Relational Database management system

Time : Three Hours Maximum Marks : 80

Note : Total ***five*** questions are to be attempted. Selecft ***one*** question from each unit. Question No. 1 is compulsory.

Compulsory Question

1. Attempt all the following :

   (a) Explain Select operation with example. (3)

(b) Define 1NF and 2NF. (3)

(c) Explain the meaning of Full functional dependence with example. (3)

(d) Describe the syntax of six clauses of SQL query command. (3)

(e) Write the limitations of SQL.

(f) Explain different literals in PL/SQL.

UNIT-I

2. (a) Write down the various Cood's rules for relational model. (6)

(b) Explain Project, Cartesian product, Join & Division operations with example. (10)

3. What is the basic difference between Table-oriented and Domain-oriented relational calculus ? Explain by giving suitable examples. (16)

UNIT-II

4. (a) What does the term Unnormalized relation refer to? How did the normal forms develop historically? (8)

(b) Discuss Insertion, Deletion and Modification anomalies. Why are they considered bad ? Illustrate with example. (16)

5. Define and explain 3NF & BCNF by taking suitable example. (16)

UNIT-III

6. What do you mean by SQL ? Explain the data tyepes available in SQL. Also explain how does SQL implement different integrity constraints with example. (16)

7. (a) Explain various DML commands with example. (10)

(b) Write short note on Views in SQL. (6)

UNIT-IV

8. (a) Define Identifier and its rules in PL/SQL. Explain different methods of assigning values to variable.

Also explain percentage datatype, % type and % Row type. (8)

(b) Explain with example If-Then-elsif statement and Exist-when statement.

9. Write a program in PL/SQL to compute L.C.M. of two numbers. (16)