RELATIONAL DATA BASE MANAGEMENT SYSTEM

Time : 3 Hours   Maximum Marks : 90

1. Define following terms :
   i) Primary Key   ii) Candidate Key
   iii) Project operation   iv) Transitive Dependency

    v) Data Definition command
    vi) BCNF Normal form.

Unit-II

2. a) Explain Relational Constraints with example.
   b) What do you mean by Joint Operation. Explain equi join, natural join & thetha join operation with example

3. i) Explain following terms using Tuple oriented Relational calculus :
   a) Tuple variable
   b) Well formed formulas
   c) Free & bound variables.
   ii) Consider the following relational schema. An employee can work in more than on department.
   Emp (eid, ename, salary)
   works (eid, did)
   (Dept (did, dname, managerid, floormem)
   Write following queries :
   a) Print the names of all emp. who work on the 10th floor and make less than Rs. 50,000.
   b) Print the names of all managers who mange three or more departments on the same floor.
   c) Print the names of the departments that employee santa work in.

Unit-II

4. What do you mean by normalization explain 1 NF, NF, 3NF with example in detail.

5. a) What do you mean by functional. Dependency explain fully functional dependency & Transitive functional Dependency with example.
   b) Explain BCNF. If a relation is in 3NF then whether the relation will be in BCNF or not.

UNIT-III

6. a) What is SQL. Explain its Advantages and Disadvantages of SQL.

   b) Explain Select statement with various types of option available in SELECT.

7. a) Explain various Data-Type used in SQL.

   b) What you mean by DDL commands in SQL. Explain two DDL commands with example.

UNIT-IV

8. Explain various control structure available in PL/SQL. Explain with example

9. a) Write program in PL/SQL to find the sum of first n natural no. Using while Loop & for loop.

   b) Explain the structure of PL/SQL Block in detail.

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