

	Required	Total
1	Create web page using structure tags to display sample message.	1 02
2	Create a web page for displaying a paragraph using block level tags, HR tags (Part-I).	1 02*
3	Create a web page for displaying a paragraph using block level tags, HR tags (Part-II)	1 02
4	Create a Web Page using Text level Tags and Special Characters.	11 02
5	Create a web page for implementing different types of Lists.	11 02*
6	Create a web page to link- <ol style="list-style-type: none"> A different web page of same site A different location on the same web page. A specific location on different web page of same site. 	III 02
7	i) Create a web page to link- <ol style="list-style-type: none"> An external page of different web site. To an email ID. ii) Write tags to change colors of links	III 02*
8	Insert images on web page using various attributes	III 02
9	Implement image as a button and set image as background.	III 02
10	Create a web page to implement Frame tags.	IV 02*
11	Create a web page to implement Table tags	IV 02
12	Create a web page for demonstration of CSS by applying Internal style.	V 02*
13	Create a web page for demonstration of CSS by applying External style.	V 02
14	Create a web page for demonstration of CSS by applying Inline style.	V 02
15	Install a web server and publish a website on Intranet	VI 02
16	Publish a website on Internet by acquiring space on free hosting site.	VI 02*
	Total	32

Note

- i. A suggestive list of Pro's is given in the above table. More such Pro's can be added to attain the COs and competency. A judicial mix of practical need to be performed, out of which, the practicals marked as * are compulsory, so that the student reaches the 'Applying Level' of Blooms's 'Cognitive Domain Taxonomy' as generally required by the industry.
- ii. The 'process' and 'product' related skills associated with each Pro are to be assessed according to a suggested sample given below.

S. No.	Performance Indicators	Weightage in %
a.	Debugging ability	20
b.	Quality of output achieved (Product)	40
c.	Complete the practical in stipulated time	10
d.	Answer to sample questions	20
e.	Submit report in time	10
	Total	100

S. No.	Equipment Name with Broad Specifications	Exp. S. No.	Topics and Sub-topics
1	Computer with a text editor and browser	ALL	
2	Scanner : A4 size, supporting image quality 200 DPI or higher	7	
3	Computer system with Internet connection	12	
4	Web server.	12	

8. UNDERPINNING THEORY COMPONENTS

The following topics/subtopics are to be taught and assessed in order to develop UOs for achieving the COs to attain the identified competency.

Unit	Unit Outcomes (UOs) (in cognitive domain)	Topics and Sub-topics
Unit – I Basics of HTML	1a. Differentiate characteristics of the given type of web sites. 1b. Describe structure of the given HTML page. 1c. Explain use of head tag and body tag in the given web page. 1d. Describe the procedure of using the given block level tag on a web page.	1.1 Fundamentals of World Wide Web(www): Information about Web Browsers, Web Servers and types of sites. Static vs. dynamic web sites. Web page structure: DOCTYPE, head, body, title and other meta tags with attributes.
		1.2 Block Level Tags And Horizontal Rules: Headings, Paragraphs, Breaks, Divisions, Centered Text, Block Quotes. Preformatted text, types of Address, HR tag
		2.1 Text Level Tags And Special Characters: Bold, Italic, Teletype.

Unit	Unit Outcomes (UOs) (in cognitive domain)	Topics and Sub-topics
Level Tags and List	Web Page. 2b. Use relevant tag to display the given special characters. 2c. Explain use of the given type of list in Web Pages. 2d. Describe the procedure of using the given text level tags in creating a Web Page.	Underline, Strikethrough, Superscript, Subscript , DIV tag, displaying Special characters. 2.2 Lists: Ordered Lists, Unordered Lists, Definition Lists, Nested Lists.
Unit- III URL And Images	3a. Describe feature of the given type of URLs. 3b. Describe the given image attribute on a web page. 3c. Explain process of using the given colors/images as page background on a Web Page. 3d. Describe the procedure for creating the given type of hyper linking.	3.1 URL And Anchor Tag:URL : Types of URLs, Absolute URLs, Relative URLs, pros and cons of relative and absolute URLs, Anchor Tag: Linking various documents for internal and external links. 3.2 Images, Colors And Backgrounds: Inserting Images, formattting image for sizing, alignment, Border and using other attributes with IMG tag Inserting image as page background Creating solid color page background.
Unit-IV Table And Frames	4a. Explain the given table attributes to organize data on a web page. 4b. Use the given table attribute to change default table setting. 4c. Describe the given type of 'frame' with examples. 4d. Describe the procedure to organize display as per given screen layout using frames.	4.1 Table: Table tag with attributes. TABLE, TR, TH, TD tags. Border, cell spacing, cell padding, width, align, bgcolor attributes. 4.2 Frames: Types of Frames with their attributes, Creating frames; FRAMESET tag – rows, cols attributes.
Unit –V Cascading Style sheets	5a. Describe CSS code for the given type of formatting on a web page. 5b. Describe the given style sheet properties. 5c. Explain the given property of CSS. 5d. Describe the procedure to create CSS for applying the given presentation scheme on a web page.	5.1 Cascading Style Sheets: Different types of Style Sheets, Benefits of using CSS, Adding style to the document: Linking to style sheets, Embedding style sheets, Using inline style, Selectors: CLASS rules, ID rules. 5.2 Style sheet properties: Font, text, box, color and background properties; Creating and Using a simple external CSS file; Using the internal and inline CSS; background and color gradients in CSS Setting font and text in style sheet using table layout.

Unit	Unit Outcomes (UOs) (in cognitive domain)	Topics and Sub-topics
Unit-VI Website Hosting	6a. Describe the procedure to configure a webserver. 6b. Differentiate hosting requirement on Internet and intranet 6c. Describe the procedure for hosting the given website. 6d. Explain process of uploading the given files on a website.	6.1 Website Hosting: Concept of Internet and Intranet, Publishing website on Intranet, Installing and configuring web server, uploading files on intranet site, access intranet based website; Publishing website site on Internet, hiring Web space, uploading files using FTP, Virtual Hosting, access internet based website

Note: To attain the COs and competency, above listed UOs need to be undertaken to achieve the 'Application Level' of Bloom's 'Cognitive Domain Taxonomy'.

9. SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

- Not Applicable-

- 10. SUGGESTED STUDENT ACTIVITIES**
Other than the classroom and laboratory learning, following are the suggested student-related *co-curricular* activities which can be undertaken to accelerate the attainment of the various outcomes in this course:
 - Prepare journals based on practical performed in laboratory.
 - Browse and Observe features of different types of website.
 - Identify different host servers for hosting static website.
- 11. SUGGESTED SPECIAL INSTRUCTIONAL STRATEGIES (if any)**
These are sample strategies, which the teacher can use to accelerate the attainment of the various learning outcomes in this course:
 - Massive open online courses (**MOOCs**) may be used to teach various topics/topics.
 - '*I*', in item No. 4 does not mean only the traditional lecture method, but different types of teaching methods and media that are to be employed to develop the outcomes.
 - About 15-20% of the *topics/sub-topics* which is relatively simpler or descriptive in nature is to be given to the students for *self-directed learning* and assess the development of the COs through classroom presentations (see implementation guideline for details).
 - With respect to item No 10, teachers need to ensure to create opportunities an provisions for *co-curricular activities*.
 - Guide student(s) in undertaking micro-projects.
 - Demonstrate students thoroughly before they start doing the practice.
 - Encourage students to refer different websites to have deeper understanding of the subject.
 - Observe continuously and monitor the performance of students in Lab.

The practical exercises as listed in point no. 6 above may be undertaken keeping in mind to develop a sample web site as final output. Some sample topics/domains are suggested below.

12. SUGGESTED MICRO-PROJECTS

Only one micro-project is planned to be undertaken by a student assigned to him/her in the beginning of the semester. S/he ought to submit it by the end of the semester to develop the industry oriented COs. Each micro-project should encompass two or more COs which are in fact, an integration of POs, UOs and ADOs. The micro-project could be industry application based, internet-based, workshop-based, laboratory-based or field-based. Each student will have to maintain dated work diary consisting of individual contribution in the project work and give a seminar presentation of it before submission. The total duration of the micro-project should not be less than **16 (sixteen) student engagement hours** during the course.

In the first four semesters, the micro-project could be group-based. However, in higher semesters, it should be individually undertaken to build up the skill and confidence in every student to become problem solver so that s/he contributes to the projects of the industry. A suggestive list is given here. Similar micro-projects could be added by the concerned faculty: Create sample website with minimum ten web pages Containing text, images, colors & background, frames, tables, and CSS with suitable hyper linking.

a. Website for Universities or Colleges.

b. Web site for books shops, grocery store, others

c. Web site for any Vehicle Showroom.

d. Website for Hospital facilities

e. Web site for Travel and Tourism Agency

f. Web site related to any Sports. (Ex. Cricket, Tennis,

Any other suggested topic by subject teacher.

13. SUGGESTED LEARNING RESOURCES

S. No.	Title of Book	Author	Publication
1.	HTML and XHTML – The complete reference	Powell Thomas Robbins	Tata McGraw Hill, New Delhi, 2014, ISBN: 9780070701946 O'Reilly, London, 2012 ISBN 10:1-4493-1927-0
2.	Learning Web Design	SAMS	Pearson Education Publication, New Delhi, 2015, ISBN: 978-072336140
3.	Teach Yourself HTML & CSS in 24 Hours	Bohem, Anne	Murach's Publication, New York, 2013, ISBN 13: 978-1890774578
4.	HTML,XHTML and CSS	DT Editorial services	Dreamtech Publication, New Delhi, ISBN: 978-9350040959
5.	HTML 5 Black Book(second edition)		

14. SOFTWARE/LEARNING WEBSITES

- a. <http://www.w3schools.com/html>
- b. <http://www.html.net/>
- c. <http://www.2createawebsite.com>
- d. <http://webdesign.about.com>

