IV Semester

WEB PROGRAMMING (Practical based)			
Course Code	**21CSL481**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	0:0:2:0	SEE Marks	50
Total Hours of Pedagogy	12T + 12P	Total Marks	100
Credits	01	Exam Hours	02

Course Objectives:

CLO 1. Learn Web tool box and history of web browsers.
CLO 2. Learn HTML, XHTML tags with utilizations.
CLO 3. Know CSS with dynamic document utilizations.
CLO 4. Learn JavaScript with Element access in JavaScript.
CLO 5. Logically plan and develop web pages..

Teaching-Learning Process (General Instructions)

These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.

1. Lecturer method (L) need not to be only a traditional lecture method, but alternative effective teaching methods could be adopted to attain the outcomes.
2. Use of Video/Animation to explain functioning of various concepts.
3. Encourage collaborative (Group Learning) Learning in the class.
4. Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking.
5. Adopt Problem Based Learning (PBL), which fosters students' Analytical skills, develop design thinking skills such as the ability to design, evaluate, generalize, and analyze information rather than simply recall it.
6. Introduce Topics in manifold representations.
7. Show the different ways to solve the same problem with different circuits/logic and encourage the students to come up with their own creative ways to solve them.
8. Discuss how every concept can be applied to the real world - and when that's possible, it helps improve the students' understanding.

Module-1

Introduction to WEB Programming: Internet, WWW, Web Browsers, and Web Servers, URLs, MIME, HTTP, Security, The Web Programmers Toolbox.

Textbook 1: Chapter 1(1.1 to 1.9)

Teaching-Learning Process	Chalk and board, Active Learning, practical based learning

Module-2

HTML and XHTML: Origins of HTML and XHTML, Basic syntax, Standard XHTML document structure, Basic text markup, Images, Hypertext Links, Lists, Tables. Forms, Frames in HTML and XHTML, Syntactic differences between HTML and XHTML.

Textbook 1: Chapter 2(2.1 to 2.10)

Teaching-Learning Process	Chalk and board, Active Learning, Demonstration, presentation, problem solving

Module-3

CSS: Introduction, Levels of style sheets, Style specification formats, Selector forms, Property value forms, Font properties, List properties, Color, Alignment of text, Background images, tags.

Textbook 1: Chapter 3(3.1 to 3.12)

Teaching-Learning Process	Chalk and board, Demonstration, problem solving

Module-4

Java Script – I: Object orientation and JavaScript; General syntactic characteristics; Primitives,

Operations, and expressions; Screen output and keyboard input.

Textbook 1: Chapter 4(4.1 to 4.5)

Teaching-Learning Process	Chalk and board, Practical based learning, practical's

Module-5

Java Script – II: Control statements, Object creation and Modification; Arrays; Functions; Constructor; Pattern matching using expressions; Errors, Element access in JavaScript.

Textbook 1: Chapter 4(4.6 to 4.14)

Teaching-Learning Process	Chalk and board, MOOC

Course Outcomes (Course Skill Set):

At the end of the course the student will be able to:

CO 1. Describe the fundamentals of web and concept of HTML.
CO 2. Use the concepts of HTML, XHTML to construct the web pages.
CO 3. Interpret CSS for dynamic documents.
CO 4. Evaluate different concepts of JavaScript & Construct dynamic documents.
CO 5. Design a small project with JavaScript and XHTML.

Assessment Details (both CIE and SEE)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks (20 marks). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each course. The student has to secure not less than 35% (18 Marks out of 50) in the semester-end examination (SEE).

Continuous Internal Evaluation (CIE):

NOTE: List of experiments to be prepared by the faculty based on the syllabus mentioned above

CIE marks for the practical course is **50 Marks**.

The split-up of CIE marks for record/ journal and test are in the ratio **60:40**.

- Each experiment to be evaluated for conduction with observation sheet and record write-up. Rubrics for the evaluation of the journal/write-up for hardware/software experiments designed by the faculty who is handling the laboratory session and is made known to students at the beginning of the practical session.
- Record should contain all the specified experiments in the syllabus and each experiment write-up will be evaluated for 10 marks.
- Total marks scored by the students are scaled downed to 30 marks (60% of maximum marks).
- Weightage to be given for neatness and submission of record/write-up on time.
- Department shall conduct 02 tests for 100 marks, the first test shall be conducted after the 8th week of the semester and the second test shall be conducted after the 14th week of the semester.
- In each test, test write-up, conduction of experiment, acceptable result, and procedural knowledge will carry a weightage of 60% and the rest 40% for viva-voce.
- The suitable rubrics can be designed to evaluate each student's performance and learning ability. Rubrics suggested in Annexure-II of Regulation book
- The average of 02 tests is scaled down to **20 marks** (40% of the maximum marks).

The Sum of scaled-down marks scored in the report write-up/journal and average marks of two tests is the total CIE marks scored by the student.

Semester End Evaluation (SEE):

- SEE marks for the practical course is 50 Marks.
- SEE shall be conducted jointly by the two examiners of the same institute, examiners are appointed by the University
- All laboratory experiments are to be included for practical examination.
- (Rubrics) Breakup of marks and the instructions printed on the cover page of the answer script to be strictly adhered to by the examiners. **OR** based on the course requirement evaluation rubrics shall be decided jointly by examiners.

- Students can pick one question (experiment) from the questions lot prepared by the internal /external examiners jointly.
- Evaluation of test write-up/ conduction procedure and result/viva will be conducted jointly by examiners.
- General rubrics suggested for SEE are mentioned here, writeup-20%, Conduction procedure and result in -60%, Viva-voce 20% of maximum marks. SEE for practical shall be evaluated for 100 marks and scored marks shall be scaled down to 50 marks (however, based on course type, rubrics shall be decided by the examiners)
- The duration of SEE is 02 hours

Rubrics suggested in Annexure-II of Regulation book

Textbooks

1. Robert W Sebesta, "Programming the World Wide Web", 6th Edition, Pearson Education, 2008.

Reference Books

1. M.Deitel, P.J.Deitel, A.B.Goldberg, "Internet & World Wide Web How to program", 3rd Edition, Pearson Education / PHI, 2004.
2. Chris Bates, "Web Programming Building Internet Applications", 3rd Edition, Wiley India, 2006.
3. Xue Bai et al, "The Web Warrior Guide to Web Programming", Thomson, 2003.
4. Sklar, "The Web Warrior Guide to Web Design Technologies", 1st Edition, Cengage Learning India

Weblinks and Video Lectures (e-Resources):

1. Fundamentals of WEB Programming: https://www.youtube.com/watch?v=DR9dr6gxhDM
2. HTML and XHTML: https://www.youtube.com/watch?v=A1XlIDDXgwg
3. CSS: https://www.youtube.com/watch?v=J35jug1uHzE
4. Java Script and HTML Documents: https://www.youtube.com/watch?v=Gd0RBdFRvF0
5. Dynamic Documents with JavaScript: https://www.youtube.com/watch?v=HTFSIJALNKc

Tutorial Link:

1. http://www.tutorialspoint.com
2. http://www.w3schools.com

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- Demonstration of simple projects