**Complete HTML Summary with All HTML Tags**

**1. Core HTML Structure**

<!DOCTYPE html> → Declares HTML5 document.

<html> → Root element of an HTML page.

<head> → Metadata section (not visible).<title> → Sets page title.

<meta> → Defines character set, viewport, SEO data.

<link> → Connects to external CSS files.

<style> → Internal CSS styles.

<script> → JavaScript inclusion.

<body> → Visible page content.

**2. Text Formatting Tags**

Headings: <h1> - <h6> (largest to smallest).

Paragraph: <p>.

Text Styling:<b> → Bold (non-semantic).

<strong> → Important text (bold, semantic).

<i> → Italic (non-semantic).

<em> → Emphasized text (italic, semantic).

<u> → Underline.

<mark> → Highlight text.

<small> → Small text.

<del> → Strikethrough (deleted text).

<ins> → Inserted text (underlined).

<sub> → Subscript.

<sup> → Superscript.

<abbr> → Abbreviation (title="Full Form" for tooltip).

<cite> → Citation for references.

<code> → Inline code snippet.

<pre> → Preformatted text (preserves spacing).

<kbd> → Keyboard input.

<samp> → Sample output.

<var> → Variable in programming.

**3. Lists**

Unordered List: <ul> <li>Item</li> </ul>

Ordered List: <ol> <li>Item</li> </ol>

Description List:<dl> → Defines the list.

<dt> → Term.

<dd> → Definition.

**4. Links & Navigation**

<a href="URL">Link Text</a> → Hyperlink.

<nav> → Defines navigation menu.

Attributes:target="\_blank" → Opens in new tab.

rel="nofollow" → Avoids SEO impact.

download="file.pdf" → Forces download.

**5. Images & Media**

<img src="image.jpg" alt="description"> → Displays an image.

<figure> → Groups media with captions.

<figcaption> → Caption for <figure>.

<audio controls> → Adds audio.<source src="audio.mp3" type="audio/mp3">.

<video controls> → Adds video.<source src="video.mp4" type="video/mp4">.

<iframe> → Embeds another webpage.

**6. Tables**

<table> → Creates a table.

<tr> → Table row.

<td> → Table data (cell).

<th> → Table header.

<thead> → Groups header rows.

<tbody> → Groups body rows.

<tfoot> → Groups footer rows.

Attributes:colspan="2" → Merges columns.

rowspan="2" → Merges rows.

**7. Forms & User Input**

<form> → Container for input fields.

<input> → Accepts user input.type="text", email, password, checkbox, radio, file, date, number, range, etc.

<textarea> → Multi-line input.

<button> → Clickable button.

<label> → Labels input fields.

<fieldset> → Groups related inputs.

<legend> → Title for <fieldset>.

<select> → Dropdown menu.<option> → Dropdown options.

<datalist> → Provides a list of suggested inputs.

<output> → Displays the result of calculations.

**8. Semantic HTML (SEO & Accessibility)**

<header> → Introductory section or navigation.

<nav> → Group of navigation links.

<section> → Thematic content section.

<article> → Standalone content (blog post, news).

<aside> → Sidebar content.

<footer> → Page footer (copyright, links).

<main> → Main content of the page.

<figure> → Self-contained content with <figcaption>.

<summary> & <details> → Collapsible content.

<mark> → Highlights text.

**9. Interactive & Scripting Elements**

<script> → Embeds JavaScript.

<noscript> → Alternative content if JavaScript is disabled.

<canvas> → Draw graphics via JavaScript.

<svg> → Scalable vector graphics.

**10. Meta Tags & SEO Optimization**

<meta charset="UTF-8"> → Defines character encoding.

<meta name="viewport" content="width=device-width, initial-scale=1.0"> → Responsive design.

<meta name="description" content="Webpage summary for SEO">.

<meta name="keywords" content="HTML, Web, Development">.

<meta name="author" content="Your Name">.

<meta http-equiv="refresh" content="5;url=page.html"> → Redirects after 5 seconds.

**11. Miscellaneous Tags**

<hr> → Horizontal line (divider).

<br> → Line break.

<wbr> → Word break opportunity.

<bdi> → Bidirectional text isolation.

<bdo> → Changes text direction (dir="rtl" for right-to-left).

<progress> → Progress bar (value & max).

<meter> → Measurement within a range.

<time> → Defines a specific time.

<template> → Hidden reusable HTML content.

**12. HTML5 Features & APIs**

Storage: localStorage, sessionStorage.

Geolocation: Get user location.

Drag & Drop: Enable draggable elements.

WebSockets: Real-time communication.