Bapatla EnginEEring CollEgE::Bapatla
(Autonomous)
Department of Information Technology

Subject Name:-**Mobile Application Development** III B. Tech. – V Semester (Code: 20CS605 / 20IT505)					
Lectures	:	3 Hours/Week	Continuous Assessment	:	30
Final Exam	:	3 hours	Final Exam Marks	:	70

Pre-Requisite: Java Programming(20CS303) /Object Oriented Programming (20IT303)	
Course Objectives:	
CO1	Understand the Android Application Architecture and Working.
CO2	Understand how to develop android applications and internal working of applications
CO3	Understand Intents, Broadcast Receivers, State and User Preferences and Databases in Android Apps.
CO4	Understand to develop applications Content Providers, Services and Advanced Views.
Course Outcomes: Students will be able to:	
CLO-1	Interpret and Analyze the Android platform features and framework.
CLO-2	Design basic User Interfaces using Activities, Fragments.
CLO-3	Apply Intents, Broadcast Receivers, State, User Preferences and Database in Android Apps.
CLO-4	Develop Android apps using Content Providers, Services and Advanced UI controls.

Learning Outcome, Program Objectives & Program Specific Objectives Mapping

	POs												PSOs		
LO	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
20CSL605.1	1	2		1									2		
20CSL605.2	1	2	3	1	1					1			1	2	1
20CSL605.3			3		2		1			1		1	2	2	1
20CSL605.4	1	1	2		2		1			1		1	2	2	1

UNIT-1	(15 Hours)
Hello, Android:-Android: An Open platform for Mobile development, Android SDK Features, Introducing the Development Framework. **Getting Started**:-Developing for Android, Developing for Mobile and Embedded devices.	
UNIT-2	(15 Hours)
Creating Applications and Activities:-Components of an Android Application, Introducing the Application Manifest File, The Android Application Lifecycle, A Closer Look at Android Activities, Creating Activities, The Activity Lifecycle, Activity States Android Application class, Android Activities. **Building User Interfaces**:- Fundamental Android UI Design, Android User Interface Fundamentals, Introducing Layouts, Introducing Fragments.	
UNIT-3	(15 Hours)
Intents and Broadcast Receivers:-Introducing Intents, Creating Intent Filters and Broadcast Receivers. **Saving State and User Preferences:-**Creating and Saving Shared Preferences, Retrieving Shared Preferences Persisting the Application Instance State. **Creating and Using Databases:-** Working with SQLite Databases.	
UNIT-4	(15 Hours)
Content Providers:- Creating Content Providers, Accessing Content Providers, using Native Android Content Providers. **Working in the Background:-** Creating and Controlling Services, Binding Services to Activities . **Expanding the User Experience:-** Introducing the Action Bar ,Creating and Using Menus and Action Bar Action Items.	
Text Books:	1. Professional Android, Reto Meier and Ian Lake, 4th Edition, John Wiley & Sons, Inc. 2018.ISBN: 978-1-118-94952-8.
References:	1. Android Programming: The Big Nerd Ranch Guide, Brian Hardy & Bill Phillips, Big Nerd Ranch, Inc. 2. Head First: Android Development, Dawn Griffiths & David Griffiths, O'Reilly Publications.