03/06/2019

Roll No. ..... Total Pages : 03

BT-6/M-19 36007

ADVANCED DATABASE SYSTEMS

CSE-324

Time : Three Hours] [Maximum Marks : 100

Note : Attempt *Five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

Unit I

1. What form of parallelism (inter-query, inter-operation and intra-operation) is likely to be the most important for each of the following tasks : (a) Increasing the throughput of a system with many small queries (2) Increasing the throughout of a system with a few large queries, when the number of disks and CPU in large. **10+10=20**

(a) What is query processing in distributed database ? How data is stored and processed in DDBMS ?

(b) Draw a neat sketch of distributed DBMS architecture. Elaborate the problems associated with distributed concurrency control. **10+10=20**

Unit II

3. What is Clustering ? Differentiate between data matrix and dissimilarity matrix. Explain hierarchical method of clustering detail. **20**

4. (a) What is meant by support, confidence, join, prune and item-set in association rule mining ?

   (b) Write a detailed note on similarity search over sequences. **10+10=20**

Unit III

5. How RDBMS differ from ORDBMS and OODBMS ? Explain the designing steps for implementing of ORDBMS. **20**

6. What are object oriented database systems ? How persistence is handled in typical OODBMS ? Explain structured types and reference types. **20**

Unit IV

7. How a query is processed in multimedia databases ? Discuss multimedia sources identified in multimedia database. **20**

8. (a) What do you mean by temporal databases ? Write a precise note on valid time and transaction time by a suitable example.

(b) Write and explore the strategies to ensure integrated access to multiple data sources ? 10+10=20