Assignment 1 – Theory

1. Explain the structure of an HTML document and the purpose of DOCTYPE.

ANS - An HTML document has a well-defined structure that ensures web browsers correctly interpret and display content. Here’s a breakdown of its main components:

Structure of an HTML Document

<!DOCTYPE html>

- Declares the document type and version of HTML being used.

- In modern web development, <!DOCTYPE html> is used to specify HTML5.

<html>

- The root element that encloses the entire HTML document.

- Has a lang attribute (e.g., <html lang="en">) to specify the language of the document.

<head>

- Contains metadata about the document (not visible on the page).

- Includes elements like:

- <meta charset="UTF-8"> (Defines character encoding)

- <title> (Specifies the page title shown in the browser tab)

- <link> (Links external stylesheets)

- <script> (Includes JavaScript files)

- <meta> tags (For SEO and responsiveness)

<body>

- Contains the visible content of the webpage.

- Includes elements like:

- Headings (<h1> to <h6>)

- Paragraphs (<p>)

- Links (<a>)

- Images (<img>)

- Lists (<ul>, <ol>, <li>)

- Forms (<form>, <input>, <button>)

- Divisions and sections (<div>, <section>)

Purpose of <!DOCTYPE html>

- Ensures the browser interprets the document as standard HTML.

- Prevents browsers from rendering the page in "quirks mode," which mimics older, non-standard behavior.

- Helps maintain consistency across different browsers.

1. List and explain at least five common HTML tags used in website design.

Ans –

1. <h1> to <h6>: These tags define headings, with <h1> representing the highest level (typically the main title) and <h6> the lowest.
2. <a>: The anchor tag is used to create hyperlinks, allowing users to navigate to other pages or resources. The href attribute specifies the URL of the linked resource.
3. <img>: This tag embeds images into a webpage. The src attribute specifies the path to the image, while the alt attribute provides alternative text for screen readers and situations where the image cannot be displayed.
4. <ul> and <ol>: These tags define unordered (bulleted) and ordered (numbered) lists, respectively. Each list item is enclosed within an <li> (list item) tag.
5. <table>: Defines a table structure, with <tr> for table rows, <th> for header cells, and <td> for data cells.
6. Describe the difference between block-level and inline elements in HTML.

ANS - Block-level elements.

Display: Start on a new line and occupy the full width available, stretching from the left to the right margin.

Common examples: <div>, <p>, <h1> to <h6>, <ul>, <ol>, <li>, <table>.

Inline elements:

Display: Do not start on a new line; they occupy only the width necessary for their content, allowing other elements to sit beside them on the same line.

Common examples: <a>, <img>, <br>, <label>, <input>.