Roll No. [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

PRESIDENCY UNIVERSITY
BENGALURU

School of Computer Science and Engineering
Mid - Term Examinations - November 2024

Semester: VII

Course Code: CSE2023

Course Name: Data Warehouse & its application

Program: B. tech

Date: 06-11-2024

Time: 11.45am to 01.15pm

Max Marks: 50

Weightage: 25%

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.   **5Qx2M=10M**

1	Define Meta data.	2 Marks	L1	CO1
2	What are the uses of Data warehouse in organizations?	2 Marks	L1	CO1
3	Explain about data mart in data warehouse.	2 Marks	L2	CO2
4	Explain the Functions of back-end tools and utilities used in data warehouse systems.	2 Marks	L2	CO2
5	Why is data warehouse called as Non-volatile and integrated?	2 Marks	L3	CO1

Part B

Answer ALL Questions. Each question carries 10 marks.   **4QX10M=40M**

6	a.	Define Access tool in data warehouse.	2Marks	L1	CO1
	b.	Describe different design approach of Data warehouse in real-time.	3Marks	L2	CO2
	c.	Apply the concept of star schema with Suitable Diagram.	5Marks	L3	CO2

or

7	a.	List the different Benefits of data warehouses.	2Marks	L1	CO1
	b.	Differentiate between Computing paradigm and Business Paradigm.	3Marks	L2	CO1

	c.	Demonstrate the concept of snowflake schema with Suitable Diagram.	5Marks	L3	CO2
8	**a.**	List out the different types of data available in data warehouse.	2Marks	L1	CO1
	b.	Explain the ETL concept in data warehouse.	3Marks	L2	CO2
	c.	Demonstrate Business & design consideration for building a data warehouse.	5Marks	L3	CO2

or

9	**a.**	Define Roll-up and Drill-down.	2Marks	L1	CO1
	b.	Explain the 2-tair data warehouse architecture with a neat diagram.	3Marks	L2	CO1
	c.	Demonstrate Technical & Implementation consideration for building a data warehouse.	5Marks	L3	CO2

10	**a.**	Define OLAP in data warehouses.	2Marks	L1	CO1
	b.	Explain the need of data preprocessing in data warehouse.	3Marks	L2	CO2
	c.	Demonstrate the generic data model life cycle with a neat diagram.	5Marks	L3	CO2

or

11	**a.**	Define a data warehouse and its purpose.	2Marks	L1	CO1
	b.	Describe the 3-tier data warehouse architecture.	3Marks	L2	CO2
	c.	Demonstrate the typical OLAP operations in data warehouse.	5Marks	L3	CO2

12	**a.**	Define data mart in data warehouses.	2Marks	L1	CO1
	b.	Discuss the role of metadata in the data warehouse architecture.	3Marks	L2	CO1
	c.	Demonstrate the concept of ETL (Extract, Transform, Load) and its significance in a data warehouse.	5Marks	L3	CO2

or

13	**a.**	Describe different types of data mart in data warehouse.	2Marks	L1	CO1
	b.	Explain various Schemas for Multidimensional Data Model in detail.	3Marks	L2	CO2
	c.	Demonstrate the differences between join index and bit map index in data warehouse.	5Marks	L3	CO2