

JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT

TEST -1 EXAMINATIONS-2022

B.Tech-V Semester (ECE)

COURSE CODE (CREDITS): 20B1WEC532(3)

MAX. MARKS: 15

COURSE NAME: Introduction to Machine Learning

COURSE INSTRUCTORS: Lt. Pragya Gupta

MAX. TIME: 1 Hour

---

*Note: All questions are compulsory. Marks are indicated against each question in square brackets.*

---

Q1. What is Confusion matrix? With a simple example explain False Negative (FN), False Positive (FP), True Negative (TN) and True Positive (TP). [3] (CO1)

Q2. Find out the derivative of the cost function in Linear regression. [3] (CO2)

Q3. What is Bias- Variance tradeoff in Machine Learning . How are over fitting and under fitting related to bias and Variance? [4] (CO1)

Q4. A sample of 10 boxes of raisins has following weights (in grams):

25, 28, 29, 29, 30, 34, 35, 35, 37, 38

Make a Box-Whisker Plot of the data. About what percent of the boxes of raisins weighed more than 29 grams? [5] (CO3)