

Reg. No.

Question Paper Code

11863

13 JUN 2023

B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL/MAY 2023

Fifth Semester

Civil Engineering

20CEEL502 – ENVIRONMENTAL AND SOCIAL IMPACT ASSESMENT

(Regulations 2020)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

*Marks,
K-Level, CO*

1. What is the purpose of Environmental Impact Assessment (EIA)? *2,K1,CO1*
2. What are the types of EIA? *2,K1,CO1*
3. Distinguish between Direct impact and Indirect impact. *2,K2,CO2*
4. Define Terms of reference (TOR). *2,K1,CO2*
5. Suggest any four mitigation options for noise pollution. *2,K2,CO4*
6. What are the objectives of Environmental Management Plan? *2,K1,CO4*
7. What is meant by Socio-economic assessment? *2,K1,CO5*
8. What is mean by public consultation? *2,K1,CO5*
9. Mention some of the environmental effects of constructing a new dam. *2,K1,CO6*
10. What are the two components of the LARR Act? *2,K1,CO6*

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11. a) Explain the groups of Environmental impacts resulting from proposed actions as per MoEF guide lines. *13,K2,CO1*
OR
b) Illustrate with a flow diagram the various stages involved in EIA clearance process. *13,K2,CO1*
12. a) Describe the various methodologies commonly used in the prediction of EIA. *13,K2,CO2*
OR
b) Summarize the Baseline monitoring, Prediction and Assessment concepts in EIA. *13,K2,CO2*
13. a) Discuss the mitigation measures for soil and ground water impacts. *13,K2,CO4*

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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- b) Describe in detail the environmental management plan for Air, Water and Land environment in the context of Thermal Power plant project. *13,K2,CO4*
14. a) Discuss in detail the conceptual framework for prediction and assessment of socio-economic impacts with a neat flow chart. *13,K2,CO5*
- OR**
- b) Explain in detail about the cost benefit analysis in EIA. *13,K2,CO5*
15. a) Explain in detail about a case study related to a road construction project. *13,K2,CO6*
- OR**
- b) Considering nuclear power plant as a case study explain the positive and negative impacts and suggest some mitigation measures. *13,K2,CO6*

PART - C (1 × 15 = 15 Marks)

16. a) Describe how the matrix method is used for the impact assessment of a mining project. *15,K2,CO3*
- OR**
- b) Explain in detail on Mathematical models for Impact prediction. *15,K2,CO3*