**1. Which of the following is a key goal of Test Design?**

a) To write test cases  
b) To define testing objectives  
c) To improve software quality  
d) All of the above

**2. What is a test case?**

a) A method of identifying test scenarios  
b) A document describing the input, action, and expected result  
c) A tool used to track bugs  
d) A software development methodology

**3. Which of the following test design techniques focuses on selecting representative values for testing?**

a) Boundary Value Analysis  
b) Decision Table Testing  
c) State Transition Testing  
d) Equivalence Partitioning

**4. What is the purpose of Boundary Value Analysis (BVA)?**

a) To check only the boundary values  
b) To focus on testing within the valid range  
c) To test input that lies just outside the boundaries  
d) To check values near the boundaries of input conditions

**5. Which of the following best describes the use of Decision Table Testing?**

a) To create tests based on functional specifications  
b) To test interactions between multiple input variables  
c) To identify boundary conditions  
d) To test the system under different environmental conditions

**6. Which technique is most useful for testing combinations of inputs that lead to different outcomes?**

a) State Transition Testing  
b) Decision Table Testing  
c) Equivalence Partitioning  
d) Boundary Value Analysis

**7. What does a Test Data Set refer to?**

a) The environment where the tests are executed  
b) The specific data input used during test execution  
c) The collection of expected results  
d) A group of testers assigned to a project

**8. What is the primary purpose of Smoke Testing?**

a) To test the core functionality of the application  
b) To ensure the build is stable enough for further testing  
c) To check performance under load  
d) To validate data integrity

**9. Which type of test design technique involves testing a system by creating inputs and outputs that follow state changes?**

a) State Transition Testing  
b) Equivalence Partitioning  
c) Boundary Value Analysis  
d) Cause-Effect Graphing

**10. In Test Design, the term "Test Oracle" refers to what?**

a) A set of input values used for testing  
b) A predefined set of expected results  
c) A tool used for automating tests  
d) A document that describes test case execution steps

**Answer:** b) A predefined set of expected results

**11. What does the term "Regression Testing" refer to?**

a) Testing of new features  
b) Testing to ensure that previously working functionality remains unaffected by changes  
c) Testing the software's performance under stress  
d) Testing of specific boundary conditions

**12. Which of the following techniques would most effectively test a function that processes user input for valid and invalid values?**

a) Decision Table Testing  
b) Equivalence Partitioning  
c) Boundary Value Analysis  
d) All of the above

**13. In Equivalence Partitioning, how do you classify inputs?**

a) Valid inputs  
b) Invalid inputs  
c) Boundary values  
d) Both a and b

**14. Which of the following test design techniques is used for creating tests based on logical conditions and decisions?**

a) Path Testing  
b) Cause-Effect Graphing  
c) Boundary Value Analysis  
d) Decision Table Testing

**15. Which of the following is a common risk in test design?**

a) Test cases being too generic  
b) Not considering edge cases  
c) Lack of test data  
d) All of the above

**16. What is the purpose of "Pairwise Testing"?**

a) To test all combinations of input variables  
b) To test all pairs of input variables for interactions  
c) To test the boundary conditions  
d) To test pairs of test cases for coverage

**17. What is a key advantage of using Automated Test Design?**

a) It reduces the need for manual effort  
b) It can be used to test non-functional requirements  
c) It eliminates the need for testers  
d) It only works for small systems

**18. Which of the following is an example of a non-functional test?**

a) Boundary Value Analysis  
b) Performance Testing  
c) Regression Testing  
d) Functional Testing

**19. Which of the following best defines the term "Test Coverage"?**

a) The total number of test cases executed  
b) The degree to which the tests cover the code, requirements, or functionality  
c) The percentage of defects found during testing  
d) The length of time taken to execute the tests

**20. Which test design technique is most effective in situations where the specification requires testing all combinations of inputs?**

a) Path Testing  
b) Equivalence Partitioning  
c) State Transition Testing  
d) Exhaustive Testing

**21. In which scenario is "Path Testing" most useful?**

a) When testing state-dependent functionality  
b) When testing for boundary conditions  
c) When testing all possible paths in a program  
d) When testing for equivalence classes

**22. What is the primary goal of "Exploratory Testing"?**

a) To execute predefined test cases  
b) To discover untested scenarios based on the tester's knowledge and experience  
c) To automate repetitive tests  
d) To validate all test data

**23. Which test design technique is based on the assumption that errors tend to occur at the boundaries of input values?**

a) Decision Table Testing  
b) Path Testing  
c) Boundary Value Analysis  
d) Cause-Effect Graphing

**24. What is "State Transition Testing" primarily concerned with?**

a) Testing specific function inputs  
b) Testing different combinations of input variables  
c) Testing system behaviour based on state changes  
d) Testing system limits

**25. Which test design technique is suitable for testing complex business logic and rules?**

a) Decision Table Testing  
b) Path Testing  
c) Equivalence Partitioning  
d) Boundary Value Analysis

**26. What is the main purpose of using Test Case Design in software testing?**

a) To find software defects  
b) To provide test data for regression testing  
c) To define the conditions under which the software is expected to perform  
d) To automate repetitive tasks

**27. What does “Test Case Design Techniques” help determine?**

a) How to improve performance  
b) Which test management tool to use  
c) How to ensure that test cases cover the requirements effectively  
d) How to reduce the number of bugs

**28. Which test technique is based on analysing the relationship between conditions and actions in a decision table?**

a) Path Testing  
b) State Transition Testing  
c) Cause-Effect Graphing  
d) Equivalence Partitioning

**29. Which of the following testing methods is particularly useful for testing user interfaces?**

a) Boundary Value Analysis  
b) Usability Testing  
c) Load Testing  
d) Regression Testing

**30. Which of the following is NOT a characteristic of a good test case?**

a) It is reusable  
b) It is easy to understand  
c) It tests multiple requirements at once  
d) It includes the expected result

#### 31. ****Which of the following is a key goal of Test Design?****

a) To write test cases  
b) To define testing objectives  
c) To improve software quality  
d) All of the above

#### 32. ****What is a test case?****

a) A method of identifying test scenarios  
b) A document describing the input, action, and expected result  
c) A tool used to track bugs  
d) A software development methodology

#### 33. ****Which of the following test design techniques focuses on selecting representative values for testing?****

a) Boundary Value Analysis  
b) Decision Table Testing  
c) State Transition Testing  
d) Equivalence Partitioning

#### 34. ****What is the purpose of Boundary Value Analysis (BVA)?****

a) To check only the boundary values  
b) To focus on testing within the valid range  
c) To test input that lies just outside the boundaries  
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#### 35. ****Which of the following best describes the use of Decision Table Testing?****

a) To create tests based on functional specifications  
b) To test interactions between multiple input variables  
c) To identify boundary conditions  
d) To test the system under different environmental conditions

#### 36. ****Which technique is most useful for testing combinations of inputs that lead to different outcomes?****

a) State Transition Testing  
b) Decision Table Testing  
c) Equivalence Partitioning  
d) Boundary Value Analysis

#### 37. ****What does a Test Data Set refer to?****

a) The environment where the tests are executed  
b) The specific data input used during test execution  
c) The collection of expected results  
d) A group of testers assigned to a project

#### 38. ****What is the primary purpose of Smoke Testing?****

a) To test the core functionality of the application  
b) To ensure the build is stable enough for further testing  
c) To check performance under load  
d) To validate data integrity

#### 39. ****Which type of test design technique involves testing a system by creating inputs and outputs that follow state changes?****

a) State Transition Testing  
b) Equivalence Partitioning  
c) Boundary Value Analysis  
d) Cause-Effect Graphing

#### 40. ****In Test Design, the term "Test Oracle" refers to what?****

a) A set of input values used for testing  
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c) A tool used for automating tests  
d) A document that describes test case execution steps