

MARIS STELLA COLLEGE (AUTONOMOUS), VIJAYAWADA -8
(Affiliated to Krishna University, Machilipatnam)

SYLLABUS

Subject: Computer Science **Semester: VI**

Course Title: Android Programming

Course Code: COMPC081

No of Hours: 45

Credits: 3

Objectives

- To setup the Android Eclipse-based development tools.
- To design and develop useful Android applications with compelling user interfaces.

Course Outcomes

CO1: Use the development tools in the Android development environment.

CO2: Use the major components of Android API set to develop their own apps.

CO3: Describe the life cycles of Activities, Applications and Fragments.

CO4: Use the Java programming language to build Android apps.

CO5: Make UI-rich apps using all the major UI components.

UNIT – I **(9 Hrs.)**

Introduction: History of Android, Introduction to Android Operating Systems, Android Development Tools, Android Architecture.

UNIT – II **(9 Hrs.)**

Development Tools: Installing and using Eclipse with ADT plug-in, Installing Virtual machine for Android sandwich/Jelly bean (Emulator), configuring the installed tools, creating a android project – Hello Word, run on emulator, Deploy it on USB-connected Android device.

UNIT - III **(9 Hrs.)**

User Interface Architecture: Application context, intents, Activity life cycle, multiple screen sizes.

UNIT- IV**(9 Hrs.)**

User Interface Design: Form widgets, Text Fields, Layouts, Button control, toggle buttons, Spinners (Combo boxes), Images, Menu, and Dialog.

UNIT - V**(9 Hrs.)**

Database: Understanding of SQLite database, connecting with the database.

Prescribed Text Book:

N.P Gopalan, J.Akilandesari, "Web Technology – A Developer's perspective", PHI (2008).

Reference Books:

1. Robert W.Sebesta, "programming the world wide web" 3rd edition, Pearson Education (2007)
2. Ander Moller and Michel Schwartz Bach, "An introduction to XML and web technologies" Addison Wesley (2006)
3. Chris Bates,"Web programming- building internet Application". Second Edition, Wiley(2007)
4. Jeffrey C. Jackson, "web technologies – A Computer science perspective". Pearson Education (2008).