Rashtriya Sanskrit Vidyapeetha (Deemed University) Tirupati – 517 507.

Department of Computer Science

Web-Technology under Vocational Course with CBCS at SASTRI LEVEL

2019 - 2020

Semester wise Syllabus

| S.No. | Semester | Paper | Title of the Paper |
|-------|--------------|-------|---|
| 1. | I Semester | 1 | Introduction to Information Technology |
| 2. | II Semester | 2 | Basics of Internet Technology |
| 3. | III Semester | 3 | HTML |
| 4. | IV Semester | 4 | Advanced HTML and DHTML |
| 5. | V Semester | 5 | Web Programming using VB Script and Java Script |
| 6. | V Semester | 6 | Working with Forms |
| 7. | VI Semester | 7 | XML |
| 8. | VI Semester | 8 | Project Work |

Pattern of Marks (Following Pattern will be followed for each paper)

| 5 x 2 Marks (Objective type) | 10 Marks |
|-----------------------------------|----------|
| 5 x 4 Marks (Internal Choice) | 20 Marks |
| 2 x 10 Marks (Out of 5 Questions) | 20 Marks |
| | 50 Marks |
| Practicals | 50 Marks |
| | |

Grand Total = 50 Marks + 50 Marks = 100 Marks

Programme Name :Sastri/BA Web Technology I yr I semester

Course No: Paper 1. INTRODUCTION TO Information Technology

Name of the text book:

PRESCRIBED TEXTBOOKS:

1. Raja Raman, Introduction to computers by PHP Publications

REFERENCE BOOKS:

1. Sanjay Saxena , A first course in computers by Vikas Publishing House.

General Objectives of the course: The introduction to computer systems program aims to prepare students to understand the technology and introduction to the fundamentals of computing devices with respective to personal use of computer hardware, software and basic computer skills.

Objective of UNIT I: The objective of this unit is to clearly know about what computer is, its history, classification of computers and applications.

Objective of UNIT II: The main objective of this unit is to know how and where Input and Output device are used.

Objective of UNIT III: Memory management plays vital role in computer for processing. In this unit we will learn about computer memory in detail.

Objective of UNIT IV: Operating System is an important part of the computer. What is Operating System, Types of Operating Systems, Dos Commands, GUI concepts are discussed in this unit.

Objective of UNIT V: Windows Operating system, its icons, how to interact with window Operating System

Detailed syllabus

UNIT – I

Introduction to computers – A brief history of computers – Generation of Computers, Basic Structure of Computers, Classification of Computers – Applications of Computers.

UNIT – II

Computer Peripherals : Input Devices : KeyBoard, Mouse, Digitizer, light pen, Joystick, OMR, OCR, MICR, VDU -Output Devices : Printers, Serial Printers, Line Printers, Laser Printers, Plotters

UNIT – III

Computer Memory : Primary Memory, ROM, RAM – Cache Memory, Secondary Memory : Magnetic Disk, Magnetic Tape, Floppy disk and Optical Storage devices.

UNIT – IV

Introduction to Operating system : Functions of Operating System, Classification of Operating System – MS-DOS : Introduction to Disk Operating System (DOS), Internal and External commands – Introduction to windows operating system – Windows GUI : Desktop, Icons, taskbar and Start button - Recycle bin.

LAB: Introduction to Information Technology (50 Marks)

Programme Name :Sastri/BA Web Technology I yr II semester

Course No: Paper 2. Basics of Internet technology

Name of the text book:

Prescribed Textbook:

1. Dr. G.Sreedhar, Fundamentals of Web Design, Rashtriya Sanskrit Vidyapeetha, Tirupati

Reference Books:

1. Thomas A. Powell, The Complete Reference Web Design, Tata McGraw Hill edition.

2. Thomas A. Powell, The Complete Reference HTML & XHTML, Tata McGraw Hill Fourth edition.

General Objectives of the course: students aimed at enabling the interconnection and integration of the physical world and the cyber space.

Objective of UNIT I : This unit will make student learn about web page, web site and client server.

Objective of UNIT II : The main objective of this unit is to learn about search engines, information sharing.

Objective of UNIT III: Students can learn how to work with E-mail.

Objective of UNIT IV: Helps students to design web sites.

Objective of UNIT V: learn how to site design, web page design.

Detailed syllabus

UNIT I

Introduction – Elements of Web: Servers and Clients – Web Documents – URL – Web Sites – Web Browsers – Domain Name System

UNIT II

Information Sharing: Community Building – Resource Sharing – Entertainment – Business Transactions – Search Engines

UNIT III

Email - Web Site Architecture: Two Tiered Architecture - The n-tiered Architecture

UNIT IV

Designing a Web Site: Administrative – Creative – Technical – Marketing Web Site Design Process: Analysis – Design – Development – Implementation – Evaluation and maintenance –

UNIT V

Elements of Web Site Design: Site Structure - Site Navigation - Web page design and layout

LAB: Basics of Internet Technology (50 Marks)

Programme Name :Sastri/BA Web Technology II yr I semester

Course No: Paper 3. HTML

Name of the text book:

Prescribed Textbook: 1. Dr. G.Sreedhar, Fundamentals of Web Design, Rashtriya Sanskrit Vidyapeetha, Tirupati

Reference Books:

Thomas A. Powell, The Complete Reference Web Design, Tata McGraw Hill edition.
Thomas A. Powell, The Complete Reference HTML & XHTML, Tata McGraw Hill Fourth edition.

General Objectives of the course: students aimed design web pages.

Objective of UNIT I : This unit will make student learn basics of HTML, HTML structure.

Objective of UNIT II : The main objective of this unit is to learn basic tags of HTML.

Objective of UNIT III: Students can learn how to work with formatting tags.

Objective of UNIT IV: Students can learn how to work with image tags and hyper link tags.

Objective of UNIT V: Helps students to design tables using HTML tags.

Detailed syllabus

UNIT - I Basic HTML: HTML- Advantages of HTML – Disadvantages of HTML – Structure of HTML – Working with Text

UNIT - II

Heading Tags – Font Tag – Address Tag – Line Break – Paragraph Tags – Center Tag – Preformatted Tag – Marquee Tag

UNIT III

Formatting Block Text: Div Tag - Span Tag - List Tag: Unordered List - Ordered List

UNIT - IV

Inserting Images in Web Pages: IMG tag - Creating Hyperlinks in a Web Page: Anchor Tag

UNIT -V

Creating Table in a Web Page: Introduction to Tables – Rowspan and Colspan attributes – Table for Layout: Cell Padding and Cell Spacing – Cell Alignment

LAB: HTML (50 Marks)

Programme Name :Sastri/BA Web Technology II yr II semester

Course No: Paper 4. Advance HTML and DHTML

Name of the text book:

Prescribed Textbook:

1. Dr. G.Sreedhar, Fundamentals of Web Design, Rashtriya Sanskrit Vidyapeetha, Tirupati

Reference Books:

1. Thomas A. Powell, The Complete Reference Web Design, Tata McGraw Hill edition.

2. Thomas A. Powell, The Complete Reference HTML & XHTML, Tata McGraw Hill Fourth edition.

General Objectives of the course: students aimed to design web sites using advance HTML and DHTML

Objective of UNIT I : This unit will make student learn how to insert multimedia properties in web pages.

Objective of UNIT II : The main objective of this unit is to learn frames.

Objective of UNIT III: Students can learn how to work with DHTML and CSS.

Objective of UNIT IV: students learn how to import and embed a style sheet.

Objective of UNIT V: Students can learn how to work with dynamic table, animation using DHTML Helps

Detailed syllabus

UNIT I

Working with Multimedia in a Web Page: Creating background sound using <BGSOUND> - Embedding Multimedia Objects in a Web Page – Creating inline video

UNIT II

Working with Frames – Frameset tag – Frame Tag – Working with Named Frames to Create Home Page in a Web Site – Frame Layouts – noframe tag

UNIT III

Dynamic HTML: Features of DHTML - Integration with DHTML - Cascading Style Sheets (CSS)

UNIT IV

Attaching CSS to HTML Documents: Using an Inline Style Sheet – Embedding a style Sheet – Importing a Style Sheet – Linking an External Style Sheet - Setting Dynamic Styles in a web page: Dynamic Alignment of the text in the Web Page

UNIT V

Creating Dynamic Tables in a web page - Creating animation using DHTML

LAB: Advanced HTML and DHTML (50 Marks)

Programme Name :Sastri/BA Web Technology III yr I semester

Course No: Paper 5. Web Programming using VB Script and Java Script

Name of the text book:

Prescribed Textbook:

1. Dr. G.Sreedhar, Fundamentals of Web Design, Rashtriya Sanskrit Vidyapeetha, Tirupati

Reference Books:

1. Thomas A. Powell, The Complete Reference Web Design, Tata McGraw Hill edition.

2. Thomas A. Powell, The Complete Reference HTML & XHTML, Tata McGraw Hill Fourth edition.

General Objectives of the course: students aimed to design web sites using VB Script and Java Script

Objective of UNIT I : This unit will make give detail description of VB Script features and data types.

Objective of UNIT II : The main objective of this unit is to learn variables, operators and decision statements and function in VB Script.

Objective of UNIT III: Students can learn how to work with decision making statements in Java Script.

Objective of UNIT IV: Students can learn how to work with decision making statements in Java Script.

Objective of UNIT V: Students can learn how to work with Arrays in Java Script.

UNIT I

Detailed syllabus

Introduction to VB Script – Features of VBScript – Embedding VBScript in HTML – Data Types in VBScript

UNIT II

Elements of VBScript : Variables – Operators – Control Statements Decision statements Loop Statements – Functions - VBScript Objects

UNIT III

Introduction to JavaScript - Java Script Programming - if..else statement - Switch Statement

UNIT IV

while loop Statement - do..while statement- for statement

UNIT V

Array in JavaScript – Functions in JavaScript – JavaScript Events – JavaScript Objects

LAB: Web Programming using VB Script and Java Script (50 Marks)

Programme Name :Sastri/BA Web Technology III yr II semester

Course No: Paper 6. Working with Forms

Name of the text book:

Prescribed Textbook:

1. Dr. G.Sreedhar, Fundamentals of Web Design, Rashtriya Sanskrit Vidyapeetha, Tirupati

Reference Books:

1. Thomas A. Powell, The Complete Reference Web Design, Tata McGraw Hill edition.

2. Thomas A. Powell, The Complete Reference HTML & XHTML, Tata McGraw Hill Fourth edition.

General Objectives of the course: students aimed to learn forms in Web page.

Objective of UNIT I: This unit will make give detail description of form tags, form fields.

Objective of UNIT II : The main objective of this unit is to learn to insert pull down menus, button in web page.

Objective of UNIT III: Students can learn how to other form elements such as labels etc.

Objective of UNIT IV: Students can learn how to work with form and its fields.

Objective of UNIT V: Students can learn how to work with form field attributes, form presentation with HTML.

Detailed syllabus

UNIT I

Form Tag – The action Attribute – The method Attribute – Enctype Attribute – Simple Form Example - The name and id attribute – Form Field Elements – Text Fields.

UNIT II

Pull Down Menus - Scrolled Lists - Check Boxes - Radio Buttons - Reset and Submit Buttons

UNIT III

Other Form Elements: Button Tag - Label Tag - Fieldset tag- Form Accessibility Enhancements: Keyboard

UNIT IV

Improvement Forms - Tooltip and Form Fields

UNIT V

Form Field Attributes - Form Presentation with HTML - Form Presentation with CSS

LAB: Working with Forms (50 Marks) Programme Name :Sastri/BA Web Technology III yr II semester

Course No: Paper 7. XML

Name of the text book:

Prescribed Textbook: 1. Dr. G.Sreedhar, Fundamentals of Web Design, Rashtriya Sanskrit Vidyapeetha, Tirupati

Reference Books:

1. Thomas A. Powell, The Complete Reference Web Design, Tata McGraw Hill edition.

2. Thomas A. Powell, The Complete Reference HTML & XHTML, Tata McGraw Hill Fourth edition.

General Objectives of the course: students aimed to learn forms in Web page using XML.

Objective of UNIT I: This unit will make students learn about basics of XML.

Objective of UNIT II : The main objective of this unit is to learn creating XML document.

Objective of UNIT III: Students can learn how to declaring elements and attributes in DTD.

Objective of UNIT IV: Students can learn how to add with CSS to XML and comparing HTML and XML

Objective of UNIT V: Students can learn how to work with different types of servers like Apache.

Detailed syllabus

UNIT - I Introduction to XML – Features of XML – Organizing XML Documents

UNIT II

XML Elements and Attributes - Creating XML Documents

UNIT - II

Documents Type Declarations: Declaring Elements in DTD - Declaring Attributes in DTD

UNIT - III

XML Schemas - Adding CSS to XML - Comparing HTML and XML

UNIT - IV

Web Server - Types of Web Servers - IIS - PWS-Apache

LAB: XML (50 Marks)

Programme Name :Sastri/BA Web Technology III yr II semester

Course No: Paper 8. Project Work

Lab: Web designing Project Work (100 Marks)