## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -1 EXAMINATION- FEB-2023

## B.Tech CSE&IT VI Semester

COURSE CODE(CREDITS): 18B1WCI634(2) MAX. MARKS: 15 COURSE NAME: Machine Learning COURSE INSTRUCTORS: Dr. Yugal, Dr. Abhilasha & Dr. Vipul MAX. TIME: 1 Hour Note: All questions are compulsory. Marks are indicated against each question in square brackets. What are the key challenges in developing machine learning applications? Q1. CO-1 [2] What is F1-Measure and RoC curve? Give their significance. [2] Q2. CO-1 Calculate the value of accuracy, precision and recall from the following multiclass [3] confusion matrix. Predicted Α C В  $\mathbf{A}$ 18 12 11 В 8 25 16 5 13 35 O3. CO-2 a. How do we handle categorical data in Machine Learning? [2] b. Differentiate between classification and regression problems with the help of an [2] example, a. What do you mean by reinforcement learning? Q4. CO-2 [1] b. What do you mean by inductive learning? [1] c. What do you mean by logistic regression? Derive its objective function. [2]