

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2025

PhD II Semester (CE)

COURSE CODE (CREDITS): 24P1WCE231 (3)

MAX. MARKS: 15

COURSE NAME: Life Cycle Analysis and Design for Environment

COURSE INSTRUCTORS: Dr. Rishi Rana Kalia

MAX. TIME: 1 Hour

Note: (a) All questions are compulsory.

(b) The candidate is allowed to make Suitable numeric assumptions wherever required for solving problems

Q.No	Question	CO	Marks
Q1	Given the five stages of LCA (Planning, Screening, Data Collection, Evaluation, and Improvement Assessment), construct a mathematical model to determine the relative weight of each stage in influencing the final environmental impact assessment of a product.	CO-1	7 Marks
Q2	Compare and contrast the role of LCA in corporate sustainability strategies with its role in regulatory compliance (such as ISO 14000 and EMAS). Which is more impactful in driving environmental improvements, and why?	CO-2	5 Marks
Q3	State basic concept of LCA?	CO-1	1.5 Marks
Q4	Neatly draw and elucidate various product life cycle stages?	CO-1	1.5 Marks