

Question Paper Code: 51647

### B.E/B.Tech. DEGREE EXAMINATION, MAY/JUNE 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)

(Regulations 2008/2010)

Time: Three Hours

Maximum: 100 Marks

# Answer ALL questions.

 $PART - A (10 \times 2 = 20 Marks)$ 

- 1. What are the factors to be considered in land degradation?
- 2. Define desertification. What are the causes for desertification?
- 3. Define genetic diversity and species diversity.
- 4. Differentiate food chain and food web.
- 5. What are the recommended noise levels to hospital zone and residential?
- 6. Why soil pollution control is necessary?
- 7. State two nuclear accidents and their causes happened.
- 8. What are the importances of wetland in cities? Why to be preserved?
- Define HIV and causes of AIDS.
- 10. Why population exploitation is menace?

06-06

# $PART - B (5 \times 16 = 80 Marks)$

| 11. | (a) | (i)   | What are renewable and non-renewable resources?                                | (8)        |
|-----|-----|-------|--|------------|
|     |     | (ii)  | India is resourced with solar energy. How this energy is harnessed fo Indians? | r<br>(8)   |
|     |     |       | OR   |            |
|     | (b) | Give  | a case study over utilization of land and deforestation.                       | (16)       |
| 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)   | What are the sources of solid waste for municipality residences.               | (5)        |
|     |     | (ii)  | What are its ill effects?  | (5)        |
|     |     | (iii) | What are the management techniques?  | <b>(6)</b> |
|     |     |       | $\overline{\mathbf{OR}}$   |            |
|     | (b) | (i)   | How man is responsible for disasters like flood and landslides?                | (8)        |
|     |     | (ii)  | Explain consequences and causes of these by taking a case study.               | (8)        |
| 14. | (a) | (i)   | What are the causes for ozone depletion?                                       | (6)        |
|     |     | (ii)  | How ozone layer is useful to us?   | (4)        |
|     |     | (iii) | How to preserve the ozone layer?   | <b>(6)</b> |
|     |     |       | OR   |            |
| _   | (b) | (i)   | What are the conservation technologies available for water?                    | <b>(8)</b> |
| •   |     | (ii)  | How to conserve water for an institution like college?                         | (8)        |
| 15. | (a) | (i)   | Draw a typical population pyramid of developing country and discuss.           | (8)        |
|     |     | (ii)  | Explain the environmental problem by population, explotion.                    | (8)        |
|     |     |       | OR   |            |
|     | (b) | Giv   | e a case study to explain the role of IT in environmental and human health.    | (16)       |
|     |     |       |  |            |