1. HTML Introduction

- Html is a Markup language which is not a programming language as HTML stands for Hypertext Markup Language.
  ➢ Why it is called Markup Language?
- HTML is made up of tags and attributes that work together to identify document parts or tell the browser how to display them.
- HTML documents are also known as Web Pages or Web documents.
- The collection of HTML pages makes a Website.

2. Classification of HTML Tags

- HTML tags are not case sensitive.
- HTML tags actually serve two purposes:
  i) Identify logical document parts.
  ii) It includes pointers and links to other documents, images, sound files, video files and so on.
- All tags are composed of elements that are contained within angular brackets (< >) and tags are closed with /.
- However, there are two categories of HTML tags.
  A. Container tags or Paired tags
     ~ that has to be opening and closing tags.
     e.g.: <html> </html>
  B. Empty tags or Unpaired tags
     ~ that has to be open only no need to close the tags.
     e.g.: <img> To display image
3. Meaning of Attributes

• Some tags work in combination with attributes, which provides additional information about an element, such as how element should align, what other files should be accessed, or even the color of an element.

For example

<Body bgcolor="red">

• Here the background color of whole page will be red.

4. Basic Structure of HTML

<HTML>

<HEAD>

<TITLE>

Create my first page

</TITLE>

</HEAD>

<BODY>

All tags, attributes and information that you want to display on your webpage.

</BODY>

</HTML>

5. Purpose of Basic tags of HTML

➢ The <HTML> Tag: The <HTML> tag identifies the document as an HTML.

➢ The <HEAD> Tag: The <HEAD> tag contains information about the document, including its title, scripts used, style definitions and document descriptions.

➢ The <TITLE> Tag: The <TITLE> tag contains the document title.
➢ The <BODY> Tag: The <BODY> tag encloses all tags, attributes and information that you want on a visitor browser to display.
Attributes of <BODY> tag:
- Bgcolor: Background color of the document.
- Align: Alignment of the document (Left, Right or Center).
- Text: Defines the color of the text.

E.g.: `<body bgcolor="yellow" text="red" align="center">`

6. <P> tag
- It is one of the tag in HTML which is used for making paragraphs.
- It is a container/Paired tag.

Attribute of <P> tag
- ALIGN: Positions the Paragraph in the right, left or in the center of a document.

E.g.:

```html
<P align="center">Write Your Paragraph </P>
```

7. Heading tags
- Heading tags are used to specify headings.
- There are total 6 heading tags numbered from 1 to 6 like `<h1>,<h2>,<h3>,.........,<h6>` depending on their sizes.
- `<H1>` will be the largest Heading tag.
- `<H6>` will be the smallest Heading tag.
- All the Heading tags are container/paired tags.

Attribute of heading tag
- ALIGN: Positions the heading in the right, left or in the center of a
document.

E.g.:

<H2 align="center">Heading Number 2</H2>
WORKSHEET

Date: 30/03/2020    TIME: 1.5HRS    MARKS: 40

I) FILL IN THE BLANKS

1. HTML is a _____ language.
2. The collection of web pages are called _____.
3. The <TITLE> tag contains the document title.
4. HTML stands for _______.
5. Container tag is also known as____.
6. _____ provides additional information about an element.
7. _____ attribute is used to get the Background color.
8. The ____ tag identifies the document as an HTML.
9. _____ attribute specifies the position of the document.

II) STATE TRUE OR FALSE

1. HTML tags are case sensitive.
2. HTML is not a programming language.
3. Tag is a coded command.
4. <TITLE> tag is always placed inside <BODY> tag.
5. Every HTML program has a fixed basic structure.
6. <H6> will be the largest heading tag.
7. <P> tag is used to make paragraphs.

III) MATCH THE FOLLOWING:

1) <H6> (a) Largest Heading tag
2) <P> (b) Empty tag
3) <H1> (c) Paragraph tag
4) <img> (d) Smallest Heading tag

IV) PROGRAMS

1. Create a webpage to display “INFORMATION TECHNOLOGY” in center with background color blue.
2. Create a webpage to display a paragraph consisting of 5 lines about your pet.
3. Create a webpage to display Highest level of heading in the right and the lowest level of heading in the left.
Create a webpage to display any 2 heading tags and a paragraph with yellow background color.
**Text Formatting Elements of HTML**

1) `<b>` tag: Displays text within it in bold.
   
   Eg: `<b>Hello</b>`

2) `<i>` tag: Displays text within it in italicized manner.
   
   Eg: `<i>Hello</i>`

3) `<u>` tag: Displays text with underline
   
   Eg: `<u>Hello</u>`

4) `<small>` tag: Displays text in small font size.
   
   Eg: `<small>Hello</small>`

5) `<sub>` tag: Displays text in subscript form.
   
   Eg: `H<sub>2</sub>0`

6) `<sup>` tag: Displays text in superscript form.
   
   Eg: `(a+b) <sup>3</sup>`

7) `<ins>` tag: Displays text as inserted text.
   
   Eg: `<ins>This is insert tag</ins>`

8) `<del>` tag: Displays text as deleted text.
   
   Eg: `<del>This is delete tag</del>`
9) `<mark>` tag: Displays text marked or highlighted text.

   Eg: `<mark>This is mark tag </mark>`
**WORSHEET**

**Date:** 31/03/2020  
**TIME:** 1.5HRS  
**MARKS:** 40

**I) FILL IN THE BLANKS**

1. _____ tag indicates text that should appear in **Bold** face.
2. For subscript _____ tag is used.
3. To make text underlined we need to use _____ tag.
4. _____ tag helps to display mathematical formulas.
5. <i> tag displays text in ______ manner.
6. _____ tag is used to display text in 1 size smaller font.
7. <ins> tag displays text in ______ manner.
8. To make text highlighted, one should use ___ tag.
9. _____ tag is used to strike through text.

**II) STATE TRUE OR FALSE**

1. <mark> tag is used to strike out the lines.
2. <u> tag is one of the empty tag.
3. <sup>tag is helpful for displaying base terms.
4. <small> tag displays the default font size.
5. <sup> is container tag.
6. <u> tag appears as bold, italic and underlined.
7. <sub> tag helps to display chemistry formulas.

**III) MATCH THE FOLLOWING:**

1. <b> (a) **HELLO**
2. <mark> (b) **HELLO**
3. <i> (c) *HELLO*
4. <u> (d) *Hello*

**IV) PROGRAMS**

1. Create a webpage to display one mathematical and chemistry formula in **bold**.
2. Create a webpage to display a text in **bold**, italic and underlined with background color purple and text color red.
3. Create a webpage to display a paragraph consisting of following tags: <mark>tag, <del> tag, <ins> tag.
Create a webpage to display a paragraph about Corona Virus in small font with alignment right.
1. Inserting an Image and its attributes

- The `<IMG>` tag is used to place an image in a document.
- It is one of the empty/unpaired tags.

Attributes of `<IMG>` tag

- **SRC**: This defines the name of the image file. If the file is on the desktop then just write the image name with extension (.jpg) and if not then write the complete path or URL. [JPEG: Joint Photographic Expert Group].
- **HEIGHT**: It specifies the height of the image.
- **WIDTH**: It specifies the width of the image.
- **BORDER**: It gives the border to the image.
- **ALIGN**: It defines the position of the image. It can be in left, right or in center.
- **ALT**: It displays the description of the image.

E.g.: `<IMG SRC="Sunset.jpg" HEIGHT=500 WIDTH=300 BORDER=2 ALIGN="CENTER" ALT="Display text">`

2. `<HR>` tags with Attributes

- The `<HR>` tag is used to display horizontal ruled line.
- It is one of the empty/unpaired tags.
Attributes of `<HR>` tag

- **COLOR**: It sets the color for the horizontal ruled line.
- **SIZE**: It sets thickness of a ruled line.
- **WIDTH**: It specifies the width of the horizontal ruled line.

E.g.: `<HR COLOR="RED" WIDTH=60%>`

3. **<BR> tag**

- The `<BR>` tag is used to break a line of continuous text and prevents text alignment around images.
- It is one of the empty/unpaired tag.

  E.g.: THIS IS TESTING `<BR>` FOR BREAK LINE `<BR>` TAGS.
WORKSHEET

Date:01/04/2020          TIME: 1.5HRS          MARKS:40

I) FILL IN THE BLANKS

1. _____ tag is used to break lines.
2. _____ attribute specifies the path of the image.
3. <HR> tag stands for ______.
4. _____ attribute specifies the position of an image.
5. _____ attribute displays the description of the image.
6. JPEG stands for ________.
7. ____ attribute is used to display the size of a ruled line.
8. <img> tag is used to place _________ on the webpage.
9. ___ attribute sets the color of the line.

II) STATE TRUE OR FALSE

1. <HR> tag is used to break the lines.
2. Alt means Alignment .
3. <BR> tag is unpaired tag.
4. SRC is mandatory attribute in <img> tag.
5. Height attribute specifies the height of the image.
6. <IMG> tag is a container tag .
7. THICK attributes specifies the thickness of ruled line.

III) MATCH THE FOLLOWING:

1) <br> (a) Container tag
2) <hr> (b) Breaking lines
3) <img> (c) Size attribute
4) <html> (d) Src attribute

IV) PROGRAMS

1. Create a webpage to display an image of size 50*70 with an alternate text “picture not available”.
2. Create a webpage to display two horizontal thick lines with different colors.
3. Create a webpage to display an image and make use of following attributes: SRC, HEIGHT, WIDTH, ALT
Create a webpage to display the college image and write a paragraph about the college in center with background color green.
**Creating Table** (page 35)

What is table?
In HTML, a table is basically arranging data such as (text, images, links etc) into a tabular design—basically into rows and columns.

When to use tables?
When you want to organize data that would look best in a spreadsheet.

Example: to display such as financial data, calendars, pricing, feature comparison and many other tabular data.

(Table tag is paired tag/container tag)

Tags or Elements that are used to create a table are as follows:

- `<table>`: used to indicate the creation of a table.
  
  Example: columns

  ```html
  <table>
   |   |   |
  --|--|--
  |   |   | rows
  ```

  so table is of 2 rows and 3 columns.

  Syntax: `<table> ------ </table>`

- `<caption>`: specify the heading of the table.
  
  Align attribute like ‘Top’ or ‘Bottom’ by its values.
  
  By default, ‘Top’ value.

  Syntax: `<caption> ---- </caption>`

- `<tr>`: used to create a row for each table.

  Syntax: `<tr> ------ </tr>`
• `<th>`: defines a table header cell.

By default text in cell is BOLD and CENTERED.

Syntax: `<th>--------</th>`

• `<td>`: defines a table data cell or content of cell.

By default text is aligned left and centered vertically in cell.

Syntax: `<td>--------------</td>`

**The attributes of Table are:**

1. `border`: display border for entire table, indicate thickness in pixels.

   Give the value as an integer. No Border means value 0.

   Syntax: `border=”value”`

   Ex: `<table border=”2”>`

   Will display the table border of thickness value 2.

2. `align`: specifies the horizontal placement of the table to the left, right, center.

   By default table align to left.

   Ex: `<html>`

   `<head> align</head>`

   `<body>`

   `<table align=”left” border=”2”> align the table in left.>`

   `<tr>`

   `<td>pace</td>`

   `</tr>`

   `</table>`

   `</body>`

   `</html>`

   Similarly `<table align=”right”> align the table in right.>`

   `<table align=”center”> align the table in center.>`

3. `bordercolor`: display the border in a specific color.

   Syntax: `bordercolor=”color” or bordercolor=”hexcode”`

   Ex: `<html>`

   `<head> bordercolor</head>`

   `<body>`

   `<table border=”2” bordercolor=”red”> OR`  

   `<tr>`
Similarly: <table border="2" bordercolor="#FF0000">
</table>
Will display the table border with color red and with thickness of border value 2.

4. bgcolor: it will set the background for the table.
Syntax: bgcolor="color" or bgcolor="hexcode"
Ex: <html>
<head> bgcolor</head>
<body>
<table border="2" bordercolor="red" bgcolor="green"> OR
<tr>
<td>pace</td>
</tr>
</table>
</body>
</html>
Similarly: <table border="2" bgcolor="#008000">
Will sets the table background color to green.

5. height: specifies the height of table, height can be in number of pixels or a percentage
Syntax: height="value"
Ex: <html>
<head> height</head>
<body>
<table border="2" height="100">
<tr>
<td>pace</td>
</tr>
</table>
</body>
</html> Will display the table height with value 100 in terms of pixels or percentage.
6. **width**: defines the width of table, can be in number of pixels or percentage.

**Syntax**: `width="value"`

**Ex**: `<html>
  <head> width</head>
  <body>
    <table border="2" bordercolor="red" width="50">
      <tr>
        <td>pace</td>
      </tr>
    </table>
  </body>
</html>`

Will display the table width with value 50 in terms of pixels or percentage & bordercolor red.

**The attributes of the `<tr>`, `<td>` , `<th>`:**

1. **align**: aligns the text horizontally, values are `align to left`, `right`, `center`.

**Ex**: `<table border="2">`<br>
  `<tr>`
    `<td align="center">IT</td>`
    `<td align="right">CSE</td>`
    `<td align="left">ENGG</td>`
  `<tr>`
`</table>`

Will display the table with content alignment of 1\textsuperscript{st} column in center, 2\textsuperscript{nd} column in right and 3\textsuperscript{rd} column in left.

2. **colspan**: its used in table to merge one or more column, it creates spanning of table based on the number of columns to be spanned.

**Ex**:

<table>
<thead>
<tr>
<th>Sr.no</th>
<th>alphabets</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>B</td>
</tr>
</tbody>
</table>

Above table is of 2 rows and 3 columns out of which column is merge in 1\textsuperscript{st} row.
3. **rowspan** attribute is used in table to merge one or more rows, creates spanning of table, based on the numbers of rows to be spanned.

Ex:

```
<table>
<thead>
<tr>
<th>Pace college</th>
<th>powai thane</th>
</tr>
</thead>
<tbody>
<tr>
<td>neet</td>
<td>mhcet</td>
</tr>
</tbody>
</table>
```

Above table is of 3 rows & 2 Column, in which 1st row 2 rows are spanned.

NOTE: `<tr>`, `<td>`, `<th>` tags can have `bgcolor` attribute for giving background color to a row or column.

1. **program.**

```html
<!DOCTYPE html>
<head>
<title> table with 2 rows & 4 columns</title>
</head>
<body bgcolor="red" text="green">
<table border="2" >
<tr >
   <th> </th>
   <th> </th>
   <th> </th>
   <th align="center"> SALES </th>
</tr>
<tr>
   <th colspan="2" align="center"> 2019 </th>
   <th colspan="2" align="center"> 2020 </th>
</tr>
</table>
</body>
</html>`
I.T WORKSHEET

Date: 02/04/2020

Marks: 40

TIME: 1.5hrs

Q1. FILL IN THE BALNKS: 9 marks

1. Bgcolor sets _________ background for table.
2. ______attribute specifies the alignment for the table.
3. ___ attribute gives color to the border of the table.
4. _______ tag is used to create heading in above or below of table.
5. ______attribute is used to span the rows.
6. <table> tag is _________ tag.
7. _______ is default value for <caption> tag.
8. ______attribute is used to display the border for entire table.
9. ______ tag is used to specify the cell content.

Q2. STATE TRUE OR FALSE: 7 marks

1. Table tag is empty tag.
2. In table we cannot set the background color for the table.
3. We can write the table without caption.
4. Heading of the table lies inside the <th> tag.
5. <Colmerge> tag is used to span the column in table.
6. Table is organised data that looks best in spreadsheet.
7. <tr> <td> <th> can have bgcolor attribute.

Q3. MATCH THE FOLLOWING: 4 marks

1. Tabular data a. Table row
2. <tr> b. Table
3. Bgcolor c. table heading
4. <th> d. Attribute
Q4. WRITE PROGRAMS: 20marks

1. Write a program in HTML for the following output?

<table>
<thead>
<tr>
<th>YEARS</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNITS</td>
<td>500</td>
<td>1500</td>
<td>25000</td>
</tr>
<tr>
<td>INCOME</td>
<td>1000</td>
<td>4000</td>
<td>50000</td>
</tr>
</tbody>
</table>

2. Write a program in HTML to create a table with 2 rows and 2 columns?

3. Write a program in HTML for the following output?

<table>
<thead>
<tr>
<th>Name</th>
<th>Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>RONAK D.</td>
<td>NEET</td>
</tr>
<tr>
<td></td>
<td>JEE</td>
</tr>
</tbody>
</table>

4. Write a program in HTML for the following output?

<table>
<thead>
<tr>
<th>PIZZA(Domino's)</th>
<th>With toppings</th>
<th>Rs. 199</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without toppings</td>
<td>Rs.150</td>
</tr>
<tr>
<td>Pav Bhaji</td>
<td>Cheese pav bhaji</td>
<td>Rs. 60</td>
</tr>
</tbody>
</table>
CHAPTER 3: IMPRESSIVE WEB DESIGNING

1. Creating Hyperlinks in Webpage (page 37)

Links are found nearly in all web pages. Links allow user to click their way from page to page.

What is a link?

Links are used to connect one or more document with other document also when you open Any website and click on a text or an image it will take you that page, which is called as Hyperlink. Links are also called as anchor tag.

A hyperlink is a string that appears in a different color from the rest of the text. Html links are hyperlinks.

Ex: www.yahoo.com, www.rediffmail.com etc.

When you move the mouse over a link, the mouse arrow will turn into little hand.

Note: A link does not have to be text. It can be an image or any other HTML element.

HTML Links – Syntax

The tag that makes HTML document active, is the anchor tag, (<A>) tag which inserts Hyperlinks in your document.

Syntax: <a href="url"> link text</a>

url stands Uniform Resource locator, which is an address of document on server is unique.
Ex:

a) Linking to documents in the same folder:
   `<a href="index.html">call college site</a>`
   Here we are linking on same folder i.e index.html.

b) Linking to documents in the different folder:
   `<a href="faculty/data/fac.html">college faculty</a>`
   Linking in folder called faculty and in faculty data and in data our html file fac.html.

c) Linking to documents on web:
   `<a href="www.yahoo.com">visit yahoo</a>`
   Directly linking to yahoo webpage.

d) Linking to specific location:
   `<a href="#microsoft">Microsoft</a>`

e) Linking to email:
   `<a href="mailto:abc@rediffmail.com">click me</a>`

The attribute of link are:

- **Href**: gives the location to which the hyperlinks points.
  Ex: `<a href="www.yahoo.com">` Here location is yahoo.com which i am looking.

- **Title**: value of this attribute is displayed as tool tip text.
  Ex: `<a href="mailto:abc@rediffmail.com">click me</a>`
  So click me is here tool tip text which will open rediff mail

- **Target**: attribute specifies where to open the linked document.
  By default the linked document open in same window using _self attribute
Ex: `<html>
<head>
<title> target attribute</title>
</head>
<body>
<a href="https://www.yahoo.com/" target="_blank">visit yahoo</a>
<p> if you set target to “_blank “ the link will open in new browser window or tab</p>
</body>
</html>`

if you set target to “_blank “ the link will open in new browser window or tab.

**HTML Link Colors:**

By default ,a link will appear like this in all the browser (ex: chrome, firefox, IE ETC.)

- An unvisited link is underlined and blue.
- A visited link is underlined and purple.
- An active link is underlined and blue

**Image Hyperlink:**

Many websites have images as hyperlink.

Syntax: `<a href="url"> <img src="image.type" ></a>`

Ex:

```
<!doctype html>
<html>
<body>
<h1> image link</h1>
<a href="first.html"> <img src="smiley.gif" alt="click on smiley"> </a>
</body>
</html>
```

It will display the smiley image in link first .html
SUMMARY:
- Href is used for link purpose.<a href="url"></a>
- _blank attribute open link in new window or in new tab
- Link is always in blue color.
- Img src is used to insert image and to create image link<img src>
- URL is uniform resource locator.
- _self attribute used in target to open the link document in same page.
- Target is an attribute of anchor tag.
- URL is also a link destination.

I.T WORKSHEET

DATE: 03/04/2020
TIME: 1.5HRS
MARKS:40

Q1. FILL IN THE BLANKS: 9 marks
1. Link URL in HTML is specified using______attribute.
2. <a> tag is________tag.
3. ___ are used to connect one document with another document.
4. href stands for__________________.
5. link in HTML is________________color.
6. URL stands for______.
7. In HTML links are created by using ___tag.
8. __________is used for linking purpose.
9. Unvisited link is______________Color.

Q2. STATE TRUE OR FALSE: 7 marks
1. Unvisited link is red color.
2. _self attribute open link document in different window.
3. <img >tag is used to defined links in HTML document.
4. <ach> is anchor tag.
5. default attribute of target value is _self in HTML.
6. Visited link is in blue color.
7. href is hyperlink.
Q3. MATCH THE FOLLOWING:  

1. Link color  
   a. target  
2. HREF  
   b. Hyperlink image  
3. _self  
   c. blue  
4. <a href="url"> <img src="" ></a>  
   d. To create link

Q4. PROGRAMS.  

1. Write a program using html to create a text link to local web page?  
2. Write a program using html to create an image link to “google.com”?  
3. Write a program using html to create a text link to your college website?  
4. Write a program using html to create a image link to abc.html?