

ISTQB Foundation Sample Question Paper No. 23

Q. 1: For software to be reliable it must:

- A. Be easy to maintain.
- B. Be unlikely to cause a failure.
- C. Never fail under any circumstances.
- D. Be written according to coding standards

Q. 2: In a system designed to work out the tax to be paid: An employee has \$4000 of salary tax free. The next \$1500 is taxed at 10% The next \$28000 is taxed at 22% Any further amount is taxed at 40% To the nearest \$ which of these is a valid Boundary Value Analysis test case?

- A. \$1500
- B. \$32001
- C. \$28000
- D. \$33501

Q. 3: Faults found by users are due to:

- A. Poor quality software
- B. Poor software and poor testing
- C. Bad luck
- D. Insufficient time for testing

Q. 4: An incident logging system

- A. Only records defects
- B. Is of limited value
- C. Is a valuable source of project information during testing if it contains all incidents
- D. Should be used only by the test team.

Q. 5: The later in the development life cycle a fault is discovered, the more expensive it is to fix. Why?

- A. The documentation is poor, so it takes longer to find out what the software is doing.
- B. Wages are rising
- C. The fault has been built into more documentation, code, tests, etc.
- D. None of the above

Q. 6: Which of the following is true?

- A. Component testing should be black box, system testing should be white box.
- B. If u find a lot of bugs in testing, you should not be very confident about the quality of software
- C. The fewer bugs you find, the better your testing was
- D. The more tests you run, the more bugs you will find.

Q. 7: If the pseudo code below were a programming language ,how many tests are required to achieve 100% statement coverage?

1. If $x=3$ then
2. Display_messageX;
3. If $y=2$ then
4. Display_messageY;
5. Else
6. Display_messageZ;
7. Else
8. Display_messageZ;

- A. 1
- B. 2
- C. 3

D. 4

Q. 8: Software testing activities should start

- A. As soon as the code is written
- B. During the design stage
- C. When the requirements have been formally documented
- D. As soon as possible in the development life cycle

Q. 9: Using the same code example as question 17, how many tests are required to achieve 100% branch/decision coverage?

- A. 1
- B. 2
- C. 3
- D. 4

Q. 10: A test design technique is

- A. A process for selecting test cases
- B. A process for determining expected outputs
- C. A way to measure the quality of software
- D. A way to measure in a test plan what has to be done

Q. 11: What is the main reason for testing software before releasing it?

- A. To show that system will work after release
- B. To decide when the software is of sufficient quality to release
- C. To find as many bugs as possible before release
- D. To give information for a risk based decision about release

Q. 12: Testware(test cases, test dataset)

- A. Needs configuration management just like requirements, design and code
- B. Should be newly constructed for each new version of the software
- C. Is needed only until the software is released into production or use
- D. Does not need to be documented and commented, as it does not form part of the released software system

Q. 13: Which of the following is NOT a standard related to testing?

- A. IEEE829
- B. IEEE610
- C. BS7925-1
- D. BS7925-2

Q. 14: In which order should tests be run?

- A. The most important tests first
- B. The most difficult tests first(to allow maximum time for fixing)
- C. The easiest tests first (to give initial confidence)
- D. The order they are thought of

Q. 15: A program validates a numeric field as follows:

Values less than 10 are rejected, values between 10 and 21 are accepted, values greater than or equal to 22 are rejected. Which of the following covers the MOST boundary values?

- A. 9,10,11,22
- B. 9,10,21,22
- C. 10,11,21,22
- D. 10,11,20,21

Q. 16: Which of the following is not the integration strategy?

- A. Design based

- B. Big-bang
- C. Bottom-up
- D. Top-down

Q. 17: Which of the following tools would you use to detect a memory leak?

- A. State analysis
- B. Coverage analysis
- C. Dynamic analysis
- D. Memory analysis

Q. 18: Which of the following statements are true?

- A. Faults in program specifications are the most expensive to fix.
- B. Faults in code are the most expensive to fix.
- C. Faults in requirements are the most expensive to fix
- D. Faults in designs are the most expensive to fix.

Q. 19: Increasing the quality of the software, by better development methods, will affect the time needed for testing (the test phases) by:

- A. Reducing test time
- B. No change
- C. Increasing test time
- D. Can't say

Q. 20: Which of the following is a black box design technique?

- A. Statement testing
- B. Equivalence partitioning
- C. Error- guessing
- D. Usability testing

Q. 21: When reporting faults found to developers, testers should be:

- A. As polite, constructive and helpful as possible
- B. Firm about insisting that a bug is not a "feature" if it should be fixed
- C. Diplomatic, sensitive to the way they may react to criticism
- D. All of the above

Q. 22: Which of the following statements is not true

- A. Performance testing can be done during unit testing as well as during the testing of whole system
- B. The acceptance test does not necessarily include a regression test
- C. Verification activities should not involve testers (reviews, inspections etc)
- D. Test environments should be as similar to production environments as possible

Q. 23: What is the important criterion in deciding what testing technique to use?

- A. How well you know a particular technique
- B. The objective of the test
- C. How appropriate the technique is for testing the application
- D. Whether there is a tool to support the technique

Q. 24: When should you stop testing?

- A. When time for testing has run out.
- B. When all planned tests have been run
- C. When the test completion criteria have been met
- D. When no faults have been found by the tests run

Q. 25: Coverage measurement

- A. Is nothing to do with testing
- B. Is a partial measure of test thoroughness
- C. Branch coverage should be mandatory for all software

D. Can only be applied at unit or module testing, not at system testing

Q. 26: Which of the following is NOT a type of non-functional test?

- A. State-Transition
- B. Usability
- C. Performance
- D. Security

Q. 27: Which of the following is the component test standard?

- A. IEEE 829
- B. IEEE 610
- C. BS7925-1
- D. BS7925-2

Q. 28: A program validates a numeric field as follows:

Values less than 10 are rejected, values between 10 and 21 are accepted, values greater than or equal to 22 are rejected. Which of the following input values cover all of the equivalence partitions?

- A. 10,11,21
- B. 3,20,21
- C. 3,10,22
- D. 10,21,22

Q. 29: Which is not true-The black box tester

- A. Should be able to understand a functional specification or requirements document
- B. Should be able to understand the source code.
- C. Is highly motivated to find faults
- D. Is creative to find the system's weaknesses

Q. 30: Which of the following is a static test?

- A. Code inspection
- B. Coverage analysis
- C. Usability assessment
- D. Installation test

Q. 31: A program with high cyclometric complexity is almost likely to be:

- A. Large
- B. Small
- C. Difficult to write
- D. Difficult to test

Q. 32: Which of the following is the odd one out?

- A. White box
- B. Glass box
- C. Structural
- D. Functional

Q. 33: Which of the following techniques are black box techniques?

- A. State transition testing, code testing, agile testing
- B. Equivalence partitioning, state transition testing, decision table testing
- C. System testing, acceptance testing, equivalence partitioning
- D. System integration testing, system testing, decision table testing

Q. 34: A number of critical bugs are fixed in software. All the bugs are in one module, related to reports. The test manager decides to do regression testing only on the reports module.

- A. The test manager should do only automated regression testing.

- B. The test manager is justified in her decision because no bug has been fixed in other modules
- C. The test manager should only do confirmation testing. There is no need to do regression testing
- D. Regression testing should be done on other modules as well because fixing one module may affect other modules

Q. 35: Which of the following statements contains a valid goal for a functional test set?

- A. A goal is that no more failures will result from the remaining defects
- B. A goal is to find as many failures as possible so that the cause of the failures can be identified and fixed
- C. A goal is to eliminate as much as possible the causes of defects
- D. A goal is to fulfil all requirements for testing that are defined in the project plan.

Q. 36: What makes an inspection different from other review types?

- A. It is led by a trained leader, uses formal entry and exit criteria and checklists
- B. It is led by the author of the document to be inspected
- C. It can only be used for reviewing design and code
- D. It is led by the author, uses checklists, and collects data for improvement

Q. 37: Why does the boundary value analysis provide good test cases?

- A. Because it is an industry standard
- B. Because errors are frequently made during programming of the different cases near the 'edges' of the range of values
- C. Because only equivalence classes that are equal from a functional point of view are considered in the test cases
- D. Because the test object is tested under maximal load up to its performance limits

Q. 38: If a program is tested and 100% branch coverage is achieved, which of the following coverage criteria is then guaranteed to be achieved?

- A. 100% Equivalence class coverage
- B. 100% Condition coverage and 100% Statement coverage
- C. 100% Statement coverage
- D. 100% Multiple condition coverage

Q. 39: A defect management system shall keep track of the status of every defect registered and enforce the rules about changing these states. If your task is to test the status tracking, which method would be best?

- A. Logic-based testing
- B. Use-case-based testing
- C. State transition testing
- D. Systematic testing according to the V-model

Q. 40: In system testing...

- A. Both functional and non-functional requirements are to be tested
- B. Only functional requirements are tested; non-functional requirements are validated in a review
- C. Only non-functional requirements are tested; functional requirements are validated in a review
- D. Only requirements which are listed in the specification document are to be tested

Answers:

- Q.1-B
- Q.2-D
- Q.3-B
- Q.4-C
- Q.5-C
- Q.6-B

Q.7-C
Q.8-D
Q.9-C
Q.10-A
Q.11-D
Q.12-A
Q.13-B
Q.14-A
Q.15-B
Q.16-A
Q.17-C
Q.18-C
Q.19-A
Q.20-B
Q.21-D
Q.22-C
Q.23-B
Q.24-C
Q.25-B
Q.26-A
Q.27-D
Q.28-C
Q.29-B
Q.30-A
Q.31-D
Q.32-D
Q.33-B
Q.34-D
Q.35-B
Q.36-A
Q.37-B
Q.38-B
Q.39-C
Q.40-A