



B.E DEGREE EXAMINATIONS: APRIL/MAY 2016

(Regulation 2013)

Sixth Semester

CIVIL ENGINEERING

U13CETE11 : Environmental Impact Assessment in Civil Engineering Project

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The primary cause of acid rain in the world is -----
2. An environmental audit helps for achieving the
 - a) Resource optimization
 - b) waste minimization
 - c) Public awareness
 - d) NGO promotion
3. ----- is the matrices in which environmental factors are displaced against other environmental factors.
4. Biological magnification of pesticides takes place through which of the following
 - a) Population pyramids
 - b) Hydrological cycle
 - c) Food chain
 - d) Air cycle
5. Archaeological Resources Protection Act Amended in the Year -----
6. In quantifying damage EIA considers
 - a) Reversible and Irreversible effects in same category
 - b) Balance between gains and losses due to various activities
 - c) Adverse effects on human beings
 - d) All pollution monitoring and controlling scheme
7. According to MoEF/New Delhi, the mining and Harbor project comes under -----
8. Man made emission of Chloro Fluro Carbon(CFC) is likely to deplete the ozone layer in the troposphere,leading to increase in
 - a) Radio activity
 - b) Sound
 - c) Heat
 - d) Ultra violet radiation
9. ESP(Electro Static Precipitator) is most useful for the ----- Industry
10. In India major cause of large scale displacement of people is
 - a) Forest fire
 - b) Construction of dams
 - c) Earth quakes
 - d) Wars

PART B (10 x 2 = 20 Marks)

(Answer not more than 40 words)

11. What is the purpose of Environmental Impact Assessment?
12. How do EIA contribute to Sustainable development?
13. List out the check list for EIS preparation.
14. Distinguish between Matrices and Network Methods in EIA.
15. What are the impacts of developmental project on flora?
16. Distinguish between EIA and NEPA.
17. State the significance of public participation in EIA.
18. List the essential components of environment management plan.
19. Write any four Public environmental issues related to smart city.
20. List two adverse impacts associated with dam construction.

PART C (5 x 14 = 70 Marks)

(Answer not more than 400 words)

Q.No 21 is Compulsory

21. (i) Discuss the role of EIA in project cycle. (8)
- (ii) Briefly describe the legal requirement in India regarding EIA. (6)

22. (a) List the various methods adopted for prediction and evaluation process? Explain any two methods.

(OR)

- (b) (i) Summarize the Leopold matrix method in EIA and highlight its strength and applicability. (8)
- (ii) What are the four methodologies used in EIA and Explain any one in detail? (6)

23. (a) Explain a mathematical model to predict the impact of emission through stacks and detail the data requirements and data sources for the application of the model.

(OR)

- (b) Write a detailed note on identification of activities which will have different types of impact on groundwater quantity and quality.

24. (a) List any six adverse impact of a “Water supply project” and suggest appropriate mitigation measure for each.

(OR)

(b) What are the significant environmental issues to be considered while planning to develop a new National highway?

25. (a) What are the significant environmental issues to be considered while planning to develop a “Smart City”.

(OR)

(b) (i) List any six adverse impact of a “Ports and Harbor Project and suggest (7) appropriate mitigation measures for each.

(ii) What are the methods for review of an EIA report? (7)
