MANIPAL INSTITUTE OF TECHNOLOGY

MANIPAL

(A constituent unit of MAHE, Manipal)

V SEMESTER B.TECH. COMPUTER SCIENCE & ENGG.
MAKEUP EXAMINATIONS, NOV/DEC 2019
SUBJECT : MOBILE APPLICATION DEVELOPMENT(CSE 4027) ELE-I
REVISED CREDIT SYSTEM
DATE: 27-12-2019

TIME:03 HOURS   MAX.MARKS : 50

Instructions to Candidates:

- Answer **ALL** questions.

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

1A. Explain physical ecosystem of mobility with a neat diagram. **3M**

1B. Design an Activity for Registration to the App. The Registration should include collecting user name, password, confirm password, phone number, gender. Write the Layout XML file. Also write a function named validate() which will validate whether all fields entered are correct. **4M**

1C. Write the code for an Activity which has a textbox and a button. User will enter a string in the text box and will click the button. On clicking the button display separately the number of each vowel present in the textbox. **3M**

2A. List the types of Services in Android. Draw and explain the Service Life cycle for each type of Service. **4M**

2B. Write the code for an Activity which has names of any 6 States of India. Use Spinner for displaying the states. In the same activity provide a button. Once the user clicks on the button, display the state selected by the user. **3M**

2C. Explain how to perform a task in Android using AsyncTask. Give an example. **3M**

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

3B. Write all the code for displaying a notification with text "The time now is <time>" whenever user clicks on a button. **4M**

3C. Explain Shared Preferences with an example. Write the location of XML file output of a shared preference. **3M**

4A. Explain the following methods of SQLiteDatabase object. **4M**

    i. query

    ii. rawQuery

    iii. insert

    iv. execSQL

4B. Write the code for drawing a blue smooth circle of radius 30 pixels and a yellow square of size 50 pixels. **3M**

4C. Explain the types of animations in Android. **3M**

5A. List and explain the types of Sensors packaged with an Android phone. **3M**

5B. Explain the types of Testing which can be carried out on an Android App. Write the code for a unit testing. **4M**

5C. Explain the different distribution options for an Android App mentioning the advantages and disadvantages of each option. **3M**