

B.E. (Civil Engineering) Eighth Semester (C.B.S.)
Elective-II : Environmental Management System

P. Pages : 2

Time : Three Hours



NRT/KS/19/3617

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Due credit will be given to neatness and adequate dimensions.
 9. Assume suitable data whenever necessary.
 10. Illustrate your answers whenever necessary with the help of neat sketches.
 11. Use of non programmable calculator is permitted.

1. a) Explain the purposes of environmental management system. What is the benefit of ISO 1400 standard for EMS? **7**

b) Write a short note on international voluntary standards. **6**

OR

2. a) Differentiate between environmental reporting and certification. **6**

b) Explain Eco – labeling & its importance with examples. **7**

3. Explain in detail about the pollution control acts, rules and notifications. **13**

OR

4. a) What is environmental audit? **7**

b) Explain EMS certification. **6**

5. Explain in detail the concept and methodology of Environmental impact Assessment. **13**

OR

6. Write notes on: **13**

i) Environmental Clearance in India.

ii) EIA case studies.

7. a) Describe how earth observation and GIS technologies can assist environmental management programs. **7**

b) Discuss how “cost – benefit analysis” is the part of the justification for the project in an EIS. **7**

OR

8. a) Define the term “Risk Assessment”. Discuss various methods of impact analysis. 7
b) Write a short note on cost – benefit appraisals. 7
9. a) Design a risk management program for various constructional activities in Civil Engineering. 7
b) Define Environmental Risk analysis. Suggest some risk assessment applications for environmental management problems. 6

OR

10. a) Discuss how to measure quantified risk assessment for various industrial accidents. 7
b) Briefly explain various steps involved in risk management related to hazard identification. Exposure assessment and risk characterization. 6
11. a) Write a short note on Energy Conservation. 7
b) Enlist various energy sources and discuss importance of energy impact analysis. 7

OR

12. a) Discuss various energy alternatives that can be adopted to minimize energy impact and pollution on environment. 7
b) Define and briefly explain the following. 7
i) Supply Demand.
ii) Energy Inventory.
