Sample exam - Questions
**Sample exam B Version
1.6**

Certified Tester Syllabus ® Foundation level
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International Software Testing Qualification Committee

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The ISTQB exam working group® is responsible for this document.

This document is updated by an ISTQB core team® made up of the syllabus working and the examination working group.

Thanks

This document was produced by an ISTQB team® : Stuart Reid and Adam Roman.

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Revision history

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1.6	July 8, 2024	Corrected question: #32
1.5	May 29, 2024	Bump to match Answer version
1.4	April 12, 2024	Answer key: #2, #35
1.3	January 8, 2024	Answer key: #26, #39
1.2	December 5, 2023	Answer key: #8, #13
1.1	November 15, 2023	Corrected question: #35
1.0	October 16, 2023	First version

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Introduction

Purpose of this document

The sample questions and answers and associated rationale in this sample exam have been created by a team of subject matter experts and experienced question writers with the aim of. :

- Assist ISTQB member committees® and examination committees in their question-writing activities.
- Providing training organizations and candidates with sample examination

questions These questions cannot be used as they stand in an official examination.

Note that real exams can include a wide variety of questions, and this sample exam is *not* intended to include examples of every possible question type, style or length. In additionthis sample exam may be more or less difficult than an official exam.

Instructions

In this document you will find

- Questions[1] , including for each question :
    - Any scenario required by question statement
    - Point value
    - Answer option set
- Additional questions, including for each question [does not apply all sample exams] :
    - Any scenario required by question statement
    - Point value
    - Answer option set

- *Answers, including justifications, are provided in a separate document.*

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[1] In this example exam, questions are classified according to the LO they target, which is not the case in a real exam.

Questions

Question n° 1 (1 point)

Which of the following examples illustrates the need for testing?

    a) Dynamic testing increases quality by causing test objects fail a way that could never have been achieved by users.
    b) Static tests are used by developers to identify faults in their program code earlier than dynamic tests allow.
    c) Static analysis enables us to prove to our customers that system components which do not deliver any results are fit for commissioning.
    d) Reviews improve the quality of requirements specifications and reduce the number of changes required to derived products.

Select ONE option.

Question n°2 (1 point)

Which of the following statements quality assurance (QA) and/or quality control (QC) is correct?

    a) Quality assurance is carried out as part of testing
    b) Tests are carried out as part of quality control
    c) Testing is another term for quality control
    d) Tests are carried out part of

quality assurance Select ONE option.

Question n° 3 (1 point)

One of the "testing principles" states that exhaustive testing is impossible. Which of the following examples illustrates the application of this principle?

    a) Create test cases that cover all specified possible outcomes
    b) Document all possible variations in test input data and prioritize them according to their importance.
    c) Start testing as early as possible with exams and other static testing approaches
    d) Use equivalence partitioning and limit value analysis to generate test

cases Select ONE option.

Question n°4 (1 point)

Which test activity involves working with test data requirements, test conditions, test environment requirements and test cases?

    a) Test design
    b) Test execution
    c) Test analysis
    d) Implementation of the

test Select ONE option.

Question n° 5 (1 point)

Which of the following is most likely have an impact on the way tests are carried out for a given test object?

    a) The average experience level of the organization's marketing team
    b) Users' awareness of the fact that a new system is being developed for them
    c) Number years' experience of test team
    d) End-user organizational structure a commercial music streaming application

Select ONE option.

Question n°6 (1 point)

Which of the following is a CORRECT example of the value of traceability?

    a) The traceability between mitigated risks and successful test cases
        makes it possible determine the level of residual risk.
    b) The traceability between user requirements and test results enables us to
        measure the progress of the project in relation to the company's objectives.
    c) The traceability between testers and failed test cases makes it possible to determine
        the skill level of testers.
    d) The traceability between the identified risks and the written test conditions
        makes it possible determine which risks deserve to be tested.

Select ONE option.

Question n° 7 (1 point)

Which of the following is most likely to be an example a tester using a generic skill in a test?

    a) The tester's in-depth knowledge of computer games enabled him get on well
        with one of the developers, also a games enthusiast.
    b) The tester was a former pilot, and better able to understand the acceptance
        criteria for the helicopter's control system.
    c) The tester had previously worked as a programmer and used his skills in this
        field to better communicate with business analysts.
    d) The tester was very careful not to make any mistakes when methodically
        generating test cases before starting his exploratory testing session.

Select ONE option.

Question n° 8 (1 point)

Which of the following is an advantage of the whole-team approach?

    a) It allows team members to assume any role at any time.
    b) All it is one team to support the entire development project.
    c) It integrates company representatives alongside developers in a single team
    d) It generates a team synergy that benefits the whole team.

project Select ONE option.

Question n° 9 (1 point)

Which of the following statements about the chosen software development cycle is CORRECT?

    a) In agile software development, system test automation replaces regression testing.
    b) If a sequential development model is used, dynamic testing is generally limited to the end of the lifecycle.
    c) If an iterative development model is used, component testing is usually carried out manually by the developers.
    d) If an incremental development model is used, static tests are carried out in the early phases and dynamic tests in the later phases.

Select ONE option.

Question n°10 (1 point)

Which of the following is a good testing practice that applies to all software development ?

    a) Testers are asked to review the work products as part of the next development .
    b) Testers should review work products as soon as projects are available.
    c) Testers should review work products before beginning test analysis and design.
    d) Testers must review work products immediately after publication

Select ONE option.

Question n°11 (1 point)

Which of the following is an example a test-first development approach?

    a) Test-driven development
    b) Coverage-oriented development
    c) Quality-oriented development
    d) Feature-based

development Select ONE option.

Question n°12 (1 point)

Which of the following statements about DevOps is CORRECT?

    a) To speed up releases, continuous integration is used to encourage developers to submit their code quickly, without to test components.
    b) To be able to update and publish systems more frequently, numerous automated regression tests are needed to reduce the risk of regression.
    c) To treat developers and operations in the same way, testers will more effort to release testing by operations, using a "shift-right" approach.

d) To create greater synergy between testers, developers and operations, testing needs to be fully automated, with no manual testing.

Select ONE option.

Question n°13 (1 point)

Which of the following is most likely to be achieved as part of the system test
?

    a) Security testing a credit management system by an independent test team
    b) Testing interface between a foreign exchange system and an external banking system
    c) Beta-testing of a distance learning system by courseware designers
    d) Testing interactions between the user interface and the database of a human

resources system Select ONE option.

Question n°14 (1 point)

Which of the following statements is CORRECT?

    a) The number of regression tests increases as the project progresses, while the number of confirmation tests decreases as the project progresses.
    b) Regression tests are created and run when test object is fixed, confirmation tests are run when the test object is improved.
    c) Regression tests are designed to check that the operating environment remains unchanged, while confirmation tests are designed to test changes made to the test object.
    d) Regression tests are concerned with undesirable effects in unchanged code, while confirmation tests are concerned with the testing of modified code.

Select ONE option.

Question n°15 (1 point)

Which of the following is an example of a fault that can be detected by static testing but NOT by dynamic testing?

    a) User interface lacks user-friendliness
    b) Code without path
    c) Poor response times for most intended users
    d) Required features not implemented in the code

Select ONE option.

Question n°16 (1 point)

Which of the following is an advantage of early and frequent feedback from stakeholders?

    a) Managers know which developers are the least productive
    b) It enables project managers to prioritize interactions with stakeholders.
    c) It facilitates early communication of potential quality problems
    d) End-users better understand why work product delivery is delayed

Select ONE option.

Question n°17 (1 point)

The following job descriptions are given:

1. The quality characteristics to be assessed and the output criteria are selected.
2. Everyone has access to work product
3. Anomalies are identified in the work product
4. Anomalies are discussed

And the following review activities

A. Individual examination
B. Introduction to revision
C. Planning
D. Communication and analysis

Which of the following best describes your tasks and activities?

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

Select ONE option.

Question n°18 (1 point)

The following roles are assigned in examinations:

1. Scribe
2. Responsible for revision
3. Facilitator
4. Manager

And the following responsibilities in examinations:

A. Ensure that review meetings run smoothly and that a safe review environment is in place.
B. Records information relating to review, such as decisions and new anomalies identified during the review meeting.
C. Decide what needs to be examined and provide resources such as personnel and time for the examination.
D. Assumes overall responsibility for the exam, including organizing time and place of the exam.

Which of the following best describes your roles and responsibilities?

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

Select ONE option.

Question n°19 (1 point)

Which of the following statements best describes the difference between decision table tests and branch tests?

a) In decision table tests, test cases are derived from decision statements in the code. In branch tests, test cases are derived from knowledge of the test object's control flow.

b) In decision table testing, test cases are derived from the specification, which describes the business logic. In branch testing, test cases are based the anticipation of potential defects in the source code.

c) In decision table testing, test cases are derived from knowledge of the object's control flow. In branch testing, test cases are derived from the specification describing the business logic.

d) In decision table testing, test cases are independent of how the software is implemented. In branch testing, test cases can only be created after the code has designed or implemented.

Select ONE option.

Question n° 20 (1 point)

Customers of the TestWash carwash chain are issued with cards showing the number of washes they have completed to date. The initial value is 0. After entering the carwash, the system increases the card number by one.
This value represents the wash number. Based on this number, the system decides which discount the customer is entitled to.

For every tenth wash, the system grants a 10% reduction, and for every twentieth wash, the system grants a further 40% reduction (for a total reduction of 50%).

Which of the following sets of input data (understood as the numbers of the current wash) achieves the highest coverage of the equivalence partition?

a) 19, 20, 30
b) 11, 12, 20
c) 1, 10, 50
d) 10, 29, 30, 31

Select ONE option.

Question n°21 (1 point)

You are testing a form that checks the correct length of the password given as input. The form accepts a password of the correct length and rejects one is too short or too long. The length of the password is correct if it is between 6 and 12 characters inclusive. Otherwise, it is considered incorrect.

Initially, the form is empty (password length= 0). You apply the limit value analysis to the "password length" variable.

Your set of test cases provides 100% coverage of the limit value at 2 values. The team decided that, due to the high risk of this component, test cases should be added to guarantee 100% coverage of the 3-value limit value.

What additional password lengths need to be tested to achieve this?

    a) 4, 5, 13, 14
    b) 7, 11
    c) 1, 5, 13
    d) 1, 4, 7, 11, 14

Select ONE option.

Question n°22 (1 point)

The following decision table contains the rules for determining the risk of atherosclerosis.

	Rule 1	Rule 2	Rule 3	Rule 4	Rule 5
Conditions					
Cholesterol (mg/dl)	≤124	≤ 124	125 - 200	125 - 200	≥ 201
Blood pressure (mm Hg)	≤ 140	> 140	≤ 140	> 140	-
Action					
Risk level	very low	low	medium	high	very high

You have designed the test cases with the following input data:

TC1 : Cholesterol= 125 mg/dl   Blood pressure= 141 mm Hg

TC2 : Cholesterol= 200 mg/dl   Blood pressure= 201 mm Hg

TC3 : Cholesterol= 124 mg/dl   Blood pressure= 201 mm Hg

TC4 : Cholesterol= 109 mg/dl   Blood pressure= 200 mm Hg

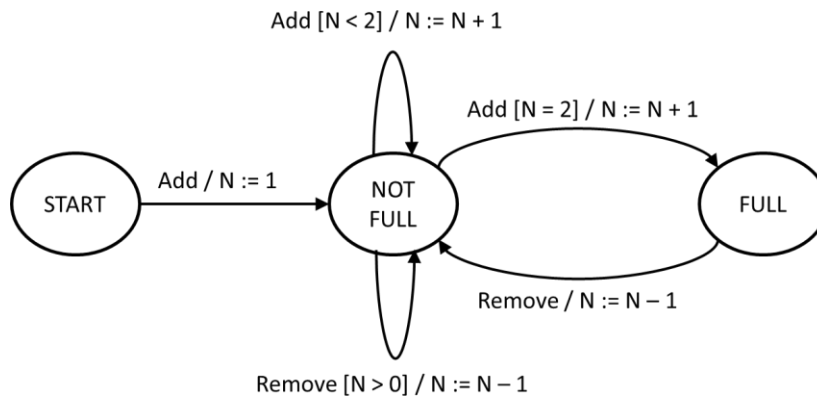TC5 : Cholesterol= 201 mg/dl   Blood pressure= 140 mm Hg

What is the coverage of the decision table obtained by these test cases?

a) 40%
b) 60%
c) 80%
d) 100%

Select ONE option.

Question n°23 (1 point)

A storage system can store up to three elements and is modeled by the following state transition diagram. The variable N represents the number of elements currently stored.

Which of the following test cases, represented as sequences of events, achieves the highest level of coverage of valid transitions?

    a) Add, delete, add, add, add
    b) Add, Add, Add, Add, Remove, Remove
    c) Add, Add, Add, Remove, Remove
    d) Add, Add, Add, Delete,

Add Select ONE option.

Question n°24 (1 point)

You run two test cases, T1 and T2, on the same code. Test T1 has achieved 40% instruction coverage and test T2 has achieved 65% instruction coverage.

Which of the following sentences is necessarily true?

    a) The test suite comprising tests T1 and T2 achieves 105% instruction coverage.
    b) There is at least one statement that must have been executed by both T1 and T2.
    c) At least 5% of the instructions in the code tested are not executable.
    d) The test suite consisting of tests T1 and T2 achieves complete

coverage of the Select ONE option branch.

Question n° 25 (1 point)

Let's define the branch coverage measure as follows: BCov

= (X / Y) * 100%. What do X and Y represent in this formula?

a) X= number of decision outcomes exercised by the test
   cases Y = total number of decision outcomes in the
   code
b) X= number of conditional branches exercised by the test
   cases Y = total number of branches in the code
c) X= number of branches exercised by the test
   cases Y = total number of branches in the
   code
d) X= number of conditional branches exercised by the test
   cases Y= total number of decision results in the code

Select ONE option.

Question n°26 (1 point)

Which TWO of the following statements best justify the use of exploratory testing?

a) Testers don't have enough time test design and execution.
b) The existing test strategy requires testers to use formal, black-box testing techniques.
c) The specification is written in a formal language that can be processed by a tool.
d) Testers are members of an agile team and have good programming skills.
e) Testers are experienced in the business and good analytical skills

   Select TWO options.

Question n° 27 (1 point)

Which of the following best matches a checklist item used in checklist-based testing?

a) "The developer made a mistake when implementing the code".
b) "The coverage of the declaration made exceeds 85%".
c) "The program works well with regard to both functional and non-functional
   requirements.
d) "Error are written in a language that the user can understand" Select

ONE option.

Question n°28 (1 point)

Consider the following acceptance criteria for a user written from the point of view of an online store owner.

```
If the user is logged in and on the home page, when he clicks

on the "Add article" button,

"Create an element" form appears,

The user must be able to enter a name and price for the new item.
```

What form do these acceptance take?

a) Rules-oriented
b) Scenario-driven
c) Product-oriented
d) Process-

oriented Select ONE

option.

Question n°29 (1 point)

Your team analyzes the following user story to define acceptance criteria:

As a registered customer, I would like to be able to consult my previous orders on the company's website, in order to keep a record of my purchases.

Which of the following test cases is NOT relevant to this user story?

a) Entry: the customer logs into his account on the website and clicks on the "view order history" button.
    Expected result: the system displays a list of all the customer's previous orders, including date, order number and total cost.
b) Entry: the customer clicks on an order in the order list
    Expected result: the system displays the various items purchased, with their price and quantity.
c) Entry: the customer clicks on the "Sort by ascending order" button in the order history screen.
    Expected result: the system displays the order history sorted by order in ascending order.
d) Input: an unregistered customer registers as a new customer with a valid e-mail address that does not yet exist in the customer database. Expected result: the system accepts the registration and creates the account.

Select ONE option.

Question n° 30 (1 point)

Your team follows a process that uses the DevOps delivery pipeline. The first three stages of this process are :

> (1) Code development
> (2) Submit the code to a version control system and merge it into the "test" branch.
> (3) Perform component tests on submitted code

Which of the following is MOST appropriate to be the entry criterion for stage (2) of this pathway?

a) Static analysis does not return any high severity warnings for the submitted code.
b) The version control system reports no conflicts when merging code into the "test" branch.
c) Component tests are compiled and ready for execution
d) Statement coverage at least

80% Select ONE option.

Question n°31 (1 point)

You want to estimate the test effort for the new project using a ratio-based estimate. You calculate ratio of test effort to development effort using average data for development effort and test effort from four historical projects similar to the new project. The table shows this historical data.

Project	Effort development ($)	Effort test ($)
P1	800,000	40,000
P2	1,200,000	130,000
P3	600,000	70,000
P4	1,000,000	120,000

The estimated development effort for the new project is $800,000. What is your estimate of the testing effort for this project?

a) $40,000
b) $80,000
c) $81,250
d) $82,500

Select ONE option.

Question n° 32 (1 point)

You're testing a web application that lets users search for products, view product details, add products to a shopping cart and place an order.

You have prepared the following seven test cases, all of which you would like to run. The tests should be run in the best order, according to their priority.

	Test	Priority (1= priority plus high)
TC1	Product search A	4
TC2	Product search B	4
TC3	See product details A	3
TC4	See product details B	2
TC5	Add product A to shopping cart	3
TC6	Add product B to shopping cart	1
TC7	place an ORDER	5

You have also identified the following logical dependencies between test cases:
- SEARCH functionality must be tested before VIEW functionality can be tested.
- VIEW must be tested before ADD.
- The ADD functionality must be tested before the ORDER

functionality. Which test case should be executed in fourth position?

a) TC3
b) TC1
c) TC7
d) TC2

Select ONE option.

Question n°33 (1 point)

According to the test quadrant model, which of the following items is in quadrant Q1 ("facing technology" and "team support")?

a) Usability
b) Functional testing
c) User acceptance
d) Component

integration tests Select ONE

option.

Question n° 34 (1 point)

Given the following risks :

1. Inefficient implementation of loops leads to long system responses
2. Consumers are changing their preferences
3. Flooding of the server room
4. Patients over a certain age receive inaccurate reports

And the following mitigation activities:

A. Risk acceptance
B. Performance tests
C. Using limit value analysis as a test technique
D. Transfer of risk

Which of the following best matches risks to mitigation activities?

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

Select ONE option.

Question n° 35 (1 point)

Which of the following is a measure of product quality?

a) Mean time to failure
b) Number of defects found
c) Need coverage
d) Fault detection

percentage Select ONE option.

Question n°36 (1 point)

You are a member of a test team located in North America, developing a product for a customer located in Europe. The team is agile and follows the DevOps approach and uses a continuous integration/continuous delivery pipeline.

Which of the following is the LEAST effective way of communicating test progress the customer?

a) Face to face
b) Dashboards
c) E-mail
d) Videoconference

Select ONE option.

Question n°37 (1 point)

Which of the following statements best describes an example of how configuration management (CM) supports testing?

- a) With the environment version number, the CM tool can retrieve the version numbers of the libraries, stubs and drivers used in this environment.
- b) a record of test input values, the CM tool can execute test cases for these configurations and calculate test coverage.
- c) With data on the purchase date of a software license, the CM tool automatically generates information on when the product license is about to expire.
- d) With the case version number, the CM tool can automatically generate test data for this test case.

Select ONE option.

Question n°38 (1 point)

You are testing a sorting function that receives a set of numbers as input and returns the same set of numbers sorted in ascending order. test execution log is as follows.

Environment configuration: sort function build 2.002.2182, test case set: TCS-3, # of TCs: 5 Test run ID: 736
Start time 12:43:21.003
12:43:21.003 Execution of TC1. Input: 3.   Output: 3.   Result :
12:43:21.003 Execute TC2. Input: 3 11 6 5.   Output: 3 5 6   successful
11.   Result
12:43:21.004 Execution of TC3. Input: 8 7 3 7 1.   Output: 1 3 7 8.   : passed
12:43:21.005 Execution of TC4. Input: -2 -2 -2 -3 -3. Output: -3 -2.   Result :
12:43:21.005 Execution of TC5. Input: 0 -2 0 3 4 4 Output: -2 0 3   failed
4.   Result :

End 12:43:21.005
Total test cycle time: 0:00:00.002

Result : failed

Result : failed

Which of the following provides the BEST fault description for use in a fault report?

- a) The system is unable to sort several series of digits. Reference: TC3, TC4, TC5.
- b) The system seems to ignore duplicates when sorting. Reference: TC3, TC4, TC5.
- c) The system fails to sort negative numbers. Reference: TC4, TC5.
- d) TC3, TC4 and TC5 are faulty (duplicate input data) and need to be

corrected. Select ONE option.

Question n°39 (1 point)

Based on the following descriptions :
1. Workflow monitoring
2. Facilitating communication
3. Virtual machines
4. Support examinations

And following test tool categories:
A. Static test tools
B. Tools scalability and standardization of deployment
C. DevOps tools
D. Collaboration tools

Which of the following best matches the descriptions and categories?

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

Select ONE option.

Question n° 40 (1 point)

Which of the following is most likely be a benefit test automation?
?

a) It provides coverage measurements that are too complicated for humans to calculate.
b) He shares responsibility for testing with tool supplier.
c) It removes the need for critical reflection analyzing test results.
d) It generates test cases from an analysis of program

code Select ONE option.