**Verbally asked SQL interview questions -**

1. Explain order of execution of SQL.
2. What is difference between where and having?
3. What is the use of group by?
4. Explain all types of joins in SQL?
5. What are triggers in SQL?
6. What is stored procedure in SQL
7. Explain all types of window functions? (Mainly rank, row\_num, dense\_rank, lead & lag)
8. What is difference between Delete and Truncate?
9. What is difference between DML, DDL and DCL?
10. What are aggregate function and when do we use them? explain with few example.
11. Which is faster between CTE and Subquery?
12. Explain the concept of ACID properties in SQL transactions.
13. What is the difference between a clustered and a non-clustered index?
14. Describe the purpose and usage of the EXISTS and NOT EXISTS operators in SQL.
15. How would you handle NULL values in SQL queries?
16. What are constraints and types of Constraints?
17. Types of Keys?
18. Different types of Operators ?
19. Difference between Group By and Where?
20. What are Views?
21. What are different types of constraints?
22. What is difference between varchar and nvarchar?
23. Similar for char and nchar?
24. What are index and their types?
25. What is an index? Explain its different types.
26. List the different types of relationships in SQL.
27. Differentiate between UNION and UNION ALL.
28. How many types of clauses in SQL ?
29. What is the difference between UNION and UNION ALL in SQL?
30. What are the various types of relationships in SQL?
31. Difference between Primary Key and Secondary Key?
32. What is the difference between where and having?
33. Find the second highest salary of an employee?
34. Write retention query in SQL?
35. Write year-on-year growth in SQL?
36. Write a query for cummulative sum in SQL?
37. Difference between Function and Store procedure ?
38. Do we use variable in views?
39. What are the limitations of views?

**Scenario-Based Questions**

1. Write a query to find duplicate records in a table.
2. Write a query to find employees who have worked in all departments.
3. Describe how you would implement pagination in SQL.
4. Write a SQL query to pivot and unpivot data.
5. Write a query to calculate year-over-year growth.

**Practical SQL Challenges**

1. You have a table with user transactions. Write a query to find the top 5 users with the highest transaction amounts.
2. Given a sales table, write a query to find the total sales for each month.
3. Write a query to merge two tables and handle duplicate entries.
4. Explain the use of window frames in window functions.
5. Describe how you would query hierarchical data.