

# **Sample Exam**

## **Certified Tester Foundation Level**

### **Questions**

ASTQB Created - 2018

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American Software Testing Qualifications Board

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**This exam should be completed in 60 minutes.**

**Question #1 (1pt)**

C1\_K1 ---keyword

What is the test basis?

- a. The point during software development when testing should start
- b. **The body of knowledge used for test analysis and design**
- c. The source to determine the actual results from a set of tests
- d. The method used to systematically devise test conditions

C1\_K2----1.4

**Question #2 (1 pt)** C1\_K1

When the tester verifies the test basis while designing tests early in the lifecycle, which common test objective is being achieved?

- a. Gaining confidence
- b. Finding defects
- c. **Preventing defects**
- d. Providing information for decision making

**Question #3 (1 pt)**

C1

When following the **fundamental test process**, when should the test control activity take place?

- a. During the planning activities
- b. During the implementation and execution activities
- c. During the monitoring activities
- d. **During all the activities**

**Question #4 (1 pt)**

C1\_K2----1.2

Which of the following is a correct statement?

- a. **A developer makes a mistake which causes a defect that may be seen as a failure during dynamic testing**
- b. A developer makes an error which results in a failure that may be seen as a fault when the software is executed
- c. A developer has introduced a failure which results in a defect that may be seen as a mistake during dynamic testing
- d. A developer makes a mistake which causes a bug that may be seen as a defect when the software is executed

**Question #5 (1 pt)**

C1\_K2----1.1

Which of the following is an example of debugging?

- a. A tester finds a defect and reports it
- b. A tester retests a fix from the developer and finds a regression

C1. testing&debugging

- c. A developer finds and fixes a defect
- d. A developer performs unit testing

**Question #6 (1 pt)**

C1\_K2----1.3

Which of the following is a true statement about exhaustive testing?

- a. It is a form of stress testing
- b. It is not feasible except in the case of trivial software
- c. It is commonly done with test automation
- d. It is normally the responsibility of the developer during unit testing

**Question #7 (1 pt)**

C5

A new retail product was released to production by your company. Shortly after the release it was apparent that there were numerous problems with the point of sale application. This resulted in a number of customer complaints and negative postings on social media encouraging people to take their business to your competitor. You have investigated the problems and have discovered that the production point of sale equipment is a later model than the model used in testing. The software functions correctly on the old version, but fails on the later model.

Given this scenario, what is the root cause and what is the effect?

- a. The root cause is the old equipment and the effect is the new equipment
- b. The root cause is the customer complaints and the effect is the social media postings
- c. The root cause is conducting the testing on the wrong version of the equipment and the effect is the customer complaints and postings
- d. The root cause is the software failing on the later model and the effect is the customer complaints

**Question #8 (1 pt)**

C5

If you need to provide a report showing test case execution coverage of the requirements, what do you need to track?

- a. Traceability between the test cases and the requirements
- b. Coverage of the risk items by test case
- c. Traceability between the requirements and the risk items
- d. Coverage of the requirements by the test cases that have been designed

TC01\_R1  
TC02\_R1  
TC03\_R1  
TC04\_R1

**Question #9 (1 pt)**

C2\_K1----2.3

Which of the following is most correct regarding the test level at which functional tests may be executed?

- a. Unit and integration
- b. Integration and system

non-functional testing: system&acceptance testing  
functional testing: all levels

- c. System and acceptance
- d. All levels



**Question #10 (1 pt)** C2\_K2---2.1

Which of the following is a true statement regarding the V-model lifecycle?

- a. Testing involvement starts when the code is complete
- b. The test process is integrated with the development process
- c. The software is built in increments and each increment has activities for requirements, design, build and test
- d. All activities for development and test are completed sequentially

**Question #11 (1 pt)** C2\_k2---2.3

Usability testing is an example of which type of testing?

- a. Functional
- b. Non-functional
- c. Structural
- d. Change-related

**Question #12 (1 pt)** C2\_K2

What type of testing is normally conducted to verify that a product meets a particular regulatory requirement?

- a. Unit testing
- b. Integration testing
- c. System testing
- d. Acceptance testing

**Question #13 (1pt)** C2\_k2

You have been receiving daily builds from the developers. Even though they are documenting the fixes they are including in each build, you are finding that the fixes either aren't in the build or are not working. What type of testing is best suited for finding these issues?

- a. Unit testing
- b. System testing
- c. Confirmation testing acceptance testing, validation testing, end-user, customer
- d. Regression testing

**Question #14 (1 pt)** C3\_K1---3.2.2

In a formal review, which role is normally responsible for documenting all the open issues?

- a. The facilitator
- b. The author
- c. **The scribe** người ghi chép, thư ký cuộc họp
- d. The manager

**Question #15 (1 pt)** C3\_K2---3.1.3

Which testing technique would be most effective in determining and improving the **maintainability of the code** (assuming developers fix what is found)?

- a. Peer reviews
- b. **Static analysis**
- c. Dynamic testing
- d. Unit testing

mã nguồn muốn bảo trì: dễ đọc, dễ hiểu, dễ đánh giá  
đánh giá: chất lượng comment, phức độ phức tạp câu lệnh, độ đo cyclomatic, độ sâu vòng lặp, độ sâu của kế thừa....

=> lab 2 sử dụng tool để phân tích tĩnh mã nguồn --> đánh giá chất lượng mã nguồn

**Question #16 (1 pt)** 3.2.1 C3\_k2

For a **formal review**, at what point in the **process** are the **entry** and **exit criteria** defined?

- a. **Planning**
- b. Review initiation
- c. Individual review
- d. Fixing and reporting

hỏi về các phases của formal review process

plan--> kickoff (istqb2011)/review initiation(istqb2018) --> individual review --> review meeting --> fix and report

**Question #17 (1 pt)** 3.2.3 c3\_k2

If the **author** of the code is **leading** a code review for other developers and testers, what **type of review** is it?

- a. An informal development review
- b. **A walkthrough**
- c. An inspection
- d. An audit

riêng trong walkthrough thì author thực hiện trình bày đối tượng review trước group để đánh giá

**Question #18 (1 pt)** 3.2.4 C3\_K3

You are participating in a **role-based review session**. Your assigned role is that of a **senior citizen**. The product is **an online banking application** that is targeted for use on **smart phones**. You are currently reviewing the **user interface** of the product with a **prototype that works on iPhones**. Which of the following is an area that you should review?

- a. The ~~speed~~ of response from the banking backend
- b. The attractiveness of the application
- c. **The size and clarity of the instruction text**
- d. The ~~reliability~~ of the application when the connection is dropped

color, white-space rate, text density, image, media  
UI/UX testing

**Question #19 (1 pt)** keyword c4\_k1

Which of the following is an extension of equivalence partitioning?

- a. Decision tables
- b. Decision testing
- c. Boundary value analysis
- d. State transition testing

**Question #20 (1 pt)**

4.4.1

C4\_k2

If test cases are derived from looking at the code, what type of test design technique is being used?

- a. Black-box
- b. White-box
- c. Specification-based
- d. Behavior-based

**Question #21 (1 pt)**

4.4.1

c4\_k2

Which of the following is a good reason to use experience-based testing?

- a. You can find defects that might be missed by more formal techniques
- b. You can test for defects that only experienced users would encounter
- c. ~~You can target the developer's efforts to the areas that users will be more likely to use~~
- d. ~~It is supported by strong tools and can be automated~~

**Question #22 (1 pt)**

4.4.1

c4\_k2

If you are using error guessing to target your testing, which type of testing are you doing?

- a. Specification-based
- b. Structure-based
- c. Experience-based
- d. Reference-based

**Question #23 (1 pt)**

4.3.2

c4\_k2

If you are testing a module of code, how do you determine the level of decision coverage you have achieved?

- a. ~~By taking the number of decisions you have tested and dividing that by the total number of executable statements in the module~~
- b. By taking the number of decisions you have tested and dividing that by the total number of decisions in the module
- c. ~~By taking the number of decisions you have tested and dividing that by the total lines of code in the module~~
- d. By taking the number of decision outcomes you have tested and dividing that by the total number of decision outcomes in the module

**Question #24 (1 pt)**

4.2.5

c4\_k2

Which of the following best describes the behaviors defined in a use case that should be covered by tests?

- a. ~~Positive path and negative path~~ state transition testing
- b. **Basic, exception and error** ← basic flow, exception flow, alternate flow
- c. Normal, error, data, and integration
- d. ~~Control flow, data flow and decision paths~~

**Question #25 (1 pt)**

4.2.1

C4\_k3

You are testing a machine that scores exam papers and assigns grades. Based on the score achieved the grades are as follows: 1-49 = F, 50-59 = D-, 60-69 = D, 70-79 = C, 80-89 = B, 90-100=A

If you apply **equivalence partitioning**, how many test cases will you need to achieve **minimum test coverage**?

- a. 6
- b. **8**
- c. 10
- d. 12

**Question #26 (1 pt)**

4.2.2

c4\_k3

You are testing a machine that scores exam papers and assigns grades. Based on the score achieved the grades are as follows: 1-49 = F, 50-59 = D-, 60-69 = D, 70-79 = C, 80-89 = B, 90-100=A

If you apply **two-value boundary value analysis**, how many test cases will you need to achieve minimum test coverage?

- a. 8
- b. 10
- c. 12
- d. **14** 12+ 2 values (0, 101)

**Question #27 (1 pt)**

4.2.3

c4\_k3

You have been given the following conditions and results from those condition combinations. Given this information, using the **decision table technique**, what is the **minimum number of test cases** you would need to test these conditions?

Conditions:
Valid cash
Valid credit card
Valid debit card
Valid pin
Bank accepts
Valid Selection

kẻ bảng tìm tập tối thiểu các cột sao cho hai giá trị (T,F) của mỗi condition đều được xuất hiện ít nhất 1 lần

Item in Stock
<b>Results:</b>
Reject Cash
Reject Card
Error Message
Return Cash
Refund Card
Sell Item

- a. 7
- b. 13
- c. 15
- d. 18

**Question #28 (1 pt)**

4.2.4

c4\_k3

You have been given the following requirement:

A user must log in to the system with a valid username and password. If they fail to enter the correct combination three times, they will receive an error and will have to wait 10 minutes before trying again. The test terminates when the user successfully logs in.

How many test cases are needed to provide 100% state transition coverage? minimum tc--> maximum coverage

- a. 1
  - b. 2
  - c. 4
  - d. 5
- TC1---[3 fails] --> waiting ---[10minutes] --> normal  
TC2---[success] --> successfully

**Question #29 (1 pt)**

4.2.2

c4\_k3

You are testing a thermostat for a heating/air conditioning system. You have been given the following requirements:

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- When the temperature is below 70 degrees, turn on the heating system
- When the temperature is above 75 degrees, turn on the air conditioning system
- When the temperature is between 70 and 75 degrees, inclusive, turn on fan only

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Which of the following is the minimum set of test temperature values to achieve 100% two-value boundary value analysis coverage?

- a. 70, 75
  - b. 65, 72, 80
  - c. 69, 70, 75, 76
  - d. 70, 71, 74, 75, 76
- nếu đề thi hỏi vào phương pháp Equivalence partitioning thì b là đáp án đúng, phủ 100% phân vùng

**Question #30 (1 pt)**

5.3.1

c5\_k1



A metric that tracks the number of test cases executed is gathered during which activity in the test process?

- a. Planning
  - b. Implementation
  - c. Execution
  - d. Reporting
- tool dùng color và status values để tracking the execution of test cases

**Question #31 (1 pt)**

5.1.2

c5\_k1

Who is normally responsible for the creation and update of a test plan for a project?

- a. The project manager
- b. The test manager
- c. The tester
- d. The product owner

**Question #32 (1 pt)**

5.3.2

c5\_k2

Which of the following variances should be explained in the Test Summary Report?

- a. The variances between the weekly status reports and the test exit criteria
- b. The variances between the defects found and the defects fixed
- c. The variances between what was planned for testing and what was actually tested
- d. The variances between the test cases executed and the total number of test cases

**Question #33 (1 pt)**

5.5.2

c5\_k2

Which of the following is a project risk?

- a. A module that performs incorrect calculations due to a defect in a formula
  - b. A failed performance test
  - c. An issue with the interface between the system under test and a peripheral device
  - d. A problem with the development manager which is resulting in his rejecting all defect reports
- correctness --> tính đúng đắn yc chức năng --> product risk  
product risks

**Question #34 (1 pt)**

5.1.1

c5\_k2

Which of the following is a benefit of test independence?

- a. Testers have different biases than developers
- b. Testers are isolated from the development team
- c. Testers lack information about the test object
- d. Testers will accept responsibility for quality

các mức độ độc lập kiểm thử/ cách thức tổ chức kiểm thử, mục 1 của chương 5

**Question #35 (1 pt)**

5.2.1

c5\_k2

You are working in a team of testers who are all writing test cases. You have noticed that there is a

significant inconsistency with the length and amount of detail in the different test cases. Where should the test case guidelines have been documented? test strategies/ test approaches của mẫu IEEE 829

- a. The test plan
- b. The test approach
- c. The test case template
- d. The project plan

**Question #36 (1 pt)**

5.2.3

c5\_k2

Which of the following is an example of a good exit criterion from system testing?

- a. All tests should be completed
  - b. The project budget should be spent
  - c. All defects should be fixed
  - d. All severity 1 defects must be resolved
- IEEE 829, mục exit criteria

**Question #37 (1 pt)**

5.6.1

c5\_k3

You have received the following description section in a defect report:

The report executed per the attached steps, but the data was incorrect. For example, the information in column 1 was wrong. See the attached screenshot. This report is critical to the users and they will be unable to do their jobs without this information.

What is the biggest problem with this defect report? /incident report

vấn đề gặp phải khi kỹ năng viết báo cáo sai sót, báo cáo sự cố của tester kém --> dev không hiểu --> không tái tạo được incident --> không biết problem để mà debug

- a. The developer won't know how important the problem is
- b. The developer won't know how to repeat the test
- c. The developer won't be able to see what the tester is saying is wrong
- d. The developer won't know what the tester expected to see

**Question #38 (1 pt)**

5.2.4

c5\_k3

You have been given the following set of test cases to run. You have been instructed to run them in order by risk and to accomplish the testing as quickly as possible to provide feedback to the developers as soon as possible. Given this information, what is the best order in which to run these tests?

Test Case ID	Duration	Risk Priority	Dependency
1	30 mins	Low	6
2	10 mins	Medium	none
3	45 mins	High	1
4	30 mins	High	2
5	10 mins	Medium	4
6	15 mins	Low	2

- a. 2, 4, 5, 6, 1, 3
- b. 4, 3, 2, 5, 6, 1
- c. 2, 5, 6, 4, 1, 3

phân biệt priority và serverity

d. 6, 1, 3, 2, 4, 5

**Question #39 (1 pt)**

6.1.2

c6\_k1

trong chương 6, khi đưa vào/giới thiệu 1 test tool mới cho tổ chức thì có các hướng dẫn cụ thể về quy trình đưa vào sao cho hiệu quả

Why is it important to define usage guidelines for a **new tool?**

- a. **Because this is a proven success factor in tool deployment**
- b. Because this will ensure the licensing restrictions are enforced
- c. Because management needs to understand the details of the tool usage
- d. Because this will provide the information needed for the cost/benefit analysis

**Question #40 (1 pt)**

6.1.1

c6\_k2

Which of the following is an example of a **tool that supports static testing?**

- a. **A tool that assists with tracking the results of reviews**
- b. A defect tracking tool
- c. A test automation tool
- d. A tool that helps design test cases for security testing