b>Ie. Stations at Sharjah</b>			
64.	Cluttons	2	1
65.	Computer Networks	2	1
66.	Consilium Middle East FZC	3	1
67.	Diplomat Engineering	4	1
68.	L&T Sharjah	4	1
69.	Petrofac International Ltd.*	6	1
70.	Verger et Delporte Ltd.	4	1
<b>II. Stations in India</b>			
<b>Ila. Stations at Chandigarh</b>			
71.	Bhushan Power & Steel Limited	5	1
72.	Central Scientific Instruments Organisation (CSIO)	6	1
73.	Ess Ess Bathroom Products Pvt. Ltd.	2	1
<b>Ilb. Stations at Delhi</b>			
74.	Fortis Escorts Heart Institute & Research Centre	6	1
75.	Indian Oil Corporation Limited	5	1
76.	Religare Enterprises Ltd.	5	1
77.	Sun Flag Iron And Steel Company	6	1
78.	Tecumseh Products	5	1
<b>Ilc. Stations at Hyderabad</b>			



S.No.	Station	No. of Students	No. of Faculty
79.	Aurobindo Pharma	8	1
80.	Euroflex India	3	1
81.	Sujana Metal Products Ltd.	4	1
<b><i>IId. Stations at Mumbai</i></b>			
82.	Boxco Logistics India Pvt. Ltd.	3	1
83.	L & T Infotech	5	1
84.	Intellect Design Arena Limited	5	1
85.	Tech Mahindra	5	1
86.	BIOKIT	3	1

**Summary:**

Total number of students	324
Total number of Stations	86
Total number of Faculty	29**

**Note:**

\* - also PS II station

\*\* - Each PS I Faculty was allotted more than one station to monitor.

**SOME PRACTICE SCHOOL- II STATISTICS**

Statistical Details of the Distribution of Students &amp; Faculty over Practice School-II during the year 2015:

S.No.	Name of the PS Station	Second Semester 2014-15 01.02.2015 – 02.07.2015		First Semester 2015-16 06.08.2015 – 13.01.2016		Total No. of Students
		No. of Students	No. of Faculty	No. of Students	No. of Faculty	
<b>A. Stations at Abu Dhabi</b>						
1	Honeywell	2	1	-	-	2
2	Litwin PEL LLC	2	1	-	-	2
3	Maricon Electromechanical Contracting & Trading LLC	-	-	1	1	1
4	Siemens	1	1	-	-	1
5	ThyssenKrupp Elevator	-	-	1	1	1
6	Tyco	2	1	-	-	2
<b>B. Stations at Ajman</b>						
7	Elfit Arabia	3	1	3	1	6
8	Lavish Livings International FZE	-	-	4	1	4
<b>C. Stations at Dubai</b>						
9	ABB	-	-	1	1	1
10	Adapt Middle East LLC	-	-	2	1	2
11	Advance Technical Spare Parts Co LLC	2	1	-	-	2
12	Aerizo	-	-	3	1	3
13	Al Abbas Group	-	-	3	1	3
14	Al Ghandi Auto	3	1	-	-	3
15	Al Ghandi Electronics	-	-	3	1	3
16	Al Tamimi Engineering Services LLC	2	1	2	1	4
17	AMSA Renal Care FZ LLC	4	1	-	-	4
18	Aristo Star General Trading LLC	2	1	-	-	2
19	ATECO	-	-	1	1	1
20	Azbil Corporation	2	1	2	1	4
21	Central Motors & Equipment (BOSCH)	2	1	1	1	3
22	Crude Energy LLC	-	-	6	1	6
23	Cube Innovation	-	-	3	1	3
24	D-Link Middle East & Africa	-	-	3	1	3
25	Dodsall Group	2	1	-	-	2
26	Doxnation	-	-	2	1	2
27	Dulsco	4	1	-	-	4
28	Emerson Process Mgt. FZE	12	1	16	1	28
29	<b>Energy Automation Systems, Inc. (EASI)</b>	-	-	3	1	3
30	Evanssion	3	1	-	-	3
31	Fujisoft LLC	5	1	-	-	5
32	Gateway Computers LLC	-	-	3	1	3
33	Heinz International	2	1	-	-	2
34	ICBA	2	1	-	-	2

35	ICT Health LLC	-	-	2	1	2
36	Indata Oilfield Equip. Mnfg.	6	1	-	-	6
37	Intercoil International LLC	4	1	7	1	11
38	Johnson Controls	-	-	4	1	4
39	Kingsmen Middle East LLC	3	1	-	-	3
40	KPTAC Technologies	3	1	3	1	6
41	L&T Automation	8	1	3	1	11
42	Larsa Scientific	3	1	-	-	3
43	Levtech Consulting	3	1	3	1	6
44	Lucy Switchgear FZE	3	1	2	1	5
45	Medcare Hospital	1	1	2	1	3
46	Merck Sharp & Dohme	5	1	6	1	11
47	Metadata Technologies FZ LLC	2	1	3	1	5
48	Olive Technologies	-	-	2	1	2
49	Paramount Computer Systems Free Zone LLC	2	1	-	-	2
50	Prime Health Care Group LLC	-	-	1	1	1
51	Proserv Middle East	3	1	2	1	5
52	Protiviti	4	1	2	1	6
53	Redcube Systems LLC	2	1	2	1	4
54	Sanbook Quality Consultancy	-	-	7	1	7
55	Scan Technology LLC	-	-	2	1	2
56	Sciencetech	3	1	4	1	7
57	Siemens	4	1	7	1	11
58	Silex	4	1	-	-	4
59	Steinweg - Sharaf FZCO	-	-	3	1	3
60	Systechnic Solutions	-	-	2	1	2
61	Thyssenkrupp Elevator	6	1	3	1	9
62	Topnet Distribution FZCO	2	1	6	1	8
63	Trans Gulf Electro Mechanical LLC	5	1	-	-	5
64	YallaSpree	-	-	4	1	4
65	Young and Mubeen Controls	6	1	5	1	11
66	Zio Technologies LLC	3	1	2	1	5
<b>D. Sharjah</b>						
67	Central Motors BOSCH	-	-	3	1	3
68	Diplomat Engineering LLC	-	-	6	1	6
69	ESRI	2	1	2	1	4
70	Gulf Petrochem	3	1	-	-	3
71	L&T Hydrocarbon	-	-	3	1	3
72	Petrofac International Ltd.	4	1	-	-	4

**Summary:**

Total No. of PS II stations in Semester II – 45

Total No. of PS II stations in Semester I – 50

Total No. of students in Semester II – 151

Total No. of students in Semester I – 166

Common Stations in Both Semesters – 23

\* 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

<b>PRACTICE SCHOOL II</b>					
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
	II	January 2010 to July 2010	59	163	52

<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>
		(31.01.2010 to 14.07.2010)			
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

## FACILITIES AVAILABLE AT PSI STATIONS DURING THE YEAR 2014-2015

S. No.	STATION	Out of Pocket allowance in AED & other facilities
<b>I. Stations in United Arab Emirates (UAE)</b>		
<b>la. Stations at Abu Dhabi</b>		
1	Automech Engineering Co. LLC	1000
2	DBA Infotech	1000
3	Denholm Yam Contracting LLC	1000
4	Global Enterprises Trading Co. LLC	1000
5	Protiviti	2000
<b>lb. Stations at Ajman</b>		
1	Elfit Arabia*	750
2	Lavish Livings International FZE	1500
<b>lc. Stations at Dubai</b>		
1	Al Abbas Group	1000
2	Al Ghandi Electronics*	1000
3	Al Khaleej Sugar	1000
4	Cluttons	1500
5	Constellation Marine Services LLC	750
6	Crude Energy	1000
7	Emerson Process Management FZE*	500
8	Energy Automation System Inc *	1000
9	Fujisoft Technology LLC*	1000
10	Globelink West Star Shipping LLC	1000
11	GRANTEQ	500
12	Intercoil International LLC*	2000
13	Kingsmen Middle East LLC*	1000
14	Levtech Consulting*	750
15	MSD*	2000
16	Paramount Computer Systems FZ LLC*	1500
17	Protiviti*	1500
18	Q-People	750
19	RAS Infotech Ltd.	1000
20	Roto Packing Materials Ind. Co. LLC.	750
21	Sanbook Quality Consultancy	500
22	Sciencetechnic*	1000
23	Screencheck ME FZ LLC	750
24	Topnet Distribution*	1000
25	Young & Mubeen Controls*	1000
26	Zio Technologies LLC*	1000
<b>ld. Stations at Sharjah</b>		
1	Cluttons	1500
2	Petrofac International Ltd.*	4500

**FACILITIES AVAILABLE AT PS II SEM I STATIONS DURING THE YEAR 2015-2016**

S. No.	STATION	Out of Pocket allowance in AED & other facilities
<b>I. Stations in United Arab Emirates (UAE)</b>		
<b>la. Stations at Abu Dhabi</b>		
1	Thyssenkrupp	1500
2	Time Electro Contracting	1000
<b>lb. Stations at Ajman</b>		
1	Lavish Livings International FZE	1500
<b>lc. Stations at Dubai</b>		
1.	ABB	1800
2.	Adapt ME	1000
3.	Al Abbas Group	500
4.	Al Tamimi	1000
5.	Azbil Corporation	800
6.	Cube Innovation,Deira	750
7.	D Link ME,JAFZA	1500
8.	Doxnation,JLT	1000
9.	Emerson Process Mgt. FZE,JAFZA	2000
10.	Energy Automation	1300
11.	Gateway Computers	1350
12.	ICT Health	3000
13.	Intercoil,AI Quoz	2000
14.	Johnson Controls	1000
15.	KPTAC Technologies,Silicon Oasis	5000
16.	L & T Electrical & Automation,JAFZA	2000
17.	Lucy Switchgear FZE,JAFZA	1500
18.	Medcare,Jumeirah	1000
19.	Metadata Technologies,DIC	1000
20.	MSD,Health Care City	2000
21.	Olive Technologies	1000
22.	Proserv ME	1000
23.	Redcube Systems LLC	1000
24.	Rotopacking	1500
25.	Sanbook Consultancy	500
26.	Scientechnic	1000
27.	Siemens	3000
28.	Steinweg sharaf	1500
29.	Systechnic,Deira	1500
30.	Topnet Distribution	1500
31.	Yalls Spree	750
32.	YM controls	750
33.	Zio Technologies	1000
<b>ld. Stations at Sharjah</b>		
1	Central Motors & Equipment (BOSCH)	2000
2	ESRI	3700
3	L& T Hydrocarbon	1500

**LIST OF PROJECT ASSIGNMENTS FOR PS II - SECOND SEMESTER 2014-15**

1.	Advance Tech Spare Parts Co., Dubai
1.	Thermal Insulation, Scroll Compressor And Product Cataloguing
2.	Nano Insulating Materials And Condensing Units
2.	Al Ghandi Auto, Dubai
3.	Overhauling Of Trakker Gear Box
4.	Analysis Of Suspensions In Vehicles
5.	Diagnosis Servicing And Repair Of Automobiles
3.	Altamimi Engg Services, Dubai
6.	Study Of Mechanical and Plumbing Systems And its Estimation Procedure
7.	Design, Installation and Maintenance Of Electrical Systems
4.	AMSA Renal Care FZ LLC, Dubai
8.	Detailed study on chronic renal failure
9.	Working of the Heamo-dialysis machine and the participating parameters and materials used for its construction
10.	Study of haemoglobin trends in dialysis patients
11.	Analysis of the RO treatment plant
5.	Aristo Star General Trading LLC, Dubai
12.	Angular JS an open-source Web Application Framework
13.	Model View Controller Programming using Backbone JS
6.	Azbil Corporation, Dubai
14.	Hvac Bms Graphics
15.	Azbil BMS Management, Structure And Integration
7.	Central Motors & Equipment (BOSCH), Dubai
16.	Business Development at Central Motors & Equipment, Dubai, UAE
17.	Bosch Power Tools and CME Dealer Schemes
8.	Dodsai Engg. Construction Pte. Limited, Dubai
18.	Design Of Static And Dynamic Equipment Utilized In The Process Industry
19.	Design And Calculations For Storage Tanks In Oil And Gas Field
9.	Dulsco, Dubai
20.	Study Of Air Conditioning System In Vehicles
21.	Design And Fabrication Of Cyclonic Separator
22.	Troubleshooting Truck Hydraulics
23.	IT Hardware And Network Support
10.	Elfit Arabia, Ajman
24.	Solar Power System in Elfit Arabia
25.	Optimisation and analysis of hydraulic circuit at Elfit Arabia
26.	IT infrastructure Development of Elfit Arabia
11.	Emerson Process Mgt. FZE, Dubai
27.	Application Of Lean And Six Sigma In An Assembly Plant For Control Valves
28.	Coordinate Measuring Machine
29.	Instrumentation Measurement, Control & Piping In A Process Industry
30.	Control Valves And Positioners And Their Industrial Applications
31.	Quality Control
32.	Differential Pressure Level Measurement, Dmmc
33.	Role Of The Planning Department In Rosemount, Emerson FZE



	34.	Oracle Web Based Tools - Functions And User-Benefits
	35.	Use Of Magnetic Level Indicator Assembly Over Displacer Arrangement
	36.	Improvement in sourcing component parts and Scheduling orders based on leadtime
	37.	Managing Business Process Complexities in a Manufacturing Engineering Organization
	38.	Life Cycle Processes
12.	ESRI Global, Sharjah	
	39.	Python Raster Functions
	40.	"Landsat 8 Application and Image Service Widgets for WebApp Builder
13.	Evanssion Middle East, Dubai	
	41.	Develop an Iphone Application using Model View Controller Architecture
	42.	Marketing Plan for Evanssion
	43.	Sales - Engineering : POC Of Various Products
14.	Fujisoft, Dubai	
	44.	Data Center Storage and Virtualization
	45.	Web Design and Development
	46.	Big Data: Services, Solutions, Technology and Analytics
	47.	Product Management - IPTV and AMC
	48.	Cisco Networking Devices, WebEx and Virtualization
15.	Gulf Petrochem, Sharjah	
	49.	Oxidation of Grease and Polymer Modified Bitumen
	50.	Quality Testing of Lubricants and Manufacturing, Storage and Handling, and Environmental Aspects of Bitumen
	51.	Oxidation of Grease and Polymer Modified Bitumen
16.	Heinz International, Dubai	
	52.	Business Planning and Financial Management at Heinz
	53.	Financial Administration and Operations Management at Heinz
17.	Honeywell (Abu Dhabi)	
	54.	Distributed Control System and Remote Telemetry Unit and their Implementation in Oil Fields
	55.	Architecture and Implementation of Distributed Control Systems in C300 & RTU's
18.	ICBA, Dubai	
	56.	Biochar and its application in increasing crop yield
	57.	ICBA Website
19.	Indata Oilfield Equip. MFG, Dubai	
	58.	A Study on Manufacturing of Oil and Gas Equipments
	59.	A Study of A60 Offshore Pressurized Cabin
	60.	A Report on the Oilfield Industry and its Equipments
	61.	A Report of Study on Oil Rigs
	62.	A Report on Equipments in Oilfield Industry
	63.	A Project on Estimations and Proposals Department in Oilfield
20.	Intercoil, Dubai	
	64.	Pneumatic System Analysis In An Industry
	65.	Enterprise Resource Planning & its importance to an Industry
	66.	Study And Analysis Of Mattress Production Processes In An Industry
	67.	Utilisation Of Cnc Methods In Carpentry
21.	Kingsmen Middle East LLC, Dubai	
	68.	Event Management - Procedures&Challenges
	69.	Work of Joinery Department in Events&Exhibitions
	70.	The experience of Events department in Kingsmen

22.	KPTAC	
	71.	Evergreen Hospitality industry in UAE
	72.	KPTAC Technologies in development of New mobile applications using Zomato restaurant
	73.	Innovation in Hospitality industry in UAE
23.	L & T Electrical & Automation, Dubai	
	74.	Engineering Design and Testing of Integrated Control and Automation Systems
	75.	Role of QC and Manufacturing
	76.	Software Development and Signal Testing
	77.	HR Practices and Business Development Principles for MNCs
	78.	Role of Technical Documentation in Project Management
	79.	Engineering and Configuration of Telecom System
	80.	Preparation of Technical Documents
	81.	Design, Engineering, Manufacturing and Testing of Control Systems
24.	Lamprell Litvin (Abu Dhabi)	
	82.	Working and Functions of Instrumentation Valves in Oil and Gas Industries in the UAE
	83.	Scope of Communication in offshore and onshore oil fields
25.	Larsa Scientific, Dubai	
	84.	Electrical Design
	85.	HVAC Design
	86.	Metrology
26.	Levtech Consulting, Dubai	
	87.	Microsoft Dynamics
	88.	Web Development using a CMS and Graphic Designing
	89.	Elapco mobility software
27.	Lucy Switchgear FZE, Dubai	
	90.	Analysis of current contract activities and documenting processes maps for the new ERP AX Dynamics system (being implemented at Lucy Electric, Dubai)
	91.	Automation of Data Work in Supplier Follow Up Process
	92.	Digital Signage and its Implementation in Lucy Electric
28.	Medcare, Dubai	
	93.	Human Resource Management Systems
29.	Merck Sharp & Dohme (MSD Gulf), Dubai	
	94.	Management of Information Systems and Data Handling
	95.	Impact fo Sales Force Effectiveness and CRM Analytics in Pharmaceutical Industry
	96.	Marcos: A practical Approach in Saving Time and Enhancing User Experience
	97.	Creation and Automation of Testing of Digital Detail Aids
	98.	Design Efficiency in Promotional Material Management
30.	Metadata, Dubai	
	99.	Study of functionalities of Microsoft Dynamics CRM.
	100.	"How Customer Relationship Management Benefits Real Estate Sector in UAE.
31.	Paramount Computer Systems FZ, Dubai	
	101.	Remote Access Lab for Penetration Testing
	102.	Information Security, Virtualization and Networks
32.	Petrofac, Sharjah	
	103.	Extraction of Heavy Oil
	104.	Project and Proposal Stage Work Execution
	105.	"Integrated Control & Safety System
	106.	Integrated Control & Safety System"

33.	Proserv, Dubai	
	107.	Working of Injection Skids
	108.	Hydraulic Sysytems
	109.	Supply Chain Management
34.	Protiviti, Dubai	
	110.	Business Continuity Management System
	111.	IT Strategy in Oil and Gas Industry
	112.	Data Leakage Prevention
	113.	Study and Implementation of Business Continuity Management
35.	Redcube System LLC, Dubai	
	114.	Closed Circuit Television Systems and Access Control Systems
	115.	Structured Cabling Systems and Audio Visual Systems
36.	Sciencetech, Dubai	
	116.	Estimation And Designing-Building Technologies Division
	117.	Commissioning & Manitenance - Building Technologies Division
	118.	Fire Alarm & Emergency Lighting System-Building Technologies Division
37.	Siemens (Abu Dhabi)	
	119.	Substation Control and Monitoring System
38.	Seimens Dubai	
	120.	'Control Valves & Actuators'
	121.	" Centralized Management For All Building Disciplines "
	122.	'HVAC Design and Integration in Building Automation'
	123.	Exploring Intercommunication and Logic Design of Typical BAS Constituents.
39.	Silex, Dubai	
	124.	Quality Control for Polyethylene Garbage Bags
	125.	Product Management Operations at Silex General Trading LLC
	126.	Brand Management and Physical Distribution
	127.	Sales Integration At Al Gurg Unilever
40.	Thyssenkrupp Elevator, Dubai	
	128.	New Installation Sales At Thyssenkrupp Elevator
	129.	Maintenance Of Elevators At Thyssenkrupp
	130.	Trend In Man-Hours For Maintenance Department At Thyssenkrupp Elevators
	131.	Stage Engineering For Dubai Opera
	132.	"Application Of Linear Synchronous Motors In Elevators
	133.	Overview Of Tke Mobile App
41.	Topnet Distribution, Dubai	
	134.	Fiber Optic Communication System
	135.	A Study and analysis on the Utility of a Kvm Switch
42.	Transgulf Electro Mechanical, Dubai	
	136.	HVAC System In Dubai Police Forensics And Criminology Department
	137.	HVAC System Used In Emirates Flight Catering
	138.	A Study Of Mechanical, Electrical And Plumbing Services Used In Modern Day Structural Design
	139.	HVAC systems and load calculations
	140.	HVAC, Electrical and Plumbing Systems Used In Landmark Site
43.	Tyco (Abu Dhabi)	
	141.	Testing and Commissioning of the Fire and Gas Detection System in Process Engineering
	142.	Function of Health,Safety and Environment Department in Process Industry

44.	Young & Mubeen Controls, Dubai
	143. Central Battery System
	144. Structured cabling System
	145. Parking Management System
	146. Access Control System
	147. Building Management System
	148. Fire Alarm System
45.	Zio Technologies LLC, Dubai
	149. Student Attendance System Using Biometrics: Fingerprint Technology
	150. Application Of Organic Light Emitting Diode (Oled'S) Technology In Flat Panel Displays
	151. Voip With Pbx Over Legacy Pbx Phone Systems

#### LIST OF PROJECT ASSIGNMENTS FOR PS II - FIRST SEMESTER 2015-16

1	ABB Dubai
	1 Development of a MS Access based tool for Estimation and Operations of Low Voltage Systems- Service Business
2	Adapt Middle East LLC Dubai
	2 Delivering Customer Experience In Dubai Via Inbound Marketing Strategy
	3 Business Intelligence Tools for Organizing Work Flow
3	Aerizo Dubai
	4 Visitor Authentication Management System
	5 Healthcare and Information Technology
	6 Social Informatics and Technology
4	Al Abbas Group Dubai
	7 Competitive Analysis of Konica Minolta Production Printers With Respect To Other Printers In Market
	8 ERP System Implementation in Al Abbas Group
	9 Managed Print Services
5	Al Ghandi Electronics
	10 Solar Energy Technology-The future of lighting
	11 Intelligent Lighting Systems
	12 Solid State Lighting - LEDs
6	Al Tamimi Engineering Services LLC Dubai
	13 Designing and Working Principles of Electrical Systems
	14 Design and Maintenance of Mechanical Systems in Buildings
7	ATECO Dubai
	15 Introduction to Video Surveillance
8	Azbil Corporation Dubai
	16 Intelligent and Energy Efficient Building Technologies on HVAC Systems
	17 Dynamic Control Techniques for HVAC Systems
9	Central Motors & Equipment (BOSCH) Sharjah
	18 Market Potential Survey In Bosch Power Tools
	19 Marketing & Survey of Bosch Power Tools in UAE
	20 BOSCH Service Center - Power Tools Division
	21 Product Development in the Automotive Aftermarket
10	Crude Energy LLC, Dubai
	22 Treatment of rotogravure cylinders prior to printing
	23 Durability Analysis of a Rotogravure Cylinder
	24 Automation process design in Packaging Industry

	25	HRM Appraisal Practices Design in Packaging Industry
	26	Parameters affecting engraving process of a rotogravure cylinder
	27	Waste Management System in Packaging Industry
11		Cube Innovation Dubai
	28	Document Management For Small, Medium And Large Enterprises
	29	Contentverse as Real-Time Application
	30	Synergy: Case Study On combining Sales And Technology
12		D-Link Middle East & Africa Dubai
	31	Switching solutions
	32	Detailed analysis of D-Links Business
	33	Network solutions
13		Diplomat Engineering LLC Sharjah
	34	The Operations & Dynamic Procedures of MEP Contracting Works
	35	Operational overview of Chilled Water Systems in HVAC field
	36	Extra Low Voltage Devices In Fire Safety & CCTV
	37	Fire Protection System
	38	Drainage and Plumbing Systems for Buildings and Facilities
	39	Green Marketing & HVAC systems
14		Doxnation Dubai
	40	Marketing Research and Graphic Designing
	41	Technological Development of Database "Doxrecruit" ,Website "Doxjournal" and ERP research
15		Elfit Arabia, Ajman
	42	Features of cable pulling and its detailed analysis
	43	Analysis of Plastic Injection Moulding Machine at Elfit Arabia Limited
	44	Analysis of winch machine
16		Emerson Fisher FZE Dubai
	45	Optimisation of ITP Procedure, Target Analysis, Rotary valves database & Designing of Assembly Bench
	46	Business Analysis, Auditing and Supply Chain Management for Emerson Fisher
	47	Installation and Maintenance of Control Valves
	48	Design Considerations and Quality Control of Control Valves & Actuators
	49	Quality Control Techniques for Control Valves
	50	Automation of Data Retrieval and Refinement through design of Business Intelligent Software
17		Emerson Fisher Valve Automation Dubai
	51	Strategical and Marketing Analysis for Emerson Valve Automation
	52	Inventory Management & Development of the Configurator
	53	Adoption of Cloud Services in Supply Chain Management
18		Emerson Rosemount
	54	Implementation of Progressive Methodologies for Perfect Execution in the Project Management Office
	55	DMMC Manufacturing Improvement Projects
	56	Analyzing the Impact of Strategic Planning on Process Management Operations
	57	Efficient Project Management Through Statistical Data Consolidation and Optimization for a Wireless Wellhead Surveillance Project
	58	Role of a Buyer in a Supply Chain
	59	Quality Management System
	60	Study on special manifolds and AMF process in instrument installation for process connection of Rosemount pressure transmitter
19		Energy Automation Systems, Inc, Dubai

	61	Building Management System at EKFC and Park Place
	62	Energy Management System at Park Place and its Solutions
	63	HVAC Control Systems in Modern Buildings
20	ESRI Sharjah	
	64	A Report on Building Imagery Workflows
	65	Implementation of Raster Types in GIS Software
21	Gateway Computers LLC, Dubai	
	66	Application of cloud environment for online marketing strategies.
	67	Implementation of Online sales and Internet advertising.
	68	Implementation of Automation in manufacturing sector.
22	ICT Health LLC Dubai	
	69	Development of HINAI Mobile Applications
	70	Design and Implementation of HINAI Modules
23	Intercoil International LLC Dubai	
	71	Production Planning and Control on Operational Cost of Furniture Manufacturing
	72	Facility Design and Production Optimization Techniques in Mattress Manufacturing Unit
	73	Lean Manufacturing using Enterprise Resource Planning
	74	Logistics Automation: Automated Truck Loading/Unloading Systems
24	Intercoil International LLC RAK	
	75	Analysis of Silicone Surfactants for the Maximization of Foam Production
	76	Design & Structural Analysis of the Intercoil Plant at Ras Al Khaimah
	77	Maximization and Optimization Methods in Mattress Production Industry
25	Johnson Controls Dubai	
	78	An Introduction to Building Management System
	79	Applications of Control Systems in Building Management System
	80	Client computing in JCI
	81	SharePoint Intranet Portal: A Web based Intranet Portal developed under SharePoint for Project Management
26	KPTAC Technologies Dubai	
	82	Payment Gateway Integration & Front-End Web Development
	83	Content Resource Management And Ecommerce Website Design
	84	Payment Gateway Integration And E-Commerce Development
27	L&T Automation Dubai	
	85	Network Architecture and Designs for CCTV Systems
	86	Graphics Designing and Monitoring of SCADA in Fire and Gas System
	87	Detailed Telecom System Designs and Documentation
28	L&T Hydrocarbon Sharjah	
	88	Instrumentation used in process industries
	89	Industrial Automation controls & proposals
	90	Project Management
29	Lavish Livings International FZE, Ajman	
	91	An overview of ecommerce on Telecommunication
	92	Selling on Amazon and Souq
	93	Site Development and Backdrops for ecommerce
	94	E services : Operating strategy- Implementation framework and Case study
30	Levtech Consulting Dubai	
	95	An effective study on Human Resource Management System
	96	An overview of Enterprise Resource Planning

	97	An overview of Customer Relationship Management
31	Lucy Switchgear FZE Dubai	
	98	Kaizen Projects For Optimization Of Manufacturing
	99	IT Support In Lucy And Research On Windows 10
32	Maricon Electromechanical Contracting & Trading LLC Abu Dhabi	
	100	High Voltage Testing
33	Medcare Hospital Dubai	
	101	An overview of the Department of Health Checkups at Medcare
	102	An Overview of the Biomedical Department at Medcare Hospital
34	Metadata Technologies FZ LLC Dubai	
	103	Document Core Pack and Telephonic Integration in Microsoft Dynamics
	104	Deployment of Click Dimensions in Microsoft Dynamics CRM
	105	Microsoft Dynamics Social Engagement
35	Merck Sharp & Dohme Dubai	
	106	Sales Report Automation
	107	HR Service tools and Mobile Applications
	108	Design and Application Development for Promotional Materials Management
	109	Effectiveness of Visual Communication and its Implementation in Corporate Environment
	110	Data Analytics in Pharma Industries – Current Application and Future Impact
	111	Analysis and Development of the Finance Department
36	Olive Technologies Dubai	
	112	Web Applications and Web Site Development for Olive Technologies
	113	Implementing Windows Installer XML, WebSockets and AngularJS to Develop Software Applications
37	Prime Health Care Group LLC Dubai	
	114	Diagnostic procedures at Premier Diagnostic and Medical Center
38	Proserv Middle East Dubai	
	115	Junction Box in Well Head Control Panels
	116	Pressure test units - Standardization
39	Protiviti Dubai	
	117	Overview of Business Advisory and its services
	118	Consulting Services
40	Redcube Systems LLC Dubai	
	119	Design of structured cabling System
	120	Installation of Access Control Systems
41	Sanbook Quality Consultancy Dubai	
	121	Design and study of Project Management Professional certification
	122	A Study of Environmental Management System Practices
	123	A Study of ISO 17025 standards, implementation and certification
	124	Design and Application of Integrated Management System
	125	Design and Application of Goods Manufacturing Practices.
	126	A Study of Occupational Health and Safety Management System
	127	A Study of ISO 9001 Quality Management System
42	Scan Technology LLC Dubai	
	128	Predictive Analysis
	129	Application of Self-Service Business Intelligence
43	Scientechnic Dubai	
	130	Fire detection and emergency lighting systems and their estimations.

	131	Design Analysis of Fire Fighting & Temporary Fire Alarm Systems at HILG Site 628
	132	RFID Smoke detector.
	133	Firefighting systems.
44	Siemens Dubai	
	134	Process Efficiency in Industrial Customer Care for Engineering Operations
	135	Desigo XWorks Plus - Software Design of Building Management Systems at SIEMENS LLC.
	136	Industrial network concepts, its applications and future prospects
	137	Services Department at Siemens Building Technology
	138	Project Department of Siemens Building Technologies
	139	Project on the Sales Portfolio of Building Technologies Division, Siemens
	140	Compilation of Siemens Lunch & Learn sessions and designing automation tasks with Siemens PLCs & HMI
45	Steinweg - Sharaf FZCO Dubai	
	141	Integrated Management Systems Procedures and Risk Analysis for OHSAS Certification
	142	OHSAS Certification of Steinweg Sharaf FZCO
	143	Risk Assessment for OHSAS Certification and Integrated Management System
46	Systechnic Solutions Dubai	
	144	Design and Development of Online Project Management Portal
	145	Design and Development of Software modules and Online Reservation System
47	ThyssenKrupp Elevator Abu Dhabi	
	146	Ground Breaking Innovations of Elevation Sectors - The Space Challenge
48	Thyssenkrupp Elevator Dubai	
	147	Modern Trends in Transportation Systems
	148	Sales and Marketing Structure in Vertical Transportation Business at ThyssenKrupp Elevators - Dubai
	149	Management of Operations and Installation in vertical transportation industry
49	Topnet Distribution FZCO Dubai	
	150	Structure Cabling-Copper Solution
	151	Fiber Optic Solution In Structure Cabling
	152	A Report On Security And Av Solutions
	153	Fiber Optic Media Converters
	154	Data Centre Solutions-Kvm Switch And Environmental Monitoring System
	155	Analysis of Market Research On Networking Products & Connectivity Industry
50	YallaSpree, Dubai	
	156	Marketing Strategies used by Yalla Spree
	157	Case Study On Digital Advertising Vs Traditional Advertising
	158	Market Research
	159	Location Based Mobile Advertisement App In Dubai
51	Young and Mubeen Controls Dubai	
	160	ELV Solutions for Al Ain Hospital
	161	Study of Al Ain Hospital Speciality Systems
	162	Effective Home Security Solutions
	163	Access Control Systems
	164	Parking Management Systems
52	Zio Technologies LLC Dubai	
	165	Tele-presence and Video Conferencing services based on WebRTC
	166	Biometric Access Control Systems : Iris Recognition



**COMPUTING FACILITIES ACROSS THE CAMPUS**

S.No.	Location	Hardware	Qty	Software
		Equipment		
1	Server Room	Intel Xeon Quad Core E5310 1.60Ghz/1066 Mhz,8MB,IBM 146Gb SFF Non Hot Swap 10K SAS HDD,2Gb(2X1Gb) PC2-5300 667 MHz ECC Chipkill DDR2,Qlogic 4Gb SFF Fibre Channel Expansion Card for IBM eServer Blade Center	2	Windows Server 2003 R2- Enterprise x64 edition, Domain Controller, Windows Server 2008 – Web Server Backup
		Intel Xeon Quad Core E5310 1.60Ghz/1066 Mhz,8MB L2,2X1GB Chipkill, O/Bay SAS,2Gb(2X2Gb) PC2-5300 667 MHz ECC Chipkill DDR2,IBM 146Gb SFF Non Hot Swap 10K SAS HDD FBDIMM,4gb SFF Fibre Channel Expansion card for IBM eServer Bladecenter	3	Windows Server 2003 R2- Enterprise x64 edition, Microsoft Exchange 2007( HT,CA and MB)
		Intel Xeon Quad Core E5420 80W 2.50GHz/133Mhz/12Mb L2,2X1Gb chk, O/Bay SAS,2Gb(2X1Gb) PC2-5300 667 MHz ECC Chipkill DDR2 FBDIMM,IBM 146Gb SFF Non Hot Swap 10K SAS HDD  Cyberoam CR500ia	3	Windows Server 2003 R2- Enterprise x64 –Spare proxy, Windows Server 2008 Domain Controller, Windows Server 2008 – Exchange 2010
		Intel Xeon Quad Core E5310 1.60Ghz/1066 Mhz,8MB,IBM 146Gb SFF Non Hot Swap 10K SAS HDD,2Gb(2X1Gb) PC2-5300 667 MHz ECC Chipkill DDR2,Qlogic 4Gb SFF Fibre Channel Expansion Card for IBM eServer Blade Center	1	Windows Server 2008 edition, DNS,DHCP
		Intel Xeon Quad Core E5310 1.60Ghz/1066 Mhz,8MB,IBM 146Gb SFF Non Hot Swap 10K SAS HDD,2Gb(2X1Gb) PC2-5300 667 MHz ECC Chipkill DDR2,Qlogic 4Gb SFF Fibre Channel Expansion Card for IBM eServer Blade Center	1	Windows Server 2003 R2- Enterprise x64 edition,Mathworks-Matlab
		3. 06Ghz P4Intel Xeon Processor, 2 GB RAM and 80Gb Harddisk	1	Windows Server 2003-Standard Edition, Autocad
		3.05GhzP4 Intel Xeon Processor,1Gb RAM and 80Gb Hard disk	1	Windows Server 2003-Standard Edition, McAfee AntiVirus
		3.6GhzP4 Intel Processor, 1.72Gb RAM and 80Gb Hard disk	1	Windows Server 2003-Standard Edition,Catia
		2.40Ghz P4 Intel Xeon Processor, 1Gb RAM and 80Gb Hard disk	1	Windows Server 2003-Standard Edition,Tally
		Intel Core 2Ghz,1GB Ram,160Gb HDD	2	Windows Server-2003-Enterprise Edition,App Test & Student Projects
		Panasonic TDA 620	3	
		Panasonic TDA 600	1	
		Panasonic TVM 200	1	
2	Computer Programming Lab	Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz,Ether Link 10/100 DVD Combo	78	Windows 8.1, Win XP
		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	3	

S.No.	Location	Hardware	Qty	Software
		Equipment		
		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	33	
3	Catia Lab	ACER: Intel® Pentium 4 - 2.8GHzACPI uniprocessor PC, 512 MB RAM, 40 GB HDD, Broadcom NetXtreme Gigabit Ethernet Network Card	16	Windows XP, CATIA V5
4	Engineering Graphics Lab	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	61	Windows XP, AutoCad2005
		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	11	
5	Microprocessor Lab	Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz,Ether Link 10/100 DVD Combo	30	Windows XP, RedHat Linux 5.0 advanced platform
		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	Red Hat Linux, Ubuntu and Win 8.1
		ACER 5200,2.4Ghz\Intel,256MB	2	Windows XP
6	Physics Lab	ACER 5600,2.80Ghz\Intel, 512 MB RAM	6	Windows XP,
7	Communication & Instrumentation Lab	Compaq D510 ,2.40Ghz\Intel, 256 MB Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz,Ether Link 10/100 DVD Combo	8	Windows XP, Win 8.1
		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	2	
8	Digital Electronics Lab	ACER:Intel® Pentium 4 - 2.8GHzACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk,3COM Ether Link 10/100 Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz,Ether Link 10/100 DVD Combo	20	Windows XP
9	Analog /DSP LAB Electronics Lab	ACER:Intel® Pentium 4 - 2.8GHzACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk,3COM Ether Link 10/100	1	Windows 8.1,
		Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz,Ether Link 10/100 DVD Combo	2	
10	EMEC Lab	ACER:Intel® Pentium 4 - 2.8GHzACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk,3COM Ether Link 10/100	3	Windows XP Win 8.1
11	Heat Transformation Lab	Compaq D510 ,2.40Ghz\Intel	1	Windows XP
		ACER:Intel Core 2 CPU 2.0GHz, 1 GB RAM, 150GB Hard Disk, DVD Writer	2	
12	Communication Lab	Inter Core i5 CPU 650 @ 3.20 Ghz 2 Gb RAM 500 HDD	1	Windows XP 2003 and Matlab 7 SIMULINK-R2010a
		ACER:Intel® Pentium 4 - 2.8GHzACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk,3COM Ether Link 10/100	1	
13	MT (II) EEE Lab	ACER:Intel® Pentium 4 - 2.8GHzACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk,3COM Ether Link 10/100	1	Windows XP
14	MT (II) Non EEE Lab	ACER:Intel® Pentium 4 - 2.8GHzACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk,3COM Ether Link 10/100	1	Windows XP
15	Mechanical Workshop	Assembled-3.0Ghz\Intel, 512 Mb RAM	1	Windows XP
16	Transport	Assembled-3.0Ghz\Intel, 512 Mb RAM	2	Windows XP

S.No.	Location	Hardware	Qty	Software
		Equipment		
	Phenominon Lab			
17	CNC Lab	ACER: Intel® Pentium 4 - 2.8GHz ACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	1	Windows XP
18	Chemistry Lab	ACER: Intel® Pentium 4 - 2.8GHz ACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	1	Windows XP
19	Biology Lab	ACER: Intel® Pentium 4 - 2.8GHz ACPI uniprocessor PC, 1GB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	30	Windows XP
20	Class Rooms	Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz, Ether Link 10/100 DVD	3	Windows XP
21	Divisions (Grading, PSP, PS Div PCP, AAR, SW, I&E)	Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz, Ether Link 10/100 DVD	3	Windows 8.1
		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	6	
22	Library	HP: Intel® Pentium 4 - 3.2GHz ACPI uniprocessor PC, 1GB RAM, 80GB Hard Disk, 3COM Ether Link 10/100	10	Windows XP
		HP Compaq DL320 3.6Ghz Intel Xeon, 1Gb, 80GB HDD	1	Windows XP
		Compaq D510, 2.40Ghz Intel	16	Windows Server 2003-Standard Edition, Autolib
		ACER: Intel® Pentium 4 - 2.8GHz ACPI uniprocessor PC, 512MB RAM, 40GB Hard Disk, 3COM Ether Link 10/100	20	Windows XP
		IBM -LENOVO-Think Centre: Inter® Core 2 Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz, Ether Link 10/100 DVD Combo HP Laptop	28 +28	Windows XP
23	Faculty	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	31	Windows 8.1
		Dell- Optiplex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz, Ether Link 10/100 DVD Combo	4	
24	Administration	Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz, Ether Link 10/100 DVD	4	Windows XP Win 8.1
25	Admission	Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz, Ether Link 10/100 DVD	1	Win 8.1
26	Students Services	Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz, Ether Link 10/100 DVD	4	Win 8.1
		IBM-LENOVO-Think centre: Intel Core 2 CPU 4400 @ 2.00 GHz, 1.99GHz, 1GB RAM, 150GB Hard Disk, Broadcom NetLink Gigabit Ethernet		
27	Chemical LAB1			Win XP
28	SOFTWARE SYSTEMS LAB in Room 332 (newly established)	75 Desktop Computer Systems each having configuration as follows: i7-4770 Processor with Monitor, 8GB RAM, 1 TB HDD, 1 DVD Drive, Intel Graphics Card, WiFi, KBD, Mouse, 3 Yrs support/warranty		Windows 8.1, LINUX (CENT OS edition).

**LIST OF EQUIPMENTS PROCURED DURING THE YEAR 2015**

<b>S. No</b>	<b>Name of Equipment</b>	<b>Used for Courses/Thesis/Dissertation Computational/Administrative Work</b>
1	Olympus Fluorescence Microscope BX53 with phase contrast, dark field and camera attachment (1nos)	BIOTECHNOLOGY LABS
2	Student compound microscopes (21nos)	
3	Vortex mixers (3 nos) nnn	
4	Sartorius Analytical balance (1 no)	
5	QSONICA sonicator system with micro probe (1nos).	
7	MSC ADAMS software, Pin on disc wear tester and VCR Engine were added to the existing lab facilities.	MECHANICAL LABS
8	CO2 Analyzer	CHEMICAL ENGINEERING LAB
	pH/mV/ISE/TDS/Salinity/DO meter	
	Digital Anemometer	
	Air compressor (capacity 200 lit)	
	Multi-Thermometer (digital)	
	Solar Power Meter	
	Photo bioreactor	
	Specific Gravity Hydrometers	
	Glass Viscometer	
	Ozone generator	
10	Dell- OptiPlex 9020, Win 8.1 Enterprise Processor Intel® Core (TM) i-7 4770, CPU @ 3.40GHz, Ether Link 10/100 DVD Combo	Computer Programming Lab and Staff
11	HP Pavilion 15-N221SE, Processor Intel® Core (TM) i-7, 8GB RAM, Windows 8.1, 2GB Graphic card	Faculty and Staff
12	CISCO IP Telephone	Faculty and Staff
13	IP CCTV Camera	Academic block and hostel block

**NEW COURSES OFFERED DURING 2015**

<b>S. No.</b>	<b>Course No.</b>	<b>Course Title</b>
1	BITS E661	RESEARCH METHODOLOGY I
2	BITS F467	BIOETHICS AND BIOSAFTY
3	BITS G560	PRACTICE SCHOOL
4	CHE F418	MODEL & SIMU IN CHE ENGG
5	CHE G512	PETRO REFIN & PETROCHEM
6	CHEM F366	LABORATORY PROJECT
7	CHEM F491	SPECIAL PROJECT
8	DE G522	DESIGN PROJECTS
9	ECE F418	MOD COMMUNICATION TECH
10	EEE G512	EMBEDDED SYSTEM DESIGN
11	FIN F315	FINANCIAL MANAGEMENT
12	GS F244	REPORT & WRITE FOR MEDIA
13	HSS F328	HUMAN RESOURCE DEVELOP
14	INSTR F367	LABORATORY PROJECT
15	MATH F377	DESIGN PROJECT
16	MBA C489	ENTERPRISE RESOURCE PLAN
17	ME G511	MECHANISMS & ROBOTICS
18	MEL G631	PHY & MO OF MICROEL DEV
19	PHY F266	STUDY PROJECT
20	PHY F366	LABORATORY PROJECT
21	SS G527	CLOUD COMPUTING
22	SS G562	SOFTWARE ENGG & MANAGEMT

BITS Pilani

# annual report 2015

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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 Gurunaryanan, Dean
3. Mr. 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

### B5.2 HISTORY

Since 1979, the Institute has been participating in the human resource development needs of the industries. The Institute has evolved several degree programmes by integrating the working environment of the employees with the learning environment required by the Institute. These programmes were first started as M.E. (Collaborative) programmes in 1979. Later, from 1988, the Institute ventured into Off-campus Work-Integrated Learning Programmes in Science and Technology areas. These programmes:

- (a) are targeted to meet the needs of continuing education of employed professionals;
- (b) are based on Science & Technology approach and operate disciplines that are non-conventional and Science & Technology oriented;
- (c) are designed for the purposeful acquisition of scientific methods, modern skills and involvement in open-ended experiments;
- (d) judiciously combine the flexibility and ingenuity of the off-campus system with all the regular features of the on-campus system; and
- (e) allow the employed professionals to pursue a meaningful and relevant university degree with minimum dislocation from their work environment.

### B5.3 SALIENT FEATURES

All programmes offered under the Work-Integrated Learning Programmes are characterized by a person - centered approach where the rigour and standard are maintained as in the institute's on-campus programmes. While a number of on-campus programmes are also available under off-campus, the Institute interacts with various organizations like industries, hospitals and national laboratories with a view to design and offer specialized programmes. Many organizations sponsor their employees for various programmes, in order to prepare their human resources to meet the challenges posed by the growth of industries and rapid advancement of technology in India and abroad.

### B5.4 PROGRAMMES OFFERED

Table 1: Currently Operative Off-Campus Work-Integrated-Learning Programmes at a Glance

Programmes	Collaborating / Sponsoring Organization
<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
3. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries and Wipro Bangalore



<b>Programmes</b>	<b>Collaborating / Sponsoring Organization</b>
4. Manufacturing Technology	- Kirloskar Oil Engines, Kolhapur
5. Marine Engineering	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
6. Nautical Technology	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
7. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy - Mumbai; Essar Power, Hazira
8. Process Engineering	- Aditya Birla Group, Mumbai; JSW Steel, Toranagallu; DRL, Hyderabad; Sesa Sterlite, Jharsuguda
<b>B.Optom. Programme</b>	
1. Optometry	- Sankara Nethralaya, Chennai; LV Prasad Eye Institute, Hyderabad; The Tun Hussein Onn National Eye Hospital, Malaysia
<b>M.Sc. Programme</b>	
1. 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. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
3. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
<b>M.Tech. Programmes</b>	
1. Automotive Engineering	- Tata Technologies, Pune
2. Design Engineering	- John Deere, Pune; Cluster Programme, Pune
3. Embedded Systems	- UTC, Bangalore; iGate, Mumbai; L&T, Vadodara; Cluster programme, Pune
4. Environmental Engineering	- Goa State Pollution Control Board, Goa
5. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries, Sesa Sterlite, Jharsuguda
6. Microelectronics	- Cypress, Qualcomm, Texas Instruments, Bangalore
7. Pharmaceutical Operations and Management	- Lupin, Mumbai; Cipla, Mumbai
8. Quality Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
9. Science Communication	- National Council of Science Museums, Kolkata
10. Software Engineering	- EMC, Bangalore; Tech Mahindra, Pune; iGate, Mumbai; Qualcomm, Hyderabad; SAP Labs, Bangalore; Persistent, Pune; Cybage, Pune; CTS, Chennai; TCS, Hyderabad; Virtusa, Chennai; Wipro Technologies, Bangalore
11. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries; Wipro Technologies, Bangalore; TCS, Hyderabad
12. Systems Engineering	- Wipro Infotech, Bangalore
13. Telecommunications and Software Engineering	- Avaya, Pune, Tech Mahindra, Pune

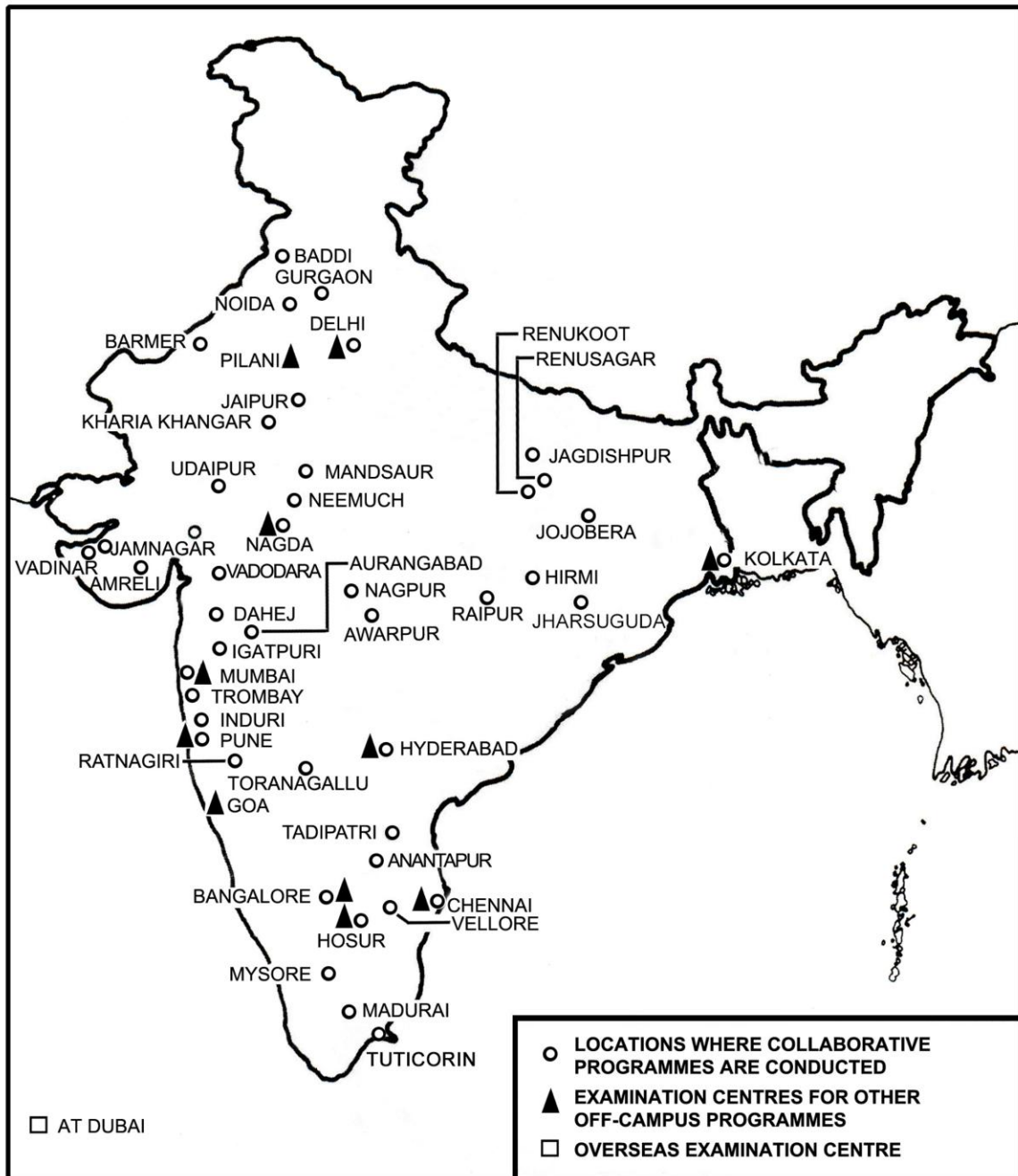
Programmes	Collaborating / Sponsoring Organization
<b>M.Phil.</b>	
1. Consciousness Studies	- Bhaktivedanta Institute, Mumbai
2. Hospital and Health Systems Management	- CMC, Vellore; Bombay Hospital, Mumbai
3. Optometry	- Sankara Nethralaya, Chennai

Table 2: The following Off-Campus Work-Integrated-Learning Programmes are also operated for old registered students

Programmes	Collaborating / Sponsoring Organization
<b>B.S. Programmes</b>	
1. Engineering Design	- Eaton Technologies, Pune; L&Ties, Vadodara
2. Engineering Technology	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
3. Information Systems	- Designed for the HRD needs of a diverse spectrum of IT Industries and Wipro Infotech, Mumbai
4. Manufacturing Engineering	- Bharath Forge, TACO, Kirloskar Oil Engines, Pune
5. Marine Engineering	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
6. Nautical Technology	- Tolani Maritime Institute, Induri; RL Institute of Nautical Sciences, Madurai
7. Optometry	- Sankara Nethralaya, Chennai; LV Prasad Eye Institute, Hyderabad; The Tun Hussein Onn National Eye Hospital, Malaysia
8. Physician Assistant	- Madras Medical Mission, Chennai
9. Power Engineering	- Aditya Birla Group, Tata Power, JSW Energy - Mumbai; Essar Power, Hazira
10. Process Engineering	- Aditya Birla Group; Hindalco Industries, Dahej; JSW Steel, Toranagallu; DRL, Hyderabad; Sesa Sterlite, Jharsuguda
<b>M.S. Programmes</b>	
1. Automotive Engineering	- Tata Technologies, Pune
2. Consciousness Studies	- Bhaktivedanta Institute, Mumbai
3. Consultancy Management	- Consultancy Development Centre, New Delhi
4. Design Engineering	- Eaton Technologies, Pune, L&T, Vadodara; SKF, Pune
5. Embedded Systems	- John Deere, iGate, Pune; L&T, Vadodara
6. Manufacturing Management	- Designed for the HRD needs of a diverse spectrum of Engineering Industries
7. Microelectronics	- Wipro Technologies, Cypress, Qualcomm, IBM, Bangalore
8. Pharmaceutical Operations & Management	- Lupin, Mumbai
9. Quality Management	- Indian Institute of Quality Management, Jaipur
10. Science Communication	National Council of Science Museums, Kolkata
11. Software Engineering	- Wipro Technologies, EMC, SAP Labs - Bangalore; CTS, Virtusa, Chennai; Tech Mahindra, Pune; Cybage, Persistent, iGATE, Mumbai, TCS, Hyderabad, Qualcomm, Hyderabad
12. Software Systems	- Designed for the HRD requirements of a diverse spectrum of IT Industries
13. Systems Engineering	- Wipro Infotech - Bangalore
14. Telecommunications & Software Engineering	- Tech Mahindra, Avaya - Pune

**B5.5 MAP OF BITS WORK-INTEGRATED LEARNING & COLLABORATIVE PROGRAMMES 2015-2016**

**MAP OF BITS WORK-INTEGRATED LEARNING & COLLABORATIVE PROGRAMMES  
2015-2016**



**B5.6 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>Total</b>
Second Semester 2014-2015	145(021)	2966(100)	3111(121)
First Semester 2015-2016	923(083)	2153(500)	3076(583)

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.

<b>Semester</b>	<b>Number of students registered</b>
Second Semester 2014-2015	21060
First Semester 2015-2016	20474

Details of Registration of students for the First Semester 2014-2015 are given in **Annexure 2 (Part B5)**.

**B5.8 GEOGRAPHICAL DISTRIBUTION OF STUDENTS REGISTERED IN FIRST SEMESTER 2015-2016****(A) INDIA**

<b>State</b>	<b>No. of students</b>		
	<b>Specific</b>	<b>Non Specific</b>	<b>Total</b>
Andhra Pradesh	1010	646	1656
Assam		15	15
Bihar		12	12
Chandigarh		11	11
Chattisgarh		14	14
Dadra & Nagar Haveli		1	1
Delhi	400	196	596
Goa		47	47
Gujarat	35	129	164
Haryana		234	234
Himachal Pradesh		2	2
Jammu & Kashmir		14	14
Jharkand		25	25
Karnataka	5842	1709	5751
Kerala	210	293	503
Madhya Pradesh		61	61
Maharashtra	3228	656	3884

State	No. of students		
	Specific	Non Specific	Total
Meghalaya		1	1
Mizoram		5	5
Nagaland		3	3
Orissa		27	27
Pondicherry		15	15
Punjab		54	54
Rajasthan		120	120
Tamil Nadu	2417	1118	3535
Telangana	320	299	619
Uttar Pradesh	6	255	261
Uttarakhand		27	27
West Bengal	154	294	473
<b>Total</b>	<b>13622</b>	<b>6283</b>	<b>19905</b>

**(B) Foreign**

Country	No. of students		
	Specific	Non Specific	Total
China		1	1
Georgia		1	1
KSA		18	18
Kuwait		32	32
Malaysia	97		97
Oman		29	29
Qatar		64	64
Singapore		32	32
UAE		269	269
UK		4	4
USA		13	13
VIRGINIA		9	9
<b>Total</b>	<b>97</b>	<b>472</b>	<b>569</b>
<b>Grand Total</b>	<b>13719</b>	<b>6755</b>	<b>20474</b>

**B5.9 SPONSORING ORGANIZATIONS**

During the year, 3149 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 2015, Second Semester 2014-2015 started on 20-12-2014 and ended on 15-05-2015, while First Semester 2015-2016 started on 18-07-2015 and ended on 14-12-2015 for all programmes except the following:

**Second Semester 2014-2015**

Degree	Discipline	Organization	Location	Semester Start Date	Semester End Date
B.S.	Engineering Design	Eaton	Pune	18-01-2015	14-06-2015
B.S.	Engineering Design	L&Ties	Vadodara	01-01-2015	30-06-2015
B.S.	Information Systems	Wipro Infotech	Bangalore	14-03-2015	26-08-2015
B.S.	Information Systems	Wipro Infotech	Delhi	14-03-2015	26-08-2015
B.S.	Information Systems	Wipro Infotech	Hyderabad	14-03-2015	26-08-2015
B.S.	Information Systems	Wipro Infotech	Pune	14-03-2015	26-08-2015
B.S.	Information Systems	Wipro Infotech	Mumbai	14-03-2015	26-08-2015
B.S.	Manufacturing Engineering	Bharat Forge	Pune	18-01-2015	14-06-2015
B.S.	Manufacturing Engineering	TACO	Pune	17-01-2015	13-06-2015
B.S.	Manufacturing Engineering	Kirloskar	Pune	24-01-2015	14-06-2015
B.S.	Marine Engineering	RLINS	Madurai	02-02-2015	28-06-2015
B.S.	Marine Engineering	TMI	Pune	09-02-2015	11-07-2015
B.S.	Nautical Technology	RLINS	Madurai	02-02-2015	28-06-2015
B.S.	Nautical Technology	TMI	Pune	09-02-2015	11-07-2015
B.S.	Optometry	LVPEI	Hyderabad	19-01-2015	06-06-2015
B.S.	Optometry	Sankara Netralaya	Chennai	05-01-2015	20-06-2015
B.S.	Optometry	THONEH	Malaysia	19-01-2015	06-06-2015
B.S.	Physician Assistant	ICVD	Chennai	02-01-2015	25-06-2015
B.S.	Power Engineering	ABG	Mumbai	01-01-2015	30-06-2015
B.S.	Power Engineering	Essar Power	Hazira	01-01-2015	30-06-2015
B.S.	Power Engineering	JSW Energy	Barmer	01-01-2015	30-06-2015
B.S.	Power Engineering	TATA Power	Mumbai	01-01-2015	30-06-2015
B.S.	Process Engineering	ABG	Mumbai	01-01-2015	30-06-2015
B.S.	Process Engineering	DRL	Hyderabad	04-04-2015	08-08-2015
B.S.	Process Engineering	Indogulf	Jagdishpur	01-01-2015	30-06-2015
B.S.	Process Engineering	JSW Steel	Toranagallu	16-01-2015	29-06-2015
B.S.	Process Engineering	Vedanta	Jharsuguda	01-01-2015	30-06-2015
B.Tech.	Information Systems	Wipro Infotech	Delhi	14-03-2015	26-08-2015
B.Tech.	Information Systems	Wipro Infotech	Mumbai	14-03-2015	26-08-2015
B.Tech.	Manufacturing Technology	Kirloskar	Pune	24-01-2015	14-06-2015
M.Phil.	Optometry	Sankara Netralaya	Chennai	05-01-2015	17-06-2015
M.S.	Automobile Engineering	TATA Technologies	Pune	17-02-2015	28-06-2015
M.S.	Design Engineering	Eaton	Pune	18-01-2015	14-06-2015
M.S.	Design Engineering	L&Ties	Vadodara	01-01-2015	30-06-2015
M.S.	Design Engineering	SKF	Pune	20-12-2014	12-04-2015

Degree	Discipline	Organization	Location	Semester Start Date	Semester End Date
M.S.	Embedded Systems	L&Ties	Vadodara	01-01-2015	30-06-2015
M.S.	Engineering Management	Technip	Chennai	14-12-2014	30-06-2015
M.S.	Integrated Software Systems	ATOS	Pune	20-12-2014	15-05-2015
M.S.	Integrated Software Systems	Tech Mahindra	Pune	20-12-2014	15-05-2015
M.S.	Manufacturing Engineering	Vedanta	Jharsuguda	20-12-2014	15-05-2015
M.S.	Microelectronics	Qualcomm	Bangalore	21-12-2014	09-05-2015
M.S.	Microelectronics	Texas, Sage & Analog	Bangalore	14-03-2015	04-07-2015
M.S.	Pharmaceutical Operations & Management	Lupin	Mumbai	02-02-2015	14-06-2015
M.S.	Pharmaceutical Operations & Management	Wockhardt	Aurangabad	01-01-2015	30-06-2015
M.S.	Science Communication	NCSM	Kolkata	03-01-2015	16-05-2015
M.S.	Software Engineering	Aricent Technologies	Chennai /Delhi	14-12-2014	30-06-2015
M.S.	Software Engineering	CTS	Chennai	07-02-2015	28-06-2015
M.S.	Software Engineering	CTS	Chennai	21-02-2015	05-07-2015
M.S.	Software Engineering	Cybage	Pune	03-01-2015	16-05-2015
M.S.	Software Engineering	EMC	Bangalore	31-01-2015	13-06-2015
M.S.	Software Engineering	IGATE	Pune	14-02-2015	14-06-2015
M.S.	Software Engineering	Persistent	Pune	17-01-2015	30-05-2015
M.S.	Software Engineering	Qualcomm	Hyderabad	11-04-2015	29-08-2015
M.S.	Software Engineering	SAP Labs	Bangalore	07-02-2015	20-06-2015
M.S.	Software Engineering	TCS	Mumbai	17-02-2015	17-07-2015
M.S.	Software Engineering	TCS	Hyderabad	17-02-2015	17-07-2015
M.S.	Software Engineering	TCS	Delhi	17-02-2015	17-07-2015
M.S.	Software Engineering	Tech Mahindra	Pune	17-01-2015	30-05-2015
M.S.	Software Engineering	Tech Mahindra	Hyderabad	10-01-2015	06-06-2015
M.S.	Software Engineering	Virtusa	Chennai	24-01-2015	14-06-2015
M.S.	Software Engineering	Virtusa	Hyderabad	24-01-2015	14-06-2015
M.S.	Software Engineering	Wipro Technologies	Bangalore	14-03-2015	26-08-2015
M.S.	Software Engineering	Wipro Technologies	Bangalore	25-04-2015	02-09-2015
M.S.	Software Engineering	Wipro Technologies	Chennai	14-03-2015	26-08-2015
M.S.	Software Engineering	Wipro Technologies	Chennai	25-04-2015	02-09-2015
M.S.	Software Engineering	Wipro Technologies	Hyderabad	14-03-2015	26-08-2015
M.S.	Software Engineering	Wipro Technologies	Hyderabad	25-04-2015	02-09-2015
M.S.	Software Engineering	Wipro Technologies	Mumbai	14-03-2015	26-08-2015
M.S.	Software Engineering	Wipro Technologies	Mysore	14-03-2015	26-08-2015
M.S.	Software Engineering	Wipro Technologies	Pune	14-03-2015	26-08-2015
M.S.	Software Engineering	Wipro Technologies	Pune	25-04-2015	02-09-2015

Degree	Discipline	Organization	Location	Semester Start Date	Semester End Date
M.S.	Software Engineering	Wipro Technologies	Delhi	14-03-2015	26-08-2015
M.S.	Software Engineering	Wipro Technologies	Delhi	25-04-2015	02-09-2015
M.S.	Software Engineering	Wipro Technologies	Kolkata	14-03-2015	26-08-2015
M.S.	Software Engineering	Wipro Technologies	Kolkata	25-04-2015	02-09-2015
M.S.	Software Engineering	Wipro Technologies	Kochi	14-03-2015	26-08-2015
M.S.	Systems Engineering	Wipro Infotech	Bangalore	14-03-2015	26-08-2015
M.S.	Systems Engineering	Wipro Infotech	Delhi	14-03-2015	26-08-2015
M.S.	Systems Engineering	Wipro Infotech	Mumbai	14-03-2015	26-08-2015
M.S.	Telecommunications and Software Engineering	Avaya	Pune	21-12-2014	12-04-2015
M.S.	Telecommunications and Software Engineering	Tech Mahindra	Pune	17-01-2015	30-05-2015
M.Tech.	Design Engineering	Cluster	Pune	01-03-2015	09-08-2015
M.Tech.	Design Engineering	John Deere	Pune	01-03-2015	09-08-2015
M.Tech.	Embedded Systems	Cluster	Pune	28-02-2015	08-08-2015
M.Tech.	Manufacturing Engineering	Vedanta	Jharsuguda	20-12-2014	15-05-2015
M.Tech.	Microelectronics	IBM Texas	Bangalore	20-12-2014	09-05-2015
M.Tech.	Software Engineering	CTS	Chennai	07-02-2015	28-06-2015
M.Tech.	Software Engineering	CTS	Chennai	21-02-2015	05-07-2015
M.Tech.	Software Systems	TCS	Hyderabad	06-06-2015	29-11-2015
M.Tech.	Software Systems	TCS	Delhi	06-06-2015	29-11-2015
M.Tech.	Software Systems	TCS	Mumbai	06-06-2015	29-11-2015
M.Tech.	Software Systems	WIPRO	Bangalore	31-01-2015	15-06-2015

### First Semester 2015-2016

Degree	Discipline	Organization	Location	Semester Start Date	Semester End Date
B.S.	Power Engineering	ABG	Mumbai	20-08-2015	30-12-2015
B.S.	Process Engineering	DRL	Hyderabad	26-09-2015	15-02-2016
B.S.	Power Engineering	Essar Power	Hazira	20-08-2015	30-12-2015
B.S.	Physician Assistant	ICVD	Chennai	03-08-2015	23-12-2015
B.S.	Process Engineering	Indogulf	Jagdishpur	20-08-2015	30-12-2015
B.S.	Power Engineering	JSW Energy	Barmer	20-08-2015	30-12-2015
B.S.	Process Engineering	JSW Steel Ltd.	Toranagallu	26-04-2015	06-09-2015
B.S.	Manufacturing Engineering	Kirloskar	Pune	22-08-2015	03-01-2016
B.S.	Engineering Design	L&Ties	Vadodara	20-08-2015	30-12-2015
B.S.	Optometry	LVPEI	Hyderabad	06-07-2015	05-12-2015
B.S.	Marine Engineering	RLINS	Madurai	03-08-2015	24-12-2015
B.S.	Optometry	Sankara Netralaya	Chennai	01-07-2015	19-12-2015



Degree	Discipline	Organization	Location	Semester Start Date	Semester End Date
B.S.	Manufacturing Engineering	TACO	Pune	01-08-2015	09-01-2016
B.S.	Power Engineering	TATA Power	Mumbai	20-08-2015	30-12-2015
B.S.	Optometry	THONEH	Malaysia	22-07-2015	04-12-2015
B.S.	Marine Engineering	TMI	Pune	10-08-2015	16-01-2016
B.S.	Nautical Technology	TMI	Pune	10-08-2015	16-01-2016
B.S.	Process Engineering	Vedanta	Jharsuguda	20-08-2015	30-12-2015
B.S.	Information Systems	Wipro Infotech	Bangalore	04-09-2015	30-01-2016
B.S.	Information Systems	Wipro Infotech	Delhi	19-09-2015	14-02-2015
B.S.	Information Systems	Wipro Infotech	Hyderabad	19-09-2015	14-02-2015
B.S.	Information Systems	Wipro Infotech	Pune	19-09-2015	14-02-2015
B.S.	Information Systems	Wipro Infotech	Mumbai	19-09-2015	14-02-2015
B.Tech.	Manufacturing Technology	Bharat Forge Ltd.	Pune	02-08-2015	20-12-2015
B.Tech.	Process Engineering	JSW Steel Ltd.	Toranagallu	26-04-2015	06-09-2015
B.Tech.	Manufacturing Technology	Kirloskar	Pune	09-08-2015	03-01-2016
B.Tech.	Information Systems	Wipro Infotech	Delhi	19-09-2015	14-02-2015
B.Tech.	Information Systems	Wipro Infotech	Mumbai	19-09-2015	14-02-2015
M Tech	Software Engineering	Wipro Technologies	Bangalore	03-10-2015	30-01-2016
M Tech	Software Engineering	Wipro Technologies	Chennai	03-10-2015	30-01-2016
M Tech	Software Engineering	Wipro Technologies	Hyderabad	03-10-2015	30-01-2016
M Tech	Software Engineering	Wipro Technologies	Pune	03-10-2015	30-01-2016
M Tech	Software Engineering	Wipro Technologies	Delhi	03-10-2015	30-01-2016
M Tech	Software Engineering	Wipro Technologies	Kolkata	03-10-2015	30-01-2016
M.Phil.	Optometry	Sankara Netralaya	Chennai	03-08-2015	19-12-2015
M.S.	Integrated Software Systems	ATOS	Pune	18-07-2015	14-12-2015
M.S.	Tele & Software Engineering	Avaya	Pune	19-07-2015	22-11-2015
M.S.	Software Engineering	Cybage	Pune	18-07-2015	05-12-2015
M.S.	Design Engineering	Eaton	Pune	01-08-2015	19-12-2015
M.S.	Software Engineering	EMC	Bangalore	15-07-2015	15-11-2015
M.S.	Software Engineering	EMC	Bangalore	12-09-2015	06-02-2016
M.S.	Software Engineering	EMC	Bangalore	13-09-2015	28-02-2016
M.S.	Software Engineering	IGATE	Pune	08-08-2015	09-01-2016
M.S.	Design Engineering	L&Ties	Vadodara	20-08-2015	30-12-2015
M.S.	Embedded Systems	L&Ties	Vadodara	20-08-2015	30-12-2015
M.S.	Pharmaceutical Operations & Management	Lupin	Mumbai	10-08-2015	13-12-2015

Degree	Discipline	Organization	Location	Semester Start Date	Semester End Date
M.S.	Science Communication	NCSM	Kolkata	13-07-2015	5-03-2016
M.S.	Microelectronics	Qualcomm	Bangalore	8-12-2015	16-01-2016
M.S.	Software Engineering	Qualcomm	Hyderabad	12-09-2015	05-03-2016
M.S.	Software Engineering	SAP Labs	Bangalore	08-08-2015	19-12-2015
M.S.	Design Engineering	SKF	Pune	25-07-2015	14-12-2015
M.S.	Integrated Software Systems	Tech Mahindra	Pune	01-08-2015	19-12-2015
M.S.	Integrated Software Systems	Tech Mahindra	Pune	18-07-2015	19-12-2015
M.S.	Software Engineering	Tech Mahindra	Pune	01-08-2015	19-12-2015
M.S.	Software Engineering	Tech Mahindra	Hyderabad	04-07-2015	29-12-2015
M.S.	Telecommunications and Software Engineering	Tech Mahindra	Pune	01-08-2015	19-12-2015
M.S.	Software Engineering	Virtusa	Hyderabad	19-07-2015	27-12-2015
M.S.	Systems Engineering	Wipro Infotech	Bangalore	03-08-2015	30-11-2015
M.S.	Software Engineering	Wipro Technologies	Bangalore	03-08-2015	30-11-2015
M.S.	Software Engineering	Wipro Technologies	Chennai	03-08-2015	30-11-2015
M.S.	Software Engineering	Wipro Technologies	Hyderabad	03-08-2015	30-11-2015
M.S.	Software Engineering	Wipro Technologies	Pune	03-08-2015	30-11-2015
M.S.	Software Engineering	Wipro Technologies	Delhi	03-08-2015	30-11-2015
M.S.	Software Engineering	Wipro Technologies	Kolkata	03-08-2015	30-11-2015
M.S.	Software Engineering	Wipro Technologies	Kochi	03-08-2015	30-11-2015
M.S.	Software Engineering	Wipro Technologies	Bangalore	03-10-2015	30-01-2016
M.S.	Software Engineering	Wipro Technologies	Chennai	03-10-2015	30-01-2016
M.S.	Software Engineering	Wipro Technologies	Hyderabad	03-10-2015	30-01-2016
M.S.	Software Engineering	Wipro Technologies	Mumbai	03-10-2015	30-01-2016
M.S.	Software Engineering	Wipro Technologies	Mysore	03-10-2015	30-01-2016
M.S.	Software Engineering	Wipro Technologies	Pune	03-10-2015	30-01-2016
M.S.	Software Engineering	Wipro Technologies	Delhi	03-10-2015	30-01-2016
M.S.	Software Engineering	Wipro Technologies	Kolkata	03-10-2015	30-01-2016
M.S.	Software Engineering	Wipro Technologies	Kochi	03-10-2015	30-01-2016
M.Tech.	Design Engineering	Cluster	Pune	23-08-2015	10-01-2016
M.Tech.	Embedded Systems	Cluster	Pune	23-08-2015	10-01-2016
M.Tech.	Embedded Systems	Cluster	Bangalore	12-09-2015	13-02-2016
M.Tech.	Software Engineering	CTS	Chennai	22-08-2015	02-01-2016
M.Tech.	Microelectronics	Cypress Semiconductor	Bangalore	11-07-2015	19-12-2015
M.Tech.	Environmental Engineering	Goa State Pollution Control Board	Goa	11-08-2015	13-12-2015
M.Tech.	Software Engineering	Hexaware Technologies	Mumbai	29-08-2015	10-01-2016

Degree	Discipline	Organization	Location	Semester Start Date	Semester End Date
M.Tech.	Design Engineering	John Deere	Pune	23-08-2015	10-01-2016
M.Tech.	Automotive Engineering	TATA Technologies	Pune	24 -08-2015	10-01-2016
M.Tech.	Software Systems	TCS	Hyderabad/Delhi /Mumbai	13-06-2015	31-11-2015
M.Tech.	Manufacturing Management	Vedanta	Jharsuguda	20-08-2015	30-12-2015
M.Tech.	Software Systems	WIPRO	Bangalore	11-07-2015	09-12-2015

### B5.11 COURSES OFFERED

The number of courses, offered during the year 2015 is as follows:

	Number of Courses offered
Second Semester 2013-2014	708
First Semester 2014-2015	718

### B5.12 NEW COURSES INTRODUCED

The new courses introduced during the year 2015 is as follows

S.No.	Course No.	Course Title
1.	BA* ZC412	Models and Applications in Operations Research
2.	BA* ZC413	Introduction to Statistical Methods
3.	BA* ZC414	Optimization Methods for Analytics
4.	BA* ZC415	Analytics for Competitive Advantage
5.	BA* ZC416	Investment Banking Analytics
6.	BA* ZC417	Financial Risk Analytics
7.	BA* ZC418	Advanced Financial Modeling
8.	BA* ZC420	Data Visualization
9.	BA* ZC421	Marketing Models
10.	BA* ZC422	Marketing Analytics
11.	BA* ZC423	Retail Analytics
12.	BA* ZC424	Supply Chain Analytics
13.	BA* ZC425	HR Analytics
14.	BA* ZC426	Real-Time Analytics
15.	BA* ZG512	Predictive Analytics
16.	BA* ZG522	Business Data Mining
17.	BA* ZG523	Introduction to Data Science
18.	BA* ZG524	Advanced Statistical Methods
19.	BA* ZG525	Dig Data Analytics
20.	BA* ZG537	Text Analytics
21.	EE* ZG532	Pumps and Automation Systems
22.	EE* ZG533	Industrial Pollution Abatement
23.	EE* ZG534	Urban Water Management
24.	EE* ZG624	Advanced Water Treatment Technology and Water Supply Systems
25.	EE* ZG625	Advanced Wastewater Engineering
26.	FIN ZG512	Global financial Markets and Products

27.	FIN ZG513	Management of banks & Financial Institutions
28.	FIN ZG514	Derivatives and Risk Management
29.	FIN ZG518	Multinational Finance
30.	FIN ZG519	Business Analysis and Valuation
31.	FIN ZG520	Security Analysis and Portfolio Management
32.	FIN ZG522	Mergers, Acquisitions, and Corporate Restructuring
33.	FIN ZG523	Market Risk Management
34.	FIN ZG524	Credit Risk Management
35.	FIN ZG525	Operational Risk Management
36.	FIN ZG526	Advanced Risk Models
37.	FIN ZG527	International Regulatory Framework for Banks
38.	FIN ZG528	Venture Capital & Private Equity
39.	ST* ZG522	Structural Health Assessment and Rehabilitation
40.	ST* ZG523	Advanced Concrete Technology
41.	ST* ZG524	Advanced Concrete Structural Design
42.	TE* ZG512	Soil Exploration and Field Techniques
43.	TE* ZG511	Soil Mechanics for Highway Engineering
44.	TE* ZG513	Reinforced Soil Structures for Transportation Engineering
45.	TE* ZG514	Advanced Concrete Technology in transportation Engineering
46.	TE* ZG515	Applications in Transportation Engineering
47.	TE* ZG516	Laboratory in Transportation Engineering
48.	TE* ZG517	Road Safety and Audit
49.	TE* ZG518	Pavement Analysis and Design
50.	TE* ZG519	Pavement Evaluation Field Project
51.	TE* ZG534	Pavement Material Characterization
52.	TE* ZG535	Highway Geometric Design
53.	TE* ZG623	Ground Improvement Techniques

### B5.13 LIVE INTERACTIVE LECTURE SESSIONS

For the WILP courses offered during II Semester 2014-2015 and I Semester 2015-2016 for the B.S. Engineering Technology, B.S. Information Systems, B.S. Process Engineering, B.S. Power Engineering, M.S. Software Systems, M.S. Manufacturing Management, M.S. 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 2014-2015

S.No.	Course No.	COURSE TITLE
1.	AAOC ZC111	PROBABILITY & STATISTICS
2.	AAOC ZC222	OPTIMIZATION
3.	BITS ZC461	SOFTWARE ENGINEERING
4.	BITS ZC471 / CM ZC471 / HHSM ZC471	MANAGEMENT INFORMATION SYSTEMS
5.	BITS ZC481	COMPUTER NETWORKS
6.	BITS ZG553	REAL TIME SYSTEMS
7.	CS ZG525	ADVANCED COMPUTER NETWORKS
8.	CS ZG623	ADVANCED OPERATING SYSTEMS

S.No.	Course No.	COURSE TITLE
9.	EA ZC412	FLEXIBLE MANUFACTURING SYSTEMS
10.	EA ZC451	INTERNETWORKING TECHNOLOGIES
11.	EA ZC473	MULTIMEDIA COMPUTING
12.	EEE ZG512	EMBEDDED SYSTEM DESIGN
13.	ENGG ZC111	ELECTRICAL & ELECTRONICS TECHNOLOGY
14.	ENGG ZC232	ENGINEERING MATERIALS
15.	ENGG ZC241	MECHANICAL TECHNOLOGY
16.	ENGG ZC242	MAINTENANCE AND SAFETY
17.	ES ZC261	DIGITAL ELECTRONICS & MICROPROCESSORS
18.	ET ZC234	MANUFACTURING PROCESS
19.	ET ZC341 / ET ZC344	INSTRUMENTATION & CONTROL
20.	ET ZC342	MATERIALS MANAGEMENT
21.	ET ZC362	ENVIRONMENTAL POLLUTION CONTROL
22.	ET ZC412	PRODUCTION PLANNING & CONTROL
23.	ET ZC413	ENGINEERING DESIGN
24.	ET ZC414	PROJECT APPRAISAL
25.	ET ZC423	ESSENTIALS OF PROJECT MANAGEMENT
26.	ET ZC432	QUALITY CONTROL ASSURANCE & RELIABILITY
27.	HISM ZC417	MANAGERIAL COMMUNICATION
28.	IS ZC313	OBJECT ORIENTED PROG & DESIGN
29.	IS ZC323	SYSTEMS PROGRAMMING
30.	IS ZC332	DATABASE SYSTEMS & APPLICATIONS
31.	IS ZC353	COMPUTER ORGANIZATION & ARCHITECTURE
32.	IS ZC362	OPERATING SYSTEMS
33.	IS ZC363	DATA STRUCTURES & ALGORITHMS
34.	IS ZC372	COMPILER DESIGN
35.	IS ZC415	DATA MINING
36.	IS ZC424	SOFTWARE FOR EMBEDDED SYSTEMS
37.	IS ZC446	DATA STORAGE TECHNOLOGIES & NETWORKS
38.	IS ZC462	NETWORK PROGRAMMING
39.	IS ZC464	MACHINE LEARNING
40.	MATH ZC222	DISCRETE STRUCTURES FOR COMP SCIENCE
41.	MATH ZC232	ENGINEERING MATHEMATICS – II
42.	MATH ZC233	CALCULUS
43.	MATH ZC234	LINEAR ALGEBRA & OPTIMIZATION
44.	MBA ZC415	FINANCIAL & MANAGEMENT ACCOUNTING
45.	MBA ZC416	MANAGERIAL ECONOMICS
46.	MBA ZG511	MANAGING PEOPLE & ORGANIZATIONS
47.	MBA ZG541	CONSULTANCY PRACTICE
48.	MM ZC411 / MBA ZC411 / QMJ ZC411	MARKETING
49.	MM ZC441	HUMAN RESOURCE MANAGEMENT
50.	MM ZG513	MAINTENANCE ENGINEERING

S.No.	Course No.	COURSE TITLE
51.	MM ZG514 / QM ZG514 / QMJ ZG514	LEADERSHIP & MANAGING CHANGE
52.	MM ZG515 / MBA ZC417 / QM ZG515	QUANTITATIVE METHODS
53.	MM ZG521 / MBA ZG521	FINANCIAL MANAGEMENT
54.	MM ZG522 / CM ZG532/ HHSM ZG518 / QM ZG532	TOTAL QUALITY MANAGEMENT
55.	MM ZG523 / CM ZG523/ QM ZG523 / QMJ ZG523	PROJECT MANAGEMENT
56.	MM ZG533	MANUFACTURING PLANNING & CONTROL
57.	MM ZG534	SUSTAINABLE MANUFACTURING
58.	MM ZG537	LEAN MANUFACTURING
59.	MM ZG541	PRODUCT DESIGN
60.	MM ZG611/CM ZG611/ MBA ZG611 / QMJ ZG611/QM ZG611	STRATEGIC MGT & BUSINESS POLICY
61.	MM ZG621 / MBA ZG621/ QMJ ZG621	SUPPLY CHAIN MANAGEMENT
62.	MM ZG627	MANAGERIAL CORPORATE FINANCE
63.	QM ZG524/ MBA ZG524/ QMJ ZG521	QUALITY MANAGEMENT SYSTEMS
64.	QM ZG526/ MBA ZG526	OPERATIONS MANAGEMENT
65.	QM ZG528	RELIABILITY ENGINEERING
66.	QM ZG531	STATISTICAL QUALITY CONTROL
67.	QM ZG663	CONCURRENT ENGINEERING
68.	SS ZG513	NETWORK SECURITY
69.	SS ZG514	OBJECT ORIENTED ANALYSIS & DESIGN
70.	SS ZG515	DATA WAREHOUSING
71.	SS ZG518	DATABASE DESIGN & APPLICATIONS
72.	SS ZG519	DATA STRUCTURES & ALGORITHMS DESIGN
73.	SS ZG526	DISTRIBUTED COMPUTING
74.	SS ZG527	CLOUD COMPUTING
75.	SS ZG531	PERVASIVE COMPUTING
76.	SS ZG552	SOFTWARE TESTING METHODOLOGIES
77.	SS ZG622	SOFTWARE PROJECT MANAGEMENT
78.	SS ZG653	SOFTWARE ARCHITECTURES
79.	SS ZG661/QM ZG662	SOFTWARE QUALITY MANAGEMENT
80.	TA ZC163	COMPUTER PROGRAMMING
81.	TA ZC164	COMPUTER PROGRAMMING (MATLAB)
82.	TA ZC232	ENGINEERING MEASUREMENTS
83.	HHSM ZG514	HEALTH CARE MARKETING & STRATEGIC MANAGEMENT
84.	HHSM ZG515	QUANTITATIVE METHODS
85.	HHSM ZG516	EPIDEMIC & DISASTER MANAGEMENT
86.	HHSM ZG517	HEALTH CARE MANAGEMENT
87.	MMVA ZG621	SUPPLY CHAIN MANAGEMENT
88.	MMVA ZG537	LEAN MANUFACTURING
89.	MMVA ZG523	PROJECT MANAGEMENT
90.	MMVA ZC441	HUMAN RESOURCE MANAGEMENT
91.	MMVA ZG533	MANUFACTURING PLANNING & CONTROL

S.No.	Course No.	COURSE TITLE
92.	MMVA ZG522	TOTAL QUALITY MANAGEMENT
93.	MMVA ZG515	QUANTITATIVE METHODS
94.	MMVA ZG541	PRODUCT DESIGN
95.	AETT ZG524	VEHICLE DYNAMICS
96.	AETT ZG532	COMPUTER AIDED ENGINEERING
97.	AETT ZG523	PRODUCT MANAGEMENT
98.	AETT ZG611	COMPUT FLUID DYN & HEAT TRANS
99.	PEVA ZC235 / PEAB ZC235 / EDLT ZC235 / POWAB ZC234	LINEAR ALGEBRA & OPTIMIZATION
100.	PEVA ZC164 / EDLT ZC164 / PEAB ZC164	COMPUTER PROGRAMMING
101.	PEVA ZC321/ PEAB ZC321	CHEMICAL PROCESS CALCULATIONS
102.	PEVA ZC311/ PEAB ZC311	CHEMICAL ENGINEERING THERMODY
103.	POWAB ZC242	ENGINEERING MEASUREMENTS
104.	POWAB ZC313	POWER GENERATION
105.	POWAB ZC343	MICROPROCESSORS & MICROCONTR
106.	EDLT ZC113	PROBABILITY & STATISTICS
107.	EDLT ZC245	FLUID MECHANICS & MACHINES
108.	PERL ZC317	TRANSPORT PHENOMENA - II
109.	PERL ZC342	PHARMA QUALITY CONT & REG AFF
110.	PERL ZC412	PROCESS EQUIPMENT DESIGN
111.	PERL ZC411	PRODUCTION PLANNING & CONTROL
112.	ESLT ZG525	AVIONICS SYSTEMS
113.	ESLT ZG533	RECONFIGURABLE COMPUTING
114.	ESLT ZG612	FAULT TOLERANT SYSTEM DESIGN
115.	ESLT ZG651	NETWORKED EMBEDDED APP
116.	DELT ZG621	COMPUTER AIDED ANALYSIS & DESIGN
117.	DELT ZG525	MECHANICAL SYSTEM DESIGN
118.	DELT ZG531	CONCURRENT ENGINEERING
119.	DELT ZG611	DYNAMICS & VIBRATIONS
120.	PEVA ZC317	TRANSPORT PHENOMENA-II
121.	PEVA ZC412	PROCESS EQUIPMENT DESIGN
122.	PEVA ZC411	PRODUCTION PLANNING & CONTROL
123.	POWAB ZC431	MAINTENANCE & SAFETY
124.	POWAB ZC342	POWER SYSTEM ENGINEERING - I
125.	POWAB ZC314	PRIME MOVERS & FLUID MACHINES
126.	POWAB ZC344	INSTRUMENTATION & CONTROL
127.	POWAB ZC441	POWER SYSTEMS ENGINEERING - II
128.	POWAB ZC411	ENV. POLLUTION CONTROL
129.	POWAB ZC421	ESSENTIALS OF PROJECT MGT
130.	PEAB ZC314/ PEHC ZC314	POWER PLANT ENGINEERING
131.	PEAB ZC331 / PEHC ZC331 / PEVA ZC331	QUALITY CONT ASSU & RELI
132.	PEAB ZC382	CEMENT TECHNOLOGY
133.	PEAB ZC413 / PEHC ZC413	PROCESS PLANT SAFETY & ENVIRON

S.No.	Course No.	COURSE TITLE
134.	PEHC ZC385	FERTILIZER TECHNOLOGY
135.	POMCL ZG534	ADVANCED PHARMACEUTICAL TECHNOLOGY
136.	POMCL ZG545	INTELLECTUAL PROPERTY RIGHTS AND PHARMACEUTICALS
137.	POMCL ZG542	PRODUCTION AND OPERATIONS MANAGEMENT
138.	POMCL ZG523	PROJECT MANAGEMENT

### First Semester 2015-2016

S.No.	Course No.	Course Title
1.	AAOC ZC111	PROBABILITY & STATISTICS
2.	AAOC ZC222	OPTIMIZATION
3.	BITS ZC461	SOFTWARE ENGINEERING
4.	BITS ZC471/CM ZC471 / HHSM ZC471	MANAGEMENT INFORMATION SYSTEMS
5.	BITS ZC481	COMPUTER NETWORKS
6.	BITS ZG553	REAL TIME SYSTEMS
7.	CS ZG525	ADVANCED COMPUTER NETWORKS
8.	EA ZC412 / MM ZC412	FLEXIBLE MANUFACTURING SYSTEMS
9.	EA ZC473	MULTIMEDIA COMPUTING
10.	EEE ZG512	EMBEDDED SYSTEM DESIGN
11.	ENGG ZC112	ELECTRICAL & ELECTRONICS TECHNOLOGY
12.	ENGG ZC232	ENGINEERING MATERIALS
13.	ENGG ZC241	MECHANICAL TECHNOLOGY
14.	ENGG ZC242	MAINTENANCE AND SAFETY
15.	ES ZC261	DIGITAL ELECTRONICS & MICROPROCESSORS
16.	ET ZC234	MANUFACTURING PROCESSES
17.	ET ZC342	MATERIALS MANAGEMENT
18.	ES ZC343	MICROPROCESSORS & MICROCONTROLLERS
19.	ET ZC344	INSTRUMENTATION & CONTROL
20.	ET ZC362	ENVIRONMENTAL POLLUTION CONTROL
21.	ET ZC412	PRODUCTION PLANNING & CONTROL
22.	ET ZC413	ENGINEERING DESIGN
23.	ET ZC415	MANUFACTURING EXCELLENCE
24.	ET ZC423	ESSENTIALS OF PROJECT MANAGEMENT
25.	ET ZC432	QUALITY CONTROL ASSURANCE & RELIABILITY
26.	HHSM ZC417	MANAGERIAL COMMUNICATION
27.	IS ZC313	OBJECT ORIENTED PROGRAMMING & DESIGN
28.	HHSM ZG519	PROJECT MANAEMENT
29.	IS ZC323	SYSTEMS PROGRAMMING
30.	IS ZC332	DATABASE SYSTEMS & APPLICATIONS
31.	IS ZC353	COMPUTER ORGANIZATION & ARCHITECTURE
32.	IS ZC362	OPERATING SYSTEMS
33.	IS ZC363	DATA STRUCTURES & ALGORITHMS
34.	IS ZC372	COMPILER DESIGN
35.	IS ZC415	DATA MINING



S.No.	Course No.	Course Title
36.	IS ZC423	SOFTWARE DEVELOPMENT FOR PORTABLE DEVICES
37.	IS ZC424	SOFTWARE FOR EMBEDDED SYSTEMS
38.	IS ZC446	DATA STORAGE TECHNOLOGIES & NETWORKS
39.	IS ZC462	NETWORK PROGRAMMING
40.	IS ZC464	MACHINE LEARNING
41.	IS ZC472	COMPUTER GRAPHICS
42.	MATH ZC222	DISCRETE STRUCTURES FOR COMP SCIENCE
43.	MATH ZC233	CALCULUS
44.	MATH ZC234	LINEAR ALGEBRA & OPTIMIZATION
45.	MBA ZC415	FINANCIAL & MANAGEMENT ACCOUNTING
46.	MBA ZC416	MANAGERIAL ECONOMICS
47.	MM ZG515 / QM ZG515 / CM ZG515	QUANTITATIVE METHODS
48.	MBA ZC417	QUANTITATIVE METHODS
49.	MBA ZG511	MANAGING PEOPLE & ORGANIZATIONS
50.	MBA ZC411/ QMJ ZC411	MARKETING
51.	MBA ZG514 / MMVA ZG514 / MM ZG514 / QM ZG514	LEADERSHIP & MANAGING CHANGE
52.	MBA ZG521/ CM ZG513	FINANCIAL MANAGEMENT
53.	MBA ZG522/ MM ZG522 / QM ZG532 / CM ZG532 / HHSM ZG518	TOTAL QUALITY MANAGEMENT
54.	MBA ZG515	CONSULTING & PEOPLE SKILLS
55.	MBA ZG526/ QM ZG526	OPERATIONS MANAGEMENT
56.	MBA ZG531 / QM ZG531	STATISTICAL QUALITY CONTROL
57.	MBA ZG611 / MM ZG611 / QM ZG611 / CM ZG611	STRATEGIC MANAGEMENT & BUSINESS POLICY
58.	MGTS ZC211	PRINCIPLES OF MANAGEMENT
59.	MM ZG533	MANUFACTURING PLANNING & CONTROL
60.	MM ZC441 / QM ZC441/ MMVA ZC441	HUMAN RESOURCE MANAGEMENT
61.	MM ZG512/ MMVA ZG512	MANUFACTURING STRATEGY
62.	MM ZG513	MAINTENANCE ENGINEERING
63.	MM ZG523 / QM ZG523 / CM ZG523 / QMJ ZG523 / MMVA ZG523	PROJECT MANAGEMENT
64.	MBA ZG523	PROJECT MANAGEMENT
65.	MBA ZG525	BUSINESS PROCESS ANALYSIS
66.	MM ZG534/ MMVA ZG534	SUSTAINABLE MANUFACTURING
67.	MM ZG535 / QM ZG535	DECISION ANALYSIS (NEW)
68.	MM ZG537 / MBA ZG537 / MMVA ZG537	LEAN MANUFACTURING
69.	MM ZG541	PRODUCT DESIGN
70.	MBA ZG541	CONSULTANCY PRACTICES
71.	MM ZG621 / QMJ ZG621/	SUPPLY CHAIN MANAGEMENT
72.	MMVA ZG621	SUPPLY CHAIN MANAGEMENT
73.	MBA ZG634	STRATEGIC CHANGE MANAGEMENT
74.	MM ZG627/MMVA ZG627	MANAGERIAL CORPORATE FINANCE
75.	QM ZG528	RELIABILITY ENGINEERING
76.	QM ZG536	DESIGN OF EXPERIMENTS
77.	QM ZG663	CONCURRENT ENGINEERING

S.No.	Course No.	Course Title
78.	SS ZG513	NETWORK SECURITY
79.	SS ZG514	OBJECT ORIENTED ANALYSIS & DESIGN
80.	SS ZG515	DATA WAREHOUSING
81.	SS ZG518	DATABASE DESIGN & APPLICATIONS
82.	SS ZG519	DATA STRUCTURES & ALGORITHMS DESIGN
83.	SS ZG526	DISTRIBUTED COMPUTING
84.	SS ZG527	CLOUD COMPUTING
85.	SS ZG531	PERVASIVE COMPUTING
86.	SS ZG537	INFORMATION RETRIEVAL
87.	SS ZG552	SOFTWARE TESTING METHODOLOGIES
88.	SS ZG554	DISTRIBUTED DATA SYSTEMS
89.	SS ZG582	TELECOM NETWORK MANAGEMENT (NEW)
90.	SS ZG622	SOFTWARE PROJECT MANAGEMENT
91.	SS ZG653	SOFTWARE ARCHITECTURES
92.	SS ZG661/QM ZG662	SOFTWARE QUALITY MANAGEMENT
93.	TA ZC163	COMPUTER PROGRAMMING (C)
94.	TA ZC164	COMPUTER PROGRAMMING (MATLAB)
95.	TA ZC232	ENGINEERING MEASUREMENTS
96.	PEAB ZC316	TRANSPORT PHENOMENA-I
97.	PEAB ZC361	ENVIRONMENTAL POLLUTION CONTROL
98.	PEVA ZC453	PROCESS CONTROL & INSTRU
99.	PEVA ZC452	PROCESS PLANT SAFETY & ENVIRON
100.	PEVA ZC383	EXTRACTIVE MATALLURGY
101.	PERL ZC453	PROCESS CONTROL & INSTRU
102.	PERL ZC361	ENVIRONMENTAL POLLUTION CONTROL
103.	PERL ZC452	PROCESS PLANT SAFETY & ENVIRON
104.	POWAB ZC441/POWJS ZC441 / POWTP ZC441	POWER SYSTEMS ENGINEERING -II
105.	POWAB ZC332/ POWJS ZC332 / POWTP ZC332	ENERGY MANAGEMENT
106.	POWAB ZC342/ POWES ZC342	POWER SYSTEMS ENGINEERING -I
107.	POWAB ZC344 / POWES ZC344	INSTRUMENTATION & CONTROL
108.	POWAB ZC421/ POWJS ZC421 / POWTP ZC421	ESSENTIALS OF PROJECT MGT
109.	POWAB ZC314 / POWES ZC314	PRIME MOVERS & FLUID MACHINES
110.	POMCL ZC441	HUMAN RESOURCE MANAGEMENT
111.	POMCL ZG611	STRATEGIC MANAGEMENT & BUSINESS POLICY
112.	POMLM ZC441	HUMAN RESOURCE MANAGEMENT
113.	POMLM ZG513	FINANCIAL MANAGEMENT
114.	PEAB ZC113	PROBABILITY & STATISTICS
115.	PEAB ZC352/ PEVA ZC352	ENERGY MANAGEMENT
116.	POWAB ZC312/ POWJS ZC312 / POWTP ZC312	QUALITY CONTROL ASSUR & RELIAB
117.	POWAB ZC431 / POWES ZC431	MAINTENANCE & SAFETY
118.	EDLT ZC311	MANUFACTURING PROCESSES
119.	EDLT ZC321	MECHANICS OF SOLIDS

S.No.	Course No.	Course Title
120.	EDLT ZC332	MECHANICAL ENGINEERING DESIGN - I
121.	EDLT ZC341	THERMAL ENGINEERING - I
122.	AETT ZG612	ADV IN MATERIALS COMPO & PLAST
123.	AETT ZG621	DURABILITY CRASH & SAFETY ENGG
124.	AETT ZG622	ADVANCED MANUFACTURING PROCESS
125.	AETT ZG633	ADVANCES IN VEHICLE BODY STRU
126.	POMCL ZG532	SUPPLY CHAIN MANAGEMENT
127.	POMLM ZG532	SUPPLY CHAIN MANAGEMENT
128.	PERL ZC352	ENERGY MANAGEMENT
129.	POMCL ZG525	PHARMACEUTICAL PROCESS DEVELOPMENT & SCALE-UP
130.	POMLM ZG515	PHARMACEUTICAL ADMIN & MANAGEMENT

#### B5.14 PROJECT WORK AND DISSERTATION

Students of B.S. programmes do a full-semester Project Work in their final semester, while students of higher degree programmes like M.S., M.Tech. and M.Phil. submit a Dissertation 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 2015.

#### 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 2014-2015	I Semester 2015-2016
1.	Registered and under the under the purview of AMB at the beginning of the semester	1523	1234
2.	Declared outside the purview of AMB at the end of the semester	1071	549
3.	Discontinued during the semester	12	20
4.	Continue to be under the purview of AMB	440	665
5.	New cases referred to AMB at the end of the Semester	2985	1012
6.	Under the purview of AMB at the beginning of the next semester	3425	1677
7.	Registered and under the purview of AMB at the beginning of the next semester	1234	219

#### B5.16 AWARD OF DEGREES

During the year, a total of 6660 students graduated. The details on the award of degrees are given below.

	Number of degrees awarded
76 <sup>th</sup> Award (vide Board of Governors meeting held on 04.05.2015)	4345(1552)
77 <sup>th</sup> Award (vide Board of Governors meeting held on 17.07.2015)	2315(0522)
<b>Total:</b>	<b>6660(2074)</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 2015

1. M.Tech. Software Engineering (Verizon Chennai)

2. M.Tech. Software Engineering (Hexaware, Mumbai)
3. B.Tech. Manufacturing Technology (Tata Motors, Jamshedpur)
4. B.Tech. Manufacturing Technology (Kirloskar, Pune)
5. M.Tech. Embedded Systems (UTC aerospace Systems, Bangalore)

### **B5.18 COLLABORATIVE PROGRAMMES UNDER DISCUSSION**

The new collaborative programmes under discussion are indicated below:

1. M.Tech. Structural Engineering for employees of Public Works Department, Goa
2. M.Tech. Transportation Engineering for employees of Public Works Department, Goa
3. M.Sc. Business Analytics for employees of Genpact

### **B5.19 New Initiatives**

#### **Programme and Content Design**

As part of our continuing efforts to improve the quality of the programmes offered under WILP, we have initiated several measures related to Programme and Content Design including curriculum review, content development, pedagogy and instructional delivery, and enhancing experiential learning aspects through virtual laboratories and simulations.

We have redesigned the course handouts to incorporate a lot more detail, starting with including course and module level objectives and student learning outcomes, which are aligned with the programme-level objectives.

These efforts are focussed on defining and articulating the value proposition that we offer to students and the companies that partner with us in these programmes.

#### **WILP Transformation**

WILP has started focussing on enhancing the emphasis on skills-based training as a part of the WILP, and the courses therein. As part of this effort, we have begun moving our pedagogical approach from a teaching-centric, lecture-based approach, to a learner-centred, discussion, hands-on, and practical based approach to instruction built around essential content in electronic form, focusing on work integration.

To meet these academic requirements of a fairly large scale, and the corresponding business goals, we have reorganized WILP in fundamental ways, with the formation of the Academic Groups with Leaders, the Programme Committees with their Leads, the Work Streams with their Leaders, the Educational Technology team, and the business team. We have been, and will continue to seek external support as and where necessary, to ensure that we have adequate bandwidth, capability, and capacity to move rapidly and effectively.

In addition to the efforts required on programme design, content development, laboratory development, and pedagogy, we have also devoted time and thought to matters such as faculty recruitment, training and development, and accreditation by appropriate academic bodies and endorsement by industry associations. We will also be exploring suitable strategic partnerships.

We have begun working with our business development team, in interacting with industry to identify areas offering significant potential for growth and expansion, particularly when it comes to short-term programmes, and also to enhance the degree of customization and skilling.

In consonance with the emphasis on skills-based training, we have also begun work on offering short term and certificate programmes. As part of this effort, we offered a certificate programme on 'Pumps, Fans and Blowers' to sponsored employees of Grasim Industries, Nagda, which was well received.

## LIST OF ANNEXURES

<b>Annexure No.</b>	<b>Description</b>	<b>Page No.</b>
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B5-3	LIST OF ORGANIZATIONS WHO HAVE SPONSORED THEIR EMPLOYEES FOR WORK INTEGRATED LEARNING PROGRAMMES OF BITS	B5: A-5-69
B5-4	LIST OF PROJECT WORK SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED LEARNING PROGRAMMES IN THE YEAR 2015	B5: A-70-78
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## DETAILS OF ADMISSIONS MADE DURING THE YEAR 2015

### (A) Second Semester 2014-2015

PROGRAMMES	No. of students joined
<b>1. Integrated First Degree Programmes:</b>	
<b>B.Tech</b>	
Information Systems	72(007)
Manufacturing Technology	23(007)
Process Engineering	50(007)
<b>Sub Total</b>	<b>145(021)</b>
<b>2. Higher Degree Programme:</b>	
<b>M.Tech</b>	
Design Engineering	82(008)
Embedded Systems	69(008)
Environmental Engineering	27(004)
Manufacturing Management	182(008)
Microelectronics	29(004)
Quality Management	112(004)
Software Engineering	1549(032)
Software Systems	721(016)
System Engineering	84(004)
<b>MBA</b>	
Consultancy Management	48(004)
Manufacturing Management	45(004)
Quality Management	18(004)
<b>Sub total</b>	<b>2966 (100)</b>
<b>Total</b>	<b>3111(121)</b>

**(B) First Semester 2015-2016**

<b>PROGRAMMES</b>	<b>No. of students joined</b>	
<b>1. Integrated First Degree Programmes:</b>		
<b>B.Tech</b>		
Engineering Technology		393(012)
Information Systems		31(002)
Manufacturing Technology		91(000)
Marine Engineering		240(002)
Nautical Technology		80(001)
<b>B.Optom</b>		88(066)
	<b>Sub total</b>	<b>923(083)</b>
<b>2. Higher Degree Programmes:</b>		
<b>M.Tech</b>		
Automotive Engineering		74(006)
Design Engineering		38(006)
Embedded Systems		52(007)
Manufacturing Management		247(015)
Microelectronics		69(006)
Quality Management		152(019)
Software Engineering		232(093)
Software Systems		1057(304)
<b>M.B.A.</b>		
Consultancy Management		83(014)
Manufacturing Management		63(000)
Quality Management		49(016)
<b>M.Phil.</b>		
Hospital and Health Systems Management		31(010)
Optometry		06(004)
	<b>Sub total</b>	<b>2153(500)</b>
	<b>Total</b>	<b>3076(583)</b>

**SUMMARY**

	<b>II Semester 2014-15</b>	<b>I Semester 2015-16</b>	<b>Total</b>
Integrated First Degree Programmes	145(021)	923(083)	1068(104)
Higher Degree Programmes	2966(100)	2153(500)	5119(600)
<b>Total</b>	<b>3111(121)</b>	<b>3076(583)</b>	<b>6187(704)</b>

**NUMBER OF STUDENTS REGISTERED IN FIRST SEMESTER 2015-2016**

Programme	Year of Admission						Total
	2010 and earlier	2011	2012	2013	2014	2015	
<b>A. Integrated First Degree Programmes</b>							
<b>B.Optom.</b>						58(42)	58(42)
<b>B.S.</b>							
Engineering Design	-	-	1(0)	-	23(3)	-	24(3)
Engineering Technology	62(2)	32(0)	172(2)	391(9)	220(10)	-	877(23)
Information Systems	13(0)	1(0)	160(59)	36(0)	-	-	210(59)
Manufacturing Engineering	-	-	28(0)	107(3)	77(1)	-	212(4)
Marine Engineering	13(0)	29(0)	234(1)	242(1)	251(3)	-	769(5)
Nautical Technology	6(0)	15(0)	76(1)	71(0)	80(2)	-	248(3)
Optometry	1(01)	9(6)	82(60)	100(86)	94(71)	30(24)	316(248)
Physician Assistant	-	-	8(8)	23(20)	34(34)	-	65(62)
Power Engineering	-	-	30(0)	87(0)	51(0)	-	168(0)
Process Engineering	-	-	76(1)	124(3)	31(1)	-	231(5)
<b>B.Tech.</b>							
Engineering Technology	-	-	-	-	-	392(12)	392(12)
Information Systems	-	-	-	-	72(18)	31(2)	103(20)
Manufacturing Technology	-	-	-	-	23(0)	86(0)	109(0)
Marine Engineering	-	-	-	-	-	240(2)	240(2)
Nautical Technology	-	-	-	-	-	80(1)	80(1)
Process Engineering	-	-	-	-	50(0)	-	50(0)
<b>Sub. Total</b>	<b>95(03)</b>	<b>86(06)</b>	<b>867(132)</b>	<b>1181(122)</b>	<b>1006(143)</b>	<b>917(83)</b>	<b>4152(489)</b>
<b>B. Higher Degree Programmes</b>							
<b>MBA</b>							
Consultancy Management	-	-	-	-	113(17)	83(14)	196(31)
Manufacturing Management	-	-	2(1)	10(1)	111(11)	63(0)	186(13)
Quality Management	-	-	-	2(0)	68(15)	49(16)	119(31)
<b>M.S.</b>							
Automotive Engineering	-	-	-	-	33(02)	-	33(02)
Consultancy Management	-	2(0)	4(0)	6(0)	-	-	12(0)
Design Engineering	-	-	-	28(0)	-	-	28(0)
Embedded Systems	-	-	-	14(1)	-	-	14(1)
Integrated Software Systems	-	-	-	141(66)	44(20)	38(25)	223(111)
Manufacturing Management	4(0)	2(0)	4(0)	50(2)	-	-	60(2)



Programme	Year of Admission						Total
	2010 and earlier	2011	2012	2013	2014	2015	
Microelectronics	-	-	-	4(0)	-	-	4(0)
Pharmaceutical Operations and Management	-	-	-	-	52(5)	-	52(5)
Quality Management	3(0)	1(0)	2(0)	14(1)	-	-	20(1)
Software Engineering	23(9)	1135(668)	1377(877)	386(198)	66(25)	-	2987(1777)
Software Systems	17(2)	5(0)	8(3)	61(19)	134(42)	-	225(66)
Systems Engineering	-	132(78)	-	51(8)	-	-	183(86)
Telecommunications & Software Engineering	-	-	1(0)	17(3)	30(4)	-	48(7)
<b>M.Phil.</b>							
Hospital & Health Systems Management	1(0)	1(01)	3(0)	6(03)	31(10)	31(10)	73(23)
Optometry	-	-	-	-	11(6)	6(4)	17(10)
<b>M.Tech.</b>							
Automotive Engineering	-	-	-	-	-	74(6)	74(6)
Design Engineering	-	-	-	71(8)	71(6)	38(6)	180(20)
Embedded Systems	-	-	-	-	62(16)	52(7)	114(23)
Environmental Engineering	-	-	-	-	26(8)	-	26(8)
Integrated Software Systems	-	-	-	7(1)	23(4)	8(4)	38(9)
Manufacturing Management	5(0)	2(0)	7(0)	152(15)	486(28)	247(15)	899(58)
Microelectronics	-	-	-	27(8)	23(4)	69(6)	119(18)
Pharmaceutical Operations and Management	-	-	-	-	42(3)	-	42(3)
Quality Management	-	-	-	12(3)	258(31)	152(19)	422(53)
Science Communication	-	-	-	-	11(3)	-	11(3)
Software Engineering	22(8)	1846(972)	2458(1361)	802(365)	1359(652)	230(93)	6717(3451)
Software Systems	27(4)	12(3)	38(10)	527(159)	1388(362)	931(261)	2841(799)
Systems Engineering	-	145(65)	-	13(6)	80(26)	-	238(97)
Telecommunications and Software Engineering	-	-	1(0)	19(12)	19(7)	-	39(19)
<b>Sub. Total</b>	<b>102 (23)</b>	<b>3283 (1786)</b>	<b>3905 (2252)</b>	<b>2420 (879)</b>	<b>4541 (1307)</b>	<b>2071 (486)</b>	<b>16322 (6733)</b>
<b>Total Off-campus</b>							<b>20474 (7222)</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**

1.	[24]7 INC.	BENGALURU
2.	[24]7 INNOVATION LABS	BENGALURU
3.	24BY7CIOINFOTECH	PUNE
4.	3DPLM SOFTWARE SOLUTIONS LTD.	NANDED
5.	3DPLM SOFTWARE SOLUTIONS LTD.	PUNE
6.	3I-CORPORATION	NAGPUR
7.	3M ELECTRO & COMMUNICATION I PVT. LTD.	HOSUR
8.	3M SINGAPORE PVT. LTD.	VELACHERY
9.	7N CONSULTING PVT. LTD.	GURGAON
10.	A CLP INDIA LTD.	JHAJJAR
11.	A PRODULE SYSTEMS PVT. LTD.	COIMBATORE
12.	AARVEE ASSOCIATES ARCHITECTS ENGINEERS LTD.	HYDERABAD
13.	AASHNA CLOUDTECH PVT. LTD.	PUNE
14.	ABB GISL	TIRUVANNAMALAI
15.	ABB GLOBAL INDUSTRIES AND SERVICES LTD.	ADILABAD
16.	ABB GLOBAL INDUSTRIES AND SERVICES LTD.	BENGALURU
17.	ABB GLOBAL INDUSTRIES AND SERVICES LTD.	CHENNAI
18.	ABB GLOBAL INDUSTRIES AND SERVICES LTD.	KOLKATA
19.	ABB GLOBAL INDUSTRIES AND SERVICES LTD.	MAYILADUTHURAI
20.	ABB INDAI LTD.	CHENNAI
21.	ABB INDIA LTD.	BENGALURU
22.	ABB INDIA LTD.	VADODARA
23.	ABB LLC	DOHA
24.	ABB LTD.	BENGALURU
25.	ABB MALAYSIA SDN BHD	KUALA LUMPUR
26.	ABB SPA PROCESS AUTOMATION DIVISION	KUWAIT
27.	ABCFRC,GRASIM INDUSTRIES LTD.	KOSAMBA
28.	ABCL SAFETY CONSULTANTS	DUBAI
29.	ABDULLAH A.M. AL-KHODARI SONS CO.	AL-KHOBAR
30.	ABDULLAH H AL SHUWAYER SONS COMPANY	DAMMAM
31.	ABELLON CLEAN ENERGY LTD.	AHMEDABAD
32.	ABG CEMENT BUSINESS	MUMBAI
33.	ABI SHOWATECH INDIA LTD.	SHOLINGHUR
34.	ABI SHOWATECH LLC	SALALAH
35.	ABS GROUP INC	ABU DHABI
36.	ABS GROUP SAUDI ARABIA CO. LTD.	TIRUCHIRAPPALLI
37.	ABSOLUTE QUALITY CERTIFICATION PVT. LTD.	GHAZIABAD
38.	ABU DHABI AIRCRAFT TECHNOLOGIES	ABU DHABI
39.	ABU DHABI COMPANY FOR ONSHORE OIL OPERATION	KUMBAKONAM
40.	ABU DHABI COMPANY FOR ONSHORE PETROLIUM	THRISSUR
41.	ABU DHABI GAS DEVELOPMENT COMPANY LTD.	ABU DHABI
42.	ABU DHABI GAS INDUSTRIES LTD.	ABU DHABI
43.	ABU DHABI GAS INDUSTRIES LTD.	ERNAKULAM
44.	ABU DHABI GAS INDUSTRIES LTD.	KULITHALAI

45.	ABU DHABI GAS INDUSTRIES LTD.	RUWAIS
46.	ABU DHABI OIL REFINERY COMPANY	RUWAIS
47.	ABU DHABI OIL REFINING COMPANY	ABU DHABI
48.	ABU DHABI POLYMERS LTD.	ABU DHABI
49.	ABU DHABI POWER AND CONTROL SYSTEMS WORK	ABU DHABI
50.	ABUDHABI GAS INDUSTRIES LTD.	ABUDHABI
51.	ABUDHABI GAS INDUSTRIES LTD.	ALAPPUZHA
52.	ABUDHABI GAS INDUSTRIES LTD.	CHENNAI
53.	ABUDHABI GAS INDUSTRIES LTD.	RUWAIS
54.	ABUDHABI OIL REFINING COMPANY (TAKREER)	RUWAIS
55.	ACC LTD.	BELLARY
56.	ACC LTD.	COIMBATORE
57.	ACC LTD.	KYMORE
58.	ACCEL FRONTLINE LTD.	DELHI
59.	ACCEL FRONTLINE LTD.	TRIVANDRUM
60.	ACCELYST SOLUTIONS PVT. LTD.	BENGALURU
61.	ACCENTURE SERVICES PVT. LTD.	BENGALURU
62.	ACCENTURE SERVICES PVT. LTD.	CHENNAI
63.	ACCENTURE SERVICES PVT. LTD.	COIMBATORE
64.	ACCENTURE SERVICES PVT. LTD.	DELHI
65.	ACCENTURE SERVICES PVT. LTD.	JAMMU
66.	ACCENTURE SERVICES PVT. LTD.	KOLKATA
67.	ACCENTURE SERVICES PVT. LTD.	KRISHNAGIRI
68.	ACCENTURE SERVICES PVT. LTD.	MUMBAI
69.	ACCENTURE SERVICES PVT. LTD.	NAVI MUMBAI
70.	ACCENTURE SERVICES PVT. LTD.	PUNE
71.	ACCENTURE SERVICES PVT. LTD.	THRISSUR
72.	ACCENTURE TECH PVT. LTD.	GURGAON
73.	ACCESS INDIA IMPEX CENTRE PVT. LTD.	NEW DELHI
74.	ACCION LABS INDIA PVT. LTD.	DELHI
75.	ACCIONA ENERGY INDIA PVT. LTD.	BENGALURU
76.	ACCOLITE SOFTWARE INDIA PVT. LTD.	THANE
77.	ACCURATE LOGISTICS PVT. LTD.	CHENNAI
78.	ACE MANUFACTURING SYSTEMS LTD.	BENGALURU
79.	ACG INSPECTION SYSTEM PVT. LTD.	THANE
80.	ACG PAMPAC MACHINES PVT. LTD.	KOLHAPUR
81.	ACI WORLDWIDE SOLUTIONS PVT. LTD.	BENGALURU
82.	ACIDAES SOLUTIONS PVT. LTD.	NEW DELHI
83.	ACME ELECTROMECHANICAL INSTALLATION WORK	DUBAI
84.	ACME INDUSTRIAL HARDWARE TRADING CO LLC	THRISSUR
85.	ACTUANT INDIA PVT. LTD.	BENGALURU
86.	ADANI DEVELOPERS PVT. LTD.	NAVI MUMBAI
87.	ADANI PORTS & SEZ LTD.	MUNDRA
88.	ADANI POWER MAHARASHTRA LTD.	DURGAPUR
89.	ADCC JV	ARUPPUKOTTAI
90.	ADCO	ABU DHABI
91.	ADDNODE INDIA PVT. LTD.	MUMBAI
92.	ADE TECHNOLOGIES PTE LTD.	SINGAPORE
93.	ADECCO INDIA PVT. LTD.	HALDWANI

94.	ADITYA AUTO PRODUCTS ENGG I PVT. LTD.	BENGALURU
95.	ADITYA BIRLA NUVO LTD.	KANPUR
96.	ADITYA BIRLA RETAIL LTD.	MUMBAI
97.	ADITYA INDUSTRY	BARODA
98.	ADNOC DISTRIBUTION	AL AIN
99.	ADOBE SYSTEMS INDIA PVT. LTD.	AGRA
100.	ADOBE SYSTEMS INDIA PVT. LTD.	CUTTACK
101.	ADOBE SYSTEMS INDIA PVT. LTD.	GHAZIABAD
102.	ADOBE SYSTEMS INDIA PVT. LTD.	KAITHAL
103.	ADOBE SYSTEMS INDIA PVT. LTD.	KANPUR
104.	ADOBE SYSTEMS INDIA PVT. LTD.	KOLLAM
105.	ADOBE SYSTEMS INDIA PVT. LTD.	NEW DELHI
106.	ADOBE SYSTEMS INDIA PVT. LTD.	RISHIKESH
107.	ADP INDIA PVT. LTD.	CHENNAI
108.	ADP INDIA PVT. LTD.	HYDERABAD
109.	ADP INDIA PVT. LTD.	PUNE
110.	ADP SOLUTIONS PVT. LTD.	CHENNAI
111.	ADRENALIN ESYSTEMS LTD.	CHENNAI
112.	ADVANCED ELECTRONICS COMPANY	RIYADH
113.	ADVANCED MICRO DEVICES (AMD)	BENGALURU
114.	ADYARD ABUDHABI LLC	ABUDHABI
115.	ADYARD INTERSERVE ABUDHABI L.L.C	ABUDHABI
116.	AEDIFICO TECH PVT. LTD.	GHAZIABAD
117.	AEQUS PVT. LTD.	BELGAUM
118.	AEROEURO ENGINEERING INDIA PVT. LTD.	BENGALURU
119.	AERONAUTICAL DEVELOPMENT AGENCY	BENGALURU
120.	AERONAUTICAL DEVELOPMENT ESTABLISHMENT	BENGALURU
121.	AEROSTRUCTURES ASSEMBLIES INDIA PVT. LTD.	BELGAUM
122.	AERZEN MACHINES INDIA PVT. LTD.	VADODARA
123.	AFFLUENT GLOBAL SERVICES	HYDERABAD
124.	AFOUR TECHNOLOGIES PVT. LTD.	BENGALURU
125.	AGFA HEALTHCARE SOLUTIONS	DUBAI
126.	AGGREKO ENERGY RENTAL INDIA PVT. LTD.	FARIDABAD
127.	AGILIAD TECHNOLOGIES PVT. LTD.	KOLHAPUR
128.	AHALIA HOSPITAL	ERNAKULAM
129.	AIB VINCOTTE INTERNATIONAL PARTNERS LLC	VADODARA
130.	AIBEL	SINGAPORE
131.	AIBEL PTE LTD.	TANJAVUR
132.	AIMIA	PILANI
133.	AIR INDIA LTD.	CHENNAI
134.	AIR INDIA SATS	MUMBAI
135.	AIRBUS GROUP INDIA PVT. LTD.	MADURAI
136.	AIRFORCE	AGRA
137.	AIRTEL	PUNE
138.	AISECT COMPUTER EDUCATION	PILANI
139.	AJAX FIORI ENGINEERING (I) PVT. LTD.	INDORE
140.	AKAMAI TECHNOLOGIES INDIA PVT.LTD.	BENGALURU
141.	AKASHIC BUSINESS SOLUTIONS	PONDA
142.	AKSA SOFTWARE SOLUTIONS PVT. LTD.	SRINAGAR

143.	AKZO NOBEL INDIA LTD.	BENGALURU
144.	AL AHLEIA SWITCHGEAR CO	TRICHUR
145.	AL AHLEIA SWITCHGEAR CO.	ERNAKULAM
146.	AL AMEEN FATHIMA COLLEGE OF NURSING	BIJAPUR
147.	AL GHURAIR IRON & STEEL LLC	ABU DHABI
148.	AL GHURAIR IRON &STEEL LLC	MUSSAFAH
149.	AL GHURAIR IRON AND STEEL LLC	MUSSAFAH
150.	AL HADITHA PETROLEUM SERVICES S.A.O.C	MUSCAT
151.	AL HAMRAH CONSTRUCTION.CO.LLC	AL JAZEERA
152.	AL HAMRAH CONSTRUCTION.CO.LLC	RAS AL KHAIMAH
153.	AL HASSAN ENGINEERING CO SAOG	RUWI
154.	AL HOSN GAS(ABU DHABI GAS DEVELOPMENT CO	MADURAI
155.	AL JABER GROUP	ABU DHABI
156.	AL JABER L.E.G.T ENGINEERING & CONTRACTION	DUBAI
157.	AL JAMAL HOLIDAYS	DUBAI
158.	AL JAZEERA MEDIA NETWORK	DOHA
159.	AL JAZIRA METAL INDUSTRIES CO. LLC	ABU DHABI
160.	AL KHALEEJ SUGAR	TIRUVALLUR
161.	AL MAHASIN ELECTRIAL CONT.CO	SHARJAH
162.	AL MASRAF	DUBAI
163.	AL MAZROEI BOWYER BUILDING	DUBAI
164.	AL MOAYYED TRADING & CONTRACTING	MANAMA
165.	AL NASR ENGINEERING	COIMBATORE
166.	AL QABAS EMPLOYMENT	ABU DHABI
167.	AL REYAMI STEEL	TRICHY
168.	AL SABBAAH ELECTROMECHANICAL	ABUDHABI
169.	AL SALEM JOHNSON CONTROLS	TIRUPPUR
170.	AL SHIRAWI ELECTRICAL & MECHANICAL ENGINEERING	DUBAI
171.	AL TAJIR GLASS INDUSTRIES	DUBAI
172.	AL-AHLEIA SWITCHGEAR CO.	THIRUVALLA
173.	ALCATEL LUCENT INDIA PVT. LTD.	BENGALURU
174.	ALCATEL LUCENT INDIA PVT. LTD.	NEW DELHI
175.	ALFANAR CO.	DAMMAM
176.	ALFANAR ELECTRICAL SYSTEMS	RIYADH
177.	AL-FUTTAIM ENGINEERING	CHICKMAGLUR
178.	ALITCO	RIYADH
179.	ALJABER ENERGY SERVICES LLC	ABU DHABI
180.	ALKEM LABORATORIES LTD.	ZIRAKPUR
181.	ALLEGIS SERVICES INDIA P LTD.	BENGALURU
182.	ALLGO EMBEDDED SYSTEMS PVT. LTD.	NEW DELHI
183.	ALLIANCE GLOBAL SERVICES	HYDERABAD
184.	ALLIANCE TIRE COMPANY	TIRUNELVELI
185.	ALLIANZ MANAGED OPERATIONS & SERVICES SE	KANCHIPURAM
186.	ALLSCRIPTS INDIA PVT. LTD.	BENGALURU
187.	ALLSCRIPTS INDIA PVT. LTD.	KODAGU
188.	ALLSCRIPTS INDIA PVT. LTD.	PUNE
189.	ALLSTATE SOLUTIONS PVT. LTD.	BENGALURU
190.	ALLYZONE SOFTTECH PVT. LTD.	DELHI
191.	ALPHA PALLETS FZC	NANDED

192.	AL-RAWAHY EST.	MUSCAT
193.	ALREEM HOSPICO COMPANY LLC	ALAIN
194.	ALSA ENGINNERING & CONSTRUCTION CO. LLC	BHUBANESWAR
195.	ALSTOM BHARAT FORGE POWER LTD.	AHMEDABAD
196.	ALSTOM INDIA LTD.	VADODARA
197.	ALSTOM MIDDLE EAST	ABU DHABI
198.	ALSTOM T&D INDIA LTD.	CUDDALORE
199.	ALSTOM TRANSPORT INDIA LTD.	BENGALURU
200.	ALTAIR ENGINEERING INDIA PVT. LTD.	BENGALURU
201.	ALTIMETRIK INDIA PVT. LTD.	WARASEONI
202.	ALTIOSTAR NETWORKS	BENGALURU
203.	ALTISOURCE BUSINESS SOLUTIONS PVT. LTD.	BENGALURU
204.	ALTURKI ENT.LLC	VIRUDHUNAGAR
205.	AMADA SOFT INDIA PVT. LTD.	CHENNAI
206.	AMADEUS SOFTWARE LABS PVT. LTD.	BENGALURU
207.	AMADEUS SOFTWARE LABS PVT. LTD.	MYSORE
208.	AMANA CONCRETE MODULAR CONSTRUCTIONS	DUBAI
209.	AMAZON DEVELOPMENT CENTRE INDIA PVT. LTD.	BENGALURU
210.	AMAZON DEVELOPMENT CENTRE INDIA PVT. LTD.	HYDERABAD
211.	AMAZON DEVELOPMENT CENTRE INDIA PVT. LTD.	JAIPUR
212.	AMBA DIAGNOSTICS	LAKISARAI
213.	AMDOCS INDIA PVT. LTD.	DELHI
214.	AMDOCS INDIA PVT. LTD.	FARIDABAD
215.	AMDOCS INDIA PVT. LTD.	HYDERABAD
216.	AMDOCS INDIA PVT. LTD.	LIMASSOL
217.	AMDOCS INDIA PVT. LTD.	PUNE
218.	AMEC BLACKCAT LLC	CUDDALORE
219.	AMEC FOSTER WHEELER	COIMBATORE
220.	AMEC INTERNATIONAL LTD.	ABU DHABI
221.	AMERICAN AXLES & MANUFACTURING	CHENNAI
222.	AMERICAN EXPRESS	DELHI
223.	AMERICAN UNIVERSITY IN THE EMIRATES	DUBAI
224.	AMETEK INSTRUMENTS INDIA PVT. LTD.	CHENNAI
225.	AMPHENOL INTERCONNECT INDIA PVT. LTD.	KANCHIPURAM
226.	AMPLEX EMIRATES LLC	ABU DHABI
227.	AMRAPALI GROUP OF INSTITUTIONS	HALDWANI
228.	AMRAPALI GROUP OF INSTITUTIONS	LUCKNOW
229.	AMTEX SYSTEMS,CHENNAI	CHENNAI
230.	AMW MOTORS LTD.	BHUJ
231.	ANALOG DEVICES INDIA PVT. LTD.	BENGALURU
232.	ANAND AUTOMOTIVE PVT. LTD.	GURGAON
233.	ANDHRA PRADESH POWER GENERATION CORP.	PRODDATUR
234.	ANGLER TECHNOLOGIES INDIA PVT. LTD.	COIMBATORE
235.	ANNAI APPLIANCES MANUFACTURING PVT. LTD.	BENGALURU
236.	ANSALDO STS - UNION SWITCH & SIGNAL	CHENNAI
237.	ANSR CONSULTING INDIA PVT. LTD.	BENGALURU
238.	ANTZ MCS PVT. LTD.	BENGALURU
239.	ANUBAVAM TECHNOLOGIES	CHENNAI
240.	ANZ TECHNOLOGIES	BENGALURU

241.	AON HEWITT	NOIDA
242.	AON SERVICES INDIA PVT. LTD.	DELHI
243.	APIGEE TECHNOLOGIES LTD.	BENGALURU
244.	APJ TOURS & TRAVELS PVT. LTD.	DELHI
245.	APOLLO TYRES LTD.	ALWAYE
246.	APOLLO TYRES LTD.	CHENNAI
247.	APOTEX PHARMACHEM INDIA PVT. LTD.	BENGALURU
248.	APPAREL TRAINING & DESIGN CENTRE	GURGAON
249.	APPLIED MATERIALS INDIA PVT. LTD.	CHENNAI
250.	APPLIED MICRO CIRCUITS INDIA PVT. LTD.	PUNE
251.	APPLUS VELOSI LLC	MANGALORE
252.	APPLUS VELOSI LLC	VISAKHAPATNAM
253.	APPSMYTH TECHNOLOGIES INDIA PVT. LTD.	MUMBAI
254.	APTEAN INDIA PVT. LTD.	BENGALURU
255.	APTEAN INDIA PVT. LTD.	DHARWAD
256.	APTECH LTD.	PUNE
257.	ARAB GULF VOLTECH SERVICES LLC	ABU DHABI
258.	ARAB SHIPBUILDING & REPAIR YARD	THRISSUR
259.	ARABI- ENERTECH KUWAIT	FAHAHEEL
260.	ARABIAN AUTOMOBILES CO LLC	MADURAI
261.	ARABIAN COMPANY FOR WATERPIPE INDUSTRY LTD.	DAMMAM
262.	ARABIAN INDUSTRIES PROJECTS	ALRUSAYL
263.	ARABIAN MEP CONTRACTING	DOHA
264.	ARABIAN PIPELINE PROJECTS CO	MANAPARAI
265.	ARABTEC CONSTRUCTION LLC	TIRUCHIRAPPALLI
266.	ARAYMOND FASTENERS INDIA PVT. LTD.	PUNE
267.	ARCELORMITTAL DESIGN & ENGINEERING CENTRE	ABHOY NAGAR
268.	ARCHGROUP CONSULTANTS	PUDUKKOTTAI
269.	ARDC, HAL	BENGALURU
270.	ARGHA TECHNOLOGY SERVICES INDIA PVT. LTD.	HYDERABAD
271.	ARIBA TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
272.	ARICENT TECHNOLOGIES HOLDINGS LTD.	ALLAHABAD
273.	ARICENT TECHNOLOGIES HOLDINGS LTD.	CHENNAI
274.	ARICENT TECHNOLOGIES HOLDINGS LTD.	GURGAON
275.	ARICENT TECHNOLOGIES HOLDINGS LTD.	NAMAKKAL
276.	ARIES MARINE ENGINEERING SERVICES	MUSSAFAH
277.	ARINC INCORPORATED	DUBAI
278.	ARISGLOBAL SOFTWARE PVT. LTD.	BENGALURU
279.	ARISTOCRAT TECHNOLOGIES LTD.	NEW DELHI
280.	ARM WELDERS PVT. LTD.	PUNE
281.	ARMESMAINI STORAGE SYSTEMS PVT. LTD.	BENGALURU
282.	ARMSTRONG INTERNATIONAL PVT. LTD.	CHENNAI
283.	ARMSTRONG PUMPS LTD.	BENGALURU
284.	ARMY	NAGROTA
285.	ARMY	PANAGARH
286.	AROGYA HEALTH CARE PVT. LTD.	THANJAVUR
287.	ARRIS INDIA PVT. LTD.	BENGALURU
288.	ARROW ELECTRONICS INDIA PVT. LTD.	BENGALURU
289.	ARTECH INFOSYSTEMS PVT. LTD.	BENGALURU

290.	ARTEMIS HOSPITAL	GURGAON
291.	ARTERIA TECHNOLOGIES PVT. LTD.	MUMBAI
292.	ARUBA NETWORKS INDIA PVT. LTD.	BENGALURU
293.	ARVIND ACCEL LTD.	VIJAYAWADA
294.	ARVIND ENVISOL PVT. LTD.	AHMEDABAD
295.	ARYAKA NETWORKS INDIA PVT. LTD.	BENGALURU
296.	ASAHI INDIA GLASS LTD.	DELHI
297.	ASAN CONSULTING	COIMBATORE
298.	ASCENDAS SERVICES INDIA PVT. LTD.	BENGALURU
299.	ASHOK LEYLAND LTD.	BENGALURU
300.	ASHOK LEYLAND LTD.	CHENNAI
301.	ASHOK LEYLAND LTD.	HALDWANI
302.	ASHOK LEYLAND LTD.	HOSUR
303.	ASHVINI MAGNETS PVT. LTD.	PUNE
304.	ASHWIN INDUSTRIES	CHENNAI
305.	ASIA MOTOR WORKS PVT. LTD.	BHUJ
306.	ASIAN PAINTS LTD.	CHENNAI
307.	ASIAN PAINTS LTD.	HYDERABAD
308.	ASPECT TECHNOLOGIES	BENGALURU
309.	ASPENTECH	PUNE
310.	ASRY	ERNAKULAM
311.	ASSOCIATED LIGHTING COMPANY	DHANOURA
312.	ASTERIA AEROSPACE PVT. LTD.	BENGALURU
313.	ASTRA SYSTEMS PVT. LTD.	BENGALURU
314.	AT&S INDIA PVT. LTD.	MYSORE
315.	AT&T COMMUNICATION SERVICES INDIA PVT.LTT.	BENGALURU
316.	AT&T GBS INDIA PVT. LTD.	HYDERABAD
317.	ATHENAHEALTH TECHNOLOGY PVT. LTD.	BHUBANESWAR
318.	ATHENAHEALTH TECHNOLOGY PVT. LTD.	CHENNAI
319.	ATKINS	BENGALURU
320.	ATLAS CAST ALLOY LTD.	PUNE
321.	ATLAS COPCO INDIA LTD.	PUNE
322.	ATMEL R&D INDIA PVT. LTD.	CHENNAI
323.	ATOS INDIA PVT. LTD.	KOLKATA
324.	ATOS INDIA PVT. LTD.	NAVI MUMBAI
325.	ATOS INDIA PVT. LTD.	PUNE
326.	AU FINANCIERS LTD.	JODHPUR
327.	AUMA INDIA PVT. LTD.,	BENGALURU
328.	AURIBISES TECHNOLOGIES PVT. LTD.	LUDHIANA
329.	AUTOLIV INDIA PVT. LTD.	BENGALURU
330.	AUTOMATIC DATA PROCESSING PVT. LTD.	HYDERABAD
331.	AUTOMOTIVE ROBOTICS (INDIA) PVT. LTD.	CHENNAI
332.	AUTOMOTIVE ROBOTICS (INDIA) PVT. LTD.	HYDERABAD
333.	AUTOMOTIVE STAMPINGS & ASSEMBLIES LTD.	PUNE
334.	AV INTEGRATION DISTRIBUTION INDIA PVT.LTD.	BENGALURU
335.	AVACO INTERNATIONAL	SHARJAH
336.	AVAYA INDIA PVT. LTD.	HYDERABAD
337.	AVAYA INDIA PVT. LTD.	PUNE
338.	AVERY DENNISON INDIA PVT. LTD.	BENGALURU



339.	AVL INDIA PVT. LTD.	DELHI
340.	AVL INDIA PVT. LTD.	GURGAON
341.	AVTEC LTD.	HOSUR
342.	AVVAS INFOTECH (CLIENT AMDOCS)	PUNE
343.	AWAREGLOBAL HOSPITAL	HYDERABAD
344.	AXA TECHNOLOGY SERVICES	BENGALURU
345.	AXIOM CONSULTING PVT. LTD.	BENGALURU
346.	AXIS IT&T LTD.	KANPUR
347.	AXIS IT&T LTD.	MYSORE
348.	AXON CONSTRUCTIONS PVT. LTD.	TRICHY
349.	AXSYS HEALTHTECH LTD.	HYDERABAD
350.	B FOURESS PVT. LTD.	BENGALURU
351.	B M C SOFTWARE LTD.	PUNE
352.	B.H.E.L	HARIDWAR
353.	BA CONTINUUM INDIA PVT. LTD.	CHENNAI
354.	BA CONTINUUM INDIA PVT. LTD.	GURGAON
355.	BA CONTINUUM INDIA PVT. LTD.	HYDERABAD
356.	BA CONTINUUM INDIA PVT. LTD.	THANE
357.	BACHI SHOES LTD.	VELLORE
358.	BAHWAN CYBERTEK PVT. LTD.	CHENNAI
359.	BAHWAN ENGINEERING COMPANY LLC	DUBAI
360.	BAHWAN TECHNICAL CONTRACTING CO LLC	AL QUOZ
361.	BAJAJ AUTO LTD.	PUNE
362.	BAJAJALLIANZ LIFE INSURANCE COMPANY	BARGARH
363.	BAKER HUGHES GHANA LTD.	MUMBAI
364.	BAKER HUGHES SINGAPORE PTE.	RAMANATHAPURAM
365.	BALLY TECHNOLOGIES	CHENNAI
366.	BAM HIGGS & HILL LLC	DUBAI
367.	BANK OF AMERICA	GUNTUR
368.	BANK OF AMERICA	HYDERABAD
369.	BANK OF AMERICA	THANE
370.	BARALA HOSPITAL	JHUNJHUNU
371.	BARCLAYS TECHNOLOGY CENTRE INDIA PVT. LTD.	PUNE
372.	BARCO ELECTRONIC SYSTEMS PVT. LTD.	FARIDABAD
373.	BARCO ELECTRONIC SYSTEMS PVT. LTD.	GURGAON
374.	BASE CONTROL TECH FZC	SHARJAH
375.	BDI SYSTEMS AND TECHNOLOGIES PVT. LTD.	BENGALURU
376.	BDS STEEL DETAILERS AUSTRALIA PTY. LTD.	CHENNAI
377.	BE ENGINEERING SERVICE INDIA PVT. LTD.	HYDERABAD
378.	BECKMAN COULTER INDIA PVT. LTD.	MUMBAI
379.	BELHASA PROJECTS LLC	TIRUNELVELI
380.	BELLSONICA AUTO COMPONENT INDIA PVT. LTD.	GURGAON
381.	BENCHMARK TECHNOLOGY	RIYADH
382.	BENNETT COLEMAN AND CO LTD.	PUNE
383.	BENTLEY SYSTEMS INDIA	PUNE
384.	BENU INC	CHENNAI
385.	BERCO UNDERCARRIAGES(INDIA)PVT. LTD.	HYDERABAD
386.	BERGER PAINTS EMIRATES LTD.	DUBAI
387.	BEROE CONSULTING INDIA PVT. LTD.	CHENNAI

388.	BEST BUSINESS BUREAU	DUBAI
389.	BG EXPLORATION AND PRODUCTION INDIA LTD.	DAHANU
390.	BG EXPLORATION AND PRODUCTION INDIA LTD.	MALAPPURAM
391.	BG EXPLORATION AND PRODUCTION INDIA LTD.	NAVI MUMBAI
392.	BG EXPLORATION AND PRODUCTION INDIA LTD.	PERUMBAVOOR
393.	BG EXPLORATION AND PRODUCTION INDIA LTD.	VADODARA
394.	BG EXPLORATION AND PRODUCTION INDIA LTD.	VISAKHAPATNAM
395.	BHABHA ATOMIC RESEARCH CENTRE	MUMBAI
396.	BHAKTIVEDANTA INSTITUTE	MUMBAI
397.	BHARAT DYNAMICS LTD.	HYDERABAD
398.	BHARAT ELECTRONICS LTD.	CHENNAI
399.	BHARAT FORGE LTD.	NEW DELHI
400.	BHARAT FORGE LTD.	PUNE
401.	BHARAT HEAVY ELECTRICALS LTD.	BHOPAL
402.	BHARAT HEAVY ELECTRICALS LTD.	CHENNAI
403.	BHARAT HEAVY ELECTRICALS LTD.	TIRUCHIRAPPALLI
404.	BHARAT PETROLEUM CORPORATION	MADURAI
405.	BHARAT PETROLEUM CORPORATION LTD.	NAVI MUMBAI
406.	BHARAT SANCHAR NIGAM LTD.	NANDED
407.	BHARATH HEAVY ELECTRICALS LTD.	TRICHY
408.	BHARTI AIRTEL LTD.	GURGAON
409.	BHARTI AIRTEL LTD.	NILAKKOTTAI
410.	BHARTI INFRATEL LTD.	GURGAON
411.	BHATIA HOSPITAL	THANE
412.	BHAWAN ENGINEERING CO LLC	PUNE
413.	BHORUKA CHARITABLE TRUST	JAIPUR
414.	BHUSHAN POWER AND STEEL LTD.	PHUSRO
415.	BHUSHAN STEEL LTD.	PHATHAKERA
416.	BHUSHAN STEEL LTD.	PILANI
417.	BIECCO LAWRIE LTD.	KOLKATA
418.	BIESSE MANUFACTURING PVT. LTD.	BENGALURU
419.	BIGTECH SOFTWARE PVT. LTD.	COIMBATORE
420.	BILAD OMAN LLC (SUHAIL BAHWAN GROUP)	SOHAR
421.	BILT GRAPHIC PAPER PRODUCTS LTD.	CHANDRAPUR
422.	BILT MIDDLE EAST LLC	TIRUNELVELI
423.	BILZ TOOL PVT. LTD.	BENGALURU
424.	BIN SALIM ENTERPRISES LLC	MUSCAT
425.	BINLADIN CONTRACTING GROUP	PATHANAMTHITTA
426.	BIOCON	BENGALURU
427.	BIOCON LTD.	HYDERABAD
428.	BIOLOGICAL E LTD.	HYDERABAD
429.	BIPSUN ENGINEERS PVT.LTD.	PUNE
430.	BIRLA CELLULOSIC	BHARUCH
431.	BIRMINGHAM STEEL FABRICATION	ROLLA
432.	BITS PILANI	MUMBAI
433.	BITS PILANI	PILANI
434.	BITS PILANI DUBAI CAMPUS	DUBAI
435.	BITS PILANI HYDERABAD CAMPUS	HYDERABAD
436.	BITS PILANI K K BIRLA GOA CAMPUS	GOA

437.	BLACK KNIGHT INDIA SOLUTIONS PVT. LTD.	HYDERABAD
438.	BLACKROCK	GURGAON
439.	BLOOM ENERGY INDIA PVT. LTD.	BENGALURU
440.	BLUE CHIP COMPUTER CONSULTANTS PVT. LTD.	ERODE
441.	BLUE STAR LTD.	GURGAON
442.	BLUE STAR LTD.	UDUMALPET
443.	BLUESTAR LTD.	RAJAPALAYAM
444.	BLUESTAR LTD.	UDUPI
445.	BMC SOFTWARE INDIA PVT. LTD.	BENGALURU
446.	BMC SOFTWARE INDIA PVT. LTD.	PUNE
447.	BMW INDIA	NEW DELHI
448.	BOBST AFRICA MIDDLE EAST	DUBAI
449.	BOBST INDIA PVT. LTD.	PUNE
450.	BOMBARDIER TRANSPORTATION INDIA LTD.	KANCHARAPARA
451.	BOMBARDIER TRANSPORTATION SWEDEN AB.	VALSAD
452.	BOMBAY HOSPITAL	THANE
453.	BONATRANS INDIA PVT. LTD.	AURANGABAD
454.	BONFIGLIOLI TRANSMISSION PVT. LTD.	SALEM
455.	BOROUGE(ABU DHABI POLYMERS COMPANY)	ABU DHABI
456.	BOSCH AUTOMOTIVE ELECTRONICS (I) PVT. LTD.	BENGALURU
457.	BOSCH CHASSIS SYSTEMS INDIA LTD.	PUNE
458.	BOSCH LTD.	BENGALURU
459.	BOSCH LTD.	GOA
460.	BOSCH LTD.	JAIPUR
461.	BOSCH LTD.	NASHIK
462.	BOSCH REXROTH INDIA LTD.	AHMEDABAD
463.	BRADY CORPORATION	BENGALURU
464.	BRAHMOS AEROSPACE	HYDERABAD
465.	BRAKES INDIA LTD.	CHENNAI
466.	BRAKES INDIA LTD.	COIMBATORE
467.	BRAKES INDIA LTD.	HYDERABAD
468.	BRAKES INDIA LTD.	PONDICHERRY
469.	BRAKES INDIA LTD.	SHOLINGHUR
470.	BRAKES INDIA LTD.	VIRUDHUNAGAR
471.	BREACH CANDY HOSPITAL TRUST	MUMBAI
472.	BREMBO BRAKE INDIA PVT.LTD.	PUNE
473.	BRIJ LAL HOSPITAL	BAREILLY
474.	BRILLIO TECHNOLOGIES LTD.	BENGALURU
475.	BRILLIO TECHNOLOGIES LTD.	ERNAKULAM
476.	BRITISH TELECOM	BENGALURU
477.	BROADCOM COMMUNICATION TECHNOLOGIES PVT. LTD.	BENGALURU
478.	BROADCOM CORPORATION	BENGALURU
479.	BROADCOM INDIA RESEARCH PVT. LTD.	BENGALURU
480.	BROADCOM INDIA TECHNOLOGIES PVT. LTD.	HYDERABAD
481.	BROADRIDGE FINANCIAL SOLUTIONS INDIA PVT. LTD.	HYDERABAD
482.	BROADRIDGE FINANCIAL SOLUTIONS INDIA PVT. LTD.	SHANKARPALLY
483.	BROADRIDGE JAPAN LTD.	CHENNAI
484.	BRUNEL ENERGY KUWAIT, EQUATE PETROCHEMIC	CHENNAI
485.	BS&B TECHNOLOGIES PVT. LTD.	CHENNAI

486.	BSES RAJDHANI POWER LTD.	JAIPUR
487.	BT E-SERV INDIA PVT. LTD.	BENGALURU
488.	BT E-SERV INDIA PVT. LTD.	KANYAKUMARI
489.	BT E-SERV INDIA PVT. LTD.	SRIKALAHASTI
490.	BTL INDIA PVT. LTD.	PALAKKAD
491.	BUHLER INDIA PVT. LTD.	ATTIBELE
492.	BUHLER INDIA PVT. LTD.	BENGALURU
493.	BUREAU VERITAS CERTIFICATION INDIA PVT. LTD.	HOWRAH
494.	BUREAU VERITAS CERTIFICATION INDIA PVT. LTD.	WADIKABIR
495.	BUSH ELECTRICALS AND ENGINEERS	THANE
496.	BVRAUTOMATION	BENGALURU
497.	C&C HOTELS VENTURE PVT. LTD.	NEW DELHI
498.	C&S ELECTRIC LTD.	DELHI
499.	C.S.I COLLEGE OF NURSING	TRIVANDRUM
500.	CA INDIA TECHNOLOGIES PVT. LTD.	BENGALURU
501.	CA INDIA TECHNOLOGIES PVT. LTD.	CHENNAI
502.	CA INDIA TECHNOLOGIES PVT. LTD.	FATEHABAD
503.	CA INDIA TECHNOLOGIES PVT. LTD.	HYDERABAD
504.	CACTUS COMMUNICATIONS PVT. LTD.	MUMBAI
505.	CADENCE AMS DESIGN	BENGALURU
506.	CADENCE DESIGN SYSTEMS	GHAZIABAD
507.	CADENCE DESIGN SYSTEMS, INC.	DELHI
508.	CADILA PHARMACEUTICALS LTD.	DHRANGADHRA
509.	CADILA PHARMACEUTICALS LTD.	VIKASPURI
510.	CADODESSY/REBCON GROUP INDIA	HYDERABAD
511.	CADSYS (INDIA) LTD.	HYDERABAD
512.	CAIRN ENERGY INDIA PTY LTD.	NEW DELHI
513.	CALSOFT LABS INDIA PVT. LTD.	BENGALURU
514.	CALSOFT LABS INDIA PVT. LTD.	CHENNAI
515.	CALSOFT LABS INDIA PVT. LTD.	MANCHERIAL
516.	CALSOFT LABS INDIA PVT. LTD.	PUNE
517.	CALTEK GROUP	SINGAPORE
518.	CAMERON MANUFACTURING INDIA PVT. LTD.	COIMBATORE
519.	CAMERON MANUFACTURING INDIA PVT. LTD.	TIRUPPUR
520.	CAMERON MANUFACTURING INDIA PVT. LTD.	YAOUNDE
521.	CAMP SYSTEMS PVT. LTD.	HYDERABAD
522.	CANARA HSBC OBC LIFE INSURANCE	NEW DELHI
523.	CANON INDIA	DELHI
524.	CANRAY HEALTH ALLIANCE PVT. LTD.	CHENNAI
525.	CAP GEMINI CONSULTING LTD.	BENGALURU
526.	CAPARO ENGINEERING INDIA LTD.	CHENNAI
527.	CAPARO POWER LTD.	DELHI
528.	CAPE EAST LTD.	DOHA
529.	CAPGEMINI INDIA PVT. LTD.	AURANGABAD
530.	CAPGEMINI INDIA PVT. LTD.	BENGALURU
531.	CAPGEMINI INDIA PVT. LTD.	CHENNAI
532.	CAPGEMINI INDIA PVT. LTD.	CHIKMAGALORE
533.	CAPGEMINI INDIA PVT. LTD.	DOMBIVLI
534.	CAPGEMINI INDIA PVT. LTD.	HOSUR

535.	CAPGEMINI INDIA PVT. LTD.	MALEGAON
536.	CAPGEMINI INDIA PVT. LTD.	MUMBAI
537.	CAPGEMINI INDIA PVT. LTD.	PUNE
538.	CAPILLARY TECHNOLOGIES PVT. LTD.	BENGALURU
539.	CAPITA INDIA PVT. LTD.	MUMBAI
540.	CAPITA INDIA PVT. LTD.	PUNE
541.	CAPTRONIC SYSTEMS PVT. LTD.	BENGALURU
542.	CARBONYX ENGINEERING (I) PVT. LTD.	PANAJI
543.	CARBORUNDUM UNIVERSAL LTD.	CHENNAI
544.	CARESOFTE GLOBAL PVT. LTD.	COIMBATORE
545.	CARRIER AIRCONDITIONING & REFRIGERATION LTD.	KOLKATA
546.	CARRIER AIRCONDITIONING & REFRIGERATION LTD.	ROHINI
547.	CARTINI INDIA LTD.	PONDA
548.	CASHEDGE INDIA PVT. LTD.	CHENNAI
549.	CATERPILLAR ENGINEERING DESIGN CENTER	COIMBATORE
550.	CATERPILLAR INC	HOSUR
551.	CATERPILLAR INDIA PVT. LTD.	ARNI
552.	CATERPILLAR INDIA PVT. LTD.	COIMBATORE
553.	CATERPILLAR INDIA PVT. LTD.	HOSUR
554.	CATERPILLAR INDIA PVT. LTD.	THENI
555.	CAVOTEC ENGG. SERVICES INDIA PVT. LTD.	PUNE
556.	CDAC	BENGALURU
557.	CDAC	CHENNAI
558.	CDAC	MUMBAI
559.	CDAC	PUNE
560.	CDAC	TRIVANDRUM
561.	CDK GLOBAL INDIA PVT. LTD.	PUNE
562.	CDMO	BARGARH
563.	CELSTREAM TECHNOLOGIES PVT. LTD.	BENGALURU
564.	CENTINA SYSTEMS	BENGALURU
565.	CENTUM RAKON INDIA PVT.LTD.	BENGALURU
566.	CENTURY HOSPITAL	CHENGANNUR
567.	CENTURYLINK TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
568.	CENTURYLINK TECHNOLOGIES INDIA PVT. LTD.	JAGTIAL
569.	CERNER HEALTHCARE SOLUTIONS PVT. LTD.	BENGALURU
570.	CG POWER SYSTEMS SAUDI ARABIA LTD.	DAMMAM
571.	CGG	CHENNAI
572.	CGI GROUP INC	BENGALURU
573.	CGI GROUP INC	HOSUR
574.	CGI GROUP INC	MUMBAI
575.	CGI GROUP INC	PATHANAMTHITTA
576.	CGI TECHNOLOGIES AND SOLUTIONS INC	HYDERABAD
577.	CH2M HILL VECO ENGINEERING	BENGALURU
578.	CHANNELPLAY LTD.	GURGAON
579.	CHECKTRONIX INDIA PVT. LTD.	CHENNAI
580.	CHECKTRONIX INDIA PVT. LTD.	TIRUPPUR
581.	CHECKTRONIX INDIA PVT. LTD.	TIRUVANNAMALAI
582.	CHEMROLS INDUSTRIES LTD.	THANE
583.	CHENNAI MEDICAL COLLEGE HOSPITAL & RC	TIRUCHIRAPPALLI

584.	CHENNAI METCO PVT. LTD.	VILLUPURAM
585.	CHETTINAD CEMENT CORPORATION LTD.	CHENNAI
586.	CHEVRON ORONITE PTE LTD.	SINGAPORE
587.	CHILWORTH TECHNOLOGY P. LTD.	TRICHY
588.	CHINA PETROLEUM ENGINEERING & CONSTRUCTI	CHENNAI
589.	CHIYODA ALMANA	DOHA
590.	CHOICE SOLUTIONS PVT. LTD.	KAMAREDDY
591.	CHOLAMANDALAM MS RISK SERVICES	CHENNAI
592.	CHRISTIAN FELLOWSHIP HOSPITAL	ODDANCHATRAM
593.	CHRISTIAN MEDICAL COLLEGE AND HOSPITAL	VELLORE
594.	CHRONUS SOFTWARE (INDIA) PVT. LTD.	CHENNAI
595.	CHRYSLER INDIA AUTOMOTIVE PVT. LIMITE	BHADRAK
596.	CIARPRO TECHNOLOGIES	CHENNAI
597.	CIENA INDIA PVT. LTD.	FARIDABAD
598.	CIENA INDIA PVT. LTD.	GURGAON
599.	CIENA INDIA PVT. LTD.	GURGAON
600.	CIGNETIX SYSTEMS	DUBAI
601.	CIPLA LTD.	MUMBAI
602.	CISCO SYSTEMS INDIA PVT. LTD.	BELGAUM
603.	CISCO SYSTEMS INDIA PVT. LTD.	BENGALURU
604.	CISCO SYSTEMS INDIA PVT. LTD.	MADURAI
605.	CISCO SYSTEMS INDIA PVT. LTD.	PUNE
606.	CISCO VIDEO TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
607.	CITI CORP	BHOPAL
608.	CITI CORP	CHENNAI
609.	CITI SERVICES INDIA LTD.	PUNE
610.	CITRIX R&D INDIA PVT. LTD.	BENGALURU
611.	CKR CONSULTING ENGINEERS	DUBAI
612.	CLAIRVOYANT MOBILE SOLUTIONS	DELHI
613.	CLARICE TECHNOLOGIES PVT. LTD.	BENGALURU
614.	CLARICE TECHNOLOGIES PVT. LTD.	PUNE
615.	CLCD LLC	HYDERABAD
616.	CLEAR-TRAIL	INDORE
617.	CLOVER INFOTECH PVT. LTD.	BENGALURU
618.	CLOVER INFOTECH PVT. LTD.	SHRIRAMPUR
619.	CMA SYSTEMS FZ LLC	DUBAI
620.	CMC LTD.	CHENNAI
621.	CMC LTD.	HYDERABAD
622.	CMS INFOSYSTEM	NOIDA
623.	CMW CO2 TECHNOLOGIES	THANE
624.	CNO IT SERVICES (INDIA) PVT. LTD.	HYDERABAD
625.	COAL INDIA LTD.	DHANBAD
626.	COASTAL GUJARAT POWER LTD.	KUTCH
627.	COASTAL GUJARAT POWER LTD.	MUNDRA
628.	CODELATHE LLC	CHENNAI
629.	CODENOMICON SOFTWARE INDIA PVT. LTD.	NEW DELHI
630.	COEXTRIX TECHNOLOGIES PVT. LTD.	BENGALURU
631.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	AKOLA
632.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	ARANTHANGI

633.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	AUSTIN
634.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	BAGALUR
635.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	BENGALURU
636.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	CHENNAI
637.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	COIMBATORE
638.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	ERODE
639.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	HYDERABAD
640.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	JABALPUR
641.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	JALGAON
642.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	KOCHI
643.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	KOLKATA
644.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	MALDEN
645.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	NORWOOD
646.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	PUNE
647.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	PURI
648.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	QUINCY
649.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	RANCHO
650.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	SALEM
651.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	SARAVANAMPATTI
652.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	SINGAPORE
653.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	SURAT
654.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	TIRUVALLUR
655.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	VISHAKAPATNAM
656.	COGNIZANT TECHNOLOGIES SOLUTIONS PVT. LTD.	WOODBURY
657.	COLDFIRE DESIGN STUDIO PVT. LTD.	MORINDA
658.	COLGATE GLOBAL BUSINESS SERVICES PVT. LTD.	THANE
659.	COLLABERA TECHNOLOGIES PVT. LTD.	BENGALURU
660.	COLLABNET SOFTWARE PVT. LTD.	CHENNAI
661.	COLLEAGUES CONSULTANT PVT. LTD.	NEW DELHI
662.	COMMVault	BENGALURU
663.	COMMVault SYSTEMS INDIA PVT. LTD.	MADURAI
664.	COMPASS ENGINEERING SERVICES LLC	THRISSUR
665.	COMPASSITES SOFTWARE SOLUTIONS PVT. LTD.	BENGALURU
666.	COMPUTER SCIENCES CORPORATION INDIA PVT. LTD.	BENGALURU
667.	COMPUTER SCIENCES CORPORATION INDIA PVT. LTD.	CHENNAI
668.	COMPUTER SCIENCES CORPORATION INDIA PVT. LTD.	CUDDALORE
669.	COMPUTER SCIENCES CORPORATION INDIA PVT. LTD.	HYDERABAD
670.	COMVERSE NETWORK SYSTEMS INDIA PVT. LTD.	BENGALURU
671.	COMVERSE NETWORK SYSTEMS INDIA PVT. LTD.	GURGAON
672.	CONARES METAL SUPPLY LLC	AL DHAID
673.	CONARES STEEL	DUBAI
674.	CONAX ACCESS SYSTEMS PVT. LTD.	GHAZIABAD
675.	CONSILIUUM MIDDLE EAST	SHARJAH
676.	CONSOLIDATED CONTRACTORS COMPANY	SRIKALAHASTI
677.	CONSTRUCTION DEVELOPMENT COMPANY	CHENNAI
678.	CONSUTLANCY DEVELOPMENT CENTRE	NEW DELHI
679.	CONTINENTAL AUTOMOTIVE COMPONENTS LTD.	BATHINDA
680.	CONTINENTAL AUTOMOTIVE COMPONENTS LTD.	BENGALURU
681.	CONTINENTAL AUTOMOTIVE COMPONENTS LTD.	GURGAON

682.	CONTINENTAL HOSPITALS LTD.	HYDERABAD
683.	CONTROL AND APPLICATIONS EMIRATES	SHARJAH
684.	CONVERGYS INDIA SERVICES PVT. LTD.,	HYDERABAD
685.	CONVERGYS INFORMATION MANAGEMENT INDIA PVT. LTD.	HYDERABAD
686.	CORECOMPETE PVT. LTD.	HYDERABAD
687.	COREEL TECHNOLOGIES (I) PVT. LTD.	BENGALURU
688.	CORNING TECHNOLOGIES INDIA PVT. LTD.	MUMBAI
689.	CORNING TECHNOLOGIES INDIA PVT. LTD.	NAGPUR
690.	COROMANDEL INTERNATIONAL LTD.	ANKLESHWAR
691.	CORPORATE EXECUTIVE BOARD	PILANI
692.	CORPUS SOFTWARE PVT. LTD.	SOMPETA
693.	COSMA INTERNATIONAL INDIA PVT. LTD.	CHENNAI
694.	COVIDIEN ENGINEERING SERVICES PVT. LTD.	HYDERABAD
695.	COVIDIEN ENGINEERING SERVICES PVT. LTD.	SECUNDERABAD
696.	COVIDIEN HEALTHCARE INDIA PVT. LTD.	MYSORE
697.	CPWD (PRESENTLY IN DELHI PWD)	GHAZIABAD
698.	CQAV DGQA MIN OF DEFENCE	AHMEDNAGAR
699.	CRAFTSMAN AUTOMATION PVT. LTD.	JAMSHEDPUR
700.	CREATIVE BUSINESS LABS PVT. LTD.	NEW DELHI
701.	CREATIVE SYNERGIES CONSULTING INDIA PVT.	BENGALURU
702.	CREATIVE VIRTUAL	MUMBAI
703.	CREDIT INFORMATION BUREAU INDIA LTD.	NAVI MUMBAI
704.	CREDIT SUISSE SERVICES (INDIA) PVT. LTD.	INDORE
705.	CREDIT SUISSE SERVICES (INDIA) PVT. LTD.	PUNE
706.	CREST PREMEDIA PVT. LTD.	PUNE
707.	CREST STEEL & POWER (P) LTD.	BILASPUR
708.	CREST, CALICUT	CALICUT
709.	CRI PUMPS PVT. LTD.	COIMBATORE
710.	CRI PUMPS PVT. LTD.	KOLKATA
711.	CRYOGEN INSTRUMENTS INDIA PVT. LTD.	THANE
712.	CRYOLOR ASIA PACIFIC	CHENNAI
713.	CRYSTAL CROP PROTECTION PVT. LTD.	DELHI
714.	CSC INDIA PVT. LTD.	NEW DELHI
715.	CSC INDIA PVT. LTD.	NOIDA
716.	CSC INDIA PVT. LTD.	PALAMPUR
717.	CSC INDIA PVT. LTD.	SALEM
718.	CSC INDIA PVT. LTD.	SECUNDERABAD
719.	CSIR-CEERI	PILANI
720.	CSS CORP PVT. LMTD	KURNOOL
721.	CSS CORP PVT. LTD.	CHENNAI
722.	CSS CORP PVT. LTD.	PALAKKAD
723.	CTE GLOBAL SOLUTIONS PVT. LTD.	CHENNAI
724.	CUE BLOCKS TECHNOLOGIES PVT. LTD.	LUDHIANA
725.	CUMMINS INDIA LTD.	DAMAN
726.	CUMMINS INDIA LTD.	PHALTAN
727.	CUMMINS INDIA LTD.	PUNE
728.	CUMMINS INDIA LTD.	PUNE
729.	CUMMINS MIDDLE EAST	JEBEL ALI
730.	CUMMINS MIDDLE EAST FZE	DUBAI



731.	CUMMINS TECHNOLOGIES INDIA LTD.	HYDERABAD
732.	CUMMINS TECHNOLOGIES INDIA LTD.	INDORE
733.	CUMMINS TECHNOLOGIES INDIA LTD.	PUNE
734.	CUMMINS TURBOTECHNOLOGY LTD.	DEWAS
735.	CYBAGE SOFTWARE PVT. LTD.	PUNE
736.	CYIENT LTD.	BENGALURU
737.	CYIENT LTD.	HYDERABAD
738.	CYLINGAS COMPANY LLC	DUBAI
739.	CYPRESS SEMICONDUCTORS PVT. LTD.	BENGALURU
740.	D. E. SHAW INDIA SOFTWARE PVT. LTD.	HYDERABAD
741.	DAELIM INDUSTRIAL CO LTD.	KOLKATA
742.	DAIMLER INDIA COMMERCIAL VEHICLES PVT. LTD.	CHENNAI
743.	DAKSHIN SPEAKER MFG PVT. LTD.	CHENNAI
744.	DANA INDIA PVT. LTD.	CHENNAI
745.	DANA INDIA PVT. LTD.	PUNE
746.	DANFOSS INDUSTRIES PVT. LTD.	CHENNAI
747.	DANFOSS INDUSTRIES PVT. LTD.	COCHIN
748.	DANFOSS INDUSTRIES PVT. LTD.	KANCHIPURAM
749.	DANGOTE CEMENT PLC.	BHILAI
750.	DANWAY EME LLC	DUBAI
751.	DASSAULT SYSTEMES INDIA PVT. LTD.	BENGALURU
752.	DATA TELESIS PVT. LTD.	CHENNAI
753.	DATAGROUP GEOSPATIAL TECHNOLOGIES PVT. LTD.	HYDERABAD
754.	DATAMATICS VISTA INFO SYSTEMS LTD.	CHENNAI
755.	DATT MEDIPRODUCTS PVT. LTD.	DELHI
756.	DATTA MEGHE INSTITUTE OF MEDICAL SCIENCE	NAGPUR
757.	DAYALBAGH EDUCATIONAL INSTITUTE ,AGRA	AGRA
758.	DAYALBAGH UNIVERSITY	AGRA
759.	DBXENTO SYSTEMS	NASHIK
760.	DECURTIS CORPORATION	JAIPUR
761.	DEE DEVELOPMENT ENGINEERS LTD.	FARIDABAD
762.	DEFENCE RESEARCH & DEVELOPMENT ORGANISATION	SECUNDERABAD
763.	DEFENCE RESEARCH & DEVELOPMENT ORGANISATION	HYDERABAD
764.	DEFIANCE TECHNOLOGIES	CHENNAI
765.	DEGREMONT LTD.	NEW DELHI
766.	DELHI INTEGRATED MULTI-MODAL TRANSIT SYSTEM	NEW DELHI
767.	DELHI STATE HEALTH MISSION,GOVT. OF NCT	GHAZIABAD
768.	DELL FORCE10	NAGERCOIL
769.	DELL INDIA PVT. LTD.	BENGALURU
770.	DELL INTERNATIONAL SERVICES INDIA PVT. LTD.	BENGALURU
771.	DELL INTERNATIONAL SERVICES INDIA PVT. LTD.	CHENNAI
772.	DELOITTE CONSULTING INDIA PVT. LTD.	BENGALURU
773.	DELOITTE CONSULTING INDIA PVT. LTD.	CHITTORGARH
774.	DELOITTE CONSULTING INDIA PVT. LTD.	GWALIOR
775.	DELOITTE CONSULTING INDIA PVT. LTD.	MUMBAI
776.	DELOITTE CONSULTING INDIA PVT. LTD.	SANGARIA
777.	DELPHI AUTOMOTIVE SYSTEMS	BENGALURU
778.	DELPHI CONNECTION SYSTEMS INDIA PVT. LTD.	CHENNAI
779.	DELPHI-TVS DIESEL SYSTEMS LTD.	CHENNAI

780.	DELPHI-TVS DIESEL SYSTEMS LTD.	NEYVELI
781.	DELPHI-TVS DIESEL SYSTEMS LTD.	THIRUVALLUR
782.	DELTA POWER SOLUTIONS INDIA PVT. LTD.	FARIDABAD
783.	DENSO INDIA LTD.	NANGLOI
784.	DEODITA TECHNOLOGIES	MUMBAI
785.	DESCON ENGINEERING LTD.	CHENNAI
786.	DESCON ENGINEERING LTD.	THIRUVANANTHAPURAM
787.	DGQA	SECUNDERABAD
788.	DHYAN NETWORKS AND TECHNOLOGIES	COIMBATORE
789.	DIAMOND POWER INFRASTRUCTURE LTD.	VADODARA
790.	DIEBOLD SYSTEMS PVT. LTD.	MAPUSA
791.	DIEBOLD SYSTEMS PVT. LTD.	TIVIM
792.	DIFACTO ROBOTICS AND AUTOMATION PVT. LTD.	VELLORE
793.	DIGITAL INSIGHT INDIA PRODUCTS PVT. LTD.	BENGALURU
794.	DIMA E SOLUTIONS PVT. LTD.	PUNE
795.	DIMENSION DATA INDIA PVT. LTD.	GURGAON
796.	DIPAK CONSTRUCTIONS	ERNAKULAM
797.	DISA INDIA LTD.	TUMKUR
798.	DISTRICT HEALTH SOCIETY, PATNA	PATNA
799.	DMI INNOVATIONS PVT. LTD.	GHAZIBAD
800.	DNATA	THIRUVALLA
801.	DNATA (EMIRATES GROUP)	DUBAI
802.	DNV-GL	MATAR QADEEM
803.	DOLPHIN ENERGY LTD.	DOHA
804.	DOOSAN INFRACORE	CHENNAI
805.	DOOSAN POWER SYSTEMS INDIA PVT. LTD.	CHENNAI
806.	DORNIER CONSULTING GMBH	AL KARAAMA
807.	DOVER INDIA PVT. LTD.	CHENNAI
808.	DOVER INDIA PVT. LTD.	HYDERABAD
809.	DOW CHEMICAL INTERNATIONAL PVT. LTD.	CHENNAI
810.	DP POLYMER PRODUCTS	MUMBAI
811.	DR REDDY'S LABORATORIES LTD.	HYDERABAD
812.	DR REDDY'S LABORATORIES LTD.	MEDAK
813.	DR. RAMESH CARDIAC AND MULTISPECIALITY H	VIJAYAWADA
814.	DR. REDDY'S LABORATORIES LTD.	HYDERABAD
815.	DR.K.M.CHERIAN'S FRONTIER LIFELINE HOSPITAL	CHENNAI
816.	DR.REDDYS LABORATORIES LTD.	VISHAKAPATNAM
817.	DRAKE & SCULL INTERNATIONAL LLC	KANYAKUMARI
818.	DRDL	HYDERABAD
819.	DRDO	NEW DELHI
820.	DRESSER VALVE INDIA PVT. LTD.	COIMBATORE
821.	DRESSER VALVE INDIA PVT. LTD.	KHARGHAR
822.	DRUVA SOFTWARE	PUNE
823.	DRYDOCKS WORLD DUBAI	DUBAI
824.	DSA ANALYTICS AND RESEARCH PVT. LTD.	BENGALURU
825.	DTE GEN OF QUALITY ASSURANCE	JABALPUR
826.	DUBAI AIR NAVIGATION SERVICES	DUBAI
827.	DUBAI AIRPORTS	DUBAI
828.	DUBAI ALLUMINIUM COMPANY LTD.	DUBAI

829.	DUBAI CABLE COMPANY PVT. LTD.	MUSSAFAH
830.	DUBAI ELECTRICITY & WATER AUTHORITY	DUBAI
831.	DUBAI ELECTRICITY & WATER AUTHORITY	JEBEL ALI
832.	DUBAL	VISAKHAPATNAM
833.	DUMDE	AIZAWL
834.	DURGABAI DESHMUKH HOSPITAL & RESERCH CENTRE	HYDERABAD
835.	DURR INDIA PVT. LTD.	HOSUR
836.	DYANSYS INDIA PVT. LTD.	CHENNAI
837.	DYANSYS INDIA PVT. LTD.	CHENNAI
838.	DYNACAST SINGAPORE PTE LTD.	JURONG WEST
839.	E.I.DUPONT INDIA PVT. LTD.	HYDERABAD
840.	E.I.DUPONT INDIA PVT. LTD.	SECUNDERABAD
841.	E2INFOSYSTEMS PVT. LTD.	CHENNAI
842.	EAGLEBURGMANN (MALAYSIA) SDN BHD	MADURAI
843.	EASI, AN ALLEGIS GROUP OF COMPANY	BENGALURU
844.	EASI, AN ALLEGIS GROUP OF COMPANY	TRICHY
845.	EASUN REYROLLE LTD.	NEYVELI
846.	EATON CORP MTL INSTRUMENTS PVT. LTD.	CHENNAI
847.	EATON CORPORATION	PUNE
848.	EATON FLUID POWER LTD.	NOIDA
849.	EATON INDIA ENGINEERING CENTER PUNE	PUNE
850.	EATON INDIA ENGINEERING CENTER PVT. LTD.	PUNE
851.	EATON INDUSTRIAL SYSTEMS PVT. LTD.	PUNE
852.	EATON INDUSTRIAL SYSTEMS PVT. LTD.	PUNE
853.	EATON POWER QUALITY PVT. LTD.	MUMBAI
854.	EATON TECHNOLOGIES PVT. LTD.	KOLHAPUR
855.	EATON TECHNOLOGIES PVT. LTD.	KOPPAL
856.	EATON TECHNOLOGIES PVT. LTD.	PUNE
857.	EATON TECHNOLOGIES PVT. LTD.	SATARA
858.	EATON TECHNOLOGIES PVT. LTD.	TASGAON
859.	EC SOFTWARE	DHARMAPURI
860.	ECHO ARCHITECTURE	RIYADH
861.	ECIL	HYDERABAD
862.	ECON METALLIC INDIA PVT. LTD.	MOHALI
863.	E-CONNECT SOLUTIONS PVT. LTD.	UDAIPUR
864.	EDGEVERVE SYSTEMS LTD.	PUNE
865.	EDIFECS TECHNOLOGIES PVT. LTD.	NOIDA
866.	EGA-DUBAI ALUMINIUM COMPANY	DUBAI
867.	EGAIN COMMUNICATIONS	PUNE
868.	EGI - ERICSSON INDIA GLOBAL SERVICES PVT. LTD.	COOCH BEHAR
869.	EINFOCHIPS LTD.	AHMEDABAD
870.	EINFOCHIPS LTD.	SOLAPUR
871.	EISYSTEMS SERVICES	MATHURA
872.	ELECTRO MECHANICAL SERVICES LLC	RUWI
873.	ELECTRONICA HITECH MACHINE TOOLS PVT. LTD.	PUNE
874.	ELECTRONICS CORPORATION OF INDIA LTD.	HYDERABAD
875.	ELECTRONICS FOR IMAGING PVT. LTD.	BENGALURU
876.	ELECTROPNEUMATICS & HYDRAULICS IND PVT. LTD.	PUNE
877.	ELEVATOR COMPANY (INDIA) LTD.	BENGALURU

878.	ELITE SCHOOL OF OPTIMETRY	CHENNAI
879.	ELITECORE TECHNOLOGY PVT. LTD.	CHHATARPUR
880.	ELSEWEDY CABLES	DOHA
881.	ELSYTEC POWER PROJECTS PVT. LTD.	CHENNAI
882.	ELVERS TECH	BENGALURU
883.	EMBEDDED SYSTEMS SOLUTIONS	BENGALURU
884.	EMC CORPORATION	BENGALURU
885.	EMC DATA STORAGE SYSTEMS INDIA PVT. LTD.	BENGALURU
886.	EMC SOFTWARE AND SERVICES INDIA PVT. LTD.	BENGALURU
887.	EMC SOFTWARE AND SERVICES INDIA PVT. LTD.	ERODE
888.	EME ENGINEERING CONSULTANTS	BUSINESS BAY
889.	EMERIO INFOTECH PTE LTD.	SINGAPORE
890.	EMERSON ELECTRIC CO. INDIA PVT. LTD.	NAVI MUMBAI
891.	EMERSON FZE	JEBEL ALI
892.	EMERSON FZN	JEBEL ALI
893.	EMERSON INDUSTRIAL AUTOMATION	BENGALURU
894.	EMERSON INNOVATION CENTER	PUNE
895.	EMERSON NETWORK POWER (I) PVT. LTD.	BENGALURU
896.	EMERSON NETWORK POWER (I) PVT. LTD.	DOMBIVLI
897.	EMERSON NETWORK POWER (I) PVT. LTD.	KHARAR
898.	EMERSON NETWORK POWER (I) PVT. LTD.	MULUND
899.	EMERSON NETWORK POWER (I) PVT. LTD.	NAVI MUMBAI
900.	EMERSON NETWORK POWER (I) PVT. LTD.	THANE
901.	EMERSON PROCESS MANAGEMENT	JEBEL ALI
902.	EMERSON PROCESS MANAGEMENT ASIA PACIFIC	SINGAPORE
903.	EMIDS TECHNOLOGIES PVT. LTD.	BENGALURU
904.	EMIRATES ALUMINIUM COMPANY	ABU DHABI
905.	EMIRATES ALUMINIUM COMPANY	DUBAI
906.	EMIRATES ALUMINIUM COMPANY	ERNAKULAM
907.	EMIRATES ALUMINIUM COMPANY	JAMNAGAR
908.	EMIRATES BLOCK FACTORY	ABU DHABI
909.	EMIRATES GENERAL PETROLEUM CORPORATION	DUBAI
910.	EMIRATES GLOBAL ALUMINIUM	AHMEDABAD
911.	EMIRATES GROUP	DUBAI
912.	EMIRATES STEEL INDUSTRIES	MUSSAFAH
913.	EMIRATES STEEL INDUSTRIES	RAJAMPET
914.	EMIRATES TRADING AGENCY (ETA)	DUBAI
915.	EMISSION CONTROLS MANUFACTURERS ASSOCIATES	NEW DELHI
916.	EMITAC ENTERPRISE SOLUTIONS	ABUDHABI
917.	EMMANUEL HOSPITAL ASSOCIATION	LALITPUR
918.	E-MUG TECHNOLOGIES PVT. LTD.	HYDERABAD
919.	ENARKA INSTRUMENTS PVT. LTD.	BENGALURU
920.	ENDEAVOUR SOFTWARE TECHNOLOGIES	BENGALURU
921.	ENDURANCE TECHNOLOGIES PVT. LTD.	AURANGABAD
922.	ENDURANCE TECHNOLOGIES PVT. LTD.	RUDRAPUR
923.	ENERGO PROJEKT ENTEL CO.LTD.	DUBAI
924.	ENERGO PROJEKT ENTEL CO.LTD.	OUDMETHA
925.	ENERGY ENGINEERING	AJMAN
926.	ENGINEERS INDIA LTD.	BHARUCH

927.	ENGTECH ASSOCIATES	ALLAHABAD
928.	ENLIGHTEN SOFTWARE SERVICES PVT. LTD.	BENGALURU
929.	ENVESTNET ASSET MANAGEMENT (INDIA) PVT. LTD.	TRIVANDRUM
930.	EPCOS INDIA PVT. LTD.	REWARI
931.	EQ-TECHNOLOGIC	PUNE
932.	EQUADRIGA SOFTWARE PVT. LTD.	TIRUCHIRAPPALLI
933.	EQUATE PETRO CHEMICALS COMAPNY	KUWAIT
934.	EQUATE PETRO CHEMICALS COMAPNY	MUMBAI
935.	EQUATE PETRO CHEMICALS COMAPNY	ORATHANADU
936.	EREVMAX TECHNOLOGIES PVT. LTD.	KOLKATA
937.	ERICSSON INDIA GLOBAL SERVICES PVT. LTD.	BENGALURU
938.	ERICSSON INDIA GLOBAL SERVICES PVT. LTD.	CHENNAI
939.	ERICSSON INDIA GLOBAL SERVICES PVT. LTD.	COIMBATORE
940.	ERICSSON INDIA GLOBAL SERVICES PVT. LTD.	TUMKUR
941.	ERICSSON UK LTD.	DELHI
942.	ERNST & YOUNG	TRIVANDRUM
943.	ERNST & YOUNG GLOBAL (ASIA PACIFIC) PTE	SINGAPORE
944.	ERNST YOUNG LLP	HYDERABAD
945.	EROS INTERNATIONAL MEDIA PVT. LTD.	BENGALURU
946.	ESAB MIDDLE EAST LLC	DUBAI
947.	ESCORTS AGRI MACHINERY LTD.	FARIDABAD
948.	ESCORTS LTD.	FARIDABAD
949.	ESCORTS LTD.	PANIPAT
950.	ESNAAD	NEW DELHI
951.	ESOFT	HYDERABAD
952.	E-SOURCE SOLUTIONS LTD.	BENGALURU
953.	ESQUARE INFO SOLUTIONS	TIRUVALLUR
954.	ESSAR ENERGY SERVICES LTD.	JAMNAGAR
955.	ESSAR OIL LTD.	JAMNAGAR
956.	ESSAR POWER LTD.	SURAT
957.	ESSAR PROJECS (I) LTD.	NAVI MUMBAI
958.	ESSAR PROJECTS SINGAPORE PTE LTD.	HOSUR
959.	ESSAR STEEL INDIA LTD.	CHENNAI
960.	ESSAR STEEL INDIA LTD.	SURAT
961.	ESSENTRA LTD.	BENGALURU
962.	ESSILOR INDIA PVT. LTD.	BENGALURU
963.	ESSILOR MANUFACTURING INDIA PVT. LTD.	CHIKMAGLUR
964.	ESTUATE SOFTWARE PVT. LTD.	BENGALURU
965.	ETA ASCON (M&E DIVISION)	MUMBAI
966.	ETA ASCON GROUP OF COMPANIES	KADAYANALLUR
967.	ETA PCS SWITCHGEAR LLC	AJMAN
968.	ETERNIS FINE CHEMICALS	KOLHAPUR
969.	ETIHAD AIRWAYS ENGINEERING	ABU DHABI
970.	EUROFINS IT SOLUTIONS INDIA PVT. LTD.	BENGALURU
971.	EURONET INDIA PVT. LTD.	PUNE
972.	EUROTAS INFRASTRCTURE LTD.	NASHIK
973.	EUTHENICS IT SERVICES PVT. LTD.	VISAKHAPATNAM
974.	EVALUESERVE.COM	NEW DELHI
975.	EVERSENDI ENGINEERING FZE	SHARJAH

976.	EVERSENDAI ENGINEERING LLC	SHARJAH
977.	EVERSENDAI OFFSHORE RMC FZE	DUBAI
978.	EVOLUTION DEVELOPERS LTD.	DELHI
979.	EVOQUA WATER TECHNOLOGIES PTE LTD.	SINGAPORE
980.	EXCEL POWER SWITCHGEAR PVT. LTD.	CHENNAI
981.	EXCELERON SOFTWARE PVT. LTD.	BENGALURU
982.	EXCELLENCE INFOCOM	PUNE
983.	EXCELLENCE INFONET	JUNAGADH
984.	EXCELLENT SHIPBUILDERS	GURUVAYUR
985.	EXETER SOFTWARE INDIA	BENGALURU
986.	EXFO INC.	PUNE
987.	EXIDE LIFE INSURANCE COMPANY LTD.	BENGALURU
988.	EXILANT TECHNOLOGIES PVT. LTD.	BENGALURU
989.	EXPEDIA ONLINE TRAVEL SERVICES INDIA PVT. LTD.	DWARKA
990.	EXPEDIA ONLINE TRAVEL SERVICES INDIA PVT. LTD.	GURGAON
991.	EXPERT GLOBAL SOLUTION PVT. LTD.	PUNE
992.	EXTERRAN BELLELI ENERGY FZE	SHARJAH
993.	EXTERRO R & D	TIRUCHIRAPPALLI
994.	EXXON MOBIL	SINGAPORE
995.	EXZA INFOSYSTEMS PVT. LTD.	VIMANNAGAR
996.	EY (ERNST & YOUNG)	THIRUVANNAMALAI
997.	EYE Q VISION PVT. LTD.	ALIGARH
998.	FACC OPERATIONS GMBH	TUMKUR
999.	FAG ROLLER BEARING PVT.LTD.	VADODARA
1000.	FAIR HAVENS FOUNDATION	HYDERABAD
1001.	FAIR ISAAC INDIA SOFTWARE PVT. LTD.	HYDERABAD
1002.	FAIVELEY TRANSPORT RAIL TECHNOLOGIES IND	VELLORE
1003.	FANUC INDIA PVT. LTD.	KANNUR
1004.	FARAH LEISURE PARK MANAGEMENT LLC	AHMEDABAD
1005.	FAURECIA EMISSIONS CONTROL TECHNOLOGIES	TIRUNELVELI
1006.	FAURECIA INTERIOR SYSTEMS INDIA PVT.LTD.	PUNE
1007.	FCI TECHNOLOGY SERVICES	PALAKKAD
1008.	FEDERAL MOGUL GOETZE (INDIA) LTD.	MADURAI
1009.	FELICITAS GLOBAL PTE LTD.	SINGAPORE
1010.	FERROFAB FZE	PONNERI
1011.	FEV INDIA PVT. LTD.	PUNE
1012.	FIAT CHRYSLER AUTOMOTIVES	CHENNAI
1013.	FIAT INDIA AUTOMOBILES LTD.	PUNE
1014.	FICO	KANCHIPURAM
1015.	FIDELITY BUSINESS SERVICES INDIA PVT. LTD.	BENGALURU
1016.	FIDELITY BUSINESS SERVICES INDIA PVT. LTD.	GIDDALUR
1017.	FIDELITY INVESTMENTS	BENGALURU
1018.	FIDELITY NATIONAL INFORMATION SERVICES	BENGALURU
1019.	FINANCIAL SOFTWARE AND SYSTEMS	CHENNAI
1020.	FINETECH CONTROLS PVT. LTD.	NOIDA
1021.	FIREEYE CYBERSECURITY PVT. LTD.	BENGALURU
1022.	FIS GLOBAL BUSINESS SOLUTION INDIA P LTD.	BENGALURU
1023.	FIS GLOBAL BUSINESS SOLUTION INDIA P LTD.	CHENNAI
1024.	FIS GLOBAL BUSINESS SOLUTION INDIA P LTD.	TIRUNELVELI

1025.	FISERV INDIA PVT. LTD.	GHAZIABAD
1026.	FISERV INDIA PVT. LTD.	GHAZIABAD
1027.	FISERV INDIA PVT. LTD.	PUNE
1028.	FLEXTRONICS INDIA LTD.	CHENNAI
1029.	FLEXTRONICS INDIA LTD.	COIMBATORE
1030.	FLEXTRONICS INDIA PVT. LTD.	PUNE
1031.	FLEXTRONICS TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1032.	FLEXTRONICS TECHNOLOGIES INDIA PVT. LTD.	KANCHIPURAM
1033.	FLEXTRONICS TECHNOLOGIES INDIA PVT. LTD.	MUMBAI
1034.	FLIPKART INDIA PVT. LTD.	BENGALURU
1035.	FLIPKART INTERNET PVT. LTD.	BENGALURU
1036.	FLIPKART LTD.	MEERUT
1037.	FLOWSERVE INDIA CONTROLS PVT. LTD.	BENGALURU
1038.	FLOWSERVE INDIA CONTROLS PVT. LTD.	COIMBATORE
1039.	FLSMIDTH INDIA PVT. LTD.	CHENNAI
1040.	FLSMIDTH INDIA PVT. LTD.	CUDDALORE
1041.	FLSMIDTH INDIA PVT. LTD.	ELURU
1042.	FLUOR DANIEL INDIA PVT. LTD.	GURGAON
1043.	FLUOR KUWAIT COMPANY	AHMADI
1044.	FMC TECHNOLOGIES INDIA PVT. LTD.	HYDERABAD
1045.	FOLEYDESIGNS PVT. LTD.	BENGALURU
1046.	FORBES MARSHALL PVT. LTD.	PIMPRI
1047.	FORBES MARSHALL PVT. LTD.	PUNE
1048.	FORCE MOTORS LTD.	PUNE
1049.	FORD INDIA PVT. LTD.	AHMEDABAD
1050.	FORD INDIA PVT. LTD.	BOISAR
1051.	FORD INDIA PVT. LTD.	CHENNAI
1052.	FORD INDIA PVT. LTD.	THIRUKKOILUR
1053.	FORD IT	CHENNAI
1054.	FORD MOTOR COMPANY	AHMEDABAD
1055.	FORD MOTOR PVT. LTD.	CHENNAI
1056.	FORD TECHNOLOGY SERVICES INDIA LTD.	CHENNAI
1057.	FORD TECHNOLOGY SERVICES INDIA LTD.	SIRSI
1058.	FORMATIVE SOFTWARE SOLUTIONS PVT. LTD.	CHENNAI
1059.	FORTIS	KALYAN
1060.	FOSTER WHEELER	CHENNAI
1061.	FOX SOLUTIONS	NASHIK
1062.	FRANCONNECT SOFTWARE INDIA PVT. LTD.	DELHI
1063.	FRAUSCHER SENSOR TECHNOLOGY	BENGALURU
1064.	FREESCALE SEMICONDUCTOR INDIA PVT. LTD.	BENGALURU
1065.	FREESCALE SEMICONDUCTOR INDIA PVT. LTD.	HYDERABAD
1066.	FRESHDESK TECHNOLOGIES PVT. LTD.	CHENNAI
1067.	FTD INDIA PVT. LTD.	HYDERABAD
1068.	FTD INFOCOM PVT. LTD.	BENGALURU
1069.	FUJITEC INDIA PVT. LTD.	CHENNAI
1070.	FUJITSU CONSULTING INDIA LTD.	HYDERABAD
1071.	FUJSENG CONSTRUCTION LLC	FUJAIRAH
1072.	FUJSENG CONSTRUCTION LLC	THANJAVUR
1073.	FUNDTECH INDIA LTD.	PUNE

1074.	FUNIZEN SOLUTIONS PVT. LTD.	CHENNAI
1075.	FUTURESOFT INDIA PVT. LTD.	BHIWANI
1076.	GABOM	GABON
1077.	GABRIEL INDIA LTD.	ERODE
1078.	GABRIEL INDIA LTD.	PUNE
1079.	GABRIEL INDIA LTD.	SALEM
1080.	GALFAR AL MISNAD ENGINEERING AND CONTRACT	DOHA
1081.	GALFAR ENGINEERING AND CONTRACTING SAOG	MUSCAT
1082.	GALIPOGLU HIDROMAS INDIA MANFAC	CHENNAI
1083.	GANGES INTERNATIONALE PVT. LTD.	CHENNAI
1084.	GARS INFOTECH PVT. LTD.	PILANI
1085.	GASCO (ABUDHABI GAS INDUSTRIES)	CHENNAI
1086.	GATES UNITTA INDIA CO PVT. LTD.	MADURAI
1087.	GAVS TECHNOLOGY	CHENNAI
1088.	GE APPLIANCES	BENGALURU
1089.	GE ENERGY	HYDERABAD
1090.	GE F&PT - DRESSER VALVE INDIA PVT. LTD.	COIMBATORE
1091.	GE HEALTHCARE	BENGALURU
1092.	GE INDIA EXPORTS PVT. LTD.	HYDERABAD
1093.	GE INDIA INDUSTRIAL PVT. LTD.	BENGALURU
1094.	GE INDIA INDUSTRIAL PVT. LTD.	GURGAON
1095.	GE INDIA TECHNOLOGY LTD.	BENGALURU
1096.	GE INTELLIGENT PLATFORMS PVT. LTD.	BENGALURU
1097.	GE INTELLIGENT PLATFORMS PVT. LTD.	PUNE
1098.	GE OIL & GAS	TRICHUR
1099.	GE POWER CONVERSION LTD.	CHENNAI
1100.	GE WATER & PROCESS TECHNOLOGIES	MUSCAT
1101.	GE-BEL (GE-HEALTH CARE )	BENGALURU
1102.	GEBR PFEIFFER (INDIA) PVT. LTD.	NEW DELHI
1103.	GEBR PFEIFFER (INDIA) PVT. LTD.	NOIDA
1104.	GENERAL ELECTRIC	BENGALURU
1105.	GENERAL ELECTRIC HEALTHCARE	BENGALURU
1106.	GENERAL MOTORS TECHNICAL CENTER INDIA PVT LTD.	BENGALURU
1107.	GENERAL MOTORS TECHNICAL CENTER INDIA PVT LTD.	PUNE
1108.	GENERAL MOTORS TECHNICAL CENTER INDIA PVT LTD.	TUTICORIN
1109.	GENOMATRIX INDIA PVT. LTD.	DEWAS
1110.	GENPACT HEADSTRONG CAPITAL MARKETS	BENGALURU
1111.	GENPACT INDIA PVT. LTD.	GHAZIABAD
1112.	GENPACT INDIA PVT. LTD.	HYDERABAD
1113.	GENUINE CONSULTANCY SERVICE	CHENNAI
1114.	GEOMETRIC LTD.	BENGALURU
1115.	GEOMETRIC LTD.	PUNE
1116.	GERMANISCHER LLOYD INDUSTRIAL SERVICES	TRICHY
1117.	GESTAMP AUTOMOTIVE CHENNAI LTD.	CHENNAI
1118.	GHANTOOT GENERAL MECHANICAL ENGINEERING	PARAMAKUDI
1119.	GHCL LTD.	VERAVAL
1120.	GI AUTO PVT. LTD.	BENGALURU
1121.	GIESECKE & DEVRIENT INDIA PVT. LTD.	PUNE
1122.	GIOSTAR - SAVIOUR HOSPITAL	MUMBAI



1123.	GIVAUDAN INDIA PVT. LTD.	THANE
1124.	GKN SINTER METALS PVT. LTD.	PUNE
1125.	GLAXO SMITHKLINE CONSUMER HEALTHCARE	MANGALDOI
1126.	GLEEDS HOOLOOMANN CONSULTING INDIA PVT. LTD.	MALAPPURAM
1127.	GLOBAL ANALYTICS INDIA PVT.LTD.	KARUR
1128.	GLOBAL ANALYTICS INDIA PVT.LTD.	SHENGOTTAH
1129.	GLOBAL EDGE SOFTWARE LTD.	BENGALURU
1130.	GLOBAL FOUNDRIES SINGAPORE PTE LTD.	VILLUPURAM
1131.	GLOBAL INFOTECH & ENGINEERING ASSOCIATE	SERAMPORE
1132.	GLOBAL LOGIC INDIA LTD.	BENGALURU
1133.	GLOBAL LOGIC INDIA LTD.	NOIDA
1134.	GLOBAL PETROLEUM BUSINESS TRADING ESTABL	DOHA
1135.	GLOBAL PROCESS SYSTEM	DUBAI
1136.	GLOBAL REMOTE INTEGRATED ACCESS SOLUTION	CHENNAI
1137.	GLOBALLOGIC INDIA PVT. LTD.	BHATINDA
1138.	GLOBALLOGIC INDIA PVT. LTD.	CHENNAI
1139.	GLOBALLOGIC INDIA PVT. LTD.	MANDYA
1140.	GLOCAL HEALTH CARE-BEGUSARAI	PATNA
1141.	GMAX AUTO LTD.	NARNAUL
1142.	GMERS MEDICAL COLLEGE GANDHINAGAR	GANDHINAGAR
1143.	GOA STATE POLLUTION CONTROL BOARD	GOA
1144.	GODREJ & BOYCE MFG CO. LTD.	BHUBANESWAR
1145.	GODREJ & BOYCE MFG CO. LTD.	CALICUT
1146.	GODREJ & BOYCE MFG CO. LTD.	DELHI
1147.	GODREJ & BOYCE MFG CO. LTD.	ERODE
1148.	GODREJ & BOYCE MFG CO. LTD.	KARJAT
1149.	GODREJ & BOYCE MFG CO. LTD.	MUMBAI
1150.	GODREJ & BOYCE MFG CO. LTD.	NAVI MUMBAI
1151.	GODREJ & BOYCE MFG CO. LTD.	NEW DELHI
1152.	GODREJ & BOYCE MFG CO. LTD.	PATIALA
1153.	GODREJ & BOYCE MFG CO. LTD.	PUNE
1154.	GODREJ & BOYCE MFG CO. LTD.	VIKROLI
1155.	GOLDMAN SACHS SERVICES PVT. LTD.	BENGALURU
1156.	GOLDSTONE INFRATECH LTD.	SECUNDERABAD
1157.	GOODRICH AEROSPACE SERVICES PVT. LTD.	BENGALURU
1158.	GOODYEAR INDIA LTD.	CHENNAI
1159.	GOPA INTEC	KALPETTA
1160.	GOPA INTERNATIONAL ENERGY CONSULTANTS	MUSSAFAH
1161.	GOVERNMENT POLYTECHNIC FOR WOMEN	SRINAGAR
1162.	GOVT POLYTECHNIC COLLEGE	PULWAMA
1163.	GOYAL HOSPITAL & RESEARCH CENTRE PVT. LTD.	JODHPUR
1164.	GRASIM INDUSTRIES LTD.	NAGDA
1165.	GREAT SOFTWARE LABORATORY	PUNE
1166.	GREAVES COTTON LTD.	AURANGABAD
1167.	GREEN LINE SOLAR PVT. LTD.	PONDICHERRY
1168.	GREENHECK FAN INDIA PVT. LTD.	KOLKATA
1169.	GREENMILE CONSULTANCY SERVICES PVT. LTD.	THIRUNELVELI
1170.	GREENSCAPES	DUBAI
1171.	GRINDWELL NORTON LTD.	NAGPUR

1172.	GROWELL HR SOLUTION PVT. LTD.	BENGALURU
1173.	GROZ ENGG TOOLS PVT. LTD.	NEW DELHI
1174.	GROZ ENGINEERING TOOLS PVT. LTD.	MORADABAD
1175.	GRUNER INDIA PVT.LTD.	CHORGALIA
1176.	GS ENGINEERING & CONSTRUCTION DELHI PVT. LTD.	GURGAON
1177.	GS ENGINEERING & CONSTRUCTION PVT. LTD.	THANE
1178.	GSH (INDIA) PVT. LTD.	BHAGALPUR
1179.	GSH (INDIA) PVT. LTD.	NAVI MUMBAI
1180.	GSPANN TECHNOLOGIES	HYDERABAD
1181.	GSPC GAS CO LTD.	GONDAL
1182.	GTRE, DRDO, MIN OF DEFENCE	BENGALURU
1183.	GUINEE	GUINEA
1184.	GUJARAT STATE ELECTRICITY CORPORATION	NAVSARI
1185.	GULF OIL LUBRICANTS INDIA LTD.	SILVASSA
1186.	GULF PETROCHEMICAL & TRADING SERVICES LLC	THRISSUR
1187.	GULF PIPING COMPANY	ABUDHABI
1188.	GULF PIPING COMPANY	MUSSAFAH
1189.	GULF VALVE - PENTAIR	CHENNAI
1190.	GULF VALVE FZE	SHARJAH
1191.	GVK BIOSCIENCES PVT. LTD.	HYDERABAD
1192.	GW TECH PVT. LTD.	SAS NAGAR
1193.	GXS INDIA TECHNOLOGY CENTRE PVT. LTD.	BENGALURU
1194.	H K AL SADIQ SONS CO.LTD.	KALPETTA
1195.	HADEED, SABIC	JUBAIL
1196.	HALCROW INTERNATIONAL PARTNERSHIP(CH2M H	DUBAI
1197.	HALLA VISTEON CLIMATE SYSTEMS INDIA PVT. LTD.	BHIWADI
1198.	HALLA VISTEON CLIMATE SYSTEMS INDIA PVT. LTD.	FARIDABAD
1199.	HANYANG AUTOMOTIVE INDIA P LTD.	CHENNAI
1200.	HAPPIEST MINDS TECHNOLOGIES PVT. LTD.	BENGALURU
1201.	HAPPIEST MINDS TECHNOLOGIES PVT. LTD.	GHAZIABAD
1202.	HARBINGER SYSTEMS PVT. LTD.	PUNE
1203.	HARITA FEHRER LTD.	HOSUR
1204.	HARITA SEATING SYSTEMS LTD.	HOSUR
1205.	HARITA TECHSERV LTD.	PUNE
1206.	HARITA TECHSERV LTD.	VELLORE
1207.	HARMAN INTERNATIONAL (INDIA) PVT. LTD.	BENGALURU
1208.	HARTFORD STEAM BOILER INTERNATIONAL GMBH	MUMBAI
1209.	HAYA WATER SAOC	MUSCAT
1210.	HBL POWER SYSTEMS LTD.	HYDERABAD
1211.	HCENTIVE TECHNOLOGY INDIA PVT. LTD.	DELHI
1212.	HCL TECHNOLOGIES LTD.	BENGALURU
1213.	HCL TECHNOLOGIES LTD.	CHENNAI
1214.	HCL TECHNOLOGIES LTD.	COIMBATORE
1215.	HCL TECHNOLOGIES LTD.	GHAZIABAD
1216.	HCL TECHNOLOGIES LTD.	HOSUR
1217.	HCL TECHNOLOGIES LTD.	KOTTAYAM
1218.	HCL TECHNOLOGIES LTD.	MADURAI
1219.	HCL TECHNOLOGIES LTD.	NEW DELHI
1220.	HCL TECHNOLOGIES LTD.	NOIDA

1221.	HCL TECHNOLOGIES LTD.	SINGAPORE
1222.	HEAT EXCHANGES SPECIALISTS (S) PTE LTD.	MAMALLAPURAM
1223.	HEAVY ENGINEERING INDUSTRIES AND SHIPBUI	SAFAT
1224.	HED EXPERTS PVT. LTD.	BENGALURU
1225.	HEDRICH VACUUM SYSTEMS (I) PVT. LTD.	KOLKATA
1226.	HEIDELBERG CEMENT INDIA LTD.	NARSINGARH
1227.	HEIDELBERG CEMENT INDIA LTD.	NEW DELHI
1228.	HELLA INDIA AUTOMOTIVE PVT. LTD.	CHENNAI
1229.	HELLA INDIA AUTOMOTIVE PVT. LTD.	GURGAON
1230.	HELLA INDIA PVT. LTD.	NEW DELHI
1231.	HEMARUS THERAPEUTICS LTD.	SECUNDERABAD
1232.	HENDERSON INTERNATIONAL. LLC.	PERUMALPATTU
1233.	HENKEL TEROSON INDIA LTD.	LUCKNOW
1234.	HENKEL TEROSON INDIA LTD.	CHENNAI
1235.	HERO MOTOCORP LTD.	GURGAON
1236.	HEW PRECISION WORKS PVT. LTD.	PARATWADA
1237.	HEWIIT ASSOCIATES INDIA PVT. LTD.	NOIDA
1238.	HEWLETT PACKARD GLOBALSOFT LTD.	BENGALURU
1239.	HEWLETT PACKARD GLOBALSOFT LTD.	CHENNAI
1240.	HEWLETT PACKARD ISO PVT. LTD.	BENGALURU
1241.	HEXAGON CAPABILITY CENTER INDIA PVT. LTD.	HYDERABAD
1242.	HEXAGON CAPABILITY CENTER INDIA PVT. LTD.	SECUNDERABAD
1243.	HEXAWARE TECHNOLOGIES LTD.	CHENNAI
1244.	HEXAWARE TECHNOLOGIES LTD.	COIMBATORE
1245.	HEXAWARE TECHNOLOGIES LTD.	NAVI MUMBAI
1246.	HGST	ERNAKULAM
1247.	HI JOULE	ABU DHABI
1248.	HIDI RAE CONSULTING ENGINEERS INC	DUBAI
1249.	HIKAL LTD.	BENGALURU
1250.	HINDALCO INDUSTRIES LTD.	BELGAUM
1251.	HINDALCO INDUSTRIES LTD.	KOLLAM
1252.	HINDALCO INDUSTRIES LTD.	UJJAIN
1253.	HINDUJA FOUNDRIES LTD.	CHENNAI
1254.	HINDUSTAN AERONAUTICS LTD.	BENGALURU
1255.	HINDUSTAN PETROLEUM CORPORATION LTD.	MUMBAI
1256.	HINDWARE(HSIL)	ROORKEE
1257.	HIRMI CEMENT WORKS, ULTRATECH CEMENT LTD.	BALODA BAZAR
1258.	HITACHI AUTOMOTIVE SYSTEMS	CHENNAI
1259.	HITACHI CONSULTING SOFTWARE SERVICES PVT. LTD.	BENGALURU
1260.	HI-TECH GEARS LTD.	FARIDABAD
1261.	HLL LIFECARE LTD.	COCHIN
1262.	HN BUSINESS CONSULTANTS	NEW DELHI
1263.	HNG FLOAT GLASS LTD.	VADODARA
1264.	HODEK VIBRATION TECHNOLOGIES PVT. LTD.	PUNE
1265.	HOLY FAMILY HOSPITAL	MUMBAI
1266.	HONDA CARS INDIA LTD.	BHARATPUR
1267.	HONDA CARS INDIA LTD.	GREATER NOIDA
1268.	HONDA LOGISTICS INDIA PVT. LTD.	NOORPUR
1269.	HONDA MOTORCYCLE AND SCOOTERS INDIA PVT. LTD.	BENGALURU

1270.	HONDA MOTORCYCLE AND SCOOTERS INDIA PVT. LTD.	HOSUR
1271.	HONDA MOTORCYCLE AND SCOOTERS INDIA PVT. LTD.	KOLAR
1272.	HONDA MOTORCYCLE AND SCOOTERS INDIA PVT. LTD.	LUDHIANA
1273.	HONDA MOTORCYCLE AND SCOOTERS INDIA PVT. LTD.	NEW DELHI
1274.	HONEYWELL AUTOMATION INDIA LTD.	PUNE
1275.	HONEYWELL ECC	PUNE
1276.	HONEYWELL ELECTRICAL DEVICES & SYSTEMS	DEHRADUN
1277.	HONEYWELL INTERNATIONAL (INDIA) PVT. LTD.	BENGALURU
1278.	HONEYWELL INTERNATIONAL (INDIA) PVT. LTD.	PUNE
1279.	HONEYWELL TECHNOLOGY SOLUTION LAB PVT. LTD.	BENGALURU
1280.	HONEYWELL TECHNOLOGY SOLUTION LAB PVT. LTD.	GAJWEL
1281.	HONEYWELL TECHNOLOGY SOLUTION LAB PVT. LTD.	MADURAI
1282.	HOSPIHEALTH CONSULTANTS INDIA PVT. LI	BENGALURU
1283.	HOSPIRA HEALTHCARE INDIA PVT. LTD.	CHENNAI
1284.	HOSPIRA HEALTHCARE INDIA PVT. LTD.	COIMBATORE
1285.	HOWARD FINLEY AL KHALEEJ	ABU DHABI
1286.	HP GLOBALSOFT PVT. LTD.	BENGALURU
1287.	HP INDIA SALES PVT. LTD.	FARIDABAD
1288.	HP LTD.	CHENNAI
1289.	HSBC EDPI PVT. LTD.	BENGALURU
1290.	HSBC GLT3.0	HYDERABAD
1291.	HSBC SOFTWARE DEVELOPMENT INDIA PVT. LTD.	HYDERABAD
1292.	HSBC SOFTWARE DEVELOPMENT INDIA PVT. LTD.	NAVI MUMBAI
1293.	HSBC SOFTWARE DEVELOPMENT INDIA PVT. LTD.	PUNE
1294.	HT MEDIA LTD.	GURGAON
1295.	HUAWEI TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1296.	HUBNER INTERFACE SYSTEMS INDIA PVT. LTD.	BENGALURU
1297.	HUDCO	NEW DELHI
1298.	HUGHES SYSTIQUE INDIA PVT. LTD.	NEW DELHI
1299.	HUMBOLDT WEDAG INDIA PVT. LTD.	DELHI
1300.	HUSKY INJECTION MOLDING SYSTEMS	CHENNAI
1301.	HUTCHINSON BELT DRIVE SYSTEMS INDIA	CHENNAI
1302.	HYDAC INDIA PVT. LTD.	NEW DELHI
1303.	HYDER CONSULTING INDIA PVT. LTD.	BENGALURU
1304.	HYDER CONSULTING INDIA PVT. LTD.	HYDERABAD
1305.	HYDRAULIC SYSYEMS CENTRE LLC	MUSCAT
1306.	HYDRO MIDDLE EAST INCORPORATED	CHIDAMBARAM
1307.	HYDROTECH ENGINEERING LLC	TRIVANDRUM
1308.	HYPERLOCAL PVT. LTD.	BENGALURU
1309.	HYUNDAI CONSTRUCTION EQUIPMENTS INDIA PVT LTD.	PUNE
1310.	HYUNDAI MOBIS	GANDHIDHAM
1311.	HYUNDAI MOTOR INDIA LTD.	CHENNAI
1312.	HYUNDAI MOTOR INDIA LTD.	MANAPAKKAM
1313.	HYUNDAI MOTOR INDIA LTD.	NEW DELHI
1314.	I.S.R.O	BENGALURU
1315.	I NAUTIX TECHNOLOGIES INDIA PVT. LTD.	CHENNAI
1316.	IAF	BENGALURU
1317.	IANEW IT SERVICE PVT. LTD.	BELLARY
1318.	IAP COMPANY PVT. LTD.	JAIPUR

1319.	IBM GLOBAL SERVICES PVT. LTD.	NEW DELHI
1320.	IBM INDIA PVT. LTD.	BENGALURU
1321.	IBM INDIA PVT. LTD.	CHENNAI
1322.	IBM INDIA PVT. LTD.	GHAZIABAD
1323.	IBM INDIA PVT. LTD.	GUNTUR
1324.	IBM INDIA PVT. LTD.	PUNE
1325.	IBM INDIA PVT. LTD.	SRIKALAHASTI
1326.	IBM INDIA PVT. LTD.	THIRUVANANTHAPURAM
1327.	IBM INDIA PVT. LTD.	TIRUCHIRAPPALLI
1328.	IBOBO GROUP PVT. LTD.	GURGAON
1329.	IBS SOFTWARE SERVICES PVT. LTD.	CHENGANNUR
1330.	IBS SOFTWARE SERVICES PVT. LTD.	TRIVANDRUM
1331.	ICEM	KOLLAM
1332.	ICICI BANK	NEW DELHI
1333.	ICREON COMMUNICATIONS PVT. LTD.	DELHI
1334.	IDBI BANK LTD.	KONNAGAR
1335.	IDBI BANK LTD.	MUMBAI
1336.	IDBI INTECH LTD.	PILANI
1337.	IDEA CELLULAR LTD.	BENGALURU
1338.	IDEA CELLULAR LTD.	KOCHI
1339.	IDEAS - A SAS COMPANY	PUNE
1340.	IDMC LTD.	SECUNDERABAD
1341.	IFB INDUSTRIES LTD.	BENGALURU
1342.	IFFCO KISAN SANCHAR LTD.	NEW DELHI
1343.	IFGL REFRACTORIES LTD.	KOLKATA
1344.	IFOCUS SYSTEC PVT. LTD.	BENGALURU
1345.	IGATE COMPUTER SYSTEMS LTD.	MUMBAI
1346.	IGATE GLOBAL SOLUTIONS LTD.	BENGALURU
1347.	IGATE GLOBAL SOLUTIONS LTD.	NOIDA
1348.	IGIDR	MUMBAI
1349.	IGNITE WORLD	SIRSA
1350.	IGUS (INDIA) PVT. LTD.	NEW DELHI
1351.	IHQ MOD NAVY	MUMBAI
1352.	IHS GLOBAL PVT. LTD.	NEW DELHI
1353.	IIT MADRAS	SIVAKASI
1354.	IKA INDIA PVT. LTD.	BENGALURU
1355.	ILENSYS TECHNOLOGIES PVT. LTD.	HYDERABAD
1356.	IM GEARS PVT. LTD.	THIRUVANNAMALAI
1357.	IMAGEGRAFIX SOFTWARE FZCO	DUBAI
1358.	IMAGEX TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1359.	IMPEC FILTERS PVT. LTD.	CHENNAI
1360.	IMPIGER TECHNOLOGIES (PVT.) LTD.	SALEM
1361.	IMPLANTAIRE TECHNOLOGIES INDIA PVT.LTD.	BENGALURU
1362.	IMPLANTAIRE TECHNOLOGIES INDIA PVT.LTD.	MYSORE
1363.	IMTAC LLC	TIRUVARUR
1364.	INA BEARING INDIA PVT. LTD.	PUNE
1365.	INAPP INFORMATION TECHNOLOGIES	ALAPPUZHA
1366.	INAPP INFORMATION TECHNOLOGIES (INDIA) PVT LTD.	THIRUVANANTHAPURAM
1367.	INAUTIX TECHNOLOGIES INDIA PVT. LTD.	CHENNAI

1368.	INAUTIX TECHNOLOGIES INDIA PVT. LTD.	MADURAI
1369.	INAUTIX TECHNOLOGIES INDIA PVT. LTD.	PUNE
1370.	INDECOMM GLOBAL SERVICES (INDIA) PVT. LTD.	BENGALURU
1371.	INDECOMM GLOBAL SERVICES (INDIA) PVT. LTD.	TIRUVALLUR
1372.	INDEGENE LIFE SYSTEMS	KANNUR
1373.	INDEXNINE TECHNOLOGIES	PUNE
1374.	INDIA COMNET	CHENNAI
1375.	INDIA NIPPON ELECTRICALS LTD.	HOSUR
1376.	INDIA PISTONS LTD.	CHENNAI
1377.	INDIAN AIR FORCE	NEW DELHI
1378.	INDIAN AIR FORCE	SURATGARH
1379.	INDIAN ARMED FORCES	NEW DELHI
1380.	INDIAN ARMY	AMBALA CANTT
1381.	INDIAN ARMY	BATHINDA
1382.	INDIAN ARMY	BELGAUM
1383.	INDIAN ARMY	BENGALURU
1384.	INDIAN ARMY	HYDERABAD
1385.	INDIAN ARMY	NEW DELHI
1386.	INDIAN ARMY	UDHAMPUR
1387.	INDIAN HOTELS COMPANY LTD.	MUMBAI
1388.	INDIAN INSTITUTE OF ASTROPHYSICS	BENGALURU
1389.	INDIAN INSTITUTE OF PACKAGING	NEW DELHI
1390.	INDIAN INSTITUTE OF TECHNOLOGY PATNA	PATNA
1391.	INDIAN INSTITUTE OF TECHNOLOGY ROPAR	RUPNAGAR
1392.	INDIAN NATIONAL CENTRE FOR OCEAN INFORMATION	HYDERABAD
1393.	INDIAN NAVY	NEW DELHI
1394.	INDIAN RAILWAY	LUCKNOW
1395.	INDIAN RARE EARTHS LTD.	KOLLAM
1396.	INDIAN SPACE RESEARCH ORGANISATION	BENGALURU
1397.	INDIAN SPACE RESEARCH ORGANISATION	SULLURUPETA
1398.	INDIAN SPACE RESEARCH ORGANIZATION	THIRUVANANTHAPURAM
1399.	INDO - MIM	BENGALURU
1400.	INDO AUTOTECH LTD.	BENGALURU
1401.	INDO GULF FERTILISERS	SULTANPUR
1402.	INDO-US MIM TEC PVT. LTD.	BENGALURU
1403.	INDRA HYDRO TECH PUMPS PVT.LTD.	BENGALURU
1404.	INDUSTRIAL FANS INDIA PVT.LTD.	CHENNAI
1405.	INDUSTRYARC	PILANI
1406.	INEDA SYSTEMS	HYDERABAD
1407.	INEDA SYSTEMS PVT. LTD.	HYDERABAD
1408.	INEL POWER ELECTROMECHANICAL LLC	VADALUR
1409.	INFINEON TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1410.	INFINERA IND PVT. LTD.	COIMBATORE
1411.	INFOEDGE INDIA LTD.	DELHI
1412.	INFOEDGE INDIA LTD.	NOIDA
1413.	INFOGAIN INDIA PVT. LTD.	KANPUR
1414.	INFOR (INDIA) PVT. LTD.	HYDERABAD
1415.	INFOR GLOBAL SOLUTIONS	SECUNDERABAD
1416.	INFORMATICA BUSINESS SOLUTIONS PVT. LTD.	BENGALURU

1417.	INFORMATION MOSAIC	GURGAON
1418.	INFOSUVIDHA AND SERVICES PVT. LTD.	MAHE
1419.	INFOSYS LTD.	BENGALURU
1420.	INFOSYS LTD.	HYDERABAD
1421.	INFOSYS LTD.	PUNE
1422.	INFOSYS LTD.	SERAMPORE
1423.	INFOSYS TECHNOLOGIES LTD.	BENGALURU
1424.	INFOSYS TECHNOLOGIES LTD.	CHENNAI
1425.	INFOSYS TECHNOLOGIES LTD.	HYDERABAD
1426.	INFOSYS TECHNOLOGIES LTD.	MANGALORE
1427.	INFOSYS TECHNOLOGIES LTD.	PUNE
1428.	INFOTECH ENTERPRISES LTD.	BENGALURU
1429.	INFOTECH ENTERPRISES LTD.	HYDERABAD
1430.	INFOTECH ENTERPRISES LTD.	VISAKHAPATNAM
1431.	INFOTECH GLOBAL	KANDUKUR
1432.	INFOZECH SOFTWARE LTD.	DELHI
1433.	INFOZECH SOFTWARE LTD.	NEW DELHI
1434.	INGENIOUS NETWORK FZC	SHARJAH
1435.	INGERSOLL RAND INTERNATIONAL LTD.	BENGALURU
1436.	INGERSOLL RAND INTERNATIONAL LTD.	CHENNAI
1437.	INMOBI SOFTWARE PVT. LTD.	BENGALURU
1438.	INMOBI TECHNOLOGY SERVICES PVT. LTD.	BENGALURU
1439.	INNOMINDS SOFTWARE PVT. LTD.	HYDERABAD
1440.	INSTITUTE OF MINERALS & MATERIALS TECHNO	BHUBANESWAR
1441.	INTACCT SOFTWARE PVT. LTD.	BENGALURU
1442.	INTAS PHARMACEUTICALS LTD.	AHMEDABAD
1443.	INTEGRAL RAPIDTRANZ SYSTEMS PVT. LTD.	TRICHY
1444.	INTEGRATED SPECIALIZED GENERAL CONTRACTION	ABU DHABI
1445.	INTEGRITYHOST LLC	PUNE
1446.	INTEL INDIA PVT. LTD.	BENGALURU
1447.	INTEL MOBILE COMMUNICATIONS INDIA PVT. LTD.	BENGALURU
1448.	INTEL TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1449.	INTELIZIGN ENGG SERVICES PVT. LTD.	CHENNAI
1450.	INTELIZIGN ENGINEERING SERVICES PVT.LTD.	CHENNAI
1451.	INTELLECT DESIGN ARENA LTD.	VELLORE
1452.	INTELLIGENT CONTROL AND AUTOMATION SYSTE	DUBAI
1453.	INTELLIGRAPHICS TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1454.	INTERGLOBE TECHNOLOGIES SOLUTIONS PVT. LTD.	FARIDABAD
1455.	INTERGRAPH CONSULTING PVT. LTD.	SECUNDERABAD
1456.	INTERNATIONAL CENTER FOR AUTOMOTIVE TECH	NEW DELHI
1457.	INTERRAIT	GHAZIABAD
1458.	INTERTEK MOODY	TIRUNELVELI
1459.	INTERTEK(ABUDHABI)	CHENNAI
1460.	INTREPID ONLINE RETAIL PVT. LTD. (STYLETAG	TRICHY
1461.	INTUIT INDIA PRODUCT DEVELOPMENT CENTRE PVT LTD.	BENGALURU
1462.	INTUIT TECHNOLOGY SERVICES PVT. LTD.	BENGALURU
1463.	INVENGER TECHNOLOGIES PVT. LTD.	MANGALORE
1464.	INVENSYS INDIA PVT. LTD.	CHENNAI
1465.	INVOLUTE TECHNOLOGIES PVT. LTD.	PUNE

1466.	ION EXCHANGE PROJECTS & ENGINEERING LTD.	MUMBAI
1467.	ION TRADING PVT. LTD.	NEW DELHI
1468.	IPETRONIK INC	BENGALURU
1469.	IPUNITY COMMUNICATIONS (P) LTD.	TRICHY
1470.	IQUID PROPULSION SYSTEM-ISRO	TRIVANDRUM
1471.	IRRIGATION DEPARTMENT	MALAPPURAM
1472.	ISGEC HEAVY ENGINEERING LTD.	FARIDABAD
1473.	ISIGHTPARTNERS	PUNE
1474.	ISOLUX CORSAN INDIA ENGINEERING & CONSTRUCTION	GREATER NOIDA
1475.	ISRO	TRIVANDRUM
1476.	ISRO PROPULSION COMPLEX	NAGERCOIL
1477.	ISRO SATELLITE CENTRE	BENGALURU
1478.	ISRO,SDSC SHAR,SRIHARIKOTA	SULLURUPETA
1479.	ISRO-SRIHARIKOTA	NELLORE
1480.	ISSA, DRDO, MINISTRY OF DEFENCE	NEW DELHI
1481.	ISTRAC,INDIAN SPACE RESEARCH ORGANIZATIO	BENGALURU
1482.	IT PEOPLE FZ LLC	BENGALURU
1483.	IT SERVICES AND SOLUTIONS	PUNE
1484.	ITAL BEAUTY NIPPERS PVT. LTD.	PUDUCHERRY
1485.	ITC INFOTECH INDIA LTD.	BENGALURU
1486.	ITC INFOTECH INDIA LTD.	GURGAON
1487.	ITC INFOTECH INDIA LTD.	HOSUR
1488.	ITC INFOTECH INDIA LTD.	TRIVANDRUM
1489.	ITE&C DEPARTMENT, GOVT OF ANDHRAPRADESH	HYDERABAD
1490.	ITER - INDIA, INSTITUTE FOR PLASMA RESEARCH	BHAVNAGAR
1491.	ITER-INDIA / IPR	AHMEDABAD
1492.	ITPC. INDIA PVT. LTD.	PUNE
1493.	ITS DIGITECH PVT. LTD.	PUNE
1494.	ITW INDIA LTD.	GHAZI
1495.	J S W ENERGY LTD.	MUMBAI
1496.	J S W STEEL LTD.	BELLARY
1497.	J&S RESEARCH AND INNOVATIONS	NEW DELHI
1498.	JABIL CIRCUIT SDN. BHD.	BAYAN LEPAS
1499.	JAITECH POWER PROJECT PVT. LTD.	VELLORE
1500.	JAMMU DEVELOPMENT AUTHORITY	JAMMU
1501.	JAMNA AUTO INDUSTRIES LTD.	GWALIOR
1502.	JANANI MOULDINGS PVT. LTD.	CHENNAI
1503.	JANATICS INDIA PVT. LTD.	GANDHINAGAR
1504.	JANUS TECHNOLOGIES	CHENNAI
1505.	JAYPEE CEMENT CORPORATION LTD.	GUNTUR
1506.	JBJ TECHNOLOGY LTD.	DELHI
1507.	JBK CONTROLS	DOHA
1508.	JCB INDIA DESIGN CENTER	PUNE
1509.	JCB INDIA LTD.	CHENNAI
1510.	JCB INDIA LTD.	FARIDABAD
1511.	JCB INDIA LTD.	PUNE
1512.	JCB MANUFACTURING LTD.	PUNE
1513.	JEHANGIR HOSPITAL	PUNE
1514.	JENESYS TECHNOLOGIES	BENGALURU



1515.	JGC GULF INTERNATIONAL COMPANY LTD.	MUMBAI
1516.	JHAJJAR POWER LTD.	JHAJJAR
1517.	JINDAL SAW LTD.	MUNDRA
1518.	JINDAL STAINLESS LTD.	JAJPUR
1519.	JINDAL STEEL & POWER LTD.	PARALAKHEMUNDI
1520.	JK ORGANISATION	AGRA
1521.	JK TYRE & INDUSTRIES LTD.	CHENNAI
1522.	JK TYRE & INDUSTRIES LTD.	RAJSAMAND
1523.	JMC PROJECTS (I) LTD.	DHARWAD
1524.	JOHN DEERE INDIA PVT. LTD.	HYDERABAD
1525.	JOHN DEERE INDIA PVT. LTD.	PUNE
1526.	JOHNCRANE SEALING SYSTEM INDIA PVT. LTD.	BENGALURU
1527.	JOHNSON CONTROLS (I) PVT. LTD.	GURGAON
1528.	JOHNSON CONTROLS (I) PVT. LTD.	PUNE
1529.	JOHNSON CONTROLS AUTOMOTIVE LTD.	PUNE
1530.	JOHNSON ELECTRIC PVT. LTD.	TRICHY
1531.	JOTUN SAUDIA CO. LTD.	JEDDAH
1532.	JOTUN U.A.E LTD. (L.L.C)	DUBAI
1533.	JP MORGAN INDIA PVT. LTD.	BENGALURU
1534.	JP MORGAN INDIA PVT. LTD.	DEWAS
1535.	JP MORGAN INDIA PVT. LTD.	MUMBAI
1536.	JRD INTERNATIONAL	JABEL ALI
1537.	JRL MINING P LTD.	DHANBAD
1538.	JSOFT SOLUTIONS LTD.	MUMBAI
1539.	JSW STEEL LTD.	BELLARY
1540.	JSW STEEL LTD.	SALEM
1541.	JTEKT SONA AUTOMOTIVE INDIA LTD.	NEW DELHI
1542.	JUNIPER NETWORKS INDIA PVT. LTD.	BENGALURU
1543.	JUPITER LIFELINE HOSPITAL, THANE	THANE
1544.	JURONG SHIPYARD PTE LTD.	SINGAPORE
1545.	JVMR INDUSTRIES	BENGALURU
1546.	K2 INC.	SOLAPUR
1547.	KAAR TECHNOLOGIES INDIA PVT. LTD.	CHENNAI
1548.	KABELSCHLEPP INDIA PVT. LTD.	TIRUPPUR
1549.	KADIMI SPECIAL STEELS PVT. LTD.	THOOTHUKUDI
1550.	KAILASH VAHAN UDYOG LTD.	PUNE
1551.	KALPENA INDUSTRIES LTD.	AHMEDABAD
1552.	KAR MOBILES LTD.	HOSUR
1553.	KAYS HARBOR TECHNOLOGIES	ZIRAKPUR
1554.	KEC INTERNATIONAL LTD.	JAIPUR
1555.	KEC INTERNATIONAL LTD.	TIRUCHIRAPPALLI
1556.	KELE CONTRACTING LLC	VELLORE
1557.	KEMS FORGINGS LTD.	BENGALURU
1558.	KENDRION PUNE PVT. LTD.	PUNE
1559.	KENNAMETAL INDIA LTD.	BENGALURU
1560.	KENNAMETAL SHARED SERVICES PVT. LTD.	BENGALURU
1561.	KENTZ OVER SEAS LTD.	MANGAF
1562.	KEO INTERNATIONAL CONSULTANTS	RAJAHMUNDRY
1563.	KERAL STATE ELECTRONIC DEVELOPMENT CORP	KOLLAM

1564.	KERAL STATE ELECTRONIC DEVELOPMENT CORP	THIRUVANANTHAPURAM
1565.	KERRY INGREDIENTS INDIA PVT. LTD.	CHENNAI
1566.	KEY INFORMATION TECHNOLOGY	DUBAI
1567.	KEYSIGHT TECHNOLOGIES	FARIDABAD
1568.	KEYSIGHT TECHNOLOGIES	MANESAR
1569.	KEYSIGHT TECHNOLOGIES INTERNATIONAL	NEW DELHI
1570.	KG DESIGN SERVICES PVT. LTD.	COIMBATORE
1571.	KHALIFA UNIVERSITY	ABU DHABI
1572.	KHANSAHEB CIVIL ENGINEERING LLC	AL RASHIDIYA
1573.	KHODAY INDIA LTD.	CHITRADURGA
1574.	KIIT UNIVERSITY	KOLKATA
1575.	KIMMCO	SHUAIBA
1576.	KINPO INTERNATIONAL LTD.	BENGALURU
1577.	KIRAN INSTITUTE OF CAREER EXCELLENCE PVT. LTD.	DELHI
1578.	KIRLOSKAR BROTHERS LTD.	PUNE
1579.	KIRLOSKAR ELECTRIC	BENGALURU
1580.	KIRLOSKAR FERROUS INDUSTRIES LTD.	HOSPET
1581.	KIRLOSKAR OIL ENGINES LTD.	CHENNAI
1582.	KIRLOSKAR OIL ENGINES LTD.	KOLHAPUR
1583.	KIRLOSKAR OIL ENGINES LTD.	PUNE
1584.	KIRLOSKAR PNEUMATIC CO LTD.	PUNE
1585.	KIRLOSKAR TOYOTA TEXTILE MACHINERY	BENGALURU
1586.	KIRODIMAL INSTITUTE OF TECHNOLOGY	RAIGARH
1587.	KITCO LTD.	KOTTAYAM
1588.	KJS INDIA PVT.LTD.	ZAHEERABAD
1589.	KLN ENGINEERING PRODUCTS PVT. LTD.	COIMBATORE
1590.	KNETCO, JOINT OPERATION	THANJAVUR
1591.	KNEXIR CONSULTANTS PVT. LTD.	KALYAN
1592.	KNOWLEDGE PARTNET TECHNOLOGIES PVT. LTD.	CHENNAI
1593.	KODIAK NETWORKS INDIA PVT. LTD.	BENGALURU
1594.	KOMATSU INDIA PVT. LTD.	MADURAI
1595.	KONE ASSARAIN LLC	MUSCAT
1596.	KONE ELEVATORS INDIA PVT. LTD.	CHENNAI
1597.	KONE ELEVATORS INDIA PVT. LTD.	SALEM
1598.	KONE MIDDLE EAST LLC	DUBAI
1599.	KONECRANES SHARED SERVICES INDIA	JUBAIL
1600.	KONECRANES SHARED SERVICES INDIA	PUNE
1601.	KOPERA SOFTWARE PVT. LTD.	PUNE
1602.	KORES INDIA LTD.	PUNE
1603.	KOTHARI MEDICAL CENTRE	KOLKATA
1604.	KPIT CUMMINS INFOSYSTEMS LTD.	BENGALURU
1605.	KPIT TECHNOLOGIES LTD.	BENGALURU
1606.	KPIT TECHNOLOGIES LTD.	CHIDAMBARAM
1607.	KPIT TECHNOLOGIES LTD.	PUNE
1608.	KPMG INDIA	CHENNAI
1609.	KPMG INDIA	HYDERABAD
1610.	KPMG INDIA	NOIDA
1611.	KRISHNA HOSPITAL	BHILWARA
1612.	KRISHNA MARUTI LTD.	GURGAON

1613.	KRONOS SOLUTIONS INDIA PVT. LTD.	NEW DELHI
1614.	KSB PUMPS LTD.	NASHIK
1615.	KSB PUMPS LTD.	PUNE
1616.	KSEB LTD.	TRICHUR
1617.	KSEB LTD.	TRIVANDRUM
1618.	KSK MAHANADI POWER COMPANY LTD.	BILASPUR
1619.	KUWAIT NATIONAL PETROLEUM COMPANY	MAVELIKARA
1620.	KUWAIT OIL COMPANY SECONDED THROUGH OIL	FAHAHEEL
1621.	L M WINDPOWER TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1622.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	BEAWAR
1623.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	BENGALURU
1624.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	CHENNAI
1625.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	COIMBATORE
1626.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	MANGALORE
1627.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	PALAKKAD
1628.	L&T CONSTRUCTION EQUIPMENT PVT. LTD.	TIRUNELVELI
1629.	L&T GEOSTRUCTURE	CHENNAI
1630.	L&T HYDROCARBON ENGINEERING LTD.	SHARJAH
1631.	L&T INFOTECH	ALLAHABAD
1632.	L&T INFOTECH	BENGALURU
1633.	L&T INFOTECH	KALYAN
1634.	L&T INTEGRATED ENGINEERING SERVICES	BENGALURU
1635.	L&T LTD.	JALNA
1636.	L&T MHI	CHENNAI
1637.	L&T MHI BOILERS PVT.LTD.	CHENNAI
1638.	L&T MHPS BOILERS PVT. LTD.	CHENNAI
1639.	L&T MODULAR FABRICATION YARD LLC	SOHAR
1640.	L&T OMAN LLC	MUSCAT
1641.	L&T POWER	CHIDAMBARAM
1642.	L&T POWER	INDORE
1643.	L&T TECHNOLOGY SERVICES LTD.	BENGALURU
1644.	L&T TECHNOLOGY SERVICES LTD.	NAVI MUMBAI
1645.	L&T VALVES LTD.	COIMBATORE
1646.	L&T WATER & RENEWABLE ENERGY IC	BENGALURU
1647.	L.V. PRASAD EYE INSTITUTE	HYDERABAD
1648.	LABVANTAGE SOLUTIONS	UTTARPARA
1649.	LAFARGE INDIA PVT. LTD.	CHITTORGARH
1650.	LAHMEYER INTERNATIONAL GMBH	VADALUR
1651.	LAKSHMI MACHINE WORKS LTD.	COIMBATORE
1652.	LALITHA SUPERSPECIALITY HOSPITAL	GUNTUR
1653.	LAM RESEARCH INDIA PVT. LTD.	BENGALURU
1654.	LANCE CADD SOLUTIONS	HYDERABAD
1655.	LANCO POWER ANPARA LTD.	ANPARA
1656.	LANDIS & GYR	GHAZIABAD
1657.	LANPL, ANPARA	SONEBHADRA
1658.	LARSEN & TOUBRO (OMAN) LLC	RUWI
1659.	LARSEN & TOUBRO (OMAN)LLC	THRISSUR
1660.	LARSEN & TOUBRO B&F IC	MUMBAI
1661.	LARSEN & TOUBRO CONSTRUCTION LTD.	CHENNAI

1662.	LARSEN & TOUBRO CONSTRUCTION LTD.	NAVI MUMBAI
1663.	LARSEN & TOUBRO CONSTRUCTION LTD.	THRISSUR
1664.	LARSEN & TOUBRO ECC DIV.	PUNE
1665.	LARSEN & TOUBRO HYDROCARBON ENGINEERING	BHARUCH
1666.	LARSEN & TOUBRO INFOTECH LTD.	BENGALURU
1667.	LARSEN & TOUBRO INFOTECH LTD.	SALEM
1668.	LARSEN & TOUBRO LTD.	ABU DHABI
1669.	LARSEN & TOUBRO LTD.	AKOLA
1670.	LARSEN & TOUBRO LTD.	ANGUL
1671.	LARSEN & TOUBRO LTD.	ARIYALUR
1672.	LARSEN & TOUBRO LTD.	BENGALURU
1673.	LARSEN & TOUBRO LTD.	BHILAI
1674.	LARSEN & TOUBRO LTD.	COIMBATORE
1675.	LARSEN & TOUBRO LTD.	CUDDALORE
1676.	LARSEN & TOUBRO LTD.	ERNAKULAM
1677.	LARSEN & TOUBRO LTD.	FARIDABAD
1678.	LARSEN & TOUBRO LTD.	KOLKATA
1679.	LARSEN & TOUBRO LTD.	MANAMADURAI
1680.	LARSEN & TOUBRO LTD.	MUMBAI
1681.	LARSEN & TOUBRO LTD.	MYSORE
1682.	LARSEN & TOUBRO LTD.	NAGPUR
1683.	LARSEN & TOUBRO LTD.	NAIHATI
1684.	LARSEN & TOUBRO LTD.	NASHIK
1685.	LARSEN & TOUBRO LTD.	NAVI MUMBAI
1686.	LARSEN & TOUBRO LTD.	NEW DELHI
1687.	LARSEN & TOUBRO LTD.	RAMNAD
1688.	LARSEN & TOUBRO LTD.	REWA
1689.	LARSEN & TOUBRO LTD.	ROORKEE
1690.	LARSEN & TOUBRO LTD.	RUDRAPRAYAG
1691.	LARSEN & TOUBRO LTD.	SHARJAH
1692.	LARSEN & TOUBRO LTD.	SIVAGANGAI
1693.	LARSEN & TOUBRO LTD.	SURAT
1694.	LARSEN & TOUBRO LTD.	THIRUVARUR
1695.	LARSEN & TOUBRO LTD.	THOLUR
1696.	LARSEN & TOUBRO LTD.	TRICHY
1697.	LARSEN & TOUBRO LTD.	UDUPI
1698.	LARSEN & TOUBRO LTD.	VELLORE
1699.	LARSEN & TOUBRO LTD.	VYARA
1700.	LATIFA SCHOOL FOR GIRLS	DUBAI
1701.	LAW FIRM OF NAREN THAPPETA	BENGALURU
1702.	LEADERS FOR TOMORROW FOUNDATION	NEW DELHI
1703.	LEAR AUTOMOTIVE INDIA PVT. LTD.	CHENNAI
1704.	LEAR AUTOMOTIVE INDIA PVT. LTD.	NAGPUR
1705.	LEAR AUTOMOTIVE INDIA PVT. LTD.	PUNE
1706.	LEGRAND SNC FZE	DUBAI
1707.	LEIGHTON OFFSHORE SDN BHD	KATPADI
1708.	LEITWIND SHRIRAM MFG. LTD.	CHENNAI
1709.	LENNOX INDIA TECHNOLOGY CENTRE	CHENNAI
1710.	LENOVO INDIA PVT. LTD.	BENGALURU

1711.	LEPRO HERBALS (P) LTD.	AGRA
1712.	LETRIKA ROOTS PVT. LTD.	NAMAKKAL
1713.	LG ELECTRONICS INDIA PVT. LTD.	CHENNAI
1714.	LG ELECTRONICS INDIA PVT. LTD.	GURGAON
1715.	LG SOFT INDIA	BENGALURU
1716.	LG SOFT INDIA PVT. LTD.	BENGALURU
1717.	LIEBHERR INDIA PVT. LTD.	NAVI MUMBAI
1718.	LIFESENSE MEDICAL SYSTEMS PVT. LTD.	BENGALURU
1719.	LIFTOFF SOFTWARE INDIA PVT. LTD.	BENGALURU
1720.	LINKEDIN TECHNOLOGY INFORMATION PVT. LTD.	BENGALURU
1721.	LINKS MIDDLEEAST TECHNICAL SERVICES LLC	MUSSAFAH
1722.	LINKWELL TELESYSTEMS PVT. LTD.	HYDERABAD
1723.	LIQUID PROPULSION SYSTEMS CENTRE	TRIVANDRUM
1724.	LIQUID PROPULSION SYSTEM CENTER	THIRUVANANTHAPURAM
1725.	LISLE TECHNOLOGY PARTNERS	BENGALURU
1726.	LISTER TECHNOLOGIES	CHENNAI
1727.	LIVACO INDUSTRIES/OMNISCIENT PROCESS EQU	MUMBAI
1728.	LIVECAREER INDIA PVT. LTD.	DELHI
1729.	LIVECAREER INDIA PVT. LTD.	NOIDA
1730.	LM WIND POWER TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1731.	LVN TECHNOLOGY PVT. LTD.	HYDERABAD
1732.	LOBO STAFFING SOLUTIONS PVT. LTD.	BENGALURU
1733.	LOCUZ ENTERPRISE SOLUTIONS	CHENNAI
1734.	LODHA DEVELOPERS PVT. LTD.	NAVI MUMBAI
1735.	LOGICA PVT. LTD.	CHENNAI
1736.	LONZA BIOLOGICS TUAS PTE LTD.	BUKIT BATOK
1737.	LRDE ,DRDO,MIN.OF DEFENCE	BENGALURU
1738.	LRN CONTENT SOLUTIONS PVT. LTD.	GURGAON
1739.	LSI INDIA RESEARCH AND DEVELOPMENT PVT. LTD.	BENGALURU
1740.	LUBRIZOL INDIA PVT. LTD.	MUMBAI
1741.	LUCAS TVS LTD.	NEYVELI
1742.	LUCAS TVS LTD.	REWARI
1743.	LUCAS-TVS LTD.	CHENNAI
1744.	LUK INDIA	DHARMAPURI
1745.	LUPIN LTD.	MUMBAI
1746.	M A QADEER QURAIISHI	HYDERABAD
1747.	M. V. G. R. COLLEGE OF ENGINEERING	VISAKHAPATNAM
1748.	MAADEN ALUMINIUM COMPANY	RASLAFFAN
1749.	MAADEN ALUMINIUM COMPANY	SANGLI
1750.	MAARS AUTOCORP PVT. LTD.	GURGAON
1751.	MADRAS ENGINEERING INDUSTRIES PVT. LTD.	CHENNAI
1752.	MADRAS MEDICAL MISSION	CHENNAI
1753.	MADURA FASHION AND LIFESTYLE	BENGALURU
1754.	MAERSK GLOBAL SERVICE CENTRE	MUMBAI
1755.	MAERSK GLOBAL SERVICE CENTRES (I) PVT. LTD.	PUNE
1756.	MAGNA COSMA INTERNATIONAL (I) PVT. LTD.	MALAPPURAM
1757.	MAGNA INFOTECH PVT. LTD.	BENGALURU
1758.	MAGNA INFOTECH PVT. LTD.	FARIDABAD
1759.	MAGNA INFOTECH PVT. LTD.	NEW DELHI

1760.	MAGNA QUEST TECHNOLOGIES LTD.	HYDERABAD
1761.	MAGNA QUEST TECHNOLOGIES LTD.	PRODDATUR
1762.	MAGNETI MARELLI UM ELECTRONIC SYSTEMS PVT LTD.	GURGAON
1763.	MAHIANDRAREVA ELECTRICALS VEHICLES PVT LTD.	WARANGAL
1764.	MAHINDRA & MAHINDRA LTD.	LUCKNOW
1765.	MAHINDRA & MAHINDRA LTD.	NASHIK
1766.	MAHINDRA & MAHINDRA LTD.	PUNE
1767.	MAHINDRA & MAHINDRA LTD.	RUDRAPUR
1768.	MAHINDRA & MAHINDRA LTD.	THANE
1769.	MAHINDRA & MAHINDRA LTD.	ZAHEERABAD
1770.	MAHINDRA AEROSPACE PVT. LTD.	BENGALURU
1771.	MAHINDRA ENGINEERING SERVICES LTD.	PUNE
1772.	MAHINDRA HEAVY ENGINES PVT. LTD.	PUNE
1773.	MAHINDRA REVA ELECTRIC VEHICLE PVT. LTD.	BENGALURU
1774.	MAHINDRA SATYAM	HYDERABAD
1775.	MAHINDRA VEHICLE MANUFACTURERS LTD.	NASHIK
1776.	MAHLE BEHR ENGINEERING SERVICES	CHINCHWAD
1777.	MAHLE BEHR INDIA LTD.	PUNE
1778.	MAHLE FILTER SYSTEM INDIA (P) LTD.	GURGAON
1779.	MAIHAR CEMENT	MAIHAR
1780.	MAKEMYTRIP (I) PVT. LTD.	NEW DELHI
1781.	MAKEMYTRIP.COM	MATHURA
1782.	MAKINO AUTO INDUSTRIES PVT. LTD.	GHAZIABAD
1783.	MAMIGO TECHNOLOGY SOLUTIONS PVT. LTD.	BENGALURU
1784.	MANAPPURAM FINANCE LTD.	THRISSUR
1785.	MANATEC ELECTRONICS PVT. LTD.	KANCHIPURAM
1786.	MANDO AUTOMOTIVE INDIA PVT. LTD.	CHENNAI
1787.	MANDO SOFTTECH INDIA PVT. LTD.	GURGAON
1788.	MANHATTAN ASSOCIATES PVT. LTD.	BENGALURU
1789.	MANITOWOC CRANES, POTAIN INDIA PVT.LTD.	PUNE
1790.	MANLIFT POWER L.L.C	DUBAI
1791.	MANPOWER SERVICES INDIA PVT. LTD.	VILLAPURAM
1792.	MANTHAN SYSTEMS	BENGALURU
1793.	MAPR TECHNOLOGIES RESEARCH & DEVELOPMENT	HYDERABAD
1794.	MARICO LTD.	ERODE
1795.	MARQUIS TECHNOLOGIES	GURGAON
1796.	MARS GCC	AL MAJAZ
1797.	MARS INTERNATIONAL INDIA PVT. LTD.	SECUNDERABAD
1798.	MARUTI PLASTIC	SURAT
1799.	MARUTI SUZUKI INDIA LTD.	HUDA
1800.	MARVELL INDIA PVT. LTD.	HYDERABAD
1801.	MARVELL INDIA PVT. LTD.	PUNE
1802.	MARVELL SEMICONDUCTORS	PUNE
1803.	MATEX NET PVT. LTD.	DELHI
1804.	MAVUNO TECHNOLOGIES PVT. LTD.	DELHI
1805.	MAXIM INTEGRATED INDIA PVT. LTD.	BENGALURU
1806.	MAXIM INTEGRATED PRODUCTS INC	BENGALURU
1807.	MAXIM SMT TECHNOLOGIES PVT. LTD.	NOIDA
1808.	MAXLINEAR TECHNOLOGIES PVT. LTD.	BENGALURU

1809.	MBTECH GROUP GMBH & CO. KGAA	BENGALURU
1810.	MCAFEE INDIA PVT. LTD.	BENGALURU
1811.	MCAFEE SOFTWARE (INDIA) PVT. LTD.	BENGALURU
1812.	MCAFEE SOFTWARE (INDIA) PVT. LTD.	JAIPUR
1813.	MCC PTA INDIA CORP. PVT. LTD.	HALDIA
1814.	MCDERMOTT MIDDLE EAST INC	DUBAI
1815.	MCF, ISRO	HASSAN
1816.	MCKINSEY KNOWLEDGE CENTRE	GURGAON
1817.	MCNALLY BHARAT ENGINEERING COMPANY LTD.	BAIDYABATI
1818.	MECH AUTOMOBILES	THANJAVUR
1819.	MECH HONDA	THANJAVUR
1820.	MECHATRONICS SYSTEMS PVT. LTD.	PUNE
1821.	MECON LTD.	BENGALURU
1822.	MEDIA LAB ASIA	DELHI
1823.	MEDIATEK INDIA TECHNOLOGY PVT. LTD.	NOIDA
1824.	MEDTRONIC (COVIDIEN)	HYDERABAD
1825.	MEETHAQ EMPLOYMENT AGENCY	JAIPUR
1826.	MEGATECH CONTROL LLC	KUNDAPURA
1827.	MEHRO CONSULTANTS	NEW DELHI
1828.	MELSTAR INFORMATION TECHNOLOGY LTD.	NEW DELHI
1829.	MEMF-ETA SWITCHGEAR MFG. CO.	SANGLI
1830.	MENTOR GRAPHICS	BENGALURU
1831.	MERCEDES BENZ R&D INDIA PVT. LTD.	BENGALURU
1832.	MERCEDES BENZ R&D INDIA PVT. LTD.	PUNE
1833.	MERCER CONSULTING INDIA PVT. LTD.	NEW DELHI
1834.	MERIDIANSOFT INFO SYSTEMS PVT. LTD.	HYDERABAD
1835.	MERITOR CVS INDIA PVT. LTD.	BENGALURU
1836.	MERU NETWORKS INDIA PVT. LTD.	BENGALURU
1837.	METACUBE SOFTWARE PVT. LTD.	JAIPUR
1838.	METALSA INDIA PVT. LTD.	SARAIKELA
1839.	METAS OF SDA, GIFALFARD MEMORIAL HOSPITAL	CHENNAI
1840.	METEXIM SOURCING PVT.LTD.	KANYAKUMARI
1841.	METHODEXSYSTEMS LTD.	DEWAS
1842.	METITO OVERSEAS LTD.	DUBAI
1843.	METITO OVERSEAS LTD.	TRICHY
1844.	METITO WATER TREATMENT	SHARJAH
1845.	METRICSTREAM INFOTECH INDIA PVT. LTD.	BENGALURU
1846.	MHB FILTER INDIA PVT. LTD.	AKKALKOT
1847.	MICHELIN INDIA TAMILNADU TYRES PVT. LTD.	CHENNAI
1848.	MICRO LABS LTD.	BENGALURU
1849.	MICROCHIP TECHNOLOGY	CHENNAI
1850.	MICROLAND	BENGALURU
1851.	MICRON SEMICONDUCTOR ASIA PTE LTD.	SINGAPORE
1852.	MICROSOFT CORPORATION	BENGALURU
1853.	MICROSOFT CORPORATION	HYDERABAD
1854.	MICROSOFT GLOBAL SERVICES CENTER	BENGALURU
1855.	MICROSOFT GLOBAL SERVICES CENTER	HYDERABAD
1856.	MICROSOFT INDIA (R&D) PVT. LTD.	BENGALURU
1857.	MICROSOFT INDIA (R&D) PVT. LTD.	HYDERABAD

1858.	MICROSOFT INDIA (R&D) PVT. LTD.	JAIPUR
1859.	MICROSOFT INDIA DEVELOPMENT CENTER	MYSORE
1860.	MICROSOFT INDIA GTSC	BENGALURU
1861.	MICROSOFT INDIA PVT. LTD.	HYDERABAD
1862.	MICROSOFT SERVICES GLOBAL DELIVERY	HYDERABAD
1863.	MIDAS POLYMER COMPOUNDS PVT. LTD.	KOTTAYAM
1864.	MIDAS SAFETY PRODUCTS PVT. LTD.	ALAPPUZHA
1865.	MIDDLEEAST PRESTRESSING LLC	TIRUNELVELI
1866.	MILESTONE CORPORATE SERVICES PVT. LTD.	HYDERABAD
1867.	MILLENNIUM TECHNOLOGIES LTD.	HYDERABAD
1868.	MINACS PVT. LTD.	BENGALURU
1869.	MIND CURV	ERNAKULAM
1870.	MINDA FURUKAWA ELECTRIC PVT. LTD.	NARNAUL
1871.	MINDA FURUKAWA ELECTRIC PVT. LTD.	REWARI
1872.	MINDA KYORAKU LTD.	REWARI
1873.	MINDA STONERIDGE INSTRUMENTS LTD.	PUNE
1874.	MINDARIKA PVT. LTD.	CHENNAI
1875.	MINDQ SYSTEMS PVT. LTD.	HYDERABAD
1876.	MINDTECK INDIA LTD.	BENGALURU
1877.	MINDTREE LTD.	BENGALURU
1878.	MINDTREE LTD.	COCHIN
1879.	MINDTREE LTD.	VRIDHACHALAM
1880.	MINERALS TECHNOLOGIES	BENGALURU
1881.	MISHRA DHATU NIGAM LTD.	HYDERABAD
1882.	MISTRAL SOLUTIONS PVT. LTD.	BENGALURU
1883.	MISYS FINANCIAL SOFTWARE	BENGALURU
1884.	MISYS SOFTWARE SOLUTIONS	BENGALURU
1885.	MITSUBISHI ELECTRIC INDIA PVT.LTD.	PUNE
1886.	MITSUMI ELASTOMERS SINGAPORE PVT. LTD.	PARAMAKUDI
1887.	MITTAL PUBLICATIONS	NEW DELHI
1888.	ML OUTSOURCING SERVICES PVT. LTD.	CHENNAI
1889.	MOBIGRAPH	TIRUNELVELI
1890.	MOBILE INTERFACE DESIGNS	PUNE
1891.	MOBILEUM INDIA PVT. LTD.	GURGAON
1892.	MOCA HEALTHCARE CERTIFICATIONS PVT. LTD.	NEW DELHI
1893.	MO-DATA INC	FREMONT
1894.	MODEC OFFSHORE PRODUCTION SYSTEMS	SINGAPORE
1895.	MOHAMED ABDUL RAHMAN AL BAHAR	SHARJAH
1896.	MOHINI CONSTRUCTION EQUIPMENTS	JAIPUR
1897.	MOLBIO DIAGNOSTICS PVT. LTD.	PERNEM
1898.	MOLD MASTERS TECHNOLOGIES PVT. LTD.	COIMBATORE
1899.	MOLEX INDIA PVT. LTD.	BENGALURU
1900.	MONDELEZ INDIA FOODS PVT. LTD.	SAHARANPUR
1901.	MOOG INDIA TECHNOLOGY CENTER PVT. LTD.	BENGALURU
1902.	MORGAN CERAMICS MIDDLE EAST	RA AL KHAIMAH
1903.	MORGAN STANLEY	AMBALA CITY
1904.	MORGAN STANLEY ADVANTAGE SERVICES	BENGALURU
1905.	MOSER BAER INDIA LTD.	GREATER NOIDA
1906.	MOTHERSON AUTOMOTIVE TECHNOLOGIES & ENGG	CHENNAI



1907. MOTHERSON SUMI INFOTECH & DESIGNS LTD.	KURNOOL
1908. MOTHERSON SUMI SYSTEMS LTD.	NEW DELHI
1909. MOTIVITY LABS	HYDERABAD
1910. MOTT MACDONALD	ABU DHABI
1911. MOTT MACDONALD & CO. LLC	MUSCAT
1912. MOZZAT ENTERPRISE SDN BHD	SERIA
1913. MPHASIS AN HP COMPANY	BENGALURU
1914. MPHASIS LTD.	SALEM
1915. MRF LTD.	CHENNAI
1916. MRF TYRES	ERODE
1917. MRV INFOTECH INDIA PVT. LTD.	VELACHERRY
1918. MSCRIPTS SYSTEMS INDIA PVT. LTD.	CHINTAMANI
1919. MSD INTERNATIONAL GMBH	SINGAPORE
1920. MSYS TECHNOLOGIES	BENGALURU
1921. MUBEA AUTOMOTIVE INDIA	PUNE
1922. MUBLE SOLUTIONS PVT. LTD.	COCHIN
1923. MURUGAPPA MORGAN THERMAL CERAMICS LTD.	AHMEDABAD
1924. MUSASHI AUTO PARTS INDIA PVT. LTD.	BENGALURU
1925. MUTHOOT MEDICAL CENTRE	KOLLAM
1926. MVIT,VSSC,DOS,ISRO	THIRUVANANTHAPURAM
1927. MYCITYWAY INDIA RESEARCH LABS PVT. LTD.	MORADABAD
1928. MYLAN LABORATORIES LTD.	HYDERABAD
1929. MYNTRA DESIGNS PVT. LTD.	BENGALURU
1930. MYSORE MEDICAL COLLEGE AND RESEARCH INST	MYSORE
1931. MYUNG SUNG INDIA PRECISION PVT. LIMIT	CHENNAI
1932. N.V.N INDUSTRIES	TIRUCHIRAPPALLI
1933. NABKO SYSTEMS AND COMMUNICATIONS PVT. LTD.	BENGALURU
1934. NACHI KG TECHNOLOGY INDIA PVT. LTD.	NEEMRANA
1935. NAFFCO ELECTROMECHANICAL	ABU DHABI
1936. NAFFCO FZCO	DUBAI
1937. NAGA ARCHITECTS	DUBAI
1938. NAGARRO SOFTWARE PVT. LTD.	FARIDABAD
1939. NAGARRO SOFTWARE PVT. LTD.	GHAZIABAD
1940. NAGARRO SOFTWARE PVT. LTD.	GURGAON
1941. NAGRA VISION INDIA PVT. LTD.	BENGALURU
1942. NAGRA VISION INDIA PVT. LTD.	HOSUR
1943. NAJM FOR INSURANCE SERVICES	TANJORE
1944. NAKILAT KEPPEL OFFSHORE AND MARINE LTD.	NEYVELI
1945. NAMO NARAYAN INDUSTRIES	VALANCHERY
1946. NAPINO AUTO & ELECTRONICS LTD.	GHAZIABAD
1947. NAPINO AUTO & ELECTRONICS LTD.	GURGAON
1948. NASCON ENGINEERING LTD.	ABU DHABI
1949. NATIONAL CENTRE FOR BIOLOGICAL SCIENCES	BENGALURU
1950. NATIONAL CONSTRUCTION COMPANY	MUSSAFAH
1951. NATIONAL CONTRACTING CO. LTD.	ABU DHABI
1952. NATIONAL CONTRACTING COMPANY LTD.	CHENNAI
1953. NATIONAL COUNCIL FOR CEMENT AND BUILDING	FARIDABAD
1954. NATIONAL COUNCIL OF SCIENCE MUSEUM	KOLKATA
1955. NATIONAL ENGINEERING INDUSTRIES LTD.	GURGAON

1956.	NATIONAL ENGINEERING INDUSTRIES LTD.	JAIPUR
1957.	NATIONAL INFORMATICS CENTRE	THIRUVANANTHAPURAM
1958.	NATIONAL INSTITUTE OF FASHION TECHNOLOGY	BENGALURU
1959.	NATIONAL INSTITUTE FOR SMART GOVERNMENT	GUWAHATI
1960.	NATIONAL INSTITUTE OF ELECTRONICS & INFORMATION	NEW DELHI
1961.	NATIONAL INSTITUTE OF TECHNOLOGY MANIPUR	IMPHAL
1962.	NATIONAL INSTITUTE OF WIND ENERGY TECHNOLOGY	CHENNAI
1963.	NATIONAL INSTRUMENTS INDIA PVT. LTD.	GUNTUR
1964.	NATIONAL INSTU. OF OPHTHALMIC SCIENCES	MALAYSIA
1965.	NATIONAL MARINE DREDGING CO.	ABU DHABI
1966.	NATIONAL PETROLEUM CONSTRUCTION CO	ABU DHABI
1967.	NATIONAL PETROLEUM CONSTRUCTION CO	MUSSAFAH
1968.	NATIONAL PHYSICAL LABORATORY	NEW DELHI
1969.	NATIONAL PROJECTS CONSTRUCTION CORPORATION	FARIDABAD
1970.	NATIONAL REMOTE SENSING CENTER	HYDERABAD
1971.	NATIONAL REMOTE SENSING CENTER	SECUNDERABAD
1972.	NAVARATAN TECHNOLOGIES	HYDERABAD
1973.	NAVIKARAN INFOTECH PVT. LTD.	NEW DELHI
1974.	NAVITAS IT BUSINESS CONSULTING PVT. LTD.	VIJAYAWADA
1975.	NBC BEARINGS (NEI LTD.)	JAIPUR
1976.	NBPPL	NOIDA
1977.	NCC LTD.	HYDERABAD
1978.	NCR CORPORATION	DUBAI
1979.	NCR CORPORATION INDIA PVT. LTD.	ALIGARH
1980.	NCR CORPORATION INDIA PVT. LTD.	NOIDA
1981.	NDDDB DAIRY SERVICES	SONIPAT
1982.	NDS SERVICES PAY-TV TECHNOLOGY PVT. LTD.	BENGALURU
1983.	NEC INDIA PVT. LTD.	COCHIN
1984.	NEC TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
1985.	NEC TECHNOLOGIES INDIA PVT. LTD.	NEW DELHI
1986.	NEETA DAIRY	MUMBAI
1987.	NEOSOFT TECHNOLOGIES	THANE
1988.	NEOSOFT TECHNOLOGIES	ULHASNAGAR
1989.	NESH TECHNOLOGIES PVT. LTD.	CHENNAI
1990.	NESMA & PARTNERS CONTRACTING CO	CHENNAI
1991.	NESS SOFTWARE SERVICES PVT. LTD.	BENGALURU
1992.	NESS TECHNOLOGIES (P) LTD.	BENGALURU
1993.	NEST	TRIVANDRUM
1994.	NETAPP INC.	BENGALURU
1995.	NETAPP INDIA PVT. LTD.	BENGALURU
1996.	NETAPP INDIA PVT. LTD.	UDUPI
1997.	NETCORE SOLUTIONS PVT. LTD.	BENGALURU
1998.	NETCORP DIGITAL SOLUTIONS	LUCKNOW
1999.	NETCRACKER TECHNOLOGY SOLUTION INDIA PVT. LTD.	HYDERABAD
2000.	NETENRICH TECHNOLOGIES PVT. LTD.	HYDERABAD
2001.	NETTUR TECHNICAL TRAINING FOUNDATION	VELLORE
2002.	NETWORK SYSTEMS AND TECHNOLOGIES PVT. LTD.	KANNUR
2003.	NETWORK SYSTEMS AND TECHNOLOGIES PVT. LTD.	THIRUVANANTHAPURAM
2004.	NEWGEN SOFTWARE TECHNOLOGIES LTD.	PILIBHIT

2005.	NEWTRONIC LIFECARE EQUIPMENT PVT. LTD.	VIRPUR
2006.	NIBHA ENTERPRISE PVT. LTD.	GURGAON
2007.	NIC MIT GOI	GHAZIABAD
2008.	NICE NEOTECH MEDICAL SYSTEMS PVT. LTD.	TIRUNELVELI
2009.	NICHEPRO TECHNOLOGIES PVT. LTD.	CHENNAI
2010.	NICHI-IN SOFTWARE SOLUTIONS	BENGALURU
2011.	NIELIT AIZAWL	AIZAWL
2012.	NIHILENT TECHNOLOGIES PVT. LTD.	PUNE
2013.	NIHON COMMUNICATION SOLUTIONS PVT. LTD.	BENGALURU
2014.	NIIT TECHNOLOGIES LTD.	DELHI
2015.	NIIT TECHNOLOGIES LTD.	GURGAON
2016.	NILKAMAL LTD.	THANE
2017.	NIMR AUTOMOTIVE LLC	KANCHIPURAM
2018.	NINELEAPS TECHNOLOGY SOLUTIONS PVT. LTD.	BENGALURU
2019.	NIPPON AUDIOTRONIX LTD.	SAHARANPUR
2020.	NIPPON DATA	ROHTAK
2021.	NIRMA CHEMICALS LTD.	SURENDRANAGAR
2022.	NISG, UNDER DEPT OF IT, GOVT OF INDIA	GUWAHATI
2023.	NISSAN MOTOR INDIA PVT. LTD.	BENGALURU
2024.	NIST ITI	VISAKHAPATNAM
2025.	NIVIDOUS SOFTWARE SOLUTIONS PVT. LTD.	MUMBAI
2026.	NJS ENGINEERS INDIA PVT. LTD.	KOLKATA
2027.	NMGH INDIA ENGINEERING & SUPPORT SERVICE	PUNE
2028.	NOKIA INDIA PVT. LTD.	BENGALURU
2029.	NOKIA NETWORKS PVT. LTD.	BENGALURU
2030.	NOKIA SIEMENS NETWORKS INDIA PVT. LTD.	TIRUPPUR
2031.	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	ANANTAPUR
2032.	NOKIA SOLUTIONS & NETWORKS PVT. LTD.	BENGALURU
2033.	NOVA INTEGRATED SYSTEMS LTD.	HYDERABAD
2034.	NOVARTIS INDIA LTD.	THANE
2035.	NOVELL SOFTWARE DEVELOPMENT INDIA PVT. LTD.	BENGALURU
2036.	NOVELL SOFTWARE DEVELOPMENT INDIA PVT. LTD.	GADAG
2037.	NPCC	DUBAI
2038.	NRSC ISRO	HYDERABAD
2039.	NRSC ISRO	SECUNDERABAD
2040.	NSL SEZ HYD PVT. LTD.	HYDERABAD
2041.	NTPC BHEL POWER PROJECTS PVT. LTD.	TIRUNELVELI
2042.	NTT DATA AMERICAS	BENGALURU
2043.	NTT DATA FA INSURANCE SYSTEMS PTE. LTD.	BENGALURU
2044.	NTT DATA GLOBAL DELIVERY SERVICES LTD.	GURGAON
2045.	NTT DATA PVT. LTD.	TIRUNELVELI
2046.	NUCLEUS SOFTWARE EXPORTS LTD.	DELHI
2047.	NUMERIC-LEGRAND GROUP	CHENNAI
2048.	NVIDIA GRAPHICS PVT. LTD.	BENGALURU
2049.	NVIDIA GRAPHICS PVT. LTD.	PUNE
2050.	NVIDIA GRAPHICS PVT. LTD.	SANGAMNER
2051.	NXP SEMICONDUCTORS INDIA PVT. LTD.	BENGALURU
2052.	O P JINDAL INSTITUTE OF TECHNOLOGY	RAIGARH
2053.	OCTAVO SOLUTIONS PVT. LTD.	GREATER NOIDA

2054.	ODESSA TECHNOLOGIES	BENGALURU
2055.	OFFICE OF H.H THE CROWN PRINCE OF DUBAI	DUBAI
2056.	OFFSHORE DEVELOPMENT CENTER	BENGALURU
2057.	OIL INDIA LTD.	DULIAJAN
2058.	OILFIELD SERVICES & SUPPLIES INDIA PVT. LTD.	CHENNAI
2059.	OLIVE GROUP INDIA PVT. LTD.	NEW DELHI
2060.	OMNEX INDIA PVT. LTD.	CALICUT
2061.	OMNIX INTERNATIONAL	DUBAI
2062.	ON SEMICONDUCTOR TECHNOLOGIES	BENGALURU
2063.	ONMOBILE GLOBAL LTD.	BENGALURU
2064.	OPERATIONAL ENERGY GROUP INDIA PVT.LTD.	CHENNAI
2065.	OPG POWER GENERATION PVT. LTD.	CHENNAI
2066.	OPUS SOFTWARE SOLUTION LTD.	PUNE
2067.	OPUS SOFTWARE SOLUTION LTD.	VELLORE
2068.	ORACLE CORPORATION	BENGALURU
2069.	ORACLE CORPORATION	PATHANAMTHITTA
2070.	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	BENGALURU
2071.	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	HYDERABAD
2072.	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	NAVI MUMBAI
2073.	ORACLE FINANCIAL SERVICES SOFTWARE LTD.	PUTTUR
2074.	ORACLE INDIA PVT. LTD.	BENGALURU
2075.	ORACLE INDIA PVT. LTD.	ERNAKULAM
2076.	ORACLE INDIA PVT. LTD.	HYDERABAD
2077.	ORACLE INDIA PVT. LTD.	MADURAI
2078.	ORACLE INDIA PVT. LTD.	SILIGURI
2079.	ORACLE INDIA PVT. LTD.	THENI
2080.	ORACLE INDIA PVT. LTD.	THIRUVANANTHAPURAM
2081.	ORANGE BUSINESS SERVICES	GURGAON
2082.	ORBIT TECHNICAL SOLUTIONS PVT. LTD.	MOHALI
2083.	ORBITZ INDIA SERVICES PVT. LTD.	BENGALURU
2084.	ORDNANCE FACTORY BOARD	CHENNAI
2085.	ORGA SYSTEMS INDIA PVT. LTD.	KOLKATA
2086.	ORYX GTL LTD.	VISAKHAPATNAM
2087.	OSSCUBE	GHAZIABAD
2088.	OTIS ELEVATORS COMPANY INDIA LTD.	BENGALURU
2089.	OTIS ELEVATORS COMPANY INDIA LTD.	JAIPUR
2090.	OTIS ELEVATORS COMPANY INDIA LTD.	PUNE
2091.	OTIS-ISRC PVT. LTD.	PUNE
2092.	OVERSEAS AST CO. LLC	AL QUOZ
2093.	OZLA PLASTOCRAFT PVT. LTD.	DELHI
2094.	OZLA PLASTOCRAFT PVT.LTD.	NEW DELHI
2095.	OZONE MULTISPECIALITY HOSPITAL & CRITICAL	AKOLA
2096.	P M NAGARATHNA AITHAL	BENGALURU
2097.	P3 VOITH AEROSPACE PVT. LTD.	BENGALURU
2098.	P3 VOITH AEROSPACE PVT. LTD.	CHENNAI
2099.	PACE MICRO TECHNOLOGY INDIA PVT. LTD.	BENGALURU
2100.	PACE MICRO TECHNOLOGY INDIA PVT. LTD.	MADURAI
2101.	PACKETVIDEO INDIA PVT. LTD.	JIND
2102.	PADMINI VNA MECHATRONICS PVT. LTD.	DHENKANAL

2103.	PALAR PAPER MILLS LTD.	VELLORE
2104.	PANAMON TECHNOLOGIES	CHENNAI
2105.	PANASONIC AVIONICS CORPORATION	DUBAI
2106.	PANORAMA CONTRACTING AND ENGINEERING COM	ERNAKULAM
2107.	PARABLU SYSTEMS PVT. LTD.	BENGALURU
2108.	PARAM TECHNOLOGIES PVT. LTD.	DEWAS
2109.	PARAMETRIC TECHNOLOGY CORPORATION	GURGAON
2110.	PARAMETRIC TECHNOLOGY INDIA PVT. LTD.	GURGAON
2111.	PARAMOUNT TRADING COOPERATION	COIMBATORE
2112.	PAREXEL INTERNATIONAL INDIA PVT. LTD.	LUCKNOW
2113.	PARKER HANNIFIN INDIA PVT. LTD.	COIMBATORE
2114.	PARSONS INTERNATIONAL	ABUDHABI
2115.	PARSONS INTERNATIONAL	DOHA
2116.	PATEL REALTY INDIA LTD.	THRISSUR
2117.	PATHPARTNER TECHNOLOGY CONSULTING PVT. LTD.	THRISSUR
2118.	PATNI COMPUTER SYSTEMS LTD.	BAHADURGARH
2119.	PATSPIN INDIA LTD.	ALUVA
2120.	PAXTERRA SOFTWARE SOLUTIONS PVT. LTD.	BENGALURU
2121.	PAYPAL INDIA PVT. LTD.	CHENNAI
2122.	PAYPAL INDIA PVT. LTD.	NAGERCOIL
2123.	PEARL INSULATION MATERIAL LLC	MADURAI
2124.	PEGASYSTEMS WORLDWIDE INDIA PVT. LTD.	CHODAVARAM
2125.	PEGASYSTEMS WORLDWIDE INDIA PVT. LTD.	HYDERABAD
2126.	PEMAC PTE LTD.	THOOTHUKUDI
2127.	PENANG ADVENTIST HOSPITAL	PENANG
2128.	PENTAIR GULF VALVE FZE	SHARJAH
2129.	PENTAIR WATER INDIA PVT. LTD.	CHENNAI
2130.	PENTAIR WATER INDIA PVT. LTD.	SANKHALIM
2131.	PEOPLECLOUD TECHNOLOGIES PVT. LTD.	BENGALURU
2132.	PEOPLESTRONG HR SERVICES PVT. LTD.	DELHI
2133.	PERFINT HEALTHCARE PVT. LTD.	KANYAKUMARI
2134.	PERFOMIX TECHNOLOGIES INTL. PVT. LTD.	THRISSUR
2135.	PERKINELMER INDIA PVT. LTD.	KALKA
2136.	PERSISTENT SYSTEMS LTD.	DHULE
2137.	PERSISTENT SYSTEMS LTD.	NAGPUR
2138.	PERSISTENT SYSTEMS LTD.	PONDA
2139.	PERSISTENT SYSTEMS LTD.	PUNE
2140.	PESCO	PUNE
2141.	PETROFAC ENGG & CONSULTANCY SERVICES PVT. LTD.	CHENNAI
2142.	PETROFAC INTERNATIONAL LLC	SHARJAH
2143.	PETROFAC SAUDI ARABIA LTD.	AL KHOBAR
2144.	PETROFAC U.A.E	AL QASIMIYA
2145.	PETROLEUM DEVELOPMENT OMAN	CHENNAI
2146.	PETROLEUM DEVELOPMENT OMAN LLC	MINA AL FAHAL
2147.	PETRON EMIRATES CONTRACTING AND MANUFACTURING	DUBAI
2148.	PETRONASH FZE	JEBEL ALI
2149.	PETROSTAR CORPORATION LLC	TIRUNELVELI
2150.	PETROFAC INTERNATIONAL LTD.	SHARJAH
2151.	PHILIPS CARBON BLACK	THRISSUR

2152.	PHILIPS ELECTRONICS INDIA LTD.	BENGALURU
2153.	PHILIPS ELECTRONICS INDIA LTD.	PUNE
2154.	PHILIPS INDIA LTD.	NOIDA
2155.	PHILIPS INDIA LTD.	PUNE
2156.	PHILIPS INNOVATION CAMPUS	BENGALURU
2157.	PINNACLE INNOVATIVE TECHNOLOGIES PVT. LTD.	KOCHI
2158.	PINNACLE SOURCING AND CONSULTANCY PVT. LTD.	GREATER NOIDA
2159.	PIRAMAL HEALTHCARE LTD.	CHENNAI
2160.	PIT SOLUTIONS PVT. LTD.	NAGERCOIL
2161.	PITNEY BOWES SOFTWARE INDIA PVT. LTD.	DELHI
2162.	PITNEY BOWES SOFTWARE INDIA PVT. LTD.	FARIDABAD
2163.	PITNEY BOWES SOFTWARE INDIA PVT. LTD.	NEW DELHI
2164.	PITNEY BOWES SOFTWARE INDIA PVT. LTD.	NOIDA
2165.	PITNEY BOWES SOFTWARE INDIA PVT. LTD.	PUNE
2166.	PL ENGINEERING	GURGAON
2167.	PLANET ENGINEERING DIVISION	DOHA
2168.	PLATINUM ELECTROMECHANICAL CONTRACTING	ABU DHABI
2169.	PLATINUM HOSPITALS	NAVI MUMBAI
2170.	PLINTRON GLOBAL TECHNOLOGY SOLUTIONS PVT. LTD.	CHENNAI
2171.	POLAIS FINANCIAL TECHNOLOGY	PILANI
2172.	POLARIS CONSULTING AND SERVICES LTD.	CHENNAI
2173.	POLARIS CONSULTING PVT. LTD.	GURGAON
2174.	POLARIS FINANCIAL TECHNOLOGY LTD.	CHENNAI
2175.	POLARIS INDIA PVT. LTD.	CHENNAI
2176.	POLARIS SOFTWARE LAB LTD.	CHENNAI
2177.	POLARIS SOFTWARE LAB LTD.	CUDDALORE
2178.	POLYPLASTICS INDUSTRIES INDIA PVT. LTD.	YAMUNANAGAR
2179.	POSCO ELECTRICAL STEEL INDIA PVT. LTD.	GOREGAON
2180.	POSCO ELECTRICAL STEEL INDIA PVT. LTD.	MANGAON
2181.	POSCO MAHARASHTRA STEEL PVT. LTD.	ALIBAG
2182.	POSCO MAHARASHTRA STEEL PVT. LTD.	MAHAD
2183.	POSCO MAHARASHTRA STEEL PVT. LTD.	MANGAON
2184.	POSCO MAHARASHTRA STEEL PVT. LTD.	PUNE
2185.	POSCO MAHARASHTRA STEEL PVT. LTD.	RAIGARH
2186.	POSCO MAHARASHTRA STEEL PVT. LTD.	ROHA
2187.	POSCO MAHARASHTRA STEEL PVT. LTD.	SATARA
2188.	POSCO MAHARASHTRA STEEL PVT. LTD.	SUDHAGAD
2189.	POSCO MAHARASHTRA STEEL PVT. LTD.	THANE
2190.	POSITIVE TRADING AND CONTRACTING	KECHERY
2191.	POWER ELECTRONINCS	BENGALURU
2192.	POWER ENGINEERING INDIA PVT. LTD.	PANAJI
2193.	POWERTECH ENGINEERING LLC	MUSCAT
2194.	PPL SHIPYARD	SINGAPORE
2195.	PRAJ INDUSTRIES LTD.	PUNE
2196.	PRAMATI TECHNOLOGIES PVT. LTD.	CHENNAI
2197.	PRAMATI TECHNOLOGIES PVT. LTD.	HYDERABAD
2198.	PRASHANTH HOSPITAL	VIJAYAWADA
2199.	PRATHAM SOFTWARE	JAIPUR
2200.	PRATIK & RITVIK CONSTRUCTIONS	KALPAKKAM

2201.	PRECITEC PRECISION MACHINERIES PVT. LTD.	BENGALURU
2202.	PREMIER EVOLVICS PVT. LTD.	COIMBATORE
2203.	PREMIER EXPLOSIVE LTD.	HYDERABAD
2204.	PREMIER PRODUCTION FABRICATORS LLC	RUWI
2205.	PRICEWATERHOUSECOOPERS PVT. LTD.	SECUNDERABAD
2206.	PRICEWATERHOUSECOOPERS SDC BENGALURU	ERODE
2207.	PRICOL TECHNOLOGIES	COIMBATORE
2208.	PRIME 4 INSPECTION L.L.C	KARAMA
2209.	PRIMETALS TECHNOLOGIES INDIA PVT. LTD.	KOLKATA
2210.	PRIMUS TECHSYSTEMS PVT. LTD.	PUNE
2211.	PRINCE ALY KHAN HOSPITAL	MUMBAI
2212.	PRISIO TECHNOLOGIES	JAIPUR
2213.	PROCESSMONK LTD.	KANNUR
2214.	PROKARMA SOFTECH PVT. LTD.	CHENNAI
2215.	PROLIFICS	COIMBATORE
2216.	PROSERV MIDDLE EAST	ALAPPUZHA
2217.	PROTOVEC TECHNOLOGIES PVT. LTD.	MUMBAI
2218.	PTC SOFTWARE INDIA PVT. LTD.	AHMEDNAGAR
2219.	PTC SOFTWARE INDIA PVT. LTD.	DELHI
2220.	PTC SOFTWARE INDIA PVT. LTD.	PUNE
2221.	PUBMATIC INDIA PVT. LTD.	PUNE
2222.	PUNJ LLOYD PTE LTD.	SOMPETA
2223.	PURETRAININGS SOFTWARE PVT. LTD.	NOIDA
2224.	PURPLETALK INDIA PVT. LTD.	HYDERABAD
2225.	PYRAMID ENGINEERING	MUMBAI
2226.	PYRO NETWORKS PVT. LTD.	HYDERABAD
2227.	Q FOCUS ENGINEERING INDIA PVT. LTD.	COIMBATORE
2228.	QA INFOTECH	NOIDA
2229.	QAPCO - QATAR PETROCHEMICAL CO.	WAKRAH
2230.	QATALUM	MESAIEED
2231.	QATAR ALUMINIUM	DOHA
2232.	QATAR ALUMINIUM	MESAIEED
2233.	QATAR CHEMICAL COMPANY	DOHA
2234.	QATAR CHEMICAL COMPANY	MESAIEED
2235.	QATAR FERTILISER COMPANY	MESAIEED
2236.	QATAR FOUNDATION	DOHA
2237.	QATAR KENTZ WLL	CHENNAI
2238.	QATAR KENTZ WLL	DOHA
2239.	QATAR PETROLEUM	CHENNAI
2240.	QATAR PETROLIUM	DUKHAN
2241.	QATAR POWER COMPANY	DOHA
2242.	QATAR SHELL GTL LTD.	DOHA
2243.	QATAR STEEL COMPANY	MESSAIED
2244.	QATARGAS	RASLAFFAN
2245.	QCHEM	MESAIEED
2246.	QD-SBG CONSTRUCTION	CHENNAI
2247.	QLOGIC INDIA PVT. LTD.	PUNE
2248.	QUALCOMM INDIA PVT. LTD.	BENGALURU
2249.	QUALCOMM INDIA PVT. LTD.	CHENNAI

2250.	QUALCOMM INDIA PVT. LTD.	HYDERABAD
2251.	QUALCOMM TECHNOLOGIES	HISAR
2252.	QUALITAT SYSTEMS	PUNE
2253.	QUALITY ENGINEERING AND SOFTWARE TECHNOLOGY	BENGALURU
2254.	QUALITY FABRICATORS CO. W.L.L.	ABU DHABI
2255.	QUANTEC INSTRUMENTS	FAZILKA
2256.	QUARKXPRESS PUBLISHING R&D (INDIA) PVT. LTD.	MOHALI
2257.	QUEST GLOBAL ENGINEERING PVT. LTD.	BENGALURU
2258.	QUEST GLOBAL ENGINEERING PVT. LTD.	TRIVANDRUM
2259.	QUEST GLOBAL MANUFACTURING PVT. LTD.	GADAG
2260.	QUEST GLOBAL PVT.LTD.	CHALLAPALLI
2261.	QUIKR INDIA PVT. LTD.	BENGALURU
2262.	QUINSTREET INDIA PVT.LTD.	PUNE
2263.	QUINTILES TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
2264.	QWIKCILVER SOLUTIONS PVT. LTD.	BENGALURU
2265.	R SYSTEMS INTERNATIONAL LTD.	FARIDABAD
2266.	R. L. INSTITUTE OF NAUTICAL SCIENCES	MADURAI
2267.	RADISYS INDIA PVT.LTD.	BENGALURU
2268.	RADIX LEARNING PVT. LTD.	BENGALURU
2269.	RAHUL ELECTRONICS	AHMEDABAD
2270.	RAILTEL CORPORATION OF INDIA LTD.	CUTTACK
2271.	RAJA RAMANNA CENTRE FOR ADVANCED TECHNOLOGY	INDORE
2272.	RAJASHREE CEMENT WORKS	GULBARGA
2273.	RAJIV GANDHI CENTRE FOR BIOTECHNOLOGY	TRIVANDRUM
2274.	RAMBOLL INDIA PVT. LTD.	CHENNAI
2275.	RAMCO SYSTEMS LTD.	CHENNAI
2276.	RAMKRISHNA FORGINGS LTD.	JAMSHEDPUR
2277.	RANAL ENGINEERING SERVICES PVT. LTD.	BENGALURU
2278.	RANE (MADRAS) LTD.	CHENNAI
2279.	RANE (MADRAS) LTD.	HOSUR
2280.	RANE TRW STEERING SYSTEMS PVT. LTD.	CHENNAI
2281.	RANE TRW STEERING SYSTEMS PVT. LTD.	ERODE
2282.	RANG DE	BENGALURU
2283.	RARE EARTH CONVEYORS PVT. LTD.	GHAZIABAD
2284.	RASGAS COMPANY	RASLAFFAN
2285.	RASGAS LNG LTD.	ALKHOR
2286.	RASHTRIYA CHEMICALS & FERTILIZERS LTD.	MUMBAI
2287.	RATNAGIRI GAS & POWER PVT. LTD.	RATNAGIRI
2288.	RAYCHEM RPG PRV. LTD.	PUNE
2289.	RBEI	KOTTAYAM
2290.	RBS INDIA DEVELOPMENT CENTER	FARIDABAD
2291.	RBS INDIA DEVELOPMENT CENTER	KARNAL
2292.	RCI (DRDO)	HYDERABAD
2293.	RCKR SOFTWARE PVT. LTD.	BENGALURU
2294.	REBUSCODE INFORMATION SOLUTIONS PVT. LTD.	NEW DELHI
2295.	RED HAT SOFTWARE SERVICES PVT. LTD.	AHMEDABAD
2296.	RED HAT SOFTWARE SERVICES PVT. LTD.	COCHIN
2297.	RED HAT SOFTWARE SERVICES PVT. LTD.	PUNE
2298.	REDGRAPE BUSINESS SERVICES	CHENNAI



2299.	REED ELSEVIER INDIA PVT. LTD.	CHENNAI
2300.	REGAL SOLUTIONS PVT. LTD.	MUMBAI
2301.	REGEN POWERTECH PVT. LTD.	CHENNAI
2302.	RELGO NETWORKS PVT. LTD.	BENGALURU
2303.	RELIANCE CEMENT COMPANY PVT. LTD.	NAGPUR
2304.	RELIANCE CORPORATE IT PARK LTD.	NAVI MUMBAI
2305.	RELIANCE CORPORATE IT PARK LTD.	THANE
2306.	RELIANCE INDUSTRIES LTD.	JAMNAGAR
2307.	RELIANCE INDUSTRIES LTD.	MUMBAI
2308.	RELIANCE INDUSTRIES LTD.	VADODARA
2309.	RELIANCE JIO INFOCOMM LTD.	NAVI MUMBAI
2310.	RELIANCE TECH SERVICES	HYDERABAD
2311.	RELINACE JIO INFOCOMM LTD.	MAHENDER GARH
2312.	RENATA PRECISION COMPONENTS PVT. LTD.	PUNE
2313.	RENAULT NISSAN AUTOMATIVE INDIA PVT. LTD.	CHENNAI
2314.	RENAULT NISSAN AUTOMATIVE INDIA PVT. LTD.	HYDERABAD
2315.	RENAULT NISSAN TECHNOLOGY BUSINESS CENTRE	CHENNAI
2316.	RENAULT NISSAN TECHNOLOGY BUSINESS CENTRE	KANCHIPURAM
2317.	RENAULT NISSAN TECHNOLOGY BUSINESS CENTRE	KOVILPATTI
2318.	RENEWABLE ENERGY SYSTEMS LTD.	HYDERABAD
2319.	REPLICON SOFTWARE (INDIA) PVT. LTD.	BENGALURU
2320.	RESONANCE EDUVENTURES PVT. LTD.	KOTA
2321.	RETTERI SRI KUMARAN HEALTH CENTRE	CHENNAI
2322.	REYAMI ELECTROMECHANICAL (INDIA) PVT. LTD.	ERNAKULAM
2323.	REYNOLD INDIA PVT. LTD.	NOIDA
2324.	RHINO MACHINES PVT. LTD.	ANAND
2325.	RIKA FORGE	CHENNAI
2326.	RISESMART HR SERVICE PTV LTD.	PUNE
2327.	RKM POWERGEN PVT. LTD.	KHARSIA
2328.	RMC READYMIX (INDIA)	NEW PANVEL
2329.	RNAIPL	CHENNAI
2330.	RNTBCI	CHENNAI
2331.	ROBERT BOSCH AUTOMOTIVE ELECTRONICS INDI	BENGALURU
2332.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	BENGALURU
2333.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	CHENNAI
2334.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	COIMBATORE
2335.	ROBERT BOSCH ENGINEERING & BUSINESS SOLUTIONS	SIRSI
2336.	ROBERT BOSCH INDIA LTD.	BENGALURU
2337.	ROBERT BOSCH INDIA LTD.	COIMBATORE
2338.	ROBERT BOSCH INDIAN CHASSIS LTD.	TRICHY
2339.	ROBOTIC AUTOMATION	PANIPAT
2340.	ROCKWELL AUTOMATION INDIA PVT. LTD.	GHAZIABAD
2341.	ROCKWELL AUTOMATION INDIA PVT. LTD.	THANE
2342.	ROCKWELL COLLINS INDIA PVT. LTD.	HYDERABAD
2343.	ROHDE & SCHWARZ EMIRATES LLC	ABU DHABI
2344.	ROHM & HAAS INDIA PVT. LTD.	CHENNAI
2345.	ROLEX FABRICATORS	ANAND
2346.	ROLLS-ROYCE MARINE INDIA PVT. LTD.	CHENNAI
2347.	ROLLS-ROYCE MARINE INDIA PVT. LTD.	NAVI MUMBAI

2348. ROOTS INDUSTRIES INDIA LTD.	COIMBATORE
2349. ROTORK CONTROLS INDIA PVT. LTD.	PALAKKAD
2350. ROTORK CONTROLS INDIA PVT. LTD.	SIVAGANGAI
2351. ROYAL BANK OF SCOTLAND	MALOUT
2352. ROYAL ENFIELD	CHENNAI
2353. RR DONNELLEY	TRIVANDRUM
2354. RRSC,NRSC,ISRO	NAGPUR
2355. RSAM TECHNOLOGIES INDIA	MYSORE
2356. RSB TRANSMISSIONS (I) LTD.	DEOGHAR
2357. RUDRACE TECHNOLOGIES	DELHI
2358. RUWAIS FERTILIZER INDUSTRIES LTD.	RUWAIS
2359. RWANDA	RWANDA
2360. RYNEK TECHNOLOGIES PVT. LTD.	KOCHI
2361. S M AUTO ENGINEERING PVT. LTD.	PUNE
2362. S&P CAPITAL IQ	NEW DELHI
2363. S.A TECHNOLOGIES	CHENNAI
2364. S.O.S INTERNATIONAL EQUIPMENTS L.L.C	THIRUNELVELI
2365. S.VE.J ASSOCIATES	NILGIRIS
2366. SAARTHI AIRWAYS (P) LTD.	THRISSUR
2367. SABMILLER INDIA LTD.	KANPUR
2368. SADAR HOSPITAL	MOTIHARI
2369. SAFENET INC	AGRA
2370. SAFENET INC	HATHRAS
2371. SAFRAN ENGINEERING SERVICES INDIA PVT. LTD.	BENGALURU
2372. SAG, DRDO	GHAZIABAD
2373. SAHARA AND MAADEN PETROCHEMICAL COMPANY	KOLLAM
2374. SAHARA ENGINEERING	COIMBATORE
2375. SAINATH ENVIROTECH	TUTICORIN
2376. SAINT GOBAIN GLASS INDIA	PATHANKOT
2377. SAINT GOBAIN GYPROC EMIRATES INDUSTRIES	ABU DHABI
2378. SAIPEM CONTRACTING NETHERLANDS BV SHARJA	SHARJAH
2379. SAIPEM INDIA PROJECTS LTD.	CHENNAI
2380. SAIPEM INDIA PVT. LTD.	CHENNAI
2381. SAIPEM S.P.A	INDORE
2382. SALCOMP MANUFACTURING INDIA PVT. LTD.	CHENNAI
2383. SALESFORCE.COM	HYDERABAD
2384. SAME DEUTZ-FAHR PVT. LTD.	KALPAKKAM
2385. SAME DEUTZ-FAHR PVT. LTD.	NAMAKKAL
2386. SAMSUNG MANUFACTURING PVT. LTD.	CHENNAI
2387. SAMSUNG DATA SYSTEMS INDIA PVT. LTD.	GURGAON
2388. SAMSUNG DATA SYSTEMS INDIA PVT. LTD.	NOIDA
2389. SAMSUNG ELECTRONICS INDIA PVT. LTD.	FARIDABAD
2390. SAMSUNG ELECTRONICS INDIA PVT. LTD.	GHAZI
2391. SAMSUNG ELECTRONICS INDIA PVT. LTD.	GHAZIABAD
2392. SAMSUNG ELECTRONICS INDIA PVT. LTD.	GURGAON
2393. SAMSUNG ELECTRONICS INDIA PVT. LTD.	MEERUT
2394. SAMSUNG ELECTRONICS INDIA PVT. LTD.	NEW DELHI
2395. SAMSUNG ELECTRONICS INDIA PVT. LTD.	NOIDA
2396. SAMSUNG ELECTRONICS INDIA PVT. LTD.	ROHTAK

2397.	SAMSUNG INDIA SOFTWARE OPERATIONS PVT. LTD.	BENGALURU
2398.	SAMSUNG R&D INSTITITE	BENGALURU
2399.	SAMSUNG R&D INSTITITE	CHENNAI
2400.	SAMSUNG R&D INSTITITE	ERNAKULAM
2401.	SAMSUNG R&D INSTITITE	FARIDABAD
2402.	SAMSUNG R&D INSTITITE	GHAZIABAD
2403.	SAMSUNG R&D INSTITITE	INDORE
2404.	SAMSUNG R&D INSTITITE	JIND
2405.	SAMSUNG R&D INSTITITE	NOIDA
2406.	SAMSUNG RESEARCH INSTITUTE	AMBALA CANTT
2407.	SAMSUNG RESEARCH INSTITUTE	BENGALURU
2408.	SAMSUNG RESEARCH INSTITUTE	GHAZIABAD
2409.	SAMSUNG RESEARCH INSTITUTE	NOIDA
2410.	SAMSUNG RESEARCH INSTITUTE	PRAKASAM
2411.	SAMVITH TECHNOLOGIES	BENGALURU
2412.	SANCHAY TECH	NEW DELHI
2413.	SANDHAR AUTOMACH	BENGALURU
2414.	SANDHU ENTERPRISES	RUDRAPUR
2415.	SANDISK INDIA DEVICE DESIGN CENTRE PVT. LTD.	BENGALURU
2416.	SANDVIK ASIA PVT. LTD.	SATARA
2417.	SANDVINE TECHNOLOGIES (I) PVT. LTD.	BENGALURU
2418.	SANKALP HOSPITAL	SURAT
2419.	SANMINA INDIA PVT. LTD.	CHENNAI
2420.	SANMINA-SCI TECHNOLOGY INDIA PVT. LTD.	CHENNAI
2421.	SANNAM S4 CONSULTING PVT. LTD.	PUNE
2422.	SAP LABS INDIA PVT. LTD.	ALLAHABAD
2423.	SAP LABS INDIA PVT. LTD.	BENGALURU
2424.	SAP LABS INDIA PVT. LTD.	GURGAON
2425.	SAPIENT CONSULTING INIDA PVT. LTD.	BENGALURU
2426.	SAPIENT CONSULTING INIDA PVT. LTD.	DELHI
2427.	SAPIENT CONSULTING INIDA PVT. LTD.	GURGAON
2428.	SAPIENT CONSULTING INIDA PVT. LTD.	JALANDHAR
2429.	SAPIENT CONSULTING INIDA PVT. LTD.	NEW DELHI
2430.	SAPIENT CORPORATION	NEW DELHI
2431.	SAPIENT NITRO	BENGALURU
2432.	SARTORIUS MECHATRONICS INDIA PVT. LTD.	KANNUR
2433.	SAS POWER INDUSTRIES FZE	CHENNAI
2434.	SAS R&D INDIA PVT. LTD.	PUNE
2435.	SASKEN COMMUNICATION TECHNOLOGIES LTD.	BENGALURU
2436.	SASKEN COMMUNICATION TECHNOLOGIES LTD.	HOSUR
2437.	SASKEN COMMUNICATION TECHNOLOGIES LTD.	MAYILADUTHURAI
2438.	SATYAM COMPUTER SERVICES LTD.	BENGALURU
2439.	SATYAM COMPUTER SERVICES LTD.	KANCHIPURAM
2440.	SATYAM VENTURE ENGINEERING SERVICES	PUNE
2441.	SAUDI CHEVRON PHILIPS COMPANY	JUBAIL
2442.	SAUDI CHEVRON PHILLIPS	JUBAIL
2443.	SAUDI CRANES & STEEL WORKS FACTORY	JUBAIL
2444.	SAUDI IRON & STEEL COMPANY	DURG
2445.	SAUDI TABREED DISTRICT COOLING COMPANY	AL KHOBAR

2446.	SAUDICRANES / KONECRANES	JUBAIL
2447.	SAURASHTRA CHEMICALS DIVISION OF NIRMA Ltd.	DWARKA
2448.	SCHAEFFLER (FAG BEARINGS INDIA LTD.)	CHENNAI
2449.	SCHLUMBERGER - REDA PRODUCTION SYSTEMS	SALEM
2450.	SCHLUMBERGER INDIA PVT. LTD.	PUNE
2451.	SCHNEIDER ELECTRIC INDIA PVT. LTD.	BENGALURU
2452.	SCHNEIDER ELECTRIC INDIA PVT. LTD.	CHENNAI
2453.	SCHNEIDER ELECTRIC INDIA PVT. LTD.	SECUNDERABAD
2454.	SCHNEIDER ELECTRIC INDIA PVT. LTD.	VADODARA
2455.	SCHNEIDER PROTOTYPING INDIA PVT. LTD.	VELLORE
2456.	SCHNELLECKE JEENA LOGISTICS INDIA PVT. LTD.	PUNE
2457.	SCHWING STETTER INDIA PVT. LTD.	CHENNAI
2458.	SCHWING STETTER INDIA PVT. LTD.	MUMBAI
2459.	SCIENTECHNIC LLC	ABU DHABI
2460.	SCIENTECHNIC LLC	DEIRA
2461.	SCIENTECHNIC LLC	DUBAI
2462.	SCIENTIFIC PUBLISHING SERVICES (P) LTD.	CHENNAI
2463.	SCIT LTD.	PUNE
2464.	SCMS COCHIN SCHOOL OF BUSINESS	COCHIN
2465.	SCOPE INTERNATIONAL PVT. LTD.	CHENNAI
2466.	SD MIDDLE EAST LLC	HYDERABAD
2467.	SDG SOFTWARE INDIA PVT. LTD.	NOIDA
2468.	SDL TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
2469.	SDL TECHNOLOGIES INDIA PVT. LTD.	TUKMUR
2470.	SDSC SHAR	NELLORE
2471.	SE BLADES LTD.	COIMBATORE
2472.	SE BLADES LTD.	TEZPUR
2473.	SEA & LAND DRILLING CONTRACTORS INC.	THANE
2474.	SEAGATE INDIA	BENGALURU
2475.	SEAGATE TECHNOLOGY INT (SINGAPORE)	PARAMAKUDI
2476.	SEASIA INFOTECH PVT. LTD.	BATHINDA
2477.	SECO TOOLS INDIA PVT. LTD.	PUNE
2478.	SECURE ENERGY SERVICES LTD.	JAIPUR
2479.	SECURE METERS LTD.	CHIRAWA
2480.	SECURITY TECH ENTERPRISES	THANE
2481.	SEMBCOP GULF O&M CO LTD.	QIDFA
2482.	SEMBCORP MARINE LTD.	SINGAPORE
2483.	SEMIFI INTEGRATED TECHNOLOGIES	BENGALURU
2484.	SEMILON TECHNOLOGIES PVT. LTD.	THIRUVANANTHAPURAM
2485.	SERIA APPLIED RESEARCH PVT. LTD.	KANNUR
2486.	SERVEU (L.L.C)	AL-QUOZ
2487.	SESA STERLITE LTD.	JHARSUGUDA
2488.	SESHADRIPURAM FIRST GRADE COLLEGE	BENGALURU
2489.	SESHASAYEE PAPER AND BOARDS LTD.	ERODE
2490.	SEVEN N CONSULTING PVT. LTD.	GHAZIABAD
2491.	SEVEN SEAS COMPUTERS LLC	DUBAI
2492.	SFO TECHNOLOGIES PVT. LTD.	COCHIN
2493.	SGS INDIA PVT. LTD.	AHMEDABAD
2494.	SGS INSPECTION SERVICES SAUDI ARABIA LTD.	THOOTHUKUDI

2495.	SHABIA ENERGY FZC	SHARJAH
2496.	SHAHEED SUKHDEV COLLEGE OF BUSINESS STUDIES	DELHI
2497.	SHAHI EXPORTS PVT. LTD.	SHIMOGA
2498.	SHAPOORJI PALLONJI & CO. PVT. LTD.	JAGDALPUR
2499.	SHAPOORJI PALLONJI MIDDLE EAST	CHENNAI
2500.	SHELL PETROLEUM DEVELOPMENT COMPANY	HYDERABAD
2501.	SHEOREY DIGITAL SYSTEMS LTD.	BENGALURU
2502.	SHILPI CABLE TECHNOLOGIES LTD.	NEW DELHI
2503.	SHIP BUILDING CEMTRE	VISAKHAPATNAM
2504.	SHIVA ATHENE TECHNOLOGIES	PALAKKAD
2505.	SHREE CEMENT LTD.	JAIPUR
2506.	SHREY PLASTIC MOULDERS	DELHI
2507.	SHRI RAM PISTONS & RINGS LTD.	ALWAR
2508.	SHRIKRISHNA HRUDAYALAYA	NAGPUR
2509.	SHRIRAM PISTONS & RINGS LTD.	GHAZIABAD
2510.	SHRIRAM PISTONS & RINGS LTD.	KHETRI
2511.	SHUWEIHAT O&M LTD.	RUWAI
2512.	SICK INDIA PVT. LTD.	PUNE
2513.	SICON DESIGN TECHNOLOGIES PVT. LTD.	BENGALURU
2514.	SIDDHA DEVELOPMENT RESEARCH AND CONSULTANT	BHUBANESWAR
2515.	SIDDHI VINAYAK CEMENT PVT. LTD.	AJMER
2516.	SIECHEM TECHNOLOGIES PVT. LTD.	CHENNAI
2517.	SIEMENS INDUSTRY SOFTWARE (INDIA) PVT. LTD.	MASDAR
2518.	SIEMENS INDUSTRY SOFTWARE (INDIA) PVT. LTD.	PUNE
2519.	SIEMENS LLC	ABUDHABI
2520.	SIEMENS LTD.	GURGAON
2521.	SIEMENS LTD.	KOLKATA
2522.	SIEMENS LTD.	PONDA
2523.	SIEMENS PLM	PUNE
2524.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	BENGALURU
2525.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	CHENNAI
2526.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	DELHI
2527.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	PUNE
2528.	SIEMENS TECHNOLOGY AND SERVICES PVT. LTD.	TIRUNELVELI
2529.	SIERRA ATLANTIC SOFTWARE SERVICES LTD.	CHENNAI
2530.	SIFY TECHNOLOGIES	CHENNAI
2531.	SIGED EMIRATES L.L.C	TRISSUR
2532.	SIGMA ELECTRIC MANUFACTURING CORP PVT. LTD.	LONAVLA
2533.	SIGMA ELECTRIC MANUFACTURING CORP PVT. LTD.	PUNE
2534.	SIGMA ENGINEERING WORKS LLC	ABU DHABI
2535.	SILBURY IT SOLUTIONS	HYDERABAD
2536.	SILICUS	PUNE
2537.	SILTRONIC SINGAPORE PTE LTD.	HOUGANG
2538.	SILVERTECH MIDDLE EAST	COIMBATORE
2539.	SILVERTECH MIDDLE EAST	DUBAI
2540.	SILVERTECH MIDDLE EAST	JEBEL ALI
2541.	SIMEIO DEVELOPMENT PVT. LTD.	MUMBAI
2542.	SIMPLEX INFRASTRUCTURES LTD.	MIDNAPORE
2543.	SIMPSON & CO LTD.	CHENNAI

2544.	SINGAPORE OXYGEN AIRLIQUIDE PTE LTD.	CHENNAI
2545.	SINICON ELECTRICALS MATERIALS TRADING LL	ABU DHABI
2546.	SIS INDIA PVT. LTD.	HYDERABAD
2547.	SITE TECHNOLOGY LTD. CO.	DUBAI
2548.	SIVASAKTHI PRECISION TOOLS	COIMBATORE
2549.	SKANRAY TECHNOLOGIES PVT. LTD.	CHENNAI
2550.	SKARDIN INDUSTRIAL CORP	PONDICHERRY
2551.	SKAVA SYSTEMS	TIRUPPUR
2552.	SKF INDIA LTD.	CHENNAI
2553.	SKF INDIA LTD.	HARIDWAR
2554.	SKF INDIA LTD.	ROORKEE
2555.	SKILLNET SOLUTIONS INDIA PVT. LTD.	INDORE
2556.	SKODA AUTO INDIA PVT. LTD.	AURANGABAD
2557.	SLING MEDIA PVT. LTD.	BENGALURU
2558.	SLK SOFTWARE SERVICES PVT. LTD.	BENGALURU
2559.	SMART ENOVATIONS (I) PVT. LTD.	BENGALURU
2560.	SMART SMILES DENTAL CLINIC	MUMBAI
2561.	SMARTPLAY TECHNOLOGIES (INDIA) PVT. LTD.	BENGALURU
2562.	SMARTPLAY TECHNOLOGIES (INDIA) PVT. LTD.	HYDERABAD
2563.	SMARTPLAY TECHNOLOGIES (INDIA) PVT. LTD.	MADHAPUR
2564.	SMARTSTRINGS	HYDERABAD
2565.	SMC PNEUMATICS INDIA PVT. LTD.	DELHI
2566.	SML ENTERPRISES	CHENNAI
2567.	SMR HR TECHNOLOGIES	CHENNAI
2568.	SMS INDIA PVT. LTD.	JAIPUR
2569.	SMT. K. NAVALE COLLEGE OF PHYSIOTHERAPY	VADODARA
2570.	SN INDUSTRIAL CONSULTANTS	BENGALURU
2571.	SNAPDEAL	NEW DELHI
2572.	SNC LAVALIN ARABIA	RAJAPALAYAM
2573.	SO INFOTECH	PANIPAT
2574.	SOBHA LLC	DUBAI
2575.	SOCIETE GENERALE	BENGALURU
2576.	SOCTRONICS TECHNOLOGIES PVT. LTD.	HYDERABAD
2577.	SOFTWARE AG BENGALURU TECHNOLOGIES PVT. LTD.	BENGALURU
2578.	SOFTWARE AG BENGALURU TECHNOLOGIES PVT. LTD.	KURNOOL
2579.	SOFTWARE DEVELOPMENT INSTITUTE	BENGALURU
2580.	SOFTWARE PARADIGMS INFOTECH PVT. LTD.	MYSORE
2581.	SOFTWARE TECHNOLOGY PARKS OF INDIA	NEW DELHI
2582.	SOHAR ALUMINIUM COMAPNY	AHMEDABAD
2583.	SOHAR ALUMINIUM COMAPNY	SOHAR
2584.	SOLITON TECHNOLOGIES PVT. LTD.	BENGALURU
2585.	SONA KOYO STEERING SYSTEMS LTD.	DHARUHERA
2586.	SONA OKEGAWA PRECISION FORGINGS LTD.	GURGAON
2587.	SONA SKILL DEVELOPMENT CENTRE	GURGAON
2588.	SONATA SOFTWARE LTD.	BENGALURU
2589.	SONICWALL INFOSECURITY PVT. LTD.	BENGALURU
2590.	SONUS NETWORKS INDIA PVT. LTD.	BENGALURU
2591.	SONY ELECTRONICS SINGAPORE PTE LTD.	SINGAPORE
2592.	SONY ELECTRONICS SINGAPORE PTE LTD.	SIRSI

2593.	SONY INDIA SOFTWARE CENTRE PVT. LTD.	BENGALURU
2594.	SOPRA INDIA PVT. LTD.	NEW DELHI
2595.	SOPRA INDIA PVT. LTD.	NOIDA
2596.	SOPRA STERIA GROUP	DELHI
2597.	SOURCESOL INTERACTIVE TECHNOLOGIES PVT. LTD.	TIRUCHIRAPPALLI
2598.	SPACE APPLICATIONS CENTRE	AHMEDABAD
2599.	SPAN INFOTECH (INDIA) PVT. LTD.	BENGALURU
2600.	SPAN INFOTECH (INDIA) PVT. LTD.	MOHALI
2601.	SPECIALIST SERVICES LLC	AL QOUZE
2602.	SPECTRON ENGINEERS PVT. LTD.	MUMBAI
2603.	SPICER INDIA PVT.LTD.	DHARWAD
2604.	SPICER INDIA PVT.LTD.	PANTNAGAR
2605.	SPICER INDIA PVT.LTD.	SATARA
2606.	SPIRENT COMMUNICATIONS PVT. LTD.	MYSORE
2607.	SPRINT TECHNOLOGIES PVT. LTD.	KOCHI
2608.	SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL	TRIVANDRUM
2609.	SRF LTD.	CHENNAI
2610.	SRF LTD.	GWALIOR
2611.	SRI BALAMURUGAN ENGG. WORKS PVT. LTD.	PUDUKKOTTAI
2612.	SRI SATHYA SAI INSTITUTE OF HIGHER MEDICINES	ANANTHAPUR
2613.	SRISHTI ENGG. SERVICES	HOSUR
2614.	SS&C GLOBEOP FINANCIAL SERVICES INDIA (P) LTD.	MUMBAI
2615.	ST MICROELECTRONICS INDIA PVT. LTD.	NEW DELHI
2616.	ST. MARTHA'S HOSPITAL	BENGALURU
2617.	STANDARD CHARTERED SCOPE INTERNATIONAL P	CHENNAI
2618.	STAR CEMENT CO LLC	RAS AL KHAIMAH
2619.	STAR CEMENT COMPANY L.L.C	CHENNAI
2620.	STAR GULF/BOS-SHELF LLC	KANNUR
2621.	STARMARK SOFTWARE PVT. LTD.	BENGALURU
2622.	STATE BANK OF PATIALA	ROHTAK
2623.	STATE STREET SERVICES INDIA PVT. LTD.	BENGALURU
2624.	STEAG ENERGY SERVICES (INDIA) PVT. LTD.	BHAGALPUR
2625.	STEAG ENERGY SERVICES (INDIA) PVT. LTD.	ROURKELA
2626.	STEEL & INDUSTRIAL FORGINGS LTD.	THRISSUR
2627.	STEEL AUTHORITY OF INDIA LTD.	KEONJHAR
2628.	STEEL EXCHANGE INDIA LTD.	SREERAMPURAM
2629.	STELIS BIOPHARMA PVT. LTD.	BENGALURU
2630.	STEP ELECTRONICS PVT. LTD.	BENGALURU
2631.	STERA ENGINEERING INDIA PVT. LTD.	CHENNAI
2632.	STERIA INDIA LTD.	CHENNAI
2633.	STERIA INDIA LTD.	DELHI
2634.	STERICSSON	GHAZIABAD
2635.	STERLING & WILSON PVT. LTD.	KOLKATA
2636.	STERLING HOLIDAYS	VILLUPPURAM
2637.	STERLITE COPPER VEDANTA LTD.	THANJAVUR
2638.	STIGA SOFT	GHAZIABAD
2639.	STONE INDIA LTD.	KOLKATA
2640.	STOVEKRAFT PVT. LTD.	BENGALURU
2641.	STPWEBHOSTING PVT. LTD.	RAJKOT

2642.	STRAITS ORTHOPAEDICS	TRICHY
2643.	STRATA MANUFACTURING PJSC	AL AIN
2644.	STRONGMOMENTS TECHNOLOGIES PVT. LTD.	DELHI
2645.	STRYKER GLOBAL TECHNOLOGY CENTER	GURGAON
2646.	STRYKER GLOBAL TECHNOLOGY CENTRE PVT. LTD.	GURGAON
2647.	STŽUBLI TEC SYSTEMS INDIA PVT. LTD.	MUMBAI
2648.	SUBEX PVT. LTD.	BENGALURU
2649.	SUBMARINE HEADQUARTERS	VISAKHAPATNAM
2650.	SUEX TRACTBEL OPERATION & MAINTENANCE CO	KUMBAKONAM
2651.	SUHAIL BAHWAN HEALTH CARE CENTER LLC	CHENNAI
2652.	SULEKHA.COM NEW MEDIA PVT. LTD.	CHENNAI
2653.	SUN PHARMA	INDORE
2654.	SUNBEAM AUTO PVT. LTD.	GURGAON
2655.	SUNDARAM AUTO COMPONENTS LTD.	HOSUR
2656.	SUNDARAM CLAYTON LTD.	CHENGALPET
2657.	SUNDARAM CLAYTON LTD.	CHENNAI
2658.	SUNDARAM CLAYTON LTD.	GINGEE TALUK
2659.	SUNDRAM FASTENERS LTD.	CHENNAI
2660.	SUNDRAM FASTENERS LTD.	COIMBATORE
2661.	SUNGARD GLOBAL SOLUTIONS	PUNE
2662.	SUNGARD INDIA SOLUTIONS PVT. LTD.	MUMBAI
2663.	SUNMACHX ENGINEERING INDUSTRIES	THANJAVUR
2664.	SUNTEC BUSINESS SOLUTIONS PVT. LTD.	PALAKKAD
2665.	SUNTEC BUSINESS SOLUTIONS PVT. LTD.	THIRUVANANTHAPURAM
2666.	SUNTEC BUSINESS SOLUTIONS PVT. LTD.	TRIVANDRUM
2667.	SUPREME TELECOMMUNICATIONS LTD.	BENGALURU
2668.	SURELOCK PLASTICS PVT. LTD.	KHARAGPUR
2669.	SUREWAVES MEDIATECH PVT. LTD.	BENGALURU
2670.	SUTHERLAND GLOBAL SERVICES	CHENNAI
2671.	SUZLON ENERGY LTD.	NAGERCOIL
2672.	SWIFT PLM SERVICES	PUNE
2673.	SYMANTEC CORPORATION	PUNE
2674.	SYMANTEC CORPORATION	SECUNDERABAD
2675.	SYMANTEC INDIA PVT. LTD.	PUNE
2676.	SYMANTEC SOFTWARE & SERVICES INDIA PVT. LTD.	BENGALURU
2677.	SYMANTEC SOFTWARE & SERVICES INDIA PVT. LTD.	BHOPAL
2678.	SYMANTEC SOFTWARE & SERVICES INDIA PVT. LTD.	CHENNAI
2679.	SYMANTEC SOFTWARE & SERVICES INDIA PVT. LTD.	MALAPURAM
2680.	SYMANTEC SOFTWARE & SERVICES INDIA PVT. LTD.	PUNE
2681.	SYMANTEC SOFTWARE & SERVICES INDIA PVT. LTD.	SANGLI
2682.	SYMBOL TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
2683.	SYMBOL TECHNOLOGIES INDIA PVT. LTD.	DHARWAD
2684.	SYMPHONY TELECA CORP. PVT. LTD.	BENGALURU
2685.	SYMPHONY TELECA CORP. PVT. LTD.	PUNE
2686.	SYNAPSE DESIGN	BENGALURU
2687.	SYNAPSE DESIGN	CALICUT
2688.	SYNCHRONOSS TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
2689.	SYNECHRON TECHNOLOGIES PVT. LTD.	PUNE
2690.	SYNERGIX INTERNATIONAL	DUBAI



2691.	SYNERGY HOSPITAL	INDORE
2692.	SYNERGY MARINE PTE LTD.	CHENNAI
2693.	SYNERGY MARITIME PVT. LTD.	PUDUKKOTTAI
2694.	SYNIVERSE TECHNOLOGIES	BENGALURU
2695.	SYNOPSIS INDIA PVT. LTD.	BENGALURU
2696.	SYNOPSIS INDIA PVT. LTD.	NEW DELHI
2697.	SYNOPSIS INDIA PVT. LTD.	PITAMPURA
2698.	SYNTEL INTERNATIONAL PVT. LTD.	CHENNAI
2699.	SYNTEL INTERNATIONAL PVT. LTD.	TIRUNELVELI
2700.	SYNTEL LTD.	COIMBATORE
2701.	SYSCO INFOTECH	CHENNAI
2702.	SYSTECH SOLUTIONS PVT. LTD.	CHENNAI
2703.	TAAL TECH INDIA PVT. LTD.	BENGALURU
2704.	TAEGUTEC INDIA P LTD.	BENGALURU
2705.	TAGROS CHEMICALS INDIA LTD.	CUDDALORE
2706.	TAKASAGO INTERNATIONAL INDIA PVT. LTD.	CHENNAI
2707.	TAKREER REFINERY	ANGAMALY
2708.	TAKREER REFINERY	RUWAI
2709.	TAL MFG SOLUTIONS LTD.	NAGPUR
2710.	TALENTICA SOFTWARE PVT. LTD.	PUNE
2711.	TALLY SOLUTIONS PVT. LTD.	BENGALURU
2712.	TAMILNADU NEWSPRINT AND PAPERS LTD.	KARUR
2713.	TANEJA AEROSPACE AND AVIATION LTD.	HOSUR
2714.	TANUJ KUMAR SINGH	BENGALURU
2715.	TARAPAN SOLUTIONS PVT. LTD.	PUNE
2716.	TARENTO TECHNOLOGIES PVT. LTD.	BENGALURU
2717.	TARGET CORPORATION INDIA PVT. LTD.	PANIPAT
2718.	TARGET ENGINEERING CONSTRUCTION CO. LLC	ABU DHABI
2719.	TARGET ENGINEERING CONSTRUCTION CO. LLC	SHARJAH
2720.	TARGETING MANTRA	NEW DELHI
2721.	TARSHAN	BENGALURU
2722.	TATA ADVANCED MATERIALS LTD.	BENGALURU
2723.	TATA ADVANCED SYSTEMS LTD.	BALAPUR
2724.	TATA ADVANCED SYSTEMS LTD.	HYDERABAD
2725.	TATA AUTOCOM SYSTEMS LTD.	BASIRHAT
2726.	TATA AUTOCOMP GY BATTERIES LTD.	TIRUPATI
2727.	TATA AUTOCOMP SYSTEMS LTD.	PUNE
2728.	TATA COMMUNICATIONS LTD.	CHENNAI
2729.	TATA COMMUNICATIONS LTD.	PUNE
2730.	TATA CONSULTANCY SERVICES LTD.	BENGALURU
2731.	TATA CONSULTANCY SERVICES LTD.	BHOPAL
2732.	TATA CONSULTANCY SERVICES LTD.	CHENNAI
2733.	TATA CONSULTANCY SERVICES LTD.	GURGAON
2734.	TATA CONSULTANCY SERVICES LTD.	MEERUT
2735.	TATA CONSULTANCY SERVICES LTD.	MUMBAI
2736.	TATA CONSULTING ENGINEERS LTD.	RANCHI
2737.	TATA CUMMINS LTD.	BARAMATI
2738.	TATA CUMMINS LTD.	JAMSHEDPUR
2739.	TATA CUMMINS LTD.	PUNE

2740.	TATA ELXSI LTD.	KOTTAYAM
2741.	TATA ELXSI LTD.	THIRUVANANTHAPURAM
2742.	TATA ELXSI LTD.	THODUPUZHA
2743.	TATA INTERACTIVE SYSTEMS	MUMBAI
2744.	TATA JOHNSON CONTROLS AUTOMOTIVE LTD.	PUNE
2745.	TATA MOTORS LTD.	LUCKNOW
2746.	TATA MOTORS LTD.	PUNE
2747.	TATA MOTORS LTD.	SIRSA
2748.	TATA POWER CO LTD.	BENGALURU
2749.	TATA POWER CO LTD.	MUMBAI
2750.	TATA PROJECTS LTD.	NELLORE
2751.	TATA STEEL LTD.	JAMSHEDPUR
2752.	TATA STEEL LTD.	JODA
2753.	TATA TECHNOLOGIES LTD.	CHINCHWAD
2754.	TATA TECHNOLOGIES LTD.	PUNE
2755.	TATA TELESERVICES LTD.	CHENNAI
2756.	TAVANT TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
2757.	TAVISCA SOLUTIONS PVT. LTD.	PUNE
2758.	TAYO ROLLS LTD.	JAMSHEDPUR
2759.	TCL INDIA HOLDINGS PVT. LTD.	CHENNAI
2760.	TCS LTD.	BENGALURU
2761.	TCS LTD.	BENGALURU
2762.	TCS LTD.	CHENNAI
2763.	TCS LTD.	YAMUNANAGAR
2764.	TE CONNECTIVITY INDIA PVT. LTD.	BENGALURU
2765.	TE CONNECTIVITY INDIA PVT. LTD.	CHANNAPATNA
2766.	TE CONNECTIVITY INDIA PVT. LTD.	PUNE
2767.	TEAK STAFFING PVT. LTD.	PUNE
2768.	TEBODIN MIDDLE EAST LTD.	ABU DHABI
2769.	TECH MAHINDRA LTD.	DAVANAGERE
2770.	TECH MAHINDRA LTD.	HUBLI
2771.	TECH MAHINDRA LTD.	HYDERABAD
2772.	TECH MAHINDRA LTD.	MADANAPALLI
2773.	TECH MAHINDRA LTD.	PUNE
2774.	TECH MAHINDRA LTD.	SALEM
2775.	TECH SEMICONDUCTOR SINGAPORE PTE LTD.	SINGAPORE
2776.	TECHASPECT SOLUTIONS PVT. LTD.	VIJAYAWADA
2777.	TECHINT INDIA PVT. LTD.	MUMBAI
2778.	TECHNICAL EQUIPMENT CO.LLC	ABUDHABI
2779.	TECHNICAL SOLUTIONS TO INDUSTRY	DUBAI
2780.	TECHNIP INDIA LTD.	KALYAN
2781.	TECHNOFOUR	PUNE
2782.	TECHNOSOFT GLOBAL SERVICES (P) LTD.	BENGALURU
2783.	TECNOTREE CORPORATION	BENGALURU
2784.	TEEKAY (OOGTK PROJECT)	SINGAPORE
2785.	TEJAS INNOVATIVE SOLUTION PVT. LTD.	CHENNAI
2786.	TEJAS NETWORKS	MUMBAI
2787.	TEK CARE INDIA PVT. LTD.	CHENNAI
2788.	TEK SYSTEMS	BENGALURU

2789.	TEKNIKA SOLUTIONS	THIRUVANANTHAPURAM
2790.	TEKNORIX SYSTEMS PVT. LTD.	VERNA
2791.	TEKTRONIX COMMUNICATION	MUMBAI
2792.	TELEDNA COMMUNICATIONS PVT. LTD.	BENGALURU
2793.	TELES COMPUTER SYSTEMS INDIA PVT. LTD.	KOTTAYAM
2794.	TELEXCELL	NEW DELHI
2795.	TEMENOS INDIA PVT. LTD.	BENGALURU
2796.	TERADATA INDIA PVT. LTD.	HYDERABAD
2797.	TEREX EQUIPMENT PVT. LTD.	FARIDABAD
2798.	TEREX INDIA PVT. LTD.	BENGALURU
2799.	TEREX INDIA PVT. LTD.	PUNE
2800.	TESCO HSC	NAMAKKAL
2801.	TESSOLVE SEMICONDUCTORS PVT. LTD.	BENGALURU
2802.	TETRAPAK INDIA PVT. LTD.	BENGALURU
2803.	TEXAS INSTRUMENTS INDIA PVT. LTD.	BENGALURU
2804.	TEXTRON INDIA PVT. LTD.	BENGALURU
2805.	TG KIRLOSKAR AUTOMOTIVE PVT. LTD.	BENGALURU
2806.	THAI ACRYLIC FIBER CO. LTD.	KHANDWA
2807.	THANGAM CORPORATE SERVICES	PONDICHERRY
2808.	THCM	JAMSHEDPUR
2809.	THE CATHOLIC SYRIAN BANK LTD.	CHENNAI
2810.	THE DEPOSITORY TRUST AND CLEARING CORP	CHENNAI
2811.	THE DHANLAXMI BANK LTD.	THRISSUR
2812.	THE ILLUSTRATORS	BENGALURU
2813.	THE INDIA CEMENTS LTD.	KADAPA
2814.	THE KANOO GROUP COMMERCIAL LLC	COIMBATORE
2815.	THE KERALA MINERALS AND METALS LTD.	KOLLAM
2816.	THE MATHWORKS INDIA PVT. LTD.	BENGALURU
2817.	THE RAMCO CEMENTS LTD.	KANCHIPURAM
2818.	THE ROYAL BANK OF SCOTLAND	GURGAON
2819.	THE TATA POWER COMPANY LTD.	MUMBAI
2820.	THERMAX LTD.	VADODARA
2821.	THERMO FISHER SCIENTIFIC INDIA PVT. LTD.	CHENNAI
2822.	THIRUPATHY BRIGHT INDUSTRIES	TRICHY
2823.	THOMSON REUTERS INDIA SERVICES PVT. LTD.	BENGALURU
2824.	THOMSON REUTERS INDIA SERVICES PVT. LTD.	GODAVARI
2825.	THOUGHTWORKS TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
2826.	THOUGHTWORKS TECHNOLOGIES INDIA PVT. LTD.	CHENNAI
2827.	THOUGHTWORKS TECHNOLOGIES INDIA PVT. LTD.	GURGAON
2828.	THYROCARE TECHNOLOGIES LTD.	THANE
2829.	THYSSENKRUPP ELEVATORS	DUBAI
2830.	THYSSENKRUPP INDUSTRIES INDIA PVT. LTD.	PUNE
2831.	TI CYCLES OF INDIA LTD.	CHENNAI
2832.	TI METAL FORMING	THIRUVALLUR
2833.	TIBCO SOFTWARE INDIA PVT. LTD.	PUNE
2834.	TIETO IT SERVICES INDIA PVT. LTD.	PUNE
2835.	TIGER STEEL ENGINEERING LLC	AL AIN
2836.	TII TECHNO TESTING SERVICES P LTD.	CHENNAI
2837.	TIME ANALYTIC AND SHARED SERVICES	KANPUR

2838.	TIMES INTERNET LTD.	GURGAON
2839.	TITAN COMPANY LTD.	HOSUR
2840.	TITAN COMPANY LTD.	NEW DELHI
2841.	TITAN INDUSTRIES LTD.	HOSUR
2842.	TML DRIVELINES LTD.	JAMSHEDPUR
2843.	TOLANI MARITIME INSTITUTE	PUNE
2844.	TOOL ROOM ENGINEERING	CHENNAI
2845.	TOOLTECH GLOBAL ENGINEERING PVT. LTD.	PUNE
2846.	TORRY HARRIS BUSINESS SOLUTION PVT.LTD.	BENGALURU
2847.	TOSHIBA GLOBAL COMMERCE SOLUTIONS	BENGALURU
2848.	TOSHIBA MACHINE (CHENNAI) PVT.LTD.	CHENNAI
2849.	TOSHIBA SOFTWARE INDIA PVT. LTD.	BENGALURU
2850.	TOSHIBA TRANSMISSION & DISTRIBUTION	SECUNDERABAD
2851.	TOYODA GOSEI MINDA INDIA PVT. LTD.	NARNAUL
2852.	TOYOTA KIRLOSKAR MOTOR PVT. LTD.	BENGALURU
2853.	TOYOTA KIRLOSKAR MOTOR PVT.LTD.	RAMANAGAR
2854.	TPS INFRASTRUCTURE LTD.	DURG
2855.	TRACTORS AND FARM EQUIPMENT LTD.	BENGALURU
2856.	TRACTORS AND FARM EQUIPMENT LTD.	DHARMAPURI
2857.	TRACTORS AND FARM EQUIPMENT LTD.	HUBLI
2858.	TRACTORS AND FARM EQUIPMENT LTD.	NAMAKKAL
2859.	TRACTORS AND FARM EQUIPMENT LTD.	SALEM
2860.	TRACTORS AND FARM EQUIPMENT LTD.	UDUMALPET
2861.	TRADESTONE SOFTWARE INDIA PVT. LTD.	BENGALURU
2862.	TRANE INDIA PVT. LTD.	NAJAFGARH
2863.	TRANQUILIT SOFTWARE PVT. LTD.	COIMBATORE
2864.	TRANS GULF ELECTRO-MECHANICAL LLC	DUBAI
2865.	TRANSASIA BIOMEDICALS LTD.	DOMBIVLI
2866.	TRANSFORMERS AND ELECTRICALS KERALA LTD.	KOLLAM
2867.	TRANSIGHT SYSTEMS PVT. LTD.	ERNAKULAM
2868.	TRANter INDIA PVT. LTD.	PUNE
2869.	TRAWEX TECHNOLOGIES	BENGALURU
2870.	TRENSETTERS SKILL ASSESSORS PVT. LTD.	GURGAON
2871.	TRIDAT TECHNOLOGIES PVT. LTD.	MUMBAI
2872.	TRIDENT INFOSOL PVT. LTD.	BENGALURU
2873.	TRIDENT INFOSOL PVT. LTD.	FARIDABAD
2874.	TRIDENT TECLABS	BENGALURU
2875.	TRIGENT SOFTWARE LTD.	BENGALURU
2876.	TRIMBLE INFORMATION SOLUTIONS PVT. LTD.	PUNE
2877.	TRIMBLE INFORMATION TECHNOLOGIES LTD.	CHENNAI
2878.	TRYZENS	SALEM
2879.	TSI FZE	DUBAI
2880.	TUBE INVESTMENTS OF INDIA LTD.	PUNE
2881.	TUBE PRODUCTS OF INDIA	CHENNAI
2882.	TUBE PRODUCTS OF INDIA	KUMBAKONAM
2883.	TUSCANO EQUIPMENTS PVT. LTD.	KARUR
2884.	TUSHACO PUMPS PVT.LTD.	DAMAN
2885.	TUV RHEINLAND (INDIA) PVT. LTD.	HYDERABAD
2886.	TVM SIGNALLING AND TRANSPORTATION SYSTEM	BENGALURU

2887.	TVS & SONS LTD.	CHENNAI
2888.	TVS & SONS LTD.	ERNAKULAM
2889.	TVS ELECTRONICS LTD.	CHENNAI
2890.	TVS MOTOR COMPANY LTD.	CHENNAI
2891.	TVS MOTOR COMPANY LTD.	HOSUR
2892.	TVS MOTOR COMPANY LTD.	MYSORE
2893.	TVS SUNDARAM AUTO COMPONENTS LTD.	HOSUR
2894.	TVS SUNDARAM CLAYTON LTD.	CHENNAI
2895.	TVS SUNDARAM CLAYTON LTD.	TIRUNELVELI
2896.	TVS SUNDRAM FASTENERS LTD.	CHENNAI
2897.	TVS SUNDRAM FASTENERS LTD.	HOSUR
2898.	TVS SUNDRAM FASTENERS LTD.	MADURAI
2899.	TVS SUNDRAM FASTENERS LTD.	VELLORE
2900.	TVS TRAINING & SERVICES LTD.	CHENNAI
2901.	TYCO ELECTRONICS	BENGALURU
2902.	TYCO FIRE & SECURITY PVT. LTD.	BENGALURU
2903.	TYCO FIRE & SECURITY UAE LLC	ABUDHABI
2904.	TYFONE CDI PVT. LTD.	BENGALURU
2905.	TYFONE COMMUNICATIONS DEVELOPMENT	BENGALURU
2906.	U.P. PROVINCIAL MEDICAL SERVICES	ALLAHABAD
2907.	U2OPIA MOBILE PVT. LTD.	BENGALURU
2908.	UAE EXCHANGE CENTER LLC	CHENNAI
2909.	UBIQUE SYSTEMS PVT. LTD.	KOLKATA
2910.	UFI FILTERS INDIA PVT. LTD.	REWARI
2911.	UGAM SOLUTIONS	BENGALURU
2912.	UIT TRAINING INSTITUTE LLC	THRISSUR
2913.	ULTRATECH CEMENT LTD.	AMRELI
2914.	ULTRATECH CEMENT LTD.	BALODABAZAR
2915.	ULTRATECH CEMENT LTD.	CHENNAI
2916.	ULTRATECH CEMENT LTD.	CHITTORGARH
2917.	ULTRATECH CEMENT LTD.	KOPPAL
2918.	ULTRATECH CEMENT LTD.	KOVAYA
2919.	ULTRATECH CEMENT LTD.	KUTCH
2920.	ULTRATECH CEMENT LTD.	MUMBAI
2921.	ULTRATECH CEMENT LTD.	ROBERTSGANJ
2922.	ULTRATECH CEMENT LTD.	SAHARANPUR
2923.	ULTRATECH CEMENT LTD.	TUTICORIN
2924.	UNICHARM INDIA PVT. LTD.	BHIWANI
2925.	UNIGEN INDIA PVT. LTD.	HYDERABAD
2926.	UNION BANK OF INDIA	RANCHI
2927.	UNIPRES INDIA PVT. LTD.	CHEYAR
2928.	UNIQUE SOLUTIONS	CHENNAI
2929.	UNISYS GLOBAL SERVICES INDIA	BENGALURU
2930.	UNITECH MACHINES LTD.	NEW DELHI
2931.	UNITED BREWERIES LTD.	BENGALURU
2932.	UNITED DEVELOPMENT COMPANY	DOHA
2933.	UNITED ENGINEERING SERVICES LLC	RUSAYL
2934.	UNITED HEALTH GROUP	CHENNAI
2935.	UNITED HEALTH GROUP	GURGAON

2936.	UNITED HEALTH GROUP	NOIDA
2937.	UNITED TECHNO INFO SYSTEMS	CHENNAI
2938.	UNITED TECHNOLOGIES	HYDERABAD
2939.	UPL LTD.	ANKLESHWAR
2940.	UPL LTD.	SURAT
2941.	URS CERTIFICATION LTD.	HARIDWAR
2942.	US TECHNOLOGY INTERNATIONAL PVT. LTD.	BENGALURU
2943.	US TECHNOLOGY INTERNATIONAL PVT. LTD.	ERNAKULAM
2944.	USHA INTERNATIONAL LTD.	FARIDABAD
2945.	USHA INTERNATIONAL LTD.	GURGAON
2946.	UST GLOBAL	TRIVANDRUM
2947.	USV LTD.	NAVI MUMBAI
2948.	UTC AEROSPACE SERVICES PVT. LTD.	BENGALURU
2949.	UTC SEROSPACE SYSTEMS	BENGALURU
2950.	UTKAL ALUMINA INTERNATIONAL LTD.	ROURKELA
2951.	UTTAM BIOTECH PVT. LTD.	MUMBAI
2952.	UVIONICS TECH PVT. LTD.	CHENNAI
2953.	VA TECH VENTURES PVT. LTD.	BENGALURU
2954.	VALDEL ENGINEERS & CONSTRUCTORS PVT. LTD.	BENGALURU
2955.	VALEO INDIA PVT. LTD.	CHENNAI
2956.	VALEO INDIA PVT. LTD.	PUNE
2957.	VALUE ADDITION FZC	SHARJAH
2958.	VALUE LABS	ADOOR
2959.	VALUE LABS LLP	HYDERABAD
2960.	VARIAN MEDICAL SYSTEMS INDIA SOFTWARE PVT. LTD.	PUNE
2961.	VARROC ENGINEERING PVT. LTD.	CHENNAI
2962.	VARROC ENGINEERING PVT. LTD.	CHIPLUN
2963.	VARROC ENGINEERING PVT. LTD.	PUNE
2964.	VARROC POLYMERS PVT. LTD.	GHAZIABAD
2965.	VARROC POLYMERS PVT. LTD.	PUNE
2966.	VASTUSTAR TRADING PVT. LTD.	NEW DELHI
2967.	VE COMMERCIAL VEHICLES LTD.	INDORE
2968.	VE COMMERCIAL VEHICLES LTD.	LUCKNOW
2969.	VEC OIL & GAS CONSULTANTS	AL-KHUWAIR
2970.	VEDAMS SOFTWARE SOLUTIONS INDIA PVT. LTD.	HYDERABAD
2971.	VEDANTA LTD.	SANQUELIM
2972.	VEDNAG RADIO TECHNOLOGY PVT. LTD.	HYDERABAD
2973.	VEGE MOTORS	NEW DELHI
2974.	VELOSI LLC	HAMRIYA
2975.	VELOSI LLC	MUSCAT
2976.	VELOSI LLC	SULLIA
2977.	VENAIR	CHENNAI
2978.	VENGALA ENGINEERING DESIGN SERVICES	BENGALURU
2979.	VENTURE GULF ENGINEERING W.L.L	DOHA
2980.	VERIFONE INDIA TECHNOLOGY PVT. LTD.	BENGALURU
2981.	VERIZON DATA SERVICES INDIA PVT. LTD.	CHENNAI
2982.	VERIZON DATA SERVICES INDIA PVT. LTD.	DINDIGUL
2983.	VERIZON DATA SERVICES INDIA PVT. LTD.	HYDERABAD
2984.	VERIZON DATA SERVICES INDIA PVT. LTD.	THENI

2985.	VERIZON INC	NEW DELHI
2986.	VERMEER MIDDLE EAST FZCO	DUBAI
2987.	VERYX TECHNOLOGIES PVT. LTD.	CHENNAI
2988.	VESTAS TECHNOLOGY R & D CHENNAI PVT. LTD.	CHENNAI
2989.	VEVEO INDIA PVT. LTD.	TIPTUR
2990.	VGN INFRA INDIA PVT. LTD.	CHENNAI
2991.	VIABLE IT SOLUTIONS	SUNAM
2992.	VIBHA CORPORATION	NASHIK
2993.	VIDEOCON D2H LTD.	GREATER NOIDA
2994.	VIDYOTTAMA CONSULTANCY SERVICES PVT. LTD.	MUNGER
2995.	VIGNET IT SOLUTIONS PVT. LTD.	NASHIK
2996.	VIKRAM SARABHAI SPACE CENTRE	THIRUVANANTHAPURAM
2997.	VIMSRICONSULTING PVT. LTD.	SECUNDERABAD
2998.	VINFOTECH	TIRUVANNAMALAI
2999.	VINTAGE ENTERPRISE PVT. LTD.	PRATAPGARH
3000.	VIPUL MEDCORP	PUNE
3001.	VIRAJ ENGINEERING COMPANY	NASHIK
3002.	VIRTUSA CONSULTING SERVICES PVT. LTD.	BENGALURU
3003.	VIRTUSA CONSULTING SERVICES PVT. LTD.	HYDERABAD
3004.	VIRTUSA INDIA PVT. LTD.	ARCOT
3005.	VIRTUSA INDIA PVT. LTD.	MEDAK
3006.	VIRTUSA SOFTWARE SERVICES PVT. LTD.	CHENNAI
3007.	VIRTUSA SOFTWARE SERVICES PVT. LTD.	MANAPAKKAM
3008.	VISA INC	BENGALURU
3009.	VISA WORLD WIDE PTE LTD.	SINGAPORE
3010.	VISHAY PRECISION TRANSDUCERS (I) PVT. LTD.	CHENNAI
3011.	VISHWAKARMA INSTITUTE OF MANAGEMENT	PUNE
3012.	VISION INFORMATION TRANSCATION INDIA PVT. LTD.	SECUNDERABAD
3013.	VISMI TECHNOLOGIES PVT. LTD.	CHENNAI
3014.	VISTA AUTOMATION	DUBAI
3015.	VISTA INFOSYSTEMS	CHENNAI
3016.	VISTEON AUTOMOTIVE SYSTEMS INDIA PVT. LTD.	AHMEDABAD
3017.	VISTEON AUTOMOTIVE SYSTEMS INDIA PVT. LTD.	CHENGALPET
3018.	VISTEON AUTOMOTIVE SYSTEMS INDIA PVT. LTD.	CHENNAI
3019.	VISTEON AUTOMOTIVE SYSTEMS INDIA PVT. LTD.	COIMBATORE
3020.	VISTEON TECHNICAL AND SERVICES CENTRE PVT. LTD.	CHENNAI
3021.	VISUAL IQ TECHNO SERVICES INDIA PVT. LTD.	COCHIN
3022.	VISWAMBARA SOFTWARE SYSTEMS	VILLUPURAM
3023.	VITAL WIRES	DELHI
3024.	VIZUAL BUSINESS TOOL PVT. LTD.	CHENNAI
3025.	VMC SYSTEMS LTD.	SECUNDERABAD
3026.	VMWARE INDIA PVT. LTD.	BENGALURU
3027.	VMWARE INDIA PVT. LTD.	PUNE
3028.	VMWARE SOFTWARE INDIA PVT. LTD.	BENGALURU
3029.	VODAFONE INDIA SERVICES PVT. LTD.	PUNE
3030.	VOITH HYDRO PVT. LTD.	NOIDA
3031.	VOITH INDUSTRIAL SERVICES INDIA PVT. LTD.	NANDED
3032.	VOITH PAPER FABRICS INDIA LTD.	FARIDABAD
3033.	VOITH PAPER FABRICS INDIA LTD.	KONNAGAR

3034.	VOLITION LABS LLP	MUMBAI
3035.	VOLKSWAGEN INDIA PVT. LTD.	PUNE
3036.	VOLTAS LTD.	DOHA
3037.	VOLVO EICHER COMMERCIAL VEHICLE LTD.	YAMUNANAGAR
3038.	VOLVO INDIA PVT. LTD.	BENGALURU
3039.	VOLVO INDIA PVT. LTD.	COIMBATORE
3040.	VOLVO INDIA PVT. LTD.	PRODDATUR
3041.	VSERV BUSINESS SOLUTIONS PVT. LTD.	KARNAL
3042.	VSPLASH TECHLABS PVT. LTD.	HYDERABAD
3043.	VXL INSTRUMENTS LTD.	BENGALURU
3044.	W S ATKINS & PARTNER OVERSEAS	ABU DHABI
3045.	WABCO INDIA LTD.	CHENNAI
3046.	WABCO INDIA LTD.	KANCHIPURAM
3047.	WABCO INDIA LTD.	TRICHY
3048.	WALMART GLOBAL TECHNOLOGY SERVICES	BENGALURU
3049.	WARTSILA GULF LLC	DUBAI
3050.	WARTSILA INDIA LTD.	VIRUDHUNAGAR
3051.	WASCO ENGINEERING INTERNATIONAL LTD.	DUBAI
3052.	WAVEAXIS TECHNOLOGIES PVT. LTD.	DINDIGUL
3053.	WEATHERFORD ENGINEERED SYSTEM SUPPORT	MUMBAI
3054.	WEBRAINS SOLUTIONS PVT. LTD.	BHUBANESWAR
3055.	WEG INDUSTRIES INDIA PVT.LTD.	HOSUR
3056.	WEIR ENGINEERING SERVICES COMPANY	MADURAI
3057.	WEIR MINERALS INDIA PVT. LTD.	BENGALURU
3058.	WELLPOINT INC.	GLEN ALLEN
3059.	WELLS FARGO INDIA SOLUTIONS PVT. LTD.	BENGALURU
3060.	WELLS FARGO INDIA SOLUTIONS PVT. LTD.	HYDERABAD
3061.	WELLS FARGO INDIA SOLUTIONS PVT. LTD.	SECUNDERABAD
3062.	WELLSPRING HEALTHCARE PVT. LTD.	MUMBAI
3063.	WHEELS INDIA LTD.	CHENNAI
3064.	WHIRLPOOL OF INDIA LTD.	PUNE
3065.	WHITECROSS HEALTH INITIATIVES PVT. LTD.	BENGALURU
3066.	WIELAND METALS SINGAPORE PTE LTD.	SINGAPORE
3067.	WILLIAM HARE INDIA PVT. LTD.	BENGALURU
3068.	WILLIAMS CONTROLS IND. LTD.	PUNE
3069.	WINCOR NIXDORF PTE. LTD.	CHOA CHU KANG
3070.	WINGIFY SOFTWARE PVT. LTD.	NEW DELHI
3071.	WINSHUTTLE SOFTWARE INDIA PVT. LTD.	CHANDIGARH
3072.	WIPRO ENTERPRICES LTD.	CHEYYAR
3073.	WIPRO ENTERPRISES LTD.	VELLORE
3074.	WIPRO GE HEALTHCARE PVT. LTD.	BENGALURU
3075.	WIPRO INFOTECH PVT. LTD.	BENGALURU
3076.	WIPRO INFOTECH PVT. LTD.	MYSORE
3077.	WIPRO LTD.	BENGALURU
3078.	WIPRO LTD.	CHENNAI
3079.	WIPRO LTD.	MANDYA
3080.	WIPRO TECHNOLOGIES LTD.	BENGALURU
3081.	WIPRO TECHNOLOGIES LTD.	CHENNAI
3082.	WIPRO TECHNOLOGIES LTD.	DELHI



3083.	WIPRO TECHNOLOGIES LTD.	DINDIGUL
3084.	WIPRO TECHNOLOGIES LTD.	GREATER NOIDA
3085.	WIPRO TECHNOLOGIES LTD.	KANCHIPURAM
3086.	WIPRO TECHNOLOGIES LTD.	TIRUPPUR
3087.	WIRECARD SINGAPORE PTE. LTD.	SINGAPORE
3088.	WITTUR ELEVATOR COMPONENTS INDIA PVT. LTD.	THIRUVALLUR
3089.	WITTYBEE TECHNOLOGIES LTD.	AHMEDABAD
3090.	WME CONSULTANTS	DUBAI
3091.	WNS GLOBAL SERVICES PVT. LTD.	GURGAON
3092.	WNS GLOBAL SERVICES PVT. LTD.	THANE
3093.	WOCKHARDT HOSPITALS LTD.	HYDERABAD
3094.	WOCKHARDT LTD.	AURANGABAD
3095.	WORLEY PARSONS ENGINEERING CONSULTING CO	ABU DHABI
3096.	WORLEY PARSONS ENGINEERING CONSULTING CO	MANGALORE
3097.	WORLEY PARSONS ENGINEERING CONSULTING CO	RATNAGIRI
3098.	WORLEY PARSONS OMAN ENGINEERING LLC	MUSCAT
3099.	WORLEY PARSONS OMAN ENGINEERING LLC	VISAKHAPATNAM
3100.	WRIGLEY INDIA PVT. LTD.	BENGALURU
3101.	WS ATKINS & PARTNERS OVERSEAS	ABU DHABI
3102.	WS ATKINS & PARTNERS OVERSEAS	SHARJAH
3103.	WSP   PARSONS BRINCKERHOFF	ALAPPUZHA
3104.	WYSKI ENGINEERING & TECHNOLOGY PVT. LTD.	DARBHANGA
3105.	XCHANGING SOLUTIONS LTD.	BENGALURU
3106.	XENTO SYSTEMS	PUNE
3107.	XEROX BUSINESS SERVICES INDIA PVT. LTD.	NOIDA
3108.	XEROX SERVICES	NEW DELHI
3109.	XEROX SERVICES	TRIVANDRUM
3110.	XILINX INDIA TECHNOLOGY SERVICES LTD.	HYDERABAD
3111.	XOME SERVICES INDIA PVT. LTD.	CHENNAI
3112.	XORAIL LLC	BENGALURU
3113.	XORIENT SOLUTIONS PVT. LTD.	PUNE
3114.	XYLEM WATER SOLUTIONS INDIA PVT. LTD.	VADODARA
3115.	YAHOO SOFTWARE DEVELOPMENT INDIA PVT. LTD.	BENGALURU
3116.	YAHOO SOFTWARE DEVELOPMENT INDIA PVT. LTD.	GWALIOR
3117.	YASHODA HOSPITALS	HYDERABAD
3118.	YATRA ONLINE PVT. LTD.	HYDERABAD
3119.	YAZAKI WIRING TECHNOLOGIES INDIA PVT. LTD.	CHENNAI
3120.	YAZAKI WIRING TECHNOLOGIES INDIA PVT. LTD.	KOTTAYAM
3121.	YAZAKI WIRING TECHNOLOGIES INDIA PVT. LTD.	PUNE
3122.	YOKOGAWA IA TECHNOLOGIES INDIA PVT. LTD.	BENGALURU
3123.	YSC ENGINEERING SERVICE PVT.LTD.	THIRUVALLA
3124.	Z S ASSOCIATES	NEW DELHI
3125.	ZADCO	BENGALURU
3126.	ZAFIN LABS	NAGERCOIL
3127.	ZALONI TECHNOLOGIES LTD.	GUWAHATI
3128.	ZAMIL AIRCONDITIONING AND REFRIGERATION	DAMMAM
3129.	ZAMIL STEEL INDUSTRIES	RAS AL KHAIMAH
3130.	ZAPBUILD TECHNOLOGIES PVT. LTD.	MOHALI
3131.	ZEBRA TECHNOLOGIES	BENGALURU

3132.	ZEN TECHNOLOGIES LTD.	HYDERABAD
3133.	ZENERICA INFOSOLUTIONS PVT. LTD.	DELHI
3134.	ZENSAR TECHNOLOGIES LTD.	PUNE
3135.	ZEUS SYSTEMS	TAMILNADU
3136.	ZF HERO CHASSIS SYSTEMS PVT. LTD.	CHENNAI
3137.	ZF INDIA PVT. LTD.	PUNE
3138.	ZF LENKSYSTEME INDIA PVT. LTD.	PUNE
3139.	ZF LENKSYSTEME INDIA PVT. LTD.	SATARA
3140.	ZILLION INFO TECH SOLUTION PVT. LTD.	ABUDHABI
3141.	ZINGMOBILE PTE LTD.	GREATER NOIDA
3142.	ZOHO CORPORATION PVT. LTD.	CALICUT
3143.	ZOHO CORPORATION PVT. LTD.	CHENNAI
3144.	ZOHO CORPORATION PVT. LTD.	COIMBATORE
3145.	ZS ASSOCIATES INDIA PVT. LTD.	GURGAON
3146.	ZUARI CEMENT LTD.	KADAPA
3147.	ZUTI ENGINEERING SOLUTIONS	PUNE
3148.	ZYDUS HOSPITALS & RESEARCH PVT. LTD.	AHMEDABAD
3149.	ZYME SOLUTIONS PVT. LTD.	BENGALURU

**LIST OF PROJECT WORK SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED LEARNING PROGRAMMES IN THE YEAR 2015**

**B.S. (Engineering Technology)**

1. A FEASIBILITY STUDY ON PROJECT PLANNING, PROJECT APPRAISAL, PROJECT FINANCING & PROJECT IMPLEMENTATION
2. A QUALITATIVE STUDY ON APPLICATION OF SCM TECHNIQUES ON PT&D UAE PROJECTS
3. A STUDY OF ALTERNATE LOCATION OF WAREHOUSE AND ITS IMPACT ON CUSTOMER SERVICE AND BUSINESS IMPROVEMENT
4. A SUSTAINABLE HOUSE DESIGN SUITABLE FOR A SMALL HOUSE PLOT
5. ADVANCE COMPOSITE MATERIALS & COMPOSITE REPAIRS OF AIRCRAFT STRUCTURES
6. ADVANCE HYDRAULIC SYSTEM & APPLICATION DEVELOPEMENT FOR RADIAL DAM GATE
7. ADVANCED LOAD-SHEDDING SCHEME USING IEC 61850 TECHNOLOGY
8. AIR CLEANER MOUNTING DESIGN FOR TRACK TYPE TRACTOR
9. AL AIN- AL NAHYAN MASJED PROJECT 3D MODEL DEVELOPMENT
10. ALARM MANAGEMENT SYSTEM
11. ALTERNATIVE COMPONENT DEVELOPMENT FOR VARIABLE FREQUENCY DRIVES USED IN WIND TURBINE PITCH CONTROL
12. ALTERNATOR AIR GAP MEASURING
13. AN EFFORT TO APPLY TIME STUDY TO IMPROVE THE PRODUCTIVITY IN CYCLE ASSEMBLE LINE
14. ANALAYSIS AND IMPROVE WELDING QUALITY
15. ANALYSIS OF ACCIDENT PROBABILITY IN CONSTRUCTION FIELD AND PREVENTIVE MEASURES.
16. ANALYSIS OF CONTROL METHODS FOR OPTIMIZED EMISSION CONTROL IN CI ENGINES
17. ANALYSIS OF THE DISTRIBUTION OF INTERMETALLIC PARTICLES AND GRAIN SIZE IN AA6063 ALUMINIUM ALLOY
18. ANALYZING AND IMPROVEMENT OF CONSTRUCTION METHODOLOGY OF OFFSHORE MODULES
19. ARC FLASH DETECTOR USING FIBER OPTIC SENSOR
20. ARC FLASH PROTECTION SYSTEM FOR HV SWITCHGEAR AND CONTROL GEAR
21. ASSESSMENT OF MARKET POTENTIAL AND PREPARATION OF CAPEX PROPOSAL OF NEW PROJECT - MICROPOROUS INSULATION
22. AUTOMATIC LEVEL CROSSING IN RAILWAYS
23. AUTOMATIC MATERIAL HANDLING UNIT
24. AUTOMATIC POWER FACTOR CORRECTION
25. AUTOMATIC VACUUMING & OIL FILLING STATION
26. AUTOMATION BASED WATER DISTRIBUTION NETWORK
27. AUTOMATION BASED WATER TREATMENT PLANT
28. AUTOMATION CONTROL FOR BLOWN FILM LINE
29. AUTOMATION OF HIGH PRESSURE BY PASS VALVE IN THERMAL POWER PLANT USING PIC 16F877A
30. AUTOMATION OF SHOTBLASTING MACHINE WITH ABB ROBOT
31. AUTOMATION OF TERMINAL CUTTING PROCESS
32. AUTOMATION SYSTEM & ITS APPLICATION IN PROCESS PLANT
33. AUTOMOTIVE INTERIOR CAD PROJECT MANAGEMENT
34. BANDWIDTH OPTIMIZATION IN OPTICAL FIBER NETWORK
35. BLOWING AGENT CONVERSION FOR PU FOAM INSULATION IN DOMESTIC REFRIGERATOR
36. BOILER FEED WATER PUMP AND TURBINE INTERMITTENT VIBRATIONANALYSIS AND RECTIFICATION
37. BUILDING AUTOMATION FOR ENERGY MANAGEMENT
38. BUSINESS STRATEGY FOR NEW VENTURE
39. CAD / CAE APPLICATION IN DESIGNING AND MANUFACTURING OF TRUCK MUD GUARD
40. CAM IMPLEMENTATION IN MACHINE SHOP
41. CAPACITY IMPROVEMENT & BOTTLE NECK CYCLE TIME REDUCTION (NEW PRODUCT DEVELOPMENT)
42. CAPM - CAPACITY AVAILABILITY & PLANNING MANAGEMENT
43. CAPTURE OF CO<sub>2</sub> BY METAL ORGANIC FRAME WORKS & IONIC LIQUID.
44. CASE STUDY ON PROJECT ASSIGNMENT SUPPORT GROUPS
45. CASE STUDY: SAFETY, DRIVER COMFORD, PERFORMANCE FEATURES OF EUROPEAN MINING TIPPER & ITS IMPACT ON OVERALL MINE SAFETY & PRODUCTIVITY.

46. CHILLER PLANT AUTOMATION
47. CNC CONTROLLER IN PROGRAMMABLE LOGIC CONTROLLER (PLC)
48. COKE OVEN BATTERY CONSTRUCTION AND COKE PRODUCTION
49. COMPARISON OF VARIOUS SHAFT ALIGNMENT TECHNIQUES USED IN TURBOMACHINERY
50. COMPRESSED AIR HEATING DEVICE TO GET SATURATED DRY AIR
51. COMPUTER BASED SAFETY MANAGEMENT FOR CARRY OUT MAINTANANCE WORK ON COMBINED CYCLE POWER PLANT
52. CONCEPT AND DESIGN OF NOVEL MODULAR ARCHITECTURE OF BUS STRUCTURE
53. CONFINED SPACE
54. CONSEQUENCE CRITICALITY ANALYSIS ON THE PIPE LAY VESSEL CASTORO OTTO ENGINE DEPARTMENT
55. CONSUMPTION OF NON-MOVING DISTANCE PIECES
56. CONTINUOUS EMISSION MONITORING SYSTEM (CEMS) UPGRADE PROJECT TO ACHIEVE COMPLIANCE WITH US EPA 40CFR PART 60
57. CONTROL CENTER FOR ELECTRICAL SUBSTATIONS
58. CONTROLLED EMERGENCY PARKING BRAKE RELEASING FOR SAFE TOWING FUNCTION IN DUMPER
59. CONTROLLING & COMPENSATING THE THERMAL EXPANSION OF RAM IN CNC HORIZONTAL BORING MACHINE
60. CONVERSION TIME RDUCTION IN CIGARETTE MAKING MACHINE
61. CONVERTING BATCH PRODUCTION TO LINE PRODUCTION CONCEPT FOR ASSEMBLING ELEVATOR DOOR MECHANISM
62. CONVEYOR LUBRICATION SYSTEM
63. COST AND TIME SAVING ON TELECOM FTTH CONNECTIVITY BY IMPLEMENTING MICRO DUCT SYSTEM
64. COST OPTIMIZATION FOR FOAM DISPATCH FROM BANGALORE TO CHENNAI THROUGH OPERATION RESEARCH METHOD
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70. CRITICAL OUT OF SEQUENCE INSTALLATION
71. CUSTOMER COMPLAINT REDUCTION BY IMPROVING SERVICE REPAIR QUALITY PROCESS
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75. DC POWER SUPPLY 12/18 VOLTS 2 AMPS
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77. DEFECT REDUCTION IN RAISED FACE ON VALVE BODIES
78. DESIGN & DEVELOP ENGINE HISTORY DASHBOARD FOR ENGINE BUILD HISTORY RETRIEVAL & ANALYSIS
79. DESIGN & DEVELOP SWING CIRCUIT FOR 20T TRACKED EXCAVATOR
80. DESIGN A PROCESS FOR ENGINE DATAPLATE PRINTING.
81. DESIGN AND BUILD OF THERMAL ENERGY STORAGE TANK FOR CHILLED WATER
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84. DESIGN AND FABRICATION OF BIO MASS GASIFIER
85. DESIGN AND FABRICATION OF SNAP RING PRESS
86. DESIGN AND IMPLEMENTATION OF INFRASTRUCTURE FOR 750KW DATA CENTER
87. DESIGN AND OPTIMIZATION OF ENGINE SIDE MOUNTING BRACKETS
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89. DESIGN AND OPTIMIZATION OF SUBSTATION PROTECTION RELAY PANELS USING NUMERICAL IEDS
90. DESIGN AND STATIC ANALYSIS OF LEAF SPRING
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228. NEW PRODUCT DEVELOPMENT & SUPPLY OF 8<sup>1/2</sup> CLUTCHES FOR 12HP GARDEN TRACTORS
229. NEW PRODUCT DEVELOPMENT <sup>1</sup>/<sub>2</sub>TRACTOR ASSEMBLY LINE CONVEYOR SKID FIXTURE DESIGN & IMPLEMENTATION FOR ID-33 NDL TRACTOR<sup>1</sup>/<sub>2</sub>
230. NEW PRODUCT LAUNCH STRATEGY FOR C&S ELECTRIC PROTECTION RELAY SERIES <sup>1</sup>/<sub>2</sub>CEZEN<sup>1</sup>/<sub>2</sub>.
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- RESULTING IN EFFECTIVE UTILIZATION OF MACHINES AND MEN
365. TO IMPROVE RELIABILITY OF TE -245 TEST BENCH USED FOR TESTING UNA-82 OF JAGUAR FIGHTER AIRCRAFT
366. TO IMPROVE THE CLAMPING PROCESS OF ENGINE PLATEN IN HOT TEST CELL.
367. TO IMPROVE THE RELIABILITY OF HYDRODYNAMIC BEARINGS BY STUDYING THE EFFECT OF HEAT ON OIL PROPERTY
368. TO INCREASE THE DIRECT PASS PERCENTAGE OF 160IL BSIII ENGINE PRODUCTION TO VEHICLE ASSEMBLY THROUGH ENGINE TESTING
369. TO INCREASE THE SPARE PARTS BUSINESS FROM NEW CUSTOMERS BY UTILIZING SIX SIGMA QUALITY TOOLS
370. TO STUDY DEODORIZED FIELD CONDENSATE (DFC) UNIT
371. TRACK TYPE TRACTOR ACCESS SYSTEM DESIGN
372. TRIAC DIMMABLE 20WATTS LED DRIVER SMPS
373. UPGRADE OF VIBRATION MONITORING SYSTEM
374. USING VERTICAL RAISER GRAVITY FLOW WASTE WATER TO PRODUCE ELECTRIC ENERGY
375. UTILIZATION OF HEAVY PRESSURE PART MANUFACTURING FACILITY FOR BOILER MISCELLANEOUS PIPING LINE MANUFACTURING
376. VAPOUR RECOVERY SYSTEM
377. VARIOUS PROCESS IMPROVEMENTS IN SUPPLY CHAIN IN CURRENT WORKING ORGANIZATION
378. V-GROOVE INSERTER
379. VIRTUAL TEST BENCH
380. VISION BASED AUTOMOTIVE INSTRUMENT CLUSTER CALIBRATION & TESTING SYSTEM
381. VISUAL KANBAN SYSTEM FOR MATERIAL FEEDING TO THE NACELLE ASSEMBLY LINE IN WIND INDUSTRIES
382. WARRANTY CONTROL & PROCESS MANAGEMENT AND FAULT ESCALATION MANAGEMENT
383. WATCH CASE CENTER COST REDUCTION THROUGH AUTOMATION
384. WATER PURIFIER OPPORTUNITY AT GODREJ APPLIANCE SERVICE, MUMBAI BRANCH
385. WHEEL DISC MANUFACTURING IN AUTO COMPONENT
386. WIRELESS COMMUNICATION BETWEEN PROGRAMMABLE CONTROLLER AND HMI
387. WIRELESS POWER TRANSMISSION
388. WORKING CAPITAL MANAGEMENT
389. ZIGBEE BASED WIRELESS END OF LINE TESTING SYSTEM ANDROCALLER: MOBILE CTI

**B.S. (INFORMATION SYSTEMS)**

390. DESIGNING & BUILDING NEXT-GEN PRIVATE CLOUD FOR ORACLE @CUSTOMER
391. DESIGNING THE NETWORK AND PERFORMANCE ANALYSIS USING SUBNETTING
392. DEVELOPMENT OF PCB PLANNER
393. FILE SHARE REPORT GENERATION AND SECURITY GROUP MEMBERÄ€™S EXTRACTION
394. GSM BASED HOME AUTOMATION SYSTEM
395. KEYWORD DRIVEN E2E TEST AUTOMATION FOR WSA SYSTEMS
396. NETWORK RESILIENCY FOR MULTI CONTROLLER RADIO NETWORK CONTROLLER (MCRNC)
397. PUBLIC CLOUD SECURITY SOLUTION FOR INFRASTRUCTURE AS A SERVICE
398. ROBUST CORRELATION OF ENCRYPTED ATTACK TRAFFIC THOROUGH STEPPING STONES BY FLOW WATERMARKING
399. RUNNING WINDOWS BASED APPLICATIONS IN OPEN SOURCE ENVIRONMENT AND INTERNETWORKING DIFFERENT LOCATIONS BY USING LAN EXTENSION OVER WAN.

**LIST OF DISSERTATION SUBMITTED BY STUDENTS UNDER THE WORK INTEGRATED  
LEARNING PROGRAMMES IN THE YEAR 2015**

**M.S. (CONSULTANCY MANAGEMENT)**

1. A STUDY ON CONCEPTUALIZING THE BENEFITS FOR A PROPOSED UNDERTAKING OF AN ENTERPRISE WIDE BUSINESS INFORMATION SYSTEMS IN THE INDIAN CONTEXT
2. A STUDY ON QUALITY MANAGEMENT AND PROCESS IMPROVEMENT
3. ANALYSIS OF PPP MODEL IN ROAD SECTOR
4. ANALYSIS OF TEST PROCESSES FOR INCREASED EFFECTIVENESS
5. ANALYSIS OF WORKING CAPITAL MANAGEMENT IN M/S.TATA CONSULTANCY SERVICES
6. APPLICATION DELIVERY EXCELLENCE & GOVERNANCE
7. ASSESSING GLOBAL MARKET POTENTIAL OF SMART GRIDS
8. AUTOMATED DECISION SUPPORT SYSTEM
9. AUTOMATION OF IAAS AND CONTROL PLATFORM
10. BUSINESS INTELLIGENCE REPORTS USING SOCIAL MEDIA
11. CASE STUDY ON TRANSFORMATION FROM LEGACY APPLICATIONS TO ERP FOR AUTOMOBILE COMPANY IN EUROPE
12. CHALLENGES AND OPPORTUNITIES FACED BY THE NATURAL GAS SECTOR IN INDIA
13. CHALLENGES IN SAAS IMPLEMENTATION PROJECTS WHILE IMPLEMENTING ACROSS INDUSTRIES AND WITH CROSS-CULTURAL TEAMS
14. CHANGING TRENDS AND CHALLENGES IN THE MANAGED SERVICES -TELECOM SERVICE PROVIDERS - INDIA
15. COMMERCIAL MOBILE APPLICATION FOR TARGETED AND COLLABORATIVE SHOPPING
16. COMPETITIVE INTELLIGENCE USING INTERNET OF THINGS (IOT)
17. COMPETITIVE STRATEGIC ANALYSIS AND STRATEGY FORMULATION IN IT SERVICE SECTOR
18. COMPETITIVE STRATEGY ANALYSIS AND DEVELOP FUTURE COURSE OF ACTION FOR CIENA CORPORATION
19. CONSULTANCY PRACTICE IN CRM STRATEGIC IMPLEMENTATION
20. CONTRACT LAWS ,CLAIMS AND DISPUTE RESOLUTION ISSUES IN INTERNATIONAL PROJECTS (WITH REFERENCE TO GUIDELINES TO INDIAN CONTRACTORS FOR INTERNATIONAL CONTRACTING)
21. CORE BANKING SYSTEM IMPLEMENTATION: PROJECT MANAGEMENT ASPECTS IN AN IT ORGANIZATION
22. COST OPTIMIZED IT INFRASTRUCTURE AS A SERVICE
23. CROSS SKILL OF EMPLOYEES - KM CONSULTING
24. DATA ANALYSIS OF AUDIT SYSTEMS OF INTUIT
25. DATA CENTRE MIGRATION METHODOLOGY
26. DATA MINING TECHNIQUES FOR AFFINITY ANALYSIS
27. DESIGN AND IMPLEMENTATION OF MIS-CRM FOR DISTRIBUTION BUSINESSES IN BOP MARKET
28. DEVELOPING AND ESTABLISHING "PROJECT MANAGEMENT PROCESSES AS NORMAL PRACTICE" IN START-UP COMPANIES
29. DEVELOPMENT OF A MATURITY MODEL FOR A GLOBAL ENGINEERING CENTER
30. E BUSINESS , PAST ,PRESENT AND FUTURE OF E BUSINESS IN INDIA, CUSTOMER BEHAVIOR, ROLE OF CONSULTANT
31. EFFECTIVE INVENTORY CONTROL MANAGEMENT AND ITS IMPACT ON CUSTOMER SATISFACTION
32. EFFICIENT & EFFECTIVE REVENUE MANAGEMENT
33. EMPIRICAL STUDY ON BENEFITS AND PROCESSES BY ADOPTING ITIL BEST PRACTICES INTO SAP ENVIRONMENT, FOR TATA TECHNOLOGIES DOMESTIC ERP CUSTOMERS
34. ENHANCEMENT OF QUALITY IN CONSULTING ORGANIZATION
35. ENTERPRISE IT SECURITY RISK MANAGEMENT
36. ENTERPRISE MOBILITY SOLUTION FOR BUSINESS INTELLIGENCE
37. ENTERPRISE RESOURCE PLANNING IN AUSY TECHNOLOGIES
38. ESTABLISHING AN EFFICIENT SERVICE DELIVERY MODEL IN PEOPLE MOBILITY FUNCTION IN ACCENTURE UAE
39. EXPLORE INTERNATIONAL BUSINESS ENVIRONMENT IN QUEBEC, CANADA
40. FEASIBILITY STUDY OF AGILE PRACTICES IN SOFTWARE DEVELOPMENT FOR PHILIPS SMART TVS
41. FINANCIAL INCLUSION OF UNBANKED MASSES
42. FRONT END ENGINEERING DESIGN (FEED) TO ASSESS RISK AND CALCULATE RESOURCE

- COMMITMENT.
43. GATEWAY TO PAYMENT TRANSFORMATION IN LEADING AUTO OEM
  44. GLOBAL COMPENSATION MARKET SURVEY TOOL
  45. GREEN MARKETING AND ITS IMPACT ON BRAND EQUITY IN REAL ESTATE SECTOR
  46. HIMSHAKTHI PROJECT
  47. HOW IAAS IS HELPING SMALL AND MEDIUM SIZE COMPANIES TO USE NEW TECHNOLOGIES TO COMPETE WITH MARKET LEADERS
  48. HOW TO BREAK AWAY FROM CONVENTIONAL CONSULTING METHODS AND ADAPT TO NEW AGE CLOUD CONSULTING
  49. HOW TO RUN AND SETUP A PMO
  50. IDENTIFY SOME POSSIBLE WASTES IN IT PROJECT IMPLEMENTATION AND SUGGEST SOME PROCESSES TO ELIMINATE THEM
  51. IMPACT OF OIL PRICES ON INDIAN STOCK MARKET RETURNS
  52. IMPACT OF PROJECT MANAGEMENT STANDARDS IN PRIVATE SECTOR COMPANIES IN INDIA
  53. IMPACT OF TOTAL QUALITY MANAGEMENT
  54. IMPLEMENTATION OF ONLINE TENDERING AND AUCTION SOLUTION
  55. IMPLEMENTATION OF PERFORMANCE MANAGEMENT SYSTEM (PMS) & GOAL SETTING FOR YEAR 2015-2016, ECOTECH IT SOLUTIONS, PUNE
  56. IMPLEMENTATION OF SYSTEM ENGINEERING STUDY BY USING ETAP 12.6.0 FOR KARBALA REFINERY PROJECT, IRAQ
  57. IMPROVING EFFECTIVENESS OF VENDOR MANAGEMENT IN ENGINEERING SERVICES
  58. IMPROVING QUALITY AND PRODUCTIVITY THROUGH KM
  59. IMPROVISATION OF PROFESSIONAL PRACTICES IN SCM (SUPPLY CHAIN MANAGEMENT) IN EMERGING MARKETS, ESPECIALLY IN INDIA
  60. INDIA INSURANCE SECTOR: HOW IT CONSULTING CAN BENEFIT FROM GROWTH IN INSURANCE VERTICAL AND ITS ROLE AS CATALYST TO DRIVE INSURANCE BUSINESS IN INDIA
  61. INTEGRATION IN ERP USING PROJECT MANAGEMENT CONCEPTS
  62. INVESTMENT AND SAVINGS OPTIONS IN INDIAN INVESTMENT MARKET FOR NRIS IN UAE: A STUDY
  63. IT INFRASTRUCTURE SETUP IN CHANGING BUSINESS ENVIRONMENT AND REVAMP PROJECT FRAMEWORK
  64. KEY SUCCESS FACTORS FOR SERVICE TRANSITION IN IT INFRASTRUCTURE OUTSOURCING PROJECTS
  65. KNOWLEDGE BASED DESIGN OF SOFTWARE TESTING SYSTEM FRAMEWORK
  66. KNOWLEDGE MANAGEMENT AT REACHLOCAL
  67. KNOWLEDGE MANAGEMENT FRAMEWORK
  68. KNOWLEDGE MANAGEMENT IMPLEMENTATION
  69. KNOWLEDGE TRANSFER IN ENGINEERING CONSULTING FIRM
  70. LEAN IMPLEMENTATION FOR PROBLEM REMEDIATION
  71. LEVERAGING ANALYTICS IN MANAGEMENT DECISION MAKING
  72. MANAGING A CONSULTING SERVICES FIRM
  73. MANAGING DEVELOPMENT PROJECT OF A REMOTE SENSING WIRELESS DEVICE TO GENERATE CROP ADVISORY FOR FARMERS.
  74. OVERVIEW OF COURIER INDUSTRY IN INDIA - MARKET STUDY ON DRIVERS AND CHALLENGES
  75. PREDICTIVE ANALYTICS DRIVEN BY DATA MINING
  76. PRIVATE EQUITY IN INDIAN MARKET
  77. PROACTIVE CAPACITY MANAGEMENT IN BANKING
  78. PROCESS SHEET GENERATION THROUGH SAP ECC 6.0
  79. PRODUCTIVITY ACCELERATORS THROUGH AUTOMATION
  80. PROGRESS AND PROSPECTS OF EVENT MANAGEMENT @ NLAG
  81. PROJECT MANAGEMENT AND DELIVERY CHALLENGES IN R&D PROJECTS
  82. PROJECT MANAGEMENT IN STRUCTURAL STEEL FABRICATION & ERECTION
  83. PROJECT MANAGING IT CONSULTING PROJECT IN MIDDLE EAST & ROLE OF A PROJECT MANAGER
  84. PROVIDING EFFECTIVE MARKETING SOLUTION FOR BPM ADOPTION
  85. QUALITY IMPLEMENTATION AND MONITORING ON PETROFAC KNPC CLEAN FUEL PROJECTS (2020)
  86. REIMAGINING MASTER DATA MANAGEMENT FOR BETTER CUSTOMER INSIGHT
  87. REPLATFORMING TELECOM APPLICATIONS FOR SCALABILITY AND ENHANCED PERFORMANCE
  88. RESEARCH & DESIGN IN DEVELOPING OPERATIONAL STRATEGY FOR IMPLEMENTING CEM
  89. RISK MITIGATION USING GAME THEORY IN SOFTWARE PROJECTS
  90. ROLE OF INFORMATION TECHNOLOGY IN STRATEGIC MANAGEMENT
  91. ROLE OF MONITORING & EVALUATION (M&E) IN PROJECT MANAGEMENT

92. SCOPE OF PREMIUM PROFESSIONAL COSMETICS PRODUCTS IN INDIA
93. SERVICE DELIVERY MODELS FOR REMOTE CONSULTING
94. SMART CITY ICT MASTER PLAN AND FRAMEWORK FOR INDIA
95. STRATEGIC MANAGEMENT & BUSINESS POLICY FOR E&I PROJECTS SECTOR IN DOMESTIC MARKET
96. STRATEGIC PLAN AND OFFERING FOR MDM AND EMM SERVICES
97. STRATEGIES TO UTILIZE E-WASTE DUMP FOR CSR
98. STUDY & RECOMMENDATION ON FUTURE BUSINESS STRATEGY FOR TATA TECHNOLOGIES, ENTERPRISE SOLUTION GROUP (ESG) VERTICAL, ERP BUSINESS
99. STUDY ON IMPROVED RISK PERFORMANCE IN OIL & GAS INDUSTRY AFTER IMPLEMENTATION OF ENTERPRISE RISK MANAGEMENT & SIX SIGMA.
100. SUPPLY NETWORK - MODELING AND OPTIMIZATION CONSULTING
101. SYNTHETIC RATING TOOL FOR INITIAL CREDIT ASSESSMENTS BY ENTREPRENEURS FOR BANK LOAN EXPOSURES
102. THE IMPORTANCE OF EVALUATION IN PROJECT MANAGEMENT
103. TO ANALYZE CONSUMER BUYING BEHAVIOR TOWARDS LIFE INSURANCE POLICIES TO STUDY & ANALYSIS'S THE FUTURE PROSPECT OF CRAFT PLUS INDIA AND STUDY THE
104. MARKETING STRATEGIES FROM THE PERSPECTIVE OF STRATEGIC MANAGEMENT & BUSINESS POLICY
105. TRAINING AND EVALUATION PLATFORM
106. TRANSFORMATION OF FREIGHT INVOICE PAYMENT SYSTEM USING BPM
107. TRANSITIONING FROM TRANSACTIONAL TO CONSULTATIVE SELLING
108. USE OF IT & GPS BASED TECHNOLOGY TO ENSURE POWER PRODUCTION AND SUPPLY THROUGH EFFICIENT USE OF NATURAL RESOURCES LIKE COAL
109. USEFULNESS OF SOME IN-HOUSE DEVELOPED PRODUCTS & SERVICES FOR OTHER ORGANIZATIONS
110. USING SOCIAL MEDIA FOR ENTERPRISE KNOWLEDGE SHARING
111. VISUAL IMAGE ENCRYPTION FOR SECURING AUTOMOBILE ORGANIZATION VISUAL INFORMATION

#### **M.S. (MANUFACTURING MANAGEMENT)**

112. A STUDY ON EFFECTIVENESS OF PERFORMANCE MANAGEMENT SYSTEM IN AN ORGANIZATION
113. A STUDY ON EFFECTIVENESS OF EMPLOYEE SAFETY MEASURES IN OUR ORGANIZATION
114. A STUDY ON RELATIONSHIP BETWEEN MANAGEMENT AND EMPLOYEE IN OUR ORGANISATION
115. AGILE MANUFACTURING FOR OEM GEARBOX ASSEMBLY
116. AN ACTIVITY TO REDUCE POINTER CALIBRATION ERROR FROM 3.9% TO 0.5%
117. ANALYZING VARIOUS PROCESSES INVOLVED IN DEVELOPMENT OF A NEW PRODUCT
118. APPLICATION OF INFORMATION TECHNOLOGY IN TRANSFORMING QUALITY MANAGEMENT SYSTEMS IMPLEMENTATIONS
119. APPLICATION OF LEAN PRINCIPLES IN BLACKMER PUMPS & COMPRESSORS MANUFACTURING PROCESS
120. ASSET MANAGEMENT SYSTEM
121. AUTOMATION OF MEASUREMENT SYSTEM IN EXTRUSION MACHINE
122. CAPACITY IMPROVEMENT BY BOTTLENECK MANAGEMENT
123. CAPACITY IMPROVEMENT IN GLAZE FIRING ELECTRICAL BATCH FURNACES
124. CAR SECOND ROW SEAT FLIP ARMREST DESIGN
125. CATERPILLAR BCP PROJECT MANAGEMENT AND EXECUTION
126. COMPETITIVE BENCHMARKING ANALYSIS OF AUTOMOTIVE WINDOW LIFT SWITCHES
127. CONTINUOUSLY IMPROVING THE WELDING QUALITY OF STRUCTURAL STEEL FABRICATION BY MEANS OF STATISTICAL PROCESS CONTROL TOOLS & TECHNIQUES
128. CONTINUOUS FLOW DEPLOYMENT AT FINAL INSPECTION AREA
129. COST REDUCTION ANALYSIS FOR AUTOMOBILE COMPONENTS
130. CUSTOMER FULFILLMENT THROUGH IMPROVING THE DELIVERY EFFICIENCY THROUGH ANALYSIS OF BOTTLENECK AREAS OF MANUFACTURING BY IMPLEMENTATION OF LEAN MANUFACTURING SYSTEMS
131. CYCLE TIME REDUCTION IN BANDO MACHINE
132. DECISION MAKING TOOLS, SKILLS IN PURCHASING AND SUPPLY MANAGEMENT OF MANUFACTURING INDUSTRIES
133. DESIGN AND CUSTOMIZING WAFER LINE MACHINE SINGULATION SYSTEM
134. DESIGN AND DEVELOPMENT OF A NEW INTRANET TOOL TO PROMOTE COMMON CORPORATE CULTURE TO DELIVER QUALITY SERVICE TO DOMAIN CUSTOMER.
135. DESIGN AND DEVELOPMENT OF PISTON GROOVE CHIPS CLEANING METHODS/FIXTURE/MACHINE
136. DESIGN OF STARTER SAFETY RELAY MODULES FOR AUTOMOBILES
137. DESIGN OPTIMIZATION THROUGH TEMPERATURE PREDICTION OF COUPLING ENCLOSURES FOR

- SIEMENS SINGLE SHAFT TURBOCOMPRESSORS
138. DETAILED BENCHMARKING ANALYSIS OF AUTOMOTIVE STEERING COLUMN CONTROL MODULE
  139. DEVELOPMENT OF NEW MODEL COMPRESSOR WITH COST INNOVATION IN 1 DOOR REFRIGERATOR
  140. DEVELOPMENT OF STARTER INLET - A SUB-ASSEMBLY OF AIRCRAFT ENGINE STARTER
  141. EFFECT OF 3D PRINTING IN SUSTAINABLE MANUFACTURING
  142. EFFECT OF CRYOGENIC TREATMENT ON WC-CO
  143. EFFECTIVE INTERNAL PROJECT MANAGEMENT
  144. EFFECTIVE UTILIZATION OF PARTS SUPPLY IN MANUFACTURING MANAGMENT
  145. ENERGY MANAGEMENT
  146. FUNCTIONAL BENCHMARKING ANALYSIS OF AUTOMOTIVE ELECTRONIC STEERING COLUMN LOCKS.
  147. GAS & WATER SUPPRESSION SYSTEM
  148. HEALTH MONITORING AND PROGNOSTICS OF AIRCRAFT SYSTEMS
  149. IDENTIFYING INSTALLATION BASE OF SECONDARY SALES THROUGH CRM
  150. IMPLEMENTATION OF E-PROCUREMENT AND ITS PERFORMANCE EFFECT WITHIN THE MANUFACTURING SECTOR
  151. IMPLEMENTATION OF LEAN PRINCIPLES TO IMPROVE CYCLE TIME OF A PRODUCT IN PRODUCTION MANAGEMENT
  152. IMPLEMENTING TOTAL PRODUCTIVE MAINTENANCE IN OFFSHORE DRILLING SERVICE PROVIDERS TO IMPROVE ITS OPERATIONAL EFFICIENCY LEADING TO BUSINESS EXCELLENCE
  153. IMPROVEMENT IN SERVICE TO SALES THROUGH TOTAL DISTRIBUTION COST OPTIMIZATION
  154. IMPROVEMENT OF PROCESS AND RESOURCES IN MANUFACTURING ENGINEERING
  155. IMPROVING THE OVERALL CYCLE TIME OF DIAPHRAGM PUMP PRODUCTION PROCESS
  156. INVENTORY MANAGEMENT FOR AUTOMATION BUSINESS UNIT OF SCHNEIDER ELECTRIC
  157. JEWELLERY ORNAMENTS MANUFACTURING THROUGH CNC MACHINERIES USING CAD / CAM
  158. LEAD TIME REDUCTION IN ELEMENT BARREL THROUGH CONTINUOUS IMPROVEMENT PROCESS
  159. LEADERSHIP NOVICE TO EXPERT
  160. LEAN MANUFACTURING IMPLEMENTATION IN PET PREFORM AND STRETCH BLOW MOLDING UNIT
  161. LEAN MANUFACTURING WITH SIX SIGMA METHODOLOGY
  162. LUMBER KNOB NOT SMOOTH FUNCTIONING.
  163. MAINTENANCE & SAFETY MEASURES AT COMMON SEA WATER FACILITY
  164. MANUFACTURING AND SUSTAINABILITY
  165. MANUFACTURING SHOP FLOOR PRODUCTION-WORK INSTRUCTION BUSINESS CONTINUITY
  166. MARKET STUDY FOR MODERN KITCHEN APPLIANCES
  167. MARKETING STRATEGIES TO UPTURN GROWTH OF L&T'S ELECTRICAL SYSTEMS BUSINESS IN GULF
  168. MEASUREMENT SYSTEM ANALYSIS FOR CNC VERTICAL LATHE
  169. METHODS TO CONTROL INVENTORY ACCURACY IN WAREHOUSE
  170. MODERN APPROACH IN JEWELLERY INDUSTRY MATERIAL HANDLING - A SCIENTIFIC APPROACH TOWARDS THE GOLD AND DIAMOND JEWELLERY CHILD ITEMS HANDLING
  171. NEW PRODUCT DEVELOPMENT
  172. NEW AGE JEWELLERY MANUFACTURING - A SYSTEMIC APPROACH TO BUILDING NEW JEWELLERY PRODUCTION SYSTEM
  173. NEW PRODUCT DEVELOPMENT OF HYDRO TEST END COVER PLATE USING PRODUCT DESIGN TECHNIQUES
  174. OPERATIONAL EFFICIENCY AND TIME REDUCTION THROUGH EFFECTIVE PROJECT MANAGEMENT
  175. OPTIMIZATION AND SUSTAINABILITY IN PRODUCT DESIGN
  176. OPTIMIZATION OF INVENTORY & LOGISTICS FOR DIRECT/BAILMENT PARTS IN FORD - CHENNAI VEHICLE ASSEMBLY PLANT
  177. OPTIMIZATION OF MATERIAL MOVEMENT THROUGH LEAN CONCEPTS IN ASSEMBLY LINE OF ELECTRICAL SWITCHBOARDS
  178. PREDICTION OF STABILITY LOBE DIAGRAM FOR HIGH SPEED THIN RIB MACHINING
  179. PREVENTION OF LEAKAGES (ALL FLUIDS-AIR, OILS, COOLANT) IN LCVS (LIGHT COMMERCIAL VEHICLES), PRODUCED AT TML DHARWAD & IMPROVING FSOK (FIRST SHOT OK) OF LCV PRODUCTION LINE.
  180. PROCESS CONTROL OF BMW-COMPRESSOR & AIR DRYER LINE VIA TRACEABILITY
  181. PROCESS IMPROVEMENT IN WHEEL SHOP
  182. PRODUCT LINE STRATEGY FOR OPTIDRIVE AMT FOR INDIAN COMMERCIAL VEHICLE MARKET
  183. PRODUCTIVITY IMPROVEMENT IN PLUNGER VALUE STREAM
  184. PRODUCTIVITY IMPROVEMENT THROUGH LPS
  185. PROJECT MANAGEMENT ON DATSUN HEAD LAMP

186. PROJECT MANAGEMENT ON MANUFACTURING AND ASSEMBLY OF BISCUIT SHEETING LINE
187. PROPOSAL FOR DEVELOPING A MANUFACTURING PLANT FOR ASTERIA AEROSPACE
188. QUALITY CONTROL ASSURANCE AND RELIABILITY
189. QUALITY, COST, DELIVERY IMPROVEMENT IN PRODUCTION SYSTEM
190. REDUCTION OF DIMENSION CHANGE OVER TIME USING SMED IN EXTRUSION MACHINE
191. REDUCTION OF INVENTORY THROUGH IMPLEMENTATION OF MILKRUN
192. REDUCTION OF THROUGHPUT TIME IN CAMSHAFT VALUE STREAM BY LEAN MANUFACTURING APPROACH
193. REJECT REDUCTION BY DEVELOPING COMPETENCY FRAMEWORK
194. RENOVATION, MODERNIZATION AND UP-GRADATION OF SEA WATER BASED ELECTRO-CHLORINATION SYSTEM
195. SETUP TIME REDUCTION
196. SOLAR POWER BASED WATER METERING SYSTEMS FOR REMOTE AREA APPLICATIONS
197. STANDARD AND OPTIMIZE THE SUPPLIER PACKING METHOD
198. STANDARD ESTIMATION METHODOLOGY FOR MODELING OF SEAT COMPONENTS
199. STUDY ON USAGE OF NANO MATERIAL FOR INSULATION OF HIGH TEMPERATURE PIPING.
200. SUSTAINABLE MANUFACTURING OF AUTOMOTIVE TYRES
201. SYSTEMATIC APPROACH OF APPLYING DFX PRINCIPLES TO OPTIMIZE THE COST OF THE PRODUCT
202. TO REDUCE DIE CHANGE OVER TIME IN PRESS SHOP (S.M.E.D)
203. VIRTUAL WELD PROCESS PLANNING
204. WIFI CONNECTED DISPENSING ROBOT IN CASE ASSEMBLY TO REDUCE REJECTIONS AND ENHANCE FLEXIBILITY IN MANUFACTURING PROCESS

#### **M.S. (QUALITY MANAGEMENT)**

205. A STUDY OF ORGANIZATIONAL PERFORMANCE: A TRAINING AND INDIVIDUAL PRODUCTIVITY APPROACH IN INDIAN DEFENCE FORCES
206. A STUDY ON EFFECTIVENESS OF LEADERSHIP AT BIOCON LIMITED, BANGALORE.
207. A STUDY ON IMPROVING EFFECTIVENESS OF ORGANIZATION THROUGH TRAINING & DEVELOPMENT
208. A STUDY ON REDUCED CUSTOMER COMPLAINTS THROUGH PRE DISPATCH INSPECTION
209. A STUDY ON THE IMPACT OF TEAM MANAGEMENT ACTIVITIES WITH SPECIAL REFERENCE TO THE PRODUCTIVITY
210. ANALYSIS OF CUSTOMER COMPLAINT BY USING CE (CAUSE & EFFECT) OR FB (FISH BONE) DIAGRAM AS A TQM TOOL TO ACHIEVE BETTER CUSTOMER SATISFACTION: AN ISO 10002:2004 & ISO 9001:2008 PERSPECTIVE.
211. ANALYSIS OF ENGINEERING ISSUES BY USING QUALITY CIRCLE AND OTHER TQM TOOLS FOR IMPROVED PRODUCTIVITY AND EFFECTIVE MANAGEMENT
212. ANALYSIS, ESTIMATE AND ESTABLISH A PROJECT PLAN, SCHEDULE, COST AND RISK ASSESSMENT TO IMPLEMENT A QUALITY CONTROL CIRCLE (A PART OF TQM INITIATIVE) TO ENHANCE PRODUCTIVITY AND REDUCE COST OF POOR QUALITY.
213. APPLIANCE FEATURES SENSORIAL FIXTURE CALIBRATION & MEASUREMENT SYSTEM STUDY
214. APPLICATION OF QUALITY CONTROL TECHNIQUES FOR REDUCING REJECTION RATE OF AGRICULTURAL PLUCKING MACHINE AC301
215. APPLICATION OF SCM PRINCIPLES FOR SSIS-ELECTRONIC INDUSTRY
216. APPLYING AGILE PRACTICES IN SAP APPLICATION MAINTENANCE AND SUPPORT PROJECT
217. APPLYING BUSINESS PROCESS RE-ENGINEERING TO AUTOMATE HUMAN RESOURCE MANAGEMENT PROCESSES IN AN AIR FORCE STATION
218. APPLYING TOTAL QUALITY MANAGEMENT CORE CONCEPTS IN A SMALL SCALE BUSINESS SETUP AT RURAL/ SEMI URBAN AREA TO CONFORM THE VARYING CUSTOMER'S REQUIREMENT
219. ATTRITION CONTROL BY IMPROVING THE STICKINESS FACTOR IN AN ORGANISATION
220. AUTOMATION FRAMEWORK FOR WEB BASED APPLICATIONS
221. BENCH-MARKING OF HIGH VOLTAGE DISCONNECT SWITCH
222. CAD QUALITY IMPROVEMENT
223. CASE STUDY ON BEARING FAILURE IN ROTAVATOR
224. CENTRALISED REAL TIME MONITORING OF MECHANICAL TRANSPORT DEPARTMENT USING INFORMATION TECHNOLOGY AS FORCE MULTIPLIER
225. CISCO NEXUS SWITCHES QUALITY PROCESS IMPROVEMENT - THINK AS CUSTOMER
226. CONTINUAL IMPROVEMENT IN INSTRUMENT MAINTENANCE STRATEGY
227. CONTINUAL SERVICE IMPROVEMENT - 2015 FOR WU (WESTERN UNION)
228. CONTINUOUS IMPROVEMENT THROUGH IMPLEMENTATION OF COST OF POOR QUALITY.
229. CORRELATION AND REGRESSION ANALYSIS OF TBR AUTOMOTIVE TUBE MANUFACTURING
230. CUSTOMER COMPLAINT REDUCTION IN MOTORCYCLES



231. DATA GATHERING AND ANALYSIS THROUGH ONLINE SYSTEMS
232. DESIGNING A MIS SOLUTION FOR VARIOUS PROCESS FOR OPERATIONAL EFFICIENCY AS PART OF END TO END ICT SOLUTION IN ASSESSMENT AND ACCREDITATION CYCLE.
233. DISASTERS MANAGEMENT IN INDIA AND ROLE OF INDIAN AIR FORCE
234. DMAIC APPROACH IN REDUCING INTERNAL PROCESS REJECTIONS
235. EFFECTIVE IMPLEMENTATION OF QUALITY CONTROL AND ASSURANCE ACTIVITIES IN SOFTWARE BANKING PRODUCT
236. ELIMINATE LOW OUTPUT REJECTIONS IN ALTERNATOR ASSEMBLY LINE
237. EMPLOYEE MOTIVATION TECHNIQUES AND ITS IMPACT ON PERFORMANCE
238. ENTERPRISE COUNCIL- 1ITEC1MEASURE
239. ESTIMATION, ANALYSIS AND REDUCE COST OF QUALITY BY USING PROBLEM SOLVING TECHNIQUES
240. EVALUATION & MINIMIZATION OF TIME CONSUMPTION FOR THE ENGINEERING CHANGE ACTIVITY
241. EVALUATION OF MANAGEMENT INFORMATION SYSTEM IN NPCIL
242. FAILURE ANALYSIS AND CONCERN RESOLUTION IN CHASSIS & SUSPENSION OF XYZ VEHICLE
243. FAILURE REDUCTION OF POINT MACHINE
244. FRAMEWORK DESIGN FORMULATION FOR SYSTEMIZING AND IMPROVING QUALITY MANAGEMENT PROCESS IN AGILE SDLC PROCESS
245. IDENTIFY & ANALYZE BUSINESS IMPACTING PROCESS NON COMPLIANCE AND ENSURE COMPLIANCE FOR BEST CUSTOMER SATISFACTION AND IMPROVED BUSINESS.
246. IMPLEMENTATION OF AIA INSURANCE RE-RATES
247. IMPLEMENTATION OF COMPOSITE SKILL AND TRADE STRUCTURE AT AN INDUSTRIAL UNIT IN INDIAN NAVY
248. IMPLEMENTATION OF CONTROL CHARTS IN COMBIFLEX PRODUCTS MEASUREMENT
249. IMPLEMENTATION OF QUALITY CONCEPTS TO REDUCE THE REPAIR RATE IN WELDING USING CRITICAL KPIVS.
250. IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT USING TQM TOOLS AND TECHNIQUES TO THIRD LINE STRUCTURAL REPAIRS ON WESTERN FLEET AIRCRAFT
251. IMPLEMENTING A LEARNING ORGANIZATION IN SW VERIFICATION AND VALIDATION CENTRE OF EXCELLENCE, HONEYWELL AEROSPACE
252. IMPLEMENTING 'CAUSE AND EFFECT DIAGRAM' TO REDUCE 'LATE FOUND CRITICAL ISSUES'
253. IMPLEMENTING OFFICE 5S 'IMPROVE ERGONOMICS & SAFETY
254. IMPLEMENTING TQM IN PROF. MGK MENON LABORATORY FOR SPACE SCIENCES
255. IMPROVE AUDIT SCORES IN THE PROJECT
256. IMPROVE BY MEASURES IN ISSUE RESOLUTION
257. IMPROVE CUSTOMER ACCEPTANCE RATE-DESIGN SOLUTIONS
258. IMPROVE CUSTOMER SATISFACTION BY ADOPTING Q TECHNIQUES - NRV IN ALTERNATORS
259. IMPROVE PROCESS MATURITY OF SERVICE DELIVERY THROUGH EFFECTIVE PROCESS EXCELLENCE
260. IMPROVE PRODUCT QUALITY BY INCREASING STRENGTH USING QC TOOLS & TECHNIQUES
261. IMPROVE U140 ENGINE ASSEMBLY PROCESS TO REDUCE INTERNAL AND EXTERNAL CUSTOMER COMPLAINTS
262. IMPROVE WELDING FPY
263. IMPROVEMENT IN FAILURE REPORTING SYSTEM OF SURVEILLANCE RADAR ELEMENT(SRE) RADAR SYSTEM THROUGH TOTAL QUALITY MANAGEMENT(TQM)
264. IMPROVEMENT IN VEHICLE QUALITY BY RESOLUTION OF BOUGHT OUT COMPONENTS ISSUES & SUPPLIER UPGRADATION
265. IMPROVEMENT OF PARTNER PROCESS FOR DELIVERING PROJECTS 'RIGHT THE FIRST TIME'
266. IMPROVING COST-EFFECTIVENESS, TIME-TO-MARKET AND RETURN ON INVESTMENT BY DESIGN OF EXPERIMENTS USING EMC DEBUGGING TECHNIQUES
267. IMPROVING CUSTOMER SATISFACTION THROUGH DELIVERY EXCELLENCE
268. IMPROVING EFFECTIVENESS OF QUALITY ASSURANCE DIRECTOR REVIEW
269. IMPROVING PERFORMANCE AND COMPETENCIES OF EMPLOYEES TO ELIMINATE TEAM DYSFUNCTIONS
270. IMPROVING PRODUCT QUALITY BY ADOPTING SIX SIGMA METHODOLOGY IN HVAC INDUSTRY
271. IMPROVING PRODUCTIVITY & QUALITY OF WORK IN ORGANIZATIONS BY IMPLEMENTING CONTINUOUS IMPROVEMENT PHILOSOPHY
272. IMPROVING THE COLD-SET OFFSET INK DRYING ABILITY OF PAPER BY USING ADDITIVES IN SURFACE SIZING
273. IMPROVISING THE SCALE OF "RESEARCH AND INNOVATION" IN INDIAN INFORMATION TECHNOLOGY
274. INCREASE IN RELEASE SUCCESS RATE FOR MOBILY ACCOUNT

275. INCREASE THE PROCESS EFFICIENCY OF WORK REQUEST SYSTEM (WRS)
276. INDIAN AIR FORCE AS A COMMITTED ORGANISATION TOWARDS "GREEN": A VISION DOCUMENT WITH AN ACTION PLAN
277. INDIVIDUAL PRODUCTIVITY IMPROVEMENT THROUGH QUALITY CONTROL ASSURANCE AND RELIABILITY
278. INTEGRATED LEARNING AND COMPETENCY MANAGEMENT
279. INTERPRETATION AND APPLICATION OF ISO 9001:2015 (DIS) IN EDUCATION SERVICES.
280. INTRODUCTION OF IQ-AUDIT SOFTWARE FOR PLANNING & CONDUCTING OF AUDITS AT RBAI
281. LEAN SIX SIGMA FRAMWORK - FAST
282. MANUFACTURING PROCESS IMPROVEMENT IN TRIPOT HOUSING
283. MINIMIZE SPILLOVER OF QUALITY TASKS IN RELEASE CYCLE OF PRODUCT
284. MIS DASHBOARD OPTIMIZATION FOR ERS ECH DELIVERY UNIT
285. NO HIGH SEVERITY ISSUE IN FIELD & PLANT ON MAXXIMO PLATFORM BY PROACTIVE WORK AT SUPPLIER END.
286. NOTE THICKNESS SHAFT (NTS) FAILURE REDUCTION
287. OPTIMIZATION OF HUMAN WELL BEING AND OVERALL SYSTEM PERFORMANCE IN FOOTWEAR INDUSTRY
288. OPTIMIZATION OF PARTNER MIGRATION PROCESS FOR BETTER EFFICIENCY AND PRODUCTIVITY
289. OPTIMIZE LIQUID OPTICAL CLEAR ADHESIVE (LOCA) CONSUMPTION
290. PAINT CONSUMPTION REDUCTION IN TWO WHEELER PAINTING THROUGH DMAIC METHODOLOGY
291. POST PRODUCTION DEFECTS - TO REDUCE MEAN TIME TO RESOLUTION
292. PROCESS CAPABILITY ANALYSIS OF MANUFACTURING PROCESS OF ANTIHISTAMINE TABLETS 10MG
293. PROCESS CERTIFICATION OF ELEVATOR DOOR BENDING PROCESS
294. PROCESS IMPROVEMENT
295. PROCESS IMPROVEMENT FOR DATA MIGRATION PROJECTS
296. PROCESS SCRAP REDUCTION IN CAMSHAFT LINE
297. PRODUCT QUALITY AND ON-TIME MANAGEMENT IN POST-SALE SERVICE ISSUES
298. PRODUCT QUALITY IMPROVEMENT IN VALVE PLATE
299. PROJECT MANAGEMENT PLAN FOR COMPLIANCE OF MIRAGE 2000 I/TI UPGRADE IN COMBINATION WITH MAJOR INSPECTION 2 USING MS PROJECT SOFTWARE
300. QC PROBLEM SOLUTION IN INSTRUMENT AIR COMPRESSOR BY MODIFICATIONS USING FMEA
301. QUALITY & RELIABILITY ENHANCEMENT THROUGH OPTIMIZATION OF WEIGHT AND COST IN FRONT AND REAR CHASSIS SYSTEMS OF SUV
302. QUALITY CONTROL, ASSURANCE & RELIABILITY OF PAINT
303. QUALITY EVALUATION AND IMPROVEMENT IN INDUCTION HARDENING PROCESS OF AUTOMOBILE ENGINE CRANKSHAFT
304. QUALITY IMPROVEMENT IN REEL TO REEL INJECTION MOLDING PROCESS BY REDUCING SETUP REJECTION & PROCESS MONITORING
305. QUALITY IMPROVEMENT ON HEAT TREATABLE COMPONENTS USED IN CONTROL VALVES
306. QUALITY MANAGEMENT SYSTEM FOR MANUFACTURING DRAWING
307. QUALITY MANAGEMENT SYSTEM OF A MANUFACTURING FIRM (MULTITECH PRODUCTS)
308. REDUCE GEAR SHIFTING HARD ISSUE IN TWO WHEELER ENGINE THROUGH QC METHODOLOGY
309. REDUCE GM OIL FILTER LEAK ISSUES
310. REDUCE LEAD TIME AND COST FOR FILTER VALVE COLLAR FOR EXTERNAL CASING PACKER
311. REDUCING CUSTOMER LINE REJECTION FROM 10740PPM TO 3000PPM(70%)
312. REDUCING THE DEFECT ESCAPE RATIO IN PRODUCT DEVELOPMENT
313. REDUCTION IN AUXILIARY POWER IN A COAL FIRED THERMAL POWER PLANT.
314. REDUCTION OF IN-HOUSE REJECTION % USING TQM TOOLS & TECHNIQUES
315. REDUCTION OF IN-HOUSE REJECTIONS IN GEAR REDUCTION STARTER ASSEMBLY LINE
316. REDUCTION OF IN-HOUSE REJECTIONS IN S-92 HELICOPTER ASSEMBLY LINE THROUGH APPLICATION OF SHAININ TECHNIQUE
317. REDUCTION OF REJECTIONS IN CAM IN TRACTOR BRAKE ASSEMBLY
318. REDUCTION OF REWORK IN RELAY ASSEMBLY
319. REDUCTION OF SCRAP REJECTION & IMPLEMENTATION OF 5S
320. RELIABILITY BASED MAINTENANCE OPTIMIZATION
321. RELIABILITY MODELLING AND LIFECLASS PREDICTION OF PHILIPS LED DOWNLIGHT
322. REUSABLE WEB APPLICATION AUTOMATION SCRIPTING VIA SELENIUM FRAMEWORK
323. RISK MANAGEMENT IN PROJECTS
324. RISK MANAGEMENT OF CONSTRUCTION ACTIVITIES IN L&T CONSTRUCTION BUILDINGS & FACTORIES INDEPENDENT COMPANY
325. ROLE OF HR IN ORGANIZATION DESIGN AND CHANGE MANAGEMENT

326. ROOT CAUSE ANALYSIS
327. ROUTE OPTIMIZATION OF MATERIAL BIN MOVEMENT FROM WAREHOUSE TO PRODUCTION LINE USING VALUE STREAM ANALYSIS
328. SETTING UP OF ANCILLARY
329. SIZING & METRICS APPROACH FOR SOFTWARE TESTING PROJECTS
330. SOFTWARE QUALITY AND DEFECT MANAGEMENT
331. SOFTWARE TESTING PROCEDURE
332. STACK RANKING USING QUALITY METHODOLOGY
333. STRATEGIC AUDIT OF ETOWN INDIA SERVICES PVT. LTD BY APPLYING THE PRINCIPLES OF STRATEGIC MANAGEMENT AND BUSINESS POLICY
334. STREAMLINING HCM ASD CONSOLIDATION
335. STREAMLINING OF SOFTWARE TESTING PROCESS TO ENHANCE PRODUCTIVITY WITHOUT COMPROMISING ON QUALITY
336. STRETEGIC ORGANIZATIONAL ADAPTAION IN INDIAN NUCLEAR POWER SECTOR
337. STUDY THE KAIZEN QUALITY AND ITS ALIGNMENT WITH ORGANIZATIONAL OBJECTIVE OF CONTINUAL IMPROVEMENT.
338. SUPPLY CHAIN MANAGEMENT FOR ACHIEVING THE GOALS OF AIRCRAFT UPGRADE PROJECT
339. SUSTAINABLE DEVELOPMENT IN CONSTRUCTION INDUSTRY THROUGH 5S TECHNIQUE
340. TECHNICAL ANALYSIS OF NIFTY AND NON-NIFTY
341. TO DETERMINE CONTRIBUTION, OF FOLLOWING SOLUTIONS OF: 1.WATER & ETHYLENE GLYCOL, 2.MIXTURE OF PETROLEUM LIQUIDS, 3.WATER & SULFURIC ACID, AND 4.WATER, ETHYL ALCOHOL & SODIUM CHLORIDE, TO UNCERTAINTY OF MEASUREMENT ASSOCIATED WITH CALIBRATION OF A LACTOMETER, CALIBRATED BY COMPARISON METHOD USING DENSITY HYDROMETERS AND EACH AFORESAID SOLUTIONS AS A MEDIUM FOR COMPARISON.
342. TO ELIMINATE THE FAILURE OF BRH OUTPUT SHAFT
343. TO ESTABLISH AND DOCUMENT CE MARKING PROCESS BY USING EFQM MODEL 2013.
344. TO IMPROVE QUOTE TO WIN RATE
345. TO REDUCE OVERALL CYCLE TIME OF PPSC ECO PROCESS
346. TO REDUCE THE PROBLEM OF "ARM REST STUCK UP WHILE OPERATING" BY USING PROBLEM SOLVING TOOLS AND TECHNIQUES
347. TO STUDY THE PRESENT QUALITY STANDARD OF HANDLING AERO ENGINE LUBRICATION OIL AT VARIOUS LEVELS DURING AIRCRAFT SERVICING AND OPERATIONS AND FIND OUT THE AREA OF IMPROVEMENT ,CHECK STANDARDS AND INTRODUCE STEPS TO FURTHER IMPROVE THE QUALITY STANDARDS OF ENGINE OIL BY USING VARIOUS TOOLS OF TOTAL QUALITY MANAGEMENT.
348. UPGRADE CENTER QUALITY IMPROVEMENT
349. USE OF PROBLEM SOLVING TECHNIQUES TO REDUCE THE SUPPLIER REJECTION FROM 3.5% TO 0.5%
350. VARIOUS PROCESS IMPROVEMENTS IN QUARTERLY PROJECT RELEASES AND WEEKEND PATCH RELEASES TO PRODUCTION

#### **M.S. (SOFTWARE SYSTEMS)**

351. A NOVEL SYSTEM FOR CYBER SECURITY
352. ACHIEVING HIGH TEST COVERAGE FOR ENTERPRISE APPLICATION WITH AUTOMATION FRAMEWORKS.
353. AN ENHANCED DATA ANONYMIZATION TECHNIQUE TO PRESERVE PRIVACY IN BIGDATA
354. AN ENHANCED TCP ANALYSIS FOR PERSISTENT PACKET REORDERING
355. AN INTEGRATED MOBILE-STB SYNC SERVICE
356. ANALYSIS ON NETWORK TRAFFIC PATTERN AN PROTOCOL SIGNATURE RESEARCH USING DEEP PACKET INSPECTION
357. ANALYSIS ON THE EFFECT OF ASPECTIZING APPLICATIONS OF DIFFERENT DOMAINS
358. ANDROID APPLICATION FOR PATHOLOGICAL LABORATORY MANAGEMENT
359. ANDROID BASED MALWARE PROPAGATION, DETECTION AND QUANTIZATION IN WIRELESS NETWORKS
360. ANOMALY DETECTION SYSTEM
361. APPLICATION AND NETWORK CONTROL SOFTWARE IN ANDROID OPERATING SYSTEM
362. APPLICATION AWARENESS IN SOFTWARE DEFINED NETWORKS THROUGH DEEP PACKET INSPECTION
363. ARRANGING AN EFFECTIVE MEETING BETWEEN THE BUYER AND SELLER FOR THE FASHION TRADE SHOW/SHOW ROOM/FASHION WEEK
364. AUGMENTED REALITY BASED SMART CITY SERVICES USING SECURE IOT INFRASTRUCTURE
365. AUTO SOURCE GENERATOR AND CODE AUDITING TOOL
366. AUTOMATED GUI TESTING TOOL USING MACRO AND XML

367. AUTOMATED NIGHT CAB ALLOCATION SYSTEM
368. AUTOMATED PERSON RECOGNITION BY COMBINING CUES FROM IRIS AND PERIOCLAR
369. AUTOMATED PRODUCTION TESTING FOR MEDICAL DEVICES
370. AUTOMATED SECURITY TESTING
371. AUTOMATIC BACKUP FOR NETWORK DEVICE CONFIGURATIONS
372. AUTOMATIC LOCATION-AWARE SYSTEM FOR E-COMMERCE DELIVERY
373. AZURE BILLING OPTIMIZER
374. BARCODE SCANNING USING ANDROID SMARTPHONE
375. BEHAVIORAL ASSISTED SIGNATURE BASED CLASSIFICATION FOR ENCRYPTED TRAFFIC
376. BESAFE APP FOR SAP INSURANCE
377. BEST MEDICINE
378. BRIDGING THE VOCABULARY GAP BETWEEN HEALTH SEEKERS AND HEALTHCARE KNOWLEDGE
379. BUILDING SCALABLE ARCHITECTURES - MICRO SERVICES
380. CAMPUS RECRUITMENT SYSTEM
381. CASE STUDY ON NOSQL DATABASE IN REAL TIME WEB APPLICATIONS
382. CATIE - COMMUNICATION AND ACCESS TO INFORMATION EVERYWHERE
383. CLIENT PROPERTY MIGRATION
384. CRF BASED ASSOCIATION RULES FOR INTRUSION DETECTION
385. CUSTOMER CREDIT CARD COMPLAINT MANAGEMENT SYSTEM
386. DATA DYNAMIC INDIRECT MUTUAL TRUST FOR CLOUD COMPUTING STORAGE DEVICE
387. DATA MINING RESEARCH CHALLENGES IN E-COMMERCE
388. DATACENTER APPLICATION VISIBILITY AND TRAFFIC ANALYSIS THROUGH FLOW SENSORS
389. DATAMART APPLICATION ON A CLOUD
390. DEATH HACKER - REALIZING A SMART ACCIDENT MANAGEMENT IOT
391. DECISION SUPPORT SYSTEM
392. DELEGATION APP IN SAP FIORI
393. DEMAND FORECASTING
394. DEVELOPMENT OF COMPREHENSIVE UITOOLKIT SERVICE FOR THE WEB APPLICATIONS OF DIFFERENT DEPARTMENTS OF AN ORGANIZATION
395. DISCUSSING THE SECURITY RISK AND ATTACK ANALYSIS AND ITS MITIGATION FOR DEVELOPING A SECURE NETWORK
396. EASY SHOPPING
397. EBIDDING FOR SUPPLIER SELECTION TO AWARD A QUOTATION OR TENDER FOR MALAYSIAN GOVERNMENT PROCUREMENT(ANALYSIS AND DESIGN DECISIONS FOR HIGH AVAILABILITY AND HIGH PERFORMANCE REQUIREMENTS )
398. E-BUSINESS: HARNESSING TECHNOLOGY FOR OMNI-CHANNEL RETAILING-THE NEXT EVOLUTION IN RETAIL
399. EFFECTS OF HIDING WEIGHTED FREQUENCY ITEMSETS IN UPDATED DATABASE
400. ELECTRONIC SUBROGATION SYSTEM
401. EMULATING PRODUCTION-LIKE DATA IN PERFORMANCE ENVIRONMENT
402. ETOKEN BASED DOCUMENT MANAGEMENT
403. EXTENDING BUSINESS INTELLIGENCE WITH BIG DATA
404. FASTER RE-AUTHENTICATION FOR EFFICIENT AND SEAMLESS HANDOVER IN 4G NETWORKS
405. FRAMEWORK FOR SURVEILLANCE OF INSTANT MESSAGES IN INSTANT MESSENGERS AND SOCIAL NETWORKING SITES USING DATA MINING AND ONTOLOGY
406. GENERATION OF MERCHANT INSIGHTS FROM HIGH VOLUME TRANSACTION DATA USING MAPREDUCE
407. GIFT - GROOVY INMEMORY FRAMEWORK FOR TESTING
408. GPU VERSION OF PHASE CONGRUENCY FILTER
409. GTP-C PROTOCOL DEVELOPMENT FOR MME
410. HOSPITAL MANAGEMENT SOFTWARE FOR DENTISTRY USING E BUSINESS
411. IBM WEBSHERE APPLICATION SERVER NETWORK DEPLOYMENT V7.0 & IBM IHS WEB SERVER V7.0
412. IMPLEMENTING INFRASTRUCTURE AS A SERVICE IN PRIVATE CLOUD
413. IMPROVE SOFTWARE DEVELOPMENT PROCESSES AND DOCUMENTS FOR GREAT USER EXPERIENCE
414. IMPROVE THE SDLC PROCESS BY INTRODUCING CODE COVERAGE
415. IMPROVING PERFORMANCE AND SCALABILITY IN NETWORK APPLICATIONS USING JAVA NIO
416. IMPROVING ROBUSTNESS OF INDUSTRIAL ETHERNET USING FUZZING TECHNIQUE
417. INDUSTRY DATABASE MANAGEMENT SYSTEM
418. INFRASTRUCTURE MANAGEMENT FOR ENERGY EFFICIENT HOMES
419. INTEGRATION OF APACHE STORM WITH APACHE IGNITE

420. INTEGRATION OF CRIME AND COMPLAINT REPORTING AND EFFECTIVE DATA SHARING IN REMOTE CLOUD STORAGE WITH MULTI USER ACCESS
421. INTELLIGENT PACKET ROUTING USING VELOCITY BASED ADAPTIVE ZONE ROUTING PROTOCOL
422. IS SDLC A QUALITY ASSURANCE TECHNIQUE FOR DATA CENTRIC PROJECTS
423. JIRA CUSTOMIZATION USING PLUGIN DEVELOPMENT
424. JPUB
425. KALMAN FILTER IMPLEMENTATION FOR TRACKING POSITION OF BOT
426. KEYLOGGING-RESISTANT VISUAL AUTHENTICATION PROTOCOLS
427. LAYER 4 TO LAYER 7 SERVICES ORCHESTRATION IN PRIVATE CLOUDS
428. LOG CONSOLIDATION FOR IPTV NETWORK
429. MANAGED INVESTMENTS - ACCOUNT MAINTENANCE - CHANGE OF INVESTMENT WORKFLOW PROCESS
430. MARITIME SURVEILLANCE USING EDGE DETECTION OF THERMAL IMAGES, ON FLOATING BUOYS
431. MAXIMALLY STABLE EXTREMAL REGIONS APPLIED TO IDENTIFICATION AND TRACKING OF ART OBJECTS
432. MECHANISM TO STORE AND TRAVERSE DIRECTED CYCLIC GRAPH USING DISTRIBUTED COMPUTING
433. MESSAGE ESCALATION SYSTEM FOR GROUP NOTIFICATION
434. MOBILE BASED AUTOMATED HOME AUTOMATION
435. MOBILE POS
436. MONITORING & CONTROL SYSTEM OVER RAILNET
437. MULTIPLE OPTICAL VIRTUAL PRIVATE NETWORK
438. NETWORKING TECHNOLOGY
439. NEW PROSPECTS IN FUTURE OF MOBILITY
440. ONLINE BUSINESS CONSULTANCY
441. ONLINE POLICY ENROLLMENT USING ANDROID
442. ONLINE VOTING FOR NRI
443. OS AND HARDWARE VIRTUALIZATION
444. PAISE BACHAO
445. PERFORMANCE ANALYSIS OF AES AND BLOWFISH ALGORITHMS
446. PERFORMANCE IMPROVEMENT IN DAYEND LOAD PROCESS BY ARCHIVING HISTORICAL SALES DATA AND TUNING SALES AGGREGATES JOB
447. PERFORMANCE TEST AUTOMATION FRAMEWORK
448. PERFORMANCE TESTING
449. PRIVACY-PRESERVING OPTIMAL MEETING LOCATION DETERMINATION ON MOBILE DEVICES.
450. PRODUCT PAGE CLASSIFIER
451. PROJECT - FINANCIAL MANAGEMENT SYSTEMS
452. PROVISOIR
453. QUALITY IMPROVEMENT PROCESS ACROSS UNILEVER FACTORIES
454. RAINBOW PROGRAMME BACS TARGET
455. RANDOM IMAGE STEGANOGRAPHY - KNIGHT TOUR METHOD
456. REAL TIME TRADE MANAGEMENT SYSTEM
457. REMOTE ACCESSABILITY OF WEIGH BRIDGE READINGS VIA SERIAL PORT
458. REQUIREMENTS ELICITATION IN WATERFALL AND AGILE
459. RESOURCE AND RELIABLE ROUTING PROTOCOL FOR MANET
460. RESPONSIVE STUDENTS MANAGEMENT SYSTEM
461. REVAMPED NETWORK MANAGEMENT TOOLS
462. REVERSE ENGINEERING ETL JOBS IN INFORMATICA
463. ROOT CAUSE ANALYSIS IN NETWORK FAULT MANAGEMENT
464. SECURED HEALTH RECORDS ON CLOUD (SHRC)
465. SECURED PAYMENT SYSTEMS
466. SHARE REMINDER APPLICATION
467. SIEBEL LBS (LOCATION BASED SERVICE)
468. SIP SIGNALING SANITY TEST
469. SMART CANTEEN
470. SOFTWARE PACKET ANALYSER FOR HARDWARE SAN PRODUCTS
471. TCP ANALYSIS FOR NETWORK MONITORING
472. TCP/IP ATTACK IN-DEPTH ANALYSIS
473. TELECOM BILLING AND INVOICING SYTEM
474. TEXT ANALYTICS ON CUSTOMER COMPLAINTS DATA
475. THE ADOPTION OF CLOUD COMPUTING FOR ENTERPRISES

- 476. UPGRADE AUTOMATION OF ZFS 74XX SERIES
- 477. VALUE CHAIN MONITORING SYSTEM (VALMON)
- 478. VIDEO STORY- EASILY TELL YOUR BIG LIFE STORIES
- 479. VOIP INTEGRATION WITH E-SERVICES
- 480. WEBANALYTICAL TOOL IN ENERGY TRADING
- 481. WEIGHTED PARAMETER BASED SEARCH IN CARGO MANAGEMENT SYSTEM

**MBA (QUALITY MANAGEMENT)**

- 482. LTE TECHNOLOGY IMPLEMENTATION & QUALITY OF SERVICES ASSURANCE AND CONTROL

**MBA (MANUFACTURING MANAGEMENT)**

- 483. ADVERTISING & BRAND POSITIONING IN THE TELECOMMUNICATION SECTOR FOR RURAL MARKETS IN INDIA
- 484. DEVELOPMENT OF AGRICULTURE TRACTOR RUNNING ON ALTERNATE SOURCE OF ENERGY FOR FARMERS WITH SMALL LAND-HOLDINGS
- 485. ED COATING PAINT PROCESS DEVELOPMENT & PAINT LIFE IMPROVEMENTS IN CHASSIS PARTS
- 486. EVALUATING AND STREAMLINING OPERATIONS FOR SUSTAINABLE MANUFACTURING
- 487. INSTALLATION, TESTING AND COMMISSIONING OF PASSENGER BOARDING BRIDGES
- 488. LEVERAGING SFDC ON CLOUD COMPUTING PLATFORM FOR GROWTH AND PROFITABLE SALES AND ACHIEVING THE PROMISE OF BETTER CUSTOMER RELATIONSHIP.
- 489. LOCALIZATION OF PARTS APPROVAL FOR MECHANICAL AND PWB CATEGORY
- 490. OPERATIONS MANAGEMENT
- 491. PLANNING, DEVELOPMENT, ESTABLISHMENT AND ANALYSIS OF QUALITY CLINIC FOR REDUCTION IN COPQ AND INCREASE IN CUSTOMER SATISFACTION.
- 492. RELIABILITY ASSESSMENT OF CRITICAL EQUIPMENT IN GLASS CONTAINER INDUSTRY

**M.PHIL. (HOSPITAL & HEALTH SYSTEM MANAGEMENT)**

- 493. A STUDY ON IMPACT OF ONLINE APPOINTMENT SYSTEMS ON HEALTHCARE ACCESSIBILITY
- 494. ACCOUNTABILITY AND ETHICS AMONG HEALTHCARE PRACTITIONERS DURING CLINICAL EXAMINATION OF PATIENTS.
- 495. A STUDY ON THE IMPACTS OF HOSPITAL DESIGN ON PATIENT SAFETY AND STAFF PERFORMANCE
- 496. EVALUATING INFECTION CONTROL PRACTICES AT MEDICAL INTENSIVE CARE UNIT BY TRACKING VENTILATOR ASSOCIATED PNEUMONIA RATE & IMPLEMENTING VAP BUNDLE FOR IMPROVING THE VENTILATOR CARE
- 497. JOB SATISFACTION AMONG PHYSIOTHERAPY DOCTORS, A MULTI-FACETED SUBJECT STUDIED AT VARIOUS PHYSIOTHERAPY COLLEGES IN PUNE & PIMPRI-CHINCHWAD.

**M.TECH. (SOFTWARE SYSTEMS)**

- 498. 11I TO R12 MIGRATION
- 499. 2D SEISMIC ACOUSTING MODELLING FOR HYBRID COMPUTING PLATFORM OF PARAM YUVA II
- 500. 3D AIR DEFENCE ASSET PLANNING SYSTEM (ADAPS)
- 501. 3D PROPORTIONAL NAVIGATION FOR ENGAGING AIR BORNE VEHICLE USING MATLAB/ SIMULINK
- 502. 3D MASTER PMICOMPARE TOOL
- 503. 3G-4G NODES SIMULATOR
- 504. A BUSINESS MODEL FOR CLOUD COMPUTING
- 505. A DISTRIBUTED AUTHENTICATION SCHEME FOR THE INTERCLOUD
- 506. A HYBRID CLOUD APPROACH FOR SECURE AUTHORIZED DEDUPLICATION
- 507. A MODEL OF DATA WAREHOUSE WITH ETL PROCESSES
- 508. A NEW GENERATION TEST AUTOMATION TOOL FOR WEB APPLICATIONS
- 509. A PREOCCUPATION WITH SOCIAL MEDIA: A STEP TOWARDS HOW SENTIMENT ANALYSIS CAN PREDICT PROTEST MOVEMENTS.
- 510. A RETRIEVAL STRATEGY FOR CASE-BASED REASONING USING SIMILARITY AND ASSOCIATION KNOWLEDGE
- 511. A SAAS BASED ELEARNING SYSTEM CONJUGATED WITH MULTI-TENANCY AND WORKFLOW TECHNOLOGIES
- 512. A SCALABLE TWO-PHASE TOP-DOWN SPECIALIZATION APPROACH FOR DATA ANONYMIZATION USING MAPREDUCE ON CLOUD
- 513. A SCALABLE, EXTENSIBLE WEB CRAWLER BASED ON ARTIFICIAL BEE COLONY ALGORITHM AND NATURAL LANGUAGE PROCESSING
- 514. A SECURE CLIENT SIDE DEDUPLICATION SCHEME IN CLOUD STORAGE ENVIRONMENTS
- 515. A SECURE DATA ACQUISITION USING HONEY POT SYSTEMS
- 516. A SECURE ERASURE CODE-BASED CLOUD STORAGE SYSTEM WITH SECURE DATA FORWARDING
- 517. A SIMPLE TO-DO ANDROID APP DEVELOPMENT USING VISUAL STUDIO AND C#

518. A SMART WAY TO OPTIMIZE RESOURCE AND TEST COVERAGE
519. A SOFTWARE APPLICATION FOR COMPLIANCE AND AUDITING
520. A SOLUTION FOR THE OMNI-CHANNEL EXPERIENCE FOR THE NATIVE PLATFORM
521. A STUDY AND IMPLEMENTATION OF EMOTION DETECTION BASED ON TEXT ANALYSIS
522. A STUDY OF PERFORMANCE OF PERFORMANCE OF FREIGHT OPERATION INFORMATION SYSTEM (FIOS) ANALYSIS AND SOLUTION
523. A STUDY ON SELECTION OF FEASIBLE WEB
524. A SYSTEM FOR DENIAL-OF-SERVICE ATTACK DETECTION BASED ON MULTIVARIATE CORRELATION ANALYSIS
525. A/B FEATURE METRICS IN E-COMMERCE
526. A SYSTEM FOR SIMULATING HIGH BITCOIN TRANSACTION VOLUMES
527. ACCELERATING WEB APPLICATION USING VARNISH
528. ACTIVELY MODIFYING RUNNING BINARIES
529. ACTIVITY STREAM FOR ALTAIR SIMULATION MANAGER
530. ADAPTABLE ROUTING IN MOBILE SOCIAL NETWORKS
531. ADAPTIVE E-LEARNING
532. ADAPTIVE LINK CACHE IN MOBILE AD HOC NETWORK
533. ADDITIONAL ENHANCEMENTS FOR (MSS-ATP) MANAGED SECURITY SERVICES ADVANCED THREAT PROTECTION V2
534. ADOPTION OF DATA WAREHOUSING IN AN ENTERPRISE
535. ADSERVER PIPELINE VALIDATION FRAMEWORK
536. ADVANCED COMPOSITE COMMUNICATION SYSTEM
537. ADVANCED WIND TURBINE REMOTE DIAGNOSTICS USING SECURED EMBEDDED WEB SERVER TECHNOLOGIES
538. ADW AND BI ANALYTICS FOR PERFORMANCE MANAGEMENT
539. ADW AND BI ANALYTICS FOR UNIVERSITY
540. AGGREGATION OF REAL-TIME DATA IN DATA CENTERS
541. AIRLINE CREW ROSTER OPTIMIZER ASSISTANT (ACROA)
542. ALERT CAMPAIGN- NOTIFICATION SYSTEM FOR USER
543. ALGORITHMS FOR LINE ROUTING IN CIRCUIT
544. ALLEVIATING MALICIOUS INSIDER IN CLOUD THROUGH OFFENSIVE DECOY TECHNOLOGY
545. AN EFFICIENT SCHEDULING ALGORITHM FOR CLOUD DATACENTERS
546. AN EFFICIENT SCHEME DESIGN AND VIDEO ANALYTICS TOOL
547. AN EMPIRICAL PERFORMANCE EVALUATION OF RELATIONAL KEYWORD SEARCH SYSTEMS
548. AN EMPIRICAL STUDY ON ACHIEVING WEB SECURITY BY SQL INJECTION DETECTION & ITS PREVENTION
549. AN ENTITY LINKAGE FRAMEWORK USING MAPREDUCE AND BAYES THEOREM
550. AN IMPLEMENTATION OF SINGLE NODE JOB EXECUTED AS DISTRIBUTED TASK ON A LAN, TO IMPROVE PERFORMANCE
551. AN INTELLIGENT, EFFICIENT AND LOW COST PARKING SOLUTION
552. AN OPTIMIZED SOLUTION TO TODAY'S IP BASED NETWORKS USING SDN CONTROLLERS AND OPENFLOW
553. ANALYSIS AND ADDRESSING THE CHALLENGES OF SOFTWARE DEFINED NETWORKING
554. ANALYSIS AND OPTIMISATION OF COMPLEX ENTERPRISE SYSTEMS FOR OPTIMAL PERFORMANCE AT WEB SCALE
555. ANALYSIS AND RECLAMATION OF FRAGMENTED SPACE IN ORACLE DATABASE
556. ANALYSIS OF EXISTING NETWORK WITH SDN OPEN FLOW
557. ANALYSIS OF SCM- TRANSPORTATION DATA W.R.T REPORTING
558. ANALYSIS OF SHIPPING DOMAIN DATA
559. ANALYSIS OF SLEEP DISORDERS USING BIG DATA
560. ANALYSIS OF STOCK BASED ON FUNDAMENTAL
561. ANALYSIS/METHODS FOR ANDROID PERFORMANCE OPTIMIZATION
562. ANALYTICS FOR RECOMMENDATIONS BASED ON NEO4J
563. ANALYZE CUSTOMER CREDIT SCORE
564. ANDRIOD APP FOR ONLINE SHOPPING
565. ANDROID APPLICATION FOR A TERMINAL EMULATOR WITH ENHANCED FEATURES
566. ANDROID BASED MOBILE POS (POINT OF SALE) AND BACKEND COMMERCE PLATFORM TO ENABLE DIGITAL COMMERCE FOR SMALL BUSINESSES IN EMERGING NATIONS
567. ANDROID BENDED EDGE MULTI FUNCTIONALITY SCREEN
568. ANESTHESIA MONITORING ANALYSIS APPLICATION
569. APACHE JENA - SPARQL QUERY CACHING
570. APPLICATION MANAGEMENT

571. APPLICATION RATIONALIZATION FOR MIGRATION OF LEGACY AND CITRIX APPLICATIONS TO APP-V 4.6
572. APPLICATION TO CREATE ANTI-SPAM FILTERS USING HEURISTICS
573. APPLICATION TO CREATE VIRTUAL NETWORKS AND EMULATE NETWORK FAILURES
574. APPLICATION-AWARE LOCAL-GLOBAL SOURCE DEDUPLICATION FOR CLOUD BACKUP SERVICES OF PERSONAL STORAGE
575. APPLYING CLUSTERING ALGORITHMS FOR SPATIAL TWITTER TREND ANALYSIS
576. APPLYING MACHINE LEARNING TECHNIQUES IN SOFTWARE ENGINEERING
577. APPRAISAL PORTAL
578. AROUND ME
579. ASSET TRACKING SOLUTION
580. ASSOCIATE PERFORMANCE MONITOR
581. ATOMICITY FEATURE IMPLEMENTATION AND ENHANCEMENT IN NOR FLASH BASED SMART CARD SYSTEMS
582. AUDIT MECHANISM FOR CUSTOMER CLOUD
583. AUGMENTED REALITY IN FIELD OF VIDEO ON SURFACE OF NEWSPAPER AND IOS TECHNOLOGY
584. AUTHENTICATED MESSAGE TRANSFER PROTOCOL
585. AUTHENTICATION AND AUTHORIZATION ON CLOUD USING CUSTOM BUILT SECURITY PROVIDER
586. AUTO CONNECTION AND VLAN SCAN OPTIMIZATION IN ENODEB
587. AUTO STIGMATOR CALIBRATION FOR SEM BASED PROCESS CONTROL TOOL PERFORMANCE IMPROVEMENT
588. AUTOMATE MONITORING PROCESS IN SUPPORT PROJECT TO HANDLE TICKET QUEUE
589. AUTOMATE SELENIUM FUNCTIONAL TESTING ENVIRONMENT USING DOCKER
590. AUTOMATE SOFTWARE ENGINEERING ACTIVITIES FOR CORRESPONDENT MORTGAGE BANKING DOCUMENT MANAGEMENT SUITE OF APPLICATIONS
591. AUTOMATED API TESTING FRAMEWORK
592. AUTOMATED APPLICATION SURVEILLANCE SYSTEM
593. AUTOMATED AWS IMAGE CREATION AND VERIFICATION FOR KPOINT
594. AUTOMATED BOT TO ASSIST PATIENT AND A DOCTOR
595. AUTOMATED DATA MIGRATION ETL & BANKING
596. AUTOMATED FAULT DETECTION AND NOTIFICATION
597. AUTOMATED FAULT DIAGNOSTICS TESTING FOR AUTOMOTIVE ECU DEPLOYING NI-PXI INTEGRATED WITH LAUTERBACH TRACE32 HIL SETUP
598. AUTOMATED ISSUE RESOLVER USING HEURISTICS
599. AUTOMATED POWER ON TEST SUITE
600. AUTOMATED TEST SYSTEM FOR TELECOM POWER SOLUTIONS
601. AUTOMATED TESTING AND CONTINUOUS INTEGRATION OF EJB APPLICATION
602. AUTOMATED VIRTUAL MACHINE PROVISIONING SYSTEM
603. AUTOMATED WEB APPLICATION SECURITY ASSESSMENT FRAMEWORK
604. AUTOMATIC CAPTION GENERATION FOR NEWS IMAGES
605. AUTOMATIC NUMBER PLATE RECOGNITION
606. AUTOMATIC PURGING USING UNIX SHELL SCRIPT IN AIX PLATFORM
607. AUTOMATING AND OPTIMIZING SOFTWARE TESTING
608. AUTOMATING OPERATIONS IN CLOUD INFRASTRUCTURE (VIRTUAL MACHINES)
609. AUTOMATING PERFORMANCE TESTING ON WEB APPLICATIONS
610. AUTOMATING QUALCOMM'S INTEGRATED FABLESS MANUFACTURING PROCESS
611. AUTOMATING THE REPORTING MODEL OF GRS APPLICATION MODULE USING JAVA AND PERL
612. AUTOMATION FOR PRODUCTIVITY IMPROVEMENT
613. AUTOMATION FRAMEWORK DESIGN AND DEVELOPMENT FOR CROSS BROWSER TESTING ON ANDROID USING SELENIUM
614. AUTOMATION FRAMEWORK DESIGN AND IMPLEMENTATION USING C#.
615. AUTOMATION FRAMEWORK FOR SYSTEM MIGRATION TO CLOUD
616. AUTOMATION FRAMEWORK FOR UNIX SERVER BASED APPLICATION
617. AUTOMATION FRAMEWORK FOR VIPR OPENSTACK NORTH BOUND INTEGRATION
618. AUTOMATION FRAMEWORK TO SUPPORT OPTICAL TRANSPORT SERVICE IN 5620SAM (NETWORK MANAGEMENT SYSTEM)
619. AUTOMATION FRAMEWORK USING WATIR, RUBY AND CUCUMBER
620. AUTOMATION OF BUILD & RELEASE ACTIVITY
621. AUTOMATION OF CHECK-IN/CHECK-OUT IN CLEARCASE USING UNIX SCRIPTS
622. AUTOMATION OF EDM MODEL(ELECTRONIC DISCOVERY REFERENCE MODEL) WORK FLOW
623. AUTOMATION OF ETL TESTING USING SAS



624. AUTOMATION OF HIERARCHY MAINTENANCE IN ESSBASE
625. AUTOMATION OF INTEGRATION TEST WITH EMBEDDED SYSTEM FOR REDUCING TEST CYCLE TIME
626. AUTOMATION OF RDBMS INSTALLATION AND DATABASE CREATION
627. AUTOMATION OF SLA METRICS DASHBOARD IN CITRIX ENVIRONMENT USING AGILE MODEL
628. AUTOMATION OF TRAINEES MANAGEMENT
629. AUTOMATION OF UNIT TEST PROCESS USING RTRT
630. AUTOMATION TESTING OF RETAIL BANKING APPLICATION
631. AUTOMATION TESTING TOOL FOR FUSION TRANSPORTATION MANAGEMENT INTELLIGENCE
632. AUTOMATION TOOL
633. AUTOMATION TOOL FOR ENODEB SYSTEM TESTING
634. AUTOMATION TOOL FOR SANITY VALIDATIONS
635. AUTONOMOUS CAR : AN ANALYSIS OF VARIOUS INVOLVED ALGORITHMS
636. AUTONOMOUS MOBILE ROBOT DESIGN
637. AUTOPARTS MANAGEMENT SOFTWARE
638. AUTOSYS ASSIST
639. AVIONICS BUS DATA ACQUISITION AND DISPLAY SOFTWARE IN REAL TIME LINUX
640. AWARD NOMINATION TOOL
641. AXON PLUGIN FOR APACHE CAMEL - OPEN SOURCE INTEGRATION FRAMEWORK
642. BACKUP SERVICE FOR CLOUD USING APPLICATION AWARE DE-DUPLICATION
643. BANKING CRM USING MICROSOFT DYNAMICS
644. BATCH INPUT FILE GENERATION APPLICATION
645. BDD BASED AUTOMATION FRAMEWORK
646. BEHAVIOUR DRIVEN DEVELOPMENT BASED AUTOMATED TEST FRAMEWORK
647. BEST SOFTWARE TEST & QUALITY ASSURANCE PRACTICES IN THE PROJECT LIFE-CYCLE
648. BETTER RELATIONSHIP MANAGEMENT FOR CAD
649. BIG DATA IMPLEMENTATION IN HETEROGENEOUS APPLICATIONS DATA ANALYSIS
650. BIG DATA IMPLEMENTATION OF UNSTRUCTURED DATA ANALYTICS OF SOCIAL NETWORK REVIEWS USING SENTIMENT ANALYSIS & SVM
651. BIG DATA PLATFORM AS A SERVICE ON CLOUD
652. BIG INSIGHTS
653. BIGINSIGHTS SERVICE ON BLUEMIX - MANAGEMENT CONSOLE
654. BILL CYCLE MIPS REDUCTION FRAMEWORK FOR LEGACY MAINFRAMES
655. BIOMETRIC SECURITY BASED ON FINGERPRINT RECOGNITION TECHNOLOGY
656. BITS ZG628T
657. BLOG CONTENT SEARCH ENGINE
658. BLOOD VESSELS AND EXUDATES DETECTION USING K MEANS CLUSTERING ALGORITHM AND MORPHOLOGICAL OPERATION
659. BOOT TIME OPTIMIZATION FOR ANDROID BASED DEVICES
660. BOX AUTOMATION HELPER
661. BRINGING BUSINESS OBJECTS INTO EXTRACT LOAD TRANSFORM TECHNOLOGY
662. BUG TRACKING SYSTEM
663. BUILDING DATA WAREHOUSE FOR BUSINESS ANALYTICS AND IMPROVEMENTS
664. BUILDING EFFECTIVE BATCH INTERFACE BETWEEN LEGACY SYSTEM AND DATA WAREHOUSE
665. BURN ZONE TEMPERATURE TREND ANALYSIS & PATTERN IDENTIFICATION
666. BUSINESS CONTINUITY & DISASTER RECOVERY
667. BUSINESS DRIVEN GENERIC AUTOMATION FRAMEWORK
668. BUSINESS INTELLIGENCE IN RETAILING
669. BUSINESS INTELLIGENCE SYSTEM
670. BUSINESS INTELLIGENT ITSM
671. BUSINESS PROCESS TESTING(BPT)
672. BUSINESS RULE ENGINE IMPLEMENTATION FOR TRANSACTION DECISION
673. C2000 MICROCONTROLLER BASED FILAMENT INVERTER CONTROL ON CANOPEN STACK
674. CAB MANAGEMENT SYSTEM
675. CALCULATION OF INTEREST ON GROSS BASIS FOR NESTED CUSTOMER ACCOUNTS IN BANK
676. CALL DATA RECORDS- ANALYSIS & VERIFICATION
677. CALLER RING BACK TONE[CRBT] PROVIDED FOR TATA TELESERVICE LTD
678. CALLER TUNES BIRTHDAY PROMOTION
679. CANDIDATE EXPERIENCE INSIGHTS USING "IBM DIGITAL ANALYTICS"
680. CAPACITY PLANNING IN CLOUD COMPUTING
681. CAPACITY PLANNING IN CLOUD COMPUTING

- 682. CARPOOLING
- 683. CARPOOLING, BUS LIVE TRACKING AND PARKING ASSIST.
- 684. CASE STUDY ON PROTOCOL SPECIFICATIONS AND NETWORK MESSAGE DECODER
- 685. CASH BACK & SHOPPING ANDROID APPLICATION
- 686. CAT(CLOUD ASSESSMENT TOOL)
- 687. CATCH LIVE USE CASE IMPLEMENTATION FOR SET TOP BOX USING GSTREAMER
- 688. CDN SUPPORT FOR CISCO SERVERS
- 689. CELLULAR MOBILE RADIO BASE STATION NETWORK PLANNING FOR TELECOMMUNICATIONS
- 690. CENTRALIZED CRIMINAL BACKGROUND VERIFICATION SYSTEM
- 691. CENTRALIZED LOCALIZATION MANAGER AND REPOSITORY
- 692. CHANGE CONTROL, DESIGN LOG, QUANTITY, VALUE DRIVER AND CHECKLIST IN ENGINEERING MANAGEMENT SYSTEM
- 693. CHANGE REQUEST RELEASE MANAGEMENT SYSTEM
- 694. CHATTING AND VIDEO CONFERENCING USING XMPP AND WEBRTC FOR ANDROID
- 695. CHECK MARK - A DIGITAL ASSIGNMENT ECOSYSTEM
- 696. CHURN PREDICTION IN TELECOM INDUSTRY
- 697. CHURN PREDICTION USING MACHINE LEARNING
- 698. CLASSIFICATION OF COMPANIES TO INDUSTRY
- 699. CLASSIFICATION OF E-COMMERCE CUSTOMERS BY THEIR BROWSING BEHAVIOR
- 700. CLINICAL OUTPATIENT SELF CHECK-IN SYSTEM
- 701. CLOUD BASED ANALYTICS FOR SMART BUILDINGS
- 702. CLOUD BASED BOOK MANAGEMENT SYSTEM
- 703. CLOUD BASED COMPUTING FOR SUPPLY CHAIN MANAGEMENT
- 704. CLOUD BASED DATA REPLICATION FOR BLOCK STORAGE
- 705. CLOUD BASED DISASTER RECOVERY
- 706. CLOUD BASED ENVIRONMENT FOR MULTI-CHANNEL CUSTOMER RELATIONSHIP MANAGEMENT
- 707. CLOUD BASED ONLINE ADMISSION TEST
- 708. CLOUD BASED PRAGMATIC RESTFUL API DESIGN TO QUERY LOGICAL RESOURCES CREATED USING A 3D MODELING TOOL.
- 709. CLOUD COMPUTING - ENSURING DATA SECURITY USING DYNAMIC DATA OPERATIONS
- 710. CLOUD COMPUTING-BASED FORENSIC ANALYSIS FOR COLLABORATIVE NETWORK SECURITY MANAGEMENT SYSTEM
- 711. CLOUD CONTAINERS
- 712. CLOUD DATABASES FOR INTERNET OF THINGS FOR PHARMA AND HEALTHCARE ORGANIZATION
- 713. CLOUD DIGITAL VIDEO RECORDER
- 714. CLOUD E-COMMERCE: CLOUD BASED CONTENT MANAGEMENT SYSTEM USING ADOBE
- 715. CLOUD SAAS SOFTWARE - PERFORMANCE OPTIMIZATION
- 716. CLOUD-RAN "A CENTRALIZED SOLUTION FOR MOBILE OPERATORS- CHALLENGES AND SOLUTION"
- 717. CLUSTERING ALGORITHMS : ANALYSIS & IMPLEMENTATION
- 718. CLUSTERING AND CLASSIFICATION OF BIG DATA FOR MALWARE DETECTION
- 719. CLUSTERING MALWARE FAMILIES USING DATA MINING APPROACH
- 720. CMS SIMULATOR FOR MOBILE BROADBAND
- 721. CODE QUALITY ANALYZER APPLICATION
- 722. CODE REVIEW TOOL FOR INFORMATICA
- 723. CODING J2EE IN A SECURE WAY
- 724. COGNITIVE RADIUS MESSAGE WRAPPING
- 725. COMMERCIAL MOBILE ALERT SYSTEM (CMAS)
- 726. COMMISSION CONSOLIDATED SYSTEM ON FOCUS WITH US INSURANCE SYSTEM
- 727. COMMUNICATION PLATFORM FOR E-BUSINESSES
- 728. COMMUNITY VIRTUAL LIBRARY
- 729. COMPARATIVE STUDY AND ANALYSIS OF THE USE OF BFD AS AN OAM FOR VXLAN TUNNELS
- 730. COMPARATIVE STUDY OF DIFFERENT AUTOMATION TESTING TECHNIQUES FOR PRESENTATION LAYER IN WEB BASED APPLICATION
- 731. COMPARATIVE STUDY OF DIFFERENT SAAS SOLUTIONS PROVIDED BY CLOUD PROVIDERS.
- 732. COMPONENT BUSINESS MODELING FOR A LEADING EUROPEAN TELECOM OPERATOR
- 733. COMPONENT POWER ANALYZER FOR IA BASED ANDROID PLATFORMS
- 734. CONFIGURABLE NE SALTED PASSWORD DIGEST
- 735. CONFIGURATION AND MANAGEMENT TOOL FOR IP-PBX
- 736. CONFIGURATION SERVICE SUPPORT HIGH PERFORMANCE QUERY INTERFACE
- 737. CONFLICT RESOLUTION IN SYSTEMS
- 738. CONJURE DATA STRUCTURES

739. CONSISTENCY AS A SERVICE : AUDITING CLOUD CONSISTENCY
740. CONTACT CENTER ON CLOUD
741. CONTENT AND SIMILARITY INTEGRATION BASED RETRIEVAL OF IMAGE INFORMATION
742. CONTENT CACHING AND SCHEDULING IN WIRELESS NETWORKS WITH ELASTIC AND INELASTIC TRAFFIC
743. CONTENT CHANGE RATE ANALYSIS FOR POWER SAVING IN TRANSMISSIVE DISPLAY PANELS
744. CONTENT MANAGEMENT DASHBAOARD
745. CONTENT RECOMMENDATION AND SHARING AMONG SET-TOP-BOX USERS USING PEER-TO-PEER COMMUNICATION
746. CONTEST ENGINE-PLAY AND WIN
747. CONTEXT AWARE API FOR ANDROID APPLICATIONS
748. CONTEXT AWARE SMART DRIVING DIRECTION SYSTEM
749. CONTEXT AWARE SPELL CHECKER
750. CONTEXTUAL IMAGE SEGMENTATION USING MARKOV RANDOM FIELD (MRF)
751. CONTINUOUS INTEGRATION FOR ANGULARJS BASED WEB APPLICATIONS
752. CONTINUOUS INTEGRATION IN SOFTWARE TESTING
753. CONTINUOUS TESTING FRAMEWORK TO AID IN CONTINUOUS INTEGRATION & DELIVERY IN AGILE METHODOLOGY
754. CORPORATE CHAT
755. COURSE RECOMMENDATION IN AN ONLINE LEARNING COMMUNITY USING LINKEDIN DATA
756. COVERT CHANNEL DETECTION USING PHASE SPACE RECONSTRUCTION
757. CQ5 WEB CONTENT MANAGEMENT SYSTEM
758. CRA AUTOMATION
759. CRM CLIENT OPENUI FRAMEWORK
760. CROSS PLATFORM XORIAN HELPDESK MOBILE APPLICATION
761. CROSS-LINGUAL NAME ENTITY TRANSLITERATION SYSTEM
762. CROWDSOURCED AGRICULTURAL PRODUCT FEEDBACK USING INTERNET OF THINGS
763. CSAT
764. CUCUMBER SUPPORT AND REPORT GENERATION
765. CURE WEB SERVICE CLIENT AND DATA TRANSFER OVER THE NETWORK VIA SECURE INTERFACE
766. CUSTOM REPORTING FRAMEWORK V2
767. CUSTOMER ANALYSIS DETAILS
768. CUSTOMER ONLINE INFORMATION SYSTEM (COINS)
769. CUSTOMER USAGE PATTERN/ANALYSIS OF CLOUD SERVICE MANAGEMENT
770. CUSTOMER-PRODUCT RELATIONSHIP ANALYSIS FOR E-COMMERCE BUSINESS
771. CUSTOMIZABLE VIRTUAL PRIVATE NETWORK SERVICE WITH QOS
772. CUSTOMIZATION OF TRADING PARTNER CONFIGURATION IN SEEBURGER FOR E-BUSINESS
773. CUT DETECTION IN WIRELESS SENSOR NETWORKS
774. CYBER SECURITY USING RSA ALGORITHM
775. DAILY ORDERING DATABASE FOR SEPARATE ETL SYSTEM
776. DASHBOARD & REPORTING TOOL
777. DASHDB ADMINISTRATIVE CAPABILITY IN CLPPLUS
778. DATA ANALYSIS FOR BANKING
779. DATA ANALYSIS FOR ERP IMPLEMENTATION
780. DATA ANALYSIS WITH GRAPH DATABASE
781. DATA ANALYTICS BY APPLYING ENTERPRISE INTEGRATION PATTERNS
782. DATA ANALYTICS IN EDUCATION DOMAIN
783. DATA ANONYMIZATION USING MAP REDUCE ON CLOUD
784. DATA BUILDING AND SERVER CONFIGURATION UTILITY
785. DATA CENTER API FOR FINDING THE SHORTEST PATH BASED ON MINIMUM SPANNING-TREE
786. DATA DISCOVERY SOLUTION FOR PDM
787. DATA DRIVEN USER INTERFACE FOR ONLINE RECRUITMENT TESTS
788. DATA ENCYCLOPEDIA
789. DATA EXTRACT PROCESS
790. DATA INBOUND/OUTBOUND INTERFACE
791. DATA LOGGER
792. DATA MIGRATION PROCESS AND GUIDELINES
793. DATA MIGRATION THROUGH SAP BODS
794. DATA MINING OF CONSUMER INTERACTION DATA TO FIND CONSUMER PREFERENCES
795. DATA PERFORMANCE TUNING IN TIBCO
796. DATA SERVICES USING ACORD IN INSURANCE SYSTEM

- 797. DATA TRANSFER MECHANISM
- 798. DATA WAREHOUSE MANAGEMENT WITH SAP BW ON HANA FOR A RETAIL OUTLET
- 799. DATABASE CAPACITY AND SCALING
- 800. DATABASE-CENTRIC GENERATION IN THE CLOUD ATMOSPHERE
- 801. DATACENTER SITE PROFILER
- 802. DATAWAREHOUSING WITH STAR SCHEMA DESIGN FOR ANALYSING BROADBAND SUBSCRIBER BOOKINGS.
- 803. DB-IMPACT (R12 ANALYZER)
- 804. DEBUGGING TOOL
- 805. DECODING OF S1AP MESSAGES BETWEEN ENODEB AND MME
- 806. DECOUPLING CENTRAL WTT-DOMAIN INTERFACE LAYER
- 807. DEEP LEARNING WITH ADUINO
- 808. DEEP PACKET INSPECTION
- 809. DEFECT SUMMARY AUTOMATION
- 810. DEMAND MANAGEMENT SYSTEM
- 811. DEMONSTRATE USE OF CCXML AND VXML APPLICATIONS IN IP PBX HQ/BRANCH OFFICE DEPLOYMENTS
- 812. DESCRIPTIVE AND PREDICTIVE ANALYSIS OF EMO DEVICE DATA USING R
- 813. DESIGN & DEVELOPMENT OF PROXIMITY LIGHTING IN OPEN STORAGE AREAS ON VEHICLE DASHBOARD
- 814. DESIGN & DEVELOPMENT OF WEB APPLICATION FOR PURCHASE OF TREES FROM TREES GROWERS (FOREST DEPARTMENT)
- 815. DESIGN & IMPLEMENTATION OF ITN (IT NETWORK) FOR RAINWATER WATER HARVESTING SYSTEM
- 816. DESIGN AND DEVELOP SOLUTION A SOLUTION TO IMPROVE PERFORMANCE OF SELENIUM GRID ARCHITECTURE
- 817. DESIGN AND DEVELOPMENT OF JAVA PROFILING TOOL FOR WEB/ENTERPRISE APPLICATIONS
- 818. DESIGN AND DEVELOPMENT OF PRODUCT ON MODULE(POM)
- 819. DESIGN AND DEVELOPMENT OF SMART BIOMETRIC AUTHENTICATOR
- 820. DESIGN AND DEVELOPMENT OF TEST & EVALUATION DATA MANAGEMENT SYSTEM FOR LAUNCH VEHICLE AVIONICS PACKAGES
- 821. DESIGN AND DEVELOPMENT OF WEB BASED MANAGEMENT CONSOLE FOR APPLICATION CONTROL SERVER
- 822. DESIGN AND DEVELOPMENT OF WEB BASED SOFTWARE TO MANAGE THE INTERNAL ISO AUDITS OF VSSC
- 823. DESIGN AND IMPLEMENT DATA VIRTUALIZATION AND FEDERATION FRAMEWORK
- 824. DESIGN AND IMPLEMENT GRAPH BASED SPATIAL DATA FORMAT
- 825. DESIGN AND IMPLEMENT MODEL VIEW CONTROLLER APPLICATION FOR THE ENTERPRISE SEARCH PLATFORM TO ENABLE USER TO SEARCH AND VIEW INTELLECTUAL PROPERTY INFORMATION, ADDITIONALLY ENHANCING THE USER PATENT'S SEARCH AND VIEW PREFERENCES.
- 826. DESIGN AND IMPLEMENT READ FROM SAP STAGE IN SPECTRUM USING REMOTE FUNCTION MODULE (RFM)
- 827. DESIGN AND IMPLEMENT WEB-BASED ORGANIZATIONAL SKILL MANAGEMENT SYSTEM
- 828. DESIGN AND IMPLEMENTATION OF AUTOMATED SOFTWARE SIZING TOOL FOR ONLINE TRANSACTION PROCESSING SYSTEMS
- 829. DESIGN AND IMPLEMENTATION OF DATA MART FOR AN AIRLINE
- 830. DESIGN AND IMPLEMENTATION OF DATA WAREHOUSE FOR SPEND ANALYSIS IN LARGE BUSINESSES
- 831. DESIGN AND IMPLEMENTATION OF HYPERION PLANNING HISTORY CUBES USING BSO INSTEAD OF ASO
- 832. DESIGN AND SIMULATION ANALYSIS OF A BUS ARBITRATION MECHANISM FOR MULTIPROCESSOR SYSTEMS
- 833. DESIGN APP MODEL AVAILABLE ON OFFICE APP STORE FOR EXCEL 2013 AS ADD-IN
- 834. DESIGN OF A COMMON BIT ENGINE FOR EMBEDDED SYSTEMS
- 835. DESIGN OF A FASTER, SECURED DATA TRANSMISSION MECHANISM PREVENTING COMPRESSION SIDE-CHANNEL ATTACKS
- 836. DESIGN OF SDH BASED STM-1 RING
- 837. DESIGN OF SOFT KEYPAD AND WORD PREDICTION ENGINE
- 838. DESIGNING A FRAMEWORK TO AUTOMATE THE CONFIGURATION MANAGEMENT IN A NETWORK MANAGEMENT SYSTEM.
- 839. DESIGNING AN EFFICIENT BRAIN COMPUTER INTERFACE (BCI) WITH HIGHER ACCURACY AND TRANSFER RATES

840. DESIGNING AND DEVELOPING REPORTS FOR AGGREGATE REPORTING TOOL
841. DESIGNING CLOUD PLATFORM USING OPENSTACK & RHEL
842. DETECTION AND PREVENTION OF DATA LEAKAGE
843. DETECTION OF DIFFERENT FACIAL FEATURES UNDER SWARM OPTIMIZATION
844. DETECTION OF MISBEHAVIOR NODES IN WI-FI USING DISTRIBUTED SNIFFERS
845. DETECTOR AND BEHAVIORAL ANALYZER FOR BOTNETS (ZOMBIES) BASED ON NETWORK AND HOST AND IMPLEMENTING PATTERN MATCHING TECHNIQUE TO DETECT WEB ROBOTS
846. DEVELOP GSTREAMER BASED APPLICATION FOR TEST FRAMEWORK ENHANCEMENT AND AUTOMATION IN ST MEDIA FRAMEWORK FOR SET TOP BOX PLATFORMS.
847. DEVELOPING A DISTRIBUTED DIGITAL ASSET LIBRARY USING CLOUD STORAGE AS COMMUNICATION BACKBONE
848. DEVELOPING A TOOL TO UPLOAD/DOWNLOAD DATA INTO AND FROM SAP WITH AUTOMATION OF SALES AND DISTRIBUTION PROCESSES IN CGS INDUSTRIES.
849. DEVELOPING DATABASE LINKAGE BETWEEN MIS AND GEOSPATIAL DATABASE FOR INTEGRATED WATERSHED DEVELOPMENT MONITORING
850. DEVELOPING SHIPPING SOFTWARE FOR E-BUSINESS LOGISTICS
851. DEVELOPING VEHICULAR DATA CLOUD SERVICES IN THE IOT ENVIRONMENT
852. DEVELOPMENT FOR AMPLITUDE & PHASE MEASUREMENT TECHNIQUE OF RF PARAMETER
853. DEVELOPMENT OF 802.11AF IN TVWS BAND AND PERFORMANCE COMPARISON WITH CONVENTIONAL WLAN NETWORKS
854. DEVELOPMENT OF A LIGHT WEIGHT PROFILER FOR A LINUX BASED SYSTEM
855. DEVELOPMENT OF AN END-TO-END MAPS FEEDBACK AUTOMATION FRAMEWORK
856. DEVELOPMENT OF AUTOMATED SOFTWARE FOR FAULT FREE TEST DATA ANALYSIS
857. DEVELOPMENT OF CONDITIONAL ACCESS SYSTEM FOR SET-UP BOX
858. DEVELOPMENT OF GPS DISCIPLINED TIMING SOLUTION
859. DEVELOPMENT OF HIGH PERFORMANCE FREQUENCY TO VOLTAGE CONVERTER TECHNIQUE FOR HIGH SPEED ANALOG RECEIVER MODULE
860. DEVELOPMENT OF ON-LINE EXAM PLATFORM FOR EXAMINER AND EXAMINEE
861. DEVELOPMENT OF SINGLE SIGN ON USING OAUTH 2.0 PROTOCOL
862. DEVELOPMENT OF TWO WAY RANGING SYSTEM FOR IRNSS SATELLITE'S PRECISE ORBITATION
863. DEVELOPMENT OF WEB BASED EXAMINATION INFORMATION SYSTEM OF NIELIT AND APPLYING DATA ANALYSIS TECHNIQUES USING OPEN SOURCE TOOLS.
864. DEVELOPMENT TECHNIQUES FOR WINDOWS PHONE MOBILE APPLICATION
865. DEVICE FIRMWARE UPDATE
866. DFCRS -PMS SYSTEM
867. DFORCE TESTING - EFFECTIVE FREE FORM EXPLORATORY TESTING
868. DIAGNOSTIC
869. DIGITAL CAMPAIGN MANAGEMENT PLATFORM
870. DIGITAL ENGINE CONTROLLER SOFTWARE FOR SMALL TURBO FAN ENGINE
871. DIGITAL IMAGE COPY-MOVE FORGERY DETECTION BASED ON KEYPOINT FEATURES.
872. DIGITAL TELEVISION VIA SATELLITE BROADCASTING - DESIGN AND DEVELOPMENT OF A DVB COMPLAINT DTV PLATFORM
873. DIGITAL TERRAIN MODEL (DTM) VISUALIZATION AND INTERACTIVE EDITING USING JAVA 3D
874. DIGITALIZING THE APPROVAL PROCESS FOR PURCHASE ORDER
875. DISASTER RECOVERY SYSTEMS
876. DISASTER RESPONSE, SUPPORTING DISASTER RELIEF EFFORTS WITH CRITICAL TOOLS AND INFORMATION
877. DISTANCE ADAPTIVE PICTURE QUALITY
878. DISTRIBUTED, CONCURRENT AND INDEPENDENT ACCESS TO ENCRYPTED CLOUD DATABASES
879. DISTRIBUTED, IN-MEMORY, REAL TIME, STREAMING, BIG DATA ANALYTICS
880. DOWNLOAD CENTER
881. DPI INTEGRATION IN OPENSTACK CLOUD WITH FAST PACKET PROCESSING USING DPDK
882. DRIVER ASSISTANCE SYSTEM FOR LANE CHANGE DETECTION
883. DYNAMIC ALGORITHM SELECTION FOR DATA MINING CLASSIFICATION
884. DYNAMIC CONTENT MANAGER FOR WEBSITE DEVELOPMENT.
885. DYNAMIC DICTIONARY SUPPORT FOR VARIOUS DIAMETER INTERFACES ON CISCO ASR5000
886. DYNAMIC LOAD BALANCING ACROSS WAN LINKS USING SOFTWARE DEFINED NETWORKING
887. DYNAMIC REAL-TIME INTERACTIVE MANAGED SECURITY SERVICES PORTAL
888. DYNAMIC RESOURCE ALLOCATION USING VIRTUAL MACHINES FOR CLOUD COMPUTING ENVIRONMENT
889. DYNAMIC RESOURCE MANAGEMENT SYSTEM FOR CLOUD COMPUTING

890. DYNAMIC SGSN RESPONSE SYSTEM IN MOBILE BACKHAUL
891. DYNAMIC TUNNELS - SCALE IMPROVEMENT FEATURE
892. DYNAMIC WEBSERVICE INVOCATION
893. DYNAMICALLY CONFIGURABLE BLOCK BASED REGISTER ALLOCATION
894. E - BUSINESS APPLICATION FOR FUN FAIR ORGANIZERS
895. E- BUSINESS ON DIGITAL ASSETS
896. E- BUSINESS USING MOBILE TECHNOLOGY & IMPACT ON COMMON PEOPLE
897. E PROCUREMENT SYSTEM
898. E SEARCH - SOLR
899. E SHOP FOR HEALTH PLANS FOR US MARKET
900. E-CERTIFICATES WITH SECURE DIGITAL VALIDATION
901. ECOMMERCE
902. E-COMMERCE BOOK SHOPPING CART
903. E-COMMERCE FOR HOME APPLIANCES
904. E-COMMERCE FRAMEWORK FOR CONNECTING MULTIPLE PRODUCERS AND MULTIPLE CONSUMERS
905. E-COMMERCE MANAGEMENT WEB APPLICATION
906. E-DISCOVERY IN BANKING
907. E-DISCOVERY MANAGEMENT SYSTEM APPLICATION
908. EDUMANTRA - EDUCATIONAL MANAGER & TRACKER
909. EFFECTIVE ALARM HANDLING THROUGH CUSTOMER PRODUCT INFORMATION
910. EFFECTIVE GRAPHICS RENDERING ON CLOUD COMPUTING PLATFORM
911. EFFECTIVE NETWORK SECURITY THROUGH QUANTUM KEY DISTRIBUTION PROTOCOL
912. EFFECTIVE PREDICTION OF DIFFICULT KEYWORD OVER DATABASES
913. EFFECTIVELY MODERNIZING LEGACY SERVICES - SOA AND API ADOPTION
914. EFFICIENT MULTIPOINT LIVE STREAMING OVER WEBRTC
915. EFFICIENT NONCE-BASED REMOTE USER AUTHENTICATION SCHEME USING SMART CARDS
916. EFFICIENT UTILIZATION OF NETWORK RESOURCES BY TRAFFIC LOAD BALANCING USING SDN
917. E-FORM BANKING SERVICES
918. E-HEALTH CARE MANAGEMENT SYSTEM
919. ELECTRICITY CONTROL SYSTEM
920. ELECTRONIC HEALTH RECORD (EHR) SOFTWARE WITH FOCUS ON NATIONAL DRUG CODE (NDC)
921. ELECTRONIC HEALTH RECORD(EHR) MANAGEMENT
922. EMAIL ARCHIVING IN HADOOP
923. EMAIL FUNCTIONALITY FOR BATCH
924. EMAIL LIFECYCLE MANAGEMENT AND PROVISIONING IN CLOUD APPLICATION
925. EMAIL MARKETING ANALYSIS
926. EMOTION CLASSIFICATION OF POSTS AND REVIEWS IN BLOG
927. EMPLOYEE REFERRAL MANAGEMENT SYSTEM
928. EMPLOYEE TIME SHEET MANAGEMENT USING ORACLE FORMS AND REPORTS
929. EMPOWER PURCHASE TEAM TO BE MORE INTELLIGENT, MARKET SENSITIVE AND DEMAND DRIVEN THROUGH COGNITIVE COMPUTING
930. EMPOWERED ONLINE CLASSROOMS
931. EMPOWERING UNMANNED CALL DISSEMINATION IN CALL CENTRE THROUGH CTI
932. EMULATOR FOR INDUSTRIAL COMMUNICATION DEVICE
933. ENABLING SAFE SOCIAL COMMERCE SOLUTION FOR TRADING PORTAL
934. END-TO-END NETWORK TOPOLOGY DETECTION USING SWITCH CAM
935. ENERGY CONSUMPTION PROFILING USING HADOOP
936. ENERGY EFFICIENT RELIABLE ROUTING CONSIDERING RESIDUAL ENERGY IN WIRELESS ADHOC NETWORKS
937. ENGINEERING PRE-CHECKLIST TASK COLLABORATION
938. ENHANCE SECURITY ON CLOUD STORAGE
939. ENHANCED CIRCUIT SWITCHED FALLBACK
940. ENHANCED P2P POWER SAVE METHOD
941. ENHANCED REVEALING MODULE PATTERN WITH MVC
942. ENHANCEMENT OF AMOS AUTOMATION IN WRAN
943. ENHANCEMENT TO EXCEPTION FILINGS
944. ENHANCING FRESHNESS OF SEARCH RESULTS BASED ON USER ACTIVITY FEEDS
945. ENHANCING MARKET REACH THROUGH E-COMMERCE AND MOBILE APP IN THE CONVENTIONAL SHIPPING INDUSTRY
946. ENTERPRISE CONTENT MANAGEMENT & DIGITAL TRANSFORMATION OF ENTERPRISE

947. ENTERPRISE DOCUMENTS MANAGEMENT SYSTEM
948. ENTERPRISE LAN FOR A INFANTRY/MECHANISED BRIGADE
949. ENTERPRISE LEVEL ALL-IN-ONE UNIFIED COMMUNICATION SOLUTION
950. ENTERPRISE MOBILE DEVICE MANAGEMENT
951. ENTERPRISE PERFORMANCE MANAGEMENT – A NEW ERA OF ENTERPRISE RESOURCE PLANNING
952. ENTERPRISE REPORTING FRAMEWORK.
953. ENVIRONMENT VALIDATION TOOL
954. ENVIRONMENT/INSTALLATION VERIFICATION TESTING TOOL
955. ENVISION SELF SERVICE DESIGN
956. E-OFFICE SPACE
957. ERASURE CODING IN DATA STORAGE
958. E-REGISTRATION FOR ONLINE COURSE REGISTRATION
959. ERROR HANDLING FOR REAL TIME EMBEDDED SYSTEM
960. E-SALES REPORTING STRATEGY IN DATA WAREHOUSE SYSTEM
961. ESCROW COMPONENT ANALYSIS IN BILL MODEL OF LOAN METHODOLOGY
962. E-SPORT CHALLENGE
963. ESTIMATION GENERATION TOOL
964. ESTIMATION SOFTWARE FOR CONSTRUCTION INDUSTRY
965. ETHERNET BASED COMMUNICATION BETWEEN ECUS IN AUTOMOBILES
966. ETL AUTOMATION FRAMEWORK
967. ETL PROCESS: ROLE IN DATA WARE HOUSE
968. ETL USING HADOOP FOR DATA WAREHOUSING
969. EVALUATE MODEL BASED APPLICATION DEVELOPMENT USING RHAPSODY UNIFIED MODELING TOOL AND CODE GENERATION FOR EMBEDDED SYSTEM.
970. EVALUATE TARGET SPECIFIC TOOL-CHAIN INTEGRATION IN IBM RHAPSODY FOR EMBEDDED SYSTEM PLATFORMS.
971. EVALUATION AND COST TO BENEFIT ANALYSIS OF ADOPTING UNIT TEST TOOLS FOR EMBEDDED SYSTEMS TO ENABLE A FASTER WORKFLOW.
972. EVALUATION OF DIFFERENT HYPERVISORS PERFORMANCE IN THE PRIVATE CLOUD
973. EVENT MANAGEMENT SYSTEM
974. E-VOTING SYSTEM
975. EXCEPTION MANAGEMENT SYSTEM
976. EXPLORING REPORTING TECHNIQUES TO MAKE AUDIT ANALYTICS FLEXIBLE
977. EXPRESSIVE, EFFICIENT, AND REVOCABLE DATA ACCESS CONTROL FOR MULTI-AUTHORITY CLOUD STORAGE
978. EXTENDED OBRM FOR TELCO PROVIDERS
979. EXTENDING CAPABILITIES OF COGNOS REPORTING WITH JAVASCRIPT
980. EXTENDING WIRELESS RANGE USING LAYER 2 HOPPING - AN EMERGENCY COMMUNICATION MECHANISM
981. EXTENSIBLE PROJECT TRACKER
982. EXTERNAL SYSTEM INTERFACE WITH FINACLE TREASURY
983. FACILITY STATUS REPORTING (FSR)
984. FAILURE HANDLING FOR REAL TIME EMBEDDED SYSTEMS
985. FAST [FIX AND SHIP TODAY] ENGINEERING - DEMONSTRATE CUTTING EDGE TECHNIQUES TO OPTIMIZE SOFTWARE VALIDATION CYCLES
986. FDA WEB CONTENT MINING
987. FEDERATED SECURITY IN CROSS DOMAIN WEB AUTHENTICATION
988. FFPA COUNT BENCHMARKING FOR FTP
989. FILE CASTING USER APPLICATION DEVELOPMENT FOR DAB
990. FILE STORE MOBILE APP WITH EMC ATMOS
991. FILE SYSTEM NOTIFICATION SUPPORT IN GLUSTERFS
992. FILLING OF DATA GAPS IN SEA SURFACE TEMPERATURE TIME SERIES DATA USING HADOOP BASED NEURAL NETWORKS
993. FINANALYTICS - DATA MINING AND DATA ANALYTICS IN FINANCIAL SYSTEMS
994. FINANCIAL RECONCILIATION WHILE SEPARATING A BANK
995. FIRE EXTINGUISHER ROBOT
996. FIXSIMUL – FIX SIMULATOR
997. FLEET SERVICES
998. FLIGHT CONTROL FUNCTIONALITY ON QUADCOPTER
999. FLIGHT MANAGEMENT SYSTEM ON QUADCOPTER

1000. FLOATING POINT EXCEPTIONS TRAPPING ON ARM
1001. FLOOR OCCUPANCY ANALYSIS TO IDENTIFY AND IMPROVE SENSOR CONFIGURATION EFFECTIVENESS.
1002. FLOW CONTROL IN HIGH CAPACITY SYSTEMS
1003. FM SMART SWITCH
1004. FOUNDATIONAL TECHNOLOGIES BATCH ARCHETYPE JMS FUNCTIONALITY
1005. FRAMEWORK AGAINST WEB CODE INJECTION VULNERABILITIES
1006. FRAMEWORK FOR GROUP BOOKING IN AIRLINE DOMAIN
1007. FRAMEWORK FOR METADATA BASED FILE-MANAGEMENT
1008. FRAUD DETECTION
1009. FRAUD RISK VULNERABILITY ASSESSMENT IN TCL
1010. FREE PARKING LOT MANAGEMENT (IOT)
1011. FREE RAP TONE DOWNLOAD FOR RBT SUBSCRIBERS.
1012. FRENCH TO HINDI MACHINE TRANSLATION SYSTEM USING PROBABILISTIC APPROACH
1013. FRICTIONLESS BANKING
1014. FRIEND LOCATOR MOBILE APP
1015. GENERALIZATION OF THE DATA NORMALIZATION PROCESS
1016. GENERATING CONSTANT DATA IN REAL TIME ENVIRONMENT TO SAVE TRANSACTIONS USING XML AS STATIC
1017. GENERIC CONFIGURATION DEVICE AGENTS ( MEDICAL DEVICE)
1018. GENERIC PORTAL DASHBOARD FOR INTEGRATING STANDALONE WEB APPLICATIONS
1019. GENERIC SOFTWARE LIBRARY FOR GENERATION OF PLANETARY DATA SYSTEM 4(PDS4) COMPLAINT DATA SETS
1020. GENERIC TEST AUTOMATION FRAMEWORD
1021. GIS AND BIG DATA FOR TOURISM
1022. GLOBAL EVENT MANAGEMENT (GEM) SYSTEM
1023. GLOBAL REPORTING AND BASE MANAGEMENT
1024. GLOBAL TRANSLATION SERVICES FOR MULTI-SITE MANAGEMENT IN AEM
1025. GOING AGILE FOR DEVELOPMENT IN ERP SYSTEM – A CASE STUDY
1026. GOLOCAL
1027. GOOGLE IS RUINING THE CREATIVITY OF YOUNG MINDS
1028. GPS BASED WASTE MANAGEMENT SYSTEM USING REAL TIME DATA
1029. GPUMODESWITCH TOOL FOR VMWARE ESXI 6.0
1030. GRAHICAL REPRESENTATION, STORAGE AND FETCHING OF HIRING DATA
1031. GRC CONTENT SERVER
1032. GREEN LIGHT OPTIMAL SPEED ADVISORY FOR EFFICIENCY IN VEHICLES
1033. GROUP RECOMMENDER SYSTEMS
1034. GROWING NEED OF AUTOMATED EMERGENCY RESPONSE SYSTEM AND ITS IMPLEMENTATION
1035. GSE IMPLEMENTATION INSIDE LINUX DVB FRAMEWORK
1036. GSM VAMOS VERIFICATION
1037. GUI TESTING TOOL FOR WINDOW APPLICATIONS
1038. GUIDELINES FOR SOFTWARE PROJECT PLANNING AND EXECUTION ON THE FLOOR - ADDRESSING THE REAL TIME CHALLENGES.
1039. GWT BASED WEB-PORTAL FOR TCMFG
1040. HADOOP AS AN ETL TOOL
1041. HAND GESTURE BASED REMOTE CONTROL
1042. HANDLING FATAL ERROR IN BANKING APPLICATION BATCH JOBS
1043. HEALTH CARE DATAWAREHOUSE APPLICATION SYSTEM
1044. HEALTH CONTINUA STANDARD BASED SENSOR PLATFORM FOR ANDROID DEVICES
1045. HEALTH MONITORING – LOG DATA ANALYTICS
1046. HETEROGENEOUS CONNECTIVITY FOR THE LEGACY DEVICES VIA OPEN INTERCONNECT CONSORTIUM(OIC) IN IOT ECOSYSTEM.
1047. HIGH AVAILABILITY MODELLING FOR LOCATION BASED SYSTEM
1048. HIGH AVAILABILITY STORAGE FOR EDA TOOLS
1049. HIGH AVAILABILITY SYSTEMS
1050. HIGH RESOLUTION IMAGE TASKING AND ACQUISITION SOFTWARE
1051. HOME AUTOMATION: TOUCH SCREEN KEYPAD
1052. HOSPITAL MANAGEMENT SYSTEM IN SALESFORCE
1053. HOSTING A POSIX COMPLAINT GPOS AS A THREAD IN AN RTOS
1054. HOSTING DATA ACQUISITION AND ANLYTICS SOFTWARE IN CLOUD
1055. HUMAN RESOURCE MANAGEMENT SYSTEM



1056. HUMAN RESOURCE MANAGEMENT SYSTEM (HRMS)
1057. I2C DEVICE DRIVER USED TO SENSE TEMPERATURE OVER LINUX PLATFORM
1058. IBM DATAPOWER SELF SERVICE FRAMEWORK
1059. IC(INNOVATION CENTER) ONLINE PORTAL
1060. I-CENTER USING SOLR
1061. I-CENTER USING SOLR
1062. IDEA MANAGEMENT PORTAL WHERE ORGANIZATIONS (BOTH IT & NON-IT) CAN SETUP AN EXCLUSIVE WORKSPACE AND START INVITING IDEAS FROM EMPLOYEES.
1063. IDENTIFICATION OF DUPLICATE IMAGES IN DIGITAL REPOSITORY
1064. IINTEGRATED AVIONICS SYSTEM TESTER
1065. IMAGE CLASSIFICATION USING CONVOLUTION NEURAL NETWORK
1066. IMAGE CLASSIFICATION USING ML TECHNIQUES
1067. IMAGE COMPARISON FOR VIDEO SURVEILLANCE USING COLOR HISTOGRAM AND TEXTURE BASED APPROACHES
1068. IMAGE COMPRESSION TECHNIQUES FOR ANDROID
1069. IMAGE PRE-PROCESSING DESIGN METHODS TO IMPROVE THE INPUT IMAGES TO OCR ENGINE EMPLOYED BY SNIPP.COM
1070. IMAGE PROCESSING AND APPLICATIONS
1071. IMAGE PROCESSING USING WAVELET-BASED EDGE DETECTION
1072. IMAGE STITCHING USING INVARIANT FEATURES
1073. IMAGE/VOICE RECOGNITION
1074. IMPACT OF USING GPGPU ON ARTIFICIAL INTELLIGENCE CLUSTERING ALGORITHMS
1075. IMPLEMENTATION OF 40G-QSFP TO10G SFP+ ADAPTERS FOR DATA CENTER GRADE FABRIC SWITCHES
1076. IMPLEMENTATION OF AN ENTERPRISE APPLICATION USING MEAN(MONGO DB, EXPRESS JS,ANGULAR JS, NODE JS)
1077. IMPLEMENTATION OF CLOUD BASED NEXT GENERATION SEQUENCING DATA ANALYSIS
1078. IMPLEMENTATION OF DATA MINING TECHNIQUES FOR POWER DISTRIBUTION UTILITIES.
1079. IMPLEMENTATION OF DEVOPS FOR ANY PROJECT
1080. IMPLEMENTATION OF FLEXIBLE LINE KEY CUSTOMIZATION ON MICROSOFT LYNC COMPATIBLE PHONES
1081. IMPLEMENTATION OF NEW DATABASE FOR SEPERATE ETL SYSTEM IN AN ENTERPRISE
1082. IMPLEMENTATION OF ORACLE® SALES CLOUD CRM
1083. IMPLEMENTATION OF RAC (REAL APPLICATION CLUSTER) IN BUSINESS
1084. IMPLEMENTATION OF SERVICE ORIENTED ARCHITECTURE IN PAYMENT GATEWAYS
1085. IMPLEMENTATION OF STUDENT MANAGEMENT SYSTEM USING SAP
1086. IMPLEMENTATION OF VIRTUAL ROUTER REDUNDANCY PROTOCOL (VRRP) FOR IPV4 ON LINUX PLATFORM
1087. IMPLEMENTATION OF WEB HOSTED IMAGE STEGANOGRAPHY SERVICE & STUDY OF VARIOUS STEGANOGRAPHY ALGORITHMS.
1088. IMPLEMENTATION OF ZERO SHUTTER LAG ON ANDROID CAMERA
1089. IMPLEMENTING IOT ON WATER TREATMENT PLANT USING WIRELESS SENSOR NODES
1090. IMPLEMENTING END TO END PROCUREMENT CYCLE (SAP )
1091. IMPLEMENTING FIPS SIMULATOR FOR NETOWRK SECURITYPRODUCT(AAA)
1092. IMPLEMENTING LBAAS WITH OPENSTACK USING NETSCALER.
1093. IMPLEMENTING TRANSPORTATION MANAGEMENT SOLUTION USING OTM
1094. IMPLEMENTING, MAINTAINING AND ADMINISTERING DATABASE SOLUTION
1095. IMPROVE THE PROCESS OF EVOLUTION OF A BUSINESS SCENARIO IN SAP OPINT RUNNING ON SAP HANA DB
1096. IMPROVED MOVIE RECOMMENDATION SYSTEM USING COMPUTATIONAL INTELLIGENCE
1097. IMPROVED QUALITY ASSURANCE USING AGILE METHODS AND TEST AUTOMATION
1098. IMPROVING ACCESS PERFORMANCE OF SSTABLE USING BLOOM FILTERS
1099. IMPROVING DATA PERFORMANCE THROUGH OPTIMIZING TRANSMISSION RESOURCES
1100. IMPROVING DEFECT REMEDIATION THROUGH CASE-BASED REASONING.
1101. IMPROVING ENERGY EFFICIENCY AND QOM AWARE IN MULTIMEDIA SENSOR NETWORKS
1102. IMPROVING TEST AUTOMATION EFFICIENCY LEVERAGING APPLICATION MONITORING AGENTS AND ARTIFICIAL INTELLIGENCE
1103. IMPROVING THE EFFECTIVENESS OF MARKETING AND SALES USING DISTRIBUTED ASSOCIATION RULE MINING
1104. IMPROVING USABILITY OF SUPERVISOR APPLICATION
1105. IMPROVISED EMOTION CLASSIFICATION IN SOCIAL MEDIA ANALYTICS

- 1106. IN MEMORY COMPONENT AUTOMATION TESTING
- 1107. IN-APP MEMORY PROFILER FOR TEST FRAMEWORK
- 1108. INCIDENT MANAGEMENT AND HADOOP CLUSTER DATA REPORTING
- 1109. INDEPENDENT MICROPROCESSOR FIRMWARE LAYOUT SUPPORTING MULTIPLE OPERATING SYSTEM
- 1110. INDUSTRIAL INTERNET GATEWAY
- 1111. INDUSTRIAL INTERNET OF THINGS: CONVERGENCE IN STANDARDIZATION OF ARCHITECTURE AND PROTOCOL
- 1112. INFORMATION RETRIEVAL USING MODERN RANKING ALGORITHMS
- 1113. INGENIOUS AGENT TO METAMORPHOSE E-MEMOIRS AND PHONETIC MEMOIRS FOR VISUALLY IMPAIRED
- 1114. INPUT OUTPUT FUNCTIONALITY ON ARDUINO PLATFORM
- 1115. INTEGRAL SECURITY AND END NODE IDENTIFICATION IN INTERNET OF THINGS
- 1116. INTEGRATED CALL HOME
- 1117. INTEGRATED CLOUD DEPLOYMENT PLATFORM
- 1118. INTEGRATED SECURITY TOOL
- 1119. INTEGRATED SOFTWARE DEVELOPMENT ENVIRONMENT (ISDE) FOR THE INDIGENOUS MISSION COMPUTER OF ISRO SATELLITE LAUNCH VEHICLES
- 1120. INTEGRATING CLOUD STORAGE WITH SOCIAL NETWORKING FEATURES
- 1121. INTEGRATION OF AUTOMATED MEDICINE DISPENSARY SYSTEM
- 1122. INTEGRATION OF CLEAR REPORTS WITH CARGO MANAGEMENT SOLUTION
- 1123. INTEGRATION SOFTWARE DEVELOPMENT KIT
- 1124. INTELLIGENCE SSD USING TEMPERATURE SENSOR
- 1125. INTELLIGENT ALARM QUALIFIER
- 1126. INTELLIGENT CASE ROUTING USING PREDICTIVE ANALYTICS
- 1127. INTELLIGENT DEMAND CALCULATION IN RETAIL
- 1128. INTELLIGENT RECOVERY AND COLLECTIONS SYSTEM FOR DELINQUENT ACCOUNTS
- 1129. INTELLIGENT TEST CASES ANALYSER
- 1130. INTELLIGENT TRAFFIC CONTROL
- 1131. INTELLIGENT TRANSPORTATION SYSTEM (SAFE DRIVING USING MOBILE PHONES)
- 1132. INTELLIGENT WAN - NETWORK FILE SHARING TRAFFIC ANALYSIS
- 1133. INTERACTIVE E-CUSTOMER SUPPORT APPLICATION
- 1134. INTERACTIVE WEB PORTAL FOR OPERATION AND PERFORMANCE MANAGEMENT OF GSM AND UMTS NETWORK
- 1135. INTEREST CANCELLATION AND SETTLEMENT FOR TERM DEPOSITS ACCOUNT
- 1136. INTERNAL MESSENGER
- 1137. INTERNET OF THINGS FOR RETAIL STORES
- 1138. INTEROPERABILITY ISSUES IN MILITARY GEOGRAPHICAL INFORMATION SYSTEM
- 1139. INTEROPERABILITY SOLUTIONS FOR DEVICES IN INTERNET OF THINGS (IOT)
- 1140. INTRODUCTION OF REGISTERED CARD FUNCTIONALITY FOR NON- PROPRIETARY MERCHANTS
- 1141. INTRUSION DETECTION SYSTEM IN MANET
- 1142. INVENTORY MANAGEMENT SYSTEM
- 1143. INVENTORY TRACKING SYSTEM FOR MANAGEMENT OF ASSETS
- 1144. INVESTIGATING BORDER PATROLLING PRACTICES & IMPROVING THEIR EFFICACY THROUGH A SUITE OF GPS ENABLED MOBILE APPLICATIONS
- 1145. IOS MOBILE APPLICATION WITH TOUCHID API AND SPEECHKIT INTEGRATED
- 1146. IOT DEVELOPMENT PLATFORM
- 1147. IRIS MOBILE
- 1148. ISA100.11A CERIFICATION KIT
- 1149. ISHARE-DATA APPLICATION
- 1150. JAVASCRIPT COMPILATION TO NATIVE MACHINE CODE FOR HIGH PERFORMANCE DESKTOP APPLICATIONS
- 1151. JPOLLING - ONLINE POLLING
- 1152. KERNEL ROBUSTNESS TEST FRAMEWORK
- 1153. KEY - AGGREGATE CRYPTOSYSTEM FOR SCALABLE DATA SHARING IN CLOUD STORAGE
- 1154. KEY EXCHANGE BETWEEN PARTIALLY TRUSTED NODES
- 1155. KEYWORD DRIVEN TEST AUTOMATION FRAMEWORK USING SELENIUM
- 1156. KNOWLEDGE MANAGEMENT MOBILE APPLICATION
- 1157. K-ZERO DAY SAFETY (MEASURING THE SECURITY RISK OF NETWORKS AGAINST UNKNOWN ATTACKS)
- 1158. LEARNING MANAGEMENT SYSTEM

- 1159. LEAVE MANAGEMENT SYSTEM IN KIOSK
- 1160. LEGACY APPLICATIONS:SCREEN SCRAPPING AND ITS IMPLEMENTATION IN WEB 2.0
- 1161. LEGACY ISCSI EXPANSION ROM DEVELOPMENT FOR CISCO VIC ADAPTER
- 1162. LEGITIMIZATION OF SIZEABLE DATA FOR HEALTHCARE
- 1163. LENDER MANAGEMENT SYSTEM
- 1164. LEVERAGING MOBILE CROSS PLATFORM TECHNOLOGY
- 1165. LIBPAAS - UNIFIED AND EXTENSIBLE PAAS INTERFACE
- 1166. LICENSE MANAGEMENT
- 1167. LIFERAY PORTAL SYSTEM APPLICATION
- 1168. LIVE MONITORING CONSOLE FOR AUTOMATED SOFTWARE TESTING FRAMEWORK
- 1169. LIVE RESOURCE MONITORING FOR REAL TIME SOFTWARE TESTING USE CASES TO PREDICT POSSIBLE FAULT DETECTION AND DEBUGGING
- 1170. LOAD TESTING APPLICATION FOR TETRA EXTRAS SWITCH
- 1171. LOCATION BASED INFORMATION COLLECTOR
- 1172. LOCATION BASED VITUAL PUBLIC NOTICE BOARDS
- 1173. LOG ANALYZER
- 1174. LOW COST FUNCTION GENERATOR
- 1175. LOYALTY PLATFORM MIGRATION
- 1176. LTE ADVANCED - CARRIER AGGREGATION
- 1177. LTE CMAS/ETWS FEATURE IMPLEMENTATION
- 1178. LTE-ENODEB TCP TRAFFIC GENRATOR
- 1179. M2M DEVICE MANAGEMENT
- 1180. M2M FOR LTE CORE NETWORK
- 1181. M4M: A MODEL FOR ENABLING SOCIAL NETWORK BASED SHARING IN THE INTERNET OF THINGS
- 1182. MAKING DOMINO APPLICATIONS CLOUD READY
- 1183. MAKING HRMS APPLICATION CLOUD READY
- 1184. MALARIA OUTBREAK PREDICTION USING MACHINE LEARNING
- 1185. MALWARE ANALYSIS
- 1186. MANAGEMENT AND CONTROL OF VARIOUS TYPES OF TRAFFIC IN A DATA CENTER
- 1187. MANAGEMENT AND NOTIFICATION APP FOR WORKFLOWS
- 1188. MANAGEMENT INTERFACE DEVELOPMENT FOR NETWORK ADDRESS TRANSLATION USING TRANSACTION LANGUAGE 1
- 1189. MANAGEMENT TOOLS USING LEGACY SYSTEM AS400
- 1190. MANAGING AND ORCHESTRATING CONTAINERIZED APPLICATION CLUSTER IN PRODUCTION ENVIRONMENT
- 1191. MANAGING V-CLOUD ENVIRONMENT WITH VCD ADAPTER FOR VR OPS
- 1192. MANUFACTURING QUALITY MANAGEMENT SYSTEM
- 1193. MAPPING OF ADDRESS AND PORTS (MAP) IN NETWORK
- 1194. MARKER BASED AUGMENTED REALITY LEARNING APPLICATION (MARLAPP)
- 1195. MARKET ANALYSIS IN A BEVERAGE COMPANY
- 1196. MARKET BASKET ANALYSIS USING DATA MINING FEATURE OF MICROSTRATEGY
- 1197. MARSHALLING ENGINEERING PROCESS
- 1198. MATERIAL DATA MANAGEMENT SYSTEM [AN INTEGRATION BETWEEN PLM AND IMDS]
- 1199. MAXIMIZING RESOURCE UTILIZATION OF FACILITIES FOR THE CITY (SMART CITY)
- 1200. MCAFEE PARTNER AUTMATION SYSTEM
- 1201. MDM-UI AUTOMATOR
- 1202. MDS-DISABLE ENABLE VENDOR SERVERS (MDS-MARKET DATA SERVICES)
- 1203. MEASURING CURRENT, VOLTAGE & FREQUENCY THROUGH IOT
- 1204. MEASURING SITE ENGAGEMENT
- 1205. MECHANISM TO SECURELY MODIFY THE REPORTING INFORMATION FIELDS OF AN IOT DEVICE
- 1206. MEDIA INFOTAINMENT SOLUTION FOR AUTOMOBILES
- 1207. MEDIA PROCESSING SOLUTION USING OPENSOURCE TOOLS
- 1208. MEMORY ALLOCATOR PERFORMANCE IMPROVEMENTS FOR EMBEDDED AND VIRTUAL ENVIRONMENTS
- 1209. MEMORY ERROR DEBUGGING TOOL
- 1210. MENU TREE GENERATION AND TRAVERSAL
- 1211. MESSAGING AT SCALE WITH AZURE SERVICE BUS
- 1212. METADATA MANAGEMENT USING ODATA PROTOCOL
- 1213. METAVIEW
- 1214. METHOD & SYSTEM TO GENERATE MUSIC RECOMMENDATION
- 1215. METHOD TO ACHIEVE FORMAT PRESERVING ENCRYPTION

- 1216. METHODS OF ENTITY DISAMBIGUATION USING NARUAL LANGUAGE PROCESSING TECHNIQUES
- 1217. METHODS TO MINIMIZE ESCAPES IN SOFTWARE TESTING
- 1218. MICROCONTROLLER BASED CENTRALIZED MONITORING OF WATER TANKS USING ULTRASONIC AND 2G
- 1219. MIGRATING TO SHAREPOINT ONLINE 2013 (CLOUD)
- 1220. MINE CLIENT SERVER MODEL
- 1221. MINING CUSTOMER SATISFACTION
- 1222. MINING INDEX TERMS
- 1223. MINING THE BIG DATA-REFINE AND VISUALIZE SENTIMENT DATA
- 1224. ML BASED AUTOMATED PLANNING SYSTEM
- 1225. MOBILE APP FOR MODERN TIFFIN SERVICE
- 1226. MOBILE APPLICATION FOR PLANT ENGINEERING DATA (ISO 15926 COMPLIANT)
- 1227. MOBILE CLOUD COMPUTING RESOURCE ALLOCATION AND LOAD BALANCING ENGINE
- 1228. MOBILE DB ACCELERATION USING OPENCL
- 1229. MOBILE DEVICE MANAGEMENT IN CLOUD (SAAS APPLICATION)
- 1230. MOBILE DVR SYSTEM FOR HEAVY DUTY VEHICLES
- 1231. MOBILE ONLINE SERVICES IN AFTER SALES
- 1232. MOBILE SESSION MANAGER
- 1233. MOBILE TRACKING AND SECURITY SYSTEM VIA SMS
- 1234. MOBILE WORKFORCE AND DECISION SUPPORT SYSTEM
- 1235. MOBILITY AND MULTIHOMING ON INTERNET PROTOCOL VER 6 (IPV6) CAMPLIANT NETWORK FOR NETWORK CENTRIC WARFARE
- 1236. MODEL BASED TESTING SOLUTIONS WITH TEST DESIGNER STUDIO (TEDES0)
- 1237. MODEL BASED TESTING-APPLICABLITY IN READ WORLD TESTING
- 1238. MONITORING ENERGY AND CARBON (MONEC)
- 1239. MONTE CARLO SIMULATION RESULTS INTEGRATION WITH ORACLE DATABASE USING R SCRIPTING LANGUAGE
- 1240. MOP AUTOMATION
- 1241. MOTION CONTROL VIDEO CAPTURE AND PLAYBACK FOR ANDROID
- 1242. MOTIONTRACKING AND IMAGE SEQUENCES ANALYSIS
- 1243. MOTORRAD LEAD CONVERSION
- 1244. MPSTRAK
- 1245. MQ - CICS ADAPTER TO IMPLEMENT ENTERPRISE SERVICE BUS (ESB) ARCHITECTURE
- 1246. MQTT PROTOCOL TO CONNECT INTERNET OF THINGS USING MESSAGESIGHT AS BROKER
- 1247. MULTI POINTER SUPPORT ON WINDOW SYSTEMS
- 1248. MULTI TOUCH FACE CAPTURE IN CAMERA FOR ANDROID
- 1249. MULTI VIEW FACE DETECTION APPLICATION USING DEEP NEURAL NETWORKS
- 1250. MULTICAST STREAMING OVER WI-FI WITH RAPTOR FEC
- 1251. MULTI-DEGREE GRAFTING ALGORITHM FOR AUTOMATIC AMPLIFIER PLACEMENTS IN OPTICAL NETWORKS
- 1252. MULTIKERNEL OPERATING SYSTEMS ON 64-BIT ARM PROCESSORS
- 1253. MULTI-KEYWORD RANKED SEARCH OVER ENCRYPTED CLOUD DATA
- 1254. MULTI-LINGUAL SITE FOR TRUCK RENTAL
- 1255. MULTIMEDIA ASSISTANCE FOR BLIND
- 1256. MULTIMEDIA CLOUD COMPUTING TO SAVE SMARTPHONE ENERGY
- 1257. MULTIMEDIA QUESTIONAIRE SYSTEM
- 1258. MULTIMEDIA VISUAL PROGRAMMING TOOLKIT
- 1259. MULTI-TENANT APPLICATION FOR ELECTRONIC PART ALERTS
- 1260. MY FLORIST WORLD
- 1261. MY MASS TIMING - ST ANTHONY FRIARY CHURCH, BANGALORE
- 1262. NAN - NETWORK ANALYZER
- 1263. NATIVE SAS - IMPLEMENTATION OF SLOT ACCOUNTING SYSTEM PROTOCOL
- 1264. NEAR CONTINUOUS DATA PROTECTION
- 1265. NEAR REAL-TIME DATA PROCESSING ON HADOOP USING APACHE SPARK
- 1266. NEED AND PROPOSAL FOR DIRNSS AND RTK POSITIONING USING IRNSS
- 1267. NETWORK AUTOMATION AND SERVICE CHAINING USING OPENDAYLIGHT SDN CONTROLLER AND OPENFLOW TECHNOLOGY
- 1268. NETWORK CLOUD SERVICE ORCHESTRATOR
- 1269. NETWORK INTRUSION DETECTION AND COUNTERMEASURE SELECTION IN VIRTUAL NETWORK SYSTEMS
- 1270. NETWORK MANAGEMENT MONITORING SYSTEM FOR SIP PLATFORM

- 1271. NETWORK MANAGEMENT OF LINUX CONTAINERS
- 1272. NETWORK MONITORING SYSTEM
- 1273. NETWORK MONITORING USING ADAPTIVE PACKET FILTERING TECHNIQUE
- 1274. NETWORK NOTIFICATION CENTER
- 1275. NETWORK SECURITY IN CLOUD COMPUTING
- 1276. NETWORK SECURITY IN MOBILE COMPUTING
- 1277. NETWORK SECURITY USING GNAVE ALGORITHM
- 1278. NETWORK TRANSCRIPT ENGINE TO CONFIGURE CELLULAR RADIO NETWORKS
- 1279. NEW GDS INTEGRATION WITH AIRLINE RESERVATION GATEWAY
- 1280. NEW ORDERS DATA BASE FOR SEPARATE ETL SYSTEM
- 1281. NEXT GENERATION NETWORK AND NETWORK MONITIRING UTILITY
- 1282. NEXT GENERATION WAREHOUSE(NGW)
- 1283. NFC BASED HOME AUTOMATION SYSTEM
- 1284. NFV: VIRTUAL NETWORK SERVICES IMPLEMENTATION USING NET FLOW AND PYTHON.
- 1285. NIM DISCREPANCY AND RECONCILIATION CLIENT
- 1286. NORTH AMERICAN BENEFITS DELIVERY BUSINESS MODEL - TBA
- 1287. NOTIFI-ME
- 1288. NOTIFY-ME
- 1289. NOVEL TECHNIQUE FOR END TO END FUNCTIONAL VALIDATION FOR REBRANDED OEM APPLICATIONS ON ALL THE EMBEDDED UTILITIES AND AGENTLESS LIFECYCLE MANAGEMENT TOOLS
- 1290. NVRAM EMULATION ON NAND
- 1291. OBJECT RECOGNITION VIA DEEP LEARNING
- 1292. OBJECT STORAGE SOLUTION ON COMMODITY HARDWARE USING SOFTWARE DEFINED NETWORKING
- 1293. OBSERVED TIME DIFFERENCE OF ARRIVAL (OTDOA) FOR LOCATION ESTIMATION IN LTE (4G)
- 1294. OFFICE SECRET MESSAGE MEDIUM (OSMM)
- 1295. OFFLINE REPORTING CAPABILITY FOR DATABASE PERFORMANCE MONITOR
- 1296. ON-BOARDING FORMALITIES FOR NEW HIRES
- 1297. ONE CLICK BUILD AND AUTO QUALIFICATION
- 1298. ONE GOVERNANCE ONLINE PORTAL
- 1299. ONE SHOP APP FOR TELCOS
- 1300. ONIE HW DIAGNOSTICS FRAMEWORK
- 1301. ONLINE EXAMINATION SYSTEM
- 1302. ONLINE INSURANCE QUOTE GENERATION SYSTEM
- 1303. ONLINE REQUISITION SYSTEM FOR LABORATORY
- 1304. ONLINE REVIEW TOOL
- 1305. ONLINE TENDERING SYSTEM
- 1306. ONLINE TRAINING AND PLACEMENT MIS
- 1307. ONLINE TRANSPORT STREAM ANALYZER FOR BROADCAST MULTIMEDIA
- 1308. ONTOLOGICAL KNOWLEDGE EXTRACTION FROM RELEVANT ONTOLOGY
- 1309. OPEN SOURCE UNIFIED COMMUNICATION SOLUTION FOR SMALL AND MEDIUM SCALE ENTERPRISES
- 1310. OPENEHR: A STEP TOWARDS MAINTAINABLE E-HEALTH SOFTWARE
- 1311. OPEN-FLOW ENABLED SOLUTIONS FOR OPTICAL NETWORKS
- 1312. OPENGL ES GRAPHICS FOR EMBEDDED SYSTEMS
- 1313. OPENS CRUM - A CROSS PLATFORM SCRUM MANAGEMENT APPLICATION
- 1314. OPERATING SYSTEM AUDIT MANAGER
- 1315. OPTICAL CHARACTER RECOGNITION AND TRANSLATION FOR HINDI LANGUAGE
- 1316. OPTIMIZATION OF BUS SERVICE
- 1317. OPTIMIZATION OF LOGISTICS THROUGHPUT THROUGH INTERNET OF THINGS (IOT) ENABLEMENT
- 1318. OPTIMIZATION OF TESTING TECHNIQUES IN Z/OS
- 1319. OPTIMIZED SEARCH FOR MUSIC APPLICATIONS
- 1320. OPTIMIZING DPI USING INTEL'S DPDK
- 1321. OPTIMIZING REFRESH STRATEGY OF DATA WAREHOUSE
- 1322. ORACLE DR SETUP FOR PRODUCTION DATABASES.
- 1323. ORACLE SALES CLOUD TO SIEBEL CRM UI MASHUP
- 1324. ORCHESTRATION AND END TO END ORDER FULFILLMENT USING CISCO PRIME FULFILLMENT SUITE
- 1325. ORDER MANAGEMENT SYSTEM USING ENTERPRISE INTEGRATION PATTERNS
- 1326. ORDER TO CASH STABILIZATION USING MANUFACTURING INTELLIGENCE

1327. ORDER VISIBILITY
1328. OSPF LOAD BALANCING IN CISCO ROUTER THROUGH WITH THREE MPLS CONNECTION FOR EACH LOCATION AND LINK STATUS MONITORING
1329. PACK: PREDICTION-BASED CLOUD BANDWIDTH AND COST REDUCTION SYSTEM
1330. PACKET GENERATOR FOR DYNAMIC AUTHORIZATION EXTENSIONS TO REMOTE AUTHENTICATION DIAL IN USER SERVICE (RADIUS)
1331. PACKETIZATION LAYER PATH MTU DISCOVERY
1332. PALM REJECTION FOR N-POINT TOUCH SCREEN
1333. PARALLEL PROGRAMING - STUDY OF CACHE LINE SHARING EFFECTS ON MULTICORE CPUS.
1334. PART SUBSTITUTION MANAGEMENT - NAPO, TOYOTA
1335. PARTIAL OPEN FOR BIG ASSEMBLIES IN CATIA V5
1336. PATIENT ASSISTANCE SYSTEM
1337. PATTERN BASED TEXT MINING AND ANALYTICS IN DIGITAL REPOSITORY
1338. PAYMENT SYSTEM USING RELATION DATABASE
1339. PEER TO PEER MESSAGING THROUGH WIFI
1340. PEOPLES ALLY
1341. PEOPLESOFT UPGRADE PLANNER
1342. PERFORMANCE ANALYSIS AND TUNING OF DIFFERENT METHODS OF DATABASE ACCESS ON THE IBM AS/400 SYSTEM
1343. PERFORMANCE ANALYZER OF KVM HYPERVISORS
1344. PERFORMANCE ENGINEERING FOR SCALABLE WEB APPLICATIONS
1345. PERFORMANCE ENGINEERING OF BUSINESS INTELLIGENCE APPLICATION
1346. PERFORMANCE IMPROVEMENT OF SERVICE PROVIDER IN ORDER WORKFLOW
1347. PERFORMANCE MODEL FOR INTRUSION DETECTION AND PREVENTION SYSTEM WITH MALICIOUS TRAFFIC
1348. PERFORMANCE MONITORING & ALERTS AUTOMATION USING WEB PANEL (LINUX)
1349. PERFORMANCE REVIEWS
1350. PERSONAL FINANCE MANAGEMENT SYSTEM
1351. PERSONAL FINANCIAL PORTFOLIO MANAGER
1352. PERSONAL MEDASSIST (ANDROID APPLICATION)
1353. PERSONAL SAFETY MOBILE APPLICATION
1354. PERSONALIZATION OF LEARNING PATH ADOPTING SHARABLE CONTENT OBJECT REFERENCE MODEL (SCORM) STANDARD IN E-LEARNING SYSTEM
1355. PHOTO RETRIEVAL SYSTEM USING THE CLOUD
1356. PHOTOGRAPH DATABASE MANAGEMENT USING FACE RECOGNITION ALGORITHM
1357. PILOTING THE PROCESS OF VAPT(VULNERABILITY ASSESSMENT & PENETRATION TESTING)
1358. PKG-NOTIFY
1359. PLANNER MOBILE
1360. PLANNING & DESIGN OF SAP<sup>®</sup>'S PROCUREMENT SOLUTION FOR SELF SERVICE PURCHASING IN AMOS INDIA
1361. PLATFORM INDEPENDENT AUTOMATION FRAMEWORK
1362. PLUGGABLE USER SENTIMENT ANALYTICS AND RECOMMENDATION BROWSER TOOL
1363. PN JUNCTION MODELING
1364. PORTAL FOR AGRIBUSINESS
1365. POTHOLE DETECTION SYSTEM ON ANDROID
1366. POWER OPTIMIZATION IN CLOUD BY SCHEDULING ALGORITHM WITH APRIORI PREDICTION
1367. PREDEPLOYMENT QUALITY ASSURANCE OF WINDOWS INSTALLER DATABASE
1368. PREDICTING CUSTOMER 'BUYS' USING MACHINE LEARNING
1369. PREDICTING CUSTOMER CHURN IN TELECOMMUNICATIONS USING DATA MINING
1370. PREDICTION ANALYSIS FOR DETECTION OF FRAUDULENT CLAIMS
1371. PREDICTION OF AGRICULTURAL CROP USING ARTIFICIAL INTELLIGENCE AND NEURAL NETWORKS
1372. PREDICTIVE ANALYSIS OF CAMERA SHOT ATTRIBUTES BY PROCESSING THE SCENE CONTENT IN A SCREENPLAY.
1373. PREDICTIVE HEALTH CARE APP
1374. PRE-SHIPMENT LOAN EXPOSURE MAINTENANCE
1375. PREVENTION OF DUAL RELOAD IN MOBILITY BACKBONE DEVICE
1376. PRIME INFRASTRUCTURE FOR CISCO INTELLIGENT WAN MANAGEMENT
1377. PRINT DESIGNER AND EMULATOR
1378. PRIORITY-BASED MULTIPROCESSOR SCHEDULING
1379. PRIVATE CLOUD SOLUTION FOR COUNTRY OFFICE

- 1380. PROCESS AND IMPLEMENTATION OF FULL MNP USING TIBCO INTEGRATION SERVICES
- 1381. PROCESS IMPROVEMENT IN PLUGIN DEVELOPMENT USING MICROSOFT DYNAMICS CRM
- 1382. PROCURE TO PAY (P2P) USING SYSTEMS APPLICATIONS & PRODUCTS IN DATA PROCESSING (SAP)
- 1383. PROCUREMENT ANALYTICS FOR SRM SOLUTION USING SAP HANA
- 1384. PRODUCT TESTING
- 1385. PROFESSIONAL RECRUITMENT MANAGEMENT SYSTEM
- 1386. PROFITABILITY
- 1387. PROJECT DEFECT ANALYSIS
- 1388. PROJECT ENGINEER(I.T)-1
- 1389. PROJECT MANAGEMENT TOOL
- 1390. PROJECT MANAGEMENT WITH PROFILING
- 1391. PROJECT TRACKER TOOL
- 1392. PROPOSAL ASSESSMENT AND ISSUING QUOTE
- 1393. PROPOSE A SCALABLE STORAGE SOLUTION INTEGRATED WITH PERFORMANCE MANAGEMENT SYSTEM
- 1394. PROTON THERAPY OPERATIONAL MANAGEMENT
- 1395. PROTOTYPE OF HEARTBEAT TRACKING WEARABLE DEVICE
- 1396. PROTRACTOR TESTING TOOL
- 1397. PROVIDING AUTOMATIC REDUNDANCY TO NON CLUSTERED SERVER USING NETWORK TECHNOLOGY
- 1398. PROVIDING SECURITY TO ROUTERS AND SWITCHES USING MACSEC MKA PROTOCOL
- 1399. PROXIMITY BASED AD-HOC PEER-TO-PEER MOBILE COMPUTING
- 1400. PROXIMITY MARKETING USING BEACONS
- 1401. PROXIMITY SENSED CONTENT SHARE FOR MOBILE APPLICATION
- 1402. PURCHASE REQUISITION MANAGEMENT & APPROVAL SYSTEM
- 1403. PYTHON TO .NET BRIDGE
- 1404. QUALITY ASSURANCE ACTIVITIES AND PRODUCT METRICS IN AGILE SOFTWARE DEVELOPMENT
- 1405. QUALITY IMPROVEMENT TOOLS
- 1406. QUALITY REVIEW PROCESS IN SUPERVISOR MANAGEMENT APPLICATION
- 1407. QUARTERS INFORMATION SYSTEM IN SCCL
- 1408. QUERY BUILDER FOR APACHE GEODE
- 1409. QUICK BLOOD DONOR LOCATOR - AN ANDROID APPLICATION USING GEO-LOCATION OF AVAILABLE AND ELIGIBLE DONORS
- 1410. QUICK EPHEMERIS PREDICTION TO ENHANCE GPS PERFORMANCE
- 1411. QUICK PRO TOOL
- 1412. QUIZ MANAGER
- 1413. REAL ESTATE MANAGEMENT SYSTEM
- 1414. REAL TIME FILE TO FILE TRANSFER USING SAP PROCESS INTEGRATION 7.4
- 1415. REAL TIME LOAN APPLICATION MONITORING - GRAPHICAL APPROACH
- 1416. REAL TIME P2P COMMUNICATION FOR FINANCIAL SERVICES USING WEB RTC
- 1417. REAL TIME PRICE COMPARISON FOR E BUYERS
- 1418. REAL-TIME BROADCAST PLAYOUT VERIFICATION SYSTEM
- 1419. REALTIME OPERATIONS STATISTICS
- 1420. REAL-TIME PHYSICS SIMULATION SYSTEM USING PARALLEL COMPUTING
- 1421. RECOMMEND ME: A SMART THINKING APP TO SUGGEST YOUR FAVORITE PLACES
- 1422. RECOMMENDATION SYSTEM
- 1423. RECOMMENDATION SYSTEM DEVELOPMENT USING IOT FRAMEWORK
- 1424. RECOMMENDATIONS WITH MAHOUT
- 1425. RECRUITING APPLICATION ON CLOUD
- 1426. REDUCING DATA INTEGRITY RISKS BY DEVELOPING STANDARDIZED DATA MANAGEMENT PROCESS
- 1427. REDUCING THE AUDIT PROCESS EFFORT IN SOFTWARE QUALITY ASSURANCE PROCESS
- 1428. REFACTORING WEB PORTAL AND GENERATING BILL OF MATERIALS FOR A LEGACY WEB APPLICATION
- 1429. REFERENCE MODEL OF SERVICE ORIENTED ARCHITECTURE FOR ELECTRIC DISTRIBUTION UTILITIES IN INDIA
- 1430. REGULATION OF MANAGEMENT DATA IN NETWORK DEVICES
- 1431. RELEASE MANAGEMENT SYSTEM
- 1432. RELIABLE CONNECTED APPLICATIONS ON CLOUD: TESTING STRATEGIES FOR RESTFUL APIS
- 1433. RELIABLE CONTENT MANAGEMENT SYSTEM FOR MUSIC APPLICATIONS

- 1434. REMOTE BUILDING MANAGER
- 1435. REMOTE DICTIONARY SERVER
- 1436. REMOTE MONITORING APPLICATION FOR PHILIPS INTELLISPACE PORTAL
- 1437. REMOTE MONITORING OF THE NETWORK DEVICE USING EMBEDDED WEB SERVER
- 1438. REMOTE PATIENT MANAGEMENT ON CLOUD USING ANDROID APP
- 1439. REMOTE VIDEO SURVEILLANCE VEHICLE
- 1440. REMOTE VOLUME SYNCHRONIZATION & VALIDATION UTILITY
- 1441. REPORT COMPARISON TOOL TO ENHANCE TESTING EFFECTIVENESS.
- 1442. REPORT DESIGNER WITH GRID BASED REPORTS
- 1443. RESEARCH FUNDING MANAGEMENT
- 1444. RESEARCH ON DW TOOLS AND TECHNIQUES AND DEVELOPMENT ON KAM
- 1445. RESEARCH ON REDUCING POWER UTILIZATION OF GPS FOR A LOCATION BASED ANDROID APP
- 1446. RESILIENCE ENGINEERING FOR HEALTHCARE ANALYTICS PLATFORM
- 1447. RESOURCE MANAGEMENT FOR ERP SYSTEMS
- 1448. RESOURCE MANAGEMENT SYSTEM FOR FINACLE DIGITAL COMMERCE
- 1449. RESPONSIVE ELEARNING DEVELOPMENT
- 1450. REST SUPPORT FOR XCP 1.X APPLICATIONS
- 1451. RESTAURANT FINDER APP FOR WINDOWS PHONE
- 1452. REUSABLE DATA DRIVEN INPUT/OUTPUT ENGINE FOR EMBEDDED APPLICATION SOFTWARE
- 1453. REUSING MEMORY WHILE MIGRATING VMS(VIRTUAL MACHINES)
- 1454. REVENUE ASSURANCE
- 1455. REVENUE OPTIMIZATION MODEL OF DATA CENTER
- 1456. REVOLUTION OF CLOUD COMPUTING
- 1457. RFID BASED IDENTIFICATION
- 1458. RICH COMMUNICATION SERVICES
- 1459. RICH COMMUNICATION SERVICES: THEIR NEED AND REALIZATION IN NATIVE MESSAGING APPLICATIONS
- 1460. RING TOPOLOGY FOR GSM-R BTS
- 1461. RISK MANAGEMENT - ANALYZE HIGH-RISK PATIENTS
- 1462. ROBUST REVERSIBLE WATERMARKING TECHNIQUE FOR RELATIONAL DATA
- 1463. ROLE OF INTERNET OF THINGS (IOT) IN HEALTHCARE DOMAIN
- 1464. ROUTE RANKING USING SAP BRFPPLUS
- 1465. RTOS IMPLEMENTATION STUDY AND IMPLEMENTING BASIC RTOS PRIMITIVES
- 1466. RULE BASED GENERIC PRODUCT CONFIGURATION TOOL
- 1467. SAAS - BENEFITS AND RISKS
- 1468. SAAS APPLICATION MONITORING
- 1469. SAILPOINT IDENTITYIQ ENHANCEMENT
- 1470. SALES DATA MART FOR A SMALL ENTERPRISE
- 1471. SALES ORDER CREATION PROCESS USING SAP WEB DYNPRO
- 1472. SAP BUSINESS OBJECTS INTEGRATION SERVICE
- 1473. SAP HANA CLOUD INTEGRATION AND ITS RELEVANCE FOR HCM SYSTEMS
- 1474. SATELLITE MODEL FOR DATA ACQUISITION
- 1475. SCALABILITY OF MOBILE APPLICATION
- 1476. SCHEDULING AND SYNCHRONIZATION IN DISTRIBUTED SYSTEMS
- 1477. SCHOLARSHIP MANAGEMENT MODULE FOR ENTERPRISE BUSINESS APPLICATION
- 1478. SCHOOL MANAGEMENT SYSTEM
- 1479. SCREEN TRANSLATOR FOR MULTILINGUAL USER INTERFACE TESTING
- 1480. SDN WITH NETWORK AIRTULIZATION AND ITS SECURITY
- 1481. SEAMLESS CALL AND HANDOVER IN GSM
- 1482. SEARCH FOR A PROCESS POINT ACROSS VARIOUS REPOSITORIES IN A PROCESS KNOWLEDGE SYSTEM
- 1483. SEARCH PLATFORM FOR RDBMS
- 1484. SECURE AND PERFORMANCE ORIENTED WEB APPLICATION
- 1485. SECURE E-CONTRACT SYSTEM
- 1486. SECURE ELECTRONIC VOTING WITH FINGER PRINT AUTHENTICATION
- 1487. SECURE FILE STORAGE IN CLOUD
- 1488. SECURE HEALTHCARE ANALYSIS TOOL (S-HAT)
- 1489. SECURE NETWORK DISCOVERY IN TRUSTED ASSISTANCE ROUTING FOR WSN
- 1490. SECURE PAYMENT SYSTEMS
- 1491. SECURE TRANSFER OF VENDOR PAYMENT FILES AND EMPLOYEE PAYROLL FILES FROM SAP SYSTEM TO BANK SYSTEM USING CERTIFICATE AUTHENTICATION AND PGP DATA ENCRYPTION



1492. SECURECAMERA
1493. SECURED BUSINESS SERVICES INTERFACE
1494. SECURITY ARCHITECTURE FOR BUILDING SITE TO SITE COMMUNICATION IN CLOUD
1495. SECURITY GUIDANCE FOR CRITICAL AREAS OF FOCUS IN CLOUD COMPUTING
1496. SECURITY IMPLEMENTATION FOR DOCUMENTUM CONTENT SERVER & AEK LOCKBOX AND RKM
1497. SECURITY ISSUES IN CLOUD COMPUTING
1498. SECURITY ISSUES OF SMART APPLICATIONS
1499. SECURITY MEASURES IN CLOUD COMPUTING
1500. SECURITY PANELS CONNECTIVITY PATTERN ANALYSIS THROUGH BIG DATA ANALYTICS
1501. SECURITY TESTING OF WEB APPLICATION
1502. SELF SERVICE UPDATE PORTAL FOR AADHAAR
1503. SELF-HEALING SYSTEM IN DISTRIBUTED NETWORK
1504. SEMANTIC WEB CRAWLER
1505. SENSITIVE DATA STRUCTURE FORTIFICATION
1506. SENSOR FUSION WITH KALMAN FILTERING ON ANDROID DEVICES FOR POSITION TRACKING
1507. SENTIMENT ANALYSIS ON SOCIAL MEDIA TO UNDERSTAND IMPACT OF NEW PRODUCT LAUNCH IN THE ORGANISATION
1508. SENTIMENT ANALYSIS FOR TWEETS
1509. SENTIMENT ANALYSIS OF TWITTER FEEDS TO REVIEW A MOVIE
1510. SENTIMENT ANALYSIS ON CLOUD
1511. SENTIMENT ANALYSIS ON TWITTER DATA
1512. SENTIMENT ANALYSIS ON TWITTER USING R AND SHINY FRAMEWORK
1513. SENTIMENT ANALYSIS OF BRANDS
1514. SENTIMENT CLASSIFICATION USING SUPERVISED METHOD
1515. SENTIMENTAL ANALYSIS ON UNSTRUCTURED DATA USING HYBRID APPROACH
1516. SERIAL PORT COMMUNICATION MANAGER IN JAVA
1517. SERVICE DESK: FULL FMG SOLUTIONS
1518. SERVICE ENABLED PROCESS SCHEDULING AND MONITORING FOR PROCESSING OF SATELLITE IMAGE DATA
1519. SERVICE REQUEST MANAGEMENT (SRM)
1520. SERVICE RESOURCE PLANNING USING PORTAL DEVELOPMENT KIT
1521. SERVICE SECURITY FOR SAAS CLOUDS
1522. SEVENSPLIT & TRIP TRACKER
1523. SHORT MAINTENANCE WINDOW
1524. SIGNATURE VERIFICATION AND CONTROL IN CORPORATE BANK
1525. SIMULATING HEATED INJECTORS AND DIAGNOSTICS
1526. SIMULATION OF FUZZY BASED CONTROL STRATEGY FOR BOOST-CONVERTER-INVERTER SYSTEM FOR HYBRID VEHICLES
1527. SINGLE WIDEBAND RF SOLUTION FOR A MULTI-CONSTELLATION GNSS RECEIVER
1528. SIP PRECONDITION
1529. SIP SELECTOR AND LOAD BALANCER
1530. SIP SERVER SIMULATOR FOR PTT CLIENT
1531. SKILL MATRIX MANAGEMENT USING DATABASE APPLICATION
1532. SMART CAPTION OPTION IN MEDIA PLAYER
1533. SMART EXCHANGE PLATFORM
1534. SMART FLASH SENSOR IN VIDEO RECORDING
1535. SMART GARBAGE MANAGEMENT SYSTEM
1536. SMART HOME USING ANDRIOD APPLICATION
1537. SMART LIFE SAVER
1538. SMART MONITORING SYSTEM (IOT)
1539. SMART MOOD LIGHTING FOR AUTOMOBILES
1540. SMART PAYMENT WALLET
1541. SMART PHONE BASED PERFORMANCE IMPROVED HR & PAYROLL APPLICATION
1542. SMART PLUG ZWAVE
1543. SMART STORE SYSTEM (S3)
1544. SMART VISITOR MANAGEMENT : AN IOE SOLUTION
1545. SMARTCARD MANAGER
1546. SMARTER CONFIGURATION MANAGEMENT WITH INFRASTRUCTURE-AS-CODE
1547. SNAP AND PACK
1548. SNAPTEXT
1549. SNMP BASED SDN CONTROL TO DATA-PLANE INTERFACE DRIVER

1550. SNOWFLAKE SCHEMA DATAWAREHOUSE FOR ANALYSING SURRENDER OF BROADBAND SERVICES
1551. SOCIAL NETWORKING OR SOCIAL ENGINEERING : THE THIN LINE
1552. SOFTWARE DEFINED NETWORKING: ENABLING FEDERATED CLOUD ARCHITECTURES
1553. SOFTWARE DESIGN DOCUMENT BUILDER
1554. SOFTWARE ESTIMATION FRAMEWORK AND BEST PRACTICES
1555. SOFTWARE FOR CHECKING CONFORMANCE TO REQUIREMENTS TEMPLATES & TEST CASE GENERATION USING NATURAL LANGUAGE PROCESSING
1556. SOFTWARE FOR ROBOT CONTROLLER INFRASTRUCTURE
1557. SOFTWARE PERFORMANCE IMPROVEMENT MODEL
1558. SOFTWARE QUALITY IMPROVEMENT WITH ERROR LOG MINER
1559. SOFTWARE TESTING AND QUALITY ASSURANCE WITH FOCUS ON MOBILE AND WEB BASED TECHNOLOGIES
1560. SOFTWARE TESTING METHODOLOGIES IN CLOUD COMPUTING & CROWD SOURCING
1561. SOFTWARE TESTING METHODOLOGIES -TOOLS AND APPLICATION
1562. SOFTWARE VALIDATION SUITE USING OATS (ORACLE APPLICATION TEST SUITE)
1563. SOLAR APPLICATIONS USING EMBEDDED SYSTEMS
1564. SPEECH SYNTHESIS
1565. SSL INSPECTOR
1566. STAGE GATE IMPLEMENTATION
1567. STANDARDIZATION OF SECONDARY VEHICLE SALES
1568. STATEFUL TRAFFIC GENERATOR TOOL
1569. STATICALLY ANALYZE AND DETECT CLOCK DOMAIN CROSSING IN VHDL BASED FPGA DESIGN
1570. STIRLING - ORDER GENERATION TOOL
1571. STOCK PRICE MOVEMENT PREDICTION BASED ON WEB NEWS ANALYSIS
1572. STREAMING TECHNOLOGIES FOR LIVE STREAMING - HTTP LIVE STREAMING
1573. STUDY ON OAM ON ETHERNET NETWORKS
1574. STUDY AND IMPLEMENTATION OF UE CONFORMANCE TESTING PROCEDURES FOR GERAN
1575. STUDY AND IMPROVING HUMANIZED COMPUTING TECHNOLOGIES.
1576. STUDY OF BIOMETRICS AUTHENTICATION SYSTEM BASED ON PALMPRINT USING MATLAB
1577. STUDY OF IEEE 802.11W AND IMPLEMENTATION ASPECTS
1578. STUDY OF PRODUCT CATEGORIZATION FOR E-COMMERCE PLATFORMS IN INDIAN PERSPECTIVE
1579. STUDY OF QUALITY OF SERVICES (QOS)
1580. STUDY OF SOFTWARE DEFINED NETWORKS, ADVANTAGES, ISSUES AND SOLUTIONS
1581. SUBSCRIBER MANAGEMENT TOOL
1582. SUBSCRIPTION MISMATCH AND ERP SYSTEMS(TELECOM)
1583. SUPERCOMPUTER (PROXIMO)
1584. SUPERVISED DETECTION TECHNIQUE FOR SQL INJECTION ATTACKS USING SCORE BASED APPROACH
1585. SUPPORT FOR ATTACHING SINGLE VOLUME TO MULTIPLE INSTANCES IN OPENSTACK ARCHITECTURE
1586. SUPPORT OF INTEGRATED SPC SOLUTION FOR NT HLR ON ATCA HW
1587. SWEEPS ENGINE IN FINANCIAL SERVICES
1588. SWIFT - CONFIGURATION MANAGEMENT TOOL
1589. SYSTEM INTEGRATION TEST AUTOMATION USING ROBOT FRAMEWORK.
1590. SYSTEM MANAGEMENT & POLICY ENFORCEMENT USING WEB-PANEL (LINUX)
1591. SYSTEMATIC METHODOLOGIES FOR SYSTEM TESTING TO REDUCE EFFORT OR COST
1592. TABLE DRIVEN BUSINESS RULES FRAMEWORK
1593. TAF - TEST AUTOMATION FRAMEWORK
1594. TALLYUPSALES - A LEAD MANAGEMENT MOBILE APP FOR ANDROID AND IOS
1595. TASK TRACKING MANAGEMENT FOR ORGANIZATION AND EMPLOYEES
1596. TAX FILING INFRASTRUCTURE
1597. TEAM MANAGER
1598. TECHNIQUES OF DATA COMPRESSION
1599. TELECOM CRM AND E- BUSINESS
1600. TELEMATICS FOR LOW COST VEHICLES WITH THE HELP OF SMARTPHONE
1601. TEMPLE FUNDS TRACKING SYSTEM
1602. TENENO VPN APPLICATION WORKINGS AND ITS SCOPE
1603. TEST ADEQUACY ASSESSMENT USING CODE COVERAGE
1604. TEST AUTOMATION FOR EMBEDDED MOBILE DEVICE PLATFORMS
1605. TEST AUTOMATION FOR WEB SERVICE APIS OF SWS

- 1606. TEST AUTOMATION FRAMEWORK
- 1607. TEST AUTOMATION FRAMEWORK FOR INTEGRATION TESTING
- 1608. TEST AUTOMATION IN DATA WAREHOUSING
- 1609. TEST AUTOMATION OF IOS & ANDROID SMART APPS
- 1610. TEST CASE & REPORT MANAGEMENT SYSTEM
- 1611. TEST DRIVEN DEVELOPMENT ENABLER
- 1612. TEST DRIVEN DEVELOPMENT:CAPABILITIES AND ITS USABILITY
- 1613. TEST MANAGEMENT & REPORTING SYSTEM
- 1614. TESTBED CONFIGURATION MANAGEMENT & AUTO DEPLOYMENT
- 1615. TESTING AND MONITORING OF ECM USING AUTOMATION TOOLS
- 1616. TESTING AUTOMATION AND ANALYSIS ON TIME SAVING WITH AUTOMATION
- 1617. TESTING THE EVENTUAL CONSISTENCY OF A HADOOP SUBSYSTEM
- 1618. TEXT MINING TO IDENTIFY CELEBRITY AND FASHION THEMES FROM NEWS ARTICLES
- 1619. THE DESIGN AND IMPLEMENTATION OF AN E-COMMERCE SITE FOR ONLINE BOOK SALES
- 1620. THE DIGITAL PERSONA
- 1621. THE FUTURE OUTLOOK OF PROJECT MANAGEMENT THROUGH VIRTUAL MEANS: BUILDING MOBILE APPLICATION FOR PROJECT MANAGEMENT
- 1622. THEORY OF VALUE BASED SOFTWARE ENGINEERING
- 1623. THIRD GENERATION MOBILE NETWORK INTER SYSTEM HANDOVER OPTIMIZATION THROUGH AUTOMATED PLANNING AND MONITORING
- 1624. TIME TRACKING AND BILLING SOFTWARE AS A PRODUCT
- 1625. TIMESHEET
- 1626. TO IDENTIFY THE INCONSISTENCIES WITH-IN CENTRAL MANAGEMENT SYSTEM (CMS) AND FILE REPOSITORY SYSTEM (FRS) BASED ON SPECIFIC INFOBJECT PROPERTY (KIND) USING REPORT DIAGNOSTIC TOOL (RDT)
- 1627. TOOL DEVELOPMENT FOR ACCELERATION OF SITE ROLLOUT
- 1628. TOOL FOR DENIAL OF SERVICE(DOS-TOOL)
- 1629. TOOLING FRAMEWORK FOR INFORMATICA'S ADAPTER SDK
- 1630. TOPOMAPPER TOOL
- 1631. TPA SYSTEM - CLAIM IMPORT
- 1632. TRADING REVENUE DATAMART
- 1633. TRAFFIC PATTERN BASED COMPARISON OF MANET ROUTING PROTOCOLS FOR DIFFERENT MOBILITY MODELS USING NS-2 SIMULATORS
- 1634. TRAFFIC PATTERN DISCOVERY FOR MANETS
- 1635. TRANSACTION DOCUMENTS MANAGEMENT SYSTEM
- 1636. TRANSFER PROCESS AUTOMATION
- 1637. TRANSFORMING E-BUSINESS ON THE CLOUD
- 1638. TRANSPORT MANAGEMENT SYSTEMS
- 1639. TRAVEL MATE- AN ALERT SYSTEM WHILE TRAVELLING
- 1640. TRAVEL PARTNER
- 1641. TRAVEL PORTAL
- 1642. TRAVEL RECOMMENDATION ENGINE
- 1643. TREASURY INTEGRATION & NEW ACCOUNTING: CHANGES FOR FLEXCUBE RETAIL BANKING MODULE
- 1644. TREND IN AUTO-PARTS DEFECTS FOR STRATEGIC ANALYSIS
- 1645. TRIGGERLAW ON DANISH MORTGAGE
- 1646. TSDOCS- DOCUMENT MANAGEMENT SYSTEM
- 1647. TWITTER DATA ANALYSIS USING R LANGUAGE
- 1648. TWO WAY DATA SYNCHRONIZATION BETWEEN OFFLINE AND ONLINE DATABASE.
- 1649. UE ASSISTAND TEST AUTOMATION TOOL
- 1650. UI REVAMP OF AN E-COMMERCE STORE
- 1651. ULD TRACKING AND TRANSFER SYSTEM
- 1652. UNIFIED DIAGNOSTIC SERVICES IMPLEMENTATION
- 1653. UNIFIED HARASSER METHODOLOGY
- 1654. UNIFIED INSTALLATION TOOL
- 1655. UNIFIED TESTTASK ARCHITECTURE FOR MULTIPLE PLATFORMS
- 1656. UNIVERSAL BUILD AND RELEASE MANAGEMENT WITH CROSS PLATFORM SUPPORT
- 1657. UNIVERSITY ADMISSION & MAINTENANCE SYSTEM
- 1658. UPDATE MANAGEMENT
- 1659. UPLOADING CAMERA CLIPS ON CLOUD
- 1660. UPOINT - HR PORTAL FOR BENEFIT ADMINISTRATION

- 1661. USER AUTHENTICATION USING LDAP SERVICES FOR TEAMCENTER ENTERPRISE.
- 1662. USER FRIENDLY TEST AUTOMATION FRAMEWORK
- 1663. USER REVIEW SEMANTIC & SENTIMENT ANALYSIS
- 1664. USER, ROLE AND RESOURCE MANAGEMENT AND PROVISIONING
- 1665. USING DOCKER FOR RAPID PROTOTYPING AND DEPLOYMENT OF IBM STERLING SELLING AND FULFILLMENT SUITE RUNTIMES
- 1666. UTILITY FOR SENDING & RECEIVING NOTIFICATIONS
- 1667. VANTAGE POINT AUTOMATION
- 1668. VAT BUSINESS INTELLIGENCE
- 1669. VCENTER REPORTING TOOL
- 1670. VEHICLE CLASSIFICATION AND LEARNING USING CONVOLUTIONAL NEURAL NETWORKS
- 1671. VEHICLE IMMOBILIZER SYSTEM
- 1672. VENDOR AGNOSTIC STORAGE MANAGEMENT IN OPENSTACK CLOUD DEPLOYMENT
- 1673. VERIFICATION ASPECTS OF 3GPP SELF ORGANISING NETWORKS(SON) IN MOBILE MODEM PLATFORM
- 1674. VERIFICATION ASPECTS OF 3GPP VOICE OVER LTE AND SRVCC IN MOBILE MODEM PLATFORM
- 1675. VIRTUAL ACCELERATOR USING OPENVSWITCH AND DPKD BASED FAST-PATH
- 1676. VIRTUAL DESKTOP INFRASTRUCTURE FOR CLASSROOMS
- 1677. VIRTUAL ENERGY-BASED ENCRYPTION AND KEYING FOR WIRELESS SENSOR NETWORKS
- 1678. VIRTUAL FEATURES NETWORK TOPOLOGY
- 1679. VIRTUALIZED TESTING TECHNIQUES
- 1680. VISHAY SAP BW
- 1681. VISUAL ANALYSIS OF SCADA DATA IN A GRAPHICAL FORM
- 1682. VISUAL SIMULATOR
- 1683. VOICE ACTIVATED MOM (MINUTES OF MEETING) GENERATOR USING SPEECH TO TEXT
- 1684. VOICE BASED REQUEST/RESPONSE SYSTEM TO ASSIST PILOT
- 1685. VOICE PICKING ENABLER FOR WAREHOUSE SYSTEMS
- 1686. WAREHOUSE AND QUALITY MANAGEMENT IN SAP
- 1687. WARRANTY CLAIM MANAGEMENT SYSTEM
- 1688. WEARABLE
- 1689. WEARABLE INTEGRATION IN THE CLOUD FOR INSPECTION
- 1690. WEB ANALYTICS FOR CONTENT MANAGEMENT SYSTEMS
- 1691. WEB APPLICATION AND MOBILE APPLICATION TESTING
- 1692. WEB APPLICATION AUTOMATION USING SELENIUM WEBDRIVER WITH JUNIT FRAMEWORK
- 1693. WEB APPLICATION INTEGRATION IN A FEDERATED IDENTITY BASED ENVIRONMENT
- 1694. WEB APPLICATION ON CLOUD USING SAAS MODEL
- 1695. WEB BASED APPLICATION FOR WIRE ROUTE INFORMATION AND TERMINAL LIST MANAGEMENT OF CONTROL & INSTRUMENTATION SYSTEMS
- 1696. WEB CONTENT MANAGEMENT SYSTEM USING EMC DOCUMENTUM
- 1697. WEB CONTENT MIGRATION TOOL FOR LIFERAY
- 1698. WEB IMAGE RE-RANKING USING K-MEANS ALGORITHM
- 1699. WEB PERFORMANCE ANALYZER
- 1700. WEB SERVICE SECURITY FRAMEWORK IN JAVA
- 1701. WEB TEST AUTOMATION FRAMEWORK
- 1702. WEBGFX - CROSS BROWSER AUTOMATION FRAMEWORK FOR RICH MEDIA AND MOTION-GRAPHICS RENDERING VIA HTML5 CANVAS AND WEBGL
- 1703. WEBSITE CONTENT PERFORMANCE AND OPTIMIZATION USING CDN SERVICES
- 1704. WEBSITE FOR TRANSPORTATION FOR MAKING BOTH CUSTOMERS AND TRANSPORTERS LIFE EASIER
- 1705. WEEKEND TRIP FINDER
- 1706. WEGABIT - SHIPMENT TRACKING SYSTEM
- 1707. WELCOME TO YOUR SMART PHONE
- 1708. WIMAX RELAY SYSTEM
- 1709. WINDOWS AZURE(IAAS) AS CLOUD COMPUTING FOR LARGE AND MEDIUM ENTERPRISE.
- 1710. WIRELESS MULTIMEDIA COMMUNICATION WITH QOS GUARANTEE
- 1711. WLAN AUTOMATION DEVELOPMENT FOR ANDROID DEVICES
- 1712. WORK ON ASR OF NLD IN GSM NETWORK
- 1713. WSI PROTOCOL COMMUNICATOR FOR PRINTER
- 1714. XML BASED WEB SERVICES FRAMEWORK IN YII
- 1715. XMPP BASED COLLABORATIVE FITNESS APP FOR IOS
- 1716. XPERTE ANALYSIS AND PERFORMANCE MONITORING SYSTEM (XAPMS)

- 1717. YACC EXPRESSIONS TO GROOVY SCRIPT CONVERTER
- 1718. YOCTO LINUX ON QUALCOMM SNAPDRAGON
- 1719. ZIGBEE WI-FI GATEWAY

**M.TECH. (QUALITY MANAGEMENT)**

- 1720. ACHIEVEMENT OF ZERO DEFECTS BY ENHANCING THE SKILL DEVELOPMENT OF SUPERVISORS FOR SUSTAINABLE AND PROFITABLE GROWTH OF THE ORGANIZATION BY USING CAUSE AND EFFECT ANALYSIS (ISHIKAWA DIAGRAMS) - "A TQM TOOLS AND TECHNIQUES"
- 1721. APPLICATION OF QUALITY CONTROL TECHNIQUES FOR IMPROVING THE AVAILABILITY OF TELECOMMUNICATION NETWORK
- 1722. EMBRACING AND ADAPTING TO CLOUD, THE NEW REALITY, AND MANAGING THE CHANGE
- 1723. FAILURE ANALYSIS & CONCERN RESOLUTION IN ENGINE COMPONENT THROUGH DMAIC APPROACH
- 1724. IMPLEMENTATION OF STRATEGIC MANAGEMENT IN ORGANISATION
- 1725. IMPROVE OVERALL EQUIPMENT EFFECTIVENESS OF CYLINDER BLOCK CASTING PRODUCTION CELL
- 1726. PROCESS PERFORMANCE MODEL - DEFECT PREDICTION
- 1727. PROJECT MANAGEMENT AT 132/33 KV SUBSTATION ALONG WITH 132 KV DOUBLE CIRCUIT I/C CABLE LAYING FOR BSEB PATNA
- 1728. QUALITY MANAGEMENT AT VARIOUS PHASES OF OIL & GAS PROJECT EXECUTION
- 1729. TQM CONCEPTS

**M.TECH. (MANUFACTURING MANAGEMENT)**

- 1730. A COMPARATIVE STUDY OF AUTOMAT MACHINE & CNC MACHINE
- 1731. A METHOD OF MEASUREMENT OF WIDTH OF TAPERED GROOVE AT THE ROOT OF THE BLADES IN A STEAMTURBINE
- 1732. A METHOD TO IMPROVE FUEL EFFICIENCY, DRIVABILITY AND REDUCE CO2 IN PASSENGER CAR VEHICLES BY CONTROLLING THE ALTERNATOR THROUGH MODERN ELECTRONICS
- 1733. A NEW APPROACH IN RELIABILITY CENTERED MAINTENANCE
- 1734. A STUDY ON EMOTIONAL INTELLIGENCE AMONG THE EMPLOYEES WORKING FOR CONSTRUCTION COMPANIES IN UNITED ARAB EMIRATES
- 1735. A STUDY ON THE VENDOR PERFORMANCE MANAGEMENT
- 1736. ACCELERATING SALES AND PROFITABILITY IN RETAIL SEGMENT OF FASTENERS
- 1737. ACCURACY IMPROVEMENT & ENERGY CONSERVATION IN KILN FEED SYSTEM
- 1738. ACCURACY OPTIMIZATION IN KILN FEED SYSTEM
- 1739. ACHIEVING COST REDUCTION IN EARTH MOVING EQUIPMENTS
- 1740. ADAPTION OF COMPUTER AIDED PARAMETRIC DESIGN FOR TYRE SIDEWALL MARKINGS USING NX CAD
- 1741. ADOPTION OF FAST CLUSTER DESIGN TECHNIQUES - A WCE INITIATIVE
- 1742. ADVANCE AUTOMATION SYSTEM FOR ERROR PROOFING IN ASSEMBLY LINE
- 1743. ADVANCE PRODUCT QUALITY PLANNING PROCEDURE (POLYMER FUEL TANK DEVELOPMENT)
- 1744. ADVANCE TECHNOLOGY IN AUTOMOTIVE
- 1745. ADVANCED PLANNING AND SCHEDULING SYSTEMS IN MANUFACTURING PROCESSES
- 1746. AN IN-DEPTH ANALYSIS OF ELECTRONIC COMMERCE IN INDIA AND ITS STRATEGIES TO ATTRACT CUSTOMERS
- 1747. ANALYSIS FOR DEMURRAGE REDUCTION IN MATERIAL LOADING/UNLOADING FOR CEMENT PLANT
- 1748. ANALYSIS OF DESIGN FOR ENVIRONMENT AND SUSTAINABLE MANUFACTURING USING LIFE CYCLE ASSESSMENT TOOL BY DOING CASE STUDIES IN SHIP BUILDING INDUSTRY IN CONTEXT TO MAJOR ELECTRICAL SYSTEMS ON THE SHIP. THE SYSTEMS TAKEN INTO CONSIDERATION FOR THIS STUDY WILL BE A) INTEGRATED BRIDGE SYSTEM B) POWER MANAGEMENT SYSTEM C) LIGHT FITTINGS (LED)(USING END OF LIFE AND DISASSEMBLY)
- 1749. ANALYSIS OF FACTORS AFFECTING THE IMPLEMENTATION OF SUSTAINABLE MANUFACTURING IN INDIAN AEROSPACE INDUSTRY
- 1750. ANALYSIS ON FABRICATION MAN-HOUR CONSUMPTION WITH NEW MACHINERY, TO BRING COST COMPETITIVENESS
- 1751. APPLICATION OF DMAIC TO INCREASE DIRECT PASS RATIO OF WORLDTRAC (EXPORT MODEL) TRACTORS
- 1752. APPLICATION OF CONCURRENT DESIGN AND MANUFACTURING MODEL FOR THE DESIGN, DEVELOPMENT AND REALISATION OF AN UNMANNED CREW MODULE
- 1753. APPLICATION OF HUMAN ERROR PREVENTION IN NEW PRODUCT DEVELOPMENT
- 1754. APPLICATION OF IR THERMOGRAPHY IN CONDITION MONITORING OF LNG TRAINS
- 1755. APPLICATION OF LEAN PRINCIPLES TO WELD OPERATION IN MANUFACTURING INDUSTRY
- 1756. ASSEMBLY TO DISPATCH (PHYSICAL AND SYSTEM ) LINE INTEGRATION OF MULTI-CYLINDER FUEL INJECTION PUMP

1757. ASSESSMENT OF PROJECTS WITH PROJECT PROGRESS EVALUATION METHODS
1758. ATTAINING NEARLY 0% REJECTION USING TQM, SIX SIGMA & OTHER TECHNIQUES & ITS EFFECTS ON FINANCIAL & STRATEGIC PERFORMANCE
1759. ATTEMPTS TO IMPROVE THE EFFECTIVENESS OF GLOBALIZATION
1760. AUTOMOTIVE HEADLAMP CONDENSATION
1761. AUTOMOTIVE UNDERBODY TECHNOLOGY
1762. AXLE HOUSING DESIGN
1763. BATTERY TERMINAL SPARK REDUCTION DURING CHARGING
1764. BREAK THROUGH ANALYSIS OF HIGH PRESSURE DIECASTING PROCESS VARIABLES
1765. BREAKTHROUGH IMPROVEMENT IN VERTICAL ROLLER CLINKER MILL
1766. BUS INTERIORS DESIGN
1767. CAPACITY ENHANCEMENT IN ACTUATOR ASSEMBLY THROUGH IMPROVEMENT IN PRODUCTION SYSTEM AND PLANNING
1768. CAPACITY IMPROVEMENT IN HEX ASSEMBLY LINE THROUGH PROCESS IMPROVEMENT
1769. COMBINING NEW PRODUCT DEVELOPMENT & PROJECT MANAGEMENT TECHNIQUES TO INCREASE MARKET SHARE OF CURRENT & NEW PRODUCTS
1770. COMMISSIONING OF 220KV SWITCHYARD
1771. CONTRIBUTION OF ADITYA BIRLA EXCELLENCE MODEL IN LOGISTIC AND SCM
1772. CONVERSION OF WOW (WET ON WET- PRIMER + TOP COAT) FACILITY TO CED (CATHODIC ELECTRO-DEPOSITION) FACILITY.
1773. CORROSION RESISTANCE IMPROVEMENT OF STAINLESS STEEL PLATED WATCH CASE(BRASS)
1774. COST OF QUALITY REDUCTION IN ADHESIVE DISPENSING PROCESS
1775. COST OPTIMIZATION OF FRAME 39 MODELS
1776. COST PROFILING IN A PRODUCT LIFE CYCLE THROUGH VALUE ENGINEERING & SHOULD COSTING APPROACH
1777. CREATING EFFECTIVE AND EFFICIENT ASSEMBLY WORK STATIONS (DEVISING A METHODOLOGY)
1778. CROSS DOCKING FOR DISTRIBUTION OF AGRO PRODUCTS IN INDIA
1779. CUSTOMISED ERP SYSTEM FOR A DESIGN & DEVELOPMENT DIVISION
1780. CUTTING BLADE LOSS REDUCTION IN SPRAY DRIERS
1781. CV OPTIMIZATION AND PERFORMANCE IMPROVEMENT IN CONTROL VALVES USING CFD ANALYSIS
1782. CYCLE TIME OPTIMISATION ON GAP GRINDING MACHINE USING SIX SIGMA METHODOLOGY
1783. CYCLE TIME OPTIMIZATION IN ROUGH TURNING OPERATION IN MAHINDRA PISTON USING SIX SIGMA TOOL
1784. CYCLE TIME REDUCTION IN MACHINING DIA 168.3 P91 90DEG ELBOW
1785. CYLINDER HEAD CASTING DEVELOPMENT AND VALIDATION FOR MDT ENGINE
1786. DEFECT ANALYSIS AND PROCESS IMPROVEMENT THROUGH SIX SIGMA
1787. DEFINE AND DEPLOY STRATEGY FOR ZERO MANUFACTURING PROCESS DEFECT .
1788. DESIGN & DEVELOPMENT OF 28000 LITER WATER SPRINKLER
1789. DESIGN & DEVELOPMENT OF A NEW SMOOTH CLOSING LID FOR WASHING MACHINE
1790. DESIGN & DEVELOPMENT OF HYDROPNEUMATIC TEST EQUIPMENT FOR SECONDARY CONTROL & LUBRICATION PUMP
1791. DESIGN ANALYSIS & TESTING OF 3-WHEELER HANDLE BAR CONTROL SWITCH ASSEMBLY
1792. DESIGN AND DEVELOP PLEAT END JOINTING MACHINE
1793. DESIGN AND DEVELOPMENT OF TKSA MEASURING UNIT TEST RIG
1794. DESIGN AND OPTIMIZATION TO REDUCED BATTERY INTRUSION IN FRONTAL IMPACTS
1795. DESIGN IMPROVEMENT FOR PLUG INTEGRITY IN DOUBLE BLOCK AND BLEED VALVE
1796. DESIGN OF A DECISION SUPPORT SYSTEM FOR VENDOR SELECTION USING FUZZY LOGIC
1797. DESIGN OF AUTOMATIC TOOL LUBRICATION SYSTEM FOR WARM FORGING
1798. DESIGN OF SPARK PLUG FOR EMI COMPLIANCE
1799. DESIGN OPTIMIZATION OF OIL PAN FOR HEAVY DUTY ENGINES
1800. DESIGN OPTIMIZATION OF TRUCK BODY USING HIGH STRENGTH MATERIAL
1801. DESIGNING NEXT GENERATION NEW PRODUCT DEVELOPMENT SYSTEM BY APPLYING LEAN PRINCIPLES.
1802. DETERMINE & INCREASE ASSOCIATE WORKING SPEED TO IMPROVE PRODUCTIVITY ON MPOWER ENGINE ASSEMBLY LINE
1803. DEVELOP A MARKETING PLAN FOR EPAMS SALE IN INDIA
1804. DEVELOP A MODEL FOR MANPOWER COMPOSITION AT CUMMINS POWER GENERATION INDIA PLANT
1805. DEVELOP APPROPRIATE & COST EFFECTIVE MAINTENANCE STRATEGY TO ENSURE EXPECTED PERFORMANCE AND INTEGRITY OF AGED GAS TURBINE DRIVEN CENTRIFUGAL COMPRESSOR PACKAGES IN NGL FRACTIONATION PLANT.

1806. DEVELOPING 5S PRINCIPLES,PRACTICES AND MANAGEMENT IN WORKSHOP-I
1807. DEVELOPING A NEW PRODUCT DEVELOPMENT AND LAUNCH PROCESS
1808. DEVELOPMENT AND IMPLEMENTATION OF COMPREHENSIVE ENERGY MANAGEMENT SYSTEM FOR NEW PROJECT CEMENT GRINDING UNIT AT JHAJJAR CEMENT WORKS.
1809. DEVELOPMENT AND INTEGRATION OF ENHANCED ROBOT PATH PLANNING TOOL IN COMPUTER AIDED ROBOTIC (CAR)SIMULATION SOFTWARE
1810. DEVELOPMENT OF CASTINGS FOR ENERGY PRODUCTION BY RENEWABLE SOURCES OF ENERGY.
1811. DEVELOPMENT OF CNC LASER CUTTING MACHINE FOR SMALL SCALE INDUSTRIES
1812. DEVELOPMENT OF COMPREHENSIVE EMS SYSTEM FOR IMPLEMENTATION OF ISO-50001:2011 & MONITORING AT DADRI CEMENT WORKS.
1813. DEVELOPMENT OF DELAY MODULES FOR AUTOMOTIVE APPLICATIONS
1814. DEVELOPMENT OF FULL WHEEL COVER FOR COMPACT SUV SEGMENT FOR IND REGION BASED ON MARKET REQUIREMENTS
1815. DEVELOPMENT OF HIGH TENSILE FASTENERS BY SEVERE PLASTIC DEFORMATION PROCESS
1816. DEVELOPMENT OF INTEGRATED TEST JIG FOR MISSILE SYSTEMS
1817. DEVELOPMENT OF JACK ASSEMBLY - AN APPROACH TO PRODUCT COMMUNIZATION FOR INDIA MARKET
1818. DEVELOPMENT OF LOW RELAYS FOR INDUSTRIAL APPLICATIONS
1819. DEVELOPMENT OF NEW BOWL FOR ALDEC-35 DECANter SIZE
1820. DEVELOPMENT OF NEW POWDER RECYCLING BOOTH TO INCREASE FIRST PASS TRANSFER EFFICIENCY
1821. DEVELOPMENT OF REAL TIME BUSINESS & PERFORMACE KPI BY USING PI SYSTEM AT DADRI CEMENT WORKS
1822. DEVELOPMENT OF ROTOR SHAFT THROUGH APQP PROCESS
1823. DEVELOPMENT OF SLIDING PIN WITHOUT HEAT TREATMENT
1824. DEVELOPMENT OF SWINGING ARM TYPE PADDLE FEEDER FOR COAL UNLOADING OPERATION
1825. DEVELOPMENT OF TEMPLATE POSTPROCESSOR FOR 4 AXIS CNC MILLING MACHINES FOR FANUC SERIES CONTROLS USING UNIGRAPHICS NX6 AND POST BUILDER
1826. DEVISE EFFECTIVE LOGISTICS STRATEGY FOR MULTI MODEL AUTOMOTIVE ASSEMBLY LINE
1827. DEVLPOMENT OF AUTO GUIDED VEHICLE FOR MATERIAL HANDLING
1828. DIE SET UP TIME REDUCTION BY ADOPTING SMED TECHNIQUE
1829. DIESEL INJECTOR LEAK OFF TUBE BENDING AUTOMATION
1830. DIGITAL NEEDLE SHARPNESS TESTING MACHINE
1831. DOMESTIC SUPPLIER SELECTION FOR RADIOTHERAPY MACHINE MANUFACTURER - AN ANALYTICAL APPROACH
1832. DOWNSIZING OF 1.4L ENGINE INTO 1.05L DIESEL ENGINE WITH SAME PERFORMANCE & EMISSION
1833. DRIVING BUSINESS EXCELLENCE AT CENTUM RAKON
1834. DUAL ENERGY-HARVESTING FROM VEHICLE SUSPENSION SYSTEMS
1835. DYNAMIC SCHEDULING SYSTEM FOR CONSTRUCTION INDUSTRY
1836. EFFECTIVE IMPLEMENTATION OF CONTROL & INSTRUMENTATION AT LIME STONE CRUSHER
1837. ELIMINATING THE RISK OF BOTTLE NECK AT THE END OF PRODUCTION LINE
1838. ELIMINATION OF AIR LEAK PROBLEM IN GUSTO CYLINDER HEAD. USING QC TOOLS
1839. ELIMINATION OF BRUSH STICKY IN COMPRESSOR MOTOR
1840. ELIMINATION OF COPPER PLATING IN SECTOR SHAFT BY INDUCTION SOFTENING
1841. ELIMINATION OF ENGINE FAN LEAF BREAKAGE IN LIGHT COMMERCIAL VEHICLES
1842. ELIMINATION OF REJECTION DUE TO DELAMINATION IN PYRO LOGS
1843. ENERGY CONSERVATION THROUGH SEQUENTIAL STOP SEQUENCE OF PRETREATMENT AND ELECTROCOATING PROCESSSES IN THE PAINT SHOP
1844. ENERGY MANAGEMENT FOR INDUSTRIAL THERMAL POWER PLANT
1845. ENERGY MANAGEMENT IN PLANT OPERATIONS
1846. ENERGY MANAGEMENT OF AIRCONDITIONING EQUIPMENTS AT ETSALAT HQ BUILDING.
1847. ENERGY OPTIMIZATION FOR CEMENT INDUSTRY USING CONTROL SYSTEM
1848. ENERGY SAVING IN THE EXISITNG VERTICAL CEMENT MILL GRINDING SYSTEM ALONG WITH THE INSTALLATION OF NEW BULK LOADING SYSTEM.
1849. ENGINE PROCESS & FACILITY SET UP FOR 1.5 L TDI & 2.0 L ENGINE
1850. ENHANCE VALUE ADDITION RATIO IN ROTO MOULDING PARTS MANUFACTURING PROCESS
1851. ENHANCEMENT IN ELECTRIC BIKE FOR HANDICAPS
1852. ENHANCING UTILIZATION OF ALTERNATIVE FUEL IN KILN
1853. ESTABLISH TRUE "PULL BASED PRODUCTION" SYSTEM THROUGH PRODUCTION LEAD TIME REDUCTION
1854. EVALUATION OF FINANCIAL POSITION AND PERFORMANCE OF COMPANIES IN ENERGY SECTOR

1855. EVALUATION OF MECHANICAL AND TRIBOLOGICAL PROPERTIES OF AL-MG-SI BASED HYBRID COMPOSITE (AL-7075)
1856. EXERGY ANALYSIS OF A MANUFACTURING SYSTEM
1857. FABRICATION OF FORK SHIFT 3RD & 4TH USING FUNCTIONALLY GRADED MATERIAL BY APPLYING POWDER METALLURGICAL TECHNIQUE
1858. FACILITY PLANNING FOR NEW PUMP MANUFACTURING PLANT
1859. FACTORS INFLUENCING MAINTENANCE MANAGEMENT IN A PETROLEUM REFINERY WITH FOCUS ON MAINTENANCE PHILOSOPHY AND ITS EFFECTS ON INSTRUMENTATION MAINTENANCE.
1860. FACTORY ENERGY CONSERVATION AND MANAGEMENT
1861. FATIGUE LIFE IMPROVEMENT ON PLASTIC MOULDED CITY BUS SEATS
1862. FEASIBILITY STUDY OF IMPLEMENTING MANUFACTURING 3D WORK INSTRUCTIONS THRU TEAM CENTER IN B/E AEROSPACE, MIAMI.
1863. FLUIDIZED CATALYTIC CRACKING COLD FLOW PILOT PLANT (FCC-CFPP)
1864. FORMULATING A STRUCTURED DRIVING SKILL ASSESSMENT PROGRAM FOR SAFE DRIVING ENVIRONMENT ON THE TEST TRACK
1865. FREEZING OF MASTER PRODUCTION SCHEDULE TO REDUCE SYSTEM NERVOUSNESS
1866. FRONT END ENGINEERING AND DESIGN OF HIGH PRESSURE WATER INJECTION PIPELINES
1867. GENERATION OF ENERGY FROM BIO WASTE-A USEFUL PRODUCT SUCH AS BIO GAS
1868. GENSET CANOPY PRODUCT ENHANCEMENT
1869. HAMMER LINES INTRODUCTION IN INDIA FOR 20 TON CLASS HYDRAULIC EXCAVATOR
1870. HEAT TREATMENT PROCESS ESTABLISHMENT AND QUALIFICATION SUPPORT FOR SPECIFIC AERO-ENGINE CUSTOMER REQUIREMENT
1871. IDENTIFICATION OF THE POTENTIAL POWER SAVING AREA & REDUCTION OF PWER CONSUMPTION IN UTILITY SECTION
1872. IMPACT OF SOLAR POWER AS ALTERNATIVE ENERGY SOURCE IN RURAL BENGAL
1873. IMPLEMENTATION OF "ANTI SKIP" GEAR SHIFTING MECHANISM IN TWO WHEELER ENGINE
1874. IMPLEMENTATION OF CONTINUAL IMPROVEMENT PRACTICE IN OEM DECALS MANUFACTURING
1875. IMPLEMENTATION OF EMISSION NORMS IN HEAVY COMMERCIAL VEHICLE FROM BSIII TO BS IV
1876. IMPLEMENTATION OF EMISSION NORMS IN HEAVY COMMERCIAL VEHICLE(FROM BHARAT STAGE II TO BHARAT STAGE III)
1877. IMPLEMENTATION OF JISHU HOZEN & KAIZEN IN STEEL FABRICATION
1878. IMPLEMENTATION OF LEAN MANUFACTURING TECHNIQUE AT OSCILLATOR FACTORY
1879. IMPLEMENTATION OF LEAN MANUFACTURING TO IMPROVE COMPETITIVENESS
1880. IMPLEMENTATION OF POWER SYSTEM SCADA AT ROURKELA STEEL PLANT
1881. IMPLEMENTATION OF TPM IN CYLINDER BLOCK MACHINING
1882. IMPLEMENTATION OF WHEEL ALIGNMENT CHECKING MACHINE FOR ROYAL ENFIELD MOTORCYCLES
1883. IMPLEMENTING AND UTILIZING TECHNOLOGICAL IMPROVEMENTS FOR DESIGN AUTOMATION AND STRATEGIC DECISION MAKING AT SEMICONDUCTOR DESIGN AND MANUFACTURING COMPANY.
1884. IMPLEMENTING ISUZU MANUFACTURING MANAGEMENT TECHNIQUES IN CONTRACT MANUFACTURING PLANT (HMFCL, CHENNAI) TO PRODUCE DEFECT FREE VEHICLES
1885. IMPROVE PRODUCTIVITY IN DAIMLER INDIA COMMERCIAL VEHICLE SEAT ASSEMBLY PROCESS
1886. IMPROVE THE FTT [FIRST TIME THRU] OF A PARTICULAR PRODUCT USING THE SIX SIGMA METHODOLOGY DMAIC (THE DEFINE MEASURE ANALYSE IMPROVE CONTROL PROCESS)
1887. IMPROVEMENT IN CHEMICAL MANAGEMENT SYSTEMS
1888. IMPROVEMENT IN LIFE OF FRONT AXLE HUB BEARINGS USING STATISTICAL ANALYSIS & RELIABILITY TOOLS
1889. IMPROVEMENT IN OPERATION EFFICIENCY (K.E.) OF LV PANEL THORUGH INTERNALIZATION OF BUSBAR MANUFACTURING
1890. IMPROVEMENT IN PRODUCTIVITY BY AUTOMATION
1891. IMPROVEMENT IN PRODUCTIVITY OF CENTERLESS GRINDER
1892. IMPROVEMENT OF SURVIVAL SPACE FOR OCCUPANT IN CASE OF SIDE POLE IMPACT CRASH IN A CAR
1893. IMPROVEMENTS IN MANUFACTURING PROCESS TO ACHIEVE BUSINESS EXCELLENCE BY USING M.O.S.T
1894. IMPROVEMENTS IN PRODUCT CONFIRMATION METHODOLOGY OF TRACTOR PRODUCTS
1895. IMPROVING CNC MACHINES OUTPUT BY REDUCING LOSSES
1896. IMPROVING CUSTOMER FULFILLMENT THROUGH IMPROVEMENT IN OVERALL EQUIPMENT EFFECTIVENESS OF A BOTTLENECK MACHINE
1897. IMPROVING FIRST FILL RATE IN TWO WHEELER SPARES BUSINESS
1898. IMPROVING FIRST TIME THROUGHPUT YIELD (FTT) OF ENGINE ASSEMBLY
1899. IMPROVING INJECTION MOLDING PROCESS CONTROL AND CAPABILITY USING SCIENTIFIC PROCESSING



1900. IMPROVING LOGISTICS EFFICIENCY BY ENHANCING SUPPLY CHAIN SYSTEM AND PROCESS TO MEET EVOLVING CUSTOMER EXPECTATION
1901. IMPROVING QUALITY & PRODUCTIVITY IN MANUFACTURING ORGANIZATION
1902. IMPROVING THE MTBF BY OPTIMIZATION OF CLINKER COOLER HYDRAULIC OPERATION.
1903. IMPROVING THE PRODUCTION PLANNING PROCESS FOR BETTER PRODUCT AVAILABILITY WITH OPTIMAL INVENTORY FOR SOLAR WATER HEATER MANUFACTURING
1904. INCLUSIVE WAYS TO ECONOMISE COSTING AND DEVISE IMPROVEMENT METHODOLOGIES IN THERMAL POWER PLANT CONSTRUCTION PROJECTS
1905. INCREASE IN CES INDIA LAB UTILIZATION
1906. INCREASING INVENTORY TURN AROUND CYCLE USING LEAN MANUFACTURING CONCEPTS
1907. INCREASING PRODUCTIVITY BY USING LEAN MANUFACTURING FOR CAM SHAFT
1908. INFORMATION MANAGEMENT SYSTEM FOR SUGGESTION SCHEME IN THE MISSILE SYSTEMS SBU
1909. INJECTOR BODY & SHAFT DAMAGE ELIMINATION
1910. INSTALLATION & COMMISSIONING OF 4 HI SKIN PASS MILL
1911. INTEGRATING QUALITY MANAGEMENT INTO VALUE SUPPLY CHAIN
1912. INTEGRATION OF AUTO TRANSFER SYSTEM TO IMPROVE THE RELIABILITY OF SWITCHGEAR IN DESALINATION WATER PLANT
1913. INTRODUCTION OF INTELLIGENT PROCESSOR UNITS IN LV SWITCHBOARDS
1914. INVESTIGATE AND ELIMINATE THE SURFACE DEFECTS IN CARL GUSTAV 84MM BARREL
1915. INVESTIGATE RISKS & REWARDS IN IMPLEMENTING GREEN SUPPLY CHAIN IN INDIAN AUTOMOTIVE TIER SUPPLIERS
1916. INVESTIGATION ON BURR FORMATION AND MACHINING TIME REDUCTION IN DRILLING FOR THREE DIFFERENT METALS
1917. KANBAN IMPLEMENTATION FOR LOCAL SUPPLIERS
1918. KANBAN PULL SYSTEM
1919. LEAD TIME REDUCTION AND ON TIME DELIVERY BY CASE CAPTIVE VENDOR THROUGH LEAN IMPLEMENTATION
1920. LEAD TIME REDUCTION IN MANUFACTURING
1921. LEAD TIME REDUCTION IN PROCUREMENT PROCESS
1922. LEAD TIME REDUCTION IN SWITCH BOARD MANUFACTURING
1923. LEADERSHIP IN PROJECT MANAGEMENT
1924. LEAN CONSTRUCTION BY 5S IMPLEMENTATION
1925. LEAN MANAGEMENT IN PROCUREMENT FUNCTIONS
1926. LEAN OPTIMIZATION OF STEERING COLUMN MANUFACTURING PROCESS AND SUB COMPONENTS TO MEET CAPACITY REQUIREMENTS OF NEW PRODUCT
1927. LEAN PRODUCTION IN COMPONENT MODULE
1928. LIFECYCLE AND PART DATA MANAGEMENT FOR ELECTRICAL/ELECTRONIC COMPONENTS
1929. LOCALISATION OF STEERING WHEEL ARMATURE FOR THE INDIAN PASSENGER CAR MARKET
1930. LOOSE & LEAK DEFECTS REDUCTION IN OFF HIGHWAY TRUCK LINE ASSEMBLY
1931. MANUFACTURING OF HARD-FACED SEAT ASSEMBLY IN BLOW-DOWN (PRESSURE DROP) VALVES FOR HIGH PRESSURE STEAM GENERATORS
1932. MANUFACTURING ORGANIZATION AND CHANGE MANAGEMENT
1933. MANUFACTURING PROCESS CERTIFICATION OF ELEVATOR UPRIGHT STIFFENER BRACKET
1934. MANUFACTURING PROCESS DEVELOPMENT FOR CAB LEG ASSLY
1935. MEASURING CUSTOMER BASED BRAND EQUITY
1936. MECHANICAL RESOLUTION TOWARDS THE REDUCTION OF TWO WHEELER ENGINE CAM NOISE
1937. MEMBRANE BASED (MBR) SEWAGE WATER TREATMENT SYSTEM
1938. METHODS FOR TREATMENT OF AN EXHAUST GAS FROM AN ENGINE
1939. MIS FOR DESIGN DEPARTMENT ON DESIGN MEASURABLES & IDENTIFYING THE OPPORTUNITY FOR IMPROVEMENTS IN TERMS OF PRODUCTIVITY, QUALITY & EFFECTIVE UTILIZATION OF DESIGN RESOURCES
1940. MODEL SIMPLIFICATION
1941. MONITORING OF GRID SUPPLY PARAMETERS WITH INTEGRATION OF PLANT INFORMATION SYSTEM AND RF COMMUNICATION
1942. NET SHAPE FORGING WITH TOOTH IN PLANETARY GEAR
1943. NEW PRODUCT DEVELOPMENT - CASE STUDY
1944. NEW PRODUCT DEVELOPMENT FOR HIGH SPEED SPRAG MIXERS IN INDIA
1945. NEW PRODUCT DEVELOPMENT IN A PRODUCTION LINE ENVIRONMENT
1946. NEW PRODUCT INTRODUCTION OF F1-TX DISPENSER MODEL FOR GLOBAL MARKET
1947. OIL SEALS & GASKETS MARKET SEGMENTATION & MARKET STUDY INCLUDING NEW PRODUCT INTRODUCTION
1948. ON TIME DELIVERY OF SERIAL PRODUCTION ORDERS IN MULTI PROJECT ENVIRONMENT

1949. OPTIMISATION OF PROJECT INFORMATION FLOW IN BOILER DESIGN USING PROJECT MANAGEMENT TOOLS.
1950. OPTIMIZATION OF HOT FORGING PROCESS TO ELIMINATE DEFECTS IN BEVEL GEAR
1951. OPTIMIZATION OF MASTER PRODUCTION SCHEDULE OUTPUT FOR MAKE TO ORDER SCENARIO
1952. OPTIMIZATION OF PRODUCT DEVELOPMENT CYCLE USING MOBILE PHONE COVERS
1953. OPTIMIZATION OF PRODUCTION TIME FOR SCHUF SPECIALITY VALVES USING CRITICAL PATH METHOD
1954. OPTIMIZATION OF RAWMILL OUTPUT BY IMPROVING THE CAPABILITY INDEX OF RAWMILL FEEDRATE
1955. OPTIMIZATION OF VIRTUAL PRODUCT DEVELOPMENT PROCEDURE FOR QUICK PRODUCT DESIGN AND DEVELOPMENT
1956. OPTIMIZATION STUDY FOR MATERIAL CORROSION IN OIL AND GAS INDUSTRY AND COST IMPACT
1957. OPTIMIZING ASSET AVAILABILITY USING RELIABILITY ENGINEERING
1958. OPTIMIZING RECRUITMENT FUNCTION AND SPEEDING UP RESULTS
1959. OPTIMIZING UPSTREAM FLOWS THROUGH SUSTAINABLE PACKAGING
1960. ORGANIZATIONAL STUDY FOR ENHANCEMENT OF PROJECT EXECUTION
1961. OVERALL EQUIPMENT EFFECTIVENESS IMPROVEMENT OF TYRE BUILDING MACHINE
1962. PACKING DESIGN FOR ORAL SOLID DOSAGE MANUFACTURING PRODUCTS
1963. PERFORMANCE ANALYSIS AND ENHANCEMENT IN INDUCTION HEATING PROCESS FOR PIPE COATING
1964. PERFORMANCE AND ANALYSIS OF GRINDING PROCESS
1965. PERFORMANCE IMPROVEMENT OF RABH&POLLUTION CONTROL IN RAW MILL
1966. PET PREFORM YIELD IMPROVEMENT ON HOT FILL JUICE BEVERAGE INDUSTRY
1967. PILOT PROJECT OF NEW MAINTENANCE SYSTEM THROUGH RCM METHODOLOGY ALONG WITH SAFETY
1968. PIN TEST TO ANALYZE PERFORMANCE OF PCB SURFACE FINISH
1969. PLC - SANMINA
1970. POWER CONSUMPTION & TEMPERATURE ANALYSIS FOR COMPRESSORS AND MOTORS
1971. PRIME EDGE: A TOTAL QUALITY MANAGEMENT APPROACH ON SLITTING AND SHEARING PROCESSES OF STEEL COILS IN MANUFACTURING ORGANISATION.
1972. PROCESS AND TOOL ENGINEERING FOR MACHINING OF AUTOMOTIVE COMPONENT - CONNECTING ROD
1973. PROCESS CONTROL IN PHARMACEUTICAL INJECTION MANUFACTURING
1974. PROCESS FMECA FOR LIQUID ROCKET STAGE ASSEMBLY & INTEGRATION ACTIVITIES (L40 STAGE) FOR HUMAN SPACE PROGRAMME
1975. PROCESS IMPROVEMENT BY CYCLE TIME REDUCTION THROUGH LEAN METHODOLOGY
1976. PROCESS IMPROVEMENT FOR DIE CHANGE ON PRESSES
1977. PROCESS IMPROVEMENT IN PRIMARY PRODUCTION DEPARTMENT, THROUGH SIX SIGMA
1978. PROCESS IMPROVEMENT USING KAIZEN BY HOMOGENIZING THE FLOOR WELDING
1979. PROCESS OPTIMIZATION FOR FLIGHT OPERATION ACTIVITIES
1980. PROCESS OPTIMIZATION TO IMPROVE ON-TIME DELIVERY AND ENHANCE PROJECT CASH FLOW
1981. PROCUREMENT PROCESS OPTIMIZATION AND ESTABLISHING SUPPLIER EVALUATION SYSTEM
1982. PRODUCT DESIGN STRATEGY: CASE STUDY ON DESIGN OF BUS BODY DOOR SYSTEM
1983. PRODUCT DEVELOPMENT OF PASSENGER VEHICLE INSTRUMENT CLUSTER
1984. PRODUCT DEVELOPMENT STRATEGY: CASE STUDY ON PLASTIC & RUBBER PARTS
1985. PRODUCT DEVELOPMENT-AN R&D PERSPECTIVE AND ITS APPLICATION IN REALIZING SCANNING MECHANISM FOR SATELLITE APPLICATION
1986. PRODUCT FUNCTIONAL ENHANCEMENT BY INTRODUCING FORCED ASPIRATION IN AIR INTAKE SYSTEM
1987. PRODUCT LIFE CYCLE MANAGEMENT TO ESTABLISH NEW PRODUCT AND PRODUCT FEATURE IN MARKET
1988. PRODUCTIVITY IMPROVEMENT AND COST REDUCTION IN WIND ENERGY COMPONENT
1989. PRODUCTIVITY IMPROVEMENT AND NEW PROCESS DEVELOPMENT FOR CURRENT PLM SYSTEM IN ESCORTS
1990. PRODUCTIVITY IMPROVEMENT BY REDUCING SUPER FINISHING MACHINE CHANGEOVER ADJUSTMENT TIME OF SINGLE BALL BEARING (SBB) LINE
1991. PRODUCTIVITY IMPROVEMENT BY STOCK OPTIMIZATION IN GRIND LINE (0 TO 8 INCH)
1992. PRODUCTIVITY IMPROVEMENT IN BALL MILL FOR CEMENT GRINDING
1993. PRODUCTIVITY IMPROVEMENT IN FEEDER PARTS
1994. PRODUCTIVITY IMPROVEMENT IN HIGH MIX AND LOW VOLUME CELL
1995. PRODUCTIVITY IMPROVEMENT IN INSPECTION MACHINE
1996. PRODUCTIVITY IMPROVEMENT IN MINING TRUCK ASSEMBLY LINE THROUGH LEAN MANUFACTURING

1997. PRODUCTIVITY IMPROVEMENT IN PLATE UPPER PRESSING OF STICK COIL ASSEMBLY LINE
1998. PRODUCTIVITY IMPROVEMENT IN PRESS SHOP BY REDUCING DIE CHANGE OVER TIME
1999. PRODUCTIVITY IMPROVEMENT IN VALVE ASSEMBLY
2000. PRODUCTIVITY IMPROVEMENT OF 11V9 DIAMOND GRINDING WHEELS BY IMPROVED MOULD & PRESS DESIGN
2001. PRODUCTIVITY IMPROVEMENT THROUGH EFFECTIVE LINE BALANCING
2002. PRODUCTIVITY IMPROVEMENT THROUGH MULTI LOADING OF PRESS OPERATIONS
2003. PRODUCTIVITY IMPROVEMENTS.
2004. PRODUCTION PLANNING & CONTROL
2005. PROJECT CORRIGO FOR MANUFACTURING ORACLE SYSTEMS
2006. PROJECT LEAD TIME OPTIMIZATION IN UNCERTAIN ESTIMATION AND SCHEDULING CONDITIONS USING CRITICAL CHAIN PROJECT MANAGEMENT CONCEPTS
2007. PROJECT MANAGEMENT
2008. PROJECT MANAGEMENT FOR HYDROCYCLONE CLUSTER PROJECTS
2009. PROJECT MANAGEMENT OF CHASSIS PARTS LAUNCH
2010. PROJECT MANAGEMENT OF EXECUTION OF CRUSHER & SCREENING SYSTEM PROJECT
2011. PROJECT MANAGEMENT OF STRESS ANALYSIS OF WING COMPONENTS FOR A COMMERCIAL AIRCRAFT
2012. PROJECT ON MACHINING OUTSOURCING TO INCREASE THE BOTTOM-LINE AND REDUCE LEAD TIME
2013. PROJECT ON TOTAL PRODUCTIVE ENERGY MANAGEMENT
2014. QCD IMPROVEMENT AT TIER-1 VENDOR THROUGH CIP METHODOLOGY
2015. QUALITY ASSURANCE THROUGH RELIABILITY ON EUROPE BUS PROJECT
2016. QUALITY CONTROL ASSURANCE AND RELIABILITY IN STANDARDIZATION OF FASTENERS
2017. QUALITY ENHANCEMENT OF DRAWING RELEASE PROCESS BY MINIMIZING UNIGRAPHICS' CHECKMATE BYPASS
2018. QUALITY IMPROVEMENT IN TRANSMISSION PRODUCT CHARACTERISTICS-LEAD ANGLE AND SURFACE FINISH THROUGH DOE
2019. QUALITY SYSTEM BASICS IMPLEMENTATION
2020. QUICK IMPLEMENTATION OF IMPROVED FOOTREST DESIGN IN MOTORCYCLE THROUGH PROJECT MANAGEMENT
2021. RAW MILL FAN POWER SAVING
2022. RESEARCH AND IMPROVEMENT ON OPERATOR'S ERGONOMICS TO CREATE A SUSTAINABLE OPERATING ENVIRONMENT LEADING TO BETTER PRODUCTION EFFICIENCY
2023. REDESIGN AND RELOCATION OF CONTACTOR UNIT IN SCHILKA TANK FOR THE EASE OF ASSEMBLY AND TROUBLESHOOTING
2024. RE-DESIGN OF THE POWER TURBINE (PT) BEARING OIL SEAL SLEEVE OF GEM TURBO-SHAFT ENGINE.
2025. REDFINING METHODOLOGY OF NEW PRODUCT INTRODUCTION IN RECONDITIONING BUSINESS OF TATA MOTORS
2026. REDUCE CUSTOMER COMPLAINTS DUE TO PUMP BODY LEAK IN VOLVO MEDIUM DUTY TRUCK PRE FUEL FILTERS
2027. REDUCE INHOUSE REJECTION FOR A SAFETY CRITICAL COMPONENT
2028. REDUCE INTERNAL REJECTIONS IN VOLVO MEDIUM DUTY ENGINE MOUNTED FUEL FILTERS
2029. REDUCE REJECTION IN BAJAJ PULSAR MIXING BODY CARBURETOR CASTING
2030. REDUCE THE DUST EMISSION OF ESP FROM 70 MGNM3 TO 30 MGNM3
2031. REDUCE WATER USAGE IN AUTOMOBILE WASH TO SUSTAIN RESOURCE AND CONTROL ENVIRONMENTAL POLLUTION
2032. REDUCTION IN AUXILIARY POWER CONSUMPTION OF 4X25 MW TPP
2033. REDUCTION IN CLINKER CONSUMPTION BY INCREASING FLY ASH ADDITION IN POZZOLANA PORTLAND CEMENT FROM 24% TO 25%.
2034. REDUCTION IN COST PER COMPONENT OF SHAFT OUTPUT CARRIER
2035. REDUCTION IN NEW PRODUCT INTRODUCTION TIME (VALTRA PROJECT) WITH RIGHT FIRST TIME QUALITY
2036. REDUCTION OF COAL JAMMING OF UNDER FEED BOILER [AFBC]
2037. REDUCTION OF COMPRESSED AIR ENERGY CONSUMPTION IN 5 MILLION TONNES PER ANNUM CEMENT PLANT
2038. REDUCTION OF FALLOUT REJECTION IN LP 1341 WHEEL
2039. REDUCTION OF INTERNAL REJECTION-INNER DIAMETER UNCLEAR SURFACE IN PART NUMBER 2H.008.01.0.07(4R1040)-KIRLOSKAR
2040. REDUCTION OF LEAD TIME THROUGH LEAN MANUFACTURING
2041. REDUCTION OF LINE REJECTIONS IN GEAR REDUCTION STARTER MOTOR ASSEMBLY LINE USING DESIGN OF EXPERIMENT APPROACH

2042. REDUCTION OF SPECIFIC POWER IN RAWMILL
2043. REDUCTION OF TIME & COST INCURRED IN WATER TREATMENT PROJECTS BY APPLICATION OF FLUID DYNAMICS & PLANT DESIGN SOFTWARE TOOLS
2044. REFURBISHMENT OF OFFSHORE JACK-UP RIG - AL YASAT
2045. REJECTION ANALYSIS OF POWDER COATING USING STATISTICAL QUALITY CONTROL TOOLS
2046. RELIABILITY AND FEASIBILITY OF ADVANCED AND SUSTAINABLE METHODS FOR TREATING DISTILLERY WASTE.
2047. RELIABILITY ASSESSMENT OF SPACE SUBSYSTEM AT CENTUM ELECTRONICS
2048. RESOLUTION OF FIELD FAILURES OF OIL SUMP IN "EASHOK LEYLAND E-COMET TRUCK" USING LEAN SIX SIGMA METHODOLOGY
2049. REUSING THE EXISTING ROBOTIC LINE
2050. RISK MANAGEMENT IN IMPLEMENTATION OF A PROJECT
2051. ROCK EXCAVATION BY RIPPING - A COST EFFECTIVE AND ENVIRONMENT FRIENDLY INITIATIVE BY L&T
2052. ROD LIFT PUMPS
2053. ROOT CAUSE ANALYSIS OF DAMAGE OF TAPER ROLLER BEARING IN HIGH SPEED SHAFT APPLICATION FOR WIND TURBINE GEARBOXES
2054. ROUTING STANDARDIZATION OF SEAT AND GUARD FOR COMPRESSOR VALVES
2055. SELECTION OF FACILITIES FOR BLAST FURNACE IRON MAKING PROJECT TO ENSURE OPTIMIZED CAPEX AND OPEX COSTS AND OVERHEADS
2056. SETTING-UP ROBOTIZED TWO WHEELER CHASSIS(FRAME) LINE FOR NEW PRODUCT
2057. SKILL MATRIX AND COMPETENCY DEVELOPMENT
2058. SM AND BP IN THE CONTEXT OF MEDIUM SCALE INDIAN ENGINEERING INDUSTRY
2059. SPLIT PPM REDUCTION IN STEEL PARTS OF PASSENGER CARS
2060. STABILISATION OF CONSUMPTION BASED PRODUCTION ACROSS VALUE STREAM USING LEAN PRINCIPLES
2061. STABILITY & PERFORMANCE ANALYSIS OF A HYDRODYNAMIC JOURNAL BEARING (USING AVL EXCITE DESIGNER SIMULATION TOOL)
2062. STRATEGIC CUSTOMER MANAGEMENT
2063. STRATEGIC PLANNING ON OPTIMISED COVERAGE OF VEHICLE VARIANTS FOR PRODUCT AUDIT
2064. STRATEGICALLY IMPROVING CUSTOMER SATISFACTION BY ENHANCING XYZ MODEL
2065. STRATEGY IMPLEMENTATION IN A DYNAMIC ENVIRONMENT
2066. STRENGTH IMPROVEMENT OF A GAS TURBINE CASING TO PREVENT FATIGUE FAILURE
2067. STUDY & ANALYSIS OF PLM FOR EMERSON APPLETON GROUP
2068. STUDY OF CUTTING TOOL LIFE MONITORING
2069. STUDY OF ENABLING I.T. IN THE SHOP FLOOR OF AEROSPACE MANUFACTURING SET-UP
2070. STUDY OF HRD PRACTICES WITH RESPECT TO SKILL DEVELOPMENT IN PROCESS INDUSTRY
2071. STUDY OF PROJECT & TOTAL QUALITY MANAGEMENT IN MANUFACTURING INDUSTRY
2072. STUDY OF USING LEVER WITH PAD DESIGN IN STARTER MOTOR FOR COST EFFECTIVE SOLUTION
2073. STUDY OF VARIOUS PLM SYSTEMS AND PROCESSES FOR POSSIBLE OPTIMIZATION OPPORTUNITIES
2074. STUDY ON SHEET METAL DISPLACEMENT DURING INJECTION MOLDING IN BUSBAR
2075. STUDY, PROCESS DEFINITION AND QUANTIFY THE BENEFITS OF MBE (MODEL BASED ENTERPRISE)
2076. STUDYING, ANALYSING AND IMPROVING OPERATIONAL EFFICIENCY OF THE FILTER CAGE MANUFACTURING UNIT
2077. SUPPLIER PERFORMANCE MEASUREMENT AND VENDOR MANAGEMENT SYSTEM
2078. SUPPLY CHAIN MANAGEMENT AT DADRI CEMENT WORKS
2079. SUPPLY CHAIN MANAGEMENT CASE STUDY : MAT HOLDINGS, INC
2080. SUPPLY CHAIN PERFORMANCE THROUGH LEAN AND GREEN
2081. SUPPORT STRUCTURE DESIGN FOR 100 T TRUCK COOLING PACKAGE
2082. SUSTAIN & EXPAND MARKET LEADERSHIP WITH USP ADDITION TO REFRESH WASHING MACHINE DESIGN.
2083. SUSTAINABLE MANUFACTURING
2084. SUSTAINABLE MANUFACTURING ENTERPRISE SUPPLY CHAIN PLANNING(SUPPLY/DEMAND COMPUTATION) INTEGRATION AND RECOVERY OPERATIONS COST ALLOCATION INFORMATION SYSTEM SOFTWARE.
2085. SUSTAINABLE MANUFACTURING IN THE ALCOHOL-BEVERAGE INDUSTRY: BEST PRACTICES AND SOLUTIONS
2086. SYSTEM FOR PRE-CUTTING THE HIGH VOLUME FOOD WASTE FOR FINE GRINDING IN FOOD WASTE DISPOSER TO GENERATE ENERGY.
2087. SYSTEMATIC APPROACH TO SET UP "RIGHT FIRST TIME" MANUFACTURING PRACTICE
2088. TASK FORCE TEAM MODEL

- 2089. TECHNOLOGICAL OPTIMIZATION OF MASTER REEL USED IN PAPER INDUSTRY
- 2090. TIME TO MARKET
- 2091. TIME-COST-QUALITY-SAFETY-ENVIRONMENT TRADE-OFF ANALYSIS FOR DECISION MAKING IN MANUFACTURING INDUSTRIES
- 2092. TO ASCERTAIN DIFFERENT MAINTENANCE EFFECTIVENESS APPROACHES FOR PLANT & MACHINERIES AND SET A SAFETY STANDARD FOR SAFE OPERATION RELATED TO THERMAL POWER PLANT CONSTRUCTION PROJECTS TO OVERCOME OPERATIONAL BOTTLENECKS.
- 2093. TO IMPROVE MACHINE AVAILABILITY THROUGH OPPURTUNISTIC MAINTENACE
- 2094. TO IMPROVE PAINTING REPAIR QUALITY OF CAR FROM RENAULT AUTHORIZED SERVICE CENTER
  
- 2095. TO IMPROVE THE ST PASS BY TPM ZERO DEFECT APPROACH BY PREVENTING GENERATION/OUTFLOW OF DEFECTS AT THE SOURCE OF GENERATION TO ENSURE QUALITY ASSURANCE AND RELIABILITY.
- 2096. TO REDUCE THE DOWNTIME OF SIEVING EQUIPMENT & TO IMPROVE THE PRODUCTIVITY
- 2097. TOLERANCE AND STACK-UP ANALYSIS FOR THE ASSEMBLY IN 3D CAD TOOL
- 2098. TOLERANCE CALCULATIONS /ANALYSIS AND SIMULATION FOR COMPLEX ASSEMBLIES USING 3D STACK-UP SOFTWARE
- 2099. TOTAL QUALITY MANAGEMENT IN GREEN FEILD PROJECT
- 2100. TQM IMPLEMENTATION AT KVUL(VENDOR OF TML)
- 2101. TRANSFORMATION OF A PROTOTYPE PROJECT INTO SERIAL PRODUCTION USING QRM TECHNIQUES
- 2102. TRENDS IN ADVANCE MANUFACTURING: COST EFFECTIVE MANUFACTURING USING ADDITIVE METHODS
- 2103. UPGRADATION OF THE DEMINERALISED WATER SYSTEM TO IMPROVE THE AUTOMOTIVE TESTING RELIABILITY
- 2104. USE OF WHITE COAL ( BIO-BRIQUETTES) IN SMALL SCALE BOILERS
- 2105. UTILIZATION OF SEWERAGE TREATED WATER TO CHILLERS
- 2106. VALUE ADDITION & COST SAVING OF VOSS CONNECTOR BY INTEGRATION OF OPERATION & SUPPLY CHAIN MANAGEMENT
- 2107. VALUE ADDITION BY VSM
- 2108. VALUE ANALYSIS & VALUE ENGINEERING: DETAILED PROPOSAL TO ENHANCE DRESSER RAND OPERATIONS IN DUBAI.
- 2109. VALUE ENGINEERING IN WIRING HARNESS
- 2110. VALUE STREAM MAPPING FOR TRACK ASSEMBLY LINE
- 2111. VARIANT MANAGEMENT IN AUTOMOTIVE INDUSTRY
- 2112. VIBRATORY COMPACTOR PERFORMANCE ENHANCEMENT THRU VALUE ENGINEERING APPROACH ON ECCENTRIC MECHANISM
- 2113. VIRTUAL BRIDAL APP FOR MARKETING HIGH VALUE DIAMOND JEWELLERY BY REDUCING INVENTORY COST
- 2114. VISUAL MANAGMENT
- 2115. VISUAL RE-ORDER
- 2116. VSM ON LEAD TIME OF EXECUTION FOR SWITCHGEAR INDUSTRY
- 2117. WATER CONSERVATION THROUGH REVERSE OSMOSIS (RO) PROCESS OF INDUSTRIAL WASTE WATER
- 2118. WIRING HARNESS DESIGN FOR NEO REFRIGERAOR WITH IMPROVED CYCLE TIME

## STATEMENT OF DEGREES AWARDED

Degrees	No. of degrees	
	76 <sup>th</sup> Award (04.05.2015)	77 <sup>th</sup> Award (17.07.2015)
<b>A. Integrated First Degrees</b>		
<b>B.S.</b>		
Engineering Design	-	20(04)
Engineering Technology	166(00)	233(07)
Information Systems	101(31)	5(00)
Manufacturing Engineering	-	84(01)
Marine Engineering	322(03)	26(00)
Nautical Technology	90(00)	43(00)
B.Optom.	-	1(01)
Optometry	20(14)	22(22)
Physician Assistant	-	27(20)
Power Engineering	13(00)	-
Process Engineering	9(00)	-
	721(48)	-
Sub Total	721(48)	461(55)
<b>B. Higher Degrees</b>		
<b>M.S.</b>		
Automotive Engineering	-	3(00)
Consultancy Management	5(01)	102(18)
Embedded Systems	17(06)	-
Engineering Management	25(00)	20(06)
Manufacturing Management	34(00)	46(03)
Microelectronics	-	1(00)
Pharmaceutical Operations & Management	2(00)	-
Quality Management	8(02)	133(26)
Science Communications	14(04)	-
Software Engineering	945(438)	120(34)
Software Systems	64(20)	63(20)
Systems Engineering	79(27)	-
Telecommunications & Software Engineering	8(04)	3(01)
<b>MBA</b>		
Manufacturing Management	-	1(00)
<b>M.Tech.</b>		
Automotive Engineering	-	28(01)

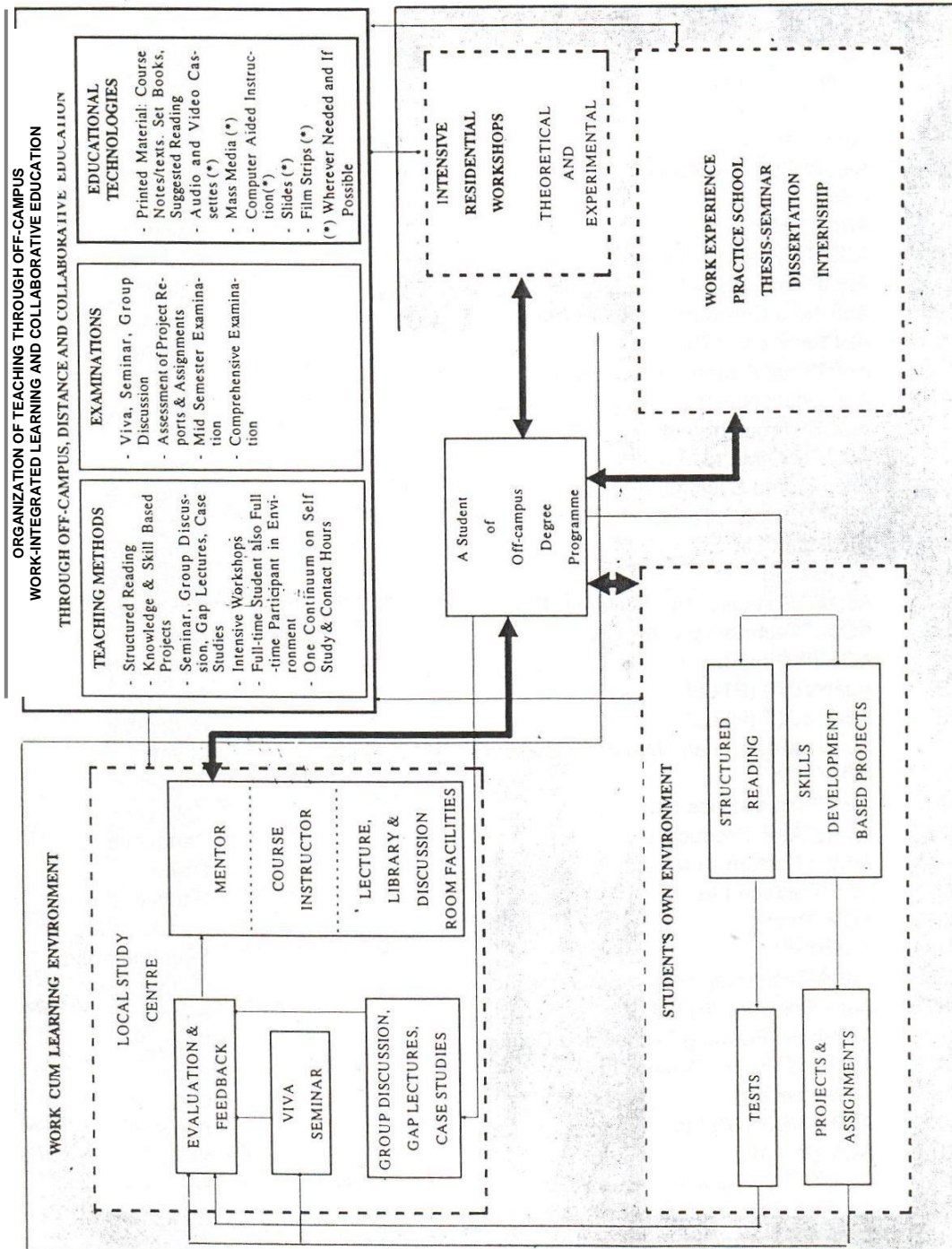
Design Engineering	38(10)	2(00)
Embedded Systems	18(04)	1(00)
Engineering Management	11(00)	
Manufacturing Management	115(04)	245(11)
Microelectronics	78(21)	34(06)
Pharmaceutical Operations & Management	18(01)	-
Project Engineering & Management	18(02)	-
Software Engineering	1558(799)	220(83)
Software Systems	480(132)	748(219)
Systems Engineering	37(13)	3(00)
Telecommunications & Software Engineering	48(16)	39(20)
<b>M.Phil.</b>		
Hospital and Health Systems Management	4(00)	35(14)
Optometry	-	7(05)
Sub Total	3624(1504)	1854(467)
<b>Total</b>	<b>4345(1552)</b>	<b>2315(522)</b>

**Note:** The numbers in brackets indicate number of female students.

#### SUMMARY

Award	76 <sup>th</sup>	77 <sup>th</sup>	Total
Integrated First Degrees	721(0048)	461(055)	1182(0103)
Higher Degrees	3624(1504)	1854(467)	5478(1971)
Total	<b>4345(1552)</b>	<b>2315(522)</b>	<b>6660(2074)</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



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Chancellor

**Smt. Shobhana Bhartia**  
Pro-Chancellor

**Prof. V.S. Rao**  
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**Prof. Ranendra N. Saha**  
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**Prof. G. Sundar**  
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Deputy Director, K K Birla Goa Campus

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**Mr. Manoj Fitkariwala**  
Chief Financial Officer (on-deputation)

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Dean, Academic Research (Ph.D. Programme)

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

**Prof. R. Mahesh**  
Dean, Faculty Affairs

**Prof. Niranjana Swain**  
Dean, Practice School

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

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

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



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