

WEB TECHNOLOGIES

V Semester: CSE/IT								
Course Code	Category	Hours / Week			Credits	Maximum Marks		
AITB09	Core	L	T	P	C	CIA	SEE	Total
		3	1	0	3	30	70	100
Contact Classes: 30		Tutorial Classes: 15		Practical Classes: Nil			Total Classes: 45	
<p>OBJECTIVES: The Students Will Try To Learn:</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, Servlets, JSP and PHP. III The project-based experience needed for designing real time web based client-server applications. <p>COURSE OUTCOMES: After successful completion of the course, Students will be able to:</p> <ul style="list-style-type: none"> CO 1 Explain the structure and basic elements of HTML for designing the web pages. CO 2 Demonstrate client server web applications with the help of appropriate protocol and technologies. CO 3 Analyze static and dynamic web pages for appropriately using them in Web applications. CO 4 Develop effective and interactive web pages using elements and selectors in style sheets and dynamic HTML. CO 5 Make use of functions in JavaScript and PHP for implementing data validations in web applications. CO 6 Develop the XML document for storing and transporting the web page information in a structured form through web. CO 7 Develop reusable software components by using JavaBeans in a web application. CO 8 Develop a server side web application using servlets for request-response programming paradigm. CO 9 Develop the web applications using java server pages (JSP) with model view control architecture. CO10 Outline an interface between the front end and back end (database) to perform CRUD operations. CO11 Summarize the process of developing client/server applications through Asynchronous JavaScript and XML (AJAX). CO12 Develop dynamic web site using server side PHP programming and database connectivity. 								
MODULE-I	INRODUCTION TO HTML AND JAVA SCRIPT						Classes: 09	
<p>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.</p> <p>JavaScript: JavaScript basics, variables, string manipulation, mathematical functions, statements, operators, arrays and functions.</p>								

MODULE-II	OBJECTS IN JAVASCRIPT AND XML	Classes: 09
<p>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.</p> <p>XML: Basics XML, document type definition, xml schemas, Document Object Model, presenting XML.</p>		
MODULE-III	SERVLETS AND JSP	Classes: 09
<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>		
MODULE-IV	INTRODUCTION TO PHP	Classes: 09
<p>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>		
MODULE-V	PHP AND DATABASE ACCESS	Classes: 09
<p>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.</p>		
Text Books:		
<ol style="list-style-type: none"> 1 Chris Bates, "Web Programming: Building Internet Applications", Wiley Dream Tech, 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 WHans 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", Hill - Osborne, 8th Edition, 2011. 		
Web References:		
<ol style="list-style-type: none"> 1. https://www.vidyarthiplus.com/vp/Thread-Web-Technologies-Lecture-Notes-All-Units#.WFzQvVMrLDc 2. https://nptel.ac.in/courses/106/105/106105084/ 3. https://www.iare.ac.in 		
E-Text Books:		
<ol style="list-style-type: none"> 1. https://bookboon.com/en/it-programming-ebooks 2. https://www.free-ebooks.net/internet-technology 		