

Student Name:

Student ID:

Read the instructions carefully

1. Must write your name and ID in the indicated space over the question paper and answer sheet
2. Mark your answers legibly in the space given in the indicated box at the end.
3. No overwriting is allowed.
4. Use **only pen** to tick " " mark in the respective box(es).
5. There is a **negative marking (0.25)** for **single answer MCQs**
6. For **multiple answers MCQs**, select **all that apply as correct answer**. **No partial marking** and **a zero** will be awarded if all the correct options are **NOT** selected.
7. **DO NOT** detach the answer sheet from the question paper.

PART A: Single Answer MCQ (1M X40 = 40M)

1. Lime stone is generally added to ____ soil to improve the crop's growth.
 - A. Salty
 - B. Dry
 - C. Alkaline
 - D. Acidic
2. _____ is one of the most prevalent hotspots of biodiversity in India.
 - A. Himalayas
 - B. Western Ghats
 - C. Ganges
 - D. None of the above
3. _____ is an example of an ex-situ conservation.
 - A. Sacred groves
 - B. Wildlife sanctuary
 - C. Seed bank
 - D. National Parks
4. _____ is not generally seen in biodiversity hotspots.
 - A. Endemism
 - B. Species richness
 - C. Loss of diversity
 - D. Lesser interspecific competition.
5. _____ occurs when the death of the last individual in a species occurs.
 - A. Adaptation
 - B. Phylogenetic diversity
 - C. Speciation
 - D. Extinction
6. _____ is defined as an ecological state of a species being unique to a specific geographic location.
 - A. Exotic species
 - B. Endemic species
 - C. Ecosystem
 - D. None of the above

7. _____ states in India are under the control of Joint Forest Management (JFM) until 2002, according to National Forest Policy (1988)
- A. 27
 - B. 24
 - C. 29
 - D. 28
8. _____ includes differences in genes among the individuals of a species, the variety and richness of all the plant and animal species at different scales in space, locally, in a region.
- A. Species density
 - B. biodiversity
 - C. Species richness
 - D. Population density
9. Global warming can significantly be controlled by _____
- A. Increasing solid waste
 - B. Reducing water wastage
 - C. Controlled eutrophication
 - D. Reducing fossil fuel consumption
10. Environmental studies are defined as the branch that deals with the
- A. Design, study, and discovery of new materials.
 - B. The study of humanities, social, biological, and physical sciences.
 - C. Approach about the natural world and the impact of humans on its integrity.
 - D. Incorporate the information and physical sciences.
11. Which layer of the atmosphere contains the ozone responsible for the absorption of Ultra-Violet light?
- A. Troposphere
 - B. Mesosphere
 - C. Lithosphere
 - D. Stratosphere
12. Who wrote "The Origin of Species"?
- A. Ralph Emerson
 - B. Gregor J Mendel
 - C. Charles Darwin
 - D. John Muir
13. Which of the following statement about the Botanical Survey of India (BSI) is true?
- A. It was established in 1916 to do an organized survey of fauna in India.
 - B. It was established in 1982 for research in Wildlife Management.
 - C. It is the first crocodile conservation breeding center in Asia.
 - D. It was established in 1890 at the Royal Botanical Gardens, Calcutta.
14. India's first Forest Policy was enunciated in the year
- A. 1952
 - B. 1947
 - C. 1960
 - D. 1988
15. The entomologist who envisioned that biological diversity was a key to human survival on earth?
- A. Rachel Carson
 - B. EO Wilson
 - C. Charles Darwin
 - D. Henry Thoreau
16. Arsenic poisoning through the drinking of groundwater was first observed in _____
- A. Telangana
 - B. Kerala
 - C. West Bengal
 - D. Punjab
17. When did India sign the Montreal Protocol?
- A. 1985
 - B. 1986
 - C. 1995
 - D. 1992

18. Geometrical shape or form of the smoke coming out of a chimney is called
- Mist
 - Fog
 - Smog
 - Plume
19. The degree of hearing loss depends on the duration as well as the intensity of the noise. Typically, 1 hour of exposure to a 100 dBA sound level can produce
- TTS
 - NIPTS
 - DBA
 - BOD
20. Pani Panchayat is a watershed development program initiated on barren and uncultivated land of _____ in the _____ (district/state)
- Vilasrao Salunkhe, Pune
 - Rajendra Singh, Rajasthan
 - Shirish Apte, Bhandara
 - Ayyappa Masagii, Gadag
21. In 1985, the first report on the Status of India's Environment was published under the supervision of
- Anil Agarwal
 - Sunitha Narain
 - Madhav Gadgil
 - K Kasturi Rangan
22. _____ is not a possible adverse effect of global warming
- Sea level rise
 - Increase of the forest cover
 - Retreat of glaciers
 - Extraordinary weather patterns
23. Environment Impact Assessment (EIA) notification, 2006 has been notified under
- National Green Tribunal Act
 - The Environment (Protection) Act
 - The Wildlife (Protection) Act
 - Energy Conservation Act
24. THE WATER ACT includes
- Prevention of water pollution related to industry waste only
 - Controlling the point sources different pollutants and restoration of the wholesomeness of water
 - Establishment of water monitoring committee in every district of India
 - Prevention of water pollution along with prevention of illegal capturing of water animals
25. How many sectors are mentioned in the Schedule in the 2006 EIA notification
- 8
 - 16
 - 32
 - 20
26. Indian elephant found in
- Madhumalai National Park
 - Great Himalayan National Par
 - Kanha National Park
 - Keoladeo National Park
27. Aerosol consisting of liquid droplets
- fume
 - Plume
 - Fog
 - Mist
28. Chronic exposure to _____ cause bronchitis or respiratory tissue irritation
- Carbon monoxide
 - Sulfur oxide
 - chlorofluorocarbon
 - Carbon dioxide

29. GRIHA is the name of
- Water conservation measures
 - UN agencies
 - Green Building Rating System
 - National Building Code
30. Protective cover of organic matter and plants like stalks which reduce evaporation, help in retaining soil moisture and reduce soil erosion
- Mulching
 - Leaching
 - Agroforestry
 - Vegetable barrier
31. Accidental release of _____ (gas) caused the greatest industrial disaster in Bhopal
- Methyl isocyanide
 - Carbon Monoxide
 - Hydrogen Sulfide
 - Nitrogen Oxide
32. the temperature decreases with altitude falling up to -110°C at the top in _____(layer) of the atmosphere.
- Troposphere
 - Mesosphere
 - Thermosphere
 - Stratosphere
33. What is the full form of CPCB?
- Control Pollution Central Board
 - Central Pollution Control Board
 - Central Pollution Cooperative Board
 - Control Pollution Cleanliness Board
34. The graph shows seasonal and annual changes in atmospheric carbon dioxide (CO_2) concentrations since 1958 at the Mauna Loa Observatory in Hawaii. The graph charts the buildup of CO_2 in the atmosphere. The graph referred to here is called
- Keeling Curve
 - Scripps Curve
 - Hawai Curve
 - Greenhouse gas Curve
35.is the process of burning municipal solid waste in a properly designed furnace under suitable temperatures and operating conditions?
- Incinerator
 - Incineration
 - Industrial Furnace
 - Burning Incinerator
36. This experiment measured changes in the local pull of gravity as water shifts around Earth due to changing seasons, weather and climate processes. Among its innovations, this experiment has monitored the loss of ice mass from Earth's ice sheets, improved understanding of the processes responsible for sea level rise and ocean circulation, provided insights into where global groundwater resources may be shrinking or growing and where dry soils are contributing to drought and monitored changes in the solid Earth. This Experiment was named as
- GRACE
 - INSAR
 - EnviSat
 - Sentinel
37. The _____ is a computer program is useful for risk assessment and vulnerability of natural disasters
- Geographical Information Systems
 - Global Positioning System
 - Remote Sensing
 - A and B both

38. _____ is the point on the earth's surface vertically above the focus of an earthquake
- A. Focal center
 - B. Epicenter
 - C. Zenith
 - D. Nadir
39. In India National Institute of Disaster Management is located at _____.
- A. Manipur
 - B. Punjab
 - C. Hyderabad
 - D. New Delhi
40. Which group contains only renewable energy sources?
- A. solar, wind, coal
 - B. tidal, natural gas, wind
 - C. geothermal, hydroelectric, tidal
 - D. hydroelectric, uranium, natural gas

PART B: Multiple Answer MCQ (2M X 20 = 40M)

1. What are the different sources / spheres which provide mankind with resources?
- A. Stratosphere
 - B. Ionosphere
 - C. Lithosphere
 - D. Hydrosphere
 - E. Mesosphere
2. Human Development Index includes
- A. Increased Longevity
 - B. Increase in Housing
 - C. Increase in Knowledge
 - D. Increased consumption of water
 - E. Enhancement in Income
3. Different types of mines
- A. Strip
 - B. Adhesive
 - C. Bore
 - D. Shaft
 - E. Core
4. Extinct animals are
- A. Pygmy Hog
 - B. The great Indian bustard
 - C. Komodo dragon
 - D. Dodo
 - E. Asian Cheetah in India
5. The effects of cyclones can be mitigated through effective and efficient mitigation policies and strategies. Some of these include
- A. Maintaining wetlands
 - B. Improvement of flow conditions in the channel and anti-erosion measures.
 - C. Developing communication infrastructure:
 - D. Construction of permanent houses
 - E. Installation of early warning systems
6. _____ and _____ are the pesticide residues commonly detected in India
- A. organo-carbide
 - B. organo-phosphorus
 - C. organo-nitrite
 - D. Organo-chlorine
 - E. Organo-sulphur
7. **Fluorosis leads to**
- A. Gastro-intestinal problems

- B. IQ of children
 - C. Cardiac arrest
 - D. Paralysis
 - E. Chalky white teeth
8. Long-term exposures to Polychlorinated biphenyls (PCBs) led to their deposition in the following human organs
- A. Kidney
 - B. liver
 - C. Spleen
 - D. Lung
9. Most vulnerable regions of India affected by seismic activity
- A. Himalayan
 - B. Sub-Himalayan
 - C. Western ghats
 - D. Aravalli
 - E. Satpura
10. Fly ash consists
- A. Cinders
 - B. Mineral dust
 - C. Soot
 - D. Mist
 - E. CFC
11. Human wastes contain concentrated populations of coliforms like _____
- A. *Escherichia coli*
 - B. *Streptococcus faecalis*
 - C. *Vibrio cholerae*
 - D. *Bacillus spores*
 - E. *Helicobacter pylori*
12. Ozone depletion causes
- A. Sunburn
 - B. Skin Cancer
 - C. Cataract
 - D. Bronchitis
 - E. Migraine
13. Groundwater pollution is not related to
- A. Leachate from landfills
 - B. Mining waste
 - C. Improving the quality of vehicular exhausts
 - D. Heavy rainfall
 - E. Eutrophication
14. Vulnerable regions affected by the ingress of salt water and the rising sea
- A. Ganges-Brahmaputra delta
 - B. Maldives
 - C. Nile delta in Egypt
 - D. Mumbai
 - E. Srilanka
15. Drugs derived from plants having anticancer activity
- A. Monocrotaline
 - B. Taxol
 - C. Colchicine
 - D. Codeine
 - E. Morphine
16. The major threats to wildlife conservation in the **Kailadevi wildlife sanctuary** are
- A. Exploitation of timber and fuel woods
 - B. Migrant grazers
 - C. Mining
 - D. Poaching
 - E. Animal trafficking

17. A neurodegenerative disease of cattle with sponge-like changes in the spinal cord and brain
- A. Bovine Spongiform Encephalopathy (BSE)
 - B. Variant Creutzfeldt-Jakob disease
 - C. Bovine spiniform encephalitis
 - D. Mad cow
 - E. Prion
18. Select the protected areas which are declared as Tiger reserves
- A. Bandipur
 - B. Bhitarkanika
 - C. Manas
 - D. Sunderbans
19. Invasive plant species cause
- A. Nutrient availability
 - B. Water quality
 - C. Change water flow
 - D. Helping growth of endemic species
 - E. Decrease diversity in plant population
20. Species diversity of a species is best described as
- A. the number of different habitats occupied by one particular species
 - B. the number of different species in an ecosystem.
 - C. the total number of individuals in an ecosystem.
 - D. genetic variation between different individuals of a species.
 - E. the relative population sizes of different species in an ecosystem.

Semester I, 2022-23
BITS F225 Environmental Studies
Comprehensive Examination
(Open book)

Student Name:		Student ID:	
PART A (1MX40 = 40M)		PART B (2MX20= 40M)	
Correct _____ X 1M		Correct _____ X 2M	
Wrong _____ X 0.25M			
Final Marks (PART A + PART B) =			

PART A										PART B					
	A	B	C	D		A	B	C	D		A	B	C	D	E
1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	21	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	22	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	23	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	24	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	25	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	26	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	27	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	28	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	29	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	30	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	31	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	32	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	33	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	34	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	35	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	36	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	16	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	37	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	17	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	38	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	18	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	39	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	19	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	40	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	20	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>