



Seat No. : _____

DG-104

December-2025

5th Year M.Sc. (CA & IT), Sem.-IX

Mobile Application Development

Time : 2:30 Hours]

[Max. Marks : 70

1. Answer the following questions. 14

- (1) What is the Open Handset Alliance (OHA), who are its members, and why was it created ? 3
- (2) What information and components are defined in the AndroidManifest.xml file ? 4
- (3) Explain the layers of the Android software stack from the Linux Kernel up to applications, and describe the function of each. 7

OR

- (3) Describe the activity lifecycle in Android and why methods like onCreate(), onPause(), and onDestroy() are important ? 7

2. Answer the following questions : (Attempt ANY TWO) 14

- (1) Differentiate between LinearLayout, RelativeLayout, ConstraintLayout, FrameLayout and GridLayout with suitable use cases. 7
- (2) Explain the difference between ListView and RecyclerView. Why is RecyclerView more efficient ? 7
- (3) What are the different types of animations supported in Android (View, Property, Drawable) ? Explain with examples and their applications in UI design. 7

3. Answer the following questions : 14

- (1) Explain the role of SharedPreferences in Android applications. 3
- (2) What is the purpose of Content Values in SQLite operations ? 4
- (3) Describe the steps involved in creating, reading, updating, and deleting data in an SQLite database. 7

OR

- (3) Discuss the different types of data storage in Android focusing on SharedPreferences, internal storage, and external storage. 7

4. Answer the following questions : (Attempt ANY TWO) 14
- (1) What is Android Networking ? Explain why network operations must run on a background thread. 7
 - (2) What is JSON ? Describe its structure with an example and explain the steps to parse JSON data in Android. 7
 - (3) What is Android SMS Service ? Distinguish between SEND_SMS and RECEIVE_SMS permissions and explain the steps to send an SMS programmatically. 7
5. Answer the following questions. 14
- (1) What is FusedLocationProviderClient ? How does it improve the accuracy of location-based services ? 7
 - (2) Explain Notification in Android: Explain why Notification Channels are required in Android 8.0+ and describe the steps to create a simple notification using NotificationCompat.Builder. 7
- OR**
- (1) Compare GPS Provider and Network Provider used in location detection. Explain with examples. 7
 - (2) What is Video View ? Explain how to play a video using Video View and describe the role of MediaController in multimedia applications. 7
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