Printed Pages:02 **Sub Code: KCA012**

Paper Id: 232311 **Roll No.** | | | | | | | | | | |

MCA
(SEM III) THEORY EXAMINATION 2022-23
DATA WAREHOUSING & DATA MINING

Time: 3 Hours ***Total Marks: 100***

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. 2 x 10 = 20

a. Write down the components of data warehouse.
b. What is meta data?
c. What is SMP?
d. What do you mean by workload matrix?
e. What are the steps involved in data transformation?
f. What is binning technique?
g. Briefly describe genetic algorithm.
h. Explain market basket analysis.
i. What is MOLAP?
j. Define web mining.

SECTION B

2. Attempt any *three* of the following: 10 x 3 = 30

a. Define data warehouse. What are the key features of data warehouse?
b. What is data warehouse planning? Explain its activities.
c. Describe the steps involved in data mining when viewed as a process of knowledge discovery.
d. Describe classification. Also discuss Naive Bayesian classification.
e. Describe various OLAP operations in multidimensional data model.

SECTION C

3. Attempt any *one* part of the following: 10 x 1 = 10

a. Write short note on :
   (i) Shared-disk architecture
   (ii) Distributed memory architecture
b. Differentiate between OLAP and OLTP.

4. Attempt any *one* part of the following: 10 x 1 = 10 \

a. Discuss master slave processing with the help of diagram.
b. Explain two primary categories of parallel hardware used for data warehousing.

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5. Attempt any *one* part of the following: 10 x 1 = 10

a. What do you mean by cleaning of the data? Explain the important types of data cleaning.

b. What is decision tree? Explain the classification by decision tree induction.

6. Attempt any *one* part of the following: 10 x 1 = 10

a. What is clustering? Briefly explain k-means clustering algorithm.

b. Describe neural network. How the neural network is useful in classification.

7. Attempt any *one* part of the following: 10 x 1 = 10

a. Write a short note on the following:
   (i) Tuning the data warehouse
   (ii) Testing the data warehouse

b. List various algorithms used in web mining. Briefly discuss any one of them.

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