**Html Basic**

**Theory Assignment 1**

**Q.1 Define HTML. What is the purpose of HTML in web development?**

**Ans:** html stands for **Hypertext Markup Language.** It is scripting language not a programming language. The purpose of html in web development is to provide fundamental structure of a web page.

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

**Ans:** The basic structure of html and its mandatory tags and purposes:

**<DOCTYPE Html>** represent Html version 5.  
**<html lang=” en”>** lang represent the content in body tag is in English language and it’s just given information not shows in output.  
**<Head>** head contains meta information’s that does not shows in website. It includes:  
**<meta charset=”UTF-8”>** UTF -8 represent the asci value because computer only understand binary or asci value.  
**<meta name="viewport" content="width=device-width, initial-scale=1.0">** Ensures responsive design by controlling layout on mobile browsers.  
**<title>** Sets the title of the webpage and browser tab.  
**<body>** Contains all the visible content in the webpage like Links, Text, Form, Table, etc.

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

**Ans:** The Block-level elements take the full width of the web screen, if the content is small or big, it starts from the new line aways. Whereas the **inline elements** only take up as much width as the content inside them requires and doesn’t start with a new line. It continues where it ends.  
For ex: **<h1> to <h6>, <p>, <div>** this are block-level elements. Where **<span>, <b>, <img>** takes content width.

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

**Ans:** Semantic HTML means using HTML5 tags that clearly show what each part of a webpage is for. Instead of just focusing on how things look, these tags help explain the purpose of the content. This makes it easier for web browsers, search engines, screen readers, and even developers to understand and work with the page better.

**Why is it important for accessibility and SEO:**

1. Accessibility

Semantic tags make it easier for screen readers and other assistive tools to understand how a page is structured. This helps people with disabilities navigate the website more smoothly.

For example, using a <nav> tag tells assistive tech that this section contains navigation links, allowing users to skip directly to it.

2. SEO (Search Engine Optimization)

Search engines like Google use semantic tags to figure out what each part of your page is about. This helps them understand your content better and rank it more accurately.

Tags like <article> and <header> highlight key parts of your content, making it easier for search engines to index your site and improve its visibility in search results.

Examples of Semantic elements are:

**<header>** Describes the beginning part of a webpage or a specific section, usually containing titles, logos, or introductory content.

**<nav>** Specifies navigations links.

**<main>** Represent the main content of the page.

**<aside>** Shows extra information that's related to the main content, like a sidebar or related links.

**<article>** reusable content.

**<section>** Defining grouping of content.

**<footer>** Content footer information like copyright, contact.