### 1. Match the types of SQL commands (Queries)

Α	DDL	1	Insert, Update, Delete
В	DCL	2	Commit, Rollback, Savepoint
С	DML	3	Select
D	DQL	4	Create, Drop, Alter, Truncate
E	TCL	5	Grant, Revoke

A-4 B-1 C-3 D-2 E-5

A-4 B-5 C-1 D-3 E-2

A-1 B-5 C-3 D-4 E-2

A-4 B-2 C-1 D-3 E-5

# 2. Which of the subsequent SQL statements should be used to add a new column to an existing table? (DDL)

ADD COLUMN UPDATE TABLE MODIFY COLUMN

**ALTER TABLE** 

The ALTER TABLE statement in SQL is used to modify the structure of an existing table, which includes adding or deleting columns, modifying data types or constraints, and so on. The specific syntax for adding a new column to an existing table is:

# 3. Which of the above SQL statements inserts data into a table while selecting data from another table? (DML)

UPDATE MERGE

**INSERT INTO...SELECT** 

DELETE

The INSERT INTO...SELECT statement is a Data Manipulation Language (DML) statement in SQL that is used to insert data into a table by selecting data from another table. The syntax snippet of the INSERT INTO...SELECT statement is as follows:

INSERT INTO table\_name (column1, column2, ...)
SELECT column1, column2, ...
FROM another\_table
WHERE ...

# 4. Which of the following SQL statements is used to fetch data from various tables according to a given condition? (DQL)

SELECT ALL
SELECT UNION
SELECT DISTINCT
SELECT JOIN

The SELECT JOIN statement in SQL is used to retrieve data from multiple tables based on a specified condition. There are different types of join operations available in SQL, including INNER JOIN, LEFT JOIN, RIGHT JOIN, and FULL OUTER JOIN. The syntax for an INNER JOIN is as follows:

SELECT column1, column2, ...
FROM table1
INNER JOIN table2
ON table1.column = table2.column;

# 5. Which of the following SQL statements is used to grant privileges to a user in a database? (DCL)

#### **GRANT**

GRANT PRIVILEGES
GRANT PERMISSIONS
GRANT USER

The syntax for granting privileges is as follows: GRANT privilege\_name
ON object\_name

TO user name;

6. Which of the subsequent SQL statements is used to go back to a particular savepoint within a database transaction? (TCL)

ROLLBACK TO

**ROLLBACK SAVEPOINT** 

**ROLLBACK TRANSACTION** 

The syntax for rolling back to a savepoint is as follows

ROLLBACK TO savepoint name;

This statement rolls back to the specified savepoint within the current transaction, undoing all changes made after the savepoint was set.

# 7. In order to end a database transaction without committing or rolling back the changes, which of the following SQL statements is used? (TCL)

#### **END TRANSACTION**

EXIT TRANSACTION
HALT TRANSACTION
COMMIT TRANSACTION

The syntax for ending a transaction is as follows:

### **END TRANSACTION**;

This statement ends the current transaction without committing or rolling back the changes. The transaction can be resumed later using the BEGIN TRANSACTION statement.

8. Which of the following SQL joins returns all rows from the left table and the matching rows from the right table, excluding NULL values where there is no match?

LEFT JOIN RIGHT JOIN INNER JOIN FULL OUTER JOIN

The syntax for an inner join is as follows:

SELECT \*
FROM table1
INNER JOIN table2
ON table1.column = table2.column;

#### 9. Describe SQL.

### A language for database querying

A database management system A markup language for web page creation An email-sending protocol on a network

10. Which of the following commands is used to select a specific set of columns?

Selection **Projection** 

Join

Union

#### 11.NATURAL JOIN is also known as:

Combination of Union and cartesian product

Combination of Projection and cartesian product

Combination of Selection and cartesian product

None

## 12. Choose valid SQL data type.

NUMERIC CHARACTER FLOAT All of the above

### 13. What do you name a table that is connected to itself?

Join
Self join
Outer join
Equi join

### 14. Choose the proper points of view.

Derived columns
Data security
All of the above
Hiding of complex queries

#### 15. Which definition of relational calculus is correct?

### It is a non-procedural language

It is a high level language
It is a procedural language
It is a data definition language

### 16. Carefully read the query:

```
SELECT emp_name
FROM department
WHERE dept_name LIKE ' _____ Computer Science';
```

Which of the following can be entered into the blank space of the aforementioned Query to choose the "dept name" that also has "computer science" as its ending string?

&

%

\$

### 17. By one to many relationships, what do you mean?

One class may have many teachers

# One teacher can have many classes

Many classes may have many teachers Many teachers may have many classes

# 18. Assume the subsequent transactions with beginning values of 0 for data items P and Q:

For concurrent execution, any non-serial interleaving of T1 and T2 results in

```
T1: read (P);
read (Q);
if P = 0 then Q : = Q + 1;
write (Q);
T2: read (Q);
read (P);
if Q = 0 then P : = P + 1;
write (P);
```

a schedule that is serializable

#### A schedule that is non conflict serializable

A schedule that is conflict-serializable

a schedule that cannot be represented by a precedence graph

19. Which of the following statements is executed automatically during a transaction before commit in the event of shutdown?

#### Rollback

View

Commit

Flashback

20. Which of the following can be inserted into the blank space in the following query to display the salary from highest to lowest amount and sort the employee names alphabetically?

SELECT \*
FROM instructor
ORDER BY salary \_\_\_\_\_, name \_\_\_\_;

Ascending, Descending Asc, Desc **Desc, Asc** All of the above

#### Important links

https://www.interviewbit.com/dbms-mcg/

https://www.geeksforgeeks.org/50-dbms-mcqs-with-answers/

https://www.javatpoint.com/dbms-mcq

https://www.sanfoundry.com/1000-database-management-system-questions-answers/

https://engineeringinterviewquestions.com/dbms-multiple-choice-questions/

https://www.examtiger.com/mcg/database-concept/

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- **W3Schools:** wide range of tutorials and exercises
- **SQLZoo:** interactive tutorials that cover SQL topics at various levels of difficulty, from beginner to advanced.
- HackerRank: This website offers coding challenges, including SQL.
- LeetCode: Similar to HackerRank, LeetCode offers a platform for practicing
   GeeksforGeeks: This website offers a variety of tutorials and articles on SQL and related database topics.