

PG-DESD AUG 2024

Module Name: Software Testing

Note: This question bank is only for your reference. first, go through the videos, then do these questions.

1. What does "testing-related terminology" primarily focus on?
 - A. Coding standards
 - B. Definitions and concepts used in testing
 - C. Software design principles
 - D. Project management techniquesAnswer: B
2. Which of the following is a key issue in software testing?
 - A. Code optimization
 - B. Defining test criteria
 - C. User experience design
 - D. Database normalizationAnswer: B
3. In the context of software testing, what is the primary relationship of testing to other activities?
 - A. Testing occurs independently
 - B. Testing is always the last phase
 - C. Testing is integrated with development and design
 - D. Testing replaces documentationAnswer: C
4. What is the main objective of testing?
 - A. To write code
 - B. To validate and verify that the software meets requirements
 - C. To enhance the user interface
 - D. To create documentationAnswer: B
5. Which testing technique relies on the software engineer's intuition?
 - A. Fault-based techniques
 - B. Code-based techniques
 - C. Usage-based techniques
 - D. Experience-based techniquesAnswer: D
6. Input domain-based testing primarily focuses on:
 - A. The physical interface of the software
 - B. Analyzing user inputs and their validity
 - C. Testing the speed of the software
 - D. Checking the code qualityAnswer: B

7. Which of the following techniques is used to evaluate code behavior under various conditions?

- A. Fault-based techniques
- B. Model-based techniques
- C. Code-based techniques
- D. Experience-based techniques

Answer: C

8. Fault-based techniques are primarily concerned with:

- A. Identifying user interface flaws
- B. Testing the software under normal operating conditions
- C. Introducing faults intentionally to test robustness
- D. Measuring performance metrics

Answer: C

9. Usage-based testing techniques focus on:

- A. How frequently features are used in real scenarios
- B. The design of the software architecture
- C. The error handling capabilities of the software
- D. The speed of execution

Answer: A

10. What is the aim of model-based testing?

- A. To create documentation based on user feedback
- B. To use abstract models to generate test cases
- C. To improve code readability
- D. To replace manual testing

Answer: B

11. Which aspect is NOT typically evaluated during the program under test?

- A. Performance metrics
- B. Usability
- C. Aesthetic design
- D. Functionality

Answer: C

12. In test-related measures, what does evaluation of the tests performed involve?

- A. Analyzing the source code quality
- B. Assessing the effectiveness of the tests against requirements
- C. Improving the user interface
- D. Developing new features

Answer: B

13. What are practical considerations in the test process?

- A. Technical constraints
- B. Development cost
- C. Resource allocation
- D. All of the above

Answer: D

14. Which of the following is a common category of testing tools?

- A. Debugging tools
- B. Performance testing tools
- C. Documentation tools
- D. All of the above

Answer: D

15. What is the primary purpose of test activities?

- A. To ensure code quality
- B. To define test strategies and procedures
- C. To develop new features
- D. To enhance user experience

Answer: B

16. What is the target of a test?

- A. Specific code segments or features
- B. User feedback
- C. Market trends
- D. Documentation quality

Answer: A

17. Which of the following is a key benefit of using testing tools?

- A. Improved testing speed and efficiency
- B. Enhanced creativity in coding
- C. Better team collaboration
- D. Increased documentation

Answer: A

18. How does selecting and combining techniques benefit the testing process?

- A. Increases redundancy
- B. Provides a comprehensive approach to testing
- C. Reduces the number of test cases
- D. Focuses only on code quality

Answer: B

19. What is the role of key issues in testing?

- A. To define coding standards
- B. To identify potential challenges and concerns in the testing process
- C. To focus solely on usability
- D. To replace documentation

Answer: B

20. What does the evaluation of the program under test typically include?

- A. Performance, usability, and functionality
- B. Aesthetic design and coding style
- C. Market analysis
- D. User interface design

Answer: A

21. In testing, what does the term "test levels" refer to?

- A. The stages of software development
- B. The different phases of testing activities

- C. The hierarchy of programming languages
- D. The types of coding standards

Answer: B

22. Which of the following is an example of a fault-based technique?

- A. Mutation Testing
- B. Stress Testing
- C. Smoke Testing
- D. Regression Testing

Answer: A

23. What is a key characteristic of model-based testing?

- A. It relies solely on user feedback
- B. It uses models to derive test cases automatically
- C. It is exclusively manual
- D. It ignores software specifications

Answer: B

24. What is the importance of objectives in testing?

- A. To enhance user experience
- B. To outline the scope and goals of the testing process
- C. To improve coding standards
- D. To minimize development costs

Answer: B

25. What does "test tool support" typically refer to?

- A. Enhancements to the programming environment
- B. Tools that assist in managing and executing tests
- C. Documentation software
- D. User interface design tools

Answer: B

26. Which technique focuses on examining the program based on usage patterns?

- A. Usage-based techniques
- B. Code-based techniques
- C. Fault-based techniques
- D. Model-based techniques

Answer: A

27. What is one of the primary goals of software testing?

- A. To eliminate all software defects
- B. To ensure that the software meets its requirements
- C. To improve the user interface
- D. To enhance performance

Answer: B

28. What role do "key issues" play in the testing phase?

- A. They define coding guidelines
- B. They identify challenges that may affect testing effectiveness
- C. They enhance user experience
- D. They specify documentation requirements

Answer: B

29. What type of testing examines the software's behavior under error conditions?

- A. Fault-based testing
- B. Load testing
- C. Usability testing
- D. Integration testing

Answer: A

30. In terms of software testing, what does "test activities" involve?

- A. Writing user documentation
- B. Executing tests and recording results
- C. Developing new features
- D. Managing project budgets

Answer: B

31. Which of the following represents a "testing tool support"?

- A. Code analyzers
- B. Bug tracking tools
- C. Performance measurement tools
- D. All of the above

Answer: D

32. What is the objective of selecting and combining techniques in testing?

- A. To simplify the testing process
- B. To create a more effective testing strategy
- C. To reduce costs
- D. To enhance user documentation

Answer: B

33. What does "practical considerations" in the test process refer to?

- A. Budgeting and resource allocation
- B. User feedback
- C. Design specifications
- D. Marketing strategies

Answer: A

34. Which testing technique is best for ensuring that the application behaves correctly for various user inputs?

- A. Input domain-based techniques
- B. Performance testing
- C. Integration testing
- D. Regression testing

Answer: A

35. What is the purpose of evaluating the tests performed?

- A. To enhance coding standards
- B. To ensure that tests are effective and meet objectives
- C. To write user documentation
- D. To assess market trends

Answer: B

36. Which category of tools would you use for automating testing tasks?

- A. Testing tools
- B. Documentation tools
- C. Development tools
- D. Debugging tools

Answer: A

37. What is the main purpose of software testing?

- A. To improve software performance
- B. To identify defects in software
- C. To increase software complexity
- D. To reduce development time

Answer: B

38. Which term refers to the degree to which a test accurately detects faults?

- A. Validity
- B. Reliability
- C. Coverage
- D. Effectiveness

Answer: D

39. What does "test case" mean in software testing?

- A. A single input to a program
- B. A document detailing specific conditions under which a test is conducted
- C. The expected output of a software application
- D. A measure of software performance

Answer: B

40. Which type of testing is performed to validate the entire software system's compliance with specified requirements?

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

Answer: C

41. What does a "fault" refer to in software testing?

- A. A mistake in the code
- B. A failure of the software
- C. An error detected during testing
- D. A requirement that is not met

Answer: A

42. What is the focus of unit testing?

- A. Testing individual components in isolation
- B. Testing the integration of multiple components
- C. Testing the entire system
- D. Testing user acceptance

Answer: A

43. What type of testing uses the knowledge of the internal structure of the software?

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

Answer: B

44. Which of the following is a common objective of software testing?

- A. To ensure 100% code coverage
- B. To identify all possible defects
- C. To confirm that the software meets its requirements
- D. To reduce the cost of development

Answer: C

45. What is a common advantage of automated testing?

- A. It requires no maintenance
- B. It can be run frequently and consistently
- C. It eliminates the need for manual testing
- D. It ensures that all tests will pass

Answer: B

46. What is the primary difference between verification and validation?

- A. Verification ensures the product is built right; validation ensures the right product is built
- B. Verification occurs after deployment; validation occurs during development
- C. Verification is more costly than validation
- D. There is no difference; they are synonymous

Answer: A

47. Which type of test is designed to evaluate a program's behavior under extreme conditions?

- A. Performance Testing
- B. Load Testing
- C. Stress Testing
- D. Usability Testing

Answer: C

48. What does the term "test coverage" refer to?

- A. The percentage of requirements covered by tests
- B. The amount of code tested by test cases
- C. The total number of test cases executed
- D. The resources required for testing

Answer: B

49. What is the purpose of regression testing?

- A. To test new features only
- B. To ensure previously working features still function after changes
- C. To verify performance improvements
- D. To validate user requirements

Answer: B

50. Which technique focuses on the input domain to design test cases?

- A. Code-Based Techniques
- B. Fault-Based Techniques
- C. Input Domain-Based Techniques
- D. Model-Based Techniques

Answer: C

51. What is a "test plan"?

- A. A document outlining the scope, approach, resources, and schedule for testing activities
- B. A list of all test cases
- C. A record of defects found during testing
- D. A schedule for test execution

Answer: A

52. What is the main focus of usage-based testing techniques?

- A. Testing based on user behavior and real usage patterns
- B. Testing all code paths equally
- C. Testing only the most complex parts of the software
- D. Testing based on predetermined user scenarios

Answer: A

53. What does the "Evaluation of the Program Under Test" involve?

- A. Assessing the performance of the testing team
- B. Measuring the program's functionality against requirements
- C. Reviewing the test environment
- D. Analyzing the cost of testing

Answer: B

54. Which tool is primarily used to support testing activities?

- A. Project Management Tool
- B. Version Control System
- C. Testing Tool
- D. Design Tool

Answer: C

55. What is a key characteristic of model-based testing techniques?

- A. They use user stories to define tests
- B. They rely on manual test execution
- C. They generate test cases from models of the system
- D. They do not require test automation

Answer: C

56. Which of the following is an example of a performance testing tool?

- A. Selenium
- B. JMeter
- C. Postman
- D. Git

Answer: B

57. What does "test activity" encompass in the software testing process?

- A. Planning, execution, and reporting of tests

- B. Only the execution of tests
- C. The creation of test documentation
- D. Bug fixing and troubleshooting

Answer: A

58. What is the primary goal of acceptance testing?

- A. To ensure that the software is built correctly
- B. To confirm that the software meets business needs and requirements
- C. To check for performance issues
- D. To test individual modules

Answer: B

59. Which of the following is a limitation of black-box testing?

- A. It requires knowledge of the internal workings of the application
- B. It can only test individual units
- C. It may miss hidden errors within the code
- D. It is more costly than white-box testing

Answer: C

60. What is the purpose of input domain-based testing?

- A. To assess the user interface of the application
- B. To test the system's response to valid and invalid input values
- C. To evaluate the overall performance of the software
- D. To analyze how well the software adheres to requirements

Answer: B

61. What is the term for the process of executing a program with the intent of finding errors?

- A. Verification
- B. Validation
- C. Testing
- D. Debugging

Answer: C

62. Which test level is primarily concerned with evaluating individual components of the software?

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

Answer: C

63. What is the focus of fault-based testing?

- A. To check the system's performance under load
- B. To create tests based on known defects
- C. To validate user requirements
- D. To ensure code quality

Answer: B

64. What does "test tool support" refer to in software testing?

- A. The availability of human resources for testing
- B. The use of automated tools to assist with various testing activities

- C. The methods used to perform manual testing
- D. The process of creating test documentation

Answer: B

65. Which of the following is NOT a part of the testing process?

- A. Test Planning
- B. Test Execution
- C. Test Design
- D. Test Debugging

Answer: D

66. What is one of the key challenges in software testing?

- A. Identifying all potential defects
- B. Ensuring 100% test coverage
- C. Maintaining test scripts
- D. Automating tests

Answer: A

67. What is the main benefit of conducting usability testing?

- A. To measure how well the software performs under load
- B. To evaluate how easy and user-friendly the software is
- C. To check for logical errors in the code
- D. To assess the security features of the application

Answer: B

68. Which of the following is a common challenge in test levels?

- A. Ensuring all defects are caught in unit testing
- B. Testing only user interfaces
- C. Transitioning from unit testing to system testing
- D. The lack of automated testing tools

Answer: C

69. Which technique helps ensure that multiple testing methods are effectively used together?

- A. Test Combining Techniques
- B. Test Strategy
- C. Test Coverage
- D. Test Automation

Answer: A

70. What is a common method to evaluate the effectiveness of tests performed?

- A. Conducting a performance review
- B. Measuring the number of defects found
- C. Assessing user satisfaction
- D. Comparing against benchmarks

Answer: B

71. What is the primary function of testing in software development?

- A. To write code
- B. To identify defects
- C. To enhance user interfaces
- D. To manage project schedules

Answer: B

72. Which term describes the process of verifying that a software application meets its specified requirements?

- A. Validation
- B. Verification
- C. Debugging
- D. Profiling

Answer: A

73. What is a common goal of functional testing?

- A. To test system performance
- B. To ensure each function of the software operates in conformance with the requirement specification
- C. To check code efficiency
- D. To measure user satisfaction

Answer: B

74. What technique focuses on assessing the program's performance under various load conditions?

- A. Stress testing
- B. Regression testing
- C. User acceptance testing
- D. Functional testing

Answer: A

75. Which testing approach validates the software against user expectations?

- A. Alpha testing
- B. Beta testing
- C. Unit testing
- D. Integration testing

Answer: B

76. What is the purpose of regression testing?

- A. To check if new code changes have not adversely affected existing features
- B. To evaluate software under stress
- C. To confirm system usability
- D. To validate security measures

Answer: A

77. Which type of testing is performed by end users to ensure the system meets their needs?

- A. Unit testing
- B. Integration testing
- C. User acceptance testing
- D. Smoke testing

Answer: C

78. What is the goal of smoke testing?

- A. To perform thorough testing on every feature
- B. To verify that the basic functions of the application are working
- C. To test performance under heavy load

D. To check the installation process

Answer: B

79. What is exploratory testing?

- A. Testing based on formal test cases
- B. Testing based on random inputs
- C. Testing without a formal test plan, focusing on exploratory learning
- D. Testing focused on performance metrics

Answer: C

80. What does the term "test coverage" refer to?

- A. The number of tests executed
- B. The extent to which testing verifies the codebase
- C. The amount of documentation created
- D. The total time spent on testing

Answer: B

81. What is a test case?

- A. A document detailing expected behavior
- B. A report of defects
- C. A summary of testing results
- D. A schedule for testing

Answer: A

82. What type of testing focuses on the internal structures of the code?

- A. Black-box testing
- B. White-box testing
- C. Integration testing
- D. User acceptance testing

Answer: B

83. What is the main purpose of load testing?

- A. To ensure the application can handle a specified load without performance degradation
- B. To verify code functionality
- C. To validate the software's user interface
- D. To evaluate documentation quality

Answer: A

84. Which of the following describes "test-driven development" (TDD)?

- A. Testing done after coding
- B. Writing tests before writing the corresponding code
- C. Only focusing on performance testing
- D. Ignoring user requirements

Answer: B

85. What is the function of a test plan?

- A. To schedule meetings
- B. To outline the strategy, scope, and objectives of testing activities
- C. To document user feedback
- D. To manage code repositories

Answer: B

86. What is an example of static testing?

- A. Manual code review
- B. Performance testing
- C. Load testing
- D. Usability testing

Answer: A

87. What does "defect density" refer to?

- A. The total number of features
- B. The number of defects per unit size of the software
- C. The time taken to fix defects
- D. The user satisfaction level

Answer: B

88. Which of the following is a primary benefit of automated testing?

- A. Increased manual effort
- B. Reduced testing speed
- C. Consistency and repeatability of tests
- D. Greater reliance on user feedback

Answer: C

89. What is a "test environment"?

- A. The hardware and software setup used for testing
- B. The location where tests are executed
- C. The team responsible for testing
- D. The documentation for testing procedures

Answer: A

90. Which testing technique evaluates how the software handles unexpected inputs?

- A. Boundary value testing
- B. Usability testing
- C. Stress testing
- D. Load testing

Answer: A

91. What is "user acceptance testing" (UAT)?

- A. Testing performed by developers
- B. Final testing conducted by end-users to validate the software before production
- C. Performance testing conducted by QA
- D. Automated testing of all functions

Answer: B

92. Which technique is primarily used to detect memory leaks?

- A. Functional testing
- B. Load testing
- C. Stress testing
- D. Performance testing

Answer: D

93. What is the main focus of security testing?
- A. To assess application performance
 - B. To identify vulnerabilities and ensure data protection
 - C. To verify user interface design
 - D. To ensure compliance with coding standards

Answer: B

94. What is "test maintenance"?
- A. Updating tests to reflect changes in the application
 - B. Documenting testing procedures
 - C. Scheduling testing activities
 - D. Conducting performance reviews

Answer: A

95. What does a "defect life cycle" represent?
- A. The stages a defect goes through from detection to resolution
 - B. The development process
 - C. The software release timeline
 - D. The testing environment setup

Answer: A

96. What is the significance of "peer reviews" in testing?
- A. To increase development time
 - B. To gather multiple perspectives for improving code quality
 - C. To reduce the number of developers
 - D. To focus solely on usability

Answer: B

97. Which type of testing examines the interactions between integrated components?
- A. Unit testing
 - B. Integration testing
 - C. System testing
 - D. Regression testing

Answer: B

98. What is the purpose of a "bug tracking system"?
- A. To manage software releases
 - B. To document and track defects and their status
 - C. To improve team collaboration
 - D. To enhance user documentation

Answer: B

99. What does "end-to-end testing" validate?
- A. The functionality of individual components
 - B. The overall flow of the application from start to finish
 - C. The performance of the software
 - D. The security measures in place

Answer: B

100. Which of the following is a goal of performance testing?
- A. To identify the maximum operational capacity of an application

- B. To assess user interface design
- C. To verify user requirements
- D. To improve code readability

Answer: A

101. What does "black-box testing" focus on?
- A. Internal logic and structure of the code
 - B. Functionality of the software without knowledge of its internal code
 - C. Testing the database structure
 - D. Code optimization

Answer: B

102. What is the primary goal of security testing?
- A. To measure performance
 - B. To identify potential vulnerabilities and ensure data integrity
 - C. To enhance user experience
 - D. To validate usability

Answer: B

103. What is "smoke testing" often referred to as?
- A. Sanity testing
 - B. Regression testing
 - C. Functional testing
 - D. Load testing

Answer: A

104. Which of the following types of testing focuses on verifying specific functionalities of the software?
- A. Functional testing
 - B. Performance testing
 - C. Stress testing
 - D. Usability testing

Answer: A

105. What is a critical outcome of conducting thorough testing?
- A. Increased user complaints
 - B. Reduced software quality
 - C. Higher customer satisfaction and reduced defects in production
 - D. Increased development time

Answer: C

106. What is "Test Automation"?
- A. Performing tests manually
 - B. Using software tools to execute tests automatically
 - C. Relying solely on manual testing
 - D. Ignoring test results

Answer: B