



B.E/B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, APRIL 2011

MINING ENGINEERING BRANCH

SIXTH SEMESTER – (REGULATIONS – 2008)

MI – 9355 MINE ENVIRONMENTAL MANAGEMENT

Time: 3 hr

Max Mark: 100

Answer ALL Questions

PART A (10 x 2 = 20 Mark)

1. What is energy movement in a food chain?
2. Explain the concept of nutrient cycling in an ecosystem.
3. Compute the ThOD of 345.4 mg/L of the organic compound C_4H_{10}
4. What are the various components of untreated domestic waste water?
5. What are the primary objectives of a reclamation plan?
6. What are the primary procedures involved in the closure of a surface mine?
7. What is meant by environmental accounting?
8. What is an environmental management plan?
9. What are the constitutional provisions that help in the environmental protection?
10. What are the important features of Forest Conservation Act?

PART B (5 x 16 =80 Mark)

11. What is acid rain? Explain the occurrence of ozone depletion and the scientific basis for global warming.

- 12 a Explain the concepts of pyramids of energy, biomass and numbers.

OR

- 12 b. i) With neat diagrams, explain carbon cycle and nitrogen cycle (12)

- ii) Explain the concept of Nitrogen fixation. (4)

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- 13 a. i) Explain the effects on health due to the various types of air pollution (12)
ii) Explain 'Leach Dumps' and 'Stockpiles' (4)

OR

- 13 b. i) Explain the time sequence of reclamation activities for surface coal mining (10)
ii) What are the various impacts of coal mining on the environment? (6)

- 14 a. Explain the formation of Environmental Management System standards. What are the various modules of Environmental Management System ISO 14001?

OR

- 14 b. How is Environmental Impact assessment done in surface mines? What are the various features of an Environment Impact Assessment Report?

- 15 a. Explain the salient features of Air Act and Water Act

OR

- 15 b Explain the salient features of Forest Act and Environment (Protection) Act.