

Time: 3Hrs

Marks: 80

Q1 is compulsory.

Attempt any three questions out of remaining five questions.

- Q1. Attempt All questions 20M
- Explain role of DBA.
 - Explain generalization in EER.
 - Explain concept of log-based recovery.
 - Explain DML commands with example.
- Q2. 10M
- Explain Conflict and View Serializability in detail 10M
 - Write SQL Queries for the following. Assume data wherever required. 10M
Employee (Eid, Ename, Salary, Experience, Dept_name, Location)
 - Find maximum salary of employees Dept_name wise.
 - Change department to 'Testing' of employees who experience is less than 5 years.
 - Create view from employee table as employee_record containing first 3 columns of employee table.
 - Delete all entries from employee table working in 'production' Department.
- Q3 10M
- Draw EER diagram for hospital management system 10M
 - Write relational algebra queries for. Assume data wherever required. 10M
 - Find names of employees whose location is 'Mumbai'
 - Find maximum salary of employee from employee table,
 - Find names of the employees whose Eid is greater than 3.
- Q4. 10M
- Explain concept of sub queries with example 10M
 - Draw and explain DBMS system architecture. 10M
- Q5 10M
- Define Normalization. Explain 2NF in detail 10M
 - Draw and explain generalization and specialization in detail 10M
- Q6. Write short note on 20M
- Binary Relational operation
 - Types of attributes
 - Foreign key with example
 - Recursive Queries

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