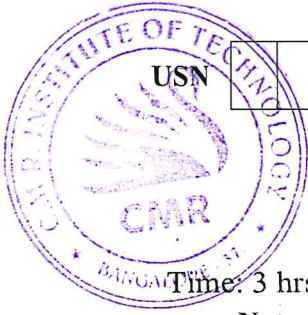


CBCS SCHEME



15CS661

Sixth Semester B.E. Degree Examination, Aug./Sept. 2020 Mobile Application Development

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. What is Android? Explain Android Architecture with neat diagram. (08 Marks)
b. What are the Challenges of Android App development? (04 Marks)
c. Explain the Layout View Groups. (04 Marks)

OR

- 2 a. What is an Activity? Explain the Activity Life Cycle. (08 Marks)
b. What is an Intent? Explain two types of Intents and also explain Intent Objects and Fields. (04 Marks)
c. How do you debug an App? (04 Marks)

Module-2

- 3 a. Which are the android user Input controls? Explain any two user Input controls in detail. (05 Marks)
b. Which are the different types of Menus? Explain any two types of Menus in detail. (07 Marks)
c. What is a Recyclerview? Explain Recyclerview components? (04 Marks)

OR

- 4 a. What is a Drawable? Explain Several types of Drawables. (06 Marks)
b. What is a Material Design? Explain Colors, Typography, Layout, Motion, Animations with respect to Material design. (07 Marks)
c. Explain the following with respect to Testing the User Interface
i) Manual Testing
ii) Automated Testing. (03 Marks)

Module-3

- 5 a. Explain UI Thread and AsyncTask. (05 Marks)
b. Write short notes on :
i) Broadcast Intents
ii) Broadcast Receivers. (06 Marks)
c. What is a Service? Explain the different types of Services. (05 Marks)

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OR

- 6 a. Explain the Service Life Cycle of started service and bound service with neat diagrams. (08 Marks)
b. What are the Notification Design guidelines? (03 Marks)
c. Explain the two general types of Alarms. (05 Marks)

Module-4

- 7 a. What are the data storage options? Explain briefly any four data storage options. (05 Marks)
b. How do you Create, Save, Restore, Clear Shared preferences. (05 Marks)
c. Write short notes on :
i) SQL database
ii) SQLite
iii) Transactions
iv) Cursor. (06 Marks)

OR

- 8 a. What is a Content Provider? And what is a Content Resolver? Explain. (04 Marks)
b. Explain the content provider architecture with neat diagram. (06 Marks)
c. Explain the Loader architecture with neat diagram. (06 Marks)

Module-5

- 9 a. What are the two types of permissions? Explain. (04 Marks)
b. Explain four types of monitors that measure the performance of an android app. (06 Marks)
c. What are the security best practices? Explain in detail. (06 Marks)

OR

- 10 a. Write short notes on :
i) Firebase Analytics
ii) Firebase Notifications
iii) Firebase Realtime database
iv) AdMob (12 Marks)
b. How do you publish Android App in the Google play store? (04 Marks)

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