MCQ TEST – SQL

Q1. When you have a subquery inside of the main query, which query is executed first?

1. The subquery is never executed. Only the main query is executed.
2. They are executed at the same time
3. the main query
4. <mark>the subquery</mark>

Q2. You need to export the entire database, including the database objects, in addition to the data. Which command-line tool do you use?

1. mysqlexport
2. mysqladmin
3. <mark>mysqldump</mark>
4. mysqld

Q3. You must ensure the accuracy and reliability of the data in your database. You assign some constraints to limit the type of data that can go into a table. What type of constraints are you assigning?

1. [ ] row level
2. [ ] database level
3. <mark>[x] column level</mark>
4. [ ] function level

Q4. Which option of most MySQL command-line programs can be used to get a description of the program's different options?

1. [ ] --options
2. [ ] ?
3. [x] --help
4. [ ] –h

Q5. MySQL uses environment variables in some of the programs and command-line operations. Which variable is used by the shell to find MySQL programs?

a. [ ] DIR
b. [ ] HOME
c. [x] PATH
d. [ ] MYSQL_HOME

How can you create a stored procedure in MySQL?

A 1 CREATE PROCEDURE P () AS

  2 BEGIN

  3 END;

B 1 CREATE PROCEDURE P ()

  2 BEGIN

3 END

C 1 CREATE PROCP

2 BEGIN

3 END;

D 1 CREATE PROC P AS O

2 BEGIN

3 END;

Q7. If you were building a table schema to store student grades as a letter (A, B, C, D, or F) which column type would be the best choice?

1. <mark>ENUM</mark>
2. OTEXT
3. VARCHAR
4. LONGTEXT

Q8Management has requested that you build an employee database. You start with the employee table. What is the correct syntax?

A

CREATE TABLE employee (

employeeID char(10),

firstName varchar(50),

lastName varchar(50),

phone varchar(20),

```
    address varchar(50),

    PRIMARY KEY ON employeeID

    );
```

B

```
    CREATE TABLE employee (

    employeeID char(10),

    firstName varchar(50),

    lastName varchar(50),

    phone varchar(20),

    address varchar(50),

    PRIMARY KEY employeeID

    );
```
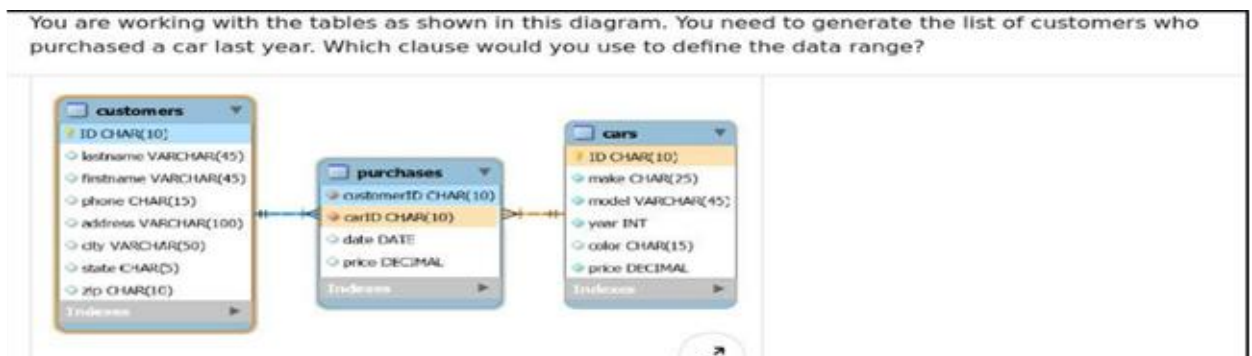
C

```
    CREATE TABLE IF EXISTS employee (

    employeeID char(10),

    firstName varchar(50),

    lastName varchar(50),

    phone varchar(20),

    address varchar(50),

    PRIMARY KEY (employeeID)
```

);

D

CREATE TABLE IF NOT EXISTS employee (

employeeID char(10),

firstName varchar(50),

lastName varchar(50),

phone varchar(20),

address varchar(50),

PRIMARY KEY (employeeID)

);

Q9. You are working with the tables as shown in this diagram. You need to generate the list of customers who purchased certain car models. Which SQL clause do you use?

You are working with the tables as shown in this diagram. You need to generate the list of customers who purchased a car last year. Which clause would you use to define the data range?

1. LIKE
2. IN

3. BETWEEN
4. HAVING

Q10. Which query would NOT be used to administer a MySQL server?

1. USE db
2. SELECT column FROM tbl
3. SHOW COLUMNS FROM tbl
4. SHOW TABLES

Q11 MySQL server can operate in different SQL modes, depending on the value of the sql_mode system variable. Which mode changes syntax and behavior to conform more closely to standard SQL?

1. TRADITIONAL
2. ANSI
3. MSSQL
4. STRICT

Q12 Which MySQL command shows the structure of a table?

1. INFO table;
2. SHOW table;
3. STRUCTURE table;
4. DESCRIBE table;

Q13 . How do you select every row in a given table named "inventory"?

1. SELECT all FROM inventory;
2. FROM inventory SELECT all;

3. FROM inventory SELECT *;
4. <mark>SELECT * FROM inventory;</mark>

Q14 .

MySQL option files provide a way to specify commonly used options so that they need not be entered on the command line each time you run a program. What is another name for the option files?

1. variable settings
2. <mark>configuration files</mark>
3. help files
4. default settings

Q15. You need to export the data in the customers table into a CSV file, with columns headers in the first row. Which clause do you add to your MySQL command?

1. JOIN
2. WITH HEADERS
3. <mark>UNION</mark>
4. WITH COLUMNS

Q16. . What is the requirement for using a subquery in the SELECT clause?

1. the subquery must use an aggregate function.
2. the subquery must refer to the same table as the main query.
3. the subquery must return a single value.

4. <mark>the subquery must return at least one value.</mark>

Q17

What mysql statement is used to check which accounts have specific privileges?

1. <mark>show grants (displays the privileges and roles that are assigned to a MySQL user account or role)</mark>
2. show privileges (shows the list of system privileges that the MySQL server supports)
3. show access
4. show user permissions

Q18 Which is the correct syntax of an extended insert statement?

1. insert into cars (make, model, year) values ('Ford', 'Mustang', 2002) ('Mercedes', 'C', 2003)

2. insert into cars (make, model, year) values ('Ford', 'Mustang', 2002) values ('Mercedes', 'C', 2003)

3. insert into cars (make, model, year) extended ('Ford', 'Mustang', 2002), ('Mercedes', 'C', 2003)

4. <mark>insert into cars (make, model, year) values ('Ford', 'Mustang', 2002), ('Mercedes', 'C', 2003)</mark>

Q19. You manage a database with a table "customers". You created a temporary table also called "customers" with which you are working for the duration of your session. You need to recreate the temporary table with different specs. Which command do you need to run first?

1. CREATE TEMPORARY TABLE customers;
2. DROP TEMP TABLE customers;
3. DROP TABLE customers;
4. DROP TEMPORARY TABLE customers;

Q20.

Management has requested that you build an employee database. You need to include each employee's current position and salary, as well as all prior positions and salaries with the company. You decide to use a one-to-many structure: an employee table with the main information such as name and address, and an employment table with position and salary history. You can use the employeeID field to connect them. What is employment.employeeID an example of?

1. primary key;
2. secondary key;
3. foreign key;
4. alternate key;

Query Writing :

1. You are working with the table in this diagram. You want to use full-text search to find the customers who live on a street or a drive. What is the command to do that?

   select * from customers where address like '%Street' or address like '%drive';

2. What is the valid way to create a database view in MySQL?

   Create view temp_view as select * from table1;

3. You are working with the tables shown below. You need to generate the list of all cars, whether or not they had been sold. Which statement accomplishes that?

   Select cars.*, purchases.date FROM cars LEFT JOIN purchases ON cars.ID = purchases.carID;

What steps do you need to take to normalize the table from this diagram?

Create another table as a lookup for powers with fields.

Questions:

Consider the Sailors-Boats-Reserves DB described below.

S (sid, sname, rating, age)

B (bid, bname, color)

R (sid, bid, date)

Sailors

Sid	Sname	Rating	Age
22	Dustin	7	45
29	Brutus	1	33
31	Lubber	8	55.5
32	Andy	8	25.5
58	Rusty	10	35
64	Horatio	7	35
71	Zorba	10	16
74	Horatio	9	40
85	Art	3	25.5
95	Bob	3	63.5

Boats

bid	bname	color
101	Interlake	blue
102	Interlake	red
103	Clipper	green
104	Marine	red

Reserves

sid	bid	day
22	101	1998-10-10
22	102	1998-10-10
22	103	1998-10-8
22	104	1998-10-7
31	102	1998-11-10
31	103	1998-11-6
31	104	1998-11-12
64	101	1998-9-5
64	102	1998-9-8
74	103	1998-9-8

Figure 1: Instances of Sailors, Boats and Reserves

Give a SQL expression for each of the following queries:

1. Find the colors of boats reserved by Dustin.

select color from Sailors s, Boats b, Reserves r where s.sid=r.sid and r.bid=b.bid and s.Sname="Dustin";

2. Find all IDs of sailors who have a rating of at least 8 or have reserved boat 103.

```sql
select distinct(s.sid) from Sailors s, Reserves r where s.sid=r.sid
and (s.rating>=8 or r.bid=103);
```

3. Find the names of sailors who have not reserved a red boat.

```sql
select sname from Sailors where sid not in (select sid from
Reserves inner join Boats on Reserves.bid = Boats.bid where color
= "red");
```

4. Find the IDs of sailors with age over 20 who have not reserved a red boat.

```sql
Select distinct(s.sname) from Sailors s, Boats b, Reserves r Where
s.sid = r.sid and b.bid=r.bid and b.color!="red" and s.age>20;
```

5. Find the names of sailors who have reserved at least two boats.

```sql
select sname from reserves inner join Sailors on
Reserves.sid=Sailors.sid group by Reserves.sid having
count(Reserves.sid)>=2;
```

6. Find the names of sailors who have reserved all boats.

```sql
select sname from reserves inner join Sailors on
Reserves.sid=Sailors.sid group by Reserves.sid having
count(Reserves.sid)=(select count(*) from boats);
```

7. Find the names of sailors who have reserved all boats called Interlake.

Select sname from Sailors s Where not exists(Select * From Boats b Where bname = "Interlake" and NOT EXISTS(SELECT * FROM Reserves r where r.sid = s.sid and r.bid = b.bid))

8. Find the IDs of sailors whose rating is better than some sailor called Andy.

select sid from Sailors where rating>(select min(rating) from Sailors where sname="Andy");

9. Find the IDs of sailors whose rating is better than every sailor called Andy.

select sid from Sailors where rating>(select max(rating) from Sailors where sname="Andy");

10. Find the IDs of sailors with the highest rating.

select sid from Sailors where rating=(select max(rating) from Sailors);

11. Find the name and age of the oldest sailor

select sname,age from Sailors where age=(select max(age) from Sailors);