

Code No.: AD514PE

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**CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS**

**III-B.TECH-I-Semester End Examinations (Regular) - January- 2024
DATA WAREHOUSE & DATA MINING
(AI&DS)**

[Time: 3 Hours]

[Max. Marks: 70]

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks.

PART-A

(20 Marks)

1. a) Discuss about data cleaning. [2M]
- b) List the methods of filling missing values. [2M]
- c) What is data warehouse? [2M]
- d) Explain about two differences between OLAP and OLTP. [2M]
- e) Why are decision trees useful? [2M]
- f) Explain about the applications of classification. [2M]
- g) Discuss the two approaches to improve quality of hierarchical clustering. [2M]
- h) What is cluster analysis? [2M]
- i) Define data stream mining. [2M]
- j) List the applications of web usage mining. [2M]

PART-B

(50 Marks)

- 2.a) Write short notes on data mining task primitives. [5M]
 - b) Discuss in detail about data preprocessing. [5M]
- OR**
- 3.a) What is data mining? Discuss the challenges associated with data mining. [5M]
 - b) Explain about the classification of data mining systems. [5M]
- 4.a) Describe the Data Warehouse architecture. [5M]
 - b) Explain the OLAP operations in the multi dimensional model. [5M]
- OR**
- 5.a) Discuss about the Data cube Technology in detail. [5M]
 - b) Write down the steps in building a data warehousing architecture. [5M]
6. Describe Naïve Bayesian Classification method with an example. [10M]
- OR**
7. Discuss about Decision tree induction algorithm with an example. [10M]
- 8.a) List out various clustering methods. [5M]
 - b) How to cluster the data sets using k-means clustering algorithm? [5M]
- OR**
- 9.a) Explain k-medoids clustering algorithms with example. [5M]
 - b) List and explain the Key Issues in Hierarchical Clustering. [5M]
10. Explain the following:
 - a) Spatial data mining. [5M]
 - b) Text Mining. [5M]
- OR**
11. Explain briefly about
 - a) Web mining. [5M]
 - b) Mining sequence patterns in transactional databases. [5M]
