BCA/M-20   1896

RELATIONAL DATABASE MANAGEMENT
SYSTEM
BCA-244

Time : Three Hours]   [Maximum Marks : 80

Note : Attempt *Five* questions in all, selecting *one* question from each Unit in addition to Compulsory Q. No. **1**. All questions carry equal marks.

Compulsory Question

1. (a) Write a short note on Relational Model Concepts. **4**

   (b) Explain various anomalies in RDBMS.   **4**

   (c) Write a short note on Data types in SQL.   **4**

   (d) What are the advantages of PL/SQL ?   **4**

Unit I

2. What are the Codd's rules for RDBMS ? Explain in detail.   **16**

3. Explain various operations in Relational Algebra along with suitable examples.   **16**

Unit II

4. Write short notes on the following :

    (a)   Functional Dependencies   **4**

    (b)   Fully Functional Dependencies   **4**

    (c)   Transitive Dependencies   **4**

    (d)   Decomposition.   **4**

5. Define Normalization. What is its significance ? Explain the various types of normal forms along with suitable examples.   **16**

Unit III

6. Explain the basic DDL and DML commands in SQL along with suitable examples.   **16**

7. Explain the concept of Indexes and Aggregate functions in SQL with suitable examples.   **16**

Unit IV

8. Elaborate the following :

    (a)   PL/SQL architecture   **4**

    (b)   Loop Control Statements in PL/SQL.   **12**

9. Define Cursors in PL/SQL. Explain various types of Cursors. Write any program of your choice in PL/SQL that makes use of Cursors.   **16**