

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATION- 2025

B.Tech-V Semester (CSE/IT)

COURSE CODE (CREDITS): 25B11CI512 (3)

MAX. MARKS: 15

COURSE NAME: Intelligent Techniques for predictive data analytics

COURSE INSTRUCTORS: Dr. Nishant Sharma*

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	(i) Define predictive analytics. Differentiate between descriptive, predictive, and prescriptive analytics with suitable examples. (ii) Explain the predictive analytics cycle. Why is data preprocessing considered a critical step?	[CO-1]	2+2
Q2	(i) Differentiate between normalization and standardization. When should each be applied? (ii) Short note: Importance of data quality in predictive analytics.	[CO-1,2]	3+1
Q3.	(i) What are outliers? Explain any two statistical techniques for outlier detection. (ii) Explain feature selection and feature engineering. Illustrate with an example how these techniques can improve model performance.	[CO-1, 2]	2+2
Q4.	(i) Discuss methods for handling missing values in a dataset (ii) Explain the difference between supervised and unsupervised learning based on classification and clustering techniques.	[CO-2]	2+1