

Part – B (5 X 16 = 80 Mark)

B.E / B.Tech DEGREE EXAMINATIONS, April / May - 2011

IV & VI SEMESTER

GE 9261 – Environmental Science and Engineering

(Regulation -2008)

Time : 3 hours

Max.Mark : 100

Answer ALL Questions

Part – A (10X2 = 20 Mark)

1. What are Greenhouse gases and Green house effect ?
2. What is rainwater harvesting?Mention its importance
3. What is Biomagnification?
4. What is Tsunami? How it occurs?
5. What do you mean by consumptive use value of bio diversity?
6. What do you mean by extinct, endangered, vulnerable and rare species?
7. Write the different types of ecological pyramids.
8. Write a note on the following
1.Producer 2.Consumer 3. Decomposer
9. Define HIV and AIDS.
10. Expand the following abbreviations
1.ICUN. 2.WWF

11. a(i) Discuss the age-structure pyramid types for predicting population growth trend of a nation with examples. **10 marks**
a(ii) Write the role of NMIS, ENVIS and GIS in dissemination of Environmental information and management. **6 marks**

12. a(i) Briefly discuss insitu and ex-situ conservation of biodiversity. **10 marks**
a(ii) What are hotspots of biodiversity? Mention the criteria of recognising hotspots. List out few global hotspots of biodiversity. **6 marks**

OR

- b (i) Discuss the models of energy flow in an ecosystem. **8 marks**
b (ii) Explain characteristic features and functions of 'Aquatic ecosystem'. Draw its ecological pyramid. **8 marks**
13. a (i) Briefly discuss the sources, effects and control measures of urban and industrial solid wastes. **8 marks**
a (ii) Discuss the mitigation and disaster management of a) cyclone b)floods **8 marks**

OR

- b (i) Discuss sources, causes, effects and control measures of marine pollution **8 marks**
b (ii) Give an account of causes, effects and control measure of nuclear hazards. **8 marks**
14. a (i) Write note on the followings **8 marks**
a) Shifting cultivation b) Overgrazing c) Water logging and salinity
d) Environmental refuges.
a (ii) Discuss the role of an individual in the conservation of different natural resources. **8 marks**

OR

- b(i) Explain the causes, effects and control of land degradation and soil erosion.. **8 marks**

b(ii) Write notes on the following **8 marks**
a) Biomass energy
b) Solar energy and wind energy

15. a(i) Discuss the salient features of **8 marks**
a) Wildlife (protection) Act and
b) Forest conservation Act

a(ii) What do you mean by sustainable development? Write the major measures to attain sustainability. **8 marks**

OR

b(i) Explain how population, consumerism and waste products are interrelated? **8 marks**

b(ii) Describe the different methods to propagate environmental awareness in the society. **8 marks**