M.Sc. - I (Computer Science) (CBCS Pattern) First Semester PSCSCT03 - Data Warehousing & SQL Paper-III

| | ages : ie : Th | 2 ree Hours $* 3 2 4 7 *$ | GUG/W/18/11144 Max. Marks : 80 | |
|----|-------------------|---|--|--|
| | Note | es: 1. All questions are compulsory and carry equal marks. 2. Draw neat and labelled diagram and use supporting data whereve 3. Avoid vague answers and write specific answers related to Quest | - | |
| 1. | | Either | | |
| | a) | Define Data Warehouse. Explain it's Architectural strategies in detail. | 8 | |
| | b) | Explain following in detail:1) Building a Data warehouse.2) Tools for Data Warehouse. | 8 | |
| | OR | | | |
| | c) | Explain about OLTP and OLAP system. Explain types of OLAP in detail. | 8 | |
| | d) | What do you mean by Managed Query Environment (MQE)? Explain it ir | n detail. 8 | |
| 2. | | Either | | |
| | a) | What is Data Mart? Explain about the metadata for a Data Mar in detail. | 8 | |
| | b) | Explain following.1) Tables in Data Mart.2) Security in Data Mart. | 8 | |
| | | OR | | |
| | c) | Define Data Mining. Explain the Algorithm for Data Mining from Data W | Vare house. 8 | |
| | d) | Explain following.1) Data segmentation.2) Link Analysis. | 8 | |
| 3. | | Either | | |
| | a) | Explain about the SQL server storage Architecture and Data Engine. in de | etail. 8 | |
| | b) | What do you mean by SQL Basis object? Explain different data types of S | SQL server. 8 | |
| OR | | | | |
| | c) | Explain about Data Definition Language and Data manipulation Language | e in SQL server. 8 | |
| | d) | Explain how stored procedures are used in SQL server by giving suitable | example. 8 | |

| 4. | | Either | | | |
|----|----|---|---|--|--|
| | a) | What do you mean by Data Integrity control? Explain about different constraints in SQL server. | 8 | | |
| | b) | Write a program to demonstrate the concept of permission in SQL server. | 8 | | |
| | | OR | | | |
| | c) | What is concurrency control? Explain how triggers work use sample example. | 8 | | |
| | d) | Explain following. 1) Back up Types. 2) Restore Database. | 8 | | |
| 5. | | Solve all the questions. | | | |
| | | a) What are the crucial Decisions in Designing a Data warehouse? Explain. | 4 | | |
| | | b) Write a note on predictive Modeling. | 4 | | |
| | | c) Write a note on Scalar operators in SQL server. | 4 | | |
| | | d) Write a note on Transaction logs. | 4 | | |
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