



**V SEMESTER B.TECH. COMPUTER SCIENCE & ENGG.**  
**END SEMESTER EXAMINATIONS, NOV/DEC 2018**  
**SUBJECT : MOBILE APPLICATION DEVELOPMENT(CSE 4027)**  
**REVISED CREDIT SYSTEM**  
**DATE: 26-11-2018**

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 Android with a diagram. **3M**
- 1B.** A publishing house provides content through a mobile app. App provides users with registration. Users need to enter their First name, Last name, gender, e-mail address, country, publication types namely Arts, Sports, Science and Political. Provide atleast 6 countries. Users can select multiple publication types. Also provide two buttons namely Register and Cancel. On clicking Register button display all user's entry and selection. On clicking Cancel button, all entries should be blank. Write the XML and Java code. **4M**
- 1C.** An Activity has to be designed such that it has one textbox. The user can enter any character in the textbox. As soon as any character is added or removed, immediately at the bottom of screen a count of number of vowels and consonants in the string in the textbox has to be displayed. User may also enter digits or special symbols in the textbox. Write the XML and Java code for the Activity. **3M**
- 2A.** Design and develop an app with a button. On long pressing the button should display a menu with three items namely "New", "Print" and "Settings". On clicking the menu a message "xxxx menu selected" should be displayed, where xxxx is the title of the menu selected. Write the XML and Java code. **4M**
- 2B.** Explain the method of raising a custom broadcast event in Android. Show all the code. **3M**
- 2C.** Explain all methods in AsyncTask class with an example. **3M**

- 3A.** Design and develop an Android app which shows five people's names "Ajay", "Bipin", "Chandra", "Durgesh" and "Ekta" in a list box. On clicking any item should display a notification with title as the name of the person clicked and text as Welcome. The App should work in Android 8(API level 26). Write the Java and XML code. **5M**
- 3B.** Design and develop an App which has a textbox, a label and two buttons with title Save and Retrieve. On clicking the Save button the content in the textbox should be saved in a database. On clicking the retrieve button should show the contents of all rows in the database table on the label. Write all the XML, Java code. **5M**
- 4A.** Develop an App for playing a music "vaishnavo\_janathe\_gandhi.mp3" as a background service. Show the Java code. **3M**
- 4B.** Write the code for sending an SMS message "How are you ?" to a telephone number 9874663363 in Android. The method should work in Android 8(API level 26). Write the Java code. **4M**
- 4C.** Explain the classification of sensors found in an Android device with examples. **3M**
- 5A.** Design an App which has an Activity with a replica of Indian flag. The flag has three rectangles with saffron(red=255, green=153,blue=25), white and green color. Also a blue colored circle at the center with 24 spokes has to be drawn. **4M**
- 5B.** Design an App which has two textboxes, a button and a label. User will enter two numbers in the two textboxes and presses the button. The app will show the sum of the two numbers in the label. Write the JUnit test case for checking the correctness of addition. You can assume the ids of the UI elements. **3M**
- 5C.** Explain in detail the version specifying step for an Android App before publishing. **3M**

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