

# **Diploma in Mobile App Development**

*Max Marks 100 (ESE-70            IA-30)*

*Passing Marks-40*

**Question Paper Pattern for each Session exam (ESE)**

**Max Marks-70**

Part-A-will contain 20 short questions of 2 marks each.

Part-B will contain 3 questions (1 from each unit with internal choice) of 10 marks each.

## **Paper-P011**

### **Mobile Communication & Java Programming**

#### **UNIT-I**

Concept of mobile communication, different generations of wireless technology, understanding GSM and CDMA, basic of the GSM Architecture and services, different modes used for mobile communication, security concern related to mobile computing, middleware and gateway require for mobile computing, mobile IP, basic mobile computing protocol.

#### **UNIT-II**

Introduction to Java Programming-object oriented concepts in Java, Java features, java virtual machine, Data types and control structures, operators, array, constructor and destructor, functions overloading and overriding, classes and objects, inheritance, string handling, Exception handling in Java

#### **UNIT-III**

Introduction of Packages and Interfaces, AWT: Overview of AWT classes, Graphics primitives and GUI Components, Layout features, Standalone GUI applications, Layout Managers, Implementation of event driven mechanism, Delegation of event model, Listeners and Adapters, Introduction to applets programming

#### **Recommended Books**

1. Asoke K Talukder, Hasan Ahmed, Roopa R Yavagal, "Mobile Computing: Technology, Applications and Service Creation", 2nd ed, Tata McGraw Hill, 2010.
2. Jochen Burthardt et al, 'Pervasive Computing: Technology and Architecture of Mobile Internet Applications', Pearson Education, 2003
3. Balaguruswmy, Programming with Java, Tata McGraw Hill
4. Herbert Scliildt, Java 2, Tata Mc Graw Hill.

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**Paper-P012**

**Android Application Development**

**UNIT-I**

Overview of Android, android architecture, framework, emulators, environment setup for android app development, building a simple android application

**UNIT-II**

Activities life cycles, building UI with activities, notification, styles and themes, intent, intent filters and broadcast receivers, managing data by SQLite, content provider

**UNIT-III**

Services, multimedia in android, Google maps, web services, sensors, WI-Fi, telephony services, Bluetooth

**Recommended Books**

1. Lauren Darcey and Shane Conder, “Android Wireless Application Development”, Pearson Education, 2nd ed. (2011)
2. Reto Meier, “Professional Android 2 Application Development”, Wiley India Pvt Ltd (2011)
3. Mark L Murphy, “Beginning Android”, Wiley India Pvt Ltd(2009)
4. Sayed Y Hashimi and Satya Komatineni, “Pro Android”, Wiley India Pvt Ltd(2009)
- 5 . Reto Meier, “Professional Android 2 Application Development”, Wrox Wiley,2010

**Paper-PR011**

**Practical paper**

The practical paper will be based on java programming and android application of the theory paper.

Java programming – based on paper P011 from unit II and III

Android Application Development- based on paper P012 from unit I to III.