



**SDCCA405/SDCCA407**

**IV Semester B.C.A./B.C.A. (DS) Degree Examination, June/July - 2026  
(SEP Scheme Freshers)**

**COMPUTER APPLICATIONS**

**Machine Learning**

**Time : 1½ Hours**

**Maximum Marks : 40**

**Instructions:**

**Answer All the sections.**

**SECTION - A**

**I. Answer any Four questions. Each question carries 5 marks. (4×5=20)**

1. Mention any Perspective of Machine Learning?
2. Explain any Two - performance metrics of Machine Learning?
3. What is overfitting. Elaborate overfitting in Machine Learning?
4. Explain the role of Support Vector Machine (SVM)?
5. What is the role of Bayesian Learning - Bayes theorem?
6. Write a short note on Hidden Markov Models?

**SECTION - B**

**II. Answer any Two questions. Each question carries 10 marks. (2×10=20)**

7. a) Explain the concepts of hypotheses? (5)  
b) Explain designing learning systems? (5)

**[P.T.O.]**



(2)

**SDCCA405/SDCCA407**

8. Write a short note on:

- a) Artificial Neural networks. (5)
- b) Instance-based learning: K-nearest neighbour learning. (5)

9. Explain the following classifier.

- a) Naive Bayes classifier (5)
  - b) Bayes optimal classifier. (5)
-