

- (c) FI-score.
- (d) K-NN is called Lazy Learner. Explain it.
- (e) Underfitting.
- (f) Logistic Regression.

**UNIT – I**

- 2. What is Machine Learning ? Explain its importance and applications in the modern world. 15
- 3. Discuss different types of Machine Learning techniques with suitable example. 15

**UNIT – II**

- 4. (a) What is Dimensionality reduction ? How does the curse of dimensionality affects Machine Learning Models. 8
- (b) Write advantages and disadvantages of Dimensionality Reduction. 7
- 5. What is PCA ? Write down steps of a PCA algorithm with example. 15

**UNIT – III**

- 6. Explain Decision Trees algorithm in ML & discuss it's important attributes needed to construct it. 15

- 7. What are the basic assumptions used in Naive Bayes classifier ? Explain working principle of Naive Bayes algorithm with example. 15

**UNIT – IV**

- 8. Differentiate between Bagging and Boosting techniques. Explain *one* example (algorithm) that use Bagging technique. 15
- 9. Write short note on :
  - (a) Confusion Matrix 7
  - (b) ROC and AUC 8

Roll No. ....

**3717**

**B. Tech. 8th Semester  
(Computer Science & Engg.)  
Examination – May, 2023**

**MACHINE TEARNING**

**Paper : PCC-CSE-402-G**

*Time : Three Hours ]*

*[ Maximum Marks : 75*

*Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note :** Attempt *five* questions in all, selecting *one* question from each Unit. Question No. 1 is *compulsory*. All questions carry equal marks.

- 1. Write short notes on :** 2.5 × 6 = 15
- (a) Support vectors.
  - (b) Median Absolute Deviation.

3717-2,350-(P-3)(Q-9)(23)

P. T. O.