

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

MCA (Sem.-6)
DATA WAREHOUSING & MINING

Subject Code : MCA-601

M.Code : 74755

Date of Examination : 04-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTIONS-A, B, C & D contains TWO questions each carrying TEN 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. a) What is Spatial data warehouse? Discuss the architecture of spatial data warehouse.
b) Discuss MDDM and its schemas.
2. a) Discuss the different components of data warehouse with the help of a diagram.
b) Explain the three tier architecture of data warehouse.

SECTION-B

3. Discuss in detail about the temporal extension of multidimensional model. Elaborate the advantages of temporal hierarchies.
4. a) Discuss fact relationships. What is the significance of temporal support for levels?
b) Discuss various conceptual models for temporal data warehouse.

SECTION-C

5. Explain various data mining functionalities. Discuss Bayesian belief networks in context of Naive Bayesian classification.
6. Discuss in detail about the k-Nearest Neighbor and case based reasoning classification methods of data mining.

SECTION-D

7. What is Prediction? Explain in detail about the linear and multiple regression methods used in prediction.
8. What are the problems that can occur when clustering is applied to real world database? Compare and contrast various clustering methods.

SECTION-E

9. Answer the following questions in brief:

- a) What is Big Data?
- b) What is the need for data preprocessing?
- c) What is rough set approach?
- d) List types of data used in cluster analysis.
- e) Define Case based Reasoning.
- f) List major data warehouse applications.
- g) What is topological relationship?
- h) Give examples of nominal and ordinal variables.
- i) What is the main difference between classification and prediction?
- j) Explain predictive mining.

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.