

# Govt. Polytechnic Hamirpur (H.P.)

## Lecture Planning (Theory)

Branch : **Computer Engg.**

Semester: **3<sup>rd</sup>**

Subject : **Web Technologies**

Session: **August-Dec 2024**

Course Code: **IoTPC205**

Laboratory: **Yes**

Teacher : **Vikas Soni**

Class Room: **CBLH 2**


Sr. No.	No. of Lectures	Chapter/ Unit Description	Detail of Contents	Referen ce Resources	Remarks
1.	1-8	<b>Internet and World Wide Web</b>	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	R3,R2	
2.	9-16	<b>HTML 5</b>	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>,<meta> elements, html comments,Document object model(DOM).	R3,R2	
3.	17-26	<b>HTML Basic Elements</b>	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,cellpadding,border,rowspan,colspan;Images- <img>; Image attributes- src,alt; Hyperlink- <a>; Hyperlink attributes- href,target.	R3,R2	
4.	27-32	<b>HTML Layout Elements</b>	Block and inline elements,creating sections- <div>,<span>;Identifying elements- id,class and name attributes; Frames- <iframe>;	R3,R2	

			Html5 semantic elements- <main>,<header>,<footer>,<article>,<section>,<nav>,<aside>,<details>,<summary>,<time>,<figure>	
5.	33-40	<b>Cascading Style Sheets</b>	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, fontdecoration, text-align; CSS Layout - position and float; Flexbox and Grid layouts; Styling Tables and Lists; Basic Animation using CSS, CSS Pseudo Elements and Pseudo Classes	R1,R3
6.	41-48	<b>Javascript</b>	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,R3

R1-Web Technologies - A Computer Science Perspective, Jeffrey C.Jackson,  
R2-<https://www.w3schools.com> - HTML, CSS and Javascript Tutorials  
R3-Web programming - Building Internet Application, Chris Bales

Course Outcomes : After completing this course the students will be able to :

- CO-1. Understand the Internet and WWW terminology.
- CO-2. Utilize 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.

 01.08.2024  
Signature of Teacher with Date

  
Signature of H.O.D



# Govt. Polytechnic Hamirpur (H.P.)

## Practical Planning & Coverage

Branch : **Computer Engg.**

Semester: 5<sup>th</sup>

Subject : **Web Technologies (Group B)**


Session: Aug-Dec-2024


Teacher : **Vikas Soni**

Laboratory: APL

Pract. No.	Description of Practical	Reference for Procedure/ Writeup	Likely Dates	Actual Dates	Signature
1.	To send, receive, reply and forward emails with attachments.	Lab Manual	8/8/24		
2.	To connect the computer system to the Internet using at least two methods.	Lab Manual	16/8/24		
3.	To install and configure Visual Studio Code for static website development.	Lab Manual	23/8/24		
4.	To create a web page consisting of text elements <h1> - <h6>, >p>, <pre>, <code>, <q>, <var>, and set their background colors using inline css.	Lab Manual	30/08/24		
5.	To create a web page consisting of ordered and unordered lists and set their fonts and other text properties using internal CSS.	Lab Manual	5/09/24		
6.	To create a web page using HTML and CSS consisting of different <div> elements arranged in a grid structure with each <div> containing a different image. The experiment must also demonstrate the CSS box model.	Lab Manual	12/09/24		
7.	To create a web page containing hyperlinks to the web pages created in the first five experiments. The experiment must demonstrate different values of the target attribute.	Lab Manual	20/09/24		
8.	To create a web page using semantic elements <main>, <header>, <footer>, <article>, <section>, <nav>, <aside>, <details>, <summary> with each element properly positioned as per standard web page layout.	Lab Manual	27/09/24		
9.	To create a web page to demonstrate basic CSS animation.	Lab Manual	04/10/24		
10.	To create a web page to find out the sum of two numbers using Javascript.	Lab Manual	18/10/24		
11	To create a web page consisting of a label, a text field, a command button and write javascript code to find out whether the number entered in the text	Lab Manual	25/10/24		

	field is a prime number.			
12	To dynamically add HTML elements to a web page using Javascript.	Lab Manual	23/10/24	
13	To change the CSS properties of a text element using Javascript.	Lab Manual	6/11/24	
14	To demonstrate frequently used Javascript builtin functions (at least 10).	Lab Manual	13/11/24	

Signature of Teacher 

Signature of H.O.D. 

## Govt. Polytechnic Hamirpur (H.P.)

### Practical Planning & Coverage

Branch : **Computer Engg.**

Semester: 5<sup>th</sup>

Subject : **Web Technologies (Group A)**

Session: **Aug-Dec-2024**


Teacher : **Vikas Soni**


Laboratory: **APL**

Pract. No.	Description of Practical	Reference for Procedure/ Writeup	Likely Dates	Actual Dates	Signature
1.	To send, receive, reply and forward emails with attachments.	Lab Manual	3/8/24		
2.	To connect the computer system to the Internet using at least two methods.	Lab Manual	10/8/24		
3.	To install and configure Visual Studio Code for static website development.	Lab Manual	17/8/24		
4.	To create a web page consisting of text elements <h1> - <h6>, <p>, <pre>, <code>, <q>, <var>, and set their background colors using inline css.	Lab Manual	27/08/24		
5.	To create a web page consisting of ordered and unordered lists and set their fonts and other text properties using internal CSS.	Lab Manual	3/09/24		
6.	To create a web page using HTML and CSS consisting of different <div> elements arranged in a grid structure with each <div> containing a different image. The experiment must also demonstrate the CSS box model.	Lab Manual	14/09/24		
7.	To create a web page containing hyperlinks to the web pages created in the first five experiments. The experiment must demonstrate different values of the target attribute.	Lab Manual	21/09/24		
8.	To create a web page using semantic elements <main>, <header>, <footer>, <article>, <section>, <nav>, <aside>, <details>, <summary> with each element properly positioned as per standard web page layout.	Lab Manual	28/09/24		
9.	To create a web page to demonstrate basic CSS animation.	Lab Manual	05/10/24		
10.	To create a web page to find out the sum of two numbers using Javascript.	Lab Manual	9/10/24		
11	To create a web page consisting of a label, a text field, a command button and write Javascript code to find out whether the number entered in the text	Lab Manual	16/10/24		



	field is a prime number.				
12	To dynamically add HTML elements to a web page using Javascript.	Lab Manual	08/11/24		
13	To change the CSS properties of a text element using Javascript.	Lab Manual	14/11/24		
14	To demonstrate frequently used Javascript builtin functions (at least 10).	Lab Manual	22/11/24		

Signature of Teacher 

  
Signature of H.O.D.