

Department of Computer Science and Applications

Program: BCA

Web Development (24CSC401SE01)

SCHEME

Course Name	Web Deve	lopment	Course Type	Theory and Practical
Course Code	24CSC4019	SE01	Class	BCA 1 st Sem
Delivery	Per week Lectures: 1, Practical: 2 Total No. Classes Per Sem: 15(L), 30(P) End Term Exam: Theory(25%), Practical (50%)			
Course Coordinator	Dr. Pooja Chawla	Course Instructors	Dr. Pooja Chav	vla & Ms. Ankita

COURSE OVERVIEW

Web development is a popular course that deals with the creating and maintaining of websites. Students pursuing web development courses will equip themselves with the skills and knowledge of creating websites which are user friendly and easy to use. Web design courses involve planning, creating, and maintaining websites.

PREREQUISITE

- Basic knowledge of Computer hardware and software.
- Basic knowledge in HTML tags.
- Knowledge of Internet and Web Sites.

COURSE OBJECTIVE

The objective of this course is to develop the skill & knowledge of Web Page design. Students will understand the basic concept of HTML, DHTML, Java Script & CSS along with its Website Development.

COURSE OUTCOMES (COs)

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

CO No.	Course Outcomes	
	Remember the basic concept of WWW, Web Browser, Web Server, Search Engine and Web Hosting.	
2	Understand the tags of HTML and CSS with its attributes.	
3	Apply different types of tags to make web pages.	
4	Develop the concept of Web.	



COURSE CONTENT

Content

UNIT-I

Introduction to Internet and World Wide Web (WWW): Evolution and History of WWW, Basic features; the evolution of Web development; Domaín Name, Web Browsers; Web Servers; Hypertext Transfer Protocol; URLs; IP Addresses; Searching and Web-Casting Techniques; Search Engines and Search Tools, Internet Security; The Web Programmers: Toolbox, Introduction to Web Technologies; Introduction to HTML, CSS and JavaScript, Introduction to Client and Server Side Scripting.

UNIT - II

Web Publishing: Hosting your web Site; ISP, Planning and designing your Web Site, Steps for developing your Site: Choosing the contents; Home page, Domain Names; Creating a Website and the Markup Languages (HTML, DHTML): : Introduction to HTML; Hypertext and HTML; HTML Document Features; HTMI command Tags; Creating Links; Headers; Text Styles; Text Structuring; Text colors and Background; Formatting text; Page Layouts; Lists, Tables; meta element; New HTMI5 Form input Types; input and data list elements; auto complete Attribute; Page-Structure Elements; Introduction to DHTML and its features;

UNIT - III

Brief Introduction to Interactivity Tools: CGI, Features of Java; Java Script; Features of ASP; VBScript; Macromedia Flash; Macromedia Dreamweaver; JavaScript: The JavaScript execution environment; The Document Object Model; Element access in JavaScript; Events and event handling: Handling events from the body elements; Button elements, Text box, and Password elements; The DOM 2 event model; The navigator object; DOM tree traversal and modification;

UNIT-IV

Introduction to CSS: Introduction to CSS, Block and Inline Elements, Inline Styles, using internal CSS, Using external CSS, How CSS rules cascade, inheritance, Wily use external style sheets? CSS3 Basics: CSS selectors, color: foreground color, background color, contrast, opacity; text: Typeface terminology, Specifying Typefaces, fonts; list tables and forms: list-style, table properties, styling forms, styling text input Layout and Positioning: Layout: key concepts in positioning elements, controlling the pc ion of elements: relative positioning, absolute positioning, fixed positioning, Z-Index, float, clear, creating multi column layout with float, fixed width layout, liquid layout, layout grids, images: controlling size of images in CSS, aligning images using CSS, centering images using CSS, background images, gradients, Media Queries.

LESSON PLAN (THEORY AND TUTORIAL CLASSES)

L. No	Topic to be Delivered	Unit
_	Introduction to Internet and World Wide Web(Features and History)	
2	Web Browser, Web Server, Internet terms	1
3	E-Mail, Http, URL and Home Page	
4	Working of Internet and Web Browser, Search Engine	
5	Applications of Internet	1
6	Introduction to HTML.	



7	Basic tags of HTML(Bold, Italic, Underline)	
8	Superscript and Subscript tags, HR, BR tag	
		2
9	Ordered and Unordered Lists.	
10	Table Tag, Heading Tags	
11	Linking Tags-1in HTML	
		2
12	Linking Tags-2 in HTML	
13	Text Structuring; Text colors and Background;	
	Formatting text; Page layouts	
14	Insert image in web page	2
15	Frame Creation and Layouts	
16	Working with Forms and Menus	
17	Ordered and Unordered lists	
18	Working with Radio Buttons;	2
	Check Boxes	
19	Web Casting and its types	
20	Web Hosting and its types.	
21	Domain Name and IP address.	1
22	Introduction to Client Side and Server Side Scripting.	
23	Web Publishing(Planning and Designing a Website) and ISP	1,2
24	Introduction to DHTML and its features.	
25	Java and Java Script features	
26	ASP and VBScript features	3
27	Macromedia and DOM	
28	Events and Event Handling	
29	DOM 2 event model, DOM tree traversal and	3
	modification	
30	Button, textbox and password elements	
31	CSS block and inline elements	A
32	Internal and External CSS, Inheritance	4
33	CSS background and foreground color	
34	List tables and forms, Properties	_
35	Relative and Absolute Positioning	4
36	Aligning images, centering images, background images	
37	CSS media queries	,
38	Liquid and Layout grids	4
39	Z-index and various types of l,ayout	
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Text Book

Sushil Goel, Web Development, Natraj Publication House, Karnal.

Reference Books

- Raj Kamal, "Internet and Web Technologies", Tata McGraw-Hill.
- Ramesh Bangia, "Multimedia and Web Technology", Firewall Media.
- Thomas A. Powell, "Web Design: The Complete Reference", 4/e, Tata McGraw-Hill
- Wendy Willard, "HTML Beginners Guide", Tata McGraw-Hill.
- Deitel and Goldberg, "Internet and World Wide Web, How to Program", PHI.

Web/Links for e-content

- https://www.tutorialspoint.com/internet_technologies/website_designing.htm
- https://www.geeksforgeeks.org/web-design/
- https://www.javatpoint.com/html-tutorial
- https://www.w3schools.com/tutorials/
- https://developer.mozilla.org/en-US/docs/Web/CSS/@property



PRACTICE QUESTIONS (QUESTION BANK)

S.No	Important Questions Theory
	Unit-I
1.	Write short note on the following :-
	• WWW
	Web Browser & Web Server
	HTTP & URL
2.	Define Proxy Server.
3.	Explain hardware and software requirements for Internet.
4.	Explain Internet Security in detail.
5.	Define Web Casting and Search Engine.
6.	Define ISP's with their types.
7.	Explain Client-Side and Server-Side Scripting.
8.	What is domain name & how it is different from an IP address.
9.	Describe Domain Name System with example.
10.	What is Web hosting? Explain different types of Web Hosting.
	UNIT-II
	What do you mean by Web Publishing? Explain in detail.
12.	Explain the following: • ISP
	HTML and DHTML
13.	Describe various phases of Planning and Designing Web Site.
14.	Define Home page.
15.	Give a complete description about HTML.
16.	Explain Heading Tags in HTML.
17.	Describe the following:
	Page Layouts.Text Styles.
18.	What is HTML? What types of Pages are created with the help of HTML. Explain the structure of
10	HTML documents.
19.	Explain features of DHTML.
20.	How to create a link with in a web page and other web site.
21.	Describe Listing Tags.
22.	Define Table. How can you insert a table captions & header.



23.	Define image. How would you create image links including an image as a link.
24.	Explain how we can add graphics & image in HTML.
25.	Explain Page structure elements in detail.

	UNIT-III
26.	Explain CGI.
27.	Explain various features of ASP.
28.	Explain various features of JAVA.
29.	Explain Macromedia Flash and Dreamweaver.
30.	Difference between Java Script and VBScript.
31.	Describe Document Object Model.
32.	Explain various methods to access element in the DOM.
33.	Describe DOM Tree Traversal.
34.	Explain Alert and Prompt dialog box.
	UNIT-IV
35.	Explain JAVA and Java Script with its features.
36.	Define CSS & list some properties of CSS.
37.	Explain Advantages and Disadvantages if Internal Style Sheet.
38.	Explain Media Queries using example.
39.	Explain CSS Radial Gradients by using example.
40.	Explain Advantages and Disadvantages of Inline Style Sheet.
41.	Explain Multi-Columns properties by using example.



PRACTICE QUESTIONS (QUESTION BANK)

S.No	Important Questions Practical
1.	Write HTML code to make text Bold, Italic.
2.	Write HTML code to display education details using Table tag.
3.	Write HTML code to implement internal linking.
4.	Write HTML code to insert an image on a webpage.
5.	Write HTML Code to illustrate- Ordered and Unordered list.
6.	Write HTML code to create a frameset.
7.	Write HTML code to implement Definition list.
8.	Write HTML code of Header and Footer element.
9.	Write HTML code to demonstrate the usage of inline CSS.
10.	Write HTML code to demonstrate the usage of internal CSS.
11.	Write HTML code to demonstrate the usage of external CSS.
12.	Write HTML code to create a login form.
13.	Write HTML code to implement Menu list.
14.	Write HTML code to implement Checkboxes and Radio button.
15.	Write HTML code to implement external linking.
16.	Write HTML code to implement tables using CSS.
17.	Make a program using CSS positioning properties.
18.	Write code to implement lists using CSS.
19.	Write HTML code using Superscript and Subscript tag.
20.	Write code to implement link in CSS.
21.	Write code to implement Radial Gradients.
22.	Write code to implement Linear Gradients.
23.	Write code to implement Input type tel.
24.	Write code to implement Input type Time and Month
25.	Write code to implement Input type Number and Range.
26.	Write code to implement article element.
27.	Write HTML code to implement Definition List.
28.	Write HTML code to implement Table using all table tag properties.
29.	Write HTML code using alt attribute of image tag.
30.	Write CSS code to implement Multi-columns properties.

