B. Tech.

(Semester II) Even Semester Theory Examination, 2012-13

ENVIRONMENT & ECOLOGY

Time: 2 Hours] [Total Marks: 50

Note: Attempt questions from each Section as per instructions.

Section-A

Attempt all parts of this question. Each part carries 2 marks. 2×5=10

1. (a) Which are the greenhouse gases that cause global warming?
(b) Define sustainable development.
(c) What is exponential growth of population?
(d) Describe the need of awareness for the conservation and protection of environment.
(e) What are renewable and non-renewable energy resources?

Section-B

Attempt any three parts of this question. Each part carries 5 marks. 5×3=15

2. (a) Classify the atmosphere on the basis of temperature variation. State the main activities taking place in each of them.
(b) What are ecological pyramids? Explain why some of these pyramids are upright while others are inverted in different ecosystem.
(c) What is deforestation? Enumerate the effects of deforestation. Explain the measures taken for conserving forest wealth.
(d) What are solid wastes? Discuss their types, effect and name the various methods used to dispose solid wastes. Explain any one of them with its merits and demerits.
Section-C

Attempt five questions of this Section. Each question carries 5 marks. \[ 5 \times 5 = 25 \]

3. Illustrate the photochemical reaction involved in the formation and destruction of ozone in the stratosphere. Discuss the effect of ozone layer destruction and remedial measures.

4. Describe various alternative energy sources and their use.

5. What is meant by 'flow of energy' in an ecosystem? What is its importance for ecosystem?

6. What is meant by mineral resources? Describe the effect of mineral extraction on environment.

7. Explain the phenomenon of Nitrogen cycle with help of suitable line diagram. Discuss its physical significance also.

8. What is meant by 'water conservation'? Suggest various measures that should be adopted to conserve water in domestic, agriculture and industrial fronts.

9. What do you mean by NGO? What are their duties? Write up the details of the work taken-up by any two Indian NGO operating in India.