

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

P. Pages : 2

Time : Three Hours



**GUG/W/24/15361**

Max. Marks : 80

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- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw a neat and labeled diagram and use supporting data wherever necessary.
  3. Avoid vague answer and specific points / answers to related questions.

**Either:**

1. a) What is open source? Explain any two license issues in detail. 8
- b) What do you mean by Android? Explain the layers of Android. 8

**OR**

- c) Define Android SDK? Explain the kinds of Android components. 8
- d) Write a program to build an Android Application that uses GUI component fonts and colors. (Write XML Code). 8

**Either:**

2. a) Discuss the Android Terminologies, also explain application context in brief. 8
- b) Explain the hierarchy of managing application resources in detail. 8

**OR**

- c) What is intents? Explain the Receiving and Broadcasting Intents. 8
- d) Write a program to build an Android Application that uses Layout Managers and event listeners. (Write XML Code). 8

**Either:**

3. a) What do you mean by UIS? Explain any two User Interface Screen Elements. 8
- b) What is Layout? Explain any two layout in detail. 8

**OR**

- c) What do you mean by Animation? Explain the working with Animation. 8

- d) Write a program to build an Android Application that develop a native calculator application. (Write XML Code). 8

**Either:**

4. a) Explain the Android Data and storage APIs in detail. 8

- b) Explain Android's Networking API in detail. 8

**OR**

- c) Explain the Android Telephony APIs in detail. 8

- d) Write a program to build an Android Application to develop an application that makes use of the database (Write XML Code). 8

5. Solve all the questions.

- a) Explain the open Handset Alliance. 4

- b) What do you mean by services? Explain it. 4

- c) What is Drawing? Explain the working of drawing. 4

- d) Explain the Android's Web APIs. 4

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