

Multiple Choice Questions

1. RDBMS stands for:

- A) Relationship Database Management System
- B) Data Management Service
- C) Database Memory System
- D) Data Backup Management System

Answer: A

2. Which is an advantage of DBMS over a file system?

- A) Data redundancy increases
- B) Better data security
- C) No backup facility
- D) More data duplication

Answer: B

3. The three-level architecture of DBMS consists of:

- A) Internal, External, Conceptual
- B) Physical, Logical, Virtual
- C) Client, Server, Network
- D) Table, View, Schema

Answer: A

4. Who is responsible for managing a database?

- A) Programmer
- B) Database Administrator (DBA)
- C) User
- D) Operator

Answer: B

5. Which key uniquely identifies each record in a table?

- A) Foreign Key
- B) Candidate Key
- C) Primary Key
- D) Composite Key

Answer: C

6. A Foreign Key is mainly used to:

- A) Sort data
- B) Maintain referential integrity
- C) Delete records
- D) Create indexes

Answer: B

7. ER model stands for:

- A) Entity Relationship Model

- B) Entity Record Model
- C) External Relation Model
- D) Entry Relationship Model

Answer: A

8. In an ER diagram, a rectangle represents:

- A) Relationship
- B) Entity
- C) Attribute
- D) Key

Answer: B

9. Which constraint ensures that every primary key value is unique?

- A) Domain Constraint
- B) Entity Integrity
- C) Referential Integrity
- D) Key Constraint

Answer: B

10. The main objective of normalization is to:

- A) Increase redundancy
- B) Reduce redundancy
- C) Increase storage
- D) Delete records

Answer: B

11. First Normal Form (1NF) removes:

- A) Partial dependency
- B) Repeating groups
- C) Transitive dependency
- D) Functional dependency

Answer: B

12. Second Normal Form (2NF) removes:

- A) Repeating groups
- B) Partial dependency
- C) Transitive dependency
- D) Multivalued dependency

Answer: B

13. Third Normal Form (3NF) removes:

- A) Partial dependency
- B) Repeating groups
- C) Transitive dependency
- D) Composite keys

Answer: C

14. Which file organization stores records in no particular order?

- A) Sequential File
- B) Heap File

- C) Indexed File
- D) Hashed File

Answer: B

15. Which SQL command is used to create a table?

- A) SELECT
- B) INSERT
- C) CREATE
- D) UPDATE

Answer: C

16. Which SQL clause is used to filter records?

- A) ORDER BY
- B) GROUP BY
- C) WHERE
- D) HAVING

Answer: C

17. Which SQL clause is used to sort query results?

- A) GROUP BY
- B) ORDER BY
- C) WHERE
- D) SELECT

Answer: B

18. Which SQL statement is used to retrieve data?

- A) INSERT
- B) UPDATE
- C) SELECT
- D) DELETE

Answer: C

19. Which SQL operation combines rows from two or more tables?

- A) VIEW
- B) JOIN
- C) INDEX
- D) SEQUENCE

Answer: B

20. Which SQL language is used for transaction control?

- A) DDL
- B) DML
- C) TCL
- D) DCL

Answer: C

Fill in the Blanks

1. DBMS stands for _____. (**Database Management System.**)
2. The three-schema architecture has _____ levels. (**Three**)
3. A _____ key uniquely identifies a record. (**Primary**)
4. ER stands for _____ Relationship. (**Entity**)
5. 1NF removes _____ groups. (**Repeating**)
6. 2NF removes _____ dependency. (**Partial**)
7. 3NF removes _____ dependency. (**Transitive**)
8. BCNF is stricter than _____. (**3NF (Third Normal Form)**)
9. SQL stands for _____. (**Structured Query Language**)
10. DDL stands for _____. (**Data Definition Language**)
11. DML stands for _____. (**Data Manipulation Language**)
12. DCL stands for _____. (**Data Control Language**)
13. TCL stands for _____. (**Transaction Control Language**)
14. The WHERE clause filters _____. (**Rows (Records)**)
15. GROUP BY is used for _____. (**Grouping rows with the same values**)
16. A JOIN combines data from _____ tables. (**Two or more**)
17. A VIEW is a _____ table. (**Virtual**)
18. An INDEX improves _____ speed. (**Data retrieval (query)**)
19. A FOREIGN KEY maintains _____ integrity. (**Referential**)
20. ORDER BY sorts the _____. (**Result set (rows)**)

Short Answer Questions

1. Define DBMS.
2. What is a data model?
3. What is a primary key?
4. Define foreign key.
5. What is an ER diagram?
6. What is normalization?
7. State 1NF.
8. What is referential integrity?
9. List SQL command types.
10. What is a view in SQL?