

Sample Question Paper:

Course Title: Mobile Application Development

Q.1) Attempt the following.

- a) List features of Android Operating System.
- b) Define Android Virtual Devices (AVD).
- c) Write the directory path where images are stored while developing Android application.
- d) List all attributes to develop a simple button .
- e) Write the syntax for Intent-Filter tag.
- f) Define services in Android operating system.
- g) Enlist the steps to publish the Android application.

Q.2) Attempt the following.

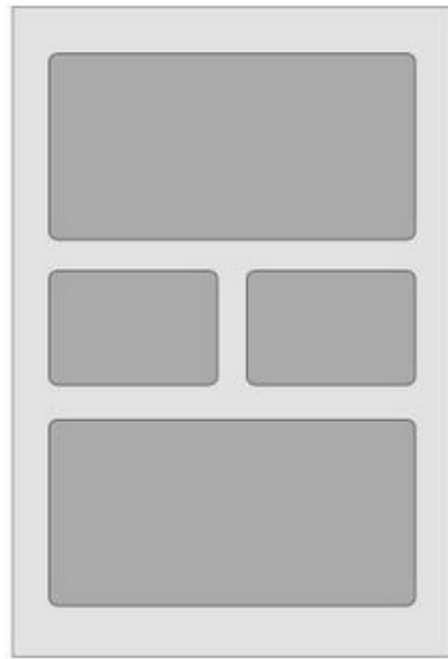
- a) Describe the Android architecture in detail.
- b) Differentiate between JVM and DVM.
- c) Explain the activity life cycle.
- d) Discuss the need of permissions in Android. Describe the permissions to set system functionalities like bluetooth, camera.

Q.3) Attempt the following.

- a) Explore the Steps to install and configure Android Studio and SDK .
- b) Explain Date and Time picker with its methods.
- c) Describe the significance of SQLite database in Android.
- d) Discuss Developer console with its purpose.

Q.4) Attempt the following.

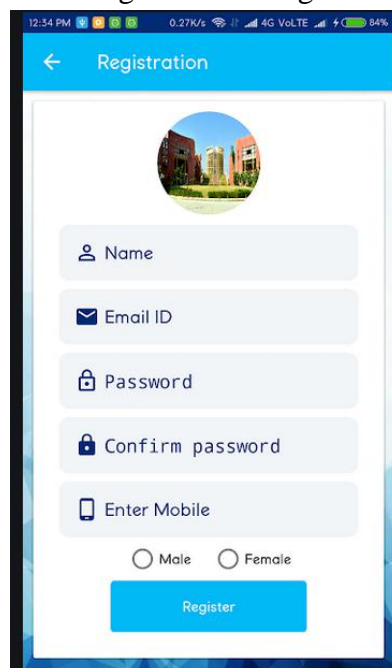
- a) Observe the following GUI and write an XML file using relative layout to create the same.



- b) Write a program to display circular progress bar.
c) List sensors in Android and explain any one in detail.
d) Explain zoom control (IN / OUT) with the help of an example.
e) Develop an application to send and receive SMS. (Write ONLY .java and permission tag in manifest file)

Q.5) Attempt the following.

- a) Develop the registration form using the following GUI.



- b) Write a program to capture an image using camera and display it.
c) Develop a program to send an email.

Q.6) Attempt the following.

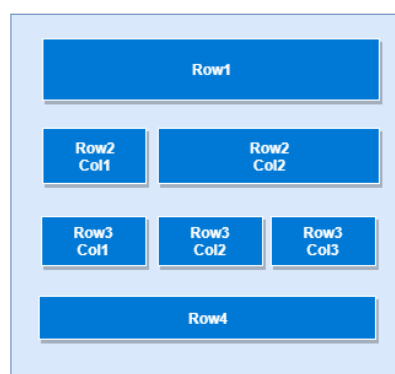
- a) Develop an application to store student details like roll no, name, branch, marks,percentage and retrieve student information using roll no. in SQLite databases.
- b) Write a program to locate user's current location. (Write ONLY .java and manifest file)
- c) Develop a simple calculator using table layout.

Q7. Attempt All.

- a) List all versions of android operating system.
- b) Explain ADT Plugins in detail.
- c) Define Emulator.
- d) List Eight alignment attributes of relative layout.
- e) Draw the hierarchical directory structure of android application.
- f) Write features of android operating system.

Q8. Attempt all.

- a) Draw and explain android architecture in detail.
- b) Differentiate JVM and DVM.
- c) Write a program to display following output using suitable layout.



- d) Explain any four UI Components of Android application.

Q9. Attempt All.

- a) List different User Interface Elements. Explain Toggle Button.
- b) Enlist different ways to handle databases in android? Elaborate any one.
- c) Draw the life cycle of an activity.
- d) List different types of views? Explain Scroll view.
- e) Name any 4 methods to get location data in android.
- f) Write steps to develop an android application.

Q10. Attempt all.

- a) Build a GUI for Student table with 5 records, write queries to add, delete and view the records from the SQLite databases.
- b) Develop an android application to calculate age (Use Date Picker) using following GUI.

The image shows a screenshot of an Android application interface. It has a light blue background. At the top, there is a label 'Date of Birth' followed by a date picker showing '11-Jun-2016'. Below this is another label 'Current Date' followed by a date picker showing '11-Jun-2016'. In the center, there is a button labeled 'Calculate'. At the bottom, there is a text label 'Your Age : 0'.

- c) Define content provider and explain fragments.
- d) Describe types of permissions used while developing android applications.