

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		
OBJECTIVES: The Students Will Try To Learn: - 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.								
COURSE OUTCOMES: After successful completion of the course, Students will be able to: - 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	
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.								

MODULE-II	OBJECTS IN JAVASCRIPT AND XML	Classes: 09
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.		
MODULE-III	SERVLETS AND JSP	Classes: 09
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. 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.		
MODULE-IV	INTRODUCTION TO PHP	Classes: 09
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.		
MODULE-V	PHP 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.		
Text Books:		
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:		
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:		
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:		
1. https://bookboon.com/en/it-programming-ebooks 2. https://www.free-ebooks.net/internet-technology		