

B.C.A Semester - 6 (CBCS) Examination**March/April-2025 (NEW COURSE)****Mobile Computing using Android and iPhone (Core (New))****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

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- Que-1(A) Attempt the following (03)
1. _____ method in android is used to initialize an activity.
 2. The Started service keeps running in the background until it is stopped by application or system: True/False.
 3. What is Manifest file?
- Que-1(B) Attempt the following (any two) (06)
1. Explain the Android Platform and its key components.
 2. What is Activity in Android? Explain activity lifecycle.
 3. Write a note on Android SDK.
 4. Explain the concept of Services in Android. Discuss any one service.
- Que-1(C) Attempt the following (any one) (05)
1. Write in detail: the Anatomy of an Android application.
 2. Explain the concept of Intent Filters giving appropriate example.
- Que-2(A) Attempt the following (03)
1. _____ class is used to create animation in Android.
 2. What is Fragment?
 3. _____ Layout is similar to an HTML Table.
- Que-2(B) Attempt the following (any two) (06)
1. Explain with example: ImageButton Control.
 2. Explain giving example: Linear Layout.
 3. What is Cross Fading? Explain how it can be implemented?
 4. Create an Android app using Animation class to show Tweened Animation.
- Que-2(C) Attempt the following (any one) (05)
1. Explain the process of creating Frame by Frame Animation in an Android app. Explain where it is suitable.
 2. Develop an Android app which uses some User Interface Screen Elements.
- Que-3(A) Attempt the following (03)
1. Give full form: REST API.
 2. An SQLite database file has _____ extension.
 3. A record from the dataset is deleted using DeleteRecord command : True/False.
- Que-3(B) Attempt the following (any two) (06)
1. What are the advantages of using SQLite in mobile applications?
 2. Explain how Content Provider helps in managing data security in an Android app.
 3. Explain how to perform UPDATE operation using Content Provider by giving example.
 4. What are Shared Preferences? Explain.

- Que-3(C) Attempt the following (any one) (05)
1. Write in detail about Rest API.
 2. Explain the Retrofit library in Android and its role in making Android apps function.
- Que-4(A) Attempt the following (03)
1. Give full form: JSON.
 2. Give full form: GPS.
 3. What is marker?
- Que-4(B) Attempt the following (any two) (06)
1. What is Telephony API? What are its uses?
 2. Explain the concept of location-based services.
 3. Explain how GPS works in Android devices. Explain in brief two common uses of GPS in mobile applications.
 4. Write a code which shows how to vibrate the phone using app.
- Que-4(C) Attempt the following (any one) (05)
1. Explain how to customize notifications in Android by giving an example of how to implement a custom notification.
 2. Write in detail the purpose and uses of Android Networking API.
- Que-5(A) Attempt the following (03)
1. Give full form: MVC.
 2. The extension of a storyboard file is _____.
 3. CocoaTouch supports touch-based interactions on mobile apps: True/False.
- Que-5(B) Attempt the following (any two) (06)
1. Explain giving example, how to take single and multiline input in an XCode app?
 2. Briefly explain MVC Architecture.
 3. Explain the advantage of using XCode in developing iOS apps
 4. List various User Interface Controls. Explain the use and purpose of any one by giving example.
- Que-5(C) Attempt the following (any one) (05)
1. Explain the role of Storyboard in design and development of an iOS application.
 2. Design and develop a basic "I Love India" iOS application using Xcode.
