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Question Paper Code : 80629

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2021.

Eighth Semester

Civil Engineering

GE 2021 — ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to Sixth Semester – Petroleum Engineering, Fifth Semester – Mechanical Engineering, Aeronautical Engineering, Automobile Engineering, Electronics and Communication Engineering and Production Engineering – Third Semester – Computer Science and Engineering, Civil Engineering and Information Technology and Fourth Semester – Biomedical Engineering)

(Regulations 2008)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define Ecosystem.
2. Write about ecological pyramids.
3. Define the term Noise Pollution.
4. What is a cyclone?
5. Define the term flood.
6. What are the effects of pesticides?
7. What is rain water harvesting?
8. Define sustainable development.
9. Expand HIV.
10. What is value education? Give its significance.

PART B — (5 × 16 = 80 marks)

11. (a) (i) What is an ecosystem? Give an account of the structure and function of forest ecosystem. (8)
(ii) Discuss the causes for extinction of species. (8)

Or

- (b) (i) Explain the flow of energy in an ecosystems. (8)
(ii) Discuss the concept of biodiversity at three hierarchical levels. (8)
12. (a) Explain the causes, effects and control measures of water pollution.

Or

- (b) (i) Explain about any one nuclear holocaust. (8)
(ii) Give in detail the various strategies to control the municipal solid waste generation. (8)
13. (a) (i) What is Deforestation? Write the effects of deforestation. (8)
(ii) Write briefly the Environmental issues caused by mineral resources. (8)

Or

- (b) Explain the role of alternate energy sources in pollution control with case studies.
14. (a) (i) What are the major urban problems related to energy? (8)
(ii) Briefly discuss the salient features of the Environment (Protection) Act, 1986. (8)

Or

- (b) (i) What is a watershed? Critically discuss the objectives and practices of water shed management. (8)
(ii) Write short notes on Nuclear accidents and holocaust. (8)
15. (a) Describe the role of information technology in environment and human health.

Or

- (b) Write short notes on : (4 × 4 = 16)
(i) Effect of Modern agriculture
(ii) HIV/AIDS
(iii) Noise Pollution
(iv) Role of an individual in prevention of pollution.