

Roll No.

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Total No. of Pages : 02

Total No. of Questions : 07

BCA (Sem-4)

DATABASE MANAGEMENT SYSTEMS

Subject Code : UGCA1922

M.Code : 79726

Date of Examination : 20-05-2025

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **SIX** questions carrying **TEN** marks each and students have to attempt any **FOUR** questions.

SECTION - A

1. Write briefly :

- a. Define view level.
- b. Limitations of hierarchical data model.
- c. Difference between alter and update.
- d. List the two DDL statements.
- e. Why do we need Normalization?
- f. What is cursor?
- g. Define the term functional dependence.
- h. What is log base recovery?
- i. What is the difference between authorization and authentication?
- j. List the different file operations.

SECTION - B

2. Discuss data redundancy, data inconsistency, data integrity, security and concurrent access.
3. Discuss Hierarchical, Network, Relational and Object-Oriented Models.
4. Why do we need the concept of keys in DBMS? Discuss Primary Key, Candidate Key, Foreign Key, Super Key and Composite Key with the help of suitable example.
5. Discuss how normalization removes redundancy and improves data integrity. Explain 1NF, 2NF and 3NF.
6. What are joins in SQL? Explain the different types of joins with examples.
7. What is concurrency control? Explain the different concurrency control techniques.

NOTE: Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.