

CBCS SCHEME

17CS661



Sixth Semester B.E. Degree Examination, Dec.2023/Jan.2024 Mobile Application Development

Max. Marks: 100

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

Module-1

- 1 a. What is Android? List various reasons and challenges in developing app in android. (10 Marks)
- b. Explain the development process of android app, with a neat diagram. Also explain the importance of manifest and gradle files. (10 Marks)

OR

- 2 a. What are Intents? Explain intent types and key fields of intents. (10 Marks)
- b. Explain in detail activity lifecycle and their callback methods with a neat diagram. (10 Marks)

Module-2

- 3 a. What are the different input controls available for making choices in android? Explain in detail. (10 Marks)
- b. What are dialogs and pickers? Explain their types in detail. (10 Marks)

OR

- 4 a. What are Menus? Explain their types. Also explain the different functional area of an app bar. (10 Marks)
- b. What is a RecyclerView? With a neat diagram, explain components of a RecyclerView. (10 Marks)

Module-3

- 5 a. What is AsyncTask? With a neat diagram, explain the AsyncTask execution process steps. List the limitations of AsyncTask. (10 Marks)
- b. Explain in detail steps to be taken to make internet connection in an android app. Also, explain security best practices for network operations. (10 Marks)

OR

- 6 a. What are broadcast intents? How they are different from implicit intents? Explain types of broadcast intents. (10 Marks)
- b. What is a service? Explain service lifecycle with call back methods. Also compare bound and unbound service. (10 Marks)

Module-4

- 7 a. Explain different storage options provided by Android. List similarities and difference between shared preferences and saved instance state. (10 Marks)
- b. What SQLite? Explain data types associated with SQLite databases. List the steps involved in implementing SQLite database. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

OR

- 8 a. With a neat diagram, explain content provider and content resolver. Explain content provider architecture. (10 Marks)
- b. What are loaders? List their characteristics. Explain loader architecture with a neat diagram. (10 Marks)

Module-5

- 9 a. List and explain the best practices to be followed for app securities. Also, explain how performance can be improved of an app. (10 Marks)
- b. What is Firebase? With an example show how data is stored in firebase real time database. (10 Marks)

OR

- 10 a. What is an APK? What are measures required to do before generating an APK? (10 Marks)
- b. Explain the monetization models used to make money from android apps. Also explain how AdMob can be used in monetization of apps (10 Marks)

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