Semester IV (B.Tech.)

Er. No.. 201B308

Academic Year: 2021-22

Jaypee University of Engineering & Technology, Guna

T-2 (Even Semester 2022)
18B11CI918 – MACHINE LEARNING

Maximum Duration: 1 Hour 30 Minutes

20/25

Maximum Marks: 25

Notes:
1. This question paper has 4 questions.
2. Write relevant answers only.
3. Do not write anything on question paper (Except your Er. No.).

Marks

Q1. For the training data, a binary classier shows the output of a command to print confusion

matrix as array([[53057, 1522],

[1325, 4096]]

For this classifier compute following:

(a) Precision of the classifier [05] 5

(b) Sensitivity of the classifier. [05] 5

Q2. Write a python script to append a new entry to the dataframe df, also write code to show that

the new entry has been added to the df. [05] 0

Output of head command is shown below:

>>> df.head()

temp wind diff

0 0.5 1.5 2.0

1 0.6 1.6 2.1

2 0.7 1.7 2.2

3 0.8 1.8 2.3

4 0.9 1.9 2.4

New entry has data as: temp 7.3, wind 11.2, and diff 4.7

Q3. Differentiate between multiclass and multilabel classification problems. [05] 5

Q4. Explain the need of Gradient Descent in machine learning. [05] 5

1423
1424
1

1928