1. Which of the following is NOT a window function?

correct -

ASCII

2. Which command will NOT return a current user?

DEFAULT\_USER

3. The script SELECT 50/(5-5); throws an error: ERROR\_ON\_DIVISION\_BY\_ZERO What could be the reason?

SQL mode is used.

4. Which of the following is NOT a select expression?

Database\_name.\*

5. You created a stored procedure "Changemap" that has security characteristics set as definer. It deletes some data while executing. How would you ALTER the procedure so that everyone cannot use the procedure to delete data?

ALTER PROCEDURE Changemap SQL SECURITY INVOKER;

6. You are working on a stored procedure named InventoryBuckets and there is a confirmed requirement to tweak the logic of the body. What do you need to do first considering you have backup of code and now need to update the stored procedure with same name?

DROP PROCEDURE InventoryBuckets;

7. What is true for the ALTER PROCEDURE statement?

It can be used to change the characteristics of a stored procedure.

8. What does a TRUNCATE(X, D) function return?

It returns a number X truncated to D decimal places.

9. You have executed several SQL statements, but the changes are not reflected. You discover that auto-commit is disabled. How can you enable it?

SET autocommit = 1;

10. How many columns can be concatenated using CONCAT?

255

11. What is the range of the unsigned tinyint data type?

0 to 255

12. You are working on a table named Marks that contains three columns: Student, Subject, and Marks. How would you retrieve all data along with a column containing average marks of the associated subjects?

SELECT Student, Subject, Marks, AVG(Marks) OVER (PARTITION BY Subject) AS 'SubjectAverage' FROM Marks;

13. You are working on a table named "Sales", that contains four columns: "Region", "SalesPersonId", "SalesId", and "SalesAmount". There are a total of six unique regions and each region has two salespeople. How many rows does the script below generate?

SELECT Region, SalesPersonId , SUM(SalesAmount) FROM Sales GROUP BY Region, SalesPersonId;

12

14. What is a SQL-Transaction?

A sequence of executions of SQL statements that is completely successful or has no effect on schema or data

15. You create a stored procedure and want to change its characteristics. What would happen if you tried to alter the procedure?

The procedure would be altered without an error.

16. What does the window function do?

Calculates an aggregate value based on a group of rows and returns multiple rows for each group

17. What is the difference between SELECT and TRUNCATE?

SELECT is a DQL statement, while TRUNCATE is a DDL statement.

18. You need to insert a few records in a table, but you don't know if the records are duplicate on the primary key or not. If it is a duplicate, then you need to perform an update only. How can you accomplish this?

INSERT … ON DUPLICATE KEY UPDATE …

19. You are working on concatenating two variables VAR1 and VAR2 with the script given below. Either of the variables may contain a NULL value.

CONCAT(VAR1, VAR2);

The script results in a NULL. How can you handle the expected NULL value?

CONCAT(IFNULL(VAR1, " "), IFNULL(VAR2, " "));

20. You are working on a table containing master data, named Master. It has the following columns:

Id

Text1

Text2

Text3

Text4

Text5

How would you select all records containing "Master record" in any Text1, Text2, Text3, Text4 and, Text5 columns?

SELECT \* FROM Master WHERE 'Master record' IN (Text1, Text2, Text3, Text4, Text5);

21. Which function will generate the current date?

CURDATE()

22. You are working on two tables: A and B. Both tables contain master data. You need them to be joined so that each row in a table is joined with all the rows in the other table. What will do that?

SELECT \* FROM A CROSS JOIN B;

23. You need to delete all records of a table named ExpiredItems. Which of the following is an efficient way to clear the table?

TRUNCATE ExpiredItems;

24. A stored procedure has a required input parameter of DATE type, which is used to calculate the difference between the date fetched and the current date. Which function will do this?

DATEDIFF(CURDATE(), Variable);

25. A coalesce script is given below:

COALESCE(NULL, 1, NULL, 2, NULL, 3, NULL, 4);What is the output of the script?

1

26. Which of the following is a correct column-alias?

SELECT COUNT(\*) AS TotalRecords FROM X;

27. You are working on a table named Marks that has four columns: Id, Math, Science, and Arts. How would you get Id, Math, and Science, where Math marks are in ascending order and Science marks are in descending order?

SELECTS Id, Math, Science FROM Marks ORDER BY Math ASC, Science DESC;

28. What is the purpose of the ORDER BY clause?

It allows sorting by one or more columns.

29. What is the advantage of a CTE (Common Table Expression) in place of a sub-query?

It can be referenced multiple times in the same statement, a sub-query cannot.

30. You are working on a table named Student that contains three columns: Name, Subject, and Marks. How would you calculate average marks for each student?

SELECT Name , AVG(Marks) AS AverageMarks FROM Student GROUP\_BY Name;

1. Which of the following is true about alias in a query?

It is a correlation name

2. You have executed several SQL statements, but the changes are not reflected. You discover that auto-commit is disabled. How can you enable it?

SET autocommit = 1;

3. What would be the result of the given script?

SELECT CASE BINARY 'B' WHEN 'a' THEN 1 WHEN 'b' THEN 2 END;

NULL

4. You are required to create a stored procedure that retrieves outdated records from master data tables. For inactive records, a column named ActiveInd is set to 0 in every master data table. How would you create this stored procedure?

CREATE PROCEDURE FetchInactive ( param CHAR(100))

BEGIN

SELECT \* FROM param WHERE ActiveInd = 0;

END

5. You are working on a table named Donations that contains columns Id (text), Prefix (numeric), and Suffix (text). There is a script to retrieve data which throws an error.

SELECT Id, Prefix + Suffix AS Donation FROM Donations;

How would you fix the error?

SELECT Id, CAST(Prefix AS CHAR(20)) + Suffix AS Donation FROM Donations;

6. SELECT CURDATE();

The script above is used to generate the current date in a string format. How would you generate it in a numeric format?

SELECT CURDATE() + 0;

7. You are working on a table named Student that contains three columns: Name, Subject, and Marks. How would you describe the result of the SQL statement given below?

SELECT Name, Subject, AVG(Marks) FROM Student;

Result would be incorrect and mismatched.

8. What is the difference between CURRENT\_USER() and USER()?

USER() returns the username and hostname given when authenticating MariaDB, while CURRENT\_USER returns the username and hostname from the MariaDB account that the server used to authenticate the current client.

9. You are working on a table named Marks that has four columns: Id, Math, Science, and Arts. How would you get Id and Math where items in Math are in ascending order?

SELECTS Id, Math FROM Marks ORDER BY Math;

10. You are required to create a procedure that counts the number of rows of any table passed as an argument and store it in an output argument. How would you create this procedure?

CREATE PROCEDURE FetchData (IN param1 CHAR(100), OUT param2 INT)

BEGIN

SELECT COUNT(\*) INTO param2 FROM param1;

END;

11. Which of the following is a numeric data type?

BOOLEAN

12. How would you create a stored procedure to retrieve all data from a table named 'Sales'?

CREATE PROCEDURE Retrieve\_Sales BEGIN SELECT \* FROM Sales; END;

13. You are working on a table named "MaterialDiscount" that contains three columns: Product, Price, and Discount, where Discount is a ratio. How would you retrieve all data from the table, with an additional column calculating price after discount?

SELECT Product, Price, Discount, Price - Price\*Discount AS 'Price after discount' FROM MaterialDiscount;

17. You are performing TRUNCATE and DELETE operations to clear an equal amount of data, but the TRUNCATE operation is faster than DELETE. Why?

TRUNCATE drops and recreates a table, whereas DELETE performs row by row deletion.

19. You are working with four SQL queries given below:

SELECT \* FROM USER;

SHOW AUTHORS;

SHOW COLUMNS FROM USER;

RENAME USER STAT TO STANLEY;

How many of the above queries are DQL?

3

20. You are working on a data-set named Flight that contains two columns: Origin and Destination. You are required to create a recursive common table expression that selects all the destinations one can reach from origin "London". Which code would do the job?

WITH RECURSIVE Route AS (

SELECT Origin AS Destination FROM Flight WHERE Origin = "London"

UNION

SELECT Flight.Destination FROM Flight, Route WHERE Route.Destination = Flight.Origin

)

21. Which of the following is used to display columns in a table?

SHOW COLUMN

22. What is the default order of the SELECT query?

No order

Which of the following is true about alias in a query?

 Incorrect -

It renames the column or table

 Your choice: correct -

It is a correlation name

 Incorrect -

It creates the same table with a different column name

 Incorrect -

It is used to assign another name to the table permanently

 Incorrect -

I don't know yet.

How would you create a stored procedure to retrieve all data from a table named 'Sales'?

 Incorrect -

CREATE PROCEDURE Retrieve\_Sales AS SELECT \* FROM Sales; END;

 Incorrect -

CREATE PROCEDURE Retrieve\_Sales AS BEGIN STATEMENT SELECT \* FROM Sales; END;

 Incorrect -

CREATE PROCEDURE Retrieve\_Sales AS BEGIN Sales; END;

 Your choice: correct -

CREATE PROCEDURE Retrieve\_Sales BEGIN SELECT \* FROM Sales; END;

 Incorrect -

I don't know yet.

How can you change the parameters of a stored procedure?

 Incorrect -

With the TRUNCATE statement

 Incorrect -

With the SELECT statement

 Incorrect -

With the ALTER PROCEDURE statement

 Your choice: correct -

By dropping and replace the stored procedure

 Incorrect -

I don't know yet.

You are working on a table named Donations that contains columns Id (text), Prefix (numeric), and Suffix (text). There is a script to retrieve data which throws an error.

SELECT Id, Prefix + Suffix AS Donation FROM Donations;

How would you fix the error?

 Your choice: correct -

SELECT Id, CAST(Prefix AS CHAR(20)) + Suffix AS Donation FROM Donations;

 Incorrect -

SELECT Id, "Prefix + Suffix" AS Donation FROM Donations;

 Incorrect -

SELECT Id,Suffix + Prefix AS Donation FROM Donations;

 Incorrect -

SELECT Id, CONCAT(Prefix + Suffix) AS Donation FROM Donations;

 Incorrect -

I don't know yet.

A stored procedure calls CURRENT\_USER(). What is the output of the call?

 Correct -

Owner of the procedure

 Incorrect -

Host name of the system

 Your choice: incorrect -

Current user of the system

 Incorrect -

User of the Client

 Incorrect -

I don't know yet.

What is the purpose of the GROUP BY clause?

 Incorrect -

It groups text into a required pattern.

 Your choice: correct -

It groups records into summarized rows.

 Incorrect -

It groups rows into order.

 Incorrect -

It groups columns into a summarized column.

 Incorrect -

I don't know yet.

You are working on a table named 'Products' with three columns; 'Id', 'Name ', and 'Price'. How would you apply rank over a select query?

 Incorrect -

SELECT Id, Name, Price, RANK OVER (ORDER BY Price) FROM Products;

 Incorrect -

SELECT Id, Name, Price, RANK() (ORDER BY Price) Rank\_price FROM Products;

 Your choice: correct -

SELECT Id, Name, Price, RANK() OVER (ORDER BY Price) Rank\_price FROM Products;

 Incorrect -

SELECT Id, Name, Price, RANK() OVER (Price) Rank\_price FROM Products;

 Incorrect -

I don't know yet.

You are required to write a Common Table Expression (CTE) for a complicated query that is being used frequently. Which of the following is the correct syntax to write a CTE?

 Your choice: correct -

WITH CTEName (Columns names,…) AS( Definition)

 Incorrect -

FUNCTION CTEName (Columns names,…) WITH( Definition)

 Incorrect -

WITH CTEName (Columns names,…) IS( Definition)

 Incorrect -

FUNCTION CTEName (Columns names,…) AS( Definition)

 Incorrect -

I don't know yet.

Which command will execute a stored procedure?

 Incorrect -

BEGIN

 Correct -

CALL

 Your choice: incorrect -

EXEC

 Incorrect -

COMMIT

 Incorrect -

I don't know yet.

Which of the following is true for TRUNCATE?

 Incorrect -

It is a DCL statement.

 Your choice: correct -

It is a DDL statement.

 Incorrect -

It is a DQL statement.

 Incorrect -

It is a DML statement.

 Incorrect -

I don't know yet.

Which parameter type can be used to store the output in stored procedures?

 Incorrect -

IN

 Incorrect -

ENUM

 Your choice: correct -

OUT

 Incorrect -

EX

 Incorrect -

I don't know yet.

What is the difference between INNER and LEFT OUTER JOIN?

 Incorrect -

INNER join selects the first table with matching records of the second table, while LEFT OUTER JOIN will select matching records in both tables.

 Your choice: correct -

INNER join selects matching records in both tables, whereas LEFT OUTER JOIN will select the first table with matching records of the second table.

 Incorrect -

INNER join selects all records of both tables, whereas LEFT OUTER JOIN will select the second table with matching records of the first table.

 Incorrect -

INNER join selects the second table with matching records of the first table while LEFT OUTER JOIN will select matching records in both tables.

 Incorrect -

I don't know yet.