

ISTQB Certified Tester

Foundation Level

Sample Exam 1 - Answers

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American Software Testing Qualifications Board



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#1

C is correct per the syllabus. The other three are achieved primarily by doing dynamic testing. This is a tricky one because you are very likely to find defects while doing this analysis and this may lead to either gaining or destroying confidence and needing to supply information to the decision makers. However, the wording of the question matches the wording in the syllabus that defines preventing defects.

#2

D is correct. Control occurs throughout the project to ensure that it is staying on track based on the plan and to take any corrective steps that may be necessary. The monitoring information is used to determine if control actions are needed.

#3

B is correct. The design and prioritization of the high level test cases happens during test analysis and design. Prioritization of the test procedures happens during implementation and execution.

#4

A is correct. When the person who wrote the code is the person designing the tests, that is the lowest level of independence possible. The higher levels of independence come from separating the test design from the development of the code.

#5

A is correct. The developer makes a mistake/error which causes a defect/fault/bug which may cause a failure when the code is dynamically tested or executed. B is incorrect because fault and failure are reversed. C is incorrect because failure and mistake are reversed. D is incorrect because it's a failure that's seen during execution, not the defect itself. The failure is a symptom of the defect.

#6

C is correct. Debugging is what the developer does to identify the cause of the defect, analyze it and fix it. D may involve debugging, if the developer finds a defect, but the act of unit testing is not the same as debugging.

#7

B is correct. Exhaustive testing, all combinations of inputs and preconditions, is not feasible unless the software is trivially simple. Otherwise it would take too long and might not even be possible.

#8

C is correct. This allows testers to have input into the quality of the document as well as the work products that will result from the documentation. Reviewing at the draft stage will require subsequent reviews as the document matures, but better to get a look at it while it's still being changed to provide input.

#9

D is correct. Functional testing should be conducted at all levels.

#10

D is correct. Non-functional testing should be conducted at all levels.

#11

A is correct. Maintenance testing is conducted for products that have been released to production that have been modified, migrated or had some component retired. B is not correct because the product is still in development, not in production. C is not correct because the product is still in testing and has not been released yet (we hope!). D is not correct because this is a product that is still in development that has not yet been released to production.

#12

B is correct. When the design documents are finished, the tester should have enough information to be writing the functional and non-functional test cases. This can also be used as a way to review the design documents. A is not correct because this is the developer's job. C is not correct because this should have been done before the requirements documents were signed off and design started. D is not correct because this could have been done from the requirements documents and should already be complete at this point.

#13

B is correct.

#14

C is correct. The scribe is normally responsible for documenting all issues, problems and open points. The author may take notes as well, but that is not their primary role.

#15

C is correct. Dead code should be detected by a static analysis tool and it can be quite hard to find any other way. A is not correct because this is better found by a code review or dynamic testing. B is better found by dynamic testing. D is best found in a code review where humans are checking the code against the requirements. This could also be caught during system testing.

#16

B is correct. Static analysis with tools will give the best results for improving maintainability and ensuring adherence to good coding practices. A may help, but depending on the peer, it may just reinforce bad habits. C is unlikely to help because only failures will be observed, not the underlying code. D may help, but since it's usually done by the developer who wrote the code, it's unlikely to highlight maintenance issues.

#17

B is correct. A, C and D are all black-box and use the specifications or requirements for the test design.

#18

B is correct. The inputs and outputs are defined in the test case.

#19

B is correct. A test condition is what a test case targets for testing.

#20

A is correct. Experience-based testing is often used to fill in the gaps left by the more formal testing techniques. B is not correct because it is used by experienced testers and has nothing to do with the experience level of the users. C is not correct because it is a test technique, not a development technique. D is not correct. There is not much tool support for these techniques and automation is not usually a goal because the effectiveness depends on the experience of the tester.

#21

C is correct. This is an experience-based technique.

#22

D is correct. Decision coverage looks at the number of decision outcomes, not just the decision statements.

#23

C is correct. This meets the requirements of the end to end testing and does the highest priority test cases first in each set. A is not correct because it only considers priority, not the need to run the test cases in transactional order. B is not correct because it does not consider priority in the separate tasks and runs the low priority refund test twice. D is not correct because it does not consider the end to end flow.

#24

C is correct. See table.

Conditions:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Valid cash	Y	Y	Y	N											
Valid credit card					Y	Y	Y	Y	N						
Valid debit card										Y	Y	Y	Y	Y	N
Valid PIN										Y	N	Y	Y	Y	
Bank accepts					Y	N	Y	Y		Y		N	Y	Y	
Valid Selection	Y	N	Y		Y		N	Y		Y			N	Y	
Item in Stock	Y		N		Y			N		Y				N	
Results:															
Reject Cash				Y											
Reject Card						Y			Y		Y	Y			Y
Error Message		Y	Y	Y			Y	Y					Y	Y	
Return Cash		Y	Y												
Refund Card							Y	Y					Y	Y	
Sell Item	Y				Y					Y					

#25

B is correct. You need a test for the invalid too low (0 or less), one for each valid partition, and one for invalid too high (>100).

#26

D is correct. You need the following test cases: 0, 1, 49, 50, 59, 60, 69, 70, 79, 80, 89, 90, 100, 101

#27

A is correct. You have to do and not do the loop and try Wednesday and a not Monday/Wednesday.

#28

B is correct. Only two tests are needed, one with day = Monday and one with day = Tuesday. The Tuesday test will test the first else statement and the second if statement.

#29

A is correct. The others are tasks that would be expected of a tester.

#30

C is correct. Test execution metrics are gathered during the Test Execution activity. These metrics are used in reporting.

#31

B is correct per the syllabus. D is backwards – the test strategy influences the test plan.

#32

A is correct. Risk-based testing is an analytical approach to testing based off the risk analysis.

#33

C is correct. The variances section talks about the differences between the test plan and the testing that was actually done.

#34

D is a project risk. The other three are product risks.

#35

A is correct because it addresses the highest risk and fastest tests first. It runs a fast medium test before a slow and more dependent high risk test because this will give feedback to the developers more quickly.

#36

D is correct. From this information, the developer only knows the tester thinks the information is wrong, but it's not clear what was expected. A is incorrect because, although vague, the incident report seems to indicate this is an important problem. B is incorrect because the steps are attached (or so it says). C is incorrect because the screen shot should indicate column 1 that is wrong.

#37

C is correct. The scripts tend to be unstable and easily broken when changes to the system occur. A is not correct because the scripts are notoriously difficult to maintain. B is not correct because the data is hard coded in the scripts. D is not correct because experienced automators will write scripts using shells rather than just using the script created by the capture/replay tool.

#38

B is correct. The proof-of-concept is to ensure that the tool will work with the system under test and within the current infrastructure. A, C and D are all important to verify, but are not activities covered within the proof-of-concept.

#39

A is correct. This is one of the success factors in tool deployment. B is not correct because the usage guidelines are for the actual users, not the overall organization which is where the licensing requirements might be a concern. C is not correct because management is not focusing on the details. D is not correct because the cost/benefit information needs to be gathered long before the tool is procured.

#40

A is correct. The probe effect means that the tool has been intrusive and may influence the results of the test and the way the software works.