

**School of Computer Science and Engineering**

**Dept. of. Computer Science and Engineering**

**COURSE PLAN**

**Academic Year 2025-26 ODD SEMESTER**

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| --- | --- |
| **School/Department of Students** | **Computer Science and Engineering** |
| **Name of the Program(s) of Students** | **B.Tech-Computer Science and Engineering (CAI,CCS,CIT,COM/CEI,CSD,CSG/CST,CSI,CSN)** |
| **PRC Approval Ref. No.** | **PU/AC-24.05/SOCSE04/SoCSE/2024-2028** |
| **Semester/Year** | **III/II** |
| **Course Code & Name** | **WEB TECHNOLOGIES– CSE2258** |
| **Credit Structure (L-T-P-C)** | **3-0-0-3** |
| **Contact Hours** | **45** |
| **Course In-Charge (IC)** | **Ms.Pushpalatha, Mr. Muthuraju, Dr. Jayanthi Kamalasekaran** |
| **Course Instructor(s)** | **Dr. Anandaraj S P,Dr. Gopal Krishna Shyam, Dr. Ramesh T, Ms.Impa B H,Mr. Jerrin Joe Francis,Ms Pushpalatha M,Ms. Soumya,Mr. Sunil Kumar Sahoo,. Dr. Jayanthi Kamalasekaran, Ms. Sandhya L, Mr. Muthuraju V,Mr. Likhith S R, Ms. Alina Raheen,** **Ms. Sharon,Mr. Santhosh Kumar K L, Dr. Debasmitha Mishra, Ms. Swetha K H, Ms. Poonam Yadav,Ms. Sushmitha S S, Mr. Bikram Sarkar,Ms. Pushpalatha M (NF), Mr Vivek Bongale, Mr. Sakthivel E, Ms. Amreen Khanum D, Ms. Josephine, Dr. Taranath N L,Ms. Rohini A,Mr. Lakshmisha, Mr. Tamil Selvan, Ms. Prachi Amol Gadhikar, Mr. Ranjan Ghosh, Mr. Kirubakaran** |
| **Course URL** | [**https://presidencyuniversity.linways.com**](https://presidencyuniversity.linways.com) |

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| 1. **COURSE PRE-REQUISITES:** |
| *NIL* |

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| 1. **COURSE DESCRIPTION:** |
| *This course highlights the comprehensive introduction to scripting languages that are used for creating web-based applications.*  *The associated laboratory provides an opportunity to implement the concepts and enhance critical thinking and analytical skills.* |

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| 1. **COURSE OBJECTIVES:** |
| The objective of the course is to familiarize the learners with the concepts of **Web Technologies** and attain **Skill Development** through **Experiential Learning techniques**. |

1. **COURSE OUTCOMES:**

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| **TABLE 1: COURSE OUTCOMES** | | |
| **CO Number** | **Statement of CO** | **Blooms Cognitive Level** |
| *On successful completion of the course the students shall be able to* |
| CO1 | Implement web-based application using client-side scripting languages. | Apply |
| CO2 | Apply various constructs to enhance the appearance of a website. | Apply |
| CO3 | Apply server-side scripting languages to develop a web page linked to a database. | Apply |

1. **MAPPING OF COURSE OUTCOMES WITH PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:** 
   1. ***PROGRAM OUTCOMES*:**

On successful completion of the Program, the students will be able to:

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| PO1. | Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. |
| PO2. | Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. |
| PO3. | Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. |
| PO4. | Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions. |
| PO5. | Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations. |
| PO6. | The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. |
| PO7. | Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. |
| PO8. | Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. |
| PO9. | Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. |
| PO10. | Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports anddesign documentation, make effective presentations, and give and receive clear instructions. |
| PO11. | Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one’s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments. |
| PO12. | Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. |

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| **TABLE 2a: CO-PO Mapping** | | | | | | | | | | | | |
| **CO.**  **No** | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** |
| **CO1** | H | M | L | - | M | - | - | - | - | - | - | L |
| **CO2** | H | M | L | - | M | - | - | - | - | - | - | L |
| **CO3** | H | M | L | - | M | - | - | - | - | - | - | L |

* 1. **PROGRAM SPECIFIC OUTCOMES:**

On successful completion of the Program, the students will be able to:

|  |  |
| --- | --- |
| PSO1 | Problem Analysis: Identify, formulate, research literature, and analyze complex engineering problems related to Software Engineering principles and practices, Programming and Computing technologies reaching substantiated conclusions using first principle |
| PSO2 | Design/development of Solutions:Design solutions for complex engineering problems related to Software Engineering principles and practices, Programming and Computing technologies and design system components or processes that meet the specified needs |
| PSO3 | Modern Tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities related to Software Engineering principles and practices, Programme. |

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| **TABLE 2b: CO-PSO Mapping** | | | |
| **CO Number** | **PSO1** | **PSO2** | **PSO3** |
| **CO1** | M | M | L |
| **CO2** | M | M | L |
| **CO3** | M | H | M |

1. **COURSE CONTENT:**

|  |  |  |
| --- | --- | --- |
| Module  Number | Module Name | Number of Sessions |
|  | Introduction to XHTML  Basics: Web, WWW, Web browsers, Web servers, Internet.  XHTML: Origins and Evolution of HTML and XHTML: Basic Syntax, Standard XHTML Document Structure, Basic Text Markup, Images, Hypertext Links, Lists, Tables, Forms, Frames, Syntactic Differences between HTML and XHTML, Demonstration of applications using XHTML for Responsive web pages**.** | 15 |
|  | Advanced CSS  Advanced CSS: Layout, Normal Flow, Positioning Elements, Floating Elements, Constructing Multicolumn Layouts, Approaches to CSS Layout, Responsive Design, CSS Frameworks  XML: Basics, Demonstration of applications using XML with XSLT. | 15 |
|  | PHP  PHP: Introduction to server-side Development with PHP, Arrays, Super global Arrays, $GET and $ POST, $\_SERVER Array, $\_Files Array, Reading/Writing Files, PHP Classes and Objects, Object Oriented Design, working with Databases, SQL, Database APIs, Managing a MySQL Database. Accessing MySQL in PHP, Applications. | 15 |

***REFERENCE MATERIALS:***

**TextBooks:**

T1: Robert. W. Sebesta, "*Programming the World Wide Web"*, Pearson Education, 9th Edition, 2016.

T2. Paul Deitel, Harvey Deitel, Abbey Deital,"Internet & World Wide Web How to Program", Fifth Edition, Pearson Education, 2021.

T3.*CSS Notes for Professionals*, ebook available at https://books.goalkicker.com/CSSBook/ (Retrieved on Jan. 20, 2022)

T4. Deitel, Deitel, Goldberg,"*Internet & World Wide Web How to Program*", Fifth Edition, Pearson

Education, 2021.

**Reference Books:**

R1. Randy Connolly, Ricardo Hoar, “Fundamentals of Web Development”, Pearson Education India, 1st.Edition.2016.

R2. Jeffrey C. Jackson, “Web Technologies: A Computer Science Perspective", Pearson Education, 1st

  Edition,2016.

**Online Resources**

1. W3schools.com
2. Developer.mozilla.org/en-US/docs/Learn
3. docs.microsoft.com
4. informit.com/articles/ The Relationship Between Web 2.0 and Social Networking
5. https://presiuniv.knimbus.com/user#/home

1. **DETAILED SCHEDULE OF INSTRUCTION**

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| **TABLE 3: LESSON PLAN** | | | | |
| **Session Number** | **Topic** | **Sub-Topic** | **CO Number** | **Reference** |
|  | Program Integration & Course Integration | Overview of the Course, Scopes and Opportunities of T and D | CO1 | T1 |
| **Module 1** | | | | |
|  | Introduction to XHTML | Web, WWW, Web browsers, Web servers, Internet.  LO1: List out the difference between the Internet and the World Wide Web?  LO2: Compare and contrast the features of two popular web browsers | CO1 | T1(Pg. 2-8) |
|  | Origins and Evolution of HTML and XHTML  LO1: List out the significant features that were introduced in HTML5?  LO2: Describe the historical context in which HTML was created and its impact on the development of the World Wide Web.. | CO1 | T1(Pg. 34) |
|  | Basic Syntax, Standard XHTML Document Structure  LO1: Name the three main sections of a standard XHTML document.  LO2: Explain the implications of incorrect syntax in an XHTML document.  SDG Goal-4 | CO1 | T1 (Pg. 38) |
|  | Basic Text Markup, Images, Hypertext Links  LO2: Describe the importance of using semantic tags for text markup in modern web development.  LO3: Demonstrate a complex XHTML document structure that incorporates various text markup elements, ensuring semantic correctness and accessibility.  SDG Goal-4 | CO1 | T1(Pg.40-57) |
|  | Lists  LO2: Describe the different types of numbering that can be applied to an ordered list using the type attribute.  LO3: Demonstrate an example of nested unordered lists and explain how they are rendered in a browser. | CO1 | T1(Pg.58-62) |
|  | Tables  LO2: Explain a complex table structure that includes merged cells (using colspan and rowspan.  LO3: Demonstrate a table using basic HTML to represent a monthly calendar, including merged cells for days and events. Explain the challenges and solutions involved in this design.. | CO1 | T1(Pg.63-68) |
|  | Forms  LO2: Interpret a form using basic HTML to collect user feedback, including fields for name, email, rating, and comments. Explain the challenges and solutions involved in creating a user-friendly and accessible form.  LO3: Illustrate the impact of using different input types (text, password, email, number, etc.) on form validation and user experience. Provide examples and discuss potential use cases. | CO1 | T1 (Pg.69-82) |
|  | Forms  LO2: Interpret a form using basic HTML to collect user feedback, including fields for name, email, rating, and comments. Explain the challenges and solutions involved in creating a user-friendly and accessible form.  LO3: Illustrate the impact of using different input types (text, password, email, number, etc.) on form validation and user experience. Provide examples and discuss potential use cases.  SDG Goal-4 | CO1 | T1 (Pg.69-82) |
|  | Frames  LO2: Summarize the implications of using nested framesets in a complex web application. Discuss the potential challenges and benefits, and provide an example of an appropriate use case.  LO3: Demonstrate a web page using a combination of <frameset>, <frame>, and <noframes> tags to create a layout that includes a static navigation bar and a dynamic content area. Explain your design choices and how they address usability and accessibility concerns. | CO1 | T1 (Pg.35) |
|  | Frames  LO2: Summarize the implications of using nested framesets in a complex web application. Discuss the potential challenges and benefits, and provide an example of an appropriate use case.  LO3: Demonstrate a web page using a combination of <frameset>, <frame>, and <noframes> tags to create a layout that includes a static navigation bar and a dynamic content area. Explain your design choices and how they address usability and accessibility concerns. | CO1 | T1 (Pg.35) |
|  | Syntactic Differences between HTML and XHTML  LO1: Name one major similarity between HTML and XHTML.  LO2: Describe the implications of improperly nested tags in XHTML compared to HTML. | CO1 | T1 (Pg.89) |
|  | Sample static Web Page Design | CO1 | T1  (Pg-2-89) |
|  | Sample static Web Page Design | CO1 | T1  (Pg-2-89) |
|  | Continuous Assessment-I | | |
| **Module 2** | | | | |
|  | Advanced CSS | Advanced CSS: Layout, Normal Flow  LO2: Compare and contrast the display properties block, inline, inline-block, and flex in terms of layout behavior and use cases.  LO3: Illustrate an example of how to create a sticky header or footer using CSS positioning or floats. Discuss the pros and cons of each approach. | CO2 | T1(Pg.95) |
|  | Advanced CSS: Layout, Normal Flow  LO2: Compare and contrast the display properties block, inline, inline-block, and flex in terms of layout behavior and use cases.  LO3: Illustrate an example of how to create a sticky header or footer using CSS positioning or floats. Discuss the pros and cons of each approach. | CO2 | T1(Pg.95) |
|  | Positioning Elements  LO2: Differentiate the positioning properties position: relative, position: absolute, position: fixed, and position: sticky. Provide examples of when each would be appropriate for different layout scenarios.  LO3: Investigate the impact of CSS positioning techniques on web performance and rendering speed. Conduct performance tests and propose optimization strategies based on your findings. | CO2 | T3(Pg.148) |
|  | Positioning Elements  LO2: Differentiate the positioning properties position: relative, position: absolute, position: fixed, and position: sticky. Provide examples of when each would be appropriate for different layout scenarios.  LO3: Investigate the impact of CSS positioning techniques on web performance and rendering speed. Conduct performance tests and propose optimization strategies based on your findings. | CO2 | T3(Pg.148) |
|  | Floating Elements, Constructing Multicolumn Layouts  LO2: Describe the challenges of using floats for layout compared to modern techniques like Flexbox and CSS Grid.  LO3: Interpret how CSS Grid's auto-placement feature can be used to create flexible multicolumn layouts that adapt to varying content sizes and screen resolutions. | CO2 | T3(Pg.157) |
|  | Floating Elements, Constructing Multicolumn Layouts  LO2: Describe the challenges of using floats for layout compared to modern techniques like Flexbox and CSS Grid.  LO3: Interpret how CSS Grid's auto-placement feature can be used to create flexible multicolumn layouts that adapt to varying content sizes and screen resolutions. | CO2 | T3(Pg.157) |
|  | Approaches to CSS Layout, Responsive Design, CSS Frameworks.  LO2: Explain the benefits of using a CSS framework (e.g., Bootstrap, Foundation) for layout consistency and rapid prototyping. What are the drawbacks?  LO3: Illustrate how a CSS framework simplifies the implementation of responsive design principles. What challenges might arise when customizing a framework's default styles? | CO2 | W1 |
|  | Approaches to CSS Layout, Responsive Design, CSS Frameworks.  LO2: Explain the benefits of using a CSS framework (e.g., Bootstrap, Foundation) for layout consistency and rapid prototyping. What are the drawbacks?  LO3: Illustrate how a CSS framework simplifies the implementation of responsive design principles. What challenges might arise when customizing a framework's default styles?  SDG Goal-10 | CO2 | W1 |
|  |  | **MID TERM** |  |  |
|  | Advanced CSS | Midterm Exam Question Paper and Scheme of Evaluation – Discussion | | |
|  | XML: Basics, demonstration of applications using XML  LO1: Name one major difference between XML and HTML.  LO2: Describe the role of XSLT (eXtensible Stylesheet Language Transformations) in transforming XML documents into different formats, such as HTML or plain text. | CO2 | T3(Pg.544) |
|  | XML example  LO2: Interpret an XML schema for a bookstore database that includes elements for books, authors, publishers, and genres. Include constraints such as data types and uniqueness. Validate an XML instance document against this schema.  LO3: Differentiate XML Schema (XSD) with Document Type Definition (DTD). What are the advantages of using XML Schema over DTDs for validating XML documents? | CO2 | T3(Pg.558) |
|  | XML example  LO2: Interpret an XML schema for a bookstore database that includes elements for books, authors, publishers, and genres. Include constraints such as data types and uniqueness. Validate an XML instance document against this schema.  LO3: Differentiate XML Schema (XSD) with Document Type Definition (DTD). What are the advantages of using XML Schema over DTDs for validating XML documents?  SDG Goal-10 | CO2 | T3(Pg.558) |
|  | Sample Web Page Design with all positioning Elements | CO2 | T1(Pg.95)  T3(Pg.148 to 558) |
|  | Sample Web Page Design with all positioning Elements | CO2 | T1(Pg.95)  T3(Pg.148 to 558) |
|  | Continuous Assessment-II | | |
| **Module 3** | | | | |
|  | PHP | Introduction to server-side Development with PHP  LO1: List out the basic syntax rules for writing PHP code. Provide an example of a simple PHP script.  LO2: Describe the difference between local and global variables in PHP. When would you use each type? | CO3 | T3 (Pg.697) |
|  | Introduction to server-side Development with PHP  LO1: List out the basic syntax rules for writing PHP code. Provide an example of a simple PHP script.  LO2: Describe the difference between local and global variables in PHP. When would you use each type? | CO3 | T3 (Pg.697) |
|  | Arrays  LO2:Describe how you can sort an indexed array in PHP using both ascending and descending order. Provide code examples for each sorting method.  LO3: Demonstrate a PHP script that dynamically generates a multidimensional array representing a hierarchical data structure (e.g., organizational chart, nested categories). Discuss the logic and data representation used. | CO3 | T3(Pg.706) |
|  | Arrays  LO2:Describe how you can sort an indexed array in PHP using both ascending and descending order. Provide code examples for each sorting method.  LO3: Demonstrate a PHP script that dynamically generates a multidimensional array representing a hierarchical data structure (e.g., organizational chart, nested categories). Discuss the logic and data representation used. | CO3 | T3(Pg.706) |
|  | Super global Arrays  LO2: Describe the scope and lifetime of superglobal arrays in PHP scripts. How are they accessed and manipulated within different parts of a web application?  LO3: Illustarte a PHP script that dynamically reads and processes query parameters from the URL using the $\_GET superglobal array. Handle scenarios such as URL validation and parameter filtering. | CO3 | T3 (Pg.714) |
|  | Super global Arrays  LO2: Describe the scope and lifetime of superglobal arrays in PHP scripts. How are they accessed and manipulated within different parts of a web application?  LO3: Illustarte a PHP script that dynamically reads and processes query parameters from the URL using the $\_GET superglobal array. Handle scenarios such as URL validation and parameter filtering. | CO3 | T3 (Pg.714) |
|  | $GET and $ POST,  $\_SERVER Array, $\_Files Array  LO2: Identify the differences between $\_GET and $\_POST in PHP. When would you use each of these super global arrays for passing data?  LO3: Interpret a PHP script that uses $\_SERVER variables | CO3 | T1 (Pg.572) |
|  | $GET and $ POST,  $\_SERVER Array, $\_Files Array  LO2: Identify the differences between $\_GET and $\_POST in PHP. When would you use each of these super global arrays for passing data?  LO3: Interpret a PHP script that uses $\_SERVER variables | CO3 | T1 (Pg.572) |
|  | Reading/Writing Files  LO2: Outline the best practices for handling file permissions and security when writing files in PHP. How can you prevent unauthorized access and ensure data integrity in file writing operations?  LO3: Execute a PHP application that processes large binary files (e.g., images, videos) using fread() and fwrite() functions, ensuring efficient memory usage and minimal resource consumption. Discuss buffering techniques and stream handling optimizations. | CO3 | W1 |
|  | Reading/Writing Files  LO2: Outline the best practices for handling file permissions and security when writing files in PHP. How can you prevent unauthorized access and ensure data integrity in file writing operations?  LO3: Execute a PHP application that processes large binary files (e.g., images, videos) using fread() and fwrite() functions, ensuring efficient memory usage and minimal resource consumption. Discuss buffering techniques and stream handling optimizations.  SDG Goal-8 | CO3 | W1 |
|  | PHP Classes and Objects, Object Oriented Design  LO2: Describe the process of creating an object from a PHP class using the new keyword. Provide a code example demonstrating object instantiation.  LO3: Discuss the concept of inheritance in PHP classes. Provide an example of a base class and a derived class, demonstrating inheritance through method overriding. | CO3 | W1 |
|  | Working with Databases, SQL  LO2: List and briefly explain the common SQL commands (SELECT, INSERT, UPDATE, DELETE).  LO3: Demonstrate the use of PHP functions (mysqli\_query(), mysqli\_fetch\_array()) for executing SQL queries and processing query results. Compare procedural and object-oriented approaches to interacting with MySQL databases in PHP. | CO3 | T3 (Pg.719) |
|  | Database APIs  LO2: Summarize what PDO (PHP Data Objects) is and its role in PHP database connectivity.  LO3: Demonstrate a PHP application that serves as a RESTful API for CRUD operations on a MySQL database (products). Implement endpoints for GET, POST, PUT, and DELETE operations using PHP and PDO. | CO3 | T3 (Pg.722) |
|  | Managing a MySQL Database, Accessing MySQL in PHP  LO2: Outline the steps involved in establishing a connection to a MySQL database using MySQLi (MySQL Improved) in PHP. Provide a code example that demonstrates connecting to a MySQL database (dbname) hosted on localhost.  LO3: Demonstrate strategies for optimizing SQL queries in PHP applications connected to MySQL databases. Implement a PHP script that uses MySQL EXPLAIN to analyze query execution plans and optimize indexes (EXPLAIN SELECT ...).  SDG Goal-8 | CO3 | T3 (Pg.780) |
|  | Continuous Assessment-III | | |

**The main pedagogical methods in the course are as follows:**

* Collaborative Learning
* Participative Learning
* Experimental Learning
* Self-Learning

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| **TABLE 4: SPECIAL DELIVERY METHOD** | | | |
| **S. No** | **Session Number** | **Subtopic**  **(as per lesson plan)** | **Pedagogical Method** |
|  | 11 | Frames & syntactic difference between HTML &XHTML | Collaborative Learning |
|  | 23 | Responsive Design | Participative Learning |
|  | 44 | Accessing MySQL in PHP | Experimental Learning |
|  | - | JavaScript,RDBMS,PHP Cookies,HTML5 | Self-Learning |

1. **ASSESSMENT SCHEDULE**

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| **TABLE 5: ASSESSMENT SCHEDULE** | | | | | | |
| **Sl. No** | **Assessment**  **Type** | **Coverage** | **CO**  **Number(s)** | **Duration**  **in Minutes** | **Marks** | **Weightage** |
|  | Continuous Assessment 1(Coding Quiz) | Module-1 | CO1 | 60 | 15 | 7.5% |
|  | Continuous Assessment 2(Assignment) | Module 2 | CO2 | 60 | 15 | 7.5% |
|  | Midterm Exam | Module- 1&2 | CO1 & CO2 | 90 | 50 | 25% |
|  | Continuous Assessment 3(Mini Project | Module- 1,2,3 | CO1,CO2,CO3 | 60 | 20 | 10% |
|  | End Term Examination | Module-1,2,3 | CO1, CO2, CO3, | 180 | 100 | 50% |

1. **COURSE CLEARANCE CRITERIA:**

This is in accordance with the Academic Regulations of the University and the Program Regulations and Curriculum of the respective program.

1. **SAMPLE QUESTIONS:**

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| **TABLE 6: SAMPLE QUESTIONS** | | | | |
| **Sl. No** | **Question** | **Marks** | **CO Number** | **Blooms Cognitive Level** |
| 1 | The Student Welfare department at Presidency University is planning to organize a cultural fest. Cultural events are to be held with Singing, Dance, Skit, Fashion Show etc. Students should register the interesting events. Assist the web page design team to create a registration form for the Fest using appropriate HTML tags. The web page should be having following things: • The top of the page will display the Cultural event Banner (including image and text) and other related information. • The Registration page will get the following details from the participants. Participant Name, Branch, section, E-mail id, mobile no, Gender, Events (Dance, Singing etc),etc. | 10 | CO1 | **Apply** |
| 2 | Imagine a student who wants to learn JAVA course through online is enquiring through website. The website collects the details of the student through form whose fields are name of the student, password, age, address, gender (select gender), mobile number, email id, Name of the course (multiple options should be given), submit, reset. Design a static website using appropriate HTML tags which takes the input from student and displays the output as “successfully registered”. | 10 | CO1 | **Apply** |
| 3 | Demonstrate a tourist agency web page with following specifications using HTML and CSS: •Title should be about tourist agency  •Place your tourist agency name and address at the top of the page in large text, text border, text background color and text color in blue.  •Middle of the page list out some features about your tourist agency with font styles.  •Bottom of the page landmarks and contact details of tourist agency with different color, style.  •Add scrolling text with some offer message. | 10 | CO2 | **Apply** |
| 4 | Prepare a customer management system for a small business. It should allow employees to add new customers, update existing customer information, view customer details, and delete customers. Tasks: 20 Marks L5 CO3  •Design a database schema to store customer information such as name, email, phone number, and address. •Create forms for adding new customers and updating existing ones. •Display a list of customers with their details, and provide options for editing or deleting each customer. •Implement search functionality to allow users to find customers by name or email. | 20 | CO3 | **Apply** |
|  | Prepare a system for managing a product inventory. It should allow users to add new products, update existing products, view product details, and delete products from the inventory. Tasks: •Design a database schema for storing product information such as name, description, price, and quantity. •Create PHP scripts to interact with the database for CRUD (Create, Read, Update, Delete) operations. •Implement forms for adding new products and updating existing ones. •Display a list of products with their details, and provide options for editing or deleting each product. Ensure proper error handling and validation for user input. | 20 | CO3 | **Apply** |

1. **MAPPING WITH SUSTAINABLE DEVELOPMENT GOALS (SDGs):**

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| **TABLE 7: SDG MAPPING** | | | |
| **S. No** | **Topic** | **SDG Number** | **Justification** |
| **1** | XHTML elements, hyperlinks, forms | SDG 4 – Quality Education | Teaches students to build inclusive, accessible, and responsive web pages—empowering education and reducing digital divides. |
| **2** | CSS layouts, responsive design, XML/XSLT | SDG 10 – Reduced Inequalities | Promotes the development of modern, flexible web interfaces usable across devices, supporting innovation and inclusiveness. |
| **3** | PHP scripting, form handling, database access | SDG 8 – Decent Work & Economic Growth | Enables students to build dynamic, secure platforms (e.g., job portals, e-governance sites), fostering entrepreneurship and transparency. |

1. **CRITERIA FOR COURSE OUTCOME ATTAINMENT CALCULATION:**

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| **TABLE 8: Threshold and Target Set for Course Outcomes** | | | | |
| **Sl. No** | **C.O. No.** | **Course Outcomes** | **Threshold in %** | **Target in %** |
|  | CO1 | Implement web-based application using markup languages | 60% | 65% |
|  | CO2 | Illustrate the use of various constructs to enhance the appearance of a website. | 60% | 60% |
|  | CO3 | Apply server-side scripting languages for web page design and link to a database. | 60% | 60% |

1. **SUMMARY:**

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| **TABLE 9: SUMMARY OF COURSE SCHEDULE** | | | | |
| **Sl. No.** | **Activity** | **Start date** | **End date** | **Total number of Sessions** |
|  | Program Integration & Over View of the course | 11.08.2025 | 11.08.2025 | **01** |
|  | **Module : 01:** | 12.08.2025 | 08.09.2025 | **12** |
|  | Continuous Assessment 1 | 08.09.2025 | 08.09.2025 | **01** |
|  | **Module : 02:** Advanced CSS | 09.09.2025 | 10.10.2025 | **13** |
|  | Continuous Assessment 2 | 13.10.2025 | 13.10.2025 | **01** |
|  | **Midterm Exam** | 07.10.2025 | 11.10.2025 | **-** |
|  | Midterm Exam question paper discussion | 14.10.2025 | 14.10.2025 | **01** |
|  | **Module:03:** PHP | 15.10.2025 | 24.11.2025 | **13** |
|  | Continuous Assessment 3 | 25.11.2025 | 25.11.2025 | **01** |
|  | Revivsion | 25.11.2025 | 28.11.2025 | **02** |

**CONTACT TIMINGS IN THE CHAMBER FOR DISCUSSION**

Students can meet the respective course instructor during the Chamber Consultation Hour to clarify doubts related to the course.

**SPECIFIC GUIDELINES TO STUDENTS, IF ANY:**

1. Students are instructed to attend classes regularly.
2. Students are instructed to strictly adhere to the assignment deadlines.
3. Students are instructed to actively participate in Collaborative, Participative and Experimental Learning and in any other classroom discussions
4. Students are instructed to maintain running notes for the course.

Ms.PUSHPALATHA

Name and Signature of the course In-Charge

APPROVAL:

This course has been duly verified and approved by the Departmental Academic Committee (DAC).

Name and Signature of the Chairperson - DAC