#### > Basic SQL for Testers

- 1. What is SQL, and why is it important for testers?
- 2. What are SELECT, INSERT, UPDATE, and DELETE statements?
- 3. How do you retrieve specific columns from a table?
- 4. How do you filter data using the WHERE clause?
- 5. How do you sort data using ORDER BY?

#### > Data Validation / Testing Focus

- 1. How do you validate that data entered in the UI is stored correctly in the database?
- 2. Write a query to check for duplicate records in a table.
- 3. How do you write a query to count the number of records in a table?
- 4. What is the difference between = and LIKE in SQL?
- 5. How can you compare two tables and find mismatched records?

### > Joins and Relationships

- 1. What is a JOIN, and why would a tester use it?
- 2. What is the difference between INNER JOIN and LEFT JOIN?
- 3. Write a query to fetch user details along with their order details (2-table join).
- 4. How do you test referential integrity using SQL?

# > Aggregations and Grouping

- 1. How do you use GROUP BY and HAVING clauses?
- 2. Write a query to find the total number of orders per customer.
- 3. How do you test that calculated fields (like totals or averages) are correct?

# > Database Concepts

- 1. What is a primary key and foreign key?
- 2. What are indexes, and how do they impact query performance?
- 3. What is normalization, and why is it important?

## > Advanced SQL Testing

- 1. How do you find the second highest salary using SQL?
- 2. How do you use subqueries in testing scenarios?
- 3. What is a view, and how do you test data from a view?
- 4. How do you handle NULL values in SQL queries?

5. How do you write test cases based on SQL queries for data validation?