

Sample Exam – Questions

Sample Exam set B
Version 1.0

ISTQB® Test Management Syllabus Advanced Level

Compatible with Syllabus version 3.0

International Software Testing Qualifications Board



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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
- Additional questions, including for each question [does not apply to all sample exams]:
 - Any scenario needed by the question stem.
 - Point value.
 - Response (answer) option set
- *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 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 efforts on functional test case execution, deferring reporting until the end of the sprint for better aggregation.

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, tool support staff, and support engineers
- c) Product owners, project managers, and business users
- d) Component testers, developers, and DevOps engineers

Select ONE option.

Question 4 (1 Point)

You are the Test Manager leading the selection of a new automated test execution tool for a mission-critical healthcare application.

The tool must comply with strict regulatory and performance standards and will be used during system testing and integration testing. You have mapped your stakeholders using a power-interest matrix.

Which stakeholder group is MOST likely to have high influence on the final tool decision and high involvement in implementing the tool?

- a) Software Developers
- b) Quality Assurance Auditors
- c) Test Leads/QA Managers
- d) Marketing and Sales Teams

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.

As the Test Manager, which TWO of the following actions should you focus on to determine how 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 rely on developers to manage test monitoring activities.

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 emphasizing continuous risk identification and control for safety and cybersecurity, and align regression testing and test progress tracking with risk mitigation priorities throughout the maintenance phase.
- 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)

You are the Test Manager and you organize a structured, facilitated session dedicated specifically to identifying product quality risks, where several stakeholders — including system designers and user representatives — work together at the same time. All participants contribute collaboratively during the meeting.

Which risk identification technique are you using to facilitate a dedicated multi-stakeholder session for product risk identification?

- 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 exposure = 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 exposures, 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 testing with timing checks for notifications. Mitigate Risk B with robustness and data-integrity testing on the national database interface. Accept Risk C as residual due to its lower business impact. 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 Authentication	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 with senior testers due to its high security, performance, and functionality risks. Apply security-focused testing to User Authentication, performance testing to Shopping Cart, and lighter regression to Recommendations, with effort scaled according to each module's 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 formal documentation and broad stakeholder involvement, while lightweight approaches use quick stakeholder input with minimal documentation overhead.
- 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.

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.

You must recommend the most appropriate test approach aligned with the organizational test strategy and regulatory compliance.

Which of the following test approaches would be the MOST appropriate in this situation?

- a) Testing is based on detailed requirements, supported by early static analysis, formal reviews, white-box and black-box testing at all test levels, and traceability matrices linking requirements to test cases and defects. Defect taxonomies are used to improve root cause analysis, and test automation is applied to regression and requirements-based tests.
- b) Testing emphasizes full traceability across all test levels, supported by reviews of safety-critical artifacts. Automated regression testing is implemented, and defect root cause analysis is performed. Static analysis is performed after the integration phase.
- c) Testing relies on structured test specifications and interface coverage at integration. High-level requirements are linked to test results, and partial static analysis is applied. Defect classification is maintained, but traceability is not consistently maintained across all test levels.
- d) Testing is guided by risk-based prioritization of safety functions. Traceability and formal reviews are performed at the system level, while component and integration levels apply lighter peer reviews. Automation supports regression, and static analysis is applied to high-priority items.

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: 95% defect detection efficiency, zero security breaches
- 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?

- a) The team will use four test levels: unit testing, integration testing, system testing and acceptance testing. Developers and testers collaborate closely for unit and integration testing, using white-box techniques with targeted automation. The five testers handle system testing continuously within sprints, integrated with iterative story testing. Risk-based testing is used at all levels to prioritize test cases based on data privacy and security risks. Acceptance testing includes stakeholder-led validation activities required for FDA approval, supported by documented evidence (audit trail) and clear entry/exit criteria.
- b) The team defines four explicit test levels: unit testing, integration testing, system testing, and acceptance testing. Testing at all levels predominantly employs checklist-based methods to ensure regulatory requirements for data privacy and security are addressed. Test cases are manually executed, focusing primarily on verifying compliance through documented checklists. Acceptance testing is performed exclusively through reviews conducted by stakeholders at the end of each sprint.
- c) Given the Agile SDLC model, test levels are not explicitly mentioned. Developers automate unit tests, while the five testers perform exploratory testing guided by test charters to ensure coverage across all targeted mobile devices and operating systems. Additionally, usability testing is conducted using checklist-based methods.
- d) Two test levels are established. The first combines unit and integration testing, with testers creating test cases based on functional requirements using techniques such as equivalence partitioning, boundary value analysis, decision tables, and state transition testing. Developers then automate these test cases for use in unit and integration testing. In system testing, testers employ exploratory testing for each feature marked as “done” by developers.

Select ONE option.

Question 17 (2 Points)

You are responsible for defining test objectives for a mobile banking application. The team has been given the following objective from management: “Ensure the application is secure and performs well.”

Which of the following modifications would be MOST appropriate according to the S.M.A.R.T. criteria, considering the complexity and available resources?

- a) The mobile banking app should have zero security vulnerabilities and a maximum response time of 1 second under normal load at release.
- b) By the end of system testing, no critical security flaws should remain open, and the app must handle 100 transactions per second with responses under 2 seconds.
- c) Our application should process transactions 20% faster than competitor apps while also being more secure
- d) The development team must ensure security and performance meet at least three recognized industry benchmarks before launch.

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.

Your team must define a test objective that complies with the S.M.A.R.T. methodology to ensure it can be tracked and evaluated during the test process.

Which of the following test objectives BEST demonstrates proper application of the S.M.A.R.T. methodology for this mobile app project?

- a) Verify that the application’s response time for loading audio lessons is under 2 seconds on at least 95% of tested mobile devices by the end of the system test phase.
- b) Improve the user experience by reducing onboarding friction and defining usability enhancements, without specifying measurable criteria or timelines.
- c) Validate cultural and linguistic appropriateness of content through collaboration with native speakers across multiple countries in the EU.
- d) Ensure usability improvements increase the completion rate of audio lessons, but without defining device coverage, measurement methods, or clear time constraints.

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 project in the telecom domain. The test team wants to implement lightweight improvements to areas such as defect handling, communication, and reporting. There is no mandate for organization-wide transformation, and management is focused on short-term gains at the project level.

Which of the following models or approaches would be LEAST appropriate for this context?

- a) TMMi – if used as a full staged maturity assessment and broad improvement program without substantial tailoring, because this would be overkill for short-term, project-level improvements.
- b) TPI Next – because it supports incremental improvements by focusing on selected key areas that are relevant to the project's specific needs.
- c) Context-driven improvement using selected Agile testing practices and metrics – because it enables lightweight, project-level improvements tailored to the team's immediate needs without requiring a broader organizational transformation.
- d) Applying Kanban principles – because it helps the team visualize test progress and improve workflow incrementally in a practical way that fits short-term, project-level improvement goals.

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 number of clients, and your team performed a combination of risk-based testing and reactive testing focused on 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 of the following activities are the MOST relevant to include in the 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 root causes for inconsistencies, and prioritize corrective actions with assigned responsibilities.
- 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 a Test manager for a company specializing in autonomous vehicle software. Your company develops both embedded software for vehicle control and cloud-based applications for fleet management. The embedded software team follows a strict V-model development process with extensive regulatory compliance requirements, while the cloud team operates in Agile with frequent deployments.

Currently, your test teams rely on a mix of manual and automated testing using different tools across both teams. However, due to increasing regulatory requirements for automotive safety, your company is considering adopting a new test management tool that can integrate test planning, execution, and reporting across both teams.

A commercial test management tool has been proposed because it meets requirements of an international standard focusing on the safety of automotive electrical and electronic systems. The tool also includes built-in support for safety-critical testing. However, some team members advocate for an open-source solution that offers greater adaptability but does not have formal regulatory certification.

As a Test manager, you are responsible for analyzing the situation and proposing a plan for tool selection, considering risks, costs, and benefits.

In the final selection meeting, stakeholders have already confirmed that both shortlisted tools can integrate with the existing toolchain and support both Agile and V-model workflows, and that the organization will not change its test processes to fit the tool. The vendor roadmap and future feature promises must not be considered; only verified current capabilities and total cost of ownership may be used for the final decision.

Which of the following key factors should guide the final tool selection decision?

- a) How well the tool integrates with both Agile and V-model testing approaches
- b) Whether the tool must support both regulatory compliance and Agile flexibility
- c) The recurring and non-recurring cost of ownership, including licensing, maintenance, and training
- d) The ability of the organization to adapt its test processes to a new tool
- e) The vendor's development roadmap, including upcoming improvements to risk management and traceability features

Select TWO options.

Question 25 (3 Points)

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

Stakeholder perspectives:

- **Senior management:** Expects a positive ROI from the investment in a new test automation tool within two years.
- **Compliance team:** Requires full traceability (requirements ↔ tests ↔ defects/results) and strong support for security testing.
- **Agile team:** Has limited capacity for complex onboarding and emphasizes usability.
- **Operations team:** Wants to minimize tool maintenance effort and license complexity.

You are evaluating three tools. All include recurring annual maintenance costs (20% of purchase cost). For ROI estimation, assume manual effort reduction applies to the current annual manual regression cost of \$100,000 (other benefits may be considered qualitatively).

Tool	Purchase Cost	Supported Test Types	Traceability & Compliance Support	Usability & Maintainability	Manual Effort Reduction	Test Cycle Reduction	Test Coverage Increase
X	\$12,000	Functional only	Partial traceability; no security testing support	High	25%	10%	10%
Y	\$18,000	Functional + Performance	Full traceability; limited security testing support	Medium	35%	20%	20%
Z	\$22,000	Functional + Performance + Security	Full traceability; strong security testing support	Low	40%	30%	30%

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

- Tool X** – Lowest cost and easiest onboarding with positive ROI potential. However, it does not meet the mandatory compliance requirements (full traceability and strong security testing support), so it is not a suitable final choice.
- Tool Y** – balanced cost/benefits and manageable usability with positive ROI potential. It provides full traceability, but its limited security testing support means it still does not meet the compliance must-haves.
- Tool Z** – Highest initial cost and lowest usability. However, it meets the compliance must-haves (full traceability and strong security testing support) and provides the greatest projected efficiency gains and manual effort reduction, supporting management’s two-year ROI expectation despite onboarding challenges.
- Tool Y or Z** – Either tool could work equally well depending only on team preference, as ROI differences are negligible and compliance needs are not decisive.

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, requirement coverage, and test effort (actual vs planned resource hours).
- d) Metrics related to defects, test progress, coverage, and residual risks in not-yet-tested areas.

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 various project-level factors that may affect the accuracy of your estimation.

Which of the following factors should NOT be considered as a valid input for test effort estimation?

- a) Test approach and degree of test automation planned.
- b) Scope and technical complexity of the product to be tested.
- c) The number of improvement actions identified in the retrospective.
- d) Experience level and domain knowledge of the assigned testers.

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) Plan for full end-to-end regression coverage using detailed test scripts and full documentation.
- b) Use historical data from previous sprints to calculate average effort per identified risk item.
- c) Assume that exploratory testing is sufficient and plan minimal preparation or estimation activities.
- d) Define test charters and estimate the number and length of time-boxed exploratory test sessions for the iteration.
- e) Focus estimation only on newly developed features, assuming regression tests remain stable.

Select TWO options.

Question 33 (3 Points)

You are the Test Manager of a complex, business-critical software project for a government client. The project follows a sequential development model, with a fixed scope and strict contractual deadlines. A detailed requirements specification and early architectural documentation have already been approved.

Some historical data is available from past regulatory projects, but the current project team is not yet fully assigned, and direct expert input is limited. The project sponsor requires an early test effort estimate to support planning and budgeting.

Which of the following estimation approaches would be the MOST appropriate in this context?

- a) Use three-point estimation with optimistic, pessimistic, and most likely values derived from architectural walkthroughs and early team input.
- b) Use Planning Poker with the product owner and senior testers to derive story point-based effort estimates per feature.
- c) Use estimation based on size/complexity of the test basis, applying historical averages from similar projects for key effort areas.
- d) Use the Wideband Delphi method with experienced engineers to refine expert-based estimates through structured team consensus

Select ONE option.

Section: Defect Management

Question 34 (2 Points)

You are the Test Manager in a company developing a medical diagnostic application. During the testing phase, including automated component tests and system-level testing, a tester detects an anomaly while executing a test case. According to the defect management process used in your organization, each observed anomaly must be evaluated before creating a defect report.

In your organization, a defect report is created for any confirmed anomaly (including issues in testware, documentation, configuration, or test basis) and retest failures are recorded by updating/re-opening the existing defect report.

The only exception is for automated component tests used in a test-driven development approach, where test cases may be intentionally executed before the corresponding functionality is implemented and failures are expected and tracked within the development task rather than via defect reports.

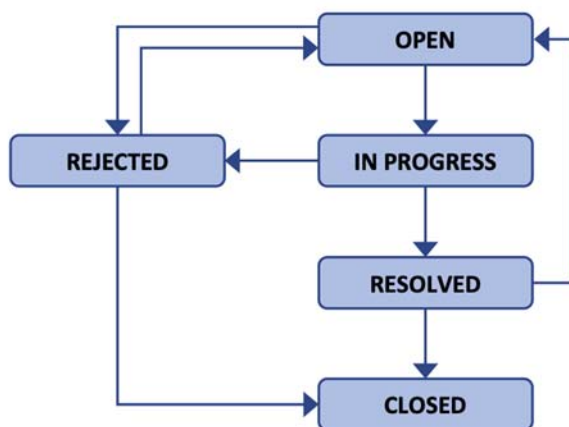
In which of the following situations would it be MOST appropriate to NOT create or update a defect report?

- a) The failure was caused by an incorrect configuration of the test environment, where the setup instructions in the test documentation were incomplete or unclear.
- b) The failure was triggered by a test case that was later found to be missing from the approved test basis.
- c) The failure occurred during automated component testing, before development of the tested functionality was finalized.
- d) The defect report had previously been marked as RESOLVED, but confirmation testing showed that the failure still occurs, so the existing defect report should be updated or re-opened.

Select ONE option.

Question 35 (2 Points)

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



In this workflow:

- OPEN – defect reported, not yet addressed
- IN PROGRESS – work is ongoing
- RESOLVED – defect fixed by development, not yet verified
- CLOSED – defect verified as fixed or finalized
- REJECTED – defect considered invalid

To improve visibility and control, you propose adding two new states:

- RE-OPENED – For issues that were RESOLVED but need further work
- DEFERRED – For defects postponed to a future release

The following rules were established for integration:

- Defects may only be DEFERRED before being fixed.
- DEFERRED defects may later be reconsidered as OPEN.
- RE-OPENED defects return to active fixing.

Which of the following sets of transitions would BEST integrate these new states into the existing workflow?

- | | |
|--|--|
| a) OPEN → DEFERRED,
CLOSED → RE-OPENED | DEFERRED → REJECTED
RE-OPENED → IN PROGRESS |
| b) OPEN → DEFERRED,
RESOLVED → RE-OPENED, | DEFERRED → OPEN
RE-OPENED → IN PROGRESS |
| c) OPEN → DEFERRED,
CLOSED → RE-OPENED, | DEFERRED → CLOSED
RE-OPENED → CLOSED |
| d) OPEN → DEFERRED,
RE-OPENED → OPEN, | DEFERRED → CLOSED
CLOSED → RE-OPENED |

Select ONE option.

Question 36 (1 Point)

You are managing defect workflows for a major insurance software integration project. Defect tracking must follow strict escalation and reporting rules agreed with external regulators.

Which of the following sequences BEST represents a valid, complete defect lifecycle leading to a terminal state, according to standard defect management practices (simple defect workflow)?

- a) OPEN → IN PROGRESS → REJECTED → RE-OPENED
- b) OPEN → IN PROGRESS → RESOLVED → CLOSED
- c) IN PROGRESS → OPEN → RESOLVED → CLOSED
- d) OPEN → RESOLVED → RE-OPENED → DEFERRED

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 that ensures consistency in defect classification and traceability across all 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. Your team uses a commercial defect management tool with a standardized reporting form. You are reviewing the fields currently marked as mandatory in the defect report template. Note: Severity is already mandatory in the template.

Which of the following data items is NOT mandatory for managing defect reports in most environments?

- a) A brief summary describing the defect condition
- b) A detailed defect description, including steps to reproduce and observed behavior
- c) The subsystem or component in which the defect lies
- d) The priority indicating how soon the defect should be addressed

Select ONE option.

Question 40 (2 Points)

You are managing testing for a large-scale integration project involving multiple vendor teams. Your defect reports are being used by both your internal developers and two external suppliers. Recently, one of the suppliers has raised concerns that your defect reports lack sufficient detail for effective triage and analysis on their side.

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 of the following data elements would most likely improve the completeness and usefulness of your defect reports for all stakeholders?

- a) The system configuration and environment settings in which the defect 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 defect detection rate at each test level
- 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 within your organization. You want to highlight a skill that reflects methodological competence according to industry 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 of the following skills and 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) Test automation and scripting skills, strong remote collaboration/communication, compliance-focused documentation and traceability, security testing knowledge, and adaptability to frequent change.
- b) Compliance-focused documentation and traceability, risk-based test analysis skills, stakeholder communication across Agile and sequential teams, performance testing expertise, and basic scripting for test utilities.
- c) Advanced test design technique expertise, DevOps pipeline knowledge, performance engineering experience, customer feedback management skills, and UI accessibility testing knowledge.
- d) Sequential process and reporting expertise, traditional estimation skills, legacy system maintenance experience, physical lab test setup skills, and change control administration skills.

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 areas of competence can BEST be assessed through this task?

- a) Professional competence based on test strategy quality and personal competence based on feedback handling.
- 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 a Test manager, you are observing the early stages of team formation in a test team. The team lacks established routines for communication and task coordination, and responsibilities are not yet clearly distributed.

Which of the following leadership skills is MOST important in this stage to support the team's development?

- a) Establishing technical coaching processes to improve testing knowledge.
- b) Helping the team agree on clear working rules and responsibilities.
- c) Encouraging independence so the team can become self-organizing quickly.
- d) Delegating tasks immediately to speed up progress and reduce the need for discussions.

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. 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” represents the average prevention cost per defect avoided through prevention activities (e.g., reviews, static analysis, training).
- 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.

Using the cost-of-quality categories, which of the following conclusions are the MOST valid from a cost-benefit perspective of testing?

- a) Investing more in prevention would reduce overall costs, since preventing defects is cheaper than fixing them internally or externally.
- b) The internal failure costs outweigh prevention and appraisal costs, so reducing testing would be more cost-effective.
- c) The appraisal activities are justified, as they helped avoid external failure costs for the 70 defects detected before release
- 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 Points) [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.