

Dr. Babasaheb Ambedkar Open University
Term End Examination July – 2026

Course	: BCA	Date	: 08/07/2026
Subject Code	: BCAR-503	Time	: 11.30am to 01.45pm
Subject Name	: Mobile Application Development	Duration	: 02.15 Hours
		Max. Marks	: 70

Section A

Answer the following (Attempt any three) (30)

1. Explain the Android Application Development Environment.
2. Explain Android Resources. Discuss different resource types and explain how resources are accessed in an Android application.
3. Explain Android Fragments. Discuss their life cycle, advantages and applications in modern Android applications.
4. Explain Android Data Storage Techniques. Discuss Shared Preferences, Internal Storage, External Storage and SQLite Database.
5. Discuss different Layout Managers and the guidelines for designing an effective mobile interface.

Section B

Answer the following (Attempt any four) (20)

1. What is Android Virtual Device (AVD)? State its advantages.
2. Explain the purpose of the **R.java** (Resource) class.
3. Write a short note on **ImageView**.
4. Differentiate between **TextView** and **EditText**.
5. Explain the purpose of **Shared Preferences**.
6. Write a short note on **Android Widgets**.

Section C

Part – A (Multiple Choice Questions) (10)

Q.1 Which Android tool is primarily used to create and manage virtual Android devices for testing applications?

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|----------------|----------------|
| A) Gradle | B) AVD Manager |
| C) SDK Manager | D) Logcat |

Q.2 Which Android resource directory generally stores XML files defining application menus?

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|---------------|-------------|
| A) res/layout | B) res/menu |
| C) res/xml | D) res/raw |

Q.3 Which UI component is most suitable for displaying an image in an Android application?

- | | |
|--------------|------------|
| A) TextView | B) Button |
| C) ImageView | D) Spinner |

Q.4 Which storage mechanism is most appropriate for storing small user preference values such as theme settings?

- | | |
|--------------------|-----------------------|
| A) SQLite Database | B) Shared Preferences |
|--------------------|-----------------------|

- C) External Storage D) Content Provider
- Q.5 Which Android component is commonly reused inside multiple Activities to create flexible user interfaces?
- A) Service B) Fragment
- C) Broadcast Receiver D) Intent
- Q.6 Which file is automatically generated to provide references to application resources?
- A) AndroidManifest.xml B) R.java
- C) MainActivity.java D) build.gradle
- Q.7 Which Android layout automatically positions child views in rows and columns?
- A) FrameLayout B) GridLayout
- C) LinearLayout D) AbsoluteLayout
- Q.8 Which Android tool displays runtime messages and debugging information during application execution?
- A) Emulator B) SDK Manager
- C) Logcat D) ADB Driver
- Q.9 Which storage option remains private to an application by default?
- A) External Storage B) Internal Storage
- C) SD Card D) Cloud Storage
- Q.10 Which file generally contains application version information and build configuration?
- A) AndroidManifest.xml B) build.gradle
- C) strings.xml D) styles.xml

Part – B (State whether the following statements are true or false)

(10)

- 1 Android Studio provides integrated tools for coding, debugging and testing Android applications.
- 2 An Android application may contain more than one Fragment within a single Activity.
- 3 Shared Preferences are generally suitable for storing large multimedia files.
- 4 Internal Storage is private to the application unless explicitly shared.
- 5 The **R.java** file provides identifiers for application resources.
- 6 ImageView is primarily used for accepting keyboard input from the user.
- 7 GridLayout arranges child views in rows and columns.
- 8 Logcat assists developers in monitoring application execution and debugging.
- 9 Android applications can access resources without using the generated resource identifiers.
- 10 AVD enables developers to test Android applications without a physical mobile device.
