

BCA-09/DCA-103

December - Examination 2025

BCA (Part II) Examination

DATA BASE 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

7×2=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.

1. (i) Define Data Dictionary.
- (ii) Define Entity Set.
- (iii) What is Redundancy in Data Base?
- (iv) What is Candidate Key?
- (v) What is Atomicity of a Transaction?
- (vi) What is Concurrency Control?
- (vii) Give definition of Relational Data Model.

Section-B

4×7=28

(Short Answer Type Questions)

Note :- Answer **any four** questions. Each answer should not exceed **200** words. Each question carries **7** marks.

2. What are the various properties of Transaction?
3. What do you understand by 'Functional Dependency'? Explain.
4. Explain BCNF with example.
5. Discuss the Role of Data Base Administrator.
6. Describe Aggregate Functions of SQL with example.

7. Explain ACID Properties. Why are they important in transaction?
8. Explain the difference between Weak & Strong Entity Set.
9. What is Serializability and how it works in concurrency?

Section-C

2×14=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 Inference Rule of Functional Dependencies.
11. Differentiate between Stored Procedure & Triggers. How they are created?
Explain with example.
12. What is Join? Explain various types of Joins with example.
13. What do you mean by Query & Sub-Query?
