**1. What is Appium?**  
Appium is an open source,cross-platform test automation tool used for native,hybrid and mobile web apps,which can test on simulators(iOS,FirefoxOS), emulators(Android), and real devices(iOS,Android,FirefoxOS).

**2. Why Appium?**

* Appium is a free open-source test automation framework for mobile testing.
* Using Appium we can automate Android Applications as well as iOS Applications i.e it is a “Cross-Platform” automation tool
* It is an extension to selenium(If the people who already have knowledge on selenium can quickly get the things on Appium and start working).
* Appium supports multiple platforms, i.e, Android, iOS, FirefoxOS
* Appium supports multiple languages with Selenium Webdriver API, i.e, Java, PHP, Python, Ruby, C# etc…
* We can use any testing framework.
* If we use Apple’s UIAutomation library without Appium we can only write tests using JavaScript and we can only run tests through the Instruments application.Similarly, with Google’s UIAutomator we can only write tests in Java.Appium opens up the possibility of true cross-platform native mobile automation.

**3. Which language is used to write tests in Appium?**  
We can write our Appium tests in any language because Appium is nothing more than an HttpServer. Most common languages and development frameworks are C#.net, Java, Ruby, Python and Javascript.

**4. What are the pre-requisites to use Appium?**(Important: Appium Interview Questions)

Below is the list of pre-requisites to start mobile automation:

* Android SDK
* Eclipse IDE
* Java Development Kit(JDK)
* Selenium Server Jars
* WebDriver language binding library
* TestNG
* Appium for Windows
* APK app info on google play
* Java Script

**5. What underlying API does Appium follow?**

Appium uses underlying selenium API to automate Test Cases, i.e. Appium is an extension to selenium because all the Selenium API’s are present in Appium also.

**6. What are Desired Capabilities?**

Desired Capabilities is bunch of keys and it's value. Using this set of keys and values we can tell to appium server that what kind of automation session we are going to create. Example : If you set platformName = Android then appium will understand that you wants to create automation session to run test on Android.

**7. How would you inspect elements of Native Android App?**

Using UIAutomator tool in android SDK we can able to get access to the object locators of the Android Native Apps.

Or

Using Appium Inspector We can inspect the Native Android app.

**8. How will you scroll down in App?**

By using scrollTo() method we can scroll down in App.This method will scroll automatically until the specific text is not matching.(Deprecated for java-client 1.5 and Above)

By using UiScrollable class and scrollIntoView() method

Usage:

driver.findElementByAndroidUIAutomator("new UiScrollable(new UiSelector())

.scrollIntoView(text(\"WebView\"))");

**11. How would you identify Mobile Browser objects(Elements)?**  
Ans:

https://developers.google.com/web/tools/chrome-devtools/remote-debugging/?utm\_source=dcc&utm\_medium=redirect&utm\_campaign=2016q3

**12. How would you identify object uniquely when there are multiple objects with same class name using appium**  
By using driver.findElements(By.className) and take the list and get through the index.Using list mechanism and findElements method we will be traversing through the indexes and handle the object uniquely with the class name.

**13. What are the Limitations of Appium?**

* Appium doesn’t support testing of Andriod version which is lower than 4.2
* It has no support to run appium inspector on Windows
* It has limited support for Hybrid App testing.

**14. What is the difference between Emulator and Simulator?**  
The emulator is used to call Android virtual devices where we use in our PC on a windows machine, and Simulator is used to call for iOS virtual devices which will launch from Xcode in MAC.

**15. How do you detect the device got connected to the PC?**  
By using the command ADB devices we can get the information whether there are any objects or devices detected by the PC.

**16. Will Appium work for Mobile Browser Automation?**  
Yes, we can use Appium to work on Mobile Browsers also.

**17. What are Native Apps?**  
Native Apps or Applications are those written by using the Android or iOS SDK’s.

**18. What are Mobile Web Apps?**  
Mobile Web Applications are those which are accessed using a Mobile browser.

**19. What test frameworks are supported by Appium?**

Appium does not support test frameworks because there is no need to support, we can use appium with all test frameworks which ever we want like NUnit etc…

**20. What are the basic requirements to write Appium tests?**

* We require driver client to write Appiumtests.It drives mobile applications as a user.Using client library we write Appium tests which wrap our test steps and sends to appium server over HTTP.
* We need to initialize a session firstly as such appium takes place in the session.Once the automation is done for one session it can be ended and wait for other sessions.
* We need to define certain parameters known as desired capabilities like platform name, platform version, device name and so on in order to initialize an appium session.
* By using a large and expressive vocabulary of driver commands we can write our tests.

**21. What are Hybrid Apps?**  
Hybrid Apps are those which have a wrapper around a webview and a native control which interacts with web content.

**22. What is the difference between Hybrid Apps and Native Apps?**  
Hybrid apps are web based apps that work well on the mobile browser, where as Native apps are written for particular OS i.e, Android, iOS, etc…

**23. What is Appium Inspector?**  
Appium Inspector is similar to selenium IDE.It is a record and playback tool.It records and plays native application behavior by inspection DOM(Documentation Object Model).By DOM Inspection it generates the test scripts in any desired language.Appium uses UIAutomator viewer in its option as appium does not support Windows.

**24. Does Appium support Emulators in iOS?**  
No, Appium doesn’t support Emulators in iOS.

**25. Explain the design of Appium?**(Important: Appium Interview Questions)

Appium is an HTTP server which is written by using node js platform and drivers.It drives Android and iOS session by using webdriver JSON wire protocol. A server is a setup on our machine which exposes REST API when appium is downloaded and installed.Appium receives command and connection request from the client and executes those commands on mobile devices.

Mobile test automation frameworks are apple instruments for iOS, Google UIAutomator for Android API and Selendroid for Android API level 15 or less.