

BCS

Exam Questions CTFL4

ISTQB Certified Tester Foundation Level CTFL 4.0 Exam



NEW QUESTION 1

Which statement is true regarding confirmation testing and regression testing?

- A. Confirmation testing confirms the quality of the test being run while regression testing ensures that the software still works after a change has been made.
- B. Confirmation testing is an optional activity whilst regression testing is not negotiable.
- C. Confirmation testing aims to verify that a defect has been resolved and regression testing ensuring that existing functionality still works after a change.
- D. Testers' involvement is essential whilst running retesting and regression testing.
- E. TESTER Involvement is essential whilst running retesting and regression testing.

Answer: C

Explanation:

Confirmation testing, also known as retesting, is conducted to verify that specific defects have been fixed. Regression testing, on the other hand, is performed to ensure that recent changes have not adversely affected existing features of the software. Both types of testing are crucial for maintaining the integrity and quality of the software after modifications.

NEW QUESTION 2

Which of the following is not an example of a typical content of a test completion report for a test project?

- A. The additional effort spent on test execution compared to what was planned
- B. The unexpected test environment downtime that resulted in slower test execution
- C. The residual risk level if a risk-based test approach was adopted
- D. The test procedures of all test cases that have been executed

Answer: D

Explanation:

This answer is correct because the test procedures of all test cases that have been executed are not a typical content of a test completion report for a test project. A test completion report is a document that summarizes the test activities and results at the end of a test project. It usually includes information such as the test objectives, scope, approach, resources, schedule, results, deviations, issues, risks, lessons learned, and recommendations for improvement. The test procedures of all test cases that have been executed are part of the test documentation, but they are not relevant for the test completion report, as they do not provide a high-level overview of the test project outcomes and performance. References: ISTQB Foundation Level Syllabus v4.0, Section 2.5.3.2

NEW QUESTION 3

Which of the following work products cannot be examined by static analysis?

- A. Test plans
- B. Source code
- C. Compiled code
- D. Formal models

Answer: A

Explanation:

Static analysis is the process of examining the work products of a software development or testing activity without executing them. Static analysis can be applied to various types of work products, such as requirements, design, code, test cases, etc. However, test plans are not suitable for static analysis, because they are high-level documents that describe the test objectives, scope, strategy, resources, schedule, and risks of a testing project. Test plans are not executable or formalized in a way that static analysis tools can analyze them. Therefore, option A is the correct answer.

References: ISTQB® Certified Tester Foundation Level Syllabus v4.01, Section 2.2.1, page 20; ISTQB® Glossary v4.02, page 45.

NEW QUESTION 4

Which of the following statements about branch coverage is true?

- A. The minimum number of test cases needed to achieve full branch coverage, is usually lower than that needed to achieve full statement coverage
- B. If full branch coverage has been achieved, then all unconditional branches within the code have surely been exercised
- C. If full branch coverage has been achieved, then all combinations of conditions in a decision table have surely been exercised
- D. Exercising at least one of the decision outcomes for all decisions within the code, ensures achieving full branch coverage

Answer: D

Explanation:

Exercising at least one of the decision outcomes for all decisions within the code, ensures achieving full branch coverage, which is a test coverage criterion that requires that all branches in the control flow of the code are executed at least once by the test cases. A branch is a basic block of code that has a single entry point and a single exit point, and a decision is a point in the code where the control flow can take more than one direction, such as an if-then-else statement, a switch-case statement, a loop statement, etc. The decision outcomes are the possible paths that can be taken from a decision, such as the then branch or the else branch, the case branch or the default branch, the loop body or the loop exit, etc. The other statements are false, because:

? The minimum number of test cases needed to achieve full branch coverage, is usually higher than that needed to achieve full statement coverage, which is a test coverage criterion that requires that all executable statements in the code are executed at least once by the test cases. This is because branch coverage is a stronger criterion than statement coverage, as it implies statement coverage, but not vice versa. For example, a single test case can achieve full statement coverage for an if-then-else statement, but two test cases are needed to achieve full branch coverage, as both the then branch and the else branch need to be exercised.

? If full branch coverage has been achieved, then all unconditional branches within the code have not necessarily been exercised, as unconditional branches are branches that do not depend on any decision, and are always executed, such as a goto statement, a break statement, a return statement, etc. Unconditional branches are not part of the branch coverage criterion, as they do not represent different paths in the control flow of the code. However, they are part of the statement coverage criterion, as they are executable statements in the code.

? If full branch coverage has been achieved, then all combinations of conditions in a decision table have not necessarily been exercised, as a decision table is a test design technique that represents the logical relationships between multiple conditions and their corresponding actions, in a tabular format. A decision table can have more combinations of conditions than the number of decision outcomes in the code, as each condition can have two or more possible values, such as true or

false, yes or no, etc. For example, a decision table with four conditions can have 16 combinations of conditions, but the corresponding code may have only two decision outcomes, such as pass or fail. To exercise all combinations of conditions in a decision table, a stronger test coverage criterion is needed, such as condition combination coverage, which requires that all possible combinations of condition outcomes in the code are executed at least once by the test cases.

References: ISTQB Certified Tester Foundation Level (CTFL) v4.0 sources and documents:

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 2.3.1, Test

Coverage Criteria Based on the Structure of the Software

? ISTQB® Glossary of Testing Terms v4.0, Branch Coverage, Statement Coverage, Branch, Decision, Decision Outcome, Unconditional Branch, Decision Table, Condition Combination Coverage

NEW QUESTION 5

In a two-hour uninterrupted test session, performed as part of an iteration on an Agile project, a heuristic checklist was used to help the tester focus on some specific usability issues of a web application.

The unscripted tests produced by the tester's experience during such session belong to which one of the following testing quadrants?

- A. Q1
- B. Q2
- C. Q3
- D. Q4

Answer: C

Explanation:

The unscripted tests produced by the tester's experience during the two-hour test session belong to the testing quadrant Q3. The testing quadrants are a classification of testing types based on two dimensions: the test objectives (whether the testing is focused on supporting the team or critiquing the product) and the test basis (whether the testing is based on the technology or the business). The testing quadrants are labeled as Q1, Q2, Q3, and Q4, and each quadrant represents a different testing perspective, such as unit testing, acceptance testing, usability testing, or performance testing. The testing quadrant Q3 corresponds to the testing types that have the objective of critiquing the product from the business perspective, such as exploratory testing, usability testing, user acceptance testing, alpha testing, beta testing, etc. The unscripted tests performed by the tester in the given scenario are examples of exploratory testing and usability testing, as they are based on the tester's experience, intuition, and learning of the web application, and they focus on some specific usability issues, such as the user interface, the user satisfaction, the user feedback, etc. The other options are incorrect, because:

? The testing quadrant Q1 corresponds to the testing types that have the objective of supporting the team from the technology perspective, such as unit testing, component testing, integration testing, system testing, etc. These testing types are usually performed by developers or testers who have access to the source code, the design, the architecture, or the configuration of the software system, and they aim to verify the functionality, the quality, and the reliability of the software system at different levels of integration.

? The testing quadrant Q2 corresponds to the testing types that have the objective of supporting the team from the business perspective, such as functional testing, acceptance testing, story testing, scenario testing, etc. These testing types are usually performed by testers or customers who have access to the requirements, the specifications, the user stories, or the business processes of the software system, and they aim to validate that the software system meets the expectations and the needs of the users and the stakeholders.

? The testing quadrant Q4 corresponds to the testing types that have the objective of critiquing the product from the technology perspective, such as performance testing, security testing, reliability testing, compatibility testing, etc. These testing types are usually performed by testers or specialists who have access to the tools, the metrics, the standards, or the benchmarks of the software system, and they aim to evaluate the non-functional aspects of the software system, such as the efficiency, the security, the reliability, or the compatibility of the software system under different conditions or environments. References: ISTQB Certified Tester Foundation Level (CTFL) v4.0 sources and documents:

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.3.1, Testing in

Software Development Lifecycles

? ISTQB® Glossary of Testing Terms v4.0, Testing Quadrant, Exploratory Testing, Usability Testing, Unit Testing, Component Testing, Integration Testing, System Testing, Functional Testing, Acceptance Testing, Story Testing, Scenario Testing, Performance Testing, Security Testing, Reliability Testing, Compatibility Testing

NEW QUESTION 6

Which of the following best describes the way in which statement coverage is measured?

- A. Measured as the number of decision outcomes executed by the tests, divided by the total number of decision outcomes in the test object.
- B. It is not possible to accurately measure statement coverage.
- C. Measured as the number of statements executed by the tests, divided by the total number of executable statements in the code.
- D. Measured as the number of lines of code executed by the test, divided by the total number of lines of code in the test object.

Answer: C

Explanation:

Statement coverage is a metric used in white-box testing that measures the percentage of executable statements in the code that have been executed by the test cases. It is calculated as the number of statements executed by the tests divided by the total number of executable statements in the code, providing an indication of how much of the code has been tested.

NEW QUESTION 7

A requirement specifies that a certain identifier (ID) must be between 5 and 10 characters long, must contain only alphanumeric characters, and its first character must be a letter. As a tester, you want to apply one-dimensional equivalence partitioning to test this ID. This means that you have to apply equivalence partitioning individually: to the length of the ID, the type of characters contained within the ID, and the type of the first character of the ID.

What is the number of partitions to cover?

- A. 7.
- B. 6.
- C. 5.
- D. 3.

Answer: A

Explanation:

To apply one-dimensional equivalence partitioning to the ID requirement, we need to consider each condition individually:

? Length of the ID: Valid partitions (5-10 characters), Invalid partitions (less than 5, more than 10) = 3 partitions.

? Type of characters: Valid partitions (alphanumeric), Invalid partitions (non- alphanumeric) = 2 partitions.

? First character: Valid partitions (letter), Invalid partitions (non-letter) = 2 partitions.

Adding these partitions, we get a total of 3 (length) + 2 (character type) + 2 (first character) = 7 partitions. Thus, the correct answer is A.

NEW QUESTION 8

Which of the following is not an example of a typical generic skill required for testing?

- A. Be able to apply test-driven development
- B. Be able to use test management tools and defect tracking tools
- C. Be able to communicate defects and failures to developers as objectively as possible
- D. Possess the necessary social skills that support effective teamwork

Answer: A

Explanation:

Test-driven development is not an example of a typical generic skill required for testing, but rather an example of a specific technical skill or a development practice that may or may not be relevant for testing, depending on the context and the objectives of the testing activities. Test-driven development is an approach to software development and testing, in which the developers write automated unit tests before writing the source code, and then refactor the code until the tests pass. Test-driven development can help to improve the quality, the design, and the maintainability of the code, as well as to provide fast feedback and guidance for the developers. However, test-driven development is not a skill that is generally expected or needed for testers, especially for testers who are not involved in unit testing or who do not have access to the source code. The other options are examples of typical generic skills required for testing, which are skills that are applicable and beneficial for testing in any context or situation, regardless of the specific testing techniques, tools, or methods used. The typical generic skills required for testing include:

? Be able to use test management tools and defect tracking tools: These are tools that help testers to plan, organize, monitor, and control the testing activities and resources, as well as to record, track, analyze, and resolve the defects detected during testing. These tools can improve the efficiency, the effectiveness, and the communication of the testing process, as well as to provide traceability, metrics, and reports for the testing outcomes.

? Be able to communicate defects and failures to developers as objectively as possible: This is a skill that involves the ability to report and describe the defects and failures found during testing in a clear, concise, accurate, and unbiased manner, using relevant information, evidence, and terminology, without making assumptions, judgments, or accusations. This skill can facilitate the collaboration, the understanding, and the resolution of the defects and failures between the testers and the developers, as well as to prevent conflicts, misunderstandings, or blame games.

? Possess the necessary social skills that support effective teamwork: These are skills that involve the ability to interact, cooperate, and coordinate with other people involved in or affected by the testing activities, such as the test manager, the test team, the project manager, the developers, the customers, the users, etc. These skills can include communication, negotiation, leadership, motivation, feedback, conflict resolution, etc. These skills can enhance the quality, the productivity, and the satisfaction of the testing process, as well as to foster a positive and constructive testing culture. References: ISTQB Certified Tester Foundation Level (CTFL) v4.0 sources and documents:

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.1.1, Testing and the Software Development Lifecycle

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.1.2, Testing and Quality

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.2.1, Testing Principles

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.2.2, Testing Policies, Strategies, and Test Approaches

? ISTQB® Glossary of Testing Terms v4.0, Test-driven Development, Test Management Tool, Defect Tracking Tool, Defect Report, Failure, Social Skill2

NEW QUESTION 9

Which of the following is a test-first approach, where tests that express a shared understanding from stakeholders of how the application is expected to work, are first written in business-readable language (following the Given/When/Then format), and then made executable to drive development?

- A. Test-Driven Development (TDD)
- B. Acceptance Test-Driven Development (ATDD)
- C. Behavior-Driven Development (BDD)
- D. Domain-Driven Design (DDD)

Answer: C

Explanation:

This answer is correct because Behavior-Driven Development (BDD) is a test-first approach, where tests that express a shared understanding from stakeholders of how the application is expected to work, are first written in business-readable language (following the Given/When/Then format), and then made executable to drive development. BDD is a collaborative approach that involves testers, developers, business analysts, product owners, and other stakeholders in defining the expected behavior of the application using scenarios that describe the preconditions, actions, and outcomes of the application. BDD scenarios are written using a domain-specific language (DSL) that can be translated into executable test cases using tools such as Cucumber or SpecFlow. BDD aims to improve communication, collaboration, and feedback among the team members, and to deliver software that meets the customer's needs and expectations. References: ISTQB Glossary of Testing Terms v4.0, ISTQB Foundation Level Syllabus v4.0, Section 3.1.1.4

NEW QUESTION 10

Which of the following statements about statement coverage is TRUE?

- A. Achieving 90% statement coverage ensures that 90% branch coverage is achieved.
- B. Achieving 100% statement coverage ensures that no variable within the code has been used without being initialised.
- C. Achieving 100% statement coverage ensures that 100% branch coverage is achieved
- D. Achieving 80% statement coverage ensures that 80% of all executable statements within the code have been exercised.

Answer: D

Explanation:

Statement coverage measures the percentage of executable statements that have been exercised by a test suite. Achieving 80% statement coverage means that 80% of the executable code lines have been tested. This metric helps in understanding how much of the code has been covered during testing. However, it does not guarantee branch coverage, variable initialization, or detection of all possible defects. The ISTQB CTFL Syllabus v4.0 explains statement coverage as a measure of the extent to which the code has been tested, without implying other types of coverage or testing goals.

NEW QUESTION 10

Which of the following is a typical potential risk of using test automation tools?

- A. Reduced feedback times regarding software quality compared to manual testing.
- B. Reduced test execution times compared to manual testing.
- C. Reduced repeatability and consistency of tests compared to manual testing
- D. Underestimation of effort required to maintain test scripts.

Answer: D

Explanation:

One of the common risks associated with test automation tools is the underestimation of the effort required to maintain test scripts. Test scripts can become outdated or broken due to changes in the application, requiring significant effort to update and maintain them. This risk is highlighted in the ISTQB CTFL syllabus under the discussion of the benefits and risks of test automation.

References:ISTQB CTFL Syllabus, Section on test tools and automation.

NEW QUESTION 13

A financial institution is to implement a system that calculates the interest rates paid on investment accounts based on the sum invested.

You are responsible for testing the system and decide to use equivalence partitioning and boundary value analysis to design test cases. The requirements describe the following expectations:

Investment range| Interest rate
R500 to R10 000| 10%

R10 001 to R50 000| 11%
R50 001 to R100 000| 12%
R100 001 to R500 000| 13%

What is the minimum number of test cases required to cover all valid equivalence partitions for calculating the interest?

- A. 5
- B. 4
- C. 8
- D. 16

Answer: B

Explanation:

Using equivalence partitioning, the investment ranges are divided into four partitions:

? R500 to R10,000 (10%)

? R10,001 to R50,000 (11%)

? R50,001 to R100,000 (12%)

? R100,001 to R500,000 (13%)

Thus, the minimum number of test cases required to cover all valid equivalence partitions for calculating the interest is 4.

NEW QUESTION 18

The four test levels used in ISTQB syllabus are:

- * 1. Component (unit) testing
- * 2. Integration testing
- * 3. System testing
- * 4. Acceptance testing

An organization wants to do away with integration testing but otherwise follow V-model. Which of the following statements is correct?

- A. It is allowed as organizations can decide on their test levels to do depending on the context of the system under test
- B. It is allowed because integration testing is not an important test level and can be dispensed with.
- C. It is not allowed because integration testing is a very important test level and ignoring it means definite poor product quality
- D. It is not allowed as organizations can't change the test levels as these are chosen on the basis of the SDLC (software development life cycle) model

Answer: D

Explanation:

The V-model is a software development life cycle model that defines four

test levels that correspond to four development phases: component (unit) testing with component design, integration testing with architectural design, system testing with system requirements, and acceptance testing with user requirements. The V-model emphasizes the importance of verifying and validating each phase of development with a corresponding level of testing, and ensuring that the test objectives, test basis, and test artifacts are aligned and consistent across the test levels. Therefore, an organization that wants to follow the V-model cannot do away with integration testing, as it would break the symmetry and completeness of the V-model, and compromise the quality and reliability of the software or system under test. Integration testing is a test level that aims to test the interactions and interfaces between components or subsystems, and to detect any defects or inconsistencies that may arise from the integration of different parts of the software or system. Integration testing is essential for ensuring the functionality, performance, and compatibility of the software or system as a whole, and for identifying and resolving any integration issues early in the development process. Skipping integration testing would increase the risk of finding serious defects later in the test process, or worse, in the production environment, which would be more costly and difficult to fix, and could damage the reputation and credibility of the organization. Therefore, the correct answer is D.

The other options are incorrect because:

? A. It is not allowed as organizations can decide on the test levels to do depending on the context of the system under test. While it is true that the choice and scope of test levels may vary depending on the context of the system under test, such as the size, complexity, criticality, and risk level of the system, the organization cannot simply ignore or skip a test level that is defined and required by the chosen software development life cycle model. The organization must follow the principles and guidelines of the software development life cycle model, and ensure that the test levels are consistent and coherent with the development phases. If the organization wants to have more flexibility and adaptability in choosing the test levels, it should consider using a different software development life cycle model, such as an agile or iterative model, that allows for more dynamic and incremental testing approaches.

? B. It is not allowed because integration testing is not an important test level and can be dispensed with. This statement is false and misleading, as integration testing is a very important test level that cannot be dispensed with. Integration testing is vital for testing the interactions and interfaces between components or subsystems, and for ensuring the functionality, performance, and compatibility of the software or system as a whole. Integration testing can reveal defects or inconsistencies that may not be detected by component (unit) testing alone, such as interface errors, data flow errors, integration logic errors, or performance degradation. Integration testing can also help to verify and validate the architectural design and the integration strategy of the software or system, and to ensure that the software or system meets the specified and expected quality attributes, such as reliability, usability, security, and maintainability. Integration testing can also provide feedback and confidence to the developers and stakeholders about the progress and quality of the software or system development. Therefore, integration testing is a crucial and indispensable test level that should not be skipped or omitted.

? C. It is not allowed because integration testing is a very important test level and ignoring it means definite poor product quality. This statement is partially true, as integration testing is a very important test level that should not be ignored, and skipping it could result in poor product quality. However, this statement is too strong

and absolute, as it implies that integration testing is the only factor that determines the product quality, and that ignoring it would guarantee a poor product quality. This is not necessarily the case, as there may be other factors that affect the product quality, such as the quality of the requirements, design, code, and other test levels, the effectiveness and efficiency of the test techniques and tools, the competence and experience of the developers and testers, the availability and adequacy of the resources and environment, the management and communication of the project, and the expectations and satisfaction of the customers and users. Therefore, while integration testing is a very important test level that should not be skipped, it is not the only test level that matters, and skipping it does not necessarily mean definite poor product quality, but rather a higher risk and likelihood of poor product quality.

References = ISTQB Certified Tester Foundation Level Syllabus, Version 4.0, 2018, Section 2.3, pages 16-18; ISTQB Glossary of Testing Terms, Version 4.0, 2018, pages 38-39; ISTQB CTFL 4.0 - Sample Exam - Answers, Version 1.1, 2023, Question 104, page 36.

NEW QUESTION 21

Which of the following statements about white-box test techniques is true?

- A. Achieving full statement coverage and full branch coverage for a software product means that such software product has been fully tested and there are no remaining bugs within the code
- B. Code-related white-box test techniques are not required to measure the actual code coverage achieved by black-box testing, as code coverage can be measured using the coverage criteria associated with black-box test techniques
- C. Branch coverage is the most thorough code-related white-box test technique, and therefore applicable standards prescribe achieving full branch coverage at the highest safety levels for safety-critical systems
- D. Code-related white-box test techniques provide an objective measure of coverage and can be used to complement black-box test techniques to increase confidence in the code

Answer: D

Explanation:

This answer is correct because code-related white-box test techniques are test design techniques that use the structure of the code to derive test cases. They provide an objective measure of coverage, such as statement coverage, branch coverage, or path coverage, which indicate how much of the code has been exercised by the test cases. Code-related white-box test techniques can be used to complement black-box test techniques, which are test design techniques that use the functional or non-functional requirements of the system or component to derive test cases. By combining both types of techniques, testers can increase their confidence in the code and find more

defects. References: ISTQB Glossary of Testing Terms v4.0, ISTQB Foundation Level Syllabus v4.0, Section 2.3.2.2

NEW QUESTION 22

Given the following User Story: "As an online customer, I would like to be able to cancel the purchase of an individual item from a shopping list so that it only displays the relevant items, in less than 1 second", which of the following can be considered as applicable acceptance test cases?

- A. Click on my online shopping list, select the unwanted Item, delete the unwanted item, the unwanted Item is deleted from the shopping list in less than 1 second.i
- B. Click on my online shopping list, select all the items, delete all the items, the unwanted items are deleted from the shopping list in less than 1 second.ii
- C. Tab to the online shopping list and press enter, select the unwanted item, delete the unwanted item, the unwanted item is deleted from the shopping list In less than 1 second.I
- D. Click on the checkout button, select the payment method, make payment, confirmation received of payment and shipping date.
- E. Click on my shopping list, select the unwanted Item, delete the unwanted item, the unwanted item is deleted from the shopping list.Select the correct Answer
- F. I, ii and v
- G. iv
- H. i and iii
- I. v

Answer: C

Explanation:

Reference:ISTQB CTFL Syllabus V4.0, Section 5.2.2

NEW QUESTION 27

Which of the following statements best describe Behavior-Driven Development (BDD)?

- A. A collaborative approach that allows every stakeholder to contribute to how the softwarecomponent must behave.
- B. Expresses the behavior of an application with test cases written in Given When Then format.
- C. Is used to develop code guided by automated test cases.
- D. A psychological technique in which the team's behavior in agile teams is evaluated.

Answer: A

Explanation:

Behavior-Driven Development (BDD) is a collaborative approach that enhances communication among project stakeholders, including developers, testers, and business analysts. It involves defining how software should behave through examples written in a common language understandable by all stakeholders, often using the Given-When-Then format.

NEW QUESTION 30

Which of the following coverage criteria results in the highest coverage for state transition based test cases?

- A. Can't be determined
- B. Covering all transitions at least once
- C. Covering only start and end states
- D. Covering all states at least once

Answer: B

Explanation:

Covering all transitions at least once is the highest coverage criterion for state transition based test cases, because it ensures that every possible change of state

is tested at least once. This means that all the events that trigger the transitions, as well as the actions and outputs that result from the transitions, are verified. Covering all transitions at least once also implies covering all states at least once, but not vice versa. Therefore, option D is not the highest coverage criterion. Option C is the lowest coverage criterion, because it only tests the initial and final states of the system or component, without checking the intermediate states or transitions. Option A is incorrect, because the coverage criteria for state transition based test cases can be determined and compared based on the number of transitions and states covered. References = CTFL 4.0 Syllabus, Section 4.2.3, page 49-50.

NEW QUESTION 34

A test status report SHOULD:

- A. Specify the impediments to carrying out the planned test activities in the reporting period and the corresponding solutions put in place to remove them
- B. Be produced as part of test completion activities and report unmitigated product risks to support the decision whether or not to release the product
- C. Always be based on the same template within an organisation, as its structure and contents should not be affected by the audience to which the report is presented.
- D. Specify the lines of communication between testing, other lifecycle activities, and within the organisation that were chosen at the outset of the test project.

Answer: A

Explanation:

A test status report is a document that provides a snapshot of the testing activities and their progress during a particular period. It should include information about any impediments encountered during the test execution and the actions taken to resolve them, which helps stakeholders understand the challenges and how they were addressed .

Option B describes an activity related to test completion rather than ongoing status reporting. Option C is incorrect because the structure and contents of the report may vary based on the audience's needs. Option D, while important, is not the primary purpose of a test status report, which focuses more on the current status and impediments.

NEW QUESTION 35

What is test oracle?

- A. The source of test objectives
- B. The source for the actual results
- C. The source of expected results
- D. The source of input conditions

Answer: C

Explanation:

A test oracle is a mechanism or principle that can be used to determine whether the observed behavior or output of a system under test is correct or not¹. A test oracle can be based on various sources of expected results, such as specifications, user expectations, previous versions, comparable systems, etc². References: ISTQB Certified Tester Foundation Level(CTFL) v4.0 Syllabus, Section 1.2.1, Page 91; ISTQB Glossary of Testing Terms, Version 4.0, Page 332.

NEW QUESTION 36

A program is used to control a manufacturing line (turn machines on and off. start and stop conveyer belts, add raw materials to the flow. etc.). Not all actions are possible at all times. For example, there are certain manufacturing stages that cannot be stopped - unless there is an emergency. A tester attempts to evaluate if all such cases (where a specific action is not allowed) are covered by the tests.

Which coverage metric will provide the needed information for this analysis?

- A. Code coverage
- B. Data flow coverage
- C. Statement coverage
- D. Branch Coverage

Answer: D

Explanation:

Branch coverage is a type of structural coverage metric that measures the percentage of branches or decision outcomes that are executed by the test cases. A branch is a point in the code where the control flow can take two or more alternative paths based on a condition. For example, an if-else statement is a branch that can execute either the if-block or the else-block depending on the evaluation of the condition. Branch coverage ensures that each branch is taken at least once by the test cases, and thus reveals the behavior of the software under different scenarios. Branch coverage is also known as decision coverage or all-edges coverage.

Branch coverage is suitable for testing the cases where a specific action is not allowed, because it can verify that the test cases cover all the possible outcomes of the conditions that determine the action. For example, if the program has a condition that checks if the manufacturing stage can be stopped, then branch coverage can ensure that the test cases cover both the cases where the stage can be stopped and where it cannot be stopped. This way, branch coverage can help identify any missing or incorrect branches that may lead to undesired or unsafe actions.

The other options are not correct because they are not suitable for testing the cases where a specific action is not allowed. Code coverage is a general term that encompasses various types of coverage metrics, such as statement coverage, branch coverage, data flow coverage, etc. Code coverage does not specify which type of coverage metric is used for the analysis. Data flow coverage is a type of structural coverage metric that measures the percentage of data flow paths that are executed by the test cases. A data flow path is a sequence of statements that define, use, or kill a variable. Data flow coverage is useful for testing the correctness and completeness of the data manipulation in the software, but not for testing the conditions that determine the actions. Statement coverage is a type of structural coverage metric that measures the percentage of statements or lines of code that are executed by the test cases. Statement coverage ensures that each statement is executed at least once by the test cases, but it does not reveal the behavior of the software under different scenarios. Statement coverage is a weaker criterion than branch coverage, because it does not account for the branches or decision outcomes in the code. References = ISTQB Certified Tester Foundation Level (CTFL) v4.0 syllabus, Chapter 4: Test Techniques, Section 4.3: Structural Testing Techniques, Pages 51-54.

NEW QUESTION 41

The following rules determine the annual bonus to be paid to a salesman of a company based on the total annual amount of the sales made (referred to as TAS). If the TAS is between 50k€ and 80k€, the bonus is 10%. If the TAS exceeds 80k€ by a value not greater than 40k€, the bonus is 15%. Finally, if the TAS exceeds the maximum threshold which entitles to a 15% bonus, the bonus is 22%. Consider applying equivalence partitioning to the TAS (Note: 1k€ = 1000 euros). Which one of the following answers contain only test cases that belong to the same equivalence partition?

- A. TC1 = 81 k€; TC2= 97k€; TC3=111k€; TC4=118k€
 B. TC1 = 40k€; TC2= 46k€; TC3=51k€; TC4=53k€
 C. TC1 = 79k€; TC2= 80k€; TC3=81k€; TC4=82k€
 D. TC1 = 90k€; TC2= 110k€; TC3=125k€; TC4=140k€

Answer: A

Explanation:

This answer is correct because equivalence partitioning is a test design technique that divides the input domain of a system or component into partitions of equivalent data, such that each partition is expected to produce the same output or behavior. Equivalence partitioning aims to reduce the number of test cases by selecting one representative value from each partition. In this case, the input domain of the TAS can be divided into four partitions based on the bonus rules: less than 50k€, between 50k€ and 80k€, between 80k€ and 120k€, and more than 120k€. The test cases in the answer belong to the same partition, which is between 80k€ and 120k€, and they are expected to produce the same output, which is a bonus of 15%. References: ISTQB Glossary of Testing Terms v4.0, ISTQB Foundation Level Syllabus v4.0, Section 2.3.2.1

NEW QUESTION 44

Consider a review for a high-level architectural document written by a software architect. The architect does most of the review preparation work, including distributing the document to reviewers before the review meeting. However, reviewers are not required to analyze the document in advance, and during the review meeting the software architect explains the document step by step. The only goal of this review is to establish a common understanding of the software architecture that will be used in a software development project. Which of the following review types does this review refer to?

- A. Inspection
 B. Audit
 C. Walkthrough
 D. Informal review

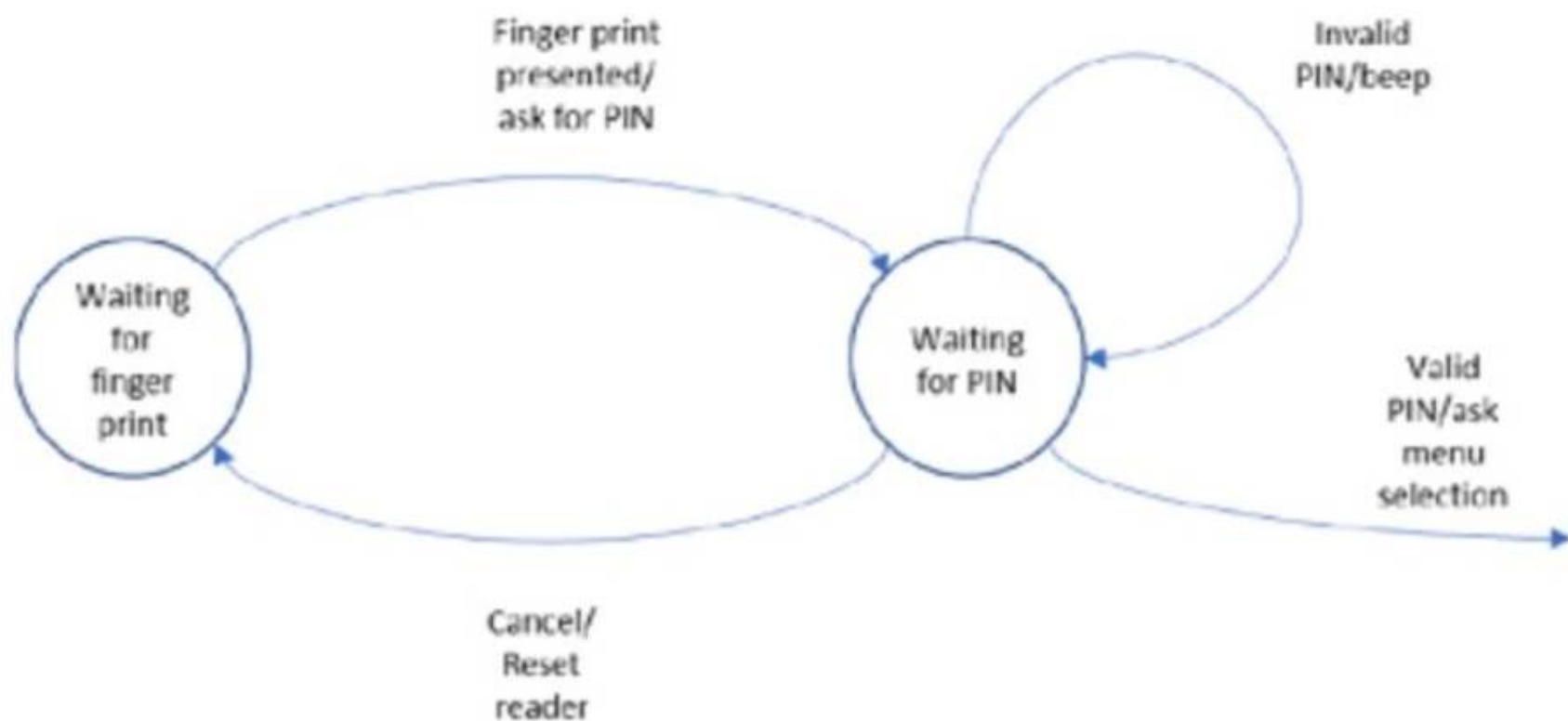
Answer: C

Explanation:

This answer is correct because a walkthrough is a type of review where the author of the work product leads the review process and explains the work product to the reviewers. The reviewers are not required to prepare for the review in advance, and the main objective of the walkthrough is to establish a common understanding of the work product and to identify any major defects or issues. A walkthrough is usually informal and does not follow a defined process or roles. In this case, the review for a high-level architectural document written by a software architect matches the characteristics of a walkthrough. References: ISTQB Glossary of Testing Terms v4.0, ISTQB Foundation Level Syllabus v4.0, Section 2.4.2.2

NEW QUESTION 47

The following state transition diagram describes the functionality involved in a system using fingerprint and password authentication to log onto a system.



How many distinct states of the system are visible in the above diagram?

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

Answer: C

Explanation:

The state transition diagram provided shows three distinct states:

- ? Waiting for fingerprint
- ? Waiting for PIN
- ? Valid PIN/ask menu selection

Each state represents a different stage in the system's operation, with transitions based on user actions and system responses.

NEW QUESTION 48

Which of the following statements is TRUE'?

- A. Unlike functional testing, non-fundional testing can only be applied to conventional systems, not artificial intelligence-based system.
- B. Functional testing focuses on what the system is supposed to do, while white-box testing focuses on how well the system does what it is supposed to do
- C. Functional testing can be applied to all test levels, while non-functional testing can be applied only to system and acceptance test levels.
- D. Black-box test techniques and experience-based test techniques may be applicable to both functional testing and non-functional testing

Answer: D

Explanation:

Statement D is correct. According to the ISTQB CTFL syllabus, both black- box test techniques (which focus on testing without internal knowledge of the application) and experience-based test techniques (which rely on testers' experience and intuition) can be applied to both functional and non-functional testing. Functional testing is concerned with what the system does, whereas non-functional testing looks at how the system performs under certain conditions. These techniques are versatile and can be employed to address both these aspects.

NEW QUESTION 52

For each test case to be executed, the following table specifies its dependencies and the required configuration of the test environment for running such test case:

Test Case	Dependencies	Configuration
TC1		CONF2
TC2	TC4	CONF2
TC3	TC4	CONF1
TC4		CONF1
TC5	TC1	CONF2

Assume that CONF1 is the initial configuration of the test environment Based on this assumption, which of the following is a test execution schedule that is compatible with the specified dependencies and allows minimising the number of switches between the different configurations of the test environment^

- A. TC4, TC3, TC2, TC1, TC5.
- B. TC1, TC5, TC4, TC3, TC2
- C. TC4, TC3, TC2, TC5, TC1.
- D. TC4, TC1, TC5, TC2, TC3

Answer: A

Explanation:

To determine the optimal test execution schedule that minimizes the number of configuration switches and respects the dependencies, we start with the initial configuration, CONF1.

? TC4: It has no dependencies and runs on CONF1 (initial configuration).

? TC3: Depends on TC4 and runs on CONF1. Since TC4 is already executed, we can proceed with TC3.

? TC2: Depends on TC4 and runs on CONF2. We switch to CONF2 after TC3.

? TC1: No dependencies and runs on CONF2. Since we are already in CONF2, we can execute TC1 next.

? TC5: Depends on TC1 and runs on CONF2. Since TC1 is already executed, we can proceed with TC5 without additional configuration switches.

By following this sequence (TC4, TC3, TC2, TC1, TC5), we respect the dependencies and minimize the number of configuration switches

NEW QUESTION 54

Which of the following is a task the Author is responsible for, as part of a typical formal review?

- A. Determining the people who will be involved in the review
- B. Recording the anomalies found during the review meeting
- C. Identifying potential anomalies in the work product under review
- D. Fixing the anomalies found in the work product under review

Answer: C

Explanation:

This answer is correct because identifying potential anomalies in the work product under review is one of the tasks the Author is responsible for, as part of a typical formal review. The Author is the person who creates the work product to be reviewed, such as a requirement specification, a design document, or a test case. The Author's tasks include preparing the work product for the review, identifying potential anomalies in the work product, and fixing the anomalies found in the work

product after the review. References: ISTQB Glossary of Testing Terms v4.0, ISTQB Foundation Level Syllabus v4.0, Section 2.4.2.1

NEW QUESTION 59

Which of the following statements is true?

- A. A defect does not always produce a failure, while a bug always produces a failure
- B. A defect may cause a failure which, when occurring, always causes an error
- C. Failures can be caused by defects, but also by environmental conditions
- D. Bugs are defects found during component testing, while failures are defects found at higher test levels

Answer: C

Explanation:

Failures can be caused by defects, but also by environmental conditions. A failure is an event in which the software system does not perform a required function or performs a function incorrectly, according to the expected behavior. A defect is a flaw in the software system or a deviation from the requirements or the specifications, that may cause a failure. However, not all failures are caused by defects, as some failures may be caused by environmental conditions, such as hardware malfunctions, network interruptions, power outages, incompatible configurations, etc. Environmental conditions are factors that affect the operation of the software system, but are not part of the software system itself. The other statements are false, because:

? A defect does not always produce a failure, while a bug always produces a failure.

This statement is false, because a defect may or may not produce a failure, depending on the inputs, the outputs, the states, or the scenarios of the software system, and a bug is just another term for a defect, so it has the same possibility of producing a failure as a defect. For example, a defect in a rarely used feature or a hidden branch of the code may never produce a failure, while a defect in a frequently used feature or a critical path of the code may produce a failure often. A bug is not a different concept from a defect, but rather a synonym or a colloquial term for a defect, so it has the same definition and implications as a defect.

? A defect may cause a failure which, when occurring, always causes an error. This

statement is false, because an error is not a consequence of a failure, but rather a cause of a defect. An error is a human action or a mistake that produces a defect in the software system, such as a typo, a logic flaw, a requirement misunderstanding, etc. An error is not observable in the software system, but rather in the human mind or the human work products, such as the code, the design, the documentation, etc. A failure is not a cause of an error, but rather a result of a defect, which is a result of an error. For example, an error in the code may cause a defect in the software system, which may cause a failure in the software behavior.

? Bugs are defects found during component testing, while failures are defects found at higher test levels. This statement is false, because bugs and failures are not different types of defects, but rather different terms for defects and their manifestations. As mentioned before, bugs are just another word for defects, and failures are the events in which the software system does not perform as expected due to defects. Bugs and failures can be found at any test level, not only at component testing or higher test levels. Test levels are the stages of testing that correspond to the levels of integration of the software system, such as component testing, integration testing, system testing, and acceptance testing. Defects and failures can occur and be detected at any test level, depending on the test objectives, the test basis, the test techniques, and the test environment. References: ISTQB Certified Tester Foundation Level (CTFL) v4.0 sources and documents:

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.1.2, Testing and Quality1

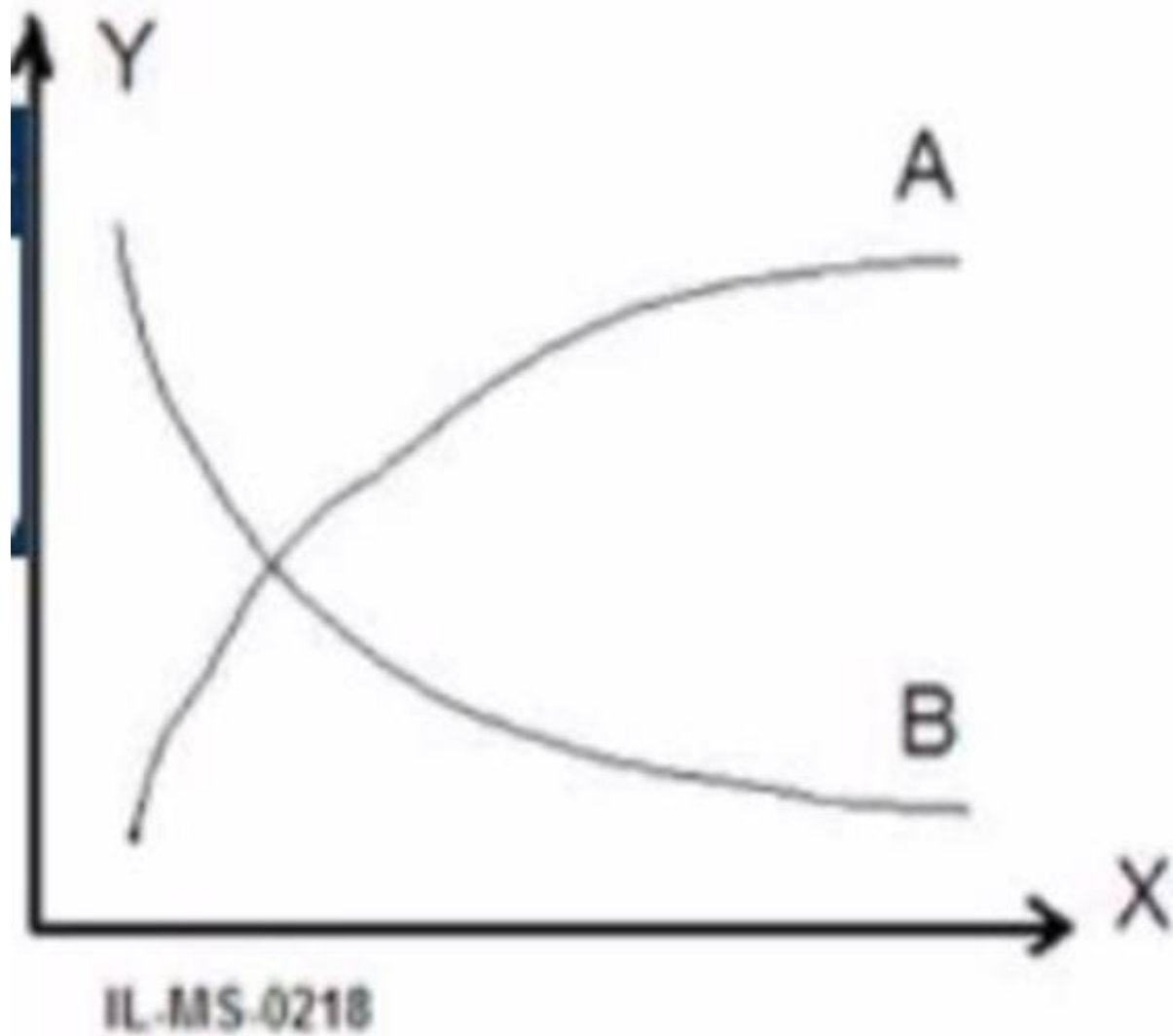
? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.2.1, Testing Principles1

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.3.1, Testing in Software Development Lifecycles1

? ISTQB® Glossary of Testing Terms v4.0, Failure, Defect, Bug, Environmental Condition, Error, Test Level2

NEW QUESTION 61

The following chart represents metrics related to testing of a project that was completed. Indicate what is represented by tie lines A, B and the axes X.Y



A)

X - Time

Y - Cost

A - Cost of test (per week)

B - Cost of finding a single bug (per week)

B)

X - Time

Y - Number of defects

A - Number of open defects

B - Number of closed defects

C)

X - Time

Y - Percent

A - % of functional tests in the test suite

B - % of non-functional tests in the test suite

D)

X - Time

Y - Count

A - Total number of executed tests

B - Number of open bugs

A. Option A

B. Option B

C. Option C

D. Option D

Answer: D

Explanation:

Option D correctly explains what is represented by the lines A, B and the axes X, Y in a testing metrics chart. According to option D:

? X-axis represents Time

? Y-axis represents Count

? Line A represents Number of open bugs

? Line B represents Total number of executed tests

This information is essential in understanding and analyzing the testing metrics of a completed project.

References: ISTQB Certified Tester Foundation Level (CTFL) v4.0 Syllabus, Section 2.5.1, Page 35.

NEW QUESTION 62

Which of the following types of tools is BEST suited for determining source code compliance with the guidelines provided by a coding standard?

A. Containerisation tool

B. Fault seeding tool.

C. Static analysis tool.

D. Test data preparation tool

Answer: C

Explanation:

A static analysis tool is best suited for determining source code compliance with coding standards. These tools analyze the code without executing it and can check for adherence to coding standards, syntax errors, and other static properties of the code. The ISTQB CTFL syllabus emphasizes the role of static analysis tools in verifying that code meets predefined standards and guidelines.

References: ISTQB CTFL Syllabus, Section on static testing and tools.

NEW QUESTION 65

Match each objective to the correct test level Objective:

A) Verifying whether the functional and non-functional behaviors of the system are as designed and specified.

B) Verifying whether the functional and non-functional behaviors of the interfaces are as designed.

C) Verifying whether the functional and non-functional behaviors of the components are as designed and specified.

D) Establishing confidence in the quality of the system as a whole. Test Level:

* 1. Component testing. 2. Integration testing. 3. System testing. 4. Acceptance testing.

A. A3, B2, C4, D1

B. A2, B3, C1, D4

C. A3, B2, C1, D4

Answer: C

Explanation:

The test levels and their objectives can be matched as follows:

? Verifying whether the functional and non-functional behaviors of the system are as designed and specified (A3: System testing).

? Verifying whether the functional and non-functional behaviors of the interfaces are as designed (B2: Integration testing).

? Verifying whether the functional and non-functional behaviors of the components are as designed and specified (C1: Component testing).

? Establishing confidence in the quality of the system as a whole (D4: Acceptance testing).

NEW QUESTION 66

During which main group of test activity are the following tasks performed?

- Checking test results and logs against specified coverage criteria.
- Assessing the level of component or system quality based on test results and logs.
- Determining whether more tests are needed. Select the correct Answer:

- A. Test planning.
- B. Test analysis.
- C. Test design.
- D. Test monitoring and control.

Answer: D

Explanation:

The activities of checking test results and logs against specified coverage criteria, assessing the level of component or system quality based on test results and logs, and determining whether more tests are needed fall under the category of test monitoring and control. This phase involves ongoing assessment and adjustment of the test activities to ensure they meet the test objectives and quality goals.

NEW QUESTION 69

A Test Manager conducts risk assessment for a project. One of the identified risks is: The sub-contractor may fail to meet his commitment". If this risk materializes, it will lead to delay in completion of testing required for the current cycle. Which of the following sentences correctly describes the risk?

- A. It is a product risk since any risk associated with development timeline is a product risk.
- B. It is no longer a risk for the Test Manager since an independent party (the sub- contractor) is now managing it
- C. It is a object risk since successful completion of the object depends on successful and timely completion of the tests
- D. It is a product risk since default on part of the sub-contractor may lead to delay in release of the product

Answer: D

Explanation:

? A product risk is a risk that affects the quality or timeliness of the software product being developed or tested1. Product risks are related to the requirements, design, implementation, verification, and maintenance of the software product2.

? The risk of the sub-contractor failing to meet his commitment is a product risk, as it could cause a delay in the completion of the testing required for the current cycle, which in turn could affect the release date of the product. The release date is an important aspect of the product quality, as it reflects the customer satisfaction and the market competitiveness of the product3.

? The other options are not correct because: References =

? 1 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 97

? 2 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 98

? 3 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 99

? 4 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 100

? 5 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 101

? 6 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 102

NEW QUESTION 70

Which of the following statements refers to good testing practice to be applied regardless of the chosen software development model?

- A. Tests should be written in executable format before the code is written and should act as executable specifications that drive coding
- B. Test levels should be defined such that the exit criteria of one level are part of the entry criteria for the next level
- C. Test objectives should be the same for all test levels, although the number of tests designed at various levels can vary significantly
- D. Involvement of testers in work product reviews should occur as early as possible to take advantage of the early testing principle

Answer: D

Explanation:

The statement that refers to good testing practice to be applied regardless of the chosen software development model is option D, which says that involvement of testers in work product reviews should occur as early as possible to take advantage of the early testing principle. Work product reviews are static testing techniques, in which the work products of the software development process, such as the requirements, the design, the code, the test cases, etc., are examined by one or more reviewers, with or without the author, to identify defects, violations, or improvements. Involvement of testers in work product reviews can provide various benefits for the testing process, such as improving the test quality, the test efficiency, and the test communication. The early testing principle states that testing activities should start as early as possible in the software development lifecycle, and should be performed iteratively and continuously throughout the lifecycle. Applying the early testing principle can help to prevent, detect, and remove defects at an early stage, when they are easier, cheaper, and faster to fix, as well as to reduce the risk, the cost, and the time of the testing process. The other options are not good testing practices to be applied regardless of the chosen software development model, but rather specific testing practices that may or may not be applicable or beneficial for testing, depending on the context and the objectives of the testing activities, such as:

? Tests should be written in executable format before the code is written and should act as executable specifications that drive coding: This is a specific testing practice that is associated with test-driven development, which is an approach to software development and testing, in which the developers write automated unit tests before writing the source code, and then refactor the code until the tests pass. Test-driven development can help to improve the quality, the design, and the maintainability of the code, as well as to provide fast feedback and guidance for the developers. However, test-driven development is not a good testing practice to be applied regardless of the chosen software development model, as it may not be feasible, suitable, or effective for testing in some contexts or situations, such as when the requirements are unclear, unstable, or complex, when the test automation tools or skills are not available or adequate, when the testing objectives or levels are not aligned with the unit testing, etc.

? Test levels should be defined such that the exit criteria of one level are part of the entry criteria for the next level: This is a specific testing practice that is associated with sequential software development models, such as the waterfall model, the V- model, or the W-model, in which the software development and testing activities are performed in a linear and sequential order, with well-defined phases, deliverables, and dependencies. Test levels are the stages of testing that correspond to the levels of integration of the software system, such as component testing, integration testing, system testing, and acceptance testing. Test levels should have clear and measurable entry criteria and exit criteria, which are the conditions that must be met before starting or finishing a test level. In sequential software development models, the exit criteria of one test level are usually part of the entry criteria for the next test level, to ensure that the software system is ready and stable for the next level of testing. However, this is not a good testing practice to be applied regardless of the chosen software development model, as it may not be relevant, flexible, or efficient for testing in some contexts or situations, such as when the software development and testing activities are performed in an iterative and incremental order, with frequent changes, feedback, and adaptations, as in agile software development models, such as Scrum, Kanban, or XP, when the test levels are not clearly defined or distinguished, or when the test levels are performed in parallel or concurrently, etc.

? Test objectives should be the same for all test levels, although the number of tests designed at various levels can vary significantly: This is a specific testing

practice that is associated with uniform software development models, such as the spiral model, the incremental model, or the prototyping model, in which the software development and testing activities are performed in a cyclical and repetitive manner, with similar phases, deliverables, and processes. Test objectives are the goals or the purposes of testing, which can vary depending on the test level, the test type, the test technique, the test environment, the test stakeholder, etc. Test objectives can be defined in terms of the test basis, the test coverage, the test quality, the test risk, the test cost, the test time, etc. Test objectives should be specific, measurable, achievable, relevant, and time-bound, and they should be aligned with the project objectives and the quality characteristics. In uniform software development models, the test objectives may be the same for all test levels, as the testing process is repeated for each cycle or iteration, with similar focus, scope, and perspective of testing. However, this is not a good testing practice to be applied regardless of the chosen software development model, as it may not be appropriate, realistic, or effective for testing in some contexts or situations, such as when the software development and testing activities are performed in a hierarchical and modular manner, with different phases, deliverables, and dependencies, as in sequential software development models, such as the waterfall model, the V-model, or the W-model, when the test objectives vary according to the test levels, such as component testing, integration testing, system testing, and acceptance testing, or when the test objectives change according to the feedback, the learning, or the adaptation of the testing process, as in agile software development models, such as Scrum, Kanban, or XP, etc. References: ISTQB Certified Tester Foundation Level (CTFL) v4.0 sources and documents:

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.1.1, Testing and the Software Development Lifecycle1

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.2.1, Testing Principles1

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.2.2, Testing Policies, Strategies, and Test Approaches1

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 1.3.1, Testing in Software Development Lifecycles1

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 2.1.1, Test Planning1

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 2.1.2, Test Monitoring and Control1

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 2.1.3, Test Analysis and Design1

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 2.1.4, Test Implementation1

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 2.1.5, Test Execution1

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 2.1.6, Test Closure1

? ISTQB® Glossary of Testing Terms v4.0, Work Product Review, Static Testing, Early Testing, Test-driven Development, Test Level, Entry Criterion, Exit Criterion, Test Objective, Test Basis, Test Coverage, Test Quality, Test Risk, Test Cost, Test Time2

NEW QUESTION 73

A requirement specifies that if the total amount of sales (TAS) made during the year by a corporate seller is 300,000€ or more, the bonus that must be paid to the seller is 100% of a certain amount agreed upon at the beginning of the year. The software contains a fault as it implements this requirement with the decision "IF (TAS = 300,000)" instead of "IF (TAS >= 300,000)". The application of the 3-value boundary value analysis to this problem consists of the following three test cases (TAS is an integer variable):

TC1 = 299,999 TC2=300,000 TC=300,001

Which of the following statements is TRUE?

- A. TC1 would highlight the fault
- B. TC2 would highlight the fault
- C. TC3 would highlight the fault
- D. None of the three test cases would highlight the fault.

Answer: B

Explanation:

The requirement specifies that a bonus should be paid if the total amount of sales (TAS) made during the year is 300,000€ or more. The software incorrectly implements this requirement with "IF (TAS = 300,000)" instead of "IF (TAS >= 300,000)". Using boundary value analysis (BVA), which is a common technique in software testing, the three test cases provided (TC1 = 299,999, TC2 = 300,000, and TC3 = 300,001) cover the critical boundary values around the condition.

? TC1 tests just below the boundary (299,999),

? TC2 tests exactly at the boundary (300,000),

? TC3 tests just above the boundary (300,001).

Since the software incorrectly checks for TAS equal to 300,000, only TC2 will fail because the condition is exactly met and highlights the incorrect implementation of the decision logic.

Reference: ISTQB CTFL Syllabus V4.0, Chapter 4.2.2, Boundary Value Analysis (BVA).

NEW QUESTION 74

Which of the following statements about white-box testing is FALSE?

- A. Static testing can benefit from using code-related white-box test techniques during code reviews.
- B. White-box testing allows suggesting test cases for increasing coverage levels which are based on objective measures
- C. Achieving full code coverage for a component or a system ensures that it has been fully tested
- D. Black-box testing can benefit from using code-related white-box test techniques to increase confidence in the code.

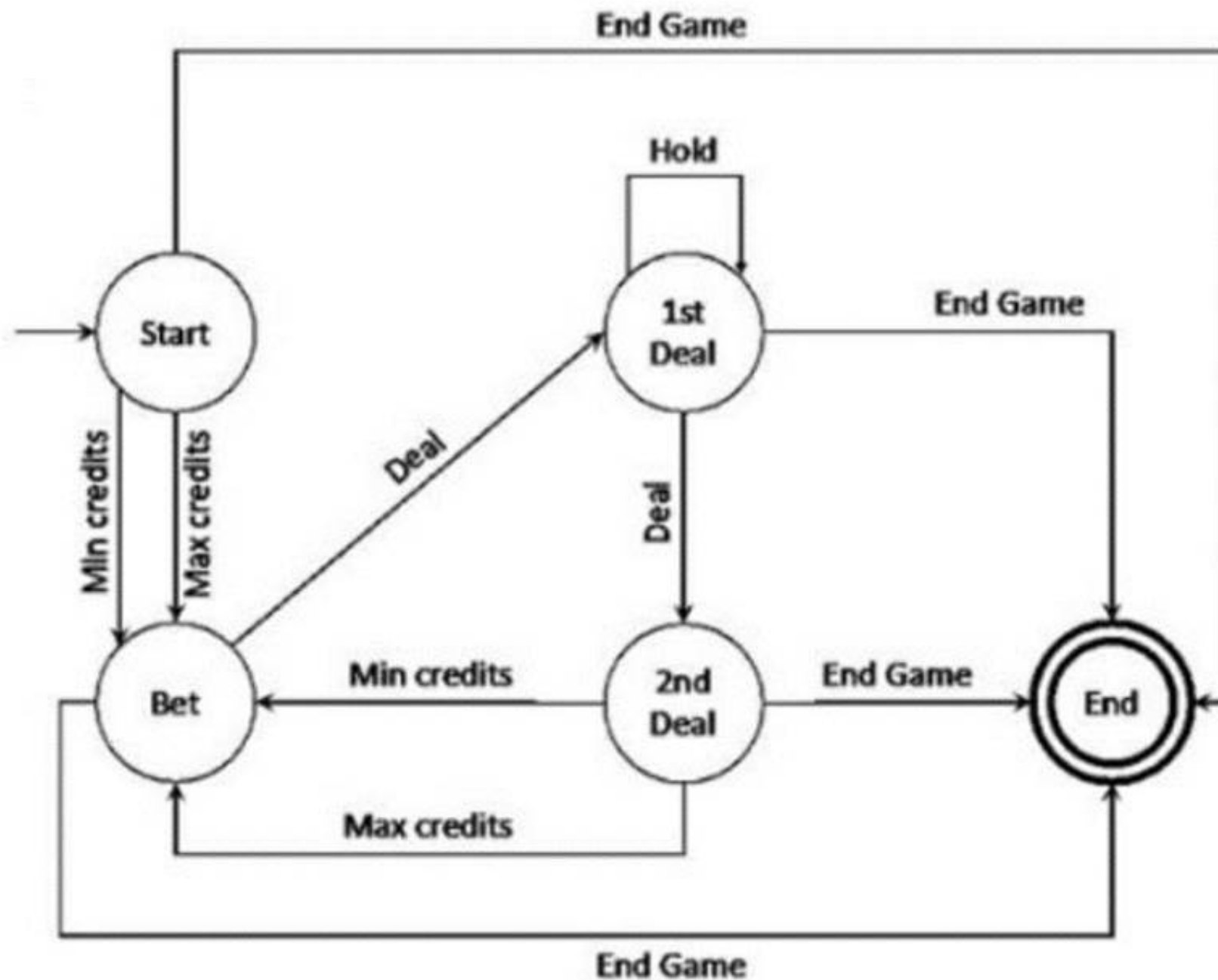
Answer: C

Explanation:

Achieving full code coverage does not guarantee that the component or system is fully tested or free of defects. Code coverage metrics indicate the extent to which the source code has been tested, but they do not account for the quality of the tests or whether all possible scenarios have been considered. Other types of testing, including functional, performance, and security testing, are necessary to ensure comprehensive testing. The ISTQB CTFL Syllabus v4.0 highlights that while high code coverage is beneficial, it does not equate to complete testing.

NEW QUESTION 78

Consider the following simplified version of a state transition diagram that specifies the behavior of a video poker game:



What Is the minimum number of test cases needed to cover every unique sequence of up to 3 states/2 transitions starting In the "Start" state and ending In the "End" state?

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

Answer: D

Explanation:

The minimum number of test cases needed to cover every unique sequence of up to 3 states/2 transitions starting in the ??Start?? state and ending in the ??End?? state is 4. This is because there are 4 unique sequences of up to 3 states/2 transitions starting in the ??Start?? state and ending in the ??End?? state:

? Start -> Bet -> End

? Start -> Deal -> End

? Start -> 1st Deal -> End

? Start -> 2nd Deal -> End References: ISTQB Certified Tester Foundation Level (CTFL) v4.0 sources and documents.

NEW QUESTION 81

Consider an estimation session in which a six-member Agile team (Memb1..... Memb6) uses the planning poker technique to estimate a user story (in story points). The team members will use a set of cards with the following values: 1,2, 3,5, 8,13,21. Below is the outcome of the first round of estimation for this session:

Memb1 = 3
Memb4 = 21

Memb2 = 3
Memb5 = 3

Memb3 = 3
Memb6 = 1

Which of the following answers BEST describes how the estimation session should proceed?

- A. The final estimate of the user story in story points is determined by applying the three- point estimation technique with the following input values most optimistic estimate - 1, most likely estimate - 3, and most pessimistic estimate - 21
- B. Further estimation rounds should be performed until all team members will pick the card having the same value: this value will represent the final estimate of the user story in story points.
- C. The final estimate of the user story in story points is determined by calculating the average value between the most optimistic estimate of 21 story points (Memb4> and the most pessimistic estimate of 1 story point (Memb6)
- D. Memb6 and Memb4 which have produced the most pessimistic and the most optimistic estimates respectively, should explain the reasons of their choices to stimulate a discussion between all members before proceeding to another estimation round

Answer: D

Explanation:

In Agile teams using the planning poker technique for estimating user stories, it is common practice to have further discussions and rounds of estimation if there is a significant discrepancy in the initial estimates. This helps in reaching a consensus and ensures that all team members understand the complexity and

requirements of the user story. According to the ISTQB CTFL syllabus, planning poker involves discussions to clarify differences in estimates, especially when there is a wide range of values selected. By having Memb6 and Memb4, who provided the most pessimistic and optimistic estimates, explain their reasoning, it fosters a deeper understanding and encourages the team to converge towards a more accurate and agreed-upon estimate.
References: ISTQB CTFL Syllabus, Section on Agile methodologies and estimation techniques.

NEW QUESTION 82

A company runs a pilot project for evaluation of a test automation tool. Which of the following is NOT a valid object of this pilot project?

- A. Get familiar with the functionality and options of the tool
- B. Check how the tool fits to the existing test processes
- C. Train all testers on using the tool
- D. Decide upon standards for tool implementation

Answer: C

Explanation:

? A pilot project is a small-scale experiment or trial that is conducted to evaluate the feasibility, effectiveness, and suitability of a test automation tool before implementing it on a larger scale¹.

? The objectives of a pilot project may vary depending on the context and scope of the test automation initiative, but some common ones are²:

? Therefore, option C is not a valid objective of a pilot project, as it is not necessary to train all testers on using the tool at this stage. Training all testers on using the tool would be more appropriate after the tool has been selected and approved for full-scale implementation, and after the standards and guidelines have been established. Training all testers on using the tool during the pilot project would be inefficient, costly, and premature, as the tool may not be suitable or effective for the intended purpose, or may be replaced by another tool later.

References:

? 1: ISTQB Certified Tester Foundation Level Syllabus 2018, Version 4.0, p. 82

? 2: ISTQB Certified Tester Foundation Level Syllabus 2018, Version 4.0, p. 83

? : ISTQB Certified Tester Foundation Level Syllabus 2018, Version 4.0, p. 84

? : ISTQB Certified Tester Foundation Level Syllabus 2018, Version 4.0, p. 85

NEW QUESTION 85

A typical objective of testing is to

- A. Determine the most appropriate level of detail with which to design test cases.
- B. Verify the compliance of the test object with regulatory requirements.
- C. Plan test activities in accordance with the existing test policy and test strategy
- D. Verify the correct creation and configuration of the test environment

Answer: B

Explanation:

One of the primary objectives of testing is to ensure that the software or system being tested meets all regulatory requirements. This is crucial in many industries where compliance with laws and standards is mandatory. According to the ISTQB CTFL Syllabus v4.0, testing aims to evaluate the quality of the software product and verify that it complies with specified requirements, including regulatory requirements.

NEW QUESTION 90

Which of the following lists factors That contribute to PROJECT risks?

- A. skill and staff shortages; problems in defining the right requirements, contractual issues.
- B. skill and staff shortages; software does not perform its intended functions; problems in defining the right requirements.
- C. problems in defining the right requirements; contractual issues; poor software quality characteristics.
- D. poor software quality characteristics; software does not perform its intended functions.

Answer: A

Explanation:

Project risks are the uncertainties or threats that may affect the project objectives, such as scope, schedule, cost, and quality. According to the ISTQB Certified Tester Foundation Level (CTFL) v4.0 syllabus, some of the factors that contribute to project risks are:

? Skill and staff shortages: This factor refers to the lack of adequate or qualified human resources to perform the project tasks. This may result in delays, errors, rework, or low productivity.

? Problems in defining the right requirements: This factor refers to the difficulties or ambiguities in eliciting, analyzing, specifying, validating, or managing the requirements of the project. This may result in misalignment, inconsistencies, gaps, or changes in the requirements, affecting the project scope and quality.

? Contractual issues: This factor refers to the challenges or disputes that may arise from the contractual agreements between the project parties, such as clients, suppliers, vendors, or subcontractors. This may result in legal, financial, or ethical risks, affecting the project delivery and satisfaction.

The other options are not correct because they list factors that contribute to PRODUCT risks, not project risks. Product risks are the uncertainties or threats that may affect the quality or functionality of the software product or system. Some of the factors that contribute to product risks are:

? Poor software quality characteristics: This factor refers to the lack of adherence or compliance to the quality attributes or criteria of the software product or system, such as reliability, usability, security, performance, or maintainability. This may result in defects, failures, or dissatisfaction of the users or stakeholders.

? Software does not perform its intended functions: This factor refers to the deviation or discrepancy between the expected and actual behavior or output of the software product or system. This may result in errors, faults, or malfunctions of the software product or system.

References = ISTQB Certified Tester Foundation Level (CTFL) v4.0 syllabus, Chapter 1: Fundamentals of Testing, Section 1.5: Risks and Testing, Pages 14-16.

NEW QUESTION 92

You are testing a system that is used in motor vehicles to warn the driver of an obstacle when re-versing. Output is provided by a series of LED lights (green, yellow, and red), each illuminated based on clearly defined conditions.

The following summary describes the functionality:

- Object within 10 metres, green LED lit.
 - Object within 5 metres, yellow LED lit.
 - Object within 1 metre, red LED lit.
 - Setting sensitivity mode to "ON" will result in only the red LED being lit when the object is within 1 metre.
- The following decision table describes the rules associated with the functioning of this proximity warning system:

Conditions	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5	Rule 6
Distance < 10 m	Y	N	N	Y	N	N
Distance < 5 m	N	Y	N	N	Y	N
Distance < 1 m	N	N	Y	N	N	Y
Sensitivity ON	N	N	N	Y	Y	Y

Actions						
Green LED	Y	N	N	N	N	N
Yellow LED	N	Y	N	N	N	N
Red LED	N	N	Y	N	N	Y

Which intended functionality is tested by Rule 5 in the decision table?

- A. Object is within 5 metres of the vehicle and the sensitivity mode is switched "off", resulting in the yellow LED being lit.
- B. Object is within 5 metres of the vehicle and the sensitivity mode is switched "on", resulting in the yellow LED being lit.
- C. Object is within 5 metres of the vehicle and the sensitivity mode is switched "off", resulting in no LED being lit.
- D. Object is within 5 metres of the vehicle and the sensitivity mode is switched "on", resulting in no LED being lit.

Answer: D

Explanation:

Rule 5 in the decision table indicates that when the object is within 5 metres of the vehicle and the sensitivity mode is switched "on", no LED is lit. This matches the conditions and actions described in the decision table provided, ensuring that only the red LED is lit when the sensitivity mode is on and the object is within 1 metre, otherwise no LED is lit .

NEW QUESTION 93

Mark the correct sentences:

- * Defects are a result of environmental conditions and are also referred to as "Failures"
- * A human mistake may produce a defect
- * A system mil totally fail to operate correctly when a failure exists in it
- * When a defect exists in a system it may result in a failure
- * Defects occur only as a result of technology changes

- A. II, IV
- B. I, II
- C. IV, V
- D. II, III, IV

Answer: A

Explanation:

? The question is about marking the correct sentences among the given statements related to defects, failures, and mistakes. According to the ISTQB glossary, the definitions of these terms are1:

? Therefore, out of the five given statements, only two are correct, namely:

? The other three statements are incorrect, namely: References:

? 1: ISTQB Glossary of Testing Terms 4.0, 2023, available at (ISTQB) and (ASTQB).

NEW QUESTION 97

Confirmation testing is performed after:

- A. a defect is fixed and after other tests do not find any side-effect introduced in the software as a result of such fix
- B. a failed test, and aims to run that test again to confirm that the same behavior still occurs and thus appears to be reproducible
- C. the execution of an automated regression test suite to confirm the absence of false positives in the test results
- D. a defect is fixed, and if such testing is successful then the regression tests that are relevant for such fix can be executed

Answer: D

Explanation:

Confirmation testing is performed after a defect is fixed, and if such testing is successful then the regression tests that are relevant for such fix can be executed. Confirmation testing, also known as re-testing, is the process of verifying that a defect has been resolved by running the test case that originally detected the defect. Confirmation testing is usually done before regression testing, which is the process of verifying that no new defects have been introduced in the software as a result of changes or fixes. Therefore, option D is the correct answer.

References: ISTQB® Certified Tester Foundation Level Syllabus v4.01, Section 2.4.1, page 28; ISTQB® Glossary v4.02, page 15.

NEW QUESTION 98

Which of the following statements is incorrect regarding the involvement of testers in the software development lifecycle (SDLC)?

- A. Testers should contribute to all activities in the SDLC and participate in design discussions.
- B. Testers should be involved from the beginning of the SDLC to increase understanding of design decisions and detect defects early.
- C. Testers should only be involved during the testing phase.
- D. Testers' involvement is essential; developers find it difficult to be objective.

Answer: C

Explanation:

Involving testers only during the testing phase is incorrect as per the ISTQB CTFL syllabus. Effective involvement of testers is crucial throughout the entire software development lifecycle (SDLC). This includes early stages such as requirement analysis and design, which allows testers to understand the design decisions and detect defects early. Early involvement helps in better understanding the project and ensures that quality is built into the product from the beginning. Furthermore, the ISTQB syllabus emphasizes the importance of testers contributing to all activities in the SDLC, including design discussions, to enhance defect detection and prevention.

References: ISTQB CTFL Syllabus, Section 2.1.1, "The Influence of Development Models on Testing" and Section 1.1.1, "Test Objectives."

NEW QUESTION 103

Which one of the following is a typical entry criteria for testing?

- A. Planned tests have been executed.
- B. Availability of testable requirements.
- C. The number of unresolved defects is within an agreed limit.
- D. The number of estimated remaining defects is sufficiently low.

Answer: B

Explanation:

A typical entry criterion for testing is the availability of testable requirements. Testable requirements provide a basis for designing and executing test cases. Without clear and testable requirements, it is challenging to determine what needs to be tested and to create effective test cases. Entry criteria ensure that the necessary preconditions are met before testing begins, which helps in conducting efficient and effective testing. References: ISTQB CTFL Syllabus, Section 5.1.3, "Entry and Exit Criteria."

NEW QUESTION 104

The tests at the bottom layer of the test pyramid:

- A. run faster than the tests at the top layer of the pyramid
- B. cover larger pieces of functionalities than the tests at the top layer of the pyramid
- C. are defined as 'UI Tests' or 'End-To-End tests' in the different models of the pyramid
- D. are unscripted tests produced by experience-based test techniques

Answer: A

Explanation:

The tests at the bottom layer of the test pyramid run faster than the tests at the top layer of the pyramid because they are more focused, isolated, and atomic. They usually test individual units or components of the software system, such as classes, methods, or functions. They are also easier to maintain and execute, as they have fewer dependencies and interactions with other parts of the system. The tests at the top layer of the test pyramid, on the other hand, are slower because they cover larger pieces of functionalities, such as user interfaces, workflows, or end-to-end scenarios. They also have more dependencies and interactions with other systems, such as databases, networks, or external services. They are more complex and costly to maintain and execute, as they require more setup and teardown procedures, test data, and test environments. References: ISTQB Certified Tester Foundation Level (CTFL) v4.0 sources and documents:

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 3.2.1, Test Pyramid1

? ISTQB® Glossary of Testing Terms v4.0, Test Pyramid2

NEW QUESTION 108

The statement: "Test activities should start in the early stages of the lifecycle, adhering to the testing principle of early testing?? is relevant to which of the recognized software development models?

- A. Sequential development model.
- B. Iterative development model.
- C. Incremental development model.
- D. All the above

Answer: D

Explanation:

The principle of early testing is applicable to all recognized software development models, including sequential, iterative, and incremental models. Starting test activities early in the lifecycle helps in identifying and addressing defects as soon as possible, which can save time and costs by preventing defects from propagating to later stages of development. This proactive approach enhances the overall quality and efficiency of the software development process. Reference: ISTQB CTFL Syllabus V4.0, Section 1.3

NEW QUESTION 113

Which of the following is the most correct statement about static testing techniques?

- A. Static techniques can be used before all code is ready for execution
- B. Static techniques find more defects than dynamic techniques.

- C. Static techniques can be used by inexperienced users.
- D. Static techniques are always cheaper than dynamic techniques.

Answer: A

Explanation:

State testing techniques are a type of dynamic testing techniques that are based on the behavior of the system under test for different input conditions and events. Dynamic testing techniques require the system to be executed with test cases, whereas static testing techniques do not. Static testing techniques can be applied before the code is ready for execution, such as reviews, inspections, walkthroughs, and static analysis. Static testing techniques can help find defects early in the development process, improve the quality of the code, and reduce the cost and effort of dynamic testing. References = ISTQB Certified Tester Foundation Level (CTFL) v4.0 Syllabus, Chapter 4, Section 4.2.1, Page 281; ISTQB Glossary of Testing Terms v4.0, Page 292

NEW QUESTION 116

Which of the following statements is NOT true about Configuration management and software testing?

- A. Configuration management helps maintain consistent versions of software artifacts.
- B. Configuration management supports the build process, which is essential for delivering a test release into the test environment.
- C. When testers report defects, they need to reference version-controlled items.
- D. Version controlled test ware increases the chances of finding defects in the software under test.

Answer: D

Explanation:

Reference:ISTQB CTFL Syllabus V4.0, Section 5.4

NEW QUESTION 118

Which of the following statements best describes the difference between product risk and project risk in software testing?

- A. Product risk refers to the risk associated with the project's schedule, budget, and resources, while project risk refers to the risk associated with the quality and functionality of the software product.
- B. Product risk refers to the risk associated with issues such as delays in work product deliveries, inaccurate estimates, while project risk refers to the risk associated with the project's schedule, budget, and resources.
- C. Product risk and project risk are essentially the same and can be used interchangeably.
- D. Product risk refers to the risk associated with delays in elements such as work product deliveries and inaccurate estimates, while project risk refers to the risk associated with issues such as user dissatisfaction.

Answer: B

Explanation:

Product risk involves the potential issues that can affect the quality and functionality of the software product, such as defects, performance problems, and usability issues. Project risk, on the other hand, relates to the risks that can impact the project's schedule, budget, and resources, such as delays, cost overruns, and resource constraints. Understanding both types of risks is crucial for managing and mitigating potential problems in software projects. References:ISTQB CTFL Syllabus, Section 5.2.1, "Risk Management in Testing."

NEW QUESTION 123

Which of the following statements best describes the way in which decision coverage is measured?

- A. Measured as the number of statements executed by the tests, divided by the total number of executable statements in the code.
- B. Measured as the number of lines of code executed by the tests, divided by the total number of lines of code in the test object.
- C. Measured as the number of decision outcomes executed by the tests, divided by the total number of decision outcomes in the test object.
- D. It is not possible to accurately measure decision coverage.

Answer: C

Explanation:

Reference:ISTQB CTFL Syllabus V4.0, Section 4.3.2

NEW QUESTION 127

Which of the following issues cannot be identified by static analysis tools?

- A. Very low MTBF (Mean Time Between failure)
- B. Potentially endless loops
- C. Referencing a variable with an undefined value
- D. Security vulnerabilities

Answer: A

Explanation:

Static analysis tools are software tools that examine the source code of a program without executing it. They can detect various types of issues, such as syntax errors, coding standards violations, security vulnerabilities, and potential bugs¹². However, static analysis tools cannot identify issues that depend on the runtime behavior or performance of the program, such as very low MTBF (Mean Time Between failure)³. MTBF is a measure of the reliability of a system or component. It is calculated by dividing the total operating time by the number of failures. MTBF reflects how often a system or component fails during its expected lifetime. Static analysis tools cannot measure MTBF because they do not run the program or observe its failures. MTBF can only be estimated by dynamic testing, which involves executing the program under various conditions and collecting data on its failures⁴. Therefore, very low MTBF is an issue that cannot be identified by static analysis tools. The other options, such as potentially endless loops, referencing a variable with an undefined value, and security vulnerabilities, are issues that can be identified by static analysis tools. Static analysis tools can detect potentially endless loops by analyzing the control flow and data flow of the program and checking for conditions that may never become false⁵. Static analysis tools can detect referencing a variable with an undefined value by checking the scope and initialization of variables and reporting any use of uninitialized variables⁶. Static analysis tools can detect security vulnerabilities by checking for common patterns

of insecure code, such as buffer overflows, SQL injections, cross-site scripting, and weak encryption. References = What Is Static Analysis? Static Code Analysis Tools - Perforce Software, How Static Code Analysis Works | Perforce, Static CodeAnalysis: Techniques, Top 5 Benefits & 3 Challenges, What is MTBF? Mean Time Between Failures Explained | Perforce, Static analysis tools - Software Testing MCQs - CareerRide, ISTQB_Chapter3 | Quizizz, [Static Code Analysis for Security Vulnerabilities | Perforce].

NEW QUESTION 130

Who of the following has the best knowledge to decide what tests in a test project should be automated?

- A. The developer
- B. The customer
- C. The development manager
- D. The test leader

Answer: D

Explanation:

The test leader is the person who is responsible for planning, monitoring, and controlling the test activities and resources in a test project. The test leader should have the best knowledge of the test objectives, scope, risks, resources, schedule, and quality criteria. The test leader should also be aware of the test automation criteria, such as the execution frequency, the test support, the team education, the roles and responsibilities, and the devs and testers collaboration¹. Based on these factors, the test leader can decide which tests are suitable for automation and which are not, and prioritize them accordingly. The test leader can also coordinate with the test automation engineers, the developers, and the stakeholders to ensure the alignment of the test automation strategy with the test project goals and expectations. References = ISTQB Certified Tester Foundation Level (CTFL) v4.0 Syllabus, Chapter 2, Section 2.3.1, Page 152; ISTQB Glossary of Testing Terms v4.0, Page 403; ISTQB Certified Tester Foundation Level (CTFL) v4.0 Syllabus, Chapter 6, Section 6.1.1, Page 514; Top 8 Test Automation Criteria You Need To Fulfill - QAMIND¹

NEW QUESTION 131

From a testing perspective, configuration management

- A. Allows the expected results to be compared with the actual results.
- B. Allows the tracking of all changes to versions of the testware.
- C. Includes all activities that direct and control an organisation with regard to quality
- D. Focuses on configuring static analysis tools to choose the most suitable breadth and depth of analysis.

Answer: B

Explanation:

Configuration management in the context of testing involves the systematic control of changes to the configuration items, including testware such as test scripts, test data, and test environments. It ensures that all changes are tracked and recorded, enabling the version control and management of testware . Option A is related to test execution rather than configuration management. Option C describes quality management in a broader sense, not specifically configuration management. Option D is specific to the configuration of tools, not the overall management of testware versions.

NEW QUESTION 133

Which ONE of the following statements does NOT describe how testing contributes to higher quality?

- A. Properly designed tests that pass reduce the level of risk in a system.
- B. The testing of software demonstrates the absence of defects.
- C. Software testing identifies defects, which can be used to improve development activities.
- D. Performing a review of the requirement specifications before implementing the system can enhance quality.

Answer: B

Explanation:

? The testing of software does not demonstrate the absence of defects, but rather the presence of defects or the conformance of the software to the specified requirements¹. Testing can never prove that the software is defect-free, as it is impossible to test all possible scenarios, inputs, outputs, and behaviors of the software². Testing can only provide a level of confidence in the quality of the software, based on the coverage, effectiveness, and efficiency of the testing activities³.

? The other options are correct because: References =

- ? 1 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 10
- ? 2 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 11
- ? 3 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 12
- ? 4 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 13
- ? 5 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 97
- ? 6 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 98
- ? 7 ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 14
- ? [8] ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 15
- ? [9] ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 16
- ? [10] ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 17
- ? [11] ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 18
- ? [12] ISTQB® Certified Tester Foundation Level Syllabus v4.0, 2023, p. 19

NEW QUESTION 138

Which of the following about typical information found within a test plan is FALSE?

- A. The need to temporarily have additional test personnel available for specific test phases and/or test activities
- B. The conditions that must be met in order for the test execution activities to be considered completed.
- C. The list of the product risks which have not been fully mitigated at the end of test execution.
- D. The conditions that must be met for part of all the planned activities to be suspended and resumed.

Answer: C

Explanation:

A typical test plan includes various elements, such as resource requirements, test completion criteria, and suspension/resumption criteria. However, the list of product risks that have not been fully mitigated is generally not included in the test plan but rather in the risk management documentation.

? The test plan focuses on planning and executing tests, including resource allocation and defining criteria for test suspension and resumption.

? While risk management is crucial, unmitigated risks are typically documented in risk logs or separate risk management plans.

Reference: ISTQB CTFL Syllabus V4.0, Chapter 5.1.1, Test Planning.

NEW QUESTION 140

The whole-team approach:

- A. promotes the idea that all team members should have a thorough understanding of test techniques
- B. is a consensus-based approach that engages the whole team in estimating the user stories
- C. promotes the idea that all team members should be responsible for the quality of the product
- D. is mostly adopted in projects aimed at developing safety-critical systems, as it ensures the highest level of testing independence

Answer: C

Explanation:

This answer is correct because the whole-team approach is a way of working in agile projects where all team members share the responsibility for the quality of the product, and collaborate on delivering value to the customer. The whole-team approach involves testers, developers, business analysts, product owners, and other stakeholders in planning, designing, developing, testing, and delivering the product. The whole-team approach fosters communication, feedback, learning, and continuous improvement within the

team. References: ISTQB Glossary of Testing Terms v4.0, ISTQB Foundation Level Syllabus v4.0, Section 3.1.1.1

NEW QUESTION 142

You are an experienced tester on a project with incomplete requirements and under pressure to deploy.

What type of testing should you do?

- A. Decision-based testing.
- B. Checklist-based testing.
- C. Error guessing.
- D. Exploratory testing.

Answer: D

Explanation:

When working on a project with incomplete requirements and under pressure to deploy, exploratory testing is particularly suitable. This type of testing allows testers to use their expertise and intuition to explore the system's functionality and identify defects without needing detailed specifications. Exploratory testing is flexible and can quickly adapt to changes and gaps in the requirements.

NEW QUESTION 146

After being in operation for many years, a document management system must be decommissioned as it has reached its end of life. This system will not be replaced by any other new system. A legal obligation provides that all documents within the system must be kept for at least 20 years in a state archive. Which of the following statements about maintenance testing for decommissioning of this system is TRUE?

- A. No maintenance testing is required as this system will not be replaced.
- B. Data migration testing is required as part of maintenance testing
- C. Confirmation testing is required as part of maintenance testing.
- D. Regression testing is required as part of maintenance testing

Answer: B

Explanation:

Data migration testing is a critical part of maintenance testing during the decommissioning of a system. When a system is decommissioned, data often needs to be transferred to another system or archived securely. This process ensures that the data remains intact, accessible, and secure in its new location. Therefore, statement B is true as it aligns with the ISTQB CTFL syllabus guidelines on handling system decommissioning and data preservation.

NEW QUESTION 149

You are testing a room upgrade system for a hotel. The system accepts three differed types of room (increasing order of luxury): Platinum. Silver and Gold Luxury. ONLY a Preferred Guest Card holder s eligible for an upgrade.

Below you can find the decision table defining the upgrade eligibility:

Conditions

Preferred Guest Card holder	YES	YES	NO	NO
Room Type	Silver	Platinum	Silver	Platinum

48	Offer upgrade to Gold Luxury	YES	NO	NO	NO
	Offer upgrade to Silver	N/A	YES	N/A	NO

What is the expected result for each of the following test cases? Customer A: Preferred Guest Card holder, holding a Silver room Customer B: Non Preferred Guest Card holder, holding a Platinum room

- A. Customer A; doesn't offer any upgrade; Customer B: offers upgrade to Gold luxury room
- B. Customer A: doesn't offer any upgrade; Customer B: doesn't offer any upgrade.
- C. Customer A: offers upgrade to Gold Luxury room; Customer B: doesn't offer any upgrade
- D. Customer A: offers upgrade to Silver room; Customer B: offers upgrade to Silver room.

Answer: C

Explanation:

According to the decision table in the image, a Preferred Guest Card holder with a Silver room is eligible for an upgrade to Gold Luxury (YES), while a non-Preferred Guest Card holder, regardless of room type, is not eligible for any upgrade (NO).

Therefore, Customer A (a Preferred Guest Card holder with a Silver room) would be offered an upgrade to Gold Luxury, and Customer B (a non-Preferred Guest Card holder with a Platinum room) would not be offered any upgrade. References = The answer is derived directly from the decision table provided in the image; specific ISTQB Certified Tester Foundation Level (CTFL) v4.0 documents are not referenced.

NEW QUESTION 153

Which of the following statements about how different types of test tools support testers is true?

- A. The support offered by a test data preparation tool is often leveraged by testers to run automated regression test suites
- B. The support offered by a performance testing tool is often leveraged by testers to run load tests
- C. The support offered by a bug prediction tool is often used by testers to track the bugs they found
- D. The support offered by a continuous integration tool is often leveraged by testers to automatically generate test cases from a model

Answer: B

Explanation:

The support offered by a performance testing tool is often leveraged by testers to run load tests, which are tests that simulate a large number of concurrent users or transactions on the system under test, in order to measure its performance, reliability, and scalability. Performance testing tools can help testers to generate realistic workloads, monitor system behavior, collect and analyze performance metrics, and identify performance bottlenecks. The other statements are false, because:

? A test data preparation tool is a tool that helps testers to create, manage, and manipulate test data, which are the inputs and outputs of test cases. Test data preparation tools are not directly related to running automated regression test suites, which are test suites that verify that the system still works as expected after changes or modifications. Regression test suites are usually executed by test execution tools, which are tools that can automatically run test cases and compare actual results with expected results.

? A bug prediction tool is a tool that uses machine learning or statistical techniques to predict the likelihood of defects in a software system, based on various factors such as code complexity, code churn, code coverage, code smells, etc. Bug prediction tools are not used by testers to track the bugs they found, which are the actual defects that have been detected and reported during testing. Bugs are usually tracked by defect management tools, which are tools that help testers to record, monitor, analyze, and resolve defects.

? A continuous integration tool is a tool that enables the integration of code changes from multiple developers into a shared repository, and the execution of automated builds and tests, in order to ensure the quality and consistency of the software system. Continuous integration tools are not used by testers to automatically generate test cases from a model, which are test cases that are derived from a representation of the system under test, such as a state diagram, a decision table, a use case, etc. Test cases can be automatically generated by test design tools, which are tools that support the implementation and maintenance of test cases, based on test design specifications or test models. References: ISTQB Certified Tester Foundation Level (CTFL) v4.0 sources and documents:

? ISTQB® Certified Tester Foundation Level Syllabus v4.0, Chapter 3.4.1, Types of Test Tools

? ISTQB® Glossary of Testing Terms v4.0, Performance Testing Tool, Test Data Preparation Tool, Bug Prediction Tool, Continuous Integration Tool, Test Execution Tool, Defect Management Tool, Test Design Tool

NEW QUESTION 156

Which of the following statements about the shift-left approach is true?

- A. Shift-left in testing can be implemented only in Agile/DevOps frameworks, as it relies completely on automated testing activities performed within a continuous integration process
- B. Performance testing performed during component testing, is a form of shift-left in testing that avoids planning and executing costly end-to-end testing at the system test level in a production-like environment
- C. Shift-left in testing can be implemented in several ways to find functional defects early in the lifecycle, but it cannot be relied upon to find defects associated with non-functional characteristics
- D. Continuous integration supports shift-left in testing as it can reduce the time between the introduction of a defect and its detection, thereby reducing the cost to fix it

Answer: D

Explanation:

This answer is correct because shift-left in testing is an approach that aims to perform testing activities as early as possible in the software development lifecycle, in order to find and fix defects faster and cheaper, and to improve the quality of the software product. Continuous integration is a practice that supports shift-left in testing, as it involves integrating and testing the software components frequently, usually several times a day, using automated tools and processes. Continuous integration can reduce the time between the introduction of a defect and its detection, thereby reducing the cost to fix it and the risk of accumulating defects that could affect the functionality or performance of the software product. References: ISTQB Foundation Level Syllabus v4.0, Section 3.1.1.3, Section 3.2.1.3

NEW QUESTION 161

For the same financial institution in Question 12, with the same requirements and expectations, what would be the most likely investment values used in testing if two-point boundary value analysis is used to design test cases specific to the 13% interest rate equivalence partition?

- A. R100 000, R100 001, R500 000, R500 001.
- B. R99 999, R100 000, R499 999, R500 000.
- C. R100 000. R500 000.
- D. R99 000, R500 001.

Answer: A

Explanation:

For boundary value analysis, the test cases should include the boundary values just inside and just outside the equivalence partition for the 13% interest rate range:

- ? R100,000 (just inside the previous range)
- ? R100,001 (start of the 13% range)
- ? R500,000 (end of the 13% range)
- ? R500,001 (just outside the range)

These values ensure that both the edges of the partition are tested.

NEW QUESTION 165

Which of the following statements is true?

- A. Functional testing focuses on what the system should do while non-functional testing on the internal structure of the system
- B. Non-functional testing includes testing of both technical and non-technical quality characteristics
- C. Testers who perform functional tests are generally expected to have more technical skills than testers who perform non-functional tests
- D. The test techniques that can be used to design white-box tests are described in the ISO/IEC 25010 standard

Answer: B

Explanation:

Non-functional testing includes testing of both technical and non-technical quality characteristics. Non-functional testing is the process of testing the quality attributes of a system, such as performance, usability, security, reliability, etc. Non-functional testing can be applied at any test level and can use both black-box and white-box test techniques. Non-functional testing can cover both technical aspects, such as response time, throughput, resource consumption, etc., and non-technical aspects, such as user satisfaction, accessibility, compliance, etc. Therefore, option B is the correct answer. References: ISTQB® Certified Tester Foundation Level Syllabus v4.01, Section 1.3.1, page 13; ISTQB® Glossary v4.02, page 40.

NEW QUESTION 170

An application is subjected to a constant load for an extended period of time as part of a performance test While running this test, the response time of the application steadily slows down, which results in a requirement not being met This slowdown is caused by a memory leak where the application code does not properly release some of the dynamically allocated memory when it is no longer needed. Which of the following statements is TRUE?

- A. The slowdown is a failure while the memory leak is a defect
- B. The slowdown is a defect while the memory leak is an error.
- C. The slowdown is an error; the memory leak is a defect.
- D. The slowdown is a defect; the memory leak is a failure.

Answer: A

Explanation:

In software testing terminology, a failure is an observable deviation of the software from its expected behavior. A defect (or bug) is the cause of the failure in the software's code. In this case, the observed slowdown is the failure, while the underlying memory leak in the application code is the defect causing this failure. This distinction is clearly outlined in the ISTQB CTFL Syllabus v4.0, which differentiates between failures (observable issues) and defects (underlying issues in the code).

NEW QUESTION 171

A system has a self-diagnostics module that starts executing after the system is reset. The diagnostics are running 12 different tests on the systems memory hardware. The following is one of the requirements set for the diagnostics module:

'The time taking the diagnostics tests to execute shall be less than 2 seconds' Which of the following is a failure related to the specified requirement?

- A. The diagnostic tests fail to start after a system reset
- B. The diagnostic tests take too much time to execute
- C. The diagnostic tests that measure the speed of the memory, fail
- D. The diagnostic tests fail due to incorrect implementation of the test code

Answer: B

Explanation:

A failure is an event in which a component or system does not perform a required function within specified limits¹. A requirement is a condition or capability

needed by a user to solve a problem or achieve an objective². In this case, the requirement is that the diagnostics tests should execute in less than 2 seconds. Therefore, any event that violates this requirement is a failure. The only option that clearly violates this requirement is B. The diagnostic tests take too much time to execute. If the diagnostic tests take more than 2 seconds to complete, then they do not meet the specified limit and thus fail. The other options are not necessarily failures related to the specified requirement. Option A. The diagnostic tests fail to start after a system reset is a failure, but not related to the time limit. It is related to the functionality of the self-diagnostics module. Option C. The diagnostic tests that measure the speed of the memory, fail is also a failure, but not related to the time limit. It is related to the accuracy of the memory tests. Option D. The diagnostic tests fail due to incorrect implementation of the test code is also a failure, but not related to the time limit. It is related to the quality of the test code. References = ISTQB® Certified Tester Foundation Level Syllabus v4.0, Requirements Engineering Fundamentals.

NEW QUESTION 172

Exploratory testing is an experience-based test technique

- A. Where a developer and a tester work together on the same workstation while the developer actively writes code, the tester explores the code to find defects.
- B. That can be organised into sessions guided by test charters outlining test objectives that will guide the testers' exploration
- C. Where a team of testers explores all possible test techniques in order to determine the most suitable combination of these techniques to apply for a test project.
- D. That aims at finding defects by designing tests that exercise all possible combinations of input values and preconditions

Answer: B

Explanation:

Exploratory testing is an experience-based test technique where testers actively engage with the software, learning about its behavior while simultaneously designing and executing tests. According to the ISTQB CTFL syllabus, exploratory testing can be structured into sessions guided by test charters, which outline the test objectives and provide direction for the testers' exploration. This method is particularly useful in situations where test documentation is limited or where rapid feedback is needed. Thus, option B correctly describes how exploratory testing can be organized.

NEW QUESTION 177

Which one of the following statements correctly describes the term 'debugging'?

- A. There is no difference between debugging and testing.
- B. Debugging is a confirmation activity that checks whether fixes resolved defects.
- C. Debugging is the development activity that finds, analyses and fixes defects.
- D. Debugging is of no relevance in Agile development.

Answer: C

Explanation:

Reference: ISTQB CTFL Syllabus V4.0, Section 1.1.2

NEW QUESTION 180

Which of the following statements about the shift-left approach is FALSE?

- A. The shift-left approach can only be implemented with test automation
- B. The shift-left approach in testing is compatible with DevOps practices.
- C. The shift-left approach can involve security vulnerabilities
- D. The shift-left approach can be supported by static analysis tools.

Answer: A

Explanation:

In a formal review process, the recorder's role is typically responsible for documenting the findings of the review team, including action items, decisions, and recommendations. This ensures that there is an accurate record of what was discussed and agreed upon, facilitating follow-up and continuous improvement. Therefore, statement C is correct as per the ISTQB CTFL syllabus.

NEW QUESTION 181

Which sequence of states in the answer choices is correct in accordance with the following figure depicting the life-cycle of a defect?



- A. S0->S1->S2->S3->S5->S1
- B. S0->S1->S2->S3->S5->S1->S2->S3
- C. S0->S1->S2->S3->S4
- D. S0->S1->S2->S3->S5->S3->S4

Answer: D

Explanation:

According to the ISTQB Certified Tester Foundation Level (CTFL) v4.0, the life cycle of a defect typically follows a sequence from its discovery to its closure. In the provided figure, it starts with S0 (New), moves to S1 (Assigned), then to S2 (Resolved), followed by S3 (Verified). If the defect is not fixed, it can be Re-opened

(S5) and goes back for verification (S3). Once verified, it is Closed (S4). References: ISTQB Certified Tester Foundation Level (CTFL) v4.0 Syllabus, Section 1.4.3, Page 17.

NEW QUESTION 184

As a tester, as part of a V-model project, you are currently executing some tests aimed at verifying if a mobile app asks the user to grant the proper access permissions during the installation process and after the installation process. The requirements specification states that in both cases the app shall ask the user to grant access permissions only to the camera and photos stored on the device. However, you observe that the app also asks the user to grant access permission to all contacts on the device. Consider the following items:

[I]. Test environment [ii]. Expected result [iii]. Actual result. [IV] Test level.

[V]. Root cause.

Based on only the given information, which of the items listed above, are you able to CORRECTLY specify in a defect report?

- A. [I] and [IV]
- B. [ii] and [III].
- C. [ii], [iii] and [v]
- D. [ii], [IV] and [V].

Answer: B

Explanation:

When writing a defect report, the tester can specify the expected result and the actual result based on the observation. The expected result is what the requirements specify, and the actual result is what was observed during testing. These elements are crucial for clearly communicating the nature of the defect to developers and other stakeholders. The other items such as test environment, test level, and root cause may not be clear or necessary at this stage of defect reporting.

References:ISTQB CTFL Syllabus, Section on defect management and reporting.

NEW QUESTION 187

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