

# WD - HTML

## **Question 1: Define HTML. What is the purpose of HTML in web development?**

**Ans:** - HTML stands for HyperText Markup Language. It is the standard language used to create and structure content on the web. HTML defines the structure and layout of web pages by using a system of tags or elements, which describe the content such as headings, paragraphs, links, images, and more.

### **HTML serves several purposes**

1. Content creation: HTML allows developers to create and organize content on a web page.
2. Structure definition: HTML defines the structure of a web page, including headings, paragraphs, lists, and other elements.
3. Layout control: HTML provides basic layout control, such as aligning text and images.
4. Linking: HTML enables linking between web pages and external resources.

## **Question 2: Explain the basic structure of an HTML document. Identify the mandatory tags and their purposes.**

**Ans:** - The basic structure of an HTML document consists of the following elements

1. `<!DOCTYPE html>`: The document type declaration, which tells the browser that the document is written in HTML5.
2. `<html>`: The root element of the HTML document, which contains all the other elements.
3. `<head>`: The head section, which contains metadata about the document, such as the title, character encoding, and links to external stylesheets or scripts.
4. `<title>`: The title element, which sets the title of the page, displayed in the browser's title bar and search engine results.
5. `<body>`: The body section, which contains the content of the HTML document.

**Question 3: What is the difference between block-level elements and inline elements in HTML? Provide examples of each.**

**Ans:** - In HTML, elements can be classified into two categories: block-level elements and inline elements.

### **Block-level elements**

Take up the full width of their parent element

Start on a new line

Can contain other block-level elements or inline elements

**Examples:**

<p> (paragraph)

<h1>-<h6> (headings)

<ul> (unordered list)

<div> (division)

<table> (table)

### Inline elements:

These elements do not start on a new line. They only take up as much width as necessary to display their content, and they can appear alongside other inline elements.

#### Examples:

<span> (inline container)

<a> (anchor)

<img> (image)

<input> (input field)

<label> (label)

**Question 4: Discuss the role of semantic HTML. Why is it important for accessibility and SEO? Provide examples of semantic elements.**

**Ans:** - Semantic HTML refers to the use of HTML elements that provide meaning to the structure of a web page, rather

than just presenting content. Semantic HTML is important for two main reasons

1. **Accessibility:** Semantic HTML helps screen readers and other assistive technologies understand the structure and content of a web page, making it easier for users with disabilities to navigate and interact with the page.
2. **SEO:** Search engines use semantic HTML to understand the content and structure of a web page, which can improve the page's ranking in search engine results.

### **Examples of semantic elements:**

`<header>`: Represents the introductory section or navigation links for the webpage or a section.

`<footer>`: Contains footer information such as copyright, privacy policies, and contact details.

`<nav>`: Denotes a block of navigation links.

`<article>`: Represents a self-contained piece of content, like a blog post or news article.

`<section>`: Represents a section of content within a document, often with its own heading.

`<aside>`: Represents content that is tangentially related to the main content (e.g., a sidebar).

`<main>`: Identifies the main content area of the page, excluding headers, footers, and sidebars.

`<figure>` and `<figcaption>`: Used to mark up images, diagrams, or illustrations and provide a caption.