



**CENTRE FOR DEVELOPMENT OF IMAGING TECHNOLOGY**

(Under Government of Kerala)

**CEP EXAMINATION- FEBRUARY 2023**

**Subject: RDBMS**

**DCA**

Register No.

Time: 3 Hours

Maximum Marks:100

**I. Fill in the blanks. Answer ALL questions.**

**(10 x 1 = 10)**

1. A \_\_\_\_\_ is an organized collection of logically related data.
2. Data is represented in the form of \_\_\_\_\_
3. In ACID property 'D' stands for \_\_\_\_\_
4. Projection is \_\_\_\_\_ operation in relational algebra.
5. In RDBMS, R refers to \_\_\_\_\_
6. An attribute in a relation of a database that serves as the primary key of another relation in the same database is called a \_\_\_\_\_
7. Number of attributes in a relation is called \_\_\_\_\_ of the relation.
8. Over representation of a database is known as \_\_\_\_\_
9. DML stands for \_\_\_\_\_
10. 'AS' clause in SQL used for \_\_\_\_\_ operation.

**II. Explain briefly. Answer any TEN questions.**

**(10 x 4 = 40)**

1. What is database? Mention the advantages of DBMS.
2. Describe the three levels of data abstraction.
3. Write a short note on cardinality.
4. Briefly explain the components used in ER diagram.
5. Write SQL statement to create table student with rollno, name, age, class and totalmark.
6. Briefly explain about distributed system.
7. What is functional Dependency?
8. What is the difference between a DELETE command and TRUNCATE command?
9. Briefly explain the following relationships with examples
  - a) One to one
  - b) Many to many
10. Describe various types of file organizations.

11. Describe about the different types of keys.
12. How many aggregate functions are available in SQL? List them.
13. Write the basic structure of SQL.

**III. Answer any FIVE questions. Explain in detail.**

**(5 x 10 = 50)**

1. Explain various data models in detail.
2. What is meant by ACID properties in DBMS? Describe with examples.
3. What are the set operators in SQL? Describe with examples.
4. What you meant by Normalization? Explain different types of Normal Forms.
5. What do you mean by join in SQL? What are the types of joins? Explain each with examples.
6. Explain about DDL and DML commands in SQL with Examples.
7. What do you mean by deadlock? Explain its detection and prevention.

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