JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT Make-up Examination-Nov-2025

B.Tech (CSE/IT/ECE/CE/ECM) -VII Semester

COURSE CODE (CREDITS): 19B1WBT731 (03)

MAX. MARKS: 25

COURSE NAME: Sustainable Technologies for Waste Management

COURSE INSTRUCTOR: Dr. Garlapati Vijay Kumar

MAX. TIME: 1 Hour 30 Minutes

Note: Note: (a) All questions are compulsory.

Q.No	Question	≥ 60	Marks
Q1	Write the different advantages associated with the Refuse-derived	III	5
·	fuel (RDF)? Discuss in detail about "Super Critical Technology"	-100	
	utilization under WtE and WtP concepts?		
Q2	Elaborate the concept of "E-waste recycling" by including the by	Ш	5
	including the benefits? What are the responsibilities of "Bulk		
	Consumer" and "Producer" under E-waste Management?		
Q3	How the "Plasma Torch/arc" technology helps in conversion of	1&11	5
	hazardous to less hazardous substances by including the advantages		
	and disadvantages? Summarize the "Preventive" and "Control"		
İ	measures associated with the "Dead Poisoning"?		
Q4	List pretreatment technologies utilized for lignocellulosic biomass?	ĪV	5
	Discuss the step by step approach in hydrolysis of cellulose to		
	glucose by cellulolytic enzymes?		
Q5	Differentiate the chemical transesterification with lipase-catalyzed	III&IV	5
	transesterification? Write about the features of ultrasound- and		
	microwave-assisted transesterification?	•	