



R18 Regulation

Subject code:2P5FC

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech V Semester Supplementary Examinations, November 2025

## DATA WAREHOUSING AND DATA MINING

(IT)

Maximum Marks: 70

Date: 22.11.2025

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	List the characteristics of a data ware house.	2M	1	L1
2	Define OLAP.	2M	1	L1
3	Define data mart.	2M	2	L1
4	Define OLTP.	2M	2	L1
5	What is frequent itemset?	2M	3	L1
6	Define Slice and Dice operation.	2M	3	L1
7	What is classification?	2M	4	L1
8	What is decision tree?	2M	4	L1
9	What is an outlier?	2M	5	L1
10	Define cluster Analysis	2M	5	L1

### Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	Define data warehouse? Differentiate between operational database systems and data warehouses?	10M	1	L2
OR				
12	Draw the architecture of data warehouse and explain the three tiers in detail.	10M	1	L2
13	Describe the Architecture of a typical data mining system/Major Components?	10M	2	L2
OR				
14	Briefly explain Frequent Item Set generation using apriori algorithm.	10M	2	L2
15	Describe the data classification process with a neat diagram. How does the Naive Bayesian classification works? Explain.	10M	3	L2
OR				
16	What is prediction? Explain the various prediction techniques. Explain about Decision tree Induction classification technique.	10M	3	L2

17	Classify the K-nearest neighbour classification.	10M	4	L2
	OR			
18	Explain about the partitioning methods.	10M	4	L2
19	Explain Outlier analysis with example.	10M	5	L2
	OR			
20	Differentiate between K-means and PAM algorithms.	10M	5	L2