Roll No. : .....

Total No. of Questions : **9**] [Total No. of Pages : **3**

22641

M.Tech. (CSE) 1st Semester
Examination, March–2021
(CBCS Scheme)

DATA WAREHOUSE AND MINING
Paper–MTCSE21C4

Time : ***Three*** *Hours]* *[Maximum Marks :* ***100***

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note :– Attempt *five* questions in all, selecting at least *one* question from each Section. Question No. **1** is compulsory. All questions carry equal marks.

1. (a) What do you mean by Metadata ? Explain.

   (b) What is the process of data mining ? Explain.

(c) What is Clustering ? How it is different from classification ?

(d) Explain the various webmining softwares. 5×4=20

Section–A

2. What is Data Warehouse ? What are the design guidelines for data warehouse implementation ? 20

3. What is the difference between ROLAP and MOLAP ? Describe different types of OLAP servers. 20

Section–B

4. (a) Explain Frequent itemsets, closed itemsets and association rules of data mining briefly.

(b) Explain Apriori Algorithim for finding frequent itemsets in data mining. 10,10

5. (a) What is Dynamic Item Set Counting (DIC) ? How is it different from Apriori algorithm. Explain in detail.

(b) Explain mining frequent pattern without candidate generation in detail. 10,10

Section–C

6. (a) What is Classification ? Explain general approach to classification.

(b) Explain Decision Tree Induction with its method in detail. 10,10

7. (a) Explain split algorithm based on information theory briefly.

(b) What are the software used for association rule mining ? Explain. 10,10

Section–D

8. Write short notes on the following :

(a) Partition methods of clustering

(b) Hierarchical methods

(c) Destiny based methods 20

9. (a) What is Web content mining and Web usage mining ? Explain in detail.

(b) Explain the following :

(i) Web Terminology and Characteristics

(ii) Locality and Hierarchy in the web 10,10