1. Which of the following is a true statement about exhaustive testing?

A. It is normally the responsibility of the developer during unit testing
B. It is a form of stress testing
C. **It is not feasible except in the case of trivial software**
D. It is commonly done with test automation

2. Which of the following is a correct statement?
A. A developer has a failure which results in a defect that may be seen as a mistake during dynamic testing
B. **A developer makes a mistake which causes a defect that may be seen as a failure during dynamic testing**
C. A developer makes a mistake which causes a bug that may be seen as a defect when the software is executed
D. A developer makes an error which results in a failure that may be seen as a fault when the software is executed

3. System test execution on a project is planned for eight weeks. After a week of testing, a tester suggests that the test objective stated in the test plan of 'finding as many defects as possible during system test' might be more closely met by redirecting the test effort according to which test principle?
A. Importance of early testing
B. The absence of errors fallacy
C. **Defect clustering**
D. Impossibility of exhaustive testing

4. An android application has a bug which results in incorrect interest payments, due to a single line of incorrect code. This bug results in customer complaints. When root cause analysis was performed, the root cause was identified as the lack of product owner understanding in the interest calculations. Which of the following is considered as an "effect"?
A. The improper calculation in the code is
B. **The customer complaints**
C. The incorrect interest payments
D. Lack of knowledge on the part of the product owner

5. Which of the following is considered as a type of validation?
A. Checking whether reported defects are solved
B. **Checking whether the system meets user and stakeholders need**
C. Checking whether the system meets the user stories written by the product owner
D. Checking whether enough component Testing has been done

6. Below is a list of problems that can be observed during testing or operation. Which is MOST likely a failure?
A. The computation algorithm used the wrong input variables

B. The product crashed when the user selected an option in a dialog box
C. The developer misinterpreted the requirement for the algorithm
D. One source code file included in the build was the wrong version

7. Checking whether all defect reports are closed occurs during which activity in the fundamental test process?
A. Test analysis
B. Test Design
C. Test Completion
D. Test planning

8. What is the definition of debugging?
A. Testing/checking whether the software performs correctly
B. Checking that no unintended consequence have occurred as a result of a fix
C. Identifying the cause of a defect, repairing the code and checking the fix is correct
D. Checking that a previously reported defect has been corrected

9. Which of the following is an example of a defect that causes harm?
A. A defect that causes slow response time when running reports
B. A defect that causes raw sewage to be dumped into the ocean
C. A regression defect that causes the desktop window to display in green
D. A usability defect that results in user dissatisfaction

10. Which objective may be obtained by having testers work closely with developers while the code is under development?
A. Reduce the risk of incorrect or untestable functionality being developed
B. Reduce the risk of fundamental design defects and enable tests to be identified at an early stage
C. Reduce the risk of defects within the code and the tests
D. Increase the likelihood that the software meets stakeholder needs and satisfies requirements

11. When test cases are designed early in the lifecycle, verifying the test basis via the test design, which common test objective is being achieved?
A. Gaining confidence
B. Preventing defects
C. Providing information for decision-making
D. Finding defects

12. Why is software testing sometimes required for legal reasons?
A. Testing across systems must be accompanied by legal documentation
B. International laws require software testing for exported products
C. Contracts may specify testing requirements that must be fulfilled

D. It prevents developers from suing testers

13. An android application has a bug which results in incorrect interest payments, due to a single line of incorrect code. This bug results in customer complaints. When root cause analysis was performed, the root cause was identified as the lack of product owner understanding in the interest calculations. What solution could be used to reduce the likelihood of such bugs in the future?
A. Exhaustive testing is impossible so it is impossible to reduce the likelihood of such bugs in the future
B. The developer should review the user stories before they are implemented
C. **The product owner could be trained in the topic of interest calculations**
D. The tester could imply the Invest technique on the user stories to ensure that they are written correctly

14. Developing and prioritizing test procedures occurs during which activity in the fundamental test process?
A. **Test Implementation**
B. Test Execution
C. Test Monitoring & Control
D. Test Analysis

15. In which Development model may the testers be involved in debugging and component testing?
A. **Agile and iterative models**
B. Waterfall Model
C. V-model
D. Mobile Model

16. Which characteristic must a tester possess in order to be successful when working with a project team?
A. Authoritarian leadership style
B. **Constructive Communication Skills**
C. Extensive organizational network
D. Extroverted personality

17. Which of the following is an example of debugging?
A. A tester finds a defect and reports it
B. **A developer finds and fixes a defect**
C. A tester retests a fix from the developer and finds a regression
D. A developer performs unit testing

18. Which statement about testing is true?
A. Testing is started after the code is written so that we have a system with which to work
B. **Testing is started as early as possible in the life cycle**

C. Testing can only be done by an independent test team

D. Testing is most economically done at the end of the life cycle

19. If you need to provide a report showing test case execution coverage of the requirements, what do you need to track?

A. Coverage of the requirements by the test cases that have been designed

B. Coverage of the risk items by test case

C. Traceability between the requirements and the risk items

D. Traceability between the test cases and the requirements

20. Test summary reports are considered as which type of test work products?

A. Test execution work products

B. Test Completion work products

C. (Correct)

D. Test implementation work products

E. Test design work products

21. According to the ISTQB Glossary, the word "bug" is synonymous with which of the following?

A. Error

B. Defect

C. Incident

D. Mistake

22. Defining and prioritizing test conditions based on analysis of the test basis occurs during which activity in the fundamental test process?

A. Test planning

B. Test analysis

C. Test Completion

D. Test Design

23. Which of the following statements are TRUE?

A. Software testing may be required to meet legal or contractual requirements

B. Software testing is mainly needed to improve the quality of the developer's work

C. Rigorous testing and fixing of defects found can help reduce the risk of problems occurring in an operational environment

D. Rigorous testing is sometimes used to prove that all failures have been found

A. B and C are true, A and D are false

B. A and C are true, B and D are false

C. A and D are true, B and C are false

D. C and D are true, A and B are false

24. Which of the following is a correct relationship between quality control, quality assurance, and quality management?
A. Quality Control includes both quality management and quality assurance
B. Quality control and quality assurance are the same and quality management is part of them
C. **Quality management includes both quality control and quality assurance**
D. Quality Assurance includes both quality management and quality control

25. In what way does root cause analysis contribute to process improvement?
A. Specifies the desired root causes to be achieved by other teams
B. Outlines how development teams can code faster
C. **Helps to better identify the root cause of defects**
D. Contributes to the justification of future project funding

26. Which of the following is not a correct statement about software testing and quality assurance?
A. Software testing and quality assurance are not the same
B. **There must be two different roles in any type of organization, quality assurance specialist and software tester**
C. Some people use the phrase quality assurance to refer to testing
D. Quality assurance supports proper testing

27. Which of the following statements BEST describes the difference between testing and debugging?
A. Testing removes faults. Debugging identifies the causes of failure
B. **Dynamic testing shows failures caused by defects. Debugging finds, analyzes, and removes the causes of failures in the software**
C. Dynamic testing prevents causes of failures. Debugging removes the failures
D. Testing pinpoints (identifies the source of) the defects. Debugging analyzes the faults and proposes prevention activities

28. Which of the following statements is the MOST valid goal for a test team?
A. Prove that any remaining faults will not cause any failures
B. Determine whether enough component testing was executed
C. Prove that all faults are identified
D. **Cause as many failures as possible so that faults can be identified and corrected**

29. Ensuring that test design starts during the requirements definition phase is important to enable which of the following test objectives?
A. Finding defects through dynamic testing
B. Finishing the project on time
C. Gaining confidence in the system
D. **Preventing defects in the system**

30. Designing and prioritizing test cases occurs during which activity in the fundamental test process?
A. Test planning
B. Test Completion
C. Test analysis
D. Test Design

31. Which of the following could be a root cause of a defect in financial software in which an incorrect interest rate is calculated?
A. Insufficient funds were available to pay the interest rate calculated
B. Insufficient training was given to the developers concerning compound interest calculation rules
C. Inaccurate calculators were used to calculate the expected results
D. Insufficient calculations of compound interest were included

32. Recall the activity that removes the cause of a failure
A. Dynamic Testing
B. Debugging
C. Testing
D. Reverse engineering

33. Defect reports are considered as which type of test work products?
A. Test implementation work products
B. Test design work products
C. Test execution work products
D. Test Completion work products

34. Which of the following, if observed in reviews and tests, would lead to problems (or conflict) within teams?
A. Testers and reviewers are not qualified enough to find failures and faults
B. Testers and reviewers are not curious enough to find defects
C. Testers and reviewers communicate defects as criticism against persons and not against the software product
D. Testers and reviewers expect that defects in the software product have already been found and fixed by the developers

35. Which of the following is an important objective of testing activities in the software development lifecycle?
A. Exhaustive testing
B. Clustering defects
C. Providing decision-making information
D. Debugging

36. What is a test condition?
A. The steps to be taken to get the system to a given point
B. An input, expected outcome, precondition and post-condition
C. Something that can be tested
D. A specific state of the software, e.g. before a test can be run

37. Checking test results and test logs against specified coverage criteria occurs during which activity in the fundamental test process?
A. Test Monitoring & Control
B. Test Implementation
C. Test Analysis
D. Test Execution

38. Which objective may be obtained by having testers verify and validate the software prior to release?
A. Reduce the risk of defects within the code and the tests
B. Reduce the risk of fundamental design defects and enable tests to be identified at an early stage
C. Reduce the risk of incorrect or untestable functionality being developed
D. Increase the likelihood that the software meets stakeholder needs and satisfies requirements

39. Test cases are considered as which type of test work products?
A. Test planning work products
B. Test design work products
C. Test monitoring and control work products
D. Test Analysis work products

40. For which test level may this objective be relevant?
   "Increase code coverage of the components"
A. Acceptance Testing
B. Component Testing
C. System Testing
D. Integration Testing

41. A company recently purchased a commercial off-the-shelf application to automate their bill-paying process. They now plan to run an acceptance test against the package prior to putting it into production. Which of the following is their most likely reason for testing?
A. To detect bugs in the application
B. To build confidence in the application
C. To train the users
D. To gather evidence for a lawsuit

42. A tester was executing a test case, the test data in the test case was pronounced incorrectly. The name of item that should be written in the search field should contain the value "Laptop", but the tester wrote the value "labtob" instead.

The actual result of the test case was a message saying "There is no results for the word (labtob), did you mean (laptop)

The tester reported the defect and written the following description "When the user searches for laptops, an error message appears, a list of laptops should appear instead"

What is the problem with this situation?

A. The developer made a mistake in writing the code which resulted in the bug
B. The tester made a mistake which is called "False Positive"
C. The tester made a mistake which is called "False Negative"
D. There is no problem with this situation

43. Which of the following are aids to good communication and which hinder it ?

I.Try to understand how the other person feels

II.Communicate personal feelings, concentrating upon individuals

III.Confirm the other person has understood what you have said and vice versa

IV.Emphasize the common goal of better quality

V.Each discussion is a battle to be won

A. (I), (III), and (IV) aid, (II) and (V) hinder
B. (III), (IV) and (V) aid, and (I) and (II) hinder
C. (II), (III) and (IV) aid, (I) and (V) hinder
D. (I), (II) and (III) aid, (IV) and (V) hinder

44. Which objective may be obtained by having testers work closely with system designers while the system is being designed?
A. Reduce the risk of defects within the code and the tests
B. Increase the likelihood that the software meets stakeholder needs and satisfies requirements
C. Reduce the risk of incorrect or untestable functionality being developed
D. Reduce the risk of fundamental design defects and enable tests to be identified at an early stage

45. Test suites are considered as which type of test work products?
A. Test design work products
B. Test execution work products
C. Test Completion work products
D. Test implementation work products

46. What is the test basis?
A. The method used to systematically devise test conditions

B. The body of knowledge used for test analysis and design
C. The point during software development when testing should start
D. The source to determine the actual results from a set of tests
   Explanation
   The test basis is "a source to determine expected results to compare with the actual result of the system under test".

47. According to the ISTQB Glossary, a risk relates to which of the following?
A. Negative consequence that will occur
B. Negative consequence that could occur
C. Negative feedback to the tester
D. Negative consequence for the test object

48. A test team consistently finds between 90% and 95% of the defect present in the system under test. While the test manager understands that this is a good defect detection percentage for her test team and industry, senior management and executives remain disappointed in the test group saying that the test team misses too many bugs. Given that the users are generally happy with the system and that the failures which have occurred have generally been low impact, which of the following testing principles is most likely to help the test manager explain to these managers and executives why some defects are likely to be missed
A. Exhaustive Testing is impossible
B. Absence of error fallacy
C. Pesticide paradox
D. Defect clustering

49. Which of the following is the correct way of writing the user story?
A. All the requirements should follow the business rule #17
B. User is able to login with Facebook or google plus
C. Given <context>, when <event>, then<result>
D. As a <role>, I want <Goal>, so that <benefit>

50. As a tester, which of the following is a key to effectively communicate and maintain positive relationships with developers when there is disagreement over the prioritization of a defect?
A. Convince the developer to accept the blame for the mistake
B. Remind them of the common goal of creating quality systems
C. Communicate in a setting with senior management to ensure everyone understands
D. Escalate the issue to human resources and stress the importance of mutual respect

51. An android application has a bug which results in incorrect interest payments, due to a single line of incorrect code. This bug results in customer complaints. When root cause analysis was performed, the root cause was identified as the lack of product owner

understanding in the interest calculations. Which of the following is considered as a "failure"?

A. lack of knowledge on the part of the product owner
B. The improper calculation in the code
C. The incorrect interest payments
D. The customer complaints

52. Test plans are considered as which type of test work products?
A. Test Analysis work products
B. Test monitoring and control work products
C. Test design work products
D. Test planning work products

53. A new retail product was released to production by your company. Shortly after the release it was apparent that there were numerous problems with the point of sale application. This resulted in a number of customer complaints and negative postings on social media encouraging people to take their business to your competitor. You have investigated the problems and have discovered that the production point of sale equipment is a later model than the model used in testing. The software functions correctly on the old version, but fails on the later model.
Given this scenario, what is the root cause and what is the effect?
A. The root cause is the software failing on the later model and the effect is the customer complaints
B. The root cause is conducting the testing on the wrong version of the equipment and the effect is the customer complaints and postings
C. The root cause is the old equipment and the effect is the new equipment
D. The root cause is the customer complaints and the effect is the social media postings

54. Test progress reports are considered as which type of test work products?
A. Test Analysis work products
B. Test design work products
C. Test monitoring and control work products
D. Test planning work products

55. Why is it important to avoid the pesticide paradox?
A. Dynamic testing is less reliable in finding bugs
B. Pesticides mixed with static testing can allow bugs to escape detection
C. Tests should not be context dependent
D. Running the same tests over and over will reduce the chance of finding new defects

56. Which of the following will prevent defects from reoccurring?
A. Determining the environmental conditions that caused the failure
B. Rotating developers to keep them motivated
C. Improving processes based on root cause analysis

D. Prioritizing reoccurring defects higher than new defects

57. Which of the statements below is the best assessment of how the test principles apply across the test life cycle?
A. Test principles only affect test execution activities
B. Test principles affect the early test activities such as review
C. Test principles only affect the preparation for testing
D. Test principles affect activities throughout the test life cycle

58. A programmer is working on code which is very complex. Which of the following is a general testing principle that may affect his work?
A. Absence of error fallacy
B. Pesticide paradox
C. Defect clustering
D. Exhaustive testing is impossible

59. Which of the following is most important to promote and maintain good relationships between testers and developers?
A. Explaining test results in a neutral fashion
B. Identifying potential customer workarounds for bugs
C. Promoting better quality software whenever possible
D. Understanding what managers value about testing

Explanation

When you explain test results in a neutral fashion, this will reduce the chance that the developer feels you are criticizing him personally.

60. Which of the following statements best describes one of the seven key principles of software testing?
A. Automated tests are better than manual tests for avoiding the exhaustive testing
B. It is normally impossible to test all input/output combinations for a software system
C. Exhaustive testing is, with sufficient effort and tool support, feasible for all software
D. The purpose of testing is to demonstrate the absence of defects

61. For which test level may this objective be relevant?
"Give information to stakeholders about the risk of releasing the system at a given time"
A. Component Testing
B. Integration Testing
C. Acceptance Testing
D. Functional Testing

62. Comparing actual results with expected results occurs during which activity in the fundamental test process?

A. Test Monitoring & Control
B. Test Analysis
C. Test Implementation
D. Test Execution

63. Test conditions are considered as which type of test work products?
A. Test design work products
B. Test monitoring and control work products
C. Test Analysis work products
D. Test planning work products

64. Which objective may be obtained by having testers involved in requirements reviews or user story refinement?
A. Reduces the risk of incorrect or untestable functionality being developed
B. Increase the likelihood that the software meets stakeholder needs and satisfies requirements
C. Reduce the risk of defects within the code and the tests
D. Reduce the risk of fundamental design defects and enable tests to be identified at an early stage

65. An android application has a bug which results in incorrect interest payments, due to a single line of incorrect code. This bug results in customer complaints. When root cause analysis was performed, the root cause was identified as the lack of product owner understanding in the interest calculations. Which of the following is considered as a "Defect"?
A. The customer complaints
B. Lack of knowledge on the part of the product owner
C. The incorrect interest payments
D. The improver calculation in the code

66. As a test leader you are collecting measure about defects. You recognize that after the first test cycle-covering all requirements – subsystem hat a defect density that is 150% higher than the average. Subsystem A on the other hand has a defect density that is 60% lower than average. What conclusion for the next test cycle could you draw from this fact?

A. We focus testing ob subsystem A, because we have found fewest defects in that module so far

B. Because we are already found many defects in subsystem C we do not need to test is much more

C. Observed defect density does not allow any conclusion about the amount of additional testing

D. According to the testing principle "defect clustering" it is probable that subsystem C has till more hidden defects. Therefore we need to test subsystem C in more detail

67. Below situation tells one of testing principle. What is it? One tester has tested software applications running on mobile phone for 5 years. He has great deal of information for testing the application and is able to test faster than anyone else. However, he has not put sufficient efforts for deriving new test cases and modifying them to find new defects any longer, which lead to finding less and less defects. What is the basic test principle that he has ignored?

A. Pesticide paradox

B. Absence-of-errors fallacy

C. Defect clustering

D. Early testing

68. Which of following alternative describes a general testing principle

1. Defects are evenly distributed through the system

2. Repeating the same test cases over again in new version of the software finds less and less defects

3. Testing can prove that there are no defects

4. If testing shows no defects, then the system is useful

69. You are running a written test which other testers have run previously. In addition, this test has found bugs previously, and those bugs have been confirmed to be fixed. The test manager has encouraged you to the specific way in which you run the test, such as the order of certain actions,.. use of mouse versus hot-keys, and the particular input values, based on the way users will use in the system. Which of the following is a testing principle that could explain the test manager's directive?

A. Early testing

B. Absence of error fallacy

C. Random testing

D. Pesticide paradox

70. Which one of the following answers describes a test condition?

A. An attribute of a component or system specified or implied by requirements documentation.

B. An aspect of the test basis that is relevant to achieve specific test objectives.
C. The degree to which a software product provides functions which meet stated and implied
needs when the software is used under specified conditions.
C. The percentage of all single condition outcomes that independently affect a decision outcome that have been exercised by a test suite

71. Which of the following statements is a valid objective for testing?
A. The test should start as late as possible so that development had enough time to create a
good product.
B. To find as many failures as possible so that defects can be identified and corrected.
C. To prove that all possible defects are identified.
D. To prove that any remaining defects will not cause any failures.
72. Which of the following statements correctly describes the difference between testing and debugging?
A. Testing identifies the source of defects; debugging analyzes the defects and proposes prevention activities.
B. Dynamic testing shows failures caused by defects; debugging finds, analyzes, and removes
the causes of failures in the software.
C. Testing removes defects; debugging identifies the causes of failures.
D. Dynamic testing prevents the causes of failures; debugging removes the failures
73. Which one of the statements below describes the most common situation for a failure discovered
during testing or in production?
A. The product crashed when the user selected an option in a dialog box.
B. The wrong version of a compiled source code file was included in the build.
C. The computation algorithm used the wrong input variables.
D. The developer misinterpreted the requirement for the algorithm
74. Mr. Test has been testing software applications on mobile devices for a period of 5 years. He has a
wealth of experience in testing mobile applications and achieves better results in a shorter time than
others. Over several months Mr. Test did not modify the existing automated test cases and did not
create any new test cases. This leads to fewer and fewer defects being found by executing the
tests. What principle of testing did Mr. Test not observe?
A. Testing depends on the environment.
B. Exhaustive testing is not possible.
C. Repeating of tests will not find new defects.
D. Defects cluster together
75. In what way can testing be part of Quality Assurance?
A. It ensures that requirements are detailed enough.

B. It contributes to the achievement of quality in a variety of ways.
C. It ensures that standards in the organization are followed.
D. It measures the quality of software in terms of number of executed test cases

76. Which of the following activities is part of the main activity "test analysis" in the test process?
A. Identifying any required infrastructure and tools.
B. Creating test suites from test scripts.
C. Analyzing lessons learned for process improvement.
D. Evaluating the test basis for testability.

77. Match the following test work products (1-4) with the right description (A-D).
1. Test suite.
2. Test case.
3. Test script.
4. Test charter.
A. A group of test scripts with a sequence of instructions.
B. A set of instructions for the execution of a test.
C. Contains expected results.
D. An instruction of test goals and possible test ideas on how to test.
a) 1A, 2C, 3B, 4D.
b) 1D, 2B, 3A, 4C.
c) 1A, 2C, 3D, 4B.
d) 1D, 2C, 3B, 4A.

78. Which of the following provides the BEST description of a test case?
a) A document specifying a sequence of actions for the execution of a test. Also known as test
script or manual test script.
**b) A set of input values and expected results, with execution preconditions and execution
post conditions, developed for a particular test condition.**
c) An attribute of a system specified by requirements documentation (for example reliability,
usability or design constraints) that is executed in a test.
d) An item or event of a system that could be verified by one or more test conditions, e.g., a
function, transaction, feature, quality attribute, or structural element

79. Which of the following is a major objective of testing?

a) To prevent defects.
b) To validate the project plan works as required.
c) To gain confidence in the development team.
d) To make release decisions for the system under test

80. Which of the following is an example of a failure in a car cruise control system?

a) The developer of the system forgot to rename variables after a cut-and-paste operation.
b) Unnecessary code that sounds an alarm when reversing was included in the system.
c) The system stops maintaining a set speed when the radio volume is increased or decreased.
d) The design specification for the system wrongly states speeds in km/h.

81. Which of the following is a defect rather than a root cause in a fitness tracker?
    a) Because he was unfamiliar with the domain of fitness training, the author of the requirements wrongly assumed that users wanted heartbeat in beats per hour.
    b) The tester of the smartphone interface had not been trained in state transition testing, so missed a major defect.
    c) An incorrect configuration variable implemented for the GPS function could cause location problems during daylight saving times.
    d) Because she had never worked on wearable devices before, the designer of the user interface misunderstood the effects of reflected sunlight

82. As a result of risk analysis, more testing is being directed to those areas of the system under test where initial testing found more defects than average.
    Which of the following testing principles is being applied?
    a) Beware of the pesticide paradox.
    b) Testing is context dependent.
    c) Absence-of-errors is a fallacy.
    d) Defects cluster together

83. Given the following test activities and tasks:
    A. Test design
    B. Test implementation
    C. Test execution
    D. Test completion
    1. Entering change requests for open defect reports
    2. Identifying test data to support the test cases
    3. Prioritizing test procedures and creating test data
    4. Analyzing discrepancies to determine their cause
    Which of the following BEST matches the activities with the tasks?
    a) A-2, B-3, C-4, D-1
    b) A-2, B-1, C-3, D-4
    c) A-3, B-2, C-4, D-1
    d) A-3, B-2, C-1, D-4

84. Which of the following BEST describes how value is added by maintaining traceability between the test basis and test artifacts?

    a) Maintenance testing can be fully automated based on changes to the initial requirements.
    b) It is possible to determine if a new test case has increased coverage of the requirements.

c) Test managers can identify which testers found the highest severity defects.
d) Areas that may be impacted by side-effects of a change can be targeted by confirmation
testing.

85. Which of the following qualities is MORE likely to be found in a tester's mindset rather than in a developer's?

a) Experience on which to base their efforts.
b) Ability to see what might go wrong.
c) Good communication with team members.
d) Attention to detail.