

**2E1017**

Roll No. : \_\_\_\_\_

Total Printed Pages : **2****2E1017****B. Tech. (I Year) (Sem. II) Examination, June/July - 2012**  
**Basic Environmental Engg.**Time : **3 Hours**][Maximum Marks : **80**[Min. Passing Marks : **24**

*Attempt any five questions, selecting one question from each unit. All questions carry equal marks. (Schematic diagrams must be shown wherever necessary.) Any data you feel missing suitably be assumed and stated clearly, Units of quantities used/calculated must be stated clearly.*

Use of following supporting material is permitted during examination.  
(Mentioned in form No. 205)

1. \_\_\_\_\_ Nil \_\_\_\_\_ 2. \_\_\_\_\_ Nil \_\_\_\_\_

**UNIT - I**

- 1 (a) Discuss the levels of organization in the biosphere. 8  
(b) What is holocoenotic environment ? How time affects the environment ? 8

**OR**

- 2 (a) Enumerate the five principles of pollution and discuss the causes of aggrevation of pollution. 8  
(b) What is the adverse effect of pollution on human health ? 8

**UNIT - II**

- 3 (a) What is water pollution ? Discuss the sources of water quality deterioration. 8  
(b) Describe the role of constructed wetlands in domestic waste water management. 8

**OR**

- 4 (a) Describe the causes of lake eutrophication ? 8  
(b) Explain the reversibility of eutrophication. 8

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### UNIT - III

- 5 (a) Discuss air pollution emission inventory source categories. 8  
(b) What is the mechanism of air pollution deposition ? 8

OR

- 6 (a) Describe the mechanism of electrostatic precipitators. 8  
(b) How chlorofluorocarbons cause ozone depletion ? 8

### UNIT - IV

- 7 (a) Discuss domestic solid waste generation and disposal. 8  
(b) How vermicomposting can be performed at domestic level ? 8

OR

- 8 (a) Describe environmental consequences of mineral waste generation in mining, milling and processing industries. 8  
(b) Explain the hazardous toxic waste export. 8

### UNIT - V

- 9 (a) Define biodiversity. What are the seven categories of species diversity in relation to ecological patterns. 8  
(b) Describe the future of biodiesel as a renewable source of energy. 8

OR

- 10 (a) Define ecosystem. Draw energy flow labelled diagrams in photoautotrophs, chemoautotrophs, and carnivores. 8  
(b) What are the curative, preventive, and symbiotic measures for sustainable development ? 8

