FDBMS

Seat No. _____

Duration:- 2½ hours   713011223   Marks:-75
Note:- A)All the questions are compulsory
       B)Each question carries equal marks.
       C)Figures (Diagrams /Charts) indicate full marks.

Q.1 **Attempt any Three of the following.**   15M

1. Write a short note on DML (Data Manipulation Language)   CO1/R

2. Solve the relational algebra Queries.   CO2/A
   i)find the information of employee name 'Rahul' from employee table.
   ii)Select the records from employee table with department id=20 and sal>50000.
   iii)find all employees having age <45 from employee table.

3. Explain characteristics of DBMS.   CO1/U
4. Explain Types of keys in DBMS.   CO1/U
5. Explain Data model.   CO1/U
6. Explain various operators in relational algebra.   CO1/U

Q.2 **Attempt any Three of the following:**   15M

1. What is strong entity and weak entity? Explain with example.   CO1/R/U

2. Write a short note on Specialization.   CO1/R
3. Construct an ER diagram for a car insurance company   CO1/A
   whose customers own one or more cars each.Each car
   has associated with it zero to any number of recorded
   accidents.

4. Write a short note on Sub class and Superclass.   CO1/R
5. Explain E-R diagram & its components.   COU
6. Write a short note on Relationships in DBMS.   CO1/U

Q.3 **Attempt any Three of the following:**   15M

1. Define Normalization and explain any two normalization   CO1/R/U
   form with example.

2. Write a short note on Boyce Codd Normal Form(BCNF).   CO1/R
3. Define functional Dependencies and their types.   CO1/R
4. Describe decornpostion.Explain desirable properties of   CO1/R
   decornposition.

5. Explain the functional Dependencies properties.   CO/U
6. Short note on keys and attributes.   CO1/R

Q4. **Attempt any Three of the following.**   15M

1. What do mean by index? Explain with example.   CO1/R/U
2. Write a short note on Hashing techniques.   CO1/U

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3. Explain tables & their syntax and example. CO3 A
4. Write advantages of views. CO3 R
5. What are triggers? Give an example. CO3 R
6. What are different file organization?

15M

Q.5 **Attempt any Three of the following.** CO3 R
1. Write a short note on Serializability. CO3 R
2. Write a short note on commit and rollback. CO3 U
3. Write fundamental properties of Transaction. CO3 U
4. Define Transaction and Explain Transaction states. CO3 R
5. Write a Short note on shadow paging. CO3 R
6. What is deadlock? Explain how dead lock detection and prevention is done.

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