Module 1 Sample Exam Answers

- 1. Which of the following expectations of a mobile application should users be expected to have?
 - a. 100% availability and fast performance (Per syllabus 1.2)
 - b. 98% availability and no functional defects
 - c. 95% availability and consistent performance across all their mobile devices
 - d. 90% availability on any network
- 2. Which of the following are challenges that testers face in testing mobile applications?
 - a. Lack of possible tools
 - b. Slow release schedules
 - c. Frequent releases and a high number of possible device configurations (Syllabus 1.3)
 - d. Too many security policies
- 3. If a mobile application is developed for use by a variety of devices with the majority of the code residing on the web site, the applications is a:
 - a. Hybrid app
 - b. Native app
 - c. Mobile web site
 - d. Mobile web application (Syllabus 1.3.2)
- 4. Facing the very high numbers of possible device configurations, which of the following test design techniques has the potential to help reduce the number of test environments?
 - a. Decision tables
 - b. Equivalence partitioning (Syllabus 1.5)
 - c. Boundary-value analysis
 - d. White-box testing
- 5. Which of the following life cycle models would be least applicable for the development and testing of most mobile applications?
 - a. Sequential (Syllabus 1.6)
 - b. Iterative
 - c. Ad-hoc
 - d. Incremental
- 6. Which of the following situations might require a more structured, sequential development and testing life cycle?
 - a. User-centric
 - b. Risk-based
 - c. Safety-critical (Syllabus 1.6)
 - d. Agile

Module 1 Sample Exam Answers

- 7. Which of the following would be an opportunity to apply equivalence partitioning at the device level?
 - a. Results from the test on one set of mobile devices is the same as would be seen if the same tests were run on another set of mobile devices (Syllabus 1.6)
 - b. Each mobile device is so unique, tests are needed for each device
 - c. Rapid release schedules allow only minimal testing
 - d. Unknown or undocumented user requirements
- 8. A company is developing a new mobile application to allow its customers to access their account information from their smartphones and tablets. Which of the following would be the biggest risk to the business in this effort?
 - a. Loss of customers if the mobile app is of low quality (Syllabus 1.2, "Organizations can lose customers if their mobile applications are not fast enough or pleasing enough. Competition in the mobile application industry is fierce, raising the importance of good testing and high quality products.")
 - b. Loss of developers to a competitor wanting to do the same type of project
 - c. Loss of trade secrets
 - d. High cost of developing and testing the application
- 9. If a mobile application resides on the device and communicates directly with the device through the device's interfaces, it is a:
 - a. Web application
 - b. Hybrid application
 - c. Native application (Syllabus 1.3.2)
 - d. API-based application
- 10. Hybrid applications are:
 - a. Dependent on some level of connectivity with a web server and may also be subject to device/browser compatibility issues (Syllabus 1.3.2)
 - b. Very secure by nature
 - c. More subject to high user expectations
 - d. Faster and easier to develop

Module 2 Sample Exam Answers

- 1. You are a tester on a project to develop a new mobile application. There are no documented requirements and no use cases readily available. What should you do as tester to help gain understanding of the application to be tested?
 - a. Seek to find any existing use cases that may be helpful (Syllabus 2.1)
 - b. Write your own set of requirements
 - c. Proceed without any documentation to help understand user tasks
 - d. Refuse to test the application
- 2. Why are use cases are good source of information for testing?
 - a. They are very detailed
 - b. They describe who will be using an application and what kinds of tasks they perform (Foundation Syllabus 4.3.5)
 - c. They describe user requirements
 - d. They describe test cases
- 3. If an application is "feature-rich but time-poor", it means that:
 - a. There are many features in the application, but little time for implementation and testing (Syllabus 2.2)
 - b. There are many features in the application, but little time for user training
 - c. There are many features in the application, but little time for documentation
 - d. There are many features in the application, but not all devices have the performance capabilities to support them
- 4. When assessing the risk of an application, the physical items are those that can be:
 - a. Physically viewed by the user
 - b. Physically accessed by the user (Syllabus 2.2)
 - c. Physically implemented by APIs
 - d. Measured in physical terms
- 5. When assessing the risk of an application, the functional items are those that:
 - a. Enable the functionality accessed by physical items (Syllabus 2.2)
 - b. Transcend device differences
 - c. Are the most important to test
 - d. Are the least important to test

Module 2 Sample Exam Answers

- 6. In assessing functional risks, which of the following scales would be most applicable?
 - a. Critical, High, Moderate, Low (Syllabus 2.2)
 - b. High, Moderate, Ignore
 - c. Critical, High, Low
 - d. High, Moderate, Low
- 7. What is the main characteristic of a risk assessment approach for a mobile app?
 - a. Very formal
 - b. Lightweight (Syllabus 2.2)
 - c. User-based
 - d. Performed once at the start of a project
- 8. Which of the following production metrics would be least applicable for determining risk areas?
 - a. Total downloads
 - b. Bounce rate
 - c. Duration
 - d. Defect rate (This is not a production metric) (Syllabus 2.2)
- 9. In determining coverage goals for testing, which of the following is most important?
 - a. To determine if the coverage goals are realistic and accomplish the testing goals for the project (Syllabus 2.3)
 - b. To determine if the coverage goals are the minimal levels needed
 - c. To determine if the coverage goals are redundant
 - d. To determine if the coverage goals are understood by users
- 10. Why is it important to define test coverage goals?
 - a. To know the extent of testing
 - b. To set the scope and timelines of testing
 - c. To help determine the types of equipment and environments that will be needed.
 - d. All of these (Syllabus 2.3)
- 11. Which type of testing is needed to keep up with rapid changes to the application?
 - a. Regression testing (Syllabus 2.6)
 - b. Performance testing
 - c. Compatibility testing
 - d. Usability testing

Module 2 Sample Exam Answers

- 12. In the event you do not have time to formally define test cases for a mobile testing project, which of the following is the next most useful?
 - a. Test scripts
 - b. Test automation
 - c. Test conditions (Syllabus 2.5)
 - d. Use cases
- 13. You are a tester on a mobile application project that is "feature-rich, time poor." How can you tell when testing is complete?
 - a. The most important cases have been tested
 - b. The coverage is sufficient
 - c. Time has run out
 - d. All of the above (Syllabus 2.5)
- 14. What is needed for effective regression testing of mobile applications?
 - a. A list of all changes
 - b. Availability to all possible device platforms
 - c. Test devices and simulators are also being updated regularly (Syllabus 2.5)
 - a. Many testers spread around the world

Module 3 Mobile Testing Sample Questions/Answers

- 1. Which of the following is considered non-functional testing:
 - a. Security testing
 - b. Usability testing (Syllabus 3.2.1)
 - c. Interoperability testing
 - d. Correctness testing
- 2. You are a tester designing tests to ensure the software provides the right functionality in a way that works for the user. You are designing tests for:
 - a. Suitability (Syllabus 3.2.2)
 - b. Accuracy
 - c. Usability
 - d. Integrity
- 3. You are a tester designing tests to ensure the functionality is provided correctly including all data delivery. You are designing tests for:
 - a. Suitability
 - b. Accuracy (Syllabus 3.2.2)
 - c. Usability
 - d. Integrity
- 4. Security testing is considered:
 - a. Something that only security experts should perform
 - b. Functional testing (Syllabus 3.2.3)
 - c. Non-functional testing
 - d. As a low risk test for mobile apps
- 5. Which of the following is true of mobile app security?
 - a. Mobile apps are more easily attacked than traditional apps (Syllabus 3.2.3.1)
 - b. People are very careful with how they guard their mobile devices
 - c. When donating or otherwise disposing of mobile devices, users take care to clean them of any sensitive data
 - d. Most people use strong passwords
- 6. Which of the following would fall outside the scope of security testing for mobile apps?
 - a. Determining if access control is correctly applied
 - b. Determining if data on the device is protected
 - c. Determining if data in transit is protected
 - d. Determining if encryption algorithms are correct (Syllabus 3.2.3.2)

- 7. As a tester, you are performing tests to ensure that a user can collect credit card data correctly through a scanner that plugs into the headphone jack of a smartphone, then transmit is securely to an e-commerce payment processor on the web through a secure connection. Which types of testing are involved in this test?
 - a. Interoperability and security testing (Syllabus 3.2.4)
 - b. Interoperability testing
 - c. Usability testing
 - d. Performance testing
- 8. As a tester, you are performing tests to ensure that a user can collect credit card data correctly through a scanner that plugs into the headphone jack of a smartphone, then transmit is securely to an e-commerce payment processor on the web through a secure connection. You are concerned that the card reader, the mobile app and the payment processing work on a variety of devices. These tests would be considered:
 - a. Usability tests
 - b. Portability and compatibility tests (Syllabus 3.3.3)
 - c. Non-functional tests
 - d. Boundary-value tests
- 9. You are designing tests for a mobile application that is to be used on an older model of a particular smartphone. Which test design considerations would be most relevant for reliability testing:
 - a. Memory and battery life (Syllabus 3.3.4.2)
 - b. Risks of the domain area
 - c. Type of application (native, hybrid, etc.)
 - d. Quality of specifications
- 10. You are designing a boundary value test for a mobile application that accepts user input for a dollar amount (In dollars and cents), which must be between .01 and 1000.00. All other amounts are invalid. Which test conditions would you choose?
 - a. 0.00, .01, 1000.00, 1000.01 (Foundation Syllabus, using 2-value rule)
 - b. .01, 1000.00, 1000.01
 - c. .01, 1000.00, 1000.01, 1000.02
 - d. 0.00, .01, 1000.00, 1000.01, 1000.02

- 11. You are testing a native application for a smart phone. The application allows the user to make grocery lists on the phone and store up to three lists at a time. A list can contain up to 50 items. Which of the following is the minimum set of test conditions to achieve 100% coverage with the equivalence partitioning test technique?
 - a. List with 47 items
 - b. List with 0 items, List with 1 item, List with 50 items, List with 51 items, 0 lists saved, 1 list saved, 3 lists saved, 4 lists saved
 - c. List with 0 items, List with 25 items, List with 51 items, 3 lists saved
 - d. List with 0 items, List with 12 items, List with 58 items, 0 lists saved, 3 lists saved, 7 lists saved (Foundation Syllabus)
- 12. You are testing a native application for a smart phone. The application allows the user to make grocery lists on the phone and store up to three lists at a time. A list can contain up to 50 items. Which of the following is the minimum set of test conditions to achieve 100% coverage with the boundary value analysis test technique?
 - a. List with 47 items
 - b. List with 0 items, List with 1 item, List with 50 items, List with 51 items, 0 lists saved, 1 list saved, 3 lists saved, 4 lists saved (Foundation Syllabus using 2-value rule)
 - c. List with 0 items, List with 25 items, List with 51 items, 3 lists saved
 - d. List with 0 items, List with 12 items, List with 58 items, 0 lists saved, 3 lists saved, 7 lists saved

13. You are testing the security functions for a new mobile banking application. The main rules are that 1) For the first time a user signs in from a new (unrecognized) device, an authorization code will be sent by phone or text message. The user must enter this code within 60 seconds before they can continue to login to their account. 2) A user gets three tries to enter their user name or password correctly before they are locked out for four hours. Based on these rules, a decision table can be formed with the conditions and actions shown below:

Condition	1	2	3	4	5	6	7
New Device	T	T	T	Т	T	F	F
Authorization code sent	F	Т	T	T	Т	I	I
correctly							
Authorization code	F	F	T	T	T	I	I
received correctly							
Authorization code	I	I	F	Т	Т	I	I
entered correctly							
within 60 seconds							
User exceeds 3	I	I	I	F	T	F	T
incorrect login attempts							
Actions							
User can continue login	N	N	N	Т	T	T	T
process							
User is granted access				T	F	T	F

Given these conditions and actions, what is the minimal number of tests needed for 100% decision table coverage?

- a. 5
- b. 7 (This is due to some conditions being invalid)
- c. 16
- d. 32
- 14. You are trying to design tests for a mobile application but have very little documentation or understanding of the application or domain. In this situation, which of the following techniques would be most suited for knowing what to test?
 - a. Specification-based testing
 - b. State-transition testing
 - c. Decision table testing
 - d. Exploratory testing (Syllabus 3.2.5.2)

- 15. Why is user persona testing helpful?
 - a. All people use mobile apps the same way
 - b. Different people use mobile apps in different ways, depending on their skills, backgrounds and moods (Syllabus 3.2.5.2)
 - c. It helps to expand the scope of testing
 - d. It aligns with specification-based testing
- 16. What is the purpose of TestStorming?
 - a. To derive test cases and scenarios via brainstorming or using mind maps in a group setting (Syllabus 3.2.6)
 - b. To confirm tests designed by other people
 - c. To create a confusing group of tests
 - d. To attack the mobile app with all kinds of obscure tests
- 17. Non-functional testing concentrates on:
 - a. How functionality is delivered to the user (Syllabus 3.3)
 - b. Correctness
 - c. User personas
 - d. Situations when the software behavior is unknown
- 18. Which of the following is a non-functional test?
 - a. Performance testing (Syllabus 3.3.1)
 - b. Correctness testing
 - c. Suitability testing
 - d. Accuracy testing
- 19. In performance testing of a mobile app, which of the following would be least helpful to test?
 - a. Launch time
 - b. Connection types and speed
 - c. Task completion
 - d. User interface design (Syllabus 3.3.1.1)
- 20. When testing with simulated devices, it is important to include a set of real devices to:
 - a. Ensure the simulated performance is reflective of the performance that will be experienced by a real user on a real device (Syllabus 3.3.2.2)
 - b. Ensure all devices are covered by the simulator
 - c. Get the most reliable performance measures
 - d. Test task completion times

- 21. In designing tests for mobile application usability, which of the following best describe the factors you would need to cover?
 - a. Simplicity, Layout, Intuitiveness, Navigation (Syllabus 3.3.2.1)
 - b. Simplicity, Layout, Intuitiveness, Navigation, Performance
 - c. Simplicity, Layout, Intuitiveness, Navigation, Documentation
 - d. Simplicity, Intuitiveness, Navigation, Correctness
- 22. When conducting usability testing of mobile applications, which of the following is the most reliable method?
 - a. Simulators that can mimic user actions
 - b. Real users based on covering various user personas (Syllabus 3.3.2.2)
 - c. Test automation on real devices that can mimic user actions
 - d. Beta testing
- 23. Which of the following is most closely related to usability testing?
 - a. Compatibility testing
 - b. Reliability testing
 - c. Accessibility testing (Syllabus 3.3.2.2)
 - d. Exploratory testing
- 24. As a tester, you are concerned that the mobile application you are testing will not function the same on some other devices and mobile operating systems.

 To determine this, you would perform:
 - a. Device equivalence testing
 - b. Regression testing
 - c. Usability Testing
 - d. Portability Testing (Syllabus 3.3.3)
- 25. Why is reliability testing such a concern in mobile device quality?
 - a. Because people take their devices with them to many locations, some of which have extreme external operating conditions (Syllabus 3.3.4)
 - b. Because most smartphones have hardware defects
 - c. Because users are very rough on their devices
 - d. Because reliability can't be measured

- 1. Which of the following should mobile testing tools be able to do?
 - a. Adapt to different environments and protocols, simulate a native device, and support testing across iOS, Android and other operating systems (Syllabus 4.1.1)
 - b. Record and playback tests
 - c. Automatically report defects
 - d. Create test metrics
- 2. Which of the following is a way to know if a tool will work in your specific environment?
 - a. The vendor's demo
 - b. A pilot project (Syllabus 4.1.1)
 - c. The list of tool features and capabilities
 - d. The recommendations from other users of the tool
- 3. Which of the following are examples of generic test tools?
 - a. Simulators and emulators
 - b. Test automation tools that drive tests on real devices
 - c. Test management tools, incident tracking tools and configuration management tools (Syllabus 4.1.2)
 - d. Security testing tools
- 4. Besides pricing, what is a key difference between Open Source tools and commercial tools?
 - a. Commercial tools will always be supported
 - b. Open source tools tend to be focused on solving a particular problem whereas commercial tools are designed to address a wide range of capabilities (Syllabus 4.1.3)
 - c. Open source tools are easier to use
 - d. Commercial tools are easier to use
- 5. When testing the connectivity, it is important to test for:
 - a. Disruptions in the connection, reconnection capabilities, the ability of the application to continue when data loss has occurred during the transmission of data (Syllabus 4.2.1.1)
 - b. The ability to connect to all types and speeds of networks
 - c. Direct access to the core device framework
 - d. Encryption during transmission of all data

- 6. In which situation would memory errors be most likely to occur?
 - a. Full-featured applications being installed on a newer mobile device
 - b. Full-featured applications being installed on an older mobile device (Syllabus 4.2.1.2)
 - c. Applications running on devices with the ability to increase memory
 - d. Smaller applications running at the same time as other applications
- 7. Features and capabilities to be considered when determining the proper test environment for the application include:
 - a. Physical size of the mobile device
 - b. The data to be stored on the device
 - c. Screen size for display, screen lighting, geolocation (Syllabus 4.2.1.4)
 - d. Usability of the device
- 8. "OTA" refers to:
 - a. "Other than advertised" features
 - b. "Over the air" updates (Syllabus 4.2.1.4)
 - c. "Once then activated" devices
 - d. "One time activation" of devices
- 9. Which test design technique can be used to help reduce the potential number of test environments by determining representative combinations of capabilities and features that do not interact?
 - a. Boundary-value analysis
 - b. State-transition tables
 - c. Pairwise test design (Syllabus 4.2.1.4)
 - d. Simulators
- 10. An airline is creating a new hybrid mobile app to allow their customers to book flights, check in to flights (which includes the storing of PDF boarding passes on the mobile device), and the ability to access flight itineraries. The itineraries are not stored on the device, but instead, on the airline's data servers. What are the data sources in this example?
 - a. User input, the backend system, data stored by the app on the device (Syllabus 4.2.1.5)
 - b. The backend system only
 - c. Data from other websites, such as car rental companies, User input and data from the airline
 - d. User input and the boarding pass data stored on the device.

- 11. In the airline mobile app, a key development decision was whether or not to create a native app or a browser-based app. In the end, the decision was made to create an app that uses APIs for native devices and also provides access to data delivered from the airline's web server. Which kind of mobile app was developed?
 - a. A native device app
 - b. A browser-based app
 - c. A hybrid app (Syllabus 4.3.3)
 - d. None of the above
- 12. It is expected that the airline mobile app will have over 1 million users in the first year. The implication is that a wide variety of mobile devices will be used to access the app. Also, a wide variety of users will be downloading the app. You are defining the test environment. Why would you consider the use of simulators?
 - a. To automate tests for regression testing
 - b. To get the broadest coverage of devices and browsers possible
 - c. To test large numbers of virtual users for performance testing
 - d. All of the above (Syllabus 4.2.2)
- 13. In the airline mobile app, when would testing with a simulator be least beneficial?
 - a. During development
 - b. Early in the project, before testing with real devices
 - c. Later in the project, after testing with real devices (Syllabus 4.4.1)
 - d. During regression testing
- 14. In using a simulator for testing a mobile app what would be one of the first things to do?
 - a. Make sure the simulator supports all device types
 - b. Create a set of automated tests
 - c. Determine how close the simulator is to actual device behavior (Syllabus 4.4.2.2)
 - d. Train all the testers in how to use the simulator
- 15. What is the main difference between a simulator and an emulator?
 - a. Emulators are often written by device manufacturers and provide the functionality of the device itself including software, hardware and operating systems (Syllabus 4.4.3)
 - b. Emulators are much more accurate than simulators
 - c. Emulators can be used to test a variety of different device brands
 - d. Emulators are better for regression testing

- 16. To determine the degree of reliability of a simulator, which approach is most appropriate:
 - a. Compare the results from the simulator to the results from an emulator
 - b. Provide the same inputs to the real device and the simulator and verify if the results are the same (Syllabus 4.4.2.2)
 - c. Read the documentation for the simulator
 - d. Ask other testers if they have noticed any differences between the similar and real devices
- 17. A company is building a mobile app that can be used by people worldwide. Which aspect of cloud testing would allow the company to test from various locations?
 - a. Cloud hosted agents (Syllabus 4.4.4)
 - b. Cloud network simulators
 - c. Cloud hosted appliances
 - d. Cloud protocol simulators
- 18. Which cloud capability is most beneficial for performance testing?
 - a. Supporting a variety of network types
 - b. Supporting a variety of protocols
 - c. Supporting a variety of device types
 - d. Supporting a variety of device quantities and usages (Syllabus 4.4.4)
- 19. Which information should be tracked during performance testing of mobile applications and devices?
 - a. Information flowing between the device and the servers
 - b. Usage patterns
 - c. The volume and frequency of data being processed
 - d. All of the above (Syllabus 4.5)
- 20. You are the test manager for a project to build a mobile app. There are currently no test automation tools in place in your company. You have been advocating for the purchase of a test automation tool for this project, but senior management is of the opinion that such a tool is too expensive and is not really needed. Which of the reasons below would be the best one to make your case?
 - a. There would be value seen almost immediately from test automation
 - b. It is the best way to test performance, perform regression testing and cover many device types in the rapid development timeframes (Syllabus 4.6)
 - c. Test automation would replace manual testers
 - d. Many other companies are successful with test automation

- 21. Which of the following facts about mobile apps most strongly impacts test automation?
 - a. Mobile apps can have a long lifespan (Syllabus 4.6.2)
 - b. Tools can be applied quickly
 - c. Tools can mimic all user behavior
 - d. Tools keep up well with new devices as they are introduced to the marketplace

Module 5 - Mobile Sample Exam Answers

- 1. In which ways should mobile computing be expected to grow in the future?
 - a. More devices with more capabilities (Syllabus 5.1)
 - b. Longer time frames for development
 - c. Longer time frames for testing
 - d. More complete specifications
- 2. In which ways will user expectations be expected to increase in the future?
 - a. Better usability and reliability (Syllabus 5.1)
 - b. Lower cost of ownership
 - c. Smaller devices
 - d. Better access to data
- 3. As a test manager, you are looking toward future mobile development in your company and what that means for your testing efforts. Your plan is to build a test approach designed for change. Which of the following would you do to help achieve that goal?
 - a. Training testers in mobile test approaches
 - b. Getting management on board with your approach
 - c. Implementing or utilizing test environments that can be quickly assembled and disassembled (Syllabus 5.2.1)
 - d. Starting a beta test program
- 4. As a test manager, you want to get the best tools for testing mobile applications. What is the most important thing to consider in getting the right tools for both current and future use?
 - a. Low cost
 - b. Good reputation
 - c. Large customer base
 - d. Flexibility and the ability to adapt to the changing market (Syllabus 5.2.1)

Module 5 - Mobile Sample Exam Questions

- 5. You are the test manager for a bank that is creating a mobile banking app for its customers. You know that the core features of the app will likely remain the same for at least two years. The development and release cycles are very short (2 weeks) which gives little time for testing and makes it difficult to optimize your test tools and approach. What would be the appropriate activities to reduce maintenance costs while enabling wide product adoption?
 - a. Focus on creating all testware to be reusable (such as data-driven test automation) and show the ROI achieved through reusability (Syllabus 5.2.1)
 - b. Advocate that developers perform most of the testing and also create much of the test automation
 - c. Use pairwise test design to reduce the number of device configurations tested
 - d. Measure how much time is devoted to regression testing and reduce it by 50%
- 6. After trying to create a mobile test environment on your own, your company has decided to investigate obtaining the services of a cloud environment vendor. What would be your primary concern about the vendor's ability to meet your needs?
 - a. Will the vendor have a fast response time to requests?
 - b. Will the vendor have a large enough staff for support?
 - c. Will the vendor be flexible enough to keep up with the changes in the industry? (Syllabus 5.2.4)
 - d. Will the vendor be able to understand your company's specific needs?
- 7. Your company is currently using an agile approach to mobile app development, but there have been challenges. For example, user stories were not very well defined and management is uncomfortable with self-leading teams. Therefore, you expect a new development lifecycle approach that is lighter weight to be investigated and implemented in the near future. As a tester, what do you expect to do if this occurs?
 - a. Perform some adaptation of the new lifecycle approach and understand the moment of involvement needed by each team (Syllabus 5.3.1)
 - b. Show clearly why the agile approach was not workable
 - c. Train the developers in the new lifecycle
 - d. Train the testers in the new lifecycle

Module 5 - Mobile Sample Exam Questions

- 8. Looking to the future, you know as a tester you will need to adapt to changes in the mobile landscape. What are some things you should expect?
 - a. Learn from your mistakes
 - b. Work closer with management
 - c. Getting users to come to your company to provide feedback about their experience with past versions of your mobile apps
 - d. Be ready and willing to adopt new technologies, investigate new tools and learn more efficient and leaner testing methodologies (Syllabus 5.4)