**Unit 3: SQL**

1. What is SQL? Why we use SQL
2. [What is the difference between SQL and MySQL?](https://www.edureka.co/blog/interview-questions/sql-interview-questions#sqlvsmysql)
3. [What is the difference between CHAR and VARCHAR2 datatype in SQL?](https://www.edureka.co/blog/interview-questions/sql-interview-questions#charvsvarchar)
4. What are different data types in sql
5. What are the main applications of SQL?
6. What is an SQL Query? Give some examples.
7. What are DDL and DML commands (or SQL subsets) do you know?
8. Give some examples of common SQL commands of each type.
9. What are tables and fields in SQL
10. What is a subquery?
11. What is nested subquery .
12. What is a constraint, and why use constraints?
13. What SQL constraints do you know?
14. What is a join?What types of joins do you know?
15. What are UNION, MINUS and INTERSECT commands
16. Explain character-manipulation functions? Explains its different types in SQL.
17. What is a Self-Join?
18. What is difference between inner join and natural join
19. What is a primary key?
20. What is a unique key
21. What is a foreign key?
22. What is an index
23. What types of indexes do you know?
24. What is a schema
25. What is a SQL operator?
26. What types of SQL operators do you know?
27. What is a clause?
28. What is the SELECT statement?
29. What are UNION, MINUS and INTERSECT commands?
30. What are some common clauses used with SELECT query in SQL?
31. What are some common statements used with the SELECT query?
32. How to create a table?
33. How to update a table?
34. How to delete a table from a database?
35. How to perform natural join of table a table?
36. How to get the count of records in a table?
37. How to sort records in a table?
38. How to select all columns from a table?
39. How to select common records from two tables
40. What is the DISTINCT statement and how do you use it?
41. What are entities? Give some examples.
42. What are relationships? Give some examples.
43. What is NULL value? How is it different from zero or a blank space?
44. What aggregate functions do you know?
45. What scalar functions do you know?
46. What are case manipulation functions? Give some examples
47. What are character manipulation functions? Give some examples.
48. Write a SQL query to display the current date?
49. What is the difference between local and global variables?
50. What is the default data ordering with the ORDER BY statement, and how do you change it?
51. What set operators do you know?
52. How do we use the DISTINCT statement? What is its use?
53. What operator is used in the query for pattern matching?
54. What is the difference between a primary key and a unique key
55. What is a composite primary key?
56. What is the order of appearance of the common statements in the SELECT query?
57. In which order the interpreter executes the common statements in the SELECT query?
58. What is a view, and why use it?
59. What is the difference between nested and correlated subqueries
60. What is the difference between clustered and non-clustered indexes?
61. What is the CASE() function?
62. What is the difference between the DELETE and TRUNCATE statements?
63. What is the difference between the DROP and TRUNCATE statements?
64. What is the difference between the HAVING and WHERE statements
65. How do you add a record to a table?
66. How to delete a record from a table?
67. How to add a column to a table
68. How to rename a column of a table?
69. How to delete a column from a table?
70. How to select all even or all odd records in a table?
71. How to prevent duplicate records when making a query?
72. How to insert many rows in a table?
73. How to find the highest value in a column of a table?How to find the values in a text column of a table that start with a certain letter?
74. How to find the lowest id in a table?
75. How to select random rows from a table?
76. What is the difference between cross join and natural join?
77. What is an ALIAS command?
78. Name the operator which is used in the query for pattern matching?
79. How can you select unique records from a table?
80. How can you fetch first 5 characters of the string?

**Unit 1:**

1. What is a database?
2. What is DBMS, and what types of DBMS do you know?
3. What is purpose of DBMS
4. What is a data Abstraction
5. What is database language
6. What are disadvantages of file Processing system
7. What is RDBMS? Give some examples of RDBMS
8. What are DATABASE SYSTEM APPLICATIONS
9. What is database schema and keys

**Unit 2:**

1. What is ER diagram? What are the components and how to draw ER diagram
2. What are the different keys?
3. What is weak entity? How to represent total participation and weal entities in ER diagram
4. What is specialization ,generalization and aggragation
5. What is attribute closure, canonical cover of FD
6. What is relationships, degree of relationship and mapping cardinalities do you know?
7. What is normalization in SQL, and why use it?
8. Explain different types of Normalization.
9. What is Attributes and its types? What is domain of attributes
10. What is denormalization in SQL, and why use it?

Unit 4:

1. What are different physical media
2. What is RAID? What are levels?
3. How records are organized into files?
4. What is Fixed length and variable length?
5. What is data dictionary?
6. What is buffer? What are buffer replacement policies?
7. What are different types of indices?
8. What is dense and sparse index?
9. What is static and dynamic hashing?

**Unit 5: Transaction**

1. What is the ACID property in a database?
2. What are states of transaction
3. What is commited and non commited transaction
4. What is concurrency control
5. What is deadlock
6. What is cascading rollback and cascadeless schedule
7. What is conflict serializability and view serializability
8. what is lock based protocol? Explain two phase locking protocol
9. explain timestamp based protocol
10. explain validation based protocol