

Sample Exam – Questions

Sample Exam set B
Version 1.1

ISTQB® Test Management Syllabus Advanced Level

Compatible with Syllabus version 3.0

International Software Testing Qualifications Board



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

This document is maintained by a core team from ISTQB® consisting of the Syllabus Working Group and Exam Working Group.

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Introduction

Purpose of this document

The example questions and answers and associated justifications in this sample exam 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
- Providing training providers and exam candidates with examples of exam questions

These questions cannot be used as-is in any official examination.

Note that real exams may include a wide variety of questions, and this sample exam *is not* intended to include examples of all possible question types, styles or lengths. This sample exam may both be more difficult or less difficult than any official exam.

Instructions

In this document you may find:

- Questions¹, including for each question:
 - Any scenario needed by the question stem.
 - Point value.
 - Response (answer) option set
- Number of questions: 50. Exam duration: 120 minutes. Total points: 88. Pass mark: 58 points or more (65%).
- *Answers, including justification are contained in a separate document.*

¹ In this sample exam the questions are sorted by their targeted LO; this will not be the case in a live exam.

Questions

Section: Test Process

Question 1 (1 Point)

You are a Test Manager participating in release planning. You are reviewing proposed activities and responsibilities to finalize the overall release test plan.

Which of the following activities does NOT belong to release test planning?

- a) Identifying the testers responsible for exploratory and automated test execution.
- b) Estimating the infrastructure cost for running the automation tests.
- c) Creating and documenting the organization's test policy.
- d) Reviewing backlog items with stakeholders to assess potential risks.

Select ONE option.

Question 2 (1 Point)

You are the Test Manager in a software migration project for a public-sector client.

The project follows a sequential software development lifecycle and is under pressure due to tight deadlines and strict compliance requirements.

To ensure that testing stays aligned with the plan and deviations are quickly detected, you must implement test monitoring.

Which of the following statements BEST defines the purpose of test monitoring?

- a) Review each pass/fail status of each test case in isolation to ensure expected results match actual results.
- b) Measure progress against the planned test execution schedule and promptly report/communicate deviations affecting critical compliance milestones.
- c) Postpone test monitoring until the test team has fully executed the regression suite.
- d) Focus monitoring on functional test case execution and postpone reporting until the end of the project.

Select ONE option.

Section: Context of Testing

Question 3 (1 Point)

You are a Test manager preparing stakeholder engagement activities for a new cross-functional product initiative. Senior management has requested that risk discussions and test strategy decisions involve stakeholders who can influence business priorities and test objectives.

Which of the following stakeholder groups is the MOST appropriate to involve in early test planning to help define the required test coverage based on perceived risks?

- a) Project coordinators, configuration managers, and scrum masters
- b) Technical writers, maintenance team members, and customer support staff
- c) Product owners, project managers, and business users
- d) Component testers, developers, and DevOps engineers

Select ONE option.

Question 4 (1 Point)

A healthcare company is evaluating a new automated test execution tool for system testing and system integration testing of a business-critical application. The steering committee gives formal procurement approval and normally adopts the ranking produced by the evaluation matrix unless there are budget or compliance objections. The stakeholders have the following responsibilities:

The head of procurement reviews prices and contractual terms and can require renegotiation if the approved budget is exceeded. After contract signature, their involvement is limited to contract administration.

Test automation specialists carry out the proof of concept and will use the tool regularly. Their findings feed into the evaluation matrix, but they do not define or weight the criteria.

The head of test management defines the exclusion criteria and weights the functional evaluation criteria. After selection, they coordinate the pilot, test process adaptation, and training of the test teams.

Quality assurance auditors independently check whether the required regulatory evidence is complete. They neither compare the candidates' functional suitability nor participate in piloting, training, or process introduction.

Which stakeholder group belongs in the high influence and high interest quadrant of a power-interest matrix and should therefore be closely involved during selection and introduction?

- a) Head of procurement
- b) Test automation specialists
- c) Head of test management
- d) Quality assurance auditors

Select ONE option.

Question 5 (1 Point)

Your organization has introduced a hybrid development model in which some components are delivered in Agile sprints while others follow a traditional release cycle.

The test team must now support both streams but is unsure how to synchronize continuous testing for Agile components with formal documentation and traceability required for the traditional stream.

As a Test manager, which of the following actions would BEST support the team in adapting to this hybrid way of working?

- a) Provide workshops on Agile test practices and integrate them into sequential processes.
- b) Extend deadlines for the initial sprints to allow the team to gradually learn by trial and error.
- c) Recommend postponing Agile adoption until the team fully masters continuous testing.
- d) Hire external Agile testers to temporarily manage the continuous testing work while the current team focuses on traditional phases

Select ONE option.

Question 6 (1 Point)

As a Test manager, you are planning the system integration testing activities for a project that includes multiple interacting software modules developed by different teams.

Which of the following is NOT a test management activity at the system integration test level?

- a) Ensuring the scope and objectives of system integration testing are clear and aligned with risk assessment and quality targets.
- b) Coordinating the availability of test environments and test interfaces needed for system integration testing
- c) Managing final product validation activities to check for release readiness.
- d) Defining which test techniques will be used to verify interfaces at the system integration test level

Select ONE option.

Question 7 (3 Points)

You are a Test Manager in a growing fintech company developing a real-time transaction monitoring system for fraud detection. The system processes thousands of transactions per second and applies machine learning algorithms to detect suspicious activity. Due to regulatory requirements, the system must maintain high availability, meet strict security standards, and provide auditable logs of all fraud detection decisions.

The company follows an Agile development model with frequent releases, and test automation is used extensively. However, recent releases have encountered production issues due to unanticipated risks in deployment, insufficient resource planning, and inadequate monitoring of test execution.

Which TWO actions should you focus on to improve the effectiveness of test management?

- a) Define a risk-based test planning approach, optimize resource allocation, and establish monitoring of key test execution metrics.
- b) Increase manual exploratory testing efforts and focus on executing more test cases per sprint to improve coverage.
- c) Ensure that test automation runs as part of CI/CD, without additional monitoring or test control processes.
- d) Implement continuous test monitoring and adaptive process management to adjust test processes based on project insights.
- e) Assign more testers to regression testing and transfer responsibility for test monitoring to the developers.

Select TWO options.

Question 8 (3 Points)

You are the Test Manager for a project developing embedded software for autonomous drones used in public safety operations.

The software must comply with strict industry standards for functional safety and cybersecurity. The project uses three-week development iterations and is entering the initial maintenance phase, which requires frequent updates and thorough regression testing to maintain compliance and reliability.

Your test team includes a mix of local and remote testers. The organization uses automated CI/CD pipelines hosted in the cloud to support integration and regression testing. Continuous test monitoring and control have been introduced to address evolving quality risks.

As the Test Manager, which of the following combinations of test management activities BEST reflects the appropriate focus for this project context, emphasizing test planning, test monitoring, and control?

- a) Enhance the test automation strategy to improve CI/CD pipeline performance and prepare a detailed defect management plan for identifying and classifying issues during regression testing.
- b) Define a comprehensive configuration management plan to ensure tool and environment consistency across locations and conduct usability testing with selected user groups.
- c) Develop and maintain a risk-based test plan with continuous risk identification and assessment, and align regression testing and test progress tracking throughout the maintenance phase with risk mitigation priorities.
- d) Extend exploratory testing coverage across the remote team and implement weekly test retrospectives to review process gaps and prioritize backlog improvements.

Select ONE option.

Section: Risk-based testing

Question 9 (1 Point)

During a recent software release, a performance issue caused the application to slow down significantly under peak load, despite the issue being identified as “low likelihood” and therefore given low overall priority during the initial risk assessment. The Test manager had deprioritized performance testing based on this classification, in order to focus on higher-priority risks. After deployment, the system underperformed during a critical promotional campaign, leading to lost sales and customer dissatisfaction.

Which would best improve the quality risk assessment to avoid mis-prioritization?

- a) Assign all non-functional requirements the highest risk level regardless of context to prevent underestimating them.
- b) Performance testing should be performed before every major release regardless of the risk level.
- c) Ensure that both risk likelihood and risk impact are consistently used together to prioritize test coverage and test efforts.
- d) Defer risk-based decisions until the end of the project when all system behavior is better understood.

Select ONE option.

Question 10 (1 Point)

As the Test Manager, you organize a planned, facilitated session to identify product quality risks. The participants, agenda, and procedure for documenting identified risks have been defined. Several stakeholders, including system architects and user representatives, collaborate on a documented risk list. The session includes a brainstorming phase.

Which overarching risk identification technique are you conducting?

- a) Expert interviews
- b) Brainstorming
- c) Risk workshop
- d) Referring to past experience

Select ONE option.

Question 11 (3 Points)

As the Test Manager, you have been asked to prioritize risk-based testing for a critical eHealth software platform. The platform must comply with regulatory standards for patient data protection and reliability, while also serving a diverse user base that includes hospitals, private labs, and patients. The test team has limited access to production-like environments, which constrains load and performance testing.

The following risks have been identified and assessed using quantitative analysis (risk level = risk likelihood × risk impact):

Risk ID	Description	Risk Likelihood	Risk Impact
A	Users might not receive timely notifications of lab results	30%	€3,000,000
B	The interface to the national database may return corrupted data	10%	€6,000,000
C	User interface inconsistencies may confuse new users	80%	€200,000
D	Authentication may fail under peak loads	40%	€1,000,000

In addition to the calculated risk levels, you must consider the regulatory compliance requirements, diverse user groups, and limited test environment availability.

Which of the following approaches BEST reflects an appropriate mitigation plan?

- a) Mitigate Risk A with end-to-end system testing, accept Risk B as residual, mitigate Risk C through exploratory usability sessions, and address Risk D with performance and load testing.
- b) Mitigate Risk A primarily through stakeholder workshops, address Risk B with unit and white-box tests, use UI guideline reviews for Risk C, and defer Risk D until final system testing.
- c) Mitigate Risk A with prototype-based walkthroughs, address Risk B only through exploratory tests, focus early usability tests and UI reviews on Risk C, and handle Risk D only if additional resources remain.
- d) Mitigate Risk A with end-to-end tests including timing checks for notifications. Mitigate Risk B with robustness and data integrity tests. Accept Risk C as residual risk. Address Risk D through targeted peak-load tests.

Select ONE option.

Question 12 (3 Points)

You are the Test Manager for an e-commerce platform releasing weekly updates.
The system includes four modules with the following risk levels per quality characteristic:

Module	Security	Performance	Functionality
User Login	High	Medium	Low
Shopping Cart	Low	High	Medium
Payment Processing	High	High	High
Recommendations	Low	Low	Medium

Your team has eight testers with mixed seniority. You must apply a risk-based testing approach for the next release cycle.

Based on the risk profiles above, which of the following approaches BEST demonstrates how to select and prioritize test activities?

- a) Prioritize Payment Processing and assign experienced testers. Apply security-focused testing to User Login, performance testing to Shopping Cart, and less extensive regression testing to Recommendations; scale effort according to each risk profile.
- b) Base prioritization mainly on defects found in previous releases, applying similar regression depth to all modules. Assign testers to keep workload balanced rather than aligning resources and techniques with the different risk levels across the four modules.
- c) Focus testing effort on modules that change most visibly for end-users, reusing the same functional regression suite for all areas. Assign senior testers according to delivery deadlines, without varying test depth across modules with different security, performance, or functionality risks.
- d) Begin with broad exploratory testing across all modules to identify issues quickly, delaying detailed prioritization. Defer security, performance, and functional allocation decisions until exploratory testing highlights areas that appear to need more attention.

Select ONE option.

Question 13 (1 Point)

You are a Test Manager working on an Agile project for a ride-sharing mobile application.

The application must integrate map APIs, payment systems, and user messaging. Requirements are captured incrementally from customer feedback and feature development cycles. The organizational strategy mandates a risk-based testing approach.

Given the fast iteration cycles, informal requirements, and the need for efficient risk identification across functional and performance areas, which statement BEST differentiates between heavyweight and lightweight risk-based testing techniques for this Agile context?

- a) Heavyweight approaches require more formal documentation and broader stakeholder involvement than lightweight approaches.
- b) Lightweight approaches are superior to heavyweight approaches regardless of project context, team size, or organizational requirements in any development environment.
- c) Both heavyweight and lightweight approaches require identical levels of formality, documentation, and stakeholder involvement across all project types and contexts.
- d) The selection between approaches depends solely on team preferences rather than project characteristics, iteration cycles, or organizational constraints and requirements.

Select ONE option.

Section: Project Test Strategy

Question 14 (1 Point)

You are defining the test approach for a large system integration project that involves both legacy and newly developed components. The business stakeholders expect a high level of confidence in system reliability, while the technical team is concerned about integration complexity.

Which of the following aspects would be MOST relevant to consider when defining the project test strategy (test approach)?

- a) Test automation tools, team composition, and customer service level agreements (SLAs).
- b) Test levels, test types, and test techniques appropriate to project risks.
- c) Entry and exit criteria, test tools, and effort estimation methods.
- d) Review techniques, documentation standards, and performance KPIs.

Select ONE option.

Question 15 (3 Points)

You are the Test Manager on a project developing a real-time braking system for autonomous vehicles. The project is part of a regulated automotive program and follows a V-model lifecycle. Safety, performance, and reliability are critical, and the system must comply with functional safety standards.

For safety-critical systems, the organizational test strategy requires early formal reviews and static analysis of safety-related work products, bidirectional traceability at all relevant test levels, systematic defect classification, and automated regression testing.

The system integrates components from multiple suppliers and involves both hardware and software testing. The test infrastructure supports automated testing, static analysis, and traceability tools. Formal documentation, reviews, and auditable results are required.

However, several constraints complicate the project context:

- Some suppliers are reluctant to maintain full traceability at the component level due to cost and time pressures.
- Management is considering skipping formal static analysis to accelerate delivery.
- A recent external audit flagged the lack of systematic defect classification and review coverage in a similar past project.

Which test approach BEST aligns with the organizational test strategy and regulatory requirements?

- a) Testing follows a requirements-based and risk-based approach. Safety-related work products undergo early formal reviews and static analysis. Suitable white-box and black-box test techniques are selected according to the test level and product risk. Bidirectional traceability links requirements to test cases, results, and defect reports at all relevant test levels. Defect taxonomies support root cause analysis; automated tests support regression testing.
- b) Testing follows a requirements-based and risk-based approach. Safety-related requirements and designs undergo early formal reviews. White-box and black-box test techniques are selected according to the test level and product risk. Bidirectional traceability is maintained at all relevant test levels. Defect taxonomies and automated regression tests are used; however, static analysis starts only after system integration is complete.
- c) Testing follows a requirements-based and risk-based approach. Safety-related work products undergo early formal reviews and static analysis. White-box and black-box test techniques are selected according to the test level and product risk. Bidirectional traceability is maintained for system and system integration testing; suppliers provide only summary reports as evidence of component testing. Defect taxonomies support root cause analysis, and automated tests support regression testing.
- d) Testing follows a risk-based approach. Safety-related work products at system level undergo early formal reviews and static analysis; supplier components undergo simplified peer reviews. White-box and black-box test techniques are selected according to product risk. Bidirectional traceability links requirements, test cases, results, and defect reports from system integration onward. Defect taxonomies support root cause analysis; automated tests support regression testing.

Select ONE option.

Question 16 (3 Points)

You are working on a project developing a mobile application for a healthcare provider. The application must comply with strict regulatory standards for data privacy and security, ensuring patient information is protected. The project follows an Agile SDLC model with three-week sprints and regular releases. The testing team consists of five testers with varying levels of experience. The test environment includes multiple mobile devices and operating systems to ensure compatibility. Test data is sourced from anonymized patient records provided by the healthcare provider.

Organizational Context:

- Test strategy: Risk-based approach with emphasis on regulatory compliance
- Quality goals: a defect detection percentage (DDP) of at least 95% and no known open security-critical defects at release
- Organizational constraints: Limited budget, compliance-first culture
- Maturity level: Intermediate test automation capabilities

Project Context:

- Budget constraints: Fixed budget with no overrun allowance
- Time constraints: Hard deadline in 6 months for regulatory approval
- Quality requirements: Must pass FDA (U.S. Food and Drug Administration) validation before release
- Integration needs: Must integrate with 3 existing hospital systems

Based on this scenario, which of the following test approaches would be most appropriate for your project?

- Following test levels are used: component, (component and system) integration, system, and acceptance testing. Developers and testers combine white-box and black-box test techniques based on risk and automate stable, frequently executed tests. System and integration tests run continuously within sprints on prioritized device and operating system combinations. Privacy, security, and hospital interfaces are tested based on risk. Acceptance testing includes stakeholder-supported validation with documented results, an audit trail, and defined entry and exit criteria, providing the required evidence for FDA validation.
- Four test levels are used: component, integration, system, and acceptance testing. Developers automate only component tests; testers execute all other tests manually using detailed compliance checklists on all available device and operating system combinations. Privacy and security risks determine execution order, but hospital interfaces are tested only in the final system test. Acceptance testing provides documented evidence for FDA validation, an audit trail, and defined entry and exit criteria.
- Explicit test levels are omitted in favor of a continuous Agile test process. Developers automate component tests; the five testers test user stories, hospital interfaces, privacy, and security in each sprint based on risk, primarily through exploratory testing guided by test charters. Prioritized device and operating system combinations are covered regularly. Before release, stakeholders review session records as evidence for FDA validation; separate acceptance tests with defined entry and exit criteria are omitted.
- Two test levels are established: combined component and integration testing, and combined system and acceptance testing. Testers derive functional test cases using equivalence partitioning, boundary value analysis, decision table testing, and state transition testing; developers automate them fully. Features marked as done and hospital interfaces are then tested exploratorily on prioritized devices. Results are documented in an auditable form for FDA approval; separate risk-based privacy and security tests are not planned.

Select ONE option.

Question 17 (2 Points)

You are responsible for defining test objectives for a mobile banking application. Management has set the following objective: “Ensure the application is secure and performs well.”

The following project information is available:

System testing lasts six weeks.

Expected peak load is 100 transactions per second.

The production-like test environment can generate up to 150 transactions per second.

The current software version processes 100 transactions per second, with 95% of responses taking less than 1.8 seconds.

Two security specialists and automated vulnerability scanning tools are available throughout system testing.

Identified critical security vulnerabilities prevent release.

Which revised test objective BEST applies the S.M.A.R.T. goal definition method in this project context?

- a) By the end of system testing, the application must have no security vulnerabilities and must process 200 transactions per second, with every response taking less than one second.
- b) By the end of system testing, no identified critical security vulnerabilities may remain open; at 100 transactions per second, 95% of responses must also take less than two seconds.
- c) By the end of system testing, the application should process transactions 20% faster than leading competing applications and offer greater security than other mobile banking applications.
- d) Before release, the application’s security and performance must meet at least three relevant industry benchmarks selected by the development team during system testing.

Select ONE option.

Question 18 (2 Points)

You are the Test Manager of a development project for a language-learning mobile app targeting the European market.

The app includes features such as audio-based lessons, interactive quizzes, progress tracking, and daily reminders. Stakeholders expect high usability and consistent performance across a wide range of mobile devices.

The following project information is available:

System testing lasts four weeks.

The team has a cloud-based device laboratory with a predefined, risk-based selection of 40 supported device and operating system configurations.

Automated performance tests can run every night using a defined reference network profile.

For the current software version, the 95th percentile of audio lesson loading time is below two seconds on 36 of these configurations.

Which test objective BEST applies the S.M.A.R.T. goal definition method in this project context?

- a) By the end of system testing, demonstrate that, under the defined reference network profile, the 95th percentile of audio lesson loading time is at most two seconds on at least 38 of the 40 predefined configurations.
- b) By the end of system testing, demonstrate improved onboarding usability on the 40 supported configurations by evaluating feedback from moderated sessions with representative users from five European countries and documenting the resulting improvements.
- c) By the end of system testing, validate the cultural and linguistic appropriateness of all learning content through reviews based on the professional judgment of native speakers from five European countries and document their overall assessment.
- d) By the end of system testing, demonstrate that usability improvements significantly increase the completion rate of audio lessons across all supported configurations and target groups, using analytics data, user feedback, and exploratory tests performed during the four-week system test phase.

Select ONE option.

Section: Improving the Testing Process

Question 19 (1 Point)

You are a Test Manager leading a process improvement initiative for a large-scale e-learning platform. The improvement objectives and scope have already been agreed with the stakeholders, and after gaining stakeholder approval and securing budget, you have completed an internal assessment of the current test process, with input from retrospectives and metrics analysis. The results of this assessment are documented and shared with all team members.

According to the IDEAL model for process improvement, what is the next step in this initiative?

- a) Finalize the scope of the improvement process and get buy-in from stakeholders.
- b) Use the results of the assessment to establish and prioritize an improvement plan.
- c) Conduct a retrospective to diagnose the weaknesses in the test process.
- d) Train the team in the revised processes and begin piloting improvements.

Select ONE option.

Question 20 (1 Point)

You are working as a test consultant on a fast-moving Agile telecommunications project. The test team wants to implement short-term, lightweight improvements in defect management, communication, and reporting. Project-specific data should be analyzed to derive targeted improvement actions.

Which approach BEST represents analytically based test process improvement?

- a) Assess the entire test process against the TMMi maturity levels and address all identified deviations from the model.
- b) Define measurement goals and related questions and metrics, analyze project data, and derive prioritized improvement actions.
- c) Adopt the test processes of a successful comparable project without further analysis.
- d) Collect only subjective feedback and immediately implement all proposed actions.

Select ONE option.

Question 21 (2 Points)

You are the Test Manager for a mobile application that enables real-time package tracking for a logistics company.

The first release was rolled out to a limited group of clients; your team combined risk-based and experience-based testing for delivery address handling, geolocation, and notification reliability.

Although major failures were not reported, customer feedback included issues with the accuracy of delivery status updates, inconsistent push notifications, and a confusing tracking interface.

You are now planning a retrospective to improve the test process before the next wider rollout.

Which TWO activities are MOST relevant for this retrospective?

- a) Identifying which parts of the test process failed to detect the issues reported by early users and analyzing why.
- b) Immediately expanding and modifying the test data set for the next sprint, without analyzing whether gaps in test design, prioritization, or execution contributed to the reported issues.
- c) Evaluating test coverage of important features like status tracking and push notifications using available metrics.
- d) Assessing whether the issues were caused by user errors instead of flaws in the test process or product.
- e) Redesigning the tracking user interface to better match the company's brand and UI guidelines, focusing on product design decisions rather than evaluating and improving the test approach.

Select TWO options.

Question 22 (2 Points)

You are a Test Manager participating in a retrospective at the end of a test cycle for a large software development project. Your team has faced challenges with defect leakage into production and inconsistent test execution rigor, coverage, and entry/exit criteria across different test levels.

Which of the following is the BEST approach to ensure that the retrospective effectively identifies and addresses areas for improvement?

- a) Analyze defect trends and test execution data, identify the causes of inconsistencies, and define and prioritize corrective actions.
- b) Invite senior management to the retrospective to provide guidance and ensure alignment with organizational goals.
- c) Focus only on major defects that caused production failures, as addressing smaller issues would slow down the retrospective process.
- d) Adopt industry-standard test process models to ensure that the team's testing aligns with best practices, without reviewing project-specific challenges.

Select ONE option.

Section: Test Tools

Question 23 (1 Point)

You are a Test manager leading the introduction of a new test management tool in a mid-sized software development organization. The current tools in use are inconsistent across teams, and your goal is to standardize test planning, execution tracking, and reporting.

Which of the following actions is NOT considered a best practice when introducing a new test management tool?

- a) Plan an organization-wide rollout of the tool in increments after validating it through a pilot and aligning/adapting processes.
- b) Replace the current tool without assessing whether the new tool supports your organization's processes.
- c) Define clear, objective criteria for evaluating the tool before selection.
- d) Run a pilot project to validate the selected tool against the team's workflows and needs.

Select ONE option.

Question 24 (3 Points)

You are the Test Manager of a company developing safety-critical vehicle control software using the V-model and cloud-based fleet applications using Agile development. Both areas are to receive a common test management tool.

The following conditions apply:

Suitable evidence of tool qualification is mandatory for the vehicle control software.

Regulatory approval must be obtained within 20 weeks.

The organization has little experience with tool qualification and accepts only low schedule and compliance risks.

Total cost of ownership over three years must not exceed €300,000.

Existing workflows must not be substantially adapted.

A proof of concept provides the following results:

Criterion	Tool A – commercial	Tool B – open source
Integration and workflows	Fully supported	Fully supported
Qualification evidence	Suitable and current	Must be prepared internally
Total cost of ownership	€285,000	€190,000 plus €70,000 for qualification
Introduction time including evidence	8 weeks	16–20 weeks
Reduction in manual effort	32%	40%
Main risks	Medium vendor dependency	High qualification, schedule, and maintenance risk

Which selection plan BEST considers requirements, costs, benefits, and risks?

- Select Tool A immediately and start introduction. Accept the existing qualification evidence without checking its applicability to the intended use; limit the pilot to technical integration. Evaluate cost developments, actual efficiency gains, and vendor dependency only after regulatory approval.
- Select Tool B as the preferred candidate and validate the PoC results in a time-limited pilot. Check integration, workflows, and efficiency gains; in parallel, prepare the required qualification evidence internally. Accept the risk that qualification finishes only at the approval deadline, together with the high maintenance risk, because of the lower costs.
- Choose Tool A as the preferred candidate and validate the PoC results in a time-limited pilot before final selection. Use defined acceptance criteria to check the applicability of the qualification evidence, migration, workflows, three-year costs, and expected efficiency gains. Contractual provisions for support, data export, and exit then limit vendor dependency.
- Pilot both tools in parallel and then select using an equally weighted evaluation matrix. Give qualification evidence, costs, introduction time, efficiency gains, and maintenance risk equal weight. Introduce the tool with the highest overall score even if mandatory qualification evidence becomes available only after regulatory approval.

Select ONE option.

Question 25 (3 Points)

You are the Test Manager of an Agile project developing a financial application with frequent regression testing and strict security and compliance requirements. Manual regression testing currently costs \$100,000 annually. The organization has a compliance-first culture and intermediate automation maturity.

Stakeholder perspectives:

- **Senior management:** Expects a positive ROI from the investment in a new test automation tool within two years.
- **The compliance team sets full traceability between requirements, tests, defects, and test results and strong support for security testing as mandatory requirements.**
- **Agile team:** Has limited capacity for complex onboarding and emphasizes usability.
- **The operations team wants to minimize maintenance effort.**

You are evaluating three tools. All tools incur recurring annual maintenance costs of 20% of their purchase price.

Tool	Purchase price / ROI	Supported test types	Traceability and compliance	Usability / maintainability	Manual effort reduction	Test cycle reduction	Test coverage increase
X	\$12,000 / 198%	Functional	Partial traceability; no security tests	High	25%	10%	10%
Y	\$18,000 / 178%	Functional + performance	Full traceability; limited security tests	Medium	35%	20%	20%
Z	\$22,000 / 160%	Functional + performance + security	Full traceability; strong security tests	Low	40%	30%	30%

The table gives each tool's ROI over two years. The values include only the one-time purchase price, maintenance costs, and savings in manual test effort.

Apply the mandatory requirements as non-compensable exclusion criteria before comparing ROI, efficiency, and other stakeholder perspectives.

Other introduction, training, and opportunity costs are considered qualitatively as risks. For this task, assume these unquantified costs do not eliminate the expected positive net benefit within two years.

Which analysis BEST supports the most suitable tool choice, considering ROI, compliance needs, efficiency, and stakeholder perspectives?

- Select Tool X. Its ROI of 198% and high usability justify accepting incomplete traceability and the absence of security testing support as residual compliance risks.**
- Select Tool Y. Its ROI of 178%, full traceability, medium usability, and lower onboarding effort compared with Z justify compensating for limited security testing support through supplementary manual security checks.**
- Select Tool Z. Z is the only tool that meets both mandatory requirements and achieves a positive ROI of 160%. Manage its low usability and maintainability through targeted onboarding, support agreements, and a maintenance plan.**
- Compare Tools X, Y, and Z using a weighted benefit analysis. Give ROI, purchase price, usability, maintainability, test cycle time, and compliance equal weight regardless of whether they are mandatory. Then select the tool with the highest overall score, because the positive ROI of all tools allows individual compliance weaknesses to be compensated for.**

Select ONE option.

Question 26 (1 Point)

You are the Test Manager of a project that is migrating from a custom-built defect management tool to a commercial defect management tool already in successful use across the company. The migration involves planning for the entire tool lifecycle.

Which of the following actions BEST illustrates an activity specific to the retirement stage of the old tool?

- a) Assigning a tool owner and defining naming conventions for work products.
- b) Ensuring interoperability and defining backup and restoration processes for artefacts.
- c) Preserving or archiving historical defect data before decommissioning the old tool.
- d) Adapting the tool to new business needs following vendor policy changes.

Select ONE option.

Section: Test Metrics

Question 27 (1 Point)

As a Test manager, you want to use metrics in a way that supports the test management activities and test reporting described in the syllabus.

Metrics:

1. Actual vs. planned effort (in hours) for testing activities
2. Actual automated test cases vs. planned automated test cases
3. Percentage of risks not yet completely tested
4. Accumulated number of resolved defects versus the accumulated number of defects

Purposes / activities:

- A. Test monitoring and test control (progress against plan)
- B. Test completion (achievement of test objectives / exit criteria)
- C. Test reporting (product risk status)
- D. Test reporting (defect status)

Which of the following correctly matches the metrics to the activities?

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

Select ONE option.

Question 28 (1 Point)

Your company is investing in a new strategic initiative focused on improving overall product quality through better tracking of test progress. Management has asked you to explain the primary value of test metrics.

Which of the following statements would BEST describe the primary role of test metrics?

- a) Test metrics provide insight into testing progress and help determine whether exit criteria and test objectives have been achieved.
- b) Test metrics directly recommend corrective actions for test scheduling and resource allocation.
- c) Test metrics mainly focus on collecting historical data after testing for lessons learned purposes.
- d) Test metrics trigger reprioritization of tests whenever a defect is detected during testing.

Select ONE option.

Question 29 (3 Points)

You are the Test manager for a large-scale smart grid control system developed over multiple release cycles. The development follows an incremental lifecycle with both legacy and new components. The test team is experienced but works under pressure to meet regulatory and integration milestones aligned with external partner systems.

Test execution is tracked weekly, and test coverage data is generated automatically by the test automation tools. The current reporting includes:

- The percentage of executed test cases
- The number of defects per test level
- The statement coverage for each major software module

Recently, the project sponsor expressed concern that the test reports lack transparency in terms of actual risk reduction and product readiness. Stakeholders are unclear whether the testing sufficiently covers critical risks and whether test progress metrics support informed go/no-go decisions.

As the Test manager, which of the following actions would most effectively improve the decision-making value of your test reports?

- a) Expand the coverage metrics to include branch and condition coverage to better demonstrate low-level code validation.
- b) Correlate defect trends and coverage to the product risk list, reporting progress in terms of mitigated and residual risks.
- c) Add visualizations that map test execution and defect status against critical business risks and acceptance criteria, supporting exit criteria evaluation.
- d) Replace coverage-based metrics with team-reported component-level stability ratings based on expert judgment.
- e) Include raw test logs and full traceability matrices to give stakeholders deeper insight into test results.

Select TWO options.

Question 30 (3 Points)

You are the Test Manager of a government project to develop a secure online voting system. The project follows a traditional document-centric sequential development model. Requirements are stable, with minimal changes, and compliance with strict security and privacy regulations is mandatory.

The project team is large, hierarchical, and follows a risk-based strategy. You are preparing the test reporting approach for system testing and must ensure that the reports support stakeholders' decision-making.

Which set of metrics would be the MOST appropriate for analyzing test results and creating meaningful test reports in this context?

- a) Metrics related to product risks, overall test execution effort, defect trends, and environment stability.
- b) Metrics related to code coverage, defect severity trends, test progress, and requirements change frequency.
- c) Metrics related to product risks, defect detection and resolution, test progress, requirements coverage, and test effort (actual vs planned resource hours).
- d) Metrics related to defect detection and resolution, test execution progress, code coverage, and residual risks in not-yet-tested areas, without reporting requirements coverage or actual versus planned test effort..

Select ONE option.

Section: Test Estimation

Question 31 (1 Point)

As the Test Manager of a software integration project, you are creating an initial test effort estimate. You are reviewing factors that can influence the required test effort.

Which information is LEAST useful as an input to test effort estimation?

- a) The availability of test automation, test tools, and test environments.
- b) The size of the test object and the complexity of the product domain.
- c) The number of retrospectives conducted in previous projects.
- d) The competencies and experience of the testers involved in similar projects and products.

Select ONE option.

Question 32 (3 Points)

You are managing a (globally) distributed Agile team working on a complex insurance platform. The testing approach combines risk-based testing for core system components, exploratory testing for frequently changing modules, and some scripted regression checks. The team has experienced testers in both onshore and offshore locations. Your task is to estimate the effort required for system testing in the upcoming iteration.

Which TWO of the following activities best support accurate test effort estimation for this iteration?

- a) Extrapolate the effort for existing scripted regression tests, based on the number of test scripts and average execution time, to estimate all system testing.
- b) Analyze effort data from comparable iterations for risk-based test activities and adjust it to the scope and risks of the upcoming iteration.
- c) Use the hours per user story recorded for exploratory testing in the last iteration as a uniform reference value for all test activities.
- d) Ask experienced testers at both locations to jointly estimate the number and duration of planned exploratory test sessions and the regression test effort, and document their assumptions.
- e) Use the total effort of the previous iteration as a baseline and adjust it based on the number of new features.

Select TWO options.

Question 33 (3 Points)

You are the Test Manager of a business-critical software project for a government client. The project follows a sequential development model with fixed scope. The requirements specification and architecture documentation are approved; test activities can be divided into known work packages.

Reliable data on scope and person-hours per test activity is available from comparable projects. However, the current project involves substantially more interfaces, creating additional integration and regression test effort; the historical data records these activities separately. The sponsor needs a justified estimate of total test effort in person-hours by tomorrow. Experienced testers can review assumptions and adjustments today.

Which estimation approach is MOST appropriate in this context?

- a) Have experienced testers produce three-point estimates in person-hours for all work packages; then use historical effort for a plausibility check.
- b) Use ratio-based estimation in person-hours based on the total scope of comparable projects; apply the historical average to the current total scope.
- c) Use ratio-based estimation in person-hours per test activity from comparable projects; adjust affected activities for the increased interface effort and review assumptions.
- d) Use expert-based estimation in person-hours for all work packages in today's team meeting; then compare the consensus values with historical totals.

Select ONE option.

Section: Defect Management

Question 34 (2 Points)

You manage testing of a medical diagnostic application. Development task D-87 has the states IN IMPLEMENTATION and READY FOR TESTING.

The defect management process specifies:

Evaluate anomalies against the expected result applicable to the current implementation state.
Track behavior still to be implemented within the development task until READY FOR TESTING.
Create a defect report for confirmed anomalies in the test object or approved test basis.
If a report for the same defect exists, update or reopen it.

Four situations occur:

- A. An automated component test is created for D-87 before the calculation logic is implemented. D-87 is IN IMPLEMENTATION; the logic is the next implementation step. The test fails for the first time.
- B. In a later build, D-87 is READY FOR TESTING. The test still fails; the test and expected result are correct. There is no defect report.
- C. The approved test basis omits a mandatory boundary value that determines expected system behavior. The omission is confirmed; there is no defect report.
- D. During confirmation testing, the defect documented in F-204 recurs. F-204 is RESOLVED; it is confirmed to be the same defect.

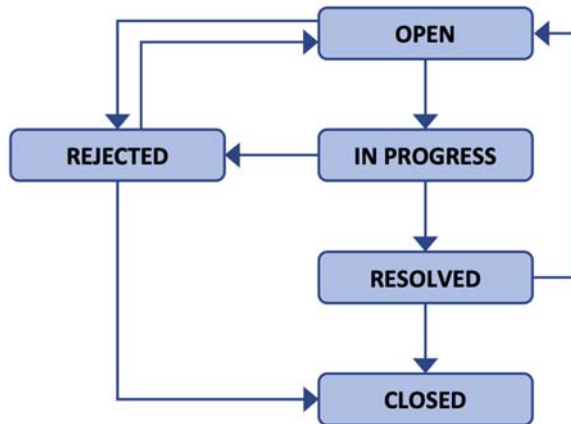
Which mapping BEST follows the defect management process?

- a) A: create a new defect report; B: track within D-87; C: create a new defect report; D: reopen F-204.
- b) A: track within D-87; B: create a new defect report; C: create a new defect report; D: create another defect report.
- c) A: track within D-87; B: create a new defect report; C: create a new defect report; D: reopen F-204.
- d) A: track within D-87; B: create a new defect report; C: only correct the test basis; D: reopen F-204.

Select ONE option.

Question 35 (2 Points)

You are reviewing the following simple defect workflow, currently used by your team:



Previously, failed confirmation testing led from RESOLVED to OPEN. The team adds REOPENED to distinguish this case from initial processing. DEFERRED identifies a valid report that has not yet been worked on and is postponed to a later release.

- The revised workflow has these rules:
- Only defect reports not yet being actively addressed may be deferred.
- When a deferred report is activated, it must be reviewed and prioritized again before assignment, as for a report not yet addressed.
- Failed confirmation testing of a RESOLVED report must be explicitly identified. Since the report has already been assessed and prioritized, fixing can start without another initial assessment.
- Defect report F-312 follows this history:

F-312 has been assessed but not yet addressed; fixing is postponed to a later release.

- In that release, F-312 is reprioritized, assigned, and worked on; the developer reports the fix as completed.
- During confirmation testing, the same failure occurs; the developer resumes fixing it.

Which sequence of states BEST represents this history?

- a) OPEN → DEFERRED → IN PROGRESS → RESOLVED → REOPENED → IN PROGRESS
- b) OPEN → DEFERRED → OPEN → IN PROGRESS → RESOLVED → REOPENED → IN PROGRESS
- c) OPEN → DEFERRED → OPEN → IN PROGRESS → RESOLVED → OPEN → IN PROGRESS
- d) OPEN → DEFERRED → OPEN → IN PROGRESS → RESOLVED → REOPENED → OPEN → IN PROGRESS

Select ONE option.

Question 36 (1 Point)

You are responsible for defect management in a large insurance software integration project involving several internal development teams and an external supplier. Defect tracking must follow the agreed escalation and reporting rules.

Which approach BEST supports effective cross-functional defect management?

- a) The Test Manager assesses and prioritizes all defect reports alone and informs the development teams only after the final decision.
- b) A cross-functional defect management committee, including supplier representatives and project or product management, evaluates defect reports and decides on status, responsibility, and priority.
- c) The Project Manager decides solely on defect severity, while each development team uses its own defect workflow independently.
- d) The defect management tool automatically decides on validity, priority, and responsibility; the roles involved coordinate only for regulatory escalations.

Select ONE option.

Question 37 (1 Point)

You are working in an Agile development team during the fourth sprint of a mobile app project. During exploratory testing, you encounter an anomaly or unexpected behavior in the notification feature developed during the second sprint. The Scrum team is well-established and collaborates closely (e.g., quick direct communication is possible and the issue can likely be clarified the same day).

Before raising a formal defect report, what is a valid reason for delaying the creation of a defect report in this situation?

- a) You want to first discuss the anomaly informally with a developer on the team to confirm whether the behavior is a defect.
- b) The Scrum Master prefers to focus the team's effort on completing the current sprint backlog.
- c) The anomaly appears minor and does not affect the app's critical paths during user testing.
- d) The Product Owner agrees the anomaly is a defect but suggests writing the report after the next sprint planning.

Select ONE option.

Question 38 (1 Point)

You are the Test manager of a project that includes both Agile teams working in sprints and traditional teams following a sequential model. Each team uses different development and testing practices, but all contribute to the same product release.

Which of the following is MOST important for effective defect management in this hybrid development environment?

- a) Use a common defect management tool with agreed defect states and mandatory fields to track defects consistently across teams.
- b) Allow each team to manage defects in its own way, since testing and planning cycles differ.
- c) Centralize defect handling exclusively under the sequential team's process to ensure control.
- d) Require Agile teams to submit weekly defect status reports formatted according to the sequential team's standards.

Select ONE option.

Question 39 (2 Points)

You are the Test Manager of a logistics platform project. Two days before the planned release, the following failure occurs in five consecutive attempts:

A dispatcher opens an approved international shipping order.

They select “Create shipping label”.

Instead of the label, “HTTP 500 Internal Server Error” appears.

No label is created. Analysis confirms that all international shipping orders are affected. Of approximately 200 daily orders, 40% are international shipments. As a workaround, each label can be created manually, taking about 15 minutes per order. Only four staff-hours per day are available for this work. All shipping labels must be created on the same day.

Your organization uses these classifications:

CRITICAL: A core business process is unusable; no workaround exists.

HIGH: An important business function has failed or is severely impaired; a workaround exists.

MEDIUM: The impact is limited and normal operation remains largely possible.

P1: Fix required before the upcoming release.

P2: Fix in the next iteration.

P3: Add to the product backlog without a fixed date.

Which addition to the defect report BEST uses the required data and classifications?

- a) Title: “Label error”; description: “Label creation does not work”; severity: CRITICAL; priority: P1
- b) Title: “HTTP 500 when creating international shipping labels”; description: Open an approved international shipping order and select “Create shipping label”; expected: shipping label is created; actual: “HTTP 500 Internal Server Error”, no label (five out of five attempts); severity: HIGH; priority: P1
- c) Title: “HTTP 500 when creating international shipping labels”; description: Open an approved international shipping order and select “Create shipping label”; expected: shipping label is created; actual: “HTTP 500 Internal Server Error”, no label (five out of five attempts); severity: MEDIUM; priority: P2
- d) Title: “Error in label module”; description: Name of the affected component and technical log excerpt without reproduction steps or expected result; severity: HIGH; priority: P1

Select ONE option.

Question 40 (2 Points)

You manage testing of a large integration project involving several supplier teams. Defect reports are used by internal developers and two external suppliers. One supplier points out that reports lack technical information needed to reproduce the reported failures and analyze their causes.

You review a few sample reports and notice that while the severity and current status are consistently included, other key information appears to be missing. In addition, the defect reporting tool already enforces recording the affected component/subsystem and automatically maintains links to related defects/known issues.

Which TWO additions to the defect reports would BEST support suppliers in reproducing the reported failures and technically analyzing their causes?

- a) The specific test item and its version number, together with the test environment and its relevant settings under which the failure was observed
- b) A business impact summary describing the user or financial effect of the defect
- c) The software component where the defect was detected
- d) A reference to related defects or known issues in the same area of the system
- e) A step-by-step account of how the defect was triggered, including expected and actual outcomes

Select TWO options.

Question 41 (1 Point)

You are reviewing defect data from previous projects to identify where improvements could reduce the cost of late defect detection. The development process includes code reviews, unit testing, integration testing, and system testing.

Which of the following measures would be the MOST useful for identifying opportunities to improve early defect detection?

- a) The average number of open defects per release
- b) The average severity of defects found in production
- c) The proportion of defects broken down by the respective phases in which they were introduced, detected, and removed
- d) The percentage of reopened defects after initial resolution

Select ONE option.

Section: Test Team

Question 42 (1 Point)

You are preparing a job description for a new tester role and want to highlight a required skill that demonstrates methodological competence according to the syllabus definitions.

Which of the following skills would BEST demonstrate methodological competence?

- a) Ability to evaluate test coverage based on traceability between requirements and tests.
- b) Ability to resolve conflicts between developers and testers effectively.
- c) Ability to independently analyze complex problems and develop solutions.
- d) Ability to update automated test scripts based on system changes.

Select ONE option.

Question 43 (3 Points)

You are managing the testing activities for a railway control system that must comply with international safety standards (e.g., EN 50128 – a functional-safety standard tailored for the particular demands of the rail industry). The project uses a hybrid development model: component development is handled by Agile teams, while system integration testing, system testing and acceptance testing follow a V-model process.

The project has just entered the system integration test phase. A key team member has left. Their responsibilities included:

- Designing and documenting risk-based system integration tests from safety and interface requirements
- Collaborating with Agile teams to verify integration points and interface behavior
- Maintaining traceability of test artifacts for regulatory audit purposes

Note: Cross-team integration coordination and alignment with the Agile teams' sprint planning is already handled by a dedicated Integration Lead (Scrum-of-Scrums). The Integration Lead also ensures that interface behavior is aligned with the Agile teams' user stories and acceptance criteria. You must urgently fill this role with someone able to take over these responsibilities with minimal onboarding.

Which TWO skills or qualifications are MOST important for the replacement?

- a) Hands-on experience with test automation frameworks used in Agile environments and test data generation
- b) Understanding of safety-critical standards and the ability to produce formal, audit-compliant documentation
- c) Experience collaborating with Agile teams using user stories and acceptance criteria to align on integration behavior
- d) Experience in applying risk-based testing and designing tests based on black-box techniques
- e) Ability to conduct integration testing using interface simulators and experience with cross-team coordination

Select TWO options.

Question 44 (3 Points)

You are the Test Manager for a multi-agency government e-services platform integrating services such as taxation, digital identity, and public health access. The development follows a hybrid model: Agile for service evolution and UI development, and sequential for legal compliance modules. The project is characterized by:

- Legal and regulatory constraints requiring auditability and traceability
- Frequent requirement changes and integration of external APIs
- A cross-functional team distributed across time zones
- Strong security and privacy requirements due to sensitive personal data

You are selecting new testers to join the team. Which combination of skills BEST matches the role requirements in this project context?

- a) Competence in automating UI, API, and regression tests, risk-based test analysis, compliance-focused documentation with bidirectional traceability, knowledge of security and privacy testing, effective remote collaboration, and adaptability to frequent changes and coordination of Agile and sequential subprojects.
- b) Risk-based test analysis, compliance-focused documentation with bidirectional traceability, knowledge of security and privacy testing, effective remote collaboration, and communication between Agile and sequential subprojects; automation competence is limited to maintaining existing scripts and manually testing external API integrations.
- c) Competence in automating UI, API, and regression tests, risk-based test analysis, knowledge of security and privacy testing, effective remote collaboration, and adaptability to Agile and sequential subprojects; regulatory documentation and traceability are covered only by summary evidence at release level.
- d) Competence in automating UI, API, and regression tests, compliance-focused documentation with bidirectional traceability, knowledge of security and privacy testing, and effective remote communication; coordination between subprojects follows fixed handovers and preapproved test plans, with changes incorporated exclusively through formal change procedures.

Select ONE option.

Question 45 (1 Point)

As a Test manager, you want to assess the strengths of a new experienced team member. You assign the team member a simplified task: drafting a high-level outline of a possible test strategy for a new project and then discussing the draft with senior testers to collect feedback.

Which TWO competence areas are PRIMARILY assessed through this demonstration task described in the syllabus?

- a) Professional competence through handling feedback and personal competence through the technical quality of the test strategy.
- b) Social competence based on collaboration skills and personal competence based on technical expertise.
- c) Professional competence based on collaboration skills and methodological competence based on creativity in writing.
- d) Professional competence based on the test strategy content and methodological competence based on structuring the strategy.

Select ONE option.

Question 46 (1 Point)

You are a Test manager developing a personal development plan for your team members. You want to ensure that the approaches you choose to develop your test team members' skills are aligned with their learning needs.

Which of the following statements about development approaches is CORRECT?

- a) Self-study is the suitable approach for developing interpersonal and communication skills.
- b) Peer learning is mainly about receiving structured coaching from a more experienced colleague.
- c) Training sessions are primarily useful for delivering professional and methodological knowledge.
- d) Coaching is primarily about delivering predefined knowledge to multiple participants simultaneously.

Select ONE option.

Question 47 (1 Point)

As the Test Manager, you observe the forming stage of a newly assembled test team. Members have only recently joined and need orientation regarding the work environment, tasks, and collaboration.

Which leadership skill is MOST important in this stage?

- a) The ability to resolve conflicts between team members.
- b) Actively supporting team members as they join the team and orient themselves.
- c) Delegating tasks to give team members personal responsibility.
- d) Ensuring adherence to already agreed values and rules through disciplined and goal-oriented leadership.

Select ONE option.

Section: Stakeholder Relationships

Question 48 (1 Point)

Consider these categories of quality costs:

1. Defect prevention costs
2. Appraisal costs
3. Internal failure costs
4. External failure costs

These are examples of quality-related activities in software projects:

- A. Training developers in secure and maintainable coding practices
- B. Executing test cases during system testing
- C. Effort for analyzing, supporting, and fixing defects reported by end users after release
- D. Time spent analyzing and fixing defects found during integration testing

Which of the following CORRECTLY matches the categories of quality costs with their examples?

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

Select ONE option.

Question 49 (2 Points)

You are the Test Manager for a mature food delivery web application that allows users to order meals, rate restaurants, and process payments. The business relies heavily on maintaining user trust and rapid service availability. You are evaluating the value of testing in financial terms.

You have gathered the following cost of quality per defect:

- Appraisal cost: \$200
- Internal failure cost: \$300
- External failure cost: \$4,800

Assume these are incremental costs per defect: if a defect is found before release, the cost is Appraisal + Internal Failure; if it escapes to production, the cost is External Failure (instead of Appraisal + Internal Failure).

Based on this information, which of the following statements is the MOST accurate?

- a) The cost of quality per defect is \$5,300 and represents the total cost of testing.
- b) The average savings per defect from testing is \$4,300 by preventing issues from reaching production.
- c) Since internal failure already incurs significant costs, minimizing appraisal activities would reduce overall quality costs.
- d) Since all testing activities incur cost, identifying fewer defects results in better cost-effectiveness.

Select ONE option.

Question 50 (2 Points)

You are the Test Manager of a financial software project. The following average costs per defect have been gathered from historical data:

- Defect prevention cost per defect: €200
- Appraisal cost per defect: €400
- Internal failure cost per defect: €350
- External failure cost per defect: €3,000

Assumptions:

- The costs above are incremental (i.e., they represent the additional average cost incurred depending on where the defect is handled).
- “Defect prevention cost per defect” is the average cost per defect avoided through preventive measures, such as training, mandatory development guidelines, or preventive process improvements.
- If a defect is detected before release, the cost is Appraisal + Internal Failure.
- If a defect escapes to production, the cost is External Failure (instead of Appraisal + Internal Failure).

During a recent release, 100 defects were logged in total. Of these, 70 were caught during testing before release, while 30 escaped to production.

Which TWO conclusions are MOST valid from a cost-benefit perspective of testing?

- a) Preventing a defect through prevention measures costs an average of €200 and is therefore cheaper than detecting and fixing it before release for €750 or after release for €3,000.
- b) The internal failure costs outweigh prevention and appraisal costs, so reducing testing would be more cost-effective.
- c) For the 70 defects found before release, appraisal activities saved an average of €2,250 per defect, totaling €157,500, compared with detection in production.
- d) Because internal failures are less expensive than external ones, focusing primarily on reducing internal failure costs is more beneficial than investing in prevention or appraisal.
- e) Since most defects were found before release, testing provides no measurable financial benefit in this project.

Select TWO options.

Appendix (Demo of other existing item types)

Question #7A [Source: CTAL-TM 3.0; Sample Exam Paper; SET A]

You are joining a long-running project as a Test Manager. The team releases new features and bug fixes for a web shop on a daily basis. Since your predecessor has already left the company, you need to decide which test management priorities are BEST suited in the SHORT TERM to continue ensuring stakeholder satisfaction and stable, continuous delivery.

Which of the following statements are TRUE?

- i. Test monitoring should continuously track test execution progress and defect status so that test control can adjust test priorities based on risks and prioritized requirements.
 - ii. Given short iteration cycles, regression test automation should be expanded to help maintain the daily delivery cadence.
 - iii. Test planning should primarily focus on running post-release retrospectives to define long-term risk-reduction strategies, even if this delays measures that stabilize daily releases.
 - iv. For effective test control, it is necessary to clarify promptly what a quality gate means in the life cycle, who makes the decision, and what the consequences are for testing (for example, entry and exit criteria).
 - v. When teams work in different locations, coordination and communication infrastructure are outside the scope of test planning and should be handled informally by the team.
-
- a) i, ii, and iv
 - b) i and ii
 - c) i and iv
 - d) ii and iv

Select ONE answer.

Question #6A [Source: CTAL-TM 3.0; Sample Exam Paper; SET A]

A new Test Manager joins an organization and needs to identify which **software development life cycle** is being used in each of four projects.

Match each **project snapshot** (1–4) with the correct **life cycle** (A–D).

Project snapshots (1–4):

1. Testing starts only after requirements are completed and signed off. The project proceeds through distinct phases (for example, requirements → design → implementation → testing) with a single major release at the end.
2. Work is organized in fixed 3-week iterations. Testing is performed within each iteration, and the team delivers an increment at the end of each iteration.
3. An initial requirements baseline is completed before testing begins. After that, development continues in 3-week iterations, supported by automation to meet time frames, and each iteration's planned work is completed before moving to the next iteration.
4. Changes are integrated frequently and released to production very often (for example, daily). Automated pipelines and operational monitoring support continuous delivery and rapid feedback.

Life cycles (A–D):

- A. Sequential
- B. Iterative
- C. Hybrid
- D. DevOps

Drag to pair each individual item from the first list with an item from the second list. No item may be left unpaired or paired with more than one other item.

Question #36A (1 Point) [Source: CTAL-TM 3.0; Sample Exam Paper; SET A]

Which of the following represents the **correct order** of defect report states from initial logging to a **terminal state**?

Assume that **IN PROGRESS** represents one or more intermediate states where developers or other stakeholders are addressing the defect.

States (unordered):

- RESOLVED
- OPEN
- CLOSED
- IN PROGRESS

Drag to reorder the states into the correct sequence, starting with the initial state and ending with a terminal state. Use each state exactly once.

Question #27A [Source: CTAL-TM 3.0; Sample Exam Paper; SET A]

As a Test manager, you are required to report on different metrics during various test activities.

Consider the following metrics (on the left) and test activities (on the right):

Which of the following mappings of metrics to test activities is most appropriate?

Metrics

1. Planned test automation degree

2. Total number of resolved defects
vs. total number of found defects

3. Percentage of actual automated
vs. planned automated test cases

Test activities

A) Test planning

B) Test monitoring and test control

C) Test completion

Assign each metric (item) to a test activity (group). No group can be left empty and no item can be assigned to more than one group.