Course Code: 23MC3T11

BONAM VENKATA CHALAMAYYA INSTITUTE OF TECHNOLOGY & SCIENCE

(AUTONOMOUS)

II – MCA I - Semester Regular/Supplementary Examinations (BR23), Jan - 2026

DATA WAREHOUSING AND MINING (MCA)

Time: 3 hours | Max. Marks: 70

Answer any Five Questions One Question for One UNIT
ALL the Question Carry Equal Marks

		Marks	CO	BL
	UNIT-I			
1.a)	Define data mining and explain its significance in modern data analysis.	7M	CO1	L1
b)	Explain techniques to handle missing, noisy, and inconsistent data.	7M	CO1	L2
	OR			
2.a)	Discuss various distance measures used for calculating dissimilarity, such as Euclidean and Manhattan distances.	7M	CO1	L2
b)	Explain the concept of ETL (Extract, Transform, Load) in data warehousing.	7M	CO1	L2
	UNIT-II	**Marks**	**CO**	**BL**
3.a)	Describe the main components of a classification model.	7M	CO2	L2
b)	Discuss the confusion matrix and its role in evaluating classification models.	7M	CO2	L3
	OR			
4.a)	What is decision tree induction, and how is it performed?	7M	CO2	L2
b)	What is the nearest neighbourhood (k-NN) classifier, and how does it work?	7M	CO2	L2
	UNIT-III	**Marks**	**CO**	**BL**
5.a)	Define association analysis and its importance in data mining.	7M	CO3	L1
b)	Explain how confidence and lift are used to evaluate association rules.	7M	CO3	L4
	OR			
6.a)	Discuss the advantages of FP-Growth in terms of efficiency and memory usage.	7M	CO3	L2
b)	Discuss the use of concept hierarchies in generating generalized association rules.	7M	CO3	L3
	UNIT-IV	**Marks**	**CO**	**BL**
7.a)	What are the main types of clustering methods? Provide a brief explanation of each.	7M	CO4	L2
b)	Explain the steps involved in agglomerative hierarchical clustering.	7M	CO4	L4
	OR			
8.a)	What are the key differences between internal and external cluster evaluation methods?	7M	CO4	L3
b)	What is a proximity matrix, and how is it used in clustering?	7M	CO4	L3

	UNIT-V	Marks	CO	BL
9.a)	Discuss the different types of web data that can be mined.	7M	CO5	L2
b)	How can natural language processing (NLP) be used in web content mining?	7M	CO5	L3
	OR			
10.a)	Explain the importance of link analysis algorithms like PageRank and HITS.	7M	CO5	L4
b)	Justify how does a search engine crawl and index web pages?	7M	CO5	L5

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