

**FACULTY OF ENGINEERING****B.E. 3/4 (EE / M/P / Inst. / I.T.) I – Semester (Old) Examination, December 2015****Subject: Environmental Studies****Time: 3 Hours****Max.Marks: 75****Note: Answer all questions from Part A. Answer any five questions from Part B.****PART – A (25 Marks)**

- |   |   |
|---|---|
| 1 Distinguish Lithosphere and Hydrosphere.  | 2 |
| 2 Explain food web and food chain.  | 2 |
| 3 What are the hot spots of Biodiversity?   | 2 |
| 4 State the difficulties with watershed Management.   | 2 |
| 5 Write a note on the concept of Ecosystem and their functions.                               | 3 |
| 6 What do you mean by Endangered species? Write examples.                                     | 3 |
| 7 Briefly discuss the effects of modern agriculture.  | 2 |
| 8 Discuss the concept of Endemic species. Write examples.                                     | 3 |
| 9 What is the importance of environmental legislation in controlling pollution?               | 3 |
| 10 Name the components likely to cause acid rain. A few mitigating measures may be explained. | 3 |

**PART – B (5x10 = 50 Marks)**

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|---|--------|
| 11 a) What is meant by soil erosion? Explain the factors which cause it and suggest mitigation measures.  | 5      |
| b) Explain the role of an individual in conservation of natural resources.  | 5      |
| 12 a) Discuss the types, characteristic features, structure and functions of marine ecosystem.  | 5      |
| b) Explain the in-situ and ex-situ methods of biodiversity conservation.  | 5      |
| 13 a) Write and explain the salient features of Wild Life Protection Act of the Indian Constitution.  | 5      |
| b) Explain any one method of water purification for drinking purpose. Draw sketches showing basic principle.  | 5      |
| 14 a) With the help of line diagrams, explain the working principles of cyclones and filters used for controlling particulates in air.  | 6      |
| b) Mention the techniques of controlling the oil pollution.   | 4      |
| 15 a) What is the significance of solid waste management? Write the classification of solid wastes. State any three best practices of solid waste management.                             | 5      |
| b) Describe the process of Cultural Eutrophication. Explain how more nutrients may not always be good for a lake.   | 5      |
| 16 a) Explain the difference between an environmentally sustainable society and an unsustainable society. Give examples of each in terms of resources, economy, attitudes and technology. | 5      |
| b) How might food cycling be affected by stressed Ecosystems? Give examples of this effect.   | 5      |
| 17 Write short note on any two of the following:  | 2x5=10 |
| a) Green house effect   |        |
| b) Wild Life Act  |        |
| c) Environmental Ethics   |        |

**FACULTY OF ENGINEERING & INFORMATICS**

B.E. 2/4 (EE/Inst./M/P/ IT) I – Semester (New) (Main) Examination, December 2015

Subject : Environmental Studies

Time : 3 Hours

Max. Marks: 75

**Note: Answer all questions from Part-A and answer any five questions from Part-B.****PART – A (25 Marks)**

- 1 Discuss the environmental impacts of mineral exploration. (3)
- 2 Discuss food chains and food webs with examples. (3)
- 3 What is desertification? (2)
- 4 Discuss salient features of wild life protection act. (2)
- 5 Enumerate basic principles of disaster management. (3)
- 6 Discuss various causes of water pollution. (2)
- 7 Give an account of water induced soil erosion. (2)
- 8 Discuss ozone layer depletion. (3)
- 9 Distinguish between renewable and non renewable resources with examples. (2)
- 10 Explain causes and effects of soil pollution. (3)

**PART – B (50 Marks)**

- 11 (a) Explain scope and importance of environmental studies. (5)  
(b) Discuss the impacts of modern agricultural practices. (5)
- 12 (a) Discuss ecological pyramids with examples. (5)  
(b) Explain the structure and functions of ecosystem. (5)
- 13 (a) Briefly discuss about various methods of water conservation. (5)  
(b) Name and describe in brief the major bio-geographical zones of India. (5)
- 14 (a) Explain the flow of energy through the atmosphere and its utilization in the ecosystem. (5)  
(b) Explain the threats and values of biodiversity. (5)
- 15 (a) What is water pollution? Briefly discuss causes, effects and control measures of water pollution. (5)  
(b) Name and briefly discuss the three functional elements of solid waste management and explain why recycling is an integral part of solid waste management. (5)
- 16 (a) Define Floods and Earth quake. Enumerate the effects and measures taken to mitigate these disasters. (5)  
(b) Discuss the salient features of environmental protection act (1986). (5)
- 17 (a) Write short notes on the following: (5)  
(i) Hydrological cycle  
(ii) Ozone layer depletion  
(b) Enumerate and explain various air pollution control equipment with their merits and demerits. (5)