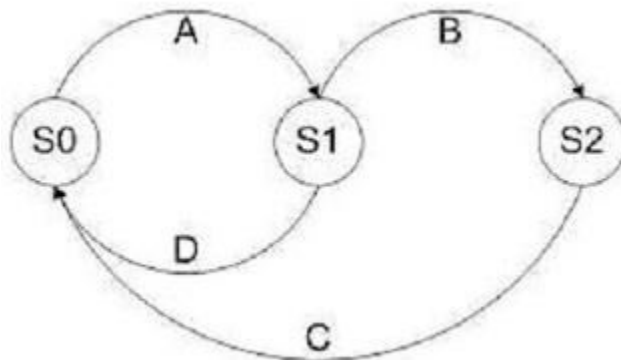## ISTQB Foundation Sample Question Paper No. 15

Q. 1: Given the following state transition table Which of the test cases below will cover the following series of state transitions? S1 SO S1 S2 SO

A. D, A, B, C.
B. A, B, C, D.
C. D, A, B.
D. A, B, C.

Q. 2: From a Testing perspective, what are the MAIN purposes of Configuration Management?:

i) Identifying the version of software under test. ii) Controlling the version of testware items.
iii) Developing new testware items.
iv) Tracking changes to testware items.
v) Analysing the need for new testware items.

A. ii, iv and v.
B. ii, iii and iv.i,
C. i, ii and iv.
D. i, iii and v.

Q. 3: Which of the following is a MAJOR task of test planning?

A. Scheduling test analysis and design tasks.
B. Initiating corrective actions.
C. Monitoring progress and test coverage.
D. Measuring and analyzing results.

Q. 4: Which of the following BEST describes the difference between an inspection and a walkthrough?

A. Both inspections and walkthroughs are led by the author.

B. An inspection is led by a moderator and a walkthrough is led by the author.
C. Both inspections and walkthroughs are led by a trained moderator.
D. A walkthrough is led by the author. The author is not present during inspections.

Q. 5: Where may functional testing be performed?

A. At system and acceptance testing levels only.
B. At all test levels.
C. At all levels above integration testing.
D. At the acceptance testing level only.

Q. 6: What is the MAIN objective when reviewing a software deliverable?

A. To identify potential application failures by use of a test specification.
B. To identify defects in any software work product.
C. To identify spelling mistakes in a requirements specification.
D. To identify standards inconsistencies in the code.

Q. 7: Who would USUALLY perform debugging activities?

A.Developers.
B. Analysts.
C. Testers.
D. Incident Managers.

Q. 8: Which of the following would you NOT usually find on a software incident report?

A. The name and/or organisational position of the person raising the problem.
B. Version of the Software Under Test.
C. Suggestions as to how to fix the problem.
D. Actual and expected results.

Q. 9: Which of the following defines the expected results of a test?

A. Test case specification.
B. Test design specification.
C. Test procedure specification.
D. Test results.

Q. 10: Some tools are geared more for developer use. For the 5 tools listed, which statement BEST details those for developers

i) Performance testing tools.
ii) Coverage measurement tools.
iii) Test comparators.

iv) Dynamic analysis tools.
v) Incident management tools.

A. i, iii. and iv. are more for developers.
B. ii. and iv. are more for developers.
C. ii, iii. and iv. are more for developers.
D. ii. and iii. are more for developers.
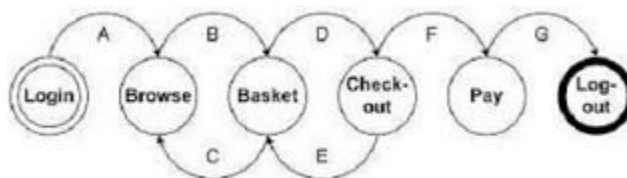
Q. 11: Which of the following is correct?

A. Impact analysis assesses the effect on the system of a defect found in regression testing.
B. Impact analysis assesses the effect of a new person joining the regression test team.
C. Impact analysis assesses whether or not a defect found in regression testing has been
fixed correctly.
D. Impact analysis assesses the effect of a change to the system to determine how much regression testing to do.

Q. 12: As part of which test process do you determine the exit criteria?

A. Test planning.
B. Evaluating exit criteria and reporting.
C. Test closure.
D. Test control.

Q. 13: Given the following state transition diagram Which of the following series of state transitions contains an INVALID transition which may indicate a fault in the system design?
Exhibit:

A. Login Browse Basket Checkout Basket Checkout Pay Logout.
B. Login Browse Basket Checkout Pay Logout.
C. Login Browse Basket Checkout Basket Logout.
D. Login Browse Basket Browse Basket Checkout Pay Logout.

Q. 14: Which of the following is a MAJOR task of test implementation and execution?
A. Measuring and analyzing results.
B. Reporting discrepancies as incidents.
C. Identifying test conditions or test requirements.
D. Assessing if more tests are needed.

Q. 15: What is beta testing?

A. Testing performed by potential customers at the developers location.
B. Testing performed by potential customers at their own locations.
C. Testing performed by product developers at the customer's location.
D. Testing performed by product developers at their own locations.

Q. 16: Given the following fragment of code, how many tests are required for 100%
decision coverage?

if width > length then
biggest_dimension = width
if height > width then
biggest_dimension = height end_if
else
biggest_dimension = length if height > length
then
biggest_dimension = height end_if
end_if

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

Q. 17: You have designed test cases to provide 100% statement and 100% decision coverage for the following fragment of code.

if width > length then
biggest_dimension = width else
biggest_dimension = length end_if

The following has been added to the bottom of the code fragment above.

print "Biggest dimension is " & biggest_dimension print "Width: " & width print "Length: " & length

How many more test cases are required?

A. One more test case will be required for 100 % decision coverage.
B. Two more test cases will be required for 100 % statement coverage, one of which will be used to provide 100% decision coverage.
C. None, existing test cases can be used.
D. One more test case will be required for 100" statement coverage.

Q. 18: A thermometer measures temperature in whole degrees only. If the temperature falls below 18 degrees, the heating is switched off. It is switched on again when the temperature reaches 21 degrees. What are the best values in degrees to cover all equivalence partitions?

A. 15, 19 and 25.
B. 17, 18 and19.
C. 18, 20 and22.
D. 16, 26 and 32.

Q. 19: Which activity in the fundamental test process creates test suites for efficient test execution?

A. Implementation and execution.
B. Planning and control.
C. Analysis and design.
D. Test closure.

Q. 20: Which of the following is TRUE?

A. Confirmation testing is testing fixes to a set of defects and Regression testing is testing to establish whether any defects have been introduced as a result of changes.
B. Confirmation testing is testing to establish whether any defects have been introduced as a result of changes and Regression testing is testing fixes to a set of defects.
C. Confirmation testing and Regression testing are both testing to establish whether any defects have been introduced as a result of changes.
D. Confirmation testing and Regression testing are both testing fixes to a set of defects.

Q. 21: Given the following decision table: Which of the following test cases and expected results is VALID?

	Rule 1	Rule 2	Rule 3	Rule 4
Conditions				
Age	<21 yrs	21-29 yrs	30-50yrs	> 50yrs
Insurance Class	A	A or B	B. C or D	C or D
Actions				
Premium	£100	£90	£70	£70
Excess	£2,500	£2,500	£500	£1000

A. 23 year old in insurance class A Premium is 0 and excess is,500.
B. 51 year old in insurance class C Premium is 0 and excess is 00.
C. 31 year old in insurance class B Premium is 0 and excess is ,500.

D. 43 year old in insurance class C Premium is 0 and excess is ,000.

Q. 22: When should configuration management procedures be implemented?

A. During test planning.
B. During test analysis.
C. During test execution.
D. When evaluating exit criteria

Q. 23: Which of the following are characteristic of regression testing ?

i) Regression testing is run ONLY once
ii) Regression testing is used after fixes have been made
iii) Regression testing is often automated
iv) Regression tests need not be maintained

Options:

A. ii, iv.
B. ii, iii.
C. i, iii, iv.
D. iii.

Q. 24: A wholesaler sells printer cartridges. The minimum order quantity is 5. There is a 20% discount for orders of 100 or more printer cartridges. You have been asked to prepare test cases using various values for the number of printer cartridges ordered. Which of the following groups contain three test inputs that would be generated using Boundary Value Analysis?

A. 5, 6, 20
B. 4, 5, 80
C. 4, 5, 99
D. 1, 20, 100

Q. 25: Which of the following activities should be performed during the selection and implementation of a testing tool?

i) Investigate the organisation's test process. ii) Conduct a proof of concept.
iii) Implement the selected tool on a project behind schedule to save time.
iv) Identify coaching and mentoring requirements for the use of the selected tool.

Options:

A. i, ii, iii.
B. ii, iii, iv.
C. i, iii, iv.

D. i, ii, iv.

Q. 26: What is the MAIN benefit of designing tests early in the life cycle?

A. It is cheaper than designing tests during the test phases.
B. It helps prevent defects from being introduced into the code.
C. Tests designed early are more effective than tests designed later.
D. It saves time during the testing phases when testers are busy.

Q. 27: Which of the following benefits are MOST likely to be achieved by using test tools?

i) Easy to access information about tests and testing.
ii) Reduced maintenance of testware.
iii) Easy and cheap to implement.
iv) Greater consistency of tests.

Options:

A. ii and iv
B. ii and iii
C. i and iv
D. i and iii

Q. 28: What is the KEY difference between preventative and reactive approaches to testing?

A. Preventative tests and reactive tests are designed as early as possible.
B. Preventative tests are designed early; reactive tests are designed after the software has been produced.
C. Preventative testing is always analytical; reactive testing is always heuristic.
D. Preventative tests are designed after the software has been produced; reactive tests are designed early in response to review comments.

Q. 29: What is the purpose of exit criteria?

A. To define when a test level is complete.
B. To determine when a test has completed.
C. To identify when a software system should be retired.
D. To determine whether a test has passed.

Q. 30: What determines the level of risk?

A. The cost of dealing with an adverse event if it occurs.
B. The probability that an adverse event will occur.
C. The amount of testing planned before release of a system.

D. The likelihood of an adverse event and the impact of the event.

Q. 31: With which of the following categories is a test comparator tool USUALLY associated?

A. Tool support for performance and monitoring.
B. Tool support for static testing.
C. Tool support for test execution and logging.
D. Tool support for the management of testing and tests.

Q. 32: Which activities form part of test planning?

i) Developing test cases.
ii) Defining the overall approach to testing.
iii) Assigning resources.
iv) Building the test environment
v) Writing test conditions.

A. i, ii & iv are true, iii & v are false.
B. ii & iii are true, i, iv & v are false.
C. iv & v are true, i, ii & iii are false.
D. i, ii & iii are true iv & v are false.

Q. 33: Match the following terms and statements.
1.Decision Table Testing
2.Decision Testing
3.State Transition Testing
4.Exploratory Testing

W. Testing carried out w boxes to achieve specific test objectives, possibly to complement structured testing.
X. A test technique used which may be used to verify different system re depending on current conditions or previous history.
Y. A test technique which combines combinations of inputs that might not otherwise have
been exercised during testing.
Z. A form of control flow testing based on decision outcomes.

Options:

A. 1Y, 2Z, 3X, 4W.
B. 1X ,2W, 3Z, 4Y.
C. 1Z, 2X, 3W, 4Y.
D. 1Z, 2Y, 3X, 4W.

Q. 34: Which type of test design techniques does the following statement best

describe a procedure to derive test cases based on the specification of a component?

A. Black Box Techniques.
B. White Box Techniques.
C. Glass Box Techniques.
D. Experience Based Techniques.

Q. 35: For which of the following would a static analysis tool be MOST useful?

A. Supporting reviews.
B. Validating models of the software.
C. Testing code executed in a special test harness.
D. Enforcement of coding standards.

Q. 36: Which of the following types of defects is use case testing MOST LIKELY to uncover?

i) Defects in the process flows during real-world use of the system.
ii) Defects in the interface parameters in integration testing.
iii) Integration defects caused by the interaction and interference of different components.
iv) Defects in the system as it transitions between one state and another.

A. ii, iii.
B. i, iii.
C. iii, iv.
D. i, ii

Q. 37: Which of the following is MOST important in the selection of a test approach?
A. Availability of tools to support the proposed techniques.
B. The budget allowed for training in proposed techniques.
C. Available skills and experience in the proposed techniques.
D. The willingness of the test team to learn new techniques.

Q. 38: Which of the following is a benefit of test independence?

A. It does not require familiarity with the code.
B. It is cheaper than using developers to test their own code.
C. It avoids author bias in defining effective tests.
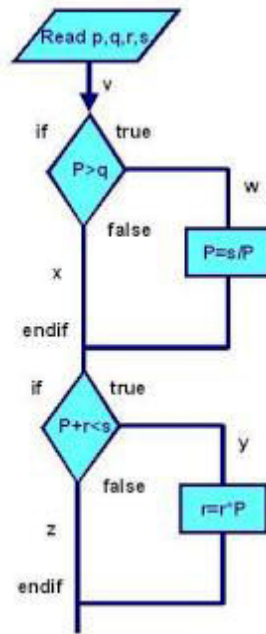D. Testers are better at finding defects than developers.

Q. 39: The above diagram represents the following paths through the code.
A. vwy
B. vwz

C. vxy
D. vxz

What is the MINIMUM combination of paths required to provide full statement coverage?
Exhibit:

A. A
B. ABD
C. ABCD
D. ACD

Q. 40: Which of the following is MOST characteristic of specification based (black-box)
techniques?

A. Test cases can be easily automated.
B. Test cases are independent of each other.
C. Test cases are derived systematically from models of the system.
D. Test cases are derived systematically from the delivered code.

Answers:
Q. 1-A
Q. 2-C
Q. 3-A
Q. 4-B
Q. 5-B
Q. 6-B
Q. 7-A
Q. 8-C

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