	CS-09: WEB PROGRAMMING	

Objectives:
- To create dynamic website / web based applications using PHP - MySQL Database.
- Able to develop website with the use of jQuery, AJAX and JSON.
- To become familiar with OOPs concept.

Prerequisites: Basic knowledge of Programming

Unit No.	Topic	Detail

1	**PHP Basic**	• Introduction to PHP
		• PHP configuration in IIS & Apache Web server
		• Understanding of PHP.INI file
		• Understanding of PHP .htaccess file
		• PHP Variable
		• Static & global variable
		• GET & POST method
		• PHP Operator
		• Conditional Structure & Looping Structure
		• Array
		• User Defined Functions:
		  ▪ argument function
		  ▪ default argument
		  ▪ variable function
		  ▪ return function
		• Variable Length Argument Function
		  ▪ func_num_args
		  ▪ func_get_arg, func_get_args
		• Built in Functions
		  - Variable Functions
		  - String Function
		  - Math Function
		  - Date Function
		  - Array Function
		  - Miscellaneous Function
		  - File handling Function

2	**Handling Form, Session Tracking & PHP Components**	• Handling form with GET & POST • Cookies • Session • Server variable • PHP Components

		- PHP GD Library - PHP Regular expression - Uploading file - Sending mail

	AJAX & JSON	• What is AJAX?
		• PHP with AJAX
		• MySql with AJAX
		• What is JQuery AJAX
		• JQuery AJAX with PHP
		• Introduction to JSON
		    o Installation & Configuration
		    o Resource Types
		    o JsonSerializable
		    o JSON Functions: json_decode, json_encode

3	**Introduction of SQL**	• Working with MySQL using PhpMyAdmin • SQL DML Statement (Insert, Update, Select, Delete) Command • PHP-MySQLi Connectivity • PHP-MySQLi Functions • mysqli_connect, mysqli_close,mysqli_error, msyqli_errno, mysqli_select_db, mysqli_query, mysqli_fetch_array, mysqli_num_Rows, mysqli_affe cted_Rows, mysqli_fetch_assoc, mysqli_fetch_field , mysqli_fetch_object,mysqli_fetch_row, mysqli_insert_id, mysqli_num_fields, mysqli_data_seek

4	**jQuery**	• What is jQuery?
		• jQuery Syntax
		• jQuery Selector
		    - Element Selector
		    - Class Selector
		    - id Selector
		• jQuery Events: Click, dbclick, keypress, keydown, keyup, submit, change, focus, blur, load, resize, scroll, unlode
		• jQuery Effects: hide show, fade, slide
		• jQuery Methods: css, height, width, innerWidth, innerHeight, outerWidth, outerHeight, html, text, append, prepend, after, before, addClass, removeClass, toggleClass, remove, empty

5	**OOP**	• Concept of OOP
		    o Class
		    o Object
		    o Property
		    o Visibility

		o Constructor, Destructor
		o Inheritance
		o Scope Resolution Operator (::)
		o Autoloading Classes
		o Class Constants
		• Mysql Database handling with oop (insert, update, select, delete

Seminar   - 5 Lectures
Expert Talk   - 5 Lectures
Test   - 5 Lectures
Total Lectures: 60+15=75

Reference Books:
1. Modern PHP: New Features and Good Practices by Josh Lockhart (ORELLY)
2. PHP Cookbook: Solutions & Examples for PHP Programmers by David Sklar and Adam Trachtenberg (ORELLY)
3. Programming PHP by Kevin Tatroe and Peter MacIntyre ORELLY)
4. PHP for the Web: Visual QuickStart Guide (4th Edition) by Larry Ullman (Peachpit Press)

Course Outcome:
- Able to Understand Creation of dynamic website / web-based applications using PHP - MySQL Database.
- Able to Understand development of website with the use of jQuery, AJAX and JSON.
- Able to Understand practical and real-life examples of OOP.

Additional Topics (Not to be asked in examination):
Student should be aware of followings
- Case Study
- Uses and Advantages of CMS
- Wordpress [Introduction & Installation]
- Joomla [Introduction & Installation]
- Magento [Introduction & Installation]