

CDOE
MASTER OF COMPUTER APPLICATIONS (CBCS - 2020 COURSE)
M.C.A. Sem-II : WINTER :- 2021
SUBJECT: DATA WAREHOUSING & DATA MINING

Day : Thursday
Date 10/2/2022

W-23059-2021

Time : 02:00 PM-05:00 PM
Max. Marks 60

N.B.:

- 1) **Q.4** from Section – I is **COMPULSORY**.
- 2) Answer **ANY TWO** questions from Q.1, 2, 3 in Section – I.
- 3) Answer **ANY TWO** questions from Q.5, 6, 7 in Section – II.
- 4) Figures to the right indicate **FULL** marks.
- 5) Draw neat and labeled diagram **WHEREVER** necessary.
- 6) Answers to both the sections should be written in **SEPARATE** answer books.

SECTION – I

- Q.1** What is a multidimensional data model? Explain star schema and snow flame schema with an example and diagrammatic illustration. [12]
- Q.2** a) Explain with suitable examples the various OLAP operations in a multidimensional data model. [06]
- b) Describe ROLAP, MOLAP, and HOLAP. [06]
- Q.3** What is data pre-processing? Why should it be done? Give a detailed account of the various pre-processing methods. [12]
- Q.4** Write short notes on **ANY THREE** of the following: [12]
- a) Framework for Business Intelligence
 - b) Data Marts
 - c) Decision Tree Induction
 - d) K – Means Algorithm
 - e) Case based reasoning

SECTION – II

- Q.5** Briefly explain the Apriori Algorithm for frequent itemset generation. [12]
Generate frequent itemset for the given data with support – 50%.
- | | | | | |
|-----|-----------|-----------|-------------|--------|
| TID | 100 | 200 | 300 | 400 |
| | {1, 3, 4} | {2, 3, 5} | {1,2, 3, 5} | {2, 5} |
- Q.6** What is the role of prediction in Data Mining? What are the various prediction techniques? Explain any one in detail. [12]
- Q.7** Explain applications of Data Warehousing and Data Mining in Retail Industry. [12]

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