Reg. No.:	a_ "											
0												-

Question Paper Code: 80177

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY 2019.

Second/Third/Fourth Semester

Civil Engineering

GE 8291 — ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to Agriculture Engineering /Materials Science and Engineering/
Medical Electronics/Chemical Engineering/Food Technology/Information
Technology/Aeronautical Engineering/Automobile 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/
Industrial Engineering/Industrial Engineering and Management/ Instrumentation
and Control Engineering/Manufacturing Engineering/Marine Engineering/
Mechanical Engineering/Mechanical Engineering (Sandwich)/Mechanical and
Automation Engineering/Mechatronics Engineering/Production Engineering/
Robotics and Automation Engineering/Pharmaceutical Technology/
Chemical and Electrochemical Engineering/Pharmaceutical Technology/Plastic
Technology/Polymer Technology)

(Regulation 2017)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

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

- 1. What is an ecosystem?
- 2. What is biodiversity?
- 3. What is air pollution?
- 4. What is thermal pollution?
- 5. Outline the fertiliser pesticide problems.
- 6. Distinguish between renewable and non renewable energy sources.
- 7. What is ozone layer depletion?

- 8. What is holocaust?
- 9. What is value education?
- 10. Outline the effects of population explosion.

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

11. (a) Give an account on the structure and function of the grassland ecosystem.

Or

- (b) Explain the causes and effects of soil pollution.
- 12. (a) What are the causes and effects of water pollution?

Or

- (b) Give an account on the environmental effects of extracting and using mineral resources.
- 13. (a) Enumerate on the use and over utilization of surface and ground water resources.

Or

- (b) Write a detailed account on water conservation, rain water harvesting and water shed management.
- 14. (a) Explain the present studies on climate change and global warming.

Oı

- (b) Enumerate on the role of information technology in environment and human health.
- 15. (a) Give an account on the family welfare, women and child welfare programmes.

 Or

(b) Explain land degradation, soil erosion and desertification.

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

16. (a) Give an account on the causes and effects of marine pollution. Add a note on the control measures.

Or

(b) Explain the characteristic features, types, structure and function of the aquatic ecosystems.