# Possible Questions for 1st Tutorial

# (with a sample)

# 1. Android - Environment Setup

## Questions

* 1. Write two main sophisticated technologies for developing Android application and what are the requirements (hardware and software) to set-up Android studio.
  2. How to set-up Java Development Kit (JDK) for Android?
  3. How to set-up Android SDK (Software Development Kit) for Android??
  4. How to set-up Android Development Tools (ADT) Plug-in for Android??
  5. How to set-up Eclipse IDE (Integrated Development Environment) for Android?

[Minimum requirements (hardware and software)]

**2. Android –Platform, Feature, Version etc.**

**Questions**

1. What is Mobile Platform? Write some examples of good platform. 2
2. What is WAP? Write some features of WAP.3
3. What is Android and why? Write some applications of Android.2-3
4. What’s are Android API levels? Make a list of Android version name sequentially with API levels.4-5
5. Explain Eclipse IDE and Android Development Tools (ADT) Plug-in with their purpose in Android. 4-5
6. What are the possible next Android version names? 1-2
7. Sketch the Block Diagram of Android & IOS Application Development.2
8. Sketch the Block Diagram of Android & IOS Development.2

**3. Android – Architecture & Components**

**Question**

1. Draw the Architecture of Android with All the Components.
2. Write Down the Definition & Function of:
3. Linux Karnel
4. Android Runtime
5. Java Virtual Machine
6. Delvik Virtual Machine
7. Android Libraries
8. Application Components
9. Write Down the Function of Following Android Libraries:
10. Android.app
11. Android.content
12. Android.database
13. Android.opengl
14. Androd.os
15. Android.view
16. Android.widget
17. Android.webkit.
18. Write Short Notes on the Following Application Framework Key Services:
19. Activity Manager
20. Content Providers
21. Resource Manager
22. Notification Manager
23. View System
24. Write Short Notes on Following Application Components:
25. Activities
26. Services
27. Broadcast Receivers
28. Content Providers
29. Fragments
30. Views
31. Layouts
32. Intents
33. Resources
34. Manifest

**Login**

1. How to create a simple Login Screen project Using Android Studio?

**Android Frontend (XML UI)**

1. Define Android View Group & View.
2. Write Short Notes on Different Android Layout Types.
3. Differentiate Among Linear Layout, Relative Layout & Absolute Layout.
4. What are the Differences between Frame Layout & Table Layout?
5. What is Android Fragment? Write Down the Block Diagram of Fragment Lifecycle.
6. How to Use Fragments? Describe Different Types of Android Fragments.

**Institute of Information Technology (IIT)**

Jahangirnagar University, Savar Dhaka

Tutorial –1

IT 4227: Mobile application Developments

Time-45 Min. Answer any **Two** Questions Marks: 20

**All parts of a particular question must be answered consecutively**

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| --- | --- | --- |
| 1(a) | What is Android and why it is popular platform? Mention few features of Android operating system | 3 |
| (b) | What is API ? Mention the android version name sequentially. | 3 |
| (c) | How many layers are in Android architecture? Mention the android sections name with few components. | 4 |
|  |  |  |
| 2(a) | Explain AndroidManifest.xml file in detail. | 3 |
| (b) | Draw Android activities interface and labeling it. | 3 |
| (c) | Differentiate the following terms:   1. wrap\_content and match\_parent 2. Java and JavaScript. 3. LinearLayout and RelativeLayout 4. JDK and IDEs 5. DVM and JVM 6. Layouts and Intents | 4 |
|  |  |  |
| 3(a) | What is orientation in Android? | 2 |
| (b) | Sketch the android application development process | 3 |
| (c) | Interpret the following android code line by line. | 5 |
|  | <?xml version="1.0" encoding="utf-8"?>  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"  android:layout\_width="fill\_parent"  android:layout\_height="fill\_parent"    <TextView android:id="@+id/text"  android:textSize="50sp"  android:textColor="#0832ca"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Hello, I am a TextView" />  <Button android:id="@+id/button"  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Hello, I am a Button" />    </LinearLayout> |  |