Register Number:

Name of the Candidate:

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## **B.C.A. DEGREE EXAMINATION, 2007**

(SECOND YEAR)

(PART - III)

(PAPER - IX)

## 630. RELATIONAL DATA BASE MANAGEMENT SYSTEMS

(New Regulations)

(Including Lateral Entry)

May ] [ Time : 3 Hours

Maximum: 100 Marks

**PART - A**  $(8 \times 5 = 40)$ 

Answer any EIGHT questions.
All questions carry equal marks.

- 1. List the advantages of a DBMS.
- 2. Can a weak entity set be converted to a strong entity set? Explain.

Turn over

2

3. Write all the rules for drawing a schema.

- 4. Explain any five relational operations of relational algebra.
- 5. Explain the basic structure of QBE with examples.
- 6. What are the aggregate functions available in SQL? Explain.
- 7. Explain 3rd normal form with suitable examples.
- 8. Describe the concept of multi-valued dependency.
- 9. Discuss on PL/SQL data types.
- 10. Write short note on PL/SQL blocks.

**PART - B** 
$$(3 \times 20 = 60)$$

Answer any THREE questions.
Each question carries TWENTY marks.

11. (a) Define the primary and secondary keys of a record. When is a concatenated key used as a primary key? What is multiple key retrieval?. (5 + 2 + 3)

3

- (b) Explain the variuos attribute types used in E R model. (10)
- 12. (a) Illustrate in detail on tuple relational calculus. (10)
  - (b) Construct an E R diagram for a carinsurance company. (10)
- 13. (a) With suitable example, discuss how to add or remove information using QBE.

  (10)
  - (b) Explain how database can be modified in SQL. (10)
- 14. Discuss Boyce Cod normal form with example. (20)
- 15. (a) Explain Data manipulation in PL/SQL. (10)
  - (b) List out the features of PL/SQL. (10)