



PRESIDENCY COLLEGE

(AUTONOMOUS)

AFFILIATED TO BENGALURU CITY UNIVERSITY, APPROVED BY AICTE, DELHI & RECOGNISED BY THE GOVT. OF KARNATAKA
RE-ACCREDITED BY NAAC WITH 'A+' GRADE

21C204.1C

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END TERM EXAMINATION MARCH 2022
BCA - I SEMESTER
GC204.1C: DATABASE MANAGEMENT SYSTEMS - DSC

Duration: 2 Hours

Max Marks: 60

Instruction: Answers should be written in **English** only.

PART- A

Answer **any EIGHT** questions. **Each** question carries **TWO** marks.

(8 X 2=16)

1. Write any two implicit properties of database approach.
2. Mention any two differences between logical and physical data independence.
3. Define Database System Environment. Mention its components.
4. Define Entity integrity constraint. Give an example.
5. Differentiate between primary key and foreign key.
6. What is Relational Model? Give an example.
7. What is the difference between DROP and TRUNCATE command?
8. What are the applications of relational algebra in RDBMS?
9. Define lock. Mention its types.
10. What is transaction in SQL? Give an example.

PART-B

Answer **any FOUR** questions. **Each** question carries **SIX** marks.

(4 X 6=24)

1. What is data model? Explain different types of data models.
2. Explain the classification of DBMS user interfaces.
3. Construct an ER diagram for company database.

4. What is Normalization? Explain 1NF and 2NF with an example.
5. Explain SELECT and PROJECT operations in relation algebra with examples.
6. Explain two phase locking techniques for concurrency control.

PART-C

Answer any **TWO** questions. Each question carries **TEN** marks.

(2 X 10=20)

1. With neat diagram explain DBMS three level Architecture.
2. Discuss the steps in high level conceptual data models for database design.
3. Explain DDL, DML and DCL commands in SQL.
4. What is database recovery? Explain database recovery techniques.
