

Course: Mobile Application Development

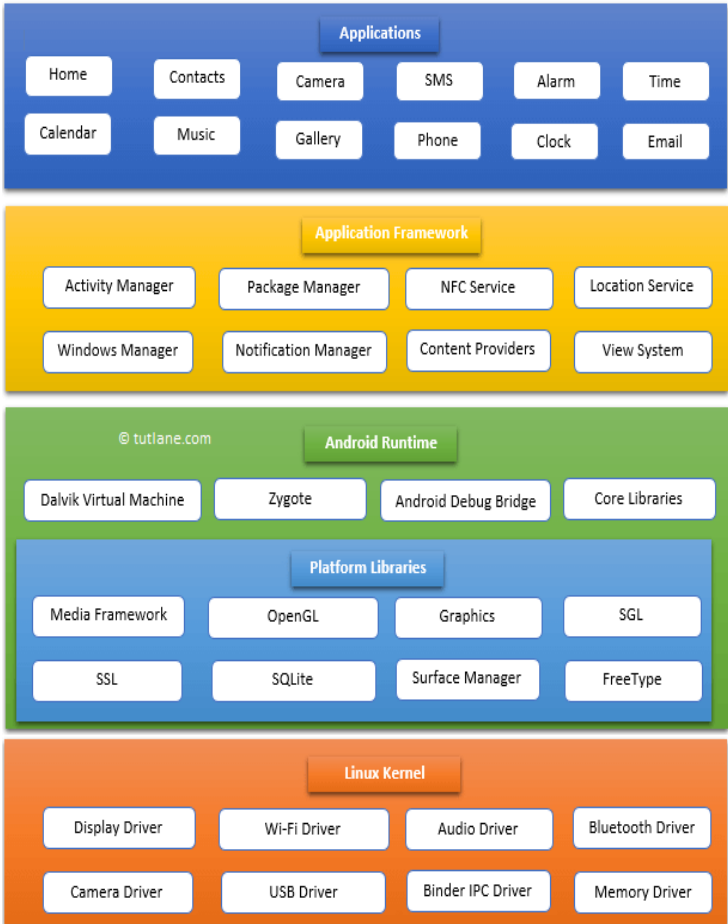
Class: CO6I

Question No	Question and Answers	Marks Distribution	Cognitive Level
1	Answer any four	2M * 4 =8M	
a.	<p>List features of Android</p> <p>Ans:</p> <ol style="list-style-type: none"> 1) Storage 2) Multitasking 3) Web Browser 4) Open Source 5) Accessibility 6) Media Support 7) Streaming Media Support 8) Voice Based Features 9) Multitouch 10) Video Calling 	List any four features (one for 1 Mark)	R
b	<p>Define: 1) Emulator 2) AVD (Android Virtual Device)</p> <p>Ans:</p> <p>1) Emulator: Android emulator is responsible for running, debugging and testing the Android application.</p> <p>2) AVD (Android Virtual Device): An Android Virtual Device (AVD) represents a device configuration. An AVD is a configuration that defines the characteristics of an Android phone, tablet, Wear OS, Android TV, or Automotive OS device that you want to simulate in the Android Emulator.</p>	1 mark for definition each	R
C	<p>List various controls of Android UI design.</p> <p>Ans:</p> <ol style="list-style-type: none"> 1) TextView 2) ImageView 3) EditText 4) Button 5) ImageButton 	List any four controls (one for 1 Mark)	R



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	6)CheckBox 7)Radiobutton 8)Togglebutton 9)PrograssBar		
d	Mention the directory path to save the image in Android. Ans: D:\MyApplication\app\src\main\res\drawable	Proper path 2 Mark	U
e	List the various attributes of ToggleButton Ans: 1)id 2)checked 3)gravity 4)textOn and textOff 5)textColor 6)textSize 7)textStyle 8)background	List any four attributes(one for 1 Mark	R

f	<p>Draw the diagram of Android Architecture. Ans:</p> 	2 Marks for correct architectur e	R
2	Attempt any three of the following	2*4=12 Marks	
a	<p>Compare JVM and DVM Ans:</p>	Any four Points 4 Marks	U

	JVM	DVM		
	JVM supports multiple operating systems	DVM supports only Android Operating System		
	It forms separate classes in separate .class byte code files	It forms multiple class in .dex byte code file.		
	JVM is based on Stack based virtual machine architecture	DVM is based on Register based virtual machine architecture.		
	It runs on more memory	It runs on less memory		
	The executable format of JVM is JAR	The executable format of DVM is APK		
	It has different constant pools.	It has common constant pool		
	JVM runs .class byte code directly	The .class byte codes are optimized to .odex format before executing in DVM		
b	Develop and android application using RelativeLayout (only XML file) Ans: <pre><?xml version="1.0" encoding="utf-8"?> <RelativeLayoutxmlns:android="http://schemas.android.com/a pk/res/android" android:layout_width="match_parent" android:layout_height="match_parent" android:paddingLeft="10dp" android:paddingRight="10dp"> <Button android:id="@+id/btn1" android:layout_width="wrap_content" android:layout_height="wrap_content" android:layout_alignParentLeft="true" android:text="Button1" /> <Button android:id="@+id/btn2"</pre>		Proper xml file 4 Marks	A

	<pre> android:layout_width="wrap_content" android:layout_height="wrap_content" android:layout_alignParentRight="true" android:layout_centerVertical="true" android:text="Button2" /> <Button android:id="@+id/btn3" android:layout_width="wrap_content" android:layout_height="wrap_content" android:layout_alignParentLeft="true" android:layout_centerVertical="true" android:text="Button3" /> <Button android:id="@+id/btn4" android:layout_width="match_parent" android:layout_height="wrap_content" android:layout_alignParentBottom="true" android:text="Button4" /> <Button android:id="@+id/btn5" android:layout_width="wrap_content" android:layout_height="wrap_content" android:layout_alignBottom="@+id/btn2" android:layout_centerHorizontal="true" android:text="Button5" /> <Button android:id="@+id/btn6" android:layout_width="wrap_content" android:layout_height="wrap_content" android:layout_above="@+id/btn4" android:layout_centerHorizontal="true" android:text="Button6" /> <Button android:id="@+id/btn7" android:layout_width="wrap_content" android:layout_height="wrap_content" android:layout_toEndOf="@+id/btn1" android:layout_toRightOf="@+id/btn1" android:layout_alignParentRight="true" android:text="Button7" /> </RelativeLayout> </pre>		
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c	<p>Design student registration form using UI components. (only XML file) Ans:</p> <pre><?xml version="1.0" encoding="utf-8"?> <LinearLayout xmlns:android="https://schemas.android.com/apk/res/andro id" android:layout_width="fill_parent" android:layout_height="fill_parent" android:gravity="center" android:orientation="vertical" android:padding="10dp" > <LinearLayout android:layout_width="match_parent" android:layout_height="wrap_content" android:layout_gravity="center" android:orientation="vertical" android:paddingLeft="20dp" android:paddingRight="20dp" > <android.support.design.widget.TextInputLayout android:id="@+id/signup_input_layout_name" android:layout_width="match_parent" android:layout_height="wrap_content"</pre>	Correct xml file 4 Marks	A
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	<pre> android:layout_centerHorizontal="true" android:layout_marginTop="10dp"> <EditText android:id="@+id/signup_input_name" android:layout_width="match_parent" android:layout_height="wrap_content" android:ems="10" android:hint="Name"/> </android.support.design.widget.TextInputLayout> <android.support.design.widget.TextInputLayout android:id="@+id/signup_input_layout_email" android:layout_width="match_parent" android:layout_height="wrap_content" android:layout_centerHorizontal="true" android:layout_marginTop="10dp"> <EditText android:id="@+id/signup_input_email" android:layout_width="match_parent" android:layout_height="wrap_content" android:ems="10" android:inputType="textEmailAddress" </pre>		
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	<pre> android:hint="Email" /> </android.support.design.widget.TextInputLayout> <android.support.design.widget.TextInputLayout android:id="@+id/signup_input_layout_password" android:layout_width="match_parent" android:layout_height="wrap_content" android:layout_centerHorizontal="true" android:layout_marginTop="10dp"> <EditText android:id="@+id/signup_input_password" android:layout_width="match_parent" android:layout_height="wrap_content" android:ems="10" android:inputType="textPassword" android:hint="@string/hint_password" /> </android.support.design.widget.TextInputLayout> <android.support.design.widget.TextInputLayout android:id="@+id/signup_input_layout_age" android:layout_width="match_parent" android:layout_height="wrap_content" android:layout_centerHorizontal="true" </pre>		
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	<pre> android:layout_marginTop="10dp"> <EditText android:id="@+id/signup_input_age" android:layout_width="match_parent" android:layout_height="wrap_content" android:ems="10" android:hint="@string/hint_dob"/> </android.support.design.widget.TextInputLayout> <RelativeLayout android:layout_width="match_parent" android:layout_height="wrap_content" android:paddingTop="20dp"> <TextView android:id="@+id/gender_textview" android:paddingRight="15dp" android:layout_width="wrap_content" android:layout_height="wrap_content" android:text="@string/hint_gender" android:fontFeatureSettings="@string/hint_password" android:textSize="20dp" android:fontFamily="@string/hint_password"/> </pre>		
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<RadioGroup
    android:id="@+id/gender_radio_group"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_toRightOf="@+id/gender_textview"
    android:orientation="horizontal">
    <RadioButton
        android:id="@+id/male_radio_btn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/male"
        android:checked="true"
    />
    <RadioButton
        android:id="@+id/female_radio_btn"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="@string/female"
    />
</RadioGroup>
</RelativeLayout>
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	<pre> <Button android:id="@+id/btn_signup" android:layout_width="fill_parent" android:layout_height="wrap_content" android:text="@string/btn_sign_up" android:background="@color/login_button_backgroun d" android:layout_marginTop="40dp" android:textColor="@android:color/white"/> <Button android:id="@+id/btn_link_login" android:layout_width="fill_parent" android:layout_height="wrap_content" android:text="@string/btn_link_login" android:background="@null" android:layout_marginTop="3dp" android:textColor="@android:color/black"/> </LinearLayout> </LinearLayout> </pre>		
d	<p>Explain ProgressBar in android. Ans: ProgressBar is used to show the progress of an operation. ProgressBar is a Visual indicator of progress in a number of operation. Display a bar to the user representing how far the</p>	<p>2Mark for explainati on. 2 Mark for any four</p>	U

	<p>operation has progressed; the application can change the amount of progress as it move forward. There is also secondary progress displayable on a progress bar which is useful for displaying intermediate progress, such as the buffer level during a stream playback progress bar.</p> <p>Properties of Progress Bar:</p> <ol style="list-style-type: none"> 1. id: id is an attribute used to uniquely identify a Progress bar 2. max: max is an attribute used in android to define maximum value of the progress can take. It must be an integer value like 100, 200 etc. 3. progress: progress is an attribute used in android to define the default progress value between 0 and max. It must be an integer value. 4. progressDrawable: progress drawable is an attribute used in Android to set the custom drawable for the progress mode. 5. background: background attribute is used to set the background of a Progress bar. We can set a color or a drawable in the background of a Progress bar 6. indeterminate: indeterminate attribute is used in Android to enable the indeterminate mode. In this mode a progress bar shows a cyclic animation without an indication of progress. This mode is used in application when we don't know the amount of work to be done. 	properties	
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