**Roll No…………….. Total No. of Pages:……**

**ST-1 (SET-III)**

**4th SEMESTER 2023-24**

**22CS007- Database Management System**

**Time allowed: 90 Minutes Max. Marks: 40**

**General Instructions:**

* **Follow the instructions given in each section.**
* **Make sure that you attempt the questions in order.**

**SECTION-A (10\*1 mark=10 marks)**

***(All questions are compulsory)***

1. Which normal form eliminates transitive dependencies?
   1. 1NF (First Normal Form)
   2. 2NF (Second Normal Form)
   3. 3NF (Third Normal Form)
   4. **BCNF (Boyce-Codd Normal Form)**
2. Which of the following represents a one-to-many relationship in an ER diagram?
   1. Crow's foot notation
   2. Dashed line
   3. **Solid line**
   4. Dotted line
3. Which normal form ensures that every non-key attribute is fully functionally dependent on the primary key?
   1. 1NF (First Normal Form)
   2. **2NF (Second Normal Form)**
   3. 3NF (Third Normal Form)
   4. BCNF (Boyce-Codd Normal Form)
4. Which language is used to define the structure and integrity constraints of a database schema?
   1. Data Manipulation Language (DML)
   2. Data Control Language (DCL)
   3. **Data Definition Language (DDL)**
   4. Query Language (QL)
5. Which SQL keyword is used to create a new table in a database?
   1. ALTER TABLE
   2. DROP TABLE
   3. **CREATE TABLE**
   4. INSERT INTO
6. Which SQL function is used to find the average value of a column in a SELECT statement?
   1. **AVG()**
   2. COUNT()
   3. SUM()
   4. MAX()
7. Which of the following best describes the concept of data masking in database security?
   1. **Hiding sensitive data from unauthorized users**
   2. Encrypting data at rest and in transit
   3. Backing up data regularly
   4. Securing the physical location of the database server
8. Which of the following is not a valid cursor type?
   1. STATIC
   2. DYNAMIC
   3. FORWARD\_ONLY
   4. **RANDOM**
9. Which of the following is an advantage of using cursors in DBMS?
   1. Improved query performance
   2. Reduced memory consumption
   3. **Ability to process data row by row**
   4. Simpler and more concise code
10. Which component of DBMS is responsible for enforcing data integrity constraints?
    1. Query Compiler
    2. Schema Manager
    3. Data Dictionary
    4. **Constraint Manager**

**SECTION-B (5\*2 mark=10 marks)**

***(All questions are compulsory)***

**SECTION-C(Coding Question) (4x5 marks=20 marks)**