



**BCA 15**

**IV Semester B.C.A. Examination, August 2011**  
**RDBMS**

**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 stated of RDBMS in detail. Explain GNF in detail. (1×10=10)**

- 1) Define query language.
- 2) Define the following terms :
  - a) Field
  - b) Record
- 3) What is lossless join decomposition ?
- 4) What are the responsibilities of DBA ?
- 5) What is equi-join ?
- 6) What do you mean by index ?
- 7) What is meant by normalization of data ?
- 8) What are the uses of functional dependencies ?
- 9) Define DDL and DML.
- 10) List the disadvantages of relational database system.

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

- 11) What are the advantages of a DBMS ?
- 12) Write short notes on database security.
- 13) Write short notes on Boyce Codd Normal Form (BCNF).
- 14) Write short notes on oracle privileges and rules.
- 15) Write short notes on PL/SQL explicit cursors.

**P.T.O.**

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**PART- B**

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

16) a) Explain three schema architecture of a database system. Describe function of each schema.

OR

b) What are various types of control structures ? Give brief explanation.

17) a) Explain the role of DBA in database environment.

OR

b) Define term anomalies. Explain BCNF in detail.

18) a) Explain briefly about Data Models.

- i) E-R model
- ii) Relational model
- iii) Object-Oriented model

OR

b) Explain tuple relational calculus with all operations.

19) a) Explain triggers in SQL. And its type with examples.

OR

b) Explain Boyce-Codd Normal Form with example.

20) a) Describe security features associated with oracle database server.

OR

b) Define identifiers, literals, delimiters and comments associated with PL/SQL with suitable examples.