Term Evaluation (Even) Semester Examination March 2025

Roll no............................

Name of the Course: B.Tech. CSE
Semester: VIII
Name of the Paper: Mobile Applications Development
Paper Code: (TCS-822)
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. Discuss the key features of Android that differentiate it from other mobile operating systems.
                                    OR

b. How does Android manage Activity transitions between different states such as onCreate(), onStart(), onResume(), onPause(), onStop(), and onDestroy()?

Q2.   (10 Marks)
a. Describe the role of each layer in the Android architecture, including Linux Kernel, Libraries, Android Runtime (ART), Application Framework, and Applications.
                                    OR
b. How do you pass data between activities using Intents? Explain with an example of sending and receiving data.

Q3.   (10 Marks)
a. How does the Activity component function in an Android app? Explain its lifecycle with a suitable example.
                                    OR
b. Explain the concept of Scroll View. How does it help in displaying content that exceeds the screen size? Provide an example implementation.

Q4.   (10 Marks)
a. Compare and contrast real device testing and emulator testing in Android development. What are the advantages and disadvantages of each?
                                    OR
b. What is a View in Android? Explain the hierarchy of Views in Android applications.

Q5.   (10 Marks)
a. What is the significance of MainActivity.java in an Android project? How does it serve as the entry point of an application?
                                    OR
b. What are Event Listeners in Android? Discuss the different types of listeners available for handling user interactions.