

Please check whether you have got the right question paper.

- N.B:**
1. All questions are compulsory
  2. All questions carry equal marks.
  3. Draw neat and labelled diagrams wherever necessary

**Q.1** Answer any two questions from the following:

- a. Explain in detail aerobic treatment for wastewater treatment. **06**
- b. Discuss in detail the role of biofilm in wastewater treatment **06**
- c. Write a note on the measurement of treatment efficiencies for waste water treatment. **06**

**Q.2** Answer any two questions from the following:

- a. What are centrifugal collectors? Explain their role in air pollution control. **06**
- b. Diagrammatically explain the Gravity Settling Chamber for air pollution control. Mention its advantages and disadvantages. **06**
- c. Describe the methods to control air pollution with special reference to Catalytic Converter **06**

**Q.3** Answer any two questions from the following:

- a) What is a landfill ? Explain various components of a landfill. **06**
- b) Describe the classification, effect and management of e-waste. **06**
- c) Define organic pollutant? Write a note on management of organic pollutants **06**

**Q.4** Answer any two questions from the following

- a) Define Biodegradation. Explain various methods to determine the efficiency of biodegradability **06**
- b) Explain phytoremediation with special reference to root zone treatment **06**
- c) Write in detail the mechanism of biotransformation with suitable example. **06**

**Q.5** Write note on any four:

- a. Tertiary wastewater treatment **03**
- b. 3Rs **03**
- c. Ocean dumping **03**
- d. Noise management **03**
- e. Fluidized bed combustion **03**
- f. Membrane Bioreactor **03**

