

Roll No.

BCA-502

**B. C. A. (Fifth Semester)
EXAMINATION, Dec., 2012**

Paper Second

BASICS OF DATABASE MANAGEMENT SYSTEM

Time : Three Hours]

[Maximum Marks : 75

Note : Section A is compulsory. Attempt any *seven* questions from Section B and *one* question from Section C.

Section – A

1. Explain the database management system architecture with a diagram. 6
2. Explain how a DBMS can be secured. 6
3. What is BCNF ? Explain with an example how is it different from 3NF. 6

Section – B

4. Explain the need of primary and foreign keys with suitable examples. 6
5. How do you implement a hierarchical data model ? Explain through an illustration. 6
6. Explain join dependency and multivalued dependency with the help of an example. 6
7. Explain the responsibilities of Database Administrator. 6

8. What do you mean by Integrity Constraints ? Explain. 6
9. What is RDBMS ? What are the characteristics of RDBMS ? 6
10. What is Distributed Database Management System ? Explain. 6
11. Explain the Oracle tools and Oracle data types. 6
12. Explain on views and security using SQL. 6
13. Explain insert, delete and update anomalies for a relation (R), with examples. 6

Section – C

14. What is Normalization ? Explain first, second and third forms with an example describing the advantages of normalization. 15
15. Construct an E-R diagram for an employee payroll system and explain it. 15