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

Total No. of Questions : 09

MCA (2013 and 2014 Batch) (Sem.–4)

DATA WAREHOUSING AND MINING

Subject Code : MCA-401

M.Code : 71415

Time : 3 Hrs. Max. Marks : 100

INSTRUCTION TO CANDIDATES :

1. **SECTIONS-A, B, C & D contains TWO questions each carrying TWENTY marks each and students have to attempt any ONE question from each SECTION.**
2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**

SECTION-A

1. Discuss the three-tier data warehouse architecture and explain its components with a diagram.

2. Discuss the various schemas with examples in multi-dimensional data model.

SECTION-B

3. What do you mean by temporal data and temporal data warehouse? Discuss the general concepts of temporal data warehouses?

4. Explain in detail the conceptual models for temporal data warehouses.

SECTION-C

5. What is Data Mining? What are the different kinds of data that can be mined?

6. What is Classification problem? Explain k-Nearest Neighbor method of classification.

SECTION-D

7. What is Regression? Differentiate between simple and multiple regression. Discuss the working of linear regression technique with an example.

8. What are the major methods of Clustering? Discuss Partitioning methods of clustering.

SECTION-E

9. Answer briefly :

a. What is the need for data pre-processing?

b. What are the various spatial objects?

c. Explain the significance of hierarchy of data.

d. Define nominal, ordinal, and ratio-scaled variables.

e. Define temporal granularity.

f. What is the role of prediction in data mining?

g. Why is Naive Bayesian classification called '*Naïve*'?

h. What is Genetic algorithm?

i. Distinguish between classification and clustering.

j. Discuss DBSCAN method.

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.