UNIT II

Types of CSS - Conflicting style sheets - Positioning Elements - Element Dimension - Box model and Text Flow - Media types - Media Queries - Drop-Down Menus - Text shadows - Introduction to JavaScript - Syntax - Variables and data types - JavaScript Control Statements - Operators - Literals

- Functions - Objects - Arrays - Built in objects - Event handling

1. Mention the advantages of java/java script
   a. Use sending data continuously File storage
   b. Massively parallel computing
   c. Smart forms – includes various controls like text box, radio button, text area control etc.
   d. Peer-to-Peer Interaction – used in various client/server model.
   e. Games – Combine the ability to easily include networking in your programs with java's powerful graphics and you have the recipe for truly awesome multiplayer games.
   f. Chat – Used in various chat applications.
   g. Whiteboards – Java programs are not limited to sending text and data across the network.
   h. A number of programmers have developed whiteboard software that allows users indiverse locations to draw on their computers

2. What are Style Sheets?
   Style sheets are collections of style information that are applied to plain text. Style information includes font attributes such as type size, special effects (bold,italic,underline), color and alignment. Style sheets also provide broader formatting instructions by specifying values for quantities such as line spacing and left and right margins.

3. List down the ways of including style information in a document.
   a. 1.Linked Styles -Style information is read from a separate file that is specified in the

   <LINK> tag
   b. 2.Embedded Styles -Style information is defined in the document head using the <STYLE> and </STYLE> tags.
   c. 3.Inline Styles -Style information is placed inside an HTML tag and applies to all contentbetween that tag and it companion closing tag.

4. Define cascading.
   Cascading refers to a certain set of rules that browsers use, in cascading order, to determine howto use the style information. Such a set of rules is useful in the event of conflicting style information because the rules would give the browser a way to determine which style is given precedence.

5. What are the style precedence rules when using multiple approaches?
   Inline styles override both linked style sheets and style information stored in the document head with <STYLE> tag.
   Styles defined in the document head override linked style sheets.Linked style sheets override browser defaults.

6. Give the syntax to specify a characteristic in linked style sheet.
   {Characteristic: value}
   Multiple characteristic/value pairs should be separated by semicolons.

7. List down font characteristics permitted in style sheets.
   i. 1.font-family
   ii. 2.font-size
   iii. 3.font-weight
   iv. 4.font-style
   v. 5.font-variant

8. Write a note on content positioning characteristic "Visibility".
   Enables the document author to selectively display or conceal positioned content; Possible valuesare show or hide.

9. Define scriptlets.
   Scriptlets enable you to create small, reusable web applications that can be used in any web page. Scriptlets are created using HTML, scripting and Dynamic HTML. To include them in an HTML document use the <OBJECT> tag.

10. What does DHTML refer?
    DHTML refers to collection of technologies, which makes HTML documents more dynamic andinteractive.

11. What does data binding mean?
    Data binding is DHTML feature that lets you easily bind individual elements in your document todata from another source such as database or comma delimited text file.

12. What is meant by Plug-in?
    A hardware or software module that adds a specific feature or service to a larger system. The idea is that the new component simply plugs in to the existing system. For example, there are number of plug-ins for the Netscape Navigator browser that enable it todisplay different types of audio or video messages. Navigator plug-ins are based on MIME filetypes.

13. MENTION THE TYPES OF SCRIPTING LANGUAGES

    · JavaScript is a Scripting language (web site development environment)created by Netscape.
    · Hence JavaScript works best with the Netscape suite of Client and Serverproducts.
    · JavaScript is the native scripting language of Netscape Navigator.
    · VBScript is the native Scripting language of HTML.

14. SERVER SIDE SCRIPTING

· In Server side scripting the script program is executed at Server Side therequired html program is sent to the client.
· The job of the server is more in server side scripting

15. CLIENT SIDE SCRIPTING
· Here the script program is processed and executed in the client sideitself.
· So that it reduces the burden of the server.

16. LIST THE ADVANTAGES OF JAVA SCRIPT
JavaScript is an object-oriented language that allows creation of interactive Web pages JavaScript allows user entries, which are loaded into an HTML form to be processed as required

17. ADVANTAGES
   a. It is an interpreted language, which requires no compilation steps.
   b. Embedded within HTML.
   c. Minimal Syntax – easy to learn
   d. Quick Development
   e. Designed for simple, small programs
   f. High performance
   g. Procedural Capabilities – support facilities such as condition checking, looping and
   h. branching.

   i. Designed for programming user events – like VB Java Script is also based on Events.
   j. Easy Debugging and Testing
   k. Platform Independence/ Architecture Neutral
   l. SYNTAX OF JAVASCRIPT PROGRAM
   m. <HTML>
   n. <HEAD>
   o. <SCRIPT language = -JavaScript||>
   p. … body of the script program
   q. </SCRIPT>
   r. </HEAD>
   s. <BODY>
   t. <SCRIPT language = -JavaScript||>
   u. body of the program.
   v. </SCRIPT>
   w. </BODY>
   x. </HTML>

18. WHAT IS DENSE ARRAYS?
· A dense array is an array that has been created with each of its elementsbeing assigned a specific value.
· Dense arrays are used exactly in the same manner as other arrays.
· Dense arrays are declared and initialized at the same time.

Array Methods

Join() – returns all elements of the array joined together as a single string.Reverse() – reverses the order of the elements in the array.

19. LIST COMPARISION OPERATORS & STRING OPERATORS IN JAVA

· = = equal (perform type conversion before testing for equality.

· = = = strictly equal (do not perform type conversion before testing forequality

STRING OPERATORS

Currently Java Script supports only one string concatenation (+)
operator.EXAMPLE

-ab‖ + -cd‖ produces -abcd‖

20. LIST THE VARIOUS DIALOG BOXES IN JAVA SCRIPT

Dialog boxes are used to display small windows. This is also used to get input from user.

   a. SYNTAX
   b. alert(—message‖);
   c. alert(—Click here to continue‖)
   d. prompt(—Enter your name‖, name)
   e. Alert is only used to display some information
   f. Prompt is used to display information along with some input value
   g. Confirm dialog box, causes program execution to halt until user action takes place.
   h. The user action can be either OK or CANCEL.
   i. OK – returns true
   j. CANCEL – returns

   falsek.

21. MENTION THE VARIOUS JAVA SCRIPT OBJECT MODELS .

   · Math Object
   · String Object
   · Date Object
   · Boolean and Number Object
   · Document Object
   · Window Object

22. HOW SCRIPTING LANGUAGE IS DIFFERS FROM HTML.

   · HTML is used for simple web page design
   · HTML with FORM is used for both form design and Reading input values from user.
   · Scripting Language is used for Validating the given input values weather it is correct or not, if the input value is incorrect, the user can pass an error message to the user.
   · Using form concept various controls like Text box, Radio Button, Command Button, Text Area control and List box can be created.

23. DEFINE FUNCTION IN JAVA SCRIPT .

Function is a part of a program or in other words function is a module in java program which canbe called or invoked any number of times from the main program.

Function can be called any number of times but it can accept any input values or parameters,however it can return only one output at a time.

24. DEFINE CSS – CASCADING STYLE SHEET

DHTML is a new and emerging technology that has evolved to

meet the increasing demand for eye-catching and mind-catching web sites.

·   DHTML combines HTML with Cascading Style Sheets (CSS) and Scripting Languages. HTML specifies a web page's elements like table, frame, paragraph, bulleted list, etc. CSS can be used to determine an element's size, color, position and a number of other features.

·   Scripting Languages (JavaScript and VBScript) can be used to manipulatethe web page's elements so that styles assigned to them can change in response to a user's input.

25. DEFINE CASDING STYLE SHEETS (CSS)

·   CSS are powerful mechanism for adding styles (e.g. Fonts, Colors, Spacing) to web documents.
·   They enforce standards and uniformity throughout a web site and provide numerous attributes to create dynamic effects.
·   The advantage of a style sheet includes the ability to make globalchanges to all documents from a single location. Style sheets are said to cascade when they combine to specify the appearance of a page.

The style assignment process is accomplished with the <STYLE>...</STYLE> tags.

26. MENTION THE TYPES OF STYLE SHEETS

i.   1 Embedded or Internal Style sheet
ii. 2 External or Linked Style sheet
iii. 3 Inline style sheet

27. LIST THE DIFFERENCE BETWEEN STYLE SHEETS

Slno   Embedded   Linked   Inline Style Sheet

Style program is embedded with in theHTML program itself.
Style program alone is storedin a separate file with an extension of
.css file. Different from Embedded andLinked CSS
Explicit LINK statementis not needed.
Explicit LINK REL statementis needed to connect with
.CSS file
Not required
Styles can be used withinthe program only, it can not be called some other files.
Styles used in .CSS file canbe
used in any HTML program

LIST THE PROPERTIES OF STYLE TAG

<STYLE> tag properties are divided in to 6 categories. They are
- Font Attributes
- Color and Background attributes
- Text Attributes
- Border Attributes
- Margin Attributes and
- List Attributes.

28. HOW TO INTRODUCE STYLE IN HTML PROGRAM?

```
<HTML>
<HEAD>
<STYLE Type = -text/css||>
predefined tag name {attribute name1:attribute value1;
attribute name2:attribute value2; ......attribute name-n:attribute value-n}
<STYLE>
</HEAD>
<BODY>
write the body of program
</BODY> </HTML>
```

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32. Give the syntax to specify a characteristic in linked style sheet.
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33. List down font characteristics permitted in style sheets.

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> Enables the document author to selectively display or conceal positioned content; Possible values are show or hide.

1. Justify "JavaScript" is an event-driven programming".

Javascript supports event driven programming. when user clicks the mouse or hit the keys on the keyboard or if user submits the form then these events and response to them can be handled using javascript. Hence javascript is mainly used in web programming for validating the data provided by the user.

2. Write a simple program in JavaScript to validate the email-id.

```
<!DOCTYPE html>
<html>
<head>
<script>
functionvalidateForm() {
var x = document.forms["myForm"]["email"].value;
varatpos = x.indexOf("@");
vardotpos = x.lastIndexOf(".");
if (atpos<1 || dotpos<atpos+2 || dotpos+2>=x.length) {
alert("Not a valid e-mail address"); return false;}}
</script>
</head>
<body>
<form    name="myForm"    action="demo_form.asp"    onsubmit="return    validateForm();"
    method="post">
Email: <input type="text" name="email">
<input type="submit" value="Submit">
</form></body></html>
```

1. How to create arrays in Javascript?

```
We can declare an array like this
Var scripts = new Array();
We can add elements to this array like this
scripts[0] = "PHP";
scripts[1] = "ASP";
scripts[2] = "JavaScript";
scripts[3] = "HTML";
```

PART B
1. Explain the various event handlers in java script. Give an example.
2. Write a java script program to develop the arithmetic calculator
3. Write a java script program to perform the validation process in an application

programs
4. Write short notes on scripting languages.
5. What are the various java script objects? Explain each with an example.
6. How to validate the check box and check box group?
7. Explain about types of cascading style sheet? Explain with example
8. Explain the various CSS properties
9. What is CSS ? List out the Various CSS Properties. Explain the various concepts of CSS properties with neatexample.
10. What are the types of CSS? Explain any two with neat example.
11. With a neat diagram write a SCRIPT PROGRAM with validation for the following (each program carries 16 marks)
    - Student Mark List
    - Inventory System
    - Employee Pay Slip generation
    - Railway Ticket Reservation
    - Online Quiz program

12. Draw form design
    - Design must have one Primary key field – always
    - check for duplication for the primary key field
    - emp- name, product- name, dept-name etc should not be blank
    - Write a function for all these validation
    - When you introduce any number field, always check it is negative or not, if it so do not accept theinput value
    - For calculations always use program concept, do not ask the user to enter total, gross etc.
    - Instead through program calculate Gross.value = val(basic.value + hra.value+da.value)
    - Always use val or ParseInt function when you perform calculation with numbers.
    - for avoiding too much of validation better use the following in the design itself
    - Radio button
    - Command button
    - Check box
    - List box
    - Must introduce SUBMIT & RESET button at the end of the design

13. Explain in detail about all the types of Cascading Style sheet with an example Program draw the form design
14. Mention the 3 types of CSS
15. Write example program for each type of CSS
16. Write the differences and advantages of each CSS
17. Write short notes on the following
18. Write short notes on Java Script/Advantages of Scripting
    - Java Script control statements
    - Java Script functions
19. Write Short notes on event model
20. How can we JavaScript using Objects. Give an Example
21. With an example describe java scripts Control structure.
22. Explain about CSS.
23. With an example describe java scripts Control structure
24. What are Style Sheets? List down the ways of including style information in a document. Explain about types ofcascading style sheet? Explain with example.

25. What are the methods associated with array object in JavaScript? Explain each one with an example.
26. Write a JavaScript to display a welcome button of an html form is pressed
27. What do you mean by CSS? Discuss the properties of CSS-level-1 in detail with suitable example.
28. Write a JavaScript program to demonstrate the JavaScript events.

29. Design a webpage with a textbox where the user can enter a four digit number and a button -validate|| . Validate the entered number for the following using java script. No zero as the first digit Entered number must be in ascending order of digits (Ex:1234,5678...)

30. Write the complete JavaScript to prompt the user for the radius of the sphere and call function sphere Volume tocalculate and display the volume of the sphere. Use the statement. Volume=(4.0/3.0)*Math.PI*Math.pow(radius,3)

31. To calculate the volume, the user should input the radius through an HTML text field and press an HTML buttonto initiate the calculations.

32. What are the objectives of using Cascading style sheet? Briefly explain about linking of external Style sheets andfixing the backgrounds.

33. Explain the concept of CSS and its properties and its uses with an example.

34. Using a JavaScript create a web page using two image files , which switch between one another as the mouse pointer moves over the images.

35. Write JavaScript for the following. Provide a text box for the user enter user name. validate the username for the no. of characters(assume some no. say 6). Provide a SUBMIT button for the validation to happen. On successful validation display a new page with an image and two text boxes for entering the width and height of the image respectively with a RESIZE button below. On clicking the Resize button validate the width and height numbers

    and on successful validation display the image with the requested width and height.

36. Develop a simple online shopping application using JavaScript(Assume your own data)

37. What are Style Sheets? List down the ways of including style information in a document. Explain about types ofcascading style sheet? Explain with example.

38. What is CSS ? List out the Various CSS Properties. Explain the various concepts of CSS properties with neatexample.
39. Explain the various event handlers in java script. Give an example of each. Write a java script program to developthe arithmetic calculator .
40. develop the web page for employee management system and validate all the fields using java script. (Note: Theweb page should contain all the html forms control)

41. Explain about cascading style sheets in detail.

    i.   Style sheet rules

    ii. Styling a page

    iii. Linking style sheets

    iv. Inline style sheets.

42. Write a XHTML program to create a web page for your college information using any one CSS type (Assume yourown data) .Explain the various CSS properties in detail. Write a suitable code each property.

43. Develop a JavaScript program to display a message -HI ! GOOD MORNING TO YOU‖ when a page is loaded and display a message -THANKS TO VISIT OUR WEB PAGE‖ when a page is unloaded.

44. Design a web page with a text box (username) where the user can enter a name and another text box (ID) where the user enter an only four digit ID.NO and a button -validate‖. Validate the entered username and ID field for the following using java script.

    i.   Both the fields should not be empty

    ii. Name field should have alphabets

    iii. ID field should have numeric.