Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 09

B.Tech. (Electrical & Electronics Engineering) (Sem.–7)

DATA MINING AND PATTERN RECOGNITION

Subject Code : BTEEE-805F

M.Code : 71974

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Q1. Answer briefly :

a) Differentiate between data warehouse and operational database.

b) Discuss role of support and confidence in association rules.

c) What are the steps involved in data pre-processing?

d) What do you understand by multi dimensional data model?

e) What is K-nearest neighbour algorithm?

f) Why is association rule necessary?

g) List the typical OLAP operations.

h) What do you mean by prediction classification? Discuss.

i) Discuss social impacts of data mining.

j) Write applications of pattern recognition in Bioinformatics.

SECTION-B

Q2. State Bayes theorm and discuss how Bayesian classifier works.

Q3. Discuss various schemas used for modeling a data warehouse using suitable examples.

Q4. Discuss classification by decision tree induction.

Q5. What do you mean by pattern recognition? Discuss its importance and applications.

Q6. Explain various methods of data cleaning.

SECTION-C

Q7. What is clustering? Explain various types of clustering methods with the help of suitable examples.

Q8. Explain the architecture of a data warehouse with the help of a diagram.

Q9. What do you mean by data pre-processing? Explain various steps involved in preprocessing of data.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.