

SCHEME OF COURSE WORK

Course Details:

Course Title	Web Programming								
Course Code	13CT1116	L	T	P	C	4	0	0	3
Program	B.Tech								
Specialization	Computer Science & Engineering, Information Technology								
Semester	V								
Prerequisites	Object Oriented Programming Through JAVA								
Courses to which it is a prerequisite	Middleware Technologies								

Course Outcomes (COs):

1.	Design static and dynamic web pages using HTML and JAVASCRIPT.
2.	Create XML documents.
3.	Develop programs using servlets.
4.	Apply Java Database Connectivity (JDBC) in JSP pages.
5.	Design web pages using AJAX and PHP

Course Outcome Versus Program Outcomes:

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO-1		S	M	M					M			
CO-2	S	S		M					M			
CO-3		S		M					M			
CO-4		S	M	M								
CO-5		S		M								

S - Strongly Correlated, M - Moderately Correlated, Blank - No Correlation

Assessment Methods:	Assignment/Quiz/Seminars/Mid-Test/End Exam
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Teaching-Learning and Evaluation

WEEK	TOPIC/CONTENTS	COURSE OUTCOMES	SAMPLE QUESTIONS	TEACHING LEARNING STRATEGY	ASSESSMENT METHOD
1	Part 1, Introduction to HTML5: Part 2: New HTML5 Form input Types, Introduction to Cascading Style Sheets	CO - 1	1. Explain Table Elements. 2. Describe about forms in HTML5.	Lecture Discussion	Assignment Quiz Mid- Term Test
2	Part 1: Inline Styles, Embedded Style Sheets ,	CO - 1	1. Illustrate different ways of using CSS	Lecture PPT	- I

	Conflicting Styles , Linking External Style Sheets		2. Describe about Javascript objects.	Discussion	
3	Java Script: Introduction to scripting, Control Structures-I, Control Structures-II	CO - 1	1. Explain about different Control Structures available in java script	Lecture PPT Discussion	
4	Java Script: Control Structures-II, Functions, Arrays, Objects XML: Introduction, XML Basics, Structuring Data, XML Namespaces	CO - 1 & 2	1. Write the rules for a well formed XML document.	Lecture PPT Seminar	Assignment Quiz Seminar Mid-Term Test - I
5	Document Type Definitions (DTDs), W3C XML Schema Documents, XML Vocabularies, Extensible Stylesheet Language and XSL Transformations	CO - 2	1. Give the usage of XSL	Lecture PPT Seminar	
6	Document Object Model (DOM): Objects and Collections. Overview of JDBC, JDBC Drivers, Connecting to a Database	CO - 2 & 3	1. Explain about JDBC drivers.	Lecture PPT Discussion	
7	The Statement Interfaces, Result Sets, Using metadata. The Life Cycle of a Servlet, Using Tomcat for Servlet Development,	CO - 3	1. Explain about tomcat webserver and testing tomcat.	Lecture PPT Discussion	Assignment Quiz Seminar Mid-Term Test - I
8	A Simple Servlet, The Servlet API, The javax.servlet Package ,Reading Servlet Parameters,	CO - 3	1. Write about different servlet parameters	Lecture PPT Seminar	
9	MID TERM EXAM - I & QUIZ - I				
10	The javax.servlet.http Package, Handling HTTP Requests and Responses, Cookies, Session Tracking	CO - 3	1. Explain about session tracking in servlets	Lecture PPT Discussion	Assignment Quiz Seminar Mid-Term Test - I
11	JSP Overview, How JSP Works, A Basic Example, JSP Syntax and Semantics: The JSP Development Model, Components of a JSP Page: Directives, Comments, Expressions, Scriptlets, Declarations, implicit objects,	CO - 4	1. Describe about JSP Processing.	Lecture PPT Discussion	Assignment Quiz Seminar Mid-Term Test - I

	Standard Actions,				
12	Tag Extensions, A Complete Example Expressions , Scriptlets, Expression and Scriptlet Handling by the JSP Container, Implicit Objects and the JSP Environment, Initialization Parameters,	CO - 4	1. Explain how dynamic content is generated in JSPs ?	Lecture PPT Seminar	Assignment Quiz Seminar Mid-Term Test - I
13	Request Dispatching: Anatomy of Request Processing, include Directive, The <jsp:include> Action, Forwarding Requests , RequestDispatcher Object	CO - 4	1. Describe about Request Dispatching and Request Dispatcher	Lecture PPT Discussion	
14	Traditional Web Applications vs. Ajax Applications, Rich Internet Applications (RIAs) with Ajax,History of Ajax, Ajax Example Using the XMLHttpRequest Object,	CO - 5	1. Write the advantages of Ajax. 2. Describe how XMLHttpRequest Object is used in Ajax.	Lecture PPT Discussion	Assignment Quiz Seminar Mid-Term Test - I
15	Using XML and the DOM, Creating a Full-Scale Ajax-Enabled Application PHP: Introduction, Simple PHP Program, Converting Between Data Types, Arithmetic Operators,	CO - 5	1. What is PHP and why PHP is needed. 2. Write a PHP script that displays Welcome to PHP.	Lecture PPT Discussion	
16	Initializing and Manipulating Arrays, String Comparisons, String Processing with Regular Expressions, Form Processing and Business Logic, Reading from a Database	CO - 5	1. Give the applications of AJAX	Lecture PPT Seminar	
17	MIS TERM TEST - II & QUIZ - II				
18	END SEMESTER EXAM				