**Beginner**

1. What is MySQL?

2. How do you create a database in MySQL?

3. Explain the difference between a primary key and a unique key.

4. What command is used to create a table in MySQL?

5. How do you insert data into a MySQL table?

6. How can you retrieve data from a MySQL table?

7. What is the use of the SELECT statement in MySQL?

8. Explain the difference between CHAR and VARCHAR data types.

9. What is a foreign key?

10. How do you update data in a MySQL table?

11. How can you delete data from a MySQL table?

12. What is the purpose of the WHERE clause?

13. How do you create an index in MySQL?

14. What is the difference between DELETE and TRUNCATE commands?

15. How do you join two tables in MySQL?

16. What is the use of the LIMIT clause?

17. How can you sort data in a MySQL query?

18. What are aggregate functions in MySQL?

19. Explain the use of the GROUP BY clause.

20. What is a subquery in MySQL?

**Intermediate**

21. What are transactions in MySQL and how do you use them?

22. How can you perform a self join in MySQL?

23. What is the difference between INNER JOIN and LEFT JOIN?

24. Explain the concept of data types in databases.

25. What is a stored procedure and how do you create one in MySQL?

26. How do you create a trigger in MySQL?

27. What are views in MySQL and how do you create them?

28. Explain the difference between CHAR and VARCHAR.

29. How do you perform a backup and restore of a MySQL database?

30. How can you improve the performance of a MySQL query?

31. How do you handle NULL values in MySQL?

32. What is the use of the HAVING clause?

33. What is the purpose of the AUTO\_INCREMENT attribute?

34. How do you rename a column in a MySQL table?

35. What are the different types of indexes in MySQL?

36. How do you use the IFNULL() function?

37. What is the difference between function and a stored procedure?

**Difficult**

38. What is a common table expression (CTE) and how do you use it in MySQL?

39. Describe the process of query optimization in MySQL.

40. What are the best practices for database security in MySQL?

41. How do you use the EXPLAIN statement to analyze a query in MySQL?

42. What is the purpose of the INFORMATION\_SCHEMA in MySQL?

43. How can you handle large datasets in MySQL to ensure efficient performance?