

M.Sc.(IT & CA) Semester - 2 (CBCS) Examination**April/May-2023 (NEW COURSE)****APPLICATION DEVELOPMENT USING ADVANCED ANDROID(CORE)****Time: 2:30 Hours****Marks: 70****Instructions:**

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

Q.1(A) Answer following Questions (03)

- 1) _____ is View hierarchies that control screen format and appearance of the views.
- 2) _____ is an auto-generated file by aapt that contains resource IDs for all the resources of res/ directory.
- 3) _____ method sets system's wall clock time.

(B) Answer Any Two (06)

- 1) Explain manifest.xml file.
- 2) Explain Array and Array List adaptor.
- 3) Explain how to record and play audio.

(C) Answer Any One (05)

- 1) Write short note on views.
- 2) Write short note on Camera API for capturing and displaying image with mode setting and zooming.

Q.2(A) Answer following Questions (03)

- 1) List out modes of shared preferences.
- 2) _____ is a message you can display to the user outside of your application's normal UI.
- 3) List out the method through which one can get the context.

(B) Answer Any Two (06)

- Explain Android File System.
Explain how to send and receive broadcast.
Explain internal and external storage.

(C) Answer Any One (05)

- 1) Write short note on content provider.
- 2) Write short note on SQLite with Android with how to write class to handle all operations.

Q.3(A) Answer following Questions (03)

- 1) One can get a list of sensors supported by your device by calling the _____ method.
- 2) Bluetooth Adapter class. get Default Adapter () returns _____ if it do not found Bluetooth device.
- 3) _____ method returned True if wi-fi is enabled.

(B) Answer Any Two (06)

- 1) Discuss difference between SOAP and RESTful web services.
- 2) Write program to start and stop Bluetooth.
- 3) Explain how to store data in external database.

(C) Answer Any One (05)

- 1) Write short note on sensors.
- 2) Write a code to start and stop wi-fi. Display available wi-fi connections.

Q.4(A) **Answer following Questions** (03)

- 1) _____ method disassociate device from the currently active access point.
- 2) _____ method returns the name of the Bluetooth adapter.
- 3) Full form of JSON is _____.

(B) **Answer Any Two** (06)

- 1) Explain JSON parsing.
- 2) Write a code to check internet connection is available or not.
- 3) Explain Retrofit.

(C) **Answer Any One** (05)

- 1) Explain how to manage wi-fi connection in android application.
- 2) Explain how to discover and bonding Bluetooth devices and how to manage connection and communicating through Bluetooth.

Q.5(A) **Answer following Questions** (03)

- 1) _____ callback method is used for receiving notifications from the LocationClient when the location has changed.
- 2) _____ is the process of transforming a street address or other description of a location into a (latitude, longitude) coordinate.
- 3) _____ is a Container to be used to draw graphics in android

(B) **Answer Any Two** (06)

- 1) Explain how to find current location.
- 2) Explain Map Overlays.
- 3) Explain 2D Animation.

(C) **Answer Any One** (05)

- 1) How to distribute Android app via google play store.
- 2) Explain how to work with bitmap and shapes.
