



- Notes :
1. All questions carry equal marks.
 2. Answer **any five** questions.
 3. Illustrate your answers wherever necessary with the help of neat sketches.

1. a) Write in detail about parameters like Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and suspended solids used for analyzing the waste water. Give their significance also. **10**
- b) Explain in detail about the test used to perform to measure Biological Oxygen Demand of Waste Water. **6**
2. a) What are the different methods of composting. Explain them in detail along with their advantages and disadvantages. **10**
- b) What is Bioremediation ? In what way it is good for environmental clean up. **6**
3. a) Explain with proper design procedure how waste water can be treated with aerated lagoon. State its advantages and disadvantages. **8**
- b) Explain in detail suitable treatment method used for the treatment of waste water from tannery industry. **8**
4. a) Explain biotechnological methods used for minimizing concentration of volatile organic carbon from polluted air. **10**
- b) Explain the application of biotechnology for air pollution control and monitoring. **6**
5. a) Explain the classification scheme used for hazardous waste. **10**
- b) Explain in detail LD50 and LC50 with their significance. **6**
6. a) State the important provisions given in Environment Protection Act. **10**
- b) Explain the role of occupational safety and Health Administration (OSHA) in dissemination of Environmental Information and its management. **6**
7. Write short notes on: **16**
 - i) Reverse Osmosis
 - ii) Waste Minimization
 - iii) Bioleaching
 - iv) Bioabsorption of heavy metal
8. Explain in detail about sources, characteristics and treatment of waste produced from Brewery Industry. **16**
