

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

P. Pages : 2

Time : Three Hours



NKT/KS/17/7534

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. Diagrams and chemical equations should be given whenever necessary.
 11. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Discuss various goals and purposes of Environmental Management Systems. What is ISO 1400 standard for EMS? Give its advantages. 7

b) Differentiate between environmental reporting and certification. 6

OR

2. a) Write a short note on international voluntary standards. 7

b) Discuss various measures to be adopted for development and implementation of international environmental management system. 6

3. a) Compare the functions of central pollution control board with the functions of state pollution control boards in the area of Air pollution control. 7

b) Discuss what are the main features of Air (Prevention and Control of pollution) Act, 1981 of the Government of India? 6

OR

4. a) Briefly discuss the Environment (Protection) Act 1986. 7

b) Explain with examples what do you understand by Environmental audit. 6

5. a) Briefly discuss Environmental Clearance Procedures in India. 7

b) What is an Environmental Impact Assessment (EIA)? Discuss how it is different from strategic Environmental Assessment (SEA) 6

OR

6. a) What are Environmental standards and why are they important in the context of EIA? 7
b) Write a short note on Environmental impact analysis. 6
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.
