1. Which SQL function is used to count the number of rows in a SQL query?  
a) COUNT()  
b) NUMBER()  
c) SUM()  
d) COUNT(\*)

2. Which SQL keyword is used to retrieve a maximum value?  
a) MOST  
b) TOP  
c) MAX  
d) UPPER

3. Which of the following SQL clauses is used to DELETE tuples from a database table?  
a) DELETE  
b) REMOVE  
c) DROP  
d) CLEAR

4. \_\_\_\_\_\_\_\_\_\_\_removes all rows from a table without logging the individual row deletions.  
a) DELETE  
b) REMOVE  
c) DROP  
d) TRUNCATE

5. Which of the following is not a DDL command?  
a) UPDATE  
b) TRUNCATE  
c) ALTER  
d) None of the Mentioned

6. Which of the following are TCL commands?  
a) UPDATE and TRUNCATE  
b) SELECT and INSERT  
c) GRANT and REVOKE  
d) ROLLBACK and SAVEPOINT

7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is not a category of SQL command.  
a) TCL  
b) SCL  
c) DCL  
d) DDL

8. If you don’t specify ASC or DESC after a SQL ORDER BY clause, the following is used by default \_\_\_\_\_\_\_\_\_\_\_\_\_\_  
a) ASC  
b) DESC  
c) There is no default value  
d) None of the mentioned

9. Which of the following statement is true?  
a) DELETE does not free the space containing the table and TRUNCATE free the space containing the table  
b) Both DELETE and TRUNCATE free the space containing the table  
c) Both DELETE and TRUNCATE does not free the space containing the table  
d) DELETE free the space containing the table and TRUNCATE does not free the space containing the table

10. What is the purpose of the SQL AS clause?  
a) The AS SQL clause is used to change the name of a column in the result set or to assign a name to a derived column  
b) The AS clause is used with the JOIN clause only  
c) The AS clause defines a search condition  
d) All of the mentioned

11. What does DML stand for?  
a) Different Mode Level  
b) Data Model Language  
c) Data Mode Lane  
d) Data Manipulation language

12. With SQL, how do you select all the records from a table named “Persons” where the value of the column “FirstName” ends with an “a”?  
a) SELECT \* FROM Persons WHERE FirstName=’a’  
b) SELECT \* FROM Persons WHERE FirstName LIKE ‘a%’  
c) SELECT \* FROM Persons WHERE FirstName LIKE ‘%a’  
d) SELECT \* FROM Persons WHERE FirstName=’%a%’

13. With SQL, how can you return all the records from a table named “Persons” sorted descending by “FirstName”?  
a) SELECT \* FROM Persons SORT BY ‘FirstName’ DESC  
b) SELECT \* FROM Persons ORDER FirstName DESC  
c) SELECT \* FROM Persons SORT ‘FirstName’ DESC  
d) SELECT \* FROM Persons ORDER BY FirstName DESC

14. With SQL, how can you return the number of not null records in the “Persons” table?  
a) SELECT COUNT() FROM Persons  
b) SELECT COLUMNS() FROM Persons  
c) SELECT COLUMNS(\*) FROM Persons  
d) SELECT COUNT(\*) FROM Persons

15. What does the ALTER TABLE clause do?  
a) The SQL ALTER TABLE clause modifies a table definition by altering, adding, or deleting table columns and/or constraints  
b) The SQL ALTER TABLE clause is used to insert data into database table  
c) THE SQL ALTER TABLE deletes data from database table  
d) The SQL ALTER TABLE clause is used to delete a database table

16. The UPDATE SQL clause can \_\_\_\_\_\_\_\_\_\_\_\_\_  
a) update only one row at a time  
b) update more than one row at a time  
c) delete more than one row at a time  
d) delete only one row at a time

17. The UNION SQL clause can be used with \_\_\_\_\_\_\_\_\_\_\_\_\_  
a) SELECT clause only  
b) DELETE and UPDATE clauses  
c) UPDATE clause only  
d) All of the mentioned

18. Which SQL statement is used to return only different values?  
a) SELECT DIFFERENT  
b) SELECT UNIQUE  
c) SELECT DISTINCT  
d) SELECT ALL

19. Which SQL keyword is used to sort the result-set?  
a) ORDER BY  
b) SORT  
c) ORDER  
d) SORT BY

20. How can you change “Hansen” into “Nilsen” in the “LastName” column in the Persons table?  
a) UPDATE Persons SET LastName=’Hansen’ INTO LastName=’Nilsen’  
b) MODIFY Persons SET LastName=’Nilsen’ WHERE LastName=’Hansen’  
c) MODIFY Persons SET LastName=’Hansen’ INTO LastName=’Nilsen’  
d) UPDATE Persons SET LastName=’Nilsen’ WHERE LastName=’Hansen’  
]

21. Which of the following command makes the updates performed by the transaction permanent in the database?  
a) ROLLBACK  
b) COMMIT  
c) TRUNCATE  
d) DELETE

22. Which TCL command undo all the updates performed by the SQL in the transaction?  
a) ROLLBACK  
b) COMMIT  
c) TRUNCATE  
d) DELETE

23. SQL query to find all the cities whose humidity is 95.  
a) SELECT city WHERE humidity = 95  
b) SELECT city FROM weather WHERE humidity = 95  
c) SELECT humidity = 89 FROM weather  
d) SELECT city FROM weather

24. SQL query to find the 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

25. 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, at any position

26. Find the names of these 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’);

27. Find the name of those cities with temperature and condition whose condition is either sunny or cloudy but temperature must be greater than 70.  
a) SELECT city, temperature, condition FROM weather WHERE condition = ‘sunny’ AND condition = ‘cloudy’ OR temperature > 70  
b) SELECT city, temperature, condition FROM weather WHERE condition = ‘sunny’ OR condition = ‘cloudy’ OR temperature > 70  
c) SELECT city, temperature, condition FROM weather WHERE condition = ‘sunny’ OR condition = ‘cloudy’ AND temperature > 70  
d) SELECT city, temperature, condition FROM weather WHERE condition = ‘sunny’ AND condition = ‘cloudy’ AND temperature > 70

28. Find all the tuples having a temperature greater than ‘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

29. Find all the cities with temperature, condition and humidity whose humidity is in the range of 63 to 79.  
a) SELECT \* FROM weather WHERE humidity IN (63 to 79)  
b) SELECT \* FROM weather WHERE humidity NOT IN (63 AND 79)  
c) SELECT \* FROM weather WHERE humidity BETWEEN 63 AND 79  
d) SELECT \* FROM weather WHERE humidity NOT BETWEEN 63 AND 79

30. The command to remove rows from a table ‘CUSTOMER’ is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
a) DROP FROM CUSTOMER  
b) UPDATE FROM CUSTOMER  
c) REMOVE FROM CUSTOMER  
d) DELETE FROM CUSTOMER WHERE

31. Which of the following command makes the updates performed by the transaction permanent in the database?  
a) ROLLBACK  
b) COMMIT  
c) TRUNCATE  
d) DELETE

32. Which TCL command undo all the updates performed by the SQL in the transaction?  
a) ROLLBACK  
b) COMMIT  
c) TRUNCATE  
d) DELETE

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b) SELECT city, temperature FROM weather  
c) SELECT city, temperature FROM weather ORDER BY temperature  
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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’);

37. Find the name of those cities with temperature and condition whose condition is either sunny or cloudy but temperature must be greater than 70.  
a) SELECT city, temperature, condition FROM weather WHERE condition = ‘sunny’ AND condition = ‘cloudy’ OR temperature > 70  
b) SELECT city, temperature, condition FROM weather WHERE condition = ‘sunny’ OR condition = ‘cloudy’ OR temperature > 70  
c) SELECT city, temperature, condition FROM weather WHERE condition = ‘sunny’ OR condition = ‘cloudy’ AND temperature > 70  
d) SELECT city, temperature, condition FROM weather WHERE condition = ‘sunny’ AND condition = ‘cloudy’ AND temperature > 70

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c) SELECT \* FROM weather WHERE temperature > (SELECT city FROM weather WHERE city = ‘Paris’)  
d) SELECT \* FROM weather WHERE temperature > ‘Paris’ temperature

39. Find all the cities with temperature, condition and humidity whose humidity is in the range of 63 to 79.  
a) SELECT \* FROM weather WHERE humidity IN (63 to 79)  
b) SELECT \* FROM weather WHERE humidity NOT IN (63 AND 79)  
c) SELECT \* FROM weather WHERE humidity BETWEEN 63 AND 79  
d) SELECT \* FROM weather WHERE humidity NOT BETWEEN 63 AND 79

40. The command to remove rows from a table ‘CUSTOMER’ is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
a) DROP FROM CUSTOMER  
b) UPDATE FROM CUSTOMER  
c) REMOVE FROM CUSTOMER  
d) DELETE FROM CUSTOMER WHERE

41. Aggregate functions are functions that take a \_\_\_\_\_\_\_\_\_\_\_ as input and return a single value.  
a) Collection of values  
b) Single value  
c) Double value  
d) All of the mentioned

42. SQL applies predicates in the \_\_\_\_\_\_\_ clause after groups have been formed, so aggregate functions may be used.  
a) Group by  
b) With  
c) Where  
d) Having

43. The \_\_\_\_\_\_\_\_ keyword is used to access attributes of preceding tables or subqueries in the from clause.  
a) In  
b) Lateral  
c) Having  
d) With

44. Which of the following is not an aggregate function?  
a) Avg  
b) Sum  
c) With  
d) Min

45. If we do want to eliminate duplicates, we use the keyword \_\_\_\_\_\_\_\_\_\_in the aggregate expression.  
a) Distinct  
b) Count  
c) Avg  
d) Primary key

46. All aggregate functions except \_\_\_\_\_\_\_\_\_\_ ignore null values in their input collection.  
a) Count(attribute)  
b) Count(\*)  
c) Avg  
d) Sum

47. A Boolean data type that can take values true, false, and \_\_\_\_\_\_\_\_\_\_\_\_  
a) 1  
b) 0  
c) Null  
d) Unknown

48. Which of the following should be used to find all the courses taught in the Fall 2009 semester but not in the Spring 2010 semester?  
a)

**SELECT** **DISTINCT** course id

**FROM** **SECTION**

**WHERE** semester = ’Fall’ **AND** **YEAR**= 2009 **AND**

course id **NOT** **IN** (**SELECT** course id **FROM** **SECTION** **WHERE** semester = ’Spring’ **AND** **YEAR**= 2010);

b)

**SELECT** **DISTINCT** course\_id

**FROM** instructor

**WHERE** name **NOT** **IN** (’Fall’, ’Spring’);

c)

**SELECT** course id

**FROM** **SECTION**

**WHERE** semester = 'Spring' **AND** **YEAR**= 2010);

d)

**SELECT** **COUNT** (**DISTINCT** ID)

**FROM** takes

**WHERE** (course id, sec id, semester, **YEAR**) **IN** (**SELECT** course id, sec id, semester, **YEAR**

**FROM** teaches

**WHERE** teaches.ID= 10101);

49. The phrase “greater than at least one” is represented in SQL by \_\_\_\_\_\_\_\_\_\_\_  
a) < all  
b) < some  
c) > all  
d) > some

50. We can test for the nonexistence of tuples in a subquery by using the \_\_\_\_\_\_\_\_\_\_ construct.  
a) Not exist  
b) Not exists  
c) Exists  
d) Exist

61. Which of the following service provider provides the highest level of service?  
a) SaaS  
b) PaaS  
c) IaaS  
d) All of the mentioned

62. Point out the correct statement.  
a) PaaS supplies the infrastructure  
b) IaaS adds application development frameworks, transactions, and control structures  
c) SaaS is an operating environment with applications, management, and the user interface  
d) All of the mentioned

63. Which of the following functional cloud computing hardware/software stack is the Cloud Reference Model?  
a) CAS  
b) CSA  
c) SAC  
d) All of the mentioned

64. For the \_\_\_\_\_\_\_\_\_ model, the security boundary may be defined for the vendor to include the software framework and middleware layer.  
a) SaaS  
b) PaaS  
c) IaaS  
d) All of the mentioned

65. Point out the wrong statement.  
a) Each different type of cloud service delivery model creates a security boundary  
b) Any security mechanism below the security boundary must be built into the system  
c) Any security mechanism above the security boundary must be maintained by the customer  
d) All of the mentioned

66. Which of the following model allows vendor to provide security as part of the Service Level Agreement?  
a) SaaS  
b) PaaS  
c) IaaS  
d) All of the mentioned

67. Which of the following cloud does not require mapping?  
a) Public  
b) Private  
c) Hybrid  
d) None of the mentioned

68. Which of the following service model is owned in terms of infrastructure by both vendor and customer?  
a) Public  
b) Private  
c) Hybrid  
d) None of the mentioned

69. Which of the following model type is not trusted in terms of security?  
a) Public  
b) Private  
c) Hybrid  
d) None of the mentioned

70. Which of the following has infrastructure security managed and owned by the vendor?  
a) Hybrid  
b) Private/Community  
c) Public  
d) None of the mentioned