- 13. Write short notes on the following:
  - Distributed database architecture
  - Data Mart
  - Difference between data warehouse and database

(4)

## BCA-09/DCA-103

June – Examination 2024

# BCA (Part II)/DCA Examination

**DATABASE MANAGEMENT SYSTEM** 

Paper: BCA-09/DCA-103

Time: 3 Hours [ Maximum Marks : 70

*Note*: The question paper is divided into three Sections A, B and C. Write answers as per the given instructions.

#### Section-A $7 \times 2 = 14$

### (Very Short Answer Type Questions)

- *Note*: Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 2 marks.
- Classify the use of Primary Key and Foreign Key.
  - (ii) Explain the use of Normalization

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- (iii) Identify the types of relation.
- (iv) Explain the use of E-R diagram.
- (v) What is difference between Inner Join and Outer Join ?
- (vi) Write full form of SQL, DDL, DML and BCNF.
- (vii) Explain the term Data Warehouse.

#### Section-B

 $4 \times 7 = 28$ 

#### (Short Answer Type Questions)

- **Note**: Answer any *four* questions. Each answer should not exceed **200** words. Each question carries 7 marks.
- 2. Differentiate between database management system and file management system.
- 3. Explain the ACID property in database management system.
- 4. Write the difference between physical and logical independence.
- 5. Explain the different types of keys that are used in relational database.
- 6. Describe the characteristics and types of SQL.
- 7. Explain the role of DBA (Database Administrator).

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- 8. Explain the following terms in brief:
  - (a) Database Instance
  - (b) Trigger
- 9. Explain the following terms in brief:
  - (a) DDL
  - (b) DML

#### Section-C

 $2 \times 14 = 28$ 

#### (Long Answer Type Questions)

- **Note**: Answer any *two* questions. You have to delimit your each answer maximum up to **500** words. Each question carries 14 marks.
- 10. Explain the different types of Normalization in detail that are used in RDBMS.
- 11. Explain the Notation of E-R Model with Extended E-R features.
- 12. What is use of SQL in RDBMS? Write the syntax and use of the following SQL Command:
  - (a) INSERT
  - (b) SELECT
  - (c) DELETE
  - (d) DROP