



## CBCS SCHEME

Sixth Semester B.E. Degree Examination, Dec.2024/Jan.2025

### Mobile Application Development

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

#### Module-1

- 1 a. Define android. Explain the architecture of android with the help of diagram. (10 Marks)
- b. Define intent. Demonstrate how to pass data between activities with intents using intent Extras. (10 Marks)

OR

- 2 a. With the help of flow diagram, describe different states of an activity in its life cycle. (10 Marks)
- b. With the help of code snippet. Demonstrate how to get back data from an activity and process it. (10 Marks)

#### Module-2

- 3 a. How to create raised button and flat button? Explain it, Also mention 3 states of each button. (10 Marks)
- b. With necessary code snippet, explain the steps for floating context menu. (10 Marks)

OR

- 4 a. Define recycler view. Demonstrate with code snippet, the usage of recycler view. (10 Marks)
- b. What is Testing? Explain manual testing and automated testing of an app. (10 Marks)

#### Module-3

- 5 a. With neat diagrams, explain the lifecycle of services. (08 Marks)
- b. Define notification. Explain the steps involved in creating and setting notifications. (07 Marks)
- c. Explain the 2 types of broadcast intent. (05 Marks)

OR

- 6 a. Define loader. Explain the callback methods of LoadManager class along with how to start and restart loader. (08 Marks)
- b. Explain the two ways of registering the broadcast receiver. (07 Marks)
- c. Explain prefetching with example. (05 Marks)

#### Module-4

- 7 a. Define shared preferences. Differentiate between shared preferences and saved instance state. (06 Marks)
- b. Define and list the characteristics of SQLite database. (08 Marks)
- c. Define Transaction. Explain ACID properties. (06 Marks)

18CS651

18CS651

OR

- 8 a. Define content provider. Explain with an example, sharing data between apps using content provider. (08 Marks)
- b. List and explain the steps of implementing an SQLite database. (12 Marks)

#### Module-5

- 9 a. Illustrate the best practices to keep user data secure. (08 Marks)
  - b. Define permission. Explain it is needed along with its types. (06 Marks)
  - c. Write a note on AdMob. (06 Marks)
- CMRIT LIBRARY  
BANGALORE - 560 037
- OR
- 10 a. Define APK. Explain the steps involved in preparing App for releasing. (10 Marks)
  - b. With an example, explain firebase real time database and also describe how the data is stored in it. (10 Marks)

\*\*\*\*\*