

LESSON PLAN

Subject: Mobile Application development

Subject code: MCA 20-43

Semester: VI

SNo	Topic	No. of Lectures	CO Covered	Teaching Methodology
1	Mobile Applications, Characteristics and Benefits, Application Models, Mobile Devices Profiles	2	CO1	Board, PPT
2	Basics of Android, Importance and Scope, Android Versions	1		PPT
3	Android Architecture, Android Stack	1		Board
4	Android Applications Structure	1		Board
5	Android Emulator, Android SDK	1		Software Mirror Cast
6	Overview of Android Studio, Android File Structure	1		Software Mirror Cast
7	Android Virtual Device Manager, DDMS, LogCat	1		Board
8	Understanding Activities	1		PPT
9	Services, Callbacks and Override in Application, Application Signing	1		PPT
10	Android User Interface, Device and Pixel Density-Independent Measuring Units	1	CO2	Board
11	Layouts – Linear, Relative, Grid, and Table Layouts	1		Board, PPT
12	Editable and Non-Editable Text Views, Buttons, Radio Buttons, Toggle Buttons	2		Software Mirror Cast
13	Checkboxes, Spinners, Dialog and Pickers, List View, Spinner View	1		Software Mirror Cast
14	Handling Clicks or Changes of Various UI Components	1		Board
15	Intents – Using Intents to Launch Activities, Explicitly Starting New Activities, Implicit Intents	2		Software Mirror Cast
16	Passing Data to Intents, Getting Results from Activities, Native Actions, Using Intents to Dial a Number or Send SMS	2		Software Mirror Cast
17	API Keys for Google Maps, Publishing Application to the Android Market	1		PPT
18	Creating Fragments, Lifecycle of Fragments	2		CO3
19	Fragment Transactions (Adding, Removing, Replacing)	1	Board	
20	Interfacing Between Fragments and Activities	1	Software Mirror Cast	
21	Location-Based Services, Android Location APIs	1	PPT	
22	Google Maps Activity and MapActivity	1	PPT	
23	Sensors and Near Field Communication (NFC)	1	Board	
24	Building Client-Server Applications, Native Libraries and Headers	2	PPT	

25	Introduction to SQLite, Creating and Opening a Database, Creating Tables	1	CO4	Software Mirror Cast
26	Inserting Data, Retrieving Data, Deleting Data from SQLite Database	1		Software Mirror Cast
27	Registering Content Providers, Using Content Providers (Insert, Delete, Retrieve, Update)	1		Software Mirror Cast
28	Saving Data to Internal Storage, Saving Data to External Storage	1		PPT
29	Canvas Drawing, Shadows, Gradients	2		Software Mirror Cast