HTML 5 Module-3

Q-1).What are the new tags added in HTML5?

ANS). There are some of the notable tags added in html-5:

Here it is :-

- <audio> is used to define sounds such as music and other audio clips. Currently there are three supported file format for HTML 5 audio tag.
- <video>-It is used to play video file in HTML.
- <header>: Defines the header of a document or a section.
- <footer>: Defines the footer of a document or a section.
- <nav>: Defines a set of navigation links.
- <section>: Defines a section in a document.
- <article>: Defines an independent piece of content that can be reused or syndicated.
- <main>: Defines the main content of a document.
- <figure>: Specifies self-contained content, such as images, diagrams, illustrations, etc.
- <figcaption>: Provides a caption for a <figure> element.
- <time>: Represents a specific period in time or a range of time.
- <progress>: Represents the progress of a task.
- <details>: Represents additional details that the user can view or hide.
- <summary>: Defines a visible heading for the <details> element.
- <mark>: Highlights text.
- <datalist>: Defines a list of pre-defined options for <input> elements.

Q-2). How to embed audio and video in a webpage?

ANS). <u>Audio Tag-</u> and <u>Video tag:-</u>

HTML <embed> tag is used to embed an external document in an HTML file which can be a third-party application, multimedia, plugin(interactive content), etc. This element is new in HTML5.

- **Audio Tag-**HTML audio tag is used to define sounds such as music and other audio clips. Currently there are three supported file format for HTML 5 audio tag.

➢ Example:-

```
<audio controls>
  <source src="audio_file.mp3" type="audio/mpeg">
  Your browser does not support the audio element.
</audio>
```

➢ **Video tag-** HTML 5 supports <video> tag also. The HTML video tag is used for streaming video files such as a movie clip, song clip on the web page.
➢ Currently, there are three video formats supported for HTML video tag:
o mp4
o webM
o ogg

➢ Example:-
Embedding Video using the <video> element:

```
1    <video controls width="400" height="300">
2        <source src="video_file.mp4" type="video/mp4">
3        Your browser does not support the video element.
4    </video>
```

Q-3). Semantic element in HTML5?

Ans).

➢ HTML5 provides more semantic elements which make easy understanding of the code.
➢ Hence Semantics defines the meaning of words and phrases, i.e Semantic elements= elements with a meaning. Semantic elements have a simple and clear meaning for both, the browser and the developer.

Sementic tag Example:-

```
<> sementic tags.html  X

C:\Users\MR. HARSHIL
PATEL\OneDrive\Desktop\WEB_DESIGNING\HTML_JANVIMAM\sementic tags.html
 3    <head>
 6        <title>Document</title>
 7        <style>
 8            header{
 9                height: 100px;
10                width: 100%;
11                background-color: rgb(157, 24, 29);
12            }
13            div{
14                height: 80px;
15                width: 100%;
16                background-color: rgb(54, 26, 91);
17            }
18            footer{
19                height: 100%;
20                width: 100%;
21                background-color: rgb(21, 113, 27);
22            }
23        </style>
24    </head>
25    <body>
26        <div>
27            <a href="">HOME</a>
28            <a href="">ABOUT US</a>
29            <a href="">NUMBER</a>
30            <a href="">PICTURES</a>
31        </div>
32      <header>
33        <img src="../img/baby lion.jpg" alt="" height="25px">
34        <input type="text" name="" id="" width="80%">
35      </header>
36      <footer>
37        Lorem ipsum dolor sit amet consectetur adipisicing elit. Quos architecto deserunt iusto ipsam consequunt
38        ur ipsa delectus nemo, doloremque, libero beatae vero neque consectetur est repudiandae
39      </footer>
40    </body>
41    </html>
```

Q-4). Canvas and SVG tags.

Ans).HTML Canvas Tag:-

- The HTML canvas element provides HTML a bitmapped surface to work with. It is used to draw graphics on the web page.
- The HTML 5 <canvas> tag is used to draw graphics using scripting language like JavaScript.
- The <canvas> element is only a container for graphics.
- It is a low level, procedural model that updates a bitmap and does not have a built-in scene. There are several methods in canvas to draw paths, boxes, circles, text and add images.

Example:-

```
<> canvas.html X
HTML_JANVIMAM > <> canvas.html > script
  1    <canvas id="myCanvas" width="400" height="200"></canvas>
  2    <script>
  3      var canvas = document.getElementById('myCanvas');
  4      var ctx = canvas.getContext('2d');
  5
  6      // Draw a rectangle
  7      ctx.fillStyle = 'blue';
  8      ctx.fillRect(50, 50, 100, 50);
  9    </script>
```

HTML SVG Tag:-

- The HTML SVG is an acronym which stands for Scalable Vector Graphics.
- HTML SVG is a modularized language which is used to describe graphics in XML.
- It describe two-dimensional vector and mixed vector/raster graphics in XML.
- you can create and edit an SVG image with text editor, but generally drawing programs like inkspace are preferred to create it.
- The <svg> element specifies the root of a SVG fragment. You can animate every element and every attribute in SVG files.

Example:-

```
<> svg.html  ●
HTML_JANVIMAM > <> svg.html > html > body
  1    <!DOCTYPE html>
  2    <html lang="en">
  3    <head>
  4        <meta charset="UTF-8">
  5        <meta name="viewport" content="width=device-width, initial-scale=1.0">
  6        <title>Document</title>
  7    </head>
  8    <body>
  9        <svg width="100" height="100">
 10            <circle cx="50" cy="50" r="40" stroke="yellow" stroke-width="4" fill="red" />
 11        </svg>
 12    </body>
 13    </html>
```