**TU/ CODL**

**TEZPUR UNIVERSITY**

**SEMESTER END EXAMINATION (SPRING) 2019**

**DEM 101: ENVIRONMENT: BASIC UNDERSTANDING**

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

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

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1. Fill in the blanks with correct answer or appropriate word(s): 1x5=5

1. The increases in temperature in stratosphere are ………………………under the influence of UV rays of solar radiation.
2. ……………………….…….. represents the amount of energy trapped per unit area and time in different trophic levels of a food chain with producers forming the base and the top carnivores at the tip.
3. The driving force of an ecosystem is the energy of the …………………..
4. A ……………………………………… is a resource readily accessible to all members of the public who wish to obtain benefits from it.
5. The Bhopal gas tragedy was an industrial incident happened at Union Carbide Factory due to the leakage of ……………………………………… which was used for manufacturing Carbamate pesticides.

2. Write ‘true’ or ‘false’ of the following statements. 1x5=5

a) Pollution Haven Hypothesis (PHH)basically suggests that countries having strict environmental standard shift all their polluting industries to the poor countries having poor environmental standards.

b) Photochemical smog is an oxidising smog having high concentration of oxidents and is characterised by brown, hazy fumes.

c) The term ‘Environmental Impact Assessment’ was first used by the Brundtland Commission in 1987 in its report, *Our Common Future.*

d) The sulphates and nitrates are the main responsible ions for acid rain.

**P.T.O.**

# e) Radiation inversion is a condition in which the temperature of the atmosphere increases with altitude in contrast to the normal decrease with altitude in the troposphere.

3. Define the following: 2x5=10

a) Ecosystem

b) Environmental pollution

c) Adiabatic lapse rate

d) Biopiracy

e) El Niño

4. What is natural resource? Explain the different types of resources.

1+4=5

5. What is the difference between ecosystem and biome? Write a brief note about the three types of pyramids. 2+3=5

6. How does solar energy influence energy radiation budget? Explain with the help of a neat diagram. 2+3=5

7. Developing countries have high population than developed countries. Justify it. Explain, why population explosion is a great concern for the environment? 2+3=5

8. Describe the processes involved in nitrogen cycle with diagrammatic

representation. 5

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

6

10. How do monsoons affect the Indian weather system? What is the

role of jet streams in tropical monsoons? 3+3=6

11. Briefly discuss the major human activities that cause environmental degradation and their consequences. 6

12. Describe the formation and depletion of ozone layer in the

stratosphere. What are the affects of ozone layer depletion? 4+3=7

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