

# ISTQB

## Exam Questions CT-TAE

Certified Tester Test Automation Engineer



#### NEW QUESTION 1

A SUT has an existing automated test suite.

Which of the following statements relating to the introduction of new features in the SUT is TRUE?

- A. Automated tests are not affected by the introduction of a new feature and running them against the new SUT is a waste of effort
- B. The introduction of a new feature could require updates or additions to the testware components
- C. The test automation engineer should work with the business analysts to ensure the new feature is testable
- D. It is generally more difficult to automate test cases for a new feature as the development has not yet started

**Answer:** B

#### NEW QUESTION 2

You are working on a TAS for standalone application. The automated tests are developed based on a automation framework that allows interaction with GUI elements using an object orientated API. The GUI elements include menus, buttons, radio buttons, text toolbars and their properties.

Whilst automating a test, you have discovered that the GUI elements of some third party components are not identifiable by the automated tool you are using.

Which of the following is the FIRST step that you take to investigate this issue?

- A. Verify the testability support with the providers of the third party components
- B. Verify whether the GUI identification depends on the browser.
- C. Adopt an approach that uses the coordinates of the GUI elements instead
- D. Verify whether naming standards for variables and have been defined for the current automation solution

**Answer:** A

#### NEW QUESTION 3

You are testing a major enhancement to an air traffic control user interface. You have use of a sophisticated pre-production test environment, created specifically for large scale automated regression, performance and security testing. The window for regression testing is limited and must successfully conclude, with no major regressions remaining, before the non-functional testing starts.

You have been using the same version of the TAS for the last few releases, each time completing the automated regression test suite in a single overnight run.

However, due to the latest enhancements for the SUT, you believe there is a risk that the test suite may no longer complete overnight and therefore delay performance and security testing.

Which option would be the BEST and MOST cost-efficient approach to mitigate this risk?

- A. Create a mirror of the pre-production test environment and split the regression test suite to run in parallel across the environments.
- B. Split the regression test suite into multiple parts, running in the environment across consecutive nights.
- C. Analyse the regression test suite and remove test coverage duplication and redundancy.
- D. Introduce better coding practices for the automation scripts, including coding guidelines, reviews and improved static analysis.

**Answer:** A

#### Explanation:

Reference: <https://www.guru99.com/regression-testing.html>

#### NEW QUESTION 4

When the SUT provides insight into the behaviour of the system, providing the users the with the status of the various actions performed so that they can check that expected behaviour equals actual behaviour, what is this called?

- A. Portability.
- B. Maintainability.
- C. Observability.
- D. Controllability.

**Answer:** C

#### Explanation:

Reference: <https://www.toptal.com/designers/ux-consultants/how-to-conduct-usability-testing-in-6-steps>

#### NEW QUESTION 5

You are working as a TAE for a company who are re-designing their website. The new website provides information for customers and there are two minor features being developed:

- 1) Request a newsletter
- 2) Ability to contact the organisation with a question or comment

The website must be "mobile friendly" and available on all major web browsers.

You have been tasked to provide an automated solution for web browsers only and to concentrate on the two minor features.

What would be a KEY challenge with automation in this context?

- A. A low level of intrusion is likely from use of existing UI elements, but depending on the solution this might be more complex than a higher level of intrusion.
- B. Because there is a high level of intrusion there may be many false alarms.
- C. Automation might not be possible on the mobile devices.
- D. The benefits of automation might not be achieved for many years due to the complexities of the SUT and automation solution.

**Answer:** D

#### Explanation:

Reference: <https://www.britannica.com/technology/automation/Advantages-and-disadvantages-of-automation>

#### NEW QUESTION 6

A major component of your organisation's Test Automaton Solution (TAS) is a popular open-source third-party capture-replay tool for automated functional testing. Which two of the following must the Test Automation Engineer (TAE) ensure happens for this TAS?

- a) The third party tool is placed under configuration management control.
- b) The annual support and maintenance costs are agreed with the tool's vendor.
- c) It is Important to obtain information about updates and new versions of the tool so that the third party tool is kept up to date.
- d) Ensure that the TAS test scripts are integrated into the tool's framework.
- e) Ensure that no changes are made to the tool, because modifications are not allowed for third party products.

- A. a and b
- B. c and d
- C. a and c
- D. d and e

**Answer:** A

#### NEW QUESTION 7

You have investigated a new tool which enables the modelling of the SUT and can then generate test cases either manually or automatically. You have convinced your managers that the best way forward is to conduct a pilot project for this tool. You need to select a project to use for the pilot. You have the choice of the following projects:

Project A: A two-year project that is critical to the business and is currently in the requirement phase. This project is for a new e-commerce web site and is mostly being developed "in-house" although the payment system is being developed and delivered by a 3rd party provider.

Project B: A safety critical application for software to drive and park cars.

Project C: An upgrade to an important HR timesheet tracking application that will be available on a desktop and mobile application. This is a 1-month project developed in-house.

Project D The payment system from project A. Which project would be BEST for the pilot?

- A. Project A because it is a large project and has high visibility and is in the requirement phase.
- B. Project B because it is a safety critical system and has high visibility.
- C. Project C because it is a short, low priority project but is important.
- D. Project D because it is a small part of a larger project and will help show the tool's capabilities.

**Answer:** D

#### NEW QUESTION 8

You are implementing test automation for a project and you want to be able to generate test cases automatically using a series of test design tools which use a variety of test design techniques such as decision tables, pairwise testing and boundary value analysis.

You also want to generate test data automatically which can then be used by the tests. Initially these tests will be run manually to verify their correctness and ultimately you want

to include them in the test execution tool so that they can run unattended.

Which layer of the gTAA will be used to support the specification of the test cases and preparation of the test data?

- A. The generation layer
- B. The definition layer
- C. The execution layer
- D. The adaptation layer

**Answer:** B

#### Explanation:

Reference: <https://www.slideshare.net/jannatindia/chapter-3-the-generic-test-automation-architecture>

#### NEW QUESTION 9

Assume that you are the TAE responsible for the correct functioning of a TAS, deployed in a test environment that consists of a few machines running the same version of the operating system. The TAS has been working and stable since its deployment, it has been used to run an automated test suite consisting of many similar automated test. The infrastructure team is planning to update the operating system on these machines by installing a new the service pack for security reasons. Since the vendor of the operating system assurance full backward compatibility, the infrastructure team assurance that there will be no impacts on the functioning of the TAS.

What is the BEST approach to confirm the correct functioning of the TAS in this scenario?

- A. Verify the behavior of the automated tests by running a small tests, then gradually run the remaining tests to confirm the correct functioning of the whole automated test suite.
- B. Make sure that the infrastructure team has completed installing the service pack on the machines where SUT is running, then run the whole automated test suite to verify its behavior
- C. Verify the behavior of the whole automated test suite by running all the automated tests
- D. Do not run any tests because you can immediately confirm the correct functioning of the automated test suite

**Answer:** A

#### NEW QUESTION 10

Which of the following statements does NOT describe good practice for maintaining the TAS?

- A. The TAS must run in the development environment because development and programming knowledge are required for its maintainability
- B. The TAS must be under configuration management, along with the test suite, the testware artefacts and the test environment in which it runs
- C. The TAS must separate the test scripts from the environment in which it runs and from the associated harnesses and artefacts
- D. The TAS must consist of components that can be easily replaced without affecting the overall behavior of the TAS itself

**Answer:** A

#### NEW QUESTION 10

You are evaluating several test modelling tools and are wanting to automatically generate test cases within the tool where many different combinations of input data are created.

You are then wanting to export the test cases into a csv file which can then be read by a functional test execution tool using a data-driven or keyword-driven scripting method.

You have investigated several tools and there is only one tool that provides all the necessary features defined by your team with the exception of the export facility. It does not provide an export into either .xls or .csv formats.

What would be the BEST next step regarding the selection of this tool?

- A. Consider another tool that is more "fit for purpose" and has all the features required.
- B. Explore the possibility of creating your own export facility.
- C. Ask the vendor and use forums to see if a solution is available or going to be available in the future.
- D. Purchase this tool and generate the .csv file manually.

**Answer: C**

#### NEW QUESTION 13

You have inherited a TAS that is working well it uses keyword-driven scripting and was well architected. The automation architect who built the system has now moved on to another company. The TAS is working across several projects and has a multiple library of keywords, categorised by project. The individual project teams maintain these keyword scripts.

Based only on the given information, what is the MOST significant risk for the TAS?

- A. The keyword driven scripts may become out of date if not maintained
- B. The level of abstraction, coupled with the departure of the architect may make the system hard to maintain
- C. New projects may not work as well with the TAS as the current projects
- D. Because the keyword scripts are maintained by different teams, there is a likelihood that good coding standards are not followed

**Answer: B**

#### NEW QUESTION 14

In order to achieve re-use of a TAS, where SHOULD the design for reuse occur?

- A. At the code level
- B. At the framework level.
- C. At the TAS level
- D. At the TAA level

**Answer: C**

#### NEW QUESTION 17

You have been asked to implement test automation for a project that is not meeting its deadlines. After further analysis you discover that the manual testers are not able to keep up with the new feature testing because the regression testing is taking 75% of their time. As a result, the new features are being released with many defects and customers are complaining about the quality.

Given this information, what metric SHOULD you be tracking to show the value of test automation for this project?

- A. Percentage of code covered by the test automation.
- B. Equivalent Manual Test Effort for the automated tests.
- C. Number of defects found by test automation.
- D. Percentage of builds accepted/rejected by the automated tests.

**Answer: B**

#### Explanation:

Reference: <https://blog.testproject.io/2019/12/04/how-to-measure-the-value-of-your-test-automation/>

#### NEW QUESTION 18

A regression test suite consist of 500 test cases which are all executed manually. The business case for a pilot project is based on the adoption of test automation using a commercial tool that will reduce the execution time by a factor of 90% for 100% of the tests in the regression test suite. The pilot project lasted one month (as planned) and you are currently its results. At the end of the pilot project, 40% of the regression tests have been automated and their execution time has been reduce by 60%.

Which of the following statements is TRUE in this scenario?

- A. The duration of the pilot project was too short –it should last until the success factors are achieved
- B. The target defined for the business case is too accurate –it should not be measureable
- C. The project selected for the pilot is too critical –it should not be too critical or too trivial
- D. The target defined for the business case seems difficult to hit – it should be realistic

**Answer: D**

#### NEW QUESTION 22

Which of the following describes how a test execution report is likely to be used?

- A. To understand which test step caused the failure in a test case
- B. To identify problematic areas of the SUT by keeping a history showing which test cases fail the most
- C. To measure coverage of the test basis by a test suite
- D. To record how a test case failure has been fixed

**Answer: B**

**Explanation:**

Reference: <https://www.guru99.com/how-test-reports-predict-the-success-of-your-testing-project.html>

**NEW QUESTION 27**

What represents good practice when automating a manual regression test suite?

- A. Test data shared between tests should, where feasible, be stored and accessed from a single source to avoid duplication or introduction of error.
- B. All existing manual tests should be decomposed into several smaller automated tests to reduce functional overlap.
- C. Remove inter-dependencies between tests to reduce automation failures and costly error analysis.
- D. Once a manual test has been automated, execute it immediately to identify whether it operates correctly.

**Answer: D**

**Explanation:**

Reference: <https://www.softwaretestinghelp.com/manual-to-automation-testing-process-challenges/>

**NEW QUESTION 30**

What is the PRIMARY advantage of using abstraction in the TAA?

- A. It makes it more flexible for future reuse and improvements
- B. It requires a higher skill level to implement
- C. It ensures that any scripting method will be supported
- D. It improves the performance of the TAS

**Answer: A**

**Explanation:**

Reference: <https://www.techtarget.com/whatis/definition/abstraction>

**NEW QUESTION 33**

You are a TAE working for a software house which provides quarterly releases of its software to its customers. There are many different versions of the SUT that need to be tested simultaneously by different test teams.

Your TAS is complex and you need to ensure it remains consistent across the different SUT environments. What is the BEST and MOST efficient way to ensure each of the test teams use the same version of the TAS to test the different versions of the SUT?

- A. Due to the complexities involved and the high risks associated with these releases, it would be best to revert to manual testing.
- B. Produce comprehensive documentation of the TAS, installation and usage guidelines and provide training for each team member.
- C. Install the TAS as a central repository and have an automated installation and configuration of the TAS from this repository to each of the SUT environments.
- D. Develop a tool to track historical test results across the different SUT environments and look for trends.

**Answer: C**

**NEW QUESTION 35**

A TAS uses a commercial test automation tool and the default logs generated by the inconsistent formats such as different types of messages (pass/fail steps, screenshots, warnings, etc.) To solve this issue some custom logging functions have been created from the test scripts, making it possible to log the different types of messages with the same format. However, this may cause a problem due to the excessive size of the logs which can make it difficult to find the required information. Assume that all the default logs will be disabled when running the automated tests and that some tests will not generate excessively sized logs.

Which of the following represents the BEST suggestion for implementing the custom logging functions?

- A. Implement the custom logging functions without saving timestamps
- B. Implement the custom logging functions to support different levels of tracing
- C. Implement the custom logging functions without saving stack traces
- D. Implement the custom logging functions to redirect the logs to multiple files

**Answer: B**

**NEW QUESTION 40**

Your TAS has been running successfully on a Windows/GUI based SUT for some years. The SUT has undergone minimal change over the years to maintain business as usual, deploying six-monthly releases for minor enhancements and bug fixes using a waterfall lifecycle.

The TAS has not changed at all during this period. The current project for the SUT will be using the Scrum methodology to deliver a more modern, competitive, user interface. It is in the release planning stage with an agreed release backlog and set of sprints outlined.

The move from lengthy waterfall releases to shorter sprints has led you to conduct a review of the current TAS to make sure it is robust and fully optimised for the timescale challenges of the new project.

What two steps would be BEST to undertake during the review?

- a) Ensure that new automation code is using the same naming conventions as existing code.
- b) Perform a full regression run in Sprint 1 to identify what improvements could be made to the TAS for future sprints.
- c) Ensure that the TAS is using the latest libraries for the operating system.
- d) Review the functions that act upon the controls for the GUI for possible consolidation.
- e) Involve the test team to see what ease-of-use improvements they would like to see made to the TAS.

- A. c and d
- B. b and c
- C. a and b
- D. d and e

**Answer: B**



#### NEW QUESTION 45

If model-based testing has been selected for the overall test automation approach for a project, how does that influence the layers of the TAA?

- A. All layers are used, but the test generation layer will be automated based on the defined model
- B. There will be no need for the execution layer
- C. No adaptation will be needed because the interfaces will be defined by the model
- D. There will be no need to design the tests for the API because those will be covered by the model

**Answer:** A

#### Explanation:

Reference: <https://www.guru99.com/automation-testing.html>

#### NEW QUESTION 49

As a TAE you are evaluating a functional test automation tool that will be for several projects within your organization. The projects require that tool to work effectively and efficiently with SUTs in distributed environments. The test automated tool also needs to interface with other existing test tools (test management tool and defect tracking tool.) The existing test tools subject to planned updates and their interface to the test automated tool may not work properly after these updates.

Which of the following are the two LEAST important concerns related to the evaluation of the test automation in this scenario?

- A) Is the test automation tool able to launch processors and execute test cases on multiple machines in different environments?
  - B) Does the test automation tool support a licensing scheme that allows accessing different sets?
  - C) Does the test automation tool have a large feature set, but only part of the features will be sets?
  - D) Do the release notes for the planned updates on existing specify the impacts on their interfaces to other tools?
- Does the test automation tool need to install specific libraries that could impact the SUT?

- A. A and C
- B. A and E
- C. B and E
- D. C and D

**Answer:** C

#### NEW QUESTION 53

.....

## Thank You for Trying Our Product

### We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

### CT-TAE Practice Exam Features:

- \* CT-TAE Questions and Answers Updated Frequently
- \* CT-TAE Practice Questions Verified by Expert Senior Certified Staff
- \* CT-TAE Most Realistic Questions that Guarantee you a Pass on Your First Try
- \* CT-TAE Practice Test Questions in Multiple Choice Formats and Updates for 1 Year

**100% Actual & Verified — Instant Download, Please Click**  
**[Order The CT-TAE Practice Test Here](#)**