MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

V SEMESTER B.TECH. COMPUTER SCIENCE & ENGG.
END SEMESTER EXAMINATIONS, NOV/DEC 2019
SUBJECT : MOBILE APPLICATION DEVELOPMENT(CSE 4027) P.E.-I
REVISED CREDIT SYSTEM
DATE: 22-11-2019

TIME:03 HOURS   MAX.MARKS : 50

Instructions to Candidates:

- Answer **ALL** questions.

- Missing data, if any, may be suitably assumed.

1A. Draw and explain Android software stack.   **3M**

1B. Create an App having three buttons with text "Button 1", "Button 2" and "Button 3" placed horizontally along the screen. The first button should occupy 15% of width, second button 80% of width and the third 5% of width. Each of the buttons height should be the entire height of the screen. Write the layout XML file.   **3M**

1C. Explain the types of Services in Android. List and explain the various methods to implement for each type of Service. Explain which are the methods for terminating each type of Service.   **4M**

2A. Write the code for displaying names of six contestants in an event using a ListView. A judge will click on each contestant one after the other. The first selected should move to the first spot, the second to the second spot and so on. Write all the code. Assume the contestants names.   **3M**

2B. Write all the code for developing an Android App which has a textbox, button. User will enter a non-negative whole number in the textbox and press the button. A counter has to be displayed continuously starting from the number upto zero. Use a delay of 1 second and use AsyncTask class.   **4M**

2C. Write all the code for displaying a message "Boot completed" whenever an Android device is booted.   **3M**

3A. Write all the code for displaying a notification with a text "App removed" whenever any app is uninstalled in an android mobile. Assume notification channel is already created.   **4M**

3B. Write the code for writing to a file called "abc.txt" with content "ABC" in Android.   **3M**

3C. List and explain the methods of SharedPreferences.Editor class.   **3M**

4A. Explain with code to create a SQLite database table in Android.   **3M**

4B. Explain the method for handling multiple screen densities.   **2M**

4C. Explain the different View animations with suitable XML files. Explain how to cause View animation on a View object.   **5M**

5A. List the types of Sensors. Explain the method to obtain the value from a Sensor in Android.   **4M**

5B. Create a Java class named Util with a method toUpper which takes a String object and returns uppercase String of the input. Write a JUnit test case to test the toUpper method.   **4M**

5C. Explain the steps involved in packaging an Android App.   **2M**