Semester II

Courses	Theory Code	Practical Code
Web Designing and Programming	**USIT201**	**USIT2P1**
Applied Mathematics – II	**USIT202**	**USIT2P2**
Microprocessor and microcontrollers	**USIT203**	**USIT2P3**
Database Management Systems	**USIT204**	**USIT2P4**
Data Communication and Networking Standards	**USIT205**	**USIT2P5**

CLASS: B. Sc (Information technology)		**Semester – II**
SUBJECT: Web Designing and Programming (USIT201)		
Periods per week	**Lectures – 5**	**3 Credits**

Unit – I	**Internet and WWW :** What is Internet?, Introduction to internet and its applications, E-mail, telnet, FTP, e-commerce, video conferencing, e-business. Internet service providers, domain name server, internet address World Wide Web (WWW) : World Wide Web and its evolution, uniform resource locator (URL), browsers – internet explorer, netscape navigator, opera, firefox, chrome, mozilla. search engine, web saver – apache, IIS, proxy server, HTTP protocol	**8 lectures**
Unit- II	**HTML and Graphics :** HTML Tag Reference, Global Attributes, Event Handlers, Document Structure Tags, Formatting Tags, Text Level formatting, Block Level formatting, List Tags, Hyperlink tags, Image and Image maps, Table tags, Form Tags, Frame Tags, Executable content tags **Imagemaps :** What are Imagemaps?, Client-side Imagemaps, Server-side Imagemaps, Using Server-side and Client-side Imagemaps together, Alternative text for Imagemaps, **Tables :** Introduction to HTML tables and their structure, The table tags, Alignment, Aligning Entire Table, Alignment within a row, Alignment within a cell, Attributes, Content Summary, Background Color, Adding a Caption, Setting the width, Adding a border, Spacing within a cell, Spacing between the cells, Spanning multiple rows or columns, Elements that can be placed in a table, Table Sections and column properties, Tables as a design tool **Frames :** Introduction to Frames, Applications, Frames document, The <FRAMESET> tag, Nesting<FRAMESET> tag, Placing content in frames with the <FRAME> tag, Targeting named frames, Creating floating frames, Using Hidden frames, **Forms :** Creating Forms, The <FORM> tag, Named Input fields, The <INPUT> tag, Multiple lines text windows, Drop down and list boxes, Hidden, Text, Text Area, Password, File Upload, Button, Submit, Reset, Radio, Checkbox, Select, Option, Forms and Scripting, Action Buttons, Labelling input files, Grouping related fields, Disabled and read-only fields, Form field event handlers, Passing form data **Style Sheets :** What are style sheets?, Why are style sheets valuable?,	**8 lectures**

	Different approaches to style sheets, Using Multiple approaches, Linking to style information in s separate file, ,Setting up style information, Using the <LINK> tag, Embedded style information, Using <STYLE> tag, Inline style information	
Unit- III	**Java Script :** Introduction, Client-Side JavaScript, Server-Side JavaScript, JavaScript Objects, JavaScript Security, **Operators** : Assignment Operators, Comparison Operators, Arithmetic Operators, % (Modulus), ++(Increment), --(Decrement), -(Unary Negation), Logical Operators, Short-Circuit Evaluation, 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, with, **Core 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, onAbort, onBlur, onChange, onClick, onDblClick, onDragDrop, onError, onFocus, onKeyDown, onKeyPress, onKeyUp, onLoad, onMouseDown, onMouseMove, onMouseOut, onMouseOver, onMouseUp, onMove, onReset, onResize, onSelect, onSubmit, onUnload	**8 lectures**
Unit – IV	**XML :** Introduction to XML, Anatomy of an XML document, Creating XML Documents, Creating XML DTDs, XML Schemas, XSL	**8 lectures**
Unit – V	**PHP :** Why PHP and MySQL?, Server-side web scripting, Installing PHP, Adding PHP to HTML, Syntax and Variables, Passing information between pages, Strings, Arrays and Array Functions, Numbers, Basic PHP errors/problems.	**8 lectures**
Unit – VI	**Advanced PHP and MySQL :** PHP/MySQL Functions, Displaying queries in tables, Building Forms from queries, String and Regular Expressions, Sessions, Cookies and HTTP, Type and Type Conversions, E-Mail	**8 lectures**

References :

1. Web Design The Complete Reference, Thomas Powell, Tata McGrawHill
2. HTML and XHTML The Complete Reference, Thomas Powell, Tata McGrawHill
3. JavaScript 2.0: The Complete Reference, Second Edition by Thomas Powell and Fritz Schneider
4. PHP: The Complete Reference By Steven Holzner, Tata McGrawHill

Term Work for USIT201

i) Assignments: Should contain at least 2 assignments covering the Syllabus.
ii) Class Tests: One. Also Known as Unit Test or In-Semester Examinations
iii) Tutorial : Minimum Three tutorials covering the syllabus

Practicals (USIT2P1):

Journal Practical	**3 Lectures per Week (1 Credit)**
List of Practical 1. Design a web page using different text formatting tags. 2. Design a web page with links to different pages and allow navigation between pages. 3. Design a web page with Imagemaps. 4. Design a web page with different tables. Design a webpage suing table so that the content appears well placed. 5. Design a webpage using frames. 6. Design a web page with a form that uses all types of controls. 7. Design a website using style sheets so that the pages have uniform style. 8. Using Java Script design a web page that prints factorial / Fibonacci series / any given series. 9. Design a form with a test box and a command button. Using Java Script write a program whether the number entered in the text box is a prime number or not. 10. Design a form and validate all the controls placed on the form using Java Script. 11. Design a DTD, corresponding XML document and display it in browser using CSS. 12. Design an XML document and display it in browser using XSL. 13. Design XML Schema and corresponding XML document.	