# HTML MOCK TEST QUESTIONS

Q.1 what is web page?

=>Web page is single document view in the browser.

Q.2 what is website?

=>Website is a collection of web pages.

Q.3 **Inventor of the World Wide Web**?

=>Tim berneres lee invent in 1989.

Q.4 what browser are do?

=>browser display the webpage using html,css,js.

Q.5 Popular Web Browsers?

=>Google chrome,safari,mozila firefox,opera.

Q.6 **What is W3C and why is it important?**

**=> An international community that sets web standards to ensure long-term growth of the Web.**

**Q.7 What are W3C guidelines for web development?**

**=>Best practices for accessibility, performance, security, HTML, CSS, and JavaScript standards.**

**Q.8 What’s the difference between HTTP and HTTPS?**

**=>http is not encypted.**

**https is secure & encrypted version of http it uses SSL/TLS to protect data during transmission.**

**Q.9 Client and Server Roles?**

**=>Client(browser) sends the requests to server**

**Server processes the request and sends the response**

**Q.10 Web Server Role?**

**=>stores and delivers the web pages to the client via HTTP.**

**Q.11 How is the Internet different from the World Wide Web?**

**=>Internet is a physical network of devices.**

**Web is uses browser and http to access websites**

**Q.12 What are URL and URI? How are they different?**

**=>URL(Uniform Resource locator)**

**URI(Uniform Resource Identifier)**

**-URL is same as URI that specially includes location of resources.**

**-All URLs are URIs,but not all URIs is URLs.**

**Q.13 Email Protocols (SMTP, MIME)?**

**=>SMTP: Sends emails.**

**MIME(Multipurpose internet mail extension): Extends email format to support attachments and different content types.**

**Q.14 FTP (File Transfer Protocol)?**

**=>Transfers files between computers on a network (e.g., uploading files to a server).**

**Q.15 Static vs Dynamic Web Page:**

* **Static: Same content for all users, fixed HTML.**
* **Dynamic: Content changes based on user interaction or data (e.g., user dashboards).**

**Q,16 Technologies for Dynamic Pages:**

* **HTML + CSS + JavaScript (frontend),**
* **Server-side: PHP, Node.js, Python (Django), Ruby, ASP.NET, databases like MySQL.**

**Q.17 Types of Websites (Examples):**

* **E-commerce (Amazon),**
* **Blogs (WordPress sites),**
* **Portfolio (personal developer site),**
* **Social Media (Facebook),**
* **News (BBC),**
* **Educational (Khan Academy).**

****

**Q.18 <!DOCTYPE html> Declaration:**

* **Declares the document type and HTML version (HTML5) to the browser.**

**Q.19 Major Parts of an HTML Document:**

* **<!DOCTYPE>, <html>, <head>, <body>.**

**Q.20 Purpose of <meta> Tag:**

* **Provides metadata like character encoding, author, viewport settings for responsive design.**

**Q.21 What are semantic tags in HTML5?**

**=>Tags like <header>, <footer>, <article>, and <section> that convey meaning about the content they enclose.**

**Q.22 What are formatting tags in HTML?**

**=>They include <b>, <i>, <u>, etc., and are used to style text without conveying meaning.**

**Q.23 What is the use of heading tags, and how many levels are there?**

**=>This is used to define heading .there 6 levels of heading tags which is <h1><h2><h3><h4><h5><h6>**

**Q.24 How does the <p> tag behave by default?**

**=>It creates paragraph and give margin above and below.**

**Q.25 What is the <pre> tag used for?**

**=>It displays preformatted text, preserving whitespace and line breaks.**

**Q.26 What’s the difference between <strong> and <em>?**

**=><strong> is for bold the text & <em> is for italic**

**Q.27  <span> vs <div>:**

* **<span>: Inline container.**
* **<div>: Block-level container.**

****

**Q.28 When to Use <label>:**

* **For labeling form inputs, improves accessibility and user experience.**

**Q.29 Use of <br> Tag:**

* **Inserts a line break (without starting a new paragraph).**

# 🔸 HTML Entities

**Q: What is an HTML entity and why is it used?  
An HTML entity is a way to display reserved or invisible characters in HTML, like <, >, or non-breaking spaces. They prevent conflicts with HTML syntax.**

**Q: What is the syntax for using an HTML entity?  
The syntax is: &entity\_name; or &#entity\_number; or &#xhex\_code;.**

**Q: Give an example of an HTML entity and its output.  
Example: &lt; renders as <, which is useful when displaying angle brackets in code.**

**Q: How do HTML hexadecimal codes differ from named entities?  
Named entities use a word like &copy; for ©, while hexadecimal codes use numeric values like &#xA9;. Not all characters have named entities, but all can be represented with numeric codes.**

**Q: Write the syntax for using a hexadecimal code in HTML.  
The syntax is: &#x<hex\_number>; — for example, &#x20AC; for the Euro symbol (€).**

**Q: What does the hexadecimal code &#x63; represent in HTML?  
It represents the character c, since 0x63 is the ASCII code for lowercase 'c'.**

# 🔸 Title Tag

**Q: What is the purpose of the <title> tag in HTML?  
The <title> tag defines the title of the web page, shown in the browser tab and used by search engines.**

**Q: How does the title tag affect SEO (Search Engine Optimization)?  
It's crucial for SEO—search engines use it to index pages and display clickable headlines in search results. A well-written title improves rankings and click-through rates.**

**Q: Can the title of a web page be seen in the browser tab? Explain.  
Yes, the text inside the <title> tag appears in the browser tab, helping users identify the page.**

**Q: Why is the title tag important for bookmarking a webpage?  
When a user bookmarks a page, the title is used as the default name, so it should be clear and descriptive.**

# 🔸 Setting Logo/Icon (Favicon)

**Q: How do you set a favicon (logo) for a web page in HTML?  
By placing a <link> tag in the <head> section:**

**html**

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**<link rel="icon" href="favicon.ico" type="image/x-icon">**

**Q: What does the rel attribute signify in the link tag used for favicon?  
The rel attribute defines the relationship between the current document and the linked resource. For favicons, it's usually rel="icon".**

**Q: Where should the favicon link tag be placed in an HTML document?  
It should be inside the <head> section to ensure it loads correctly with the page.**

**Q: What is the role of the type attribute in the favicon link tag?  
It specifies the file’s MIME type. For favicons, it's usually image/x-icon, though PNG or SVG can also be used with the appropriate type.**

**Q: Explain the visual effect of adding a favicon to a website.  
It displays a small icon in the browser tab next to the title, enhancing branding, professionalism, and user experience.**

# 🔸 Global Attributes

**Q: What is the purpose of the id attribute in HTML?  
The id uniquely identifies an element in the document, allowing it to be targeted with CSS, JavaScript, or links.**

**Q: How does the class attribute help in styling elements?  
The class attribute assigns one or more class names to an element, enabling group-based styling with CSS and selection in JavaScript.**

**Q: Explain the use of the style attribute with an example.  
It applies inline CSS directly to an element.  
Example: <p style="color: red;">This is red text.</p>**

**Q: What information does the title attribute provide?  
It shows additional information (a tooltip) when the user hovers over the element.**

**Q: How does the hidden attribute affect an element?  
It hides the element from display, though it remains in the HTML DOM and can be shown with JavaScript.**

# 🔸 Event Attributes

**Q: Describe how the onclick attribute is used in an HTML element.  
It defines a JavaScript action to run when the element is clicked.  
Example: <button onclick="alert('Clicked!')">Click Me</button>**

**Q: What happens when you use the onmouseover attribute on an element?  
It triggers JavaScript when the mouse pointer hovers over the element, often used for interactivity like hover effects.**

**Q: Explain the function of the onload attribute in the body or image tag.  
It executes JavaScript once the page or image is fully loaded.  
Example: <body onload="initApp()">**

# 🔸 Form Attributes

**Q: What are the different type values that can be used in input tags?  
Common ones include: text, password, email, number, checkbox, radio, submit, file, date, and more.**

**Q: Why is the name attribute important in form elements?  
It identifies form data keys when the form is submitted, crucial for backend processing.**

**Q: What does the value attribute define in input fields?  
It sets the default value displayed in the input field or used on submission.**

**Q: Give an example of how to use the placeholder attribute.  
<input type="email" placeholder="Enter your email"> — It shows hint text inside the field.**

**Q: How does the required attribute ensure form validation?  
It forces the user to fill the field before submitting the form; otherwise, the browser shows an error.**

# 🔸 Anchor Tag Attributes

**Q: What is the use of the href attribute in an anchor tag?  
It defines the URL the link points to.  
Example: <a href="https://example.com">Visit</a>**

**Q: How does the target attribute control link behavior?  
It specifies where to open the linked document.  
Example: target="\_blank" opens the link in a new tab.**

**Q: Explain the download attribute with an example.  
It lets the user download a file instead of navigating to it.  
Example: <a href="file.pdf" download>Download PDF</a>**

# 🔸 Image Attributes

**Q: What is the purpose of the src attribute in an image tag?  
It defines the path to the image file.  
Example: <img src="logo.png">**

**Q: Why is the alt attribute important for accessibility?  
It provides alternative text for screen readers and displays when the image can’t load, improving accessibility and SEO.**

**Q: How can you set the dimensions of an image using width and height?  
By adding width and height attributes.  
Example: <img src="pic.jpg" width="200" height="100">**

# 🔸 Boolean Attributes

**Q: How does the checked attribute work in radio buttons and checkboxes?  
It pre-selects an option by default.  
Example: <input type="checkbox" checked>**

**Q: Explain the use of the disabled attribute with an example.  
It disables user interaction with the element.  
Example: <button disabled>Submit</button>**

**Q: What is the function of the readonly attribute in input fields?  
It allows users to view the content but prevents editing.  
Example: <input type="text" value="Read-only" readonly>**

**Q: How does the autofocus attribute enhance form usability?  
It automatically focuses the input field when the page loads.  
Example: <input type="text" autofocus>**

**1. What is the purpose of the <img> tag in HTML? List its key attributes.**

**Answer: The <img> tag is used to embed images in a webpage.  
Key attributes:**

* **src: Path to the image file**
* **alt: Alternative text for accessibility**
* **width and height: Dimensions of the image**
* **title: Tooltip text**
* **loading: Lazy loading behavior (e.g., lazy, eager)**

**2. Differentiate between JPEG, PNG, SVG, GIF, and WebP image formats.**

| **Format** | **Features** |
| --- | --- |
| **JPEG** | **Compressed, good for photos, lossy** |
| **PNG** | **Lossless compression, supports transparency** |
| **SVG** | **Vector format, scalable without quality loss** |
| **GIF** | **Supports animation, limited to 256 colors** |
| **WebP** | **Modern format, smaller size, supports transparency & animation** |

**3. What are the advantages of using PNG over JPEG?**

* **PNG is lossless, preserving image quality.**
* **Supports transparent backgrounds.**
* **Better for sharp graphics like logos or icons.**

**4. How can you make an image clickable in HTML? Provide an example.**

**Wrap the <img> tag in an <a> tag:**

**html**

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**<a href="https://example.com">**

**<img src="logo.png" alt="Logo">**

**</a>**

**5. Describe at least four common uses of images in web design.**

* **Branding (logos)**
* **UI icons and buttons**
* **Background and hero sections**
* **Product showcases**
* **Infographics and data visualization**

**6. Write HTML code to insert an image from an external source.**

**html**

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**<img src="https://example.com/image.jpg" alt="External Image">**

**7. Write HTML code to insert a locally stored image as a link.**

**html**

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**<a href="about.html">**

**<img src="images/photo.jpg" alt="About Us">**

**</a>**

**8. Explain the difference between grayscale, binary, and multispectral images.**

* **Grayscale: Shades of gray (0-255), no color.**
* **Binary: Only black and white (0 or 1).**
* **Multispectral: Captures data at multiple wavelengths (used in remote sensing and medical imaging).**

**9. What is the use of the alt attribute in an <img> tag and why is it important?**

**It provides alternative text if the image can't be displayed. It's vital for accessibility (screen readers) and SEO.**

**10. Describe the role of images in branding and UI design.**

**Images visually communicate brand identity, set the tone of the site, enhance usability (icons), and help users emotionally connect with the brand.**

**11. What are vector images and why is SVG preferred for icons?**

**Vector images use paths, not pixels. SVG is preferred because it's scalable, lightweight, editable via code, and performs well at all resolutions.**

**12. What is the benefit of using WebP over older image formats?**

**WebP offers better compression (smaller file size) with high quality. It supports both lossless and lossy compression, transparency, and animation.**

**13. How do width and height attributes affect the display of an image?**

**They control the rendered size on the page. Setting them helps reserve space during loading, improving performance and layout stability.**

**14. Explain the process of embedding an image saved locally in your project.**

* **Place the image file inside your project directory (e.g., images/logo.png)**
* **Use relative path in HTML:**

**html**

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**<img src="images/logo.png" alt="Logo">**

**15. What is the impact of using large-sized images on webpage performance?**

* **Slower page load times**
* **Higher bandwidth usage**
* **Poor mobile performance**
* **Negatively affects SEO and user experience  
  Solution: Optimize images using compression and responsive sizes.**

# ANCHOR TAGS

**1. What is the purpose of the <a> (anchor) tag in HTML?**

**The <a> tag defines a hyperlink, which is used to link one page to another. It can link to internal sections, external websites, files, email addresses, or other resources.**

**2. Write the syntax of an anchor tag with an example.**

**html**

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**<a href="https://example.com">Visit Example</a>**

* **href: The destination URL or link target.**
* **The clickable text goes between the opening and closing <a> tags.**

**3. What are internal links? Give an example.**

**Internal links connect to other pages or sections within the same website.  
Example:**

**html**

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**<a href="about.html">About Us</a>**

**or**

**html**

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**<a href="#services">Our Services</a> <!-- links to a section with id="services" -->**

**4. Define external links and write an example.**

**External links point to a page on a different website.  
Example:**

**html**

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**<a href="https://openai.com" target="\_blank">Visit OpenAI</a>**

**5. What is a text link? How is it different from an image link?**

* **Text Link: Uses text as the clickable area.  
  Example: <a href="page.html">Go to Page</a>**
* **Image Link: Uses an image as the clickable area.  
  Example: <a href="page.html"><img src="icon.png" alt="Go"></a>**

**6. Explain how to create an image link in HTML with an example.**

**Wrap an <img> tag inside an <a> tag.  
Example:**

**html**

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**<a href="profile.html">**

**<img src="profile-pic.png" alt="Profile">**

**</a>**

**7. What are local links? Provide a use case example.**

**Local links point to files or pages within the same project folder or website.  
Example:**

**html**

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**<a href="docs/user-guide.pdf">Download Guide</a>**

**Use case: Linking to internal documents or subpages like /about, /contact.**

**8. How do you create an email link using the anchor tag?**

**Use the mailto: scheme in the href attribute.  
Example:**

**html**

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**<a href="mailto:info@example.com">Contact Us</a>**

**9. What is the difference between internal and external links?**

| **Type** | **Target Location** | **Example** |
| --- | --- | --- |
| **Internal** | **Same website or domain** | **href="contact.html"** |
| **External** | **Different website or domain** | **href="https://google.com"** |

**10. List and explain the different types of links supported by the anchor tag.**

1. **Internal Link:**
   * **Links to another section or page within the same site.**
   * **Example: <a href="#top">Back to Top</a>**
2. **External Link:**
   * **Links to a different website.**
   * **Example: <a href="https://news.com">News</a>**
3. **Email Link:**
   * **Opens the default email client.**
   * **Example: <a href="mailto:support@example.com">Email Us</a>**
4. **Phone Link:**
   * **Initiates a call on supported devices.**
   * **Example: <a href="tel:+1234567890">Call Now</a>**
5. **Download Link:**
   * **Downloads a file instead of navigating.**
   * **Example: <a href="file.zip" download>Download ZIP</a>**
6. **Image Link:**
   * **Uses an image as a clickable link.**
   * **Example: <a href="home.html"><img src="logo.png"></a>**

# LIST

**1. What is a list in HTML?**

**A list in HTML is a structured group of related items. It helps organize content in a readable and accessible format.**

**2. Name the three main types of lists in HTML.**

1. **Ordered List (<ol>) – items are numbered.**
2. **Unordered List (<ul>) – items are bulleted.**
3. **Description/List (<dl>) – used for name-value pairs like terms and descriptions.**

**3. What is the purpose of the <ul> tag?**

**The <ul> tag defines an unordered (bulleted) list where the order of items is not important.**

**4. Why is the type attribute considered deprecated for unordered lists in HTML5?**

**In HTML5, styling should be handled using CSS. The type attribute (e.g., type="disc") is deprecated because visual presentation is now separated from content.**

**5. Give an example of an unordered list in HTML.**

**html**

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**<ul>**

**<li>HTML</li>**

**<li>CSS</li>**

**<li>JavaScript</li>**

**</ul>**

**6. What does the <ol> tag represent in HTML?**

**The <ol> tag defines an ordered list. Each list item is automatically numbered by the browser.**

**7. List the valid values for the type attribute in an ordered list (<ol>) and describe what each represents.**

| **Type Value** | **Marker Style** |
| --- | --- |
| **1** | **Numbers (1, 2, 3...)** |
| **A** | **Uppercase letters (A, B, C...)** |
| **a** | **Lowercase letters (a, b, c...)** |
| **I** | **Uppercase Roman numerals (I, II, III...)** |
| **i** | **Lowercase Roman numerals (i, ii, iii...)** |

**8. Explain what a nested list is with an example.**

**A nested list is a list inside another list item.  
Example:**

**html**

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**<ul>**

**<li>Fruits**

**<ul>**

**<li>Apple</li>**

**<li>Banana</li>**

**</ul>**

**</li>**

**</ul>**

**9. Provide an example of a nested ordered list where the outer list uses Roman numerals and the inner list uses lowercase letters.**

**html**

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**<ol type="I">**

**<li>Frontend**

**<ol type="a">**

**<li>HTML</li>**

**<li>CSS</li>**

**</ol>**

**</li>**

**<li>Backend**

**<ol type="a">**

**<li>Node.js</li>**

**<li>Python</li>**

**</ol>**

**</li>**

**</ol>**

**10. Write HTML code for a nested unordered list of fruits and vegetables.**

**html**

**CopyEdit**

**<ul>**

**<li>Fruits**

**<ul>**

**<li>Apple</li>**

**<li>Orange</li>**

**</ul>**

**</li>**

**<li>Vegetables**

**<ul>**

**<li>Carrot</li>**

**<li>Spinach</li>**

**</ul>**

**</li>**

**</ul>**

**11. How would you create a list of three programming languages using an ordered list with lowercase letters as markers?**

**html**

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**<ol type="a">**

**<li>Python</li>**

**<li>JavaScript</li>**

**<li>Java</li>**

**</ol>**

# DIV TAG

**1. What is the purpose of the <div> tag in HTML?**

**The <div> tag is a container element used to group and organize other HTML elements. It helps structure the layout of a web page.**

**2. Is the <div> tag a block-level or inline element? Explain.**

**It is a block-level element, meaning it starts on a new line and stretches to the full width of its container.**

**3. How does the <div> tag help in organizing HTML content?**

**It allows developers to group related elements together (like text, images, or forms), making the page easier to manage, style, and script.**

**4. Can we nest <div> tags inside each other? Give an example.**

**Yes, you can nest <div> tags.  
Example:**

**html**

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**<div>**

**<div>Inner Content</div>**

**</div>**

**5. What is the difference between a <div> and a <span> tag in HTML?**

* **<div> is block-level; it stacks content vertically.**
* **<span> is inline; it flows within a line of text.  
  Use <div> for layout and grouping, <span> for inline styling or grouping.**

**6. Write a simple HTML snippet using a <div> to contain a paragraph and an image.**

**html**

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**<div>**

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

**<img src="image.jpg" alt="Sample Image">**

**</div>**

**7. How is the <div> tag used in form layout? Give an example.**

**<div> tags help separate and organize form fields.  
Example:**

**html**

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**<form>**

**<div>**

**<label>Name:</label>**

**<input type="text">**

**</div>**

**<div>**

**<label>Email:</label>**

**<input type="email">**

**</div>**

**</form>**

**8. How does using the <div> tag enhance semantic structure, if at all?**

**On its own, <div> does not provide semantic meaning. It's used purely for structure or styling. For semantic clarity, use HTML5 tags like <section> or <article>.**

**9. Explain the role of the id and class attributes with <div> (without involving CSS).**

* **id uniquely identifies a single <div> on the page (used for JavaScript or linking).**
* **class can group multiple <div>s with similar roles or purposes.**

**10. Can <div> be used within table elements? Discuss with example.**

**Technically yes, but it’s not recommended. It can break table layout in some browsers.  
Example (not best practice):**

**html**

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**<table>**

**<tr>**

**<td><div>Cell Content</div></td>**

**</tr>**

**</table>**

**11. How does the <div> tag affect the visual flow of content on a web page?**

**Being a block-level element, it creates vertical separation between content blocks, contributing to a structured, columned flow.**

**12. Why might you use a <div> instead of using multiple <p> or <section> tags?**

* **Use <div> when the content doesn't fit semantic tags.**
* **Use it to apply layout or scripting logic without implying meaning, unlike <section> which conveys structure.**

**13. What are some common pitfalls when overusing <div> tags in HTML?**

* **"Divitis" — using too many unnecessary <div>s.**
* **Reduced semantic clarity and accessibility.**
* **Harder to maintain or read the code.**

**14. How can <div> tags be used to group interactive elements even without JavaScript?**

**They can wrap clickable areas or form controls for layout or hover effects with CSS.  
Example:**

**html**

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**<div>**

**<button>Click Me</button>**

**<input type="text">**

**</div>**

**15. Compare the use of <div> with HTML5 semantic elements like <section>, <article>, and <main>.**

| **Element** | **Purpose** | **Semantic?** |
| --- | --- | --- |
| **<div>** | **General container, no meaning** | **❌ No** |
| **<section>** | **Thematic grouping of content** | **✅ Yes** |
| **<article>** | **Self-contained content block** | **✅ Yes** |
| **<main>** | **Primary content of the page** | **✅ Yes** |

**Prefer semantic tags for accessibility and SEO; use <div> only when no semantic alternative fits.**

## Section A: Objective Type Questions

1. **Which HTML tag is used to create a table?  
   → <table>**
2. **What does the <tr> tag represent in an HTML table?  
   → Table row**
3. **Which tag is used to define a table header cell?  
   → <th>**
4. **What is the function of the <td> tag in a table?  
   → Defines a standard data cell in a row**
5. **Which attribute is used to make a cell span across multiple columns?  
   → colspan**
6. **What is the purpose of the <thead> tag in a table?  
   → Groups the header content of a table**
7. **Which HTML tag is used to group the main body of the table?  
   → <tbody>**
8. **Which tag is used to group footer content in a table?  
   → <tfoot>**
9. **True or False: The <table> tag is an inline element in HTML.  
   → False (It’s a block-level element)**
10. **True or False: The <tfoot> tag must always appear at the bottom of the table.  
    → False (In code, it comes before <tbody> for browser rendering purposes)**

## Section B: Short Answer Questions

1. **What are the main tags used to create an HTML table?  
   → <table>, <tr>, <th>, <td>, <thead>, <tbody>, <tfoot>**
2. **Explain the difference between <th> and <td> tags.  
   → <th> is used for header cells and text is bold and centered by default.  
   → <td> is used for standard data cells.**
3. **Write a simple HTML table with 2 rows and 2 columns.**

**html**

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**<table border="1">**

**<tr>**

**<td>Row 1, Col 1</td>**

**<td>Row 1, Col 2</td>**

**</tr>**

**<tr>**

**<td>Row 2, Col 1</td>**

**<td>Row 2, Col 2</td>**

**</tr>**

**</table>**

1. **How does the colspan attribute work in a table?  
   → It allows a cell to span across multiple columns.**
2. **How does the rowspan attribute work in a table?  
   → It allows a cell to span across multiple rows.**
3. **What is the purpose of using <thead>, <tbody>, and <tfoot> in a table?  
   → To semantically organize table content into header, body, and footer sections, which aids in styling, scripting, and accessibility.**
4. **Write an example of a table that uses both rowspan and colspan.**

**html**

**CopyEdit**

**<table border="1">**

**<tr>**

**<th rowspan="2">Name</th>**

**<th colspan="2">Scores</th>**

**</tr>**

**<tr>**

**<th>Math</th>**

**<th>Science</th>**

**</tr>**

**<tr>**

**<td>Alice</td>**

**<td>85</td>**

**<td>90</td>**

**</tr>**

**</table>**

1. **Why is grouping rows using <thead> and <tbody> considered a good practice?  
   → It improves semantic structure, enhances accessibility, and allows for separate styling and scripting of table parts.**

## Section C: Long Answer / Practical Questions

**1. Create an HTML table with the following structure:**

**Header: Product, Price, Quantity  
3 rows of data  
Footer: Total Amount**

**html**

**CopyEdit**

**<table border="1">**

**<thead>**

**<tr>**

**<th>Product</th>**

**<th>Price</th>**

**<th>Quantity</th>**

**</tr>**

**</thead>**

**<tbody>**

**<tr><td>Pen</td><td>$1</td><td>10</td></tr>**

**<tr><td>Notebook</td><td>$2</td><td>5</td></tr>**

**<tr><td>Eraser</td><td>$0.5</td><td>8</td></tr>**

**</tbody>**

**<tfoot>**

**<tr>**

**<td colspan="2">Total</td>**

**<td>$21</td>**

**</tr>**

**</tfoot>**

**</table>**

**2. Create a student report card using HTML tables.**

**html**

**CopyEdit**

**<table border="1">**

**<thead>**

**<tr>**

**<th colspan="2">Student Report Card</th>**

**</tr>**

**</thead>**

**<tbody>**

**<tr><td>Name</td><td>John Doe</td></tr>**

**<tr><td>Roll Number</td><td>101</td></tr>**

**<tr><td>Math</td><td>90</td></tr>**

**<tr><td>Science</td><td>85</td></tr>**

**<tr><td>English</td><td>88</td></tr>**

**</tbody>**

**<tfoot>**

**<tr><td>Total Marks</td><td>263</td></tr>**

**<tr><td>Percentage</td><td>87.67%</td></tr>**

**</tfoot>**

**</table>**

**3. HTML code for a contact directory table:**

**html**

**CopyEdit**

**<table border="1">**

**<thead>**

**<tr>**

**<th>Name</th>**

**<th>Email</th>**

**<th>Phone Number</th>**

**</tr>**

**</thead>**

**<tbody>**

**<tr>**

**<td>Jane Smith</td>**

**<td>jane@example.com</td>**

**<td>123-456-7890</td>**

**</tr>**

**<tr>**

**<td>John Doe</td>**

**<td>john@example.com</td>**

**<td>987-654-3210</td>**

**</tr>**

**</tbody>**

**<tfoot>**

**<tr>**

**<td colspan="3">End of Directory</td>**

**</tr>**

**</tfoot>**

**</table>**

**4. Explain the use of <thead>, <tbody>, and <tfoot> with suitable examples.**

* **<thead> groups header content, e.g., column titles.**
* **<tbody> contains the main table data.**
* **<tfoot> is for summary or footnote content like totals.**

**Example:**

**html**

**CopyEdit**

**<table border="1">**

**<thead>**

**<tr><th>Item</th><th>Price</th></tr>**

**</thead>**

**<tbody>**

**<tr><td>Book</td><td>$10</td></tr>**

**<tr><td>Pen</td><td>$1</td></tr>**

**</tbody>**

**<tfoot>**

**<tr><td>Total</td><td>$11</td></tr>**

**</tfoot>**

**</table>**

## ✅ Multiple Choice Questions (MCQs)

1. **Which method appends form data to the URL?**
   * **A. POST**
   * **B. GET ✅**
   * **C. PUT**
   * **D. DELETE  
     ✔️ *GET appends form data to the URL as query parameters.***
2. **Which method is suitable for sending sensitive information like passwords?**
   * **A. GET**
   * **B. DELETE**
   * **C. POST ✅**
   * **D. PUT  
     ✔️ *POST sends data in the body, which is more secure.***
3. **Which method allows bookmarking of submitted results?**
   * **A. POST**
   * **B. GET ✅**
   * **C. PATCH**
   * **D. PUT  
     ✔️ *GET URLs can be saved and bookmarked with data visible in query strings.***
4. **What is the default method used if none is specified in the <form> tag?**
   * **A. GET ✅**
   * **B. POST**
   * **C. PUT**
   * **D. DELETE  
     ✔️ *HTML forms default to the GET method if method is not specified.***
5. **Which of the following statements is true about the POST method?**
   * **A. Data is sent in the URL ❌**
   * **B. Data is visible to the user ❌**
   * **C. Can be bookmarked ❌**
   * **D. Data is sent in the request body ✅  
     ✔️ *POST sends data securely in the body of the request.***

## ✏️ Short Answer Questions

1. **Explain the difference between GET and POST methods in HTML forms.  
   → GET sends data via the URL query string, making it visible and limited in size.  
   → POST sends data in the request body, keeping it hidden from the URL and suitable for large or sensitive data.**
2. **Why should sensitive information not be sent using the GET method?  
   → Because GET exposes data in the URL, which can be cached, bookmarked, logged, or intercepted, compromising security.**
3. **What are the limitations of the GET method?**
   * **Data is limited to about 2048 characters (depending on the browser).**
   * **Exposes data in the URL.**
   * **Not suitable for secure or private data.**
   * **Cannot send large or binary data.**
4. **When would you prefer to use the POST method? Give an example.  
   → Use POST for:**
   * **Submitting login forms**
   * **Uploading files**
   * **Sending large text content  
     Example:**

**html**

**CopyEdit**

**<form method="POST" action="/submit">**

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

**<input type="password" name="password">**

**<button type="submit">Login</button>**

**</form>**

1. **Can form data sent via GET method be bookmarked? Why or why not?  
   → Yes, because the data is part of the URL and can be saved as a link.**

## ✅ True or False

1. **GET method is suitable for submitting login credentials.  
   → ❌ False  
   ✔️ It exposes credentials in the URL.**
2. **POST method sends data in the request body.  
   → ✅ True**
3. **URLs generated by GET method can be bookmarked.  
   → ✅ True**
4. **POST method has length restrictions like GET method.  
   → ❌ False  
   ✔️ POST can send large amounts of data (limited by server configuration, not browser limits).**
5. **Data sent via GET method is not visible in the URL.  
   → ❌ False  
   ✔️ GET exposes all submitted data in the query string of the URL.**

**Questions on Form Input Types (Part I)**

**1. What is the purpose of an HTML form?**

**An HTML form is used to collect input from users and send that data to a server for**

**processing.**

**2. What does the &lt;input&gt; tag do?**

**The &lt;input&gt; tag is used to create various types of form elements like text fields, checkboxes,**

**radio buttons, submit buttons, etc. It is a self-closing tag and requires a &#39;type&#39; attribute to**

**define the kind of input.**

**3. Write the syntax for a form that sends data using the POST method.**

**&lt;form action=&quot;submit\_url&quot; method=&quot;POST&quot;&gt;**

**&lt;!-- form elements go here --&gt;**

**&lt;/form&gt;**

**4. Which input type is used to collect email addresses?**

**&lt;input type=&quot;email&quot; name=&quot;email&quot;&gt;**

**5. How do checkboxes differ from radio buttons?**

**- Checkboxes allow users to select multiple options.**

**- Radio buttons allow users to select only one option from a group.**

**6. Give an example of a number input field with a minimum and maximum**

**value.**

**&lt;label&gt;Age:&lt;/label&gt;**

**&lt;input type=&quot;number&quot; name=&quot;age&quot; min=&quot;1&quot; max=&quot;100&quot;&gt;**

**7. What is the role of the &#39;name&#39; attribute in a form input?**

**The &#39;name&#39; attribute is used to identify the input data on the server side. When the form is**

**submitted, the data is sent as name-value pairs.**

**8. How is the &lt;label&gt; tag useful in forms?**

**The &lt;label&gt; tag improves accessibility and usability by linking descriptive text to form**

**controls. This helps screen readers and allows users to click the label to focus or select the**

**associated input.**

**9. Provide the code for a file upload input element.**

**&lt;label&gt;Upload File:&lt;/label&gt;**

**&lt;input type=&quot;file&quot; name=&quot;upload&quot;&gt;**

**10. Explain how you would use a date input field.**

**&lt;label&gt;Date of Birth:&lt;/label&gt;**

**&lt;input type=&quot;date&quot; name=&quot;dob&quot;&gt;**

## 🔹 Section A: Multiple Choice Questions (MCQs)

**1. What is the purpose of <input type="image"> in HTML?  
Answer: B. To submit a form using an image**

**2. Which input type is used to clear all the fields in a form?  
Answer: C. type="reset"**

**3. What is the use of <input type="hidden">?  
Answer: B. To store data not visible to users**

**4. Which attribute ensures the field cannot be left empty?  
Answer: A. required**

**5. What does the 'readonly' attribute do?  
Answer: C. Prevents user from changing the value**

## 🔹 Section B: Fill in the Blanks

1. **The placeholder attribute is used to display hint text inside an input field.**
2. **The autofocus attribute automatically focuses the input when the page loads.**
3. **<input type='\*\*image\*\*'> is used to submit a form with an image.**
4. **The min and max attributes are used to set limits on numeric input.**
5. **The id attribute is used to give an input element a unique identifier.**

## 🔹 Section C: Short Answer Questions

**1. Explain the use of the value attribute in input fields.  
The value attribute defines the initial or default value of an input field. It also retains the value when a form is submitted and is used to pre-fill form fields.**

**2. What is the purpose of type="reset" in a form?  
It clears all user-entered data in the form fields and resets them to their default values defined in the HTML.**

**3. How does the checked attribute work for checkboxes and radio buttons?  
The checked attribute makes a checkbox or radio button selected by default when the page loads.**

**4. Describe a real-time use case for readonly input fields.  
Readonly fields are used when data needs to be shown to users but not edited—for example, showing an auto-calculated price or a user ID in a form.**

**5. How do minlength and maxlength attributes help in form validation?  
They set the minimum and maximum number of characters a user can input in text fields, helping enforce content length rules before form submission.**

# SEMANTIC TAG

**1. What are semantic HTML tags? Give two examples.**

**Semantic HTML tags clearly describe their meaning in both human and machine-readable ways.  
Examples:**

* **<article> – Represents independent content.**
* **<nav> – Denotes a section for navigation links.**

**2. Explain the purpose of the <header> tag with an example.**

**The <header> tag represents introductory content or a group of navigational links. It usually contains the logo, site name, and main navigation.**

**html**

**CopyEdit**

**<header>**

**<h1>My Blog</h1>**

**<nav>**

**<a href="/">Home</a>**

**<a href="/about">About</a>**

**</nav>**

**</header>**

**3. How is the <nav> tag different from <footer>?**

* **<nav> is used for primary navigation links.**
* **<footer> defines the bottom section of a page or section, usually with copyright, contact info, etc.**

**4. Write a use case where you would use the <section> tag.**

**Use <section> to group related content in a webpage, like services on a business page:**

**html**

**CopyEdit**

**<section>**

**<h2>Our Services</h2>**

**<p>We offer web design, SEO, and content writing.</p>**

**</section>**

**5. Describe the <article> tag and give a real-world example.**

**The <article> tag is used for self-contained content like a news article or blog post.**

**html**

**CopyEdit**

**<article>**

**<h2>Top 5 CSS Tips</h2>**

**<p>Here are some great tips for writing clean CSS code...</p>**

**</article>**

**6. When should you use the <aside> tag?**

**Use <aside> for tangentially related content, like sidebars, ads, or callouts.**

**html**

**CopyEdit**

**<aside>**

**<h3>Related Post</h3>**

**<p>Learn about semantic tags in HTML.</p>**

**</aside>**

**7. What is the role of the <main> tag in a webpage?**

**The <main> tag holds the central content unique to the page, excluding headers, nav, footers, etc.**

**html**

**CopyEdit**

**<main>**

**<h1>Welcome to My Portfolio</h1>**

**<p>This is the main content area.</p>**

**</main>**

**8. What is the purpose of <figure> and <figcaption>? Provide a relevant example.**

**<figure> is for self-contained content like images; <figcaption> provides a caption.**

**html**

**CopyEdit**

**<figure>**

**<img src="mountains.jpg" alt="Mountain view">**

**<figcaption>Beautiful mountain scenery at sunset.</figcaption>**

**</figure>**

**9. How does the <mark> tag work in highlighting content?**

**The <mark> tag highlights text for emphasis or search result match.**

**html**

**CopyEdit**

**<p>This course covers <mark>semantic HTML</mark> tags.</p>**

**10. What does the <time> tag represent in semantic HTML?**

**It denotes time or date information.**

**html**

**CopyEdit**

**<time datetime="2025-05-21">May 21, 2025</time>**

**11. Write a complete example using the <address> tag.**

**html**

**CopyEdit**

**<address>**

**Contact us at:<br>**

**123 Web Street,<br>**

**HTML City, CodeLand 45678<br>**

**Email: <a href="mailto:support@example.com">support@example.com</a>**

**</address>**

**12. What are the benefits of using semantic HTML tags in your code?**

* **Improves accessibility for screen readers.**
* **Enhances SEO.**
* **Makes code easier to read and maintain.**
* **Facilitates better browser compatibility.**

**13. Describe the <meter> tag with a practical usage example.**

**The <meter> tag shows a scalar measurement within a known range, like a progress bar or score.**

**html**

**CopyEdit**

**<p>Battery Level: <meter value="0.6">60%</meter></p>**

**14. How does the <bdi> tag help in multilingual content display?**

**<bdi> isolates bidirectional text to ensure it displays correctly, especially in RTL languages.**

**html**

**CopyEdit**

**<p>User: <bdi>مرحبا</bdi> (online)</p>**

**15. Explain the use of <details> and <summary> tags with example.**

**They create collapsible content blocks.**

**html**

**CopyEdit**

**<details>**

**<summary>More Info</summary>**

**<p>This section expands to show more information.</p>**

**</details>**

**16. How is audio content embedded using the <audio> tag?**

**html**

**CopyEdit**

**<audio controls>**

**<source src="music.mp3" type="audio/mpeg">**

**Your browser does not support the audio element.**

**</audio>**

**17. Demonstrate how to use the <video> tag to play a video.**

**html**

**CopyEdit**

**<video controls width="400">**

**<source src="sample.mp4" type="video/mp4">**

**Your browser does not support the video tag.**

**</video>**

**18. How does the <iframe> tag embed external content in a webpage?**

**html**

**CopyEdit**

**<iframe src="https://www.example.com" width="600" height="400" title="Example Site"></iframe>**

**19. Which tags improve SEO and accessibility in HTML documents?**

* **<header>, <nav>, <main>, <article>, <section>, <footer>, <h1>–<h6>, <strong>, <em>, <figure>, <time>**

**20. Compare semantic tags and non-semantic tags with examples.**

| **Type** | **Tag** | **Description** |
| --- | --- | --- |
| **Semantic** | **<article>, <footer>** | **Describes its meaning clearly** |
| **Non-semantic** | **<div>, <span>** | **No specific meaning; layout only** |