PRESIDENCY UNIVERSITY

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

Semester: V

Course Code: CSE2023

Course Name: Data Warehouse & its application

Program: B. tech

Date: 07-11-2024

Time: 02.00pm to 03.30pm

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**

#	Question	Marks	Level	CO
1	Define Paradigm shift.	2 Marks	L1	CO1
2	What are the uses of Data warehouse in organization?	2 Marks	L1	CO1
3	Explain about Metadata 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	Demonstrate data warehouse called as subject-oriented and time-variant?	2 Marks	L3	CO1

Part B

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

#		Question	Marks	Level	CO
6	a.	Define Data warehouse?	2Marks	L1	CO1
	b.	Describe the principles of Data warehouse in real-time.	3Marks	L2	CO2
	c.	Apply the concept of star schema, with Suitable Diagram	5Marks	L3	CO2

or

#		Question	Marks	Level	CO
7	a.	Differentiate the different characteristics of data warehouses.	2Marks	L1	CO1
	b.	Identify the Computing paradigm vs Business Paradigm.	3Marks	L2	CO1

	c.	State the concept of snowflake schema with Suitable Diagram.	5Marks	L3	CO2
8	**a.**	List out the differences between Current detail data vs old details data.	2Marks	L1	CO1
	b.	Explain the ETL concept in data warehouse.	3Marks	L2	CO2
	c.	Demonstrate Technical & Implementation consideration for building a data warehouse.	5Marks	L3	CO2

or

9	**a.**	Define Tangible & Intangible benefits.	2Marks	L1	CO1
	b.	Describe the benefits of using a data warehouse in business decision-making?	3Marks	L2	CO1
	c.	Illustrate, how data warehouse differ from an operational database?	5Marks	L3	CO2

10	**a.**	Define OLAP in data warehouses.	2Marks	L1	CO1
	b.	Demonstrate the need of data preprocessing in data warehouse.	3Marks	L3	CO2
	c.	Explain the 2-tier data warehouse architecture with a neat diagram.	5Marks	L3	CO2

or

11	**a.**	Define a data warehouse and its purpose.	2Marks	L1	CO1
	b.	Describe the 3-tair data warehouse architecture.	3Marks	L2	CO2
	c.	Demonstrate the differences between OLAP and OLTP 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 Typical operations its significance in a data warehouse.	5Marks	L3	CO2

or

13	**a.**	List the differences between Metadata and Metadata Repository.	2Marks	L1	CO1
	b.	Explain the generic data model life cycle with a neat diagram.	3Marks	L2	CO2
	c.	Define OLAP and describe its importance in the context of data warehousing.	5Marks	L3	CO2