Total Pages : 3   **Roll No. ....**

BCA-09

Bachelor of Computer Application (BCA)

(Database Management System)

3rd Semester Examination, 2024 (June)

Time : 2:00 Hrs.   Max. Marks : 70

Note **:–** This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. ***Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.***

Section–A

(Long Answer Type Questions)   2×19=38

Note **:–** Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. Explain the types of database recovery.

2. What is normalization ? Explain various types of normal forms with examples.

3. What are the characteristics of SQL ? Explain DDL and DML with examples.

4. Explain the different types of DBMS.

5. Write short note on following :

   (a) ER diagram

   (b) DBMS *Vs.* RDBMS

   (c) Merits and demerits of DBMS

   (d) Distributed database system.

Section–B

(Short Answer Type Questions)   4×8=32

Note :– Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Define functional dependency. Why it is required ?

2. What is Key ? Difference between candidate key and Super Key.

3. Describe conceptual, logical and physical data model.

4. What is Referential Integrity ? Explain with example.

5. Explain Codd's rules for RDBMS.

6. What do you mean by integrity constraint ?

7. What is DBMS ? What is Data Redundancy ? Explain properties of DBMS.

8. Explain the following terms :

   (i) Components of DBMS

   (ii) Role of database administrator

****