CI/CD Basics

1.What is CI/CD and how does it relate to automation testing?

2.Explain the difference between Continuous Integration, Continuous Delivery, and Continuous Deployment.

3.Why is CI/CD important in test automation and agile development?

**[4.How](http://4.how/)** would you integrate automated tests in a CI/CD pipeline?

🚀Tools & Implementation

5.Which CI/CD tools have you used (e.g., Jenkins, GitLab CI, CircleCI, GitHub Actions)?

**[6.How](http://6.how/)** do you trigger your automation suite from a Jenkins pipeline?

7.Have you written or configured Jenkinsfiles? What are the key stages in it for automation?

8.What is a Jenkins agent? How do you configure it to run Selenium tests?

**[9.How](http://9.how/)** do you manage test reports (e.g., ExtentReport, Allure) in the pipeline?

**[10.How](http://10.how/)** do you ensure test results are visible to the entire team via CI/CD?

🧪Testing in CI/CD

11.Where do unit, integration, and UI tests fit in a CI/CD pipeline?

**[12.How](http://12.how/)** do you run smoke vs. regression tests in a CI/CD environment?

**[13.How](http://13.how/)** do you handle flaky tests in the CI pipeline?

**[14.How](http://14.how/)** do you set up test environment variables or credentials in the pipeline?

15.What happens if an automated test fails in your pipeline? How is it handled?

🛠️Advanced/Real-World Scenarios

16.Have you worked with Docker or containers to run automated tests in pipelines?

**[17.How](http://17.how/)** do you parallelize tests to reduce build time in CI/CD?

18.What is your approach for test data management in pipelines?

**[19.How](http://19.how/)** do you ensure your tests are cross-browser or cross-platform in the pipeline?

20.Have you integrated code quality tools like SonarQube in your pipeline? How?

📦Version Control + Build Integration

**[21.How](http://21.how/)** does Git/GitLab/GitHub integrate with your CI/CD pipeline?

22.What is the role of webhooks in CI/CD for test automation?

**[23.How](http://23.how/)** do you handle feature branch testing vs. main branch builds?

🧩DevOps Collaboration

**[24.How](http://24.how/)** do you collaborate with DevOps Engineers in maintaining pipelines?

25.Have you set up test automation for microservices or APIs in CI/CD?