



B.C.A. (Honours) & B.C.A. (Honours with Research)
(Semester - 1 and Semester - 2)
Saurashtra University
To be effective from June – 2023

CS-09: WEB PROGRAMMING		
Objectives: <ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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:<ul style="list-style-type: none">▪ argument function▪ default argument▪ variable function▪ return function• Variable Length Argument Function<ul style="list-style-type: none">▪ func_num_args▪ func_get_arg, func_get_args• Built in Functions<ul style="list-style-type: none">- Variable Functions- String Function- Math Function- Date Function- Array Function- Miscellaneous Function- File handling Function
2	Handling Form, Session Tracking & PHP Components	<ul style="list-style-type: none">• Handling form with GET & POST• Cookies• Session• Server variable• PHP Components



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		<ul style="list-style-type: none"> - PHP GD Library - PHP Regular expression - Uploading file - Sending mail
	AJAX & JSON	<ul style="list-style-type: none"> • What is AJAX? • PHP with AJAX • MySql with AJAX • What is JQuery AJAX • JQuery AJAX with PHP • Introduction to JSON <ul style="list-style-type: none"> ○ Installation & Configuration ○ Resource Types ○ JsonSerializerizable ○ JSON Functions: json_decode, json_encode
3	Introduction of SQL	<ul style="list-style-type: none"> • Working with MySQL using PhpMyAdmin • SQL DML Statement (Insert, Update, Select, Delete) Command • PHP-MySQLi Connectivity • PHP-MySQLi Functions <ul style="list-style-type: none"> • mysqli_connect, mysqli_close, mysqli_error, mysqli_errno, mysqli_select_db, mysqli_query, mysqli_fetch_array, mysqli_num_Rows, mysqli_affected_Rows, mysqli_fetch_assoc, mysqli_fetch_field, mysqli_fetch_object, mysqli_fetch_row, mysqli_insert_id, mysqli_num_fields, mysqli_data_seek
4	jQuery	<ul style="list-style-type: none"> • What is jQuery? • jQuery Syntax • jQuery Selector <ul style="list-style-type: none"> - Element Selector - Class Selector - id Selector • jQuery Events: Click, dblclick, keypress, keydown, keyup, submit, change, focus, blur, load, resize, scroll, unload • 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	<ul style="list-style-type: none"> • Concept of OOP <ul style="list-style-type: none"> ○ Class ○ Object ○ Property ○ Visibility



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		<ul style="list-style-type: none">○ Constructor, Destructor○ Inheritance○ Scope Resolution Operator (::)○ Autoloading Classes○ Class Constants● Mysql Database handling with oop (insert, update, select, delete)
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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]