

DBT MCQ Test - 20

Aug18/ DBT/M155

Database Technologies

Diploma in Advance Computing

August 2018

Date: **­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

PRN: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Name: ­­­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Note: Attempt all questions. Each question carries 1 mark. No Negative Marking.***

1. A table may be joined to itself.

**a) True**

b) False

c) None of the above

2. What SQL clause is used to restrict the rows returned by a query?

a) AND

**b) WHERE**

c) HAVING

d) FROM

3. The USE command?

a) Is used to load code from another file

b) Has been deprecated and should be avoided for security reasons

c) Is a pseudonym for the SELECT command

**d) Should be used to choose the database you want to use once you’ve connected to MySQL**

4. Which of these is not a comment specifying construct?

a) #

b) /\* \*/

c) —

**d) !#**

5. The USE command?

1. Is used to load code from another file
2. Has been deprecated and should be avoided for security reasons
3. Is a pseudonym for the SELECT COMMAND?
4. **Should be used to choose the database you want to use once you've connected to MySQL**

6. A SELECT command without a WHERE clause returns?

1. All the records from a table that match the previous WHERE clause
2. **All the records from a table, or information about all the records**
3. SELECT is invalid without a WHERE clause
4. Nothing

7. In a SELECT with a GROUP BY clause, a WHERE clause, and a HAVING clause, the WHERE conditions are applied before the HAVING conditions.

1. **True**
2. False
3. Either True or False
4. None of the above

8. Which of these is not a valid name for a column

1. Far
2. Near
3. To
4. **From**

9. Which of these commands will delete a table called ABC if you have appropriate authority:

1. DROP ABC
2. DELETE ABC WHERE confirm = "YES"
3. DROP ABC WHERE confirm = "YES"
4. **DROP TABLE ABC**

10. If you want to undo a GRANT, you should use

1. **REVOKE**
2. UNDO
3. UNGRANT
4. ROLLBACK

11. If there are no matching rows, [COUNT()](https://dev.mysql.com/doc/refman/8.0/en/group-by-functions.html#function_count) returns?

1. **0**
2. 1
3. empty
4. null

12. Count(), returns a count of the \_\_\_\_\_\_\_\_\_ values of expr in the rows retrieved by a SELECT statement.

1. 0
2. NULL
3. **non-NULL**
4. Both A and B

13. COUNT(\*) will returns a count of the number of \_\_\_\_\_\_\_\_\_ retrieved, whether or not they contain NULL values.

1. **rows**
2. values
3. columns
4. Will generate an error.

14. If there are no matching rows, COUNT(DISTINCT) returns?

1. **0**
2. 1
3. null
4. empty

15. What statement will you issue to find out the highest salary from EMP table statement?

1. **SELECT MAX (SAL) FROM EMP**
2. SELECT MAXIMUN (SAL) FROM EMP
3. SELECT GREATEST (SAL) FROM EMP
4. None of the above

16. What is the meaning of “GROUP BY” clause in Mysql?

**a) Group data by column values**

b) Group data by row values

c) Both a and b

d) None of the mentioned

17. Which clause is similar to “HAVING” clause in Mysql?

a) SELECT

**b) WHERE**

c) FROM

d) None of the mentioned

18. What is the meaning of “HAVING” clause in Mysql?

**a) To filter out the row values**

b) To filter out the column values

c) Both a and b

d) None of the mentioned

19. “COUNT” keyword belongs to which categories in Mysql?

**a) Aggregate functions**

b) Operators

c) Clauses

d) All of the mentioned

20. Which among the following belongs to an “aggregate function”?

**a) COUNT**

b) UPPER

c) LOWER

d) All of the mentioned

21. Which of the following belongs to an “aggregate function”?

a) COUNT

b) SUM/AVG

c) MIN/MAX

**d) All of the mentioned**

22. Which clause is used with an “aggregate functions”?

**a) GROUP BY**

b) SELECT

c) WHERE

d) Both a and c

23. What is the significance of the statement “GROUP BY d.name” in the given query?

SELECT d.name, COUNT (emp\_id) emp\_no FROM department d INNER JOIN Employee e ON d.dept\_id = e.emp\_id GROUP BY d.name

a) Aggregation of the field “name” of both table

**b) Aggregation of the field “name” of table “department”**

c) Sorting of the field “name”

d) None of the mentioned

24. What is the significance of the statement “HAVING COUNT (emp\_id)>2” in the given query?

SELECT d.name, COUNT (emp\_id) emp\_no FROM department d INNER JOIN Employee e ON d.dept\_id=e.emp\_id GROUP BY d.name HAVING COUNT (emp\_id)>2

a) Filter out all rows whose total emp\_id below 2

b) Selecting those rows whose total emp\_id>2

**c) Both a and b**

d) None of the mentioned

25. Aggregate functions are functions that take a \_\_\_\_\_\_\_\_\_\_\_ as input and return a single value.

1. **Collection of values**
2. Single value
3. Aggregate value
4. Both Collection of values & Single value

26. SELECT \_\_\_\_\_\_\_\_\_\_ FROM instructor WHERE dept name = 'Comp. Sci.';

Which of the following should be used to find the mean of the salary?

1. Mean(salary)
2. **Avg(salary)**
3. Sum(salary)
4. Count(salary)

27. SELECT COUNT (\_\_\_\_ ID) FROM teaches WHERE semester = ‘Spring’ AND YEAR = 2010;

If we do want to eliminate duplicates, we use the keyword \_\_\_\_\_\_in the aggregate expression.

1. **Distinct**
2. Count
3. Avg
4. Primary key

28. All aggregate functions except \_\_\_\_\_ ignore null values in their input collection.

1. Count(attribute)
2. **Count(\*)**
3. Avg
4. Sum

29. A Boolean data type that can take values true, false, and\_\_\_\_\_\_\_\_

a) 1

b) 0

c) Null

**d) Unknown**

30. The \_\_\_\_ connective tests for set membership, where the set is a collection of values produced by a select clause. The \_\_\_\_ connective tests for the absence of set membership.

a) Or, in

b) Not in, in

**c) in, not in**

d) In, or

31. 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);

32. The phrase “greater than at least one” is represented in SQL by \_\_\_\_\_

a) < all

b) < some

c) > all

**d) > some**

33. Which of the following is used to find all courses taught in both the Fall 2009 semester and in the Spring 2010 semester.

**a) SELECT course id FROM SECTION AS S WHERE semester = ‘Fall’ AND YEAR = 2009 AND EXISTS (SELECT \* FROM SECTION AS T WHERE semester = ‘Spring’ AND YEAR = 2010 AND S.course id = T.course id);**

b) SELECT name FROM instructor WHERE salary > SOME (SELECT salary FROM instructor WHERE dept name = ‘Biology’);

c) 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);

d) (SELECT course id FROM SECTION WHERE semester = ‘Spring’ AND YEAR = 2010)

34. 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

35. SELECT dept\_name, ID, avg (salary) FROM instructor GROUP BY dept\_name;

This statement IS erroneous because

a) Avg(salary) should not be selected

**b) ID should not be used in group by clause**

c) Misplaced group by clause

d) Group by clause is not valid in this query

36. 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

37. Aggregate functions can be used in the select list or the \_\_\_\_\_\_\_ clause of a select statement or subquery. They cannot be used in a \_\_\_\_\_\_ clause.

a) Where, having

**b) Having, where**

c) Group by, having

d) Group by, where

38. The \_\_\_\_\_\_\_\_ keyword is used to access attributes of preceding tables or subqueries in the from clause.

a) In

**b) Lateral**

c) Having

d) With

39. Which of the following creates temporary relation for the query on which it is defined ?

**a) With**

b) From

c) Where

d) Select

40. TEMP table has total 11 rows and following data.

C1 C2

------ ------

1 1

2 2

NULL NULL

NULL NULL

NULL NULL

3 3

4 4

NULL NULL

5 5

NULL NULL

NULL 6

What will be output after giving following statement?

mysql> SELECT COUNT(\*) FROM TEMP;

1. 0
2. 1
3. **11**
4. NULL

41. TEMP table has total 11 rows and following data.

C1 C2

------ ------

1 1

2 2

NULL NULL

NULL NULL

NULL NULL

3 3

4 4

NULL NULL

5 5

NULL NULL

NULL 6

What will be output after giving following statement?

mysql> SELECT COUNT(\*) FROM TEMP GROUP BY C1;

1. 0
2. **6**
3. 11
4. NULL

42. Which of the following is not an aggregate function?

a) Avg

b) Sum

**c) With**

d) Min

43. Which of the following is not a valid aggregate function?

a) COUNT

b) MIN

c) MAX

**d) COMPUTE**

44. Which statement is used to count number of rows in table?

1. **SELECT COUNT(\*) FROM placement\_question;**
2. SELECT COUNT ALL(\*) FROM placement\_question;
3. SELECT ROWS(\*) FROM placement\_question;
4. All the above

45. Which SQL keyword is used to retrieve a maximum value?

1. TOP
2. MOST
3. UPPER
4. **MAX**

46. Which SQL keyword is used to retrieve a minimum value?

1. TOP
2. MOST
3. UPPER
4. **MIN**

47. Which of the following is a SQL aggregate function?

1. LEFT
2. **AVG**
3. JOIN
4. LEN

48. Which of the following group functions ignore NULL values?

1. MAX
2. **COUNT**
3. SUM
4. All of the above

49. "COUNT" keyword belongs to which categories in Mysql?

1. **Aggregate functions**
2. Operators
3. Clauses
4. All of the mentioned

50. "MIN" keyword belongs to which categories in Mysql?

1. **Aggregate functions**
2. Operators
3. Clauses
4. All of the mentioned

51. "MAX" keyword belongs to which categories in Mysql?

1. **Aggregate functions**
2. Operators
3. Clauses
4. All of the mentioned

52. "SUM" keyword belongs to which categories in Mysql?

1. **Aggregate functions**
2. Operators
3. Clauses
4. All of the mentioned

53. "AVG" keyword belongs to which categories in Mysql?

1. **Aggregate functions**
2. Operators
3. Clauses
4. All of the mentioned

54. Having clause is processed after the GROUP BY clause.

1. **True**
2. False

55. The sequence of the columns in a GROUP BY clause has no effect in the ordering of the output.

1. True
2. **False**

56. You want all dates when any employee was hired. Multiple employees were hired on the same date and you want to see the date only once.

Query - 1

Select distinct hiredate from hr.employee Order by hiredate;

Query - 2

Select hiredate from hr.employees Group by hiredate Order by hiredate;

Which of the above query is valid?

1. Query - 1
2. Query - 2
3. **Both**
4. None of the above

57. All aggregate functions ignore NULLs except for............

1. Distinct
2. **Count (\*)**
3. Average()
4. None of above

58. What is true about the following statement?

SELECT DEPT, AVG(SALARY) FROM EMPLOYEE GROUP BY DEPT;

1. AVG is the aggregate function name.
2. (SALARY) is the column on which the average is computed.
3. DEPT is the column by which the rows will be grouped.
4. **All of the above**

59. A NULL value is treated as a blank.

a) True

**b) False**

60. \_\_\_\_\_\_\_\_\_ is used to get unique values from the column.

1. **Distinct**
2. Rowdistinct
3. Unique
4. None of the above.