

**BCA-09 Database Management System**

**SET: 1**

**Section-A**

(Very Short Answer Questions)

1. (i) Define Database.  
(ii) What is tuple?  
(iii) What is DDL?  
(iv) What is thread?  
(v) What is Database Schema?  
(vi) What do you mean by Multi-valued Attribute?  
(vii) What is view?  
(viii) What is the advantage of data replication?  
(ix) Name SQL data types?  
(x) What is Exclusive Locks?

**Section-B**

(Short Answer Questions)

2. Differentiate between Primary key and Foreign Key.
3. What is relationship in DBMS? Explain various types of Relationship in DBMS.
4. Compare total participation and partial participation with example.
5. What is trigger? Why it is useful? Explain with example.
6. Explain the use of key in DBMS with example.
7. Explain the following:
  - a. Generalization
  - b. Specialization
  - c. Aggregation
8. What are the limitations of Oracle?
9. Write a short note on precedence graph?

**Section-C**

(Long Answer Questions)

10. What is the purpose of Database Management System? Explain different types of architectures of DBMS.
11. Explain Tuple and Domain relation calculus with fundamental operations that are used with example.
12. What is the purpose of Normalization? Give the steps to normalize a relation
13. What is SQL? Explain with types of SQL Commands

## **BCA-09 Database Management System**

### **SET: 2**

#### **Section-A**

(Very Short Answer Questions)

1. (i) Define database schema.  
(ii) How is NativeEnd user?  
(iii) What is Data redundancy?  
(iv) What is an index?  
(v) What is the importance of null value?  
(vi) What is degree of relationship?  
(viii) Write a SQL query to drop a table?  
(viii) What is checkpoint?  
(ix) What is Time stamp?  
(x) Define Fragmentation Transparency.

#### **Section-B**

(Short Answer Questions)

2. What are the function and services of Operating System?
3. Compare Database Management System and File Management System?
4. Explain the importance of Data Independence.
5. Differentiate between ER Model and Relation Model.
6. What is Database constraint? Explain various type of constraints.
7. What are Codd's 12 rules? Explain
8. What are set operation? Explain with example
9. What is transaction and its properties?

#### **Section-C**

(Long Answer Questions)

10. What is importance of ER diagram? Explain with example which shows multiple relationships between entities.
11. What are Joins. Explain various type of Joins with examples.
12. Given the following relation write a query in SQL.  
branch (branch\_name, branch\_city, assets)  
customer (customer\_name, customer\_street, customer\_city)  
account (account\_number, branch\_name, balance)  
loan (loan\_number, branch\_name, amount)  
depositor (customer\_name, account\_number)  
borrower (customer\_name, loan\_number)
  - a. Find the loan\_number, branch\_name, and amount for loans of over \$1200.
  - b. Find the names of all customers having a loan, an account, or both at the bank
  - c. Find the names of all customers having a loan at the Kota branch

- d. Find the names of all customers who have a loan at the Kota branch, but no account at any branch of the bank
13. What do you understand by Functional dependency? Discuss various types of dependencies with suitable example.