

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2005.

Seventh Semester

(Common to All Branches)

CE 071 — PRINCIPLES OF ENVIRONMENTAL SCIENCE AND ENGINEERING

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Enumerate the structural and functional elements of eco system.
2. Define sustainable development.
3. List any two environmental stresses on the biology of water and soil.
4. Mention any two environmental impacts of development projects in your discipline.
5. Define hazardous wastes.
6. List any two air pollutants and their effects on human beings from automobile emission.
7. State the objectives of treatment of waste water.
8. Enumerate the waste minimization technique.
9. Mention some of the economic instruments in Environmental Management.
10. List any four pollution control acts.

PART B — (5 × 16 = 80 marks)

11. Discuss on the components and interrelationship between the components of environment.
12. (a) Explain the sources, characteristics and effects of air pollution.

Or

- (b) Discuss the stress on water bodies owing to the impacts of anthropogenic activities.

13. (a) Explain the environmental issues related to the municipal solid waste management.

Or

- (b) (i) What is the significance of ozone layer depletion and global warming?
(ii) What are the pollutants that are responsible and control measures?
14. (a) Discuss the principles of physico-chemical waste water treatment with the help of a flow diagram.

Or

- (b) (i) Discuss on the waste minimization techniques.
(ii) Explain the biological treatment methods with the help of a neat sketch.
15. (a) Explain the steps involved in environmental impact assessment with the help of a flow sheet.

Or

- (b) (i) Discuss the role of non-government organizations in environmental management.
(ii) Discuss any four international conventions.
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