WEB TECHNOLOGIES

Course Code	20IT3502	Year	III	Semester	I	
Course Category	PC	Branch	IT	Course Type	Theory	
Credits	3	L-T-P	3-0-0	Prerequisites	Java	
Continuous Internal	20	Semester End	70		100	
Evaluation:	30	Evaluation:	70	Total Marks:	100	

	Blooms Taxonomy Level		
Upon s			
CO1	Understand the basic concepts in web design for efficient design of web applications.	L2	
CO2	Identify applications comprising of various web technologies with varying complexity	L3	
CO3	Apply the concepts of JDBC and Servlets to develop dynamic web applications	L3	
CO4	Design and Develop web applications using JSP	L3	

	Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (3:Substantial, 2: Moderate, 1:Slight)													
	PO1						PO7	PO8	PO9	PO10	PO11	PO12	PSO	PSO
													1	2
CO1	3											3	3	3
CO2		3										3	3	3
CO3			3									3	3	3
CO4			3									3	3	3

	Syllabus				
Unit No	Contents	Mapped CO			
I	Introduction To Web Technologies: History of the web, Overview of HTTP, Introducing HTML, HTML Basic, HTML Headings, Links, Images, Tables, Frames, forms and HTML controls. Introducing CSS: Inline styles, external and internal style sheets, Style classes, multiple styles.	CO1			
П	Introducing Java script: Embedding JavaScript in a HTML page, Handling Events, variables, Arrays, Objects, Operators, Control flow statements, functions Working With XML: Introduction to XML, XML Basics, XML Technologies, Extensible HTML (XHTML), Java API for XML Processing: Document Object Model(DOM), Extensible Style Sheet Language Transformation(XSLT):XSLT Style sheet, XSLT functions	CO1, CO2			
III	Working With Database: Introducing JDBC, Exploring JDBC Drivers, Describing JDBC APIs, Creating a Simple Application, Working with Prepared Statement, Using Callable Statement.	CO1, CO2, CO3			
IV	Getting started with web applications: Describing Servlets, Introducing the MVC architecture, Working with servlets: Introducing Servlets, Exploring Servlet API, Servlet Life Cycle, and Configuring Servlet in web.xml, Working with Servlet Config and Servlet Context Objects. Creating simple servlet Working with Http Servlet REQUESTS &RESPONSES: HTTP Servlet Request Interface, HTTP Servlet Response Interface.	CO1, CO2, CO3			
v	Working With JSP: Understanding JSP, Describing the JSP Life Cycle, Creating a Simple JSP pages, working with JSP basic tags and implicit objects, working with Java Beans and Action tags in JSP, Working with JSP standard Tag Library(JSTL)	CO1, CO2, CO3, CO4			

Learning Resources

Textbooks

- 1. Web Technologies, Black Book, Kogent Learning Solutions Inc, Dream tech Press, 2018.
- 2. JDBC, Servlets, and JSP, NewEdition, Santhosh Kumar K, Kogent Learning Solutions Inc, Dreamtech Press, 2018.

References

- 1. WebTechnologies, UttamK. Roy, Volume 2, Oxford University, 2010
- 2. An Introduction to Web Design and Programming-Wang-Thomson
- 3. ProfessionalJavaServerProgrammingS.AllamRajuandothersApres(dreamtech)
- 4. Java Server Programming, Ivan Bayross and others, The XTeam, SPD
- 5. Beginning Web Programming-Jon Duckett WROX.
- 6. Java Server Pages, Pekowsky, Pearson.

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