



ISTQB

Exam Questions CT-TAE

Certified Tester Test Automation Engineer

About ExamBible

Your Partner of IT Exam

Found in 1998

ExamBible is a company specialized on providing high quality IT exam practice study materials, especially Cisco CCNA, CCDA, CCNP, CCIE, Checkpoint CCSE, CompTIA A+, Network+ certification practice exams and so on. We guarantee that the candidates will not only pass any IT exam at the first attempt but also get profound understanding about the certificates they have got. There are so many alike companies in this industry, however, ExamBible has its unique advantages that other companies could not achieve.

Our Advances

* 99.9% Uptime

All examinations will be up to date.

* 24/7 Quality Support

We will provide service round the clock.

* 100% Pass Rate

Our guarantee that you will pass the exam.

* Unique Gurantee

If you do not pass the exam at the first time, we will not only arrange FULL REFUND for you, but also provide you another exam of your claim, ABSOLUTELY FREE!

NEW QUESTION 1

You identified a suitable project to pilot an automation tool and planned and conducted 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?

- A. The approach used for deployed this tool is aligned to the standard success factor for deployment
- B. The pilot project should have been critical so that maximum benefits were delivered
- C. 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.
- D. The test process should be radically changed to gain additional benefits from using the tool.

Answer: A

NEW QUESTION 2

You are implementing a TAS for a system that has been live for over three years, using a hybrid waterfall and agile lifecycle. Live updates are made on a monthly basis.

There is no test team, with developers designing and executing unit and integration tests with some degree of automation and business analysts designing and executing manual tests at the system level. No formal test process exists, although the system has proved relatively stable for most of the time.

Unfortunately, the last two monthly releases were problematic with regression defects found in production. Your priority is the automation of functional regression tests at the system level, the budget for this has been approved by project stakeholders.

The Business Analysts have identified which test cases are most suitable for regression. You must use the organisation's long standing commercial automation tool which has passed a proof of concept in the platform for the system in question.

Which of the following suitability criteria needs the MOST attention for the TAS?

- A. Technical planning in support of ROI analysis
- B. Frequency of use.
- C. Compatibility and tool support
- D. Maturity of the test process

Answer: C

Explanation:

Reference: <https://www.softwaretestinghelp.com/guide-to-functional-testing/>

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

Consider the following layers of the gTAA structure:

- * a. Test generation layer
- * b. Test definition layer
- * c. Test execution layer
- * d. Test execution layer

Consider the following capabilities associated with these layers.

Acquire all the necessary resources before each test and release all after run, in order to avoid interdependences between test

Allow the automated test scripts on an abstract level to interact with components, configurations and interfaces of the SUT.

Design test directives that allow configuring the algorithms used to automatically produce the test cases a given model of the SUT.

Allow the definition and implementation of test cases and data by means of templates and/or guidelines.

Which of the following BEST matches each layer with the appropriate capability?

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

Answer: C

NEW QUESTION 5

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

NEW QUESTION 6

New features have been added for the current release of a SUT.

Which action would NOT be appropriate for the TAE to perform when evaluating the impact on the TAS?

- A. Gather feedback from the Business Analysts to determine if the current TAS will meet the needs of the new features.
- B. Review existing keywords to see if they need to be modified.
- C. Run existing automated tests against the updated SUT to verify and record any changes to their correct operation.
- D. Evaluate compatibility with existing test tools and, where necessary, identify alternative solutions.

Answer: A

NEW QUESTION 7

Which of the following statement about the implementation of automated regression testing is FALSE?

- A. When automating regression tests, the structure of automated tests must always be the same as the corresponding manual tests
- B. When automating regression tests, the corresponding manual tests should have already been executed to verify they operate correctly
- C. When automating regression tests, the initialization steps set the test preconditions should be automated wherever possible
- D. When automating regression tests, consideration should be given to how much time would be saved by automation

Answer: D

NEW QUESTION 8

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 9

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 10

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?

- A. Data-driven scripting
- B. Keyword-driven scripting
- C. Linear scripting
- D. Structure scripting

Answer: D

NEW QUESTION 10

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 11th test. 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 11th test?

- A. Re-run the test automation suite starting from the 12th test
- B. Return the database to a consistent state that allows subsequent test to run
- C. Take a backup of the database in its current state
- D. So it can be analyzed later
- E. Re-run the test automation suite starting from the 1st test.

Answer: C

NEW QUESTION 15

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 18

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 22

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 25

Consider a TAS associated to dynamically changing software frequent releases. Your goal is to determine the amount of effort required to maintain the automated tests of the regression test suite for each new release of the SUT.

What is the MOST important metric to collect to achieve your goal?

- A. The code coverage achieved with the automated tests, for each new release of the SUT
- B. The number of automated tests which fail because of a single software defect, for each new release of the SUT
- C. The time it takes to execute all the automated tests, for each new release of the SUT.
- D. The number of automated tests requiring maintenance, for each new release of the SUT.

Answer: B

NEW QUESTION 26

Which of the following metrics could suggest, under certain condition that an automated regression test suite has NOT been updated for new functionalities added to the SUT?

- A. The ratio of comments to executable statements in the SUT code.
- B. The SUT code coverage provided by the execution of the regression test suite.
- C. The defect density in the automation code of the regression test suite.
- D. The ratio of commands to executable statements in the automation code of the regression test suite

Answer: B

NEW QUESTION 29

You have been asked to determine a TAS for a new release of a SUT, test should be automated wherever. The new release will consist of 5 new interfaces and an amendment to 3 existing interfaces. The new and amended interface will be delivered incrementally in 3 sprints, each lasting 2 weeks. What would be the BEST Test Automation Solution (TAS) design in this scenario?

- A. Automate tests at both Component and System Level
- B. Only do this automation once every interface has been fully developed or amended and manual testing has completed successfully.
- C. Automate tests at one level only, System level
- D. Use only the newly developed interfaces and do not create any customized interfaces/test hooks.
- E. Automate the tests at two levels, Component and System level
- F. Create customized hooks at Component level for interface not yet developed or amended
- G. Only use the newly developed or amended interfaces to test at System level.
- H. 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.

Answer: A

NEW QUESTION 34

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 37

Which of the following is an important success factor for any significant automation project?

- A. The TAA must be designed for testability.
- B. The TAA is self-documenting
- C. The SUT must be designed for testability
- D. The SUT is self-documenting

Answer: C

Explanation:

Reference: <https://www.infoq.com/articles/success-test-automation/>

NEW QUESTION 40

You are the TAE for an Agile project which has six sprints for the current release. Sprint five is underway and the automated regression suite is due to start later today.

You have re-examined the results from the automated regression runs for the past four sprints. You notice that two test cases both reported a pass for sprints 1 and 4 but a fail for sprints 2 and 3. The failures have gone undetected and are therefore unexplained. Both test cases are closely coupled with other tests in the suite.

What course of action SHOULD you take?

- A. Run the regression suite as planned and see if the tests fail again if they do, determine the cause of failure.
- B. Remove the test cases from the regression suite and refer them to the test designer for manual testing for future sprints.
- C. Quarantine the test cases, run the regression suite without them, and perform root cause analysis on the test cases in parallel.
- D. Run the test cases manually no
- E. If they still pass, keep them in the regression suite, if they fail perform root cause analysis.

Answer: C

Explanation:

Reference: <https://www.softwaretestinghelp.com/regression-testing-tools-and-methods/>

NEW QUESTION 44

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?

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

Answer: A

NEW QUESTION 47

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 50

If you are tracking the frequency that a test automation code reports a defect that is not really a defect, what metric are you gathering?

- A. Tool scripting metrics
- B. Automation code defect density
- C. Trend metrics
- D. The number of false-fail results

Answer: D

Explanation:

Reference: <https://www.sealights.io/regression-testing/11-test-automation-metrics-and-their-pros-cons/>

NEW QUESTION 52

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?

- A. Looking for tools that allows direct denoting of exceptions and actions depending on the SUT events.
- B. Adopting a test definition strategy based on classification tree coverage for the test definition layer.
- C. Looking for tools that allow performing setup and teardown of the test suites and the SUT.
- D. Adopting a test definition strategy based on use case/exception case coverage for the definition layer.

Answer: C

NEW QUESTION 54

As the TAE, you are working with the organisation's Test Manager to decide which external metrics and which internal metrics should be gathered for the new TAS.

Which of the following represents the BEST internal metric that would help measure the quality of the TAS and the number of problems associated with the TAS?

- A. The average maintenance cost to keep an automated test in sync with the SUT
- B. The number of hours of manual test effort saved by implementing a TAS
- C. A measure of defect density within the TAS automation code
- D. A measure of how many automated tests pass and fail

Answer: C

NEW QUESTION 56

You are using a gTAA to create a TAS for a project. The TAS is aimed at automatically and executing test cases based on a use-case Modeling approaching that uses UML as a modeling language. All the interaction between TAS and SUT will only be at the API and GUI level.

Which of the following components of the gTAA would you EXCLUDE from the TAS?

- A. The test reporting component of the test execution layer.
- B. The Test execution component of the test generation layer
- C. The test execution (test engine) of the test execution layer
- D. The Command Line Interface (CLI) component of the test adaptation layer

Answer: D

NEW QUESTION 58

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 59

Which of the following is NOT an advantage of test automation?

- A. The ability to perform tests which would be difficult or impossible to execute manually
- B. The ability to run more tests in less time and therefore to make it possible to run them more often
- C. The ability to find more defects with the same tests, compared to executing the same test manually
- D. The ability to enable a better use of skilled testers by freeing them from repetitive and boring tasks

Answer: C

NEW QUESTION 60

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 65

Which of the following statements BEST describe aspects of the SUT to consider when designing a TAA?

- A. All the interaction between SUT and TAS should be logged with the highest level of detail
- B. All the internal test interfaces of the SUT should be removed prior to the product release
- C. All the interface of the SUT affected by the tests should be controllable by the TAA
- D. All the external test interfaces of the SUT should be removed prior to the product release

Answer: A

NEW QUESTION 66

You are planning the pilot for an in-house developed Test Automation solution (TAS).

Which two of the following would be important steps to take as part of the planning process?

- a) Review your organisation's current projects and identify which one would be most suitable to pilot the TAS.
- b) Ensure that the developers will provide the necessary commitment for the TAS deployment activities.
- c) Run a series of training workshops for new users of the TAS before they are asked to use it.
- d) Develop a project plan for the pilot and reserve the necessary budget and resources for its implementation.
- e) Ask the developers to provide any missing functionality during the deployment activities.

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

Answer: B

NEW QUESTION 70

Consider the following example of TAS metrics. Time to execute automated tests
Speed and efficiency of TAS components Which of the following statements is TRUE?

- A. A and B are both internal TAS metrics
- B. A is an internal TAS metric and B is an external TAS metric
- C. A and b are both external TAS metric
- D. A is and external TAS metric and b is an internal TAS metric

Answer: D

NEW QUESTION 75

The Test Automation Manager has asked you to provide a solution for collecting metrics from the TAS that measures code coverage every time the automated regression test pack is run. The metrics must be trend based to ensure that the scope of the regression test pack continues to reflect enhancements made to the SUT - coverage must not drop and should ideally increase. The solution must be as automated as possible to avoid unnecessary manual overheads and errors. Which of the following approaches would BEST meet these requirements?

- A. Test automation cannot measure code coverage for the SUT, only the code for the automation tools and script
- B. The automated test cases would need to be run manually with a code coverage and reporting tool running in the background.
- C. The automated testware would record overall code coverage for each run and add the figure to a new row in a pre-formatted Excel spreadsheet

- D. You would then present the spreadsheet to stakeholders so they could look for changes in coverage.
- E. The automated testware would record overall code coverage for each run, export the data to a pre-formatted Excel spreadsheet that automatically updates a trend analysis bar chart for you to distribute to stakeholders.
- F. The automated testware would record the pass/fail rate of each regression test case, export the data to a pre-formatted Excel spreadsheet that automatically updates a trend analysis success rate bar chart and emails it to stakeholders.

Answer: C

NEW QUESTION 79

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 been asked 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?

- A. Maturity of the test process
- B. Complexity to automate
- C. Frequency of use
- D. Sustainability of the automated environment

Answer: D

NEW QUESTION 84

Which of the following CORRECTLY describes how automation SHOULD be applied to confirmation testing?

- A. Confirmation tests are not good candidates for automation as they are not designed to run many times
- B. Confirmation tests should only be automated if they fail to pass on the first attempt
- C. Confirmation tests can be automated and incorporated into an automated regression suite to show whether defects that were previously fixed reoccur
- D. A confirmation test should only be automated after it has been run manually

Answer: C

NEW QUESTION 88

.....

Relate Links

100% Pass Your CT-TAE Exam with Exambible Prep Materials

<https://www.exambible.com/CT-TAE-exam/>

Contact us

We are proud of our high-quality customer service, which serves you around the clock 24/7.

Viste - <https://www.exambible.com/>