

Roll No.....

Printed Pages: 2

1691

BCA/M-15

**RELATIONAL DATABASE
MANAGEMENT SYSTEM**

Paper-BCA-244

Time allowed: 3 hours]

[Maximum marks: 80

Note: Attempt five questions in all including question no.1 and selecting one question from each section. All questions carry equal marks.

Compulsory Question

1. (a) What do you mean by Extensions and Intensions of a relation?
- (b) What are objectives of Normalization?
- (c) What are the advantages of SQL?
- (d) Explain structure of PL/SQL block.

UNIT-I

2. Explain various relational Algebra operations by using suitable examples.
3. Explain tuple-oriented relational calculus by using examples.

UNIT-II

4. (a) Why Normalization is necessary? Explain by using Example.
- (b) What do you mean by Decomposition? Explain various properties of decomposition.
5. Take an example where relation is in 3NF but not in BCNF. What Problem may occur in insertion, deletion and modification in this table? Suggest possible solution of these problems also.

UNIT-III

6. Explain following SQL commands by using example

- (a) CREATE TABLE
- (b) INSERT
- (c) UPDATE
- (d) GRANT

7. Given the following relation schema :

EMP (ENO, ENAME, AGE, BASIC)

Work-in (ENO, DNO)

DEPT (DNO, DNAME, CITY)

Write SQL queries for the following:

- (a) Find the employees whose basic pay is 5000 & 7000 & 8000.
- (b) Find the Employees whose names begin with 'K'.
- (c) Find the names of Employees who work in a deptt. In Kurushetra.
- (d) Find the average basic pay of all the employees.

UNIT-IV

- 8. Explain various control structures in PL/SQL by using examples.
- 9. Explain the concept of trigger by using example. Also describe the syntax for creating a Trigger.