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

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**End Semester Examination – Nov/Dec – 2018**

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

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

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Explain the Android software stack with diagram. | CO2 | 15 |
| b. | List any five features of Android SDK. | CO2 | 5 |
| (OR) | | | | |
| 2. | a. | Explain the architectural cornerstones of all Android applications. | CO2 | 10 |
| b. | Review the following code snippet and find the root element and child.  <?xml version=”1.0” encoding=”utf-8”?>  <LinearLayoutxmlns:android=”http://schemas.android.com/apk/res/android”  android:orientation=”vertical” android:layout\_width=”fill\_parent” android:layout\_height=”fill\_parent”>  <TextView  android:layout\_width=”fill\_parent”  android:layout\_height=”wrap\_content” />  </LinearLayout> | CO2 | 5 |
| c. | Show the skeleton code for an Activity based class. | CO2 | 5 |
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| 3. | a. | Review the below mentioned string resource key in a res/values/strings.xml file and write the sample Java code to access this string resource key.  <?xml version="1.0" encoding="utf-8"?>  <resources>  <string name="prefsKey">timeBetweenNotifications</string>  </resources> | CO2 | 5 |
|  | b. | Describe the various state changes of an activity with neat diagram. | CO2 | 15 |
| (OR) | | | | |
| 4. | a. | Differentiate the vertical and horizontal orientations in linear layout with sample diagrams. | CO2 | 6 |
| b. | Write the necessary XML code to create three menu items – item1, item2 and item3 in option menu. | CO2 | 6 |
| c. | Show the necessary Java code to handle the events generated by menu items in option menu. | CO2 | 8 |
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| 5. | a. | Show the necessary XML code to design a registration activity which displays two EditText UI components and one Button UI component. | CO2 | 5 |
| b. | Write the necessary Java code to save the registration details in SQLite. | CO2 | 15 |
| (OR) | | | | |
| 6. | a. | Create a subclass of ContentProvider to share the data between apps. | CO2 | 5 |
| b. | Define the format of content URI. | CO2 | 5 |
| c. | Describe any four methods of ContentProvider. | CO2 | 10 |
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| 7. | a. | Show the Java code snippet to send sms. | CO2 | 10 |
| b. | Write the necessary Java code snippet to capture image using camera by passing the argument, android.provider.MediaStore.ACTION\_IMAGE\_CAPTURE. | CO1 | 10 |
| (OR) | | | | |
| 8. | a. | Write the necessary code to send email. | CO2 | 10 |
| b. | Write the necessary code snippet to display the Bluetooth paired devices. | CO1 | 10 |
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|  | | **Compulsory**: |  |  |
| 9. | a. | Explain the life cycle of Fragment. | CO2 | 15 |
| b. | List the necessary steps to release an Android app. | CO3 | 5 |