

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) EXAMINATION – SUMMER 2023****Subject Code:3160515****Date:10-07-2023****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) Classify solid waste.	03
	(b) List factors affecting generation of solid wastes.	04
	(c) Describe Health impacts of Solid waste Management.	07
Q.2	(a) Define(i)Rubbish(ii)Garbage(iii)Ash	03
	(b) Differentiate Reuse and Recycle. Give Examples of each.	04
	(c) Explain Biomedical Waste management.	07
	OR	
	(c) Explain sources of E-waste and ways to handle it.	07
Q.3	(a) List composition of Municipal solid waste.	03
	(b) Explain post closure care for landfill.	04
	(c) Describe with sketch the well system for recovery of gases in landfills.	07
	OR	
Q.3	(a) List steps in sequence for processing of solid waste.	03
	(b) Explain the factors considered for landfill site selection.	04
	(c) Describe plastic waste generation and its management.	07
Q.4	(a) Enlist properties of Hazardous waste.	03
	(b) Describe factors affecting the collection system of solid waste.	04
	(c) Explain Haul container system with sketch.	07
	OR	
Q.4	(a) Enlist objectives of transfer stations.	03
	(b) Describe incineration and pyrolysis.	04
	(c) Explain the transfer and transport of Hazardous waste.	07
Q.5	(a) Enlist methods of energy generation from solid waste.	03
	(b) Explain Area and Trench methods of land filling.	04
	(c) Discuss Laws for solid waste management	07
	OR	
Q.5	(a) Enlist guidelines on Extended Producer Responsibility	03
	(b) Explain volume reduction at source for disposal of solid waste.	04
	(c) Discuss the risk assessment with solid waste management.	07