



Mid Term (Odd) Semester Examination October 2024

Roll no.....

Name of the Course and semester: MCA 3rd Semester

Name of the Paper: Mobile Application Development

Paper Code: TMC-302

Time: 1.5 hour

Maximum Marks: 50

Note:

- (i) Answer all the questions by choosing any one of the sub questions
- (ii) Each question carries 10 marks.

Q1. (10 Marks)

- a. Give an overview of Android architecture and explain its various layers. **CO 1**
- OR
- b. Describe the core components of Android: Activity, Service, Broadcast Receiver, and Content Provider. **CO 1**

Q2. (10 Marks)

- a. Discuss the directory structure of an Android project. Explain the role of key files like AndroidManifest.xml, MainActivity.java, and activity_main.xml. **CO1**
- OR
- b. What is an Activity in Android? Explain its states and lifecycle with a diagram. **CO2**

Q3. (10 Marks)

- a. What are Intents in Android? Discuss how they are used to link activities together. **CO2**
- OR
- b. Discuss the difference between **TextView** and **EditText** views. How would you use them in an Android application? **CO2**

Q4. (10 Marks)

- a. What is the importance of the Android Emulator in development? Explain how to create and manage an AVD (Android Virtual Device). **CO1**
- OR
- c. Compare the **Table Layout** and **Frame Layout**. Provide scenarios where each would be best used. **CO2**

Q5. (10 Marks)

- a. Define **Adapter** in Android. How do Adapters facilitate the binding of data to UI components like ListView, Spinner, and GridView? **CO2**
- OR
- b. Compare and contrast JVM (Java Virtual Machine) and DVM (Dalvik Virtual Machine). **CO2**