R18 Regulation *Subject code:2P6EC*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, November 2025

DATA WAREHOUSING AND DATA MINING

(CSE)

Maximum Marks: 70 Date: 15.11.2025 Duration: 3 hours

Note: **1.This question paper contains two parts A and B.**
2. Part A is compulsory which carries 20 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 (10X2M=20 Marks)		Marks	CO	BTL
1	Define Data Warehousing.	2M	1	L1
2	List out the operations of OLAP.	2M	1	L1
3	What is Data Mining?	2M	2	L1
4	Define Binaryzation.	2M	2	L1
5	Define APRIORI Principle.	2M	3	L1
6	What are Maximal Frequent Item Set?	2M	3	L1
7	What is Classification?	2M	4	L1
8	Define Information Gain.	2M	4	L1
9	Write the strengths of hierarchical clustering.	2M	5	L1
10	Compare agglomerative and divisive methods.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	What is the Significance of OLAP in Data warehouse.? Describe OLAP operations with neat diagram/example.	10M	1	L2
	OR			
12	Explain with suitable diagrams Star, Snow-Flake and Fact constellation Schema.	10M	1	L2
13	Describe the various phases in knowledge discovery process with a neat diagram.	10M	2	L2
	OR			
14	Explain the various Data pre-processing techniques. How data reduction helps in data pre-processing.	10M	2	L2
15	a) Write and explain Apriori Algorithm . b) Explain how association rules are generated from frequent itemsets.	5M 5M	3	L2
	OR			
16	a) Explain how can you improve the performance of Apriori algorithm b) What are the advantages of FP-Growth algorithm?	5M 5M	3	L2

17	Explain Decision tree induction algorithm for classification. Discuss the usage of information gain in this.	10M	4	L2
	OR			
18	Why is naive Bayesian classification called "naive"? Briefly outline the major ideas of naive Bayesian classification. Explain Naive-Bayes classification.	10M	4	L2
19	What is the goal of clustering? How does partitioning around medoids algorithm achieve this goal?	10M	5	L2
	OR			
20	What are the different clustering methods? Explain in detail.	10M	5	L2