## 506-Software Testing and Quality Assurance(SEC-05)

## **MCQs**

- 1. What is the primary goal of software testing?
  - A. To debug the code
  - B. To improve the performance of the system
  - C. To identify defects and ensure the software meets requirements
  - D. To speed up development

Answer: C. To identify defects and ensure the software meets requirements

- 2. Which of the following is a type of black-box testing?
  - A. Unit Testing
  - B. Integration Testing
  - C. System Testing
  - D. Statement Coverage Testing

**Answer:** C. System Testing

- 3. Which level of testing is typically performed by developers?
  - A. System Testing
  - B. Acceptance Testing
  - C. Unit Testing
  - D. Regression Testing

**Answer:** C. Unit Testing

- 4. What does regression testing aim to verify?
  - A. Code adheres to coding standards
  - B. All modules are integrated correctly
  - C. New code hasn't broken existing functionality
  - D. Software meets business needs

Answer: C. New code hasn't broken existing functionality

- 5. Which of the following is NOT a software testing level?
  - A. Unit Testing
  - B. Integration Testing
  - C. Compilation Testing
  - D. System Testing

**Answer:** C. Compilation Testing

- 6. What is Software Testing?
  - A. The process of compiling software
  - B. The process of writing software code

- C. The process of evaluating a system or its components with the intent to find whether it satisfies the specified requirements or not
- D. The process of installing software

**Answer:** C The process of evaluating a system or its components with the intent to find whether it satisfies the specified requirements or not

- 7. Which of the following is not a type of software testing?
  - A. Unit Testing
  - B. Integration Testing
  - C. System Testing
  - D. Distribution Testing

Answer: D Distribution Testing

- 8. What is the main purpose of software testing?
  - A. Debugging the code
  - B. Ensuring the software meets customer requirements and is defect-free
  - C. Speeding up development
  - D. Writing documentation

**Answer:** B Ensuring the software meets customer requirements and is defect-free

- 9. Which type of testing is done without executing the code?
  - A. Static Testing
  - B. Dynamic Testing
  - C. White-box Testing
  - D. Black-box Testing

**Answer**: A Static Testing

- 10. Which of the following is a Black-box testing technique?
  - A. Statement Coverage
  - B. Path Testing
  - C. Boundary Value Analysis
  - D. Loop Testing

**Answer**: C Boundary Value Analysis

- 11. Which type of testing verifies that the software works as intended for the end-user?
  - A. Integration Testing
  - B. System Testing
  - C. Acceptance Testing
  - D. Unit Testing

**Answer**: C. Acceptance Testing

12. Which type of testing is performed without knowledge of the internal code or structure?

- A. White-box Testing
- B. Unit Testing
- C. Black-box Testing
- D. Regression Testing

Answer: C. Black-box Testing

- 13. What is the main focus of Unit Testing?
  - A. Whole system functionality
  - B. Business requirements
  - C. Individual components or functions
  - D. Data flow between modules

Answer: C. Individual components or functions

- 14. Which testing type checks how well the system performs under a high load?
  - A. Stress Testing
  - B. Load Testing
  - C. Volume Testing
  - D. Functional Testing

Answer: B. Load Testing

- 15. What type of testing ensures that new changes haven't broken existing features?
  - A. Performance Testing
  - B. Regression Testing
  - C. Smoke Testing
  - D. Usability Testing

**Answer**: B. Regression Testing

- 16. Which testing type involves checking the user interface, navigation, and overall experience?
  - A. Unit Testing
  - B. Usability Testing
  - C. Integration Testing
  - D. Performance Testing

Answer: B. Usability Testing

- 17. What type of testing checks system behavior under extreme or unfavorable conditions?
  - A. Load Testing
  - B. Functional Testing
  - C. Stress Testing
  - D. Smoke Testing

**Answer**: C. Stress Testing

18. Which of the following is an example of non-functional testing?

- A. Unit Testing
- B. Integration Testing
- C. Performance Testing
- D. System Testing

**Answer**: C. Performance Testing

- 19. Which testing is done to check that the critical functionalities of the application are working fine?
  - A. Regression Testing
  - B. Smoke Testing
  - C. Sanity Testing
  - D. Load Testing

Answer: B. Smoke Testing

- 20. Which type of testing is usually the last level of testing before software release?
  - A. Unit Testing
  - B. System Testing
  - C. Acceptance Testing
  - D. Integration Testing

**Answer**: C. Acceptance Testing

- 21. Which of the following is NOT a type of software testing?
  - A. Unit Testing
  - B. Integration Testing
  - C. Debugging
  - D. System Testing

**Answer**: C Debugging

Explanation: Debugging is the process of identifying and fixing defects, not a testing type.

- 22. What type of testing is performed to ensure that individual modules of a program work correctly?
  - A. System Testing
  - B. Unit Testing
  - C. Regression Testing
  - D. Acceptance Testing

**Answer**: B Unit Testing

- 23. What type of testing focuses on the interfaces and interaction between modules?
  - A. Unit Testing
  - B. Integration Testing
  - C. System Testing
  - D. Smoke Testing

**Answer**: B Integration Testing

- 24. Which testing is performed by end users to verify if the product meets business requirements?
  - A. Integration Testing
  - B. Unit Testing
  - C. Acceptance Testing
  - D. Regression Testing

**Answer:** C Acceptance Testing

- 25. Which testing ensures that previously developed and tested software still performs after a change?
  - A. Load Testing
  - B. Regression Testing
  - C. Performance Testing
  - D. Sanity Testing

**Answer**: B Regression Testing

- 26. Which testing type is concerned with evaluating system performance under heavy load?
  - A. Functional Testing
  - B. Regression Testing
  - C. Load Testing
  - D. Integration Testing

**Answer**: C Load Testing

- 27. What is Smoke Testing?
  - A. Testing conducted by users
  - B. Superficial testing to ensure critical functionality works
  - C. Testing each unit of code
  - D. Stress testing under extreme conditions

**Answer**: B Superficial testing to ensure critical functionality works

- 28. When is Smoke Testing typically performed?
  - A. After unit testing is complete
  - B. Before system testing to verify basic functionality
  - C. After regression testing
  - D. During user acceptance testing

**Answer**: B. Before system testing to verify basic functionality

- 29. In Agile development, testing is usually:
  - A. Performed only at the end of the project
  - B. Outsourced entirely
  - C. Integrated continuously during development
  - D. Done only by testers

**Answer**: C. Integrated continuously during development

- 30. A tester finds a critical bug during the demo to the client. What should they do first?
  - A. Ignore it and report it later
  - B. Log the defect in the tracking system and inform the team
  - C. Try to fix the bug themselves
  - D. Cancel the meeting

Answer: B. Log the defect in the tracking system and inform the team

- 31. Which tool is commonly used for bug tracking in real-world projects?
  - A. Selenium
  - B. Jenkins
  - C. JIRA
  - D. Postman

Answer: C. JIRA

- 32. In a real-world project, who is primarily responsible for writing unit tests?
  - A. Testers
  - B. End-users
  - C. Developers
  - D. Product Owners

Answer: C. Developers

- 33. When should testing activities ideally start in the software development life cycle (SDLC.?
  - A. After coding is complete
  - B. During the requirements phase
  - C. During deployment
  - D. During system design

**Answer**: B During the requirements phase

Explanation: Testing should start as early as the requirements phase to catch defects early (shift-left testing).

- 34. What is the purpose of a test case in practical testing?
  - A. To write code
  - B. To check the performance
  - C. To describe an input, action, and expected output for testing a feature
  - D. To fix bugs

**Answer**: C To describe an input, action, and expected output for testing a feature

- 35. What is the term for testing performed after a bug is fixed to ensure it doesn't reappear?
  - A. Regression Testing
  - B. Unit Testing

- C. Acceptance Testing
- D. Smoke Testing

**Answer**: A Regression Testing

- 36. Which document defines what to test, how to test, and who will do the testing?
  - A. Test Report
  - B. Test Case
  - C. Test Plan
  - D. Requirement Specification

Answer: C Test Plan

- 37. What kind of testing is done after receiving a new build, to check basic functionality before proceeding?
  - A. System Testing
  - B. Regression Testing
  - C. Sanity Testing
  - D. Smoke Testing

**Answer**: D Smoke Testing

- 38. In practical testing, what is the primary goal of exploratory testing?
  - A. Follow pre-defined scripts
  - B. Maximize code coverage
  - C. Find bugs by exploring the application without formal test cases
  - D. Automate testing

Answer: C Find bugs by exploring the application without formal test cases

- 39. Which of the following is a non-functional testing type often practiced in real-world applications?
  - A. Unit Testing
  - B. Load Testing
  - C. Smoke Testing
  - D. Acceptance Testing

**Answer**: B Load Testing

- 40. What is software testing?
  - A. Writing code
  - B. Installing software
  - C. Evaluating a system to find if it meets specified requirements
  - D. Optimizing performance

**Answer**: C Evaluating a system to find if it meets specified requirements

- 41. What is a bug?
  - A. A successful test

- B. A flaw in software that causes incorrect or unexpected behaviour
- C. Documentation error
- D. Code optimization

Answer: B A flaw in software that causes incorrect or unexpected behaviour

- 42. What's the difference between error, defect, and failure?
  - A. Error  $\rightarrow$  Developer, Defect  $\rightarrow$  Tester, Failure  $\rightarrow$  End-user
  - B. Error  $\rightarrow$  Operating system, Defect  $\rightarrow$  Code, Failure  $\rightarrow$  Build
  - C. They are synonyms
  - D. No difference

**Answer**: A Error  $\rightarrow$  Developer, Defect  $\rightarrow$  Tester, Failure  $\rightarrow$  End-user

- 43. A bug is best described as:
  - A. A syntax error only
  - B. Any flaw in software that deviates from expected behaviour
  - C. Always a minor typo
  - D. Hardware failure

**Answer**: B Any flaw in software that deviates from expected behaviour

- 44. Failure occurs when:
  - A. Code compiles correctly
  - B. The software doesn't meet expected functionality
  - C. The developer makes a typo
  - D. Tests pass successfully

**Answer**: B The software doesn't meet expected functionality

- 45. A defect is:
  - A. A perfect module
  - B. A mismatch between actual and expected results
  - C. A completed test case
  - D. A test plan

Answer: B A mismatch between actual and expected results

- 46. Error in software testing refers to:
  - A. A documentation fault
  - B. A misunderstanding by developers that leads to a defect
  - C. A typo in test results
  - D. A successful transaction

**Answer**: B A misunderstanding by developers that leads to a defect

- 47. What is a real-life example of a software bug causing disaster?
  - A. Ariane 5 rocket crash

- B. Successful online transaction
- C. Faster load times
- D. Improved user experience

**Answer**: A Ariane 5 rocket crash

- 48. Why is software testing important?
  - A. To skip development steps
  - B. To ensure software meets requirements and is defect-free
  - C. To write user documentation
  - D. For fun

Answer: B To ensure software meets requirements and is defect-free

- 49. A bug report should ideally contain:
  - A. Code optimization steps
  - B. Steps to reproduce, observed vs expected behaviour
  - C. Only the bug title
  - D. No details

Answer: B Steps to reproduce, observed vs expected behaviour

- 50. Which of the following is not a level of testing?
  - A. Unit Testing
  - B. Integration Testing
  - C. System Testing
  - D. Debugging

Answer: D. Debugging

- 51. What type of testing is done without executing the code?
  - A. Black-box testing
  - B. White-box testing
  - C. Static testing
  - D. Dynamic testing

Answer: C. Static testing

- 52. Which testing verifies that the software meets the business requirements?
  - A. Functional testing
  - B. Regression testing
  - C. Acceptance testing
  - D. Integration testing

Answer: C. Acceptance testing

53. In white-box testing, which of the following is not considered?

- A. Statement coverage
- B. Branch coverage
- C. Path coverage
- D. GUI behavior

Answer: D. GUI behavior

- 54. What is the purpose of regression testing?
  - A. To test system performance
  - B. To verify bug fixes didn't introduce new bugs
  - C. To test user interfaces
  - D. To validate data integrity

Answer: B. To verify bug fixes didn't introduce new bugs

- 55. What does "V" in the V-model stand for?
  - A. Verification
  - B. Validation
  - C. Both A and B
  - D. Variation

Answer: C. Both A and B

- 56. Which technique is NOT part of black-box testing?
  - A. Equivalence partitioning
  - B. Boundary value analysis
  - C. Control flow testing
  - D. Decision table testing

Answer: C. Control flow testing

- 57. Smoke testing is also known as:
  - A. Sanity testing
  - B. Build verification testing
  - C. Integration testing
  - D. Load testing

Answer: B. Build verification testing

- 58. Which tool is commonly used for performance testing?
  - A. Selenium
  - B. LoadRunner
  - C. JUnit
  - D. QTP

Answer: B. LoadRunner

59. Which of the following is a test deliverable?

- A. Test case
- B. Test plan
- C. Test summary report
- D. All of the above

Answer: D. All of the above

60. Which of these is a non-functional testing type?

Usability testing

- B. Regression testing
- C. Unit testing
- D. Smoke testing

Answer: A. Usability testing

- 61. A defect found during which phase costs the most to fix?
  - A. Design phase
  - B. Development phase
  - C. Testing phase
  - D. Production phase

**Answer**: D. Production phase

- 62. The process of finding defects is called:
  - A. Verification
  - B. Validation
  - C. Debugging
  - D. Testing

**Answer**: D. Testing

- 63. Which of these is NOT a part of the test life cycle?
  - A. Test Planning
  - B. Test Execution
  - C. Test Coding
  - D. Test Closure

Answer: C. Test Coding

- 64. What is a test case?
  - A. A document specifying input, expected output, and execution conditions
  - B. A program to automate testing
  - C. A tool used to report bugs
  - D. A summary of test results

Answer: A. A document specifying input, expected output, and execution conditions

65. Which is a type of white-box testing?

- A. Equivalence partitioning
- B. Statement coverage
- C. Boundary value analysis
- D. Decision table testing

**Answer**: B. Statement coverage

- 66. Which technique is used in black-box testing to reduce the number of test cases?
  - A. Code walkthrough
  - B. Equivalence partitioning
  - C. Branch coverage
  - D. Code inspection

Answer: B. Equivalence partitioning

- 67. What is alpha testing?
  - A. Performed by end-users at their site
  - B. Performed by developers before release
  - C. Performed by testers at the developer's site
  - D. Performed by automated tools

**Answer**: C. Performed by testers at the developer's site

- 68. What is the goal of stress testing?
  - A. To determine system performance under normal load
  - B. To determine system robustness under extreme conditions
  - C. To find bugs in early stages
  - D. To validate system usability

**Answer**: B. To determine system robustness under extreme conditions

- 69. What is the ISTQB full form?
  - A. International Software Testing Qualification Board
  - B. International Software Testing Quality Board
  - C. International Software Test Query Board
  - D. Integrated Software Testing Qualification Board

Answer: A. International Software Testing Qualification Board

- 70. Which testing is done to ensure that changes haven't broken any existing features?
  - A. Sanity Testing
  - B. Regression Testing
  - C. Load Testing
  - D. Security Testing

**Answer**: B. Regression Testing

71. What does a test plan include?

- A. Test objectives
  B. Schedule
  C. Resources
  D. All of the above
  Answer: D. All of the above
- 72. Which model uses "test early and often" principle?
  - A. Waterfall
  - B. V-Model
  - C. Agile
  - D. Spiral

Answer: C. Agile

- 73. Which is not a typical cause of software defects?
  - A. Miscommunication
  - B. Coding errors
  - C. Hardware malfunction
  - D. Perfect documentation

Answer: D. Perfect documentation

- 74. Who is responsible for quality in software development?
  - A. Testers
  - B. Developers
  - C. Project Managers
  - D. Entire team

Answer: D. Entire team

- 75. Software Quality Assurance (SQA. ensures:
  - A. Bugs are fixed
  - B. Software is delivered
  - C. Process is followed
  - D. Testing is skipped

**Answer:** C Process is followed

- 76. SQA is considered an:
  - A. Independent process
  - B. Umbrella activity
  - C. End-user role
  - D. Only test team job

Answer: B Umbrella activity

- 77. Which cost is associated with defects found after release?

  A. Prevention cost

  B. Appraisal cost

  C. Failure cost
  - Answer: C Failure cost
  - 78. A QA plan includes:

D. Planning cost

- A. User interface sketches
- B. Code documentation
- C. Methods to assure quality
- D. Development deadlines only

Answer: C Methods to assure quality

- 79. CMMI is related to:
  - A. Code review
  - B. Testing execution
  - C. Software process maturity
  - D. Programming

Answer: C Software process maturity

- 80. In Agile, testing is:
  - A. Done after development
  - B. Postponed until release
  - C. Continuous and integrated
  - D. Not needed

Answer: C Continuous and integrated

- 81. Scrum team includes:
  - A. Only developers
  - B. Only testers
  - C. Developers and testers both
  - D. Only business analysts

Answer: C Developers and testers both

- 82. Retrospective meetings are held in:
  - A. Waterfall
  - B. Spiral
  - C. Agile/Scrum
  - D. V-Model

Answer: C Agile/Scrum

83. Which is not a QA metric? A. Defect density B. Code complexity C. Test execution rate D. User interface font Answer: D User interface font 84. Which of the following is NOT a benefit of QA? A. Reduces defects B. Enhances process quality C. Increases development time only D. Ensures requirement coverage **Answer:** C Increases development time only 85. Selenium is a tool used for: A. Performance Testing B. Manual Testing C. Functional Automation Testing D. Load Testing **Answer:** C Functional Automation Testing 86. JIRA is used for: A. Test execution B. Defect tracking and project management C. Code compilation D. Load testing Answer: B Defect tracking and project management 87. Which of these is not an automation tool? A. QTP B. Selenium C. JIRA D. TestNG **Answer:** C JIRA 88. Which framework is common in test automation? A. Waterfall B. Agile C. Data-driven

D. V-Model

**Answer:** C Data-driven

89. CI/CD integrates with testing through: A. Automated deployments only B. Manual builds C. Automated testing pipelines D. Performance analysis **Answer:** C Automated testing pipelines 90. What is the full form of UFT? A. Unified Framework Testing B. Unified Functional Testing C. Unit Functional Testing D. User Function Testing **Answer:** B Unified Functional Testing 91. Which language does Selenium support? A. Java B. Python C. C# D. All of the above **Answer:** D All of the above 92. TestNG is a testing framework for: A. Python B. Java C. JavaScript D. C++ Answer: B Java 93. Which of the following is used for load testing? A. JUnit B. LoadRunner C. Selenium D. JIRA Answer: B LoadRunner 94. Which one is a performance testing tool? A. QTP B. JIRA C. Apache JMeter D. Selenium IDE Answer: C Apache JMeter

- 95. A test plan defines:
  - A. Code structure
  - B. Test strategy, schedule, resources
  - C. Build version
  - D. Program flow

Answer: B Test strategy, schedule, resources

- 96. Test cases should contain:
  - A. Only expected output
  - B. Only input data
  - C. Preconditions, steps, expected results
  - D. Source code

**Answer:** C Preconditions, steps, expected results

- 97. A test suite is:
  - A. An individual test
  - B. Collection of test cases
  - C. A report
  - D. A programming language

**Answer:** B A report

- 98. Test coverage measures:
  - A. User feedback
  - B. Number of errors
  - C. Percentage of code or features tested
  - D. Bug count

Answer: C Percentage of code or features tested

- 99. Exit criteria include:
  - A. Number of test cases written
  - B. Environment setup
  - C. Conditions to stop testing
  - D. Build deployment

**Answer:** C Conditions to stop testing

- 100. Bug life cycle starts with:
  - A. Fixing
  - B. Reopening
  - C. New status
  - D. Verification

**Answer:** C New status

- 101. When is defect status marked as 'Closed'?
  - A. When it is detected
  - B. After retesting is successful
  - C. When code is compiled
  - D. Before testing

Answer: B After retesting is successful

- 102. Severity of a defect refers to:
  - A. The impact of the bug
  - B. How hard it is to fix
  - C. Number of users affected
  - D. Size of the team

**Answer:** A The impact of the bug

- 103. Priority refers to:
  - A. Risk level
  - B. Urgency of fixing the bug
  - C. Code size
  - D. Tester's preference

Answer: B Urgency of fixing the bug

- 104. Which of the following is a test deliverable?
  - A. Project charter
  - B. Test summary report
  - C. Build version
  - D. API list

**Answer:** B Test summary report

- 105. What is the main purpose of software testing?
  - A. To develop software
  - B. To identify bugs and errors
  - C. To update software
  - D. To compile code

Answer: B To identify bugs and errors

- 106. Which is NOT a level of testing?
  - A. Unit Testing
  - B. System Testing
  - C. Compilation Testing
  - D. Integration Testing

**Answer:** C Compilation Testing

- 107. What is a defect?
  - A. A feature
  - B. An enhancement
  - C. A deviation from requirement
  - D. A passed test case

**Answer:** C A deviation from requirement

- 108. Which of the following is a white-box testing technique?
  - A. Boundary Value Analysis
  - B. Decision Table
  - C. Statement Coverage
  - D. Error Guessing

**Answer:** C Statement Coverage

- 109. Which of the following is a black-box technique?
  - A. Code Walkthrough
  - B. Path Testing
  - C. Equivalence Partitioning
  - D. Statement Coverage

**Answer:** C Equivalence Partitioning

- 110. Verification involves:
  - A. Executing code
  - B. Validating user needs
  - C. Reviewing documents and code
  - D. Fixing bugs

Answer: C Reviewing documents and code

- 111. Validation is done to check:
  - A. Internal code quality
  - B. Business needs and requirements
  - C. If the code compiles
  - D. Configuration files

Answer: B Business needs and requirements

- 112.STLC stands for:
  - A. Software Testing Local Code
  - B. Standard Test Level Check
  - C. Software Testing Life Cycle
  - D. Software Technical Life Cycle

**Answer:** C Software Testing Life Cycle

- 113. Which of the following is NOT a part of STLC?
  - A. Requirement Analysis
  - B. Test Planning
  - C. Code Review
  - D. Test Execution

**Answer:** C Code Review

- 114. Alpha testing is performed:
  - A. By end users
  - B. By developers internally
  - C. After beta testing
  - D. In production

**Answer:** B By developers internally

- 115. Regression Testing is used to:
  - A. Add new features
  - B. Test performance
  - C. Confirm old functionality still works
  - D. Test system security

**Answer:** C Confirm old functionality still works

- 116. Smoke Testing is done to:
  - A. Perform performance testing
  - B. Do final testing
  - C. Test core basic functionality
  - D. Verify GUI

**Answer:** C Test core basic functionality

- 117. Sanity Testing is:
  - A. Exhaustive testing
  - B. Focused testing after minor changes
  - C. Hardware testing
  - D. User acceptance testing

**Answer:** B Focused testing after minor changes

- 118. Which test technique checks software with no access to source code?
  - A. White-box testing
  - B. Grey-box testing
  - C. Black-box testing
  - D. Unit testing

Answer: C Black-box testing

- 119. Which technique is NOT black-box?
  - A. Decision Table
  - B. Equivalence Partitioning
  - C. Path Coverage
  - D. Boundary Value Analysis

Answer: C Path Coverage

- 120. Usability testing checks:
  - A. Speed of system
  - B. User-friendliness
  - C. Security holes
  - D. Code coverage

**Answer:** B User-friendliness

- 121. Stress Testing focuses on:
  - A. Usability
  - B. High-load conditions
  - C. Functional requirements
  - D. Regression bugs

**Answer:** B High-load conditions

- 122. Load Testing is used to:
  - A. Identify hardware bugs
  - B. Measure system response under load
  - C. Improve GUI
  - D. Unit test each class

Answer: B Measure system response under load

- 123. Which is NOT a non-functional testing type?
  - A. Performance Testing
  - B. Security Testing
  - C. Usability Testing
  - D. Smoke Testing

**Answer:** D Smoke Testing

- 124. Boundary value analysis is best for:
  - A. Functional code
  - B. Loop testing
  - C. Input range limits
  - D. API testing

**Answer:** C Input range limits