Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

		GOJAKAT TECHNOLOGICA	
		BE - SEMESTER-VI (NEW) EXAMINAT	ION – SUMMER 2022
Sub	ject	Code:3160515	Date:06/06/2022
Sub	ject	Name:Solid waste Management	
Tim	e:10	0:30 AM TO 01:00 PM	Total Marks: 70
Instr	uctio	ns:	
	1.	Attempt all questions.	
	2.	Make suitable assumptions wherever necessary	•
	3.	Figures to the right indicate full marks.	
	4.	Simple and non-programmable scientific calcul	ators are allowed.
01 /	(-)	List different sources of Colid Woods	
<b>O.1</b> (	(a)	List different sources of Solid Waste.	

Q.1	(a)	List different sources of Solid Waste.	03
	<b>(b)</b>	Discuss in brief sampling and characteristics of waste.	04
	(c)	Discuss the need for solid waste management and its Functional elements.	07
Q.2	(a)	List different types of solid waste.	03
	<b>(b)</b>	Explain hierarchy of Solid waste management.	04
	(c)	Explain in brief about the E-waste-generation and its management. <b>OR</b>	07
	(c)	Explain in brief about Biomedical waste-generation and its management.	07
Q.3	(a)	Enlist the criteria for landfills-site selection.	03
	<b>(b)</b>	Write a note on incineration.	04
	<b>(c)</b>	Describe in brief municipal solid waste in Indian conditions.	<b>07</b>
0.2	(a)	OR Enlist the types of Lendfills	03
Q.3	(a) (b)	Enlist the types of Landfills. State various leachate treatment methods.	03
	(b) (c)	Discuss plastic waste disposal and its necessary equipment.	07
	(C)	Discuss plastic waste disposal and its necessary equipment.	U7
Q.4	(a)	List the factors to be considered for efficient collection system	03
	<b>(b)</b>	Summarize the factors affecting the collection system of solid waste	04
	<b>(c)</b>	Discuss various collection methods of solid waste management system.  OR	07
Q.4	(a)	List 3 basic types of transfer operations	03
	<b>(b)</b>	Enlist the factors to be considered in determining the size of collection and transportation vehicles.	04
	<b>(c)</b>	Discuss the transportation systems in solid waste management system.	<b>07</b>
Q.5	(a)	Explain EPR in brief	03
	<b>(b)</b>	Discuss the waste minimization techniques at source.	04
	(c)	Discuss the risk assessment associated with solid waste management system	<b>07</b>
		OR	
Q.5	(a)	Enlist EIA methods.	03
	<b>(b)</b>	Explain in brief landfill closure and remediation	04
	<b>(c)</b>	Discuss Laws for solid waste management.	<b>07</b>

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