## **WEB TECHNOLOGIES**

V Semester: IT								
Course Code	Category	Hours / Week		Credits	Maximum Marks			
10006	Como	L	Т	Р	C	CIA	SEE	Total
ACS000	Core	3	1	-	4	30	70	100
Contact Classes:45	Tutorial Classes: 15	Practical Classe			ses: Nil	Total Classes: 60		

## **COURSE OBJECTIVES:**

## The course should enable the students to:

- I. Design static and dynamic web pages using HTML, CSS and Java Script.
- II. Understand a well-formed XML schemes for developing web applications.
- III. Design and implement web services from the server and client side.
- IV. Understand how server-side programming works on the web using PHP.
- V. Apply tools to retrieve the information from the database using PHP.

# **COURSE OUTCOMES (COs):**

- CO 1: Implement interactive web page (s) using HTML, CSS and JavaScript.
- CO 2: Build well-formed XML Document and implement Web Applications using Javascript objects.
- CO 3: Implement server side java application called Servlet/JSP to catch form data sent from client, process it and store it on database.
- CO 4: Understand the general concepts of PHP scripting language for the development of Internet.
- CO 5: Build Dynamic web site using server side PHP Programming and Database connectivity.

## **COURSE LEARNING OUTCOMES (CLOs):**

- 1. Understand the basic HTML tags.
- 2. Understand and apply the design principles of HTML and Java Script to create static and dynamic web pages.
- 3. Understand the difference between HTML and XML scripting languages.
- 4. Identify the engineering structural design of XML and parse construction tree model.
- 5. Analyze the client side validation procedure in web applications.
- 6. Proficient in creating reusable web component using java bean.
- 7. Identify the difference between the JSP and Servlet.
- 8. Able to use web server and data base servers using specific vendor related software's.
- 9. Create applications by using the concepts like JSP and Servlet.
- 10. Identify and perform requesting and response generation process in web servers.
- 11. Understand the PHP downloading, installation and configuring PHP process.
- 12. Understand branching statements, loop statements and use them in problem solving.
- 13. Identify the methods to read data from web pages using PHP.
- 14. Understand how MYSQL server is connected with PHP.
- 15. Able to perform crude operation in database.
- 16. Understand the file handling methods using PHP.
- 17. Familiar with basic HTML, XML, JSP and PHP techniques: Creation of web pages, that Includes verification and validation of web pages.
- 18. Possess the knowledge and skills for employability and to succeed in national and international level competitive examinations.

Introduction to Fand images, franstyles, style sheeJavaScript: Javaarrays and functiUNIT - IIOlObjects in JavaSevents; Dynamicimages, multipleXML: Basics XMUNIT - IIISFServlet: Life cycparameters, thesessions.JSP: The anatom	<ul> <li>HTML: Fundamentals of HTML elements, Document body, text, hyperlink, limes; Cascading Style Sheets: Introduction, defining your own styles, propertients, formatting blocks, and layers.</li> <li>aScript basics, variables, string manipulation, mathematical functions, state tions.</li> <li>DBJECTS IN JAVASCRIPT AND XML</li> <li>Script: Data and objects in JavaScript, regular expressions, exception handling the HTML with JavaScript: Data validation, opening a new window, Rollover e pages in a single download, floating logos.</li> <li>ML, document type definition, xml schemas, Document Object Model, presenter ERVLETS AND JSP</li> <li>cle of a Servlet, a simple Servlet, the Servlet API, the Javax. Servlet package javax.Servlet.HTTP package, Handling HTTP requests and responses, using beaps in JSP page, JSP processing, declarations, directives, expressions, code structure in JSP pages.</li> </ul>	<ul> <li>ists, tables, color</li> <li>istanting and values in</li> <li>istantian and table</li> </ul>					
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Servlet: Life cycle of a Servlet, a simple Servlet, the Servlet API, the Javax. Servlet package, reading Servlet parameters, the javax.Servlet.HTTP package, Handling HTTP requests and responses, using cookies and sessions. JSP: The anatomy of a JSP page, JSP processing, declarations, directives, expressions, code snippets, implicit objects, using beans in JSP pages, connecting to database in JSP.							
UNIT - IV IN	NTRODUCTION TO PHP	Classes: 09					
Basics of PHP: d anatomy of a Pl expressions and	Basics of PHP: downloading, installing, configuring PHP, programming in a web environment and the anatomy of a PHP page; Overview of PHP data types and concepts: Variables and data types, operators, expressions and statements, strings, arrays and functions.						
UNIT - V PI	HP AND DATABASE ACCESS	Classes: 09					
PHP and database access: Basic database concepts, connecting to a My SQL database, retrieving and displaying results, modifying, updating and deleting data; MVC architecture: PHP and AJAX other web technologies: PHP and XML, PHP and AJAX.							
Text Books:         1.       Chris Bates, "Web Programming: Building Internet Applications", Wiley Dream Tech, 2 <sup>nd</sup> Edition, 2002.         2.       Jeffrey C K Jackson, "Web Technologies", Pearson Education, 1 <sup>st</sup> Edition, 2006.         3.       Steven Holzner, "The Complete reference PHP", Tata McGraw-Hill, 1 <sup>st</sup> Edition, 2007.         Reference Books:         1.       W Hans Bergsten, "Java Server Pages", O Reilly, 3 <sup>rd</sup> Edition, 2003.         2.       D. Flanagan, "Java Script", O Reilly, 6 <sup>th</sup> Edition, 2011.         3.       Jon Duckett, "Beginning Web Programming", WROX, 2 <sup>nd</sup> Edition, 2008.         4.       Herbert Schildt, "Java the Complete Reference", Hill - Osborne, 8 <sup>th</sup> Edition, 2011.							