1T00161 - M.C.A. (SEM-I) (Choice Based) (Two Year Course) (R 2020-21) / 70623 - Advanced Databased Management System QP   CODE: 10033595   DATE: 21/07/2023

(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.   Write a short note on:

(a) Star and Snowflake schema.   **[5]**
(b) Data preprocessing   **[5]**
(c) Differentiate between ORDBMS and OODBMS   **[5]**
(d) Text Retrieval Methods   **[5]**

Q2. (a) Explain Distributed database architecture   **[10]**

      (b) Explain the KDD process in detail.   **[10]**

Q3. (a) Differentiate the following,   **[10]**
             1. Agglomerative and Divisive clustering
             2. OLAP Vs Data Mining

      (b) Apply Apriori algorithm to the following data set to find out strong association **[10]**
          rule with Support= 50% and Confidence=60%.

Transaction ID	Items
100	Dairymilk, Chips, cold drink, Juice
200	Dairymilk , Chips , cold drink
300	Dairymilk , Biscuits, Mayonnaise
400	Dairymilk , cold drink , Biscuits

Q4. (a) Explain Data warehouse architecture in detail.   **[10]**

      (b) Why clustering is an unsupervised technique? Explain K-means algorithm. **[10]**

Q5. (a) Explain the following,   **[10]**
             1. Web mining
             2. Bayesian classification
      (b) Explain the Decision tree used in classification. Explain ID3 algorithm with a
          suitable example.

                                                            [10]

Q6. (a) What is the Abstract Data type. Explain with suitable example. **[10]**
      (b) Explain Data reduction techniques.   **[10]**

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33595   **Page 1 of 1**