

Roll No.

67103-N

**MCA 3rd Semester (MCA 2 Year
Programme) w.e.f. 2020-21
Examination – December, 2024**

ANDROID MOBILE APPLICATION DEVELOPMENT

Paper : 21MCA23C3

Time : Three hours]

[Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Unit. Question No. 1 is *compulsory*. All questions carry equal marks.

1. Compulsory Questions : $8 \times 2 = 16$

- (a) What is Content Provider ?
- (b) What is DDLs ?
- (c) What is ADK ?
- (d) What is Intent ?
- (e) What is a Map Activity ?

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- (f) What is Map View ?
- (g) What is an Android Shadow ?
- (h) What is a Serialization ?

UNIT – I

2. (a) How Android Operating System is important ?
What are different types of Android Application ?
Explain with example. 10
- (b) How Infrastructure and Managing Resources are works ? Explain with example. 6
3. Explain the following with example : $4 \times 4 = 16$
 - (a) Application Model
 - (b) Concurrency and Resource Management
 - (c) Mobile Device Profiles
 - (d) Mobile Software Engineering

UNIT – II

4. (a) What is Android Application Architecture ? How it works ? Explain with example. 8
- (b) What is role of Android Framework ? Explain GUI and MVC Architecture with example. 8
5. Explain with example : $4 \times 4 = 16$
 - (a) Packaging and deployment
 - (b) Applications with multiple screens

- (c) Location based services
- (d) Traditional programming model

UNIT – III

6. (a) What is purpose of a content provider in Android and provide an example of a scenario where it might be used ? 8
- (b) What is Life Cycle for an application ? Explain Blank UI, Folding and Unfolding a scalable UI with example. 8
7. Explain the following with example : $4 \times 4 = 16$
- (a) Map View and Map Activity
 - (b) Sensors and Near Field Communication
 - (c) Building Client Server Applications
 - (d) Google Maps Activity

UNIT – IV

8. (a) What do you know the process of publishing an Android app to the Google Play Store ? Explain the steps involved and any requirements that developers need to meet. 10
- (b) What is Flutter ? Explain the Android features and UI with example. 6

9. (a) What is Bluetooth ? How Camera and Sensor integration with Bluetooth ? Explain Sending SMS, Phone Calls and Runtime Environment for Applications with example. 10

(b) What are Callbacks ? Explain Concurrency, Serialization and Application Signing with example. 6
