Scenario-Based Interview Questions and Answers On

Testing Levels

Q1. What is the purpose of Unit Testing?
Answer: To verify that each individual component or function works as expected.

Q2. Give a real-world example of Unit Testing.
Answer: Testing the “Add to Cart” function in an e-commerce app to ensure the correct product and quantity are added.

Q3. Who is responsible for Unit Testing?
Answer: Developers (mostly using automation tools like JUnit or TestNG).

Q4. What is the purpose of Integration Testing?
Answer: To verify that multiple modules (like login + database) work together correctly.

Q5. Example of Integration Testing?
Answer: Testing how the payment gateway module integrates with the order confirmation module in an online shopping app.

Q6. What is System Testing?
Answer: Testing the entire application as a whole to ensure it meets functional and non-functional requirements.

Q7. Example of System Testing in a real-world app?
Answer: Testing an airline booking system for search flights → book tickets → payment → confirmation.

Q8. What is Acceptance Testing?
Answer: The final level of testing where the client/end-user verifies if the software meets their business requirements.

Q9. Example of Acceptance Testing?
Answer: A banking client tests the mobile app to verify fund transfers, balance checks, and transaction history.

Q10. Why is Unit Testing important even when we have System Testing?
Answer: Unit Testing catches bugs early in the development phase, reducing the cost and time of fixing them later.

Q11. If login is failing, which testing level should catch this bug?
Answer: It should be caught in System Testing or Integration Testing if the issue is between UI and backend.

Q12. Difference between Alpha and Beta Testing?
Answer:
Alpha Testing: Performed by internal users at the development site.
Beta Testing: Performed by real users in a live environment.

Q13. Why do we need multiple levels of testing?
Answer: To ensure each layer (unit, integration, system, acceptance) is verified, reducing the chance of defects in production.

Q14. Which level of testing focuses on business requirements?
Answer: Acceptance Testing.

Q15. Can Unit Testing be done manually?
Answer: Yes, but it’s inefficient. Automation is preferred for speed and accuracy.

Q16. If the login button is not clickable, at which level will this bug be found?
Answer: System Testing, as it’s related to UI behavior.

Q17. During which testing level would you check that API calls between front-end and back-end work correctly?
Answer: Integration Testing.

Q18. Scenario: You have 5 modules in a project. How will you test them using an incremental approach?
Answer: Test module 1 + 2 first, then integrate and test module 3, and so on (either top-down or bottom-up).

Q19. If a payment gateway fails after a successful order placement, which testing level should catch this?
Answer: Integration Testing (interaction between order module and payment module).

Q20. In which level of testing will you verify load and performance?
Answer: Non-functional tests like performance testing are part of System Testing.

Q21. Scenario: A shopping cart is showing incorrect total after discount. Which level might have missed this bug?
Answer: Likely Unit Testing (incorrect logic in price calculation).

Q22. What’s the difference between System Testing and Integration Testing?
Answer:
System Testing: Tests the entire application end-to-end.
Integration Testing: Tests communication between modules.

Q23. If you find a UI bug after client testing, which level failed?
Answer: The bug was missed in System Testing.

Q24. Is Regression Testing a level of testing?
Answer: No, it’s a type of testing, performed after changes to ensure nothing is broken.

Q25. When would you perform Beta Testing?
Answer: Before the official product release, by real users in a real environment.

Q26. Scenario: While testing a banking app, you notice a delay in showing updated account balance after a transaction.
Which level detects this?
Answer: System Testing (Performance testing).

Q27. Can a project skip Acceptance Testing?
Answer: No, Acceptance Testing ensures that client requirements are met.

Q28. What is End-to-End Testing, and which level does it belong to?
Answer: It validates the entire workflow (e.g., login → add product → checkout → payment). It is part of System Testing.

Q29. What is the difference between Functional and Non-functional System Testing?
Answer:
Functional: Checks features (login, payments).
Non-functional: Checks performance, scalability, security.

Q30. If a database is updated but the UI doesn’t reflect it, which testing will find this?
Answer: Integration Testing (UI ↔ Database).

Q31. Which testing level ensures compliance with business workflows?
Answer: Acceptance Testing.

Q32. Scenario: Your application fails when the server goes down. Which testing will catch this?
Answer: System Testing (reliability testing).

Q33. How do you prioritize test cases for different levels of testing?
Answer: Start with critical features (unit) → module interactions → end-to-end workflows → user requirements.

Q34. Is Smoke Testing a level of testing?
Answer: No, it’s a type of System Testing.

Q35. What is the main entry and exit criteria of System Testing?
Answer:
Entry: Integration Testing is completed.
Exit: All functional and non-functional test cases pass.

Q36. Can you combine Integration and System Testing?
Answer: It’s not recommended. Each level has a specific focus and scope.

Q37. Scenario: A user reports that the mobile app works on Android but not on iOS. Which testing level missed this?
Answer: System Testing (Compatibility Testing).

Q38. If the final user rejects the product due to missing features, which testing failed?
Answer: Acceptance Testing.

Q39. Can developers perform Acceptance Testing?
Answer: No, it’s done by clients or end-users.

Q40. What are the risks of skipping Integration Testing?
Answer: Modules may fail when interacting, leading to major defects during system testing.

Q41. Scenario: A performance bottleneck is observed under high traffic. Which testing detects this?
Answer: System Testing (Performance/Load Testing).

Q42. How does Continuous Integration (CI) affect Integration Testing?
Answer: CI ensures that each integration is tested automatically to catch bugs early.

Q43. What is Sanity Testing and where does it fit?
Answer: A quick test to verify major functionalities work after a build; part of System Testing.

Q44. Scenario: During UAT, a user finds the app navigation confusing. Which testing level failed?
Answer: System Testing (Usability Testing).

Q45. Can Acceptance Testing be automated?
Answer: Rarely, as it focuses on business needs and user experience.

Q46. Difference between Black-box testing and System Testing?
Answer:
Black-box testing: Testing without internal code knowledge.
System Testing: A level that often uses black-box techniques.

Q47. Scenario: While testing a social media app, messages are delivered late. Which level detects this?
Answer: System Testing (Performance Testing).

Q48. What is Exploratory Testing and in which level is it done?
Answer: Unplanned testing done by testers to explore the app; generally part of System Testing.

Q49. What metrics would you track for System Testing?
Answer: Defect density, test coverage, pass/fail ratio, execution time.

Q50. Which testing level would you focus on for API Testing?
Answer: Integration Testing.

Q51. If multiple modules are failing during integration, how do you isolate the issue?
Answer: Use incremental integration testing (test one module at a time).