What follows are some simple SQL questions to test your knowledge. The Answer Key is provided at the end.

1. With SQL, how do you select a column named "FirstName" from a table named "Persons"?
2. EXTRACT FirstName FROM Persons
3. SELECT FirstName FROM Persons
4. SELECT Persons.FirstName
5. With SQL, how do you select all the columns from a table named "Persons" where the value of the column "FirstName" is "Peter"?
6. SELECT \* FROM Persons WHERE FirstName='Peter'
7. SELECT \* FROM Persons WHERE FirstName<>'Peter'
8. SELECT [all] FROM Persons WHERE FirstName LIKE 'Peter'
9. SELECT [all] FROM Persons WHERE FirstName='Peter'
10. With SQL, how do you select all the columns from a table named "Persons" where the value of the column "FirstName" starts with an "a"?
    1. SELECT \* FROM Persons WHERE FirstName='a'
    2. SELECT \* FROM Persons WHERE FirstName='%a%'
    3. SELECT \* FROM Persons WHERE FirstName LIKE 'a%'
    4. SELECT \* FROM Persons WHERE FirstName LIKE '%a'
11. The OR operator displays a record if ANY conditions listed are true. The AND operator displays a record if ALL of the conditions listed are true
    1. True
    2. False
12. With SQL, how do you select all the records from a table named "Persons" where the "LastName" is alphabetically between (and including) "Hansen" and "Pettersen"?
    1. SELECT \* FROM Persons WHERE LastName>'Hansen' AND LastName<'Pettersen'
    2. SELECT \* FROM Persons WHERE LastName BETWEEN 'Hansen' AND 'Pettersen'
    3. SELECT LastName>'Hansen' AND LastName<'Pettersen' FROM Persons
13. Which SQL statement is used to return only different values?
14. SELECT UNIQUE
15. SELECT DIFFERENT
16. SELECT DISTINCT
17. With SQL, how can you insert a new record into the "Persons" table?
18. INSERT INTO Persons VALUES ('Jimmy', 'Jackson')
19. INSERT ('Jimmy', 'Jackson') INTO Persons
20. INSERT VALUES ('Jimmy', 'Jackson') INTO Persons
21. With SQL, how can you insert "Olsen" as the "LastName" in the "Persons" table?
    1. INSERT ('Olsen') INTO Persons (LastName)
    2. INSERT INTO Persons ('Olsen') INTO LastName
    3. INSERT INTO Persons (LastName) VALUES ('Olsen')
22. How can you change "Hansen" into "Nilsen" in the "LastName" column in the Persons table?
23. UPDATE Persons SET LastName='Nilsen' WHERE LastName='Hansen'
24. UPDATE Persons SET LastName='Hansen' INTO LastName='Nilsen'
25. MODIFY Persons SET LastName='Hansen' INTO LastName='Nilsen
26. MODIFY Persons SET LastName='Nilsen' WHERE LastName='Hansen'
27. With SQL, how can you delete the records where the "FirstName" is "Peter" in the Persons Table?
28. DELETE ROW FirstName='Peter' FROM Persons
29. DELETE FROM Persons WHERE FirstName = 'Peter'
30. DELETE FirstName='Peter' FROM Persons
31. Which of the following will insert a record into emp table having empno and eaname as columns?
32. INSERT EMP VALUES ( 1000,'SRI');
33. INSERT FROM EMP VALUES ( 1000,'SRI');
34. INSERT EMP ( 1000,'SRI');
35. INSERT INTO EMP VALUES ( 1000,'SRI');
36. Which of the following denote aggregate functions in SQL?
37. AVG
38. COUNT
39. SUM
40. All the Above
41. A table T1 having 100 rows is joined with a table T2 with 50 rows without specifying the joined column in the where clause then result will have
42. 50 rows
43. 150 rows
44. 5000 rows
45. 100 rows
46. In order to remove the index created the SQL command used is
47. DROP INDEX;
48. DELETE INDEX;
49. REMOVE INDEX;
50. CUT INDEX;
51. the result of the combination of two tables to get duplicates also to be displayed we use command
52. UNION
53. UNION ALL
54. UNION ALL SHOW
55. INTERSECT ALL
56. Which of the following is TRUE about Primary Key?
57. A column that is defined as Primary Key value can be same value more than once.
58. A column that is defined as Primary Key cannot contain NULL value.
59. Primary key should be long type only.
60. Consider the emp(EMPNO, EMPNAME) table which has the following values; 1000, SERENA; 1001, ARNOLD. The SQL query will return output as SELECT empname, INSTR (empname, 'R') FROM emp;
61. SERENA 3 ARNOLD 2
62. SERENA 2 ARNOLD 3
63. The function TO\_DATE in SQL
64. Converts character string into date
65. Converts character number into date
66. Converts character string or number into date
67. None of above
68. Which of the following SQL statements is correct?
    1. SELECT CustomerName, COUNT(CustomerName) FROM Orders
    2. SELECT CustomerName, COUNT(CustomerName) FROM Orders GROUP BY CustomerName
    3. SELECT CustomerName, COUNT(CustomerName) FROM Orders ORDER BY CustomerName
69. What is a database cursor?
    1. A cursor is a database object pointing to a currently selected set of records
    2. A cursor is SQL keyword specifying a retrieved data order
    3. A blinking vertical line that indicates the location of the next input on the display screen
70. What is the difference between the WHERE and HAVING SQL clauses?
    1. The WHERE and the HAVING clauses are identical
    2. The HAVING SQL clause condition(s) is applied to all rows in the result set before the WHERE clause is applied (if present). The WHERE clause is used only with SELECT SQL statements and specifies a search condition for an aggregate or a group.
    3. The WHERE SQL clause condition(s) is applied to all rows in the result set before the HAVING clause is applied (if present). The HAVING clause is used only with SELECT SQL statements and specifies a search condition for an aggregate or a group.
71. What is the purpose of the SQL AS clause?
    1. The AS clause is used with the JOIN clause only
    2. The AS SQL clause is used change the name of a column in the result set or to assign a name to a derived column
    3. The AS clause defines a search condition
72. The difference between the DELETE and TRUNCATE SQL clauses is?
    1. The TRUNCATE clause deletes all rows in a database table, while the DELETE clause can have a WHERE condition and might or might not delete all rows in a table.
    2. The DELETE clause deletes all rows in a database table, while the TRUNCATE clause can have a WHERE condition and might or might not delete all rows in a table.
    3. The TRUNCATE clause is identical to the DELETE clause
73. Essay Question: Describe what the following SQL statement does:

SELECT t.\*, @row := @row + 1 AS ConversionNum

FROM pubnamemechg t, (SELECT @row := 0) r

WHERE t.`conversion category` LIKE ‘%Conversion’;

1. Essay Question: Describe what the following SQL statement does:

SELECT

CAST(DATE\_FORMAT(CONVERT\_TZ(file\_timestamp,'+00:00','-05:00'), '%Y-%m-%d')AS DATE) AS file\_timestamp,

ROUND(AVG(daily\_ins),2) as daily\_ins

from daily\_ins

GROUP BY CAST(DATE\_FORMAT(CONVERT\_TZ(file\_timestamp,'+00:00','-05:00'), '%Y-%m-%d')AS DATE)

ORDER BY CONVERT\_TZ(file\_timestamp,'+00:00','-05:00') ASC;

1. Essay Question: Describe what the following SQL statement does:

SELECT a.Id, a.BillingState, a.BillingPostalCode, a.BillingCountry, a.Description, a.Type, a.Phone, a.Website, a.Name, c.LeadSource, c.Send\_First\_Steps\_\_c, c.Email, c.Name, c.Title

FROM current\_account a

LEFT JOIN current\_contact c

ON c.AccountId = a.Id AND c.batch\_id = (SELECT MAX(batch\_id) FROM current\_contact)

WHERE a.batch\_id = (SELECT MAX(batch\_id) FROM current\_account)

GROUP BY a.`Id`;

1. Essay Question: ‘Issue\_Type’ is a VARCHAR. Write a CASE statement that orders the issues in the following order; ‘Expedite’, ‘Bug’, ‘Epic’, ‘Story’, ‘Improvement’.
2. Essay Question: Describe why you would use the ‘SELECT NULL’ in the INSERT and the SUB-QUERY:

INSERT INTO notify\_user\_prefs

SELECT NULL, nu.notify\_user\_id, du.email\_address, du.phone\_number, du.display\_name, 'en'

FROM notify\_user nu

INNER JOIN domo\_user du ON nu.domo\_user\_id = du.domo\_user\_id

WHERE du.email\_address = 'support@domo.com'

AND NOT EXISTS (SELECT NULL FROM notify\_user\_prefs nup2 WHERE nup2.email\_address = 'support@domo.com');

**ANSWER KEY**

1. B
2. A
3. C
4. A
5. B
6. C
7. A
8. C
9. A
10. B
11. D
12. D
13. C
14. A
15. B
16. B
17. A
18. C
19. B
20. A
21. C
22. B
23. A