

Enrolment Number: \_\_\_\_\_

PARUL UNIVERSITY  
FACULTY OF ENGINEERING & TECHNOLOGY  
B.TECH MIDSEM EXAMINATION  
7<sup>th</sup> SEMESTER  
ACY -2022-23 (ODD SEM)

Subject Name (Code): Waste to Energy Conversion (203109439)  
Date: 08-08-2022 Time: 10:30 A.M. to 12:00 P.M.

Branch: Mechanical  
Total Marks: 40

Sr. No.		Marks
Q.1	(A) One-line Questions	05
	1. Write Common energy sources in Indian Villages.	
	2. Why it is difficult to recycle plastic?	
	3. Why burning of solid waste is not recommended?	
	4. Define Waste.	
	5. Define Biomass.	
	(B) Compulsory Question	05
	1. Municipal Solid waste is _____ waste. (a) Rural (b) Urban (c) Both	
	2. Which of the following is the oldest and the most common method used to dump solid wastes? (a) River (b) Ocean (c) Landfill (d) None of above	
	3. Batch type biogas plant is charged at _____ days interval.	
	4. Gasification process is a process of conversion of _____ fuel into _____ fuel.	
	5. Gasifiers required at least half an hour or more to start the process. True or False.	
Q.2	Attempt any four (Short Questions)	12
	(1) Describe 3R principle of waste management,	
	(2) Differentiate between Renewable and Non-Renewable Energy Sources.	
	(3) Classify Hazardous Waste.	
	(4) Explain factors affecting biogas generation.	
	(5) Compare Thermal and Non-Thermal technologies of Waste Management	
Q.3	Attempt any two	08
	(1) Explain Management Hierarchy	
	(2) Sketch Floating drum type biogas plant.	
	(3) Explain Pyrolysis process.	
Q.4	(A) Explain Biogas Generation in detail.	05
	(B) Classify Waste. Explain Biomedical Waste.	05
	OR	
	(B) Explain Characterization of Waste for Energy Utilization.	05