

iSQI

Exam CTAL-TM_Syll2012

**ISTQB Certified Tester Advanced Level - Test Manager [Syllabus
2012]**

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[Total Questions: 64]

Topic 1, Testing Process**Question No : 1 - (Topic 1)**

Which of the following statements describing the consequences of specifying test conditions at a detailed level is NOT true?

K2 1 credit

- A.** In an environment where the test basis is continuously changing, it is recommended to specify test conditions at a detailed level in order to achieve a better maintainability
- B.** The specification of test conditions at a detailed level can be effective when no formal requirements or other development work products are available
- C.** The specification of test conditions at a detailed level can require the implementation of an adequate level of formality across the team
- D.** For system testing, the specification of test conditions at a detailed level, carried out early in the project as soon as the test basis is established, can contribute to defect prevention

Answer: A

Question No : 2 - (Topic 1)

Assume you are the Test Manager for a new software release of an e-commerce application.

The server farm consists of six servers providing different capabilities. Each capability is provided through a set of web services.

The requirements specification document contains several SLAs

(Service Level Agreements) like the following:

SLA-001: 99.5 percent of all transactions shall have a response time less than five seconds under a load of up-to 5000 concurrent users

The main objective is to assure that all the SLAs specified in the requirements specification document will be met before system release. You decide to apply a risk-based testing strategy and an early risk analysis confirms that performance is high risk. You can count on

a well-written requirements specification and on a model of the system behavior under various load levels produced by the system architect.

Which of the following test activities would you expect to be the less important ones to achieve the test objectives in this scenario?

K4 3 credits

- A. Perform unit performance testing for each single web service
- B. Monitor the SLAs after the system has been released into the production environment
- C. Perform system performance testing, consisting of several performance testing sessions, to verify if all the SLAs have been met
- D. Perform static performance testing by reviewing the architectural model of the system under various load levels

Answer: B

Question No : 3 - (Topic 1)

Consider an information system of a Pay-Tv company based on a SOA architecture.

The integrated system currently consists of three core systems:

- a CRM (Customer Relationship Management) system
- a BRM (Billing and Revenue Management) system
- a CAS (Conditional Access System) system all of them communicating with SOA Middleware.

You have been asked to manage the testing activities for the integration of two additional off-the-shelf systems from two different vendors: a SMS (Short Message Service) server and an IVR (Interactive Voice Response) system.

Assume that there is a high likelihood that the two off-the-shelf systems will be low-quality and that you have a clear proof that the testing performed by the two vendors on their systems has been unsystematic and unprofessional. This obviously leads to higher quality risk for the overall integrated system.

You are the Test Manager of this project. Your main goal is to plan for testing activities to mitigate this risk.

Which of the following answers best describes the test activities (assuming it is possible to perform all of them) you should plan for?

K4 3 credits

- A. You should plan for an informal and minimal acceptance test of the two off-the-shelf systems and then a single end-to-end test of the overall integrated system
- B. You should directly plan for a single end-to-end test focused on end-to-end tests of the overall integrated system without an acceptance test of the two off-the-shelf systems
- C. You should plan for two levels: a system integration test and an end-to-end test of the overall integrated system
- D. You should plan for adequate re-testing of both the systems followed by a system integration test and an end-to-end test of the overall integrated system

Answer: D

Question No : 4 - (Topic 1)

The following are the exit criteria described in the test plan of a software product:

EX1. The test suite for the product must ensure that at least each quality risk item is covered by at least one test case (a quality risk item can be covered by more test cases).

EX2. All test cases in the test suite must be run during the execution phase.

EX3. Defects are classified into two categories: "C" (critical defect) and "NC" (non-critical defect). No known C defects shall exist in the product at the end of the test execution phase.

Which of the following information is useless when the specified exit criteria is evaluated?

K2 1 credit

- A. A traceability matrix showing the relationships between the product risk items and the test cases
- B. A list of all the open defects with the associated classification information extracted from the defect tracking system
- C. A chart, showing the trend in the lag time from defect reporting to resolution, extracted from the defect tracking system
- D. The execution status of all the test cases extracted from the test management tool

Answer: C

Question No : 5 - (Topic 1)

Which of the following is an example of the test closure activity indicated as "lessons learned"?

K2 1 credit

- A.** Archive all the test results of the acceptance testing phase
- B.** Deliver a list of the open defects of a software product released into production to the service desk team
- C.** Participate in a meeting at the end of a project aimed at better managing the events and problems of future projects
- D.** Deliver an automated regression test suite, used during the system test phase of a software product released into production, to the team responsible for maintenance testing

Answer: C

Question No : 6 - (Topic 1)

Assume that you are the Test Manager for a small banking application development project.

You have decided to adopt a risk-based testing strategy and 5 product risks (R1, R2, R3, R4, and R5) have been identified during the quality risk analysis.

The following table shows the risk level associated to these product risks (higher numbers mean higher risk):

Product risk	Risk level
R1	12
R2	25
R3	4
R4	20
R5	25

55 test cases have been designed and implemented to cover all these 5 product risks. The coverage is described in a traceability matrix.

This is the test execution status table, after the after the first week of test execution:

About 56% of the planned test cases have been successfully executed.

Assume that no additional product risks have been identified during the first week of test execution.

Product risk	Test cases				Defects	
	Planned	Run	Passed	Failed	Found	Fixed
R1	25	13	12	1	1	0
R2	12	7	6	1	1	0
R3	8	8	8	0	0	0
R4	5	2	2	0	0	0
R5	5	4	3	1	1	0

Which of the following answers would you expect to best describe the residual risks associated with the identified product risks, at the end of the first week of test execution?

K3 2 credits

- A.** Since R3 is the only risk for which all test cases have passed, the risk has been reduced by 20%
- B.** The test execution status table indicates that the risk has been reduced by 56%

- C. The residual risk level can't be determined, because it requires that all the test cases have been executed
- D. The test execution table doesn't give an indication of the risk level of the open defects and the test cases that failed or are not run yet

Answer: D

Question No : 7 - (Topic 1)

You are the Test Manager for a project to develop a client-server application that allows wine vendors to order custom-assorted packages of wines of several winemakers to sell special packages in their wine shops.

You decide to apply a blended risk-based and reactive testing strategy. Below the exit criteria for the system testing.

EXCR1- Each "critical" quality risk item must be covered by at least one test condition

EXCR2- Each "critical" requirement must be covered by at least one test condition

The following are the "critical" requirements of the application:

REQ-SEL-1. The application shall allow the user to order only one package at a time

REQ-SEL-2. The application shall allow the user to select between four different packages (2-bottles, 6-bottles, 12-bottles, 15-bottles)

REQ-SEL-3. The application shall allow the user to order a package containing at least 1 bottle and no more bottles than the package size. No error messages shall be displayed if the user selects a valid number of bottles (at least 1 bottle and no more than the package size)

REQ-SEL-4. The application shall display an error message "Invalid number of bottles" if an invalid number of bottles is selected by the user (zero bottles or a number higher than the package size)

REQ-PAY-1. The application shall allow the user to pay with the three accepted credit cards (Visa, MasterCard, American Express)

REQ-PAY-2. The application shall display an error message "Invalid credit card" if invalid credit card data are given by the user

QUESTION NO: 11

The following is the unique “critical” quality risk item that has been identified:

CR-RSK-1. The GUI of the application might accept non-integer values for the input field designed to get the number of bottles from the user

Test analysis for system testing has just begun and the following test conditions have been identified.

TC-SEL-2. Test the selection of the package sizes

TC-SEL-4. Test wrong numbers of bottles for an order

TC-CR-RSK-1. Test the accepted values from the input field designed to get the number of bottles from the user

Assume that you have used traceability to determine the logical test cases that cover all the requirements and the single risk item identified in that scenario.

Which of the following is a positive logical test that is complete and correct, and covers the REQ-SEL-4 requirement?

K3 2 credits

- A. Select a 6-bottles package, then try to insert 5 bottles; verify that no error messages are displayed
- B. Select a 6-bottles package, then try to insert 7 bottles; verify that no error messages are displayed
- C. Select a 6-bottles package, then try to insert 7 bottles; verify that the "Invalid number of bottles" message is displayed
- D. Select a 6-bottles package, then try to insert 7 bottles

Answer: C

Question No : 8 - (Topic 1)

The following are the requirements identified as “critical”:

REQ-SEL-001. The user shall be able to combine all the three products with all the four durations to define an item to purchase

REQ-SEL-002. The user shall be able to add a maximum of six different items to the

shopping cart

REQ-PUR-001. The user shall be able to purchase all the items in the shopping cart using a credit voucher

REQ-PUR-002. The user shall be able to purchase all the items in the shopping cart using the available credit already charged on the smartcard

REQ-PUR-003. The user shall be able to purchase all the items in the shopping cart using all the accepted credit cards (Visa, MasterCard and Great Wall Card)

REG-LOGO-001. The user shall be able to logout (by clicking the logout button) from both the “select” and “purchase” pages going back to the “browse” page (anonymous navigation)

Moreover the following quality risk item has been identified as “critical”:

QR-P1. The web customer portal might not be able to provide the expected response time (less than 10 sec) for the purchase transactions under a load of up-to 1000 concurrent users

Test analysis for system testing has just begun and the following test conditions have been identified.

TC-SEL-01. Test the combinations of products and durations to define an item to purchase

TC-SEL-02. Test the maximum number of items, which can be added to the shopping cart

TC-PUR-01. Test the purchase of an item

TC-PUR-02. Test the purchase of an item with the credit charged on the smartcard

What is the MINIMUM number of test conditions that must be added to fulfill both the EXCR1 and EXCR2 exit criteria?

K3 2 credits

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

Answer: C

Question No : 9 - (Topic 1)

You are the Test Manager for a project to develop a web customer portal of a Pay-TV company that allows customers (with a smartcard and a set-top box) to purchase digital contents.

In the "select" page the system displays a dialogue where the customer can select the items (digital contents) he/she is interested in. In this page he/she can add one or more items to a shopping cart. An item consists of a product and a duration.

There are three types of products: Movie, sport and premium (movie and sport).

There are four possible durations: 1 months, 2 months, winter (from the beginning of January to end of March) and summer (from the beginning of July to end of September).

All the combinations of products and durations are allowed to define an item. Thus there are twelve possible items. A maximum of six different items can be added to the shopping cart at a time.

When the customer decides to check out he/she goes to the "purchase" page where he/she can pay the total amount of the shopping cart in three different ways:

- using a credit voucher
- using a credit already charged on the smartcard
- using a credit card (accepted credit cards are. Visa, MasterCard and Great Wall Card)

The customer can logout from both the "select" and "purchase" pages. In this case no purchase is made.

You decide to apply a blended risk-based and reactive testing strategy and the following is a subset of the exit criteria for system testing:

EXCR1- Each "critical" quality risk item must be covered by at least one test condition

EXCR2- Each "critical" requirement must be covered by at least one test condition

You are following a risk-based testing strategy. The test execution time is very limited. Assume that all the product risk items require more or less the same level of test effort.