

S. No.	Subject/ Topic	Detailed and Technical Aspects
1.	<b>Java</b>	Here, you have to study: 1. The <b>Object-Oriented Programming</b> concepts and their various models. 2. A detailed study of <b>Inheritance</b> . 3. Different types of <b>Interfaces and Packages</b> 4. What is the use of <b>Java Virtual Machine</b> and <b>.jar file extension?</b>
2.	<b>SQL</b>	Here, you have to briefly study the <b>Data Manipulation Language</b> and <b>Data Definition Language</b> queries.
3.	<b>Android Introduction</b>	What is an Android App? How to set up the development Environment What is the <b>.apk file extension and Dalvik Virtual Machine</b> .
4.	<b>Application Structure</b>	Important topics covered in this section are: 1. <b>AndroidManifest.xml</b> 2. <b>Uses-SDK</b> 3. <b>R.java and Resources</b> 4. <b>Layouts and Drawable Resources</b> 5. <b>Activities and Active Life Cycle</b> 6. <b>Installation of Android Studio</b> 7. <b>Installing AVD and Physical Device with USB and WiFi</b>
5.	<b>Emulator- Android Virtual Device</b>	Important topics covered in this section are: <ul style="list-style-type: none"> <li>• How to edit emulator settings</li> <li>• How to Launch emulator</li> <li>• What are the shortcuts for Emulator</li> <li>• what is DDMS</li> <li>• Creation of First Project</li> <li>• The manifesting File</li> <li>• What is the Layout resource</li> <li>• Running your app on Emulator</li> <li>• Second App: (switching between activities.</li> <li>• Develop an app for demonstrating the communication between Intents</li> </ul>
6.	<b>Basic UI Design</b>	Topics covered in this section are: <ul style="list-style-type: none"> <li>• Form widgets</li> <li>• Text Fields</li> <li>• Layouts</li> </ul>
7.	<b>Preferences</b>	Shared Preferences <ul style="list-style-type: none"> <li>• Preferences from XML</li> </ul>
8.	<b>Widgets</b>	Topics covered in this section are: <ul style="list-style-type: none"> <li>• Menu</li> </ul>

		<ul style="list-style-type: none"> <li>• TextView</li> <li>• EditText</li> <li>• ImageView</li> <li>• Switch</li> <li>• Button</li> <li>• CheckBox</li> <li>• RadioGroup and RadioButton</li> <li>• ToggleButton</li> <li>• Layouts</li> <li>• ScrollView</li> <li>• Menu</li> <li>• Toast</li> <li>• Examples</li> </ul>
9.	<b>Intents</b>	<p>Two types of Intents are covered in this section:</p> <ol style="list-style-type: none"> <li>1. Explicit Intents</li> <li>2. Implicit intents</li> </ol>
10.	<b>Styles &amp; Themes</b>	<p>Topics covered in this section are:</p> <ul style="list-style-type: none"> <li>• styles.xml</li> <li>• drawable resources for shapes, gradients (selectors)</li> <li>• style attribute in layout file</li> <li>• Applying themes via code and manifest file</li> <li>• Examples</li> </ul>
11.	<b>Content Providers</b>	<p>Topics covered in this section are:</p> <ul style="list-style-type: none"> <li>• SQLite Programming</li> <li>• SQLiteOpenHelper</li> <li>• SQLiteDatabase</li> <li>• Cursor</li> <li>• Reading and updating Contacts</li> <li>• Reading bookmarks</li> </ul>
12.	<b>Adapters and Widgets</b>	<p>In this section some important topics are covered:</p> <ul style="list-style-type: none"> <li>• Adapters: <ul style="list-style-type: none"> <li>• a. ArrayAdapter</li> <li>• b. BaseAdapters</li> </ul> </li> <li>• ListView and ListActivity</li> <li>• Custom listview</li> <li>• GridView using adapters</li> <li>• Gallery using adapters</li> </ul>
13.	<b>Notifications</b>	<p>This is also an important part of android programming. The topics covered in this section are:</p> <ul style="list-style-type: none"> <li>• Broadcast Receivers</li> <li>• Services and notifications</li> <li>• Toast</li> <li>• Alarms</li> </ul>

14.	<b>Advanced Android Features</b>	<p>Some very useful topics are covered in this section which has advanced features like:</p> <ul style="list-style-type: none"> <li>• Accessing Phone services (Call, SMS, CAMERA)</li> <li>• Network connectivity services</li> </ul>
15.	<b>Services</b>	<p>Topics Covered in this section are:</p> <ul style="list-style-type: none"> <li>• Android Service Overview</li> <li>• How to implement a service</li> <li>• Life Cycle of Service</li> <li>• Communication: Inter-Process</li> </ul>
16.	<b>Multimedia in Android</b>	<p>Topics Covered in this section are:</p> <ul style="list-style-type: none"> <li>• Audio File Supported by Multimedia</li> <li>• Playback Media-Simple</li> <li>• Video Formats that are supported</li> <li>• Video Playback- Simple</li> </ul>
17.	<b>Testing and Debugging Android Application</b>	<p>Topics Covered in this section are:</p> <ul style="list-style-type: none"> <li>• Dalvik Debug Monitor Server- It's Role and Use (DDMS), Android Application Debugging</li> <li>• what is the use of Filters, Breakpoints, Suspend and Resume.</li> </ul>
18.	<b>Basics of Android Secure Coding</b>	<p>Topics Covered in this section are:</p> <ul style="list-style-type: none"> <li>• Security Tips</li> <li>• Storing Data</li> <li>• Using Networking</li> <li>• Android Permissions</li> <li>• Intents</li> <li>• Broadcast Receiver</li> <li>• Activities</li> <li>• Content Providers</li> <li>• Files</li> </ul>