Regn. No. | | | | | | | | | |

MANIPAL INSTITUTE OF TECHNOLOGY
(Constituent Institute of Manipal University)
MANIPAL-576104

VII SEMESTER B.TECH. (COMPUTER SCIENCE AND ENGINEERING)
DEGREE END-SEMESTER EXAMINATION-NOV/DEC 2014
SUBJECT : MOBILE APPLICATION DEVELOPMENT(CSE 447) - ELECTIVE-II
DATE: 1-12-2014

TIME:03 HOURS MAX.MARKS : 50

Note : Answer any **FIVE** full questions.

1. (A) Explain the features that Android has while other platforms don't have.
   (B) Assume you have developed a class called VideoPlayer for showing videos on the screen. The class contains methods namely start() and stop() for starting and stopping videos. The VideoPlayer object has to be created every time the Application is started. If the video has to be started every time the application is shown on screen and has to be stopped every time the activity is taken out of screen, write the code for Activity.
   (C) Explain the methods of AlertDialog.Builder class. (3+4+3)

2. (A) Assume there are five books with Titles "C Programming", "C++ Programming", "Java Programming", "Android", "Design Patterns" and five images namely C.png, C++.png, Java.png, android.png, designp.png. Develop an Activity which houses two fragments, list of books on first fragment and when user clicks on any title of the book, it shows the corresponding image in second fragment.
   (B) Write the Layout XML file for the following screen layout shown in Figure 1.
   (C) Give two examples for which lint will give error. (4+4+2)

3. (A) An Android application requires registration of user. While registering, the application needs to accept user name, password, email address, mobile number and gender. Design the layout structure and code for displaying for a brief period all the name value pairs as a text at the bottom of screen when the user presses Register button.
   (B) List the various basic Views in Android. Explain the various events associated with basic views.
   (C) Create three Menus with titles "New", "Open" and "Save". Attach shortcuts for each menu as the first letter of the menu title. On clicking each menu, it should display the menu title in Log window. (4+4+2)

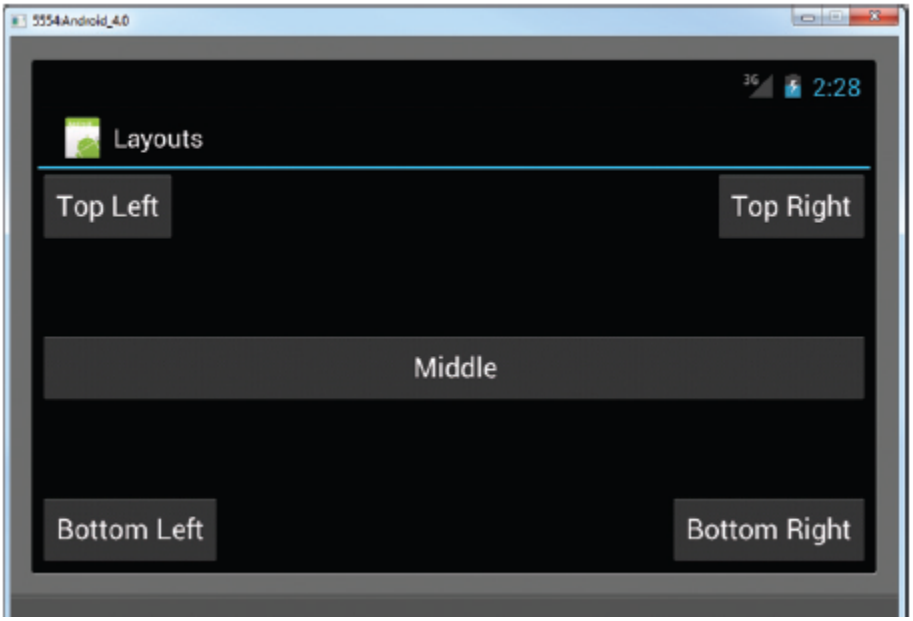

Figure 1: Qn. 2(b)

4. (A) Explain GridView with an example.

   (B) Write code for adding a text box, button three times vertically using dynamic User Interface generation. Total number of text boxes is three and buttons three. Both these controls should occupy the entire width and height of the UI elements should be minimal.

   (C) What is the use of Paint class ? List any four mutator methods of it. (4+4+2)

5. (A) Explain Intents with an example.

   (B) Explain how preferences for an Application can be collected and stored with an example.

   (C) Explain the method to store a file in an external SD card. (4+4+2)

6. (A) Explain a method by which SMS message is sent.

   (B) Explain testing of Activity based Android apps.

   (C) Explain the steps involved in Publishing Android Apps. (3+4+3)