
Student Name:

Student ID

Read the instructions carefully

1. **Must write your name and ID in the indicated space over 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 shade/write in the respective boxes.**
5. **There is negative marking (0.25) for MCQs and MSQs (with more than one answers).**
6. **Marks will not be awarded unless all the correct answers are chosen for the MSQs.**

Section 1

Multiple choice Questions (MCQs) 24 X 0.5 = 12M (negative marking (0.25) for MCQs)

1. Which of these are not considered as criteria air pollutants?
 - a. Ozone
 - b. Lead
 - c. Carbon monoxide
 - d. Mercury
2. Minamata is caused by
 - a. As
 - b. Cd
 - c. Pb
 - d. None of them
3. The term BOD stands for
 - a. Biochemical oxygen demand
 - b. Benthic oxygen demand
 - c. Bacterial oxygen demand
 - d. Bacterial oxygen decomposition
4. The popular magazine published by the Centre for Science and Environment:
 - a. Down to Earth
 - b. Me and my earth
 - c. Indian Forester
 - d. The times of biodiversity
5. Mandate of Zoological Survey of India was:
 - a. Study of endogenous species in India
 - b. Systematic survey of fauna in India
 - c. Study of biodiversity in India
 - d. Study of birds in India
6. The majority of the available fresh water on the earth comes from

- a. Lakes
 - b. Rivers
 - c. Ground water
 - d. Icecaps and Glaciers
7. Which of the following particle cannot pass through human skin?
- a. α (alpha)
 - b. β (beta)
 - c. γ (gama)
 - d. None of the above
8. Which of the following is the full form of ESA?
- a. Ecological System Assessment
 - b. Ecologically Sensitive Area
 - c. Ecological Sound Area
 - d. Ecologically Sensed Area
9. Extinction of some species occurs due to changes in land use and seriously affects the ecosystem. Such species are called?
- a. Endangered species
 - b. Keystone species
 - c. Common species
 - d. Rare species
10. In ecological succession, the intermediate developmental phase is known as
- a. Ecesis
 - b. Climax
 - c. Serel
 - d. Nudation
11. Plants convert energy from the sunlight into _____ for their growth.
- a. Inorganic substance
 - b. Chemical particle
 - c. Organic matter
 - d. Energy component
12. _____ break down dead organic material into smaller particles and finally into simpler substances that are used by plants as nutrition.
- a. Primary consumers
 - b. Carnivores
 - c. Producers
 - d. Detrivores
13. Morphine is derived from?
- a. Velvet bean
 - b. Opium poppy
 - c. Pineapple
 - d. Mint
14. Which of the following is a water bird sanctuary known for the Siberian Crane?
- a. Kanha
 - b. Ranthambore
 - c. Gir Sanctuary
 - d. Keoladeo National Park
15. _____ among the following is the hotspot of biodiversity in India.

- a. Gangetic plain
 - b. Sunderbans
 - c. Eastern ghats
 - d. Western ghats
16. Forest core zone and National Parks are classified under _____ category/ies of protected areas under _____ respectively
- a. I and II
 - b. I only
 - c. II and III
 - d. II only
17. The _____ is the only home of the wild ass in India.
- a. Gir
 - b. Little Rann of Kutch
 - c. Ladakh
 - d. Thar
18. Which of the following includes the soil component in Earth's Resources?
- a. Geosphere
 - b. Lithosphere
 - c. Mesosphere
 - d. Stratosphere
19. How many national parks are there in India?
- a. 59
 - b. 69
 - c. 79
 - d. 89
20. Beej Bachao Andolan is
- a. An initiative of villagers in Tehri district for ex situ conservation
 - b. A movement pioneered by the farmers of West Bengal
 - c. A government initiative for seed bank generation
 - d. A movement started under the leadership of Medha Patekar
21. Which is **not** a secondary pollutant
- a. Methane
 - b. ozone
 - c. Sulphur trioxide
 - d. Nitrogen dioxide
22. Which plant-based food production is largest contributor of greenhouse gas?
- a. Rice
 - b. Wheat
 - c. Sugarcane
 - d. Phytoplankton
23. Which of the following is not a threat to biodiversity?
- a. Habitat loss
 - b. Poaching of wildlife
 - c. Man-wildlife conflict
 - d. Declaration of bioreserves

24. Vector borne disease spread depends on
- Water purity
 - Rainfall pattern
 - Polluted air
 - Health of the host

Section 2

Multiple select questions (MSQs) (with more than one answers) (1 X 18 = 18M)

There is negative marking (0.25). Marks will not be awarded unless all the correct answers are chosen for the MSQs.

- The direct effect(s) of deforestation include
 - Soil erosion
 - Flood
 - Global warming
 - Noise pollution
- Which of the following is/are both greenhouse gas(es) and ozone depleting substance(s)?
 - CFC-11
 - CO₂
 - SO₂
 - N₂O
- Sustainable Utilization means
 - The growth that satisfies current demands without jeopardising future generations' ability to fulfil their own needs.
 - Ensuring the proper utilizations and management of resources.
 - Proper and efficient use of renewable and non-renewable natural sources
 - Excessive use of natural product for the benefit of the entire biological community in an ecosystem.
- Factors that threaten to reduce biodiversity
 - Bioinvasion
 - Overexploitation
 - Excessive elimination of pests
 - Food web
- Which one(s) from the below list are **not** related to *in situ* conservation
 - Marine National Park in Gujarat
 - National bureau of plant genetic resources (NBPGR)
 - Beej Bachao Andolan
 - Bhagabatpur Crocodile Project, Sundarban
- Which of the following element(s) may cause radioactive pollution:
 - Carbon-14
 - Carbon-12
 - Radium-226
 - Urenium-238
- Which of followings are examples of aerosols where the dispersed phase is liquid, and the dispersing medium is a gas?
 - Fume
 - Fog
 - Mist
 - Smoke

8. Which of the following factors leads to Eutrophication?
- Excessive use of fertilizers
 - Enhancement of self-purification capacity
 - Using alternatives (non-nitrogenous and non-phosphorus) to inorganic fertilizers and pesticides.
 - Discharge of waste water into water bodies
9. Which is **not** true for 'Bhed Bhagao Andolan'?
- Involvement of local community of Kutch, Gujrat for the initiatives related to conservation and regeneration
 - started after the threat over biodiversity in Kailadevi Wildlife Sanctuary
 - regulate excessive pastoralism and subsistence agriculture
 - started under the leadership of Sunder Lal Bahuguna
10. Which of the following are drawbacks of Hydro-electric power?
- Large area of land is required
 - Water flows from height to ground level
 - Water present in the reservoir is wasted
 - Silting of the reservoirs
11. Which of the following practices come under Integrated Crop Management?
- Maintaining proper stocks of pesticides and fertilizers during the growing season
 - Using alternatives to inorganic fertilizers and pesticides
 - Using only drip irrigation for farming practices
 - Growing multiple varieties of crops
12. The Chennai flood during December 2015 killing more than 500 and destroying infrastructure worth Rs 500 crore was due to
- a drain (small river) called Mithi, was clogged and marred by encroachments
 - encroachments of the wetlands like Pallikaranai lake
 - excessive rainfall
 - improper sewage treatment connected to Cooum, Adyar
13. Major components of "smog" are
- Stratospheric ozone
 - Ground level ozone
 - Volatile organic compound
 - CO₂
14. SP Godrej was one of India's greatest supporter of:
- Conserving sacred groves
 - Study of mammals, birds, and insects
 - Wildlife conservation
 - Nature awareness program
15. Choose the correct statement (s) with regards to the reintroduction of Cheetah in India after being extinct for 70 years.
- Cheetah was introduced in the Ranthambore National Park, Madhya Pradesh
 - Cheetah was introduced in the Kuno National Park, Madhya Pradesh
 - Cheetahs were relocated from Namibia
 - Cheetahs were relocated from Iran
16. Water hyacinth is related to
- Bioinvasion
 - Eutrophication
 - Habitat loss

- d) Indigenous plant of India majorly found in waterbodies of Kerala
17. Places where Coral reefs are found in India
- Wetlands of Assam
 - Andaman and Nicobar Islands
 - Sunderban Delta
 - Shallow areas near gulf of Kutch
18. Which is a non-Governmental institute that deals with environmental protection and conservation?
- BNHS
 - BSI
 - ZSI
 - WWF-I

Section 3

Fill in the blanks (1 x 20 = 20 M)

- In air pollution, SPM stands for _____.
- _____ considers the number of different taxonomic categories of the species present in a geographic region.
- _____ is the most abundant element in the Lithosphere.
- The pigmy hog, smallest wild boar in the world found in _____ Sanctuary.
- Extinction of Dodo was due to _____.
- The AQI (Air Quality Index), India ranges from _____ (least concern) to _____ (greatest concern).
- _____ organism that feeds on nonliving organic matter.
- The chemicals known to be major contributors of the acid deposition are _____ and _____.
- The particulate matter which can penetrate alveolus in lungs is _____ and the one which can pass through the lungs is _____.
- The entire natural resources could be categorized to _____ and _____.
- Slash-and-burn is basically a _____ method used to create a field called _____.
- Globally accepted national 'hot spots' are in the forests of the _____ and the _____.
- A _____ effect or chain reaction is the cumulative effect produced when one event sets off a chain of similar events.
- _____ a man-made situation that worsens the effects of drought.
- _____ are a population or group of population with sharing characteristics and capable of breeding within the population.
- _____ is the collection of organisms of a particular species, living in a given geographic area, or space.
- Population size is controlled through the addition effect by _____ and _____, and through reduction of individuals by _____ and _____.
- _____ is the maximum rate at which a population could increase when birth rate is maximal and death rate is minimal.
- The book 'Fall of a Sparrow' written by _____.
- The atmosphere, hydrosphere and lithosphere are all connected through the _____.

Birla Institute of Technology and Science, Pilani – Hyderabad Campus

Semester I, 2022-23

BITS F225: ENVIRONMENTAL STUDIES

Mid Semester Examination (Open Book)

Date: 03.11.2022 Marks: 50 Duration: 90 Min

(A)

Student Name:

Student ID:

Q. No.	Section 1			
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Q. No.	Section 1			
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DO NOT write anything in this box				
Section 1				
	Correct Answer 0.5M X _____		Wrong Answer 0.25M X _____	
Marks	Obtained	=	Deducted	
Final Marks				

Q. No.	Section 2			
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Q. No.	Section 2			
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	DO NOT write anything in this box			
	Section2			
	Correct Answer		Wrong Answer	
	1 M X _____		0.25M X _____	
Marks	Obtained	=	Deducted	
Final Marks				

Q. No.	Section 3
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	DO NOT write anything in this box	
	Section3	
	Correct Answer	
	1M X _____	
Marks	Obtained	
Final Marks		