MERIDA TECH MINDS

MY SQL TEST

MCQ 1 MARKS EACH

1. What is a subquery in MySQL?

a) A query with a substandard performance

b) A nested query within another query

c) A query with syntax errors

d) A query without a WHERE clause

2. Which operator is used with a subquery to compare a value to a set of values?

a) LIKE

b) BETWEEN

c) IN

d) EXISTS

3. What is the main difference between correlated and noncorrelated subqueries?

a) Correlated subqueries are faster

b) Noncorrelated subqueries cannot be nested

c) Correlated subqueries refer to the outer query

d) Noncorrelated subqueries always use the EXISTS operator

4. Question: What is the primary goal of database normalization?

a) To reduce redundancy and improve data integrity

b) To increase the size of the database

c) To speed up query performance

d) To create complex queries

5. Question: What is a database trigger in MySQL?

a) A constraint on a table

b) A stored procedure that is automatically executed

c) An index on a view

d) A rule for data normalization

6. Character data can be stored as _____

a) Fixed length string

b) Variable length string

c) Either Fixed or Variable length string

d) None of the mentioned

7. Which declaration doesn't use the same number of bytes and consumption of bytes depends on the input data?

a) Varchar

b) Char

c) Both Varchar and Char

d) None of the mentioned

8.The number of attributes in the following SQL table is _____

```
CREATE TABLE employee (
        emp_name CHAR(30),
        emp_id INT
    );
```

a) 30

b) 1

c) 2

d) 3

9.The query 'SELECT NOW()' shows the current _____

a) table

b) time only

c) date only

d) date and time

10. Suppose you want to select a database named ‘sampledb’ as the default database. Which of the following commands do you use?
a) SELECT DATABASE()
b) SELECT DATABASE sampledb
c) USE DATABASE sampledb
d) USE sampledb

11.In the context of databases, what is the purpose of normalization?

a) To increase redundancy

b) To reduce data consistency

c) To improve data integrity

d) To speed up query performance

12.Consider two tables, "Orders" and "Customers," where the "Orders" table has a foreign key "CustomerID" referencing the "Customers" table. What type of join would you use to retrieve all orders along with customer information, including those with no matching customer?

a) INNER JOIN

b) LEFT JOIN

c) RIGHT JOIN

d) CROSS JOIN

13. In a complex query involving multiple joins, what is the purpose of the USING clause?

a) It specifies the conditions for joining tables

b) It restricts the number of rows returned

c) It specifies the columns to join on, assuming they have the same name in both tables

d) It indicates the order in which tables are joined

14.Which MySQL function is used to perform string substitution based on regular expression matching?

a) REPLACE()

b) REGEXP_REPLACE()

c) SUBSTRING()

d) CONCAT()

15.In MySQL, what is the purpose of the NULLIF() function?

a) Converts NULL values to a specified default value

b) Returns NULL if two expressions are equal; otherwise, returns the first expression

c) Compares two expressions and returns NULL if they are equal

d) Replaces NULL values with the corresponding values from another column

16. How can you use the COALESCE() function to handle NULL values in a specific way?

a) By assigning a default value to NULL

b) By converting NULL to an empty string

c) By replacing NULL with the value from the next row

d) By skipping NULL values in the result set

17. Which type of table expression allows you to define a result set that can be referenced within the scope of a SELECT, INSERT, UPDATE, or DELETE statement?

a) Derived Table

b) Temporary Table

c) Table Variable

d) Common Table Expression (CTE)

18. Consider a scenario where you want to delete duplicate rows from a table, keeping only one instance of each unique row. Which statement is most suitable for this in MySQL?

a) DELETE with GROUP BY

b) DELETE with JOIN

c) DELETE with DISTINCT

d) DELETE with PARTITION BY

19.How can you use the INSERT statement to insert multiple rows into a table with a single query in MySQL?

a) Use the VALUES clause with multiple sets of values

b) Use the INSERT statement in a loop

c) Use the SELECT statement with UNION

d) Use the INSERT statement with the DEFAULT VALUES clause

20.What do you mean by HOST in MYSQL?

HOST is the user name.

HOST is the representation of where the MYSQL server is running.

HOST is the administration's machine name.

21.Explain DML commands.With syntax (5 marks)

22.Explain RDBMS (2 marks)

23. write the syntax for all ALTER functions (3 marks)

MY SQL QUERY QUESTIONS 2 MARKS EACH

employee_id	first_name	last_name	department_id	salary
1	John	Doe	101	60000.00
2	Jane	Smith	102	75000.00
3	Bob	Johnson	101	55000.00
4	Alice	Williams	103	80000.00
5	Charlie	Brown	102	70000.00

department_id	department_name
101	Engineering
102	Marketing
103	Finance
104	Human Resources
105	Sales

1. Retrieve the names and salaries of employees earning more than $70,000.

2. Find the total number of employees in the 'Engineering' department.

3. List the first names of employees in the 'Sales' department.

4. Update the salary of employee with ID 3 to $60,000.

5. Calculate the average salary of all employees.

6. Delete the employee with ID 5 from the 'employees' table.

7. Retrieve the names of employees in the 'Marketing' department with a salary greater than $70,000.

8. Find the department with the highest average salary among its employees.

9. Insert a new department with ID 106 named 'Customer Service'.

10. Retrieve the employee names and salaries sorted in descending order of salary.