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Foundation Level Sample Exam

SET F (v1.1) – GTB edition –

CTFL Syllabus Version v4.0

ISTQB® Certified Tester Foundation Level

Legal

Translation and adaptation of the English Sample Exam of the International Software Testing Qualifications Board (ISTQB®), Original title: Certified Tester, Foundation Level Sample Exam Paper v3.1 and Sample Exam Paper v4.0.

Revision History

Version	Date	Remarks
		Note: The present sample exam was mainly derived from sample exam questions on the ISTQB® CTFL syllabus 2018 (v3.1), from questions on the appendix of the CTFL v4.0, SET A sample exam and other newly developed questions and further developed to close the gaps to a complete sample exam paper.
0.1	24.11.2023	Internal BETA 01 DRAFT version (for work review)
0.2	28.12.2023	Internal BETA 02 DRAFT version
0.3	27.03.2024	Internal BETA 03 DRAFT version for trial use
0 4	27.06.2024	Internal BETA 03 DRAFT version for trial use
1.0	29.06.2024	Final GTB edition
1.1	20.11.2024	Q6 corrected, Q26 (Justification reworked), Q28 (corrected question and justification reworked), Q29 (substituted), Q30 (Question improved),

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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4) Exactly one correct solution is expected for almost every question. The exceptions explicitly mention the possibility of multiple answers.

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)

Feedback on this sample exam as a whole (40 questions) or on individual questions was provided in the German-language BETA versions of SET F in the period November - January 2024 by:

Thorsten Geiselhart (GTB), Stephan Weißleder (GTB) und Joern Münzel (former GTB), Horst Pohlmann (GTB), Marc-Florian Wendland (GTB), Christian Odenthal (GTB WP EXAM), Joachim Schulz (sepp.med), Stephanie Ulrich (GTB), Paul Müller (Software Quality Lab), Christian Modjesch (CGI), Andre Baumann (imbus AG), Henry Belter (CGI), Klaus Erlenbach (imbus AG), Sabine Gschwandtner (imbus AG), Arnd Prehl (imbus AG) and Andre Baumann (imbus AG).

Question 1	FL-1.1.1	K1	Score 1.0

Which of the following statements does NOT describe a typical test objective?

Select ONE option! (1 out of 4)

a)	Detect defects and triggering failures	☐
b)	Create confidence in the quality level of the test object	☐
c)	Reduce the risk of an inadequate testing environment	☒
d)	Meet contractual, legal or regulatory requirements	☐

FL-1.1.1 (K1) Identify typical test objectives [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – a typical test objective (see [CTFL 4.0], section 1.1.1, bullet point 2).

b) FALSE – a typical test objective (see [CTFL 4.0], section 1.1.1, bullet point 8).

c) CORRECT – not a typical test objective (see [CTFL 4.0], section 1.1.1). No test objective listed in the syllabus. Instead, bullet point describes the reduction of the risk of inadequate software quality.

d) FALSE – a typical test objective (see [CTFL 4.0], section 1.1.1, bullet point 6).

Question 2	FL-1.2.3	K2	Score 1.0

A phone ringing in a neighboring cubicle distracts a software developer causing him to improperly code the logic that checks the upper boundary of an input variable. Later, during system testing, a tester notices that this input field accepts invalid input values.

Which of the following terms accurately describes the incorrectly coded check of the upper boundary in this scenario?

Select ONE option! (1 out of 4)

a)	root cause	☐
b)	failure	☐
c)	error	☐
d)	defect	☒

FL-1.2.3 (K2) Distinguish between root cause, error, defect, and failure [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 1.2.3)

a) FALSE – The root cause is the distraction that the Software developer experienced while programming (see [CTFL 4.0], section 1.2.3, 4th paragraph).

b) FALSE – Accepting invalid inputs is a failure (see [CTFL 4.0], section 1.2.3, 2nd + 3rd paragraph).

c) FALSE – The error is the mistaken thinking that resulted in putting the defect in the code (see [CTFL 4.0], section 1.2.3, 1st paragraph).

d) CORRECT – The problem in the code is a defect (see [CTFL 4.0], section 1.2.3, 2nd paragraph).

Question 3	FL-1.4.1	K2	Score 1.0

Which of the following takes place during the "Test analysis" activity of the test process?

Select ONE option! (1 out of 4)

a)	Identify the required infrastructure and tools	☐
b)	Creating test suites based on the test script	☐
c)	Analyze the "lessons learned" for process improvement	☐
d)	Evaluate the test basis in terms of testability	☒

FL-1.4.1 (K2) Summarize the different test activities and tasks [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – this activity is performed in "Test design" (see [CTFL 4.0], section 1.4.1, Test design)..

b) FALSE – this activity is performed in "Test realization" (see [CTFL 4.0], section 1.4.1, Test realization) .

c) FALSE – this activity is performed in "Test completion" (see [CTFL 4.0], section 1.4.1, Test completion).

d) CORRECT – this activity is performed in "Test Analysis" (see [CTFL 4.0], section 1.4.1: "Test analysis involves analyzing the test base to identify testable characteristics ...").

Question 4	FL-1.3.1	K2	Score 1.0

In general according to the Pareto principle, an above-average number of defects are often found in a few areas of a system. The corresponding failures often result in the system being unusable.

Which of the following principles of testing does this describe?

Select ONE option! (1 out of 4)

a)	Testing is context dependent.	☐
b)	Defects cluster together.	☒
c)	Tests wear out.	☐
d)	Absence of defects fallacy.	☐

FL-1.3.1 (K2) Explain the seven testing principles [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – this principle simply states that testing is practiced differently in different contexts (see [CTFL4.0], section 1.3). Here, however, differences are not discussed at all, only the common aspects.

b) CORRECT – because this principle states that a small number of components of a system typically contain most of the defects (see [CTFL4.0], section 1.3. 4th bullet point). Thats how it is described in the question.

c) FALSE – this principle states that after repeated tests, tests become increasingly ineffective at detecting new defects (see [CTFL4.0], section 1.3). However, this case is not described here at all. Instead, it is just a matter of ensuring that the principle that defects occur frequently also applies if they are repeated often. One principle of testing does not cancel out another.

d) FALSE – because this principle focuses on the fact that even a thoroughly verified system with all defects corrected may still not meet user expectations (see [CTFL4.0], section 1.3). However, the question is about the scenario that there are still numerous errors. This means that the basis for the fallacy does not exist at all.

Question 5	FL-1.5.1	K2	Score 1.0

Which of the following general competencies is particularly important for passing on discovered failures to the affected developers?

Select ONE option! (1 out of 4)

a)	Test knowledge	☐
b)	Critical thinking	☐
c)	Care	☐
d)	Communication skills	☒

FL-1.5.1 (K2) Give examples of the generic skills required for testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 1.5.1)

a) FALSE – Testing knowledge is necessary to increase the effectiveness of testing, e.g. through the use of test procedures – see bullet point 1.

b) FALSE – Critical thinking, analytical thinking is important to increase the effectiveness of testing, e.g. to question assumptions – see bullet point 4.

c) FALSE – Care, thoroughness or attention to detail are important in order to detect defects, especially if they are difficult to detect – see bullet point 2.

d) CORRECT – Communication skills are important for the effective dissemination of information to stakeholders (see [CTFL 4.0], section 1.5.1, bullet point 3) The importance of communication skills is emphasized in the paragraph following the bullets.

Question 6	FL-1.4.3	K2	Score 1.0

Match the correct description from A to D:

A. A set of test cases or test scripts to be executed in a particular test cycle.

B. A sequence of instructions for the execution of a test.

C. Contains the expected results.

D. The documentation of a goal and the agenda of a test session.

to its corresponding test resource (test work results) 1 to 4:

1. test suite.

2. test case.

3. test script.

4. test charter.

Select ONE option! (1 out of 4)

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

FL-1.4.3 (K2) Differentiate the testware that supports the test activities [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

Test suite: A set of test scripts or test procedures to be executed in a particular test run. according to the glossary, where "test procedures" can be replaced by "test scripts" according to the glossary ("See Also" for test procedure or synonyms) (1A).

Test case: according to the glossary: a set of preconditions, inputs, actions (if applicable), expected results and postconditions developed on the basis of test conditions. (2C).

Test script: according to the glossary: a sequence of instructions for performing a test. (3B).

Test charter: "The documentation of an objective and agenda for a test session." According to the glossary and syllabus: The documentation of test activities in the context of session-based exploratory testing. (4D).

a) CORRECT – see above.

b) FALSE – see above.

c) FALSE – see above.

d) FALSE – see above.

Question 7	FL-1.4.4	K2	Score 1.0

Which of the following is the BEST example of how traceability between test basis, test assets, test results and defects supports testing?

Select ONE option! (1 out of 4)

a)	Conducting an impact analysis provides information about the quality of the system under test.	☐
b)	The analysis of traceability between test cases and test results provides information about the completeness of test cases.	☐
c)	The analysis of traceability by conducting an impact analysis helps in selecting appropriate test cases for regression testing.	☒
d)	Analyzing the traceability between the requirements and the test cases helps in analyzing the residual risks.	☐

FL-1.4.4 (K2) Explain the value of maintaining traceability [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 1.4.4)

a) FALSE – Performing the impact analysis does NOT provide information about the quality of the system under testing, only (as the name suggests) the impact of changes. Change impact analysis helps in selecting appropriate test cases for execution after changes. Only then can the actual quality of the system be assessed (see [CTFL 4.0], section 2.2.3, under “Regression Test”).

b) FALSE – Contrary to the content of this answer option, traceability between requirements and test cases provides information about the completeness of test cases, in this case in relation to the coverage of requirements (see [CTFL 4.0], section 1.4.4, indent 1).

c) CORRECT – Performing a change impact analysis BEST helps in selecting appropriate test cases for regression testing by showing which parts of the test object are affected by the change and which test cases need to be re-run (see [CTFL 4.0], section 1.4.4 – and section 2.2.3, “Regression Test” section).

d) FALSE – Analyzing traceability between requirements and test cases helps evaluate whether requirements are covered by test cases. The assessment of residual risks is independent of this and can be done through the traceability of test results on risks (see [CTFL 4.0], section 1.4.4, bullet points 1 and 2).

Question 8	FL-1.5.2	K1	Score 1.0

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

Select ONE option! (1 out of 4)

a)	Each team member can take on any task they wish.	☐
b)	Every team member is responsible for quality.	☒
c)	Each team member works separately on their own task.	☐
d)	Each team member has a fixed role and a defined responsibility.	☐

FL-1.5.2 (K1) Recall the advantages of the whole team approach [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – Each team member can perform any task **that they can**, not that they want to. The Whole Team approach requires that team members have the necessary skills to complete the tasks that serve the project goal (see [CTFL 4.0], section 1.5.2, paragraph 2: "…each team member who has the required competencies…".

b) CORRECT – The whole-team approach promotes shared responsibility for quality by ensuring that everyone in the team sees quality assurance as part of their role and participates in testing activities (see [CTFL4.0], section 1.5.2, 2nd paragraph, end of sentence 1).

c) FALSE – Each team member works **closely with other team members**, not separately. The Whole Team approach improves communication and interaction within the team by having team members share a common workspace (physical or virtual, see [CTFL 4.0], section 1.5.2, paragraph 3).

d) FALSE – Each team member has no **fixed role and responsibility**, but can flexibly take on different tasks. The whole-team approach makes it possible to use and expand the various competencies within the team by allowing team members to learn from and support each other (see [CTFL 4.0], section 1.5.2, paragraph 3)

Question 9	FL-2.1.1	K2	Score 1.0

You are working as a tester on a team that follows a sequential software development lifecycle (SDLC = Software Development Lifecycle).

How does the choice of this SDLC model impact the timing of testing?

Select ONE option! (1 out of 4)

a)	Dynamic tests (unit tests) cannot be carried out in the early phases of the SDLC	☒
b)	Static testing cannot be performed early phases in this SDLC	☐
c)	Test planning cannot be performed early phases in this SDLC	☐
d)	Acceptance testing can be performed early phases in this SDLC	☐

FL-2.1.1 (K2) Explain the impact of the chosen software development lifecycle on testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 2.1.1)

a) CORRECT – In sequential development models, testers are involved in requirements review, test analysis, and test design in the early stages. The executable code is usually created in the later phases, so dynamic testing cannot be performed in the early phases of the SDLC (see [CTFL 4.0], section 2.1.1, 2nd paragraph, 2nd sentence).

b) FALSE – Static testing, esp. reviews, can always be performed early in the SDLC (see [CTFL 4.0], section 2.1.1, 2nd paragraph, 1st sentence).

c) FALSE – Test planning should be done at an early stage of the SDLC, before the test project begins (see [CTFL 4.0], section 5.1.1 2nd paragraph, 1st sentence (Test planning gives...future challenges...).

d) FALSE – Acceptance testing cannot be performed when there is no working product. In sequential SDLC models the working product is usually delivered late in the SDLC (see [CTFL 4.0], section 2.1.1, 2nd paragraph, 2nd sentence).

Question 10	FL-2.1.2	K1	Score 1.0

Which of the following is a good testing practice that applies to all software development life cycles (SDLC)?

Select ONE option! (1 out of 4)

a)	Testers must accompany developers, especially in software development activities for which there are no associated testing activities.	☐
b)	Testers should define different test objectives for each test level to customize the scope and depth of testing.	☒
c)	Testers should only start the test analysis and test design once the requirements and specifications are completely implemented.	☐
d)	Testers should not perform reviews of work results in order to focus on test execution.	☐

FL-2.1.2 (K1) Recall good testing practices that apply to all software development lifecycles [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – for every software development activity there is a corresponding testing activity (see [CTFL 4.0], section 2.1.2, 1st bullet point).

b) CORRECT – This is one of the good textual practices described in the syllabus text (see [CTFL 4.0], section 2.1.2, 2nd bullet point). This is a good testing practice that applies to all software development lifecycles, as it allows testers or the test team to tailor testing activities to the specific needs and risks of each testing stage.

c) FALSE – "Testers will be involved in the review of work products as soon as drafts of this documentation are available…" to follow the principle of early testing (see [CTFL 4.0], section 2.1.2, 4th bullet point).

d) FALSE – Testers should perform reviews of work results to support the shift-left approach and avoid errors (see [CTFL 4.0], section 2.1.2, 4th bullet point).

Question 11	FL-2.1.3	K1	Score 1.0

Which of the following test-first approaches uses the given/if/then format to express the desired response of an application?

Select ONE option! (1 out of 4)

a)	Test-driven application (TDD)	☐
b)	Acceptance test-driven development (ATDD)	☐
c)	Behavior-driven development (BDD)	☒
d)	Continuous Integration / Continuous Delivery (CI/CD)	☐

FL-2.1.3 (K1) Recall the examples of test-first approaches to development [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – TDD guides coding through test cases that are necessarily written in a natural language form (see [CTFL 4.0], section 2.1.3, paragraph on TDD).

b) FALSE – ATDD derives tests from acceptance criteria that do not necessarily use the given/if/then format (see [CTFL 4.0], section 2.1.3, ATDD paragraph).

c) CORRECT – as this is one of the characteristics of BDD as described in the syllabus text (see [CTFL 4.0], section 2.1.3, paragraph about the BDD). This is a test-first approach that uses the given/if/then format to express the desired response of an application. BDD is a method that describes and verifies the behavior of the software from the stakeholder's perspective using natural language scenarios.

d) FALSE – CI/CD are technical practices (see [CTFL 4.0], section 2.1.4, 1st paragraph, 2nd sentence).

Question 12	FL-2.1.4	K2	Score 1.0

Which of the following are benefits of DevOps?

Select ONE option! (1 out of 4)

a)	Faster product release and faster time to market	☒
b)	Fast feedback by focusing exclusively on functional testing	☐
c)	Shift-Left can minimize the number of regression tests	☐
d)	Cost-effective implementation of the test automation framework.	☐

FL-2.1.4 (K2) Summarize how DevOps might have an impact on testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 2.1.4)

a) CORRECT – Faster product release and faster time to market is an advantage of DevOps because it enables the entire team to collaborate and deliver new features and stable software quickly (see [CTFL 4.0], section 2.1.4 2nd paragraph, 1st bullet point and 1st Paragraph, last sentence).

b) FALSE – This is not a benefit of DevOps, the opposite is true. DevOps increases the focus on non-functional quality characteristics (see [CTFL 4.0], section 2.1.4, 2nd paragraph, 4th bullet point).

c) FALSE – It is not the number of regression tests that is minimized but rather the risk that is minimized through the automated regression (see [CTFL 4.0], section 2.1.4, 2nd paragraph, 6th bullet point).

d) FALSE – This is not a benefit of DevOps. Setting up a test automation framework always requires investment in tools, infrastructure, skills and maintenance (see [CTFL 4.0], section 2.1.4, 3rd paragraph, 3rd bullet point).

Question 13	FL-2.2.2	K2	Score 1.0

You work as a tester on a project on a mobile application for ordering food. A high priority client requirement states:

"The order must be processed in less than 10 seconds 95% of the time."

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?

Select ONE option! (1 out of 4)

a)	Functional, because the test cases cover the user's business requirements for the system.	☐
b)	Non-functional, because the test cases measure the system's performance.	☒
c)	Exploratory because the exact processing time has not been defined	☐
d)	Structural, because we need to know the internal structure of the program to measure the order processing time.	☐

FL-2.2.2 (K2) Distinguish the different test types [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 2.2.2)

a) FALSE – The fact that the requirement for the performance of the system comes directly from the customer and that performance is important from a business perspective (i.e. is a high priority, as they do not test the "what", but the "how" of the system (i.e. how quickly the orders are processed) (see [CTFL 4.0], section 2.2.2, paragraph "Functional Testing").

b) CORRECT – This is an example of a performance test, a type of non-functional testing. Non-functional tests evaluate how well a system works under certain conditions or constraints (see [CTFL 4.0], section 2.2.2, paragraph "Non-Functional Test").

c) FALSE – Exploratory testing only makes sense when there is no sufficient specification. However, this is the case here and therefore this option is NOT the best option here (see [CTFL 4.0], section 4.4.2, paragraph 3).

d) FALSE – We do not need to know the internal structure of the code to perform the performance testing. Performance tests can also be carried out without knowledge of the structure (see [CTFL 4.0], section 2.2.2, paragraph "White Box Test").

Question 14	FL-2.2.3	K2	Score 1.0

Which of the following statements related to confirmation and regression test is CORRECT?

Select one Option! (1 out of 4)

a)	Regression tests increase in number as the project progresses, whereas the number of confirmation tests decreases as the project progresses.	☐
b)	Regression tests are created and run when the test object is fixed, whereas confirmation tests are run whenever the test object is enhanced.	☐
c)	Regression testing is concerned with checking that the operational environment remains unchanged, whereas confirmation testing is concerned with testing changes to the test object.	☐
d)	Regression testing is concerned with possible adverse effects in unchanged code, whereas confirmation testing is concerned with the positive effects of corrective changes.	☒

FL-2.2.3 (K2) Distinguish confirmation testing from regression testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0; Section 2.2.3)

a) FALSE – The number of regression tests usually increases as the project progresses (at least in an iterative-incremental software development lifecycle model), since the scope of the test object to be tested increases and thus the scope of the regression tests required to prove stability. (no adverse consequences due to change or extension) (see [CTFL 4.0], Section 2.2.3, 3rd and 4th paragraphs). However, it is not possible to make a statement on the development of the conformation tests during the course of the project. The number of confirmations tests is related to the defects rectified in the course of the project and is therefore completely independent of the progress of the project.

b) FALSE – This statement reverses the assignment of the terms. Confirmation Tests are created and executed when defects have been rectified for the test object (see [CTFL 4.0], Section 2.2.3, 2nd to 3rd paragraph). Regression tests confirm that a change, including a bug fix that has already been tested, has no adverse consequences. Regression tests are (ideally) always performed when the test object has been extended or changed (see [CTFL 4.0], section 2.2.3, 4th paragraph).

c) FALSE – A regression test confirms that a change, including a previously tested bug fix, has no adverse consequences. This may include the operating environment, but always includes the test object itself (see [CTFL 4.0], section 2.2.3, 4th paragraph). Confirmation tests are created and executed when defects have been corrected for the test object. However, not every change to the test object is based on a defect, but often on the implementation of new requirements (see [CTFL 4.0], Section 2.2.3, 2nd to 3rd paragraph).

d) CORRECT – A regression test confirms that changes, including defect corrections that have already been tested, have no adverse consequences (see [CTFL 4.0], section 2.2.3, 4th paragraph). The Confirmations test confirms that an original defect has been successfully corrected and the failure no longer occurs (see [CTFL 4.0], section 2.2.3, 2nd paragraph).

Question 15	FL-3.1.1	K1	Score 1.0

Which of the following list of work products can NOT be checked with a static testing technique?

Select ONE option! (1 out of 4)

a)	Test cases and executable test scripts	☐
b)	Requirements specification and acceptance criteria	☐
c)	Proprietary third-party executable code	☒
d)	Project documentation and models	☐

FL-3.1.1 (K2) Recognize types of products that can be examined by the different static test techniques [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 3.1.1)

a) FALSE – Test cases and test scripts are work results that can be checked by a static test (review or static analysis) (see [CTFL 4.0], section 3.1.1, 1st paragraph).

b) FALSE – Requirements specifications and acceptance criteria are work products that can be checked by a static test (review or static analysis) (see [CTFL 4.0], Section 3.1.1, 1st paragraph).

c) CORRECT – Third-party executable code, e.g. operating system software, database software, frameworks that are legally protected, may not be tested with a static test (see [CTFL 4.0], section 3.1.1, 3rd paragraph). Therefore, the correct answer is: Third-party executable code.

d) FALSE – Project documentation and models are work results that can be checked through a static test (review or static analysis) (see [CTFL 4.0], section 3.1.1, 1st paragraph).

Question 16	FL-3.1.3	K2	Score 1.0

Which of the following statements applies to the differences between static and dynamic testing?

Select ONE option! (1 out of 4)

a)	During static testing, failures are found	☐
b)	Static testing measures inadequate software performance	☐
c)	The exclusive goal of static testing is to detect defects as early as possible	☐
d)	A lack of coverage of critical safety requirements can be revealed during static testing	☒

FL-3.1.3 (K2) Compare and contrast static and dynamic testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 3.1.3)

a) FALSE – Defects are found through dynamic tests (see [CTFL 4.0], section 3.1.3.; 1st paragraph; 2nd bullet point)

b) FALSE – The software must be running to measure performance (see [CTFL 4.0], section 2.2.2, last paragraph, 2nd sentence ("…check whether a non-functional condition is fulfilled when executing the function…"), if the software is executed during the test, acts it is dynamic testing (see [CTFL 4.0], section 3.1.3.; 1st paragraph; 4th bullet point).

c) FALSE – The goal of both static and dynamic testing is to detect defects as early as possible (see [CTFL 4.0], section 1.3., paragraph 3 "Early testing saves…").

d) CORRECT – This is an example of a gap in traceability or test base coverage that is more easily found in static testing (see [CTFL 4.0], section 3.1.3., Typical defects; 7th bullet point).

Question 17	FL-3.2.2	K2	Score 1.0

Which of the following statements about formal reviews (e.g. inspections) is TRUE?

Select ONE option! (1 out of 4)

a)	The technical review is led by the author	☐
b)	The review process consists of several activities, such as planning, communication and analysis, troubleshooting and reporting.	☒
c)	Work products to be reviewed are distributed during the review meeting	☐
d)	Defects found during the review are not reported since they are found during dynamic testing anyway	☐

FL-3.2.2 (K2) Summarize the activities of the review process [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 3.2.2)

a) FALSE – A technical review is led by a moderator (see [CTFL 4.0], section 3.2.4, section 3, bullet point 3 “Technical Review”).

b) CORRECT – There are several activities during a formal review. Formal reviews follow a structured and systematic process consisting of several activities such as: Planning, review start (“kick-off”), individual review, review session, communication and analysis, remediation and reporting. These activities are intended to ensure that the review is effective and efficient (see [CTFL 4.0], section 3.2.2, paragraph “Activities of the review process”).

c) FALSE – The work results to be reviewed should be distributed as early as possible (see [CTFL 4.0], section 3.2.2, 2nd bullet point).

d) FALSE – Defects found during a review should be reported. The defects found during a review are often those that cannot be found or are difficult to find in dynamic tests, such as logical, conceptual or design defects (see [CTFL 4.0], section 3.2.2, 5th bullet point).

Question 18	FL-3.2.3	K1	Score 1.0

What task may management take on during a formal review (e.g. inspection)?

Select ONE option! (1 out of 4)

a)	Doing the post-review rework for a review object, if necessary	☐
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	☐

FL-3.2.3 (K1) Recall which responsibilities are assigned to the principal roles when performing reviews [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 3.2.3)

a) FALSE – This is not a task for management during a formal review as the author is typically responsible for fixing the defects in the work product after the review meeting (see [CTFL 4.0], section 3.2.3, 2nd bullet point).

b) CORRECT – In the ISTQB® Glossary formal review is explained as: "A type of review that follows a defined process with a formally documented output. This is the task of the management in a formal review. Management can decide what to review by selecting and prioritizing work products to review based on requirements, risks, and business objectives (see [CTFL 4.0], section 3.2.3, 1st bullet point).

c) FALSE – This is typically the role of the facilitator, who plans, leads, and moderates the review sessions, as well as resolves conflicts and promotes consensus (see [CTFL 4.0], section 3.2.3, 3rd bullet point).

d) FALSE – This is typically the role of the note taker, who manages the review documents, records and tracks comments and discrepancies, and prepares a review report (see [CTFL 4.0], section 3.2.3, 4th bullet point).

Question 19	FL-4.1.1	K1	Score 1.0

Which of the following statements describes an advantage of black box testing over white box testing?

Select ONE option! (1 out of 4)

a)	Black box test techniques can check the internal structure and processing of the test object.	☐
b)	Black box test techniques can be created regardless of the implementation of the software.	☒
c)	Black box test techniques better utilize the knowledge and experience of the testers.	☐
d)	Black box testing techniques can be performed without adjustment even though the required behavior of the test object has changed.	☐

FL-4.1.1 (K1) Distinguish black-box, white-box and experience-based test techniques [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – Black box test techniques are based on an analysis of the specified behavior of the test object without knowledge of the internal structure - the answer describes white box testing procedures (see [CTFL 4.0], section 4.1, paragraph White Box Testing Procedures).

b) CORRECT – This is an advantage of black box test techniques that is described in the syllabus text (see [CTFL 4.0], section 4.1.1). Black box test techniques can be carried out regardless of the implementation of the software. This means that the tester does not need any knowledge of the source code or the internal structure of the software Black box test techniques are therefore suitable for checking e.g. the functionality, usability and performance of the software from the end user's perspective.

c) FALSE – Experience-based testing approach effectively utilize the knowledge and experience of testers to design and implement test cases (see [CTFL 4.0], section 4.1, Experience-based Testing paragraph).

d) FALSE – the opposite is true: since black box testing procedures are based on an analysis of the specified behavior, the test cases must be adjusted as soon as the specified behavior changes (see [CTFL 4.0], section 4.1, section Black Box Testing).

Question 20	FL-4.2.1	K3	Score 1.0

A fitness app measures the number of steps taken daily and provides feedback to motivate the user to stay fit.

The feedback for different step counts should be as follows:

- **Up to and including 1000: Couch Potato!**
- **Over 1000, up to and including 2000: Get moving!**
- **Over 2000, up to and including 4000: On the right track!**
- **Over 4000, up to and including 6000: Well done!**
- **Over 6000: Super!**

Which of the following groups of test input values would provide the HIGHEST coverage of equivalence classes?

Select ONE option! (1 out of 4)

a)	0,	1000,	2000,	3000,	4000	☐
b)	1000,	2001,	4000,	4001,	6000	☐
c)	123,	2345,	3456,	4567,	5678	☐
d)	666,	999,	2222,	5555,	6666	☒

FL-4.2.1 (K3) Use equivalence partitioning to derive test cases [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

The following five valid equivalence partitions can be formed (see [CTFL 4.0], Section 4.2.1):

1) 0 - 1000 - Couch Potato!
2) 1001 - 2000 - Get moving!
3) 2001 - 4000 - On the right track!
4) 4001 - 6000 - Well done!
5) 6000 - MaxInt - Super!

Therefore, the groups of test input values cover the following classes:

a) 0 (1), 1000 (1), 2000 (2), 3000 (3), 4000 (3) – 3 classes (out of 5) = 60% coverage.

b) 1000 (1), 2001 (3), 4000 (3), 4001 (4), 6000 (4) – 3 classes (out of 5) = 60% coverage.

c) 123 (1), 2345 (3), 3456 (3), 4567 (4), 5678 (4) – 3 classes (out of 5) = 60% coverage.

d) 666 (1), 999 (1), 2222 (3), 5555 (4), 6666 (5) – 4 classes (out of 5) = 80% coverage

Therefore, Option d) is CORRECT.

Question 21	FL-4.2.2	K3	Score 1.0

You are testing a system that calculates the final grade for course participants.

The final grade is determined based on the total number of points between 0 and 100, according to the following rules:

- **0 - 50 points: failed**
- **51 - 70 points: sufficient**
- **71 - 90 points: good**
- **91 - 100 points: very good**

You have prepared the following set of test cases:

	Total points	Final grade
TF1	91	very good
TF2	50	failed
TF3	70	sufficient
TF4	100	very good
TF5	90	good
TF6	0	failed

Given these test cases, what percentage coverage is achieved when using 2-value boundary analysis?

Select ONE option! (1 out of 4)

a)	60%	☒
b)	75%	☐
c)	33,3%	☐
d)	100%	☐

FL-4.2.2 (K3) Use boundary value analysis to derive test cases [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 4.2.2, 4th paragraph: 2-value boundary analysis)

a) CORRECT – (60%) according to the syllabus, there are two covering elements for each limit: the boundary and its closest neighbor, which belongs to the adjacent class. The limit values are 0, 50, 51, 70, 71, 90, 91 and 100 points, the closest neighbors (-1, 51,71,91, 101) are already included, except for -1 and 101. The 6 test cases each cover one of these limit values. This means that 60% of the possible valid coverage elements are covered by the test cases.

b) FALSE – (70%) because it divides the number of executed limit values (6) by the number of possible coverage elements (8) without the boundary values -1 and 101.

c) FALSE – (33,3%) because it divides the number of executed limits (6) by the number of possible coverage elements according to 3-value limit analysis (218) (additional values for 3-value vs. 2-value GA: 1, 49, 52, 69, 72, 89, 92, 99).

d) FALSE – (100%) because it divides the number of executed boundary values (6) by half of the possible coverage elements (5) or the equivalence classes (5).

Question 22	FL-4.2.3	K3	Score 1.0

You are testing a new customer relationship management system for a daily bike rental company. The system requirements are as follows:

- **Anyone can rent a bike, but only members receive a 20% discount.**
- **However, if the return deadline is missed, the discount can no longer be claimed.**
- **After 15 rentals, members receive a T-shirt as a gift.**

A tester designs the following decision table to test the requirements: (T=true, F=false, X=execute action):

Conditions	**R1**	**R2**	**R3**	**R4**	**R5**	**R6**	**R7**	**R8**
is a member	T	T	T	T	F	F	F	F
Missed deadline	T	F	T	F	T	F	F	T
15. rental	F	F	T	T	F	F	T	T
Actions								
20% discount		X		X				
Gift T-shirt			X	X				X

Which rule (combination of conditions and actions) does not meet the above requirements?

Select ONE option! (1 out of 4)

a)	R4	☐
b)	R2	☐
c)	R6	☐
d)	R8	☒

FL-4.2.3 (K3) Use decision table testing to derive test cases [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 4.2.3)

a) FALSE – A member who has not missed a deadline can receive a discount and a gift t-shirt after 15 bike rentals

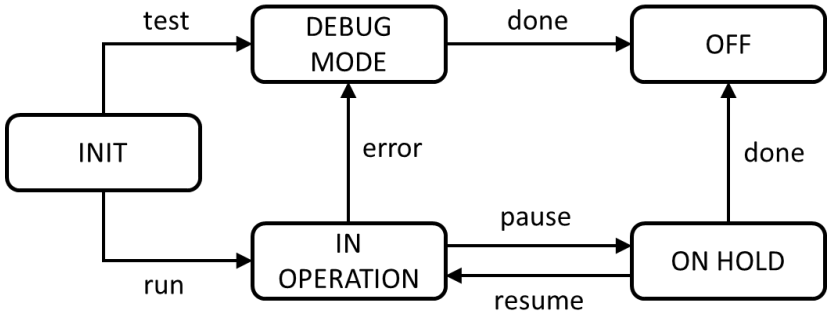
b) FALSE – A member who has not missed a deadline may receive a discount, but not a gift t-shirt, until they have rented a bike 15 times.

c) FALSE – non-members cannot receive a discount, even if they have not yet missed a deadline

d) CORRECT – Only members can receive a t-shirt as a gift. Hence the action is not correct and this combination should not be in the decision table.

Question 23	FL-4.2.4	K3	Score 1.0

You are testing a system whose life cycle is modeled by the state transition diagram shown below. The system starts in the INIT state and ends its operation in the OFF state.



What is the MINIMUM number of test cases to achieve 100% coverage of valid transitions (0-switch coverage)?

Select ONE option! (1 out of 4)

a)	2	☐
b)	3	☒
c)	4	☐
d)	7	☐

FL-4.2.4 (K3) Use state transition testing to derive test cases [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 4.2.4)

The "test" and "error" transitions cannot occur in the same test case. After 'run' there are two exits towards the 'OFF' state, once via 'error' and once via 'done'. Therefore, at least three test cases are required to achieve a valid state transition coverage of 100%.

Therefore, at least three test cases are required to achieve a valid state transition coverage of 100%.

For example:

- TF1: test, done (1)
- TF2: run, error, done (1)
- TF3: run, pause, resume, pause, done (2)

Therefore

a) FALSE

b) CORRECT

c) FALSE

d) FALSE

Question 24	FL-4.3.1	K2	Score 1.0

Your test suite achieves 100% statement coverage. What does it mean?

Select ONE option! (1 out of 4)

a)	Any selected instruction in the code has been executed at least once.	☒
b)	Any test suite that contains more test cases than your test suite also achieves 100% statement coverage.	☐
c)	Each branch in the code has been executed at least once.	☐
d)	Every combination of input values in the code was tested.	☐

FL-4.3.1 (K2) Explain statement testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 4.3.1)

a) CORRECT – Since 100% statement coverage is achieved, every of the statements must have been executed and evaluated at least once (see [CTFL 4.0], section 4.3.1, 2nd paragraph).

b) FALSE – The level of coverage depends on what is being tested, not on the number of test cases. For example, for the C 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 only achieve 50% statement coverage.

c) FALSE – This is not necessarily true, because a statement coverage of 100% does not guarantee that all possible paths have been tested through the code. It is possible that some branches were not tested if the conditions for them were not met. Therefore, 100% statement coverage generally cannot guarantee 100% branch coverage (see section 4.3.1, last sentence).

d) FALSE – Exhaustive testing is not possible (see the section on the Seven Principles of Testing section in the syllabus). For example, for the code "input x; input y; print x+y", every single test with any x and y achieves 100% statement coverage, but the tests only cover one input value.

Question 25	FL-4.3.2	K2	Score 1.0

Which of the following statements about branch testing is CORRECT?

Select ONE option! (1 out of 4)

a)	If a program contains only unconditional control transitions, 100% branch coverage can be achieved without having to execute a single test case.	☐
b)	When a branch with a test case is executed, all defects in it are revealed.	☐
c)	If 100% statement coverage is achieved, then 100% branch coverage is also achieved.	☐
d)	If 100% branch coverage is achieved, then all decision results of each conditional control transition of the code are executed.	☒

FL-4.3.2 (K2) Explain branch testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 4.3.2)

a) FALSE – In this case one test case is still needed since there is at least one (unconditional) branch that needs to be covered (see [CTFL 4.0], section 4.3.2, Last sentence of the 1st paragraph and 1st sentence of the 2nd paragraph).

b) FALSE – For example, defects s that require the execution of a specific path in code are not detected (see [CTFL 4.0], section 4.3.2, 3rd paragraph, last and penultimate sentence).

c) FALSE – 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 (see [CTFL 4.0], section 4.3.2, last paragraph).

d) CORRECT – Each decision result of a conditional control transition corresponds to the coverage of a branch, so that 100% branch coverage means that every branch in the code has been executed. This in turn means that every possible decision result of a conditional transition of control in the code has been executed by the test cases (see [CTFL 4.0], section 4.3.2, 1st and 3rd paragraph).

Question 26	FL-4.4.2	K2	Score 1.0

What is the purpose of a test charter in session-based exploratory testing?

Select ONE option! (1 out of 4)

a)	The test charter specifies the test objectives for the test session.	☒
b)	The test charter documents the steps taken and the findings made.	☐
c)	The test charter is often formulated in the form of questions.	☐
d)	The test charter evaluates the test results after the test session.	☐

FL-4.4.2 (K2) Explain exploratory testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) CORRECT – as this is the purpose of a test charter described in the syllabus text (see [CTFL 4.0], section 4.4.2, 2nd paragraph, 3rd sentence). The test charter defines the test objectives for the test session. A test charter is a statement of test objectives and possible test ideas on how to test.

b) FALSE – The test session sheets document the steps taken and the findings made (see [CTFL 4.0], section 4.4.2, 2nd paragraph, last sentence).

c) FALSE – While questions can be part of a test charter (e.g. to clarify certain aspects), this is not absolutely necessary. The main function of the test charter is to define the objectives and scope of the test session, whether this is done in the form of questions or not. (see [CTFL 4.0], Section 4.4.3

d) FALSE – The test results are discussed in the debriefing, but not evaluated by the test charter (see [CTFL 4.0], section 4.4.2, 2nd paragraph, 4th sentence).

Question 27	FL-4.4.3	K2	Score 1.0

Which of the following statements is MOST LIKELY an advantage of checklist-based testing?

Select ONE option! (1 out of 4)

a)	It enables high repeatability of the tests.	☐
b)	It provides a structured approach to testing without requiring detailed test cases.	☐
c)	It covers all requirements for the test object.	☐
d)	It supports functional and non-functional testing.	☒

FL-4.4.3 (K2) Explain checklist-based testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – since the testers can choose different ways to work through the test conditions of the checklists, an identical repetition is unlikely and therefore this is not an advantage of checklist-based testing (see [CTFL 4.0], section 4.4.3, 4th paragraph, last sentence).

b) FALSE – checklist-based testing does not require detailed test cases but is often formulated in the form of questions based on experience and knowledge etc. (see [CTFL 4.0], section 4.4.3, 1st paragraph, 2nd sentence & 2nd paragraph, 1st sentence).

c) FALSE – because checklist-based testing does not cover all requirements, but only those contained in the checklist. The checklist may be incomplete or outdated (see [CTFL 4.0], section 4.4.3, 2nd paragraph, 1st & 2nd sentence).

d) CORRECT – Checklists can support different types of tests including non-functional tests (see [CTFL 4.0], section 4.4.3, 2nd paragraph, 3rd sentence).

Question 28	FL-4.5.1	K2	Score 1.0

Which of the following statements does NOT describe the collaborative approach to writing user stories?

Select ONE option! (1 out of 4)

a)	User stories include technicality, development and testing aspects.	☐
b)	User stories are created by business representatives, developers, and testers together.	☐
c)	Acceptance criteria for user stories must be created specifically by testers to ensure independence of testing.	☒
d)	User stories are created in a sprint or interation in such a way that they are independent, negotiable, valuable, estimable, small, and testable.	☐

FL-4.5.1 (K2) Explain how to write user stories in collaboration with developers and business representatives [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 4.5.1)

a) FALSE – This statement is true: Collaborative writing of user stories means that everyone involved creates the user stories together to achieve a common vision. By working together, they can create clear, realistic, and testable user stories (see [CTFL 4.0], section 4.5.1, 3rd paragraph, last sentence).

b) FALSE – This statement is true: Collaborative writing of user stories means that everyone involved creates the user stories together to achieve a common vision. By working together, they can create clear, realistic, and testable user stories (see [CTFL 4.0], section 4.5.1, 3rd paragraph, last sentence).

c) CORRECT – This statement is false: The acceptance criteria specify the user stories so that they are accepted by all stakeholders. They are a result of discussions (see [CTFL 4.0], section 4.5.2, 1st paragraph, 3rd sentence).

d) FALSE – This statement is true: This is a list of characteristics (according to the INVEST principle) that every user story in a sprint or iteration should have in order to achieve noticeable added value through co-writing or in a collaborative writing (see [CTFL 4.0], section 4.5.1, 4th paragraph, both sentences).

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?

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 (K3) Use acceptance test-driven development (ATDD) to derive test cases [CTFL 4.0]

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

Consider the following statement from a test plan.

The correct functioning of components is verified using component tests and component integration tests. Evidence must be provided that 100% branch coverage is achieved for each component classified as critical.

Which part of the test plan does this definition belongs to?

Select ONE option! (1 out of 4)

a)	Test environment	☐
b)	Risk register	☐
c)	Context of testing	☐
d)	Test approach	☒

FL-5.1.1 (K2) Exemplify the purpose and content of a test plan [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 5.1.1)

a) FALSE – The test environment describes the hardware, software, networks and other elements needed to carry out the tests. It is not related to the test approach described here (see [CTFL 4.0], Section 5.1.1).

b) FALSE – The risk register (risk list) is the part of the test plan that lists and evaluates information about the identified risks to the product or test process (see [CTFL 4.0], section 5.1.1, Content Test Plan, 5th bullet point).

c) FALSE – Context of testing is the part of the test plan that describes the background and purpose of the test. It includes information about the product, its requirements and objectives, and the stakeholders and their expectations (see [CTFL 4.0], section 5.1.1, Content Test Plan, 1st bullet point).

d) CORRECT – The test approach as part of test plan contains information about test levels, metrics to be collected and end criteria (see [CTFL 4.0], section 5.1.1, Content Test Plan, 6th bullet point).

Question 31	FL-5.1.4	K3	Score 1.0

Given the following user story:

"As the chairman, none of the data that I upload should be viewable by any other user of the system, so that no confidential information can be viewed."

During the first poker planning session, the following effort estimations were given based on risk, effort and proper extent of testing:

Customers: 5

Developers: 5

Testers: 20

What is the BEST outcome following this planning session?

Select ONE option! (1 out of 4)

a)	Since the customers' and developers' estimates agree, the team can assume that they are good. The planning poker for this user story ends.	☐
b)	The team discusses together why consensus on the estimates has not been reached. Another round of planning poker follows.	☒
c)	Since the customer ultimately receives the system, his estimate is crucial in such conflicts. The planning poker ends.	☐
d)	The planning poker continues until all estimates from the stakeholders involved have exactly the same value.	☐

FL-5.1.4 (K3) Use estimation techniques to calculate the required test effort [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 5.1.4)

a) FALSE – Both the customer and the developers may have missed something or paid too little attention to it. The reasons for the deviation must be discussed and the entire team must agree on the estimate (see [CTFL 4.0], section 5.1.4, paragraph: Broadband Delphi, 3rd sentence: "if there are deviations... the experts discuss their current estimates").

b) CORRECT – Planning poker sessions should continue for the user story, until the entire team is satisfied with the estimated effort (see [CTFL 4.0], section 5.1.4, paragraph: Broadband Delphi, 4th sentence “This process will be repeated until consensus is reached”).

c) FALSE – The entire team must agree on the estimate for the user story. The customer alone cannot estimate the implementation of a user story (see [CTFL 4.0], section 5.1.4, paragraph: Broadband Delphi, 4th sentence “This process is repeated until a consensus is reached”).

d) FALSE – It is not necessary that they match. A rule can be defined for how such situations are handled. For example, the highest estimate or the average of all estimates is then used or limit values for the deviations from one another (see [CTFL 4.0], section 5.1.4, paragraph: Broadband Delphi, 3rd sentence “if there are deviations that lie outside the agreed limits, the experts discuss their current estimates”)

Question 32	FL-5.1.6	K1	Score 1.0

Which of the following is true regarding the test pyramid?

Select ONE option! (1 out of 4)

a)	The testing pyramid focuses on a small number of tests at the lower test levels.	☐
b)	The closer you get to the top of the pyramid, the less granular the testing should be.	☒
c)	The test pyramid has exactly 3 test layers and always includes unit tests, integration tests and end-to-end tests.	☐
d)	High-level end-to-end tests are user-friendly and therefore usually faster than tests at the lower levels.	☐

FL-5.1.6 (K1) Recall the concepts of the test pyramid [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 5.1.6)

a) FALSE – because the test pyramid emphasizes having a larger number of tests at the lower test levels. "Tests in the lowest layer are small, isolated, fast, and test a small portion of functionality, so many of them are usually needed to achieve adequate coverage." (see [CTFL 4.0], section 5.1.6)

b) CORRECT – The syllabus states: “The higher the level, the lower the test granularity” (see [CTFL 4.0], section 5.1.6, 4th sentence).

c) FALSE – “The number and names of the layers can vary.” (see [CTFL 4.0], section 5.1.6, 8th sentence)

d) FALSE – “These high-level tests are typically slower than lower-level tests and typically test a large portion of functionality, so only a few of them are typically required to achieve adequate coverage.” (see [CTFL 4.0], section 5.1.6, 7th sentence).

Question 33	FL-5.1.5	K3	Score 1.0

The following priorities and dependencies of test cases are given:

Test case-ID	Priority	Technical dependency on:	Logical dependency on:
TC1	High	TC4	
TC2	Low		
TC3	High		TC4
TC4	Medium		
TC5	Low		TC2
TC6	Medium	TC5	

Which of the following test execution plans BEST addresses the priorities, technical and logical dependencies?

Select ONE option! (1 out of 4)

a)	TC1 – TC3 – TC4 – TC6 – TC2 – TC5	☐
b)	TC4 – TC3 – TC1 – TC2 – TC5 – TC6	☒
c)	TC4 – TC1 – TC3 – TC5 – TC6 – TC2	☐
d)	TC4 – TC2 – TC5 – TC1 – TC3 – TC6	☐

FL-5.1.5 (K3) Apply test case prioritization [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 5.1.5)

The test cases should be executed in order of priority, but the execution plan must also take dependencies into account.

The two highest priority test cases (TC1 and TC3) are both dependent on TC4, so the first three test cases should be executed either in the order TC4 - TC1 - TC3 or in the order TC4 - TC3 -TC1 (we have no way of distinguishing between TC1 and TC3).

Next, we need to look at the remaining medium priority test case TC6. TC6 is dependent on TC5, but TC5 is dependent on TC2, so the next three test cases must be executed in the following order: TC2 - TC5 - TC6.

This means that there are two optimal execution plans:

- TC4 - TC1 - TC3 - TC2 - TC5 - TC6 or
- TC4 - TC3 - TC1 - TC2 - TC5 - TC6

Option b) is therefore CORRECT.

Question 34	FL-5.1.7	K2	Score 1.0

Which of the following test types belongs to quadrant Q2 – "Business-oriented, support for the team" in the test quadrant model?

Select ONE option! (1 out of 4)

a)	Component integration tests	☐
b)	User story-based tests	☒
c)	Nonfunctional tests	☐
d)	Exploratory tests	☐

FL-5.1.7 (K2) Summarize the testing quadrants and their relationships with test levels and test types [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – Component integration tests belong to quadrant Q1, which contains technology-oriented tests that support the team (see [CTFL 4.0], section 5.1.7, 1st bullet point).

b) CORRECT – as user story-based testing is one of the business-oriented tests that support the team, as described in the syllabus text (see [CTFL 4.0], section 5.1.7). The test type that belongs to quadrant Q2 in the test quadrant model is option b): User story-based tests.

c) FALSE – Nonfunctional tests belong to quadrant Q4, which contains technology-oriented tests that support critical thinking about the product (see [CTFL 4.0], section 5.1.7, 4th bullet point).

d) FALSE – Exploratory tests belong to quadrant Q3, which contains business-oriented tests that uses the critical thinking about the product (see [CTFL 4.0], section 5.1.7, 3rd bullet point).

Question 35	FL-5.2.2	K2	Score 1.0

Which of the following statements represents a project risk?

Select ONE option! (1 out of 4)

a)	Management transfers two experienced testers to another project	☒
b)	The system does not comply with functional safety standards	☐
c)	System response time exceeds user requirements	☐
d)	Disabled persons have difficulties using the system	☐

FL-5.2.2 (K2) Distinguish between project risks and product risks [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 5.2.2)

According to the ISTQB® Foundation Level Syllabus v4.0 and ISTQB® Glossary, project risks are uncertain events or conditions that can have an impact on the outcome of a project.

a) CORRECT – because project risks can influence the project outcome by qualitatively and quantitatively reducing the testing resources available to the project (see [CTFL 4.0], section 5.2.2, paragraph Project Risks, 2nd bullet point).

b) FALSE – because of product risk (see [CTFL 4.0], section 5.2.2, paragraph Product Risks, 3rd bullet point).

c) FALSE – because of product risk (see [CTFL 4.0], section 5.2.2, paragraph Product Risks, 1st bullet point).

d) FALSE – because of product risk (see [CTFL 4.0], section 5.2.2, paragraph Product Risks, 1st and 2nd bullet point).

The other options (b, c, d) are not considered as project risks because they do not directly impact the outcome of the project. They are more related to product risks, which are risks associated with the software product being developed (see [CTFL 4.0], section 5.2.2.).

Question 36	FL-5.4.1	K2	Punkte 1.0

You are working as a project manager on an internal bank software project. To avoid rework and excessive "find/fix/retest" cycles, the following process has been introduced to fix a bug as soon as it is found in the test lab:

a. **The assigned developer finds and fixes the bug and then creates an experimental build**
b. **A peer developer reviews, tests and confirms the bug fix**
c. **A tester - usually the one who found the bug - confirms the fix by testing it in the development environment**
d. **Once a day, a new release with all confirmed bug fixes is installed in the test environment**
e. **The same tester from step c tests the bug fix in the test environment**

Nevertheless, a large number of defects that the testers have confirmed as fixed in the development environment (in step c) somehow fail the post-deployment tests in the test environment, causing additional rework and impact on cycle times. You have the utmost confidence in your testers and have eliminated errors or omissions in step c.

Which of the following is the most likely the part of the process that should be checked next?

Select ONE option! (1 out of 4)

a)	The activity of developers that who may not have sufficiently tested the fix in step b.	☐
b)	The activity of testers who may be unclear about what to test in step e.	☐
c)	Configuration management, which may not maintain the integrity of the product in step d.	☒
d)	The activity of developers who may not correctly fix the errors in step a.	☐

FL-5.4.1 (K2) Summarize how configuration management supports testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – If inadequate developer testing was the problem, the bug fix test in step 3 would not pass

b) FALSE – The same tester who successfully performed the error post-test in step 3 repeats it in step 5

c) CORRECT – Configuration management preserves the integrity of the software. If a test that passes in step 3 fails in step 5, then something is different between the two steps. One possible difference is the test object, the option listed here. Another possible difference is between the development environment and the test environment, but this is not an option listed here

d) FALSE – If the developers did not fix the defect, the confirmation test in step 3 would not be successful

Question 37	FL-5.3.2	K2	Score 1.0

Which of the following statements from a weekly test progress report is NOT relevant for the stakeholders in regards to test monitoring and test control?

Select ONE option! (1 out of 4)

a)	The downtime of the test environment during the reporting period has increased by 20% to 25 hours.	☐
b)	The time for providing statistics on the coverage metrics was reduced by 35% to 72 minutes during the reporting period.	☒
c)	The execution of the test cases is currently 6 days behind schedule, as many failures are being found and there are problems with the test environment.	☐
d)	New product risks were derived from the results of the test execution, which still need to be assessed.	☐

FL-5.3.2 (K2) Summarize the purposes, content, and audiences for test reports [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0, section 5.3.2)

a) FALSE – Failure of the test environment is a critical impediment to testing and therefore should be reported to enable stakeholders to assess and control testing (see [CTFL 4.0], section 5.3.2, 2nd paragraph, 3rd bullet point).

b) CORRECT – Metrics are important information for the control of testing, but not the way or the effort to determine them. Therefore, improvements may be useful, but are not relevant for a test progress report (see [CTFL 4.0], section 5.3.2, 1st paragraph, 2nd sentence).

c) FALSE – The status of current vs. planned test execution is project-related and can therefore be used by stakeholders to manage the test team on an ongoing basis (see [CTFL 4.0], section 5.3.2, 2nd paragraph, 1st sentence and 2nd paragraph, 2nd bullet point).

d) FALSE – New risks have an impact on product quality, therefore they have a direct impact on the ongoing management of the test team (see [CTFL 4.0], section 5.3.2, 2nd paragraph, 5th bullet point).

Question 38	FL-5.5.1	K3	Punkte 1.0

After running a set of test cases, a colleague has created the following bug report and asked you for a review.

Defect report:

- **ID: br00_23_12**
- **Title: Error message on login with empty name not correct**
- **Author: Lisa van der Vaart (Test Engineer)**
- **Test object: build v00812**
- **Test environment: cfg_full_02**
- **Revealing test case: sys_128**
- **Description: After a login attempt with an empty name, the system returns the error message "wrong password". Instead, "Name must not be empty" should have appeared.**
- **Severity of the error effect: low**
- **Priority for correction: medium**
- **Defect status: new**

Which of the following suggestions for improvement would you MOST like to give to your colleague?

Select ONE option! (1 out of 4)

a)	The title does not describe the content correctly.	☐
b)	Severity and priority should be the same, as the first determines the second.	☐
c)	You have not yet observed this defect. Therefore, the status is not "new".	☐
d)	The following entry is missing: Date of the defect report: 19.12.2023	☒

FL-5.5.1 (K3) Prepare a defect report [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) FALSE – the title correctly describes the observations.

b) FALSE – the severity of the failure and the priority of rectification can be different, e.g. for a cosmetic defect with no influence on the system behavior but which offends the customer's sense of aesthetics. Both points are also dealt with separately in the syllabus (see [CTFL 4.0], section 5.5, second bullet point 8 and 9).

c) FALSE – this is about the status of this defect message in the system. After this error message has been created, it always has the status "new". This status can be changed later on, but not when it is created. Whether the failure has already been observed is irrelevant here. It is more important that there is already a defect report for this observation.

d) CORRECT – the date indicates (in addition to the tested software version) how current the observation is and should be included in the defect report (see [CTFL 4.0], section 5.5, 2nd bullet point, item 3).

Question 39	FL-6.1.1	K2	Score 1.0

Which of the following testing tools is most useful for reporting the number of defects in the test object?

Select ONE option! (1 out of 4)

a)	Management tool	☒
b)	Static test tool	☐
c)	Test coverage tool	☐
d)	Tool to support scalability	☐

FL-6.1.1 (K2) Explain how different types of test tools support testing [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) CORRECT – Management tools support the activities that have to do with the efficiency of the testing process, including overviews of error states (see [CTFL 4.0], section 6.1, 1st bullet point).

b) FALSE – Static testing tools support the tester in carrying out reviews and static analyses, not in dynamically changing evaluations of defects (see [CTFL 4.0], section 6.1, 2nd bullet point).

c) FALSE – Test coverage tools facilitate the automated measurement of coverage, e.g. of code in the test object, but do not support defect management (see [CTFL 4.0], section 6.1, 4th bullet point).

d) FALSE – Tools to support deployment scalability (e.g. virtual machines, container tools) support operational testing but not defect management (see [CTFL 4.0], section 6.1, 8th bullet point).

Question 40	FL-6.2.1	K1	Score 1.0

Which of the following statements is a potential benefit of test automation?

Select ONE option! (1 out of 4)

a)	Test automation enables more objective evaluation and delivery of measurements that are too complicated for humans to derive.	☒
b)	For test automation, you can estimate very precisely the effort required for introduction, maintenance and training.	☐
c)	Test automation increases confidence in test results because it eliminates human critical thinking.	☐
d)	Test automation always complies with regulatory requirements and security standards.	☐

FL-6.2.1 (K1) Recall the benefits and risks of test automation [CTFL 4.0]

Justification: (see ISTQB® Foundation Level Syllabus v4.0)

a) CORRECT – This is a **potential benefit** of test automation mentioned in the syllabus text: "More objective assessment (e.g., coverage) and provision of measurements that are too complicated for humans to derive" (see [CTFL 4.0], section 6.2, 3. bullet point Test automation).

b) FALSE – This is not achieved by test automation, on the contrary, it is a potential **risk** of test automation mentioned in the syllabus text "Inaccurate estimates of the time, cost and effort required to implement a test tool, maintain test scripts and change the existing manual test process" (see [CTFL 4.0], section 6.2 , 2nd bullet point risks test automation).

c) FALSE – This is not achieved by test automation, on the contrary, it is a potential **risk** of test automation mentioned in the syllabus text. "Over-reliance on a tool, e.g. neglecting the need for human critical thinking" (see [CTFL 4.0], section 6.2, 4th bullet point Risks Test Automation).

d) FALSE – This is not achieved by test automation, on the contrary, it is a potential **risk** of test automation mentioned in the syllabus text: "Choosing an inappropriate tool that does not meet regulatory requirements and/or security standards." (see [CTFL 4.0], section 6.2, 8th bullet point Test Automation Risks).

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