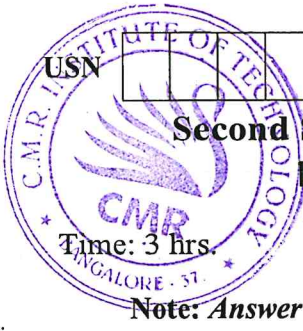


# CBCS SCHEME

20MCA252



Second Semester MCA Degree Examination, Feb./Mar. 2022

## Data Mining with Business Intelligence

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. What is Data Ware housing? Differentiate between OLAP and OLTP. (10 Marks)  
b. What is Data Cube? Explain any two data cube operations in detail. (10 Marks)

OR

- 2 a. What is Data Mining? List out the difference between ROLAP and MOLAP. (10 Marks)  
b. Explain : i) Star Schema ii) Snowflakes Schema. (10 Marks)

### Module-2

- 3 a. Explain Integration of DM system with database. (10 Marks)  
b. Explain the classification of DM system. (10 Marks)

OR

- 4 a. What is Data Preprocessing? Explain Data cleaning and Data Integration. (10 Marks)  
b. Explain any two Data Mining primitives in detail. (10 Marks)

### Module-3

- 5 a. What is Concept Description? Explain Data generalization and summarization based characterization in detail. (10 Marks)  
b. Explain Apriori algorithm for frequent item set generation in detail. (10 Marks)

OR

- 6 a. Explain Market basket analysis in detail. (10 Marks)  
b. Describe briefly on Incremental Associative Rule Mining. (10 Marks)

### Module-4

- 7 a. Explain Bayesian theorem in detail (10 Marks)  
b. Explain Rule – based classification :  
i) IF – THEN Rule ii) Rule Extraction from a Decision tree. (10 Marks)

OR

- 8 a. Explain i) Cart ii) Linear and Non linear regression. (10 Marks)  
b. Explain Decision tree basic algorithm for inducing decision tree from training tuples. (10 Marks)

### Module-5

- 9 a. Explain i) Balanced Scorecard ii) Fraud Detection. (10 Marks)  
b. Explain Data Analytics Life Cycle in detail. (10 Marks)

OR

- 10 a. Explain i) Banking and Finance ii) Market Segmentation. (10 Marks)  
b. What are Core deliverables? Explain the various functions involved in developing core deliverables and stake holders. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.