

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER- VI EXAMINATION – SUMMER 2026****Subject Code:3160515****Date:26-05-2026****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.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Enlist the functional elements of solid waste management.	03
	(b) Classify solid waste	04
	(c) Describe in brief municipal solid waste in Indian conditions	07
Q.2	(a) List the composition of municipal solid waste.	03
	(b) Differentiate Reuse and Recycle. Give Examples of each.	04
	(c) Explain E-waste-generation and its management.	07
	OR	
	(c) Explain Biomedical waste-generation and its management.	07
Q.3	(a) Explain landfill gas management	03
	(b) Explain Extended Producer Responsibility in detail.	04
	(c) Enlist the criteria for selection of sanitary landfill sites	07
	OR	
Q.3	(a) Explain Incineration.	03
	(b) Explain post closure care for landfill.	04
	(c) Give an overview of municipal solid waste management Plan in Urban area.	07
Q.4	(a) Enlist objectives of transfer stations.	03
	(b) Explain Segregation.	04
	(c) Explain Haul container system with sketch	07
	OR	
Q.4	(a) Explain Refuse Derived Fuels.	03
	(b) Describe various factors affecting the collection system of solid waste.	04
	(c) Explain Leachate and its management with treatment methods.	07
Q.5	(a) Explain waste minimization techniques at source	03
	(b) Discuss plastic waste management.	04
	(c) Explain the risk associated with solid waste management system.	07
	OR	
Q.5	(a) Enlist the objectives of site characterization.	03
	(b) Explain resource recovery from solid waste.	04
	(c) List the important Policy and Initiatives by Government of India on Solid Waste Management.	07
