**MANUAL**

1. Difference between Sdlc and stlc
2. What are the types of testing used in QA.
3. Explain Release management process
4. What is Test strategy vs test plan
5. Test scenario vs test case
6. What is Severity and priority and how to do you identify this?
7. What is CI and CD?
8. How to report a bug in detail
9. Process of QA from start to end
10. What is the role of QA in the software development process?
11. Can you explain the difference between verification and validation?
12. How do you prioritize testing activities in a project?
13. What is the importance of test documentation?
14. Explain the difference between functional testing and non-functional testing.
15. How do you ensure the reliability and stability of a software application?
16. Can you describe the bug life cycle?
17. How do you perform regression testing, and why is it important?
18. What is the purpose of test planning, and what does it involve?
19. How do you approach testing in an Agile development environment?
20. Can you explain the concept of risk-based testing?
21. How do you ensure that your testing process is efficient and effective?
22. What is the significance of automated testing in the QA process?
23. How do you handle disagreements with developers regarding the severity of a bug?
24. Can you share an experience where your testing efforts significantly contributed to the improvement of a product?

**DATA BASE**

1. What is a Database?
2. Explain SQL and its main purposes.
3. Differentiate between a Primary Key and a Foreign Key.
4. Describe the types of SQL Joins (INNER JOIN, LEFT JOIN, RIGHT JOIN, FULL JOIN).
5. What is Database Normalization? Why is it important?
6. Explain the ACID properties in the context of database transactions.
7. What is indexing in a database, and how does it improve performance?
8. Define a Stored Procedure. What are its advantages?
9. What is the difference between SQL and NoSQL databases?
10. Explain the concept of a database index.
11. What is the purpose of the GROUP BY clause in SQL?
12. type of keys in db
13. what is important in table to execute the join query
14. normalization and denormalization
15. query writing like select, delete, update joins group by, order by, sum, count , avg, min, max
16. Explain the difference between INNER JOIN and LEFT JOIN.
17. What is the difference between DELETE and TRUNCATE?
18. Write query for second highest salary
19. Write a query to find how many employees exist in each each department.  
    e.g   
    HR 5  
    Sales 6

|  |  |
| --- | --- |
| **Employee** | **Department** |
| Lana | HR |
| James | HR |
| Henry | IT |
| Mark | IT |
| Joe | Sales |
| Steve | Accounts |
| Michael | marketing |
| Julia | Sales |
| Rich | Marketing |
| Albert | IT |
| Steven | IT |
| Albertez | HR |
| Kin | Sales |
| Simen | Accounts |
| howrdy | Marketing |

**API TESTING**

1. What is api
2. Types of api and difference
3. Methods of api
4. Status codes
5. Validation in apis
6. Put and patch difference
7. Environments and variable in api
8. Tokens in api
9. What is API Testing?
10. Explain the difference between SOAP and REST.
11. What are the common HTTP methods used in RESTful APIs?
12. What is an Endpoint in API?
13. What is the purpose of the HTTP status code 200?
14. Explain the meaning of HTTP status code 404.
15. What is the purpose of the Authorization header in HTTP requests?
16. What is Postman, and how is it used in API testing?
17. What is Swagger?
18. Explain the concept of OAuth in API security.
19. What is Rate Limiting in API?
20. How can you handle authentication in API testing?
21. What is Mocking in API testing?

**JMETER**

1. What is Apache JMeter, and what is its primary use?
2. Explain the components of a Test Plan in JMeter.
3. What is a Thread Group in JMeter?
4. How does JMeter simulate real user behavior in performance testing?
5. What is the purpose of Samplers in JMeter?
6. Explain the difference between a Listener and a Post Processor in JMeter.
7. How do you parameterize a JMeter Test Plan?
8. What is a CSV Data Set Config in JMeter, and how is it used?
9. Explain the purpose of Assertions in JMeter.
10. What is the Ramp-up Period in JMeter, and why is it important?
11. How can you distribute load testing across multiple machines in JMeter?
12. What is the purpose of the Response Assertion in JMeter?
13. Explain the significance of Throughput in JMeter.
14. How can you analyze and interpret JMeter test results?

**Selenium Automation**

1. What is Selenium?
2. Explain the difference between implicit and explicit waits in Selenium.
3. How can you handle dynamic elements using Selenium?
4. What is WebDriver in Selenium?
5. How do you launch a browser using Selenium WebDriver?
6. Explain the difference between find\_element and find\_elements in Selenium.
7. How can you handle different windows in Selenium?
8. What is Page Object Model (POM) in Selenium?
9. How can you capture screenshots in Selenium?
10. Explain the concept of headless browsers in Selenium.
11. How do you handle alerts in Selenium?
12. What is the purpose of Desired Capabilities in Selenium WebDriver?
13. Explain the use of WebDriverWait and ExpectedConditions in Selenium.
14. How can you perform mouse actions using Selenium WebDriver?
15. How do you handle dropdowns in Selenium?