



End Term (Odd) Semester Examination December 2024

Roll no.....

Name of the Course and semester: BCA 5th

Name of the Paper: Android Programming

Paper Code: TBC-501

Time: 3-hour

Maximum Marks: 100

Note:

- (i) All the questions are compulsory.
- (ii) Answer any two sub questions from a, b and c in each main question.
- (iii) Total marks for each question is 20 (twenty).
- (iv) Each sub-question carries 10 marks.

Q1. (2X10=20 Marks)

- a. Explain the architecture of Android with a neat diagram. Discuss its core building blocks and their functionality. (CO1)
- b. Explain AndroidManifest.xml? Explain its structure and role in an Android application with examples. (CO1)
- c. Create a basic Android application that displays a "Welcome" message using a TextView. Explain the directory structure involved. (CO1)

Q2. (2X10=20 Marks)

- a. Discuss an Activity in Android? Explain its lifecycle with a diagram and discuss its importance in Android app development. (CO2)
- b. Write a program to demonstrate the use of different views like Button, EditText, and ImageView in Android. (CO2)
- c. Explain an Intent in Android? Differentiate between Explicit and Implicit Intents with examples. (CO2)

Q3. (2X10=20 Marks)

- a. Discuss the purpose of Event Listeners in Android? Provide examples of three commonly used listeners. (CO3)
- b. Explain the different types of layouts in Android (LinearLayout, RelativeLayout, TableLayout, etc.) with code snippets for each. (CO3)
- c. Write a program to demonstrate the use of a ProgressBar and a DatePicker in an Android application. (CO3)

Q4. (2X10=20 Marks)

- a. Explain SQLite in Android? Explain the steps involved in creating and querying a SQLite database with examples. (CO4)
- b. Write a program to insert, update, and delete records in a SQLite database. Describe the use of SQLiteOpenHelper. (CO4)
- c. Discuss the advantages and limitations of SQLite for Android app development. (CO4)

Q5. (2X10=20 Marks)

- a. Explain the role of the TelephonyManager class in Android. Write a program to display the phone's network and SIM details. (CO5)
- b. Discuss SmsManager in Android? Write a program to send and receive SMS using SmsManager. (CO5)
- c. Discuss the different types of sensors available in Android. Write a program to detect device orientation using a sensor. (CO5)