**1. Explain The Structure Of An Html Document And The Purpose Of DOCTYPE**

Ans : The Basic Structure Of An HTML Document Consists Of 5 Elements:

1. <!DOCTYPE>
2. <Html>
3. <Head>
4. <Title>
5. <Body>

**1. <!DOCTYPE>**

The First Thing In Any HTML Document Is The Preamble. For HTML, All You Need Is <!DOCTYPE Html>. This May Look Like An HTML Element, But It Isn't. It's A Special Kind Of Node Called "Doctype". The Doctype Tells The Browser To Use Standards Mode. If Omitted, Browsers Will Use A Different Rendering Mode Known As Quirks Mode. Including The Doctype Helps Prevent Quirks Mode.

**2. <Html>**

The <Html> Element Is The Root Element For An HTML Document. It Is The Parent Of The <Head> And <Body>, Containing Everything In The HTML Document Other Than The Doctype. If Omitted It Will Be Implied, But It Is Important To Include It, As This Is The Element On Which The Language Of The Content Of The Document Is Declared.

The Lang Attribute Is Not Limited To The <Html>Tag. If There Is Text Within The Page That Is In A Language Different From The Main Document Language, The Lang Attribute Should Be Used To Identify Exceptions To The Main Language Within The Document. Just Like When It Is Included In The Head, The Lang Attribute In The Body Has No Visual Effect. It Only Adds Semantics, Enabling Assistive Technologies And Automated Services To Know The Language Of The Impacted Content.

**3. <Head>**

Nested Between The Opening And Closing <Html> Tags, We Find The Two Children: <Head> And <Body>:The <Head>, Or Document Metadata Header, Contains All The Metadata For A Site Or Application. The Body Contains The Visible Content. The Rest Of This Section Focuses On The Components Found Nested Inside The Opening And Closing <Head></Head>

The Very First Element In The <Head> Should Be The Charset Character Encoding Declaration. It Comes Before The Title To Ensure The Browser Can Render The Characters In That Title And All The Characters In The Rest Of The Document.

**4. <Title>**

Your Home Page And All Additional Pages Should Each Have A Unique Title. The Contents For The Document Title, The Text Between The Opening And Closing <Title> Tags, Are Displayed In The Browser Tab, The List Of Open Windows, The History, Search Results, And, Unless Redefined With <Meta> Tags, In Social Media Cards.

5. <Body>

The <Body> Tag In An HTML Document Defines The Main Content Visible To Users In A Web Page. It Contains All The Elements That Will Be Displayed On The Browser, Including Text, Images, Links, Headings, Paragraphs, Lists, Tables, And More. The <Body> Element Is Enclosed Within The <Html> Root Element And The <Head> Element, Which Contains Metadata Like The Title And Other Information Not Displayed Directly On The Page.

**2. List And Explain At Least Five Common Html Tags Used In HTML Desgin**

* Common Types of HTML Tags and Their Uses

1. <h1> to <h6>: Headings that define different levels of text importance.  
   Purpose: Defines headings for different levels of importance in a document. <h1> is the most important heading, while <h6> is the least.

* <h1>Main Heading</h1>
* <h2>Section Heading</h2>
* <h3>Sub-section Heading</h3>

1. <p>: Paragraph tags for grouping text content.  
   Purpose: Defines a paragraph of text. It's a block-level element, meaning it starts on a new line and takes up the full width of its container.

* <p>This is the first paragraph.</p>
* <span>This is the first paragraph.</span>

1. <a>: Anchor tags used for hyperlinks.

Purpose: Creates a hyperlink that allows users to navigate to another web page or section within the same page.

* <a href="https:// www.tops-int.com">Tops Technologies</a>

1. <img>: Image tags to embed images.

Purpose: Inserts an image into the document. It's a self-closing tag, meaning it doesn't have a closing bracket

* <img src="image.jpg" alt="A description of the image">

1. <ul> and <ol>: Unordered and ordered list tags for creating lists.

HTML offers three main types of lists: unordered lists (<ul>), ordered lists (<ol>), and description lists (<dl>). Unordered lists present items without a specific order, typically using bullet points, while ordered lists display items in a sequence, often with numbers or letters. Description lists are used to associate terms with their definitions.

* <ul>

<li>Item 1</li>

<li>Item 2</li>

<li>Item 3</li>

</ul>

* <ol>

<li>Step 1</li>

<li>Step 2</li>

<li>Step 3</li>

</ol>

* <dl>

<dt>Term 1</dt>

<dd>Description of Term 1</dd>

<dt>Term 2</dt>

<dd>Description of Term 2</dd>

</dl>

**3. Describe the difference between block-level and inline elements in HTML.**

Ans - In HTML, block-level elements start on a new line and span the full width of their container, while inline elements flow within the text and only take up as much width as necessary. Essentially, block elements create distinct sections, while inline elements are used to style or modify specific parts of the text.

**1. (Block-level Elements: )**

Start on a new line: They always begin on a fresh line in the rendered output.

Take up full width: They extend to occupy the entire available width of their parent element.

Examples: <p> (paragraph), <div> (division), <h1>-<h6> (headings), <ul> (unordered list), <ol> (ordered list), <form>, <footer>, <header>, <nav>, <article>.

Purpose: Used for structuring the layout and creating distinct sections or blocks of content.

**(2. Inline Elements: )**

Flow within the text: They do not force a new line and flow within the surrounding text.

Only occupy necessary width: They take up only as much width as their content requires.

Examples: <span>, <a> (anchor/link), <img>, <strong>, <em>, <code>, <button>, <input>, <label>.

Purpose: Used to style or modify specific parts of the text or content, or to make parts of the text clickable or interactive.