iSQI CTFL_001 Exam

Volume: 299 Questions

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?

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

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.

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

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?

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

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?

A. Availability

B. Safety

C. Portability

D. Reliability

Answer: C

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!

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

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?

A. Level of test execution automation

B. Test level

C. Regulatory requirements

D. Experience level of testers

Answer: D

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?
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

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 focussedon 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.

A. Inspection

B. Management review

C. Walkthrough

D. Audit

E. Technical review

F. Informal review

G. Assessment

Answer: A,C,E

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?

A. Review tool

B. Test execution tool

C. Static analysis tool

D. Test design tool

Answer: C

Question No: 10

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

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

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.

A. Process ownership and experienced moderators who drive the inspection process.

B. Management support

C. Training of those involved

D. The availability of stands 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

Question No: 12
IEEE 1028 also defines "management review" as a type of review. What is the main purpose of a management review?

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

Question No: 13
Which of the following is an example of testing as part of the requirements specification phase?

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

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.

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

Question No: 15
Which of the following would you least expect to form part of the analysis of initial tool costs?

A. Integration with other tools

B. Learning time required to use the new tool

C. Tool portability

D. Evaluation of suitable tools

Answer: C

Topic 4, Scenario 4, V1 "Test Management Tool"
A software development company that sells an established capture-replay tool has decided to complement it with a test management tool. The capture-replay tool was developed over a number of years and is used by a large number of clients.
The test management tool will be developed by the same team that developed the capture-replay tool, using the same technology. The company test strategy mandates that structural testing is focussed at the component test level and dynamic non-functional testing is focussed at the acceptance test level.
In response to growing customer demand, it is proposed to develop the test management tool in an incremental manner. Each increment will be developed using the V life cycle model. The target platform is a PC in a local area network. The PC uses a proprietary relational database and communicates with a single PC which acts as a server.
The test management tool must interface with the company s capture replay tool. Over the first 12 months of the development period the following functionality will be developed for the tool (in two increments): basic requirements management, support for test case creation; support for test procedures, test scripts and test suites. The functionality to be included in later increments will be driven by customer demand: however they expect to provide an incident management system, a web front-end, and interfaces to other proprietary tools and database management systems.

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?
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

Question No: 17
Which of the following is a characteristic of good testing in any life cycle model?

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

Question No: 18
Which of the following would you expect to see in the master test plan?

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

iSQI CTFL_001 Exam

Question No: 19
Which of the following would be the most significant input to estimating the time to carry out the specified testing tasks?

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

Question No: 20
Which of the following would be the TWO most appropriate examples of entry criteria documented in the system integration test plan?

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

Topic 5, 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: 21
Which test management control option is most appropriate to adopt under these circumstances?

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

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?

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

Question No: 23
Which of the following is least likely to be used as a technique to identify project and product risks?

A. Brainstorming

B. Inspections