

REV-01
MSZ/01/04

2023/08

M.Sc. ZOOLOGY
SECOND SEMESTER (SPECIAL REPEAT)
ECOLOGY & ENVIRONMENTAL SCIENCE
MSZ-203

SET
A

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

(Objective)

Time: 30 mins.

Marks: 20

Choose the correct answer from the following:

1 × 20 = 20

1. What is the full form of CITES?
 - a. Conference on International Trade in Endangered Species of Wild Fauna and Flora
 - b. Conference on International Trade in Endangered Species
 - c. Conference on Indian Trade in Endangered Species of Wild Fauna and Flora
 - d. None of the above
2. Which criteria of species are presently not there in the IUCN threatened category?
 - a. Extinct
 - b. Vulnerable
 - c. Not evaluated
 - d. None of the above
3. Gross primary productivity and Net primary productivity can be related as:
 - a. $GPP = NPP$ minus energy spent in R
 - b. $GPP = NPP$ plus energy spent in R
 - c. $NPP = GPP$ plus energy spent in R
 - d. None of the above
4. When the food chain is very small, the final consumers may get:
 - a. Small amount of energy
 - b. Large amount of energy
 - c. No energy
 - d. None of the above
5. Energy in an ecosystem can be used:
 - a. Thrice
 - b. Twice
 - c. Once
 - d. None of the above
6. An eutrophication damaged aquatic system will induce mutagenicity among the fauna and flora with the help of:
 - a. Nitrosamine
 - b. Carboxyamine
 - c. Sulphideamine
 - d. Organic substances
7. For a multilateral environmental agreement, output followed by outcomes leads to:
 - a. Results
 - b. Impacts
 - c. Documents
 - d. Issues
8. IEA Database Project is also termed as:
 - a. International Environmental Agreements
 - b. Issues of Environmental Agreements
 - c. Indian Environmental Agreements
 - d. Idea in Environmental Agreements

9. Carbon sediments from the ocean floor are taken deep within Earth by the process of:
 - a. Induction
 - b. Subduction
 - c. Sublimation
 - d. Nitrification
10. Peroxy Acetyl Nitrate is a:
 - a. Primary pollutant
 - b. Tertiary pollutant
 - c. Secondary pollutant
 - d. None of the above
11. The major source of Primary Air Pollutants (57%) is from:
 - a. Incinerations
 - b. Transportation
 - c. Industrial processes
 - d. Miscellaneous
12. The aquatic plant causing water pollution, also known as "Terror of Bengal" due to its abundance, is the:
 - a. Water lily
 - b. White lotus
 - c. Water hyacinth
 - d. None of the above
13. Human intake of which toxic heavy metal is highest from use of phosphate fertilizers in rice fields?
 - a. Cr
 - b. Pb
 - c. Ni
 - d. Cd
14. Minamata disease in Japan were caused by consumption of:
 - a. Hg contaminated fish
 - b. Ni in weedicides
 - c. Pb in polluted waters
 - d. All of the above
15. The POPs (Persistent Organic pollutants) are Organic compounds that are resistant to environmental degradation, are also called:
 - a. Resistant chemicals
 - b. Toxicants
 - c. Bioresistant compounds
 - d. Forever chemicals
16. The final terminal community is also called as:
 - a. Continuum
 - b. Seriel
 - c. Climax
 - d. Complex
17. When the need of one nutrient can be replaced by another due to availability, it is called:
 - a. Factor compensation
 - b. Constraint
 - c. Factor utilization
 - d. All of the above
18. The element used by Leibig was:
 - a. Oxygen
 - b. Nitrogen
 - c. Hydrogen
 - d. Boron
19.preferred to call ecological succession as ecosystem development.
 - a. Haeckel
 - b. Odum
 - c. Darwin
 - d. Linnaeus
20. A urn-shaped pyramid represents apopulation.
 - a. Stable
 - b. Exponentially growing
 - c. Dying off
 - d. None of the above

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(Descriptive)

Time : 2 hr. 30 mins.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

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| 1. What do you mean by energy flow in an ecosystem? Enumerate the different principles of energy flow in an ecosystem. Brief details about the different models of energy flow in the ecosystem. | 2+2+6=10 |
| 2. Write short notes on the following:
a) CITES
b) IUCN | 5+5=10 |
| 3. What is a biogeochemical cycle? Mention at least one cycle in detail with a flowchart. | 3+7=10 |
| 4. What are environmental regimes? Name 07 different regimes with their year and country of origin and objectives. | 3+7=10 |
| 5. What do you mean by the term, food additives? What are its various functions? Why is it harmful for health? | 2+4+4=10 |
| 6. Classify the different types of biomedical wastes. Why is it hazardous to the environment? Discuss its management. | 4+2+4=10 |
| 7. What is population? Write about the different population attributes with diagram. | 2+8=10 |
| 8. What is ecological succession? Explain in details about the general process of succession. | 4+6=10 |

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