

M.Sc. - I (Computer Science) (NEP Pattern) Semester-II  
**02MSCCS03 - Paper-III : Android Application Development**

P. Pages : 2

Time : Three Hours



**GUG/S/25/15361**

Max. Marks : 80

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- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram wherever necessary.
  3. Avoid vague answer and write specific answers related to questions.

**Either:**

1. a) What is android? Explain their versions and applications. 8
- b) Explain the layers of Android in brief with suitable diagram. 8

**OR**

- c) Write a note on- 8
  - i) MPL
  - ii) GPL
- d) Describe Android SDK. Explore Android development environment with important attributes. 8

**Either:**

2. a) Explain the following- 8
  - i) Activities
  - ii) Services
- b) What is Android Manifest file? Explain essential attributes of Android Manifest file. 8

**OR**

- c) List and explain the method for broadcasting intents. Write an activity file which demonstrate any one method of broadcast intent. 8
- d) Give in detail the Anatomy of An Android Applications. 8

**Either:**

3. a) Explain in detail working with animation in Android. 8
- b) Explain in brief about- 8
  - i) Containers
  - ii) Layout Managers

**OR**

- c) Write about Jetpack Compose Animation. 8
- d) Write a program using graphics API in android to draw rectangle. 8

**Either:**

- 4. a) Explain with suitable example of App widget. 8
- b) Write a note on- 8
  - i) Content Provider
  - ii) SQLite

**OR**

- c) Explain in short- 8
  - i) Networking APIs
  - ii) Telephony API
- d) What is the use of Native development kit in android application? Explain. 8

- 5. All are compulsory.
- a) Write a short note on Open Handset Alliance. 4
- b) List the android terminologies. 4
- c) Write about RecyclerView. 4
- d) Write down the steps to share data between applications with content provider. 4

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