

**JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT**

**TEST -3 (1) EXAMINATION- 2025**

**B.Tech-VII<sup>th</sup> Semester (CSE/IT/ECE/CE)**

**COURSE CODE (CREDITS):19B1WBT731 (03)**

**MAX.MARKS:35**

**COURSE NAME:** Sustainable Technologies for Waste Management

**COURSE INSTRUCTORS:** Dr. Garlapati Vijay Kumar

**MAX.TIME:** 2 Hours

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

Q.No	Question	CO	Marks
Q1	Explain the concept of "Circular Economy" by including the benefits and its role in virtue of UN-SDG goals?	1 & V	6
Q2	Summarize the "advantages", "disadvantages" and "applications in automobile sector" of green composites?	IV	6
Q3	Elaborate the "Industrial Ecology concept towards waste management" by giving more emphasis on "Industrial symbiosis with the Kalundborg Eco-Industrial Park"?	V	6
Q4	Write about the "Phototrophic biofilm MFC"? Discuss about the applications of MFC technology in "Desalination" and "Robotics" sectors?	IV	6
Q5	What are the different aspects of microalgal biofuels which capture the attention of industrialists and researchers and also summarize different advantages associated with the algae-based biofuels?	II & III	6
Q6	Discuss in detail about the different components under "Life cycle analysis" by including the goals and purpose of LCA?	V	5

@@@@@@@@@@@@@@@@@ALLTHEBEST@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@@