

# PIT6I102 INTERNET AND WEB TECHNOLOGY

## UNIT-I INTRODUCTION TO INTERNET

Introduction, Evolution of Internet, WEB2.0 and Evolution of WWW. Internet Protocol - TCP/IP, UDP, HTTP, Secure Http(https) Internet Addressing Scheme – Ipv4 & IPv6, Domain Name Server and IP Addresses-Mapping. Building Web Sites: Planning for designing Web pages, site navigation, model and structure of a Website, Web Servers, Web Browsers, Two Tier and Three Tier Web Based Architecture

## UNIT-II HTML CSS AND SCRIPTING

**HTML** – Introduction, SGML, DTD(Document Type Definition). Basic HTML using images links, Lists, Tables and Forms, Frames for designing a good interactive website. HTML Standards, Issues in HTML

**HTML5:** Migration, New Elements, Semantics, Canvas, SVG, Google Maps, Multimedia, APIs

**CSS:** Syntax, Class Selector, Id Selector. External and Internal Style Sheets, Inline Style, and The class selector, div & span tags. Change the properties like background images, colors, and manipulating texts, using fonts, borders and boxes, margins, padding lists, positioning using CSS.

**CSS3:** Rounded Corners, Border Images, Gradients, Shadows, 2D and 3D Transforms, Transitions, Animations, object-fit, Multiple Columns, Box Sizing, Flexbox.

**Java Script** – Java Script Object Model, Variables-Constant – Expressions, Conditions-Relational Operators- Data Types – Flow Control – Popup Boxes, Try.... Catch Statement, Throw Statement, and Objects of JavaScript: Date object, array object, Boolean object, math object Functions & Objects-events and event handlers – Data type Conversion & Equality – Accessing HTML form elements. Email and password validations.

## UNIT-III XML and JAVA Applets

What is XML – Basic Standards, Schema Standards, Linking & Presentation Standards, Standards that build on XML, Generating XML data, Writing a simple XML File, Creating a Document type definition, Documents & Data ,Defining Attributes & Entities in the DTD ,Defining Parameter Entities & conditional Sections, Designing an XML data structure, XML Normalization.

Approaches to Dynamic Pages: CGI, Java Applets, Plug Ins, Active X controls, Java Applet: Introduction to Java, Writing Java Applets, Life cycle of applet, Design a login page using applets. Designing of applications using applet.

## UNIT-IV INTERNET SECURITY & FIREWALLS

Security Threats From Mobile Codes, Types Of Viruses, Client Server Security Threats, Data & Message Security, Various electronic payment systems, Introduction to EDI, Challenges–Response System, Encrypted Documents And Emails , Firewalls: Hardened Firewall Hosts, Ip- Packet Screening, Proxy Application Gateways, Aaa (Authentication , Authorization And Accounting).

## UNIT-V PHP

PHP: Starting to script on server side, Arrays, function and forms. Advance PHP: File Upload, Cookies, Sessions, Filters, Error Handling, Exception

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, PHP myadmin and database bugs.

## INTERNET AND WEB TECHNOLOGIES LABORATORY

### Lab Experiments

1	Basic HTML using images links, Lists, Tables and frames etc.
2	Design the web page using from elements.
3	Design a web page by suing HTML 5
4	Use different types of styles in a page. Use inline, internal and external style sheets Use the CSS3 Features.
5	Embedding the JavaScript in to Web pages. Usage of concepts and functions, array and objects.
6	Form validation using JavaScript
7	DTD and XML implementations in web designing concepts
8	Develop the web site by Php with data base connectivity.
9	Advanced PHP Concepts. Discussion of Sample Web Project.
10	Create the small web site using web2.0 concepts.