

## **Theory Assignments:**

**Que:1** Explain the structure of an HTML document and the purpose of DOCTYPE:

**ANS:**

An HTML (HyperText Markup Language) document is structured in a hierarchical format using elements (tags) and has a standardized structure that helps web browsers render content correctly. This structure organizes the content and layout of a web page. Here's the basic structure:

### **Basic Structure:**

```
<!DOCTYPE html>

<html lang="en">

  <head>

    <meta charset="UTF-8" />

    <meta name="viewport" content="width=device-width, initial-scale=1.0" />

    <title>Page Title</title>

    <!-- Additional metadata, styles, or scripts -->

  </head>

  <body>

    <!-- Page content goes here -->

  </body>

</html>
```

### **Purpose Of DOCTYPE:**

The <!DOCTYPE html> declaration:

- Informs the browser that the document is written in HTML5.
  - Helps the browser render the page in standards-compliant mode rather than "quirks mode" (which mimics old browser bugs for legacy pages).
  - It's not an HTML tag, but a declaration that must appear at the very top of the document.
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**Que:2** List and Explain at least five common HTML tags used in website design

#### **Lists the Tags:**

- <html>
- <head>
- <body>
- <h1 to h6>

- <a>
- <p>

## Explain Tags:

### 1. <html>

Purpose: This is the root tag that wraps all the content of an HTML document.

Explanation: It tells the browser that the content inside is HTML code. Everything on a web page goes inside this tag.

#### Example:

```
<html>
  <!-- All HTML content goes here -->
</html>
```

### 2. <head>

Purpose: Contains metadata and resources used by the browser (not visible to users).

Explanation: Includes the page title, links to stylesheets, character encoding, scripts, etc.

#### Example:

```
<head>
  <title>My Website</title>
  <link rel="stylesheet" href="style.css">
</head>
```

### 3. <body>

Purpose: Contains the visible content of the web page.

Explanation: Everything users see on the page (text, images, links, etc.) is placed within the <body> tag.

#### Example:

```
<body>
```

```
<h1>Welcome to My Site</h1>  
<p>This is a paragraph of text.</p>  
</body>
```

#### 4. <h1> to <h6>

Purpose: Define headings of different levels.

Explanation: <h1> is the most important heading, typically used for page titles. <h6> is the least important.

Example:

```
<h1>Main Title</h1>  
<h2>Subheading</h2>
```

#### 5. <h1> to <h6>

Purpose: Define headings of different levels.

Explanation: <h1> is the most important heading, typically used for page titles. <h6> is the least important.

Example:

```
<h1>Main Title</h1>  
<h2>Subheading</h2>
```

#### 6. <a>

Purpose: Creates hyperlinks.

Explanation: Links to another page, website, email, or a part of the same document.

Example:

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Explanation: Links to another page, website, email, or a part of the same document.

Example:

```
<a href="https://www.example.com">Click here</a>
```

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Que:3 Discribe the difference between block-level and inline elements in HTML.

In HTML, block-level elements and inline elements are two categories that define how elements behave in the document flow and how they affect layout.

❖ Block-Level Elements:

Definition: These elements take up the full width of their parent container by default, starting on a new line.

❖ Inline Elements:

Definition: These elements only take up as much width as their content requires and do not start on a new line.

Block-Level Element	Inline Level Element
Begins a new line of text	Does not begin a new line of text. Text is placed on the same line.
Its width extends beyond the inner Content.	Its width only extends as far as the inner Content.
You can set the width and height values.	You can't set the width and height values.
Can container text,data,inline elements,or Other block level element.	Can contain text,data,or other inline Elements.