

**CERTIFICATE IN MOBILE APPLICATION  
DEVELOPMENT (CMAD)**

**Term-End Examination**

**June, 2022**

**BCS-093 : INTRODUCTION TO ANDROID**

*Time : 3 hours*

*Maximum Marks : 75*

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**Note :** *Question no. 1 is compulsory. Answer any three questions from the rest.*

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1. (a) List any five categories of Android Applications in the market. For each category, write the name of an existing Mobile App as an example. 10
- (b) What is a Hardware Abstraction Layer (HAL) ? List any four of its components. 10
- (c) What is an Activity Stack ? Explain it with the help of a diagram. 10
2. (a) What are “Broadcast Receivers” and “Content Providers” ? Explain. 10
- (b) What is an “Application” class ? What is its significance ? 5

- 3.** (a) Explain any five input controls available on a mobile app's user interface. 10
- (b) Explain the process of designing a user interface with layout editor. 5
- 4.** (a) What is meant by "Debugging" ? What is the process of debugging an Android Mobile App ? 10
- (b) List any five Video formats that are supported by Android. 5
- 5.** (a) Write a short note on "Shared Preferences" class. Make necessary assumptions. 10
- (b) List any five best practices for accessing and using sensors. 5
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