

## **ISTQB Foundation Sample Question Paper No. 4**

### **1. We split testing into distinct stages primarily because:**

- a) Each test stage has a different purpose.
- b) It is easier to manage testing in stages.
- c) We can run different tests in different environments.
- d) The more stages we have, the better the testing.

### **2. Which of the following is likely to benefit most from the use of test tools providing test capture and replay facilities?**

- a) Regression testing
- b) Integration testing
- c) System testing
- d) User acceptance testing

### **3. Which of the following statements is NOT correct?**

- a) A minimal test set that achieves 100% LCSAJ coverage will also achieve 100% branch coverage.
- b) A minimal test set that achieves 100% path coverage will also achieve 100% statement coverage.
- c) A minimal test set that achieves 100% path coverage will generally detect more faults than one that achieves 100% statement coverage.
- d) A minimal test set that achieves 100% statement coverage will generally detect more faults than one that achieves 100% branch coverage.

### **4. Which of the following requirements is testable?**

- a) The system shall be user friendly.
- b) The safety-critical parts of the system shall contain 0 faults.
- c) The response time shall be less than one second for the specified design load.
- d) The system shall be built to be portable.

### **5. Analyse the following highly simplified procedure:**

Ask: “What type of ticket do you require, single or return?”

IF the customer wants ‘return’

Ask: “What rate, Standard or Cheap-day?”

IF the customer replies ‘Cheap-day’

Say: “That will be £11:20”

ELSE

Say: “That will be £19:50”

ENDIF

ELSE

Say: “That will be £9:75”

ENDIF

Now decide the minimum number of tests that are needed to ensure that all the questions have been asked, all combinations have occurred and all replies given.

- a) 3
- b) 4
- c) 5
- d) 6

6 Error guessing:

- a) supplements formal test design techniques.
- b) can only be used in component, integration and system testing.

- c) is only performed in user acceptance testing.
- d) is not repeatable and should not be used.

**7. Which of the following is NOT true of test coverage criteria?**

- a) Test coverage criteria can be measured in terms of items exercised by a test suite.
- b) A measure of test coverage criteria is the percentage of user requirements covered.
- c) A measure of test coverage criteria is the percentage of faults found.
- d) Test coverage criteria are often used when specifying test completion criteria.

**8. In prioritising what to test, the most important objective is to:**

- a) find as many faults as possible.
- b) test high risk areas.
- c) obtain good test coverage.
- d) test whatever is easiest to test.

**9. Given the following sets of test management terms (v-z), and activity descriptions (1-5), which one of the following best pairs the two sets?**

- v – test control
- w – test monitoring
- x - test estimation
- y - incident management
- z - configuration control

- 1 - calculation of required test resources
- 2 - maintenance of record of test results
- 3 - re-allocation of resources when tests overrun
- 4 - report on deviation from test plan
- 5 - tracking of anomalous test results

- a) v-3,w-2,x-1,y-5,z-4
- b) v-2,w-5,x-1,y-4,z-3
- c) v-3,w-4,x-1,y-5,z-2
- d) v-2,w-1,x-4,y-3,z-5

**10. Which one of the following statements about system testing is NOT true?**

- a) System tests are often performed by independent teams.
- b) Functional testing is used more than structural testing.
- c) Faults found during system tests can be very expensive to fix.
- d) End-users should be involved in system tests.

**11. Which of the following is false?**

- a) Incidents should always be fixed.
- b) An incident occurs when expected and actual results differ.
- c) Incidents can be analysed to assist in test process improvement.
- d) An incident can be raised against documentation.

**12. Enough testing has been performed when:**

- a) time runs out.
- b) the required level of confidence has been achieved.
- c) no more faults are found.

d) the users won't find any serious faults.

**13. Which of the following is NOT true of incidents?**

- a) Incident resolution is the responsibility of the author of the software under test.
- b) Incidents may be raised against user requirements.
- c) Incidents require investigation and/or correction.
- d) Incidents are raised when expected and actual results differ.

**14. Which of the following is not described in a unit test standard?**

- a) syntax testing
- b) equivalence partitioning
- c) stress testing
- d) modified condition/decision coverage

**15. Which of the following is false?**

- a) In a system two different failures may have different severities.
- b) A system is necessarily more reliable after debugging for the removal of a fault.
- c) A fault need not affect the reliability of a system.
- d) Undetected errors may lead to faults and eventually to incorrect behaviour.

**16. Which one of the following statements, about capture-replay tools, is NOT correct?**

- a) They are used to support multi-user testing.
- b) They are used to capture and animate user requirements.
- c) They are the most frequently purchased types of CAST tool.
- d) They capture aspects of user behaviour.

**17. How would you estimate the amount of re-testing likely to be required?**

- a) Metrics from previous similar projects
- b) Discussions with the development team
- c) Time allocated for regression testing
- d) a & b

**18. Which of the following is true of the V-model?**

- a) It states that modules are tested against user requirements.
- b) It only models the testing phase.
- c) It specifies the test techniques to be used.
- d) It includes the verification of designs.

**19. The oracle assumption:**

- a) is that there is some existing system against which test output may be checked.
- b) is that the tester can routinely identify the correct outcome of a test.
- c) is that the tester knows everything about the software under test.
- d) is that the tests are reviewed by experienced testers.

**20. Which of the following characterises the cost of faults?**

- a) They are cheapest to find in the early development phases and the most expensive to fix in the latest test phases.
- b) They are easiest to find during system testing but the most expensive to fix then.
- c) Faults are cheapest to find in the early development phases but the most expensive to fix then.
- d) Although faults are most expensive to find during early development phases, they are cheapest to fix

then.

**21. Which of the following should NOT normally be an objective for a test?**

- a) To find faults in the software.
- b) To assess whether the software is ready for release.
- c) To demonstrate that the software doesn't work.
- d) To prove that the software is correct.

**22. Which of the following is a form of functional testing?**

- a) Boundary value analysis
- b) Usability testing
- c) Performance testing
- d) Security testing

**23. Which of the following would NOT normally form part of a test plan?**

- a) Features to be tested
- b) Incident reports
- c) Risks
- d) Schedule

**24. Which of these activities provides the biggest potential cost saving from the use of CAST?**

- a) Test management
- b) Test design
- c) Test execution
- d) Test planning

**25. Which of the following is NOT a white box technique?**

- a) Statement testing
- b) Path testing
- c) Data flow testing
- d) State transition testing

**26. Data flow analysis studies:**

- a) possible communications bottlenecks in a program.
- b) the rate of change of data values as a program executes.
- c) the use of data on paths through the code.
- d) the intrinsic complexity of the code.

**27. 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 whole pound, which of these is a valid Boundary Value Analysis test case?**

- a) £1500
- b) £32001
- c) £33501
- d) £28000

**28. An important benefit of code inspections is that they:**

- a) enable the code to be tested before the execution environment is ready.

- b) can be performed by the person who wrote the code.
- c) can be performed by inexperienced staff.
- d) are cheap to perform.

**29. Which of the following is the best source of Expected Outcomes for User Acceptance Test scripts?**

- a) Actual results
- b) Program specification
- c) User requirements
- d) System specification

**30. What is the main difference between a walkthrough and an inspection?**

- a) An inspection is lead by the author, whilst a walkthrough is lead by a trained moderator.
- b) An inspection has a trained leader, whilst a walkthrough has no leader.
- c) Authors are not present during inspections, whilst they are during walkthroughs.
- d) A walkthrough is lead by the author, whilst an inspection is lead by a trained moderator.

**31. Which one of the following describes the major benefit of verification early in the life cycle?**

- a) It allows the identification of changes in user requirements.
- b) It facilitates timely set up of the test environment.
- c) It reduces defect multiplication.
- d) It allows testers to become involved early in the project.

**32. Integration testing in the small:**

- a) tests the individual components that have been developed.
- b) tests interactions between modules or subsystems.
- c) only uses components that form part of the live system.
- d) tests interfaces to other systems.

**33. Static analysis is best described as:**

- a) the analysis of batch programs.
- b) the reviewing of test plans.
- c) the analysis of program code.
- d) the use of black box testing.

**34. Alpha testing is:**

- a) post-release testing by end user representatives at the developer's site.
- b) the first testing that is performed.
- c) pre-release testing by end user representatives at the developer's site.
- d) pre-release testing by end user representatives at their sites.

**35. A failure is:**

- a) found in the software; the result of an error.
- b) departure from specified behaviour.
- c) an incorrect step, process or data definition in a computer program.
- d) a human action that produces an incorrect result.

**36. 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%**

**Which of these groups of numbers would fall into the same equivalence class?**

- a) £4800; £14000; £28000
- b) £5200; £5500; £28000
- c) £28001; £32000; £35000
- d) £5800; £28000; £32000

**37. The most important thing about early test design is that it:**

- a) makes test preparation easier.
- b) means inspections are not required.
- c) can prevent fault multiplication.
- d) will find all faults.

**38. Which of the following statements about reviews is true?**

- a) Reviews cannot be performed on user requirements specifications.
- b) Reviews are the least effective way of testing code.
- c) Reviews are unlikely to find faults in test plans.
- d) Reviews should be performed on specifications, code, and test plans.

**39. Test cases are designed during:**

- a) test recording.
- b) test planning.
- c) test configuration.
- d) test specification.

**40. A configuration management system would NOT normally provide:**

- a) linkage of customer requirements to version numbers.
- b) facilities to compare test results with expected results.
- c) the precise differences in versions of software component source code.
- d) restricted access to the source code library.

**Answers:**

- 1 A
- 2 A
- 3 D
- 4 C
- 5 A
- 6 A
- 7 C
- 8 B
- 9 C
- 10 D
- 11 A
- 12 B
- 13 A
- 14 C
- 15 B
- 16 B
- 17 D

- 18 D
- 19 B
- 20 A
- 21 D
- 22 A
- 23 B
- 24 C
- 25 D
- 26 C
- 27 C
- 28 A
- 29 C
- 30 D
- 31 C
- 32 B
- 33 C
- 34 C
- 35 B
- 36 D
- 37 C
- 38 D
- 39 D
- 40 B