Exam. Code : 107203
Subject Code : 2035

BCA Semester—III

II : DATABASE MANAGEMENT SYSTEM AND ORACLE

Time Allowed—3 Hours]   [Maximum Marks—75

Note :— Attempt any **five** questions. All questions carry equal marks.

1. (a) Discuss the three level architecture of database management system. Explain the various types of data independence. How mapping is performed between different levels of database architecture ? Explain.

   (b) Distinguish between network and hierarchical models.
   7,8

2. (a) Define functional dependency. Discuss various types of functional dependency.

   (b) Explain about Domain constraints and Referential integrity with examples.   7,8

3. (a) Discuss about the components of ER Model. Give an example.

   (b) How would you use the features of nested queries in SQL to develop complex queries ? Give examples.   7,8

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4. (a) What is normalization and its need ? Differentiate between Second and Third Normal Forms.

   (b) What are the roles and responsibilities of DBA ?

   7,8

5. (a) Briefly explain Database Recovery Management.

   (b) Discuss in brief the various issues related to data base security.   7,8

6. (a) What is cursor ? How can you use cursor in PL/SQL ?

   (b) What is a procedure ? What is a function ? Bring out the differences. Explain with examples.   7,8

7. (a) What are the object oriented features of Oracle 10g ?

   (b) Discuss the components of a database system. 7,8

8. Write short notes on :

   (a) SQL*Plus commands with examples

   (b) Oracle architecture

   (c) DBTG   5,5,5