**TU/CDOE**

**TEZPUR UNIVERSITY**

**SEMESTER END EXAMINATION (AUTUMN) 2023**

**DEM/DIPEVMD 101: THE ENVIRONMENT: BASIC UNDERSTANDING**

**Time: 3 Hours Total Marks: 70**

*The figures in the right-hand margin indicate marks for the individual question.*

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

1. Fill in the blanks with correct answer or appropriate words.

1x10=10

1. The ecological pyramids which can never be inverted in a natural ecosystem is ………
2. The phenomenon of increasing nutrient concentration in water bodies and stimulating rapid growth of aquatic plants is called ………………
3. Biosphere is the sphere occupied by ………………
4. Jhum cultivation is one of the most ……………….
5. The …… of atmosphere experiences most of all weather-related phenomenon like storms, rain, fog, clouds etc.
6. The original source of almost all the energy in most of the ecosystems is ………………….

vii)……………….. is an open system where exchange of both matter and energy take place with the surroundings.

1. All the critical issues of environmental problems are…………….. on each other and have common roots.
2. The ozone layer protects us from ………………………
3. The primary cause of global warming is ………………..

2) Write the ‘True’ or ‘False’ of the following statement. 1x5=5

i) Human Environment Conference-1972 was held a Stockholm.

ii) Desertification contributes to climate change by reducing the Earth's carbon sinks and releasing stored carbon into the atmosphere.

iii) Loss of biodiversity not only disrupts ecosystems but also threatens food security and human well-being.

iv) Organic soil constituents come from parent materials by physical, chemical, and biological weathering from soil-forming rocks.

v) Earth capital refers to the Earth's natural resources and ecosystems that provide goods and services essential for human well-being.

. 3. Write a brief note on the following, 3x5=15

i) Ecosystem service

ii) Ecological security

iii) Carbon budget

iv) Chernobyl disaster

v) Sustainable development

4. Write the causes of ozone layer depletion and its effects of human health. 3

5. How do monsoons affect the Indian weather system? 3

6. What are the different steps involved in nitrogen cycle?

Explain. 4

7. What are the different types of terrestrial ecosystems? Explain nay two. 2+3=5

8. Explain the factors influencing soil formation. 5

9. Write the different components of environment and their interactions. 5

10. Describe the flow of energy in ecosystem with diagrammatic representation. 5

11. Write the organic and inorganic pollutants of water pollution. Explain effects of these pollutants? Explain. 2+3=5

12. Write the sources of greenhouse gases. Explain global warming. 2+3=5

\*\*\*\*\*