

# **BASIC & ADVANCE HTML SYLLABUS**

## **MODULE 1: Introduction to Web & HTML Fundamentals**

### **1.1 Web Basics**

- What is Internet vs WWW
- How Websites Work
- Client–Server Architecture
- Web Browsers & Rendering Engines
- HTTP & HTTPS Overview

### **1.2 Introduction to HTML**

- What is HTML?
- History of HTML (HTML → HTML5)
- HTML vs CSS vs JavaScript
- Structure of a Web Page

## **MODULE 2: HTML Elements & Text Formatting**

### **2.1 Headings & Paragraphs**

- `<h1>` to `<h6>`
- `<p>`
- `<br>`
- `<hr>`

### **2.2 Text Formatting Tags**

- `<b>`, `<strong>`
- `<i>`, `<em>`
- `<u>`
- `<mark>`
- `<small>`
- `<del>`, `<ins>`

- `<sub>`, `<sup>`

## 2.3 Quotations & Citations

- `<blockquote>`
- `<q>`
- `<cite>`
- `<abbr>`

## MODULE 3: Lists & Hyperlinks

### 3.1 Lists

- Ordered List `<ol>`
- Unordered List `<ul>`
- Description List `<dl>`
- Nested Lists

### 3.2 Hyperlinks

- `<a>` tag
- Absolute vs Relative URLs
- Anchor Links
- Email Links
- Target attribute

## MODULE 4: Images & Multimedia

### 4.1 Images

- `<img>` tag
- `src`, `alt`, `width`, `height`
- Image Optimization
- Responsive Images
- `<picture>` element

### 4.2 Audio & Video

- `<audio>`

- <video>
- Controls attribute
- Autoplay
- Loop
- Multiple source formats

## MODULE 5: Tables

### 5.1 Table Structure

- <table>
- <tr>
- <th>
- <td>

### 5.2 Advanced Table Concepts

- rowspan
- colspan
- <thead>
- <tbody>
- <tfoot>
- Accessibility in Tables

## MODULE 6: Forms (Complete & Advanced)

### 6.1 Basic Forms

- <form>
- action, method
- GET vs POST

### 6.2 Form Elements

- <input> types:
  - text
  - password
  - email

- number
- date
- radio
- checkbox
- file
- range
- color
- <textarea>
- <select>
- <option>
- <label>

### 6.3 HTML5 Form Validation

- required
- pattern
- min, max
- maxlength
- autocomplete
- placeholder

### 6.4 Advanced Form Features

- Fieldset & Legend
- Datalist
- Progress bar <progress>
- Meter <meter>

## MODULE 7: Semantic HTML5

### 7.1 Why Semantic HTML?

- SEO Benefits
- Accessibility
- Maintainability

### 7.2 Semantic Tags

- <header>

- <nav>
- <section>
- <article>
- <aside>
- <main>
- <footer>
- <figure>
- <figcaption>
- <time>

## MODULE 8: HTML5 Graphics

### 8.1 SVG (Scalable Vector Graphics)

- <svg>
- <circle>
- <rect>
- <line>
- <polygon>
- <polyline>
- Stroke properties
- stroke-dasharray

### 8.2 Canvas

- <canvas>
- Drawing shapes
- Text rendering
- Simple animations

## MODULE 9: HTML Meta & SEO

### 9.1 Meta Tags

- <meta charset>
- Viewport meta tag
- Description meta tag

- Keywords
- Author

## 9.2 Open Graph Tags

- Social media preview
- Sharing optimization

## MODULE 10: Responsive Web Design Basics

### 10.1 Viewport

`<meta name="viewport" >`

### 10.2 Responsive Images

- max-width
- srcset

### 10.3 Mobile-First Concept

## MODULE 11: Accessibility (WCAG Basics)

- ARIA roles
- aria-label
- alt best practices
- Screen readers
- Keyboard navigation

## MODULE 12: HTML APIs

- Geolocation API
- Drag & Drop API
- Web Storage (LocalStorage & sessionStorage)
- Web Workers

- WebSockets

## MODULE 13: Advanced Topics

### 13.1 Iframes

- Embedding content
- Security issues
- Sandbox attribute

### 13.2 HTML Entities

- Special characters
- Symbols

### 13.3 Data Attributes

```
<div data-id="101"></div>
```

### 13.4 Microdata & Structured Data

## MODULE 14: Project Development

### Project:

- Personal Portfolio Website
- College Admission Form
- E-commerce Product Page