Practice Exam Questions





ISTQB Certified Tester

Advanced Level

Test Automation Engineering





ISTQB Certified Tester Advanced Level, Test Automation Engineering

Version: 6.0

[Total Questions: 40]

Question No: 1

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 allowschecking a webpage load everyseconds until a timeout value

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

Answer: B

Question No: 2

Which of the following attributes should NOT be included in a test execution report associated with a suite of automated tests?

- A. Summary of the test execution results
- **B.** System/Application under test and its version
- **C.** Defect clusters identified during test execution
- **D.** Environment in which the tests have been executed

Answer: A

Question No: 3

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?

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- **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: D

Question No: 4

Which of the following is NOT a technical design consideration for a TAA?

- A. The number of users for the SUT
- **B.** Availability of interfaces for the SUT to be testable
- C. Standards and Legal requirements, e.g data privacy
- D. Data used by the SUT, e.g configuration, users

Answer: A

Question No:5

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?

- **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

Question No: 6

Which of the following statements about the reuse of TAS artefacts is TRUE?

- **A.** Reusable TAS artefacts can include components (or parts of components) associated with different layers of the TAA
- **B.** To enable reuse of TAS artefacts, a good design for reuse is built into the TAA and to further action are needed during the TAS lifecycle
- **C.** Communications maintenance and improvements for reusing TAS artefacts are modify addressed during the design of the TAA
- **D.** Reusable TAS artifacts associated with the definition layer of the TAA include the adaptors to the SUT components and/or interfaces

Answer: A

Question No:7

Which of thefollowing 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 ofcomponents that can be easily replaced without affecting the overallbehavior of the TAS itself

Answer: A

Question No:8

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?

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

Answer: C

Question No:9

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 unit 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 –if should not be too critical or too trivial
- **D.** Thetarget defined for the business case seems difficult to hit it should be realistic

Answer: D

Question No: 10

Designing the System Under Test (SUT) for testability is important for a good test automation approach and can also benefit manual test execution.

Which of the following is NOT a consideration when designing for testability?

- **A.** Observability: The SUT needs to provide interface that give insight into the system.
- **B.** Re-useability: The code written for the SUT must be re-useable for other similar system.
- **C.** Clearly defined architecture: The SUT Architecture needs to provide clear and understandable interfaces giving control and visibility on all test levels.
- **D.** Control: the SUT needs to provide interfaces that can be used to perform actions on

SUT.

Answer: A

Question No: 11

Which of the following BEST describes why it is important to separate test definition from test execution in a TAA?

- **A.** It allows developing steps of the test process without being closely tied to the SUT interface.
- B. It allow choosing different paradigms (e.g event-driven) for the interaction TAS and SUT
- **C.** It allows specify test cases without being closely tied to the tool to run them against the SUT
- **D.** It allows testers to find more defects on the SUT

Answer: D

Question No: 12

You are using a gTAA to create a TAS for a project. The TAS is aimed specifically at automating a suit of existing manual test cases for standalone desktop applications. All the interfaces between the TAS and SUT will be from the CUI of the application.

Which of the following layers of the gTAA should you focus on for the TAS?

- A. The test Generation layer
- B. The Test Definition layer
- C. The Test Adaption layer
- **D.** The Test Execution layer

Answer: A

Question No: 13

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 SUT's in distributed environments. The test automated tool also needs to interface with other existing test tools (test management tool and defect tracking tool.) The

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existing test tools subject to planned updates and their interface to the test automated tool may not work property after these updates.

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

- Is the test automation tool able to launch processors and execute test cases on multiple machines in different environments?

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

Question No: 14

Consider a SUT that small run on multiple platform during the execution of automated test runs. In each test run an automated test suite needs to be executed, with the same version of the TAF, against the same version of the SUT of each platform. Each platform shall have its own dedicated test environment. Your goal is to implement a process as automated as possible (i.e with minimal manual intervention) that allows implementing a consistent setup of the TAS across the multiple test environments.

Which two of the following aspects are MOST relevant for achieving your goal in this scenario?

- The configuration of the TAS uses automated installation scripts
- C)Features of the TAF not used by the automated tests have been tested
- D)All the automated test cases contain the expected results
- E)The TAS components are under configuration management
- A. A and e
- B. B and c
- C. B and d