

Roll No.

8301

Printed Pages : 2

BT-3 / D-13

DATABASE MANAGEMENT SYSTEM

Paper-CSE-201-E

Time allowed : 3 hours] [Maximum marks : 100

Note : Attempt five questions, selecting at least one question from each unit.

Unit-I

1. Answer following parts :

- (a) Role and responsibilities of a database administrator.
- (b) Comparison of database approach with file processing system. 10+10=20

2. Describe the three-level architecture of database system in detail. Also describe client-server architecture of database applications. 20

Unit-II

3. Describe following by giving suitable examples : 10+10=20

- (a) relational algebra and its various operations.
- (b) relational calculus and its various operations.

4. Describe following concepts/terms and their use : 20

- (a) Index files
- (b) Index sequential files
- (c) Direct files

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Unit-III

5. Discuss what you understand by following : 5×4=20

- (a) functional dependency
- (b) full functional dependency
- (c) transitive dependency
- (d) multi-valued dependency

6. Describe various normal forms of database in context with operations' anomalies and their solutions. 20

Unit-IV

7. Write notes on following : 20

- (a) distributed databases
- (b) parallel databases
- (c) object-oriented databases

8. Discuss the problem of concurrent operations in distributed databases and various techniques to control the concurrent database operations. 20

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