

WEB TECHNOLOGIES

IV Semester: CSE V Semester: IT																										
Course Code	Category	Hours / Week			Credits	Maximum Marks																				
ACS006	Core	L	T	P	C	CIA	SEE	Total																		
		3	1	-	4	30	70	100																		
Contact Classes: 45		Tutorial Classes: 15		Practical Classes: Nil			Total Classes: 60																			
<p>I. COURSE OVERVIEW: This course emphasizes on website development, build dynamic and database driven web applications. using tools. Content of this course covers an insight into HTTP communication protocol, the markup languages HTML, DHTML, XML and the CSS for formatting and transforming web content, interactive graphics and multimedia content on the web. It also enriches client-side and server side programming using serves JSP, PHP and connects with Data bases. There is a growing need for management and decision makers to gain a clearer understanding of the application development process, from planning through to deployment and maintenance. It will also give you how you can analyze requirements, plan, design, implement and test arrange of web applications.</p>																										
<p>II. OBJECTIVES: The course should enable the students to:</p> <ul style="list-style-type: none"> I The fundamentals of designing static and dynamic web pages using HTML and DHTML for creation of websites. II The concepts of client - server programming with JavaScript, XML, Servlet, JSP and PHP.. III The project-based experience needed for designing real time web based client-server applications.. 																										
<p>III. COURSE OUTCOMES: After successful completion of the course, students should be able to:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 10%;">CO 1</td> <td style="width: 70%;">Demonstrate basic elements of HTML and CSS for designing static web pages.</td> <td style="width: 20%;">Understand</td> </tr> <tr> <td>CO 2</td> <td>Develop effective and interactive web pages using dynamic HTML with JavaScript and XML for client/server based applications.</td> <td>Apply</td> </tr> <tr> <td>CO 3</td> <td>Make use of Servlet and Java Server Pages for server side programming with Model View Control architecture.</td> <td>Apply</td> </tr> <tr> <td>CO 4</td> <td>Summarize basic concepts of PHP for designing static and dynamic web pages.</td> <td>Understand</td> </tr> <tr> <td>CO 5</td> <td>Build dynamic web pages using XML and PHP with database connectivity to perform CRUD operations and validate using AJAX and JavaScript.</td> <td>Apply</td> </tr> <tr> <td>CO 6</td> <td>Construct website by using front end and backend end programming.</td> <td>Apply</td> </tr> </table>									CO 1	Demonstrate basic elements of HTML and CSS for designing static web pages.	Understand	CO 2	Develop effective and interactive web pages using dynamic HTML with JavaScript and XML for client/server based applications.	Apply	CO 3	Make use of Servlet and Java Server Pages for server side programming with Model View Control architecture.	Apply	CO 4	Summarize basic concepts of PHP for designing static and dynamic web pages.	Understand	CO 5	Build dynamic web pages using XML and PHP with database connectivity to perform CRUD operations and validate using AJAX and JavaScript.	Apply	CO 6	Construct website by using front end and backend end programming.	Apply
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IV. SYLLABUS:																										
UNIT-I	INTRODUCTION TO HTML AND JAVA SCRIPT						Classes: 10																			
Introduction to html, fundamentals of HTML elements, Document body, text, hyperlink, lists, tables, color and images, frames; Cascading Style Sheets: Introduction, defining your own styles, properties and values in styles, style sheets, formatting blocks, and layers; JavaScript: JavaScript basics, variables, string manipulation, mathematical functions, statements, operators, arrays and functions.																										
UNIT-II	OBJECTS IN JAVASCRIPT AND XML						Classes: 08																			
Objects in JavaScript: Data and objects in JavaScript, regular expressions, exception handling, built-in objects, events; Dynamic HTML with JavaScript: Data validation, opening a new window, Rollover buttons, moving images, multiple pages in a single download, floating logos; XML: Basics XML, document type definition, xml schemas, Document Object Model, presenting XML.																										

UNIT-III	SERVLETS AND JSP	Classes: 08
<p>Servlet: Lifecycle 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.</p> <p>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.</p>		
UNIT-IV	INTRODUCTION TO PHP	Classes: 10
<p>Introduction to PHP: 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.</p>		
UNIT-V	PHP AND DATABASE ACCESS	Classes: 09
<p>PHP and database access: Basic database concepts, connecting to a MySQL database, retrieving and displaying results, modifying, updating and deleting data; MVC architecture: PHP and other web technologies: PHP and XML, PHP and AJAX.</p>		
Text Books:		
<ol style="list-style-type: none"> 1. Chris Bates, "Web Programming: Building Internet Applications", Wiley DreamTech, 2nd Edition, 2002. 2. Jeffrey C K Jackson, "Web Technologies", Pearson Education, 1st Edition, 2006. 3. Steven Holzner, "The Complete Reference PHP", Tata McGraw-Hill, 1st Edition, 2007. 		
Reference Books:		
<ol style="list-style-type: none"> 1. Hans Bergsten, "Java Server Pages", O' Reilly, 3rd Edition, 2003. 2. D. Flanagan, "Java Script", O'Reilly, 6th Edition, 2011. 3. Jon Duckett, "Beginning Web Programming", WROX, 2nd Edition, 2008. 4. Herbert Schildt, "Java the Complete Reference", McGraw Hill - Osborne, 8th Editon, 2011. 		
Web References:		
<ol style="list-style-type: none"> 1. https://www.vidyarthiplus.com/vp/thread-16509.html#.WFzQvVMrLDc 2. http://www.bdu.ac.in/centers/uic/docs/courseware/NME2-Notes/Unit1.pdf 		
E-Text Books:		
<ol style="list-style-type: none"> 1. http://bookboon.com/en/it-programming-ebooks 2. https://www.free-ebooks.net/category/internet-technology 		
Course Home Page:		