**Lesson Plan**

**Name of faculty :** Saravjit Chahal

**Discipline :** Computer Engineering

**Semester :** 6

**Subject :** Mobile Application Development

**Lesson Plan Duration :** 16 Weeks (6th March to 23rd June)

**Work Load (Lecture/ Practical) per week (in hours):** Lectures-03, Practical - 06

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week** | **Theory** | | **Practical** | |
| **Lecture day** | **Topic**  **(including assignment /**  **test)** | **Practical day** | **Topic** |
| 1st | 1st | Introduction : Evolution of Mobile Computing, Important terminologies | 1st  &  2nd | Write a program to demonstrate activity (Application Life Cycle) |
| 2nd | Mobile computing functions, Mobile computing security issues |
| 3rd | Mobile computing Devices, Networks: Wired , Wireless, Ad-hoc, Comparison of wired and wireless mechanism, Various types of wireless communication technologies |
| 2nd | 4th | Antennas, Basics of Base Station and Medium access control and Mobile station | 3rd  &  4th | Write a program to demonstrate different types of layouts. |
| 5th | Architecture of Mobile Computing, , 3- Tier Architecture |
| 6th | Mobile computing through Telephony: Evolution through telephony, Wireless LAN: Introduction - Applications of WLAN |
| 3rd | 7th | Infrared versus Radio Transmission, Features of WI-FI | 5th  &  6th | Write a program to implement simple calculator using text view, edit view, option button and button |
| 8th | Features of WI-FI and WI-MAX., Bluetooth : Introduction and application |
| 9th | ANDROID : Android Versions, Features of Android |
| 4th | 10th | Architecture of Android | 7th  &  8th | Write a program to demonstrate list view |
| 11th | Android Market, Android Runtime (Dalvik Virtual Machine) |
| 12th | ANDROID SDK & ADT : Android SDK, Android Development Tool (ADT) |
| 5th | 13th | Installing and configuring Android | 9th  &  10th | Write a program to demonstrate photo gallery |
| 14th | Android Virtual Device (AVD), Understanding Activities, Linking activities and indents |
| 15th | Sessional test |
| 6th | 16th | Calling built-in applications using intents, Fragments | 11th  &  12th | Write a program to demonstrate Date picker and time picker |
| 17th | Displaying Notifications, User Interface : Views and View groups, Layouts |
| 18th | Display Orientation, Action Bar, Listening for UI Notifications |
| 7th | 19th | Basic Views : Textview, Button, Image Button | 13th  &  14th | Develop an simple application with context menu and option menu |
| 20th | EditText, CheckBox, ToggleButton, |
| 21st | RadioButton , RadioGroup Views |
| 8th | 22nd | ProgressBar View, Auto Complete Text View | 15th  &  16th | Develop an application to send SMS |
| 23rd | Advanced Views : Time Picker View |
| 24th | Date Picker View, List Views |
| 9th | 25th | Image View, Menus | 17th  &  18th | Write a program to view, edit contact |
| 26th | Menus |
| 27th | Analog and Digital View, Dialog Boxes, Displaying Pictures & Menus with Views |
| 10th | 28th | Gallery View, ImageSwitcher, GridView | 19th  &  20th | Write a program to send e-mail |
| 29th | Creating the Helper Methods |
| 30th | Sessional test |
| 11th | 31st | Options Menu, Context Menu | 21st  &  22nd | Write a program to demonstrate a service |
| 32nd | Sending SMS |
| 33rd | Receiving SMS |
| 12th | 34th | Making phone call | 23rd  &  24th | Write a program to demonstrate web view to display web site |
| 35th | Location Based Services |
| 36th | Obtaining the Maps API Key, Displaying the Map |
| 13th | 37th | Zoom Control, Navigating to a specific location | 25th  &  26th | Write a program to display map of given location/position using map view |
| 38th | Adding Marker, Geo Coding and reverse Geo coding |
| 39th | Content Provider |
| 14th | 40th | Sharing data, view contacts, Add contacts, Modify contacts, Delete Contacts | 27th  &  28th | Write a program to demonstrate the application of intent class |
| 41st | Storage : Store and Retire data’s in Internal and External Storage |
| 42nd | SQLite, Creating and using  databases |
| 15th | 43rd | Android Service : Consuming Web service using HTTP | 29th  &  30th | Write a program to create a text file in external memory.  Write a program to store and fetch data from SQL life database. |
| 44th | Downloading binary Data, Downloading Text Content |
| 45th | Accessing Web Service |
| 16th | Revision | | | |