

Roll No. 

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Total No. of Pages : 02

Total No. of Questions : 09

**M.Sc.(IT)/PGDCA (Sem.-1)**  
**RELATIONAL DATABASE MANAGEMENT SYSTEM**  
Subject Code : PGCA-1904  
M.Code : 76974  
Date of Examination : 22-05-2023

Time : 3 Hrs.

Max. Marks : 70

**INSTRUCTIONS TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION - B & C have FOUR questions each.
3. Attempt any FIVE questions from SECTION B & C carrying TEN marks each.
4. Select atleast TWO questions from SECTION - B & C.

**SECTION-A**

1. Answer briefly :

- a. Data Mining
- b. Database Schema
- c. Relational Operations
- d. DDL
- e. Authorization
- f. Referential Integrity Constraint
- g. Functional Dependency
- h. Normal Forms
- i. ACID Properties
- j. JDBC.

### **SECTION-B**

2. What is the purpose of database and its applications? Discuss in detail.
3. Explain the architecture of database system and storage of database.
4. What is SQL and its sub-types? Also discuss aggregate functions using suitable example?
5. What is the difference between function and procedure, use SQL code to explain both?

### **SECTION-C**

6. What is ER data model? Explain ER diagram with suitable example.
7. What is the process of normalization? Explain type of normal forms and dependencies.
8. What is Concurrency? Discuss different concurrency controls and lock management.
9. What are the different security and recovery methods for database? Discuss.

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