R22 Regulation *Subject code:4E4HA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech IV Semester Supplementary Examinations, December 2025

DATA WAREHOUSING & DATA MINING

(CSE(DS))

Maximum Marks: 60 Date:16.12.2025 Duration: 3 hours

Note: **1.This question paper contains two parts A and B.**
2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Answer any one full question from each unit.
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	Bloom Tx
1.a)	Define Data warehouse.	1M	CO1	BL1
b)	Differentiate between MOLAP and ROLAP.	1M	CO1	BL2
c)	Mention the application areas of data Mining.	1M	CO2	BL1
d)	What is Data cleaning?	1M	CO2	BL1
e)	What is meant by Mining Multilevel Association Rules?	1M	CO3	BL1
f)	How to improve the efficiency of APRIOIRI algorithm?	1M	CO3	BL2
g)	Where are decision trees mainly used?	1M	CO4	BL1
h)	What is Bayesian Belief Networks?	1M	CO4	BL2
i)	List the advantages of the PAM algorithm.	1M	CO5	BL2
j)	Mention the different types of clustering.	1M	CO5	BL1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	Bloom Tx
2	Explain the three- tier Data Warehouse Architecture with neat diagram.	10M	CO1	BL3
	OR			
3	a) Compare the types of OLAP Servers b) Discuss about efficient computation of Data Cubes.	5M 5M	CO1	BL3
4	a) Illustrate with a diagram about Data Mining Task Primitives. b) Discuss about the Major issues in Data Mining.	5M 5M	CO2	BL3
	OR			
5	a) Describe about Data discretization? b) Write about Dimensionality reduction methods?	5M 5M	CO2	BL3
6	Explain in detail about Partition algorithms with an example.	10M	CO3	BL2
	OR			
7	Discuss about FP-growth algorithm for the following given example{M,O,N,K,E,Y} {D,O,N,K,E,Y} {M,A,K,E} {M,U,C,K,Y} {C,O,O,K,I,E}, Support= 60 %, Confidence = 80 %.	10M	CO3	BL3

8	Discuss about Decision tree induction algorithm with an example.	10M	CO4	BL3
	OR			
9	Discuss about k-nearest neighbor classification algorithm with an example.	10M	CO4	BL3
10	What is the drawback of k-means algorithm? How can we modify the algorithm to diminish that problem?	10M	CO5	BL3
	OR			
11	What are outliers? Discuss the methods adopted for outlier detection.	10M	CO5	BL3