

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**

**BE - SEMESTER-V • EXAMINATION – WINTER • 2014**

**Subject Code: 153703**

**Date: 01-12-2014**

**Subject Name: Solid Waste Management**

**Time: 10:30 am to 01:00 pm**

**Total Marks: 70**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What is waste minimisation? Give the classification of Waste Minimisation (WM) Techniques and discuss them briefly. **07**
- (b) Write a short note on Biomedical waste and its management. **07**
- Q.2** (a) Define: (a) Landfill (b) Garbage (c) Incineration **07**
- (b) Explain Impact of Solid Waste on Environment. **07**
- OR**
- (b) Define e-waste and explain health hazard due to e-waste **07**
- Q.3** (a) Explain the planning process of solid waste management. Give the various steps of basic planning model for solid waste management. **07**
- (b) Explain the importance of MSW Rules in Solid waste management **07**
- OR**
- Q.3** (a) Explain Hazardous waste incineration. What are the various waste incineration devices? Explain one in detail. **07**
- (b) Describe waste management hierarchy. **07**
- Q.4** (a) What are the benefits of recovery of energy from wastes? Explain the basic techniques of energy recovery. **07**
- (b) Explain the physical characteristics of solid wastes. **07**
- OR**
- Q.4** (a) Define Incineration and Explain the basic types of Incineration plants. **07**
- (b) Give the classification of wastes and explain them with examples. **07**
- Q.5** (a) What are the key characteristics of a Sanitary landfill? **07**
- (b) Explain landfill monitoring and control of leachate. **07**
- OR**
- Q.5** (a) Write a short note on vermicomposting. **07**
- (b) Explain the characteristics of Hazardous solid wastes. **07**

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