Sample Exam - Answers

ISTQB® Certified Tester Specialist Mobile Application Testing

Foundation Level

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Document Responsibility

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

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Introduction

Purpose of this document

The answer set and associated justifications in this document have been created by a team of Subject Matter Experts and experienced question writers with the aim of assisting ISTQB® Member Boards and Exam Boards in their question writing activities.

These answers cannot be used as-is in any official examination, but they should serve as guidance for question writers. Given the wide variety of formats and subjects, they should offer many ideas for the individual Member Boards on how to create good questions and appropriate answer sets for their examinations.

Instructions

The answer set is organized in the following way:

- Question number
- Correct answer
- Explanation
- Learning Objective and K-level
- Number of points

Answer Key

Question Number	Correct Answer	LO	K-Level	Points
1	c	MAT-1.1.1	K2	1
2	b	MAT-1.2.1	K2	1
3	a	MAT-1.3.1	K1	1
4	c	MAT-1.4.1	K2	1
5	d	MAT-1.5.1	K2	1
6	b	MAT-1.6.1	K3	1
7	a	MAT-1.7.1	K2	1
8	c	MAT-1.8.1	K2	1
9	a	MAT 2.1.1	K2	1
10	c	MAT-2.1.3	K2	1
11	d	MAT-2.1.4	K1	1
12	a	MAT-2.1.5	K1	1
13	b	MAT-2.1.6	K2	1
14	d	MAT-2.1.7	K3	1
15	c	MAT-2.1.8	K3	1
16	c	MAT 2.2.1	K3	1
17	a	MAT-2.2.2	K2	1
18	c	MAT-2.2.4	K2	1
19	d	MAT-2.2.5	K1	1
20	a	MAT-2.2.6	K1	1

Question Number	Correct Answer	LO	K-Level	Points
21	d	MAT-2.3.1	K2	1
22	a	MAT-3.1.1	K3	1
23	c	MAT-3.1.3	K2	1
24	a	MAT-3.1.4	K1	1
25	c	MAT-3.1.5	K3	1
26	c	MAT-3.1.6	K1	1
27	b	MAT-3.1.7	K2	1
28	a	MAT-3.1.8	K2	1
29	b	MAT-3.2.2	K2	1
30	d	MAT-3.3.1	K1	1
31	a	MAT-3.3.2	K2	1
32	d	MAT-3.4.2	K2	1
33	d	MAT-4.1.1	K1	1
34	b	MAT-4.2.1	K1	1
35	c	MAT-4.3.1	K2	1
36	b	MAT-4.4.1	K2	1
37	c	MAT-5.1.1	K2	1
38	b	MAT-5.2.1	K2	1
39	d	MAT-5.3.1	K1	1
40	b	MAT-5.4.1	K2	1

Answers

Question	Correct Answer	Explanation / Rationale	Learning Objective (LO)	K-level	Number of Points
1.	**c**	a) is not correct. Expected user base is not part of test strategy or test plan. b) is not correct. Test levels, test cases and test data are derived from the application, not from analytical data. c) is correct. As tests cannot be executed on all possible devices, the selected device portfolio and prioritization should be based on the devices and platforms most common found in the target market. The information about most common devices and platforms in the target market is provided by mobile analytics data. d) is not correct. Application type and development model is not selected within test strategy or test plan.	MAT-1.1.1	K2	1
2.	b	a) is not correct. As the scenario does not include any hint towards additional paid features. b) is correct. The data shown is publicly available, and thus it is unlikely the user will pay to read the data in the app. However, the user is used to seeing advertisements in news sites. c) is not correct, as it is a free-to-use app. d) is not correct, as no transactions are managed in this app	MAT-1.2.1	K2	1
3.	a	a) is correct. Feature phones come with some apps installed, like browsers, but user options to install additional apps are usually limited to a small set of applications provided by the device manufacturer b) is not correct. See justification in a). c) is not correct. See justification in a). d) is not correct. See justification in a).	MAT-1.3.1	K1	1
4.	c	a) is not correct. Hybrid apps are less suitable than native apps, since they require an additional layer to translate between web technology content and the device runtime environment b) is not correct. Web apps do not utilize device features as well as native apps c) is correct. The game is for one platform only and utilized many device features which can be best utilized by native apps. d) is not correct, as Android is a mobile OS not a Desktop OS.	MAT-1.4.1	K2	1

5.	d	a) is not correct. See justification in d). b) is not correct. See justification in d). c) is not correct. See justification in d). d) is correct. As it is iOS, only a native app is most appropriate. As the samples are sent out via physical shipping, a delay between registration and arrival of samples is present anyway. Thus, there is no negative impact if the registration is not received when done by the user. The store and forward model allows the user to register even when he/she is offline while doing so.	MAT-1.5.1	K2	1
6.	b	a) is not correct, as remote device access service brings no advantage for single platform user base. b) is correct, as the user bases is single platform and app is low risk. c) is not correct, as maximum coverage does not go together with low risk. d) is not correct, as testing should not be based on simulated devices alone.	MAT-1.6.1	K3	1
7.	a	a) is correct. Mobile apps are usually started via tapping in the GUI. Thus, the user has no option to provide additional parameters during startup of the app. b) is not correct. See justification in a). c) is not correct. See justification in a). d) is not correct. See justification in a).	MAT-1.7.1	K2	1
8.	c	a) is not correct, as it is a project risk. b) is not correct, as crowd testing has no impact on maintenance cost per platform. c) is correct, as the crowd has a lot of different devices. d) is not correct, as good reviews are not a risk.	MAT-1.8.1	K2	1
9.	a	a) is correct. As mentioned in the text, the SUT is a native app and common native apps can work without an internet connection. Thus, testing the WLAN module should have the lowest priority in comparison to the tests of the other hardware features. b) is not correct. See justification in a). c) is not correct. See justification in a). d) is not correct. See justification in a).	MAT-2.1.1	K2	1
10.	c	a) is not correct, as drop in CPU frequency is used to reduce power consumption. b) is not correct, as shutting down parts of the system is used to reduce power consumption. c) is correct, as apps are not de-installed due to overheating. d) is not correct, as malfunctioning can occur.	MAT-2.1.3	K2	1
11.	d	a) is not correct. GPS signal belongs to input sensors. b) is not correct. Gyroscope belongs to input sensors. c) is not correct. Motion sensor belongs to input sensors. d) is correct. This scenario is not testing an input sensor.	MAT-2.1.4	K1	1

12.	a	a) is correct. This is the best answer, because it lists only scenarios covering different input methods. b) is not correct. Printing the content of a screen is testing of an output and not an input method. c) is not correct. Sending an SMS to a friend is also testing of an output method. d) is not correct. Using a TV remote app is testing an output and not an input method.	MAT-2.1.5	K1	1
13.	b	a) is not correct. Testing security aspects is not done while testing for correct screen orientation. b) is correct. The list contains only aspects that are mentioned in the syllabus for screen orientation change. c) is not correct. Performance testing is not done while testing for correct screen orientation. d) is not correct. Testing for WLAN interrupts is not done while testing for correct screen orientation.	MAT-2.1.6	K2	1
14	d	a) is not correct. Statement i is not correct, because the software has been implemented as a mobile-web application. b) is not correct, as statements i and iv are fault tolerance for user-initiated interrupts. c) is not correct. Statement iv is not a user-initiated interrupt. d) is correct. Statements ii, iii and v are all user-initiated interrupts.	MAT-2.1.7	K3	1
15	c	a) is not correct. There is no hint in the text that the users have experienced performance problems. b) is not correct. There is nothing mentioned in the text that users are complaining about the malfunctioning of the scanning feature. c) is correct. This is the most important test to be performed, because missing or incorrect access permissions may be a possible root cause for the fixed problem. d) is not correct. The users are able to install the update of the app successfully, as stated in the text.	MAT-2.1.8	K3	1
16	c	a) is not correct. See justification in c). b) is not correct. See justification in c). c) is correct. Statements i, ii and v are functional tests, as mentioned in the text. Statements ii and iv are non-functional tests. Additionally, their execution makes no sense in this context. d) is not correct. See justification in c).	MAT-2.2.1	K3	1
17.	a	a) is correct. According to the syllabus, testing the force-touch functionality is an example that is in the context of testing quick-access links. b) is not correct. This approach does not focus on testing failure-free working of quick-access links. Instead it focuses on browser bookmarks c) is not correct. This approach does not focus on testing failure-free working of quick-access links. Instead it focuses on interactions with device hardware	MAT-2.2.2	K2	1

		d) is not correct. This approach does not focus on testing failure-free working of quick-access links. Instead it focuses on links pointing to resources not available.			
18.	c	a) is not correct, as performance is important for any app. b) is not correct, as testing the utilization of device features is important. c) is correct, as a native app does not use various browsers. d) is not correct, as the app should be compatible with the various devices of the users.	MAT-2.2.4	K2	1
19.	d	a) is not correct. Testing for security issues is not primarily the focus of verifying interoperability with different OS versions. b) is not correct. See justification in a). c) is not correct. See justification in a). d) is correct. Testing for backward compatibility focuses on verifying correct interoperability with different OS versions, as stated as example in the syllabus.	MAT-2.2.5	K1	1
20.	a	a) is correct. This is an accurate test goal for testing the SUT for co-existence with other installed applications on the device. b) is not correct. This is not a valid test goal in the context of testing for co-existence of the SUT to other applications. c) is not correct. See justification in b). d) is not correct. See justification in b).	MAT-2.2.6	K1	1
21.	d	a) is not correct. According to the syllabus, this answer contains an appropriate aspect for performing connectivity tests. b) is not correct. See justification in a). c) is not correct. See justification in a). d) is correct. To plug in a power supply via USB does not focus on connectivity, but it can be used as a suitable scenario for interrupt testing.	MAT-2.3.1	K2	1
22.	a	a) is correct. Exe is an executable file format for Windows only. It won't work on Android. b) is not correct. Connecting the device to a PC and running installation commands can be used for installation testing on Android devices. c) is not correct. Installation from the Google Play Beta Program will work on Android devices. d) is not correct. This scenario can also be used for installation testing on Android devices.	MAT-3.1.1	K3	1

23.	c	a) is not correct. Although statement i is related to security, statement iii is not. b) is not correct. Although statement ii is related to security, statement v is not. c) is correct. Both statements i and ii are related to security. d) is not correct. Although statement ii is related to security, statement iv is not.	MAT-3.1.3	K2	1
24.	a	a) is correct. Only an instrumented build can provide exact chronometric numbers on how long a processing step within the app actually lasted. A stop watch is not sufficient in the range of milliseconds. Also, it does not allow differentiation between the time taken by the app, by the backend and time for network communication. b) is not correct. Server-side performance is not app performance c) is not correct. Emulator/Simulator can never provide correct app performance d) is not correct. See justification in a).	MAT-3.1.4	K1	1
25.	c	a) is not correct, because this step is to be performed. b) is not correct, because this step is to be performed. c) is correct, because this step is NOT to be performed. d) is not correct, because this step is to be performed.	MAT-3.1.5	K3	1
26.	c	a) is not correct, as per syllabus and glossary. b) is not correct, as per syllabus and glossary. c) is correct, as per syllabus and glossary. d) is not correct, as per syllabus and glossary.	MAT-3.1.6	K1	1
27.	b	a) is not correct. See justification in b). b) is correct. When doing internationalization testing, we want to see that all strings are sourced from a resource. Thus, if the app does not show the pseudo-strings and instead shows real language, it is not sourced from the pseudo-string resource. c) is not correct. See justification in b). d) is not correct. See justification in b).	MAT-3.1.7	K2	1
28.	a	a) is correct. The syllabus states that accessibility testing "is performed to determine the ease by which users with differing needs can use a component or system" b) is not correct. See justification in a). c) is not correct. See justification in a). d) is not correct. See justification in a).	MAT-3.1.8	K2	1
29.	b	a) is not correct. Archiving testware is a test closure activity, which is done after post-release testing. b) is correct. When the app is available in the application store it must be tested that it can be installed from there, and works as in the build that was tested. c) is not correct. Application store approval testing should be done prior to submission.	MAT-3.2.2	K2	1

		d) is not correct. See justification in a).			
30.	d	a) is not correct, as the question does not provide any information about risks and all sessions have the same time frame, not a time frame adjusted according to risk. b) is not correct, as no delegation of responsibilities is happening. c) is not correct, as no performance testing is done in the scenario. d) is correct. The team lead uses Session-Based Test Management, as testing is divided into 1h sessions, each with a defined focus.	MAT-3.3.1	K1	1
31.	a	a) is correct. Tours can be helpful to learn about an app. b) is not correct. Since there is hardly any time, waiting until requirement documents are provided costs too much time. c) is not correct. The scenario does not provide any information on whether test cases are available already or not. d) is not correct. Apk-files are installation packages for Android. It it is not possible to deploy them on iOS.	MAT-3.3.2	K2	1
32.	d	a) is not correct. This statement is simply wrong. b) is not correct. This statement is simply wrong. c) is not correct. This statement is simply wrong. d) is correct. Market and device fragmentation, as well as user expectations with regard to usability, and the variability of usage scenarios give test conditions which can only be tested manually.	MAT-3.4.2	K2	1
33.	d	a) is not correct. Visual Studio IDE is not used for developing apps for iOS. b) is not correct. Xcode IDE is used for developing apps for iOS, but Universal Studio IDE is not used for developing apps for Android. c) is not correct. Xcode IDE is not used for developing apps for Android. d) is correct. Referring to the examples given at the syllabus, for Android app development Android Studio may be used and for iOS app development Xcode may be used.	MAT-4.1.1	K1	1

34.	b	a) is not correct. Taking screenshots can be utilized by an SDK and is listed in the examples of chapter 4.2. b) is correct. According to chapter 4.2 the task of designing test cases is not mentioned in the examples that can be supported by tools as part of SDKs. c) is not correct. Pushing random events to the application can be utilized by an SDK and is listed in the examples of chapter 4.2. d) is not correct. Creating virtual devices can be utilized by an SDK and is listed in the examples of chapter 4.2.	MAT-4.1.2	K1	1
35.	c	a) is not correct. See justification in c). b) is not correct. See justification in c). c) is correct. It is possible to have a simulator representing the server side, and the application installed on the AVD emulator to better utilize the earlier test environment (all on one PC). In addition, having the tester advising the developer on an environment is good, as is simulating the server side for basic functionality testing as an alternative if the server side has problems or if requested to be utilized by the testing team on early test stages d) is not correct. See justification in c).	MAT-4.3.1	K2	1
36.	b	a) is not correct. See justification in b). b) is correct. The on-premise lab main advantage is to enable specific tests for sensors, battery, and unique-device related feature or tech part, especially if it's done by the device manufacturer – in that case Samsung. The question is targeted to check if the examinee knows how to distinguish between the labs by leveraging the lab's advantages. c) is not correct. See justification in a). d) is not correct. See justification in a).	MAT-4.4.1	K2	1

37.	c	a) is not correct. An agent-based testing approach is best used for executing mobile web applications, whereas device-based testing is best used for all types of mobile applications. b) is not correct. Agent-based approaches utilize the User-Agent string sent by the browser to spoof a particular browser on a particular device and device-based approaches execute on the actual gadget. c) is correct. It is the mobile apps that are tested using general web application tools, whereas native apps are best tested using specific tools. d) is not correct. The agent-based approach mimics the browser, whereas the device-based approach runs on the actual browser.	MAT-5.1.1	K2	1
38.	b	a) is not correct. Object based scripting requires manual scripting not needed in Image/OCR scripting. b) is correct. Object based scripting is the most reliable method of authoring test automation code. c) is not correct. Maintenance effort and authoring challenges relating to of Image/OCR are higher with app changes that affect the baseline images. d) is not correct. Image/OCR is the less reliable method.	MAT-5.2.1	K2	1
39.	d	a) is not correct. It is important to consider testers skill set when evaluating the tools. b) is not correct. It is important to consider automation requirements and complexities. c) is not correct. This is an important consideration. d) is correct. It is not a major consideration to make consideration for independent operation.	MAT-5.3.1	K1	1
40.	b	a) is not correct. Remote test labs are best for advanced stages with full lab setup. b) is correct. Testing against a local device lab is the approach that would typically serve small range of devices for earlier stages of the app testing. c) is not correct. Remote test labs usually have a wide variety of devices. d) is not correct. Remote test labs are usually stable for large scale tests.	MAT-5.4.1	K2	1