

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

Term-End Examination

December, 2010

**MED-001 : UNDERSTANDING THE
ENVIRONMENT**

Time : 2 hours

Maximum Marks : 50

Note : All questions are compulsory.

1. Answer *any five* of the following : 2x5=10
- (a) Distinguish between 'weather' and 'climate'.
 - (b) Enlarge the following abbreviations
(any two) : BOD, TDS, MPN.
 - (c) Distinguish between endo- and ecto-mycorrhiza.
 - (d) Name the two forms of pollution that do not arise directly from accumulation of substances in the environment.
 - (e) "The vegetation of a warm desert comprises of mainly annuals" Comment on the statement and say why it is so.
 - (f) Name the two major continents during the Cambrian era. What are the biological consequences of the movement of the continental plates ?

Answer *any two* of the following

5x2=10

2. (a) What is bioaccumulation and how does it differ from biomagnification? Explain with the help of suitable examples.
- (b) Name the layers of the atmosphere and write their distinct physical properties. Which one is called the shield?
- (c) Write any five properties of water that are important for biological processes.
3. (a) Distinguish between photic and aphotic zones of the ocean. 5

OR

- (i) Distinguish between mutualism and parasitism. Give one example of each. 5
- (ii) What are the 3Rs of waste management? Give some examples. 3+2
What is the role of vermi-composting in waste management.

OR

- (b) Define the following terms: 1x5=5
- Primary production
- Secondary production
- Standing crop biomass
- Net Community Production
- Ecological efficiency

4. (a) Draw a well labelled diagram of the Carbon cycle. Explain what is "green house effect" and also mark it on the diagram. 5

OR

- (i) Draw an energy flow diagram showing the movement of energy beyond the producer. 5
- (ii) What are the adaptations shown by organisms that inhabit fresh waters? (Lentic+lentic) 5

OR

- (b) What are the characteristics of the Polar Tundras? How has human activity affected these regions? 5

5. Write an account of the sources and types of air pollution. What are the effects of air pollution on human health and vegetation? 5+5

OR

What is meant by renewable and non-renewable energy? 2

Write an account of the various types of renewable energy resources. 6

What are the benefits and hazards of nuclear energy use? 2
