



## ISTQB - CTFL-001

### ISTQB® Certified Tester Foundation Level

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**Topic 1, Scenario 1 "Medical Domain"**

You are working as a test manager in the medical domain leading a team of system testers. You are currently working on a major release of the product which gives customers many new features and resolves a number of problem reports from previous releases.

**QUESTION NO: 1**

You are about to release a test progress report to a senior manager, who is not a test specialist. Which of the following topics should NOT be included in the test progress report? 1 credit

- A. Product risks which have been mitigated and those which are outstanding.
- B. Recommendations for taking controlling actions
- C. Status compared against the started exit criteria
- D. Detailed overview of the risk-based test approach being used to ensure the exit criteria to be achieved

**Answer: D**

**Explanation:**

**QUESTION NO: 2**

Explain how the above mentioned report may differ from a report that you produce for the project manager, who is a test specialist. Select TWO items from the following options that can be used to report to the project manager and would not be included in a report to senior management. 1 credit

- A. Show details on effort spent
- B. List of all outstanding defects with their priority and severity
- C. Give product risk status
- D. Show trend analysis
- E. State recommendations for release

**Answer: A,B**

**Explanation:**

**QUESTION NO: 3**

Consider the typical objectives of testing. Which of the following metrics can be used to measure

the effectiveness of the testing process in achieving one of those objectives? 1 credit

- A. Average number of days between defect discovery and resolution
- B. Percentage of requirements covered
- C. Lines of code written per developer per day
- D. Percentage of test effort spent on regression testing

**Answer: B**

**Explanation:**

#### QUESTION NO: 4

You have been given responsibility for the non-functional testing of a safety-critical monitoring & diagnostics package in the medical area. Which of the following would you least expect to see addressed in the test plan? 1 credit

- A. Availability
- B. Safety
- C. Portability
- D. Reliability

**Answer: C**

**Explanation:**

#### QUESTION NO: 5

Since the system is in the medical domain and therefore in the safety critical area, testing needs to be rigorous and evidence is required that the system has been adequately tested. Identify THREE measures that would typically be part of the test approach in this domain and which are not always applicable in other domains! 1 credit

- A. High level of documentation
- B. Failure Mode and Effect Analysis (FMEA) sessions
- C. Traceability to requirements
- D. Non-functional testing
- E. Master test planning
- F. Test design techniques
- G. Reviews

**Answer: A,B,C**

**Explanation:****QUESTION NO: 6**

A test log is one of the documents that need to be produced in this domain in order to provide evidence of testing. However, the level of detail of test logs can vary. Which of the following is NOT an influencing factor for the level of detail of the test logs being produced? 1 credit

- A. Level of test execution automation
- B. Test level
- C. Regulatory requirements
- D. Experience level of testers

**Answer: D**

**Explanation:**

**QUESTION NO: 7**

Considerable attention will be given in this project to defining exit criteria and on reporting back on their status. Which combination of TWO exit criteria from the list would be best to use? 1 credit

- I. Total number of defects found
- II. Percentage of test cases executed
- III. Total test effort planned versus total actual test effort spent
- IV. Defect trend (number of defects found per test run over time)

- A. (i) and (ii)
- B. (i) and (iv)
- C. (ii) and (iii)
- D. (ii) and (iv)

**Answer: D**

**Explanation:**

**Topic 2, Scenario 2 "Reviews"**

A software development organization wants to introduce some specific improvements to its test process. Currently, most of their testing resources are focussed on system testing. They are developing embedded software, and do not have a simulation environment to enable them to execute software modules on the development host. They have been advised that introducing inspections and reviews could be the most appropriate step forward.

**QUESTION NO: 8**

Identify the THREE types of formal peer reviews that can be recognized. 1 credit

- A. Inspection
- B. Management review
- C. Walkthrough
- D. Audit
- E. Technical review
- F. Informal review
- G. Assessment

**Answer: A,C,E**

**Explanation:**

**QUESTION NO: 9**

As part of the improvement program, the organization is also looking at tool support. Which type of tool could be used to ensure higher quality of the code to be reviewed? 1 credit

- A. Review tool
- B. Test execution tool
- C. Static analysis tool
- D. Test design tool

**Answer: C**

**Explanation:**

**QUESTION NO: 10**

What is the main reason why reviews are especially beneficial in the above-mentioned scenario? 2

credits

- A. They ensure a common understanding of the product.
- B. They find defects early.
- C. They enhance project communication.
- D. They can be performed without exercising the code.

**Answer: D**

**Explanation:**

#### QUESTION NO: 11

The introduction of reviews and inspections has often failed as a process improvement action. Identify the THREE most important measures that should be taken to reduce the risk that this test process improvement will fail. 2 Credits (for 2 out of 3 correct 1 credit)

- A. Process ownership and experienced moderators who drive the inspection process.
- B. Management support
- C. Training of those involved
- D. The availability of standards and processes
- E. Usage of a more traditional software development lifecycle
- F. Alignment with software process improvement
- G. Using a reference model, e.g. TMMi

**Answer: A,B,C**

**Explanation:**

#### QUESTION NO: 12

IEEE 1028 also defines “management review” as a type of review. What is the main purpose of a management review? 1 credit

- A. Align technical concepts during the design phase
- B. Establish a common understanding of requirements
- C. Provide independent evaluation of compliance to processes, regulations, standards etc.
- D. To monitor progress, assess the status of a project, and make decisions about future actions

**Answer: D**

**Explanation:**

**QUESTION NO: 13**

Which of the following is an example of testing as part of the requirements specification phase? 1 credit

- A. A requirements review meeting
- B. A business analyst eliciting requirements
- C. Performing acceptance tests against requirements
- D. A test report showing requirements coverage

**Answer: A**

**Explanation:**

**Topic 3, Scenario 3 "Tool Selection and Implementation"**

Your company is considering whether or not to purchase a test tool suite from a respectable vendor. Your manager has searched the internet for comparable products but none of them meets his specific requirements. A tool demonstration has been arranged for next week and your team has been invited to attend. The tool suite consists of a test management tool, test execution tool and a requirements management tool. There is the possibility of adding a performance testing tool at a later stage. You have decided to attend the demo but raise some issues beforehand regarding expectations.

**QUESTION NO: 14**

Select THREE issues from the options provided that should at least be raised. 1 credit

- A. Has there been sufficient comparison of tools?
- B. What are the problems we are trying to address?
- C. Do we have a set of tool requirements to validate the tool against?
- D. How will the implementation be organized?
- E. Which project will be selected to perform the tool pilot?
- F. Is customized training available?
- G. How will the change process be managed?

**Answer: A,B,C**

**Explanation:**

**QUESTION NO: 15**

Which of the following would you least expect to form part of the analysis of initial tool costs? 1 credit

- A. Integration with other tools
- B. Learning time required to use the new tool
- C. Tool portability
- D. Evaluation of suitable tools

**Answer: C**

**Explanation:**

**Topic 4, Scenario 4, V2 "Test Management Tool"**

The project situation after 11 months is:

- The first increment was released one week late but contained sufficient functionality to be declared fit for purpose'. However, there were 20 outstanding incidents deferred to increment two.
- The amount of voluntary overtime worked PV the test team has reduced the second Increment slippage to just 3 weeks.
- There is talk of reducing the scope of requirements. The purpose of this is to first deliver the application with support for manual testing and then to provide a delivery \* weeks later to resolve any remaining points and provide support for automated testing (i.e. the link to the capture-replay tool).
- Concerns have been expressed by a section of the user community, that in some places the usability is very poor.

**QUESTION NO: 16**

Which of the following are valid reasons for adopting a different life cycle (from the V model), for increments after the first year? 2 credits



- i. We do not have a clear understanding of the requirements from a customer perspective.
- ii. We see the risk of delivering requested functionality late as being higher than the risk of delivering a lower quality product.
- iii. We do not have a budget for additional regression testing which is needed to ensure that existing functionality is not compromised by future iterations.
- iv. The company test strategy does not fit well within the V life cycle model.

- A. (i) and (ii)
- B. (i) and (iv)
- C. (ii) and (iii)
- D. (ii) and (iv)

**Answer: A**

**Explanation:**

#### **QUESTION NO: 17**

Which of the following is a characteristic of good testing in any life cycle model? 1 credit

- A. Analysis and design of tests begins as soon as development is completed.
- B. Some, but not all, development activities have corresponding test activities.
- C. Each test level has test objectives specific to that level.
- D. All document reviews involve the development team.

**Answer: C**

**Explanation:**

#### **QUESTION NO: 18**

Which of the following would you expect to see in the master test plan? 1 credit

- A. A description of how the test cases are cross-referenced to requirements in the test management tool.
- B. A detailed identification of the resources that will carry out structural testing in the first iteration.
- C. The test approach that will be applied at system integration testing.
- D. A list of the names of the testers who will carry out the performance testing for the final iteration.

**Answer: C**

**Explanation:**

**QUESTION NO: 19**

Which of the following would be the most significant input to estimating the time to carry out the specified testing tasks? 3 credits

- A. The skills and experience of developers to correct the failures.
- B. The standards used for the requirements specification.
- C. The metrics recorded from testing the capture-replay tool.
- D. The number of testers in the company and their grade.

**Answer: C**

**Explanation:**

**QUESTION NO: 20**

Which of the following would be the TWO most appropriate examples of entry criteria documented in the system integration test plan? 2 credits

- A. The percentage of decision coverage achieved during unit testing.
- B. The availability of the latest version of the capture-replay tool (for testing the interface with the newly developed test management tool).
- C. The sign-off of a performance test software release note (test item transmittal report) by both development and testing showing that system performance meets the specified acceptance criteria.
- D. The percentage of acceptance test procedures scheduled for execution.
- E. The percentage of requirements coverage achieved during system integration test.

**Answer: A,B**

**Explanation:**

**QUESTION NO: 21**

Which test management control option is most appropriate to adopt under these circumstances? 2 credits

- A. Introduce mandatory evening and weekend working to retrieve the 3 week slippage.
- B. Reconsider the exit criteria and review the test plan in the context of the current situation.
- C. Advise the user community regarding the reduced scope of requirements and the additional incremental delivery.
- D. Arrange a meeting with the user community representatives to discuss the user interface.

**Answer: B**

**Explanation:**

#### QUESTION NO: 22

Risks should be constantly reviewed. Given the current situation, which one of the following factors is most likely to lead to a revised view of product risk? 3 credits

- A. The concerns over the user interface may lead to changes to the interface which cannot be implemented by development in time for the second test iteration.
- B. The concerns over the user interface raises the likelihood of a risk in that area and increases the amount of test effort needed for the user interface, thereby limiting the test effort available for other parts of the test management tool.
- C. The delivery of the application without the interface changes may upset the user community.
- D. The method used for test estimation is not accurate enough and hence the money spent on testing exceeded its budget.

**Answer: B**

**Explanation:**

#### QUESTION NO: 23

Which of the following is least likely to be used as a technique to identify project and product risks? 1 credit

- A. Brainstorming
- B. Inspections
- C. Expert interviews
- D. Independent assessments

**Answer: B**

**Explanation:**

**QUESTION NO: 24**

Which of the following is a project risk mitigation step you might take as test manager? 1 credit

- A. Testing for performance problems
- B. Hiring a contractor after a test analyst leaves the company
- C. Arranging a back-up test environment in case the existing one fails during testing
- D. Performing a project retrospective meeting using the test results after each increment

**Answer: C**

**Explanation:**

**Topic 5, Scenario 5, V2 "Human Resource System"**

For the first increment of the new enterprise HR product you have performed a product risk analysis using the FMEA method. Five risk items have been identified and the likelihood and impact have been scored using scoring tables. This has resulted in the following scores:

Risk	Likelihood	Impact
Item 1	10	2
Item 2	9	7
Item 3	7	9
Item 4	5	7
Item 5	5	5

**QUESTION NO: 25**

You have been asked to write a testing strategy for the company. Which statement best explains how risk can be addressed within the testing strategy? 1 credit

- A. A test strategy should address identified generic product risks and present a process for mitigating those risks in line with the testing policy.
- B. A test strategy identifies the specific product for a project risk and defines the approach for the

test project.

**C.** A test strategy is derived from the test policy and describes the way risk assessments are performed in projects.

**D.** A test strategy is the result of a project risk analysis and defines the approach and resources for testing.

**Answer: A**

**Explanation:**

#### QUESTION NO: 26

In addition to risk, identify TWO other components of a testing strategy. 1 credit

**A.** The entry and exit criteria for each test phase

**B.** Test training needs for the project resources

**C.** The test design techniques to be used

**D.** Test performance indicators

**E.** The test schedule

**Answer: A,C**

**Explanation:**

#### QUESTION NO: 27

Part of the testing strategy indicates that you are going to be using systematic test design techniques. Your manager has asked that you present the main advantages of using these techniques at the next board meeting. Identify THREE main benefits of using systematic test design techniques within this company. 2 credits (for 2 out of 3 correct 1 credit)

**A.** Easier to quickly adapt testing to changing requirements compared to experienced-based testing

**B.** Targets certain types of faults

**C.** Will guide experienced testers to find defects

**D.** Provides a way to differentiate depth of testing based on product risks by using different techniques

**E.** More enhanced documentation and therefore higher repeatability and reproducibility

**F.** Will make non-systematic testing redundant

**G.** Will reduce the need for early reviews

**Answer: B,D,E**

**Explanation:**

**QUESTION NO: 28**

What is the Risk Priority Number for risk item number 2? 2 credits

- A. 16
- B. 2
- C. 1
- D. 63

**Answer: D**

**Explanation:**

**QUESTION NO: 29**

What would be a test approach regarding the test design techniques to be applied that would fit an item with the highest risk? 2 credits

- A. Component testing: decision testing; System testing: exploratory testing
- B. Component testing: decision testing; System testing: decision table testing
- C. Component testing: statement testing; System testing: equivalence partitioning
- D. Component testing: statement testing; System testing: decision table partitioning

**Answer: B**

**Explanation:**

**Topic 6, Scenario 6, V4 "Independent Test Team"**

You have for a while been trying to hire a second test automation specialist for your test team. However, you did not have any luck in finding a suitable candidate. So now, you have been asked by IT management of XYZ to forward a proposal with alternative solutions for building an automated regression test suite at system test level over a period of 2 years including needed training and eventual handover to the test team.

**QUESTION NO: 30**

Which of the following is a benefit of independent testing? 1 credit

- A. Code cannot be released into production until independent testing is complete.
- B. Testing is isolated from development.
- C. Independent testers find different defects and are unbiased.
- D. Developers do not have to take as much responsibility for quality.

**Answer: C**

**Explanation:**

**QUESTION NO: 31**

A number of options have been suggested for the level of independence to be employed for the testing on the next project, and are shown below.

- i. External test specialists perform non-functional testing.
- ii. Testing is outsourced.
- iii. Testing is carried out by the developer.
- iv. A separate test team carries out the testing.
- v. Testing is performed by the business.
- vi. Testing is performed by a different developer.

Which of the following orders the above in a correct order of independence? 1 credit

- A. i, ii, iv, vi
- B. ii, i, v, vi
- C. ii, v, i, iii
- D. i, iv, v, vi

**Answer: B**

**Explanation:**

**QUESTION NO: 32**

Which of the following is a valid drawback of independent testing? 1 credit

- A. Developer and independent testing will overlap and waste resources.
- B. Developers lose the sense of responsibility and independent testers may become a bottleneck.
- C. Independent testers need extra education and always cost more.
- D. Independent testers will become a bottleneck and introduce problems in incident management.

**Answer: B**

**Explanation:**

### QUESTION NO: 33

Based on the information given in the scenario, identify how the team could be improved most effectively? 2 credits

- A. By providing training in the payroll domain
- B. By providing a workshop on test design techniques
- C. By providing specific training on the systems being tested
- D. By providing training on reviewing requirements

**Answer: B**

**Explanation:**

### QUESTION NO: 34

Which of the following team roles would be most appropriate to enhance the team and why? 2 credits

- A. A person with the ability to complete tasks
- B. A quality assurance officer
- C. A person with in-depth technical skills
- D. A person who brings new ideas to the team

**Answer: D**

**Explanation:**



**QUESTION NO: 35**

You are considering involving users during test execution. In general, what is the main reason for involving users during test execution? 1 credit

- A. They are a cheap resource
- B. They have good testing skills
- C. This can serve as a way to build their confidence in the system
- D. They have the ability to also focus on invalid test cases

**Answer: C**

**Explanation:**

**QUESTION NO: 36**

In addition to introducing the new team member, you have decided to raise motivation. Which of the measures listed below would be the best measure to take in order to increase the motivation of the team? 2 credits

- A. Provide more time for testing in the schedule
- B. Allow people to take some time off
- C. Introduce entry criteria to the testing phase
- D. Organize a meeting with senior management in which they address the importance of good testing for this project

**Answer: D**

**Explanation:**

**QUESTION NO: 37**

Evaluate the status of the project against the defined exit criteria. Which of the following options shows the correct status? 2 credits

- A. Criteria A = OK, criteria B = OK, criteria C = OK
- B. Criteria A = NOT OK, criteria B = NOT OK, criteria C = OK
- C. Criteria A = OK, criteria B = NOT OK, criteria C = NOT OK
- D. Criteria A = NOT OK, criteria B = NOT OK, criteria C = NOT OK

**Answer: B**

**Explanation:****QUESTION NO: 38**

You have investigated different possibilities and selected four of them to present to IT management. Which of the proposals will you most likely give your highest recommendations? 3 credits

- A.** Insourcing of test automation based on an offer from a local company ABC that has people who are specialists in system level capture-replay automation tools and they also do regular training courses in test automation methods and tools. They can then work closely with Vicki.
- B.** Outsourcing of test automation based on an offer from an Asian company, AsiaAutoTest, which has people who are specialists in system level capture-replay automation tools. They also offer training and besides they offer to run and maintain the regression tests in the future.
- C.** Internal offer from the development department of XYZ to create the regression package using CppUnit as test automation tool. One of the development groups have very good experiences in automating unit tests, and they are willing to do training as well.
- D.** Solution from a tool vendor offering to educate two test team members in the use of their easy-to-use test automation capture replay tool over the first 3 month and based on that build the regression test suite. In addition to Vicki, Steve is the only one that has time available to be educated.

**Answer: A**

**Explanation:**

**QUESTION NO: 39**

Instead of having an independent test team within the company, the company is considering to outsource testing. What are THREE key challenges that are typical for outsourcing? 1 credit

- A.** Test environment more complex
- B.** Define expectation for tasks and deliverables
- C.** Clear channels of communications
- D.** Possibly different cultures
- E.** Testing of non-functional requirements
- F.** Audit trail from requirements to test cases
- G.** Applying test automation

**Answer: B,C,D**

**Explanation:**

**Topic 7, Scenario 7 "Test Estimation"**

You have been contracted to manage the acceptance testing of a new computer-based reservation system for a travel agency. You have provided an approximate budget estimate for the testing project based on previous experience with similar sized projects. However, the management of the parent company of the travel agency will not commit to the budget until detailed cost estimates are provided.

The reservation system is being developed by a third party. However, detailed specifications of the software are available, as well as an estimate of the total effort that will be spent in developing the software. The software is to be delivered in four increments, and the functionality to be delivered in each increment has already been agreed on.

**QUESTION NO: 40**

Identify THREE items that would be part of the work-breakdown structure showing the key testing activities for the acceptance test project. 2 credits (for 2 out of 3 correct 1 credit)

- A. Test planning, test case preparation and test execution for each of the four iterations
- B. Work should be explicitly allocated to test completion, test management, installation and to training on using the system
- C. Activities to deploy the system in the user environment
- D. Regression testing in the second, third and fourth iterations
- E. Development activities for unit and integration testing
- F. Reviews on requirements documentation
- G. Defining test environment requirements for system testing

**Answer: A,B,D**

**Explanation:**

**QUESTION NO: 41**

In general which part of the testing activity is most difficult to estimate? 1 credit

- A. Test planning
- B. Test execution

- C. Test management
- D. Test design

**Answer: B**

**Explanation:**

#### **QUESTION NO: 42**

In general, why is it NOT a good idea to estimate the testing effort based only on a percentage of development effort? Identify THREE valid reasons. 1 credit

- A. The quality of the development estimate may be poor.
- B. In general bottom-up estimation is always better than top-down estimation.
- C. The percentage based technique only applies to the V life cycle model.
- D. Using the same percentage every time does not address the level of risk of the application to be tested.
- E. The maturity of the organization, e.g. the quality of the test basis, quality of development testing, configuration management, availability of test tools, also influence the effort needed for testing.
- F. It builds on large set of historical data
- G. The result is almost always a too low estimate for the required test effort

**Answer: A,D,E**

**Explanation:**

#### **QUESTION NO: 43**

Which aspect in the test estimate is the main risk in this project? 1 credit

- A. Quality of the specification
- B. Availability of end-users
- C. The costs of hardware and tools
- D. Unknown input quality due to third party development

**Answer: D**

**Explanation:**

**Topic 8, Scenario 8, V2 "Test Process Improvement"**

You have raised the issue that improving the testing process is also dependent on the status of the software development process.

**QUESTION NO: 44**

Model characteristics:

Which THREE of the below mentioned characteristics relate to TMMi? 1 credit

- A. 5 maturity levels
- B. Focussed on higher level testing
- C. 20 key areas
- D. Highly related to CMMI
- E. Continuous model
- F. Staged model
- G. Focussed on component and integration testing
- H. Is build around 12 critical testing processes

**Answer: A,D,F**

**Explanation:**

**QUESTION NO: 45**

The test improvement project will take place in an organization developing a safety-critical avionics application. Which one of the following standards do you believe would be most appropriate to take into account for compliance during your assignment? 1 credit

- A. ISO 9126
- B. IEEE 829
- C. BS 7925/2
- D. DO-178B

**Answer: D**

**Explanation:**

**QUESTION NO: 46**

Comparing TMMi and TPI, which is not a valid reason for choosing either TPI or TMMi? 2 credits

- A.** If the scope of test performance improvement covers all test levels, TMMi is preferred since TPI focusses mainly on black-box testing.
- B.** If the organization is already applying CMMI, TMMi may be preferred since it has the same structure and uses the same terminology. TMMi addresses management commitment very strongly and is therefore more suitable to support a top-down improvement process.
- C.** TPI is much more a bottom-up model that is suitable for addressing test topics for a specific (test) project.
- D.** TMMi can only be used with the traditional V model, whereas TPI can be used with all types of software life cycles.

**Answer: D**

**Explanation:**

#### QUESTION NO: 47

A test assessment has been carried out using the selected model as a reference framework. A number of recommendations have been identified and you are asked to prioritize them. Based on your knowledge of the project, you are expecting severe resistance to change. Which of the following would be the most important selection criterion for defining the priority of the recommendations? 2 credits

- A.** Synchronized with the overall long-term organizational strategy
- B.** Defined according to the maturity model used
- C.** Most visible to stakeholders
- D.** Low costs actions first

**Answer: C**

**Explanation:**

#### QUESTION NO: 48

During test process improvement it is recommended to use standards where possible. Standards originate from various sources and they cover different subjects in relation to testing Pick TWO sources of software standards, useful to software testing from the ones mentioned below. 1 credit

- A.** ISO 9126-1 'Software engineering- Product quality Part 1: Quality model' is an international standard, that provides a basis on which to define quality assurance solutions.

- B.** ISA 4126-1 'Software engineering- Product quality Part 1: Quality model' is an international standard, that provides a basis on which to define quality assurance solutions.
- C.** BS-7925-2 'Software testing. Software component testing is a national standard used internationally. It covers a number of testing techniques that may be useful both on component testing level and on system testing level.
- D.** SY-395-01 'Standard for East Coast Hospital software' is a regional standard adapted from a national one. Besides hospital software, this standard ought to be used also by other types of software system in the region.
- E.** IEEE 829 'standard for software test documentation' is an international standard to be following mandatory by all testing origination regardless of lifecycle models.

**Answer: A,C**

**Explanation:**

#### **QUESTION NO: 49**

Which of the following phases in the fundamental test process is considered to deliver a document which can be used as a major input for test process improvement? 1 credit

- A.** Test planning and control
- B.** Test implementation & execution
- C.** Evaluating exit criteria and reporting
- D.** Test project closure

**Answer: D**

**Explanation:**

#### **Topic 9, Scenario 9 "Test Management Documentation"**

A software house is concerned about the number of defects found in software released to its customers. They are starting to plan a new software product. In the past, releases have often been stopped due to poor planning and too many defects found during high level testing. You have been recruited to the newly created position of test manager and asked to develop a test strategy, manage the testing of the project and organize the resources needed to carry out the testing.

#### **QUESTION NO: 50**

Which THREE activities would be valid steps during the development of the test strategy? 2 credits  
(2 out of 3 correct 1 credit)

- A. Identify test staff members that will be involved in the system test
- B. Define test career paths
- C. Understand the software development life cycle used by the software house
- D. Assess the testing that needs to be done to minimize the risks
- E. Issue the test strategy document for review
- F. Define a master test plan template
- G. Perform a project risk analysis

**Answer: C,D,E**

**Explanation:**

#### QUESTION NO: 51

As part of the test strategy, entry and exit criteria will be defined for each test level. Which is NOT a valid reason for using entry and exit criteria? 1 credit

- A. The expectation is that development testing is not adequate.
- B. Exit criteria are used to decide on when to stop testing.
- C. Entry and exit criteria are a principal way for getting adequate resources.
- D. Using entry and exit criteria will prevent software that is not or poorly tested from going to the next test level.

**Answer: C**

**Explanation:**

#### QUESTION NO: 52

Within the projects, a master test plan and phase test plan will be used. Following is a list of characteristics applicable for test plans:

- a. Any deviation from the procedures described in the test strategy document
- b. The overall estimated costs, timescales and resource requirements
- c. A detailed schedule of testing activities
- d. The development deliverables to be tested



e. Which test staff members (names) will be involved and when

f. Level of requirements coverage achieved

Which THREE of the above mentioned characteristics relate to the master test plan? 1 credit

A. a

B. b

C. c

D. d

E. e

F. f

**Answer: A,B,D**

**Explanation:**

### QUESTION NO: 53

Within the projects, a master test plan and phase test plan will be used. Following is a list of characteristics applicable for test plans:

a. Any deviation from the procedures described in the test

b. strategy document

c. The overall estimated costs, timescales and resource

d. requirements

e. A detailed schedule of testing activities

f. The development deliverables to be tested

g. Which test staff members (names) will be involved and when

h. Level of requirements coverage achieved

Which TWO of the above mentioned characteristics relate to the phase test plan? 1 credit

A. a

B. b

C. c

D. d

E. e

F. f

**Answer: C,E**

**Explanation:**

### Topic 10, Scenario 10, V3 "Online Application"

The cancellation of a current major development project has released resources. The development manager has decided to respond to his own request to tender and has proposed an in-house development with the use of a Rapid Application Development (RAO) approach.

#### QUESTION NO: 54

Which of the following product risks would be most effectively addressed just by static testing? 3 credits

- A. In the delivered application, one of the countries, as specified in the requirements, has not been correctly implemented.
- B. The application takes too long to process a request for additional cover.
- C. The test cases do not cover the key requirements.
- D. The successful bidder may not deliver all the required functionality on time.

**Answer: C**

**Explanation:**

#### QUESTION NO: 55

The development manager is managing the review of the responses received from bidders, and has asked the in-house test manager to provide a review checklist for the test management aspects of the responses. Which of the following checkpoints would be appropriate? 2 credits

- A. The bidder's test policy should enforce that incident management fully conforms to IEEE 1044.
- B. The bidder's project strategy shows that the data content of all the test environments conforms to EU standards.
- C. The bidder's test plan shows that the application will be delivered for acceptance in six months time.
- D. The bidder's project test plan depicts a phased implementation with later delivery dates to be confirmed and states that test deliverables will be developed using IEEE 829 as a guide.

**Answer: D**

**Explanation:**

**QUESTION NO: 56**

Which one of the following estimation approaches is appropriate at this stage of the project? 2 credits

- A.** Create an estimate based on the function point analysis technique and test point analysis
- B.** Create an estimate based on the complexity of the code
- C.** Create an estimate based on the credentials of the successful bidder
- D.** Create an estimate based on a percentage of the development effort

**Answer: A**

**Explanation:**

**QUESTION NO: 57**

Why might a RAD approach be a better option for the test manager rather than a sequential development? 2 credits

- A.** It will extend the development team's abilities and enhance future delivery capabilities.
- B.** It will allow the marketing, clerical and testing staff to validate and verify the early screen prototypes.
- C.** Time-box constraints will guarantee code releases are delivered on schedule.
- D.** More time can be spent on test execution as less formal documentation is required.

**Answer: B**

**Explanation:**

**QUESTION NO: 58**

Which of the following is NOT a typical key challenge for testing in a RAD based development approach? 1 credit

- A.** Re-usable test scripts for (automated) regression testing

- B. Project management and control
- C. No complete requirements specification
- D. Time-boxing

**Answer: B**

**Explanation:**

#### **QUESTION NO: 59**

As a result of the RAD based development approach, the test manager has decided to change the risk mitigation approach. Which test technique might be most appropriate to use? 2 credits

- A. Decision Table Testing
- B. Boundary Value Analysis
- C. Error Guessing
- D. Exploratory Testing

**Answer: D**

**Explanation:**

#### **QUESTION NO: 60**

The business has asked for a weekly progress report. Which of the following would be appropriate as a measure of test coverage? 2 credits

- A. Percentage of business requirements exercised
- B. Percentage of planned hours worked this week
- C. Percentage of countries that have test scenarios
- D. Percentage of test iterations completed

**Answer: A**

**Explanation:**

#### **Topic 11, Scenario 11 "Incident Management"**

The following is the current incident handling process in used at the company.

Step 1: Incident is documented in the incident Tile with the following information:

- Software module or area where the fault occurred
- Who has reported the fault
- Hardware configuration used for the test that found the fault
- The sequential incident number (1 greater than the last one recorded)

Step 2: Developer assigned to fix the fault

Step 3: Developer fixes the fault

Step 4: Developer signs off the incident as closed, and it is then removed from the incident file

#### QUESTION NO: 61

Regarding the process described above, what is the most important recommendation you would make using IEEE 1044 as a guide? 2 credits

- A. No priority or severity assigned
- B. Incident numbering is manual rather than automated
- C. No mentioning of reproduceability
- D. No classification on type of incident

**Answer: A**

**Explanation:**

#### Topic 12, Scenario 12 “Automatic Teller Machine (ATM)”

You are a test manager in charge of integration, system and acceptance testing for a bank. You are working on a project to upgrade an existing ATM to allow customers to obtain cash advances from supported credit cards. The system should allow cash advances from €20 to €500, inclusively, for all supported credit cards. The supported credit cards are American Express, VISA, Eurocard and Mastercard.

In the master test plan the following items are listed in the section named “items and/or features to be tested”:

I All supported credit cards

II Language localization

II Valid and invalid advances

IV Usability

V Response time

#### QUESTION NO: 62

Relying only on the information provided in the scenario, select the TWO items and/or features for which sufficient information is available to proceed with test design. 2 credits

- A. All supported credit cards
- B. Language localization
- C. Valid and invalid advances
- D. Usability
- E. Response time

**Answer: A,C**

**Explanation:**

#### QUESTION NO: 63

Continuing with the Scenario described in the previous question, which of the following topics would you need to address in detail in the master test plan? 3 credits

- A. An approach to regression testing
- B. A list of boundary values for "advance amount"
- C. A description of dependencies between test cases
- D. A logical collection of test cases

**Answer: A**

**Explanation:**

#### QUESTION NO: 64

Given the following figures for the testing on a project, and assuming the failure rate for initial tests remains constant and that all retests pass, what number of tests remain to be run? 3 credits

Test planned	1000
Initial tests run	500
Initial tests passed	350
Retests run	80

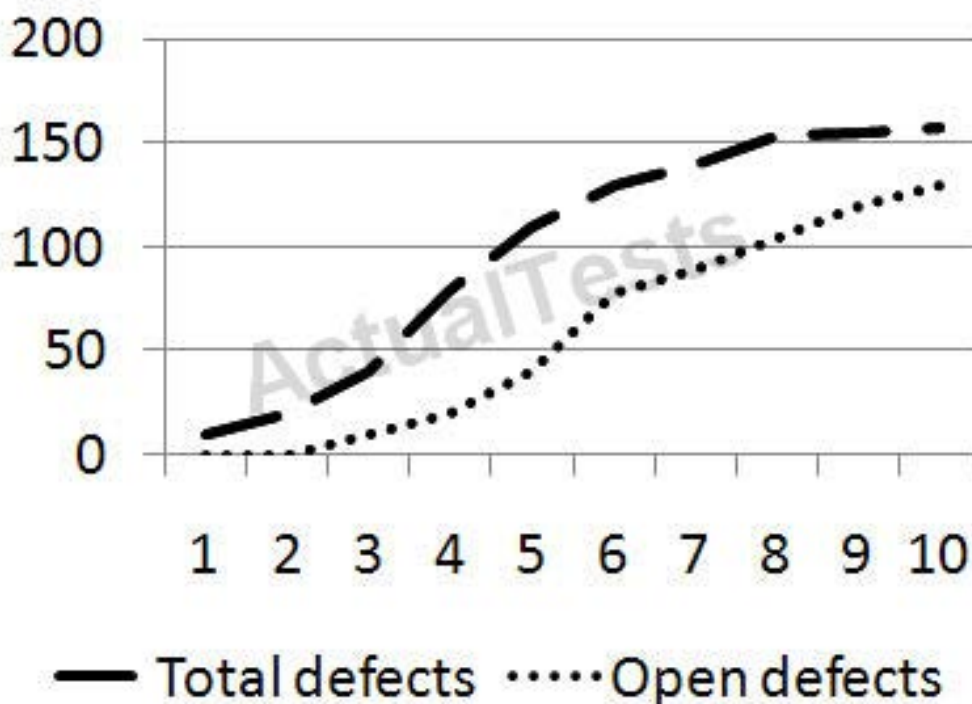
- A. 700
- B. 720
- C. 784
- D. 570

**Answer: B**

**Explanation:**

#### QUESTION NO: 65

Given is the following defect removal chart reported at the end of system testing - showing total defects detected and closed defects (fixed and successfully retested). A number of open defects are classified as critical. All tests have been executed.



Based on the chart above, what is the most appropriate next test phase? 1 credit

- A. Acceptance testing to verify the business process
- B. Acceptance testing to verify operational requirements
- C. Requirements testing as part of testing regulatory compliance
- D. Another system test cycle to verify defect resolution

**Answer: D**

**Explanation:**

### Topic13,Mix Questions

#### QUESTION NO: 66

Which option is part of the 'implementation and execution' area of the fundamental test process?

- A. Developing the tests.
- B. Comparing actual and expected results.
- C. Writing a test summary.
- D. Analyzing lessons learnt for future releases.

**Answer: B**

**Explanation:**

- A. is part of 'Analysis and design'.
- C. is part of 'Evaluating exit criteria and reporting'.
- D. is part of 'Test closure activities'.

#### QUESTION NO: 67

The five parts of the fundamental test process have a broad chronological order. Which of the options gives three different parts in the correct order?

- A. Implementation and execution, planning and control, analysis and design.
- B. Analysis and design, evaluating exit criteria and reporting, test closure activities.
- C. Evaluating exit criteria and reporting, implementation and execution, analysis and design.
- D. Evaluating exit criteria and reporting, test closure activities, analysis and design.

**Answer: B**

**Explanation:**

All other answers have at least one stage of the fundamental test process in the wrong sequence.



**QUESTION NO: 68**

Which statement is most true?

- A. Different testing is needed depending upon the application.
- B. All software is tested in the same way.
- C. A technique that finds defects will always find defects.
- D. A technique that has found no defects is not useful.

**Answer: A**

**Explanation:**

This is a restatement of the testing principle 'Testing is context dependent'

**QUESTION NO: 69**

A bug or defect is:

- A. A mistake made by a person;
- B. A run-time problem experienced by a user;
- C. The result of an error or mistake;
- D. The result of a failure, which may lead to an error?

**Answer: C**

**Explanation:**

**QUESTION NO: 70**

The effect of testing is to:

- A. Increase software quality;
- B. Give an indication of the software quality;
- C. Enable those responsible for software failures to be identified;
- D. Show there are no problems remaining?

**Answer: B**

**Explanation:****QUESTION NO: 71**

What is retesting?

- A.** Running the same test again in the same circumstances to reproduce the problem.
- B.** A cursory run through a test pack to see if any new errors have been introduced.
- C.** Checking that the predetermined exit criteria for the test phase have been met.
- D.** Running a previously failed test against new software/data/documents to see if the problem is solved.

**Answer: D**

**Explanation:****QUESTION NO: 72**

Which of the following is correct?

Debugging is:

- A.** Testing/checking whether the software performs correctly.
- B.** Checking that a previously reported defect has been corrected.
- C.** Identifying the cause of a defect, repairing the code and checking the fix is correct.
- D.** Checking that no unintended consequences have occurred as a result of a fix.

**Answer: C**

**Explanation:**

- A.** Is a brief definition of testing.
- B.** Is retesting.
- D.** Is regression testing.

**QUESTION NO: 73**

When is testing complete?

- A. When time and budget are exhausted.
- B. When there is enough information for sponsors to make an informed decision about release.
- C. When there are no remaining high priority defects outstanding.
- D. When every data combination has been exercised successfully.

**Answer: B**

**Explanation:**

Sometimes time/money does signify the end of testing, but it is really complete when everything that was set out in advance has been achieved.

#### QUESTION NO: 74

Which list of levels of tester independence is in the correct order, starting with the most independent first?

- A. Tests designed by the author; tests designed by another member of the development team; tests designed by someone from a different company.
- B. Tests designed by someone from a different department within the company; tests designed by the author; tests designed by someone from a different company.
- C. Tests designed by someone from a different company; tests designed by someone from a different department within the company; tests designed by another member of the development team.
- D. Tests designed by someone from a different department within the company; tests designed by someone from a different company; tests designed by the author.

**Answer: C**

**Explanation:**

This option has someone nearer to the written code in each statement. All other options are not in this order.

#### QUESTION NO: 75

Which of the following is in the correct order (typically)?

- A. Unit testing, system testing, acceptance testing, maintenance testing.
- B. System testing, unit testing, acceptance testing, maintenance testing.
- C. Acceptance testing, system testing, maintenance testing, unit testing.
- D. Unit testing, maintenance testing, system testing, acceptance testing.

**Answer: A**

**Explanation:**

**QUESTION NO: 76**

Which TWO of the review types below are the BEST fitted (most adequate) options to choose for reviewing safety critical components in a software project? Select 2 options.

- A. Informal review.
- B. Management review.
- C. Inspection.
- D. Walkthrough
- E. Technical Review

**Answer: C,E**

**Explanation:**

**QUESTION NO: 77**

Incidents would not be raised against

- A. Requirements
- B. Documentation
- C. Test cases
- D. Improvements suggested by users

**Answer: D**

**Explanation:**

**QUESTION NO: 78**

The cost of fixing a fault:

- A. Is not important
- B. Increases as we move the product towards live use
- C. Decreases as we move the product towards live use
- D. Is more expensive if found in requirements than functional design
- E. Can never be determined

**Answer: B**

**Explanation:**

**QUESTION NO: 79**

Which of the following statements are TRUE? A. Regression testing and acceptance testing are the same. B. Regression tests show if all defects have been resolved. C. Regression tests are typically well-suited for test automation. D. Regression tests are performed to find out if code changes have introduced or uncovered defects. E. Regression tests should be performed in integration testing.

- A. A, C and D and E are true; B is false.
- B. A, C and E are true; B and D are false.
- C. C and D are true; A, B and E are false.
- D. B and E are true; A, C and D are false.

**Answer: C**

**Explanation:**

**QUESTION NO: 80**

Which is not the fundamental test process?

- A. Planning and control
- B. Test closure activities
- C. Analysis and design
- D. None

**Answer: D**

**Explanation:**

**QUESTION NO: 81**

What is the purpose of test completion criteria in a test plan:

- A. To know when a specific test has finished its execution
- B. To ensure that the test case specification is complete
- C. To set the criteria used in generating test inputs

- D. To know when test planning is complete
- E. To plan when to stop testing

**Answer: E**

**Explanation:**

#### **QUESTION NO: 82**

Which of the following statements describes a key principle of software testing?

- A. Automated tests allow better statements of confidence about the quality of software products.
- B. For a software system, it is normally impossible to test all the input and output combinations.
- C. Exhaustive software testing is, with enough effort and tool support, feasible for all software.
- D. The purpose of software testing is demonstrating the absence of defects in software products.

**Answer: B**

**Explanation:**

#### **QUESTION NO: 83**

Reviewing the test Basis is a part of which phase

- A. Test Analysis and Design
- B. Test Implementation and execution
- C. Test Closure Activities
- D. Evaluating exit criteria and reporting

**Answer: A**

**Explanation:**

#### **QUESTION NO: 84**

Which of the following is a benefit of test independence?

- A. It does not require familiarity with the code.
- B. It is cheaper than using developers to test their own code.
- C. It avoids author bias in defining effective tests.
- D. Testers are better at finding defects than developers.

**Answer: C**

**Explanation:**

**QUESTION NO: 85**

Failure is \_\_\_\_\_

- A. Incorrect program behavior due to a fault in the program
- B. Bug found before product Release
- C. Bug found after product Release
- D. Bug found during Design phase

**Answer: A**

**Explanation:**

**QUESTION NO: 86**

During which test activity could faults be found most cost effectively?

- A. Execution
- B. Design
- C. Planning
- D. Check Exit criteria completion

**Answer: C**

**Explanation:**

**QUESTION NO: 87**

Tests are prioritized so that:

- A. You shorten the time required for testing
- B. You do the best testing in the time available
- C. You do more effective testing
- D. You find more faults

**Answer: B**

**Explanation:**

**QUESTION NO: 88**

Which of the following comparisons of component testing and system testing are TRUE?

- A.** Component testing verifies the functioning of software modules, program objects, and classes that are separately testable, whereas system testing verifies interfaces between components and interactions with different parts of the system.
- B.** Test cases for component testing are usually derived from component specifications, design specifications, or data models, whereas test cases for system testing are usually derived from requirement specifications, functional specifications or use cases.
- C.** Component testing focuses on functional characteristics, whereas system testing focuses on functional and non-functional characteristics.
- D.** Component testing is the responsibility of the technical testers, whereas system testing typically is the responsibility of the users of the system.

**Answer: B**

**Explanation:**

**QUESTION NO: 89**

Which of the following statements BEST describes the difference between testing and debugging?

- A.** Testing pinpoints (identifies the source of) the defects. Debugging analyzes the faults and proposes prevention activities.
- B.** Dynamic testing shows failures caused by defects. Debugging finds, analyzes, and removes the causes of failures in the software.
- C.** Testing removes faults. Debugging identifies the causes of failures.
- D.** Dynamic testing prevents causes of failures. Debugging removes the failures.

**Answer: B**

**Explanation:**

**QUESTION NO: 90**

Which of the following statements BEST describes one of the seven key principles of software testing?



- A. Automated tests are better than manual tests for avoiding the Exhaustive Testing.
- B. Exhaustive testing is, with sufficient effort and tool support, feasible for all software.
- C. It is normally impossible to test all input / output combinations for a software system.
- D. The purpose of testing is to demonstrate the absence of defects. The purpose of testing is to demonstrate the absence of defects.

**Answer: C**

**Explanation:**

#### QUESTION NO: 91

Which of the following, if observed in reviews and tests, would lead to problems (or conflict) within teams?

- A. Testers and reviewers are not curious enough to find defects.
- B. Testers and reviewers are not qualified enough to find failures and faults.
- C. Testers and reviewers communicate defects as criticism against persons and not against the software product.
- D. Testers and reviewers expect that defects in the software product have already been found and fixed by the developers.

**Answer: C**

**Explanation:**

#### QUESTION NO: 92

The purpose of requirement phase is:

- A. To freeze requirements
- B. To understand user needs
- C. To define the scope of testing
- D. All of the above

**Answer: D**

**Explanation:**

#### QUESTION NO: 93

Which of the following could be a disadvantage of independent testing?

- A. Developer and independent testing will overlap and waste resources.
- B. Communication is limited between independent testers and developers.
- C. Independent testers are too slow and delay the project schedule.
- D. Developers can lose a sense of responsibility for quality.

**Answer: D**

**Explanation:**

#### QUESTION NO: 94

Which of the following best describes the purpose of non-functional testing?

- A. To measure characteristics of a system which give an indication of how the system performs its functions
- B. To ensure that a system complies with the quality standards set by ISO 9126
- C. To ensure that the system deals appropriately with software malfunctions
- D. To measure the extent to which a system has been tested by functional testing

**Answer: A**

**Explanation:**

#### QUESTION NO: 95

Which of the following is the task of a Tester?

- i. Interaction with the Test Tool Vendor to identify best ways to leverage test tool on the project.
- ii. Prepare and acquire Test Data
- iii. Implement Tests on all test levels, execute and log the tests.
- iv. Create the Test Specifications

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

**Answer: B**

**Explanation:**

**QUESTION NO: 96**

Which of the following is not a major task of Exit criteria?

- A. Checking test logs against the exit criteria specified in test planning.
- B. Logging the outcome of test execution.
- C. Assessing if more tests are needed.
- D. Writing a test summary report for stakeholders.

**Answer: B**

**Explanation:**

**QUESTION NO: 97**

Which is not a major task of test implementation and execution?

- A. Develop and prioritizing test cases, creating test data, writing test procedures and optionally, preparing test harness and writing automated test scripts.
- B. Logging the outcome of test execution and recording the identities and versions of the software under test, test tools and testware.
- C. Checking test logs against the exit criteria specified in test planning.
- D. Verifying that the test environment has been set up correctly.

**Answer: B**

**Explanation:**

**QUESTION NO: 98**

The difference between re-testing and regression testing is:

- A. Re-testing is running a test again; regression testing looks for unexpected side effects
- B. Re-testing looks for unexpected side effects; regression testing is repeating those tests
- C. Re-testing is done after faults are fixed; regression testing is done earlier
- D. Re-testing uses different environments, regression testing uses the same environment
- E. Re-testing is done by developers, regression testing is done by independent testers

**Answer: A**

**Explanation:**

**QUESTION NO: 99**

Non-functional system testing includes:

- A. Testing to see where the system does not function properly
- B. Testing quality attributes of the system including performance and usability
- C. Testing a system feature using only the software required for that action
- D. Testing a system feature using only the software required for that function
- E. Testing for functions that should not exist

**Answer: B**

**Explanation:**

**QUESTION NO: 100**

A deviation from the specified or expected behavior that is visible to end-users is called:

- A. an error
- B. a fault
- C. a failure
- D. a defect

**Answer: C**

**Explanation:**

**QUESTION NO: 101**

Which of the following characteristics of good testing apply to any software development life cycle model?

- A. Acceptance testing is always the final test level to be applied.
- B. All test levels are planned and completed for each developed feature.
- C. Testers are involved as soon as the first piece of code can be executed.
- D. For every development activity there is a corresponding testing activity.

**Answer: D**

**Explanation:**

**QUESTION NO: 102**

When a defect is detected and fixed then the software should be retested to confirm that the original defect has been successfully removed. This is called:

- A. Regression testing
- B. Maintenance testing
- C. Confirmation testing
- D. None of the above

**Answer: C**

**Explanation:**

**QUESTION NO: 103**

Test Implementation and execution has which of the following major tasks?

- i. Developing and prioritizing test cases, creating test data, writing test procedures and optionally preparing the test harnesses and writing automated test scripts.
- ii. Creating the test suite from the test cases for efficient test execution.
- iii. Verifying that the test environment has been set up correctly.
- iv. Determining the exit criteria.

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

**Answer: A**

**Explanation:**

**QUESTION NO: 104**

Which of the following statements contains a valuable objective for a test team?

- A. Prove that the remaining defects will not cause any additional failures.
- B. Run all of the tests that are defined for the test object as quickly as possible.
- C. Prove that all faults have been identified through thorough testing.
- D. Cause as many failures as possible so that faults can be identified and corrected

**Answer: D**

**Explanation:**

#### QUESTION NO: 105

Which of the following statements is the MOST valid goal for a test team?

- A. Determine whether enough component testing was executed.
- B. Cause as many failures as possible so that faults can be identified and corrected.
- C. Prove that all faults are identified.
- D. Prove that any remaining faults will not cause any failures.

**Answer: B**

**Explanation:**

#### QUESTION NO: 106

Which of the following is not a type of incremental testing approach?

- A. Top down
- B. Big-bang
- C. Bottom up
- D. Functional incrementation.

**Answer: B**

**Explanation:**

#### QUESTION NO: 107

Which of the following is MOST important in the selection of a test approach?

- A. Availability of tools to support the proposed techniques.
- B. The budget allowed for training in proposed techniques.

- C. Available skills and experience in the proposed techniques.
- D. The willingness of the test team to learn new techniques.

**Answer: C**

**Explanation:**

#### **QUESTION NO: 108**

A deviation from the specified or expected behavior that is visible to end-users is called:

- A. an error
- B. a fault
- C. a failure
- D. a defect

**Answer: C**

**Explanation:**

#### **QUESTION NO: 109**

According to the ISTQB Glossary, regression testing is required for what purpose?

- A. To verify the success of corrective actions.
- B. To prevent a task from being incorrectly considered completed.
- C. To ensure that defects have not been introduced by a modification.
- D. To motivate better unit testing by the programmers.

**Answer: C**

**Explanation:**

#### **QUESTION NO: 110**

Maintenance testing is:

- A. updating tests when the software has changed
- B. testing a released system that has been changed
- C. testing by users to ensure that the system meets a business need
- D. testing to maintain business advantage

**Answer: B**

**Explanation:**

**QUESTION NO: 111**

Hand over of Testware is a part of which Phase:

- A. Test Analysis and Design
- B. Test Planning and control
- C. Test Closure Activities
- D. Evaluating exit criteria and reporting

**Answer: C**

**Explanation:**

**QUESTION NO: 112**

One Key reason why developers have difficulty testing their own work is:

- A. Lack of technical documentation
- B. Lack of test tools on the market for developers
- C. Lack of training
- D. Lack of Objectivity

**Answer: C**

**Explanation:**

**QUESTION NO: 113**

The purpose of exit criteria is:

- A. Define when to stop testing
- B. End of test level
- C. When a set of tests has achieved a specific pre condition
- D. All of the above

**Answer: D**

**Explanation:**



**QUESTION NO: 114**

What is important to do when working with software development models?

- A. To adapt the models to the context of project and product characteristics.
- B. To choose the waterfall model because it is the first and best proven model.
- C. To start with the V-model and then move to either iterative or incremental models.
- D. To only change the organization to fit the model and not vice versa.

**Answer: A**

**Explanation:**

**QUESTION NO: 115**

Which statement below BEST describes non-functional testing?

- A. The process of testing an integrated system to verify that it meets specified requirements.
- B. The process of testing to determine the compliance of a system to coding standards.
- C. Testing without reference to the internal structure of a system.
- D. Testing system attributes, such as usability, reliability or maintainability.

**Answer: A**

**Explanation:**

**QUESTION NO: 116**

For which of the following would maintenance testing be used?

- A. Correction of defects during the development phase.
- B. Planned enhancements to an existing operational system.
- C. Complaints about system quality during user acceptance testing.
- D. Integrating functions during the development of a new system.

**Answer: B**

**Explanation:**

**QUESTION NO: 117**

Reporting Discrepancies as incidents is a part of which phase:

- A. Test Analysis and Design
- B. Test Implementation and execution
- C. Test Closure Activities
- D. Evaluating exit criteria and reporting

**Answer: B**

**Explanation:**

**QUESTION NO: 118**

Important consequences of the impossibility of complete testing are:

- A. We can never be certain that the program is bug free.
- B. We have no definite stopping point for testing, which makes it easier for some managers to argue for very little testing.
- C. We have no easy answer for what testing tasks should always be required, because every task takes time that could be spent on other high importance tasks.
- D. All of the above

**Answer: D**

**Explanation:**

**QUESTION NO: 119**

Which of the following is the main purpose of the component build and integration strategy?

- A. to ensure that all of the small components are tested
- B. to ensure that the system interfaces to other systems and networks
- C. to ensure that the integration testing can be performed by a small team
- D. to specify how the software should be divided into components
- E. to specify which components to combine when, and how many at once

**Answer: E**

**Explanation:**

**QUESTION NO: 120**

What should be the MAIN objective during development testing?

- A. To cause as many failures as possible so that defects in the software are identified and can be fixed
- B. To confirm that the system works as expected and that requirements have been met
- C. To assess the quality of the software with no intention of fixing defects
- D. To give information to stakeholders of the risk of releasing the system at a given time

**Answer: A**

**Explanation:**

**QUESTION NO: 121**

Which of the following is not a part of the Test Implementation and Execution Phase?

- A. Creating test suites from the test cases
- B. Executing test cases either manually or by using test execution tools
- C. Comparing actual results
- D. Designing the Tests

**Answer: D**

**Explanation:**

**QUESTION NO: 122**

Designing the test environment set-up and identifying any required infrastructure and tools are a part of which phase:

- A. Test Implementation and execution
- B. Test Analysis and Design
- C. Evaluating the Exit Criteria and reporting
- D. Test Closure Activities

**Answer: B**

**Explanation:**

**QUESTION NO: 123**

Which of the following statements BEST describes one of the seven key principles of software testing?

- A. Automated tests are better than manual tests for avoiding the Exhaustive Testing.
- B. Exhaustive testing is, with sufficient effort and tool support, feasible for all software.
- C. It is normally impossible to test all input / output combinations for a software system.
- D. The purpose of testing is to demonstrate the absence of defects. The purpose of testing is to demonstrate the absence of defects.

**Answer: C**

**Explanation:**

**QUESTION NO: 124**

What is the benefit of independent testing?

- A. More work gets done because testers do not disturb the developers all the time.
- B. Independent testers tend to be unbiased and find different defects than the developers
- C. Independent testers do not need extra education and training.
- D. Independent testers reduce the bottleneck in the incident management process.

**Answer: B**

**Explanation:**

**QUESTION NO: 125**

What is the purpose of a test completion criterion?

- A. to know when a specific test has finished its execution
- B. to ensure that the test case specification is complete
- C. to set the criteria used in generating test inputs
- D. to determine when to stop testing

**Answer: B**

**Explanation:**

**QUESTION NO: 126**

Which activities form part of test planning?

- i) Developing test cases.
- ii) Defining the overall approach to testing.
- iii) Assigning resources.
- iv) Building the test environment.
- v) Writing test conditions.

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

**Answer: B**

**Explanation:**

**QUESTION NO: 127**

Testing should be stopped when:

- A.** All the planned tests have been run
- B.** Time has run out
- C.** All faults have been fixed correctly
- D.** Both A and C
- E.** It depends on the risks for the system being tested

**Answer: E**

**Explanation:**

**QUESTION NO: 128**

Pick the best definition of quality:

- A.** Quality is job one
- B.** Zero defects

- C. Conformance to requirements
- D. Work as designed

**Answer: C**

**Explanation:**

#### QUESTION NO: 129

Which of these are objectives for software testing?

- A. Determine the productivity of programmers
- B. Eliminate the need for future program maintenance
- C. Eliminate every error prior to release
- D. Uncover software errors

**Answer: D**

**Explanation:**

#### QUESTION NO: 130

Consider the following statements about early test design:

- i. Early test design can prevent fault multiplication
- ii. Faults found during early test design are more expensive to fix
- iii. Early test design can find faults
- iv. Early test design can cause changes to the requirements
- v. Early test design takes more effort

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

**Answer: A**

**Explanation:**

**QUESTION NO: 131**

Which of the following are the typical defects found by static analysis tools?

- a. Variables that are never used.
- b. Security vulnerabilities.
- c. Poor performance.
- d. Unreachable code.
- e. Business processes not followed.

- A.** b, c and d are true; a and e are false
- B.** a is true; b, c, d and e are false
- C.** c, d and e are true; a and b are false
- D.** a, b and d are true; c and e are false

**Answer: D**

**Explanation:**

**QUESTION NO: 132**

During the software development process, at what point can the test process start?

- A.** When the code is complete.
- B.** When the design is complete.
- C.** When the software requirements have been approved.
- D.** When the first code module is ready for unit testing

**Answer: C**

**Explanation:**

**QUESTION NO: 133**

Which is not a major task of test implementation and execution?

- A.** Develop and prioritizing test cases, creating test data, writing test procedures and optionally,

preparing test harness and writing automated test scripts.

**B.** Logging the outcome of test execution and recording the identities and versions of the software under test, test tools and testware.

**C.** Checking test logs against the exit criteria specified in test planning.

**D.** Verifying that the test environment has been set up correctly.

**Answer: C**

**Explanation:**

#### QUESTION NO: 134

Which of the following could be a reason for a failure?

- 1) Testing fault
- 2) Software fault
- 3) Design fault
- 4) Environment Fault
- 5) Documentation Fault

**A.** 2 is a valid reason; 1,3,4 & 5 are not

**B.** 1,2,3,4 are valid reasons; 5 is not

**C.** 1,2,3 are valid reasons; 4 & 5 are not

**D.** All of them are valid reasons for failure

**Answer: A**

**Explanation:**

#### QUESTION NO: 135

Which is not the testing objective?

- A.** Finding defects
- B.** Gaining confidence about the level of quality and providing information
- C.** Preventing defects.
- D.** Debugging defects

**Answer: D**



**Explanation:****QUESTION NO: 136**

Which of the following is usually the test basis for integration testing?

- A. Program specification
- B. Functional specification
- C. Technical specification
- D. Requirement specification

**Answer: C**

**Explanation:**

Option (A) is used for unit testing.

Option (B) is used for system testing and

Option (D) is used for acceptance testing.

**QUESTION NO: 137**

Which of the following are examples of iterative development models?

- (i) V-model
- (ii) Rapid Application Development model
- (iii) Waterfall model
- (iv) Agile development model

- A. (i) and (ii)
- B. (ii) and (iii)
- C. (ii) and (iv)
- D. (iii) and (iv)

**Answer: C**

**Explanation:**

The other two models are sequential models.

**QUESTION NO: 138**

Which of the following is not true of regression testing?

- A. It can be carried out at each stage of the life cycle.
- B. It serves to demonstrate that the changed software works as intended.
- C. It serves to demonstrate that software has not been unintentionally changed.
- D. It is often automated.

**Answer: B**

**Explanation:**

This is a definition of confirmation testing. The other three options are true of regression testing.

**QUESTION NO: 139**

One of the roles in a review is that of moderator, which of the following best describes this role?

- A. Plans the review, runs the review meeting and ensures that follow-up activities are completed.
- B. Allocates time in the plan, decides which reviews will take place and that the benefits are delivered.
- C. Writes the document to be reviewed, agrees that the document can be reviewed, and updates the document with any changes.
- D. Documents all issues raised in the review meeting, records problems and open points.

**Answer: A**

**Explanation:**

**QUESTION NO: 140**

What do static analysis tools analyze?

- A. Design
- B. Test cases
- C. Requirements
- D. Program code

**Answer: D**

**Explanation:****QUESTION NO: 141**

Which of the following is most likely to be a benefit of using static techniques?

- A. Fewer performance defects.
- B. Productivity improvements in the development process.
- C. More efficient regression testing.
- D. Quick return on investment in static analysis tools.

**Answer: B**

**Explanation:**

Although the other options might be seen as benefits they are not amongst the most likely benefits. Option (B) is the benefit that is most likely to be realized.

**QUESTION NO: 142**

Which of the following are static techniques?

- A. Walkthrough.
- B. State transition testing.
- C. Decision table testing.
- D. Statement testing.

**Answer: A**

**Explanation:**

Options (B), (C) and (D) are all dynamic test techniques.

**QUESTION NO: 143**

Which one of the following roles is typically used in a review?

- A. Champion.
- B. Author.

- C. Project sponsor.
- D. Custodian.

**Answer: B**

**Explanation:**

The Author is the only role that is typically used in a review.

A Champion might sponsor the review process but is not a defined role within an actual review; a Project Sponsor, if technically competent, might be asked to play a defined role within the review process, but whilst using that role they will not be a Project Sponsor; finally, a Custodian might ensure the results are stored safely but would not be involved in the actual review itself.

#### QUESTION NO: 144

Which of the following defines the expected result of a test?

- A. Test case
- B. Test procedure
- C. Test execution schedule
- D. Test condition

**Answer: A**

**Explanation:**

#### QUESTION NO: 145

Which of the following describes structure-based (white-box) test case design techniques?

- A. Test cases are derived systematically from models of the system.
- B. Test cases are derived systematically from the tester's experience.
- C. Test cases are derived systematically from the delivered code.
- D. Test cases are derived from the developers' experience.

**Answer: C**

**Explanation:**

Answer (A) relates to specification-based testing, answer (B) relates to experience-based testing and answer (D) could relate either to debugging or to experience-based techniques.

**QUESTION NO: 146**

Which of the following is a structure-based (white-box) technique?

- A. Decision table testing
- B. State transition testing
- C. Statement testing
- D. Boundary value analysis

**Answer: C**

**Explanation:**

All other options are specification-based (black-box) techniques, and the main distracter is answer (A) because decision table testing could be confused with decision testing.

**QUESTION NO: 147**

What is the main purpose of use case testing?

- A. To identify defects in process flows related to typical use of the system.
- B. To identify defects in the connections between components.
- C. To identify defects in the system related to extreme scenarios.
- D. To identify defects in the system related to the use of unapproved programming practices.

**Answer: A**

**Explanation:**

Answer (B) relates to integration testing; answer (C) could relate to boundary value analysis or performance testing, but use cases exercise typical process flows rather than extreme examples; answer (D) relates to static analysis.

**QUESTION NO: 148**

What is the purpose of exit criteria?

- A. To identify how many tests to design.
- B. To identify when to start testing.

- C. To identify when to stop testing.
- D. To identify who will carry out the test execution.

**Answer: C**

**Explanation:**

#### QUESTION NO: 149

What can a risk-based approach to testing provide?

- A. The types of test techniques to be employed.
- B. The total tests needed to provide 100 per cent coverage.
- C. An estimation of the total cost of testing.
- D. Only that test execution is effective at reducing risk.

**Answer: A**

**Explanation:**

#### QUESTION NO: 150

When assembling a test team to work on an enhancement to an existing system, which of the following has the highest level of test independence?

- A. A business analyst who wrote the original requirements for the system.
- B. A permanent programmer who reviewed some of the new code, but has not written any of it.
- C. A permanent tester who found most defects in the original system.
- D. A contract tester who has never worked for the organization before.

**Answer: D**

**Explanation:**

In this scenario, the contract tester who has never worked for the organization before has the highest level of test independence. The three others are less independent as they are likely to make assumptions based on their previous knowledge of the requirements, code and general functionality of the original system.

Note that independence does not necessarily equate to most useful. In practice most test or project managers would recruit a permanent tester who has worked on the original system in preference to a contract tester with no knowledge of the system. However, when assembling a team it would be useful to have staff with varying levels of test independence and system knowledge.

**QUESTION NO: 151**

Which of the following terms is used to describe the management of software components comprising an integrated system?

- A. Configuration management
- B. Incident management
- C. Test monitoring
- D. Risk management

**Answer: A**

**Explanation:**

Incident management is the collection and processing of incidents raised when errors and defects are discovered. Test monitoring identifies the status of the testing activity on a continuous basis. Risk management identifies, analyses and mitigates risks to the project and the product. Configuration management is concerned with the management of changes to software components and their associated documentation and testware.

**QUESTION NO: 152**

A new system is about to be developed. Which of the following functions has the highest level of risk?

- A. Likelihood of failure = 20%; impact value = £100,000
- B. Likelihood of failure = 10%; impact value = £150,000
- C. Likelihood of failure = 1%; impact value = £500,000
- D. Likelihood of failure = 2%; impact value = £200,000

**Answer: A**

**Explanation:**

In (B) the product of probability × impact has the value £15,000; in (C) the value is £5,000 and in (D) it is £4,000. The value of £20,000 in (A) is therefore the highest.

**QUESTION NO: 153**

Which of the following statements about risks is most accurate?

- A. Project risks rarely affect product risk.
- B. Product risks rarely affect project risk.
- C. A risk-based approach is more likely to be used to mitigate product rather than project risks.
- D. A risk-based approach is more likely to be used to mitigate project rather than product risks.

**Answer: C**

**Explanation:**

In general, project risk and product risk can be hard to differentiate. Anything that impacts on the quality of the delivered system is likely to lead to delays or increased costs as the problem is tackled. Anything causing delays to the project is likely to threaten the delivered system's quality. The risk-based approach is an approach to managing product risk through testing, so it impacts most directly on product risk.

**QUESTION NO: 154**

For which of the following activities in the fundamental test process would an incident management tool be most useful?

- A. Test planning and control
- B. Test analysis and design
- C. Test implementation and execution
- D. Evaluating exit criteria and reporting

**Answer: C**

**Explanation:**

Incident management tools are most useful during test implementation and execution as this is the stage at which the tool is used to raise, manage, retest and close incidents.

The data collected during the defect life cycle can then be manipulated into information that is useful for other activities within the fundamental test process.

Information on numbers of defects outstanding may be useful for evaluating exit criteria (option (D)). This information could also be used for planning future testing and for taking control (option (A)).

Incident management tools can also assist in test analysis and design (option (B)) as information



about defects found when testing the previous release of the system could be used when analyzing the type of testing required for the next enhancement.

**QUESTION NO: 155**

Which of the following defects is most likely to be found by a test harness?

- A. Variance from programming standards.
- B. A defect in middleware.
- C. Memory leaks.
- D. Regression defects.

**Answer: B**

**Explanation:**

Variance from programming standards defects (option (A)) are found during the review or static testing process. Therefore a test harness is unlikely to find a defect in programming standards.

Memory leak defects (option (C)) could potentially be found by a test harness designed to run many test cases.

Regression defects (option (D)) could be found using many types of test tool.

Defects in middleware (option (B)) are generally more likely to be found by a test harness or a dynamic analysis tool than by any other type of tool.

**QUESTION NO: 156**

A test management tool is most likely to integrate with which of the following tools?

- A. Performance testing tool
- B. Test data preparation tool
- C. Static analysis tool
- D. Requirements management tool

**Answer: D**

**Explanation:**

Requirements management tools (option (D)) often have interfaces with test management tools. In

some cases they will be sold as a package or in other cases a test management tool may have its own requirements module. The use of such interfaces or integrated packages aids traceability from requirements through to test scripts and defects.

Performance management tools (option (A)), test data preparation tools (option (B)) and static analysis tools (option (C)) are unlikely to have an interface or be integrated with a test management tool. They serve different purposes and therefore there is little need for such interfaces.

#### QUESTION NO: 157

Which of the following are aids to good communication, and which hinder it?

- i. Try to understand how the other person feels.
- ii. Communicate personal feelings, concentrating upon individuals.
- iii. Confirm the other person has understood what you have said and vice versa.
- iv. Emphasize the common goal of better quality.
- v. Each discussion is a battle to be won.

- A. (i), (ii) and (iii) aid, (iv) and (v) hinder.
- B. (iii), (iv) and (v) aid, (i) and (ii) hinder.
- C. (i), (iii) and (iv) aid, (ii) and (v) hinder.
- D. (ii), (iii) and (iv) aid, (i) and (v) hinder.

**Answer: C**

**Explanation:**

#### QUESTION NO: 158

Which pair of definitions is correct?

- A. Regression testing is checking that the reported defect has been fixed; retesting is testing that there are no additional problems in previously tested software.
- B. Regression testing is checking there are no additional problems in previously tested software; retesting enables developers to isolate the problem.

**C.** Regression testing involves running all tests that have been run before; retesting runs new tests.

**D.** Regression testing is checking that there are no additional problems in previously tested software, retesting is demonstrating that the reported defect has been fixed.

**Answer: D**

**Explanation:**

Regression testing is testing that nothing has regressed. Retesting (or confirmation testing) confirms the fix is correct by running the same test after the fix has been made. No other option has both of these as true.

### QUESTION NO: 159

The following statements relate to activities that are part of the fundamental test process.

- i. Evaluating the testability of requirements.
- ii. Repeating testing activities after changes.
- iii. Designing the test environment set-up.
- iv. Developing and prioritizing test cases.
- v. Verifying the environment is set up correctly.

Which statement below is TRUE?

- A.** (i) and (ii) are part of analysis and design, (iii), (iv) and (v) are part of test implementation and execution.
- B.** (i) and (iii) are part of analysis and design, (ii), (iv) and (v) are part of test implementation and execution.
- C.** (i) and (v) are part of analysis and design, (ii), (iii) and (iv) are part of test implementation and execution.
- D.** (i) and (iv) are part of analysis and design, (ii), (iii) and (v) are part of test implementation and execution.

**Answer: B**

**Explanation:**

All other answers contain an activity identified as analysis and design that is part of implementation and test execution.

**QUESTION NO: 160**

Which statement correctly describes the public and profession aspects of the code of ethics?

- A.** Public: Certified software testers shall act in the best interests of their client and employer (being consistent with the wider public interest). Profession: Certified software testers shall advance the integrity and reputation of their industry consistent with the public interest.
- B.** Public: Certified software testers shall advance the integrity and reputation of the profession consistent with the public interest. Profession: Certified software testers shall consider the wider public interest in their actions.
- C.** Public: Certified software testers shall consider the wider public interest in their actions. Profession: Certified software testers shall participate in lifelong learning regarding the practice of their profession and shall promote an ethical approach to the practice of their profession.
- D.** Public: Certified software testers shall consider the wider public interest in their actions. Profession: Certified software testers shall advance the integrity and reputation of their industry consistent with the public interest.

**Answer: D**

**Explanation:**

All other answers contain an activity identified as analysis and design that is part of implementation and test execution.

**QUESTION NO: 161**

Which of the following is true about the V-model?

- A.** It has the same steps as the waterfall model for software development.
- B.** It is referred to as a cyclical model for software development.
- C.** It enables the production of a working version of the system as early as possible.
- D.** It enables test planning to start as early as possible.

**Answer: D**

**Explanation:**

**QUESTION NO: 162**

Which of the following is true of iterative development?

- A. It uses fully defined specifications from the start.
- B. It involves the users in the testing throughout.
- C. Changes to the system do not need to be formally recorded.
- D. It is not suitable for developing websites.

**Answer: B**

**Explanation:**

#### QUESTION NO: 163

A top-down development strategy affects which level of testing most?

- A. Component testing
- B. Integration testing
- C. System testing
- D. User acceptance testing

**Answer: B**

**Explanation:**

The development strategy will affect the component testing (option (A)), in so far as it cannot be tested unless it has been built. Options (C) and (D) require the system to have been delivered; at these points the development strategy followed is not important to the tester. Option (B) needs knowledge of the development strategy in order to determine the order in which components will be integrated and tested.

#### QUESTION NO: 164

Which of the following is a non-functional requirement?

- A. The system will enable users to buy books.
- B. The system will allow users to return books.
- C. The system will ensure security of the customer details.
- D. The system will allow up to 100 users to log in at the same time.

**Answer: D**

**Explanation:**

The other options are functional requirements. Note that security is regarded as a functional requirement in this syllabus.

**QUESTION NO: 165**

Which of the following statements are true?

- (i) For every development activity there is a corresponding testing activity.
- (ii) Each test level has the same test objectives.
- (iii) The analysis and design of tests for a given test level should begin after the corresponding development activity.
- (iv) Testers should be involved in reviewing documents as soon as drafts are available in the development life cycle.

- A. (i) and (ii)
- B. (iii) and (iv)
- C. (ii) and (iii)
- D. (i) and (iv)

**Answer: D**

**Explanation:**

Option (ii) is incorrect: each test level has a different objective.

Option (iii) is also incorrect: test analysis and design should start once the documentation has been completed.

**QUESTION NO: 166**

Which of the following statements are correct for walkthroughs?

- (i) Often led by the author.
- (ii) Documented and defined results.
- (iii) All participants have defined roles.
- (iv) Used to aid learning.
- (v) Main purpose is to find defects.

- A. (i) and (v) are correct.
- B. (ii) and (iii) are correct.
- C. (i) and (iv) are correct.
- D. (iii) and (iv) are correct.

**Answer: C**

**Explanation:**

#### QUESTION NO: 167

Which of the following has the typical formal review activities in the correct sequence?

- A. Kick-off, review meeting, planning, follow-up.
- B. Kick-off, planning, review meeting, re-work.
- C. Planning, kick-off, individual preparation, review meeting.
- D. Planning, individual preparation, follow-up, re-work.

**Answer: C**

**Explanation:**

The correct sequence is: planning, kick-off, individual preparation, review meeting, re-work, follow-up. All of the other options have either the activities in the wrong order or activities missing from the strict flow.

#### QUESTION NO: 168

Which of the following statements are true?

- (i) Defects are likely to be found earlier in the development process by using reviews rather than static analysis.
- (ii) Walkthroughs require code but static analysis does not require code.
- (iii) Informal reviews can be performed on code and specifications.
- (iv) Dynamic techniques are generally used before static techniques.
- (v) Dynamic techniques can only be used after code is ready to be executed.

**A. (i), (ii), (vi).**

- B. (ii), (iii), (v).
- C. (i), (iv), (v).
- D. (i), (iii), (v).

**Answer: D**

**Explanation:**

The other answers are incorrect because:

(ii) Walkthroughs do not require code and static analysis does require code.

(iv) Static techniques do not execute the code and therefore can be run before and after the code is ready for execution.

#### **QUESTION NO: 169**

Which of the following is most likely to be performed by developers?

- A. Technical review of a functional specification.
- B. Walkthrough of a requirements document.
- C. Informal review of a program specification.
- D. Static analysis of a software model.

**Answer: D**

**Explanation:**

Static analysis is done almost exclusively by developers. The other review types would be performed using a combination of developers, testers and other interested stakeholders.

#### **QUESTION NO: 170**

Which of the following are most characteristic of structure-based testing?

- (i) Information about how the software is constructed is used to derive test cases.
- (ii) Statement coverage and/or decision coverage can be measured for existing test cases.
- (iii) The knowledge and experience of people are used to derive test cases.
- (iv) Test cases are derived from a model or specification of the system.

- A. (i) and (ii)



- B. (ii) and (iii)
- C. (ii) and (iv)
- D. (i) and (iii)

**Answer: A**

**Explanation:**

#### QUESTION NO: 171

Which of the following are the most important factors to be taken into account when selecting test techniques?

- (i) Tools available.
- (ii) Regulatory standards.
- (iii) Experience of the development team.
- (iv) Knowledge of the test team.

The need to maintain levels of capability in each technique.

- A. (i) and (ii)
- B. (ii) and (iv)
- C. (iii) and (iv)
- D. (i) and (v)

**Answer: B**

**Explanation:**

Answer (i) looks temptingly right, and the availability of tools might make the use of a technique more or less attractive, but it would not be decisive in the way that regulatory standards and tester knowledge are.

Answer (iii) is irrelevant because testing should be independent of development anyway, but it could tempt someone who is unsure about the relationship between development and testing.

Answer (v) is a factor in managing the test team, and experience would need to be maintained, but this should not influence the selection of techniques for a live project.

**QUESTION NO: 172**

Which of the following are most likely to be used when developing a test strategy or test approach?

- (i) Failure-based approach
- (ii) Test specification approach
- (iii) Model-based approach
- (iv) Finance-based approach

- A.** (iii) and (ii)
- B.** (i) and (iv)
- C.** (ii) and (i)
- D.** (i) and (iii)

**Answer: C**

**Explanation:**

**QUESTION NO: 173**

What test roles (or parts in the testing process) is a developer most likely to perform?

- (i) Executing component integration tests.
- (ii) Static analysis.
- (iii) Setting up the test environment.
- (iv) Deciding how much testing should be automated.

- A.** (i) and (ii)
- B.** (i) and (iv)
- C.** (ii) and (iii)
- D.** (iii) and (iv)

**Answer: A**

**Explanation:**

(i) Executing component integration tests is usually done by developers. Developers are usually responsible for unit and component integration testing. Independent testing usually follows at system and acceptance test levels.

(ii) Static analysis is usually done by developers because: it requires an understanding of the code and therefore the person doing this needs skills in the programming language; and it can be done as soon as the code is written. Therefore it is quick and effective for the developer to do it. The risk of a lack of test independence can be mitigated by performing independent system and acceptance testing.

(iii) Setting up the test environment is an activity typically performed by a tester. It may require support from developers and staff from other departments and on some occasions environments could be set up by developers. However, it is a task that could be done by a tester rather than a developer.

(iv) Deciding how much testing should be automated is typically a decision made by the test leader, who will consult other staff in the decision-making process. Developers may be involved and their skills may be required to automate some tests. However, the decision on how much to automate should not be made by developers.

#### QUESTION NO: 174

Which of the following are valid justifications for developers testing their own code during unit testing?

- (i) Their lack of independence is mitigated by independent testing during system and acceptance testing.
- (ii) A person with a good understanding of the code can find more defects more quickly using white-box techniques.
- (iii) Developers have a better understanding of the requirements than testers.
- (iv) Testers write unnecessary incident reports because they find minor differences between the way in which the system behaves and the way in which it is specified to work.

- A. (i) and (ii)
- B. (i) and (iv)
- C. (ii) and (iii)
- D. (iii) and (iv)

**Answer: A**

**Explanation:**

It is unlikely that developers will have a better understanding of the requirements than testers,

partly because testers work closely with the user community (and may be drawn from it) and partly because developers seldom work with the complete set of requirements in a medium to large development.

Testers may raise incidents related to the difference between user expectations and the specification, but these are not unnecessary. Such issues are more likely to arise at the later stages of testing.

Early testing (unit testing) is usually done most effectively by developers with a good understanding of the code and the development environment; they can be more efficient and more effective at this level. Later independent stages of testing offset any disadvantage from the lack of independence at unit testing level.

#### QUESTION NO: 175

Which of the following pairs of test tools are likely to be most useful during the test analysis and design stage of the fundamental test process?

- (i) Test execution tool
- (ii) Test data preparation tool
- (iii) Test management tool
- (iv) Requirements management tool

- A. (i) and (ii)
- B. (i) and (iv)
- C. (ii) and (iii)
- D. (iii) and (iv)

**Answer: D**

**Explanation:**

#### QUESTION NO: 176

Which of the following is most likely to cause failure in the implementation of a test tool?

- A. Underestimating the demand for a tool.

- B. The purchase price of the tool.
- C. No agreed requirements for the tool.
- D. The cost of resources to implement and maintain the tool.

**Answer: C**

**Explanation:**

#### QUESTION NO: 177

What benefits do static analysis tools have over test execution tools?

- A. Static analysis tools find defects earlier in the life cycle.
- B. Static analysis tools can be used before code is written.
- C. Static analysis tools test that the delivered code meets business requirements.
- D. Static analysis tools are particularly effective for regression testing.

**Answer: A**

**Explanation:**

#### QUESTION NO: 178

Which of the following principles should be followed when introducing a test tool into an organization?

- (i) Assessing organizational maturity to establish whether a tool will provide expected benefits.
  - (ii) Requiring a quick payback on the initial investment.
  - (iii) Including a requirement for the tool to be easy to use without having to train unskilled testers.
  - (iv) Identifying and agreeing requirements before evaluating test tools.
- A. (i) and (ii)
  - B. (i) and (iv)
  - C. (ii) and (iii)
  - D. (iii) and (iv)

**Answer: B**

**Explanation:**

Assessing organizational maturity (i) is very important when deciding whether to introduce a test tool, as implementing a tool in an immature test organization with poor processes is unlikely to

produce any benefits.

A quick return on the initial investment (ii) in a test tool is rare.

Having a requirement that a tool should be easy to use for untrained and unskilled testers (iii) is generally a false hope. This is comparable with expecting someone who has never driven a car to be able to drive safely and effectively.

Agreeing requirements before evaluating tools (iv) is essential. Not to do so would be comparable with building and testing a system without requirements.

In conclusion, (i) and (iv) are good principles to follow when introducing a tool and (ii) and (iii) are not.

#### QUESTION NO: 179

How can test execution tools be of most benefit during exploratory testing?

- A. They can record user actions so that defects are easier to recreate.
- B. They can be used to perform the regression aspects of exploratory testing.
- C. They can help to mitigate the risk of low test coverage.
- D. They can use data-driven tests to increase the amount of exploratory testing performed.

**Answer: A**

**Explanation:**

Exploratory testing is used when it is unclear what the system is supposed to do. Therefore test execution tools are of little use because expected results cannot be predicted.

However, the record feature of a test execution tool can be used to log the actions performed so that defects can be recreated (option (A)) and rectified more easily.

#### QUESTION NO: 180

Which of the following types of test tool are most likely to include traceability functions?

- (i) Performance testing tool

- (ii) Requirements management tool
- (iii) Configuration management tool
- (iv) Static analysis tool

- A. (i) and (ii)
- B. (i) and (iv)
- C. (ii) and (iii)
- D. (iii) and (iv)

**Answer: C**

**Explanation:**

Requirements management tools (ii) have traceability because they enable test conditions and subsequently test scripts and defects to be traced back to requirements. Configuration management tools (iii) also need to trace the appropriate version of a test script to the release or version of a system or module.

Performance monitoring tools (i) and static analysis tools (iv) are designed for specific objectives. Neither of these tools particularly need traceability functions.

#### QUESTION NO: 181

A system is designed to accept values of examination marks as follows:

Fail: 0–39 inclusive

Pass: 40–59 inclusive

Merit: 60–79 inclusive

Distinction: 80–100 inclusive

In which of the following sets of values are all values in different equivalence partitions?

- A. 25, 40, 60, 75
- B. 0, 45, 79, 87
- C. 35, 40, 59, 69
- D. 25, 39, 60, 81

**Answer: B**

**Explanation:****QUESTION NO: 182**

A washing machine has three temperature bands for different kinds of fabrics: fragile fabrics are washed at temperatures between 15 and 30 degrees Celsius; normal fabrics are washed at temperatures between 31 and 60 degrees Celsius; heavily soiled and tough fabrics are washed at temperatures between 61 and 100 degrees Celsius.

Which of the following contains only values that are in different equivalence partitions?

- A. 15, 30, 60
- B. 20, 35, 60
- C. 25, 45, 75
- D. 12, 35, 55

**Answer: C**

**Explanation:**

Answer (A) includes two values from the lower partition, answer (B) contains two values from the second partition, answer (D) contains one value that is invalid (out of range).

**QUESTION NO: 183**

Consider the following pseudo code:

```
1 Begin
2 Read Time
3 If Time < 12 Then
4 Print(Time, "am")
5 Endif
6 If Time > 12 Then
7 Print(Time 12, "pm")
8 Endif
```



9 If Time = 12 Then

10 Print (Time, "noon")

11 Endif

12 End

How many test cases are needed to achieve 100 per cent decision coverage?

A. 1

B. 2

C. 3

D. 4

**Answer: C**

**Explanation:**

The three decisions are in sequence and the conditions are all mutually exclusive (if any one is true the others must be false). Hence a test case that makes the first decision true will make the second and third decisions false and so on.

So test case 1 (say Time = 6) would exercise the path True, False, False, test case 2 (say Time = 15) would exercise the path False, True, False. Test case 3 would have to be Time = 12. This combination achieves 100 per cent decision coverage because each decision has been exercised through its true and its false outcomes.

#### QUESTION NO: 184

Consider the following pseudo code:

1 Begin

2 Read Time

3 If Time < 12 Then

4 Print(Time, "am")

5 Endif

6 If Time > 12 Then

7 Print(Time 12, "pm")

8 Endif

9 If Time = 12 Then

10 Print (Time, "noon")

11 Endif

12 End

If the test cases Time = 11 and Time = 15 were input, what level of decision coverage would be achieved?

- A. 100% or 6/6
- B. 50% or 3/6
- C. 67% or 4/6
- D. 83% or 5/6

**Answer: D**

**Explanation:**

Test case 1 exercises the decision outcomes True, False, False

Test case 2 exercises the decision outcomes False, True, False

This leaves the True outcome of decision 3 not exercised.

Of the 6 possible decision outcomes, 5 have been exercised, so the decision coverage is 5/6 (about 83%).

#### QUESTION NO: 185

A software component has the code shown below:

Program BiggestA,

Biggest: Integer

Begin

Read A

Biggest = 10

While A > 0

Do

If A > Biggest

Then Biggest = A

Endif

Read A

Enddo

End

The component has exit criteria for component testing that include 100% statement coverage. Which of the following test cases will satisfy this criterion?

- A. 0
- B. 10, 0
- C. 10, 5, 0
- D. 10, 11, 0

**Answer: D**

**Explanation:**

#### QUESTION NO: 186

Given the Following program IF X <=> Z THEN Statement 2;ENDMcCabe's Cyclomatic Complexity is :

- A. 2
- B. 3
- C. 4
- D. 5

**Answer: B**

**Explanation:**

#### QUESTION NO: 187

An input field takes the year of birth between 1900 and 2004. The boundary values for testing this field are:

- A. 0,1900,2004,2005
- B. 1900, 2004
- C. 1899,1900,2004,2005
- D. 1899, 1900, 1901,2003,2004,2005

**Answer: C**

**Explanation:**

#### QUESTION NO: 188

Code Coverage is used as a measure of what?

- A. Defects
- B. Trends analysis
- C. Test Effectiveness
- D. Time Spent Testing

**Answer: C**

**Explanation:**

#### QUESTION NO: 189

How many test cases are necessary to cover all the possible sequences of statements (paths) for the following program fragment?

Assume that the two conditions are independent of each other : -if (Condition 1)then statement 1else statement 2if (Condition 2)then statement 3

- A. 2 Test Cases
- B. 3 Test Cases
- C. 4 Test Cases
- D. Not achievable

**Answer: A**

**Explanation:**

#### QUESTION NO: 190

To test a function, the programmer has to write a \_\_\_\_\_, which calls the function to be tested and passes it test data:

- A. Stub
- B. Driver
- C. Proxy
- D. None of the above

**Answer: B**

**Explanation:**

#### QUESTION NO: 191

In a review meeting a moderator is a person who:

- A. Takes minutes of the meeting
- B. Mediates between people
- C. Takes telephone calls
- D. Writes the documents to be reviewed

**Answer: B**

**Explanation:**

#### QUESTION NO: 192

Incorrect form of Logic coverage is:

- A. Statement Coverage
- B. Pole Coverage
- C. Condition Coverage
- D. Path Coverage

**Answer: B**

**Explanation:**

#### QUESTION NO: 193

Independent Verification & Validation is:

- A. Done by the Developer
- B. Done by the Test Engineers
- C. Done By Management
- D. Done by an Entity Outside the Project's sphere of influence

**Answer: D**

**Explanation:**

**QUESTION NO: 194**

Boundary value testing:

- A. Is the same as equivalence partitioning tests
- B. Test boundary conditions on, below and above the edges of input and output equivalence classes
- C. Tests combinations of input circumstances
- D. Is used in white box testing strategy

**Answer: B**

**Explanation:**

**QUESTION NO: 195**

Acceptance test cases are based on what?

- A. Requirements
- B. Design
- C. Code
- D. Decision table

**Answer: A**

**Explanation:**

**QUESTION NO: 196**

Which of the following is not a quality characteristic listed in ISO 9126 Standard?

- A. Functionality

- B. Usability
- C. Supportability
- D. Maintainability

**Answer: C**

**Explanation:**

**QUESTION NO: 197**

Fault Masking is:

- A. Error condition hiding another error condition
- B. Creating a test case which does not reveal a fault
- C. Masking a fault by developer
- D. Masking a fault by a tester

**Answer: A**

**Explanation:**

**QUESTION NO: 198**

Statement Coverage will not check for the following:

- A. Missing Statements
- B. Unused Branches
- C. Dead Code
- D. Unused Statement

**Answer: A**

**Explanation:**

**QUESTION NO: 199**

“How much testing is enough?”

- A. This question is impossible to answer
- B. This question is easy to answer
- C. The answer depends on the risk for your industry, contract and special requirements

**D.** This answer depends on the maturity of your developers

**Answer: C**

**Explanation:**

#### **QUESTION NO: 200**

Which of the following is not decided in the test-planning phase..?

- A.** Schedules and deliverables
- B.** Hardware and software
- C.** Entry and exit criteria
- D.** Types of test cases

**Answer: D**

**Explanation:**

#### **QUESTION NO: 201**

What is the concept of introducing a small change to the program and having the effects of that change show up in some test..?

- A.** Introducing mutations
- B.** Performance testing
- C.** A mutation error
- D.** Debugging a program

**Answer: A**

**Explanation:**

#### **QUESTION NO: 202**

Which is the best definition of complete testing..?

- A.** You have discovered every bug in the program
- B.** You have tested every statement, branch, and combination of branches in the program
- C.** You have reached the scheduled ship date
- D.** You have completed every test in the test plan



**Answer: C**

**Explanation:**

**QUESTION NO: 203**

Security falls under..?

- A. compliance testing
- B. disaster testing
- C. verifying compliance to rules
- D. functional testing
- E. ease of operations

**Answer: A**

**Explanation:**

**QUESTION NO: 204**

What if the project isn't big enough to justify extensive testing..?

- A. Use automation tool for testing
- B. Use risk based analysis to find out which areas need to be tested
- C. Both a and b
- D. None of the above

**Answer: B**

**Explanation:**

**QUESTION NO: 205**

Complete statement and branch coverage means..?

- A. That you have tested every statement in the program
- B. That you have tested every statement and every branch in the program
- C. That you have tested every IF statement in the program
- D. That you have tested every combination of values of IF statements in the program

**Answer: B**

**Explanation:****QUESTION NO: 206**

In the MASPAR case study..?

- A. Security failures were the result of untested parts of code
- B. The development team achieved complete statement and branch coverage but missed a serious bug in the MASPAR operating system
- C. An error in the code was so obscure that you had to test the function with almost every input value to find its two special-case failures
- D. All the above

**Answer: C**

**Explanation:**

**QUESTION NO: 207**

Which is not in sequence in 11 Step Software Testing process..?

- A. Assess development plan and status
- B. Develop the test plan
- C. Test software design
- D. Test software requirement

**Answer: C**

**Explanation:**

**QUESTION NO: 208**

Important consequences of the impossibility of complete testing are ..?

- A. We can never be certain that the program is bug free
- B. We have no definite stopping point for testing, which makes it easier for some managers to argue for very little testing
- C. We have no easy answer for what testing tasks should always be required, because every task takes time that could be spent on other high importance tasks
- D. All of the above

**Answer: D**

**Explanation:**

**QUESTION NO: 209**

Tools like change Man, Clear case are used as..?

- A. functional automation tools
- B. performance testing tools
- C. configuration management tools
- D. none of the above

**Answer: C**

**Explanation:**

**QUESTION NO: 210**

What do you mean by “Having to say NO”..?

- A. No, the problem is not with testers
- B. No, the software is not ready for production
- C. Both a & b
- D. None of the above

**Answer: B**

**Explanation:**

**QUESTION NO: 211**

The selection of test cases for regression testing..?

- A. Requires knowledge on the bug fixes and how it affect the system
- B. Includes the area of frequent defects
- C. Includes the area which has undergone many/recent code changes
- D. All of the above

**Answer: D**

**Explanation:**

**QUESTION NO: 212**

What are the key features to be concentrated upon when doing a testing for world wide web sites ..?

- A. Interaction between html pages
- B. Performance on the client side
- C. Security aspects
- D. All of the above

**Answer: D**

**Explanation:**

**QUESTION NO: 213**

What if the project isn't big enough to justify extensive testing..?

- A. Use risk based analysis to find out which areas need to be tested
- B. Use automation tool for testing
- C. Both a and b
- D. None of the above

**Answer: A**

**Explanation:**

**QUESTION NO: 214**

Who is responsible for conducting test readiness review..?

- A. Project Manager
- B. Test Engineer
- C. Test Manager
- D. None of the above

**Answer: C**

**Explanation:**

**QUESTION NO: 215**

Faults found by users are due to..?

- A. Poor quality software
- B. Poor software and poor testing
- C. Bad luck
- D. Insufficient time for testing

**Answer: B**

**Explanation:**

**QUESTION NO: 216**

Which of the following is the odd one out..?

- A. White box
- B. Glass box
- C. Structural
- D. Functional

**Answer: D**

**Explanation:**

**QUESTION NO: 217**

When what is visible to end-users is a deviation from the specific or expected behavior, this is called..?

- A. An error
- B. A fault
- C. A failure
- D. A defect
- E. A mistake

**Answer: C**

**Explanation:**

**QUESTION NO: 218**

Which of the following is NOT part of configuration management..?

- A. Status accounting of configuration items
- B. Auditing conformance to ISO9001
- C. Identification of test versions
- D. Record of changes to documentation over time
- E. Controlled library access

**Answer: B**

**Explanation:**

**QUESTION NO: 219**

A tool that supports traceability, recording of incidents or scheduling of tests is called..?

- A. A dynamic analysis tool
- B. A test execution tool
- C. A debugging tool
- D. A test management tool
- E. A configuration management tool

**Answer: E**