Assignment 01

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Subject : Full Stack Development

A (MCQs)

Ques A1 : (c) <html>

Ques A2 : (d) Empty Elements or void elements

Ques A3 : (c) is used for block-level elements and is used for inline elements

Ques A4 : (b) "password"

Ques A5 : (a) Radio Buttons allow only one selection, checkboxes allow multiple.

Ques A6 : (b) <textarea>

Ques A7 : (a). <select>

Ques A8 : (a) color

Ques A9 ; (b) id

Ques A10 : (a) <link rel = "stylesheet" href = "style.css"/>

B (Subjective Questions)

Ques B1 :

(a) differences between HTML & XHTML

HTML	XHTML
① It is Hypertext Markup Language.	It is an extensible Hypertext Markup Language
② No tags or attribute is case sensitive.	All tags and attributes should be in lowercase (case sensitive)
③ Closing tags can be omitted.	Closing tags are mandatory.
④ Attribute values are given in quotes only if they consist special character.	All attribute values, including numbers are given in quotes.
⑤ Rules are not enforced for nesting elements.	Rules are enforced for nesting elements.
⑥ "Name" attribute can be used in anchor tag.	Instead of "name", "id" attribute is used.

(b) Standard structure of HTML doc

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html>
<html><head>
    <title></title>
    </head>
    <body>
        This is the body of XHTML document.
    </body>
</html>
```

→ XML declaration {encoding scheme & version}

→ Doctype definition

→ regular html document (with XHTML constraints)

(c) Hyperlinks in XHTML

A Hyperlink can be a text or image and is embedded within the opening <a> and closing tags.

→ linking to a website

```
<a href="www.xyz.com"> click here </a>
```

→ linking to another page

```
<a href="www.asy.com/abc.html"> click here</a>
```

(↳ any path)

→ linking to section on same page

```
<a href="#section1"> click here</a>
```

→ linking to section on different page

```
<a href="abc.html#section1"> click here</a>
```

Ques B2:

(a) Lists in XHTML

There are three types of lists in general:

① Unordered lists (order of items isn't important)

```
<ul> XYZ
    <li> M </li>
    <li> N </li>
    <li> O </li>
</ul>
```

② Ordered lists (sequence is important)

```
<ol type="1">XYZ
    <li> M </li>
    <li> N </li>
    <li> O </li>
</ol>
```

③ Definition lists (item and definition)

```
<dl>
    <dt> Item </dt>
    <dd> description </dd>
    <dt> Item2 </dt>
    <dd> description </dd>
</dl>
```

(b)

- cellpadding and cellspacing

cellpadding is used to specify the spacing between content/text and the innerwall of the cellborder. cellspacing is used to specify the spacing between cells/borders or cells on adjacent.

- align and valign

Align is used for specifying horizontal placement of value/content within a cell or row and can be used with <tr>, <td> and <th>. "align" attribute can take values "right", "left" and "center".
Valign is used to specify the vertical placement of content within a cell in the table and can be used with <th>, <tr>, <td>. valign attribute can take values "top" and "bottom".

- rowspan and colspan

rowspan is used to specify the number of rows merged. colspan is used to specify the number of columns merged.

(c)

XHTML table

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html>
<head>
    <style>
        table, th, td {
            border: 1px solid black;
            border-collapse: collapse;
        }
        td { width: 50px; align-content: center;
        }
    </style>
</head>
<body> <table cellpadding="10">
    <tr> <td rowspan="2"> One </td> <td> Two </td> <td></td>
        <td> Three</td> </tr>
    <tr> <td> Four</td> <td> </td> <td rowspan="2"> Five </td>
        </tr>
    <tr> <td> Six </td> <td> Seven </td> <td></td> </tr>
    <tr> <td> Eight </td> <td> Nine </td> <td></td>
        <td> Ten </td> </tr>
</table>
</body>
</html>
```

One	Two		Three
	Four		Five
Six	Seven		
Eight	Nine		Ten

Ques B3 (a) • Textboxes and password elements

<input type = "text"> is used define a single line of text called the text box

<input type = "password"> is used to define a single line of text that is masked for the user.

• Textarea elements

<textarea> is used to input multiple lines of input.

• Radio Buttons

<input type = "radio"> defines a radio button. Only one radio button can be selected at a time from a group of radio buttons.

• checkboxes

<input type = "checkbox"> defines a checkbox. Unlike radio button, multiple checkboxes can be selected at a time.

• Drop Down Menu

<select> is used to create a dropdown menu, which have radio
<option></option> buttons by default.
</select>

• Submit and Reset Buttons

<input type = "submit"> defines a submit button which is used form submission.

<input type = "reset"> defines a reset button used for resetting the controls in the form.

(b)
```
<?xml version = "1.0" encoding = "UTF-8"?>
<!DOCTYPE html>
<head></head>
<body>
    <form action = "">
        <h2> Registration form </h2>
        Name : <input type = "text">
        Summary : <textarea cols = "30" rows = "5"></textarea>
        Course : BCA <input type = "radio" name = "x">
                 BTech <input type = "radio name = "x">
        Subject : Java <input type = "checkbox">
                  Python <input type = "checkbox">
        Gender : <select name = "gender">
                    <option value = "" > Male </option>
                    <option value = "" > Female </option>
                 </select>
        <input type = "reset"> <input type = "submit">
    </form>
</body> </html>
```

Ques B4

CSS selectors

In CSS, selectors are used to select and style the HTML elements. Selectors are basically patterns which target specific elements or group of elements allowing you to apply styles particularly on them.
Various types of selectors are:

① Universal selector (*) : It selects all the elements on a webpage.

```
* { color: blue; }
```

② Type selector (Element selector): selects specific element

```
p { font-size : 16 px ; }
```

③ Class selector : selects classes

```
.ClassName { color : magenta }
```

④ ID selector : selects specific element with the given ID attribute.

```
#element-id { border: 1 px solid black ; }
```

⑤ Descendant selector : select all descendants of a given elements.

```
div p { color: brown; }
```

⑥ Child selector: selects direct children of specified element.

```
ul > li { list-style-type : square; }
```

⑦ Attribute selector: selects elements with specified attributes.

```
a[target] { color: red; }
```

⑧ Pseudo-class selector: selects elements based on their state/position;

```
a : hover {
        text-description: underline;
}
```

⑨ Pseudo-Element selector: selects parts of an element.

```
p:: first-line { font-weight : bold ; }
```

Ques B5 (a)

Levels of CSS

① Inline CSS: applied directly to HTML elements using "style" attribute.

```
<p style = "color: red;" > This is para :) </p>
```

② Internal (Embedded CSS) : defined within the style tag in the head section.

```
<head> <style> p { color: red ;
                 }
</style>
</head>
```

③ External CSS : styles are in a separate CSS file and are linked to HTML document using link tag.

```
<link rel = "stylesheet" type = "text/css" href = "styles.css" >
```

(b) Inline styles have highest precedence, then internal and then external styles. But specificity and importance attributes also influence.