



B.E / B.Tech DEGREE END SEMSTER EXAMINATIONS, APRIL/MAY 2012

Common to Civil, Geo, Mech, Printing, Manufacturing and Industrial branches

THIRD SEMESTER –REGULATIONS 2004

GE 183 ENVIRONMENTAL SCIENCE AND ENGINEERING

19

Time 3 hrs

Max marks 100

Answer all questions

PART A (10x2=20)

1. What is NIMBY syndrome?
2. Define Biomagnification.
3. What is meant by eutrophication of lakes?
4. What is hydrologic cycle?
5. Define the term Hotspot in Biodiversity.
6. Define 'Biochemical Oxygen Demand' and Chemical Oxygen Demand'.
7. What are the methods used to control particulate matters in air pollution?
8. Define Life Cycle Assessment.
9. Define Population Explosion.
10. What is meant by carrying capacity of the earth?

PART B (5x16=80)

11. Discuss the causes, effects and control measures of Global Warming.
- 12(a) (i) Compare and contrast nuclear power with solar power from environmental point of view. (8)
(ii) List the adverse environmental impacts of modern agricultural practices. (8)
(OR)
- 12(b) (i) Explain the flow of energy through various components of a forest ecosystem. (8)
(ii) Discuss (a) habitat loss and (b) Human- Wildlife conflicts. (8)
- 13 (a) Discuss the Meteorological factors that affect the dispersion and dilution of air pollutants in atmosphere.
(OR)
- 13 (b) Draw the layout of conventional municipal water treatment plant and explain the working principle and function of each treatment unit.
- 14 (a) (i) Explain the reasons for displacements of people' and their impact. (8)
(ii) Discuss the issues of resettlement and rehabilitation of displaced groups. (8)
(OR)
- 14 (b) Define Sustainable development. What are the main targets agreed at the World Summit on Sustainable Development? List the actions required for sustainable development.
- 15 (a) (i) List the important components to be considered in water shed management. (8)
(ii) Discuss 'Interlinking of Rivers' (8)
(OR)
- 15 (b) Discuss the features of the following acts.
(i) Water (Prevention and control of pollution) Act, 1974 (5)
(ii) Air (Prevention and control of pollution) Act, 1981 (5)
(iii) The Environment (Protection) Act, 1986 (6)