

Course Code	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
		L	T	P	L	T	P	Total
L502	Laboratory II – Wireless & Mobile Technology + Mini project	--	--	4	--	--	2	2
		Examination Scheme						
		Term Work		Practical		Oral		Total
		80		10		10		100

Pre-requisite Course Codes		
Course Outcomes	CO1	Install and configure PhoneGap software.
	CO2	Analyze the working of latest interactive environment i.e. PhoneGap for mobile application development.
	CO3	Design Application for mobile devices using JavaScript, HTML5, CSS by accessing features of PhoneGap.
	CO4	Adapt the features of Android's Communication APIs for Accelerometer, Camera, Contact, Event and File System.

Exp. No.	Experiment Details	Ref.	Marks
1	<b>Introduction To Phonegap</b> o A Little PhoneGap History o Why Use PhoneGap? o How PhoneGap Works o Designing for the Container o Writing PhoneGap Applications o Building PhoneGap Applications o PhoneGap Limitations o PhoneGap Plug-Ins o Getting Support for PhoneGap o PhoneGap Resources o Hybrid Application Frameworks	1,2	4
2	<b>Phonegap Development, Testing, And Debugging</b> o Hello, World! o PhoneGap Initialization o Leveraging PhoneGap APIs o Enhancing the User Interface of a PhoneGap Application o Testing and Debugging PhoneGap Applications o Dealing with Cross-Platform Development Issues o API Consistency	1,2	8
3	<b>Configuring An Android Development Environment For Phonegap</b> o Installing the Android SDK o Eclipse Development Environment Configuration o Creating an Android PhoneGap Project o Testing Android PhoneGap Applications	1,2	8
4	<b>API</b> Accelerometer Querying Device Orientation Watching a Device's Orientation o Capture	1,3	20

	Using the Capture API Configuring Capture Options Capture at Work o Contacts Introduction Listing all available contacts Displaying contact information for a specific individual Creating and saving a new contact o Events Creating an Event Listener Device ready Event Application Status Events Network Status Events Button Events o File System, Storage, Connection and Local Databases Introduction, Saving a file to device storage, Opening a local file from device storage Displaying the contents of a directory Creating a local SQLite database, Uploading a file to a remote server Caching content using the web storage local storage API o Notification Visual Alerts (Alert and Confirm), Beep, Vibrate Notification in Action		
<b>5</b>	Mini Project will be made with mobile technology with android as the platform or Advanced Web Technologies like ASP.NET, C#	1,3	<b>20</b>
<b>Total Marks</b>			<b>60</b>

**References:**

- [1] PhoneGap Essentials – John M. Wargo
- [2] Beginning PhoneGap – RohitGhatol , Yogesh Patel
- [3] Hello, android ED brunette pragmatic bookshelf