

**B.TECH.****THEORY EXAMINATION (SEM-IV) 2016-17****ENVIRONMENT AND ECOLOGY****Time : 3 Hours****Max. Marks : 100****Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.****SECTION – A****1. Explain the following:****10 x 2 = 20**

- (a) Define the Eutrophication.
- (b) What is a SYNERGISM Process?
- (c) Write difference between In situ and Ex situ conservation.
- (d) Define the Blue baby syndrome.
- (e) Write difference between point sources and non point sources.
- (f) Explain the biomagnifications.
- (g) Define the term Migration with suitable examples.
- (h) What are Bioindicators?
- (i) Which ecological pyramid is always upright? Why?
- (j) Define the Decomposers with example.
- (k) Define the birth rate and death rate.
- (l) Define the Food chain with example.

**SECTION – B****2. Attempt any five of the following questions:****5 x 10 = 50**

- (a) What is meant by structure of an ecosystem? Explain the various components of an ecosystem structure. Discuss the functions of an ecosystem also.
- (b) Discuss the water borne and Water induced diseases in detail.
- (c) Briefly discuss the salient features of Wild life (Conservation) act 1972.
- (d) Discuss the alternative Energy resources. Differentiate between the renewable and non renewable energy resources.
- (e) What do you understand by 'HOTSPOTS of Biodiversity'? Name and briefly describe the two hotspots of biodiversity that extend into India.
- (f) What do you understand by Landslides? Discuss its causes, consequences, types in detail. Also suggest the methodology to fight back such hazards.
- (g) What do you mean by water-logging and salination? What are their causes and how do they influence the agricultural yields? Suggest measures to minimize them.
- (h) What are solid wastes? Discuss their types, effects and name the various methods used to dispose solid wastes. Explain any two of them with its merits and demerits.

**SECTION – C****Attempt any two of the following questions:****2 x 15 = 30**

3. Describe the phenomenon of Sustainable development? Also Explain "Why the sustainable development is unsustainable".
4. What do you understand by the Environmental Impact Assessment? Write its Principles and objectives. Also discuss the sequential process of EIA in detail.
5. What do you mean by water pollution? Discuss its major sources and Effects. Discuss in brief the various processes of water treatment with layout of Water treatment plant.