Module 15 – Website Designing - Html5

Theory Assignment

1: Deffrence b/w HTML & HTML5?

Ans:

- **Difference Between HTML & HTML5**

HTML	HTML5
Doctype declaration is too long and complicated.	Doctype declaration is quite simple and easy.
Character encoding is long and complicated.	Character encoding is simple and easy.
Being an older version , it is not fast , flexible , and efficient as compared to HTML5.	It is efficient, flexible and more fast in comparison to HTML.
Elements like nav, footer were not present.	New element for web structure like nav, header, footer etc.
<HTML>,<Body> , and <Head> tags are mandatory while writing a HTML code.	These tags can be omitted while writing HTML code.
Old version of HTML are less mobile-friendly.	HTML5 language is more mobile-friendly.
It does not allow drag and drop effects.	It allows drag and drop effects.
It works with all old browsers.	It supported by all new browser like Firefox, Mozilla, Chrome, Safari, etc.
Vector graphics are possible in HTML with the help of various technologies such as VML, Silver-light, Flash, etc.	Vector graphics are additionally an integral part of HTML5 like SVG and Canvas.

It did not support audio and video without the use of flash player support.	It supports audio and video controls with the use of <audio> and <video> tags.
It can not handle inaccurate syntax.	It is capable of handling inaccurate syntax.
It uses cookies to store temporary data.	It uses SQL databases and application cache to store offline data.
Example: <html> <head> <title> Create a Simple html progrram </title> </head> <body> Hello World First program </body> </html>	Example: <!DOCTYPE html> <html lang="en"> <head> <meta charset="UTF-8"> <meta name="viewport" content="width=device-width, initial-scale=1.0"> <title>Document</title> </head> <body> Hello World First Program </body> </html>

2: What are the additional tags used in HTML5?

Ans: HTML5 introduced several new elements that improved the structure and accessibility of web pages.

1. **<header>** : The <header> tag is a semantic HTML element that is used to define the introductory or navigational content of a webpage or a section. Header tag are used to the website or page title, logo, navigation menus, seach bar etc.
   - **Example:**
```
<header>
    <h1>Welcome to My Website</h1>
    <nav>
        <ul>
            <li><a href="#home">Home</a></li>
            <li><a href="#about">About</a></li>
            <li><a href="#contact">contct</a></li>
        </ul>
    </nav>
</header>
```
2. **<footer>:** Defines a footer for a document or section, typically containing copyright information, contact info, or links author details.
   - **Example:**
```
<footer>
    <p>&copy; 2025 My Website</p>
</footer>
```
3. **<article>:** The HTML tag defines a self contained, independent piece of content like a blog post, news article, or comment. It is designed for content that can be independently distributed, shared, or reused, providing seman c meaning to the content. Represents an independent article with content separate from the rest of the site.
   - **Example**:
```
<article>
    <h3>My First Blog Post</h3>
    <p>Hello World</p>
</article>
```
4. **<nav>:** The tag in HTML5 is used to define a naviga on sec on of a webpage. It is a seman c element that explicitly indicates that the enclosed content consists of naviga on links.
   - **Example:**
```
<nav>
    <a href=”#home”>Home</a>
    <a href=”#about”>About</a>
```

```
                    <a href="#contact">Contact</a>
            </nav>
```

5. **<main>:** Represents the main content of the document, excluding headers, footers, and sidebars. It excludes content like sidebars, naviga on, logos, and copyright info, ensuring unique document-specific material within.
   - **Example:**
```
<main>
        <h2>Main Content</h2>
        <p>This is the primary content of the webpage.</p>
        </main>
```

6. **<section>:** Represents a section of content within a page that has its own theme or purpose. The section tag is used when requirements of two headers or footers or any other section on of documents are needed. Section on tag grouped the generic block of related contents.
   - **Example**:
```
<section>
                    <h2>My First Website</h2>
                    <p>Best Services are provde</p>
            </section>
```

7. **<aside>:** The tag defines some content aside from the content it is placed in. The aside content should be indirectly related to the surrounding content. The content is o en placed as a sidebar in a document. Typically used for sidebars, related links, ads, or addi onal resources.
   - **Example:**
```
<aside>
            <h3>Benifit of Web Technology</h3>
            <p>Easy develop to the website</p>
            <p>Best Javascript libraries provided</p>
        </aside>
```

8. **<canvas**>:The HTML <canvas> element is used to draw graphics on a web page. The canvas element is only a container for graphics. You must use JavaScript to actually draw the graphics. Canvas has several methods for drawing paths, boxes, circles, text, and adding images like .jpg, .jpeg, .png. Canvas is supported by all major browsers.

- **Example:** <canvas id="mycanvas"></canvas>

```
<script>
    var cnv = document.getElementById("mycanvas");
     var cnt = cnv.getContext('2d')
    cnt.fillStyle = 'green';
    cnt.fillRect(50, 10, 600, 600);
   console.log(cnv);
</script>
```

9. **<svg>:** SVG stands for Scalable Vector Graphics. SVG is used to define vector-based graphics for the Web. SVG defines graphics in XML format. Each element and attribute in SVG files can be animated. SVG integrates with other standards, such as CSS, DOM, XSL and JavaScript. SVG is easy to create high resolution logo compare to canvas. Svg logo create without javascript used.
    - **Example**: <svg viewBox="-10 -10 300 100" stroke="red" fill="green">
      <circle cx="40" cy="40" r="40" />
      </svg>

10. **<audio>:** The <audio> tag in HTML5 is used to embed audio content on a webpage. It allows you to play audio files like MP3 directly in the browser. The <audio> element provides attributes for controlling playback, such as play, pause, and volume. <audio> element equally important autoplay, loop atributes. Audio element are inline element.
    - **Example:** <h1>Multimedia Audio Element</h1>
      <audio src="./Form/ 23.mp3" controls autoplay loop></audio>

11. **<video>:** The <video> element in HTML is used to add video content to web pages. It supports various video formats, including MP4. Video and audio tags are introduced in HTML5.
    - **Example**: <video src="./Form/24.mp4 " controls autoplay loop></video>

12.<embed>: The <embed> tag in HTML is used to embed external content or media files (such as audio, video) directly into a webpage. It is a self-closing tag. It is often used for embedding files like PDFs, images, or other types of media that require a plugin or external application to display.

- **Example:** <embed src="./Form/25.mp4" type=""><embed src="./Form/22.mp3" type=""><embed src="./Form/65.pdf" type="">

13. <fieldset>: The <fieldset> tag specifies a set of form fields. It is generally used to group logically related controls and labels within a web form.

- **Example:** <fieldset>
  <legend>Gender</legend>
  <input type="radio" name="gender" value="male" id="male Male
  <input type="radio" name="gender" value="female" id="female"> Female
  </fieldset>