Question #A6 (1 point)
Which of the following BEST explains a benefit of independence of testing?

a) The use of an independent test team allows project management to assign responsibility for the quality of the final deliverable to the test team.
b) If a test team external to the organization can be afforded, then there are distinct benefits in terms of this external team not being so easily swayed by the delivery concerns of project management and the need to meet strict delivery deadlines.
c) An independent test team can work separately from the developers, need not be distracted with project requirement changes, and can restrict communication with the developers to defect reporting through the defect management system.
d) When specifications contain ambiguities and inconsistencies, assumptions are made on their interpretation, and an independent tester can be useful in questioning those assumptions and the interpretation made by the developer.

Select ONE option.

Question #A7 (1 point)
You are working as a tester in the team that follows the V-model. How does the choice of this software development lifecycle (SDLC) model impact the timing of testing?

a) Dynamic testing cannot be performed early in the SDLC.
b) Static testing cannot be performed early in the SDLC.
c) Test planning cannot be performed early in the SDLC.
d) Acceptance testing can be performed early in the SDLC.

Select ONE option.

Question #A8 (1 point)
Which of the following are advantages of DevOps?

i. Faster product release and faster time to market.
ii. Increases the need for repetitive manual testing.
iii. Constant availability of executable software.
iv. Reduction in the number of regression tests associated with code refactoring.
v. Setting up the test automation framework is inexpensive since everything is automated.

a) i, ii, and iv are advantages; iii and v are not.
b) Iii and v are advantages; i, ii, and iv are not.
c) i and iii are advantages; ii, iv, and v are not.
d) ii, iv, and v are advantages; i and iii are not.

Select ONE option.

Question #A9 (1 point)
You work as a tester in a project on a mobile application for food ordering for one of your clients. The client sent you a list of requirements. One of them, with high priority, says

> The order must be processed in less than 10 seconds in 95% of the cases.

You created a set of test cases in which a number of random orders were made, the processing time measured, and the test results were checked against the requirements.

What test type did you perform?

a) Functional, because the test cases cover the user's business requirement for the system.
b) Nonfunctional, because the measure the system's performance.
c) Functional, because the test cases interact with the user interface.
d) Structural, because we need to know the internal structure of the program to measure the order processing time.

Select ONE option.

Question #A10 (1 point)
Your organization's test strategy suggests that once a system is going to be retired, data migration shall be tested. As part of what test type is this testing MOST likely to be performed?

a) Maintenance testing.
b) Regression testing.
c) Component testing.
d) Integration testing.

Select ONE option.

Question #A11 (1 point)
The following is a list of the work products produced in the SDLC.

i. Business requirements.
ii. Schedule.
iii. Test budget.
iv. Third-party executable code.
v. User stories and their acceptance criteria.

Which of them can be reviewed?

a) i and iv can be reviewed; ii, iii, and v cannot.
b) i, ii, iii, and iv can be reviewed; v cannot.
c) i, ii, iii, and v can be reviewed; iv cannot.
d) iii, iv, and v can be reviewed; i and ii cannot.

Select ONE option.

Question #A12 (1 point)
Decide which of the following statements (i–v) are true for dynamic testing and which are true for static testing.

i. Abnormal external behaviors are easier to identify with this testing.
ii. Discrepancies from a coding standard are easier to find with this testing.
iii. It identifies failures caused by defects when the software is run.
iv. Its test objective is to identify defects as early as possible.
v. Missing coverage for critical security requirements is easier to find and fix.

a) i, iv, and v are true for static testing; ii and iii are true for dynamic testing.
b) i, iii, and iv are true for static testing; ii and v are true for dynamic testing.
c) ii and iii are true for static testing; i, iv, and v are true for dynamic testing.
d) ii, iv, and v are true for static testing; i, iii, and iv are true for dynamic testing.

Select ONE option.

Question #A13 (1 point)
Which of the following statements about formal reviews is TRUE?

a) Some reviews do not require more than one role.
b) The review process has several activities.
c) Documentation to be reviewed is not distributed before the review meeting, with the exception of the work product for specific review types.
d) Defects found during the review are not reported since they are not found by dynamic testing.

Select ONE option.

Question #A14 (1 point)
What task may management take on during a formal review?

a) Taking overall responsibility for the review.
b) Deciding what is to be reviewed.
c) Ensuring the effective running of review meetings and mediating, if necessary.
d) Recording review information such as review decisions.

Select ONE option.

Question #A15 (1 point)
A wine storage system uses a control device that measures the wine cell temperature T (measured in °C, rounded to the nearest degree) and alarms the user if it deviates from the optimal value of 12, according to the following rules:

- If $T = 12$, the system says, "Optimal temperature."
- If $T < 12$, the system says, "Temperature is too low!"
- If $T > 12$, the system says, "Temperature is too high!"

You want to use the 3-value boundary value analysis (BVA) to verify the behavior of the control device. A test input is a temperature in °C provided by the device.

What is the MINIMAL set of test inputs that achieves 100% of the desired coverage?

a) 11, 12, 13
b) 10, 12, 14
c) 10, 11, 12, 13, 14
d) 10, 11, 13, 14

Select ONE option.

Question #A16 (1 point)
Which of the following statements about branch testing is CORRECT?

a) If a program includes only unconditional branches, then 100% branch coverage can be achieved without executing any test cases.
b) If the test cases exercise all unconditional branches in the code, then 100% branch coverage is achieved.
c) If 100% statement coverage is achieved, then 100% branch coverage is also achieved.
d) If 100% branch coverage is achieved, then all decision outcomes in each decision statement in the code are exercised.

Select ONE option.

Question #A17 (1 point)
You are testing a mobile application that allows customers to access and manage their bank accounts. You are running a test suite that involves evaluating each screen, and each field on each screen, against a general list of user interface best practices derived from a popular book on the topic that maximizes attractiveness, ease of use, and accessibility for such applications.

Which of the following options BEST categorizes the test technique you are using?

a) Black-box.
b) Exploratory.
c) Checklist-based.
d) Error guessing.

Select ONE option.

Question #A18 (1 point)
Which of the following BEST describe the collaborative approach to user story writing?

a) User stories are created by testers and developers and then accepted by business representatives.
b) User stories are created by business representatives, developers, and testers together.
c) User stories are created by business representatives and verified by developers and testers.

d) User stories are created in a way that they are independent, negotiable, valuable, estimable, small, and testable.

Select ONE option.

Question #A19 (1 point)
Consider the following part of a test plan.

Testing will be performed using component testing and component integration testing. The regulations require to demonstrate that 100% branch coverage is achieved for each component classified as critical.

Which part of the test plan does this part belong to?

a) Communication.
b) Risk register.
c) Context of testing.
d) Test approach.

Select ONE option.

Question #A20 (1 point)
Your team uses planning poker to estimate the test effort for a newly required feature. There is a rule in your team that if there is no time to reach full agreement and the variation in the results is small, applying rules like "accept the number with the most votes" can be applied.

After two rounds, the consensus was not reached, so the third round was initiated. You can see the test estimation results in the table below.

	Team members' estimations						
Round 1	21	2	5	34	13	8	2
Round 2	13	8	8	34	13	8	5
Round 3	13	8	13	13	13	13	8

Which of the following is the BEST example of the next step?

a) The product owner has to step in and make a final decision.
b) Accept 13 as the final test estimate as this has most of the votes.
c) No further action is needed. Consensus has been reached.
d) Remove the new feature from the current release because consensus has not been reached.

Select ONE option.

Question #A21 (1 point)
Which of the following is NOT true regarding the test pyramid?

a) The test pyramid emphasizes having a larger number of tests at the lower test levels.
b) The closer to the top of the pyramid, the more formal your test automation should be.

c) Usually, component testing and component integration testing are automated using API-based tools.
d) For system testing and acceptance testing, the automated tests are typically created using GUI-based tools.

Select ONE option.

Question #A22 (1 point)
During risk analysis, the team considered the following risk: *The system allows too high a discount for a customer*. The team estimated the risk impact to be very high.
What can one say about the risk likelihood?

a) It is also very high. High risk impact always implies high risk likelihood.
b) It is very low. High risk impact always implies low risk likelihood.
c) One cannot say anything about risk likelihood. Risk impact and risk likelihood are independent.
d) Risk likelihood is not important with such a high risk impact. One does not need to define it.

Select ONE option.

Question #A23 (1 point)
The following list contains risks that have been identified for a new software product to be developed:

i. Management moves two experienced testers to another project.
ii. The system does not comply with functional safety standards.
iii. System response time exceeds user requirements.
iv. Stakeholders have inaccurate expectations.
v. Disabled people have problems when using the system.

Which of them are project risks?

a) i and iv are project risks; ii, iii, and v are not project risks.
b) iv and v are project risks; i, ii, and iii are not project risks.
c) i and iii are project risks; ii, iv, and v are not project risks.
d) ii and v are project risks; i, iii, and iv are not project risks.

Select ONE option.

Question #A24 (1 point)
Which of the following is an example of how product risk analysis influences thoroughness and scope of testing?

a) The test manager monitors and reports the level of all known risks on a daily basis so the stakeholders can make an informed decision on the release date.
b) One of the identified risks was "Lack of support of open-source databases," so the team decided to integrate the system with an open-source database.
c) During the quantitative risk analysis, the team estimated the total level of all identified risks and reported it as the total residual risk before testing.

d) Risk assessment revealed a very high level of performance risks, so it was decided to perform detailed performance efficiency testing early in the SDLC.

Select ONE option.

Question #A25 (1 point)
Which TWO of the following options are common metrics used for reporting on the quality level of the test object?

a) Number of defects found during system testing.
b) Total effort on test design divided by the number of designed test cases.
c) Number of executed test procedures.
d) Number of defects found divided by the size of a work product.
e) Time needed to repair a defect.

Select TWO options.

Question #A26 (1 point)
Which of the following pieces of information contained in a test progress report is the LEAST useful for business representatives?

a) Impediments to testing.
b) Branch coverage achieved.
c) Test progress.
d) New risks within the test cycle.

Select ONE option.

Exam Set A: Answers

Question #1
FL-4.2.2 (K3)
Correct answer: a
There are 12 boundary values for the final result values: 0, 50, 51, 60, 61, 70, 71, 80, 81, 90, 91, and 100. The test cases cover six of them (TC1, 91; TC2, 50; TC3, 81; TC4, 60; TC5, 70; and TC7, 51). Therefore, the test cases cover 6/12 = 50%.

a) Is correct.
b) Is not correct.
c) Is not correct.
d) Is not correct.

Question #2
FL-3.2.1 (K1)
Correct answer: d

a) Is not correct. Feedback can improve the test process, but if one only wants to improve future projects, the feedback does not need to come early or frequently.
b) Is not correct. Feedback is not used to prioritize requirements.
c) Is not correct. The quality of changes can be measured in multiple ways.
d) Is correct. Early and frequent feedback allows for the early communication of potential quality problems.

Question #3
FL-4.2.3 (K3)
Correct answer: d

a) Is not correct. A member without a missed deadline can get a discount and a gift T-Shirt after 15 bicycle rentals.
b) Is not correct. A member without a missed deadline can get a discount but no gift T-Shirt until they rented a bicycle 15 times.

L. Stapp et al., *ISTQB® Certified Tester Foundation Level*,
https://doi.org/10.1007/978-3-031-42767-1_14

c) Is not correct. Non-members cannot get a discount, even if they did not miss a deadline yet.
d) Is correct. No discount as a non-member that has also missed a deadline, but only members can receive a gift T-Shirt. Hence, the action is not correct.

Question #4
FL-5.4.1 (K2)
Correct answer: c

a) Is not correct. Traceability is the relationship between two or more work products, not between different versions of the same work product.
b) Is not correct. Maintenance testing is about testing changes; it is not related closely to versioning.
c) Is correct. To support testing, configuration management may involve the version control of all test items.
d) Is not correct. Requirements engineering is the elicitation, documentation, and management of requirements; it is not closely related to test script versioning.

Question #5
FL-4.1.1 (K2)
Correct answer: c

a) Is not correct. This is a common characteristic of white-box test techniques. Test conditions, test cases, and test data are derived from a test basis that may include code, software architecture, detailed design, or any other source of information regarding the structure of the software.
b) Is not correct. This is a common characteristic of white-box test techniques. Coverage is measured based on the items tested within a selected structure and the technique applied to the test basis.
c) Is correct. This is a common characteristic of experience-based test techniques. This knowledge and experience include expected use of the software, its environment, likely defects, and the distribution of those defects used to define tests.
d) Is not correct. This is a common characteristic of black-box test techniques. Test cases may be used to detect gaps within requirements and the implementation of the requirements, as well as deviations from the requirements.

Question #6
FL-4.2.4 (K3)
Correct answer: d
"test" and "error" transitions cannot occur in one test case. Neither can both "done" transitions. This means we need at least three test cases to achieve transition coverage. For example:

TC1: test, done
TC2: run, error, done
TC3: run, pause, resume, pause, done

Hence

a) Is not correct
b) Is not correct
c) Is not correct
d) Is correct

Question #7
FL-5.5.1 (K3)
Correct answer: c

a) Is not correct. The expected result is "the application should accept the provided input and create the user." The actual result is "The application hangs up after entering 'Test input. $ä.'"
b) Is not correct. There is a reference to the test case and to the related requirement, and it states that the defect is rejected. Also, the defect status would not be very helpful for the developers.
c) Is correct. We do not know in which test environment the anomaly was detected, and we also do not know which application (and its version) is affected.
d) Is not correct. The defect report states that the anomaly is urgent and that it is a global issue (i.e., many, if not all, test administration accounts are affected) and states the impact is high for business stakeholders.

Question #8
FL-5.1.2 (K1)
Correct answer: c

a) Is not correct. Priorities for user stories are determined by the business representative together with the development team.
b) Is not correct. Testers focus on both functional and nonfunctional aspects of the system to be tested.
c) Is correct. According to the syllabus, this is one of the ways testers add value to iteration and release planning.
d) Is not correct. Early test design is not part of release planning. Early test design does not automatically guarantee the release of quality software.

Question #9
FL-1.4.1 (K2)
Correct answer: b

a) Is not correct. Estimating the test effort is part of test planning.
b) Is correct. This is an example of defining test conditions, which is a part of test analysis.
c) Is not correct. Using test techniques to derive coverage items is a part of test design.
d) Is not correct. Reporting defects found during dynamic testing is a part of test execution.

Question #10
FL-5.3.3 (K2)
Correct answer: d

a) Is not correct. Acceptance criteria are the conditions used to decide whether the user story is ready. They cannot show work progress.
b) Is not correct. Defect reports inform about the defects. They do not show work progress.
c) Is not correct. Test completion report can be created after the iteration is finished, so it will not show the progress continuously within an iteration.
d) Is correct. Burndown charts are a graphical representation of work left to do versus time remaining. They are updated daily, so they can continuously show the work progress.

Question #11
FL-2.1.3 (K1)
Correct answer: c

a) Is not correct. It is more often used in behavior-driven development (BDD).
b) Is not correct. It is the description of test-driven development (TDD).
c) Is correct. In acceptance test-driven development (ATDD), tests are written from acceptance criteria as part of the design process.
d) Is not correct. It is used in BDD.

Question #12
FL-6.2.1 (K1)
Correct answer: b

a) Is not correct. Test automation does not introduce unknown regressions in production.
b) Is correct. Wrong allocation of effort to maintain testware is a risk.
c) Is not correct. Test tools must be selected so that they and their testware can be relied upon.
d) Is not correct. The primary goal of test automation is to reduce manual testing. So, this is a benefit, not a risk.

Question #13
FL-5.1.3 (K2)
Correct answer: c, e

a) Is not correct. Test environment readiness is a resource availability criterion; hence, it belongs to the entry criteria.
b) Is not correct. This is a resource availability criterion; hence, it belongs to the entry criteria.
c) Is correct. Estimated defect density is a measure of diligence; hence, it belongs to the exit criteria.
d) Is not correct. Requirements translated into a given format result in testable requirements; hence, it belongs to the entry criteria.

e) Is correct. Automation of regression tests is a completion criterion; hence, it belongs to the exit criteria.

Question #14
FL-3.1.2 (K2)
Correct answer: a

a) Is correct. Defect management is not less expensive. Finding and fixing defects later in SDLC is more costly.
b) Is not correct. This is a benefit of static testing.
c) Is not correct. This is a benefit of static testing.
d) Is not correct. This is a benefit of static testing.

Question #15
FL-1.5.1 (K2)
Correct answer: b

i. Is true. Having domain knowledge is an important tester skill.
ii. Is false. This is a task of the business analyst together with the business representative.
iii. Is true. Being a good team player is an important skill.
iv. Is false. Planning and organizing the work of the team is a task of the test manager or, mostly in an Agile software development project, the whole team and not just the tester.
v. Is true. Critical thinking is one of the most important skills of testers.

Hence b is correct.

Question #16
FL-2.1.6 (K2)
Correct answer: c

a) Is not correct. Retrospectives are more useful for identifying improvement opportunities and have little importance for clients.
b) Is not correct. Business representatives are not giving feedback about the product itself. Therefore, there is no financial gain to the organization.
c) Is correct. Regularly conducted retrospectives, when appropriate follow-up activities occur, are critical to continual improvement of development and testing.
d) Is not correct. Courage and respect are values of Extreme Programming and are not closely related to retrospectives.

Question #17
FL-4.4.2 (K2)
Correct answer: c

a) Is not correct. This is a new product. You probably do not have a checklist yet, and test conditions might not be known due to missing requirements.
b) Is not correct. This is a new product. You probably do not have enough information to make correct error guesses.
c) Is correct. Exploratory testing is most useful when there are few known specifications, and/or there is a pressing timeline for testing.
d) Is not correct. Branch testing is time-consuming, and your management is asking about some test results now. Also, branch testing does not involve domain knowledge.

Question #18
FL-5.1.4 (K3)
Correct answer: d
In the three-point estimation technique

$$E = (\text{optimistic} + 4^{*}\text{most likely} + \text{pessimistic})/6 = (2 + (4^{*}11) + 14)/6 = 10.$$

Hence d is correct.

Question #19
FL-4.3.3 (K2)
Correct answer: d

a) Is not correct. The fundamental strength of white-box test techniques is that the entire software implementation is taken into account during testing.
b) Is not correct. White-box coverage measures provide an objective measure of coverage and provide the necessary information to allow additional tests to be generated to increase this coverage.
c) Is not correct. White-box test techniques can be used to perform reviews (static testing).
d) Is correct. This is the weakness of the white-box test techniques. They are not able to identify the missing implementation, because they are based solely on the test object structure, not on the requirements specification.

Question #20
FL-3.2.4 (K2)
Correct answer: b
Considering the attributes:

- There is a role of a scribe—specified for walk-throughs, technical reviews, and inspections; thus, the reviews being performed cannot be informal reviews.
- The purpose is to evaluate quality—the purpose of evaluating quality is one of the most important objectives of a walk-through.

- The review meeting is led by the author of the work product—this is not allowed for inspections and is typically not done in technical reviews. A moderator is needed in walk-throughs and is allowed for informal reviews.
- Individual reviewers find potential anomalies during preparation—all types of reviews can include individual reviewers (even informal reviews).
- A review report is produced—all types of reviews can produce a review report, although informal reviews do not require documentation.

Hence b is correct.

Question #21
FL-4.2.1 (K3)
Correct answer: b
"Small garden" and "large garden" can go only with "ground floor," so we need two test cases with "ground floor," which cover these two "garden-type" partitions. We need two more test cases to cover the two other "floor" partitions and a remaining "garden-type" partition of "no garden." We need a total of four test cases:

TC1 (ground floor, small garden).
TC2 (ground floor, large garden).
TC3 (first floor, no garden).
TC4 (second or higher floor, no garden).

a) Is not correct.
b) Is correct.
c) Is not correct.
d) Is not correct.

Question #22
FL-2.1.5 (K2)
Correct answer: d

a) Is not correct. Early review is an example of the shift-left approach.
b) Is not correct. TDD is an example of the shift-left approach.
c) Is not correct. Early nonfunctional testing is an example of the shift-left approach.
d) Is correct. Test scripts should be subject to configuration management, so it makes no sense to create the test scripts before this process is set up.

Question #23
FL-6.1.1 (K2)
Correct answer: c

a) Is not correct. Test monitoring involves the ongoing checking of all activities and comparison of actual progress against the test plan. Test control involves taking the actions necessary to meet the test objectives of the test plan. No test data are prepared during these activities.
b) Is not correct. Test analysis includes analyzing the test basis to identify test conditions and prioritize them. Test design includes elaborating the test

conditions into test cases and other testware. Test data are not prepared during these activities.

c) Is correct. Test implementation includes creating or acquiring the testware necessary for test execution (e.g., test data).

d) Is not correct. Test completion activities occur at project milestones (e.g., release, end of iteration, test level completion), so it is too late for preparing test data.

Question #24

FL-4.3.1 (K2)

Correct answer: a

a) Is correct. Since 100% statement coverage is achieved, every statement, including the ones with defects, must have been executed and evaluated at least once

b) Is not correct. Coverage depends on what is tested, not on the number of test cases. For example, for code "if (x==0) y=1", one test case (x=0) achieves 100% statement coverage, but two test cases (x=1) and (x=2) together achieve only 50% statement coverage.

c) Is not correct. If there is a loop in the code, there may be an infinite number of possible paths, so it is not possible to execute all the possible paths in the code.

d) Is not correct. Exhaustive testing is not possible (see the seven testing principles section in the syllabus). For example, for code "input x; print x" any single test with arbitrary x achieves 100% statement coverage, but covers one input value.

Question #25

FL-2.1.2 (K1)

Correct answer: d

a) Is not correct.

b) Is not correct.

c) Is not correct.

d) Is correct; this rule holds for all SDLC models.

Question #26

FL-5.1.7 (K2)

Correct answer: a

Usability testing is in Q3 (1—C).
Component testing is in Q1 (2—A).
Functional testing is in Q2 (3—B).
Reliability testing is in Q4 (4—D).

Hence a is correct.

Question #27
FL-2.2.1 (K2)
Correct answer: a

The test basis for acceptance testing is the user's business needs (1D).
Communication between components is tested during component integration testing (2B).
Failures in logic can be found during component testing (3A).
Business rules are the test basis for system testing (4C).

Hence a is correct.

Question #28
FL-4.5.2 (K2)
Correct answer: b

a) Is not correct. Retrospectives are used to capture lessons learned and to improve the development and testing process, not to document the acceptance criteria.
b) Is correct. This is the standard way to document acceptance criteria.
c) Is not correct. Verbal communication does not allow to physically document the acceptance criteria as part of a user story ("card" aspect in the 3C's model).
d) Is not correct. Acceptance criteria are related to a user story, not a test plan. Also, acceptance criteria are the conditions that have to be fulfilled to decide if the user story is complete. Risks are not such conditions.

Question #29
FL-4.4.1 (K2)
Correct answer: a

a) Is correct. The basic concept behind error guessing is that the tester tries to guess what errors may have been made by the developer and what defects may be in the test object based on past experience (and sometimes checklists).
b) Is not correct. Although testers who used to be a developer may use their personal experience to help them when performing error guessing, the test technique is not based on prior knowledge of development.
c) Is not correct. Error guessing is not a usability technique for guessing how users may fail to interact with the test object.
d) Is not correct. Duplicating the development task has several flaws that make it impractical, such as the tester having equivalent skills to the developer and the time involved to perform the development. It is not error guessing.

Question #30
FL-1.4.5 (K2)
Correct answer: a, e

a) Is correct. This is done by the testers.
b) Is not correct. The product backlog is built and maintained by the product owner.
c) Is not correct. This is done by the development team.

d) Is not correct. This is a managerial role.
e) Is correct. This is done by the testers.

Question #31
FL-5.1.5 (K3)
Correct answer: a
Test TC 001 must come first, followed by TC 002, to satisfy dependencies. Afterward, TC 003 to satisfy priority and then TC 004, followed by TC 005. Hence:

a) Is correct.
b) Is not correct.
c) Is not correct.
d) Is not correct.

Question #32
FL-1.3.1 (K2)
Correct answer: a

a) Is correct. This principle means that if the same tests are repeated over and over again, eventually, these tests no longer find any new defects. This is probably why the tests all passed in this release as well.
b) Is not correct. This principle says about the mistaken belief that just finding and fixing a large number of defects will ensure the success of a system.
c) Is not correct. This principle says that a small number of components usually contain most of the defects.
d) Is not correct. This principle states that testing all combinations of inputs and preconditions is not feasible.

Question #33
FL-5.2.4 (K2)
Correct answer: c

a) Is not correct. We do not accept the risk; concrete actions are proposed.
b) Is not correct. No contingency plans are proposed.
c) Is correct. The proposed actions are related to testing, which is a form of risk mitigation.
d) Is not correct. Risk is not transferred but mitigated.

Question #34
FL-4.5.3 (K3)
Correct answer: a

a) Is correct. This test covers two acceptance criteria: one about editing the document and one about saving changes.
b) Is not correct. Acceptance criteria cover the editor activities, not the content owner activities.
c) Is not correct. Scheduling the edited content for publication may be a nice feature, but it is not covered by the acceptance criteria.

d) Is not correct. Acceptance criteria state about reassigning from an editor to the content owner, not to another editor.

Question #35
FL-2.2.3 (K2)
Correct answer: b

Because TC1 and TC3 failed in Execution 1 [i.e., test (1) and test (3)], test (4) and test (6) are confirmation tests.
Because TC2 and TC3 failed in Execution 2 [i.e., tests (5) and (6)], test (8) and test (9) are also confirmation tests.
TC2 passed in Execution 1 [i.e., test (2)], so test (5) is a regression test.
TC1 passed in the Execution 2 [i.e., test (4)], so test (7) is also a regression test.

Hence b is correct.

Question #36
FL-1.5.2 (K1)
Correct answer: d

a) Is not correct. The test automation approach is defined by testers with the help of developers and business representatives.
b) Is not correct. The test strategy is decided in collaboration with the developers.
c) Is not correct. Testers, developers, and business representatives are part of the whole team approach.
d) Is correct. Testers will work closely with business representatives to ensure that the desired quality levels are achieved. This includes supporting and collaborating with them to help them create suitable acceptance tests.

Question #37
FL-3.2.5 (K1)
Correct answer: d

a) Is not correct. Adequate time for individuals is a success factor.
b) Is not correct. Splitting work products into small adequate parts is a success factor.
c) Is not correct. Avoiding behaviors that might indicate boredom, exasperation, etc. is a success factor.
d) Is correct. During reviews one can find defects, not failures.

Question #38
FL-1.2.1 (K2)
Correct answer: a

a) Is correct. It is important that testers are involved from the beginning of the software development lifecycle (SDLC). It will increase understanding of design decisions and will detect defects early.
b) Is not correct. Both developers and testers will have more understanding of each other's work products and how to test the code.

c) Is not correct. If testers can work closely with system designers, it will give them insight as to how to test.
d) Is not correct. Testing will not be successful if legal requirements are not tested for compliance.

Question #39
FL-1.1.1 (K1)
Correct answer: c

a) Is not correct. It is impossible to prove that there are no defects anymore in the system under test. See testing principle 1.
b) Is not correct. See testing principle 7.
c) Is correct. Testing finds defects and failures, which reduces the level of risk and at the same time gives more confidence in the quality level of the test object.
d) Is not correct. It is impossible to test all combinations of inputs (see testing principle 2).

Question #40
FL-1.4.2 (K2)
Correct answer: b

i. Is true. The SDLC has an influence on the test process.
ii. Is false. The number of defects detected in previous projects may have some influence, but this is not as significant as i, iii, and iv.
iii. Is true. The identified product risks are one of the most important factors influencing the test process.
iv. Is true. Regulatory requirements are important factors influencing the test process.
v. Is false. The test environment should be a copy of the production environment but has no significant influence on the test process.

Hence b is correct.

Additional Sample Questions—Answers

Question #A1
FL-1.1.2 (K2)
Correct answer: a

a) Is correct. Debugging is the process of finding, analyzing, and removing the causes of failures in a component or system.
b) Is not correct. Testing is the process concerned with planning, preparation, and evaluation of a component or system and related work products to determine that they satisfy specified requirements, to demonstrate that they are fit for purpose and to detect defects. It is not related to fixing causes of failures.
c) Is not correct. Requirement elicitation is the process of gathering, capturing, and consolidating requirements from available sources. It is not related to fixing causes of failures.
d) Is not correct. Defect management is the process of recognizing, recording, classifying, investigating, resolving, and disposing of defects. It is not related to fixing causes of failures.

Question #A2
FL-1.2.2 (K1)
Correct answer: d

a) It is not correct. See justification d.
b) It is not correct. See justification d.
c) It is not correct. See justification d.
d) Is correct. Testing and quality assurance are not the same. Testing is the process consisting of all software development lifecycle (SDLC) activities, both static and dynamic, concerned with planning, preparation, and evaluation of a component or system and related work products to determine that they satisfy specified requirements, to demonstrate that they are fit for purpose and to detect defects. Quality assurance is focused on establishing, introducing, monitoring, improving, and adhering to the quality-related processes.

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Question #A3
FL-1.2.3 (K2)
Correct answer: d

a) Is not correct. The root cause is the distraction that the programmer experienced while programming.
b) Is not correct. Accepting invalid inputs is a failure.
c) Is not correct. The error is the mistaken thinking that resulted in putting the defect in the code.
d) Is correct. The problem in the code is a defect.

Question #A4
FL-1.4.3 (K2)
Correct answer: d

The testware under consideration is a test charter. Test charters are the output from test design. Hence d is correct.

Question #A5
FL-1.4.4 (K2)
Correct answer: c

a) Is not correct. Performing the impact analysis will not give information about completeness of tests. Analyzing the impact analysis of changes will help to select the right test cases for execution.
b) Is not correct. Traceability does not give information about the estimated level of residual risk if the test cases are not traced back to risks.
c) Is correct. Performing the impact analysis of the changes helps in selecting the test cases for the regression test.
d) Is not correct. Analyzing the traceability between the test basis, test objects, and test cases does not help in selecting test data to achieve the assumed coverage of the test object. Selecting test data is more related to test analysis and test implementation, not traceability.

Question #A6
FL-1.5.3 (K2)
Correct answer: d

a) Is not correct. Quality should be the responsibility of everyone working on the project and not the sole responsibility of the test team.
b) Is not correct. First, it is not a benefit if an external test team does not meet delivery deadlines, and second, there is no reason to believe that external test teams will feel they do not have to meet strict delivery deadlines.
c) Is not correct. It is bad practice for the test team to work in complete isolation, and we would expect an external test team to be concerned with changing project requirements and communicating well with developers.
d) Is correct. Specifications are never perfect, meaning that assumptions will have to be made by the developer. An independent tester is useful in that they can

challenge and verify the assumptions and subsequent interpretation made by the developer.

Question #A7
FL-2.1.1 (K2)
Correct answer: a

a) Is correct. In sequential development models, in the initial phases, testers participate in requirement reviews, test analysis, and test design. The executable code is usually created in the later phases, so dynamic testing cannot be performed early in the SDLC.
b) Is not correct. Static testing can always be performed early in the SDLC.
c) Is not correct. Test planning should be performed early in the SDLC before the test project begins.
d) Is not correct. Acceptance testing can be performed when there is a working product. In sequential SDLC models, the working product is usually delivered late in the SDLC.

Question #A8
FL-2.1.4 (K2)
Correct answer: c

i. Is true. Faster product release and faster time to market is an advantage of DevOps.
ii. Is false. Typically, we need less effort for manual tests because of the use of test automation.
iii. Is true. Constant availability of executable software is an advantage.
iv. Is false. More regression tests are needed.
v. Is false. Not everything is automated and setting up a test automation framework is expensive.

Hence c is correct.

Question #A9
FL-2.2.2 (K2)
Correct answer: b

a) Is not correct. The fact that the requirement about the system's performance comes directly from the client and that the performance is important from the business point of view (i.e., high priority) does not make these tests functional, because they do not check "what" the system does, but "how" (i.e., how fast the orders are processed).
b) Is correct. This is an example of performance testing, a type of nonfunctional testing.
c) Is not correct. From the scenario, we do not know if interacting with the user interface is a part of the test conditions. But even if we did, the main test objective of these tests is to check the performance, not the usability.

d) Is not correct. We do not need to know the internal structure of the code to perform the performance testing. One can execute performance efficiency tests without structural knowledge.

Question #A10
FL-2.3.1 (K2)
Correct answer: a

a) Is correct. When a system is retired, this can require testing of data migration, which is a form of maintenance testing.
b) Is not correct. Regression testing verifies whether a fix accidentally affected the behavior of other parts of the code, but now we are talking about data migration to a new system.
c) Is not correct. Component testing focuses on individual hardware or software components, not on data migration.
d) Is not correct. Integration testing focuses on interactions between components and/or systems, not on data migration.

Question #A11
FL-3.1.1 (K1)
Correct answer: c
Only third-party executable code cannot be reviewed. Hence the correct answer is c.

Question #A12
FL-3.1.3 (K2)
Correct answer: d

i. These behaviors are easily detectable while the software is running. Hence, dynamic testing shall be used to identify them.
ii. This is an example of deviations from standards, which is a typical defect that is easier found with static testing.
iii. If the software is executed during the test, it is dynamic testing.
iv. Identifying defects as early as possible is the test objective of both static testing and dynamic testing.
v. This is an example of gaps in the test basis traceability or coverage, which is a typical defect that is easier found with static testing.

Hence d is correct.

Question #A13
FL-3.2.2 (K2)
Correct answer: b

a) Is not correct. In all types of reviews, there is more than one role, even in informal ones.
b) Is correct. There are several activities during the formal review process.

c) Is not correct. Documentation to be reviewed should be distributed as early as possible.
d) Is not correct. Defects found during the review should be reported.

Question #A14
FL-3.2.3 (K1)
Correct answer: b

a) Is not correct. This is the task of the review leader.
b) Is correct. This is the task of the management in a formal review.
c) Is not correct. This is the task of the moderator.
d) Is not correct. This is the task of the scribe.

Question #A15
FL-4.2.2 (K3)
Correct answer: c
There are three equivalence partitions: {..., 10, 11}, {12}, and {13, 14, ...}. The boundary values are 11, 12, and 13. In the three-point boundary value analysis for each boundary, we need to test the boundary and both its neighbors, so:

- For 11, we test 10, 11, 12.
- For 12, we test 11, 12, 13.
- For 13, we test 12, 13, 14.

Altogether, we need to test 10, 11, 12, 13, and 14.

a) Is not correct.
b) Is not correct.
c) Is correct.
d) Is not correct.

Question #A16
FL-4.3.2 (K2)
Correct answer: d

a) Is not correct. In this case, one test case is still needed since there is at least one (unconditional) branch to be covered.
b) Is not correct. Covering only unconditional branches does not imply covering all conditional branches.
c) Is not correct. 100% branch coverage implies 100% statement coverage, not otherwise. For example, for an IF decision without the ELSE, one test is enough to achieve 100% statement coverage, but it only achieves 50% branch coverage.
d) Is correct. Each decision outcome corresponds to a conditional branch, so 100% branch coverage implies 100% decision coverage.

Question #A17
FL-4.4.3 (K2)
Correct answer: c

a) Is not correct. The book provides general guidance, and is not a formal requirements document, a specification, or a set of use cases, user stories, or business processes.
b) Is not correct. While you could consider the list as a set of test charters, it more closely resembles the list of test conditions to be checked.
c) Is correct. The list of user interface best practices is the list of test conditions to be systematically checked.
d) Is not correct. The tests are not focused on failures that could occur but rather on knowledge about what is important for the user, in terms of usability.

Question #A18
FL-4.5.1 (K2)
Correct answer: b

a) Is not correct. Collaborative user story writing means that all stakeholders create the user stories collaboratively, to obtain the shared vision.
b) Is correct. Collaborative user story writing means that all stakeholders create the user stories collaboratively, to obtain the shared vision.
c) Is not correct. Collaborative user story writing means that all stakeholders create the user stories collaboratively, to obtain the shared vision.
d) Is not correct. This is the list of properties that each user story should have, not the description of the collaboration-based approach.

Question #A19
FL-5.1.1 (K2)
Correct answer: d

a) Is not correct. The paragraph contains information on test levels and exit criteria, which are part of the test approach.
b) Is not correct. The paragraph contains information on test levels and exit criteria, which are part of the test approach.
c) Is not correct. The paragraph contains information on test levels and exit criteria, which are part of the test approach.
d) Is correct. The paragraph contains information on test levels and exit criteria, which are part of the test approach.

Question #A20
FL-5.1.4 (K3)
Correct answer: b

a) Is not correct. This should be a team activity and not overruled by one team member.
b) Is correct. If test estimates are not the same but the variation in the results is small, applying rules like “accept the number with the most votes” can be done.

c) Is not correct. There is no consensus yet as some say 13 and others say 8.
d) Is not correct. A feature should not be removed only because the team cannot agree on the test estimates.

Question #A21
FL-5.1.6 (K1)
Correct answer: b

a) Is not correct. The test pyramid emphasizes having a larger number of tests at the lower test levels.
b) Is correct. It is not true that near the top of pyramid, test automation should be more formal.
c) Is not correct. Usually component testing and component integration testing are automated using API-based tools.
d) Is not correct. For system testing and acceptance testing, the automated tests are typically created using GUI-based tools.

Question #A22
FL-5.2.1 (K1)
Correct answer: c

a) Is not correct. Risk impact and risk likelihood are independent.
b) Is not correct. Risk impact and risk likelihood are independent.
c) Is correct. Risk impact and risk likelihood are independent.
d) Is not correct. We need both factors to calculate risk level.

Question #A23
FL-5.2.2 (K2)
Correct answer: a

i. Project risk.
ii. Product risk.
iii. Product risk.
iv. Project risk.
v. Product risk.

Hence a is correct.

Question #A24
FL-5.2.3 (K2)
Correct answer: d

a) Is not correct. This is an example of a risk monitoring activity, not risk analysis.
b) Is not correct. This is an example of an architectural decision, not related with testing.
c) Is not correct. This is an example of performing a quantitative risk analysis and is not related to thoroughness or scope of testing.
d) Is correct. This shows how risk analysis impacts the thoroughness of testing (i.e., the level of detail).

Question #A25
FL-5.3.1 (K1)
Correct answer: a, d

a) Is correct. The number of defects found is related to the test object quality.
b) Is not correct. This is the measure of the test efficiency not the test object quality.
c) Is not correct. The number of test cases executed does not tell us anything about the quality; test results might do.
d) Is correct. Defect density is related to the test object quality.
e) Is not correct. Time to repair is a process metric. It does not tell us anything about the product quality.

Question #A26
FL-5.3.2 (K2)
Correct answer: b

a) Is not correct. Impediments to testing can be high level and business-related, so this is an important piece of information for business stakeholders.
b) Is correct. Branch testing is a technical metric used by developers and technical testers. This information is of no interest to business representatives.
c) Is not correct. Test progress is project related, so it may be useful for business representatives.
d) Is not correct. Risks impact product quality, so it may be useful for business representatives.

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