D 100496 (Pages : 2) Name.....

Reg. No.....

SIXTH SEMESTER U.G. (CBCSS—UG) DEGREE EXAMINATION MARCH 2024

BCA/Computer Science

BCA 6B 16 (B)—MACHINE LEARNING

(2019 Admission onwards)

Time : Two Hours Maximum : 60 Marks

Section A (Short Answer Type Questions)

Answer **all** *questions, each correct answer carries a maximum of* 2 *marks.*

Ceiling 20 *marks.*

1. What is vector space ?
2. State the Pythagorean theorem.
3. State the fundamental theorem of linear algebra.
4. What is bayes rule ?
5. What are the applications of machine learning ?
6. What do you mean by dimensionality reduction ?
7. What is Principal component analysis ?
8. What is regression ?
9. What are univariate trees ?
10. What do you mean by parametric classification ?
11. What is parzan Windows ?
12. What is sampling ?

Section B (Short Essay Type Questions)

Answer **all** *questions, each correct answer carries a maximum of* 5 *marks.*

Ceiling 30 *marks.*

13. Explain the different classes of spaces.
14. Explain the fundamental theorem of linear algebra.

Turn over

15. Write a note on eigenvector.
16. Explain the basic techniques for probability theory.
17. Explain K means.
18. Explain parametric methods of classification.
19. Explain how rows are extracted from trees.

Section C (Essay Type Questions)

Answer any **one** *question, correct answer carries* 10 *marks.*

20. Explain the role of probability in machine learning.
21. Explain the concept of matrix and the different operations on mattresses.

(1 × 10 = 10 marks)