# PSCSCT03 - Paper-III : Data Warehousing & SQL

P. Pages : 2

Time : Three Hours

*1322*

**GUG/S/23/11144**

Max. Marks : 80

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Notes : 1. All the questions are compulsory and carry equal marks.
2. Draw neat & labeled diagram wherever necessary.
3. Avoid vague answer and write answer relevant and specific to question only.

**Either:**

**1.** a) Explain the OLTP and OLAP Systems. **8**

b) Explain the following: - **8**
i) Managed Query environment (MQE)
ii) Building a Data Warehouse

**OR**

c) Explain the Crucial Decisions in Designing a Data Warehouse in detail. **8**

d) Explain the Characteristics of a Data Warehouse in detail. **8**

**Either:**

**2.** a) Explain Data Mart in detail. **8**

b) Explain the following: - **8**
i) Steps of Data Mining
ii) Tools for Data Mining

**OR**

c) Explain the Software Component for a Data Mart in detail. **8**

d) Explain the Predictive Modeling and Link Analysis in detail. **8**

**Either:**

**3.** a) Explain the SQL Server Data Storage Architecture in detail. **8**

b) Explain the following components- **8**
i) Data Definition Language ii) Data Manipulation Language

**OR**

c) Explain the following: - **8**
i) Stored Procedures ii) User-Defined Functions

d) What is Data type? Explain the different types of Data types in SQL. **8**

**Either:**

**4.** a) Explain the Data Integrity Controls and Working with Constraints in detail. **8**

b) Explain the Locking and Backup Types. **8**

<div align="center">**OR**</div>

c) Explain the Implementing SQL Server Principles and Authentication. **8**

d) Explain the Using Transaction Logs and Using Triggers. **8**

**5.** Attempt **all** the questions.

a) Explain in Short Data Warehouse Architectural Strategies. **4**

b) What is the Database Segmentation? Explain in short. **4**

c) Write a Short note on System Databases in SQL server. **4**

d) Write a short note on DML Triggers. **4**

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