

AE-1322

B.C.A. New Course (Part - III)
Term End Examination, 2016-17

INTRODUCTION TO RDBMS (ORACLE)

Time : Three Hours] [Maximum Marks : 100
[Minimum Pass Marks : 33

Note : Answer **all** questions. The figures in the right-hand margin indicate marks.

1. Answer the following questions in short : $2\frac{1}{2} \times 10$
- (a) Explain DBA.
 - (b) Explain the network model of database.
 - (c) What is Super Key ?
 - (d) Explain Aggregation.
 - (e) Explain Inner Joins.
 - (f) What is Projection Operation of Relational Algebra ?

(2)

- (g) What is Multivalued Dependency ?
 - (h) What is Data Redundancy ?
 - (i) Explain Alter Command.
 - (j) Write a SQL Query to create any table with foreign key.
2. (a) Draw an ER diagram for Hospital Management System. 15

OR

- (b) What is ER Model ? Explain the symbols used in it. What is Specialization and Generalization ?
3. (a) Explain cartesian product, set difference, intersection, union and division operation of Relational Algebra. 15

OR

- (b) Explain the various types of integrity constraints and keys in Relational Database.
4. (a) Explain pitfalls in Relational Database Design. What are desirable properties of good decomposition ? 15

OR

(3)

(b) What are 2NF, BCNF and 5NF of Normalization ?

5. (a) Explain syntax of the following : 15

- (i) Inserting single and multiple rows in a table.
- (ii) Deleting values from a table through which clause ?
- (iii) Altering table to remove any column from existing table.
- (iv) Creating table with composite primary key.
- (v) Selecting value from a table through nested query.

OR

(b) Explain any *five* functions of each type of the following :

- (i) Aggregate functions
- (ii) Conversion functions
- (iii) String or character based functions

(4)

6. (a) Explain the role of DBA and various types of Database users. What is data dictionary ? 15

OR

- (b) Explain the various Database models through suitable example.
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