

## Frames

**State what is frame? Explain how it can be created with suitable example. (4marks)**

Frame :

A **frame** in HTML is used to display another web page or content within the current page, allowing the browser window to be divided into multiple sections where each section can have its own content. There are two main ways to create frames: using the outdated <frameset> and <frame> tags or the modern <iframe> tag.

**<frameset> and <frame>:**

- These tags were used in older HTML to divide the browser window into multiple sections. Each section (or frame) could load a different web page.

Example:

```
<html>

<frameset cols="50%,50%">

  <frame src="page1.html">

  <frame src="page2.html">

</frameset>

</html>
```

**<iframe>:**

- The <iframe> tag is a modern approach used to embed one HTML page inside another. It is commonly used and still supported in HTML5.

<iframe src="https://www.example.com" width="100%" height="300"></iframe>

### **Create a Frame**

### **3.2 FRAME**

- To define a frame we use <frame> tag within <frameset> tag.
- Each <frame> in <frameset> may have different attributes.

**Attributes of <frameset>**

Sr. No	Attribute	Value	Description
1	cols	Pixel , percentage and "*"	It Specifies the number and size of column in frameset.
2	rows		It Specifies the number and size of rows in frameset

**Attributes of <frame>**

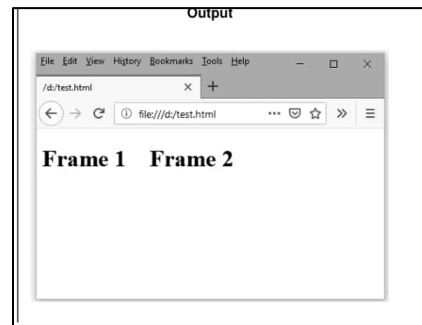
Sr. No	Attribute	Value	Description
1	frameborder	0 or 1	1=border , 0= without border
2	name	Any name	Name of frame
3	src	URL	Path of the html file

### 5.2.2 Invisible Borders of Frame

The borders of the frames can be made invisible by setting the attributes “frameborder” and “border” = 0.

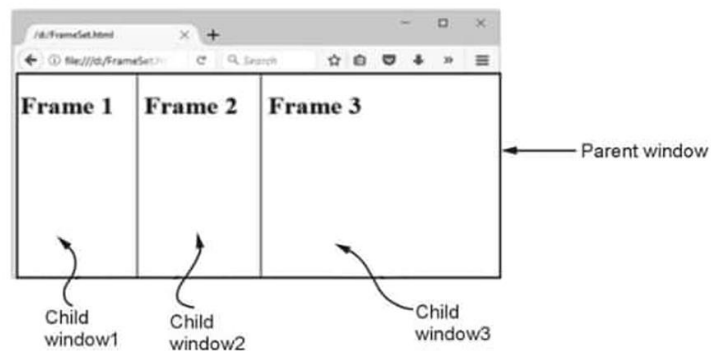
For example –

```
<!DOCTYPE html>
<html>
<frameset cols="30%,70%">
  <framesrc="frame1.html"frameborder="0" border="0"/>
  <framesrc="frame2.html"frameborder="0" border="0"/>
</frameset>
</html>
```



### 5.2.3 Calling a Child Window

The main window defining the frames in it is called parent window and each frame contains the child windows. For example –



We can call one child window from another child window. Following is a JavaScript in which we are calling the function defined in another child window from one window.

**Program 1 :** Write a javascript to open a new window and the new window is having two frames. One frame containing button as “click here !”, and after clicking this button an image should open in the second frame of that child window.(6m)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Open New Window with Frames</title>
  <script>
    function openNewWindow() {
      // Open a new window
      var newWin = window.open("", "", "width=600,height=400");

      // Write the HTML structure for two frames in the new window
      newWin.document.write(`
        <html>
        <head>
          <title>Two Frames</title>
        </head>
        <frameset cols="50%,50%">
          <frame name="buttonFrame">
          <frame name="imageFrame">
        </frameset>
        </html>
      `);

      // Write the button into the first frame (buttonFrame)
      newWin.frames["buttonFrame"].document.write(`
        <html>
        <body>
          <button
onclick="parent.frames['imageFrame'].location.href='images.jpg';">Click
Here!</button>

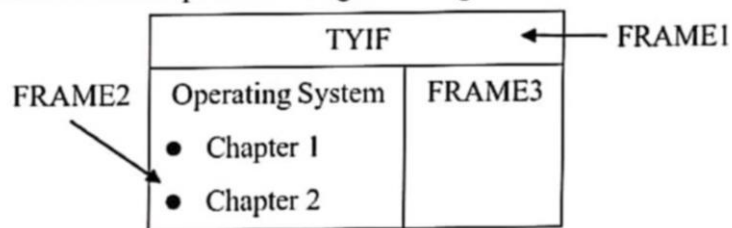
          </body>
        </html>
      `);
    }
  </script>
</head>
<body>
  <button onclick="openNewWindow()">Open New Window with Frames</button>
</body>
</html>
```

(i) Design frameset tag for representing following layout :

Frame 1		
Frame 2	Frame 4	Frame 3

```
<html>
<head>
<title>Create a Frame</title>
</head>
<frameset rows="10%,*" noresize>
<frame src="frame1.html">
<frameset cols="33%,33%,*" >
<frame src="frame2.html">
<frame src="frame4.html">
    <frame src="frame3.html">
</frameset>
</frameset>
</html>
```

(c) Write a JavaScript for creating following frame structure :



Chapter 1 & Chapter 2 are linked to the webpage Ch1 HTML & Ch2.html respectively. When user click on these links corresponding data appears in FRAME3.

```
<html>
<head>
  <title>Frame Example</title>
</head>

<frameset rows="20%,80%">
  <frame src="frame1.html" name="a">
  <frameset cols="70%,30%">
    <frame src="frame2.html" name="b">
    <frame src="frame3.html" name="c">
  </frameset>
</frameset>
</html>
```

```
Frame 1
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Frame 1</title>
</head>
<body>
  <h1
align="center">TYIF</h1>
</body>
```

```
Frame 2
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Frame 2</title>
</head>
<body>
  <h1>Operating Sytem </h1>
  <ul>
    <li><a href="Ch1.html" target="c">Chapter
1</a></li>
    <li><a href="Ch2.html" target="c">Chapter
2</a></li>
  </ul>
</body>
</html>
```

```
Frame 3
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Frame 3</title>
</head>
<body>
  <h1>Frame 3</h1>
</body>
</html>
```

```

Ch1.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Frame 2</title>
</head>
<body>
  <h1> hemant
chutiya</h1>

</body>
</html>

```

```

Chp2.html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Frame 2</title>
</head>
<body>
  <h1> hemant hariya</h1>

</body>
</html>

```

(b) Write a script for creating following frame structure

FRAME 1	
FRAME 2	FRAME 3
<ul style="list-style-type: none"> <li>• FRUITS</li> <li>• FLOWERS</li> <li>• CITIES</li> </ul>	

FRUITS, FLOWERS and CITIES are links to the webpage fruits.html, flowers.html, cities.html respectively. When these links are clicked corresponding data appears in FRAME 3.

(6marks)

```

Mainframe.html
<html>
  <head><title>Main frame</title></head>
  <frameset rows="25%,*">
    <frame src="frame1.html" name="a"></frame>
  <frameset cols="60%,*">
    <frame src="frame2.html" name="b"></frame>
    <frame src="frame3.html" name="c"></frame>
  </frameset>
</frameset>
</html>

```

Frame 1.html

```
<html>
  <head>
    <title>frame1 </title>
  </head>
  <body>
    <h2 align="center">FRAME
1</h2>
  </body>
</html>
```

Frame2.html

```
<html>
  <head>
    <title>frame1 </title>
  </head>
  <body>
    <h2>FRAME 2</h2>
    <ul>
      <li> <a href="fruits.html"
target="c">Fruits </a></li>
      <li><a href="flowers.html"
target="c">Flowers</a></li>
      <li><a href="cities.html"
target="c">Cities</a></li>
    </ul>
  </body>
</html>
```

Frame3.html

```
<html>
  <head>
    <title>frame1 </title>
  </head>
  <body>
    <h2>FRAME 3</h2>
  </body>
</html>
```

Flowers.html

```
<html>
  <head>
    <title>Flowers Page</title>
  </head>
  <body>
    <h2 align="center">Flowers</h2>
    <p>
Content here
    </p>
  </body>
</html>
```

Cities.html

```
<html>
  <head>
    <title>Cities Page</title>
  </head>
  <body>
    <h2 align="center">Cities</h2>
    <p>
      Here are the details of
population
- 3,046,163.
    </p>
  </body>
</html>
```

Fruits.html

```
<html>
  <head>
    <title>Fruit Page</title>
  </head>
  <body>
    <h2 align="center">Fruits</h2>
    <p>
      Content here
    </p>
  </body>
</html>
```

(b) Write a script for creating following frame structure :

Frame 1 contains three buttons SPORT, MUSIC and DANCE that will perform following action :

When user clicks SPORT button, sport.html webpage will appear in Frame 2.

When user clicks MUSIC button, music.html webpage will appear in Frame 3.

When user clicks DANCE button, dance.html webpage will appear in Frame 4.

	FRAME 1	
SPORT	MUSIC	DANCE
FRAME 2	FRAME 3	FRAME 4

(6m)

```
<!DOCTYPE html>
<html>
<head>
  <title>Summer 23</title>
</head>
<body>
  <frameset rows="20%,80%">
    <!-- Top row for buttons -->
    <frame name="menu" src="menu.html">

    <!-- Bottom row divided into 3 columns -->
    <frameset cols="33%,33%,34%">
      <frame name="sportFrame" src="">
      <frame name="musicFrame" src="">
      <frame name="danceFrame" src="">
    </frameset>
  </frameset>
</body>
</html>
```