

GANPAT UNIVERSITY									
FACULTY OF ENGINEERING & TECHNOLOGY									
Programme	Bachelor of Technology			Branch/Spec.	Information Technology				
Semester	VI			Version	2.0.0.0				
Effective from Academic Year	2016-17			Effective for the batch Admitted in	July 2014				
Subject code	2IT605	Subject Name		Mobile Application Development					
Teaching scheme				Examination scheme (Marks)					
(Per week)	Lecture(DT)		Practical(Lab.)		Total	CE	SEE	Total	
	L	TU	P	TW					
Credit	3	0	1	-	4	Theory	40	60	100
Hours	3	0	2	-	5	Practical	30	20	50
Pre-requisites:									
Object Oriented Programming									
Learning Outcome:									
After successful completion of this course, student will be able to									
<ul style="list-style-type: none"> • describe android and understand different versions of android. • explain concepts and theories of android's various components and apply them to various situations in android application development. • work with Database, Google map, Menus etc. 									
Theory syllabus									
Unit	Content						Hrs		
1	Introduction to Android: History of Mobile Software Development, Open Handset Alliance, What is an Android, Difference between I-phone OS (apple) and Android OS, Define term HTML,XML and WML						03		
2	Setting Up Your Android Development Environment: Configuring Your Development Environment, Difference between JVM and DVM, Android platform Architecture, Advantage of DVM over JVM, Android Emulator						02		
3	Building your first Android Application: Creating and Configuring a New Android Project, Core Files and Directories of the Android Application, Creating an AVD for Your Project, Creating Launch Configurations for Your Project, Running Your Android Application in the Emulator, Debugging Your Android Application in the Emulator, Adding Logging Support to Your Android Application, Adding Some Media Support to Your Application, Adding Location-Based Services to Your Application, Debugging Your Application on the Hardware						02		
4	Understanding the Anatomy of an Android Application: What is the meaning of an Anatomy? , Explain the activity with their states? , What are the methods used in android activity life cycle? , Explain the Android activity life cycle						03		
5	Defining your Application using the Android Manifest file: Core files and Directories of the Android Application, What are the contents of the Android Manifest file? , How to edit the Android manifest file?, Registering Activities and Other in Application						03		
6	Managing Application Resources: What Are Resources?, Storing Application Resources , Understanding the, Resource Directory Hierarchy, Resource Value Types, Setting Simple Resource Values Using Eclipse, Working with String, String Arrays, Boolean, Integer, Colors, Dimensions, Drawables, Images resources etc..., Working with Layouts, Using Layout Resources Programmatically						04		
7	Exploring User Interface Screen Elements: Introducing the Android View, Android Control, Android Layout, Displaying Text to Users with TextView, Configuring Layout and Sizing, Using Buttons, Check Boxes, Radio Groups, spinner,						03		

	ProgressBar etc.	
8	Designing User Interfaces with Layouts: Creating User Interfaces in Android, Creating Layouts Using XML Resources and Programmatically, Scrollview, GridView, ListView, Spinner etc.	02
9	Drawing and Working with Animation: Design Working with Canvases and Paints, Drawing Ovals and Circles, Frame by frame & tween animation etc.	03
10	Explore Data Storage Techniques: Working with SharedPreferences, What is SQLite, features of SQLite, store data in SQLite	03
11	Explore Google Map: Feature of Google map, version of Google map APIs, integration of google map in android application	02
12	Working with other components: Use of TimePicker & DatePicker, Different Dialogboxes, Option menu & context menu, Send/read SMS, JSON & Application with JSON	03
13	iPhone OS: Introduction to iPhone Architecture, Essential COCOA Touch Classes, Interface Builder, Nib File, COCOA and MVC Framework, Overview of features of latest ios	06
Practical content		
Experiments/Practicals/Simulations would be carried out based on syllabus		
Text Books		
1	Android Wireless Application Development, second edition by Shane Conder & Lauren Darcey. Pearson	
Reference Books		
1	Android Application Development (with Kitkat Support), Black Book by Pradeep Kothari-Dreamtech	
2	Head First Android Development by Dawn Griffiths and David Griffiths- O'Reilly	
3	Android Programming: The Big Nerd Ranch Guide, 2/e by Bill Phillips, Chris Stewart, Brian Hardy, Kristin Marsicano - Big Nerd Ranch Guides	
4	Android Application Development in 24 Hours, 4/e by Carmen Delessio, Lauren Darcey, Shane Conder - Sams Teach Yourself	
5	iPhone In Action, by Christopher Allen, Shannon Appelcline.	