PRESIDENCY UNIVERSITY

BENGALURU

Mid - Term Examinations – October 2025

Date: 07-10-2025   **Time:** 09.30am to 11.00am

School: SOCSE	**Program:** B.Tech. Computer Science and Engineering-Data Science
Course Code : CSD3408	**Course Name:** Data Mining and Warehousing
Semester:V	**Max Marks:**50 **Weightage**: 25%

CO - Levels	CO1	CO2	CO3	CO4	CO5
Marks	26	24			

Instructions:

   (i) *Read all questions carefully and answer accordingly.*

   (ii) *Do not write anything on the question paper other than roll number.*

Part A

Answer ALL the Questions. Each question carries 2marks.   **5Q x 2M=10M**

1	List any two data mining techniques.	2 Marks	L1	CO1
2	Differentiate between data transformation and data reduction.	2 Marks	L2	CO1
3	Apply similarity measures to compare two data objects with values (2, 4, 6) and (2, 4, 8).	2 Marks	L3	CO1
4	Justify why OLAP operations are necessary for business decision-making.	2 Marks	L5	CO2
5	Evaluate the effectiveness of Fact Constellation schema in handling complex queries.	2 Marks	L5	CO2

Part B

6.	a.	Define data mining. Explain in detail the various data mining techniques with suitable examples.	10 Marks	L2	CO 1
		Or			
7.	a.	Discuss the steps in data preprocessing: selection, cleaning, integration, transformation, reduction, and enrichment.	10 Marks	L2	CO 1

8.	a.	Apply and compare similarity and dissimilarity measures with examples.	10 Marks	L3	CO 1
		Or			
9.	a.	With suitable examples, explain different types of data and challenges in ensuring data quality.	10 Marks	L2	CO 1

10.	a.	Define a Data Warehouse and explain its characteristics in detail with examples.	10 Marks	L2	CO 2
		Or			
11.	a.	Differentiate between operational databases and data warehouses with suitable examples.	10 Marks	L4	CO 2

12.	a.	Explain the architecture of a Data Warehouse with neat diagram and describe its components.	10 Marks	L2	CO 2
		Or			
13.	a.	Discuss the ETL process with an example of consolidating sales data from different branches.	10 Marks	L3	CO 2