Reg. No.

VI Semester BCA Degree Examination, September/October - 2022
COMPUTER SCIENCE
Machine Learning
(CBCS Scheme)

Time : 3 Hours   Maximum Marks : 100

Instructions to Candidates :
         Answer All Sections.

SECTION -A

Answer any **TEN** questions. Each question carries **TWO** marks: (10×2=20)

1. Define machine learning.

2. What is accuracy in machine learning?

3. Define supervised learning.

4. What is multi layer neural network?

5. Describe conditional probability.

6. Mention any two applications of Bayesian classifier.

7. What is frequent itemset?

8. Write the Apriori rule.

9. Define cluster analysis.

10. What is confidence value in rule mining?

11. What are genetic algorithms?

12. Define fitness function.

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SECTION - B

Answer any **FIVE** questions. Each question carries **Five** marks: (5×5=25)

13. List out the issues of machine learning approach.

14. Discuss the various applications of machine learning.

15. Explain the concept of decision trees.

16. Give an overview of artificial neural networks.

17. Write a note on Hidden Markov models.

18. Explain the concept of inductive bias.

19. Discuss some of the applications of genetic algorithms.

20. Explain about genetic operators with examples

SECTION - C

Answer any **THREE** questions. Each question carries **Fifteen** marks: (3×15=45)

21. Explain the steps of designing a learning system.

22. Illustrate the concept of Support Vector Machine.

23. Explain the principle of Bayesian optimal classifier with an example.

24. Explain the K-means clustering algorithm.

25. Write a short note on association mining and write its applications.

SECTION - D

Answer any **ONE** question. Each question carries **Ten** marks: (1×10=10)

26. Discuss the performance metrics of machine learning.

27. Explain K-NN algorithm.