MCA/D-16
MOBILE APPLICATION DEVELOPMENT
PAPER: MCA-14-54

Time Allowed: 3 Hours   Maximum Marks: 80

Note: Attempt five questions in all. Question No. 1 is compulsory. All questions carry equal marks.

Compulsory Question

1. (a) What is the major benefit of mobile applications ?
   (b) What do you mean by Location based service?
   (c) What is concurrency?
   (d) Explain MVC in brief.
   (e) What types of permissions are required for using Google map?
   (f)   Discuss the need of fragments.
   (g) Enlist the tools of QT.
   (h) Which graphics services are available in iOS?

                                Unit-I

2. (a) Discuss various techniques for composing applications
   (b) Write a short note on Mobile software engineering.
3. (a) What do you mean by dynamic linking? Explain the rules of thumb for using dynamically loaded libraries.
   (b) How the data is stored and retrieved in mobile applications?

                                Unit-II

   4. What do you mean by JDK and ADK? Explain general architecture of an android application. Also differentiate between traditional programming and android programming using suitable examples.

5. (a) What is Canvas Drawing? How can we use the Shadows and Gradients in Android?
   (b) How the database in handled in Android?

                                Unit-III

   6. How do we play and record the audio and video in android applications? Explain using suitable examples.

   7. How can we design a UI in android applications? Design a UI having multiple layouts.

Unit-IV

8. (a) Write short note on Unity engine for game development.

   (b) Explain the various modules of QT.
9. (a) How the Apple iPhone platform is different from android? Explain.
   (b) Explain any two UI toolkit components of Ios.

android application. Also differentiate between traditional programming and android programming using suitable examples.