

Question Paper Code : 51498

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2014.

Fifth Semester

Mechanical Engineering

GE 2021/GE 32/GEU 024/080100016/080380015 — ENVIRONMENTAL SCIENCE
AND ENGINEERING

(Common to Sixth Semester — Petroleum Engineering, Fifth Semester — Aeronautical Engineering, Automobile Engineering, Electronics and Communication Engineering, Production Engineering, Mechanical and Automation Engineering and Petrochemical Engineering, Fourth Semester — Biomedical Engineering and Geoinformatics Engineering, Third Semester — Civil Engineering, Computer Science and Engineering, Information Technology, Textile Chemistry, Pharmaceutical Technology and Petrochemical Engineering)

(Also Common to HS 1201 — Environmental Science and Engineering for Fifth Semester — Electronics and Communication Engineering, Fourth Semester — Biomedical Engineering and Third Semester — Computer Science and Engineering and Information Technology also common to 10177 GE 001 for Fifth Semester — Aeronautical Engineering, Automobile Engineering, Electronics and Communication Engineering, Mechanical Engineering and Textile Technology, Fourth Semester — Biomedical Engineering, Third Semester — Civil Engineering, Computer Science and Engineering and Information Technology)

(Regulation 2008/2010)

(Common to PTGE 2021 — Environmental Science and Engineering for B.E. : (Part — Time) — Second Semester Electronics and Instrumentation Engineering, Electrical and Electronics Engineering, Textile Technology and Third Semester — Civil Engineering — Regulation 2009)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define Ecology.
2. Write the classification of Biodiversity.
3. List out the types of land pollution.
4. What are the major causes of Earth Quake?

5. Write the problems due to construction.
6. Define non-renewable resources.
7. What are the major effect of Global warming?
8. List out the objective of EIA.
9. Define value education.
10. Write the reason for child labor.

PART B — (5 × 16 = 80 marks)

11. (a) Write short notes on following :
 - (i) Ecological Pyramids (8)
 - (ii) Food web and Food chain. (8)

Or
- (b) Explain the role of biodiversity global national and local levels. (16)
12. (a) What are the effects of improper municipal solid wastes management? State the measure recommended for proper management of the solid wastes. (8 + 8)

Or

- (b) What is earth quake? Enumerate its effects. What measures should be taken to mitigate their disasters? (2 + 4 + 10)
13. (a) Explain briefly on the Hydrologic cycle with it's component with suitable sketch. (16)

Or

- (b) Write short notes on :
 - (i) Environmental impacts of modern agriculture. (8)
 - (ii) Different types of energy sources. (8)
14. (a) What are the salient features of the following acts?
 - (i) The environment (Protection) Act 1986.
 - (ii) Water (Prevention and control of Pollution) Act 1974.

Or
- (b) Write short notes on :
 - (i) Ozone depletion
 - (ii) Waste land reclamation.
15. (a) Discuss the various schemes launches for women and child welfare in India. (16)

Or

- (b) Write short notes on :
 - (i) Various method of Family planning (8)
 - (ii) What is AIDS? Explain the norms to prevent it? (8)