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**Question Paper Code: 39125**

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2021

Elective

Civil Engineering

01UCE925 - ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to ALL branches)

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. Enumerate some characteristics of an Ecosystem.
2. Differentiate between food chain and food web.
3. Mention any four sources of air pollution.
4. Define biodiversity.
5. What is green house effect?
6. Define recycling.
7. What are the objectives of waste water treatment?
8. Write 3R principle.
9. What are the objectives of water act, 1974?
10. Define environmental impact assessment.

PART - B (5 x 16 = 80 Marks)

11. (a) (i) Explain in detail about the structure and functional components of ecosystem. (16)

Or

(b) Discuss the natural and manmade impacts on water and air. (16)

12. (a) Explain the physical, chemical and biological characteristics of water and air. (16)

Or

(b) Write an essay on the impact of dams on people? What are the benefits and negative impacts on people? (16)

13. (a) Explain the primary and secondary treatment of municipal sewage with flow diagram. (16)

Or

(b) Define air pollution. List the sources of air pollutants and explain the methods to control air pollution. (16)

14. (a) Discuss briefly the different techniques in waste minimization. (16)

Or

(b) Briefly explain the engineering interventions to reduce the stress on air. (16)

15. (a) Write briefly on the community participation in environmental management programmes. (16)

Or

(b) (i) Explain the salient features of the Wildlife Protection Act, 1972. (8)

(ii) Describe the functions of state board and central board according to pollution control. (8)