BNM Institute of Technology

Dept. of Computer Science and Engineering

Choice Based Credit System (CBCS and Outcome Based Education (OBE)

Semester: IV

Course Name: Web Technology and its Applications **Course Code: 22CSE146**

L: T: P: J	**0: 0: 2: 2**	**CIA Marks:** 50
Credits:	**2**	**SEA Marks:** 50
Hours/Week (Total)	**4 (30)**	**SEA Duration:** 03 Hours

Pre-Requisites: Fundamentals of Programming and Networking

Course Learning Objectives: The students will be able to

1	To explain web application development procedures
2	To impart servlet technology for writing business logic
3	To teach students the basics of server-side scripting using PHP
4	To facilitate students to connect to databases using JDBC

Module-1:	No. of Hours	BLL with CO mapping
Introduction to HTML: The development process, Html tags and simple HTML forms, web site structure Introduction to XHTML: XML, Move to XHTML, Meta tags, Character entities, frames and frame sets.	6	1 Understand
Module-2:		
Style sheets: Need for CSS, introduction to CSS, basic syntax and structure, using CSS, background images, colors and properties, manipulating texts, using fonts, borders and boxes, margins, padding lists, positioning using CSS, CSS2.	6	2 Understand
Module-3:		
JavaScript: Client-side scripting, what is JavaScript, how to develop JavaScript, simple JavaScript, variables, functions, conditions, loops and repetition DHTML: Combining HTML, CSS and JavaScript, events and buttons, controlling your browser	6	3 Apply
Module-4:		
XML: Introduction to XML, uses of XML, simple XML, XML key components, DTD and Schemas, Well formed, using XML with application.XML, XSL and XSLT. Introduction to XSL, XML transformed simple example, XSL elements.	6	4 Apply
Module-5:		
PHP: Introduction and basic syntax of PHP, decision and looping with examples, PHP and HTML, Arrays, Functions, Browser control and detection, string, Form processing, Files, Advance Features: Cookies and Sessions. Databases: Basic command with PHP examples, Connection to server, creating database, selecting a database, listing database, listing table names creating a table, inserting data, altering tables, queries, deleting database, deleting data and tables.	6	5 Create

Handson Practice sets	
Practical Set -1 HTML	
✓	Design web pages for your college containing a description of the courses, departments, faculties, library etc, use href, list tags.
✓	Create your class timetable using table tag.
✓	Create user Student feedback form (Use textbox, text area, checkbox, radio button, select box etc.)

✓	Create your resume using HTML tags also experiment with colors, text, link, size and also other tags you studied.
✓	At the bottom create a link to take user to the top of the page
Practical Set -2 CSS	
✓	Design a web page of your home town with an attractive background color, text color, an Image, font etc. (use internal CSS).
✓	Use Inline CSS to format your resume that you created.
✓	Use External CSS to format your class timetable as you created.
✓	Use External, Internal, and Inline CSS to format college web page that you created.
Practical Set -3 JavaScript	
✓	Develop a JavaScript to display today's date.
✓	Develop simple calculator for addition, subtraction, multiplication and division operation using JavaScript
✓	Create HTML Page with JavaScript which takes Integer number as input and tells whether the number is ODD or EVEN.
✓	Create HTML Page that contains form with fields Name, Email, Mobile No,Gender, Favorite Color and a button now write a JavaScript code to combine and display the information in textbox when the button is clicked.
✓	Implement Validation in above Feedback Form.
✓	Use regular expression for validation in Feedback Form.
✓	Write a JavaScript program to change background color after 5 seconds of page load.
Practical Set -4 XML	
✓	Create XML file to store student information like Enrollment Number, Name, Mobile Number, Email Id.
Practical Set -5 PHP	
✓	Write a php program to display today's date in dd-mm-yyyy format.
✓	Write a php program to check if number is prime or not.
✓	Create HTML page that contain textbox, submit / reset button. Write php program to display this information and also store into text file.
✓	Write a PHP Script for login authentication. Design an html form which takes username and password from user and validate against stored username and password in file.
✓	Write PHP Script for storing and retrieving user information from MySql table. 1. Design A HTML page which takes Name, Address, Email and Mobile No. From user (register.php) 2. Store this data in Mysql database / text file. 3. Next page display all user in html table using PHP (display.php)
✓	Write a PHP script for user authentication using PHP-MYSQL. Use session for storing username.
Mini Project: Website	
Students have to create a website which contains above topics in Website.	

Course Outcomes: After completing the course, the students will be able to	
22CSE146 .1	Understand the HTML tags and use them to develop the user-friendly web pages.
22CSE146 .2	Understand the CSS with its types and use them to provide the styles to the web pages at various levels
22CSE146 .3	Develop the dynamic web pages by using the JavaScript
21CSE146 .4	Build the web pages dynamically using the database connectivity and applying server-side scripting with XML and PHP
21CSE146 .5	Create the modern Web applications using the client and server-side technologies and the web design fundamentals.

Reference Books
• Developing Web Applications, Ralph Moseley and M. T. Savaliya, Wiley-India • Web Technologies, Black Book, dreamtech Press • HTML 5, Black Book, dreamtech Press • Developing Web Applications in PHP and AJAX, Harwani, McGrawHil

Marks Distribution for Assessment:

CIA (50)	**Component**	**Description**	**Marks**
	Written Test	Total Number of Test: 2 Each Theory test will be conducted for 30 marks Average of 2 tests = 30 Marks	30
	Practical	Weekly Assessment (Record / Project)	10
		Lab IA Test	10
		Total Marks	50
SEA (50)	**Component**	**Description**	**Marks**
	Project	Write up – 10 marks Project Report – 25 marks Presentation and demonstration – 50 marks Viva – voce – 15 marks	100 marks reduced to 50 marks
		Total marks for the Course	**100**