

POST GRADUATE DIPLOMA IN
ENVIRONMENT AND SUSTAINABLE
DEVELOPMENT (PGDESD)

Term-End Examination

June, 2012

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) List the four main components of soils.
 - (b) What is the importance of soil air?
 - (c) List any 4 major physical properties of soil.
 - (d) What are aerosols?
 - (e) List 4 stratas in the atmosphere as we go upwards from the ground.
 - (f) What do you understand by the term 'albedo'?

2. Attempt *any two* of the following : 5x2=10
 - (a) Describe the thermal stratification in a lentic habitat.
 - (b) What are tsunamis? How are they created?
 - (c) What is acid rain? Describe its formation and effects.

3. (a) (i) What do you understand by holozoic nutrition? Describe any three processes involved in this mode of acquiring energy. 8
- (ii) A particular biome looks similar to another in quite distant location in terms of architecture (physical structure). How does this similarity arise? 2

OR

- (b) (i) Describe briefly the distribution and vegetation of tropical rain forests 5
- (ii) Describe briefly the consequences of human activities in tropical rain forests. 5

4. Attempt *any two* :

- (a) (i) What do you understand by the term 'trophic level' in an ecosystem? 1
- (ii) What are the two kinds of food chains in an ecosystem? How do they differ? 4
- (b) The flow of energy in an ecosystem is unidirectional. Explain this statement with the help of suitable diagram. 5
- (c) List 4 main factors that affect population size. Draw the three typical dispersion patterns observed in animals. 5

5. Attempt *any two* :

- (a) What are the various causes of soil erosion ? Describe its adverse effects 5
 - (b) What are the factors that promote rapid cycling of nutrients in tropical forests ? 5
 - (c) What are the factors that have led to the rapid population growth in India ? Why is it important to contain this population growth ? 5
-