

AJAY KUMAR GARG ENGINEERING COLLEGE, GHAZIABAD

DEPARTMENT OF MCA

MODAL SOLUTION ST2

Course: MCA
Session: 2017-18
Subject: Web Technology
Max Marks: 50

Semester: 3
Section: MCA-1 & 2
Sub Code: RCA-302
Time: 2 hour

SECTION-A

Q1. How IMAGES are implemented in HTML?

Ans. Images can be implemented by using tag in HTML.

`<img src = "smiley.gif" alt = "smiley face"
height = "100" width = "100">`

Q2. List different types of lists in HTML?

Ans. Types of lists in HTML are;

- (1) Ordered list ()
- (2) Unordered list ()
- (3) Definition list (<dl>)

Q3. Write a CSS rule that make all the text 2 times larger than the base font.

Ans. `<style type = "text/css">
body { font-size : 2em; text-align : justify; }
</style>`

Q4. How HTML element can be accessed by using DOM?

Ans. HTML elements can be accessed by using DOM :

- (1) `document.getElementById(id)`

- (2) document.getElementById(name)
 (3) document.getElementsByClassName(name)

Q5. What is XML Prolog?

Ans. XML file always starts with a Prolog. The minimal prolog contains a declaration that identifies the document as an XML document like this:

<?xml version="1.0">

The declaration may also contain additional information like this:

<?xml version="1.0" encoding="ISO-8859-1" standalone="yes"?>

Q6. Create a web-page having a tabular display for given invoice.

SECTION-B

Invoice			
Item Desc	Qty.	@	Price
Paperclips	100	1.15	115
Stapler pens (box)	10	45.99	459.9
Subtotal			574.9
GST		7%	40.24
Total			615.14

Ans. <table border="1">
 <tr>
 <th colspan="4"> Invoice </th>
 <tr>


```

<tr>
  <th> Item/Desc. </th>
  <th> Qty. </th>
  <th> @ </th>
  <th> Price </th>
</tr>
<tr>
  <td> Paperclips </td>
  <td> 100 </td>
  <td> 1.15 </td>
  <td> 115 </td>
</tr>
<tr>
  <td> Staples pins (box) </td>
  <td> 10 </td>
  <td> 45.99 </td>
  <td> 459.9 </td>
</tr>
<tr>
  <td colspan="3"> Subtotal </td>
  <td> 574.9 </td>
</tr>
<tr>
  <td colspan="2"> GST </td>
  <td> 7% </td>
  <td> 40.24 </td>
</tr>
<tr>
  <td colspan="3"> Total </td>
  <td colspan="2"> 615.14 </td>
</tr>
<tr>
  <td colspan="4"> </td>
</tr>
</table>

```

Q7. Explain built-in objects of javascript with suitable example of each object.

Ans. Several built-in objects are :

(1) Array Object: Array objects are capable of storing a sequence of values. The size of the array is identified by length property.

Ex:

```
var friends = new Array(5);
```

(2) String Object: The String object work with series of characters; it wraps Javascript string primitive datatype with a ~~new~~ number of methods.

Ex: <script>

```
var txt = "HelloWorld! Wo";
```

```
document.write("length" + txt.length);
```

```
document.write("Uppercase" + txt.toUpperCase());
```

```
document.write("SubString" + txt.substring(3));
```

</script>

(3) Date Object: The date objects is used to work with dates and times.

Ex: <script>

```
var today = new Date();
```

```
document.writeln(today);
```

```
document.writeln(today.getTime());
```

```
document.writeln(today.getDay());
```

</script>

(4) Math Object: provides ~~you~~ properties and methods for mathematical constants and functions.

Ex:

```
document.write(Math.round(4.4));
```

```
document.write(Math.pow(8, 2));
```


Q8. Write a program in javascript to create a web page in which, when the mouse is moved over a div, the element will display the horizontal and vertical coordinates of your mouse pointer.

Ans. `<html> <head> <style>
div { width: 200px; height: 100px; border: 1px solid black;
</style> </head>
<body>
<div onmousemove = "myFunction(event)"> </div>
<p id = "demo"> </p>
<script>
function myFunction(e) {
var x = e.clientX;
var y = e.clientY;
var coor = "Coordinates: (" + x + ", " + y + ")";
document.getElementById("demo").
innerHTML = coor;
</script>
</body>
</html>`

Q9. How "Mouseovers" can be created in Dynamic HTML? Give example to change the size and color of the Text in a Web Page.

Ans. Mouseover can be created in Dynamic HTML by using CSS. In CSS, we can use hover for changing the style of mouse overs.

In hover when the mouse comes over the content, the style of hover is implemented until mouse moves back. The other way ~~is~~ of doing this is by using onMouseOver event. This example describes the mouse over using CSS

```
<html> <head> <style>
a: hover { background-color: yellow;
           font-size: 20px;
           font-color: red; }
</style> </head>

<body>
<a href = "http://www.w3schools.com">
  w3schools.com </a>
</body>
</html>
```

Q10. What is the difference between XML DTD and Schema?
Create a XML for employee information?

Ans. XML DTD Vs XML Schema

- (1) DTD can have only two types of datatypes i.e. CDATA and PCDATA whereas in schema all the primitive datatypes used in programming languages.
- (2) In schema the developer can create custom datatypes based on the core datatypes and by using different operators and modifiers but not in DTD.
- (3) XML schema is namespace aware while the DTD is not.

Employee.xml

<?xml version="1.0" encoding="UTF-8"?>

<Personnel>

<Employee type="permanent">

<Name>Seagull</Name>

<Eid>3674</Eid>

<DOJ>6/15/2010</DOJ>

<Department>Finance</Department>

</Employee>

<Employee type="contract">

<Name>Robin</Name>

<Eid>3675</Eid>

<DOJ>01/15/2017</DOJ>

<Department>Testing</Department>

</Employee>

<Employee type="permanent">

<Name>Crow</Name>

<Eid>3676</Eid>

<DOJ>8/16/2015</Department>

<Department>HR</Department>

</Employee>

</Personnel>

SECTION-C

Q11. Explain different properties and concepts of CSS with suitable example.

Ans. Cascading Style Sheets (CSS); are a method of web design that formats web page content according to the presentation style specified

by the web page author. For example:

`<style type="text/css">`
`p { font-size : 18pt ; font-weight : bold ;`
`text-align : justify ; }`
`</style>`

Diagram labels:
Selector: `p`
properties: `{ ... }`
Value: `18pt`, `bold`, `justify`
Declaration Block: `<style type="text/css"> ... </style>`

(1) FONT PROPERTIES: Various font properties are font-family, font-style, font-weight, font-size.
For example: `p { color : green ; font-style : italic ; }`

(2) TEXT PROPERTIES: Various text-properties are text-decoration, text-transform, text-align, text-indent.

For example: `h4 { text-decoration : line-through ; text-align : center ; }`

(3). BORDER PROPERTIES: Various border properties are border-style, border-color, width, border-top etc.

For example: `p { font-size : 12pt ; border-color : green ; border-style : groove ; border-width : thick ; }`

(4) MARGIN PROPERTIES: Several margin properties are margin-top, margin-bottom, margin-left, margin-right.

For example: `p { margin-top : 10% ; }`

(5). PADDING PROPERTIES: Specifies padding for each side of element: padding-top, padding-right, padding-bottom, padding-left.

For-example: `p { padding-top: 50px; padding-right: 30px; padding-bottom: 50px; padding-left: 80px }`

Q12. Design the registration form for the creation of email account with all possible validations using javascript.

Ans.

```
<!doctype html> <html> <head>
<title> Email Registration Form </title>
<script src = "validation.js" </script> </head>
<body onload = "document.registration.userid.
focus();" >
  <h1> Email Registration Form </h1>
  <form name = "registration" onsubmit = "return
    formValidation();" >
    <label for = "userid"> User-id: </label>
    <input type = text name = "userid" /> <br>
    <label for = "password"> Password: </label>
    <input type = text name = "passid" > <br>
    <label for = "username"> Username: </label>
    <input type = text name = "username" > <br>
    <label for = "phoneno"> Phone-No: </label>
    <input type = text name = "phoneNo" /> <br>
    <input type = submit name = OK value = OK />
  </form>
</body> </html>
```

Validation.js

```
function formValidation()
{
  var uid = document.registration.userid;
  var pid = document.registration.passid;
```

```

if (userid_valid (uid, 5, 12))
{
    if (passwd_valid (passwd, 7, 12))
    {
        }
    }

```

return false;

```

}
function userid_valid (uid, mx, my)

```

```

{ var u_len = uid.value.length;

```

```

if (u_len == 0 || u_len >= my || u_len < mx)
{ alert("userid should not be empty");

```

uid.focus();

```

} return false;

```

return true;

```

}
function passwd_valid (passwd, mx, my)

```

```

{ var p_len = passwd.value.length;

```

```

if (p_len == 0 || p_len >= my || p_len < mx)

```

```

{ alert("Password should not be empty /
length be between " + mx + " to " + my);

```

passwd.focus();

```

return false;

```

```

}

```

return true

```

}

```