

MCAQ/D-21

24056

MOBILE APPLICATION DEVELOPMENT

Paper–MCA-14-54

Time Allowed : 3 Hours]

[Maximum Marks : 80

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

Compulsory Question

1. Answer any four of the following questions in brief:
 - (a) What are the three different ways to develop mobile apps?
 - (b) List any four noteworthy features of Android.
 - (c) Which database is best for mobile apps?
 - (d) Explain Near Field Communication as supported by Android.
 - (e) What is the purpose served by UI toolkit in IOS?

UNIT-I

2. What is mobile application development? Enumerate the characteristics of a successful mobile app. Describe the infrastructure and kind of resources for mobile application development.
3. Answer the following questions in brief:
 - (a) Describe the workflow for creating a mobile app.
 - (b) How do mobile apps store and retrieve data?
 - (c) What are location based services and what are its components?

UNIT-II

4. Describe the main components of Android application architecture and explain the GUI architecture of Android.
5. Answer the following questions in brief:
 - (a) What are widgets? What support is provided in .Android to develop your own widgets?

- (b) What is Android Service? Describe the two states of Android service.
- (c) How can you draw with a Canvas in Android framework?
- (d) How can we use shadows and gradients in Android?

UNIT-III

- 6. How does Android support audio and video operations in applications? What steps are required to play and record audio and video in applications in Android?
- 7. How are Google maps integrated in our application? Describe the location and mappings service supported by Android. What can you do adding location services in your app?

UNIT-IV

- 8. Give an introduction of IOS along with a description of its features. Also describe event handling and graphic services in IOS.
- 9. Give an overview of Cross-Platform application development. Give an introduction to QT and the platform supported by QT.

