

## Unit -II

### Part – A

**1. Write the Semantic Markup available in HTML5.**

A semantic markup is a HTML markup that has some meaning in the webpage.

They are,

- Header
- Nav
- Section
- Footer
- Address

**2. What is HTML canvas?**

HTML canvas is a container for graphics. This uses JavaScript to draw graphics. Commands given in JavaScript instruct the browser to draw shapes on the website without the use of any plugin.

**3. What is the use of rowspan and colspan?**

rowspan is used to used to combine more than one cell to make a single row.

colspan is used to combine more than one cell to make a single column

**4. What is CSS?**

CSS – Cascaded Style Sheets was developed by W3C to implement the concept of Separating Structure and Presentation. This enables faster and efficient website development.

**5. Write any two font properties.**

font-size: This property is used to set the size of the font. It can have text value or px value.

font-weight: This property is used to set the thickness of the font. It can have text value or numeric value between 100-900.

**6. What is a pseudo-class?**

This class specifies a special state of an element. Some example of states are mouse over an element, an element getting focus.

## Part – B

### 1. Write the difference between HTML and HTML5.

HTML	HTML5
Doctype declaration is long	Doctype declaration is simple
Audio and Video tags are not available	Audio and Video tags are available
Vector Graphics require third party technologies	Vector graphics are integral part
GeoLocation not possible	GeoLocation is possible
Cookies used for storage	Local storage is provided

### 2. What are the new form elements available in HTML5?

HTML5 has the following new form elements

- **DataList:** Used to display predefined options for an input. This feature enables auto-completion
- **Output:** This tag is used to display result of a calculation in HTML. This uses JavaScript to perform this.
- **Meter:** This tag is used to represent scalar values or fractional values. This is also known as a guage.
- **Progress:** This tag is used to represent progress of a task.

### 3. Explain in about Ordered List in HTML.

This tag is used to create list of items that are ordered by number, character or roman numbers. The list is numbered automatically. Default value for the starting element is 1.

Syntax

```
<ol type="" ">  
  <li>list item 1</li>  
  <li>list item 2</li>  
  <li>list item 3</li>  
</ol>
```

The type attribute is used to define the numbering style.

- 1 – used to set numeric list
- A – used to set alphabetic list (capital letters)
- a – used to set alphabetic list (small letters)
- I – used to set roman numbered list (Capital)
- i – used to set roman numbered list (small)

#### 4. Write the features of CSS.

- CSS allows faster webpage loading
- Less code is written in each HTML page
- Website look is consistent on all devices.
- Easy to update the design
- Easy to maintain the website

#### 5. Explain about background images in CSS.

To place an image in the background of an element in CSS. The following property is used

- background-image: This property takes url(“”) as the value which is used to provide the link of the image.
- background-position: This property is used set the position of the image within the element. It can have text values such as “top”, “left”, “right”, “bottom” (or) pixel position value.
- background-repeat: This property is used to specify the direction in which an image is to be repeated. It can have the following values “repeat”, “repeat-x”, “repeat-y”, “no-repeat”.

#### 6. Write about Class Attribute selector.

This type of selector is used to select all the HTML elements with a matching class attribute. A class attribute is added to the HTML element that require the style to be applied. The syntax of class attribute selector starts with a dot(.). A single element can have more than one class applied on it.

##### Syntax

```
.<class>{  
  
}
```

The class name must follow the naming Rule. The rule states that

- The name must begin with a letter A-Z or a-z
- It can be followed by letters(A\_za-z), digits(0-9) hyphens(-) and underscore( \_ )

## Part – C

### 1. Discuss about creation of Table in HTML. Give an example

Table is used to display data in rows and columns format. It is created by using <table> tag. Each row in the table is denoted by <tr> tag. Each column within the row is denoted by <td> tag.

#### Syntax

```
<table>
  <tr>
    <td>...</td>
    <td>...</td>
  </tr>
</table>
```

To display header information within a table there is a special tag available called the header tag <th>...</th>. By default the content of the header tag is displayed in bold and centered within the column.

#### Example

```
<!DOCTYPE html>
<html>
  <head>
    <title>Table Tag</title>
  </head>
  <body>
    <header>
      <h1>HTML Table</h1>
    </header>
    <article>
      <p>Advanced HTML Tags</p><br>
      <table>
        <tr>
          <td>Reg. No</td>
          <td>Name</td>
        </tr>
        <tr>
          <td>1001</td>
          <td>Anand</td>
        </tr>
        <tr>
          <td>1002</td>
          <td>Balaji</td>
        </tr>
      </table>
    </article>
```

```

        <footer>
            Developed by Dr. D. Natarajasivan
        </footer>
    </body>
</html>

```

## 2. Explain about FRAME tag.

In HTML frame tag is used to used to divide a web browser into multiple sections. Each section of the frame can be used to load different page. frameset tag is used to create frames. In a webpage if frame tag is used then the body tag is not used.

### Syntax

```

<frameset rows="" cols="">
    <frame name="" src=""/>
    <noframes>...</noframes>
</frameset>

```

In frameset tag rows and cols attributes are used to divide the frame into multiple sub frames.

### Syntax

```

<frameset rows="" cols="">
    <frameset rows="" cols="">
        .
        .
    </frameset>
    .
    .
</frameset>

```

### Example

```

<!DOCTYPE html>
<html>
    <head>
        <title>Frame Tag</title>
    </head>
    <frameset rows = "30%,40%,30%">
        <frameset cols = "*,*">
            <frame name = "top" src = "eg28.html" />
            <frame name = "top" src = "eg30.html" />
        </frameset>
        <frame name = "main" src = "eg31.html" />
        <frame name = "bottom" src = "eg32.html" />
    </frameset>

```

```
<body>Your browser does not support frames.</body>
</noframes>
</frameset>
</html>
```

### 3. Explain in detail about line drawing using Canvas.

In canvas to perform line drawing the following functions are used.

- `beginPath()`: This function specifies that a new path is being created for drawing
- `moveTo(x,y)`: This function moves the path to the given point on the canvas.
- `lineTo(x,y)`: This function is used to draw a line to the given point from the current point
- `closePath()`: This function is used to create a path from the current point back to starting point
- `lineWidth`: This property is used to specify width of the line  
`context.lineWidth = width;`
- `strokeStyle`: This property is used to set the color, gradient or pattern for the stroke  
`context.strokeStyle = color;`
- `stroke()`: This function is used to draw the path defined by `moveTo` and `lineTo`. The default color for stroke is black
- `fillStyle`: This property is used to set the color, gradient or pattern for the stroke  
`context.fillStyle= color;`
- `fill()`: This function is used to fill the current drawing path. The default color is Black

### 4. Explain in detail about transitions in CSS.

This CSS property enables us to change the property value smoothly over a given time.

Important Properties

- `transition-delay`
- `transition-duration`
- `transition-property`
- `transition-timing-function`
- `transition`

`transition-delay`

This property defines the time delay to be given before the start of the transition

`transition-duration`

This property defines length of time to perform the transition.

transition-property

This defines the property name for which the transition is to be applied. It can have single property name, multiple property names separated by comma or Keywords (none or all).

transition-timing-function

This property defines the function that describe how a transition will proceed for the given duration. It can have the following values ease, ease-in, ease-out or linear.

transition

This is a shorthand notation for transition property. This contains all the important property values in a single statement.

transition: [prop], [dur], [fun], [delay];

## 5. Create a FORM with CSS properties.

```
<!DOCTYPE html>
<html>
  <head>
    <title>CSS Form</title>
  </head>
  <style>
    form{
      display: table;
    }
    .frmrow{
      display: table-row;
    }
    .frmcell{
      display: table-cell;
      margin-top: 5px;
      margin-bottom: 5px;
    }
    input[type=text]:focus{
      background-color: khaki;
      color: black;
    }
    input[id=txtcpt]{
      background-image: url("dept.png");
      background-position: 5px 5px;
      background-repeat: no-repeat;
      padding: 5px 5px 5px 30px;
    }
  </style>
</html>
```

```

input[type=submit], input[type=reset]{
    background-color: lightgray;
    width: 100px;
    padding: 10px;
    margin-left: 10px;
    border-radius: 5px;
}
input[type=submit]:hover, input[type=reset]:hover{
    background-color: khaki;
}
input[type=submit]:active, input[type=reset]:active{
    background-color: lime;
}
</style>
<body>
<header>
    <h1>CSS Form</h1>
</header>
<article>
    <form id="myform">
        <div class="frmrow">
            <label class="frmcell" for="txtname" >Name: </label>
            <input class="frmcell" type="text" id="txtname">
        </div>
        <div class="frmrow">
            <label class="frmcell">Gender</label>
            <label><input class="frmcell" type="radio" name="gender"
value="M">Male</label>
        </div>
        <div class="frmrow">
            <label class="frmcell"></label>
            <label><input class="frmcell" type="radio" name="gender"
value="F">Female</label>
        </div>
        <div class="frmrow">
            <label class="frmcell" for="txtcpt" >Department: </label>
            <input class="frmcell" type="text" id="txtcpt">
        </div>
        <div class="frmrow">
            <label class="frmcell">Language</label>
            <label><input class="frmcell" type="checkbox"
name="chktam" value="tamil">Tamil</label>
        </div>
        <div class="frmrow">
            <label class="frmcell"></label>

```

```

        <label><input      class="frmcell"      type="checkbox"
name="chkeng" value="english">English</label>
    </div>
    <div class="frmrow">
        <input class="frmcell" type="submit" value="Submit">
        <input class="frmcell" type="reset" value="Clear">
    </div>
</form>
</article>
<footer>
    Developed by Dr. D. Natarajasivan
</footer>
</body>
</html>

```

## 7. What are the types of style sheet available? Give an example

CSS style sheets can be added to a webpage in any one of the following three ways

- Inline style: In this type the style property is given in the HTML tag. This is done by using the style attribute.
- Embedded styles: These style properties are embedded within the <head> tag of a website using the <style> tag.
- External Style Sheets: In this type the style sheets is placed as a separate file and the link to the file is given using the <link> tag within the <head> tag.

### Example

```

<!DOCTYPE html>
<html>
    <head>
        <title>CSS</title>
    </head>
    <!--External Style -->
    <link href="css/style.css" rel="stylesheet">
    <!--Embedded Style-->
    <style>
        header {
            text-align:center;
            background-color: #60dd5a;
            border-radius: 10px;
        }
        footer {
            text-align:center;
            font-size: 12px;
            background-color: #f1dc73;

```

```
        border-radius: 10px;
    }
    article{
        width: auto;
        border: 2px solid gray;
        border-radius: 10px;
    }
</style>
<body>
  <header>
    <h1>CSS HTML Style Sheet Types</h1>
  </header>
  <article>
    <!--Inline CSS Style-->
    <h2 style="color:GREEN">Style Sheet Types</h2>
    <p>
      This example shows the implementation of Style Sheet Types
    </p>
  </article>
  <footer>
    Developed by Dr. D. Natarajasivan
  </footer>
</body>
</html>
```

#### style.css file content

```
*{
  color:RED;
}
```