

M.Sc. - II (Computer Science) (CBCS Pattern) Semester-IV
PSCST13 - Paper-I : Android Application Development

P. Pages : 2

Time : Three Hours



GUG/W/24/11348

Max. Marks : 80

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

Either:

1. a) Describe the architecture and layers of the Android platform. 8
- b) What is the Android SDK and how do you use it for Android application development? 8

OR

- c) Describe the Android emulator and its functionalities. 8
- d) Explain the purpose and structure of the Android manifest file. 8

Either:

2. a) How do you check weather using custom URIs and broadcast receivers in Android? 8
- b) Explain the concept of intent filters and how they are used in Android. 8

OR

- c) Explain the process of persisting data to a database in Android. 8
- d) Demonstrate the process of creating custom broadcast receivers in Android. 8

Either:

3. a) How do you create animations using Android's graphics API? 8
- b) What is multimedia in Android and how do you work with it? 8

OR

- c) Explain the process of stimulating location within the Android emulator. 8
- d) What are the common challenges and considerations in graphics, animation, and multimedia - based Android applications? 8

Either:

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| 4. | a) What is the role of Android in field service applications and how do you use Android to work in a field service application? | 8 |
| | b) Explain the working of sensors in Android and how they can be used in applications. | 8 |

OR

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|--------------------------------------|---|----------|
| c) | What are app widgets in Android and how do you create and customize them? | 8 |
| d) | How do you localize an Android application for different languages and regions? | 8 |
| 5. Attempt all the questions. | | |
| a) | Describe the process of creating an Android application. | 4 |
| b) | How do you create and use implicit and explicit intents in Android? | 4 |
| c) | Describe the process of recording and playing audio in an Android application. | 4 |
| d) | How do you integrate Bluetooth functionality into an Android application? | 4 |
