

# Preparation to ISTQB Foundation Level Certification Exam

## Test Management

## SAMPLE QUESTIONS

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## Sample Question 1.

**Features to be tested, approach refinements and feature pass /fail criteria BUT excluding environmental needs should be specified in which document?**

- A. Test case specification
- B. Test plan
- C. Test procedure specification
- D. Test design specification

## Sample Question 2.

**Test basis documentation is analyzed in which phase of testing**

- A. Test Analysis
- B. Test Design
- C. Test Execution
- D. Test Planning

## Sample Question 3.

**We split testing into distinct stages primarily because:**

- A. Each test stage has a different purpose.
- B. It is easier to manage testing in stages.
- C. We can run different tests in different environments.
- D. The more stages we have, the better the testing.

## Sample Question 4.

**Which one of the following statements about system testing is NOT true?**

- A. System tests are often performed by independent teams.
- B. Functional testing is used more than structural testing
- C. Faults found during system tests can be very expensive to fix
- D. End-users should be involved in system tests.

## Sample Question 5.

**Which of the following is NOT true of incidents?**

- A. Incident resolution is the responsibility of the author of the software under test.
- B. Incidents may be raised against user requirements.
- C. Incidents require investigation and/or correction.
- D. Incidents are raised when expected and actual results differ.

## Sample Question 6.

**What is the MAIN purpose of a Master Test Plan?**

- A. To communicate how incidents will be managed.
- B. To communicate how testing will be performed.
- C. To produce a test schedule
- D. To produce a work breakdown structure

## Sample Question 7.

**Which of the following defines the sequence in which tests should be executed?**

- A. Test plan
- B. Test procedure specification.
- C. Test case specification
- D. Test design specification.



## Sample Question 8.

**Which of the following is a major task of test planning?**

- A. Determining the test approach.
- B. Preparing test specifications
- C. Evaluating exit criteria and reporting
- D. Measuring and analyzing results

## Sample Question 9.

**What is the main purpose of impact analysis for testers?**

- A. To determine the programming effort needed to make the changes.
- B. To determine what proportion of the changes need to be tested.
- C. To determine how much the planned changes will affect users.
- D. To determine how the existing system may be affected by changes.

## Sample Question 10.

**Which of the following is determined by the level of product risk identified?**

- A. Extent of testing.
- B. Scope for the use of test automation
- C. Size of the test team.
- D. Requirement for regression testing.

## Sample Question 11.

**Which of the following are valid objectives for incident reports?**

- i. Provide developers and other parties with feedback about the problem to enable identification, isolation and correction as necessary.**
- ii. Provide ideas for test process improvement.**
- iii. Provide a vehicle for assessing tester competence.**
- iv. Provide testers with a means of tracking the quality of the system under test.**

- A. i, ii, iii**
- B. i, ii, iv**
- C. i, iii, iv.**
- D. ii, iii, iv**

## Sample Question 12.

**Which activity in the fundamental test process includes evaluation of the testability of the requirements and system?**

- A. Test analysis and design
- B. Test planning and control.
- C. Test closure.
- D. Test implementation and execution

## Sample Question 13.

**What is typically the MOST important reason to use risk to drive testing efforts?**

- A. Because testing everything is not feasible
- B. Because risk-based testing is the most efficient approach to finding bugs.
- C. Because risk-based testing is the most effective way to show value.
- D. Because software is inherently risky

## Sample Question 14.

**Which of the following would be a valid measure of test progress?**

- A. Number of undetected defects.
- B. Total number of defects in the product.
- C. Number of test cases not yet executed.
- D. Effort required to fix all defects

## Sample Question 15.

**Which statement about expected outcomes is FALSE?**

- A. Expected outcomes are defined by the software's behaviour
- B. Expected outcomes are derived from a specification, not from the code
- C. Expected outcomes should be predicted before a test is run
- D. Expected outcomes may include timing constraints such as response times



## Sample Question 16.

**When should testing be stopped?**

- A. When all the planned tests have been run
- B. When time has run out
- C. When all faults have been fixed correctly
- D. It depends on the risks for the system being tested

## Sample Question 17.

**Which of the following uses Impact Analysis most?**

- A. Component testing
- B. Non-functional system testing
- C. User acceptance testing
- D. Maintenance testing

## Sample Question 18.

**A Test Plan Outline contains which of the following:-**

- i. Test Items**
- ii. Test Scripts**
- iii. Test Deliverables**
- iv. Responsibilities**

- A. i,ii,iii are true and iv is false
- B. i,iii,iv are true and ii is false
- C. ii,iii are true and i and iv are false
- D. i,ii are false and iii , iv are true

## Sample Question 19.

The bug tracking system will need to capture these phases for each bug.

- I. Phase injected
- II. Phase detected
- III. Phase fixed
- IV. Phase removed

- A. I, II and III
- B. I, II and IV
- C. II, III and IV
- D. I, III and IV

## Sample Question 20.

**Which of the following software change management activities is most vital to assessing the impact of proposed software modifications?**

- A. Baseline identification
- B. Configuration auditing
- C. Change control
- D. Version control

## Sample Question 21.

**"The tracing of requirements for a test level through the layers of a test documentation" done by**

- A. Horizontal traceability
- B. Depth traceability
- C. Vertical traceability
- D. Horizontal & Vertical traceabilities

## Sample Question 22.

**Item transmittal report is also known as**

- A. Incident report
- B. Release note
- C. Review report
- D. Audit report

## Sample Question 23.

**Change request should be submitted through development or program management. A change request must be written and should include the following criteria.**

- I. Definition of the change**
- II. Documentation to be updated**
- III. Name of the tester or developer**
- IV. Dependencies of the change request.**

- A. I, III and IV
- B. I, II and III
- C. II, III and IV
- D. I, II and IV



## Sample Question 24.

**What type of risk includes potential failure areas in the software?**

- A. Probed risks
- B. Product risks
- C. Economic risks
- D. Requirements risks

## Sample Question 25.

**Consider the following statements**

- i. A incident may be closed without being fixed**
- ii. Incidents may not be raised against documentation**
- iii. The final stage of incident tracking is fixing**
- iv. The incident record does not include information on test environments**
- v. Incidents should be raised when someone other than the author of the software performs the test**

- A. ii and v are true, i, iii and iv are false**
- B. i and v are true, ii, iii and iv are false**
- C. i, iv and v are true, ii and iii are false**
- D. i and ii are true, iii, iv and v are false**
- E. i is true, ii, iii, iv and v are false**

## Sample Question 26.

Which of the following describe test control actions that may occur during testing?

- I. Setting an entry criterion that developers must retest fixes before fixes are accepted into a build.**
- II. Changing the test schedule due to availability of a test environment.**
- III. Re-prioritizing tests when development delivers software late**

- A. I only
- B. II only
- C. I, II and III
- D. I and III

## Sample Question 27.

**Which of the following is false?**

- A. Incidents should always be fixed.
- B. An incident occurs when expected and actual results differ.
- C. Incidents can be analysed to assist in test process improvement.
- D. An incident can be raised against documentation.

## Sample Question 28.

**Which of the following is false?**

- A. In a system two different failures may have different severities.
- B. A system is necessarily more reliable after debugging for the removal of a fault.
- C. A fault need not affect the reliability of a system.
- D. Undetected errors may lead to faults and eventually to incorrect behavior.

## Sample Question 29.

**Which of the following are metrics (measurements) that a test group may use to monitor progress?**

- I. Subjective confidence of the testers in the product**
- II. The number of testers currently testing**
- III. Percentage of planned test cases prepared**
- IV. Defects found and fixed**

- A. I only
- B. II, III and IV
- C. I, II and IV
- D. II and IV

## Sample Question 30.

**Which of the following provides the test group with the ability to reference all documents and software items unambiguously?**

- A. Agile testing methodology
- B. Effective use of tools
- C. Configuration management
- D. Requirements traceability matrix

## Sample Question 31.

**Which of the following is not a job responsibility of a software tester?**

- A. Identifying test cases
- B. Preparing test data
- C. Executing tests
- D. Writing the functional specifications



## Sample Question 32.

Errors that are cosmetic in nature are usually assigned a \_\_\_\_\_ severity level.

- A. Fatal (Severity)
- B. Low (Severity)
- C. Serious (Severity)
- D. Not Serious at all

## Sample Question 33.

### What is checklist-based testing?

- A. A test technique in which tests are derived based on the tester's knowledge of past faults, or general knowledge of failures.
- B. Procedure to derive and/or select test cases based on an analysis of the specification, either functional or non-functional, of a component or system without reference to its internal structure.
- C. An experience-based test technique whereby the experienced tester uses a list of items to be noted, checked, or remembered, or a set of rules or criteria against which a product has to be verified.
- D. An approach to testing where the testers dynamically design and execute tests based on their knowledge, exploration of the test item and the results of previous tests.

## Sample Question 34.

**For which of the following situations is explorative testing suitable?**

- A. If due to time pressure requires speeding up the execution of tests already specified.
- B. If the system is developed incrementally and no test charter is available.
- C. If testers are available who have sufficient knowledge of similar applications and technologies.
- D. If an advanced knowledge of the system already exists and evidence is to be provided that it should be tested intensively.

## Sample Question 35.

**Which of the following statements BEST describes how tasks are divided between the test manager and the tester?**

- A. The test manager plans testing activities and chooses the standards to be followed, while the tester chooses the tools and their guidelines to be used.
- B. The test manager plans and controls the testing activities, while the tester specifies the tests and decides on the test automation framework.
- C. The test manager plans, monitors, and controls the testing activities, while the tester designs tests and decides on the release of the test object.
- D. The test manager plans and organizes the testing and specifies the test cases, while the tester prioritizes and executes the tests.

## Sample Question 36.

**Which of the following metrics would be MOST useful to monitor during test execution?**

- A. Percentage of executed test cases.
- B. Average number of testers involved in the test execution.
- C. Coverage of requirements by source code.
- D. Percentage of test cases already created and reviewed .

## Sample Question 37.

**Which TWO of the following can affect and be part of the (initial) test planning?**

- A. Budget limitations.
- B. Test objectives.
- C. Test log.
- D. Failure rate.
- E. Use cases.

## Sample Question 38.

**Which of the following lists contains only typical exit criteria from testing?**

- A. Reliability measures, test coverage, test cost, schedule and status about fixing errors and remaining risks.
- B. Reliability measures, test coverage, degree of tester's independence and product completeness.
- C. Reliability measures, test coverage, test cost, availability of test environment, time to market and product completeness.
- D. Time to market, remaining defects, tester qualification, availability of testable use cases, test coverage and test cost.

## Sample Question 39.

**Which one of the following is NOT included in a test summary report?**

- A. Defining pass/fail criteria and objectives of testing.
- B. Deviations from the test approach.
- C. Measurements of actual progress against exit criteria.
- D. Evaluation of the quality of the test item.



## Sample Question 40.

The project develops a "smart" heating thermostat. The control algorithms of the thermostat were modeled as Matlab/Simulink models and run on the internet connected server. The thermostat uses the specifications of the server to trigger the heating valves. The test manager has defined the following test strategy/approach in the test plan:

1. The acceptance test for the whole system is executed as an experience-based test.
  2. The control algorithms on the server are tested during implementation using continuous integration.
  3. The functional test of the thermostat is performed as risk-based testing.
  4. The security tests of data / communication via the internet are executed together with external security experts.
- A. methodical, analytical, reactive and performance preserving.
  - B. analytical, model-based, consultative and reactive.
  - C. model-based, methodical, analytical and consultative.
  - D. performance-preserving, consultative, reactive and methodical.

**What four common types of test strategies/approaches did the test manager implement in the test plan?**

## Sample Question 41.

**Which one of the following is the characteristic of a metrics-based approach for test estimation?**

- A. Budget which was used by a previous similar test project.
- B. Overall experience collected in interviews with test managers.
- C. Estimation of effort for test automation agreed in the test team.
- D. Average of calculations collected from business experts.

## Sample Question 42.

**As a test manager you are responsible for testing the following requirements:**

R1 - Process anomalies

R2 - Synchronization

R3 - Approval

R4 - Problem solving

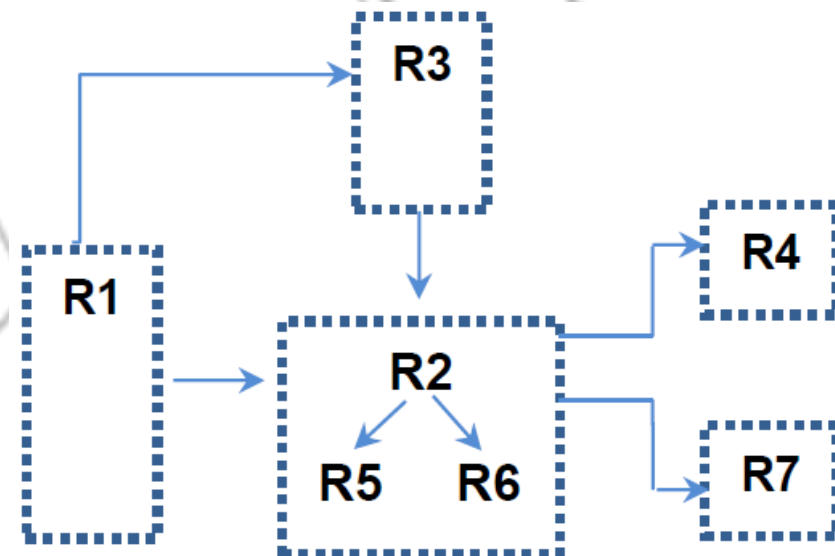
R5 - Financial data

R6 - Diagram data

R7 - Changes to the user profile

Notation: Logical requirement dependencies

(A -> B means, that B depends on A):



- A. R1 -> R3 -> R4 -> R7 -> R2 -> R5 -> R6 .
- B. R1 -> R3 -> R2 -> R4 -> R7 -> R5 -> R6.
- C. R1 -> R3 -> R2 -> R5 -> R6 -> R4 -> R7.
- D. R1 -> R2 -> R5 -> R6 -> R3 -> R4 -> R7.

**Which one of the following options structures the test execution schedule according to the requirement dependencies?**

## Sample Question 43.

You are testing a new version of software for a coffee machine. The machine can prepare different types of coffee based on four categories. i.e., coffee size, sugar, milk, and syrup. The criteria are as follows:

- Coffee size (small, medium, large),
- Sugar (none, 1 unit, 2 units, 3 units, 4 units),
- Milk (yes or no),
- Coffee flavor syrup (no syrup, caramel, hazelnut, vanilla).

Now you are writing a defect report with the following information:

**Title:** Low coffee temperature. **Short summary:** When you select coffee with milk, the time for preparing coffee is too long and the temperature of the beverage is too low (less than 40 °C )

**Expected result:** The temperature of coffee should be standard (about 75 °C). **Degree of risk:** Medium **Priority:** Normal

**What valuable information was omitted in the above defect report?**

- A. The actual test result.
- B. Data identifying the tested coffee machine.
- C. Status of the defect.
- D. Ideas for improving the test case.

## Sample Question 44.

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

- A. Test cases are created to exercise defined basic, exceptional and error behaviors performed by the system under test in collaboration with actors.
- B. Test cases are derived by identifying the components included in the use case and creating integration tests that exercise the interactions of these components.
- C. Test cases are generated by analyzing the interactions of the actors with the system to ensure the user interfaces are easy to use.
- D. 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.

## Sample Question 45.

**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.

## Sample Question 46.

**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. Create the detailed test execution schedule.
- D. Analyze, review, and assess requirements, specifications and models for testability.

## Sample Question 47.

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



## Sample Question 48.

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

## Sample Question 49.

**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.

## Sample Question 50.

**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.

## Sample Question 51.

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.

## Sample Question 52.

**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 now 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.

## Sample Question 53.

You are performing system testing of a train booking system and have found that occasionally the system reports that there are no available trains when you believe that there should be, based on the test cases you have run. You have provided the development manager with a summary of the defect and the version of the system you are testing. The developers recognize the urgency of the defect and are now waiting for you to provide more details so that they can fix it.

Given the following pieces of information:

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

Apart from the description of the defect, which includes a database dump and screenshots, which of the pieces of information would be MOST useful to include in the initial defect report?

- A. 1, 2, 6
- B. 1, 4, 5, 6
- C. 2, 3, 4, 5
- D. 3, 5, 6

## Sample Question 54.

**Which of the following can be used to measure progress against the exit criteria?**

**W. Number of test cases that passed or failed**

**X. Number of detects found in a unit of code**

**Y. Dates for milestones and deliverables**

**Z. Subjective confidence of testers in the product**

A. W, X, Y and Z

B. W, X and Y

C. W and X

D. W, X and Z

## Sample Question 55.

**Which of the following BEST describes the task partition between test manager and tester?**

- A. The test manager plans, organizes and creates the test specifications, while the tester implements, prioritizes and executes tests.
- B. The test manager plans, monitors and controls the testing activities, while the tester designs, executes tests and evaluates the results.
- C. The test manager plans testing activities and chooses the standards to be followed, while the tester chooses the tools and controls their use.
- D. The test manager reviews tests developed by others, while the tester selects tools to support testing.



## Sample Question 56.

**The test strategy that is informal and non structured is:**

- A. Equivalence partitioning
- B. Validation strategy
- C. White box testing
- D. Ad hoc testing

## Sample Question 57.

**Which of the following details would most likely be included in an incident report?**

- I. Identification of the test item (configuration item) and environment.**
- II. Development process characteristics such as organization stability and test process used.**
- III. A review of the test basis, such as requirements, architecture, design, interfaces.**
- IV. Scope or degree of the impact on the stakeholders' interests.**

- A. I, II and III.**
- B. II and III.**
- C. I and IV**
- D. III and IV**

## Sample Question 58.

**According to the ISTQB Glossary, a risk relates to which of the following?**

- A. Negative feedback to the tester.
- B. Negative consequences that will occur.
- C. Negative consequences that could occur.
- D. Negative consequences for the test object.

## Sample Question 59.

**Which of the following is among the typical tasks of a test leader?**

- A. Develop system requirements, design specifications and usage models.
- B. Handle all test automation duties.
- C. Keep tests and test coverage hidden from programmers.
- D. Gather and report test progress metrics.

## Sample Question 60.

**DDP formula that would apply for calculating DDP for the last level of testing prior to release to the field is**

- A.  $DDP = \{Defects (Testers) - Defects (Field)\} / Defects (Testers)$
- B.  $DDP = \{Defects (Testers) + Defects (Field)\} / Defects (Testers)$
- C.  $DDP = Defects (Testers) / \{Defects (Field) + Defects (Testers)\}$
- D.  $DDP = Defects (Testers) / \{Defects (Field) - Defects (Testers)\}$

## Sample Question 61.

**As a test leader you are collecting measures about defects. You recognize that after the first test cycle covering all requirements – subsystem C has a defect density that is 150% higher than the average. Subsystem A on the other hand has a defect density that is 60% lower than the average. What conclusions for the next test cycle could you draw from this fact?**

- A. It is probable that subsystem C has still more hidden defects. Therefore we need to test subsystem C in more detail.
- B. Because we have already found many defects in subsystem C, we should concentrate testing resources in Subsystem A.
- C. Observed defect density does not allow any conclusions about the amount of additional testing.
- D. We should try to equalize the amount of testing over all modules to ensure that we test all subsystems evenly.