**Module 5 – Frontend – HTML5**

**Question 1: Difference b/w HTML & HTML5**

| **Feature** | **HTML (Older versions)** | **HTML5** |
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| **Released** | Earlier versions (HTML4/XHTML, 1999) | 2014 (finalized by W3C) |
| **Doctype** | Long and complex: <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"> | Simple: <!DOCTYPE html> |
| **Structure** | Relied heavily on <div> for layout | Introduced semantic tags like <header>, <footer>, <section> |
| **Audio/Video** | Required plugins (Flash, Silverlight) | Built-in <audio> and <video> support |
| **Graphics** | Used external plugins (Flash) | Native <canvas> and <svg> support |
| **Forms** | Limited input types (text, password, radio, etc.) | New input types like email, date, number, range, color |
| **APIs** | No direct APIs for advanced features | Includes APIs like Geolocation, Web Storage, Web Workers, Drag & Drop |
| **Mobile Friendly** | Not optimized for mobile devices | Designed with mobile-first and responsive design in mind |
| **Error Handling** | Strict, browsers often broke on errors | More forgiving error handling |

**Question 2: What are the additional tags used in HTML5?**

HTML5 introduced **semantic and functional tags** to replace generic <div> and <span> structures.

**Common new tags in HTML5:**

**Semantic Tags (for better structure):**

* <header> → Defines a page or section header
* <footer> → Defines a footer for a page or section
* <section> → Groups related content into a section
* <article> → Represents independent content (like a blog post)
* <aside> → Sidebar content (related but separate from main content)
* <nav> → Navigation links
* <main> → Main content of the page

**Multimedia Tags:**

* <audio> → Embed audio files
* <video> → Embed videos
* <source> → Specifies multiple media resources
* <track> → Subtitles/captions for videos

**Graphics Tags:**

* <canvas> → Draw 2D graphics with JavaScript
* <svg> → Scalable Vector Graphics

**Form Enhancements:**

* New input types: email, url, date, number, color, range, search
* <datalist> → Provides autocomplete options for inputs
* <output> → Displays calculation results
* <progress> → Shows progress of a task
* <meter> → Displays a measurement within a range