

Question Paper Code: 70739

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2023.

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

Civil Engineering

GE 8291 - ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to All branches)

(Regulations 2017)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. Define environment. What is the scope of environmental studies?
- 2. What is biodiversity? List the levels of biodiversity.
- 3. State the significance of solid waste management.
- 4. Distinguish between non-degradable pollutants and biodegradable pollutants.
- 5. What is deforestation? List the main causes responsible for deforestation.
- 6. List the problems associated with the use of pesticides.
- 7. What are the effects of climate change in the environment?
- 8. What is acid rain?
- 9. List the organizations working for women and child welfare.
- 10. Define natality and mortality.

PART B — $(5 \times 13 = 65 \text{ marks})$

11. (a) Explain the functions of an ecosystem.

Or

(b) Describe the energy flow in ecosystem.

12. (a) Discuss the causes, effects and control measures of air pollution.

Or

- (b) Explain the effects of earthquakes and their hazards.
- 13. (a) Discuss the importance of forest resources.

Or

- (b) Describe the role of an individual in conservation of natural resources.
- 14. (a) Describe resettlement and rehabilitation of people and list the objectives of rehabilitation.

Or

- (b) Explain environmental protection act, 1986. What are the general powers of central government to take measures for protecting and improving the environment?
- 15. (a) Explain the factors controlling population growth.

Or

(b) Discuss the methods of transmission of AIDS virus.

PART C —
$$(1 \times 15 = 15 \text{ marks})$$

16. (a) "The need for public awareness about environment is of vital importance". Discuss.

Or

(b) Describe the role of information technology in human health.