



K24U 0921

Reg. No. : .....

Name : .....

**IV Semester B.Sc. Degree (C.B.C.S.S. – Supplementary/One Time Mercy  
Chance) Examination, April 2024  
(2014 to 2018 Admissions)**

**GENERAL COURSE IN COMPUTER SCIENCE  
4A13CSC – Database Management System**

Time : 3 Hours

Max. Marks : 40

**SECTION – A**

**One word answer :**

**(8×0.5=4)**

1. a) \_\_\_\_\_ represents a real-world object or concept, such as an employee or a project from the mini world that is described in the database.
- b) A formal query language for the relational model is called \_\_\_\_\_
- c) DCL stands for \_\_\_\_\_
- d) Address of a person is an example for \_\_\_\_\_ attribute.
- e) DBA stands for \_\_\_\_\_
- f) In the relation model, the relations are generally termed as \_\_\_\_\_
- g) \_\_\_\_\_ aggregate function is used to find out the number of values in a column.
- h) \_\_\_\_\_ command is used to modify the column of a table.

**SECTION – B**

Write short notes on **any seven** of the following questions :

**(7×2=14)**

2. Explain UPDATE command with syntax and example.
3. What do you mean by multi-valued attribute ? Give example.
4. List out DML commands in SQL.
5. What do you mean by referential integrity ?
6. Give an SQL query to illustrate the usage of a) BETWEEN, b) LIKE.

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7. What is the use of GROUP BY and HAVING clause in SQL ?
8. What is the purpose of INSERT command ? Give an example for INSERT statement in SQL.
9. What is the difference between UNION and UNION ALL operations in SQL ?
10. What is a trigger ? Give the syntax.
11. What is domain relational calculus ? Give its general form.

### SECTION – C

Answer **any four** of the following questions :

(4×3=12)

12. Explain functional dependency with an example.
13. Explain projection operation in relational algebra.
14. Explain set difference in SQL with an example.
15. What is a weak entity ? Explain with an example.
16. Explain specialization in ER model.
17. Differentiate DELETE and DROP commands in SQL.

### SECTION – D

Write an essay on **any two** of the following questions :

(2×5=10)

18. Explain the first, second and third normal forms in detail with examples.
  19. Discuss different types of JOIN operations in SQL.
  20. Explain in detail, the components of DBMS.
  21. Create DEPT table with the following structure (DEPTNO, DNAME, LOC) and EMP table with the following fields (EMPNO, ENAME, JOB, DEPTNO, SAL) Allow NULL for all columns except ENAME and JOB.
    - a) Update the EMP table to set the salary of all employees to Rs. 15,000/- who are working as Manager.
    - b) Delete only those who are working as Clerk.
    - c) List the records in the EMP table order by salary in descending order.
    - d) Display DEPTNO from the table employee avoiding the duplicated values.
    - e) List the EMPNO, ENAME, DNAME in which all employees are working.
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