Sample Exam – Questions

Sample Exam set C
Version 1.2

ISTQB® Certified Tester Syllabus Foundation Level

Compatible with Syllabus version 2018 v3.1

International Software Testing Qualifications Board

Release Date: May 17, 2020

Legal

Exam Working Group 2020

Document Responsibility

The ISTQB® Examination Working Group is responsible for this document.

Acknowledgements

This document was produced by a core team from ISTQB®: Rex Black

The core team thanks the Exam Working Group review team, the Syllabus Working Group and the National Boards for their suggestions and input.

This document is maintained by a core team from ISTQB® Exam Working Group.

Revision History

Sample Exam – Questions Layout Template used:	Version 2.0	Date: Marts 16, 2020

Version	Date	Remarks
1.0	May 3, 2019	Release at Yerevan GA
1.1	May 29, 2019	Cosmetic and wording fixes
1.2	May 17, 2020	Major changes to questions: 1, 19, 40 Minor changes to questions: 2, 4, 34

Table of Contents

Introduction

Purpose of this document

The sample questions and answers and associated justifications in this sample exam set have been created by a team of Subject Matter Experts and experienced question writers with the aim of assisting ISTQB® Member Boards and Exam Boards in their question writing activities.

These questions cannot be used as-is in any official examination, but they should serve as guidance for question writers. Given the wide variety of formats and subjects, these sample questions should offer many ideas for the individual Member Boards on how to create good questions and appropriate answer sets for their examinations.

Instructions

The question set is organized in the following way:

- Question - including any scenario followed by the question stem
- Answer option set

- Answers, including justification are contained in a separate document

Questions

Question #1 (1 Point)
What is quality?

a) Activities focused on providing confidence that quality requirements will be fulfilled
b) The degree to which a component or system satisfies the stated and implied needs of its various stakeholders
c) The degree to which a component or system protects information and data so that persons or other components or systems have the degree of access appropriate to their types and levels of authorization
d) The total costs incurred on quality activities and issues and often split into prevention costs, appraisal costs, internal failure costs and external failure costs

Select ONE option.

Question #2 (1 Point)
Which of the following is a typical test objective?

a) Preventing defects
b) Repairing defects
c) Comparing actual results to expected results
d) Analyzing the cause of failure

Select ONE option.

Question #3 (1 Point)
A phone ringing momentarily distracts a programmer, causing the programmer to improperly program the logic that checks the upper boundary of an input variable. Later, during system testing, a tester notices that this input field accepts invalid input values. The improperly coded logic for the upper boundary check is:

a) The root cause
b) The failure
c) The error
d) The defect

Select ONE option.

Question #4 (1 Point)
A product owner says that your role as a tester on an Agile team is to catch all the bugs before the end of each iteration. Which of the following is a testing principle that could be used to respond to this (false) statement?

a) Defect clustering
b) Testing shows the presence of defects
c) Absence of error fallacy
d) Root cause analysis

Select ONE option.

Question #5 (1 Point)

Programmers often write and execute unit tests against code which they have written. During this self-testing activity, which of the following is a tester mindset that programmers should adopt to perform this unit testing effectively?

a) Good communication skills
b) Code coverage
c) Evaluating code defects
d) Attention to detail

Select ONE option.

Question #6 (1 Point)

Consider the following testing activities:

1. Selecting regression tests
2. Evaluating completeness of test execution
3. Identifying which user stories have open defect reports
4. Evaluating whether the number of tests for each requirement is consistent with the level of product risk

Consider the following ways traceability can help testing:

A. Improve understandability of test status reports to include status of test basis items
B. Make testing auditable
C. Provide information to assess process quality
D. Analyze the impact of changes

Which of the following best matches the testing activity with how traceability can assist that activity?

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

Select ONE option.

Question #7 (1 Point)

A tester participated in a discussion about proposed database structure. The tester identified a potential performance problem related to certain common user searches. This possible problem was explained to the development team. Which of the following is a testing contribution to success that BEST matches this situation?

a) Enabling required tests to be identified at an early stage
b) Ensuring processes are carried out properly
c) Reducing the risk of fundamental design defects
d) Reducing the risk of untestable functionality

Select ONE option.

Question #8 (1 Point)
Which of the following is an example of a task that can be carried out as part of the test process?

a) Analyzing a defect
b) Designing test data
c) Assigning a version to a test item
d) Writing a user story

Select ONE option.

Question #9 (1 Point)
You are running a performance test with the objective of finding possible network bottlenecks in interfaces between components of a system. Which of the following statements describes this test?

a) A functional test during the integration test level
b) A non-functional test during the integration test level
c) A functional test during the component test level
d) A non-functional test during the component test level

Select ONE option.

Question #10 (1 Point)
Which of the following statements is true?

a) Impact analysis is useful for confirmation testing during maintenance testing
b) Confirmation testing is useful for regression testing during system design
c) Impact analysis is useful for regression testing during maintenance testing
d) Confirmation testing is useful for impact analysis during maintenance testing

Select ONE option.

Question #11 (1 Point)
Consider the following types of defects that a test level might focus on:

1. Defects in separately testable modules or objects
2. Not focused on identifying defects
3. Defects in interfaces and interactions
4. Defects in the whole test object

Which of the following list correctly matches test levels from the Foundation syllabus with the defect focus options given above?

a) 1 = performance test; 2 = component test; 3 = system test; 4 = acceptance test
b) 1 = component test; 2 = acceptance test; 3 = system test; 4 = integration test
c) 1 = component test; 2 = acceptance test; 3 = integration test; 4 = system test
d) 1 = integration test; 2 = system test; 3 = component test; 4 = acceptance test

Select ONE option.

Question #12 (1 Point)

A mass market operating system software product is designed to run on any PC hardware with an x86-family processor. You are running a set of tests to look for defects related to support of the various PCs that use such a processor and to build confidence that important PC brands will work. What type of test are you performing?

a) Performance test
b) Processor test
c) Functional test
d) Portability test

Select ONE option.

Question #13 (1 Point)

During an Agile development effort, a product owner discovers a previously-unknown regulatory requirement that applies to most of the user stories within a particular epic. The user stories are updated to provide for the necessary changes in software behavior. The programmers on the team are modifying the code appropriately. As a tester on the team, what types of tests will you run?

a) Confirmation tests
b) Regression tests
c) Functional tests
d) Change-related tests

Select ONE option.

Question #14 (1 Point)

In a formal review, what is the role name for the participant who runs an inspection meeting?

a) Facilitator
b) Programmer
c) Author
d) Project manager

Select ONE option.

Question #15 (1 Point)

You are reading a user story in the product backlog to prepare for a meeting with the product owner and a developer, noting potential defects as you go. Which of the following statements is true about this activity?

a) It is not a static test, because static testing involves execution of the test object
b) It is not a static test, because static testing is always performed using a tool
c) It is a static test, because any defects you find could be found cheaper during dynamic testing
d) It is a static test, because static testing does not involve execution of the test object

Select ONE option.

Question #16 (1 Point)

During a period of intensive project overtime, a system architecture document is sent to various project participants, announcing a previously-unplanned technical review to occur in one week. No adjustments are made to the participants' list of assigned tasks. Based on this information alone, which of the following is a factor for review success that is MISSING?

a) Appropriate review type
b) Adequate time to prepare
c) Sufficient metrics to evaluate the author
d) Well-managed review meeting

Select ONE option.

Question #17 (1 Point)

You are working as a tester on an Agile team and have participated in over two dozen user story refinement sessions with the product owner and the developers on the team at the start of each iteration. As the reviews have gotten more effective at detecting defects in user stories and the product owner more adept at correcting those defects, you and the team notice that the team's velocity, as shown in your burndown charts, has started to increase. Which of the following is a benefit of static testing that MOST DIRECTLY applies to increased velocity?

a) Increasing total cost of quality
b) Reducing testing cost
c) Increasing development productivity
d) Reducing total cost of quality

Select ONE option.

Question #18 (1 Point)

You are working on a video game development project, using Agile methods. It is based on Greek mythology and history, and players can play key roles in scenarios such as the battles between the Greeks and Trojans.

Consider the following user story and its associated acceptance criteria:

As a player,
I want to be able to acquire the Rod of Midas (a new magic object),
so that I can turn objects and other players into gold

AC1: The Rod must work on any object or player, no matter what size, which can be touched anywhere by the player holding the Rod
AC2: Holding the Rod does not change the player holding it into gold
AC3: Any object or player touched by the Rod transforms completely into gold within one millisecond
AC4: The Rod appears as shown in Prototype O.W.RoM
AC5: The transformation starts at the point of contact with the Rod and moves at a rate of one meter per millisecond

You are participating in a checklist-based review session of this user story.

This user story and its associated acceptance criteria contain which of the following typical defects identified by static testing in this type of work product?

a) Deviation from standards
b) Contradiction
c) Security vulnerability
d) Coverage gaps

Select ONE option.

Question #19 (1 Point)

What is decision coverage?

a) The coverage of condition outcomes
b) Decision coverage is a synonym for statement coverage
c) The coverage of executable statements
d) The coverage of decision outcomes

Select ONE option.

Question #20 (1 Point)

Prior to an iteration planning session, you are studying a user story and its acceptance criteria, deriving test conditions and associated test cases from the user story as a way of applying the principle of early QA and test. What test technique are you applying?

a) White-box
b) Black-box
c) Experience-based
d) Error guessing

Select ONE option.

Question #21 (1 Point)

Which of the following is a true statement about exploratory testing?

a) More experienced testers who have tested similar applications and technologies are likely to do better than less experienced testers at exploratory testing
b) Exploratory testing does not identify any additional tests beyond those that would result from formal test techniques
c) The time required to complete an exploratory testing session cannot be predicted in advance
d) Exploratory testing can involve the use of black-box techniques but not white-box techniques

Select ONE option.

Question #22 (1 Point)

You are testing a mobile app that allows customers to access and manage their bank accounts. You are running a test suite that involves evaluating each screen and each field on each screen against a general list of user interface best practices, derived from a popular book on the topic, that maximize attractiveness, ease-of-use, and accessibility for such apps. Which of the following options BEST categorizes the test technique you are using?

a) Specification-based
b) Exploratory
c) Checklist-based
d) Error guessing

Select ONE option.

Question #23 (1 Point)

Consider a mobile app that allows customers to access and manage their bank accounts. A user story has just been added to the set of features that checks customers' social media accounts and bank records to give personalized greetings on birthdays and other personal milestones. Which of the following test techniques could a PROGRAMMER use during a unit test of the code to ensure that coverage of situations when the greetings ARE supposed to occur and when the greetings ARE NOT supposed to occur?

a) Statement testing
b) Exploratory testing
c) State transition testing
d) Decision testing

Select ONE option.

Question #24 (1 Point)

A batch application has been in production unchanged for over two years. It runs overnight once a month to produce statements that will be e-mailed to customers. For each customer, the application goes through every account and lists every transaction on that account in the last month. It uses a nested-loop structure to process customers (outer loop), each customer's accounts (middle loop), and each account's transactions (inner loop).

One night, the batch application terminates prematurely, failing to e-mail statements to some customers, when it encounters a customer with one account for which no transactions occurred in the last month. This is a very unusual situation and has not occurred in the years since this application was placed in production.

While fixing the defect, a programmer asks you to recommend test techniques that are effective against this kind of defect. Which of the following test techniques would most likely have been able to detect the underlying defect?

a) Decision testing
b) Statement testing
c) Checklist-based testing
d) Error guessing

Select ONE option.

Question #25 (1 Point)

You are testing an unattended gasoline pump that only accepts credit cards. Once the credit card is validated, the pump nozzle placed into the tank, and the desired grade selected, the customer enters the desired amount of fuel in gallons using the keypad. The keypad only allows the entry of digits. Fuel is sold in tenths (0.1) of a gallon, up to 50.0 gallons.

Which of the following is a minimum set of desired amounts that covers the equivalence partitions for this input?

a) 0.0, 20.0, 60.0
b) 0.0, 0.1, 50.0
c) 0.0, 0.1, 50.0, 70.0
d) -0.1, 0.0, 0.1, 49.9, 50.0, 50.1

Select ONE option.

Question #26 (1 Point)

You are testing an e-commerce system that sells cooking supplies such as spices, flour, and other items in bulk. The units in which the items are sold are either grams (for spices and other expensive items) or kilograms (for flour and other inexpensive items). Regardless of the units, the smallest valid order amount is 0.5 units (e.g., half a gram of cardamom pods) and the largest valid order amount is 25.0 units (e.g., 25 kilograms of sugar). The precision of the units field is 0.1 units.

Which of the following is a set of input values that cover the boundary values with two-point boundary values for this field?

a) 0.3, 10.0, 28.0
b) 0.4, 0.5, 0.6, 24,9,25,0, 25.1
c) 0.4, 0.5, 25.0 25.1
d) 0.5, 0.6, 24.9, 25.0

Select ONE option.

Question #27 (1 Point)

Consider the following decision table for the portion of an online airline reservation system that allows frequent flyers to redeem points for reward travel:

Condition	1	2	3
Account/password okay	N	Y	Y
Sufficient points	-	N	Y
Action			
Show flight history	N	Y	Y
Allow reward travel	N	N	Y

Suppose that there are two equivalence partitions for the condition where Account/password okay is not true, one where the account is invalid and another where the account is valid but the password is invalid. Suppose that there is only one equivalence partition corresponding to the condition where Account/password okay is true, where both the account and password are valid.

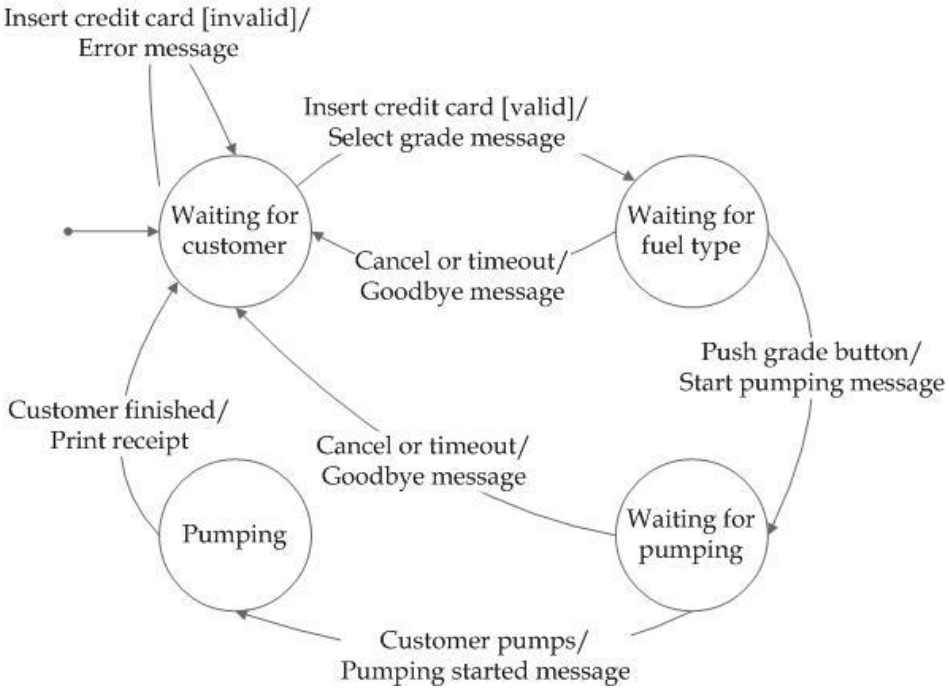
If you want to design tests to cover the equivalence partitions for Account/password okay and also for this portion of the decision table, what is the minimum number of tests required?

a) 2
b) 3
c) 4
d) 9

Select ONE option.

Question #28 (1 Point)

Consider the following state transition diagram for a credit-card only, unattended gasoline pump:



Assume that you want to develop the minimum number of tests to cover each transition in the state transition diagram. Assume further that each test must start at the beginning state, waiting for customer, and each test ends when a transition arrives at the beginning state. How many tests do you need?

a) 4
b) 7
c) 1
d) Infinite

Select ONE option.

Question #29 (1 Point)

You are testing an e-commerce system that sells cooking supplies such as spices, flour, and other items in bulk. The units in which the items are sold are either grams (for spices and other expensive items) or kilograms (for flour and other inexpensive items). Regardless of the units, the smallest valid order amount is 0.5 units (e.g., half a gram of cardamom pods) and the largest valid order amount is 25.0 units (e.g., 25 kilograms of sugar). The precision of the units' field is 0.1 units.

Which of the following is a MINIMAL set of input values that cover the equivalence partitions for this field?

a) 10.0, 28.0
b) 0.4, 0.5, 25.0, 25.1
c) 0.2, 0.9, 29.5
d) 12.3

Select ONE option.

Question #30 (1 Point)

You are working as a tester on an online banking system. Availability is considered one of the top products (quality) risks for the system. You find a reproducible failure that results in customers losing their connections to the bank Web site when transferring funds between common types of accounts and being unable to reconnect for between three and five minutes.

Which of the following would be a good summary for a defect report for this failure, one that captures both the essence of the failure and its impact on stakeholders?

a) Web server logs show error 0x44AB27 when running test 07.005, which is not an expected error message in /tmp filesystem
b) Developers have introduced major availability defect which will seriously upset our customers
c) Performance is slow and reliability flaky under load
d) Typical funds-transfer transaction results in termination of customer session, with a delay in availability when attempting to reconnect

Select ONE option.

Question #31 (1 Point)

You are testing a mobile app that allows users to find a nearby restaurant, based on the type of food they want to eat. Consider the following list of test cases, priorities (smaller number is high priority), and dependencies, in the following format:

Test case number	Test condition covered	Priority	Logical dependency
01.001	Select type of food	3	none
01.002	Select restaurant	2	01.001
01.003	Get directions	1	01.002
01.004	Call restaurant	1	01.002
01.005	Make reservation	3	01.002

Which of the following is a possible test execution schedule that considers both priorities and dependencies?

a) 01.001, 01.002, 01.003, 01.005, 01.004
b) 01.001, 01.002, 01.004, 01.003, 01.005
c) 01.003, 01.004, 01.002, 01.001, 01.002
d) 01.001, 01.002, 01.004, 01.005, 01.003

Select ONE option.

Question #32 (1 Point)

Which of the following is a common test metric often used to monitor BOTH test preparation and test execution?

a) Test case status
b) Defect find/fix rates
c) Test environment preparation
d) Estimated cost to find the next defect

Select ONE option.

Question #33 (1 Point)

Which of the following are two factors that can be used to determine the level of risk?

a) Testing and development
b) Dynamic and reactive
c) Statement and decision
d) Likelihood and impact

Select ONE option.

Question #34 (1 Point)

You are working as a project manager on an in-house banking software project. To prevent rework and excessive find/fix/retest cycles, the following process has been put in place for resolving a defect once it is found in the test lab:

a) The assigned developer finds and fixes the defect, then creates an experimental build
b) A peer developer reviews, unit tests, and confirmation tests the defect fix on his/her desktop
c) A tester – usually the one who found the defect – confirmation tests the defect fix in the development environment
d) Once a day, a new release with all confirmed defect fixes included, is installed in the test environment
e) The same tester from step 3 confirmation tests the defect fix in the test environment

Nevertheless, a large number of defects which the testers confirmed as fixed in the development environment (in step 3) are somehow failing confirmation testing in the test environment, with the resulting rework and cycle time outcomes. You have the highest confidence in your testers, and have ruled out mistakes or omissions in step 3.

Which of the following is the MOST likely part of the process to check next?

a) The activity of developers, who may not be adequately testing in step 2
b) The activity of testers, who may be confused about what to test in step 5
c) Configuration management, which may not be maintaining the integrity of the product in step 4
d) The activity of developers, who may not be fixing defects properly in step 1

Select ONE option.

Question #35 (1 Point)

You are engaged in planning a test effort for a new mobile banking application. As part of estimation, you first meet with the proposed testers and others on the project. The team is well-coordinated and has already worked on similar projects. To verify the resulting estimate, you then refer to some industry averages for testing effort and costs on similar projects, published by a reputable consultant.

Which statement accurately describes your estimation approach?

a) A simultaneous expert-based and metrics-based approach
b) Primarily an expert-based approach, augmented with a metrics-based approach
c) Primarily a metrics-based approach, augmented with an expert-based approach
d) Primarily planning poker, checked by velocity from burndown charts

Select ONE option.

Question #36 (1 Point)

During a project following Agile methods, you find a discrepancy between the developer's interpretation of an acceptance criteria and the product owner's interpretation, which you bring up during a user story refinement session. Which of the following is a benefit of test independence exemplified by this situation?

a) Recognizing different kinds of failures
b) Taking primary responsibility for quality
c) Removing a defect early
d) Challenging stakeholder assumptions

Select ONE option.

Question #37 (1 Point)

You are defining the process for carrying out product risk analysis as part of each iteration on an Agile project. Which of the following is the proper place to document this process in a test plan?

a) Scope of testing
b) Approach of testing
c) Metrics of testing
d) Configuration management of the test object

Select ONE option.

Question #38 (1 Point)

Consider the following list of undesirable outcomes that could occur on a mobile app development effort:

A. Incorrect totals on reports
B. Change to acceptance criteria during acceptance testing
C. Users find the soft keyboard too hard to use with your app
D. System responds too slowly to user input during search string entry
E. Testers not allowed to report test results in daily standup meetings

Which of the following properly classifies these outcomes as project and product risks?

a) Product risks: B, E; Project risks: A, C, D
b) Product risks: A, C, D; Project risks: B, E
c) Product risks: A, C, D, E Project risks: B
d) Product risks: A, C Project risks: B, D, E

Select ONE option.

Question #39 (1 Point)

You have just completed a pilot project for a regression testing tool. You understand the tool much better and have tailored your testing process to it. You have standardized an approach to using the tool and its associated work products. Which of the following is a typical test automation pilot project goal that remains to be carried out?

a) Learn more details about the tool
b) See how the tool would fit with existing processes and practices
c) Decide on standard ways of using, managing, storing, and maintaining the tool and the test assets
d) Assess whether the benefits will be achieved at reasonable cost

Select ONE option.

Question #40 (1 Point)

Which of the following tools is most useful for reporting test metrics?

a) Test management tool
b) Static analysis tool
c) Coverage tool
d) Model-Based testing tools

Select ONE option.

Sample Exam – Answers

Sample Exam set C
Version 1.2

ISTQB® Certified Tester Syllabus Foundation Level

Compatible with Syllabus version 2018 v3.1

International Software Testing Qualifications Board

Release Date: May 17, 2020

Legal

Exam Working Group 2020

Document Responsibility

The ISTQB® Examination Working Group is responsible for this document.

Acknowledgements

This document was produced by a core team from the ISTQB®: Rex Black

The core team thanks the Exam Working Group review team, the Syllabus Working Group and the National Boards for their suggestions and input.

This document is maintained by a core team from ISTQB® Exam Working Group.

Revision History

Sample Exam – Answers Layout Template used:	Version 2.0	Date: Marts 16, 2020

Version	Date	Remarks
1.0	May 3, 2019	Release at Yerevan GA
1.1	May 29, 2019	Cosmetic and wording fixes
1.2	May 17, 2020	Improved readability of Rationale

Table of Contents

Introduction

Purpose of this document

The sample questions and answers and associated justifications in this sample exam set have been created by a team of Subject Matter Experts and experienced question writers with the aim of assisting ISTQB® Member Boards and Exam Boards in their question writing activities.

These questions cannot be used as-is in any official examination, but they should serve as guidance for question writers. Given the wide variety of formats and subjects, these sample questions should offer many ideas for the individual Member Boards on how to create good questions and appropriate answer sets for their examinations.

Instructions

The answer set is organized in the following way:

- Correct answer – including justification of the answers
- Learning Objective and K-level of Questions
- Answer Key with Learning Objective and K-level for each question

- Questions are contained in a separate document

Answer Key

Question Number (#)	Correct Answer	LO	K-Level	Points
1	b	Keywords	K1	1
2	a	FL-1.1.1	K1	1
3	d	FL-1.2.4	K2	1
4	b	FL-1.3.1	K2	1
5	d	FL-1.5.2	K2	1
6	d	FL-1.4.4	K2	1
7	c	FL-1.2.1	K2	1
8	b	FL-1.4.2	K2	1
9	b	FL-2.3.2	K1	1
10	c	FL-2.4.2	K2	1
11	c	FL-2.2.1	K2	1
12	d	FL-2.3.1	K2	1
13	d	FL-2.3.3	K2	1
14	a	FL-3.2.2	K1	1
15	d	FL-3.1.3	K2	1
16	b	FL-3.2.5	K2	1
17	c	FL-3.1.2	K2	1
18	b	FL-3.2.4	K3	1
19	d	Keywords	K1	1
20	b	FL-4.1.1	K2	1

Question Number (#)	Correct Answer	LO	K-Level	Points
21	a	FL-4.4.2	K2	1
22	c	FL-4.4.3	K2	1
23	d	FL-4.3.2	K2	1
24	a	FL-4.3.3	K2	1
25	a	FL-4.2.1	K3	1
26	c	FL-4.2.2	K33	1
27	c	FL-4.2.3	K3	1
28	a	FL-4.2.4	K3	1
29	c	FL-4.2.1	K3	1
30	d	FL-5.6.1	K3	1
31	b	FL-5.2.4	K3	1
32	a	FL-5.3.1	K1	1
33	d	FL-5.5.1	K1	1
34	c	FL-5.4.1	K2	1
35	b	FL-5.2.6	K2	1
36	d	FL-5.1.1	K2	1
37	b	FL-5.2.1	K2	1
38	b	FL-5.5.2	K2	1
39	d	FL-6.2.2	K1	1
40	a	FL-6.1.1	K2	1

Answers

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
1	b	a) Is not correct. This is the Glossary definition of quality assurance b) Is correct. This is the Glossary definition of quality c) Is not correct. This is the Glossary definition of security d) Is not correct. This is the Glossary definition of cost of quality	Keywords	K1	1
2	a	a) Is correct. This is an objective listed b) Is not correct. This is debugging c) Is not correct. This is an activity within the test execution group of activities within the test process d) Is not correct. This is part of debugging	FL-1.1.1	K1	1
3	d	a) Is not correct. The root cause is the distraction that the programmer experienced while programming b) Is not correct. The accepting of invalid inputs is the failure c) Is not correct. The error is the mistaken thinking that resulted in putting the defect in the code d) Is correct. The problem in the code is a defect	FL-1.2.4	K2	1
4	b	a) Is not correct. Defect clustering has to do with where defects are most likely to be found, not whether all of them can be found b) Is correct. Testing can show the presence of defects but cannot prove their absence, which makes it impossible to know if you have caught all the bugs. Further, the impossibility of exhaustive testing makes it impossible for you to catch all the bugs c) Is not correct. This principle says that you can find and remove many bugs but still release an unsuccessful software product, which is not what the product owner is asking you to ensure d) Is not correct. Root cause analysis is not a testing principle	FL-1.3.1	K2	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
5	d	a) Is not correct. The programmer appears to be performing unit testing on their own code b) Is not correct. Code coverage is useful for unit testing, but it is not a tester mindset c) Is not correct. The programmer's mindset included contemplating what might be wrong with the code, but that is not a tester's mindset d) Is correct. This tester mindset, attention to detail, will help programmers find defects during unit testing	FL-1.5.2	K2	1
6	d	Traceability assists with: • Selecting regression tests in terms of analyzing the impact of changes (1D) • Evaluating completeness of test execution which makes testing auditable (2B) • Identifying which user stories have open defect reports which improves understandability of test status reports to include status of test basis items (3A) • Evaluating whether the number of tests for each requirement is consistent with the level of product risk which provides information to assess test process quality (i.e., alignment of test effort with risk) (4C) Thus, option d) is correct.	FL-1.4.4	K2	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
7	c	a) Is not correct. While enabling required tests to be identified in an early stage is a testing contribution to success, there is no indication in the question that the tester did so b) Is not correct. Ensuring processes are carried out properly is part of quality assurance, not a testing contribution to success c) Is correct. Reducing the risk of fundamental design defects is a testing contribution to success. Database structure is related to design, and performance problems can be a significant product risk d) Is not correct. While reducing the risk of untestable functionality is a testing contribution to success, the tester here has not identified something untestable, but rather something that would result in performance tests failing	FL-1.2.1	K2	1
8	b	a) Is not correct. Analyzing a defect is part of debugging, not testing b) Is correct. Creating test data is a test implementation task c) Is not correct. While a tester may need to identify a test item's version for results reporting purposes, assigning a test item's version is part of configuration management d) Is not correct. Writing a user story is not a testing activity and should be done by the product owner	FL-1.4.2	K2	1
9	b	a) Is not correct. While this test does match the description of an integration test, it is a non-functional test b) Is correct. This test matches the description of an integration test and it is a non-functional test c) Is not correct. This test does not match the description of a component test and it is not a functional test d) Is not correct. While this test is a non-functional test, it does not match the description of a component test	FL-2.3.2	K1	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
10	c	a) Is not correct. While impact analysis is useful during maintenance testing it is not necessary for confirmation testing since confirmation testing is on the intended effects of a bug fix or other change b) Is not correct. Confirmation and regression testing are two separate activities, and confirmation testing is not part of system design c) Is correct. Impact analysis can be used to select regression tests for maintenance testing d) Is not correct. Confirmation testing is not part of impact analysis, though confirmation testing will typically happen during maintenance testing	FL-2.4.2	K2	1
11	c	Performance testing is a test type, not a test level. Component testing focuses on defects in separately testable modules or objects, integration testing on defects in interfaces and interactions, system testing on defects in the whole test object, and acceptance testing is not typically focused on identifying defects. Therefore, c is the correct answer.	FL-2.2.1	K2	1
12	d	a) Is not correct. The test described is a non-functional test, it is a portability test, not a performance test b) Is not correct. Processor test is not a defined test type c) Is not correct. The test described is a non-functional test, specifically a portability test d) Is correct. Testing supported devices is a non-functional test, specifically a portability test	FL-2.3.1	K2	1
13	d	The change in behavior may be either functional or non-functional you need to run change-related tests, some of which are confirmation tests and others are regression tests. Therefore, d is the correct answer.	FL-2.3.3	K2	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
14	a	a) Is correct. The facilitator or moderator runs the review meetings b) Is not correct. This is not a role name for a formal review participant c) Is not correct. The facilitator or moderator runs the review meetings d) Is not correct. The facilitator or moderator runs the review meetings	FL-3.2.2	K1	1
15	d	a) Is not correct. Static testing does not involve execution of the test object b) Is not correct. Some static tests involve the use of a tool, especially static analysis, but reviews (such as the activity described here) do not necessarily involve the use of a tool c) Is not correct. The review activity described here is part of a static test, but defects found in static tests are usually cheaper than those found in dynamic testing d) Is correct. Static testing does not involve execution of the test object	FL-3.1.3	K2	1
16	b	a) Is not correct. Technical reviews are appropriate for technical documents such as a system architecture b) Is correct. Adequate time for preparation is important, but people are working overtime and no adjustments are made for this new set of tasks c) Is not correct. Gathering metrics from a review to evaluate participants is a factor that leads to failure, not success, because it destroys trust d) Is not correct. A well-managed review meeting is important, but there is no reason to think the review meeting will not be well managed based on the information provided	FL-3.2.5	K2	1
17	c	a) Is not correct. Reviews reduce, not increase, the total cost of quality b) Is not correct. Increasing velocity is a sign of increasing development productivity overall, not just testing, so B only partially applies c) Is correct. Velocity is a way of measuring productivity in Agile development d) Is not correct. The benefit mentioned here has to do with increasing overall development team productivity	FL-3.1.2	K2	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
18	b	a) Is not correct. While deviation from standards is a typical we are not given any standard with which the user stories should comply b) Is correct. Contradiction is a typical requirements defect. AC3 and AC5 conflict if the Rod is touched to an object that extends more than 1 meter in any direction from the point at which touched, since AC1 does not limit the size of the objects to be touched c) Is not correct. While security vulnerabilities are typical defects, there is nothing here related to security d) Is not correct. While test coverage gaps are typical defects, including missing tests for acceptance criteria, we are not provided with any information about which tests do and do not exist	FL-3.2.4	K3	1
19	d	a) Is not correct. This is the Glossary definition of condition coverage b) Is not correct. Decision coverage is a higher level of coverage and the two terms are not defined as synonyms in the Glossary c) Is not correct. This is the Glossary definition of statement coverage d) Is correct. This is the Glossary definition of coverage as applied to decisions	Keywords	K1	1
20	b	a) Is not correct. Structure-based, or white-box techniques are based on an analysis of the architecture, detailed design, internal structure, or the code of the test object b) Is correct. Behavior-based, or black-box techniques are based on an analysis of the appropriate test basis (e.g., formal requirements documents, specifications, use cases, user stories, or business processes), which describe functional and non-functional behavior c) Is not correct. Experience-based techniques leverage the experience of developers, testers, and users to determine what should be tested d) Is not correct. Error guessing is a type of experience-based testing, which is not black-box	FL-4.1.1	K2	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
21	a	a) Is correct. Exploratory testing is a form of experience-based testing, which benefits from the skills and experience of the tester b) Is not correct. Exploratory testing is useful to complement formal testing techniques c) Is not correct. In session-based test management, exploratory testing is conducted within a defined time-box, and the tester uses a test charter containing test objectives to guide the testing d) Is not correct. Exploratory testing can incorporate the use of other black-box, white-box, and experience-based techniques referenced in this syllabus	FL-4.4.2	K2	1
22	c	a) Is not correct. The book provides general guidance, and is not a formal requirements document, a specification, or a set of use cases, user stories, or business processes b) Is not correct. While you could consider the list as a set of test charters, it more closely resembles the list of test conditions c) Is correct. The list of user interface best practices is the list of test conditions d) Is not correct. The tests are not focused on failures that could occur, but rather on knowledge about what is important for the user, in terms of usability	FL-4.4.3	K2	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
23	d	a) Is not correct. Statement testing exercises the executable statements in the code, which might result in the absence of certain greetings not being tested b) Is not correct. Unless the test charter specifically mentioned testing both the presence and the absence of each type of greeting, coverage can be difficult to assess for an exploratory test c) Is not correct. State transition testing is useful for situations where the test object responds differently to an input depending on current conditions or previous history, but in this case the test object has to decide whether the current date matches a particular milestone and thus whether to display the relevant greeting d) Is correct. Decision testing involves test cases that follow the control flows that occur from a decision point, which in this case would be deciding whether a greeting should or should not be given	FL-4.3.2	K2	1
24	a	a) Is correct. For a loop construct, statement coverage only requires that all statements within the loop are executed, but decision coverage requires testing of both the conditions where the loop is executed and when it is bypassed b) Is not correct. For a loop construct, statement coverage only requires that all statements within the loop are executed, but decision coverage requires testing of both the conditions where the loop is executed and when it is bypassed c) Is not correct. Checklists are based on experience, defect and failure data, knowledge about what is important for the user, and an understanding of why and how software fails, none of which is likely to have led to the inclusion of such a test condition d) Is not correct. While it's possible that someone might anticipate a developer making the mistaken assumption that there would always be at least one transaction in a month for every account, only decision testing guarantees testing of that condition	FL-4.3.3	K2	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
25	a	There are three equivalence partitions: - No sale completed (0.0 gallons) - A valid sale occurs (0.1 to 50.0 gallons) - An invalid amount is selected (50.1 or more gallons) Therefor: a) Is correct. This set of input values has exactly one test per equivalence partition b) Is not correct. This set of input values has does not cover the invalid amount partition c) Is not correct. This set of input values has two tests for the valid sale equivalence partition, which is not the minimum d) Is not correct. This set of input values covers the three-point boundary values for the two boundaries, not the minimum number required to cover the equivalence partitions	FL-4.2.1	K3	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
26	c	There are three equivalence partitions, with the boundaries as shown: - Invalid too low (0.4 and below) - Valid (0.5 to 25.0) - Invalid too high (25.1 and above) Therefor: a) Is not correct. None of those four boundary values are included in this set of tests. These tests do cover the equivalence partitions b) Is not correct. All of these four boundary values are included in this set of tests, but two additional values are included, one for each boundary. These are the values associated with three-point boundary value analysis c) Is correct. Each of those four two-point boundary values are included in this set of tests d) Is not correct. These four values are all included in the valid partition	FL-4.2.2	K33	1
27	c	There is at least one test for each column in the decision table. However, column one requires two tests, one where the account is invalid and another where the account is valid, but the password is invalid, so the minimum number of tests is four. Thus, option c) is correct.	FL-4.2.3	K3	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
28	a	Each transition must be traversed at least once. To do so, the first test can cover the happy path, a successful purchase, the next test cancel or timeout from waiting for pumping, the next test cancel or timeout from waiting for fuel type, and the last test the insertion of an invalid credit card. While the order is immaterial, fewer than four tests fails to cover one of the transitions inbound to waiting for customer or violates the rules about where a test starts or ends. More than four tests include tests that re-traverse already-covered transitions. Thus, option a) is correct.	FL-4.2.4	K3	1
29	c	There are three equivalence partitions, with the boundaries as shown: - Invalid too low (0.4 and below) - Valid (0.5 to 25.0) - Invalid too high (25.1 and above) Therefor: a) Is not correct. Only two of the equivalence partitions are covered in this set of tests b) Is not correct. Each of those four boundary values are included in this set of tests, but the question asked for equivalence partition coverage with minimal tests, so either 0.5 or 25.0 should be dropped c) Is correct. Each of these three equivalence partitions are covered in this set of tests d) Is not correct. Only one of those equivalence partitions is covered by this test	FL-4.2.1	K3	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
30	d	a) Is not correct. While this information is useful for developers, it does not provide managers with a sense of the impact on product quality b) Is not correct. This summary does not provide developers or managers with the necessary information and attacks the developers c) Is not correct. This summary does not provide developers or managers with the necessary information and attacks the developers d) Is correct. This summary gives a good sense of the failure and its impact	FL-5.6.1	K3	1
31	b	Test 01.001 must come first, followed by 01.002, to satisfy dependencies. Afterwards, 01.004 and 01.003 should be run in either order, followed by 01.005, to satisfy priority. Thus, option b) is correct.	FL-5.2.4	K3	1
32	a	a) Is correct. Percentage of test cases prepared is a common metric during test preparation while percentage of test cases passed, failed, not run, etc., are common during test execution b) Is not correct. Defect reports are typically filed during test execution, based on failures found c) Is not correct. Test environment preparation is part implementation and would generally be complete before test execution d) Is not correct. Defects are typically reported during test execution, based on failures found, so the cost to find the next defect is available during test execution only	FL-5.3.1	K1	1
33	d	The level of risk will be determined by the likelihood of an adverse event happening and the impact (the harm) from that event. Thus, option d) is correct.	FL-5.5.1	K1	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
34	c	a) Is not correct. If inadequate developer testing were the problem, the confirmation test would not pass in step 3 b) Is not correct. The same tester who successfully performed the confirmation test in step 3 is repeating it in step 5 c) Is correct. Configuration management maintains the integrity of the software. If a test that passes in step 3 fails in step 5, then something is different between those two steps. One possible difference is the test object, the option listed here. Another possible difference is the between the development environment and the test environment, but that is not an option listed here d) Is not correct. If the developers were not fixing the defect, the confirmation test would not pass in step 3	FL-5.4.1	K2	1
35	b	a) Is not correct. The two methods are used sequentially, not simultaneously b) Is correct. The primary sources of information come from the experienced testers, who are the experts. The consultant's industry averages augment the original estimate from published metrics c) Is not correct. The expert-based approach is the primary approach, augmented by a metrics-based approach d) Is not correct. We do not know if this project is following Agile methods, and burndown charts do not come from external consultants	FL-5.2.6	K2	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
36	d	a) Is not correct. While recognizing different kinds of failures is a benefit of tester independence, in the scenario here no code yet exists that can fail, and the problem is that the developer and product owner are both assuming different things about the acceptance criteria b) Is not correct. Developers losing a sense of responsibility for quality is a drawback, not a benefit c) Is not correct. While the effect of the discovery of this disagreement is the earlier removal of the defect, prior to coding, defects can be discovered early by various people, not just independent testers d) Is correct. Challenging stakeholder assumptions is a benefit of tester independence, and here the developer and product owner are both assuming different things about the acceptance criteria	FL-5.1.1	K2	1
37	b	a) Is not correct. While scope is a topic addressed in a test plan, the implementation of a risk-based testing strategy on this project is the approach, so this topic should be addressed in that section b) Is correct. Approach is a topic addressed in a test plan and the implementation of a risk-based testing strategy on this project is the approach c) Is not correct. While metrics for test monitoring and control is a topic addressed in a test plan, the implementation of a risk-based testing strategy on this project is the approach, so this topic should be addressed in that section d) Is not correct. Configuration management is not a topic addressed in a test plan	FL-5.2.1	K2	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
38	b	Product risks exist when a work product may fail to satisfy legitimate needs, while project risks are situations that could have a negative impact on the project's ability to achieve its objectives. So: A. Incorrect totals on reports = product risk B. Change to acceptance criteria during acceptance testing = project risk C. Users find the soft keyboard too hard to use with your app = product risk D. System responds too slowly to user input during search string entry = product risk E. Testers not allowed to report test results in daily standup meetings = project risk Therefore: a) Is not correct. This list is entirely backwards b) Is correct c) Is not correct. While e is about product quality and product risks, the failure to communicate test results is a project risk per the syllabus d) Is not correct. Product risks can be functional and non-functional, so d is also a product risk	FL-5.5.2	K2	1
39	d	a) Is not correct. This is an objective for a pilot, but you have achieved it because you understand the tool much better due to the pilot b) Is not correct. This is an objective for a pilot, but you have achieved it because you have tailoring your testing processes c) Is not correct. This is an objective for a pilot, but you have achieved it because you have standardized an approach to using the tool and its associated work products d) Is correct. Assessing the benefits and configuring the metrics collection are the two objectives missing from this list	FL-6.2.2	K1	1

Question Number (#)	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-Level	Number of Points
40	a	a) Is correct. Test management tools support the activities associated with test manager including metrics b) Is not correct. Static code analysis metrics would have to do with the code only, not testing as a whole c) Is not correct. These tools report on test basis coverage and code coverage only, not testing as a whole d) Is not correct. Model-Based testing tools focus on one specific area, not testing as a whole	FL-6.1.1	K2	1