

**Sample Exam
ISTQB® Expert Level
Test Management**

2011

Version 1.0.1

International Software Testing Qualifications Board



Copyright Notice

Copyright Notice © International Software Testing Qualifications Board (hereinafter called ISTQB®).

ISTQB® is a registered trademark of the International Software Testing Qualifications Board.

All rights reserved.

The authors hereby transfer the copyright to the ISTQB®. The authors (as current copyright holders) and ISTQB® (as the future copyright holder) have agreed to the following conditions of use:

Extracts, for non-commercial use, from this document may be copied if the source is acknowledged.

Any Accredited Training Provider may use this sample exam in their training course if the authors and the ISTQB® are acknowledged as the source and copyright owners of the sample exam and provided that any advertisement of such a training course is done only after official Accreditation of the training materials has been received from an ISTQB®-recognized Member Board.

Any individual or group of individuals may use this sample exam in articles and books, if the authors and the ISTQB® are acknowledged as the source and copyright owners of the sample exam.

Any other use of this sample exam is prohibited without first obtaining the approval in writing of the ISTQB®.

Any ISTQB®-recognized Member Board may translate this sample exam provided they reproduce the abovementioned Copyright Notice in the translated version of the sample exam.

Document Responsibility

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

Acknowledgements

This document was produced by a core team from the ISTQB®: Expect Level Working Group

The core team thanks the Exam Working Group review team, the Syllabus Working Group and the National Boards for their suggestions and input.

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

ISTQB® Certified Tester Expert Level

Introduction

This is a Practice Exam intended to help the candidates prepare for the real examination. It provides a set of questions whose format is similar to the ISTQB Certified Tester Expert Level Test Manager real exam.

It is strictly forbidden to use these exam questions in a real exam.

The rules for the use of this Practice Exam are as follows:

- 1) Any individual or training company may use this Practice Exam in a training course if ISTQB is acknowledged as the source and copyright owner of the Practice Exam.
- 2) Any individual or group of individuals may use this Practice Exam as the basis for articles, books, or other derivative writings if ISTQB is acknowledged as the source and copyright owner of the Practice Exam.
- 3) Any ISTQB-recognized National Board may translate this Practice Exam and make it publicly available if ISTQB is acknowledged as the source and copyright owner of the practice exam.

The content of all of your responses to essay questions will be marked in terms of the accuracy, completeness, and relevance of the ideas expressed. The form of your answer will be evaluated in terms of clarity, organization, correct mechanics (spelling, punctuation, grammar, capitalization), and legibility. If you need additional space to write your answer, please continue on a blank sheet of paper (a separate sheet for each question) and write the question number in the top left corner of the sheet.

Scenario 1 – Test Project Evaluation and Reporting

Assume you have just been promoted to Senior Test Manager, responsible for testing your company's most strategic project, a Personal Video Recorder (PVR) capable of recording and playing back 3D TV.

The development model for this project is the V-model.

The project is due to launch in six months, and different levels of testing are already being performed in parallel.

There are six testing teams assigned to test different parts of this project. Four teams are dedicated to testing different components of the PVR and performing integration testing between components. The managers of these teams report to you as part of a matrix management organization. For the other two teams, one team is responsible for system testing and the other team is responsible for user acceptance testing. The managers of these two teams report to you directly.

Senior management holds a weekly strategy meeting and you are expected to prepare a 15-minute update on the test status of this project. You have been given six weeks to prepare for the first update.

During your first day on the job, you meet with the six Test Managers. You immediately notice that there is no standardized reporting from the test teams. Each team is using a different set of metrics to determine quality and exit criteria for their part of the project and for analyzing efficiency and effectiveness of their test process. Next, you meet with the managers of the four component development groups, the Project Manager and the Vice President of Research & Development, in order to understand what information they need from the test teams in order to make the correct decisions about the project.

By the end of the first week you realize that you need to define a set of useful metrics to be used throughout the test project, create test reports to be used by the test teams, and create a high-level test report and dashboard for reporting to project management and senior management.

1. Scenario 1 “Test Project Evaluation and Reporting” provides the context for this question. [K3]

In preparation for creating a standardized test report, you review the data that is being gathered. The component test teams are gathering large amounts of data and spending significant time analyzing this data.

Your first decision is for the component test teams to focus on the most effective indicators for tracking their part of the test project.

Select three of the following options that will be the most effective for the component Test Managers to use to control their part of the test project.

- a) **A trend of the percentage of component requirements for which test cases have been created**
- b) **The number of user requirements defects currently unresolved**
- c) **A graph of the number of defects found by each component test team member**
- d) **A trend of the ratio between open and closed defects, per component**
- e) **The ratio of the number of defects found during component testing and those that escaped component testing and were found by system testing**
- f) **A trend of the percentage of integration test cases that have passed**
- g) **A trend of the end-to-end tests that have passed**

2. Scenario 1 “Test Project Evaluation and Reporting” provides the context for this question. [K4]

Your next task as Test Manager is to decide which metrics and indicators should be measured and analyzed.

Consider the following indicators:

- i. The weekly rate at which actual versus planned test cases are being written
- ii. The amount of time per day that the test labs are inoperable when they are required for testing
- iii. Summary of unmitigated risks
- iv. Daily report of the re-opened defects
- v. Weekly defect discovery rate
- vi. Daily report of the number of newly opened show-stopper defects

Which one of the following statements correctly defines indicators that should be measured and analyzed for internal test reporting (i.e., reporting within the test organization)?

- a) **Indicators i, ii and v should be used.**
- b) **Indicators i, ii, iii and v should be used.**
- c) **All of these indicators should be used.**
- d) **Indicators i, ii, iv, v, and vi should be used.**

3. Scenario 1 “Test Project Evaluation and Reporting” provides the context for this question. [K4]

The development teams are considering moving to an Agile development process.

Consider the following:

- i. Percentage of builds that failed
- ii. The weekly rate at which actual versus planned automated regression test cases are being written
- iii. Average number of iterations run until automated test cases are obsolete
- iv. Trend of number of requirements changes
- v. Trend of length of time between defect detection and closure
- vi. Trend of number of open defects
- vii. Number of defects found during development

Which one of the following statements best summarizes the test reporting and control metrics that will be required if the teams move to an Agile process?

- a) **Metrics i, ii, iii, v and vi will be required.**
- b) **All of these metrics will be required.**
- c) **Metrics ii, iii, iv, v and vi will be required.**
- d) **Metrics i, iii, v, vi and vii will be required.**

4. Consider the following options: [K2]

- i. The Shewhart cycle enables the Test Manager to implement improvement across the complete test process in one effort
- ii. Using the PDCA (plan-do-check-action) cycle enables the Test Manager to check whether a process change improves the test process before implementing the change across the complete process
- iii. Fish-bone diagrams help the Test Manager determine the root causes of a problem by adding increasingly detailed causes and then improving the process by working on resolving the causes
- iv. Shewhart charts are used to show whether a process is under control or not by looking for unusual variations of indicators (e.g., a week with an unusually high number of new defects).
- v. Scatter diagrams are used to analyze root causes by plotting a graph of causes and effects

Which one of the following statements correctly identifies basic quality control techniques that a Test Manager must understand and be able to implement in order to improve the test process?

- a) **Options i, iii and iv are correct.**
- b) **Options ii, iii and iv are correct.**
- c) **All the options are correct.**
- d) **Options ii, iv and v are correct.**

5. Refer to Scenario 1 “Test Project Evaluation and Reporting” above. [K6]

1. Given the information in this scenario, describe a test status dashboard that would provide relevant information to the test team managers and would provide a test status across the complete testing project.
2. Given the information in this scenario, design a project dashboard that would provide relevant information to the following stakeholders:
 - a. Project manager
 - b. Development manager
 - c. Vice President of Research & Development (VP R&D)

Your answer should demonstrate an understanding of the different information needs, level of detail, and presentation media for each of the stakeholders.

6. Which one of the following is a characteristic normally associated with agile projects? [K2]

- a) **The testers are integrated into the project from the initiation of the project.**
- b) **The development specifications corresponding to the delivered functionality are as complete (i.e., they won't be added to later) as they would be in the V-model.**
- c) **The testers focus primarily on integration testing.**
- d) **When the schedule is compressed, testing planned for later iterations will be reduced or eliminated.**

7. You have just attended a risk assessment workshop. The following project [K4] risks have been identified:
- i. The development team will be using a set of libraries developed by a third party. That library may not be ready on time which may result in a delay in the start time of the coding.
 - ii. The configuration management team has decided to deploy a new set of tools.
 - iii. In the past, the beta customers have been reluctant to sign the data privacy agreement. The team is concerned that the new privacy agreement may be even more difficult for the customers to accept.
 - iv. A product that must be integrated with this product was initially planned to be ready during code development. It slipped from there to the integration level and has now slipped to the system test timeframe.
 - v. Insufficient trained test resources are available for this project
 - vi. A forced “vacation” has been declared which will result in all testing personnel taking off two weeks that was not planned in the schedule.

Regarding these risk items, which one of the following should the Test Manager do?

- a) **Adjust the existing test estimates for i. All others should be monitored by project management.**
- b) **Set triggers for i, iii, iv, v. Initiate control measures for vi. Monitor ii.**
- c) **Monitor i, ii, iii. Set a trigger date for iv. Initiate control measures for v. Adjust the existing test estimates for vi.**
- d) **Ignore i and ii as those are issues for the development team. Adjust existing test estimates for iv, v, vi. Transfer iii to the business team.**

8. Which of the following is true regarding the Test Manager's role in change management? (pick two) [K2]
- a) **The Test Manager should be involved in impact analysis even when the proposed change is not expected to affect the schedule.**
 - b) **The Test Manager should require documentation for any change proposed for an agile project.**
 - c) **The Test Manager should not attend impact analysis sessions as it will tend to discourage others from speaking and participating.**
 - d) **The Test Manager's role in change management is not restricted to the testing aspects of the project.**
 - e) **The Test Manager is responsible for the change management process.**
9. You have been asked to create a presentation regarding the role of quality management in your organization. Which of the following points should be included in your presentation to ensure that the audience understands the scope and importance of quality management? (pick three) [K4]
- a) **Quality management requires software quality assurance activities to be integrated into the project lifecycle.**
 - b) **Quality assurance and testing should not be merged into one team so that the focus of quality assurance is not confused with the scheduling aspects of testing.**
 - c) **Quality management practices must be assessed by an external audit team to ensure compliance.**
 - d) **Unit test documentation is a deliverable that is part of quality management.**
 - e) **Quality management excludes activities to deliver projects within budget.**
 - f) **The test plan is the basis for forming quality policies for an organization.**
 - g) **Tracking metrics is an important aspect of quality management.**

Scenario 2

You are a Test Manager who has just accepted a new assignment to manage a test project for the software that controls a new braking system for cars. The new braking system automatically causes the car's taillights to go into a flashing mode when the brakes are pressed suddenly and firmly. The test team started receiving code two months ago. The project is scheduled to be released to production in three more months. You have determined that the following decisions have already been made regarding this project:

1. The testing estimate was based on historical projects of similar size with the same group of developers and testers using a V-model methodology
2. The development team claims to be using an Agile methodology for this project
3. The estimated defect count at this point in the project was expected to be 500. It is currently 1000.
4. The test team is frustrated with the quality of the code. In each two week iteration they are getting new code and defect fixes, but one third of the defect fixes are breaking something else.
5. There is no information from the development team to the test team regarding what new features are included in each iteration.

The previous Test Manager was fired because of this project. You have been tasked with getting the project back on track and providing a new and achievable schedule.

10. Given the information in Scenario 2, provide the following: [K5 & K6]
1. You have been asked to provide a project status report to the management team including an explanation of why the expected and actual defect counts do not match. You will need to explain why the estimate was wrong and what is likely to occur with the defect count as the project continues.
 2. What should the Test Manager do to address the unexpected feature issue and the problem with the regressions?
 3. Given this information, what will you present to your management for your plan to get this project back on track?
11. Which one of the following is an efficiency metric for the test process? [K2]
- a) **The average number of days from defect discovery and reporting to the ultimate resolution of the defect report**
 - b) **The number of defects detected by testing divided by the sum of the number of defects detected by testing and the number of defects subsequently detected by users**
 - c) **The person hours of test design and implementation effort divided by the number of test basis elements covered by the tests cases produced**
 - d) **The total amount of effort expended on a project, including all activities in the fundamental test process**

12. You are working as the Director of Testing for a company that sells smart-phone applications for the mass consumer market. The CEO has stated the following quality related goals for the organization: [K4]
1. Minimize the number of customer complaints about the applications, especially on social media such as Twitter, Facebook, Google+, etc.
 2. Deliver new applications, and features for those applications, to customers as quickly as possible while still maintaining the highest level of customer satisfaction.

You are defining the test team's mission for the organization.

Select two of the options that belong in the test policy document as part of the mission for testing.

- a) **Detect defects that would result in customer dissatisfaction.**
- b) **Work with marketing and project management to plan test execution cycles that minimize quality risk within schedule constraints.**
- c) **Ensure that 100% of the stated requirements work correctly, without any failures.**
- d) **Design tests using sophisticated techniques for compatibility testing including pairwise testing.**
- e) **Ensure 100% defect detection effectiveness for all releases of applications and features.**
- f) **Remove all defects that would affect customer satisfaction.**
- g) **Provide the development teams with feedback on the quality of individual developers' work products.**

- 13.** Assume that you are working as a Test Manager on a new product development project for a start-up company. No written requirements or design specifications will be produced, but you have access to the major product and project stakeholders including some early adopters who have committed to purchase the product when it is complete. Assume that functionality, reliability, performance, and security are key quality attributes for this product. The project is following an Agile lifecycle model, which it has adapted for its own purposes. [K4]

Consider the following test strategies:

- i. Risk-based testing
- ii. Requirements-based testing
- iii. Reactive testing
- iv. Model-based testing
- v. Process-based testing
- vi. Functional regression test automation

Which one of the following statements best summarizes which test strategies can be used for this project?

- a) **Strategies i, iii, iv, v, and vi can be used.**
- b) **All of these strategies can be used.**
- c) **Strategies i, iv, and vi can be used.**
- d) **Strategies i, v, and vi can be used.**

Scenario 3

Assume you are working as the Director of Testing, in charge of the Enterprise Test Group. The Enterprise Test Group consists of four test teams. Four Test Managers report to you and each Test Manager leads a test team. For three of the test teams, each team is dedicated to testing a single product. These three test teams are responsible for the system test level and, if applicable, the system integration test level. Developers are responsible for unit test and component integration test. Business analysts are responsible for acceptance testing. Marketing is responsible for beta testing.

The fourth test team specializes in providing test automation frameworks (e.g., keyword-driven test harnesses) for the other three test teams, especially automated functional regression tests.

Consider the following extract from the company's test policy:

The Enterprise Test Group has the following objectives:

1. Detect defects, especially defects that would affect customer satisfaction.
2. Reduce risks to product quality to an acceptable level prior to release.
3. Build confidence that our products work properly and will satisfy our customers.
4. Provide information about product quality and the software process so we can make smart decisions about product release and process improvement.

The Enterprise Test Group shall measure the effectiveness and efficiency with which it achieves these objectives, shall work with executive management to set goals for effectiveness and efficiency, and shall receive annual bonuses based on meeting or exceeding those goals.

Assume that one of the test teams is working on a major new release for their product. Their product is an implanted medical device that monitors patient health via blood testing, blood pressure monitoring, and temperature monitoring. The new features include monitoring blood sugar levels and kidney function for diabetic patients. The project is following a V-model lifecycle. The planned time from project inception to release is six months.

14. Consider the following metrics:

[K4]

- i. The percentage of test cases for a given product which have been automated
- ii. The percentage of test effort saved for a given product due to test automation
- iii. The percentage of defects detected by a product test team during system testing
- iv. The number of people working on the test automation team
- v. The total number of years of experience for all the people working on the test automation team
- vi. The average cost to develop, execute, and maintain each automated test case

Remember that good metrics map to specific objectives and motivate correct behavior by the people involved in the process being measured. Which one of the following statements is true?

- a) **ii and iv are good metrics to show the efficiency with which the test automation team helps the Enterprise Test Group reduce risk.**
- b) **iv and v are good metrics of test automation team effectiveness within the Enterprise Test Group.**
- c) **iii is a good metric for the test automation team's effectiveness at producing defect-finding test harnesses.**
- d) **i is a good metric for the ability of the test automation team to supply useful information to Enterprise Test Group stakeholders.**

15. Refer to the scenario defined above.

[K6]

As the Test Director, you are reviewing a revised test strategy proposed by the Test Manager for the implanted medical device product. The Test Manager is proposing a blended testing strategy consisting of the following elements:

- Risk-based testing
- Requirements-based testing
- Automated regression and reliability testing
- Reactive testing

This question consists of two parts: First, describe the relationship between each element of the strategy and the objectives previously defined for the Enterprise Test Group. Second, evaluate the fitness for the project, suggesting any additional strategic elements necessary to achieve good long-term results.

One month after the release of the medical device mentioned in the scenario above, the Test Manager organized a project retrospective. The Test Manager, the Test Director, and six project and product stakeholders participated in the retrospective. In this retrospective, the following data, findings, and conclusions were reviewed:

- System testing located 129 defects, with 8 defects subsequently identified in acceptance testing, beta testing, and post-release. Therefore, the defect detection effectiveness was 94%.
- System testing located 45 high priority defects (i.e., those which would affect customer satisfaction), with 1 high priority defect subsequently identified in acceptance testing and 0 high priority defects identified in beta testing and post-release. Therefore, the defect detection effectiveness for defects with significant customer satisfaction impact was 98%.
- The high priority defect located in acceptance testing was a defect that would have affected product safety.
- Of the defects located by system testing, 9 were regression defects. No regression defects were detected after system testing (in acceptance testing, beta testing, and post-release).
- Of the defects located by system testing, 15 were reliability defects. No reliability defects were detected after system testing (in acceptance testing, beta testing, and post-release).
- System testing covered 100% of the identified risks to product quality, and all of these tests passed prior to system release.
- System testing covered 100% of the specified requirements, and all of these tests passed prior to system release.
- In the project release meeting, four stakeholders expressed very high confidence for release. One stakeholder expressed high confidence for

release. One stakeholder expressed medium confidence for release. In the retrospective meeting, all six stakeholders confirmed that they felt these levels of confidence were justified by release results.

- Immediately after product release, five stakeholders expressed very high satisfaction with the information provided by the test team, while one stakeholder expressed medium satisfaction with the information provided by the test team. In the retrospective meeting, all six stakeholders confirmed that they felt these levels of satisfaction were justified by release results.

This question consists of two parts: First, assess whether system testing can be seen as meeting realistic goals. Second, list areas for improvement of system testing, including the test policy and test strategy, on subsequent releases of this product.

Scenario 4

You have recently been employed as the Test Manager on a project developing a new HR application for an external client with an estimated 200 requirements. The Project Manager has already decided that a V-model lifecycle should be used, with testing being responsible for reviews of requirements and design specifications, and two phases of dynamic testing (integration/system and acceptance). The organization has developed similar applications in the past (following a similar approach) and has been able to provide the following (averaged) data for predicting/estimating this project:

Typical Values	Requirements	Design	Coding	Int/System Test	Accept. Test
Sizing	Half a page of specification per requirement	2 pages of specification per requirement	200 lines of code (LOC) per page of design specification	5 tests per requirement	2 tests per requirement
Defect density	4 per page	4 per page	10 per KLOC	N/A	N/A
Testing (retest /regression) costs	€2000 per page of specification	€2000 per page of specification	N/A	€200 per test (€1000 per retest/regression test per defect)	
Cost to fix (per defect)	€200	€200	€400	€500	€1000 (€5000 in production)
Defect Detection Rate	60%	60%	40%	60%	30%
Testing tools/ environment costs				€100,000	

16. The (new) Product Manager has seen the overall testing costs for some previous projects and is not convinced that testing provides a good return on investment. Using the information provided in the above scenario, your task is to produce a brief summary report for this Product Manager explaining the expected quantitative benefits of testing for this project. State any assumptions made and include any calculations in your answer. [K6]

17. Which one of the following is LEAST likely to be involved in the review of requirements specifications? [K2]
- a) **Business Analyst**
 - b) **Customer**
 - c) **User**
 - d) **Project Manager**
18. Which two of the following are LEAST likely to be examples of important relationships created by a Test Manager (TM)? [K3]
- a) **The Project TM builds a rapport with the Program TM to ensure that he is clear on his responsibilities and that the Program TM is kept informed of his team's progress.**
 - b) **The TM develops a friendship with the client Product Manager to persuade her to reduce the severity rating on incidents to allow test completion to be achieved.**
 - c) **The Project TM entrusts the developer from his organization who is embedded within the offshore team to build a relationship with the offshore TM.**
 - d) **The Security TM creates a bond with the security analyst who, although not a manager, is the person everyone goes to for technical information in the security area.**
 - e) **The Project TM forms exclusive relationships with the managers of the two test teams he manages, to prevent being overloaded by communication with individual team members.**
 - f) **The TM builds a relationship with the offshore test lead who is responsible for automating the regression tests for the next release.**

19. Which one of the following BEST matches the following scenarios with the [K3] most effective means of communication?
- i. Brainstorming to identify risks to the test project and item under test
 - ii. Informing offshore testers regarding updates to incident status
 - iii. Reporting the weekly test status to interested stakeholders
 - iv. Informing the Project Manager of the suspension of testing due to test environment failure
 - v. Communicating dates for the internal test conferences for the next year
 - vi. Reporting an incident to a specific developer
- a) **email – iii; post to intranet – iv; group meeting – vi; face-to-face – ii.**
- b) **email – ii; post to intranet – vi; group meeting – iv; face-to-face – v.**
- c) **email –iv; post to intranet –vi; group meeting – v; face-to-face – i.**
- d) **email –v; post to intranet – iii; group meeting – i; face-to-face – iv.**

20. A multi-use testing tool, MULTI-TOOL, is used within your organization to support all testing projects. It includes test management, incident management and dynamic testing support tools. However, the clients for a major new project use the INCITool incident management tool, and require this tool to be used for this project. It has been suggested that INCITool be integrated into MULTI-TOOL and replace the current incident management functionality. [K4]

Which one of the following activities is LEAST likely to be performed in response to this suggested change?

- a) **A contract will be signed to make the client jointly-responsible for maintenance of the integrated INCITool data and functionality.**
- b) **An impact analysis shall be performed to determine which users will be affected by the change and by how much.**
- c) **An analysis of the technical feasibility of the change and the available capabilities of staff to perform the change will be performed.**
- d) **The migration of the MULTI-TOOL incident database into INCITool shall be studied to determine if this is possible without compromising the quality of the original data.**

Scenario 5: Testing for TransGlobe

IT company EO-IS (ExtraOrdinary-ItServices) provides IT services to a global transportation company, TransGlobe. The integrated systems, for which EO-IS provides services, consist primarily of a customer system, an order system, a freight schedule planning system, a freight document handling system and an invoice system, along with interfaces to 15 other systems.

The EO-IS project team is situated in one location in a European country close to the headquarters of TransGlobe and consists of 108 developers, testers, Business Analysts, specialists and management. It is organized as a program with four projects delivering major releases and a maintenance team delivering small releases of defect fixes and small urgent changes.

In the yearly contract renegotiation TransGlobe has demanded lower IT costs and more frequent releases of system changes and new functionality from EO-IS. To meet these demands EO-IS has proposed the following:

- A transition of 2/3 of the project from the present onsite location in Europe to an offshore location in Asia.
- Integration of systems will continue to be carried out by the teams at the European onsite location.
- Requirement clarification done by Business Analysts and customer representatives will continue to be carried out by the teams at the European onsite location.
- The replacement for the freight schedule planning system will be developed and tested by third party provider, FS_Planner.

You are the Test Manager and you have, together with the program management group, been involved in the planning of the changes. The goals in relation to test are to reduce the total size of the test team by 20%, build an offshore test team consisting of 10 testers including a team lead, and to keep a small test team onsite consisting of six testers. You have required that the testers in the new offshore team have at least one year of experience and are certified testers at the ISTQB Foundation level.

The testing strategy will be risk-based using a mixture of requirements-based testing, regression testing and consultative testing.

The offshore test team will follow a consultative test strategy during the first year, where one senior Business Analyst and one senior tester from the onsite team act as advisors. During the first year, the offshore team will do manual regression testing, while the onsite test automation specialists finalize a keyword-driven test automation framework and automate a selected subset of the manual regression tests, which the offshore team is to deliver to the onsite team.

21. Scenario 5 “Testing for TransGlobe” provides the context for this question. [K3]

As Test Manager in IO-IS you have made a draft of an induction training program for the new testers in the offshore team.

Pick the three options that are LEAST likely to be included in your draft.

- a) **Training in using TransGlobe’s systems and familiarity with project documentation**
- b) **Training in using the debugging tools for the web applications**
- c) **Test training in standard test fundamentals**
- d) **Walkthrough of the test model and test procedures used by IO-IS**
- e) **Overview of and walkthrough of samples from the existing regression tests**
- f) **Introduction to java and walkthrough of selected java modules**
- g) **Training in using the test management and defect management tools used by IO-IS**

22. Analyze the scenario to determine the appropriate level of testing required of the onsite test team in relation to the third party freight schedule planning system provided by FS_Planner. [K4]

Which three of the options will most likely be chosen?.

- a) **Regression testing at component level**
- b) **Regression testing at integration level**
- c) **User acceptance testing**
- d) **Manual regression testing at system level**
- e) **System integration testing**
- f) **Automated system regression tests**
- g) **Hardware software integration testing**

23. Scenario 5 “Testing for TransGlobe” provides the context for this question. [K4]

Plans have been made for the offshore test team to visit the onsite team on location. As Test Manager you will plan some team building activities. What will you most likely include in a plan for team building activities that may help improve communication and build team spirit between the offshore and onsite teams?

- i. Go out and have dinner together in restaurants with local food and Asian food
- ii. Make role-games to address sexual harassment and inappropriate behavior situations that have occurred
- iii. Organize brainstorming sessions in groups about which means of communication are good for different situations.
- iv. Group-work about cultural differences based on lists of items created from the Internet or external consultancy assistance
- v. Group-work about religious differences based on each team member’s beliefs
- vi. Set up of an intranet page for the combined team and get input from the team regarding contents
- vii. Conduct sessions to familiarize everyone with the various working hours, salary ranges and holidays

Select one of the following options.

- a) **i, iii, iv,vi**
- b) **i, ii, iii, vi**
- c) **iii, iv, v, vii**
- d) **I, ii, iii, iv**

24. Scenario 5 “Testing for TransGlobe” provides the context for this question. [K4]

The delivery manager at the offshore site has defined S.M.A.R.T goals for both the developers and testers of the offshore teams working for IO-IS on the systems of TransGlobe.

Your task as Test Manager is to review and comment on the goals regarding the offshore testers.

Which two of the following items do you consider most appropriate as S.M.A.R.T goals seen in relation to the test strategy defined for the first year of transition?

- a) **Able to prevent 98 % of all regression defects to escape to production after three months**
- b) **Able to design test cases without consulting onsite senior Business Analysts and senior onsite tester after four months**
- c) **Able to create automated regression test scripts after six months**
- d) **Able to operate all standard functions of the test management and defect management tool after two weeks**
- e) **Able to execute 90% of the manual regression tests after three months**

25. Scenario 5 “Testing for TransGlobe” provides the context for this question.

[K5
&
K6]

Additional information:

Nine months have passed and you as Test Manager are making plans for the second year of transitioning testing from the onsite to the offshore test team. You have decided to move responsibility for the automation of the system regression tests and the test automation framework to the offshore team.

From the offshore team of 10 testers, the team lead has been transferred to another project and one other experienced tester has left the company due to relocation following her marriage. You have received the following tabular resumés from the offshore delivery manager to evaluate for the open job positions:

	Jay	Kim	Maria	Lee	June
Test professional skills					
Test management		2	4	3	
Test analysis and design		2	4	4	4
Test environment establishment	4		2	3	4
Test implementation	4	3	3	3	2
Test execution	2	4	4	4	4
Test management tool skills					
For follow up on testcases, test results, status		3	4	3	
For documenting testcases	2	4	4	4	3
For execution of tests	2	4	2	4	3
For logging defects	3	4	3	4	3
Test automation skills, system level test automation					
Use test automation tool to execute scripts, read the results			1	2	4
Program scripts in a script language					3
Enhance scripts so they can be modularized, run data-driven					4
Increase maintainability, implement keyword-driven frameworks					3
Create customized objects, functions and procedures					4
Technical software development skills					
Unit test tools	3	4			
Test coverage tools	3	4			
Static analysis tools	3	4			
Dynamic analysis tools	2	2			
Knowledge of middleware	2	2			
Knowledge of databases	4	3			3
Programming skills: java, COBOL, others	4	4			
Programming skills: script languages	4	3		3	4
System and business knowledge					
Knowledge of systems used in the company	2				3
Business domain knowledge (transportation sector/other)	2		2		3
Personal skills according to Briggs and Myers					
E: Extrovert: Tend to focus on the outer world		x	x		
I: Introvert: Tend to focus on the inner world	x			x	x

ISTQB® Certified Tester Expert Level

S: Sensing: Tend to focus on the present and on concrete information gained from their senses	x			x	
N: Intuition: Tend to focus on the future, with a view towards patterns and possibilities		x	x		x
T: Thinking: Tend to base their decisions primarily on logic and on objective analysis of cause and effect			x		x
F: Feeling: Tend to base their decisions primarily on values and on subjective evaluation of person-centered concerns	x	x		x	
J: Judging: Tend to like a planned and organized approach to life and prefer to have things settled			x		x
P: Perceiving: Tend to like a flexible and spontaneous approach to life and prefer to keep their options open.	x	x		x	

Level of skill and experience: 1 = none, 2 = little, 3 = some, 4 = high, 5 = very high

For the job openings, evaluate the given resumés and the scenario and additional information and determine the best candidates.

Provide the following:

1. Give your overall evaluation of the tabular resumes and argue to what extent they give a realistic and reliable coverage of skills and level of knowledge.
2. Which of the candidates do you evaluate will be the best choice as team lead, and what is the rationale for your choice based on the resumés?
3. Which of the candidates do you consider to be the best choice for the other open job position, and what is the rationale for your choice based on the resumés?

Describe the additional information about candidates (not already covered in the resumés) which needs to be gathered through an interview. Describe what you believe are effective approaches to use in these interviews.

PRACTICE EXAM