PVP SIDDHARTHA INSTITUTE OF TECHNOLOGY, KANURU, VIJAYAWADA (AUTONOMOUS)
INFORMATION TECHNOLOGY

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 Evaluation :	30	Semester End Evaluation:	70	Total Marks:	100

	Course Outcomes	Blooms Taxonomy Level
	Upon successful completion of the course, the student will be able to	
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	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2
CO1	3											3	3	3
CO2		2										2	2	2
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
II	**Introducing JavaScript:** Embedding JavaScript in a HTML page, Handling Events, variables, Arrays, Objects, Operators, Control flow statements, functions **Working With XML:** Introduction to XML, XML Basics, Document Type Definition, XML Technologies: XHTML, DOM, SAX, Extensible HTML (XHTML), Java API for XML Processing: Document Object Model(DOM), SAX, Extensible Style Sheet Language Transformation(XSLT):XSLT Style sheet	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, Introducing the 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, Understanding session tracking.	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): Describing JSTL core tags.	CO1, CO2, CO3, CO4

Learning Resources
Textbooks
1. Web Technologies (HTML, JavaScript, PHP, JAVA, JSP, ASP.NET, XML and AJAX), Black Book, Dreamtech Press, 2017.
References
1. JDBC, Servlets, and JSP, New Edition, Santhosh Kumar K, Kogent Learning Solutions Inc, Dreamtech Press, 2018 2. Web Technologies, Uttam K. Roy,Volume2, Oxford University,2010 2. 3. An Introduction to Web Design and Programming–Wang-Thomson 4. Professional Java Server Programming, S.AllamRaju and others, Apres(dreamtech) 5. Java Server Programming, Ivan Bayross and others, The XTeam, SPD 6. Beginning Web Programming-Jon Duckett WROX. 7. 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