

**Web Programming Technologies**  
**Paper Code: CSC-3076/ INF-3016**  
**Course Plan**  
**Session: 2022-23**

Unit	Lecture No.	Topic
Unit 1	1	History and basic idea of Internet.
	2	Different types of Internet services, such as, telnet, e-mail, ftp, WWW, etc.
Unit 2	3	Designing web pages with HTML
	4	Use of different tags, hyper-links, URLs in HTML
	5	HTML Tables
	6	HTML text formatting, graphics & multimedia.
	7	Image-map and frames in HTML
	8	Designing Forms in web pages and different input types
	9	Use of Cascading Style Sheet in web pages.
	10	Selectors in CSS
	11	CSS box, dealing with Border, Margin and Padding
	12	CSS Grid
	13	CSS Flexbox
Unit 3	14	Basics of JavaScript overview
	15	JavaScript variables
	16	Execution Context in JS Engine
	17	Hoisting in JavaScript
	18	Let and Const in JavaScript
	19	Concept of Functions in JavaScript

Unit 3	20	Scope Chain and Lexical Environment
	21	Creating user-defined & built-in functions
	22	Blocks and Shadowing
	23	Closures and Callback functions in JavaScript
	24	Client-side form validation using properties and methods of built-in objects.
	25	Creating interactive and dynamic web pages with JavaScript
Unit 4	26	Basics of PHP
	27	PHP Form Handling and Form Validation
	28	Basics of Standard Generalized Markup Language (SGML) such as structures, elements.
	29	Content models, DTD, attributes, entities in SGML
Unit 5	30	Introduction to using user-defined tags in web pages
	31	Displaying XML contents, Creating XML DTDs, Use of XSL.
	32	XML Sitemaps, Search engine optimization
	33	Creating interactive CRUD application
Unit 3	34	Node JS
	35	Node JS
	36	React JS
	37	React JS
	38	Creating a simple interactive website using React
	39	Introduction to MERN and NoSQL
Unit 6	40	Functions and working principle of web browsers
	41	Plug-ins & helper applications, Conceptual architecture of some typical web browsers
Unit 7	42	Basics of client-server computing, Types of Client/Server systems
	43	Fat Clients versus Fat Servers.

Unit 8	44	Web services and web server functionality, Web server composition and registration
	45	Basics of HTTP, IP address, DNS & ports
	46	Working of DNS resolution
Unit 9	47	Overview of CGI, ASP, and JSP, Server side scripting using PHP,
	48	Web database connectivity- introduction to ODBC
	49	Working on PHP with database connectivity.
Unit 10	50	Distributed Object based models- DCOM, CORBA, EJB, Web services and Related Technologies
	51	Security issues in Internet, Use of Semantic web designs
Unit 11	52	Types of Firewalls, such as, definition and their Network layer firewalls and application layer firewalls, Proxy servers.

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