BCA 07

**II Semester B.C.A. Examination, August 2011**
**DATA BASE MANAGEMENT SYSTEM**

Time : 3 Hours                                                      Max. Marks : 80

*Instruction : Answer all questions in Part A, and either (a) or (b) of each question in Part B.*

### PART – A

I. Answer **all** questions :                                       (1×10=10)

1) What is transitive dependency ?

2) What is SQL ?

3) What are the set operations in SQL ?

4) What is meant by indexing ?

5) What is concurrency control ?

6) What is a data dictionary ?

7) What is database recovery ?

8) What is relationship ? Give examples.

9) What is DML ?

10) List out the functions of DBA.

II. Answer the questions in a paragraph :                           (5×4=20)

11) Explain in details about the various database languages.

12) Explain detail in domain relational calculus.

13) What are the responsibilities of DBA ?

14) Difference between first normal form and second normal form.

15) Explain deadlock in detail.

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## PART – B

Answer the questions in detail :                                                                   (5×10=50)

16. a) Explain architecture of DBMS.

    OR

    b) Write short notes :
        i) Referential Integrity
        ii) Aggregation.

17) a) Explain Codd's 12 Rules.

    OR

    b) Explain the commands used to retrieve, insert, delete and update tables.

18. a) Write short notes on **any two** of the following :
        i) Entity and Attributes
        ii) Database
        iii) Data Independence
        iv) Data Integrity.

    OR

    b) What is recovery ? Explain the various techniques.

19) a) Explain different levels of architecture of database system.

    OR

    b) Explain the four forms of normalization employed in relational database with appropriate examples.

20) a) Draw an E-R diagram for a Inventory system assume suitable attributes.

    OR

    b) Describe the different steps in the design of a relational database.

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