

7. Rajib Mall, Fundamentals of Software Engineering, (Fifth Edition), PHI Learning Pvt Ltd.

2nd Semester	MCA02005	Internet and Web Programming	L-T-P 3-0-0	3 CREDITS
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Module I (8 Periods)

Internet Architecture: Internet overview, evolution of internet. Internet components: Local Area Networks, Access Networks, Core Networks, Routers, Transmission infrastructure, ISPs. TCP/IP model, TCP/IP vs OSI model. HTML: HTML Overview, Structure of HTML Documents, Document Types, HTML Elements and attributes. Anchor Attributes, Image Tag and its attributes, Image and Anchors, Table.

Module II (8 Periods)

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 (8 Periods)

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.

Module IV (8 Periods)

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, event.

Module V (8 Periods)

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

Internet applications: FTP, Telnet, Email, Chat. World Wide Web: HTTP protocol. Search Engines. E-commerce and security issues including symmetric and asymmetric key, encryption and digital signature, and authentication. Emerging trends, Internet telephony, and virtual reality over the web, etc. Intranet and extranet, firewall.

Books:

1. Computer Networking: A Top-Down Approach Featuring the Internet by Kurose and Ross, Pearson.
2. Web Design the Complete Reference by Thomas Powell, Tata McGrawHill.
3. HTML The Complete Reference by Thomas Powell, Tata McGrawHill.