# MODULE 5 :-  FRONT-END ( HTML5)

**QUE.1  Difference between HTML & HTML5 ?**

**ANS. :-**  Difference:-

| FEATURES | HTML | HTML5 |
|---|---|---|
| **Doctype Declaration** | The doctype declaration for HTML is <! DOCTYPE HTML PUBLIC>. | The doctype declaration is simplified to <!DOCTYPE HTML>. |
| **New Elements** | Limited set of elements ( e.g. <font>, <center>, <b>for fold). | New semantic elements like <article>, <section>, <nav>, etc. |
| **Multimedia Support** | No native support for audio and video. | Native <audio> and <video> elements  for multimedia content. |
| **Form Elements** | Basic input types (text, checkbox, and radio). | New input types like ( email, tel, date, url, etc.) and new form elements like (placeholder, required , etc.). |
| **APIs** | HTML on its own doesn't have many JavaScript APIs. | Multiple new APIs, e.g., Canvas API, Geolocation API, Local Storage, WebSockets. |
| **Semantic Markup** | Limited sematic structure. | Strong emphasis on semantic elements ( <header>, <footer>, <article>.) |
| **Mobile compatibility** | Not designed for mobile. | Built for mobile with responsive design and touch event support. |
| **Backward Compatibility** | Less flexible with older version. | Backward compatible with older version of HTML. |

**QUE.2 What are the additional tags used in HTML5 ?**

**ANS. :-** HTML5 introduced several new tags that enhance the structure and functionality of web pages. Here is a list of the most notable **additional tags in HTML5:**

1. **Structural/Content Tags :-**
   These tags help create a more semantic structure for a webpages:
   - **<article> :** Represent independent content, like a blog post or news article.
   - **<section> :** Defines a section in a document , such as a chapter, header, or a grouping of related content.
   - **<nav> :** Represent navigation links.
   - **<header> :** Represents the introductory content or a set of navigational links for a document or section.
   - **<footer> :** Represents the footer for a document or section, typically containing copyright information or contact details.
   - **<aside> :** Represents content that is tangentially related to the content around it, such as sidebars, pull quotes, or advertisements.
   - **<main> :** Represents the main content of the document, which is unique and central to the page.

2. **Multimedia Tags :-**
   These tags enables the inclusion of audio and video content without relying on third-party plugins:
   - **<audio>** : Embeds audio content, like music or sound effects.
   - **<video>** : Embeds video content.

3. **Form – related Tags :-**
   HTML5 added new input types and attributes for creating more advanced forms:
   - **<input> :**
     - email (for email input)
     - tel (for phone numbers)
     - date (for date input)
     - time (for time input)
     - url (for URL input)
     - search (for search fields)
     - range (for range sliders)
     - number (for numeric input)
     - color (for color pickers)

   - **<datalist> :** Provides a list of predefined options for an <input> element.
   - **<ouput> :** Represents the result of a calculation or user action.
   - **<progress> :** Displays the progress of a task (like a progress bar).
   - **<meter> :** Represents a scalar measurement within a known range, such as a gauge or a bar.

4. **Scripting Tags :-**
   HTML5 introduced some new tags for handling scripts:
   - **<canvas> :** Provides a space for dynamic, scriptable rendering of 2D shapes and images.
   - **<svg> :** Used for scalable vector graphics, enabling the creation of graphics and animations.

5. **Metadata Tags :-**
   These tags help define the document's metadata:
   - **<meta charset="UTF-8">:** Specifies the character encoding for the HTML document (commonly used for Unicode).
   - **<base>:** Specifies a base URL for relative URLs in the document.
   - **<link>:** Used to link to external resources like stylesheets or icons.

6. **Deprecated Tags :-**
   HTML5 also deprecated or removed certain tags that were considered outdated or unnecessary:
   - **<font> :** Styling content via the <font> tag is deprecated. Use CSS instead.
   - **<center>  :** Used to center content, but now considered obsolete. Use CSS (text-align: center) instead.
   - **<b> and <i> :** While these are still valid, HTML5 encourages using CSS for styling text as bold or italic rather than relying on these elements for presentation.