Roll No. | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

M.Sc.(IT)/MCA/PGDCA (Sem.–1)

RELATIONAL DATABASE MANAGEMENT SYSTEM

Subject Code : PGCA-1904

M.Code : 76974

Date of Examination : 17-01-2023

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) What are multivalued dependencies?

b) What are the different types of database languages?

c) What is the difference between the primary and unique key?

d) What are specialty databases?

e) What are the full forms of JDBC and SQU?

f) What are the differences between DROP, TRUNCATE and DELETE commands?

g) What is the meaning of an attribute in ER diagram?

h) What are ACID properties in DBMS?

i) What is the difference between embedded SQL and dynamic SQL?

j) What is meant by query processing?

SECTION-B

2. Explain the concept of data models in DBMS and discuss in detail the three-schema architecture.

3. Discuss in detail:

   a) Magnetic disks

   b) Primary and Secondary indexes.

4. Explain the concept of transaction management in DBMS using a real-life example. Why is conflict serializability important?

5. Discuss various aggregate functions available in SQL. Also, throw some light on the concept of join expressions.

SECTION-C

6. Explain the following :

   a) Schema

   b) View

   c) Instance

   d) Null values

   e) Foreign key.

7. Why normalization is required? Explain various normal forms available in DBMS in detail.

8. What are the features of a good relational design? Explain by citing instances.

9. Discuss various techniques available in DBMS to ensure database security.

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.