

B.Sc. (CBCS) DEGREE EXAMINATION,  
NOVEMBER 2023.

Fifth Semester

Computer Science – Core

RELATIONAL DATABASE MANAGEMENT SYSTEM

(For those who joined in July 2021-2022)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

- The collection of data that contains information relevant to an enterprise is
  - (a) MS ACCESS            (b) ORACLE
  - (c) DBMS                (d) Database

- Which join preserves tuples in both relations?
  - (a) left outer            (b) right outer
  - (c) full outer            (d) inner
- If the domains of all attributes of a relation schema R, are atomic, then R is in \_\_\_\_\_
  - (a) 1 NF                (b) 2 NF
  - (c) 3 NF                (d) BCNF
- Which dependencies generalize multivalued dependencies?
  - (a) referential
  - (b) join
  - (c) functional
  - (d) domain
- Which of the following is not included in Data Manipulation Language?
  - (a) UPDATE            (b) CREATE
  - (c) INSERT              (d) DELETE
- Which of the following keyword is used with Data Control Language statements?
  - (a) INSERT              (b) SELECT
  - (c) GRANT               (d) DELETE

- The overall design of the database is called as \_\_\_\_\_
  - (a) Structure
  - (b) Architecture
  - (c) Schema
  - (d) Model
- The relational data model is based on collection of \_\_\_\_\_
  - (a) data                    (b) relations
  - (c) decisions              (d) tables
- Which of the following is based on relational algebra?
  - (a) DML                    (b) DDL
  - (c) SQL                    (d) Tuple
- Which operator is used for performing pattern match in strings?
  - (a) equality                (b) =
  - (c) equal to               (d) like

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

- (a) Write a note on the purpose of database systems.
  - Or
  - (b) Write a note on data mining.
- (a) Give the structure of relational databases.
  - Or
  - (b) Give the basic structure of SQL queries.
- (a) Write a note on null values.
  - Or
  - (b) What are the basic datatypes in SQL?
- (a) How are ER diagrams reduced to schema?
  - Or
  - (b) Give the features of good relational design.

15. (a) How is a table modified?

Or

(b) Write a PL/SQL function to display fibonacci series: 0, 1, 1, 2, 3, 5 .....

PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Briefly describe data abstraction.

Or

(b) Briefly explain transaction management.

17. (a) Briefly explain the relational operations.

Or

(b) Explain SQL data definition.

18. (a) Briefly explain nested sub queries.

Or

(b) Briefly explain inner and outer joins.

19. (a) Explain Entity Relationship model.

Or

(b) Discuss about decomposition using functional dependencies.

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20. (a) Describe with example how a view is created in Oracle.

Or

(b) Write about stored procedures in PL/SQL.

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