

B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV / DEC 2024

Fifth Semester

Civil Engineering

20CEEL502 - ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

PART - A (MCQ) (20 × 1 = 20 Marks)

Answer ALL Questions

	Marks	K-Level	CO
1. Which is not a correct statement related to Impact assessment? (a) Relevant stakeholder's concerns are not incorporated. (b) A detailed assessment of the planned project and selected alternatives compared to the baseline conditions. (c) Quantitative descriptions such as indicating the cubic metres of water withdrawn, sewage produced, and pollutants released. (d) Qualitative descriptions measuring high, medium and low impacts.	1	K1	CO1
2. Predictions include determination of -----and magnitude of impact. (a) nature (b) action (c) predict (d) extend	1	K2	CO1
3. Relate the consequence of deforestation to urban development? (a) Improved air quality (b) Loss of wildlife habitat (c) Increased rainfall (d) Reduced soil erosion	1	K2	CO1
4. Compare the uses of Checklists, matrices, and networks with the common uses of EIA shown below (a) Organize and assess environmental data for decision-making (b) Evaluate project financing options (c) Rank public comments on the project (d) Develop marketing strategies for the project	1	K2	CO2
5. The analysis of alternatives in EIA refers to: (a) Reviewing alternative public opinions (b) Evaluating different project designs, locations, and technologies to minimize environmental harm (c) Developing alternative project timelines. (d) Comparing project costs with other similar projects	1	K2	CO2
6. Scoping in EIA involves: (a) Preparing the environmental management plan (b) Defining the key environmental issues and concerns to be studied in detail (c) Approving the project proposal (d) Calculating the project's budget	1	K2	CO2
7. The Environmental Monitoring Plan typically includes: (a) Monitoring methods, frequency, and responsible parties (b) Financial analysis of the project (c) Project timelines and deadlines (d) Marketing strategies for the project	1	K2	CO3
8. Which of the following is NOT typically included in the mitigation plan for impacts on water, air, and land? (a) Reduction of emissions (b) Water conservation strategies (c) Increase in workforce size (d) Waste management practices	1	K1	CO3

9. A post-project audit evaluates whether: 1 K2 CO3
 (a) All predicted environmental impacts were mitigated
 (b) The project was completed on time
 (c) New project permits are required
 (d) The project was profitable
10. The main purpose of public consultation in EIA is to: 1 K2 CO4
 (a) Inform the public about the project's financial aspects
 (b) Gather feedback from the local community and stakeholders on the potential environmental and social impacts of the project
 (c) Increase the project's public visibility
 (d) Promote the project's products and services
11. What is the purpose of economic valuation of environmental impacts? 1 K2 CO4
 (a) To calculate the total cost of a project
 (b) To assign a monetary value to environmental losses or benefits
 (c) To determine project timeline
 (d) To evaluate public opinion on the project
12. The aim of resettlement in an R&R plan is to: 1 K2 CO4
 (a) Relocate the workforce
 (b) Ensure displaced people have access to basic amenities like housing and healthcare
 (c) Minimize delays in project execution
 (d) Reduce project costs
13. Public consultation in the EIA process for real estate development projects is required to: 1 K2 CO5
 (a) Approve the project's design
 (b) Ensure local communities and stakeholders are involved in identifying concerns about the environmental and social impacts
 (c) Increase the project's market value
 (d) Set project deadlines
14. In the context of real estate development, which of the following impacts is typically assessed in an EIA? 1 K2 CO5
 (a) Changes in local property prices
 (b) Effects on land use, water resources, and air quality
 (c) Increase in tax revenues
 (d) Number of real estate transactions
15. EIA studies for infrastructure projects are important because they: 1 K2 CO5
 (a) Ensure the project is completed on time
 (b) Assess the environmental impacts and suggest mitigation measures to reduce harm
 (c) Provide financial support for the project
 (d) Increase public awareness about the project
16. Which of the following is a key factor in determining whether an EIA is required for a real estate development project? 1 K1 CO5
 (a) The number of investors involved (b) The size and scale of the project
 (c) The color and design of the buildings (d) The cost of the construction materials
17. In any developmental projects, how does an EIA help in managing water resources? 1 K1 CO6
 (a) By ensuring that only a limited number of water connections are approved
 (b) By assessing the impact of construction on local water bodies and groundwater, and recommending measures for sustainable water use and waste management
 (c) By determining the price of water for the project
 (d) By securing funding for water supply systems
18. Name the impact which is typically assessed in an EIA? 1 K1 CO6
 (a) Changes in local property prices
 (b) Effects on land use, water resources, and air quality
 (c) Increase in tax revenues
 (d) Number of real estate transactions

19. Which environmental issue is a primary concern when planning waste processing and disposal facilities? 1 K1 CO6
 (a) Groundwater contamination (b) Loss of marine life
 (c) Increase in industrial development (d) Traffic congestion
20. Relate the EIA for mining projects with the issue of tailings management? 1 K2 CO6
 (a) By assessing air pollution from smelting activities
 (b) By evaluating water contamination risks
 (c) By increasing surface water availability
 (d) By promoting community development

PART - B (10 × 2 = 20 Marks)

Answer ALL Questions

21. Classify the different types of Environmental Impact Assessments (EIA) commonly used in projects. 2 K2 CO1
22. Summarize the factors affecting analysis of EIA. 2 K2 CO1
23. Differentiate between Adhoc and Overlay methods. 2 K2 CO2
24. What meant by Direct impact and Indirect impact? 2 K1 CO2
25. Summarize the mitigation measures that can help in minimizing detrimental effects of air pollution. 2 K2 CO3
26. What are the various stages of Environmental Audit? 2 K1 CO3
27. Explain the two major components of Rehabilitation plan. 2 K2 CO4
28. Write a note on Land Acquisition Act. 2 K1 CO4
29. Explain the concept of cumulative impact assessment in the context of real estate development. 2 K2 CO5
30. How can mass rapid transport systems help reduce urban environmental problems? 2 K2 CO6

PART - C (6 × 10 = 60 Marks)

Answer ALL Questions

31. a) Explain the different types and impacts of EIA. 10 K2 CO1
OR
 b) Illustrate with a flow diagram the various stages involved in EIA clearance process. 10 K2 CO1
32. a) What are the major methodologies of EIA and discuss in detail on any three methods. 10 K2 CO2
OR
 b) Explain about the Checklist method and illustrate how it is applied for the Impact Assessment of a mining project. 10 K2 CO2
33. a) Describe in detail about the environmental management plan for Air, Water and Land environment in the context of Thermal power plant project. 10 K2 CO3
OR
 b) Explain in detail about the sequential action of environmental management tool with a flow chart. 10 K2 CO3
34. a) Describe the significance, features and components of Rehabilitation and resettlement plan for socio economic EIA. 10 K2 CO4
OR
 b) Summarize the different types of Participatory Rural Appraisal (PRA) Techniques. 10 K2 CO4
35. a) Discuss the various phases involved in the Environmental Impact Assessment process for a real estate projects and Provide details for each phase. 10 K2 CO5

OR

b) How does land use planning interact with EIA studies for urban real estate development project? Discuss its role in minimizing the environmental impacts. 10 K2 CO5

36. a) Outline a case study pertaining to the environmental implications of Mass Rapid Transportation system, particularly regarding local ecosystems and communities. 10 K2 CO6

OR

b) Discuss in detail about a case study on Sardar Sarovar Dam Project. 10 K2 CO6