AY 22

Reg. No



Time: 3 hrs

GIET UNIVERSITY, GUNUPUR - 765022

Ph.D. (First Semester) Examinations, January - 2024

**PPECHE1020 - Industrial Solid Waste Management** 

(Chemical)

## The figures in the right hand margin indicate marks.

## **Answer ANY FIVE Questions**

## (14 x 5 = 70 Marks)

		Marks					
1.a.	Explain the public health effects in Municipality Solid Waste Management.						
b.	Explain how modifying a product can help minimize the wastes with few examples.						
2.a.	. Interpret the solid waste characteristics.						
b.	Examine the various physico-chemical biological characteristics of solid waste.	10					
3.a.	. Waste is a misplaced resource" Justify this statement.						
b.	What is integrated management, public awareness and explain the role of NGO's.	10					
4.a.	Explain in detail about the Onsite processing / Segregation.	4					
b.	Discuss in detail about off-site processing techniques.	10					
5.a.	What is In-Vessel composting?	4					
b.	What are the properties of compost?	10					
6.a.	Enumerate about the functional elements of solid waste management.	4					
b.	Examine the different factors that influence the decision-making process in the implementation of a Solid Waste System.	10					
7.a.	Discuss the main Steps in Anaerobic Treatment of MSW.	4					
b.	Define secure landfills.	10					
8.a.	How Environmental Pollution Control (EPC) Measures Incineration Plants.	4					
b.	Enumerate about the systems being used to remove H <sub>2</sub> S from biogas based on chemical, bio-chemical processes or physical processes.	10					

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