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Question Paper Code: U9175

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2025

Open Elective

Civil Engineering

21UCE975 – ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

(Regulations 2021)

(Common to All Engineering Branches)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Which international treaty in 2015 required nearly all countries to set emission reduction goals? CO 1- U
a) Paris Agreement b) Kyoto Protocol c) Nagoya Protocol d) Montreal Protocol
2. Screening criteria based on _____. CO 1- U
a) type and location of development b) difficult and control attribute
c) type and difficult to development d) partial development
3. EIA is a _____ which helps to evaluate environmental impact of proposed developmental projects or programs. CO 1- U
a) quantitative b) tool c) subjective d) clearance
4. Why is public consultation important in the EIA process? CO 1- U
a) To ensure faster project approval
b) To minimize project costs
c) To finalize project timelines
d) To incorporate public concerns, address them appropriately
5. Which environmental impact is associated with compaction and increased erosion in transportation projects? CO4- U
a) Noise pollution b) Soil degradation c) Water contamination d) Biodiversity loss

6. Public consultation in which concerns of the local people regarding ____ CO 1- U
 (a) Beneficial impacts (b) Adverse impacts
 (c) Positive impact (d) All of the above
7. What is the mandatory requirement introduced in India's EIA Notification 1997? CO4-U
 (a) Public consultation sessions (b) Public hearings
 (c) Online submissions of EIA reports (d) Real-time impact monitoring
8. Mathematical _____ use mathematical equations to represent the CO1- U
 functional relationships between variables
 (a) models (b) equations (c) variables (d) Tools
9. Which governance institution is mandated to conduct public hearings CO2- U
 during the social impact assessment?
 (a) Gram Sabha or Municipality (b) District Collector
 (c) Ministry of Urban Development (d) Panchayati Raj Ministry
10. What is the primary focus of cultural heritage EIA methods? CO 4-U
 (a) Monitoring air quality impacts
 (b) Assessing and mitigating impacts on cultural heritage
 (c) Developing tourism infrastructure
 (d) Enhancing biodiversity conservation

PART – B (5 x 2= 10 Marks)

11. What are the important components of EIA? CO1- U
12. What are the advantages of Matrix approach? CO2- U
13. List out the different types of monitoring Programs? CO2- U
14. Write about the elements of involuntary settlement? CO4- U
15. List out the positive benefits of Sardar Sarovar Dam Project CO4 - U

PART – C (5 x 16= 80 Marks)

16. (a) Explain the project cycle and how EIA fits into it, using a clear CO1 - U (16)
 diagram or sketch to illustrate your points.
 Or
- (b) Discuss important environmental aspects that must be considered in CO1 - U (16)
 development projects and outline the protective measures typically
 recommended.

17. (a) Discuss the advantages and limitations of using matrices, networks, and checklist methods in environmental impact assessment. Compare their applications with suitable examples. **CO2 - U** (16)
- Or
- (b) Discuss the predictive techniques and parameters to be considered for different environmental components in EIA. **CO2 - U** (16)
18. (a) Discuss the generic structure of EIA Report. **CO2 - U** (16)
- Or
- (b) Explain the general impacts on fauna and flora environment by development activity. **CO2 - U** (16)
19. (a) Explain in detail about the simple valuation method **CO4 - U** (16)
- Or
- (b) Explain about the different techniques of public participation in EIA. **CO4 - U** (16)
20. (a) Write a case study undertaken by multi-storied buildings to protect the environment. **CO4 - U** (16)
- Or
- (b) Explain the environment impacts of water supply project with suitable case studies. **CO4 - U** (16)

