DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING DEPARTMENT OF COMMUNICATION OF COMMUNICA

MACHINE LEARNING (CSE-S520)

Semester: 2022-23 (Odd Semester)

Year: 4th year(2k19)

END SEMESTER EXAMINATION

Time: 3 h

Maximum marks: 50

Note:- All questions are compulsory

Section A

10 marks (10 Questions of 1 Mark each)

- 1. What is bootstrap Sampling?
- 2. What is data modeling?
- 3. Define the concept of consistent learners?
- 4. If your dataset is suffering from high variance, how would you handle it?
- 5. What is the difference between regularization and normalization?
- 6. What is Linear Regression?
- 7. Define support vectors in SVM model.
- 8. What do you understand by market sentiment analysis?
- 9. Give any three examples of supervised learning.
- 10. What is validation error in the KNN algorithm?

Section B

20 marks (5 Questions of 4 Marks each)

- 11. Write any three strengths and weaknesses of the decision tree.
- 12. Explain machine learning life cycle.
- 13. Explain random forest Model.
- 14. Explain logistic regression.
- 15. Explain rise, run and slope in a graph.

Section C

20 marks (2 Questions of 10 Marks each)

16.

- A) What is the conditions of a positive slope in a linear regression?
- Explain any five Examples of classification problem in brief.
- 17. Explain Entropy and Information gain of a decision tree with a suitable example. Which should be preferred among Gini Impurity and Entropy.