

M.Sc. I (Computer Science) (CBCS Pattern) Sem I
PSCSCT03 - Paper-III : Data Warehouse and SQL

P. Pages : 1

Time : Three Hours



GUG/S/18/8049

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw a well labelled diagram wherever necessary.
 3. Avoid vague answers and write answers specific to the questions.

1. Either
- a) What are the characteristics of Data warehouse? Explain performance considerations while designing Data warehouse. **8**
 - b) What are the various important decisions to be taken in designing a data warehouse? **8**
- OR**
- c) Explain data warehouse case study for weather forecasting. **8**
 - d) Explain managed Query Environment in detail. **8**
2. Either
- a) What are the various software components for a Data Mart? Explain in detail. **8**
 - b) What is Data Mining? Explain the important associated rules of Mining through data mining tools. **8**
- OR**
- c) Explain Metadata for a Data mart and also explain how to load a Data mart. **8**
 - d) Explain Data mining algorithm? What are the steps required to move from data warehouse to mining ? **8**
3. Either
- a) What is system Databases? Explain the SQL server Data storage architecture. **8**
 - b) What is Scalar operators? Explain the Data -types used in SQL. **8**
- OR**
- c) Discuss the role of Data-Engine in SQL server Database. **8**
 - d) Explain stored procedure with suitable example. **8**
4. Either
- a) What is Data Integrity? Explain the Mechanisms of constraint checking. **8**
 - b) Explain the concept of implementing permission in SQL server. **8**
- OR**
- c) Explain the properties of transactions and give its types? **8**
 - b) Explain the different replication methods for backup and concurrency control. **8**
5. Attempt all questions.
- a) Write short note on Data modelling. **4**
 - b) Explain the application of Data Mining in the following area. **4**
 - i) Retail / Marketing
 - ii) Banking.
 - c) Differentiate between DDL and DML. **4**
 - d) What do you mean by Locking? Explain. **4**
