

BACHELOR OF COMPUTER APPLICATION
THIRD SEMESTER
RELATIONAL DATA BASED MANAGEMENT SYSTEM
BCA-301(REPEAT)
[USE OMR FOR OBJECTIVE PART]

**SET
A**

Duration: 1.30 hrs.

Full Marks: 35

Time: 15 min.

(Objective)

Marks: 10

Choose the correct answer from the following:

1X20=20

1. The relational model uses some unfamiliar terminology. A tuple is equivalent to a ---
 - a. Record
 - b. Field
 - c. File
 - d. Database
2. The value of primary key field is -----
 - a. Unique
 - b. Null
 - c. Duplicate
 - d. None of these
3. To modify existing rows of a table , ----- statement is used.
 - a. ALTER
 - b. MODIFY
 - c. UPDATE
 - d. None of these
4. Which of the following is not a valid data type in SQL?
 - a. CHAR
 - b. DECIMAL
 - c. STRING
 - d. DATE
5. DDL stands for
 - a. Data Definition Language
 - b. Data Derivation Language
 - c. Dynamic Data Language
 - d. Detailed Data Language
6. An attribute of one table matching the primary key of another table, is called as -----
 - a. Candidate key
 - b. Foreign Key
 - c. Secondary key
 - d. None of these
7. An entity set that does not have sufficient attributes to form a primary key is a -----
- entity set.
 - a. Weak
 - b. Strong
 - c. Simple
 - d. Primary
8. The concept of locking can be used to solve the problem of
 - a. Lost update
 - b. Inconsistent data
 - c. Uncommitted dependency
 - d. All of these
9. If every non-key attribute is functionally dependent on the primary key, then the relation will be in -----

- a. First normal form
 - b. Second normal form
 - c. Third normal form
 - d. Fourth normal form
10. An indexing operation -----
- a. Sorts a file using a single key
 - b. Sorts file using two keys
 - c. Establishes an index for a file
 - d. Both (b) & (c)

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(Descriptive)

Time : 1 hrs. 15 min.

Marks : 25

[Answer question no.1 & any two(2) from the rest]

1. What is DBMS? What are the advantages of DBMS? 5
2. Describe the three-schema architecture with diagram. Why do we need mappings among schema levels? 7+3=10
3. a. Explain the steps for converting regular entity from ER to Relational Mapping with example. 5 + 5=10
b. What is integrity constraint? What do you mean by referential integrity? Explain.
4. What is normalization? Explain first, second, & third normal form. 10
5. a. Why concurrency control is needed? What is locking? 5 +5=10
b. Discuss the advantages and disadvantages of using (a) an unordered file. (b) an ordered file

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