

Theory Assignment

Que 1:

Define HTML.

- HTML – Hyper Text Markup Language.
- It is the standard language used to create and structure web pages.
- HTML define the content and layout.

What is the purpose of HTML in web development?

- It provides the basic structure of a web pages.
- It allows developers to add text , images , link , table , form.

Que 2:

Explain the basic structure of an HTML document.

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<title>My First Web Page</title>
```

```
</head>
```

```
<body>
```

```
<h1>Hello World!</h1>
```

```
<p>This is a paragraph.</p>
```

```
</body>
```

```
</html>
```

Identify the mandatory tags and their purposes.

<!DOCTYPE html> - declare the document type and version of HTML.

<html> - Element that contains all HTML content.

<head> - Contains data like title , style and link.

<title> - Define the title shown on the browser tab.

<body> - Contains the visible content of the webpages.

Que 3:

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

Block-level element:

- Block-level element start on a new line and take up full width.
- Used for larger sections or structures.

Ex.- <div>,<p>,<h1>-<h6>,<table>,<form>

Inline element:

- Inline element do not start on a new line.
- Take up as much width as needed.
- Used for smaller parts inside blocks.

Ex.- ,<a>,,,<i>

Que 4:

Discuss the role of semantic HTML. Why is it important for accessibility and SEO?

- Semantic HTML means using HTML tags that describe the meaning and structure of the content.
- Makes the code more readable and meaningful for developers.
- Semantic element to understand page structure and content relevance.
- search engines understand webpage content better → improves SEO (Search Engine Optimization).

Ex.- <header> - Define the top section or navigation area.

<nav> - Define a navigation link.

<main> - The main content of the document.

<section> - Defines a section or topic area.

<footer> - The footer or closing section.

Form Theory assignments

Que 1:

What are HTML forms used for? Describe the purpose of the input, text area, select, and button elements.

- HTML forms are used to collect user input on a web page.
- They allow users to submit data to a server for processing, such as login information, registration, feedback, or search queries.

Describe the purpose

`<input>` - Used for single-line input fields, such as text, password, email, number, radio, checkbox, etc.

`<text area>` - Used for multi-line text input, such as comments or messages.

`<select>` - Creates a dropdown menu for users to select one or more options.

`<button>` - Creates a clickable button to submit the form or perform other actions.

Que 2:

Explain the difference between the GET and POST methods in form submission. When should each be used?

GET method:-

- Appends form data to the URL as query strings.
- Data is visible in the URL.
- Limited amount of data.
- Suitable for simple searches, queries, or bookmarking URLs.

POST method:-

- Sends form data in the HTTP request body.
- Data is not visible in the URL.
- Can send large amounts of data.
- Suitable for sensitive data, login forms, file uploads, or large data submission.

Que 3:

What is the purpose of the label element in a form, and how does it improve accessibility?

- The <label> element is used to define a label for a HTML form control.
- It describes what the form field is for, helping user understand what to enter.
- Improves usability by allowing users to click the label to focus on the input field.

Ex. <label for="username">Username:</label>

<input type="text" id="username" name="username">

Table Theory Assignment

Que 1:

Explain the structure of an HTML table and the purpose of each of the following elements: <table>, <tr>, <th>, <td>, and <thead>.

Ex.

```
<table>
<thead>
<tr>
  <th>Header 1</th>
  <th>Header 2</th>
</tr>
</thead>
<tbody>
<tr>
  <td>Row 1, Cell 1</td>
  <td>Row 1, Cell 2</td>
</tr>
<tr>
  <td>Row 2, Cell 1</td>
  <td>Row 2, Cell 2</td>
</tr>
</tbody>
</table>
```

Purpose of each element

<table> - Creates the table container.

<tr> - Defines a table row.

<th> - Defines a table header cell.

<td> - Defines a table data cell.

<thead> - Groups the header content of the table.

Que 2:

What is the difference between colspan and rowspan in tables?

Provide examples.

- **colspan** → Merges **columns** across a single row.
- **rowspan** → Merges **rows** across a single column.

Ex.

```
<table border="1">

<tr>

  <th>Item</th>

  <th colspan="2">Price</th> <!-- Column span -->

</tr>

<tr>

  <td rowspan="2">Fruits</td> <!-- Row span -->

  <td>Apple</td>

  <td>$2</td>

</tr>
```

```
<tr>
  <td>Banana</td>
  <td>$1</td>
</tr>
</table>
```

Que 3:

Why Tables Should Be Used Sparingly for Layout.

- Using tables for layout can make code complex, less flexible, and harder to maintain.
- Tables are not responsive, meaning they don't adapt well to mobile screens.
- They reduce accessibility for screen readers.

Better Alternative:

- Use CSS with <div> elements or CSS Grid/Flexbox for layout.
- This approach is responsive, cleaner, and easier to maintain.