Lesson Plan

Discipline : Computer Engg.
Semester : 6th
Subject : **MOBILE APPLICATION DEVELOPMENT**
Lesson Plan Duration : 15 Weeks (From January 2020 to May 2020)

Week	Theory		Practical	
	Lecture Day	**Topic (including assignment/test)**	**Practical Day**	**Topic**
1st	1	Introduction : Evolution of Mobile Computing, Important terminologies, Mobile computing functions	1	Write a program to demonstrate activity (Application Life Cycle)
	2	Mobile computing security issues, Mobile computing Devices		
	3	Networks: Wired , Wireless , Adhoc, Comparison of wired and wireless mechanism		
	4	Various types of wireless communication technologies used in Mobiles, Antennas , Basics of Base Station and Medium access control and Mobile station.		
2nd	5	Architecture : Architecture of Mobile Computing, 3- Tier Architecture, Presentation (Tier-1), Application (Tier -2), Data (Tier – 3)	2	Write a program to demonstrate different types of layouts
	6	Mobile computing through Telephony: Evolution through telephony		
	7	Wireless LAN: Introduction-Applications of WLAN, Infrared versus Radio Transmission		
	8	Features of WI-FI and WI-MAX, Bluetooth :Introduction and application		
3rd	9	Global System for Mobile Communication (GSM): Introduction	3	Write a program to implement simple calculator using text view, edit view, option button and button
	10	GSM Architecture, GSM Entities (Basics only), Introduction to CDMA		
	11	Comparison of FDMA, CDMA andIDMA.		
	12	Short Message Service (SMS): Mobile computing over SMS, Short Message Service,		
4th	13	Strength of SMS, SMS Architecture	4	1. Write a program to demonstrate list view 2. Write a program to demonstrate photo gallery
	14	Value added services through SMS, VAS Examples		
	15	General Packet Radio Service (GPRS): Introduction,		
	16	, GPRS Packet data Network, Applications for GPRS, Generic Applications,		
5th	17	GPRS Specific Applications, Limitations of GPRS, Features of 3G and 4G Data Service	5	Write a program to demonstrate Date picker and time picker

	18	Mobile Operating Systems : Evaluation of Mobile Operating System-Handset Manufactures		
	19	and their Mobile OS- Mobile OS and their features		
	20	Linux Kernel based Mobile Or		
6th	21	ANDROID : Android Versions, Features of Android,	6	Develop an simple application with context menu and option menu
	22	Architecture of Android		
	23	Android Market, Android Runtime (Dalvik Virtual Machine)		
	24	ANDROID SDK & ADT : Android SDK,		
7th	25	Android Development Tool (ADT)	7	Develop an application to send SMS
	26	Installing and configuring Android, Android Virtual Device (AVD)		
	27	ACTIVITIES & INTENTS : Understanding Activites		
	28	activities and indents		
8th	29	Calling built-in applications using intents, Fragments Displaying Notifications	8	Write a program to view, edit contact
	30	User Interface : Views and Viewgroups		
	31	Display Orientation , Action Bar,		
	32	Listening for UI Notifications		
9th	33	Basic Views : Textview, Button, Image Button, EditText, CheckBox,	9	Write a program to send e-mail
	34	ToggleButton, RadioButton and RadioGroup Views,		
	35	ProgressBar View, Auto Complete Text View		
	36	Advanced Views : Time Picker View and Date Picker View,		
10th	37	, List Views, Image View, Menus	10	Write a program to demonstrate a service
	38	Analog and Digital View, Dialog Boxes		
	39	Displaying Pictures & Menus with Views: Image View, Gallery View,		
	40	ImageSwitcher, GridView - Creating the Helper Methods		
11th	41	Options Menu, Context Menu	11	Write a program to demonstrate web view to display web site
	42	SMS, Phone: Sending SMS		
	43	Receiving SMS,		
	44	Making phone call		
12th	45	Location Based Services : Obtaining the Maps API Key- Displaying the Map, Zoom Control , Navigating to a specific location	12	Write a program to display map of given location/position using map view
	46	Adding Marker , Geo Coding and reverse Geo coding		
	47	Location Based Service and SQLite		
	48	Location Based Services : Obtaining the Maps API Key, Displaying the Map, Zoom Control,		

13th	49	Navigating to a specific location	13	Write a program to demonstrate the application of intent class
	50	Adding Marker		
	51	Geo Coding and reverse Geo coding		
	52	Content Provider : Sharing data		
14th	53	view contacts	14	Write a program to create a text file in a external memory
	54	Add contacts, Modify contacts, Delete Contacts		
	55	Storage : Store and Retire data's in Internal and External Storage		
	56	SQLite, Creating and using databases		
15th	57	Android Service : Consuming Web service using HTTP	15	Write a program to store and fetch data from SQL life database.
	58	downloading binary Data,		
	59	Downloading Text Content		
	60	Accessing Web Service		