

CA6CRT18 -Mobile Application Development – Android (Core)

Theory:4 hrs. per week

Credits:4

Unit 1 (10 hrs.)

Introduction to Android, Android Versions, Android Activity, Android Features and Architecture, Java JDK, Android SDK, Android Development Tools, Android Virtual Devices,

Emulators, Dalvik Virtual Machine, Layouts – Linear, Absolute, Frame, Relative and Table.

Unit 2 (16 hrs.)

Android User Interface- Fundamental UI design , User interface with View- Text View, Buttons, Image Button, Edit Text, Check Box, Toggle Button, Radio Button and Radio Group, Progress Bar, Autocomplete Text View, Spinner, List View, Grid View, Image View, Scroll View, Custom Toast Alert and Time and Date Picker.

Unit 3 (14 hrs.)

Activity - Introduction, Intent, Intent_filter, Activity Life Cycle, Broadcast Life Cycle, Services, multimedia-Android System Architecture, Play Audio and Video, Text to Speech.

Unit 4 (16 hrs.)

SQLite Database in Android- Introduction to SQLite Database, Creation and Connection of the

Database, Extracting values from Cursors, Transactions, Telephoning and Messaging-SMS Telephony, Sending SMS, Receiving SMS, Wi-Fi Activity.

Unit 5 (16 hrs.)

Introduction to JSON and XML, Use of JSON, Syntax and Rule of JSON, JSON Name, JSON

Values, JSON Objects, JSON Arrays, Parsing JSON and XML.

Google Play services, Location services, Maps

Book of Study:

1. Prasanna Kumar Dixit - ANDROID, Vikas Publishing House.

2. Anubhav Pradhan, Anil Deshpande, Composing Mobile Apps using Android, Wiley India Pvt.Ltd,2014

References:

1. Kevin Grant and Chris Haseman, Beginning Android Programming – Develop and Design, Pearson.