

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) EXAMINATION – WINTER 2023

Subject Code:3160515

Date:07-12-2023

Subject Name: Solid waste Management

Time:02:30 PM TO 05:00 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 criteria for landfills-site selection.	03
	(b) Write a note on incineration.	04
	(c) Describe in brief municipal solid waste in Indian conditions.	07
Q.2	(a) Enlist the types of Landfills.	03
	(b) State various leachate treatment methods.	04
	(c) Discuss plastic waste disposal and its necessary equipment.	07
	OR	
	(c) Discuss the need for solid waste management and its Functional elements.	07
Q.3	(a) List different types of solid waste.	03
	(b) Explain hierarchy of Solid waste management.	04
	(c) Explain in brief about Biomedical waste-generation and its management.	07
	OR	
Q.3	(a) List different sources of Solid Waste.	03
	(b) Discuss in brief sampling and characteristics of waste.	04
	(c) Explain in brief about the E-waste-generation and its management.	07
Q.4	(a) Explain Segregation.	03
	(b) Write note on solid waste volume reduction at source.	04
	(c) Discuss legal aspects of solid waste disposal.	07
	OR	
Q.4	(a) Enlist EIA methods.	03
	(b) Discuss the waste minimization techniques at source.	04
	(c) Discuss the risk assessment associated with solid waste management system.	07
Q.5	(a) List the factors to be considered for efficient collection system.	03
	(b) Summarize the factors affecting the collection system of solid waste.	04
	(c) Discuss various collection methods of solid waste management system.	07
	OR	
Q.5	(a) List 3 basic types of transfer operations.	03
	(b) Enlist the factors to be considered in determining the size of collection and transportation vehicles.	04
	(c) Discuss the transportation systems in solid waste management system.	07
