**TU/CDOE**

**TEZPUR UNIVERSITY**

**SEMESTER END EXAMINATION (SPRING 2023)**

**DIPEVMD/DEM 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 word(s). **1x5=5**
2. Living organism of the biosphere consists of producers, consumers and …………………...
3. In the earth’s atmosphere, the relative volume of nitrogen constitutes the highest proportion (78.09%) followed by oxygen (20.95%), ………………………. and carbon dioxide (0.03%).
4. The entire earth's weather phenomena occur within the………………………., which are known as the locus of weather, storms, and rain.
5. ………………………. was used as an intermediate chemical in the production of carbamate insecticides at the Union Carbide Factory in Bhopal.
6. The hydrosphere covers 70% of Earth's surface, with 97% water in the seas, 2% in ……………….., 1% in freshwater (surface and ground water), and water vapour in the atmosphere.
7. Write the full form of the following: **1x5=5**
8. IPCC iv) ITCZ
9. UNEP v) CDM
10. PAN
11. Match the following: **1x5=5**

|  |  |
| --- | --- |
| 1. Bio-piracy | 1. A deposition of sediments along both sides of a glacier |
| 1. Haber-Bosch process | 1. Theft of biological materials by the process of patent |
| 1. Lateral Moraines | 1. An exclusive right granted to an inventor for its product or process |
| 1. Alpine vegetation | 1. Producing synthetic fertilizers from N2 and H2 for use in agriculture |
| 1. Patent | 1. Dominated by coniferous tree species having needle like structure leaves |

**P.T.O**

1. Write **True** or **False** of the following statements: **1x5=5**
2. Dissolution of a mineral occurs when the crystal lattice breaks down and separates into its component ions in water.
3. Satellites used for communication, weather monitoring and research move around or are stationed in the stratosphere at particular altitude.
4. The hypoxic condition of the water makes it unsuitable for flora and fauna that have low oxygen requirements.
5. Due to lack of vertical convection, the stratosphere is quite stable; therefore, any materials or pollutants that enter this layer pose long-term hazards.
6. A trademark is a distinguishing symbol that can be used to distinguish and identify one company's products from those of another offering similar products or services.
7. Define the following: **2x5=10**
8. Ecological poverty
9. Kuznets curve
10. Economic services
11. Ecological security
12. Pollution haven hypothesis
13. Differentiate between grazing food chain and detritus food chain. **3**
14. Why EIA is required for any major development projects? How does EIA aid to decision-making? **2+3=5**
15. Explain the sources and health effects of air pollutants. **5**
16. Explain the four seasons of India and its associated weather systems. **5**
17. Describe the processes involved in carbon cycle with diagrammatic representation. **5**
18. Explain five fundamental process of chemical weathering of rocks and minerals. **5**
19. What is biodiversity? Can human being survive on earth without insects? Justify your answer. **1+5=6**
20. What is climate change? Explain the impact on climate change on human life and biodiversity. **1+5=6**

\*\*\*