

## WEB TECHNOLOGIES

<b>Course Code</b>	19IT2701A	<b>Year</b>	IV	<b>Semester</b>	I
<b>Course Category</b>	Inter Disciplinary Elective-II	<b>Branch</b>	EEE	<b>Course Type</b>	Theory
<b>Credits</b>	3	<b>L-T-P</b>	3-0-0	<b>Prerequisites</b>	JAVA
<b>Continuous Internal Evaluation</b>	30	<b>Semester End Evaluation</b>	70	<b>Total Marks</b>	100

<b>Course Outcomes</b>	
<b>Upon successful completion of the course, the student will be able to</b>	
<b>CO1</b>	Understand the basic concepts of HTML,CSS,XML,JDBC connectivity, Servlets and JSP
<b>CO2</b>	use Java script for validation of web pages
<b>CO3</b>	Analyze the concepts of DOM,JDBC Architecture and life cycles of Servlets and JSP
<b>CO4</b>	Compare the concepts of HTML and XML, Servlets and JSP(L4)
<b>CO5</b>	Develop simple web applications using JDBC, servlet and JSP(L6)

<b>Contribution of Course Outcomes towards achievement of Program Outcomes &amp; Strength of correlations (3:Substantial, 2: Moderate, 1:Slight)</b>														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1			2		2								2	2
CO2			2		2								2	2
CO3			2		2									
CO4			2		2									
CO5			2	2	2									

<b>Syllabus</b>		
<b>Unit No</b>	<b>Contents</b>	<b>Mapped CO</b>
<b>I</b>	<b>INTRODUCTION TO WEB TECHNOLOGIES:</b> History of the web, Overview of HTTP, HTML Introducing HTML document structure, Creating Headings, links, paragraph, images, tables, frames, forms and html controls on a web page	<b>CO1</b>
<b>II</b>	<b>INTRODUCING CASCADING STYLE SHEETS:</b> Inline, External, Internal, Style class, Multiple styles, Introducing JavaScript , Using Variables, Using Operators, Working with Control Flow statements, Working with functions, Handling Events, Using Arrays, Creating objects in Java Script	<b>CO2</b>

<b>III</b>	<b>WORKING WITH XML:</b> Introduction to XML, XML Basics, XML Technologies, Extensible HTML (XHTML), Java API for XML Processing, Document Object Model (DOM)	<b>CO1, CO3</b>
<b>IV</b>	<b>WORKING WITH DATABASE:</b> Getting started with JDBC, Defining ODBC, Introduction to JDBC, Components of JDBC, JDBC Architecture, Types of Drivers, Working with JDBC APIs, Creating a Simple Application, Working with Prepared Statement, Using Callable Statement	<b>CO1, CO3, CO4, CO5</b>
<b>V</b>	<b>WORKING WITH SERVLETS:</b> Introducing the MVC architecture, Describing Servlets, Understanding Servlets, What are servlets, introducing the Servlet API, Servlet Life Cycle, Developing First Servlet Application <b>WORKING WITH JSP:</b> Introduction to JSP, Understanding JSP, Describing the JSP Life Cycle, Creating a Simple JSP pages	<b>CO1, CO3, CO4, CO5,</b>

### Learning Resources

#### Text books

1. Web Technologies, Black Book, Kogent Learning Solutions Inc, Dreamtech Press.
2. JDBC, Servlets, and JSP, New Edition, Santhosh Kumar K, Kogent Learning Solutions Inc, Dreamtech Press.

#### References

1. Web Technologies ,Uttam K. Roy, Volume 2 , Oxford University
2. Core Servlets and Java Server Pages Volume 1 CORE TECHNOLOGIES , Marty Hall and Larry Brown Pearson
3. Internet and World Wide Web – How to program ,Dietel and Nieto
4. An Introduction to Web Design and Programming –Wang-Thomson
5. Professional Java Server Programming S.AllamRaju and othersApres(dreamtech)
6. Java Server Programming ,IvanBayross and others,The X Team,SPD
7. Beginning Web Programming-Jon Duckett WROX.
8. Java Server Pages, Pekowsky, Pearson.
9. Java Script,D.Flanagan,O'Reilly,SPD.

#### e-Resources and other Digital Material

1. <http://nptel.ac.in/courses/106105084/13>
2. <http://www.w3schools.com/>
3. <https://www.javatpoint.com/html-tutorial>