Program: Diploma in Computer Engineering		
Course Code : 6132B	Course Title: Fundamentals of Web Technology	
Semester: 6 Credits: 4		
Course Category: Open Elective		
Periods per week: 4 (L:3 T:1 P:0)  Periods per semester: 60		

# **Course Objectives:**

- To impart skills to develop simple web pages using HTML.
- To develop web pages Using CSS and JavaScript.
- Familiarize server-side scripting using PHP.
- Familiarize domain name registration and webhosting procedure.

### **Course Prerequisites:**

Topic	Course Code	Course Name	Semester
Basic Knowledge of IT skills and basic problem solving		Introduction to IT systems Lab	I

### **Course Outcomes:**

On completion of the course, the student will be able to:

COn	Description	Duration (Hours)	Cognitive Level
CO1	Define the fundamentals of World Wide Web and HTML.	14	Applying
CO2	Demonstrate client-side scripting using JavaScript and CSS	20	Applying
CO3	Demonstrate server-side scripting using PHP	14	Applying
CO4	Illustrate domain name registration and web hosting techniques.	10	Understanding
	Series Test	2	

### **CO-PO Mapping**

Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3						
CO2	3						
CO3	3						
CO4	2						

3-Strongly mapped, 2-Moderately mapped, 1-Weakly mapped

### **Course Outline:**

Module Outcomes	Description	Duration (Hours)	Cognitive Level
CO1	Define the fundamentals of World Wide Web and HTML.		HTML.
M1.01	Define world wide web and HTML.	2	Remembering
M1.02	Demonstrate basic & formatting tags in HTML	4	Understanding
M1.03	Illustrate link and table using HTML tags	4	Understanding
M1.04	Build html forms using various controls	4	Applying

# **Contents:**

Define Internet, IPV, WWW & Domain names -web browsers, web servers- search engines & URL-HTML- Basic & formatting tags- HTML lists-Hyperlink and anchor tags-Frames & Tables- Embedding multimedia -Designing form with various controls.

CO2	Demonstrate client-side scripting using JavaScript and CSS		
M2.01	Explain cascading style sheets.	4	Understanding
M2.02	Show relevance of client-side scripting and apply JavaScript in HTML page design.	6	Applying
M2.03	Demonstrate event handling in JavaScript	6	Understanding
M2.04	Make use of JavaScript in data validation.	4	Applying
	Series Test-I	1	

#### **Contents:**

CSS-various methods for embedding CSS-inline-internal & external-CSS selectors-properties-font, color, background, list, link, text, border in web pages. Need for client-side scripting-use of JavaScript in HTML -programming elements in JavaScript-DOM-Event handling in java script-data validation using JavaScript.

CO3	Demonstrate server-side scripting using PHP		
M3.01	Compare client/server-side scripting	1	Applying
M3.02	Explain programming elements in PHP.	6	Understanding
M3.03	Illustrate form handling using PHP	4	Understanding
M3.04	Demonstrate the use of sessions and cookies	3	Understanding

#### **Contents:**

Comparison of client and server-side scripting -popular web servers-Features of PHP-embedding php scripts in a web page-PHP language elements-PHP arrays and functions - Retrieving and processing form data using PHP - setting and retrieving cookies - Session handling in PHP-PDF generation in PHP.

CO4	Illustrate domain name registration and web hosting techniques		
M4.01	Define Domain Name and domain name system.	2	Remembering
M4.02	Define domain registration process.	2	Remembering
M4.03	Define web hosting and various types of hosting.	3	Understanding
M4.04	Demonstrate website uploading	3	Understanding
	Series Test – II	1	

#### **Contents:**

Domain name and top-level domains- choosing a domain name, sub domains - domain name registration process— Server/cloud space hiring — Website Hosting - free, shared, dedicated, collocated —Uploading of websites - File Transfer Protocols.

# **Text / Reference:**

T/R	Book Title/Author		
T1	Robert W Sebesta, Programming with World Wide Web, 7 <sup>th</sup> ed., Pearson Education, New Delhi, 2009		
R1	John Duckett, Beginning Web Programming with HTML, XHTML, CSS & JavaScript, Second Edition, Wiley DreamTech		
R2	Laura Lemay Rafe Coburn Jennifer Kyrnin, Sams Teach Yourself HTML, CSS & JavaScript Web Publishing in One Hour a Day, Seventh Edition, Pearson Education		
R3	Sams teach Yourself PHP in 24 hours – Zandstra – (Pearson Education)-Third Edition		

# **Online Resources:**

Sl.No	Website Link
1	http://www.w3schools.com
2	https://html-css-js.com/
3	https://www.tutorialspoint.com/index.htm
4	http://php.net