

MSCS202 INTERNET AND WEB TECHNOLOGY (3-0-0)

Module I: 9 Hours

Internet Architecture: Internet overview, ISPs, TCP/IP model, TCP/IP vs OSI model. Introduction to PHP: Declaring variables, data types, arrays, strings, operators, expressions, control structures, functions, Reading data from web form controls like text boxes, radio buttons, lists etc., File Handling

Connecting to database (MySQL as reference), executing simple queries, handling results, Handling sessions and cookies.

Module II: 9 Hours

HTML: HTML Overview, Structure of HTML Documents, Document Types, HTML Elements and attributes. Anchor Attributes, Image Tag and its attributes, Image and Anchors, Table.

Image Map: Attributes, Client Side Image Maps and Server Side Maps. HTML Layout: Background, colors and text, Tables, Frames, Layers, Page content Division <Div>, . CSS: Style Sheet Basic, Properties, Positioning with Style Sheet. Forms: <FORM> Elements, Form controls. Dynamic HTML.

Module III: 9 Hours

Java Script: Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security. Operators: Assignment Operators, Comparison Operators, Arithmetic Operators, Increment, Decrement, Unary Negation, Logical Operators, String Operators, Special Operators, Conditional operator, Comma operator, delete, new, this, void. Statements: Break, comment, continue, delete, do ... while, export, for, for...in, function, if...else, import, labelled, return, switch, var, while. JavaScript (Properties and Methods of Each) :Array, Boolean, Date, Function, Math, Number, Object, String, regExp. Document and its associated objects, document, Link, Area, Anchor, Image, Applet, Layer. Events and Event Handlers: General Information about Events, Defining Event Handlers.

Module IV: 9 Hours

XML: Introduction to XML, Defining XML tags, their attributes and values, Document Type Definition, XML Schemes, Document Object Model, XHTML Parsing XML Data – DOM and SAX Parsers in java.

Introduction to JSP: The Anatomy of a JSP Page, JSP Processing, Declarations, Directives, Expressions, Code Snippets, implicit objects.

Server Side Programming: Common Gateway Interface (CGI), Active Server Pages.

Internet applications: E-commerce and security issues including symmetric and asymmetric key, encryption and digital signature, and authentication, firewall.

Text Book:

1. HTML, The Complete Reference by Thomas Powell, 5th Edition, Tata McGrawHill, 2010.
2. JavaScript the Complete Reference, Thomas Powell, Fritz Schneider, 3rd Edition, Tata McGrawHill, 2012 .

Reference Book:

1. The Complete Reference PHP, 1st Edition, Steven Holzner, Tata McGraw Hill, 2007
2. An Introduction to XML and Web Technologies, Abders Moller and Michael Schwartzbach, 1st Edition, Addison Wesley, 2009.