Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 09

MCA (2015 & Onward)   (Sem.–4)
MOBILE APPLICATION DEVELOPMENT
Subject Code : MCA-401
M.Code : 74119

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :
  1. **SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students have to attempt any ONE question from each SECTION.**
  2. **SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.**

SECTION-A

1. Discuss the MVC architecture pattern as it specifically relates to iOS app design. What comprises each part of the pattern?

2. a) What is Android? Explain Android working and Architecture in detail.

   b) What are the advantages of Android?

SECTION-B

3. What is Mobile Software Engineering? Why is MSWE is important? What are the Mobile Software Engineering Characteristics and Challenges? Discuss mobile software engineering process.

4. a) Give a brief description on the directory structure of an Android project.

   b) Explain Dalvik virtual machine architecture.

SECTION-C

5. Write steps to Improve Web Application Server Setup.

6. Discuss the core components of an Android app (specifically activities, intents, and services) and how they are put together to create a full-featured app.

SECTION-D

7. a) Give overview of Windows Phone and write its features. List the Windows Phone Programming Languages. Explain.

    b) Discuss the Life Cycle Of Windows Phone Application in detail.

8. Describe benefits that the Android and iOS design guidelines provide to developers. What are the advantages to following the guidelines? Are there reasons not to follow the guidelines?

SECTION-E

9. **Write briefly :**

    a) Discuss Anatomy of a Windows Phone 8 App.

    b) Windows phone 8 operating system.

    c) Discuss addressing enterprise requirements in mobile applications.

    d) What is An Activity?

    e) What do ADT stands for?

    f) What language does android support to develop an application?

    g) What is the importance of having an emulator within the Android environment?

    h) What role does Dalvik play in Android development?

    i) What is the difference between not-running, inactive, active, background and suspended execution states?

    j) List the Software required for mobile application Development .

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.