

**Bachelor of Computer Application  
(Semester - 1 and Semester - 2)  
Saurashtra University  
Effective from June – 2016**

<b>CS-08: WEB PROGRAMMING</b>		
<b>Objective:</b>		
<ul style="list-style-type: none"> <li>• To learn web programming</li> <li>• Learn to develop web site using PHP</li> </ul>		
Unit No.	Topic	Detail
<b>1</b>	<b>Web Programming</b>	<ul style="list-style-type: none"> <li>• Static and Dynamic Web</li> <li>• Client side &amp; Server Side Scripting</li> <li>• Introduction to other server side languages</li> <li>• Webserver (IIS &amp; Apache)</li> <li>• HTTP &amp; HTTPS protocol</li> <li>• FTP</li> <li>• Web Hosting, Virtual Host, Multi-Homing</li> <li>• Distributed Web Server Overview,</li> <li>• Document Root</li> </ul>
	<b>Web Services</b>	XML and JSON <ul style="list-style-type: none"> <li>• Introduction to JSON</li> <li>• Installation &amp; Configuration</li> <li>• Resource Types</li> <li>• JsonSerializerable</li> <li>• JSON Functions : json_decode, json_encode</li> </ul>
<b>2</b>	<b>PHP Basic</b>	<ul style="list-style-type: none"> <li>• Introduction to PHP</li> <li>• PHP configuration in IIS &amp; Apache Web server</li> <li>• Understanding of PHP.INI file</li> <li>• Understanding of PHP .htaccess file</li> <li>• PHP Variable</li> <li>• Static &amp; global variable</li> <li>• GET &amp; POST method</li> <li>• PHP Operator</li> <li>• Conditional Structure &amp; Looping Structure</li> <li>• Array</li> <li>• User Defined Functions:               <ul style="list-style-type: none"> <li>▪ argument function</li> <li>▪ default argument</li> <li>▪ variable function</li> <li>▪ return function</li> </ul> </li> <li>• Variable Length Argument Function               <ul style="list-style-type: none"> <li>▪ func_num_args</li> <li>▪ func_get_arg, func_get_args</li> </ul> </li> <li>• Variable Functions (Gettype, settype, isset, unset, strval, floatval, intval, print_r)</li> <li>• String Function(Chr, ord, strtolower, strtoupper, strlen, ltrim, rtrim trim, substr, strcmp, strcasecmp, strpos, strrpos, strstr, stristr, str_replace, strrev,</li> </ul>

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		<p>echo, print, explode(), implode(), join(), md5(), str_split(), str_shuffle(), strcspn(), strpbrk(), substr_compare(), substr_count(), ucfirst(), ucwords())</p> <ul style="list-style-type: none"> <li>• Math Function(Abs, ceil, floor, round, fmod, min, max, pow, sqrt, rand, cos(), acos(), sin(), asin(), tan(), atan(), bindec(), decbin(), hexdec(), dechex(), is_finite(), is_infinite(), log(), base_convert(), deg2rad())</li> <li>• Date Function (Date, getdate, setdate, Checkdate, time, mktime, date_add(), date_create(), date_format(), gmtime(), localtime(), strftime(), strtotime(), strtotime(), gettimeofday())</li> <li>• Array Function (Count, list, in_array, current, next, previous, end, each, sort, rsort, asort, arsort, array_merge, array_reverse, array_diff(), array_merge_recursive(), array_shift(), array_slice(), array_unique(), array_unshift(), array_keys(), array_key_exists(), array_push(), array_pop(), array_multisort(), array_search())</li> <li>• Miscellaneous Function (define, constant, include, require, header, die, exit)</li> <li>• File handling Function (fopen, fread, fwrite, fclose, file_exists, is_readable, is_writable, fgets, fgetc, file_get_contents, fputcsv, fputs, file_putcontents, ftell, fseek, rewind, copy, unlink, rename, move_uploaded_file)</li> </ul>
<b>3</b>	<b>Handling Form, Session Tracking &amp; PHP Components</b>	<ul style="list-style-type: none"> <li>• Handling form with GET &amp; POST</li> <li>• Cookies</li> <li>• Session</li> <li>• Server variable</li> <li>• PHP Components <ul style="list-style-type: none"> <li>- PHP GD Library</li> <li>- PHP Regular expression</li> <li>- Uploading file</li> <li>- Sending mail using mail()</li> <li>- Sending mail using smtp()</li> </ul> </li> </ul>
	<b>AJAX</b>	<ul style="list-style-type: none"> <li>• What is AJAX</li> <li>• PHP with AJAX</li> <li>• How AJAX works with PHP</li> <li>• Working with AJAX as background process</li> <li>• Using JQuery with PHP</li> <li>• JQuery AJAX with PHP</li> </ul>

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<b>4</b>	<b>Introduction of SQL</b>	<ul style="list-style-type: none"> <li>• Working with MySQL using PhpMyAdmin</li> <li>• SQL DML Statement (Insert, Update, Select, Delete) Command</li> <li>• PHP-MySQL Connectivity</li> <li>• PHP-MySQL Functions</li> <li>• mysql_connect, mysql_close,mysql_error, mmysql_erro, mysql_select_db, mysql_query, mysql_fetch_array, mysql_num_Rows, mysql_affected_Rows, mysql_fetch_assoc, mysql_fetch_field , mysql_fetch_object,mysql_fetch_row, mysql_insert_id, mysql_num_fields,mysql_result, mysql_tablename, mysql_list_tables, mysql_list_fields, mysql_field_type, mysql_db_name, mysql_db_query, mysql_data_seek</li> </ul>
<b>5</b>	<b>jQuery</b>	<ul style="list-style-type: none"> <li>• What IsjQuery?</li> <li>• jQuery Syntax</li> <li>• jQuery Selector <ul style="list-style-type: none"> <li>- Element Selector</li> <li>- Class Selector</li> <li>- id Selector</li> </ul> </li> <li>• jQuery Events Click, dblclick, keypress, keydown, keyup, submit, change, focus, blur, load, resize, scroll, unode</li> <li>• jQuery Effects hide show, fade, slide</li> </ul>

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)

**Additional Topics (Not to be asked in examination ) :**

Student should be aware of followings

- Uses and Advantages of CMS
- Wordpress [Introduction & Installation]
- Joomla [Introduction & Installation]
- Magento [Introduction & Installation]