Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov/Dec– 2017**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **14CS2063** | **Duration :** | **3hrs** |
| **Sub. Name :** | **MOBILE APPLICATION DEVELOPMENT USING ANDROID** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain the life cycle callback methods of Activity in Android. | CO1 | 17 |
| b. | Write the necessary Java code to set the user interface layout for an Activity, where the layout file is defined in the project res/layout/main\_activity.xml file. | CO1 | 3 |
| (OR) | | | | |
| 2. | a. | Explain the Android software stack. | CO1 | 15 |
| b. | Write the code snippet to call the built-in application using Intent. | CO1 | 5 |
|  |  |  |  |  |
| 3. |  | Write the code snippet to develop an Android application with the following features. |  |  |
|  | a. | Generate a list view with the names of various planets. | CO2 | 15 |
|  | b. | Display the information of a particular planet, when an item in that list is tapped. | CO2 | 5 |
| (OR) | | | | |
| 4. | a. | Write the necessary xml code to create an ImageView and Button. | CO2 | 6 |
|  | b. | Write the Java code to load an image into the ImageView from the drawable resource when the user clicks a Button. | CO2 | 10 |
|  | c. | Differentiate linear layout and relative layout. | CO2 | 4 |
|  |  |  |  |  |
| 5. | a. | Write the necessary xml code to design the following screen.    User name  email  Password | CO2 | 6 |
|  | b. | Write the Java code to save the above details into the SQLite database if the fields are not empty, when the Register button is clicked. | CO2 | 14 |
| (OR) | | | | |
| 6. | a. | Write the necessary source code to retrieve the contact name and number from people/contact application by using ContentProvider. | CO2 | 15 |
|  | b. | Write the required permission to be included in AndroidManifest.xml file to read the contact. | CO2 | 5 |
|  |  |  |  |  |
| 7. | a. | Write the necessary code snippet to verify whether the device has Accelerometer sensor or not. | CO1 | 5 |
|  | b. | Write the necessary code in onResume( ) method to register the Accelerometer for listening the events. | CO1 | 5 |
|  | c. | Write the code to override the onSensorChanged(SensorEvent event) method to display x, y and z values. | CO1 | 10 |
| (OR) | | | | |
| 8. |  | Write the necessary xml and Java code to do the following operations.   1. Switch on/off Bluetooth by using Switch or SwitchCompat UI. 2. Display the paired devices. | CO2 | 10+10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | Write the necessary Java and xml code for the below mentioned to show the marker in Google Map. |  |  |
|  | a. | Create a map fragment in xml layout file. | CO2 | 5 |
|  | b. | Write the necessary permissions in the Android Manifest.xml file to track the location. | CO2 | 5 |
|  | c. | Write the necessary Java code to display a marker in Google Map for the below mentioned latitude and longitude.  Latitude : 21  Longitude : 57 | CO2 | 10 |

ALL THE BEST