

FYMCA Sem. I

Date 6/1/25

(2 Years course)

(3 Hours)

Total Marks: 80

N.B. : 1) Question No.1 is **compulsory**.2) Attempt any **THREE** from the remaining questions.

3) Figures to the right indicate full marks.

- Q1. (a) Write a note on Text Retrieval Methods [5]
 (b) Write a note on Bayesian classification [5]
 (c) Discuss Star flake ,Snowflake schema with an example [5]
 (d) Write a note on ADT [5]

- Q2. (a) What is Parallel databases? Explain types of Parallel Database architecture. [10]
 (b) Define Data warehouse. Explain ETL process in detail. [10]

- Q3. (a) Differentiate the following [10]
 1. Agglomerative and Divisive clustering
 2. OLAP Vs OLTP
 (b) Apply Apriori algorithm to the following data set to find out strong association rule with Support= 50% and Confidence=70%. [10]

Transaction ID	Items
100	Bottles , Spoon, Dishes, Fork
200	Bottles , Spoon , Dishes
300	Bottles , Cup, Fork
400	Bottles , Dishes , Cup
500	Spoon, Fork

- Q4. (a) Define Data mining. Explain all phases of KDD process in detail. [10]
 (b) Explain the Decision tree used in classification. Compare ID3, C4.5, CART classification algorithms [10]
- Q5. (a) Explain Data reduction technique in detail [10]
 (b) Why clustering is an unsupervised technique? Explain K-means algorithm. [10]
- Q6. (a) Define Distributed Database. Explain types of Distributed Database architecture types. [10]
 (b) Explain the following, [10]
 1. Associative classification.
 2. Web Mining
