Software Testing - ISTQB Certified Tester Foundation Level (755)

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State	Finished
Completed on	Sunday, 8 May 2022, 9:00 AM
Time taken	38 mins 4 secs
Marks	31.00/40.00
Grade	**77.50** out of 100.00

Question **1**

Incorrect

Mark 0.00 out of 1.00

Which of the following statements is a valid objective for testing?

Select one:

- ○ a. To prove that any remaining defects will not cause any failures.
- ○ b. To prove that all possible defects are identified.
- ○ c. To find as many failures as possible so that defects can be identified and corrected.
- ⊙ d. To determine whether enough component tests were executed within system testing.   ✖

> Your answer is incorrect.
>
> The correct answer is: To find as many failures as possible so that defects can be identified and corrected.

Which of the following statements comparing component testing and system testing is TRUE?

Select one:

○ a. Component testing verifies the functionality of software modules, program objects, and classes that are separately testable, whereas system testing verifies interfaces between components and interactions between different parts of the system.

○ b. Component testing only focuses on functional characteristics, whereas system testing focuses on functional and non-functional characteristics.

○ c. Component testing is the responsibility of the testers, whereas system testing typically is the responsibility of the users of the system.

⦿ d. Test cases for component testing are usually derived from component specifications, design specifications, or data ✔ models, whereas test cases for system testing are usually derived from requirement specifications, or use cases.

Your answer is correct.

The correct answer is: Test cases for component testing are usually derived from component specifications, design specifications, or data models, whereas test cases for system testing are usually derived from requirement specifications, or use cases.

The following statement refers to decision coverage:
"When the code contains only a single 'if' statement and no loops or CASE statements, any single test case we run will result in 50% decision coverage."
Which of the following sentences is correct?

Select one:

⦿ a. The sentence is true. Any single test case would cause the outcome of the "if" statement to be either true or false. ✔

○ b. The sentence is false. A single test case can only guarantee 25% decision coverage in this case.

○ c. The sentence is true. Any single test case provides 100% statement coverage and therefore 50% decision coverage.

○ d. The sentence is false. The statement is too broad. It may be correct or not, depending on the tested software.

Your answer is correct.

The correct answer is: The sentence is true. Any single test case would cause the outcome of the "if" statement to be either true or false.

The design of a newspaper subscriptions system is being reviewed. The expected system users are:

- Subscribers
- Technical support team
- Billing department
- Database administrator

Each type of user logs into the system through a different login interface (e.g. subscribers login via a web page; technical support via an application).

Different reviewers were requested to review the system's login flow from the perspective of the above user categories.

Which of the following review comments is MOST LIKELY to have been made by all reviewers?

Select one:

- a. The log in flow is un-intuitive since it requires entering the password first, before the user name can be keyed-in.
- b. The login to access the billing information should also allow access to subscribers' information and not force a second   ✖
    login session.
- c. The login page on the web is cluttered with too much advertisement space. As a result, it is hard to find the "forgot
    password?" link.
- d. After logging-in to the database application, there is no log-out function.

Your answer is incorrect.

The correct answer is: The log in flow is un-intuitive since it requires entering the password first, before the user name can be keyed-in.

Question **5**

Incorrect

Mark 0.00 out of 1.00

Which one of the following is TRUE?

Select one:

- a. The purpose of regression testing is to check if the correction has been successfully implemented, while the purpose of confirmation testing is to confirm that the correction has no side effects.

- b. The purpose of regression testing is to detect unintended side effects, while the purpose of confirmation testing is to check if the original defect has been fixed.

- c. The purpose of regression testing is to detect unintended side effects, while the purpose of confirmation testing is to check if the system is still working in a new environment.

- d. The purpose of regression testing is to check if the new functionality is working, while the purpose of confirmation testing is to check if the originally defect has been fixed. ✖

Your answer is incorrect.

The correct answer is: The purpose of regression testing is to detect unintended side effects, while the purpose of confirmation testing is to check if the original defect has been fixed.

Question **6**

Correct

Mark 1.00 out of 1.00

Which one of the following is the BEST definition of an incremental development model?

Select one:

- a. A phase in the development process should begin when the previous phase is complete.

- b. Testing is viewed as a separate phase which takes place after development has been completed.

- c. Defining requirements, designing software and testing are done in a series with added pieces. ✔

- d. Testing is added to development as an increment.

Your answer is correct.

The correct answer is: Defining requirements, designing software and testing are done in a series with added pieces.

Question **7**

Correct

Mark 1.00 out of 1.00

Which of the following describes the main activities of a formal review?

Select one:

- a. Individual review, issue communication and analysis, rework, closure, follow-up, root cause analysis.
- ⦿ b. Planning, initiate review, individual review, issue communication and analysis, fixing and reporting. ✔
- c. Initiation, backtracking, individual review, issue communication and analysis rework, follow-up.
- d. Planning, individual review, issue communication and analysis, rework, closure, follow-up.

Your answer is correct.

The correct answer is: Planning, initiate review, individual review, issue communication and analysis, fixing and reporting.

Question **8**

Correct

Mark 1.00 out of 1.00

Which of the following options are roles in a formal review?

Select one:
- a. Author, Manager, Review leader, Reviewer, Designer.
- ⦿ b. Author, Moderator, Review leader, Reviewer, Scribe. ✔
- c. Author, Moderator, Manager, Reviewer, Developer.
- d. Developer, Moderator, Review leader, Reviewer, Tester.

Your answer is correct.

The correct answer is: Author, Moderator, Review leader, Reviewer, Scribe.

A company's employees are paid bonuses if they work more than a year in the company and achieve individually agreed targets.

The following decision table has been designed to test the logic for paying bonuses:

		T1	T2	T3	T4	T5	T6	T7	T8
Conditions									
Cond1	Employment for more than 1 year?	YES	NO	YES	NO	YES	NO	YES	NO
Cond2	Agreed target?	NO	NO	YES	YES	NO	NO	YES	YES
Cond3	Achieved target?	NO	NO	NO	NO	YES	YES	YES	YES
Action									
	Bonus payment?	NO	NO	NO	NO	NO	NO	YES	NO

Which test cases could be eliminated in the above decision table because the test case wouldn't occur in a real situation?

Select one:

- a. T7 and T8.

- b. T3 and T4.

- c. T1 and T2.

- ◉ d. T5 and T6. ✔

Your answer is correct.

The correct answer is: T5 and T6.

Question **10**

Correct

Mark 1.00 out of 1.00

Which of the following BEST describes how tasks are divided between the test manager and the tester?

Select one:

- ○ a. The test manager plans testing activities and chooses the standards to be followed, while the tester chooses the tools and controls to be used.

- ○ b. The test manager plans, monitors, and controls the testing activities, while the tester designs tests and decides about automation frameworks.

- ⦿ c. The test manager plans, organizes, and controls the testing activities, while the tester specifies and executes tests. ✔

- ○ d. The test manager plans and organizes the testing and specifies the test cases, while the tester prioritizes and executes the tests.

Your answer is correct.

The correct answer is: The test manager plans, organizes, and controls the testing activities, while the tester specifies and executes tests.

Question **11**

Correct

Mark 1.00 out of 1.00

Which one of the statements below describes a failure discovered during testing or in production?

Select one:

- ○ a. The computation algorithm used the wrong input variables.

- ○ b. The wrong version of one source code file was included in the build.

- ○ c. The developer misinterpreted the requirement for the algorithm.

- ⦿ d. The product crashed when the user selected an option in a dialog box. ✔

Your answer is correct.

The correct answer is: The product crashed when the user selected an option in a dialog box.

Which one of the following options is categorized as a black-box test technique?

Select one:

- ⊙ a. Techniques based on formal requirements. ✔
- ○ b. Techniques checking that the test object is working according to the technical design.
- ○ c. Techniques based on analysis of the architecture.
- ○ d. Techniques based on the expected use of the software.
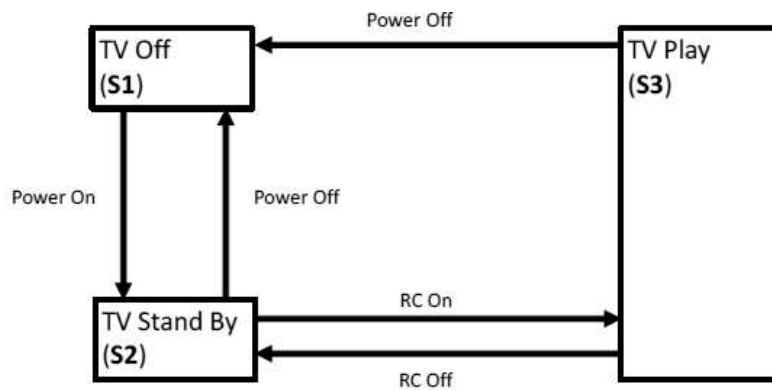

Your answer is correct.

The correct answer is: Techniques based on formal requirements.

Which of the following statements about the given state transition diagram and table of test cases is TRUE?

Test Case	1	2	3	4	5
Start State	S1	S2	S2	S3	S3
Input	Power On	Power Off	RC On	RC Off	Power Off
Expected Final State	S2	S1	S3	S2	S1

Select one option.

Select one:

○ a. The given test cases represent sequential pairs of transitions in the state transition diagram.

○ b. The given test cases can be used to cover both valid and invalid transitions in the state transition diagram.

○ c. The given test cases represent all possible valid transitions in the state transition diagram.

◉ d. The given test cases represent only some of the valid transitions in the state transition diagram.   ✖

Your answer is incorrect.

The correct answer is: The given test cases represent all possible valid transitions in the state transition diagram.

You are testing a new version of software for a coffee machine. The machine can prepare different types of coffee based on four categories. i.e. coffee size, sugar, milk and syrup. The criteria are as follows:

- Coffee size (small, medium, large),
- Sugar (none, 1 unit, 2 units, 3 units, 4 units),
- Milk (yes or no),
- Coffee flavor syrup (no syrup, caramel, hazelnut, vanilla).

Now you are writing a defect report with the following information:

Title: Low coffee temperature.

Short summary: When you select coffee with milk, the time for preparing coffee is too long and the temperature of the beverage is too low (less than 40 °C)

Expected result: The temperature of coffee should be standard (about 75 °C).

Degree of risk: Medium

Priority: Normal

What valuable information is MOST likely to be omitted in the above defect report?

Select one option.

Select one:
- a. Ideas for improving the test case.

- b. Data identifying the tested coffee machine.

- ⊙ c. Status of the defect. ✖

- d. The actual test result.

Your answer is incorrect.

The correct answer is: Data identifying the tested coffee machine.

Incorrect

Mark 0.00 out of 1.00

A speed control and reporting system has the following characteristics:

If you drive 50 km/h or less, nothing will happen.

If you drive faster than 50 km/h, but 55 km/h or less, you will be warned.

If you drive faster than 55 km/h but not more than 60 km/h, you will be fined.

If you drive faster than 60 km/h, your driving license will be suspended.

Which would be the most likely set of values (km/h) identified by two-point boundary value analysis?

Select one:

- a. 50, 55, 60.
- b. 0, 49, 50, 54, 59, 60.
- ● c. 49, 50, 54, 55, 60, 62.   ✖
- d. 50, 51, 55, 56, 60, 61.

Your answer is incorrect.

The correct answer is: 50, 51, 55, 56, 60, 61.

Correct

Mark 1.00 out of 1.00

Which one of the following is NOT included in a test summary report?

Select one option.

Select one:

- a. Deviations from the test approach.
- ● b. Defining pass/fail criteria and objectives of testing.   ✔
- c. Measurements of actual progress against exit criteria.
- d. Evaluation of the quality of the test item.

Your answer is correct.

The correct answer is: Defining pass/fail criteria and objectives of testing.

Which test tool is characterized by the classification below?

1. Tool support for management of testing and testware.
2. Tool support for static testing.
3. Tool support for test execution and logging.
4. Tool support for performance measurement and dynamic analysis.

A. Coverage tools.
B. Configuration management tools.
C. Review tools.
D. Monitoring tools.

Select one option.

Select one:

○ a. 1A, 2B, 3D, 4C.

○ b. 1A, 2C, 3D, 4B.

◉ c. 1B, 2C, 3A, 4D. ✔

○ d. 1B, 2C, 3D, 4A.

Your answer is correct.

The correct answer is: 1B, 2C, 3A, 4D.

Which of the below tasks is performed during the test analysis activity of the test process?

Select one:

○ a. Analyzing lessons learned for process improvement.

○ b. Creating test suites from test scripts.

○ c. Identifying any required infrastructure and tools.

◉ d. Evaluating the test basis for testability. ✔

Your answer is correct.

The correct answer is: Evaluating the test basis for testability.

Question **19**

Correct

Mark 1.00 out of 1.00

Which of the following statements CORRECTLY describes one of the seven key principles of software testing?

Select one:

- a. With sufficient effort and tool support, exhaustive testing is feasible for all software.

- b. The purpose of testing is to prove the absence of defects.

- c. By using automated testing it is possible to test everything.

- d. It is impossible to test all input and precondition combinations in a system. ✔

Your answer is correct.

The correct answer is: It is impossible to test all input and precondition combinations in a system.

Question **20**

Correct

Mark 1.00 out of 1.00

An employee's bonus is to be calculated. It cannot be negative, but it can be calculated down to zero. The bonus is based on the length of employment.

The categories are: less than or equal to 2 years, more than 2 years but less than 5 years, 5 or more years, but less than 10 years, 10 years or longer.

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

Select one:

- a. 2.

- b. 3.

- c. 5.

- d. 4. ✔

Your answer is correct.

The correct answer is: 4.

Question **21**

Correct

Mark 1.00 out of 1.00

What is checklist-based testing?

Select one:

- a. A test technique in which tests are derived based on the tester's knowledge of past failures, or general knowledge of failure modes.

- b. Procedure to derive and/or select test cases based on an analysis of the specification, either functional or non-functional, of a component or system without reference to its internal structure.

- c. An approach to testing where the tester dynamically designs and executes tests based on their knowledge, exploration of the test item and the results of previous tests.

- d. An experience-based test technique whereby the experienced tester uses a high-level list of items to be noted, checked, ✔ or remembered, or a set of rules or criteria against which a product has to be verified.

Your answer is correct.

The correct answer is: An experience-based test technique whereby the experienced tester uses a high-level list of items to be noted, checked, or remembered, or a set of rules or criteria against which a product has to be verified.

Question **22**

Correct

Mark 1.00 out of 1.00

Which TWO of the following can affect and be part of test planning?

Select two options.

Select one or more:

- a. Failure rate.

- b. Test log.

- ☑ c. Budget limitations. ✔

- ☑ d. Test objectives. ✔

- e. Use cases.

Your answer is correct.

The correct answers are: Budget limitations., Test objectives.

Question **23**

Correct

Mark 1.00 out of 1.00

Which one of the following is the BEST description of a test condition?

Select one:

   ○ a. The percentage of all single condition outcomes that independently affect a decision outcome that have been exercised by a test case suite.

   ○ b. The capability of the software product to provide functions which meet stated and implied needs when the software is used under specified conditions.

   ◉ c. An aspect of the test basis that is relevant to achieve specific test objectives.   ✔

   ○ d. An attribute of a component or system specified or implied by requirements documentation.

> Your answer is correct.
>
> The correct answer is: An aspect of the test basis that is relevant to achieve specific test objectives.

Question **24**

Correct

Mark 1.00 out of 1.00

Which of the following situations is NOT suited for using exploratory testing?

Select one:

   ○ a. When the main part of the application can be tested only at the customer's site.

   ○ b. When there is time pressure, and/or the requirements are incomplete or inapplicable

   ◉ c. When only new and inexperienced testers are available.   ✔

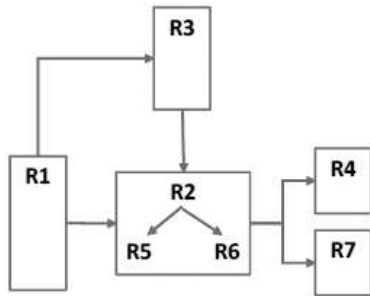   ○ d. When the system is developed and tested incrementally.

> Your answer is correct.
>
> The correct answer is: When only new and inexperienced testers are available.

The following diagram shows the logical dependencies between a set of seven requirements, where a dependency is shown by an arrow. For example, "R1 -> R3" means that R3 depends on R1.

Which one of the following options structures the test execution schedule according to the requirement dependencies?

Select one:

○ a. R1 → R2 → R5 → R6 → R3 → R4 → R7.

○ b. R1 → R3 → R1 → R2 → R5 → R6 → R4 → R7.

◉ c. R1 → R3 → R2 → R5 → R6 → R4 → R7. ✔

○ d. R1 → R3 → R2 → R5 → R2 → R6 → R4 → R7.

Your answer is correct.

The correct answer is: R1 → R3 → R2 → R5 → R6 → R4 → R7.

Which one of the following is the characteristic of a metrics-based approach for test estimation?

Select one option.

Select one:

○ a. Overall experience collected in interviews with test managers.

○ b. Overall estimate agreed with the developers.

◉ c. Budget which was used by a previous similar test project. ✔

○ d. Average of calculations collected from business experts.

Your answer is correct.

The correct answer is: Budget which was used by a previous similar test project.

Question **27**

Correct

Mark 1.00 out of 1.00

Which of the review types below is the BEST option to choose when the review must follow a formal process based on rules and checklists?

Select one:

- a. Informal Review.
- b. Inspection. ✔
- c. Walkthrough.
- d. Technical Review.

Your answer is correct.

The correct answer is: Inspection.

Question **28**

Incorrect

Mark 0.00 out of 1.00

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

Select one:

- a. Testing prevents the causes of failures; debugging removes the failures.
- b. Testing removes faults; debugging identifies the causes of failures.
- c. Testing identifies the source of defects; debugging analyzes the defects and proposes prevention activities. ✖
- d. Testing shows failures caused by defects; debugging finds, analyzes, and removes the causes of failures in the software.

Your answer is incorrect.

The correct answer is: Testing shows failures caused by defects; debugging finds, analyzes, and removes the causes of failures in the software.

Differentiate the following test work products,1-4, by mapping them to the right description, A-D.

1. Test suite.
2. Test case.
3. Test script.
4. Test charter.

A. A group of test scripts or test execution schedule.
B. A set of instructions for the automated execution of test procedures.
C. Contains expected results.
D. An event that could be verified.

Select one:

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

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

- ⦿ c. 1A, 2C, 3B, 4D. ✔

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

Your answer is correct.

The correct answer is: 1A, 2C, 3B, 4D.

Correct

Mark 1.00 out of 1.00

There are several test strategies. Which strategy (1-4) is characterized by which description (A-D) below?

1. Analytical.
2. Methodical.
3. Model-based.
4. Consultative.

A. Tests are based on a state diagram of a required aspect of the product
B. Tests are designed and prioritized based on the level of risk.
C. Systematic use of some predefined set of test conditions.
D. Tests are chosen based on the views of business domain experts.

Select one option.

Select one:

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

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

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

- ⦿ d. 1B, 2C, 3A, 4D. ✔

> Your answer is correct.
>
> The correct answer is: 1B, 2C, 3A, 4D.

Question **31**

Correct

Mark 1.00 out of 1.00

Which of the following should NOT be a trigger for maintenance testing?

Select one:

- a. Decision to test the system after migration to a new operating platform.

- b. Decision to test after "hot fixes".

- c. Decision to test if archived data is possible to be retrieved.

- ⦿ d. Decision to test the maintainability of the software. ✔

> Your answer is correct.
>
> The correct answer is: Decision to test the maintainability of the software.

Which TWO of the following statements about static testing are MOST true?

Select one or more:

- [ ] a. A cheap way to detect and remove defects.
- [x] b. It makes it possible to find run-time problems early in the lifecycle. ✖
- [ ] c. It makes dynamic testing less challenging.
- [x] d. Early validation of user requirements. ✔
- [ ] e. When testing safety-critical system, static testing has less value because dynamic testing finds the defects better.

> Your answer is incorrect.
>
> The correct answers are: A cheap way to detect and remove defects., Early validation of user requirements.

Which one of the following is the BEST description of statement coverage?

Select one:

- ○ a. It is a metric which is used to calculate and measure the percentage of test cases that have been executed.
- ◉ b. It is a metric, which is used to calculate and measure the percentage of statements in the source code which have been ✔ executed.
- ○ c. It is a metric that give a true/false confirmation if all statements are covered or not.
- ○ d. It is a metric, which is used to calculate and measure the number of statements in the source code which have been executed by test cases that are passed.

> Your answer is correct.
>
> The correct answer is: It is a metric, which is used to calculate and measure the percentage of statements in the source code which have been executed.

Correct

Mark 1.00 out of 1.00

In what way can testing be part of Quality assurance?

Select one:
- ⦿ a. It reduces the level of risk to the quality of the system. ✔
- ○ b. It ensures that standards in the organization are followed.
- ○ c. It measures the quality of software in terms of number of executed test cases.
- ○ d. It ensures that requirements are detailed enough.

Your answer is correct.

The correct answer is: It reduces the level of risk to the quality of the system.

Correct

Mark 1.00 out of 1.00

Which one of the following is MOST likely to be a benefit of using test execution tools?

Select one option.

Select one:
- ○ a. It is easy to maintain version control of test assets.
- ○ b. It is easy to create regression tests.
- ○ c. It is easy to design tests for security testing.
- ⦿ d. It is easy to run regression tests. ✔

Your answer is correct.

The correct answer is: It is easy to run regression tests.

How can white-box testing be applied during acceptance testing?

Select one:
- ● a.   To check if all work process flows have been covered.   ✔
- ○ b.   To check if large volumes of data can be transferred between integrated systems.
- ○ c.   To check if all code statements and code decision paths have been executed.
- ○ d.   To cover all web page navigations.

Your answer is correct.

The correct answer is: To check if all work process flows have been covered.

Which of the following metrics would be MOST useful to monitor during test execution?

Select one option.

Select one:
- ○ a.   Percentage of work done in test environment preparation.
- ○ b.   Percentage of work done in test case preparation.
- ○ c.   Percentage of planned test cases prepared.
- ● d.   Percentage of executed test cases.   ✔

Your answer is correct.

The correct answer is: Percentage of executed test cases.

Question **38**

Correct

Mark 1.00 out of 1.00

A video application has the following requirement:
The application shall allow playing a video on the following display sizes:

1. 640x480.
2. 1280x720.
3. 1600x1200.
4. 1920x1080.

Which of the following list of test cases is a result of applying the Equivalence Partitioning test technique to test this requirement?

Select one:

○ a. Verify that the application can play a video on any one of the display sizes in the requirement (1 test).

● b. Verify that the application can play a video on each of the display sizes in the requirement (4 tests). ✔

○ c. Verify that the application can play a video on a display of size 1920x1080 (1 test).

○ d. Verify that the application can play a video on a display of size 640x480 and 1920x1080 (2 tests).

Your answer is correct.

The correct answer is: Verify that the application can play a video on each of the display sizes in the requirement (4 tests).

Question **39**

Correct

Mark 1.00 out of 1.00

Which of the following are typical exit criteria from testing?

Select one option.

Select one:

○ a. Reliability measures, degree of tester's independence, and product completeness.

○ b. Reliability measures, test cost, availability of testable code, time to market, and product completeness.

● c. Reliability measures, test cost, schedule and unresolved defects. ✔

○ d. Time to market, residual defects, tester qualification, degree of tester independence and test cost.

Your answer is correct.

The correct answer is: Reliability measures, test cost, schedule and unresolved defects.

Which TWO of the following statements about the relationship between statement coverage and decision coverage are true?

Select one or more:

☑ a. Decision coverage is stronger than statement coverage. ✔

☐ b. Statement coverage is stronger than decision coverage.

☐ c. Decision coverage can never reach 100%.

☑ d. 100% statement coverage guarantees 100% decision coverage. ✖

☐ e. 100% decision coverage guarantees 100% statement coverage.

Your answer is incorrect.

The correct answers are: Decision coverage is stronger than statement coverage., 100% decision coverage guarantees 100% statement coverage.