## CBCS SCHEME

Second Semester MCA Degree Examination, June/July 2023

## **Data Mining and Business Intelligence**

Time: 3 hrs.

Max. Marks: 100

22MCA252

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module. 2. M: Marks, L: Bloom's level, C: Course outcomes.

		Module – 1	M	L	C
Q.1	a.	Define data warehouse. Explain the key features of data warehouse.	5	L2	CO1
	b.	With a neat diagram, explain three tier data ware house architecture.	10	L2	CO1
	c.	Give differences between: i) Rollup and drill down ii) Slice and dice	5	L2	CO1
		OR			
Q.2	a.	Discuss typical OLAP operations with an example.	10	L2	CO1
	b.	Explain the following terms:  i) Data mart  ii) Virtual ware house  iii) Data cube  iv) ROLAP and MOLAP	10	L2	CO1
					8.
		Module – 2			
Q.3	a.	What is data mining? Explain the process of Knowledge Discovery in Database (KDD) with a neat diagram.	10	L2	CO2
54	b.	Explain the classification of datamining systems.	10	L2	CO2
	-	OR	-		
Q.4	a.	What is data processing? What are the steps involved in it? Explain any 2 steps in detail.	10	L2	CO2
	b.	Explain any two data mining primitives in detail.	10	L2	CO2
	TA.	Module – 3			
Q.5	a.	What is the concept of description? Explain data generalization and summarization based characterization in detail.	10	L2	CO3
	b.	Explain Apriori algorithms for frequent item set generation in detail.	10	L2	CO3
		OR			
Q.6	a.	Explain market basket analysis in detail.	10	L2	CO3
	b.	Describe briefly incremental associative role mining.	10	L2	CO3
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		What is classification and prediction? Explain the issues regarding	10	L2	CO
Q.7 a	•	What is classification and prediction? Explain the issues regarding classification and prediction.			
b		Explain Bayesian classification method in detail.	10	L2	CC
		OR Links mathods	10	L2	CC
Q.8 a	1.	Explain linear and nonlinear regression prediction methods.	10	L2	C
k	).	Explain decision tree classification method in detail	10		
		Module – 5			~
Q.9 a	a.	Explain the following data mining business applications:  i) Balance score card  ii) Fraud detection	10	L2	C
		Explain click stream mining in detail.	10	L2	C
1	b.	Explain click stream mining in detail.			
	-	OR	40	TA	
Q.10	a.	Explain data analytics life cycle in detail.	10	L2	C
	b.	What are core deliverables? Explain various functions involved in developing core deliverables for stack holders.	10	L2	C
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