BHARATHIDASAN UNIVERSITY, TRICHIRAPALLI – 620 024

DIPLOMA IN WEB DESIGNING

(For the candidates to be admitted from the academic year 2006-2007 onwards)

Semester	Title of the Paper	Instru. Hours	Exam Hours	Total Marks
I	Paper I - Web Design using HTML	6	3	100
	Paper II - The Script Language	6	3	100
	Paper III - LAB HTML and VB Script	6	3	100
II	Paper IV - Internet Programming with ASP	6	3	100
	Paper V - .Net Framework	6	3	100
	Paper VI – LAB ASP and ASP .NET	6	3	100

Eligibility:

Pass in +2, U.G Candidates can do this concurrently.

PAPER I – WEB DESIGN USING HTML

Unit I :

    Introduction : The Internet, the Web, and HTML. HTML Building Blocks -   Writing HTML -   HTML Tags - Nesting Tags Spacing - Special Symbols -File Names - URLs- Starting Your Web Page –Creating a Title- Organizing the Page -Text Formatting - Creating Web Images - Getting Images - Making Images Smaller Exporting GIF Images from Photoshop - Using (Mostly) Browser Safe Colors - Converting to Browser Safe Colors Reducing the Number of Colors-Creating Transparency -Creating Fake Transparency - Interlacing GIF Images Creating Animated GIFs - Creating JPEG Images - Blurring Images to Aid JPEG Compression - Creating Low Resolution Images -Creating PNG Files

Unit II :

    Page Layout :   Using Background Color - Using Background Images - Centering Elements on a Page - Specifying the Margins - Creating a Line Break - Keeping Lines Together - Creating Discretionary Line Breaks - Specifying the Space Between Paragraphs - Creating Indents - Creating Indents (with Lists) - Creating Blocks of Space – Using Pixel Shims - Using Block Quotes - Quoting Short Passages of Text - Creating Columns - Using Preformatted Text - Positioning Elements with Layers

    Links : Creating a Link to Another Web Page - Creating Anchors -   Linking to a Specific Anchor -   Targeting Links to Specific Windows -   Setting the Default Target - Creating Other Kinds of Links - Creating Keyboard - Shortcuts for Links - Setting the Tab Order for Links - Using Images to Label Links - Dividing an Image into Clickable Regions-Creating a Client-Side Image Map - Using a Server-Side Image Map-Changing the Color of Links

Unit III :

    Lists : Creating Ordered Lists - Creating Unordered Lists -Creating Definition Lists - Creating Nested Lists

    Tables : Creating a Simple Table - Adding a Border - Wrapping Text around a Table - Adding Space around a Table- Spanning a Cell across Columns - Spanning a Cell across Rows - Aligning a Cell's Contents-Controlling Space in and Around Cells Dividing Your Table into Column Groups - Dividing the Table into Horizontal Sections.

    Frames : Creating a Simple Frameset -Creating Frames in Rows and Columns - Combining Framesets - Creating an Inline Frame -Adjusting a Frame's Margins-Showing or Hiding Scroll Bars - Adjusting the Color of the Borders -Adjusting the Frame Borders - Targeting Links to Particular Frames - Targeting Links to Special Spots - Changing the Default Target -   Nesting Framesets - Creating Alternatives to Frames

Unit IV :

        Forms : Creating Text Boxes-Creating Password Boxes-Creating Larger Text Areas-Creating Radio Buttons-Creating Checkboxes-Creating Menus - About Hidden Fields-Adding Hidden Fields to a Form-Creating the Submit Button. Resetting the Form -Organizing the Form Elements- Disabling Form Elements - Keeping Elements from Being Changed.

        Multimedia : Helper Applications and Plug-ins-Non-Supported Images - Sound - Getting Sound - Embedding Sound in a Page Adding a Link to a Sound - Adding Background Sound for Explorer . Video Adding External Video to Your Page -Adding Internal Video - Adding Internal Video for Explorer - Creating a Marquee.

Unit V :

        An Introduction to Cascading Style Sheets - The Advantages of Using Style Sheets - The Downside of Style Sheets -The Anatomy of a Style - Setting up Style Sheets - Creating an Internal Style Sheet -Creating an External Style Sheet - Using an External Style Sheet -Applying Styles Locally - Defining Styles for Classes -   Identifying Particular Tags -Creating Custom HTML Tags - Creating Custom Block-Level HTML Tags Using Custom Block-Level HTML Tags - Creating Custom Inline HTML Tags - Using Custom Inline HTML Tags Defining Styles for Links -Formatting Text with Styles

Text Book

1 .HTML 4 for the World Wide Web: Visual QuickStart Guide -Publisher: Peachpit Press

Reference Book

1. HTML Complete Reference : Powell ,TMH

PAPER II - THE SCRIPT LANGUAGE

Unit I : Introduction

        Introduction to VB Script - Differences Between Visual Basic and VBScript - Programming in VBScript (Simple programs : Insert a script-Write text using VBScript-Format text with HTML tags-A function in the head section-A script in the body section)–Data Types - Program Flow .

Text Book: Chapter 2 , VB Script UnLeashed ,Petroutsos, Schongar, et al.

Unit II : VBScript Functions

        Introduction to Procedures in Scripts -Intrinsic Functions -Basic Functions -String Functions -Conversion Functions -Math Functions - Time and Date Functions - Boolean Functions.

Text Book: Chapter 3 , VB Script UnLeashed, Petroutsos, Schongar, et al.

Unit III : Intrinsic Controls

       Introduction to Events in VBScript -Messages in a GUI Environment -Placing Controls in HTML -Intrinsic Controls -Checkbox - Select - Using Controls in Your Documents

Text Book: Chapter 4 , VB Script UnLeashed, Petroutsos, Schongar, et al.

Unit IV : The Scripting Model

       Windows, Documents, and Frames -The document Object -Using the document Properties and Methods - The history Object - The navigator Object - The location Object -The link Object

Text Book: Chapter 6 , VB Script UnLeashed, Petroutsos, Schongar, et al.

Unit V : Error Handling

       Handling Errors in Your VBScript Pages -Coding to Avoid Errors -Coding to Handle Errors - Looking at Examples of Error Handling

Text Book: Chapter 10 , VB Script UnLeashed, Petroutsos, Schongar, et al.

Reference Book :

1. VB Script in 21 Days- Sams Publishing.
2. VB Script Bible – Good Man

Paper III :LAB HTML & VB SCRIPT.

<u>**HTML Lab Exercise**</u>

1.   a) Create a vertical frameset with 3 different documents & Jump to a specified section within a frame
  b) Create a horizontal frameset with 3 different documents & Jump to a specified section within a frame

2. Write a HTML program to send a mail from HTML form

3. Insert images from another folder or another server in a HTML document and Align the image within a text

4. Create an application form for a computer center in HTML (use textbox, check box, button).

5. Create an advertisement in HTML for a Leading software company (animate pictures ,link multiple documents).

<u>VB Script Lab Exercise</u>

1. VB Script Program for the following Date and Time Functions
  Display date and time
  Display the days
  Display the months
  Display the current month and day
2. VB Script Program for the following Date and Time Functions
  Countdown to year 3000
  Add a time interval to a date
  Format date and time
  Is this a date?
3. Write VB Script program for the following Built-in Functions
  Uppercase or lowercase characters?
  Remove leading or trailing spaces from a string
  Reverse a string
  Round a number
4. Write VB Script program for the following Built-in Functions
  Return a random number
  Return a random number between 0-99
  Return a specified number of characters from the left or right side of a string
  Replace some characters in a string
 5. Write VB Script program to check for validation in a text box

Source : www.w3schools.com

PAPER IV – INTERNET PROGRAMMING WITH ASP

Unit I

  Introduction to Asp – PWS – IIS – Handling Asp File – setting default documents – virtual directories – ASP vs. other technologies – ASP Architecture – Scripting languages in ASP – Buffering – Content Type – Redirecting User – Virtual Path of the Script – HTTP Headers – Client IP Address – Sending a web form – Validation.

Unit II

  Session Object – Session Cookies – Global.asa – Cookie Basics – Setting Cookies – Cookie Dictionaries – Encoding Strings – Codepages and Character sets – Mapping Server paths – Limiting Script Timeout – Creating Instances of Components – Working with Dictionary Object – Linking Content Pages – Detecting a Browser's Capabilities – Adding Banners in site.

Unit III

  SMTP service – sending Email – Receiving Email – Accessing Text file – Reading drive properties – Working with Files and folders – ADO object model – ODBC Data source – Accessing Database – retrieving data from a Database – inserting Data into a table.

Unit IV

Updating Data in a Database – Deleting Data from a Database – using OLE DB Providers – Handling Server-Side Paging – Disconnecting a Recordset – Updating a Disconnected Recordset – programming and invoking stored procedures – Debugging with script Debugger – Debugging on production servers.

Unit V

Introduction to XML – Rendering XML using the DOM – XSL Style sheets – Windows script components – securing ASP Applications – II Security process – Secure Connections with SSL.

Text Books:

1. SAMS Teach Yourself Active Server Pages in 24 Hours by Christoph Wille and
   Christian Koller Published by SAMS Techmedia.

PAPER V - .NET Framework

Unit I : Introduction to .Net framework & ASP.net

Introduction to .Net Framework : .Net Components- CLR ,CLS , CTS ,Garbage Collection, Interoperability , Assemblies-Namespaces. WORKING WITH ASP.NET WEB FORMS. : Introducing ASP.NET Controls. A Simple ASP.NET Page. Benefits of ASP.NET Controls. Overview of ASP.NET Controls. Adding Application Logic to an ASP.NET Page.

Unit II : Controls

Handling Control Events. Handling Page Events. The Structure of an ASP.NET Page. Directives. Code Declaration Blocks. ASP.NET Controls. Code Render Blocks. Server-side Comments. Server-side Include Directives. Literal Text and HTML Tags. Building Smart Forms :- Using Toolbox Controls. Controlling Page Navigation. Submitting a Form to a Different Page. Using the Redirect() Method. Working with the HyperLink Control. Applying Formatting to Controls. Base Web Control Properties. Applying Styles to Web Controls.

Unit III : Performing Form Validation with Validation Controls.

Using Client-side Validation.   Configuring Client-side Validation. Enabling and Disabling Client-side Validation. Requiring Fields: The RequiredFieldValidator Control. Comparing to an Initial Value. Validating Expressions: The RegularExpressionValidator Control. Validating E-Mail Addresses, Usernames, Passwords, Phone Numbers,Web Addresses. Checking for Entry Length. Validating ZIP Codes.
Comparing Values: The CompareValidator Control. Comparing the Value of One Control to the Value of Another. Comparing the Value of a Control to a Fixed Value. Performing a Data Type Check. Checking for a Range of Values: The RangeValidator Control. Performing Custom Validation: The CustomValidator Control. Validating Credit Card Numbers. Disabling Validation.

Unit IV Advanced Control Programming.

Working with View State. Disabling View State. Adding Values to View State. Displaying and Hiding Content. Using the Visible and Enabled Properties. Using the Panel Control. Simulating Multipage Forms. Adding Controls Programmatically. Adding Controls to a Page. The PlaceHolder Control. Dynamically Generating Forms. Dynamically Generating List Items. Using Rich Controls. Displaying Interactive Calendars with the Calendar Control. Rendering Calendar Days. Displaying Banner Advertisements with the AdRotator Control. Accepting File Uploads with the HTMLInputFile Control.

Unit V Introduction to ADO.NET.

An Overview of ADO.NET. Performing Common Database Tasks. Opening a Database Connection. Retrieving Records from a Database Table. Using Parameters with Queries. Adding Records to a Database. Updating Database Records. Deleting Database Records. Improving Database Performance. Using SQL Stored Procedures. Retrieving Return Values and Output Parameters. Executing Complex Stored Procedures. Improving Performance with Connection Pooling. Advanced Database Topics. Executing Database Commands in a Transaction. Specifying a Command Behaviour. Retrieving Table Schema Information.

Text Book

1. ASP.NET Unleashed, 2nd Edition By Stephen Walther. Sams Publishing .

Reference Book

1. ASP.Net Tips & Techniques , Buczek
2. ASP.Net in 24 hrs, Sams Publishing

PAPER VI – LAB ASP & ASP.NET

ASP Lab Exercise

1. Find out different Capabilities of Browser (Use Browser capabilities component)

2. Write ASP program to retrieve values from a Dictionary.

3. Create a Simple Feed back form in ASP.

4. Write ASP program to send and retrieve E-Mail

5. Write ASP program to Read the properties of system drive

ASP.NET Lab Exercise

1. Write ASP .net program to load different advertisement in a web page (use AdRotator)

2. Perform the following validation in a web application form ASP .Net
        CompareValidator
        CustomValidator
        RangeValidator

3. Perform the following validation in a web application form ASP .Net
        RegularExpressionValidator
        RequiredFieldValidator
        Validationsummary

4. Database connection - Bind student database to a Repeater control in ASP.net

5. Database connection - Bind student database to a DataList control in ASP.net

Source :

   1. ASP
            ASP in 21 days
   2. ASP .Net
            www.w3schools.com

****