

Sample Exam – Questions

Sample Exam set B
Version 1.4

ISTQB® Certified Tester Syllabus Foundation Level

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International Software Testing Qualifications Board



Questions

Question #1 (1 Point)

Which of the following provides the definition of the term test case?

- a) Subset of the value domain of a variable within a component or system in which all values are expected to be treated the same based on the specification
- b) A set of preconditions, inputs, actions, expected results and post conditions, developed based on test conditions
- c) Work products produced during the test process for use in planning, designing, executing, evaluating, and reporting on testing
- d) A source to determine an expected result to compare with the actual result of the system under test

Select ONE option.

Question #2 (1 Point)

Which of the following is a typical objective of testing?

- a) To find defects and failures
- b) To validate the project plan works as required
- c) Ensuring of complete testing
- d) Comparing actual results with expected results

Select ONE option.

Question #3 (1 Point)

Which of the following is an example of a failure in a car cruise control system?

- a) The developer of the system forgot to rename variables after a cut-and-paste operation
- b) Unnecessary code that sounds an alarm when reversing was included in the system
- c) The system stops maintaining a set speed when the radio volume is increased or decreased
- d) The design specification for the system wrongly states speeds

Select ONE option.

Question #4 (1 Point)

Which of the following is a defect rather than a root cause in a fitness tracker?

- a) Because the author of the requirements was unfamiliar with the domain of fitness training, he therefore wrongly assumed that users wanted heartbeat in beats per hour
- b) The tester of the smartphone interface had not been trained in state transition testing, so missed a major defect
- c) An incorrect configuration variable implemented for the GPS function could cause location problems during daylight saving times
- d) Because the designer had never worked on wearable devices before, she as designer of the user interface therefore misunderstood the effects of reflected sunlight

Select ONE option.

Question #5 (1 Point)

As a result of risk analysis, more testing is being directed to those areas of the system under test where initial testing found more defects than average.

Which of the following testing principles is being applied?

- a) Beware of the pesticide paradox
- b) Testing is context dependent
- c) Absence-of-errors is a fallacy
- d) Defects cluster together

Select ONE option.

Question #6 (1 Point)

Given the following test activities and tasks:

- A. Test design
 - B. Test implementation
 - C. Test execution
 - D. Test completion
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- 1. Entering change requests for open defect reports
 - 2. Identifying test data to support the test cases
 - 3. Prioritizing test procedures and creating test data
 - 4. Analyzing discrepancies to determine their cause

Which of the following BEST matches the activities with the tasks?

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

Select ONE option.

Question #7 (1 Point)

Which of the following BEST describes how value is added by maintaining traceability between the test basis and test artifacts?

- a) Maintenance testing can be fully automated based on changes to the initial requirements
- b) It is possible to determine if a new test case has increased coverage of the requirements
- c) Test managers can identify which testers found the highest severity defects
- d) Areas that may be impacted by side-effects of a change can be targeted by confirmation testing

Select ONE option.

Question #8 (1 Point)

Which of the following qualities is MORE likely to be found in a tester's mindset rather than in a developer's?

- a) A tester's mindset tends to grow and mature as the tester gains experience
- b) Ability to see what might go wrong
- c) Good communication with team members
- d) Focus on getting all things done

Select ONE option.

Question #9 (1 Point)

Given the following statements about the relationships between software development activities and test activities in the software development lifecycle:

1. Each development activity should have a corresponding testing activity
2. Reviewing should start as soon as final versions of documents become available
3. The design and implementation of tests should start during the corresponding development activity
4. Testing activities should start in the early stages of the software development lifecycle

Which of the following CORRECTLY shows which are true and false?

- a) True – 1, 2; False – 3, 4
- b) True – 2, 3; False – 1, 4
- c) True – 1, 2, 4; False – 3
- d) True – 1, 4; False – 2, 3

Select ONE option.

Question #10 (1 Point)

Given that the testing being performed has the following attributes:

- Based on interface specifications
- Focused on finding failures in communication
- The test approach uses both functional and structural test types

Which of the following test levels is MOST likely being performed?

- a) Integration testing
- b) Acceptance testing
- c) System testing
- d) Component testing

Select ONE option.

Question #11 (1 Point)

Which of the following statements about test types and test levels is CORRECT?

- a) Functional and non-functional testing can be performed at system and acceptance test levels, while white-box testing is restricted to component and integration testing
- b) Functional testing can be performed at any test level, while white-box testing is restricted to component testing
- c) It is possible to perform functional, non-functional and white-box testing at any test level
- d) Functional and non-functional testing can be performed at any test level, while white-box testing is restricted to component and integration testing

Select ONE option.

Question #12 (1 Point)

Which of the following statements BEST compares the purposes of confirmation testing and regression testing?

- a) The purpose of regression testing is to ensure that all previously run tests still work correctly, while the purpose of confirmation testing is to ensure that any fixes made to one part of the system have not adversely affected other parts
- b) The purpose of confirmation testing is to check that a previously found defect has been fixed, while the purpose of regression testing is to ensure that no other parts of the system have been adversely affected by the fix
- c) The purpose of regression testing is to ensure that any changes to one part of the system have not caused another part to fail, while the purpose of confirmation testing is to check that all previously run tests still provide the same results as before
- d) The purpose of confirmation testing is to confirm that changes to the system were made successfully, while the purpose of regression testing is to run tests that previously failed to ensure that they now work correctly

Select ONE option.

Question #13 (1 Point)

Which of the following statements CORRECTLY describes a role of impact analysis in Maintenance Testing?

- a) Impact analysis is used when deciding if a fix to a maintained system is worthwhile
- b) Impact analysis is used to identify how data should be migrated into the maintained system
- c) Impact analysis is used to decide which hot fixes are of most value to the user
- d) Impact analysis is used to determine the effectiveness of new maintenance test cases

Select ONE option.

Question #14 (1 Point)

Which of the following statements CORRECTLY reflects the value of static testing?

- a) By introducing reviews, we have found that both the quality of specifications and the time required for development and testing have increased
- b) Using static testing means we have better control and cheaper defect management due to the ease of detecting defects later in the lifecycle
- c) Now that we require the use of static analysis, missed requirements have decreased and communication between testers and developers has improved
- d) Since we started using static analysis, we find coding defects that might have not been found by performing only dynamic testing

Select ONE option.

Question #15 (1 Point)

Which of the following statements on the use of checklists in a formal review is CORRECT?

- a) As part of the review planning, the reviewers create the checklists needed for the review
- b) As part of the issue communication, the reviewers fill in the checklists provided for the review
- c) As part of the review meeting, the reviewers create defect reports based on the checklists provided for the review
- d) As part of the review initiation, the reviewers receive the checklists needed for the review

Select ONE option.

Question #16 (1 Point)

Which of the following CORRECTLY matches the roles and responsibilities in a formal review?

- a) Manager – Decides on the execution of reviews
- b) Review Leader - Ensures effective running of review meetings
- c) Scribe – Fixes defects in the work product under review
- d) Moderator – Monitors ongoing cost-effectiveness

Select ONE option.

Question #17 (1 Point)

The reviews being used in your organization have the following attributes:

- There is a role of a scribe
- The purpose is to detect potential defects
- The review meeting is led by the author
- Reviewers find potential defects by individual review
- A review report is produced

Which of the following review types is MOST likely being used?

- a) Informal Review
- b) Walkthrough
- c) Technical Review
- d) Inspection

Select ONE option.

Question #18 (1 Point)

You have been asked to take part in a checklist-based review of the following excerpt from the requirements specification for a library system:

Librarians can:

1. Register new borrowers
2. Return books from borrowers
3. Accept fines from borrowers
4. Add new books to the system with their ISBN, author and title
5. Remove books from the system
6. Get system responses within 5 seconds

Borrowers can:

7. Borrow a maximum of 3 books at one time
8. View the history of books they have borrowed/reserved
9. Be fined for failing to return a book within 3 weeks
10. Get system responses within 3 seconds
11. Borrow a book at no cost for a maximum of 4 weeks
12. Reserve books (if they are on-loan)

All users (librarians and borrowers):

13. Can search for books by ISBN, author, or title
14. Can browse the system catalogue
15. The system shall respond to user requests within 3 seconds
16. The user interface shall be easy-to-use

You have been assigned the checklist entry that requires you to review the specification for inconsistencies between individual requirements (i.e., conflicts between requirements).

Which of the following CORRECTLY identifies inconsistencies between pairs of requirements?

- a) 6-10, 6-15, 7-12
- b) 6-15, 9-11
- c) 6-10, 6-15, 9-11
- d) 6-15, 7-12

Select ONE option.

Question #19 (1 Point)

Which of the following provides the BEST description of exploratory testing?

- a) A testing practice in which an in-depth investigation of the background of the test object is used to identify potential weaknesses that are examined by test cases
- b) An approach to testing whereby the testers dynamically design and execute tests based on their knowledge, exploration of the test item and the results of previous tests
- c) An approach to test design in which test activities are planned as uninterrupted sessions of test analysis and design, often used in conjunction with checklist-based testing
- d) Testing based on the tester's experience, knowledge, and intuition

Select ONE option.

Question #20 (1 Point)

Which of the following BEST matches the descriptions with the different categories of test techniques?

- 1. Coverage is measured based on a selected structure of the test object
- 2. The processing within the test object is checked
- 3. Tests are based on defects' likelihood and their distribution
- 4. Deviations from the requirements are checked
- 5. User stories are used as the test basis

Using notation for the following 4 options:

Black	- Black-box test techniques
White	- White-box test techniques
Experience	- Experience-based test techniques

- a) Black – 4, 5 White – 1, 2; Experience – 3
- b) Black – 3 White – 1, 2; Experience – 4, 5
- c) Black – 4 White – 1, 2; Experience – 3, 5
- d) Black – 1, 3, 5 White – 2; Experience – 4

Select ONE option.

Question #21 (1 Point)

A fitness app measures the number of steps that are walked each day and provides feedback to encourage the user to keep fit.

The feedback for different numbers of steps should be:

Up to 1000	- Couch Potato!
Above 1000, up to 2000	- Lazy Bones!
Above 2000, up to 4000	- Getting There!
Above 4000, up to 6000	- Not Bad!
Above 6000	- Way to Go!

Which of the following sets of test inputs would achieve the BEST equivalence partition coverage?

- a) 0, 1000, 2000, 3000, 4000
- b) 1000, 2001, 4000, 4001, 6000
- c) 123, 2345, 3456, 4567, 5678
- d) 666, 999, 2222, 5555, 6666

Select ONE option.

Question #22 (1 Point)

A daily radiation recorder for plants produces a sunshine score based on a combination of the number of hours a plant is exposed to the sun (below 3 hours, 3 to 6 hours or above 6 hours) and the average intensity of the sunshine (very low, low, medium, high).

Given the following test cases:

	Hours	Intensity	Score
T1	1.5	v. low	10
T2	7.0	medium	60
T3	0.5	v. low	10

What is the minimum number of additional test cases that are needed to ensure full coverage of ALL VALID INPUT equivalence partitions?

- a) 1
- b) 2
- c) 3
- d) 4

Select ONE option.

Question #23 (1 Point)

A smart home app measures the average temperature in the house over the previous week and provides feedback to the occupants on their environmental friendliness based on this temperature.

The feedback for different average temperature ranges (to the nearest °C) should be:

Up to 10°C - Icy Cool!
11°C to 15°C - Chilled Out!
16°C to 19°C - Cool Man!
20°C to 22°C - Too Warm!
Above 22°C - Hot & Sweaty!

Using BVA (only Min- and Max values), which of the following sets of test inputs provides the highest level of boundary coverage?

- a) 0°C, 11°C, 20°C, 22°C, 23°C
- b) 9°C, 15°C, 19°C, 23°C, 100°C
- c) 10°C, 16°C, 19°C, 22°C, 23°C
- d) 14°C, 15°C, 18°C, 19°C, 21°C, 22°C

Select ONE option.

Question #24 (1 Point)

Decision table testing is being performed on a speeding fine system. Two test cases have already been generated for rules R1 and R4, which are shown below:

	Rules	R1	R4
Conditions	Speed > 50	T	F
	School Zone	T	F
Actions	\$250 Fine	F	F
	Driving license withdrawal	T	F

Given the following additional test cases:

	Rules	DT1	DT2	DT3	DT4
Input	Speed	55	44	66	77
	School Zone	T	T	T	F
Expected Result	\$250 Fine	F	F	F	T
	Driving license withdrawal	T	F	T	F

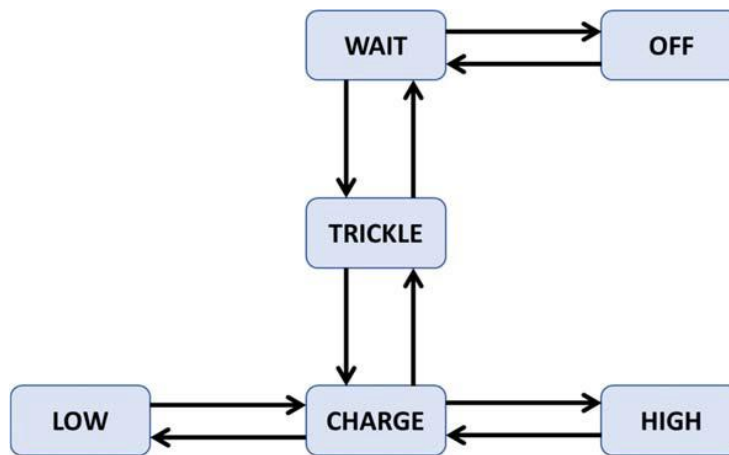
Which two of the additional test cases would achieve full coverage of the complete decision table (when combined with the test cases that have already been generated for rules R1 and R4)?

- a) DT1, DT2
- b) DT2, DT3
- c) DT2, DT4
- d) DT3, DT4

Select ONE option.

Question #25 (1 Point)

Given the following state model of a battery charger software:



Which of the following sequences of transitions provides the highest level of transition coverage for the model?

- | | | | | |
|-----------|-----------|-----------|----------|-----------|
| a) OFF → | WAIT → | OFF → | WAIT → | TRICKLE → |
| | CHARGE → | HIGH → | CHARGE → | LOW |
| b) WAIT → | TRICKLE → | WAIT → | OFF → | WAIT → |
| | TRICKLE → | CHARGE → | LOW → | CHARGE |
| c) HIGH → | CHARGE → | LOW → | CHARGE → | TRICKLE → |
| | WAIT → | TRICKLE → | WAIT → | TRICKLE |
| d) WAIT → | TRICKLE → | CHARGE → | HIGH → | CHARGE → |
| | TRICKLE → | WAIT → | OFF → | WAIT |

Select ONE option.

Question #26 (1 Point)

Which of the following statements BEST describes how test cases are derived from a use case?

- Test cases are created to exercise defined basic, exceptional and error behaviors performed by the system under test in collaboration with actors
- Test cases are derived by identifying the components included in the use case and creating integration tests that exercise the interactions of these components
- Test cases are generated by analyzing the interactions of the actors with the system to ensure the user interfaces are easy to use
- Test cases are derived to exercise each of the decision points in the business process flows of the use case, to achieve 100% decision coverage of these flows

Select ONE option.

Question #27 (1 Point)

Which of the following descriptions of statement coverage is CORRECT?

- a) Statement coverage is a measure of the number of lines of source code exercised by tests
- b) Statement coverage is a measure of the proportion of executable statements in the source code exercised by tests
- c) Statement coverage is a measure of the percentage of lines of source code (without comments) exercised by tests
- d) Statement coverage is a measure of the number of executable statements in the source code exercised by tests

Select ONE option.

Question #28 (1 Point)

Which of the following descriptions of decision coverage is CORRECT?

- a) Decision coverage is a measure of the percentage of possible paths through the source code exercised by tests
- b) Decision coverage is a measure of the percentage of business flows through the component exercised by tests
- c) Decision coverage is a measure of the 'if' statements in the code that are exercised with both the true and false outcomes
- d) Decision coverage is a measure of the proportion of decision outcomes in the source code exercised by tests

Select ONE option.

Question #29 (1 Point)

Which of the following BEST describes the concept behind error guessing?

- a) Error guessing requires you to imagine you are the user of the test object and guess mistakes the user could make interacting with it
- b) Error guessing involves using your personal experience of development and the mistakes you made as a developer
- c) Error guessing involves using your knowledge and experience of defects found in the past and typical mistakes made by developers
- d) Error guessing requires you to rapidly duplicate the development task to identify the sort of mistakes a developer might make

Select ONE option.

Question #30 (1 Point)

Which of the following BEST explains a benefit of independent testing?

- a) The use of an independent test team allows project management to assign responsibility for the quality of the final deliverable to the test team, so ensuring everyone is aware that quality is the test team's overall responsibility
- b) If a test team external to the organization can be afforded, then there are distinct benefits in terms of this external team not being so easily swayed by the delivery concerns of project management and the need to meet strict delivery deadlines
- c) An independent test team can work totally separately from the developers, need not be distracted with changing project requirements, and can restrict communication with the developers to defect reporting through the defect management system
- d) When specifications contain ambiguities and inconsistencies, assumptions are made on their interpretation, and an independent tester can be useful in questioning those assumptions and the interpretation made by the developer

Select ONE option.

Question #31 (1 Point)

Which of the following tasks is MOST LIKELY to be performed by the test manager?

- a) Write test summary reports based on the information gathered during testing
- b) Review tests developed by others
- c) Prepare and acquire test data
- d) Analyze, review, and assess requirements, specifications, and models for testability

Select ONE option.

Question #32 (1 Point)

Given the following examples of entry and exit criteria:

1. The original testing budget of \$30,000 plus contingency of \$7,000 has been spent
2. 96% of planned tests for the drawing package have been executed and the remaining tests are now out of scope
3. The trading performance test environment has been designed, set-up and verified
4. Current status is no outstanding critical defects and two high-priority ones
5. The autopilot design specifications have been reviewed and reworked
6. The tax rate calculation component has passed unit testing.

Which of the following BEST categorizes them as entry and exit criteria:

- a) Entry criteria – 5, 6; Exit criteria – 1, 2, 3, 4
- b) Entry criteria – 2, 3, 6; Exit criteria – 1, 4, 5
- c) Entry criteria – 1, 3; Exit criteria – 2, 4, 5, 6
- d) Entry criteria – 3, 5, 6; Exit criteria – 1, 2, 4

Select ONE option.

Question #33 (1 Point)

Given the following priorities and dependencies for these test cases:

Test Case	Priority	Technical dependency on:	Logical dependency on:
TC1	High	TC4	
TC2	Low		
TC3	High		TC4
TC4	Medium		
TC5	Low		TC2
TC6	Medium	TC5	

Which of the following test execution schedules BEST considers the priorities and technical and logical dependencies?

- a) TC1 – TC3 – TC4 – TC6 – TC2 – TC5
- b) TC4 – TC3 – TC1 – TC2 – TC5 – TC6
- c) TC4 – TC1 – TC3 – TC5 – TC6 – TC2
- d) TC4 – TC2 – TC5 – TC1 – TC3 – TC6

Select ONE option.

Question #34 (1 Point)

Which of the following statements about test estimation approaches is CORRECT?

- a) With the metrics-based approach, the estimate is based on test measures from the project and so this estimate is only available after the testing starts
- b) With the expert-based approach, a group of expert users identified by the client recommends the necessary testing budget
- c) With the expert-based approach, the test managers responsible for the different testing activities predict the expected testing effort
- d) With the metrics-based approach, an average of the testing costs recorded from several past projects is used as the testing budget

Select ONE option.

Question #35 (1 Point)

Which of the following BEST defines risk level?

- a) Risk level is calculated by adding together the probabilities of all problem situations and the financial harm that results from them
- b) Risk level is estimated by multiplying the likelihood of a threat to the system by the chance that the threat will occur and will result in financial damage
- c) Risk level is determined by a combination of the probability of an undesirable event and the expected impact of that event
- d) Risk level is the sum of all potential hazards to a system multiplied by the sum of all potential losses from that system

Select ONE option.

Question #36 (1 Point)

Which of the following is MOST likely to be an example of a PRODUCT risk?

- a) The expected security features may not be supported by the system architecture
- b) The developers may not have time to fix all the defects found by the test team
- c) The test cases may not provide full coverage of the specified requirements
- d) The performance test environment may not be ready before the system is due for delivery

Select ONE option.

Question #37 (1 Point)

Which of the following is LEAST likely to be an example of product risk analysis CORRECTLY influencing the testing?

- a) The potential impact of security flaws has been identified as being particularly high, so security testing has been prioritized ahead of some other testing activities
- b) Testing has found the quality of the network module to be higher than expected, so additional testing will be performed in that area
- c) The users had problems with the user interface of the previous system, so additional usability testing is planned for the replacement system
- d) The time needed to load web pages is crucial to the success of the new website, so an expert in performance testing has been employed for this project

Select ONE option.

Question #38 (1 Point)

You are performing system testing of a train reservation system. Based on the test cases performed, you have noticed that the system occasionally reports that no trains are available, although this should be the case. You have provided the developers with a summary of the defect and the version of the tested system. They recognize the urgency of the defect and are now waiting for you to provide further details.

In addition to the information already provided, the following additional information is given:

1. Degree of impact (severity) of the defect
2. Identification of the test object
3. Details of the test environment
4. Urgency/priority to fix
5. Actual results
6. Reference to test case specification

Which of this additional information is most useful to include in the defect report?

- a) 1, 2, 6
- b) 1, 4, 5, 6
- c) 2, 3, 4, 5
- d) 3, 5, 6

Select ONE option.

Question #39 (1 Point)

Given the following test activities and test tools:

1. Performance measurement and dynamic analysis
 2. Test execution and logging
 3. Management of testing and testware
 4. Test design
-
- A. Code coverage tools
 - B. Dynamic analysis tools
 - C. Test data preparation tools
 - D. Defect management tools

Which of the following BEST matches the activities and tools?

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

Select ONE option.

Question #40 (1 Point)

Which of the following is MOST likely to be used as a reason for using a pilot project to introduce a tool into an organization?

- a) The need to evaluate how the tool fits with existing processes and practices and determining what would need to change
- b) The need to evaluate the test automation skills and training, mentoring and coaching needs of the testers who will use the tool
- c) The need to evaluate whether the tool provides the required functionality and does not duplicate existing test tools
- d) The need to evaluate the tool vendor in terms of the training and other support they provide

Select ONE option.