Q #1) What is the difference between Mobile device testing and mobile application testing?

Ans. Mobile device testing means testing the mobile device and mobile application testing means testing of the mobile application on a mobile device.

Q #2) What are the types of mobile applications?

Ans. Mobile applications are of three types:

Native Application– Native app installed from application store like Android’s google play and apple’ app store. The application which can be installed into your devices and run is known as a native application for E.G. whats App, Angry birds etc.

Web Application– Web applications run from mobile web browsers like Chrome, Firefox, Opera, Safari etc using mobile network or WIFI. E.G. of web browser applications are m.facebook.com, m.gmail.com, m.yahoo.com, m.rediffmail.com etc.

Hybrid Application- Hybrid apps are combinations of native app and web app. They can run on devices or offline and are written using web technologies like HTML5 and CSS. For E.G. eBay, Flipkart etc

Q #3) How to test CPU usage on mobile devices?

Ans. There are various tools available in the market like google play or app store from where you can install apps like CPU Monitor, Usemon, CPU Stats, CPU-Z etc these are an advanced tool which records historical information about processes running on your device.

Q #4) What are the defects tracking tools used for mobile testing?

Ans. You can use same testing tool which you use for web application testing like QC, Jira, Rally, and Bugzilla etc.

Q #5) What all major networks to be considered while performing application testing?

Ans. You should test the application on 4G, 3G, 2G, and WIFI. 2G is a slower network, it’s good if you verify your application on a slower network also to track your application performance.

Q #6) When performing sanity test on the mobile application what all criteria should be taken into consideration?

Ans.

Installation and uninstallation of the application

Verify the device in different available networks like 2G, 3G, 4G or WIFI.

Functional testing

Interrupt testing- Able to receive the calls while running the application.

Compatibility testing – able to attach the photo in message from gallery

Test application performance on a different handset.

Make some negative testing by entering the invalid credentials and test the behavior of the application.

Q #7) Which things to consider testing a mobile application through black box technique?

Ans.

By testing your application on multiple devices.

By changing the port and IP addresses to make sure the device is getting connected and disconnected properly.

By making calls and sending messages to other devices.

By testing your web application on different mobile browsers like Chrome, Firefox, opera, dolphin etc.

Q #8) What is the latest version of iOS?

Ans. iOS 12.1.4

Q #9) What is the latest version of Android?

Ans. Pie Android 9.0

Q #10) What is the extension of Android files?

.apk (Android application package)

Q#11) What is the extension of iOS files?

Ans. .ipa

Q #12) What is the full form of MMS?

Ans. Multimedia Messaging Services

Q #13) What are MT and MO in SMS?

Ans. Sending message is known as MO (Message originate) and receiving the message is known as MT(Message Terminate)

Q #14) What is WAP?

Ans. WAP is Wireless Application Protocol used in network apps.

Q #15) What is GPRS and how it works?

Ans. GPRS is General Packet Radio Service which works on a mobile network with the help of IP transmissions. GPRS provides the transmission of IP packets over existing cellular networks. It provides you internet services on mobile

Q #16) What is the latest version of Windows?

Ans. Windows 10 (see latest here)

Q #17) What do you mean by Streaming media?

Ans. Streaming is a process of downloading the data from the server. Streaming media is the multimedia that is transferred from server or provider to the receiver.

Q #18) What are the automation tools available for mobile application testing?

Ans. There are many automation tools available in the market for mobile application testing but iPhone Tester is one of the best tools to test the application on iPhones and screenfly for android devices.

Q #19) What is the best way to test different screen sizes of the devices?

Ans. Using emulator. See example here.

Q #20) What is the basic difference between Emulator and Simulator?

Ans. The emulator is based on hardware and software wherein simulator is based on software. Simulation is a system that behaves similar to something else while emulation is a system that exactly behaves like something else.

Q #21) What are the common challenges in mobile application testing?

Ans. Working on different operating systems, a variety of handsets, different networks, a variety of screen size. Read more here => 5 Mobile testing challenges and solutions.

Q #22) What are the tools based on cloud-based mobile testing?

Ans. Seetest, Perfecto Mobile, BlazeMeter, AppThwack, Manymo, DeviceAnywhere etc.

Q #23) What web services are used by a mobile app?

Ans. They are many depend upon the application. SOAP and REST web services are used but RESRful is more common now.

Q #24) What all devices have you worked till now?

Ans. Android, Symbian, Windows, iPhone etc.

Q #25) How to create Emulator on Android?

Ans. Give a name in name field -> select target API from the list -> enter the size -> select the required skin section -> click on create AVD -> select the required AVD -> click on start button -> launch it

Q #26) Does Selenium support mobile internet testing?

Ans. Yes, it does, Opera browser is used for Mobile internet testing.

Q #27) Does Selenium support Google Android Operating System?

Ans. Yes, Selenium 2.0 supports Android Operating System.

Q #28) Name debugging tools for mobile?

Ans. Errors can be verified by the generated logs. We can use configuration utility on iOS and android monitor.bat on android. Here are few to name Android DDMS, Remote Debugging on Android with Chrome, Debugging from Eclipse with ADT, Android Debug Bridge, iOS simulator etc.

Q #29) Name mobile automation testing tools you know?

Ans. Paid tools:

Ranorex, Silk Mobile, SeeTest

Free tools:

Appium, Robotium, KIF, Calabash

Also, read => 5 best Android application testing tools.

Q #30) What is the strategy used to test new mobile app?

Ans.

System integration testing

Functional testing

Installation and uninstallation of the app

Test HTML control

Performance

Check in multiple mobile OS

Cross browser and cross-device testing

Gateway testing

Network and Battery testing

Q #31) What does a test plan for Mobile App contain?

Ans. Test plan for mobile app is very similar to software app

Objective

Automation tools required

required features to be tested:

network

security

performance

size

battery

memory

features not to be tested

display size

resolution

Test cases

Test Strategy

Tested by

Time required

No. of resources required

Q #32) Why mobile phone has 10 digit numbers?

Ans. The number of digits in a mobile phone number decide the maximum mobile phones we can have without dialing the country code.

Q #33) Explain critical bugs that you come across while testing in mobile devices or application?

Ans. Explain the example as per your experience. Here are top 10 mobile app risks.

Q #34) Name mobile application testing tools

Ans.

Android

Android Lint

Find Bugs

iPhone

Clang Static Analyzer

Analyze code from XCode

Q #35) Full form of the various extensions

Ans.

apk – Android Application Package File

exe – Executable Files

iPA –iOS App Store Package

prc – Palm Resource Compiler

jad – Java Application Descriptor

adb – Android Debug Bridge

Aapt – Android Asset Packing Tool

Q #36) How to test different screen sizes of the devices

Ans. Using Emulators.

Q #37) What is web service?

Ans. It is a component used in software to perform the task. It is like an interface between one program to another.

Q #38) What are the roles and responsibilities on a current mobile application you are testing?

Ans. Answer based on your experience on the current project you are working on. Also, read mobile testing career guide.

Q #39) How to create the log file?

Ans. Using CAT.

Q #40) How can we install the build on iPhones and iPads?

Ans. Using iTunes.

Q #41) Can we use QTP/UFT for mobile automation testing?

Ans. Yes, with the help of Seetest add-in.

Q #42) Is cloud base mobile testing possible? Name any?

Ans. Yes, Perfecto Mobile and Seetest.

Q #43) Where to perform forward compatibility testing?

Ans. This can be done with new versions of the mobile application.

**44.WHAT ARE DIFFERENT TYPES OF TESTING’S PERFORMED FOR MOBILE APPLICATIONS?**

Functional Testing

Laboratory Testing

Performance Testing

Memory Leakage Testing

Interrupt Testing

Usability testing

Installation testing

Certification Testing

Security Testing

Functional Testing:

Functional testing is a technique used to test the functional behaviour of the application to ensures that the application is working as per the requirements.

Performance Testing:

Testing the performance of the application by changing the connection from 2G, 3G to WIFI, sharing documents, battery consumption, etc.

Memory Leakage Testing:

Memory leakage testing checks the performance of the Mobile Applications to ensure that each application of the mobile device is using optimized memory for processing.

Interrupt Testing:

Is a process to replicate abrupt(Unexpected) interruption to the application. Interruptions can be; SMS/MMS/calls, battery removal, OS upgrade, switch off/switch on of the media player, etc,. An application should be capable enough to hold these interruptions by going into a suspended state and restarting afterwards.

Usability testing:

Usability testing is used to test the mobile applications in terms of usability, flexibility, and friendliness. The testing process makes sure that the mobile app is now easy to use and offers a suitable user experience to the user.

Installation testing:

Installation testing is used to test if the particular application is installing, uninstalling, and updating properly without any interruption (user experience is smooth and flexible with the application).

Operational testing:

Testing of backups and recovery plan if battery goes down, or data loss while upgrading the application from store.

Security Testing:

The purpose of security testing to test if the application’s data and network security is responding as per the given requirement/guideline.

Compatibility testing

Mobile devices vary between platforms, models, and operating system versions. It’s essential to select a subset of devices relevant to your application.

User Interface testing

User experience is key for apps to be accepted by end users. Check usability issues, navigation, and content. Test menus, options, buttons, bookmarks, history, settings, and navigation flow of the application.

**Significance of Mobile Application Testing:**

Testing applications on mobile devices are more challenging than testing web apps on desktop. Let us see why:

Testing should be done,

with mobile devices having different screen sizes, different configurations like virtual keypad, trackball etc.

with wide varieties of mobile devices like Apple, HTC, Samsung, Nokia, etc.

with different operating system like iOS, Bada, Windows and Android etc.

with different operating system versions like Android 4.0, 4.4.4, 5.0, iOS 9x, 10x etc.

with different mobile network operators like GSM and CDMA

LIST OUT THE MOST COMMON PROBLEM THAT TESTER FACES WHILE DOING MOBILE TESTING IN CLOUD COMPUTING?

Challenges that tester faces while doing mobile testing are

Subscription model

High Costing

Lock-in

Internet connectivity issues

Automation is image based and time-consuming

Automation cannot be used outside the framework

EXPLAIN WHAT DOES MOBILE SECURITY TESTING INCLUDES?

Mobile security testing includes

Checks for multi-user support without interfering with the data between them

Checks for access to files stored in the app by any unintended users

Decryption or Encryption method used for sensitive data communication

Detect sensitive areas in tested application so that they do not receive any malicious content

EXPLAIN WHAT IS PORT TESTING?

This testing is done to test the same functionality on different devices with different platforms. It is classified into two categories

Device Testing

Platform Testing

**Mention what are the common bugs found while mobile testing?**

Critical: Your phone system crash when testing particular feature in your device

Block: Unable to do anything though phone is on unless you reboot your device

Major: Unable to perform a function of a particular feature

Minor: Under minor bugs usually GUI bugs fall.

**Screen resolution:**

Following are some of the common screen resolutions that are considered while creating test beds:

640 × 480

800 × 600

1024 × 768

1280 × 800

1366 × 768

1400 × 900

1680 × 1050

The mobile apps must be tested in the following resolutions.

How can you measure battery usage?

1. There is a simple way to analyse and measure battery usage on mobile devices. go for device settings, and tap battery, it displays the battery usage of the each and every app that you have installed.

2. Another method is to install freely available apps in the store(eg, Battery Doctor) that measure and save the battery usage.

How an application consume more battery?

Check with yourself with these questions.

Whether your app handles large amounts of data(Example: Export/import large amount of file such as photo/documents/video.?

Whether your app handle live streaming?

Whether your app use a large amount of mobile data?

Whether your applications check for location frequently?

Whether your app sync between user and server?

Whether your app send analytic data from your app to 3rd party(Example: Google Analytics)

Whether app runs a more background data?

How to Perform Battery Testing?

Battery testing is something you’ll need to do in a methodical way. While every application is different, we’ve come up with an example of a mobile app testing workflow.

Set your app up for test(get ready to download/export/stream,, etc)

Note your current battery stats (overall percentage, the percentage used by your app currently, etc).

How to test a mobile app battery usage?

Start the test

Note down the current battery stats and keep a log of this data for comparison purpose.

Repeat the testing for any features/functions that could be more problematic

Repeat this testing with varying levels of overall battery(low/full/half)

Check whether your app’s other feature are working properly(Example, checking by turn off/on the location services)

How do I clear app or cached data?

I recommend doing preventative cache cleanings from time to time, and when you do it, do it from the list of apps with the most data. In order to do this:

Go to the Settings Menu

Click on Apps

Find the All tab (if your system doesn't show you all apps by default)

Choose an app that is taking up a lot of space

Click the button Clear Cache. If you're running Android 6.0 Marshmallow or newer on your device then you'll need to click on Storage and then Clear Cache.

To clear the app data instead of the cache, simply select Clear Data instead