| 231CSC601T | **Web Technologies** | Periods per | | | | Credits |
|---|---|---|---|---|---|---|
| | | L | T | P | R | |
| Regulation - R23 | | **3** | **0** | **0** | **0** | **3** |

| **SCHEME OF EXAMINATION** | | | | | |
|---|---|---|---|---|---|
| Duration of End Semester Examination | Marks | | | Minimum marks for | |
| | Continuous assessment Examination | End Semester Examination | Maximum marks | End Semester Examination | Total |
| 3 | 40 | 60 | 100 | 45 | 50 |

| **PREREQUISITES:** |
|---|
| Nil |

| **COURSE OBJECTIVES:** | |
|---|---|
| **1.** | To familiar with web page design using HTML |
| **2.** | To be familiar with Cascading Stylesheet |
| **3.** | To learn to create dynamic web pages using javascript. |
| **4.** | To be exposed to creating applications with node.js |
| **5.** | To learn to design responsive web applications using bootstrap |

| **COURSE OUTCOMES (COs):** | | |
|---|---|---|
| Upon completion of this course, student will be able to: | | Bloom's level |
| **CO1:** | Construct Web pages using HTML | K6 |
| **CO2:** | Apply Cascading Style sheets for web application development. | K3 |
| **CO3:** | Build dynamic web pages using Java Script | K6 |
| **CO4:** | Develop Web Applications using node.js. | K5 |
| **CO5:** | Construct responsive Web Applications. | K6 |

| **UNIT** | **TITLE** | **PERIODS** |
|---|---|---|
| **I** | **HTML5** | **8** |
| Internet: Introduction – WWW – Websites - Web Client – Web Servers - URL - DNS - HTML5 - Basic HTML Tags - HTML Lists, HTML Tables - HTML Form Controls. | | |
| **UNIT** | **TITLE** | **PERIODS** |

| II | CASCADDING STYLE SHEET | 9 |
|---|---|---|
| CSS3 - CSS Syntax - CSS Selectors - CSS Types - CSS Box Model – CSS Positioning, CSS Properties (text, font, background, border, margin), CSS transform, CSS transition, CSS Animations, CSS Flex | | |
| **UNIT** | **TITLE** | **PERIODS** |
| **III** | **JAVASCRIPT** | **10** |
| Javascript - JavaScript Introduction - Control Statements - Functions - DOM, Array, Objects and Built in Objects - Event Handling, Classes,JS Web APIs,jQuery, JSON, AJAX. | | |
| **UNIT** | **TITLE** | **PERIODS** |
| **IV** | **NODE.JS FRAMEWORK** | **9** |
| Node.js - HTTP Module,File System Module,URL Module, NPM, Node.js Events-Node.js Upload Files - Node.js MySQL - CRUD - Join | | |
| **UNIT** | **TITLE** | **PERIODS** |
| **V** | **DYNAMIC WEB PROGRAMMING** | **9** |
| BOOTSTRAP, Developing a responsive website, Combining Web Applications and Mobile Applications,API Integration with Front End, Case Study: e-commerce websites and e-carts. | | |

| **TOTAL PERIODS:** | **45** |
|---|---|

| **TEXT BOOKS:** | |
|---|---|
| 1. | Paul J. Deitel, Abbey Deitel and Harvey M. Deitel. Internet and World Wide Web: How to Program, 5/e, Pearson Education |
| 2. | Marc Wandschneider.Learning Node.js: A Hands-On Guide to Building Web Applications in JavaScript, Second Edition |

| **REFERENCE BOOKS:** | |
|---|---|
| **1.** | Duckett, J.(2014). JavaScript and JQuery: Interactive Front-End Web Development. Wiley. |
| **2.** | Node.js Design Patterns - Second Edition: Master best practices to build modular and scalable server-side web applications 2nd Edition, Kindle Edition |

| **WEBSITES:** | |
|---|---|
| **1.** | https://www.w3schools.com/html/ |
| **2.** | https://www.w3schools.com/css/ |
| **3.** | https://www.w3schools.com/js/ |

| **COURSE DESIGNERS** |
|---|

| | | | |
|---|---|---|---|
| 1. | Dr Y. Justin Dhas | HoD / AI&ML | Computer Science and |
| 2. | Dr S Ahamed Ali | Assistant Professor | Computer Science and |

| | | | |
|---|---|---|---|
| **Recommended by Board of** | Date: 10.05.2024 | Syllabus | 1 |
| **Approved by the Academic** | Date: 22.07.2024 | Meeting No. | 7 |