

# Govt. Polytechnic Hamirpur (H.P.)

## Lecture Planning (Theory)

Branch : Information Technology Semester : 3rd

Subject : Internet Technologies Session: Aug-Dec 2025

Teacher: Vijay Pathania Laboratory : Programming Lab

Sr. No.	No. of Lectures Planned	Chapter/ Unit Description	Detail of Contents	Reference Resources	Remarks
1.	8	Internet and World Wide Web	Brief History of the Internet, Structure of the Internet, Internet Services and Applications, Different Ways to Connect to the Internet, Common Internet Connection Issues and their Solutions, World Wide Web, HTTP, Familiarization with the Key Terms - Network Protocol, Web Server, Web Browser, Website, Web Application, Hypertext, Hyperlink, Search Engine, Proxy Server, URL, DNS	R2,R1,R4	
2.	8	HTML 5	HTML, HTML Coding Conventions, HTML Tag, Structure of HTML Element, Global Attributes - id, class, style, title, tabindex; Structure of a Web Page - <html>, <head>, <body>, <!DOCTYPE>, <title> and <meta> Elements; HTML Comments, Document Object Model (DOM)	R1,R2,R3,R4, R5	
3.	10	HTML Basic Elements	Headings - <h1> ... <h6>; Paragraphs - <p>, Special Text Elements - <pre>, <code>, <q>, <var>; Lists : Ordered Lists (<ol>), Unordered Lists (<ul>); Attributes of List Elements: type, start; Nested Lists, Line Break ( ) and Horizontal Rule (<hr>); Text Formatting Elements - <b>, <strong>, <em>, <i>, <mark>, <u>, <sub>, <sup>; Tables - <table>, <thead>, <tbody>, <tfoot>, <tr>, <th>, <td>, <colgroup>, <col>; Table Attributes - cellpadding, cellspacing, border, rowspan, colspan; Images - <img>; Image Attributes - src, alt; Hyperlink - <a>; Hyperlink Attributes - href, target	R1,R2,R4,R5.	
4.	6	HTML Layout Elements	Block and Inline Elements, Creating Sections - <div>, <span>; Identifying Elements - id, class and name attributes; Frames - <iframe>; HTML5 Semantic Elements - <main>, <header>, <footer>, <article>, <section>, <nav>, <aside>, <details>, <summary>, <time>, <figure>	R1,R2,R5	
5.	8	Cascading Style Sheets	CSS Types - Inline, Internal, External; <style> and <link> elements; CSS Rule, Selector and Declaration; CSS Length Units; CSS Box Model; Setting Margins, Borders and Padding of Elements; CSS Colors - Color Names, RGB and HEX Formats; Setting Colors of Text, Background and Border; Styling Text - font-family, font-size, font-style, font-weight, font-transform, font-decoration, text-align; CSS	R1,R2,R5	

			Layout - position and float; Flexbox and Grid layouts; Styling Tables and Lists; Basic Animation using CSS, CSS Pseudo Elements and Pseudo Classes		
6	'8	Javascript	Role of Javascript in a Web Page, Embedding Javascript Code in Web Page, Javascript Variables - Naming, Scope and Lifetime, Hoisting; Javascript Operators, Control Statements; Javascript Arrays; Linking External Javascript File; Accessing and Manipulating HTML DOM Elements with Javascript; JavaScript, Builtin Javascript Functions, User-defined Functions	R1,R2,R3,R4, R5,R6	

**Course Outcomes:**

After completing this course the students will be able to :

- CO-1. Understand the Internet and WWW terminology.
- CO-2. Utilise the Internet services like email, www and FTP.
- CO-3. Connect a computer to the Internet and troubleshoot common network issues.
- CO-4. Develop basic static websites using HTML, CSS and Javascript.

**Teaching Resources:**

- R1. Web Technologies - A Computer Science Perspective, Jeffrey C.Jackson,
- R2. Web programming - Building Internet Application, Chris Bales
- R3. HTML & CSS: Design and Build Websites, John Ducket, Wiley Publishing
- R4. <https://www.w3schools.com> - HTML, CSS and Javascript Tutorials
- R5. Mozilla MDN Network Tutorials on HTML, CSS and Javascript
- R6. Modern JavaScript Tutorials at <https://javascript.info>

*Pathak*  
01/08/2025

Signature of Teacher with Date

*Pathak*

Signature of H.O.D.