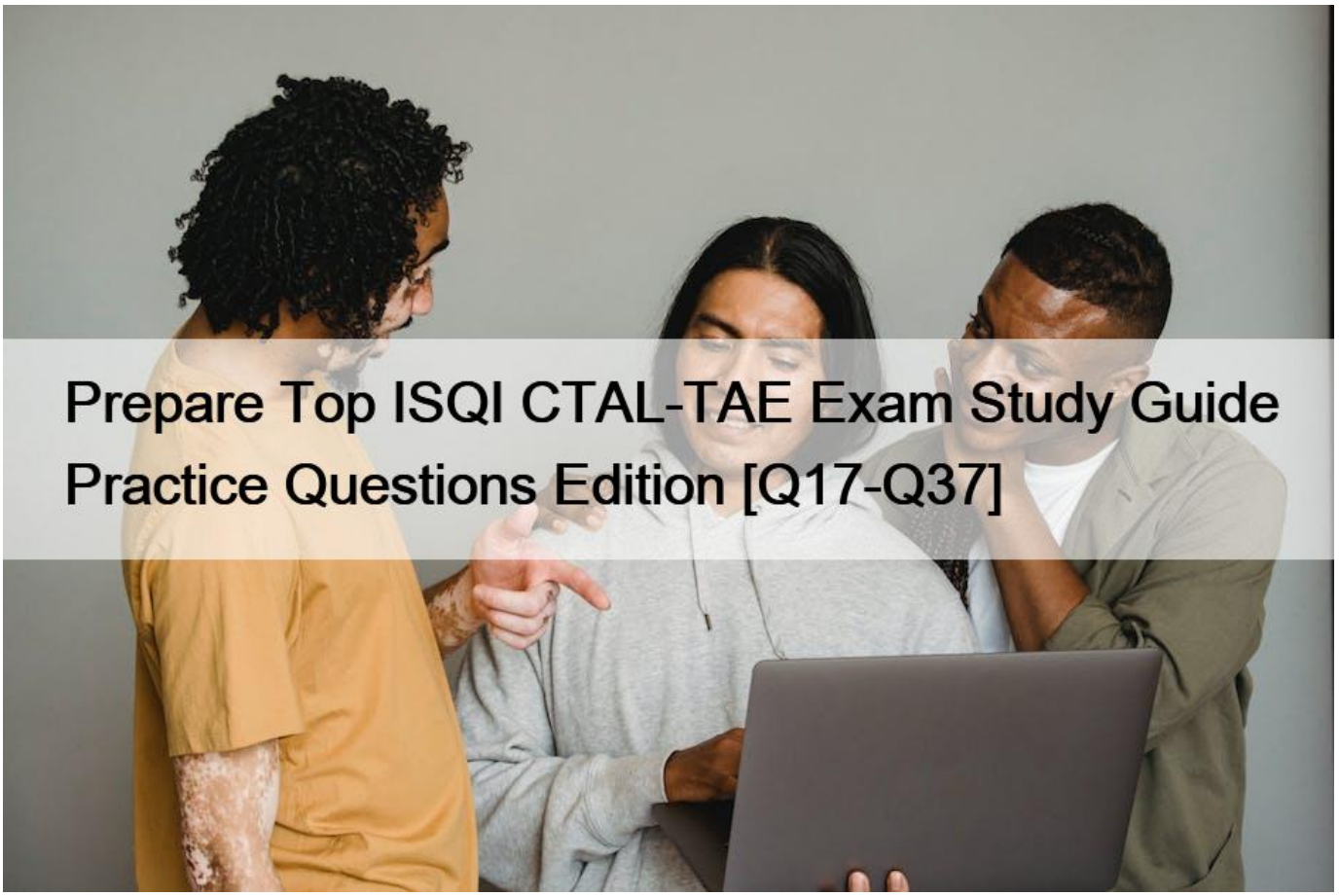
Prepare Top ISQI CTAL-TAE Exam Study Guide Practice Questions Edition [Q17-Q37



Prepare Top ISQI CTAL-TAE Exam Study Guide Practice Questions Edition
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Consider a TAS that exclusively uses the APIs of a SUT. To make this work, significant changes have been required to the SUT by adding a set of dedicated test interfaces to the APIs. All the automated tests will use these test interfaces when interacting with the SUT. Assume that you are currently verifying the correctness of the automated test environment and test tool setup.

Which of the following would you expect to be the MOST specific risk associated with this scenario?
* The connectivity from the TAS to the dedicated test interfaces will not work
* The process of configuring the TAS will be error-phone due to manual intervention
* The automated test cases will not contain the expected result
* False alarms, that are unlikely to occur in the real world, will be observed during testing

QUESTION 18

Consider a TAS deployed into production. The SUT is a web application and the test suite consists of a set of automated regression tests developed via GUI. A keyword-driven framework has been adopted for automating the regression tests. The tests are based on

identification at low-levels of the web page components (e.g class indexes, tab sequence indexes and coordinates) in the next planned release the SUT will be subject to significant corrective maintenance (bug-fixes) and evolution (new features) Maintenance costs to update the test scripts should be as low as possible and the scripts must be highly reusable.

Which of the following statements is most likely to be TRUE?
* The keyword-driven framework is not suitable, it would be better to adopt a structured-scripting approach
* False positive errors are likely to occur when running the automated tests on the new releases without modifying the test
* The total execution time of the automated regression test suite will decrease for each planned release.
* The keyword-driven framework introduces a level abstraction that is too high and makes it difficult what really happens

QUESTION 19

You have been asked todeterminea TAS for a new release of a SUT, test should be automatedwherever. The new release will consist of 5 new interfaces and an amendment to 3 existing interfaces. The new and amended interface will be deliver incrementally in 3 sprints, each lasting 2 weeks.

What would be the BEST Test Automation Solution (TAS) design in this scenario?
* Automate tests at both Component and System Level. Only do this automation once every interface has been fully developed or amended and manual testing has completed successfully.
* Automate tests at one level only, System level. Use only the newly developed interfaces and do not create any customized interfaces/test hooks.
* Automate the tests at two levels, Component and System level. Create customized hooks at Component level for interface not yet developed or amended. Only use the newly developed or amended interfaces to test at System level.
* Automate a test at once level, component level, Create customized interface/test hooks for this level where the interface has not yet been developed or amended.

QUESTION 20

A web application was released into production one year ago, it has regular release which follow a V-model lifecycle and testing is well-established and fully integration into the development lifecycle. You have beenasked to implement a TAS for the regression test suite. The regression tests have been developed via the GUI and are expected to be run at least four times a month, for each planned release, for the whole operation solution life of the system (six years). Each screen of the GUI uses several third-party controls which are not compatible with the existing automation solutions. The environment for the automation will be stable, fully controllable and separated from other environments (development, staging, production).

What could be the MOST problematic for this TAS?
* Maturity of the test process
* Complexity to automate
* Frequency ofuse
* Sustainability of the automated environment

QUESTION 21

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

QUESTION 22

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 on 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 stepthat you take to investigate this issue?
* Verify the testability support with the providers of the third party components
* Verify whether the GUI identification depends on the browser.
* Adopt an approach that uses the coordinates of the GUI elementsinstead
* Verify whether naming standards for variables and have been defined for the current automation solution

QUESTION 23

You are reviewing the testability of your SUT.

Which of the following BEST refers to the characteristic of OBSERVABILITY?
* The ability of the SUTto perform its intended function for a specified period of time
* The ability to exercise the SUT by entering inputs, triggering events and invoking methods
* The ability of the SUT to prevent unauthorized access to its components or data.
* The abilityto identify states, outputs, intermediate result and error messages in the SUT

QUESTION 24

You are executing the first test run of a test automation suite of 200 tests. All the relevant information related to the state of the SUT and to the automated test execution is stored in a small database. During the Automated test run you observe that the first 10 test pass, while an abnormal termination occurs when executing the

11thtest. This test does not complete its execution and the overall execution of the suite is aborted. An immediate analysis of the abnormal termination is expected to be time consuming and you have been asked to produce a detailed report of the execution results for the first test run, as soon as possible.

What is the MOST important FIRST step to be taken immediately after the abnormal occurred when executing the 11thtest?
* Re-run the test automation suite starting from the 12thtest
* Return the database to a consistent state that allows subsequent test to run
* Take a backup of the database in its current state. So It can be analyzed later
* Re-run the test automation suite starting from the 1sttest.

QUESTION 25

Which of the following statement about the implementation of automated regression testing is FALSE?
* When automating regression tests, the structure of automated tests must always be the same as the corresponding manual tests
* When automating regression tests, the corresponding manual tests should have already been executed to verify they operate correctly
* When automating regression tests, the initialization stepsset the test preconditions should be automated wherever possible
* When automating regression tests, consideration should be given to how much time would be saved by automation

QUESTION 26

Consider a TAS that uses a keyword-driven framework. The SUT is a web application and there is a large set of keywords available for writing the automated tests that relate to highly specific user actions linked directly to the GUI of the SUT. The automated test written with the keywords are statically analyzed by a custom tool which highlight’s repeated instances of identical sequence of keywords. The waiting mechanism implemented by the TAS for a webpage load is based on a synchronous sampling within a given timeout. The TAS allows checking a webpage load every seconds until a timeout value

* Changing thescripting approach to data-driven scripting
* Implementing keywords with a higher level of granularity
* Changing the wait mechanism to explicit hard-coded waits
* Establishing an error recovery process for TAS and SUT

QUESTION 27

A defect in a SUT has been resolved and validated by an automated defect re-test in the current release of the software. This retest has now been addedto the automated regression test suite.

Which statement BEST describes a reason why this defect could re-occur in future releases?

* Automated defect confirmation testing is not effective at confirming that the resolved defect will continue to work in future releases
* The configuration management process does not properly control the synchronization between software archives
* The automated regression test suite is not run consistently for future releases.
* The automated regression test suite has a narrower scope of functionality

QUESTION 28

You have been asked to automate a set of functional tests at system Test level via the CLI of the SUT for the first release of a software system. The automated tests will be delivered to the learn in change of maintenance testing, who will use them for part of the regression testing. They have the following requirements.

1.The automated tests must be as fast and cheap to maintain as possible

2.The cost of adding new automated tests must be as low as possible

3.The automated tests must have a high level of independence from the tool itself Which of the following scripting techniques would be MOST suitable?

* Data-driven scripting
* Keyword-driven scripting
* Linear scripting
* Structure scripting

QUESTION 29

You identified a suitable project to pilot an automation tool and planned and conduced a pilot. The pilot has been successful and tool Is being deployed within your organization, with a plan to increase tool use by the one project at a time. During this rollout some test processes will be changed slightly to gain additional benefits from using the tool.

In the pilot project, a small set of manual tests were automated for the first time. You are currently monitoring the test automation efficiency and this reveals that the automation regime for the tests is not yet mature.

Which of the following statements is TRUE?
* The approach used for deployed this tool is aligned to the standard success factor for deployment
* The pilot project should have been critical so that maximum benefits were delivered
* The target defined for the project was inappropriate, because the automation regime for the automated tests at the end of the pilot is not yet mature.
* The test process should be radically changed to gain additional benefits from using the tool.

QUESTION 30

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

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Which of the following is the FIRST step that you take to investigate this issue?
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* Verify whether the GUI identification depends on the browser.
* Adopt an approach that uses the coordinates of the GUI elements instead
* Verify whether naming standards for variables and have been defined for the current automation solution

QUESTION 31

A defect in a SUT has been resolved and validated by an automated defect re-test in the current release of the software. This retest has now been added to the automated regression test suite.

Which statement BEST describes a reason why this defect could re-occur in future releases?
* Automated defect confirmation testing is not effective at confirming that the resolved defect will continue to work in future releases
* Theconfiguration management process does not properly control the synchronization between software archives
* The automated regression test suite is not run consistently for future releases.
* The automated regression test suite has a narrower scope of functionality

QUESTION 32

Your goal is to verify completeness, consistency and correct behavior of an automated test suite. The TAS has been proven to successfully install in the SUT environment. All the preliminary checks to verify the correct functioning of the automated test environment and test tool configuration, installation and setup have successfully completed.

Which of the following is NOT a relevant check for achieving your goal in this scenario?
* Checking whether all the test cases contain the expected results
* Checking whether the post condition have been fulfilled for all the test cases
* Checking whether theloading of the TAS is repeatable in the SUT environment
* Checking whether all the test cases produce repeatable outcomes

QUESTION 33

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* Checking whether the loading of the TAS is repeatable in the SUT environment
* Checking whether all the test cases produce repeatable outcomes

QUESTION 34

A project consists of distributed teams working in a 24-hour environment, where activities happen at all hours of the day. This project adopts a CI (Continuous Integration) process when developer check-in code and consists of automated activities that include generating a build and deploying it to a test environment.

Automated integration tests are run multiple times a day. The project have asked for a report containing the automation test results for every build, which must be available 24/7 to the project team.

Which of the following would be the BEST way to automatically provides this report?
* Store the execution results of the integration tests for the last build to a database (without overwriting the results from the previous builds), use this database to automatically update a dashboard containing the build history and test results accessible to the project team.
* Store the execution result of the integration tests for the last build to a database (overwriting the results from the previous build), automatically create atest execution report for this build send It via e-mail to the project team
* Store the execution results of the integration tests for the last build to a database (without overwriting the results from the previous builds). Automatically create a test execution report for this build and send it via e-mail to the project team
* Store the code coverage results of the integration tests for the last build to a database (without overwriting the results from the previous builds). And automatically create a chart showing the trend in code coverage and send via email to the project team.

QUESTION 35

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

QUESTION 36

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 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?
* Implement the custom logging functions without saving timestamps
* Implement the custom logging functions to support different levels of tracing

* Implement the custom logging functions without saving stack traces
* Implement the custom logging functions to redirect the logs to multiple files

QUESTION 37

You are currently designing the TAA of a TAS. You have been asked to adopt an approach for automatically generating and executing test cases from a model that defines the SUT. The SUT is a state-based and event-driven that is described by a finite-state machine and exposes its functionality via an API. The behavior of the SUT depends on hardware and communication links that can be unreliable.

Which of the following aspects is MOST important when designing the TAA in this scenario?
* Looking for tools that allows direct denoting of exceptions and actions depending on the SUT events.
* Adopting a test definition strategy based on classification tree coverage for the test definition layer.
* Looking for tools that allow performing setup and teardown of the test suites and the SUT.
* Adopting a test definition strategy based on use case/exception case coverage for the definition layer.