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Question Paper Code : 40671

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

Second/Third/Fourth/Fifth/Sixth/Seventh Semester

Civil Engineering

GE 8291 — ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to : Aeronautical Engineering/Aerospace Engineering/
Agriculture Engineering/ Automobile Engineering/Biomedical Engineering/
Computer Science and Engineering/Computer and Communication Engineering/
Electrical and Electronics Engineering/Electronics and Communication Engineering/
Electronics and Instrumentation Engineering/Electronics and Telecommunication
Engineering/Environmental Engineering/Geoinformatics Engineering/ Industrial
Engineering/Industrial Engineering and Management/ Instrumentation and Control
Engineering/Manufacturing Engineering/Marine Engineering/
Material Science and Engineering/Mechanical Engineering/
Mechanical Engineering (Sandwich)/Mechanical and Automation Engineering/
Mechatronics Engineering/Medical Electronics/Petrochemical Engineering/
Production Engineering/ Robotics and Automation/Artificial Intelligence and Data
Science/Bio Technology/Chemical Engineering/Chemical and Electrochemical
Engineering/Computer Science and Business System/Fashion Technology/ Food
Technology/Handloom and Textile Technology/Information Technology/
Petrochemical Technology/ Petroleum Engineering/ Pharmaceutical Technology/
Plastic Technology/Polymer Technology/Textile Chemistry/Textile Technology)

(Regulations 2017)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Mention the types of Ecological Pyramid.
2. Mention any two uses of biodiversity.
3. Define BOD.
4. Mention the Sources of municipal solid waste.
5. Compare Renewable and Non renewable Energy.

6. List the Merits and Demerits of a Dam.
7. Define Sustainable Development.
8. Mention the different Green House gases.
9. List the effect of population explosion.
10. Mention any two child welfare programme in India.

PART B — (5 × 13 = 65 marks)

11. (a) Describe the Characteristic Features, Structure and Function of a Forest Ecosystem.

Or

- (b) Discuss India as a mega biodiversity Nation and strategies for conservation of Biodiversity.

12. (a) Explain the source, classification and control of Air pollution.

Or

- (b) Explain the role of an individual in prevention of pollution.

13. (a) Define Deforestation. Discuss the various causes and effects of deforestation. Mention the conservation methods to control deforestation.

Or

- (b) Discuss the role of individual in conservation of natural resources .

14. (a) Describe the Salient features of wild life protection act and forest act.

Or

- (b) Discuss the functions of state and central pollution control board in enforcement of environmental legislation.

15. (a) Discuss the origin of HIV, mode of transmission, symptoms and control.

Or

- (b) Explain the role of Information technology in environment and human health.

PART C — (1 × 15 = 15 marks)

16. (a) Discuss with a case study on any one water conflicts in regional or national level and also provide a remedial solution.

Or

- (b) Describe any one recent air pollution problem and suggest a suitable remedial measure.
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