DEPARTMENTOFCOMPUTERSCIENCE&APPLICATIONS
KURUKSHETRAUNIVERSITY,KURUKSHETRA

Session:2023-24	
PartA-Introduction	
Subject	BCA
Semester	II
Nameofthe Course	Introduction to Web Technologies
CourseCode	B23-CAP-202 (Common with B23-CAI-202, B23-CDS-202,B23-CTS-202)
CourseType:(CC/MCC/MDC/CC-M/DSEC/VOC/DSE/PC/AEC/VAC)	CC
Level of the course (As perAnnexure-I	100-199
Pre-requisiteforthecourse(ifany)	
CourseLearningOutcomes(CLO):	Aftercompletingthis course,thelearner willbeableto: 1. learnthebasicsofweb development. 2. understand different types of web pages and web sites. 3. implementHTML and CSS for web page designing. 4. Understand the design of web crawlers and search engines. 5*. to implement the programs based on variousconceptsof web development.

Credits	Theory	Practical	Total
	3	1	4
ContactHours	3	2	5

Max.Marks:100(70(T)+30(P)) **InternalAssessmentMarks:30(20(T)+10(P))** **EndTermExamMarks:70(50(T)+20(P))**	**Time:3Hrs.(T),3Hrs.(P)**

PartB-ContentsoftheCourse
InstructionsforPaper-Setter
Examiner will set a total of nine questions. Out of which first question will be compulsory.Remaining eight questions will be set from four unit selecting two questions from each unit.Examination will be of three-hour duration. All questions will carry equal marks. First questionwill compriseofshort answertypequestionscoveringentiresyllabus. Candidate will have to attempt five questions in all, selecting one question from each unit. Firstquestionwillbecompulsory. Practicumwillbeevaluatedbyanexternalandaninternalexaminer.Examinationwillbeof

three-hourduration.		

Unit	Topics	Contact Hours
I	Introduction to Internet and World Wide Web (WWW); Evolution and History of World Wide Web, Web Pages and Contents, Web Clients, Web Servers, Web Browsers; Hypertext Transfer Protocol, URLs; Searching, Search Engines and Search Tools. Web Publishing: Hosting website; Internet Service Provider; Planning and designing website; Web Graphics Design, Steps For Developing website	10
II	Creating a Website and Introduction to Mark up Languages (HTML and DHTML), HTML Document Features & Fundamentals, HTML Elements, Creating Links; Headers; Text styles; Text Structuring; Text colour and Background; Formatting text; Page layouts, Images; Ordered and Unordered lists; Inserting Graphics; Table Creation and Layouts; Frame Creation and Layouts; Working with Forms and Menus; Working with Radio Buttons; Check Boxes; Text Boxes, HTML5	10
III	Introduction to CSS (Cascading Style Sheets): Features, Core Syntax, Types, Style Sheets and HTML, Style Rule Cascading and Inheritance, Text Properties, CSS Box Model, Normal Flow Box Layout, Positioning, and other useful Style Properties; Features of CSS3.	10
IV	The Nature of JavaScript: Evolution of Scripting Languages, JavaScript-Definition, Programming for Non-Programmers, Introduction to Client–Side Programming, Enhancing HTML Documents with JavaScript. Static and Dynamic web pages	10
V*	Practicum: Students are advised to do laboratory/practical practice not limitedto,but includingthefollowingtypes ofproblems: • Create a web page using ordered list and unordered list. • Design a web page to show your institute with hyperlinks. • Create your resume on HTML page. • Create a web page divide the web page into four frames. In one frame create three links that will display different HTML forms in the remaining three frames respectively. • Create a web page to show the record of the college in the form of a table. • Write a HTML code to add internal CSS on a webpage • Design a blog-style personal website.	25

	· Design a web page to display your college with hyperlinks.	
	· Write a JavaScript function to calculate the sum of two numbers.	
	· Write a JavaScript program to find the maximum number in an array.	
	· Write a JavaScript function to check if a given string is a palindrome (reads the same forwards and backward).	
	· Write a CSS file and attachit to any 3 HTML webpages.	
	· Use Div and span in a page and color two words with the same colors.	
	· Using HTML,CSS create a styled checkbox with animation on state change	

	· Design a web page that is like a compose page of e-mail. It should have:
	  a) Text boxes for To, CC, and BCC respectively.
	  b) Text field for the message.
	  c) Send button.
	  d) Option for selecting a file for attachment	

	· After clicking the send button a new page should open with the display message "Message has been sent".	

SuggestedEvaluationMethods

InternalAssessment: ➢ **Theory** · ClassParticipation:5 · Seminar/presentation/assignment/quiz/classtestetc.:5 · Mid-TermExam:10 ➢ **Practicum** · ClassParticipation:5 · Seminar/Demonstration/Viva-voce/Labrecordsetc.:5 · Mid-TermExam: NA	**End-TermExamination:**A three-hourexam for boththeory andpracticum. **EndTermExamMarks:70(50(T)+20(P))**

PartC-LearningResources

RecommendedBooks/e-resources/LMS:
· 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, Tata McGraw-Hill
· Wendy Willard, HTML Beginners Guide, Tata McGraw-Hill.
· Deitel and Goldberg, Internet and World Wide Web, How to Program, PHI
· David Flanagan, JavaScript: The Definitive Guide: The Definitive Guide.
· Kogent Learning, Web Technologies: HTML, JavaScript, PHP, Java, JSP, XML, AJAX – Black Book, Wiley India Pvt. Ltd.

*Applicablefor courseshavingpracticalcomponents.