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Roll No. ....

**TBC-501**

**B. C. A. (FIFTH SEMESTER)**

**MID SEMESTER**

**EXAMINATION, Oct., 2023**

**ANDROID PROGRAMMING**

**Time : 1½ Hours**

**Maximum Marks : 50**

**Note :** (i) Answer all the questions by choosing any *one* of the sub-questions.

(ii) Each question carries 10 marks.

1. (a) Define Android. Discuss History of Android and mention features of Android operating system. (CO1)

OR

- (b) Explain Android architecture with the help of a diagram. Explain different layers present in Android architecture. (CO1)

**P. T. O.**

2. (a) Explain the work of below files present in android : (CO1)
- (i) AndroidManifest.xml
  - (ii) MainActivity.java
  - (iii) GeneratedR.java
  - (iv) Activity\_main.xml
  - (v) Strings.xml

OR

- (b) What do you understand by Dalvik Virtual Machine ? How is DVM different from JVM. Explain compiling and packaging process from the source file in Android with the help of a diagram. (CO1)
3. (a) Explain Lifecycle on an Activity. Write a simple Android program to show lifecycle of activity. (CO1/CO2)

OR

- (b) What do you understand by Constraints layout in Android ? Write a code to add a button and constraint it to the middle of screen and print "hello" after clicking on the button using TextView. (CO1/CO2)

(3)

4. (a) Design Android application with EditText, TextView and Button. Write java code which takes String from EditText and show content to TextView after clicking on a button. (CO1/CO2)

OR

- (b) Explain in detail Content Provider and Broadcast Receiver. (CO2)

5. (a) Design Android application to show RadioGroup. Print the details of selected RadioButton from RadioGroup. (CO2)

OR

- (b) Design application to get details from radio button like (gender, nationally, category etc.) and print selected details on screen using TextView. (CO2)