

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

MCA (Sem.-1)
ADVANCED DATABASE MANAGEMENT SYSTEM

Subject Code : PGCA-1953

M.Code : 79038

Date of Examination : 20-12-2024

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 at least TWO questions from SECTION - B & C.

SECTION-A

1. **Write short notes on :**
 - a. Data Models
 - b. Cardinality of Relation
 - c. Referential Integrity Constraints
 - d. Weak Entity
 - e. Projection Operation
 - f. Intra query parallelism
 - g. Distributed Database Storage
 - h. NoSQL Databases
 - i. Temporal Databases
 - j. Distributed DBMS Commit Protocols.

SECTION-B

2. What is the need of DBMS also compare with traditional file based system?
3. What is ER data model? Explain ER diagram with suitable example and their terminology.
4. What is the process of normalization? Explain first three normal forms.
5. What is the use of relational algebra also discuss different operator?

SECTION-C

6. Explain the database system architecture also differentiate centralized and client server architecture.
7. What are the concepts and use of multidimensional databases in data analytics?
8. What are spatial databases and their data structure and method of storage?
9. What are the types of XML databases? What is an XML schema type?

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.