

ISTQB Question Paper - 1

1 When what is visible to end-users is a deviation from the specific or expected behavior, this is called:

- a) an error
- b) a fault
- c) a failure
- d) a defect
- e) a mistake

2 Regression testing should be performed:

- v) every week
- w) after the software has changed
- x) as often as possible
- y) when the environment has changed
- z) when the project manager says

- a) v & w are true, x - z are false
- b) w, x & y are true, v & z are false
- c) w & y are true, v, x & z are false
- d) w is true, v, x y and z are false
- e) all of the above are true

3 IEEE 829 test plan documentation standard contains all of the following except:

- a) test items
- b) test deliverables
- c) test tasks
- d) test environment
- e) test specification

4 Testing should be stopped when:

- a) all the planned tests have been run
- b) time has run out
- c) all faults have been fixed correctly
- d) both a) and c)
- e) it depends on the risks for the system being tested

5 Order numbers on a stock control system can range between 10000 and 99999 inclusive. Which of the following inputs might be a result of designing tests for only valid equivalence classes and valid boundaries:

- a) 1000, 5000, 99999
- b) 9999, 50000, 100000
- c) 10000, 50000, 99999
- d) 10000, 99999
- e) 9999, 10000, 50000, 99999, 10000

6 Consider the following statements about early test design:

- i. early test design can prevent fault multiplication
- ii. faults found during early test design are more expensive to fix
- iii. early test design can find faults
- iv. early test design can cause changes to the requirements
- v. early test design takes more effort

- a) i, iii & iv are true. ii & v are false
- b) iii is true, i, ii, iv & v are false
- c) iii & iv are true. i, ii & v are false
- d) i, iii, iv & v are true, ii is false
- e) i & iii are true, ii, iv & v are false

7 Non-functional system testing includes:

- a) testing to see where the system does not function properly
- b) testing quality attributes of the system including performance and usability
- c) testing a system feature using only the software required for that action
- d) testing a system feature using only the software required for that function
- e) testing for functions that should not exist

8 Which of the following is NOT part of configuration management:

- a) status accounting of configuration items
- b) auditing conformance to ISO9001
- c) identification of test versions
- d) record of changes to documentation over time
- e) controlled library access

9 Which of the following is the main purpose of the integration strategy for integration testing in the small?

- a) to ensure that all of the small modules are tested adequately
- b) to ensure that the system interfaces to other systems and networks
- c) to specify which modules to combine when and how many at once
- d) to ensure that the integration testing can be performed by a small team
- e) to specify how the software should be divided into modules

10 What is the purpose of test completion criteria in a test plan:

- a) to know when a specific test has finished its execution
- b) to ensure that the test case specification is complete
- c) to set the criteria used in generating test inputs
- d) to know when test planning is complete
- e) to plan when to stop testing

11 Consider the following statements

- i. an incident may be closed without being fixed
- ii. incidents may not be raised against documentation
- iii. the final stage of incident tracking is fixing
- iv. the incident record does not include information on test environments
- v. incidents should be raised when someone other than the author of the software

performs the test

- a) ii and v are true, i, iii and iv are false
- b) i and v are true, ii, iii and iv are false
- c) i, iv and v are true, ii and iii are false
- d) i and ii are true, iii, iv and v are false
- e) i is true, ii, iii, iv and v are false

12 Given the following code, which is true about the minimum number of test cases required for full statement and branch coverage:

```
Read P
Read Q
IF P+Q > 100 THEN
Print "Large"
ENDIF
If P > 50 THEN
Print "P Large"
ENDIF
```

- a) 1 test for statement coverage, 3 for branch coverage
- b) 1 test for statement coverage, 2 for branch coverage
- c) 1 test for statement coverage, 1 for branch coverage
- d) 2 tests for statement coverage, 3 for branch coverage
- e) 2 tests for statement coverage, 2 for branch coverage

13 Given the following:

```
Switch PC on
Start "outlook"
IF outlook appears THEN
Send an email
Close outlook
```

- a) 1 test for statement coverage, 1 for branch coverage
- b) 1 test for statement coverage, 2 for branch coverage
- c) 1 test for statement coverage. 3 for branch coverage
- d) 2 tests for statement coverage, 2 for branch coverage
- e) 2 tests for statement coverage, 3 for branch coverage

14 Given the following code, which is true:

```
IF A > B THEN
C = A - B
ELSE
C = A + B
ENDIF
Read D
IF C = D Then
Print "Error"
ENDIF
```

- a) 1 test for statement coverage, 3 for branch coverage
- b) 2 tests for statement coverage, 2 for branch coverage
- c) 2 tests for statement coverage. 3 for branch coverage
- d) 3 tests for statement coverage, 3 for branch coverage
- e) 3 tests for statement coverage, 2 for branch coverage

15 Consider the following:

Pick up and read the newspaper

Look at what is on television

If there is a program that you are interested in watching then switch the the television on and watch the program

Otherwise

Continue reading the newspaper

If there is a crossword in the newspaper then try and complete the crossword

- a) SC = 1 and DC = 1
- b) SC = 1 and DC = 2
- c) SC = 1 and DC = 3
- d) SC = 2 and DC = 2
- e) SC = 2 and DC = 3

16 The place to start if you want a (new) test tool is:

- a) Attend a tool exhibition
- b) Invite a vendor to give a demo
- c) Analyse your needs and requirements
- d) Find out what your budget would be for the tool
- e) Search the internet

17 When a new testing tool is purchased, it should be used first by:

- a) A small team to establish the best way to use the tool
- b) Everyone who may eventually have some use for the tool
- c) The independent testing team
- d) The managers to see what projects it should be used in
- e) The vendor contractor to write the initial scripts

18 What can static analysis NOT find?

- a) The use of a variable before it has been defined
- b) Unreachable ("dead") code
- c) Whether the value stored in a variable is correct
- d) The re-definition of a variable before it has been used
- e) Array bound violations

19 Which of the following is NOT a black box technique:

- a) Equivalence partitioning
- b) State transition testing
- c) LCSAJ
- d) Syntax testing

e) Boundary value analysis

20 Beta testing is:

- a) Performed by customers at their own site
- b) Performed by customers at their software developer's site
- c) Performed by an independent test team
- d) Useful to test bespoke software
- e) Performed as early as possible in the lifecycle

21 Given the following types of tool, which tools would typically be used by developers and which by an independent test team:

- i. static analysis
- ii. performance testing
- iii. test management
- iv. dynamic analysis
- v. test running
- vi. test data preparation

- a) developers would typically use i, iv and vi; test team ii, iii and v
- b) developers would typically use i and iv; test team ii, iii, v and vi
- c) developers would typically use i, ii, iii and iv; test team v and vi
- d) developers would typically use ii, iv and vi; test team i, ii and v
- e) developers would typically use i, iii, iv and v; test team ii and vi

22 The main focus of acceptance testing is:

- a) finding faults in the system
- b) ensuring that the system is acceptable to all users
- c) testing the system with other systems
- d) testing for a business perspective
- e) testing by an independent test team

23 Which of the following statements about the component testing standard is false:

- a) black box design techniques all have an associated measurement technique
- b) white box design techniques all have an associated measurement technique
- c) cyclomatic complexity is not a test measurement technique
- d) black box measurement techniques all have an associated test design technique
- e) white box measurement techniques all have an associated test design technique

24 Which of the following statements is NOT true:

- a) inspection is the most formal review process
- b) inspections should be led by a trained leader
- c) managers can perform inspections on management documents
- d) inspection is appropriate even when there are no written documents
- e) inspection compares documents with predecessor (source) documents

25 A typical commercial test execution tool would be able to perform all of the following EXCEPT:

- a) generating expected outputs
- b) replaying inputs according to a programmed script
- c) comparison of expected outcomes with actual outcomes
- d) recording test inputs
- e) reading test values from a data file

26 The difference between re-testing and regression testing is

- a) re-testing is running a test again; regression testing looks for unexpected side effects
- b) re-testing looks for unexpected side effects; regression testing is repeating those tests
- c) re-testing is done after faults are fixed; regression testing is done earlier
- d) re-testing uses different environments, regression testing uses the same environment
- e) re-testing is done by developers, regression testing is done by independent testers

27 Expected results are:

- a) only important in system testing
- b) only used in component testing
- c) never specified in advance
- d) most useful when specified in advance
- e) derived from the code

28 Test managers should not:

- a) report on deviations from the project plan
- b) sign the system off for release
- c) re-allocate resource to meet original plans
- d) raise incidents on faults that they have found
- e) provide information for risk analysis and quality improvement

29 Unreachable code would best be found using:

- a) code reviews
- b) code inspections
- c) a coverage tool
- d) a test management tool
- e) a static analysis tool

30 A tool that supports traceability, recording of incidents or scheduling of tests is called:

- a) a dynamic analysis tool
- b) a test execution tool
- c) a debugging tool
- d) a test management tool
- e) a configuration management tool

31 What information need not be included in a test incident report:

- a) **how to fix the fault**
- b) how to reproduce the fault
- c) test environment details
- d) severity, priority
- e) the actual and expected outcomes

32 Which expression best matches the following characteristics or review processes:

- 1. led by author
- 2. undocumented
- 3. no management participation
- 4. led by a trained moderator or leader
- 5. uses entry exit criteria

- s) inspection
- t) peer review
- u) informal review
- v) walkthrough

- a) s = 4, t = 3, u = 2 and 5, v = 1
- b) s = 4 and 5, t = 3, u = 2, v = 1
- c) s = 1 and 5, t = 3, u = 2, v = 4
- d) s = 5, t = 4, u = 3, v = 1 and 2
- e) s = 4 and 5, t = 1, u = 2, v = 3

33 Which of the following is NOT part of system testing:

- a) business process-based testing
- b) performance, load and stress testing
- c) requirements-based testing
- d) usability testing
- e) top-down integration testing

34 What statement about expected outcomes is FALSE:

- a) expected outcomes are defined by the software's behaviour
- b) expected outcomes are derived from a specification, not from the code
- c) expected outcomes include outputs to a screen and changes to files and databases
- d) expected outcomes should be predicted before a test is run
- e) expected outcomes may include timing constraints such as response times

35 The standard that gives definitions of testing terms is:

- a) ISO/IEC 12207
- b) BS7925-1
- c) BS7925-2
- d) ANSI/IEEE 829
- e) ANSI/IEEE 729

36 The cost of fixing a fault:

- a) Is not important
- b) Increases as we move the product towards live use
- c) Decreases as we move the product towards live use
- d) Is more expensive if found in requirements than functional design
- e) Can never be determined

37 Which of the following is NOT included in the Test Plan document of the Test Documentation Standard:

- a) Test items (i.e. software versions)
- b) What is not to be tested
- c) Test environments
- d) Quality plans
- e) Schedules and deadlines

38 Could reviews or inspections be considered part of testing:

- a) No, because they apply to development documentation
- b) No, because they are normally applied before testing
- c) No, because they do not apply to the test documentation
- d) Yes, because both help detect faults and improve quality
- e) Yes, because testing includes all non-constructive activities

39 Which of the following is not part of performance testing:

- a) Measuring response time
- b) Measuring transaction rates
- c) Recovery testing
- d) Simulating many users
- e) Generating many transactions

40 Error guessing is best used

- a) As the first approach to deriving test cases
- b) After more formal techniques have been applied
- c) By inexperienced testers
- d) After the system has gone live
- e) Only by end users

Question number Correct answer

- 1 C
- 2 C
- 3 E
- 4 E
- 5 C
- 6 A
- 7 B
- 8 B
- 9 C
- 10 E
- 11 B

12 B
13 B
14 B
15 E
16 C
17 B
18 C
19 C
20 A
21 B
22 D
23 A
24 D
25 A
26 A
27 D
28 C
29 A
30 E
31 A
32 B
33 E
34 A
35 B
36 B
37 D
38 D
39 C
40 B