MCPE2004 Internet and Web Technology (3-0-0)

Course Objectives:

- To learn about the concept of Internet and a Web
- To learn how to design Website
- To learn about client scripting and server scripting language to implement client server communication

Module-1: TCP/IP Overview

TCP/IP and Internet: Layers of TCP/IP, Network Layer: Addressing, Sub netting, Introduction to WWW, WWW Architecture, URL, Domain Name, Overview of HTTP, Client server model, Web browser and Web servers, Generation of dynamic web pages, Features of Web 2.0, Web Hosting.

Web Design: Concepts of effective web design, Web design issues including Browser, Bandwidth and Cache, Display resolution, Look and Feel of the Web site, Page Layout and linking, User centric design, Sitemap, Planning and publishing website, Designing effective navigation

Module-2: HTML and CSS

HTML: Basics of HTML, formatting and fonts, commenting code, color, images, hyperlink, lists, tables, forms, XHTML, Meta tags, Character entities, frames and frame sets, features of HTML5. **Style sheets**: Need for CSS, introduction to CSS, basic syntax and structure, using CSS, Internal ,External and Inline style, Background images, colors and properties, Manipulatingtext, Margins and Padding, Positioning using CSS.

XML: Introduction to XML, uses of XML, simple XML, XML key components, DTD and Schemas

Module-3: JavaScript

JavaScript: Client side scripting with JavaScript, variables, functions, conditions, loops and repetition**Advance JavaScript**: JavaScript and objects, JavaScript Built in objects, the DOM and web browser environments, Manipulation using DOM, forms and validations

DHTML: Combining HTML, CSS and JavaScript, Events and buttons

Module-4: PHP

Introduction and basic syntax of PHP, decision and looping statement, Arrays, Functions, Browser control and detection, string handling, Form processing ,Files ,PHP with Database connectivity, Cookies and Session handling in PHP

Reference Books:

- 1. Developing Web Applications, Ralph Moseley and M. T. Savaliya, Wiley-India
- 2. Web Technologies, Black Book, dreamtech Press
- 3. HTML 5, Black Book, dreamtech Press
- 4. The Complete Reference PHP, Steven Holzner, Tata McGraw Hill, 2008.
- 5. PHP & MySQL in easy Steps, Mike Mcgrath, Tata McGraw Hill, 2012.
- 6. Web Design, Joel Sklar, Cengage Learning
- 7. Internet and World Wide Web How to program, P.J. Deitel & H.M. Deitel, Pearson