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Foundation Level Sample Exam

SET C v2.3.0 – GTB-Edition –

CTFL Syllabus Version v4.0

ISTQB® Certified Tester Foundation Level

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2.0	24.11.2024	Initial version incl. reviews
2.1	16.02.2025	Final
2.2.1	06.03.2025	Q17 justification corrected/improved
2.3.0	08.06.2025	Q5 adapted as in German edition

Introduction

This is a sample exam. It helps candidates to prepare for the actual certification exam. Questions are included whose structure, layout and format are like a regular ISTQB®/ GTB Certified Tester Foundation Level exam. It is strictly forbidden to use the exam questions as content of a certification exam.

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Exam notes

Number of questions: 40

Duration of the exam: 60 minutes

Total score: 40 (one point per question)

Score to pass the exam: 26 (or more)

Percentage of passing the exam: 65% (or more)

Question 1	**FL-1.1.1**	**K1**	**Score 1.0**

Which of the following is A TYPICAL test objective?

Please select ONE Option! (1 out of 4)

a)	Validating that documented requirements are met.	□
b)	Causing failures and identifying defects.	☒
c)	Initiating errors and identifying root causes.	□
d)	Verifying the test object meets user expectations.	□

FL-1.1.1 (K1) Identify typical test objectives.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 1.1.1)

a) FALSE –Validating that documented requirements are met is incorrect as validation is concerned with meeting user requirements and expectations, while verification is concerned with meeting specified requirements, so this would be correct if we replaced ‘validating’ with ‘verifying’ (see [CTFL 4.0], section 1.1.1, 5th bullet point under ‘Typical test objectives’).

b) CORRECT – Causing failures and identifying defects is probably the most common objective of dynamic testing. (see [CTFL 4.0], section 1.1.1, 2nd bullet point under ‘Typical test objectives’).

c) FALSE –Initiating errors and identifying root causes is incorrect because testers do not initiate errors, they try to cause failures. Errors are typically made by developers (and cannot really be initiated) and result in defects, which testers attempt to identify either directly through static testing or indirectly through failures with dynamic testing. Identifying root causes is useful but is part of debugging, which is a separate activity to testing (see [CTFL 4.0], section 1.1.1, 2nd bullet point partial and section 1.1.2, last paragraph).

d) FALSE –Verifying the test object meets user expectations is incorrect as verification is concerned with checking specified (documented) requirements are met, while validation is concerned with meeting user requirements and expectations, so this would be correct if we replaced ‘verifying’ with ‘validating’. (see [CTFL 4.0], section 1.1.1, last bullet point under ‘Typical test objectives’).

Question 2	FL-1.1.2	K2	Score 1.0

Which of the following statements BEST describes the difference between testing and debugging?

Please select ONE Option! (1 out of 4)

a)	Testing causes failures while debugging fixes failures.	☐
b)	Testing is a negative activity while debugging is a positive activity.	☐
c)	Testing determines that defects exist while debugging removes defects.	☒
d)	Testing finds the cause of defects while debugging fixes the cause of defects.	☐

FL-1.1.2 (K2) Differentiate testing from debugging.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 1.1.2)

a) FALSE –Dynamic testing does cause failures (from which defects can then be located and fixed). However, debugging is concerned with locating defects and fixing these defects. Therefore, debugging does not fix failures. (see [CTFL 4.0], section 1.1.2, 1st and 2nd paragraphs).

b) FALSE –Both testing and debugging contribute to improving the quality of the test object, so should really both be considered positively. Debugging is generally considered to be a positive activity as it is fixing something. Dynamic testing does involve intentionally causing the test object to fail, which is why some people consider it a negative activity, but that is a very narrow view (and not one typically held by testers). Both positive and negative test cases are possible. Positive test cases check that the test object correctly performs what it is supposed to do, while negative testing checks that the test object does not do what it is not supposed to do. (see [CTFL 4.0], section 1.1.2, 1st and 2nd paragraph).

c) CORRECT – Testing determines that defects exist either directly through observation of the defect in reviews (or by a tool in static analysis), or indirectly by causing a failure in dynamic testing. Debugging is a separate activity from testing (normally performed by developers) and is concerned with locating defects (only for dynamic testing) and fixing the defects. (see [CTFL 4.0], section 1.1.2, 1st and 2nd paragraph).

d) FALSE –The causes of defects are typically human errors. Testing finds defects either directly through static testing, or indirectly by causing failures in dynamic testing, and debugging fixes defects. So, testing does not find the cause of defects and debugging does not fix the causes of defects. (see [CTFL 4.0], section 1.1.2, 3rd paragraph).

Question 3	FL-1.3.1	K2	Score 1.0

The ‘absence-of-defects fallacy’ is one of the principles of testing. Which of the following is an example of addressing this principle in practice?

Please select ONE Option! (1 out of 4)

a)	Explaining that it is not possible for testing to show the absence of defects.	□
b)	Supporting the end users to perform acceptance testing.	☒
c)	Ensuring that no implementation defects remain in the delivered system.	□
d)	Modifying tests that cause no failures to ensure few defects remain.	□

FL-1.3.1 (K2) Explain the seven testing principles.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 1.3.1)

The 'absence-of-defects fallacy' is concerned with the idea that ensuring correctness in accordance with the requirements (i.e., verifying the absence of implementation defects) does not guarantee user satisfaction with the system. To address this it is also necessary to validate that the system meets users' needs and expectations, fulfills business objectives, and outperforms competing systems.

a) FALSE – The 'testing shows the presence, not the absence of defects' principle explains that while testing can detect the existence of defects in the test object, it is not possible to demonstrate that there are no defects and, therefore, guarantee its correctness. Therefore, explaining that it is not possible for testing to show the absence of defects would partially address this principle, not the 'absence-of-defects' fallacy. (see [CTFL 4.0], section 1.3, 1st principle).

b) CORRECT – By supporting the end user to perform acceptance testing it should be possible to validate that the system meets users' needs and expectations. (see [CTFL 4.0], section 1.3, 7th principle, last paragraph).

c) FALSE – It is not possible to ensure that no implementation defects remain in the delivered system as the 'testing shows the presence, not the absence of defects' principle explains that while testing can detect the existence of defects in the test object, it is not possible to demonstrate that there are no defects and, therefore, guarantee its correctness. (see [CTFL 4.0], section 1.3, 1st principle).

d) FALSE – Modifying tests that cause no failures to ensure few defects remain is one way to address the 'tests wear out' principle. This principle is concerned with the idea that repeating identical tests on unaltered code is unlikely to uncover novel defects and therefore, modifying tests may be essential. This will not validate that the system meets users' needs and expectations. (see [CTFL 4.0], section 1.3, 5th principle).

Question 4	FL-1.4.1	K2	Score 1.0

Which of the following test activities are MOST likely to involve the application of boundary value analysis and equivalence partitioning?

Please select TWO Options! (2 out of 5)

a)	Test implementation	□
b)	Test design	☒
c)	Test execution	□
d)	Test monitoring	□
e)	Test analysis	☒

FL-1.4.1 (K2) Summarize the different test activities and tasks.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 1.4.1)

Given the following description of test analysis:

To identify the features that require testing, the test basis is analyzed and defined as test conditions, which are then prioritized along with related risks. The systematic identification of test conditions as coverage items often involves using test techniques both during test analysis and as part of the test design activity.

From the above description, it can be seen that test techniques are often used in the test analysis and test design activities. Boundary value analysis and equivalence partitioning are test techniques.

a) FALSE – Test implementation is not likely to involve the use of test techniques as it is mostly concerned with assembling test cases into test procedures, while test techniques create test cases. (see [CTFL 4.0], Section 1.4.1, 5th paragraph: ‘The test realisation includes...’).

b) CORRECT – Test design is likely to involve the use of test techniques to create test cases from test conditions and coverage items. (see [CTFL 4.0], Section 1.4.1, 4th paragraph: ‘The test design includes...’).

c) FALSE – Test execution is not likely to involve the use of test techniques as it is mostly concerned with executing test procedures (and so test cases), while test techniques create test cases. (see [CTFL 4.0], section 1.4.1, 6th paragraph: ‘The test procedure includes...’).

d) FALSE – Test monitoring is not likely to involve the use of test techniques. Test monitoring is mostly concerned with ongoing checks to ensure the plan is being followed, while test techniques create test cases. (see [CTFL 4.0], section 1.4.1, 6th paragraph: ‘The test procedure includes...’).

e) CORRECT – Test analysis is likely to involve the use of test techniques to identify test conditions. (see [CTFL 4.0], Section 1.4.1, 3rd paragraph: ‘The test analysis includes...’).

Question 5	FL-1.4.3	K2	Score 1.0

Given the following test activities:

A. Test analysis

B. Test design

C. Test implementation

D. Test completion

And the following testware:

1. Coverage items

2. Change requests

3. Test execution schedule

4. Prioritized test conditions

Which of the following BEST shows the testware produced by the activities?

Please select ONE Option! (1 out of 4)

a)	1B, 2D, 3C, 4A	☒
b)	1B, 2D, 3A, 4C	□
c)	1D, 2C, 3A, 4B	□
d)	1D, 2C, 3B, 4A	□

FL-1.4.3 (K2) Differentiate the testware that supports the test activities.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 1.4.3)

Considering each of the listed test activities and their output testware:

a) Test analysis - prioritized test conditions (4) (e. g., acceptance criteria), and defect reports for defects identified in the test basis. (see [CTFL 4.0], Section 1.4.3, 4th paragraph: ‘Test analysis... (prioritised) test conditions (...)’).

b) Test design - prioritized test cases, test charters, coverage items (1), test data requirements, and test environment requirements. (see [CTFL 4.0], Section 1.4.3, 5th paragraph: ‘[...] overhang elements [...]’).

c) Test implementation - test procedures, automated test scripts, test suites, test data, test execution schedule (3), and test environment elements such as stubs, drivers, simulators, and service virtualizations. (see [CTFL 4.0], Section 1.4.3, 6th paragraph: ‘Test execution plans...’).

d) Test completion - test completion report, documented lessons learned, action items for improvement, and change requests (2) (as product backlog items). (see [CTFL 4.0], section 1.4.1, last paragraph: ‘Amendments...’).

Thus:

a) CORRECT – The correct match is: 1B, 2D, 3C, 4A

b) FALSE

c) FALSE

d) FALSE

Question 6	FL-1.4.5	K2	Score 1.0

Which of the following statements about the different testing roles is MOST likely to be CORRECT?

Please select ONE Option! (1 out of 4)

a)	In Agile software development, the test management role is the primary responsibility of the team, while the testing role is primarily the responsibility of a single individual from outside the team.	□
b)	The testing role is primarily responsible for test monitoring and control, while the test management role is primarily responsible for test planning and test completion.	□
c)	In Agile software development, test management activities that span multiple teams are handled by a test manager outside the team, while some test management tasks are handled by the team itself.	☒
d)	The test management role is primarily responsible for test analysis and test design, while the testing role is primarily responsible for test implementation and execution.	□

FL-1.4.5 (K2) Compare the different roles in testing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 1.4.5)

a) FALSE – Although it is correct to say that in Agile software development, some of the test management tasks may be handled by the Agile team itself, the testing role is not primarily the responsibility of a single individual from outside the team. Instead the testing is more likely to be performed by various team members following the whole-team approach.

b) FALSE – The test management role primarily involves activities related to test planning, test monitoring and control, and test completion. So, although this statement is partially correct, it is wrong to say that the testing role is primarily responsible for test monitoring and control.

c) CORRECT – In Agile software development, some of the test management tasks may be handled by the Agile team itself. However, for test activities that span multiple teams within an organization, test managers outside of the development team may perform these tasks. (see [CTFL 4.0], section 1.4.5, 2nd paragraph).

d) FALSE – The test management role primarily involves activities related to test planning, test monitoring and control, and test completion, while the testing role is primarily responsible for the technical and engineering aspects of testing, such as test analysis, test design, test implementation, and test execution. Thus the test management role is not normally responsible for test analysis and test design, although it is correct to say that the testing role is primarily responsible for test implementation and test execution.

Question 7	FL-1.5.2	K1	Score 1.0

Which of the following is an advantage of the whole-team approach?

Please select ONE Option! (1 out of 4)

a)	Teams with no testers.	□
b)	Improved team dynamics.	☒
c)	Specialist team members.	□
d)	Larger team sizes.	□

FL-1.5.2 (K2) Recall the advantages of the whole team approach.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 1.5.2)

a) FALSE – In the whole-team approach, testers play a vital role by sharing their testing expertise with the team and guiding product development. They collaborate with other team members to achieve the desired quality levels and work with business representatives to create acceptance tests. Testers also partner with developers to determine the optimal test strategy and automation approaches.

b) CORRECT – By leveraging the diverse skill sets of each team member most effectively, the whole-team approach fosters superior team dynamics, promotes robust communication and collaboration, and generates a synergistic effect that benefits the entire project. (see [CTFL 4.0.2], Section 1.5.2, ‘’The whole-team approach improves team dynamics, (...)").

c) FALSE – The whole-team approach allows any team member with the requisite skills and knowledge to undertake any task, thus specialist team members are not an advantage of this approach.

d) FALSE – There is no specific guidance on the optimum size of teams using the whole-team approach, and there is no suggestion that larger teams are better.

Question 8	FL-1.5.3	K2	Score 1.0

Which of the following statements about the independence of testing is CORRECT?

Please select ONE Option! (1 out of 4)

a)	Independent testers will find defects due to their different technical perspective from developers, but their independence may lead to an adversarial relationship with the developers.	☒
b)	Developers' familiarity with their own code means they only find a few defects in it, however their shared software background with testers means these defects would also be found by the testers.	□
c)	Independent testing requires testers who are outside the developer's team and ideally from outside the organization, however these testers find it difficult to understand the application domain.	□
d)	Testers from outside the developer's team are more independent than testers from within the team, but the testers from within the team are more likely to be blamed for delays in product release.	□

FL-1.5.3 (K2) Distinguish the benefits and drawbacks of independence of testing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 1.5.3)

a) CORRECT – The primary benefit of independence in testing is that testers are more likely to identify different types of failures and defects compared to developers, due to their varied backgrounds, technical viewpoints, and potential biases, including cognitive bias. However, the main disadvantage of independence in testing is that testers may become isolated from the development team, leading to communication problems, a lack of collaboration, and potentially an adversarial relationship, with testers being blamed for delays and bottlenecks in the release process. (see [CTFL 4.0], section 1.5.3; 1st and 4th paragraph, 1st sentence in each case).

b) FALSE – A developer's familiarity with the code does not mean that they rarely find defects in it, instead this familiarity means they can efficiently find many defects in their own code. And, rather than developers and testers having a shared background, developers having a different background to testers is normally cited as the reason that testers and developers find different kinds of defects.

c) FALSE – Testing can be conducted at different levels of independence, ranging from no independence for the author to very high independence for testers from outside the organization. In most projects, multiple levels of independence are utilized, with developers performing component and component integration testing, the test team performing system and system integration testing, and business representatives performing acceptance testing. So, testers can be in the developer's team and do not need to come from outside the organization. Knowledge of the application domain will change from case-to-case and is not dependent on the level of independence.

d) FALSE – Testing can be conducted at different levels of independence, ranging from no independence for the author to very high independence for testers from outside the organization, with testers from outside the developer's team generally more independent than testers from within the team. However, there is more reason to believe that testers from outside the team are likely to be more isolated from the developers and so are more likely to be blamed for delays in product release.

Question 9	FL-2.1.2	K1	Score 1.0

Which of the following is a good testing practice that applies to all software development lifecycles?

Please select ONE Option! (1 out of 4)

a)	For each test level, there is a corresponding development level.	□
b)	For each test objective, there is a corresponding development objective.	□
c)	For every software test activity, there is a corresponding user activity.	□
d)	For every software development activity, there is a corresponding test activity.	☒

FL-2.1.2 (K2) Recall good testing practices that apply to all software development lifecycles.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 2.1.2)

a) FALSE – Quality control applies to all development activities, meaning that every software development activity has a corresponding test activity. However, here we are attempting to equate test levels with development levels, and, although we know what is meant by 'test levels', there is no common understanding of the term ' development level'. (see [CTFL 4.0], Section 2.1.2, 1st paragraph: ... For every software development activity, there is a corresponding test activity').

b) FALSE – Every software development activity has a corresponding test activity; however test objectives are quite different. For instance, there might be a test objective of ensuring that a test object adheres to a contractual requirement that a certain type of testing must be performed before delivery. In this case there is no reason for there to be a corresponding development objective. (see [CTFL 4.0], section 2.1.2, 'Development Objective').

c) FALSE – Quality control applies to all development activities, meaning that every software development activity has a corresponding test activity. However, the same symmetry does not apply to testing and user activities. For instance, for some systems it is difficult to even identify the end users. Also, some test activities are focused on developers (e. g., testing for ease of maintainability), which has no user aspect to it.

d) CORRECT – Quality control applies to all development activities, meaning that every software development activity has a corresponding test activity. (see [CTFL 4.0], section 2.1.2, 1st paragraph, 1st bullet point)

Question 10	FL-2.1.3	K1	Score 1.0

Which of the following is an example of a test-first approach to development?

Please select ONE Option! (1 out of 4)

a)	Component Test-Driven Development	□
b)	Integration Test-Driven Development	□
c)	System Test-Driven Development	□
d)	Acceptance Test-Driven Development	☒

FL-2.1.3 (K1) Recall the examples of test-first approaches to development.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 2.1.3)

a) FALSE – Component Test-Driven Development is not a correct example of a test-first approach to development.

b) FALSE – Integration Test-Driven Development is not a correct example of a test-first approach to development.

c) FALSE – System Test-Driven Development is not a correct example of a test-first approach to development.

d) CORRECT – Acceptance Test-Driven Development (ATDD) is a well-known example of a test-first approach to development. (see [CTFL 4.0], Section 2.1.3, 3rd paragraph, 2nd sentence: 'Tests are written before the part of the application that fulfils the tests is developed.')

Question 11	FL-2.1.5	K2	Score 1.0

Which of the following provides the BEST description of the shift-left approach?

Please select ONE Option! (1 out of 4)

a)	When agreed by the developers, manual activities on the left-hand side of the test process are automated to support the principle of 'early testing saves time and money'.	□
b)	Where cost-effective, test activities are moved to be performed earlier in the software development lifecycle (SDLC) to reduce the total cost of quality by reducing the number of defects found later in the SDLC.	☒
c)	When they have spare time available, testers are required to automate tests for regression testing, starting with component tests and component integration tests.	□
d)	When available, testers are trained to perform tasks early in the SDLC to allow more test activities to be automated later in the SDLC.	□

FL-2.1.5 (K2) Explain the shift-left approach.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 2.1.5)

a) FALSE – Practices involved in shift-left testing are aimed at implementing more testing activities in the early phases of the development life cycle, portraying the SDLC as moving from left to right. There is no such thing as the left-hand side of the test process.

b) CORRECT – Shift-left emphasizes the importance of starting testing earlier in the software development lifecycle (SDLC). Implementing shift-left testing necessitates additional training, and increased effort and costs during the early stages of the SDLC, nevertheless, overall savings should be higher. (see [CTFL 4.0], section 2.1.5. 1. and last paragraph)

c) FALSE – Although automated component tests and component integration tests for regression testing are generally valuable, the creation of these tests is normally the responsibility of the developers, and if a continuous integration/continuous delivery (CI/CD) approach is followed, then these tests will have been submitted with the code. In some situations the tester may automate tests for regression testing, and sometimes even for component tests and component integration tests, however this is not part of a 'shift-left' approach which moves testing earlier in the SDLC.

d) FALSE – Training testers to perform tasks early in the SDLC would support a shift-left approach by emphasizing the importance of starting testing earlier in the SDLC. However, automating more test activities to be performed later in the SDLC is not part of a 'shift-left' approach.

Question 12	FL-2.1.6	K2	Score 1.0

Which of the following is LEAST likely to occur as a result of a retrospective?

Please select ONE Option! (1 out of 4)

a)	The quality of future test objects improves by identifying improvements in development practices.	☐
b)	Test efficiency improves by speeding up the configuration of test environments through automation.	☐
c)	End users' understanding of the development and test processes is improved.	☒
d)	Automated test scripts are enhanced through feedback from developers.	☐

FL-2.1.6 (K2) Explain how retrospectives can be used as a mechanism for process improvement.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 2.1.6)

a) FALSE – One of the purposes of retrospectives is to identify potential process improvements, which, if put into practice, should result in the quality of future outputs of the development process (test objects) being higher. So, this is likely to occur as a result of a retrospective.

b) FALSE – A benefit of retrospectives for testing includes increased test efficiency through process improvements. So, this is likely to occur as a result of a retrospective.

c) CORRECT – Participants at retrospectives typically include testers, developers, architects, product owners, and business analysts, but end users are rarely invited or attend these meetings – and they are also unlikely to receive any reports from these meetings. So, it is very unlikely that they will learn and understand more about the development and test processes through retrospectives. (see [CTFL 4.0], section 2.1.6, 1st paragraph)

d) FALSE – A benefit of retrospectives for testing includes improved quality of testware (including automated test scripts) through joint reviews with developers. So, this is likely to occur as a result of a retrospective.

Question 13	FL-2.2.1	K2	Score 1.0

Which of the following test levels is MOST likely being performed if the testing is focused on validation and is not being performed by testers?

Please select ONE Option! (1 out of 4)

a)	Component testing	□
b)	Component integration testing	□
c)	System integration testing	□
d)	Acceptance testing	☒

FL-2.2.1 (K2) Distinguish the different test levels.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 2.2.1)

a) FALSE – Component testing (also called unit testing) involves testing individual components in isolation and is mostly verification against a specification, rather than validation against user needs. However, this testing is not normally performed by testers, as developers usually carry out this testing in their development environment.

b) FALSE – Component integration testing involves testing the interfaces and interactions between components and is mostly verification against a specification, rather than validation against user needs. However, this testing is not normally performed by testers, as developers usually carry out this testing.

c) FALSE – System integration testing examines the interfaces with other systems and external services and is mostly verification against a specification, rather than validation against user needs. This type of testing is also most often performed by testers.

d) CORRECT – Acceptance testing focuses on validating that the system meets the user's business needs and is ready for deployment. Ideally, this testing is carried out by the end users. (see [CTFL 4.0], section 2.2.1, 5th paragraph).

Question 14	FL-2.2.3	K2	Score 1.0

The navigation system software has been updated due to it suggesting routes that break traffic laws, such as driving the wrong way down one-way streets.

Which of the following BEST describes the testing that will be performed?

Please select ONE Option! (1 out of 4)

a)	Only confirmation testing.	☐
b)	Confirmation testing then regression testing.	☒
c)	Only regression testing.	☐
d)	Regression testing then confirmation testing.	☐

FL-2.2.3 (K2) Distinguish confirmation testing from regression testing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 2.2.3)

a) FALSE – Confirmation testing to check that the updates have resulted in a correct implementation is necessary, however, it would then be sensible to perform regression testing to ensure that no defects have been introduced or uncovered in unchanged areas of the system.

b) CORRECT – Confirmation testing will check that the updates have resulted in a correct implementation, and then regression testing will be used to ensure that no defects have been introduced or uncovered in unchanged areas of the system. (see [CTFL 4.0], section 2.2.3, 2nd and 3rd paragraphs).

c) FALSE – Regression testing should be used to ensure that no defects have been introduced or uncovered in unchanged areas of the system when the update was made, however it is also necessary to perform confirmation testing that will check that the updates have resulted in a correct implementation.

d) FALSE – Confirmation testing will check that the updates have resulted in a correct implementation, and regression testing will be used to ensure that no defects have been introduced or uncovered in unchanged areas of the system. However, when performed (i.e., when an update needs to be tested), confirmation testing precedes regression testing.

Question 15	FL-3.1.3	K2	Score 1.0

Which of the following example defects BEST identifies example defects that could be found by static testing (rather than dynamic testing)?

Please select TWO Options! (2 out of 5)

a)	Two different parts of the design specification disagree due to the complexity of the design.	☒
b)	A response time is too long and so makes users lose patience.	□
c)	An defect occurs when the system attempts to write a file while running out of disk space.	□
d)	A variable is declared but never subsequently used in the program.	☒
e)	The amount of memory needed by the program to generate a report is too high.	□

FL-3.1.3 (K2) Compare and contrast static and dynamic testing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 3.1.3)

Considering each of the listed example defects:

a) Two different parts of the design specification disagree due to the complexity of the design – this is an example of a specification defect, which includes inconsistencies, ambiguities, contradictions, omissions, inaccuracies, and duplications, which can most easily be found by static testing. (see [CTFL 4.0], section 3.1.3, 2nd paragraph, 2nd bullet point).

b) A response time is too long and so makes users lose patience – this is an example of a response time defect, which can only be detected in practice by executing the program and measuring the response time, which can most easily be found by dynamic testing.

c) Memory and file-writing issues can only be discovered through dynamic testing, as they involve the system's runtime behavior. (see [CTFL 4.0], Section 4.1.4, 4th paragraph: "Dynamic testing investigates runtime issues affecting file processing and resource constraints").

d) A variable is declared but never subsequently used in the program - this is an example of a coding defect, which includes variables with undefined values, undeclared variables, duplicated or unreachable code, and excessive code complexity, which can most easily be found by static testing. (see [CTFL 4.0], section 6.1.1), (see [CTFL 4.0], section 3.1.3, 2nd paragraph, 3rd bullet point).

e) The amount of memory needed by the program to generate a report is too high – this is an example of a performance defect, which can only be detected in practice by executing the program and measuring the memory used, which can most easily be found by dynamic testing.

Thus: The correct answers for static testing are a) and d).

Question 16	FL-3.2.1	K1	Score 1.0

Which of the following is a benefit of early and frequent stakeholder feedback?

Please select ONE Option! (1 out of 4)

a)	Changes to requirements are understood and implemented earlier.	☒
b)	It ensures business stakeholders understand user requirements.	□
c)	It allows product owners to change their requirements as often as they want.	□
d)	End users are told which requirements will not be implemented prior to release.	□

FL-3.2.1 (K2) Identify the benefits of early and frequent stakeholder feedback.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 3.2.1)

a) CORRECT – Obtaining feedback from stakeholders early and often in the software development process can be highly beneficial. It facilitates early communication of potential quality issues, can prevent misunderstandings about requirements, and ensures that any changes in stakeholder requirements are understood and implemented sooner. (see [CTFL 4.0], section 3.2.1, 2nd paragraph, 1st sentence).

b) FALSE – The feedback is from stakeholders, and them providing feedback is unlikely to improve their understanding of their own user requirements.

c) FALSE – Obtaining feedback from stakeholders early and often in the software development process can be highly beneficial. It facilitates early communication of potential quality issues, can prevent misunderstandings about requirements, and ensures that any changes in stakeholder requirements are understood and implemented sooner. However, because changes in requirements can be understood and implemented sooner, it does not mean that unlimited changes to requirements are encouraged.

d) FALSE – The feedback is from stakeholders and does not cover communication to them. Communications to end users could include them being told about which requirements will not be implemented prior to release.

Question 17	FL-3.2.4	K2	Score 1.0

Given the following review types:

1. **Technical review**
2. **Informal review**
3. **Inspection**
4. **Walkthrough**

And the following descriptions:

A) Focuses on objectives such as gaining consensus, generating new ide generating new ideas, and training of reviewers by authors
B) Primarily aims at detecting potential defects and does not require formal documentation.
C) The main objective is detecting a maximum number of potential defects, with collect metrics to support process improvement.
D) The goal is to reach a consensus trough qualified reviewers, make decisions on problems and generate new ideas.

Which of the following BEST matches the review types and the descriptions?

Please select ONE Option! (1 out of 4)

a)	1A, 2B, 3C, 4D	□
b)	1D, 2B, 3C, 4A	☒
c)	1B, 2C, 3D, 4A	□
d)	1C, 2D, 3A, 4B	□

FL-3.2.4 (K2) Compare and contrast the different review types.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 3.2.4)

Considering each of the listed review types:

1. Technical review - This type of review is performed by technically qualified reviewers and led by a moderator. The objectives are to gain consensus and make decisions on technical problems while also evaluating quality and building confidence in the work product, generating new ideas, motivating and enabling authors to improve, and detecting anomalies. Assignment: 1D.

2. Informal review - The main objective is to detect anomalies. The process is not defined and does not require formal documented output. Assignment 2B.

3. Inspection - This is the most formal review type, and it follows the complete generic review process. The primary objective is to find the most anomalies, and other objectives include evaluating quality and building confidence in the work product, motivating and enabling authors to improve, and collecting metrics that can be used to enhance the software development life cycle (SDLC), including the inspection process. The author cannot act as the review leader or scribe. Assignment: 3C

4. Walkthrough - Led by the author, this type of review serves various objectives such as evaluating quality and building confidence in the work product, educating reviewers, gaining consensus, generating new ideas, motivating and enabling authors to improve, and detecting anomalies. Reviewers might perform an individual review before the walkthrough, but this is not mandatory. Assignment: 4A.

Thus:

a) Is not correct

b) Is correct.

c) Is not correct

d) Is not correct

Question 18	FL-3.2.5	K1	Score 1.0

Which of the following is a factor that contributes to a successful review?

Please select ONE Option! (1 out of 4)

a)	Ensure management participate as reviewers.	□
b)	Split large work products into smaller parts.	☒
c)	Set reviewer evaluation as an objective.	□
d)	Plan to cover one document per review.	□

FL-3.2.5 (K1) Recall the factors that contribute to a successful review.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 3.2.5)

a) FALSE – To ensure successful reviews, it's important to secure management's support for the review process, however that does not mean that they should participate as reviewers.

b) CORRECT – To ensure successful reviews, it's important to break the work product into parts that are small enough to be reviewed in a reasonable timescale to prevent reviewers from losing focus during individual review or review meetings. (see [CTFL 4.0], section 3.2.5, 3rd bullet point)

c) FALSE – To ensure successful reviews, it's important to clearly define objectives and measurable exit criteria, without evaluating participants.

d) FALSE – To ensure successful reviews, it's important to break down the review into smaller chunks to prevent reviewers from losing focus during individual review or review meetings. So you should not plan to cover one document per review.

Question 19	FL-4.1.1	K2	Score 1.0

What is the MAIN difference between black-box test techniques and experience-based test techniques?

Please select ONE Option! (1 out of 4)

a)	The test object.	□
b)	The test level at which the test technique is used.	□
c)	The test basis.	☒
d)	The software development lifecycle (SDLC) in which the test technique can be used.	□

FL-4.1.1 (K2) Distinguish black-box, white-box and experience-based test techniques.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.1.1)

a) FALSE – In most cases both black-box test techniques and experience-based test techniques can be used for the same test objects.

b) FALSE – Both black-box test techniques and experience-based test techniques can be used at all test levels.

c) CORRECT – Black-box test techniques (also known as specification-based techniques) are based on an analysis of the specified behavior of the test object without reference to its internal structure. So, the test basis is usually a specification. Experience-based test techniques effectively use the knowledge and experience of testers for the design and implementation of test cases. This means that the tester, when designing tests, may not use the specification at all. (see [CTFL 4.0], section 4.1 and section 2.2.2.)

d) FALSE – Experience-based test techniques can detect defects that may be missed using black-box (and white-box) test techniques. Hence, experience-based test techniques are complementary to black-box test techniques and white-box test techniques and both black-box test techniques and experience-based test techniques can be used in all SDLCs.

Question 20	FL-4.2.1	K3	Score 1.0

You are testing a PIN validator, which accepts valid PINs and rejects invalid PINs. A PIN is a sequence of digits. A PIN is valid if it consists of four digits and at least two of them are different.

Which of the following sets of input test data cover all equivalence partitions for this scenario?

Please select ONE Option! (1 out of 4)

a)	112, 1111, 1234, 123456	☒
b)	1, 123, 1111, 1234	□
c)	12, 112, 1112, 11112	□
d)	1, 111, 1111, 11111	□

FL-4.2.1 (K2) Use equivalence partitioning to derive test cases.
Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.2.1)
The equivalence class for valid PIN and invalid PINs are:

1. **Valid PINs**:
   - A PIN with **exactly four digits**, of which **at least two are different** (e.g. **1234, 1123, 5678**).
2. **Invalid PINs**:
   - PINs with **fewer than four digits** (e.g. **1, 12, 123**).
   - PINs with **more than four digits** (e.g. **123456, 11111**).
   - PINs with **four identical digits** (e.g. **1111, 2222**).

a.) CORRECT – 112, 1111, 1234, 123456

- **112** → Invalid (less than four digits).
- **1111** → Invalid (four identical digits).
- **1234** → Valid (four digits, at least two different).
- **123456** → Invalid (more than four digits).

This option covers all equivalence classes:

- **Less than four digits** (112)
- **Four identical digits** (1111)
- **Valid PIN (four digits, at least two different)** (1234)
- **More than four digits** (123456)

This option covers all equivalence classes and is correct.

b.) FALSE – 1, 123, 1111, 1234

- **1** → Invalid (less than four digits).
- **123** → Invalid (less than four digits).
- **1111** → Invalid (four identical digits).
- **1234** → Valid.

The equivalence class **"more than four digits"** is missing.

c.) FALSE – 12, 112, 1112, 11112

- **12** → Invalid (less than four digits).
- **112** → Invalid (less than four digits).
- **1112** → Valid (four digits, at least two different).
- **11112** → Invalid (more than four digits).
  The equivalence class **"four identical digits" (e.g., 1111)** is missing.
  → **Incomplete, therefore incorrect.**

d.) FALSE – 1, 111, 1111, 11111

- **1** → Invalid (less than four digits).
- **111** → Invalid (less than four digits).
- **1111** → Invalid (four identical digits).
- **11111** → Invalid (more than four digits).

This option does **not** include **any valid PIN**.
The equivalence class for valid PINs (e.g., **1234**) is completely missing.

Question 21	FL-4.2.2	K3	Score 1.0

A developer was asked to implement the following business rule:

```
INPUT: value (integer number)

IF (value ≤ 100 OR value ≥ 200) THEN write “value incorrect”

ELSE write “value OK”
```

You design the test cases using 2-value boundary value analysis.

Which of the following sets of test inputs achieves the greatest coverage?

Please select ONE Option! (1 out of 4)

a)	100, 150, 200, 201	□
b)	99, 100, 200, 201.	□
c)	98, 99, 100, 101.	□
d)	101, 150, 199, 200	☒

FL-4.2.2 (K3) Use boundary value analysis to derive test cases.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.2.2)

The equivalence partitions are: {…, 99, 100}, {101, 102, …, 198, 199}, {200, 201, …}.

Thus, there are 4 boundary values, which are: 100, 101, 199 and 200.

In 2-value BVA, for each boundary value there are two coverage items (the boundary value and its closest neighbor belonging to the adjacent partition). As the closest neighbors are also boundary values in the adjacent partition, then there are just four coverage items.

Thus:

a) FALSE – Only 100 and 200 are valid coverage items for 2-value BVA, so we achieve 50% coverage.

b) FALSE – Only 100 and 200 are valid coverage items for 2-value BVA, so we achieve 50% coverage.

c) FALSE – Only 100 and 101 are valid coverage items for 2-value BVA, so we achieve 50% coverage.

d) CORRECT – 101, 199 and 200 are valid coverage items for 2-value BVA, so we achieve 75% coverage.

Question 22	FL-4.2.3	K3	Score 1.0

You are working on a project to develop a system to analyze driving test results. You have been asked to design test cases based on the following decision table.

	R1	R2	R3
C1: First attempt at the exam?	-	-	F
C2: Theoretical exam passed?	T	F	-
C3: Practical exam passed?	T	-	F
Issue a driving license?	X		
Request additional driving lessons?			X
Request to take the exam again?		X	

What test data will show that there are contradictory rules in the decision table?

Please select ONE Option! (1 out of 4)

a)	C1 = T, C2 = T, C3 = F	□
b)	C1 = T, C2 = F, C3 = T	□
c)	C1 = T, C2 = T, C3 = T and C1 = F, C2 = T, C3 = T	□
d)	C1 = F, C2 = F, C3 = F	☒

FL-4.2.3 (K3) Use decision table testing to derive test cases.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.2.3)

a) FALSE – The combination (T, T, F) does not match any rule. This is an example of omission, not a contradiction.

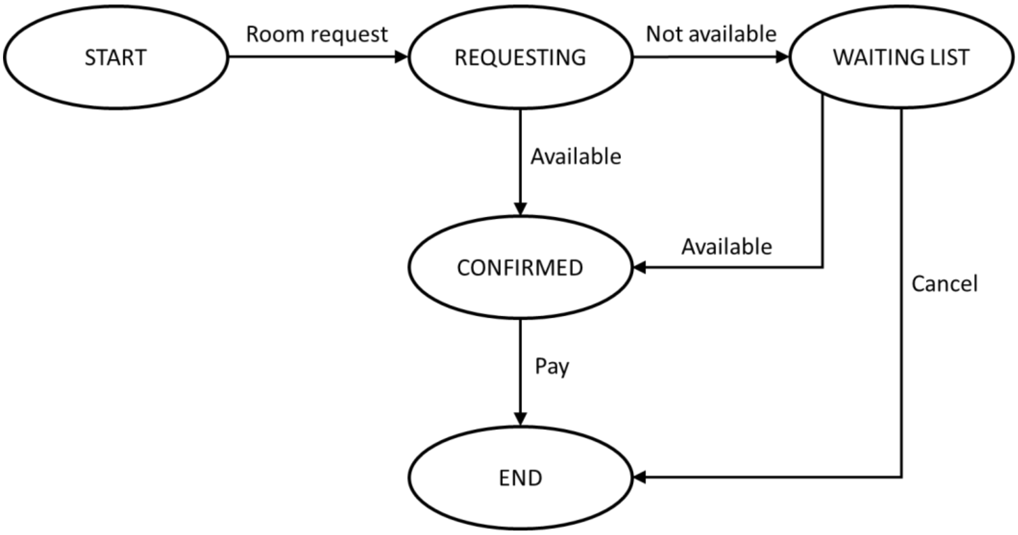
b) FALSE – The combination (T, F, T) matches only one column, R2, so there is no contradiction.

c) FALSE – Both combinations (T, T, T) and (F, T, T) match only one column, R1, so there is no contradiction.

d) CORRECT – The combination (F, F, F) matches both R2 and R3, but R2 and R3 have different actions, so this shows a contradiction between R2 and R3.

Question 23	FL-4.2.4	K3	Score 1.0

You are designing test cases based on the following state transition diagram:



What is the MINIMUM number of test cases required to achieve 100% valid transitions coverage?

Please select ONE Option! (1 out of 4)

a)	3	☒
b)	2	□
c)	5	□
d)	6	□

FL-4.2.4 (K3) Use state transition testing to derive test cases.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.2.4)

The following three transitions:

“REQUESTING -> CONFIRMED

“WAITING LIST -> CONFIRMED

“WAITING LIST -> END

cannot appear in the same test case, which suggests that at least three test cases are required. All the other transitions can appear in combination with one or more of these three transitions, so we need a minimum of three test cases. In fact, only three sequences are possible:

TC1: START (Room request) □ REQUESTING (Available) □ CONFIRMED (Pay) □ END

TC2: START (Room request) □ REQUESTING (Not available) □ WAITING LIST (Available) □ CONFIRMED (Pay) □ END

TC3: START (Room request) □ REQUESTING (Not available) □ WAITING LIST (Cancel) □ END

Thus:

a) CORRECT

b) FALSE

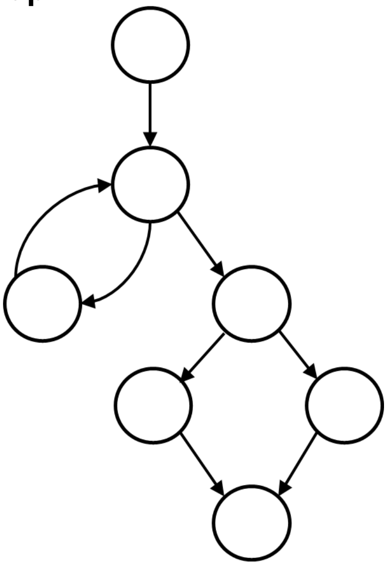
c) FALSE

d) FALSE

The correct option is a) because three test cases are sufficient to cover all valid transitions in the state transition diagram.

Question 24	FL-4.3.2	K2	Score 1.0

You want to apply branch testing to the code represented by the following control flow graph.



How many coverage items do you need to test?

Please select ONE Option! (1 out of 4)

a)	2	□
b)	4	□
c)	8	☒
d)	7	□

FL-4.3.2 (K2) Explain branch testing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.3.2)

In branch testing the coverage items are branches, which are represented by the edges of a control flow graph. There are 8 edges in the control flow graph.

Thus:

a) FALSE

b) FALSE

c) CORRECT

d) FALSE

Question 25	FL-4.3.3	K2	Score 1.0

How can white-box testing be useful in support of black-box testing?

Please select ONE Option! (1 out of 4)

a)	White-box coverage measures can help testers evaluate black-box tests in terms of the code coverage achieved by these black-box tests.	☒
b)	White-box coverage analysis can help testers identify unreachable fragments of the source code.	□
c)	Branch testing subsumes black-box test techniques, so achieving full branch coverage guarantees achieving full coverage of any black-box technique.	□
d)	White-box test techniques can provide coverage items for black-box techniques.	□

FL-4.3.3 (K2) Explain the value of white-box testing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.3.3)

a) CORRECT – Performing only black-box testing does not provide a measure of actual code coverage. White-box coverage measures provide an objective measurement of coverage and provide the necessary information to allow additional tests to be generated to increase this coverage, and subsequently increase confidence in the code.

b) FALSE – This statement is correct, but it has nothing to do with black-box testing.

c) FALSE – In general there are no subsumes relationships between white-box and black-box techniques.

d) FALSE – White-box techniques are used to design tests based on the test object itself, while black-box techniques are used to design tests based on the specification. Therefore, there is no relation between coverage items derived from these two types of techniques.

Question 26	FL-4.4.1	K2	Score 1.0

Consider the following list:

- **Correct input not accepted**
- **Incorrect input accepted**
- **Wrong output format**
- **Division by zero**

What test technique is MOST PROBABLY used by the tester who uses this list when performing testing?

Please select ONE Option! (1 out of 4)

a)	Exploratory testing	☐
b)	Fault attack	☒
c)	Checklist-based testing	☐
d)	Boundary value analysis	☐

FL-4.4.1 (K2) Explain error guessing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.4.1)

a) FALSE – Exploratory testing uses test charters, not a list of possible defects/failures. Although exploratory testing can incorporate the use of other test techniques, in this case fault attack is the most likely option.

b) CORRECT – This is a list of possible failures. Fault attacks are a methodical approach to the implementation of error guessing and require the tester to create or acquire a list of possible errors, defects and failures, and to design tests that will identify defects associated with the errors, expose the defects, or cause the failures.

c) FALSE – The tester is using a checklist of items to support their testing. Both error guessing and checklist-based testing use such lists, however, the list here is of possible failures, not test conditions, and so the MOST PROBABLE test technique is fault attack, which focuses on errors, defects and failures.

d) FALSE – BVA is based on an analysis of boundary values of equivalence partitions. The above list does not mention equivalence partitions or their boundaries.

Question 27	FL-4.4.3	K2	Score 1.0

Which of the following BEST describes how using checklist-based testing can result in increased coverage?

Please select ONE Option! (1 out of 4)

a)	Checklist items can be defined at a sufficiently low level of detail, so the tester can implement and execute detailed test cases based on these items.	□
b)	Checklists can be automated, so each time an automated test execution covers the checklist items, it results in additional coverage.	□
c)	Each checklist item should be tested separately and independently, so the elements cover different areas of the software.	□
d)	Two testers designing and executing tests based on the same high-level checklist items will typically perform the testing in slightly different ways.	☒

FL-4.4.3 (K2) Explain checklist-based testing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.4.3)

a) FALSE – Although it is true that the tester can implement and execute detailed test cases based on the checklist, it does not explain how this would result in increased coverage.

b) FALSE – Checklist items should not be automated. But even if they are, the automated test scripts always execute the tests in the same way, which usually does not result in increased coverage.

c) FALSE – It is true that each checklist item should be tested separately and independently. But this impacts the test execution order and does not impact the achieved coverage, and so does not result in increased coverage.

d) CORRECT– If the checklists are high-level, some variability in the actual testing is likely to occur, resulting in potentially greater coverage but less repeatability. If two testers follow a checklist of high-level items, each of them may use different test data, test steps, etc. This way, one tester will probably cover some areas not covered by the other tester and this will result in increased coverage. (see [CTFL 4.0], section 4.4.3, last sentence).

Question 28	FL-4.5.2	Kx	Score 1.0

Which of the following provides the BEST example of a scenario-oriented acceptance criterion?

Please select one Option! (1 out of 4)

a)	The application must allow users to delete their account and all associated data upon request.	□
b)	When a customer adds an item to their cart and proceeds to checkout, they should be prompted to log in or create an account if they haven't already done so.	☒
c)	IF (contain(product(23).Name, cart.products())) THEN return FALSE.	□
d)	The website must comply with the ICT Accessibility 508 Standards and ensure that all content is accessible to users with disabilities.	□

FL-4.5.2 (K2) Classify the different options for writing acceptance criteria.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.5.2)

a) FALSE – This acceptance criterion describes what rules or regulations the system must adhere to (in this case, the right to be forgotten). This is an example of a rule-oriented acceptance criterion.

b) CORRECT– This acceptance criterion describes an example scenario that must be realizable by the system. This is an example of a scenario-oriented acceptance criterion.

c) FALSE – This sentence looks more like a line of code that implements some business rule. Acceptance criteria should be written in collaboration with business representatives, and therefore should be written in language they understand. This sentence will most likely be unintelligible to these stakeholders.

d) FALSE – This acceptance criterion describes what rules or regulations the system must adhere to and how compliance will be ensured. Therefore, this is an example of a rule-oriented acceptance criterion, not a scenario-based acceptance criterion.

Question 29	FL-4.5.3	K3	Score 1.0

You are using acceptance test-driven development and designing test cases based on the following user story:

As a Regular or Special user, I want to be able to use my electronic floor card, to access specific floors.

Acceptance Criteria:
AC1: Regular users have access to floors 1 to 3
AC2: Floor 4 is only accessible to Special users
AC3: Special users have all the access rights of Regular users

Which test case is the MOST reasonable one to test AC3?

Please select ONE Option! (1 out of 4)

a)	Check that a Regular user can access floors 1 and 3.	□
b)	Check that a Regular user cannot access floor 4.	□
c)	Check that a Special user can access floor 5.	□
d)	Check that a Special user can access floors 1, 2 and 3.	☒

FL-4.5.3 (K2) Use acceptance test-driven development (ATDD) to derive test cases.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 4.5.3)

a) FALSE – We want to check that Special users have the rights of Regular users, so we need to test access rights for a Special user, not for a Regular user.

b) FALSE – We want to check that Special users have the rights of Regular users, so we need to test access rights for a Special user, not for a Regular user.

c) FALSE – There is no floor 5 described in the acceptance criteria. The test cases should not extend the scope of the user story. But even if we would like to perform negative testing, this test is not directly related to AC3.

d) CORRECT – This way we can check if a Special user can access floors which are accessible to a Regular user.

Question 30	FL-5.1.1	K2	Score 1.0

Which of the following is NOT a purpose of a test plan?

Please select ONE Option! (1 out of 4)

a)	To define test data and expected results for component tests and component integration tests.	☒
b)	To define as exit criteria from the component test level that “100% statement coverage and 100% branch coverage must be achieved”.	□
c)	To describe what fields the test progress report shall contain and what should be the form of this report.	□
d)	Explain why system integration tests are excluded from the test, even though the test strategy requires this test level.	□

FL-5.1.1 (K2) Exemplify the purpose and content of a test plan.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 5.1.1)

a) CORRECT – The test plan may include test data requirements (as part of the test approach), but not the detailed test data for test cases. Test data is part of the test cases, not the test plan. Also, it is usually impossible to define such data when the test plan is created, because it is not exactly known what the components will look like.

b) FALSE – One of the purposes of a test plan is to help ensure that the performed test activities will meet the established criteria, by including entry criteria and exit criteria. The code coverage criteria are an example of such criteria for the component test level.

c) FALSE – Documentation templates are typical content of a test plan. This helps to facilitate communication between the stakeholders by defining a standard way of communicating or reporting.

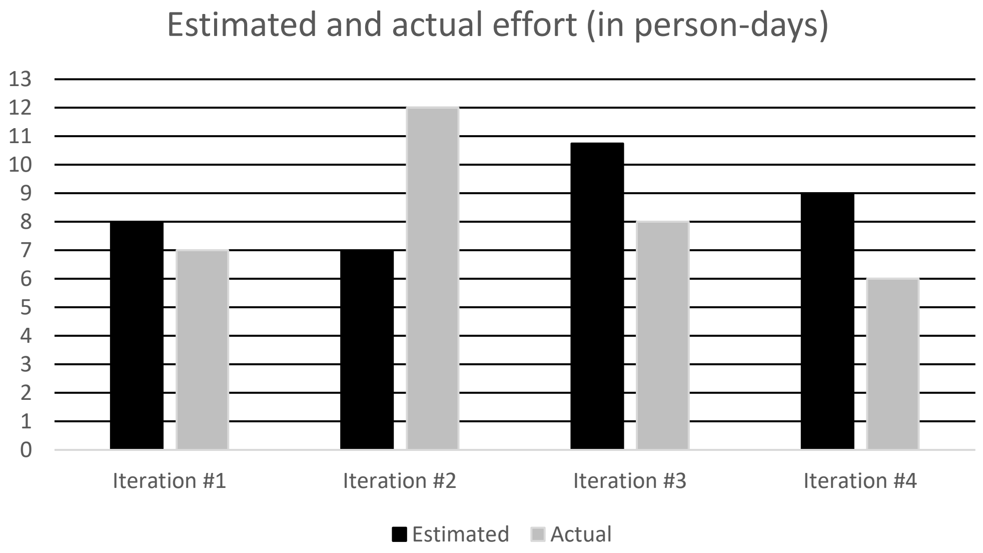
d) FALSE – One of the purposes of a test plan is to demonstrate that testing will adhere to the existing test policy and test strategy, or to explain why the testing will deviate from them. This is an example of explaining the deviation, regarding the test levels that will be (or will not be) followed.

Question 31	FL-5.1.4	K3	Score 1.0

At the beginning of each iteration, the team estimates the amount of work (in person-days) they will need to complete during the iteration. Let E(n) be the estimated amount of work for iteration n, and let A(n) be the actual amount of work done in iteration n. From the third iteration, the team uses the following estimation model based on extrapolation:

$$E(n) = \frac{3 * A(n-1) + A(n-2)}{4}$$

The graph shows the estimated and actual amount of work for the first four iterations.



What is the estimated amount of work for iteration #5?

Please select ONE Option! (1 out of 4)

a)	10.5 person-days	□
b)	8.25 person-days	□
c)	6.5 person-days	☒
d)	9.4 person-days	□

FL-5.1.4 (K3) Use estimation techniques to calculate the required test effort.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 5.1.4)

From the graph we have:

A(4)=6 and A(3)=8 (the last two gray boxes).

From the formula we obtain:

E(5) = (3*A(4) + A(3)) / 4 = (3*6+8) / 4 = 26 / 4 = 6.5 person-days.

Thus:

a) FALSE

b) FALSE

c) CORRECT

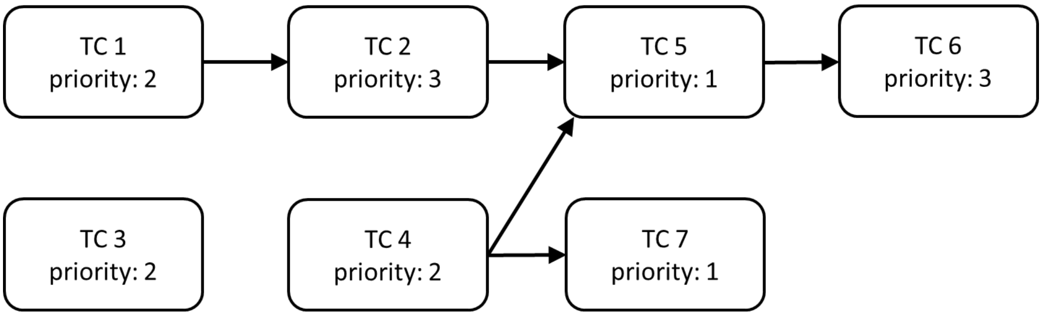
d) FALSE

Question 32	FL-5.1.5	K3	Score 1.0

You are preparing a test execution schedule for executing seven test cases TC 1 to TC 7.

The following figure includes the priorities of these test cases (1=highest priority, 3 = lowest priority).

The figure also shows the dependencies between test cases using arrows. For instance, the arrow from TC 4 to TC 5 means that TC 5 can only be executed if TC 4 was previously executed.



Which test case should be executed sixth?

Please select ONE Option! (1 out of 4)

a)	TC 3	☒
b)	TC 5	□
c)	TC 6	□
d)	TC 2	□

FL-5.1.5 (K3) Apply test case prioritization.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 5.1.5)

We want to run test cases according to their priorities, but we also need to consider the dependencies.

If we only consider priorities, we want to first run TC 5 and TC 7 (highest priority), then TC 1, TC 3, and TC 4, and finally TC 2 and TC 6 (lowest priority).

However, in order to run TC 7, we need to first run TC 4.

In order to run TC 5, we need to run TC 4 and TC 2, but TC 2 is blocked by TC 1, which should be run prior to TC 2.

So, in order to run priority 1 test cases as early as possible, the first five test cases should be: TC 4 - TC 7 - TC 1 - TC 2 - TC 5.

Next, we need to run TC 3, because it has higher priority than TC 6.

Thus the full schedule will be TC 4 – TC 7 – TC 1 – TC 2 – TC 5 – TC 3 – TC 6.

So, the sixth test case will be TC 3.

Thus:

a) CORRECT

b) FALSE

c) FALSE

d) FALSE

Question 33	FL-5.1.6	K1	Score 1.0

What does the test pyramid model show?

Please select ONE Option! (1 out of 4)

a)	That tests may have different priorities.	□
b)	That tests may have different granularity.	☒
c)	That tests may require different coverage criteria.	□
d)	That tests may depend on other tests.	□

FL-5.1.6 (K1) Recall the concepts of the test pyramid.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 5.1.6)

a) FALSE – The test pyramid model does not provide information about test priorities.

b) CORRECT – The test pyramid model shows that different tests have different levels of granularity. (see [CTFL 4.0], section 5.1.6, 1st sentence)

c) FALSE – The test pyramid model is independent of coverage criteria.

d) FALSE – Test pyramid model does not show any relations between different tests.

Question 34	FL-5.1.7	K2	Score 1.0

What is the relationship between the testing quadrants, test levels and test types?

Please select ONE Option! (1 out of 4)

a)	Testing quadrants represent particular combinations of test levels and test types, defining their location in the software development lifecycle.	□
b)	Testing quadrants describe the degree of granularity of individual test types performed at each test level.	□
c)	Testing quadrants assign the test types that can be performed to the test levels.	□
d)	Testing quadrants group test levels and test types by several criteria such as targeting specific stakeholders.	☒

FL-5.1.7 (K2) Summarize the testing quadrants and their relationships with test levels and test types.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 5.1.7)

a) FALSE – Testing quadrants group test levels and test types separately according to several criteria. They do not represent any combinations of test levels and test types and they are not related to any location within a software development lifecycle. Both test levels and test types are treated separately in the testing quadrants model.

b) FALSE – Testing quadrants group test levels and test types according to several criteria. They do not describe the degree of granularity of individual test types performed at each test level. Such a model, regarding the test levels, is called the test pyramid.

c) FALSE – The statement is wrong, because in general any test type can be performed at any test level.

d) CORRECT– The testing quadrants group test levels, test types, activities, test techniques and work products in Agile software development. In this model, tests can be business facing or technology facing. Tests can support the team (i.e., guide the development) or critique the product (i.e., measure its behavior against expectations). The combination of these two viewpoints determines the four quadrants.

Question 35	FL-5.2.3	K2	Score 1.0

Which of the following is an example of how product risk analysis may influence the thoroughness and scope of testing?

Please select ONE Option! (1 out of 4)

a)	Continuous risk monitoring allows us to identify emerging risk as soon as possible.	□
b)	Risk identification allows us to implement risk mitigation activities and reduce the risk level.	□
c)	The assessed risk level helps us to select the rigor of testing.	☒
d)	Risk analysis allows us to derive coverage items.	□

FL-5.2.3 (K2) Explain how product risk analysis may influence thoroughness and scope of testing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 5.2.3)

a) FALSE – Risk monitoring is part of risk control, not risk analysis.

b) FALSE – Risk identification itself does not allow us to implement risk mitigation activities. The mitigating actions are defined during the risk control phase.

c) CORRECT – This is an example of how risk analysis influences the thoroughness and scope of testing. ([CTFL 4.0], last Paragraph, 1st sentence)

d) FALSE – Coverage items are derived using test techniques, not through risk analysis.

Question 36	**FL-5.3.2**	**K2**	**Score**	**1.0**

Which of the following activities in the test process makes the MOST use of test progress reports?

Please select ONE Option! (1 out of 4)

a)	Test design	☐
b)	Test completion	☒
c)	Test analysis	☐
d)	Test planning	☐

FL-5.3.2 (K2) Summarize the purposes, content, and audiences for test reports.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 5.3.2)

a) FALSE – Test progress reports are mostly used during test monitoring and control, and test completion, not during test design.

b) CORRECT– A test completion report is prepared during test completion, when a project, test level, or test type is complete and when, ideally, its exit criteria have been met. This report uses information from test progress reports and other data.

c) FALSE – Test progress reports are mostly used during test monitoring and control, and test completion, not during test analysis.

d) FALSE – Test progress reports are most used during test monitoring and control, and test completion, not during test planning.

Question 37	FL-5.4.1	K2	Score 1.0

Which of the following is NOT an example of how configuration management supports testing?

Please select ONE Option! (1 out of 4)

a)	All commits to the repository are uniquely identified and version controlled.	□
b)	All changes in the test environment elements are tracked.	□
c)	All requirement specifications are referenced unambiguously in test plans.	□
d)	All identified defects have an assigned status.	☒

FL-5.4.1 (K2) Summarize how configuration management supports testing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 5.4.1)

a) FALSE – When a user reports a software failure, thanks to the unique identification of commits, it is possible to reassemble the files from the software version which was used by the user (as well as the corresponding versions of the test scripts) and thus reproduce the failure and locate the defect faster.

b) FALSE – If a change to the test environment causes unexpected issues during testing, configuration management allows testers to roll back to a previous version of the environment. This ensures that testing can continue without being affected by the change.

c) FALSE – Configuration management ensures that all identified documentation (e. g., requirement specifications) and software items are referenced unambiguously in test documentation (e. g., test plans).

d) CORRECT– This is ensured by the defect management, not configuration.

Question 38	FL-5.5.1	K3	Score 1.0

Consider the following defect report for a web-based shopping application:

Application: WebShop v0.99
Defect: Login button not working
Steps to Reproduce:
Launch the website
Click on the login button
Expected result: The user should be redirected to the login page.
Actual result: The login button does not respond when clicked.
Severity: High
Priority: Urgent

What is the MOST important information that is missing from this report?

Please select ONE Option! (1 out of 4)

a)	Name of the tester and date of the report.	□
b)	Test environment elements and their version numbers.	☒
c)	Identification of the test object.	□
d)	Impact on the interests of stakeholders.	□

FL-5.5.1 (K3) Prepare a defect report.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 5.5.1)

a) FALSE – This is important, but not as important as test environment elements.

b) CORRECT – The important thing that is missing is the identification of the browser and device used for the testing. The browser and device information are important because such a defect can be browser- or device-specific. For example, a login button may work fine on one browser (or one version of a specific browser) but not on another. Therefore, the browser and device information can help the developers to reproduce the issue and find the root cause of the problem more quickly.

c) FALSE – The test object is identified (WebShop v0.99).

d) FALSE – The impact is included – this is severity (high).

Question 39	FL-6.1.1	K2	Score 1.0

Tools from which of the following categories help with the organization of test cases, detected defects and configuration management?

Please select ONE Option! (1 out of 4)

a)	Test execution and coverage tools	□
b)	Test design and implementation tools	□
c)	Defect management tools	□
d)	Test management tools	☒

FL-6.1.1 (K2) Explain how different types of test tools support testing.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 6.1.1)

a) FALSE – Test execution and coverage tools facilitate the automated execution of test cases and the measurement of the coverage achieved by running those test cases. However, these tools do not help with the organization of defects and configuration management.

b) FALSE – Test design and implementation tools facilitate the generation of test cases, test data and test procedures, but they do not help with the organization of defects and configuration management.

c) FALSE – Defect management tools are used to manage defects but are not testing tools and are not used to organize test cases or configuration management.

d) CORRECT– Test management tools increase the test process efficiency by facilitating the management of the software development lifecycle (SDLC), requirements, tests, defects, and configuration management.

Question 40	FL-6.2.1	K1	Score 1.0

Which of the following is MOST likely to be a benefit of test automation?

Please select ONE Option! (1 out of 4)

a)	The capability of generating test cases without access to the test basis.	☐
b)	The achievement of increased coverage through more objective assessment.	☐
c)	The increase in test execution times available with higher processing power.	☐
d)	The prevention of human errors through greater consistency and repeatability.	☒

FL-6.2.1 (K2) Recall the benefits and risks of test automation.

Justification: (see ISTQB® Foundation Level Syllabus V.4.0; Section 6.2.1)

a) FALSE – The capability of generating test cases without access to the test basis' is not possible. The generation of test cases by either testers or tools requires access to the test basis.

b) FALSE – The achievement of increased coverage through more objective assessment' is not a direct benefit of test automation. Test automation will provide more objective assessment of coverage, however that objective assessment will not increase the coverage. Only by using the results of the coverage to write further test cases can the coverage possibly be increased.

c) FALSE – The increase in test execution times available with higher processing power' is a contradictory statement as higher processing power would normally reduce execution times, and increased execution times are not a benefit as the testing would take longer.

d) CORRECT– The prevention of human errors through greater consistency and repeatability is a benefit of test automation as test automation cannot suffer from human errors. For instance, it means that tests are consistently derived from requirements, test data is created in a systematic manner, and tests are executed by a tool in the same order with the same frequency.

Space for your notes:
(are neither read nor valuated during correction)

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(are neither read nor valuated during correction)