O.P.Code: 20EE0227	R20	H.T.No.									

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR

(AUTONOMOUS)

B.Tech III Year I Semester Regular & Supplementary Examinations February-2024

GENERATION OF ENERGY FROM WASTE

(Open Elective-I)

Time: 3 Hours **Max. Marks: 60**

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	a	What are the different kinds of waste?	CO1	L3	4M
	b	Explain the different types of waste in detail.	CO1	L3	8M
		OR			
2		Explain biogas digestor for waste management briefly.	CO1	L2	12M

UNIT-II

3		Write the various process of pyrolysis, briefly.	CO2	L2	12M
		OR			
4	a	Define syngas. How syngas is is produced?	CO2	L1	6M
	b	Mention primary applications of syngas in various engineering fields.	CO2	L3	6M

UNIT-III

5		Explain gasifier burner arrangement for thermal heating in detail.	CO4	L3	12M
		OR			
6		Explain the design, construction and operation of downdraft gasifier.	CO4	L3	12M

UNIT-IV

7		Briefly discuss the various types of combustors.	CO5	L3	12M
		OR			
8		What is combustion analysis? What are the combustion analysis factors?	CO5	L3	12M

UNIT-V

9		Discuss Biomass conversion process.	CO6	L2	12M
		OR			
10		Explain alcohol production from Biomass.	CO6	L3	12M

***** END *****