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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