HTML Basics

Q1. Define HTML. What is the purpose of HTML in web development? **ANS.**

HTML stands for <u>HyperText Markup Language</u>. HTML is the standard language used to create and structure content on the web.

Purpose of HTML in Web Development is;

- 1. Structure Content: HTML organizes content into a structured format using elements and tags. For example, <h> for headings, for paragraphs, and <div> for divisions.
- 2. Create Web Page Layouts: HTML helps define sections of a web page like header, footer, navigation, main content, etc..
- 3. Embed Media: HTML supports the embedding of images, audio and other multimedia using tags like ,<audio>etc..
 - 4. Linking: HTML uses hyperlinks <a> tag to connect to other pages or websites.

Q2: Explain the basic structure of an HTML document. Identify the mandatory tags and their purposes.

ANS.

</head>

An HTML is "HyperText Markup Language document" made up of elements that tell the browser how to display the content.

Structure : <!DOCTYPE html> <html> <head> <title>Structure</title>

```
<body>
<h1>Hello</h1>
HTML page
</body>
</html>
```

Mandatory tags and their purposes:

1. <!doctype html>

Purpose: Tells the browser that the document is written in HTML5 or HTML4. It is not an HTML tag.

2. <> </html>

Purpose: The root element that contains all HTML content.

3. <head> </head>

Purpose: Contains **metadata** (information about the web page) that is not displayed directly on the page. It include:

```
<title> — page title

<meta>— viewpoint

link> — css or other file

<script> — JavaScript
```

4. <body> </body>

Purpose: Contains all visible content of the webpage - text, images, videos, links, etc.

Q3.What is the difference between block-level elements and inline elements in HTML? Provide examples of each.

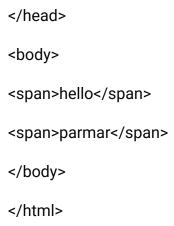
Ans.

Block-Level Elements:

<title>Structure</title>

Elements that start on a new line and take up the full width available, stretching from left to right. Takes up full width by default. Example;

```
<!DOCTYPE html>
<html>
<head>
<title>Structure</title>
</head>
<body>
HTML page
</body>
</html>
Inline elements:
      Elments that do not start on a new line continues on the same line. They only
take as much width as necessary. Example;
<!DOCTYPE html>
<html>
<head>
```



Q4.: Discuss the role of semantic HTML. Why is it important for accessibility and SEO? Provide examples of semantic elements.

ANS.

Semantic HTML means using HTML elements that have a meaningful name and purpose, describing their role in the content rather than just their appearance.

Role of Semantic HTML:

Structure & Readability: Makes your code easier for developers to

understand. Accessibility: Screen readers can navigate content correctly.

SEO (Search Engine Optimization): Search engines better understand your page content and importance.

Maintainability: Easier to style and modify without breaking meaning.

Important:

Accessibility: Screen readers rely on semantic tags to tell visually impaired users what section they're in.

SEO: Search engines like Google use semantic elements to understand:
Which part is a heading

is the main article content

Which is navigation or footer

```
Example:
<!DOCTYPE html>
<html>
<head>
<title>Semantic Example</title>
</head>
<body>
<h1>My Blog</h1>
<footer>
© 2025 My Blog
 </footer>
</body>
</html>
```