

L1B
14/11/16 FN

Reg. No. :

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Question Paper Code : 60647

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

Third Semester

Electrical and Electronics Engineering

GE 2211/GE 33/080300008/080130067/10177 GE 001/10177 GE 001 A —
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 001 A for Chemical Engineering)

(Regulation 2008/2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. How does overgrazing contribute to environmental degradation?
2. In what tectonic environments do mineral deposits form?
3. Define genetic diversity and species diversity.
4. Differentiate food chain and food web.
5. How does Tsunami occur?
6. Name the sources of soil pollution.
7. What is meant by sustainable development?
8. How does acid rain form? Write its environmental impacts.
9. What is doubling time? How it is calculated?
10. Write the social values of environmental education.

PART B — (5 × 16 = 80 marks)

11. (a) Discuss with the help of a case study, how big dams have affected forests and the tribal population.

Or

- (b) (i) What actions are required for the conservation and sustainable use of energy resources? (8)
(ii) Explain the possible contribution of individuals towards natural resources conservation. (8)
12. (a) (i) Explain India as a biodiversity nation. (8)
(ii) How to conserve biodiversity? (8)

Or

- (b) (i) Explain the structure and functions of ecosystem. (8)
(ii) Explain the energy flow in an ecosystem. (8)
13. (a) (i) Discuss the sources, adverse effects and control methods of water pollution.
(ii) Elaborately discuss the steps involved in solid waste management.

Or

- (b) (i) What are the sources for thermal pollution? Discuss briefly its effects and control methods.
(ii) How does earthquake take place? Explain the steps to be taken to mitigate the earthquake disaster.
14. (a) Discuss the following :
- (i) Nuclear Holocaust (5)
(ii) Important features of forest conservation act. (5)
(iii) Methods of waste land reclamation. (6)

Or

- (b) Explain the following :
- (i) Solutions of urban energy problem (5)
(ii) Approaches of sustainable development. (5)
(iii) Consumerism and waste products. (6)

15. (a) (i) Explain the family welfare programmes practiced by Government of India. (8)
- (ii) Explain the role of information technology in environment and human health. (8)

Or

- (b) (i) Discuss the highlights of human rights and value based education. (8)
- (ii) Give a detailed account on the women and child welfare. (8)
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