Database Assessment 2018

Name & Emp ID: _____

General Instructions:
- Questions **1 - 30** are of **1 mark each**
- Question No. 31 is of **10 marks**
- **Tick (✓)** the correct answer for MCQs. Only **ONE** choice is correct
- Maximum time allowed is 40 minutes.

1. What is the full-form of SQL?
   A. Structured Query Language
   B. Structured Query List
   C. Simple Query Language
   D. None of these

2. Which operator performs pattern-matching?
   A. BETWEEN operator
   B. LIKE operator
   C. EXISTS operator
   D. None of these

3. Which command(s) is(are) used to change to the table's storage characteristic?
   A. ALTER TABLE
   B. CHANGE TABLE
   C. MODIFY TABLE
   D. All of the above

4. Which command is used to select only one copy of each set of duplicates?
   A. SELECT DISTINCT
   B. SELECT UNIQUE
   C. SELECT DIFFERENT
   D. All of the above

5. Which of these SQL statements are correct?
   A. SELECT username AND password from Users
   B. SELECT username, password from Users
   C. SELECT username, password WHERE username = 'user1'
   D. None of the above

6. A subquery in an SQL SELECT statement:
   A. can only be used with two tables.
   B. can always be duplicated by a join.
   C. has a distinct form that cannot be duplicated by a join.
   D. cannot have its results sorted using ORDER BY.

7. What is a view?
   A. A view is a special stored procedure that occurs when a specific event occurs
   B. A view is a virtual table which results of executing a pre-compiled query. A view is not part of the physical database schema, while the regular tables are.
   C. A view is a database diagram
   D. None of the above

8. Which of the following commands is used to retrieve data?
   A. DELETE
   B. INSERT
   C. SELECT
   D. JOIN

9. Which of the following is a SQL aggregate function?
   A. LEFT
   B. AVG
   C. JOIN
   D. LEN

10. Which of the following is used to update data in a database?
    A. SAVE
    B. UPDATE
    C. SAVE AS
    D. MODIFY

11. Which of the following statement will add a column 'F_name' to the STUDENT table?
    A. ALTER TABLE Student add column (F_name varchar(20));
    B. ALTER TABLE Student add F_name varchar(20);
    C. ALTER TABLE Student add (F_name varchar(20));
    D. ALTER TABLE Student add column (F_name);

12. Which of the following is true for TRUNCATE in SQL?
    A. It is usually slower than DELETE command
    B. It is usually faster than DELETE command
    C. There is no comparison between DELETE & TRUNCATE
    D. Truncate command can be rolled back

13. Which of the following code will delete an index stu_marks_ind on the columns student_code and percentage_of_marks of the STUDENTS table?
    A. drop index stu_marks_ind;
    B. delete index stu_marks_ind;
    C. drop stu_marks_ind;
    D. drop index stu_marks_ind on students;

14. Table Employee has 10 records. It has a non-NULL salary column which is also unique. What does the following SQL statement prints out?

```
        SELECT Count(*) FROM Employee WHERE SALARY > ANY (SELECT
SALARY FROM EMPLOYEE);
```

    A. 10
    B. 9
    C. 5
    D. 0

15. Which of the following must be enclosed in double quotes?
    A. Dates
    B. Column Alias
    C. Strings
    D. All of the above

16. Find all the cities whose humidity is 89
    A. SELECT city WHERE humidity = 89;
    B. SELECT city FROM weather WHERE humidity = 89;
    C. SELECT humidity = 89 FROM weather;
    D. SELECT city FROM weather;

17. Find temperature in increasing order of all cities.
    A. SELECT city from weather ORDER BY temperature
    B. SELECT city, temperature from weather;
    C. SELECT city, temperature from weather ORDER BY temperature;
    D. SELECT city, temperature from weather ORDER BY city;

18. What is the meaning of LIKE '%0%0%'
    A. Feature begins with two 0's
    B. Feature ends with two 0's
    C. Feature has more than two 0's
    D. Feature has two 0's in it any position

19. Find the names of those cities with temperature and condition whose condition is neither sunny nor cloudy
    A. SELECT city, temperature, condition from weather WHERE condition NOT IN ('sunny', 'cloudy');
    B. SELECT city, temperature, condition from weather WHERE condition NOT BETWEEN ('sunny', 'cloudy');
    C. SELECT city, temperature, condition from weather WHERE condition IN ('sunny', 'cloudy');
    D. SELECT city, temperature, condition from weather WHERE condition BETWEEN ('sunny', 'cloudy');

20. Find all tuples where temperature is greater than that of 'Paris'

A. SELECT * FROM weather WHERE temperature > (SELECT temperature from weather WHERE city = 'Paris');
B. SELECT * FROM weather WHERE temperature > (SELECT * from weather WHERE city = 'Paris');
C. SELECT * FROM weather WHERE temperature > (SELECT city from weather WHERE city = 'Paris');
D. SELECT * FROM weather WHERE temperature > 'Paris' temperature;

21. Find the names of sailors who have reserved atleast one boat
   A. SELECT DISTINCT s.sname FROM sailors s, reserves r WHERE s.sid = r.sid;
   B. SELECT s.sname FROM sailors s, reserves r WHERE s.sid = r.sid;
   C. SELECT DISTINCT s.sname FROM sailors s, reserves WHERE s.sid = r.sid;
   D. None of these

22. If a query involves NOT, AND, OR with no parenthesis:
   A. NOT will be evaluated first; AND will be evaluated second; OR will be evaluated last
   B. NOT will be evaluated first; OR will be evaluated second; AND will be evaluated last
   C. AND will be evaluated first; OR will be evaluated second; NOT will be evaluated last
   D. The order of occurrence determines the order of evaluation

23. Which of the following is not a SQL constraint
   A. PRIMARY KEY
   B. ALTERNATE KEY
   C. FOREIGN KEY
   D. UNIQUE

24. The HAVING clause does which of the following?
   A. Acts like a WHERE clause but is used for groups rather than rows.
   B. Acts like a WHERE clause but is used for rows rather than columns.
   C. Acts like a WHERE clause but is used for columns rather than groups.
   D. Acts EXACTLY like a WHERE clause.

25. The SQL WHERE clause
   A. limits the row data that are returned
   B. limits the column data that are returned
   C. both A and B are correct
   D. both A and B are incorrect

26. Which of the following option is correct about following queries?
Query 1. SELECT emp.id, department.id FROM emp NATURAL JOIN department
Query 2. SELECT emp.id, department.id FROM department NATURAL JOIN emp

   A. Both queries will give same outputs
   B. Both queries will give different output
   C. Need table structure
   D. None of these

27. A subquery is a SQL SELECT statement enclosed in:
    A. parenthesis (...)
    B. square braces [...]
    C. flower braces {...}
    D. Capital letters

28. Which of the following do you need to consider when you make a table in SQL
    A. Data-types
    B. Primary-keys
    C. Default values
    D. All of the above

29. Which of the following is correct for using comparison operators in SQL
    A. SELECT name from student WHERE age > 50 and < 80
    B. SELECT name from student WHERE age > 50 and age < 80
    C. SELECT name from student WHERE age > 50 and WHERE age < 80
    D. None of the above

30. Which of the following is a valid SQL type
    A. CHARACTER
    B. NUMERIC
    C. FLOAT
    D. All of the above

31. Consider the following tables of the 'coffeeShop' database with the first column as primary key and column definition for all columns as varchar(45)

Customers(cid, name, phone)
Employees(eid, name, phone)
Orders(oid, cid, eid, orderDate)

and cid, eid are foreign keys in Orders table referring to cid in Customers table and eid in Employees table respectively
Write a query to (Please use the last page):

a. Find all the name, number of orders for each customer
b. Find the number of customers to whom Employee 'Dave' has served
c. Find the number of customers who visited on '20-07-2018'
d. Find the number of customers who visited multiple times on '20-07-2018'
e. Find the Employee of the day for the day '20-07-2018' i.e. highest number of orders served

Answer to Question 31: