

Reg. No. : \_\_\_\_\_

**Question Paper Code : 31469**

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Third Semester

Electrical and Electronics Engineering

GE 2211 GE 33/080300008/080130007/10177 GE 001/10177 GE 001A —  
ENVIRONMENTAL SCIENCE AND ENGINEERING(Common to Chemical Engineering, Textile Technology, Instrumentation and  
Control Engineering, Biotechnology, Plastic Technology, Electronics and  
Instrumentation Engineering, Polymer Technology and Textile Technology (Fashion  
Technology))(Also common to 10177 GE 001 for Biotechnology, Electrical and Electronics  
Engineering, Electronics and Instrumentation Engineering, Instrumentation and  
Control Engineering and 10177 GE 001A for Chemical Engineering)

(Regulation 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

**PART A — (10 × 2 = 20 marks)**

1. How does land degradation take place? Write its adverse effects.
2. Write the economic importance of forests.
3. What is meant by ecological succession?
4. Differentiate food chain and food web with suitable examples.
5. Define biological oxygen demand and chemical oxygen demand. Write its importance in environmental studies.
6. What is hydrological cycle? Give the pictorial representation of hydrological cycle.
7. What is meant by sustainable development?
8. How does acid rain form? Write its environmental impacts.
9. What is meant by population explosion? Write its consequences?
10. What are the objectives and elements of value education?

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 ETA.
9. Define valve education.
10. Write the reason for child labour.

**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 its 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 launched 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)