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Question Paper Code: 39016

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

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. Define sustainable development.
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 renewable resources?
8. What are the objectives of waste water treatment?
9. Define environmental impact assessment.
10. What are the objectives of water act?

PART - B (5 x 16 = 80 Marks)

11. (a) 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 in detail about the environmental quality objectives and goals. (16)

Or

(b) Explain the physical, chemical and biological characteristics of water and air. (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) Explain in detail about Environmental Impact Assessment (EIA). (16)

Or

(b) Explain in detail about the water act 1974 and air act 1981. (16)