

**POST GRADUATE DIPLOMA IN
ENVIRONMENT AND SUSTAINABLE
DEVELOPMENT (PGDESD)**

**Term-End Examination
June, 2010**

**MED-001 : UNDERSTANDING THE
ENVIRONMENT**

Time : 2 hours

Maximum Marks : 50

Note : All questions are compulsory.

1. Answer *any five* of the following : 5x2=10
- (a) Write the names of the different strata of the atmosphere.
 - (b) Name two sources of radiation pollution.
 - (c) Enlarge the abbreviations (*any two*) :
 - (i) PAN
 - (ii) IPCC
 - (iii) SPM
 - (d) Name the three main eras of the Geological Time Scale. Which of these is the most recent ?
 - (e) Name two plants and two animals that occur in the polar regions.
 - (f) What is the difference between atmospheric and biological nitrification.

2. Answer *any two* of the following : 2x5=10

- (a) What are the main categories of soil organisms ? How do these effect soil fertility ?
- (b) Explain what is pycnocline and thermocline.
- (c) What is meant by "primitive atmosphere" ? Name four important gases present in it. Did it support life ? Explain your answer.

3. How are organisms grouped according to principal sources of carbon and energy ? 10

OR

- (a) Distinguish between holozoic and saprophytic nutrition. 5
- (b) Describe the main characteristics that distinguish viruses from bacteria. 5

4. (a) The pyramid of biomass can be erect or inverted. Explain why ? The pyramid of energy is always erect. Why ? 3+2

- (b) Why is the phosphorus cycle classified as 'Sedimentary' ? Draw the cycle. Explain how phosphorus becomes a pollutant.

OR

1+2¹/₂+1¹/₂

Define a biome. What governs the distribution of different biomes on the Earth ? Why is it important to prioritise conservation of the tropical terrain ? 1+2+2+5

5. What are the various parameters that are tested to ensure the quality of water ? Are these levels high or low in polluted waters ? Explain the ill effects of oil spills. 5+2+3

OR

Discuss the problems of natural resource degradation in relation to human population growth. 10
