Name of the Course: Web Technologies

Sr. No.	Heading	Particulars
1	**Description the course:**	**Introduction:** The Web Technologies Course is an immersive exploration into the core technologies that drive the visual and interactive aspects of the web. Covering HTML, CSS, Javascript, XML, and PHP, this course equips individuals with the skills needed to create dynamic and aesthetically pleasing websites. **Relevance:** In the digital age, web design is paramount. The course remains highly relevant as it introduces participants to the fundamental languages and technologies that form the backbone of modern web development. **Usefulness:** The course is invaluable for anyone interested in creating responsive, user-friendly, and visually appealing websites. Participants gain practical skills in structuring web content, styling layouts, and implementing interactive features. **Application:** The concepts learned in this course find direct application in real-world web development projects. Participants design and build websites, applying HTML for structure, CSS for styling, Javascript for interactivity, XML for data representation, and PHP for server-side scripting. **Interest:** The creative and hands-on nature of web design often captivates students. Through practical exercises, participants engage in designing and developing websites, fostering a deep interest in creating visually engaging online experiences. **Connection with Other Courses:** This course establishes strong connections with various other courses in the field of web development and computer science. It provides a foundation for advanced studies in full-stack development, database management, and server-side scripting.

		Demand in the Industry:
		Professionals with strong web designing skills are in high demand. Industries spanning e-commerce, technology, and media actively seek individuals who can create user-friendly and visually appealing websites to enhance online presence and user engagement.
		Job Prospects:
		Graduates from a Web Designing Course find diverse job prospects. Roles may include web designer, front-end developer, UI/UX designer, and web content manager. These professionals are sought after for their ability to create visually stunning and functional web interfaces.
2	**Vertical:**	VSC
3	**Type:**	Practical
4	**Credits:**	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)
5	**Hours Allotted:**	60 Hours
6	**Marks Allotted:**	50 Marks
7	**Course Objectives(CO):** **CO 1.** To understand the concept of Web Technologies **CO 2.** To understand the concepts of Hyper Text Markup Language and Cascading Style Sheets. **CO 3.** To learn JavaScript for creating dynamic websites. **CO 4.** To learn various operations performed on data among web applications using XML **CO 5.** To learn Server-Side Programming using PHP	
8	**Course Outcomes (OC):** **OC 1.** Design valid, well-formed, scalable, and meaningful pages using emerging technologies. **OC 2.** Understand the various platforms, devices, display resolutions, viewports, and browsers that render websites **OC 3.** Develop and implement client-side and server-side scripting language programs. **OC 4.** Develop and implement Database Driven Websites. **OC 5.** Design and apply XML to create a markup language for data and document centric applications.	
9	**Modules:-** **Module 1 (30 hours):**	
	HTML: Fundamental Elements of HTML, Formatting Text in HTML, Organizing Text in HTML, List Tags, Links and URLs in HTML, Tables in HTML, Images on a Web Page, Image Formats, Image Maps, Colors, Navigation across multiple pages, Forms in HTML, Interactive Elements, Working with Multimedia - Audio and Video File Formats, HTML elements for inserting Audio / Video on a web page	

	CSS: Understanding the Syntax of CSS, CSS Selectors, Inserting CSS in an HTML Document, CSS properties to work with background of a Page, CSS properties to work with Fonts and Text Styles, CSS properties for positioning an element.	
	JavaScript: Using JavaScript in an HTML Document, Programming, Fundamentals of JavaScript – Variables, Operators, Control Flow Statements, Popup Boxes, Functions – Defining and Invoking a Function, Defining Function arguments, defining a return Statement, Calling Functions with Timer, JavaScript Objects - String, RegExp, Math, Date, Browser Objects - Window, Navigator, History, Location, Document, Cookies, Document Object Model, Form Validation using JavaScript	
	Module 2 (30 hours):	
	XML: Comparing XML with HTML, Advantages and Disadvantages of XML, Structure of an XML Document, XML Entity References, with Internal / External DTD, XSLT Elements and Attributes	
	AJAX: AJAX Web Application Model, How AJAX Works, XMLHttpRequest Object – Properties and Methods, Handling asynchronous requests using AJAX e.g. Mouseover, button click,	
	PHP: Variables and Operators, Retrieving data from HTML forms, Program Flow, Arrays, working with Files and Directories, working with Databases, Working with Cookies, Sessions, and Headers	
10	**Text Books** 1. HTML 5 Black Book, Covers CSS 3, JavaScript, XML, XHTML, AJAX, PHP and jQuery, 2ed, Dreamtech Press, 2016 2. Web Programming and Interactive Technologies, scriptDemics, StarEdu Solutions India, 2018 3. PHP: A Beginners Guide, Vikram Vaswani, TMH	
11	**Reference Books** 1. HTML, XHTML, and CSS Bible Fifth Edition, Steven M. Schafer, WILEY, 2011 2. Learning PHP, MySQL, JavaScript, CSS & HTML5, Robin Nixon, O'Reilly, 2018 3. PHP, MySQL, JavaScript & HTML5 All-in-one for Dummies, Steve Suehring, Janet Valade Wiley, 2018	
12	**Internal Continuous Assessment: 40%**	**Semester End Examination: 60%**
13	The internal evaluation will be determined by the completion of practical tasks and the submission of corresponding write-ups for each session. Each practical exercise holds a maximum value of 5 marks. The total evaluation, out of 50 marks, should be scaled down to a final score of 20 marks.	A **Semester End Practical Examination** of **2 hours duration** for **30 marks** as per the paper pattern given below. **Certified Journal** is **compulsory** for appearing at the time of Practical Exam
	Total: 20 marks	**Total: 30 Marks**

14	**Format of Question Paper:**		

Total Marks: 30   **Duration: 2 Hours**

Question	Practical Question Based On	Marks
Q. 1	Module 1	12
Q. 2	Module 2	12
Q. 3	Viva	06