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Total No. of Pages : 02

Total No. of Questions : 09

MCA (2015 & Onward) (Sem.-6)
DATA WAREHOUSING & MINING
Subject Code : MCA-601

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. What is a Data Warehouse? What is the need for a data warehouse? Also discuss the goals of a data warehouse.
2. What is a Spatial data warehouse? Elaborate in detail the architecture of spatial systems.

SECTION-B

3. What is a Temporal data warehouse? Explain in terms of temporal extension of the multidimensional data model. Explain temporal hierarchies, facts and measures with examples.
4. Discuss the conceptual models for temporal data warehouses.

SECTION-C

5. What is Data Mining? Explain different kinds of data that can be mined.
6. Explain classification using Back Propagation algorithm.

SECTION-D

7. What is Regression? Differentiate between simple regression and multiple regression with an example. Explain linear regression technique in detail.
8. What is Clustering? What are the different clustering methods? Describe the partitioning methods of clustering in detail.

SECTION-E

9. Answer briefly :

- a. What is '*Big Data*'?
- b. What is multidimensional data model? Give examples.
- c. Explain slice, dice and drill-down operations.
- d. What is metadata and why is it important?
- e. What is the difference between Star schema and Snowflake schema?
- f. Why do we need to pre-process data?
- g. What is data cube?
- h. What is case-based reasoning?
- i. What do you mean by data transformation?
- j. What is prediction?

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.