

Q1. What is HTML?

Ans: HTML stands for HyperText Markup Language. It is the standard language used to create and design documents on the World Wide Web. HTML structures web content and allows the inclusion of text, images, links, and other elements.

Q2. What are HTML tags?

Ans: HTML tags are the building blocks of HTML. They are used to create elements and structure content on a web page. Tags are enclosed in angle brackets, for example, `<p>` for a paragraph. Most tags come in pairs: an opening tag `<p>` and a closing tag `</p>`.

Q3. What is the basic structure of an HTML document?

Ans: An HTML document has a defined structure that includes the following elements:

`<!DOCTYPE html>`: Declares the document type and version of HTML.

`<html>`: The root element of the document.

`<head>`: Contains meta-information about the document, such as the title and links to stylesheets.

`<title>`: Specifies the title of the document, displayed in the browser's title bar.

`<body>`: Contains the content of the document, such as text, images, and other elements.

Q4. What is the difference between an element and a tag in HTML?

Ans: Tag: A tag is a part of HTML syntax used to define elements. Tags are enclosed in angle brackets, e.g., `<div>`.

Element: An element consists of a start tag, content, and an end tag. For example, `<p>This is a paragraph.</p>` is a paragraph element.

Q5. What are attributes in HTML?

Ans: Attributes provide additional information about HTML elements. They are included within the opening tag and usually come in name-value pairs, like `name="value"`.

For example, in `Link`, `href` is an attribute specifying the URL of the link.

Q6. How do you create a hyperlink in HTML?

Ans: To create a hyperlink, use the <a> (anchor) tag with the href attribute specifying the URL:

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

This creates a clickable link labeled "Visit Example" that directs to <https://www.example.com>.

Q7. What is the purpose of the tag in HTML?

Ans: The tag is used to embed images in an HTML document. It is a self-closing tag and requires the src attribute to specify the image source:

```

```

src: Specifies the path to the image file.

alt: Provides alternative text for the image, which is displayed if the image cannot be loaded.

Q8. What are the different type of elements in HTML?

Ans: Block-level elements:

These elements start on a new line and take up the full width available. Examples include <div>, <p>, and <h1> to <h6>.

Inline elements:

These elements do not start on a new line and only take up as much width as necessary. Examples include

Q9. How do you create a list in HTML?

Ans: HTML supports two types of lists:

Ordered List: Creates a numbered list using the tag.

```
<ol>
```

```
<li>First item</li>
```

```
<li>Second item</li>
```

```
<li>Third item</li>
```

```
</ol>
```

Unordered List: Creates a bulleted list using the tag.

```
<ul>
```

```
<li>First item</li>
```

```
<li>Second item</li>
<li>Third item</li>
</ul>
```

Q10. What is the `<form>` tag used for in HTML?

Ans: The `<form>` tag is used to create an HTML form for user input. It can contain various form elements like text fields, checkboxes, radio buttons, and submit buttons.

```
<form action="/submit" method="post">
<label for="name">Name:</label>
<input type="text" id="name" name="name">
<input type="submit" value="Submit">
</form>
```

Q11. What is the purpose of the `
` tag?

Ans: The `
` tag inserts a line break in the text, moving the content after the tag to a new line. It's an empty tag and doesn't require a closing tag.

Q12. How do you create a hyperlink that opens in a new tab?

Ans: To open a link in a new tab, use the target attribute with the value `_blank`:

```
<a href="https://www.example.com" target="_blank">Visit Example</a>
```

Q13. What is the `<title>` tag used for?

Ans: The `<title>` tag defines the title of the HTML document, which appears in the browser's title bar or tab. It's placed within the `<head>` section.

Q14. How do you add a comment in HTML?

Ans: Comments in HTML are added using the following syntax:

```
<!-- This is a comment -->
```

Comments are not displayed in the browser and are used to leave notes or explanations within the code.

Q15. What is the purpose of the <meta> tag?

Ans: The <meta> tag provides metadata about the HTML document, such as character set, author, description, and keywords. It's placed within the <head> section.

Q16. How do you create a table in HTML?

Ans: A table is created using the <table> tag, with rows defined by <tr> and cells by <td>. Headers can be defined using <th>.

```
<table>
<tr>
<th>Header 1</th>
<th>Header 2</th>
</tr>
<tr>
<td>Data 1</td>
<td>Data 2</td>
</tr>
</table>
```

Q17. What is the difference between <head> and <body> tags?

Ans: <head>: Contains meta-information about the document, such as the title, character set, and links to stylesheets and scripts.

<body>: Contains the actual content of the document that is displayed in the browser, such as text, images, and links.

Q18. How do you specify the character encoding for an HTML document?

Ans: The character encoding is specified using a <meta> tag within the <head> section:

```
<meta charset="UTF-8">
```

Q19. What is the tag used for?

Ans: The tag is used to indicate that the text is of strong importance, typically displayed in bold by browsers.

Q20. How do you create an email link in HTML?

Ans: To create a link that opens the user's default email client with a new message, use the mailto: scheme:

```
<a href="mailto:example@example.com">Send Email</a>
```

Q21. What is the tag used for?

Ans: The tag is used to emphasize text, typically displayed in italics by browsers.

Q22. How do you create a checkbox in HTML?

Ans: A checkbox is created using the <input> tag with the type attribute set to checkbox:

```
<input type="checkbox" id="subscribe" name="subscribe">  
<label for="subscribe">Subscribe to newsletter</label>
```

Q23. What is the purpose of the <label> tag?

Ans: The <label> tag defines a label for an <input> element, improving accessibility and usability. Associating a <label> with an <input> can be done using the for attribute, which matches the id of the <input>.

Q24. How do you create a dropdown list in HTML?

Ans: A dropdown list is created using the <select> tag, with each option defined by an <option> tag:

```
<label for="fruits">Choose a fruit:</label>  
<select id="fruits" name="fruits">  
  <option value="apple">Apple</option>  
  <option value="banana">Banana</option>  
  <option value="cherry">Cherry</option>  
</select>
```

Q25. What is the <blockquote> tag used for?

Ans: The <blockquote> tag is used to define a section that is quoted from another source, typically displayed with indentation by browsers.

Q26. What are semantic HTML elements?

Ans: Semantic HTML elements clearly describe their meaning in a human- and machine-readable way. Examples include `<article>`, `<section>`, `<header>`, `<footer>`, and `<nav>`. They improve the accessibility and SEO of web pages.

Q27. How do you embed a video in HTML5?

Ans: HTML5 provides the `<video>` tag to embed videos:

```
<video controls>
```

```
<source src="video.mp4" type="video/mp4">
```

Your browser does not support the video tag.

```
</video>
```

controls: Adds video controls like play, pause, and volume.

source: Specifies the video file and its format.

Q28. What is the purpose of the alt attribute in the `` tag?

Ans: The alt attribute provides alternative text for an image, which is displayed if the image cannot be loaded. It also improves accessibility by describing the image to screen readers.

Q29. What is the `<fieldset>` tag used for in HTML forms?

Ans: The `<fieldset>` tag is used to group related elements within a form, and the `<legend>` tag can provide a caption for the group:

```
<fieldset>
```

```
<legend>Personal Information</legend>
```

```
<label for="name">Name:</label>
```

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

```
</fieldset>
```

Q30. What is the purpose of the `<noscript>` tag in HTML?

Ans: The `<noscript>` tag defines alternative content to be displayed if the user's browser does not support JavaScript or if JavaScript is disabled.

```
<noscript>
```

```
<p>JavaScript is not enabled in your browser.</p>
```

</noscript>

Q31. How do you include a JavaScript file in an HTML document?

Ans: Use the <script> tag with the src attribute to link an external JavaScript file:

```
<script src="script.js"></script>
```

Q32. What is the difference between the and tags?

Ans: Both tags display text in bold, but indicates that the text is of strong importance, providing semantic meaning, while does not convey any extra importance.

Q33. How do you create a multi-line text input in an HTML form?

Ans: Use the <textarea> tag to create a multi-line text input:

```
<textarea name="message" rows="4" cols="50"></textarea>
```

Q34. What is the purpose of the action attribute in an HTML form?

Ans: The action attribute specifies the URL to which the form data will be submitted when the form is submitted.

```
<form action="/submit-form" method="post">  
<!-- form elements -->  
</form>
```

Q35. How do you create a numbered list in HTML?

Ans: Use the (ordered list) tag, with each list item defined by :

```
<ol>  
<li>First item</li>  
<li>Second item</li>  
<li>Third item</li>  
</ol>
```

Q36. What is the purpose of the <base> tag in HTML?

Ans: The <base> tag specifies the base URL for all relative URLs in a document. It must be included inside the <head> section.

```
<base href="https://www.example.com/">
```

Q37. How do you create a definition list in HTML?

Ans: Use the <dl> tag for the list, <dt> for each term, and <dd> for each definition:

```
<dl>
<dt>HTML</dt>
<dd>HyperText Markup Language</dd>
<dt>CSS</dt>
<dd>Cascading Style Sheets</dd>
</dl>
```

Q38. What is the purpose of the enctype attribute in an HTML form?

Ans: The enctype attribute specifies how form data should be encoded when submitting it to the server. It's used with the method="post" attribute.

```
<form action="/upload" method="post" enctype="multipart/form-data">
<!-- form elements -->
</form>
```

Q39. How do you create a hidden input field in an HTML form?

Ans: Use <input type="hidden"> to create a hidden input field that stores data without displaying it to the user:

```
<input type="hidden" name="userID" value="12345">
```

Q40. What is the purpose of the <address> tag in HTML?

Ans: The <address> tag is used to define contact information for the author or owner of a document or article.

```
<address>
Written by John Doe.<br>
Visit us at:<br>
Example.com<br>
Box 564, Disneyland<br>
USA
</address>
```


Q41. What is the purpose of the <canvas> element in HTML5?

Ans: The <canvas> element provides a drawable region in the document that can be used to render graphics, such as charts, games, or other visual images, on the fly via scripting (usually JavaScript).

```
<canvas id="myCanvas" width="200" height="100"></canvas>
```

Q42. What is the difference between and , and between <i> and tags?

Ans: The and <i> tags are used for styling text to be bold and italic respectively, without conveying any extra importance or emphasis. In contrast, and not only style the text (bold and italic respectively) but also semantically indicate that the text is of greater importance () or should be emphasized (). This semantic meaning can be beneficial for accessibility and SEO.

Q43. How can you include SVG graphics directly in an HTML document?

Ans: Scalable Vector Graphics (SVG) can be embedded directly within HTML using the <svg> tag. This allows for defining vector-based graphics that can scale without loss of quality.

```
<svg width="100" height="100">  
<circle cx="50" cy="50" r="40" stroke="black" stroke-width="3" fill="red" />  
</svg>
```

Q44. What are data attributes in HTML, and how are they used?

Ans: Data attributes in HTML are custom attributes that start with data- and allow you to store extra information on HTML elements. They are often used to embed custom data that can be accessed via JavaScript.

```
<div data-user-id="12345" data-role="admin">User Info</div>
```

In JavaScript, you can access these attributes using the dataset property:

```
const div = document.querySelector('div');  
console.log(div.dataset.userId); // Outputs: 12345  
console.log(div.dataset.role); // Outputs: admin
```

Q45. Explain the purpose of the <template> tag in HTML.

Ans: The <template> tag is used to declare a fragment of HTML that is not to be rendered immediately when the page loads. Instead, it can be instantiated later using JavaScript. This is useful for client-side templating.

```
<template id="my-template">
  <div class="card">
    <h2></h2>
    <p></p>
  </div>
</template>
```

JavaScript can then be used to clone and insert the template content into the document.

Q46. What is the purpose of the rel attribute in a <link> tag?

Ans: The rel attribute specifies the relationship between the current document and the linked resource. For example, rel="stylesheet" indicates that the linked file is a CSS stylesheet.

```
<link rel="stylesheet" href="styles.css">
```

Q47. How do you specify multiple language versions of a webpage?

Ans: To provide multiple language versions of a webpage, you can use the hreflang attribute in the <link> tag to specify the language of an alternate version. This helps search engines understand and serve the correct language version to users.

```
<link rel="alternate" href="example.fr.html" hreflang="fr">
<link rel="alternate" href="example.es.html" hreflang="es">
```

Q48. What is the purpose of the <output> tag in HTML?

Ans: The <output> tag represents the result of a calculation or user action. It's typically used in conjunction with forms to display the outcome of user interactions.

```
<form oninput="result.value=parseInt(a.value)+parseInt(b.value)">
  <input type="number" id="a" value="0"> +
  <input type="number" id="b" value="0">
  = <output name="result" for="a b">0</output>
</form>
```

Q49. How can you make an HTML element editable in the browser?

Ans: To make an HTML element editable directly in the browser, you can set the contenteditable attribute to true. This allows users to edit the content of the element in place.

```
<div contenteditable="true">
```

This is an editable div. Click here to edit the text.

```
</div>
```

Q50. What is the purpose of the <datalist> tag in HTML?

Ans: The <datalist> tag is used to provide a list of predefined options to an <input> element, typically used to offer autocomplete suggestions.

```
<label for="browser">Choose your browser:</label>
```

```
<input list="browsers" id="browser" name="browser">
```

```
<datalist id="browsers">
```

```
<option value="Chrome">
```

```
<option value="Firefox">
```

```
<option value="Safari">
```

```
<option value="Edge">
```

```
<option value="Opera">
```

```
</datalist>
```

Q51. Can we display a web page inside a web page or Is nesting of webpages possible?

Ans: Yes, we can display a web page inside another HTML web page. HTML provides a tag <iframe> using which we can achieve this functionality.

```
<iframe src="url of the web page to embed" />
```

Q52. What are tags and attributes in HTML?

Ans: Tags are the primary component of the HTML that defines how the content will be structured/ formatted, whereas Attributes are used along with the HTML tags to define the characteristics of the element. For example, <p align="center">Interview questions</p>, in this the 'align' is the attribute using which we will align the paragraph to show in the center of the view.

Q53. What are void elements in HTML?

Ans: HTML elements which do not have closing tags or do not need to be closed are Void elements. For Example `
`, ``, `<hr />`, etc.

Q54. What is the advantage of collapsing white space?

Ans: In HTML, a blank sequence of whitespace characters is treated as a single space character, Because the browser collapses multiple spaces into a single space character and this helps a developer to indent lines of text without worrying about multiple spaces and maintain readability and understandability of HTML codes.

Q55. What are HTML Entities?

Ans: In HTML some characters are reserved like '`<`', '`>`', '`'`', etc. To use these characters in our webpage we need to use the character entities called HTML Entities. Below are a few mapping between the reserved character and its respective entity character to be used.

Character	Entity Name	Entity Number
<code><</code>	<code>&lt;</code>	<code>&#60;</code>
<code>></code>	<code>&gt;</code>	<code>&#62;</code>
<code>&</code>	<code>&amp;</code>	<code>&#38;</code>
Eg. 10 PM	<code>&nbsp;</code>	<code>&#160;</code>

Q56. What are some of the advantages of HTML5 over its previous versions?

Ans: Some advantages of HTML5 are:-

It has Multimedia Support.

It has the capabilities to store offline data using SQL databases and application cache.

Javascript can be run in the background.

HTML5 also allows users to draw various shapes like rectangles, circles, triangles, etc.

Included new Semantic tags and form control tags.

Q57. What is the 'class' attribute in HTML?

Ans: The class attribute is used to specify the class name for an HTML element. Multiple elements in HTML can have the same class value. Also, it is mainly used to associate the styles written in the stylesheet with the HTML elements.

Q58. What is the difference between the 'id' attribute and the 'class' attribute of HTML elements?

Ans: Multiple elements in HTML can have the same class value, whereas a value of id attribute of one element cannot be associated with another HTML element.

Q59. Define multipart form data?

Ans: Multipart form data is one of the values of the enctype attribute. It is used to send the file data to the server-side for processing. The other valid values of the enctype attribute are text/plain and application/x-www-form-urlencoded.

Q60. Describe HTML layout structure.

Ans: Every web page has different components to display the intended content and a specific UI. But still, there are few things which are templated and are globally accepted way to structure the web page, such as:

<header>: Stores the starting information about the web page.

<footer>: Represents the last section of the page.

<nav>: The navigation menu of the HTML page.

<article>: It is a set of information.

<section>: It is used inside the article block to define the basic structure of a page.

<aside>: Sidebar content of the page.

Q61. How to optimize website assets loading?

Ans: To optimize website load time we need to optimize its asset loading and for that:

CDN hosting - A CDN or content delivery network is geographically distributed servers to help reduce latency.

File compression - This is a method that helps to reduce the size of an asset to reduce the data transfer

File concatenation - This reduces the number of HTTP calls

Minify scripts - This reduces the overall file size of js and CSS files

Parallel downloads - Hosting assets in multiple subdomains can help to bypass the download limit of 6 assets per domain of all modern browsers. This can be configured but most general users never modify these settings.

Lazy Loading - Instead of loading all the assets at once, the non-critical assets can be loaded on a need basis.

Q62. What are the various formatting tags in HTML?

Ans: HTML has various formatting tags:

- `` - makes text bold
- `<i>` - makes text italic
- `` - makes text italic but with added semantics importance
- `<big>` - increases the font size of the text by one unit
- `<small>` - decreases the font size of the text by one unit
- `<sub>` - makes the text a subscript
- `<sup>` - makes the text a superscript
- `` - displays as strike out text
- `` - marks the text as important
- `<mark>` - highlights the text
- `<ins>` - displays as added text

Q63. What are the different kinds of Doctypes available?

Ans: The three kinds of Doctypes which are available:

- Strict Doctype
- Transitional Doctype
- Frameset Doctype

Q64. Please explain how to indicate the character set being used by a document in HTML?

Ans: The character set is defined in `<meta>` tag inside `<head>` element.

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
</head>
</html>
```

Q65. What is the difference between ``, `` tags and ``, `<i>` tags?

Ans: The effect on a normal webpage of the tags ``, `` and ``, `<i>` is the same. `` and `<i>` tags stands for bold and italic. These two tags only apply font styling and bold tag ``, just adds more ink to the text, these tags don't say anything about the text.

Whereas, `` and `` tags represent that the span of text is of strong importance or more importance and emphatic stress respectively than the rest of the text. These tags have semantic meaning.

Q66. What is the significance of `<head>` and `<body>` tag in HTML?

Ans: `<head>` tag provides the information about the document. It should always be enclosed in the `<html>` tag. This tag contains the metadata about the webpage and the tags which are enclosed by head tag like `<link>`, `<meta>`, `<style>`, `<script>`, etc. are not displayed on the web page. Also, there can be only 1 `<head>` tag in the entire Html document and will always be before the `<body>` tag.

`<body>` tag defines the body of the HTML document. It should always be enclosed in the `<html>` tag. All the contents which needs to be displayed on the web page like images, text, audio, video, contents, using elements like `<p>`, ``, `<audio>`, `<heading>`, `<video>`, `<div>`, etc. will always be enclosed by the `<body>` tag. Also, there can be only 1 body element in an HTML document and will always be after the `<head>` tag.

Q67. Are the HTML tags and elements the same thing?

Ans: No. HTML elements are defined by a starting tag, may contain some content and a closing tag. For example, `<h1>Heading 1</h1>` is a HTML element but just `<h1>` is a starting tag and `</h1>` is a closing tag.

Q68. How is Cell Padding different from Cell Spacing?

Ans: Cell Spacing is the space or gap between two consecutive cells. Whereas, Cell Padding is the space or gap between the text/ content of the cell and the edge/ border of the cell. Please refer to the above figure example to find the difference.

Q69. How can we club two or more rows or columns into a single row or column in an HTML table?

Ans: HTML provides two table attributes “rowspan” and “colspan” to make a cell span to multiple rows and columns respectively.

Q70. Is it possible to change an inline element into a block level element?

Ans: Yes, it is possible using the “display” property with its value as “block”, to change the inline element into a block-level element.

Q71. In how many ways can we position an HTML element? Or what are the permissible values of the position attribute?

Ans: There are mainly 7 values of position attribute that can be used to position an HTML element:

static: Default value. Here the element is positioned according to the normal flow of the document.

absolute: Here the element is positioned relative to its parent element. The final position is determined by the values of left, right, top, bottom.

fixed: This is similar to absolute except here the elements are positioned relative to the <html> element.

relative: Here the element is positioned according to the normal flow of the document and positioned relative to its original/ normal position.

initial: This resets the property to its default value.

inherit: Here the element inherits or takes the property of its parent."

Q72. In how many ways you can display HTML elements?

Ans: inline: Using this we can display any block-level element as an inline element. The height and width attribute values of the element will not affect.

block: using this, we can display any inline element as a block-level element.

inline-block: This property is similar to inline, except by using the display as inline-block, we can actually format the element using height and width values.

flex: It displays the container and element as a flexible structure. It follows flexbox property.

inline-flex: It displays the flex container as an inline element while its content follows the flexbox properties.

grid: It displays the HTML elements as a grid container.

none: Using this property we can hide the HTML element."

Q73. What is the difference between “display: none” and “visibility: hidden”, when used as attributes to the HTML element.

Ans: When we use the attribute “visibility: hidden” for an HTML element then that element will be hidden from the webpage but still takes up space. Whereas, if we use the “display: none” attribute for an HTML element then the element will be hidden, and also it won’t take up any space on the webpage.

Q74. How to specify the link in HTML and explain the target attribute?

Ans: HTML provides a hyperlink - `<a>` tag to specify the links in a webpage. The ‘href’ attribute is used to specify the link and the ‘target’ attribute is used to specify, where do we want to open the linked document. The ‘target’ attribute can have the following values:

`_self`: This is a default value. It opens the document in the same window or tab as it was clicked.

`_blank`: It opens the document in a new window or tab.

`_parent`: It opens the document in a parent frame.

`_top`: It opens the document in a full-body window.

Q75. In how many ways can we specify the CSS styles for the HTML element?

Ans: There are three ways in which we can specify the styles for HTML elements:

Inline: Here we use the ‘style’ attribute inside the HTML element.

Internal: Here we use the `<style>` tag inside the `<head>` tag. To apply the style we bind the elements using ‘id’ or ‘class’ attributes.

External: Here we use the `<link>` tag inside `<head>` tag to reference the CSS file into our HTML code. Again the binding between elements and styles is done using ‘id’ or ‘class’ attributes.

Q76. Difference between link tag `<link>` and anchor tag `<a>`?

Ans: The anchor tag `<a>` is used to create a hyperlink to another webpage or to a certain part of the webpage and these links are clickable, whereas, link tag `<link>` defines a link between a document and an external resource and these are not clickable.

Q77. How to include javascript code in HTML?

Ans: HTML provides a `<script>` tag using which we can run the javascript code and make our HTML page more dynamic.

```
<!DOCTYPE html>
<html>
<body>
  <h1>
    <span>This is a demo for </span>
    <u><span id="demo"></span></u>
  </h1>
  <script>
    document.getElementById("demo").innerHTML = "script Tag"
  </script>
</body>
</html>
```

Q78. When to use scripts in the head and when to use scripts in the body?

Ans: If the scripts contain some event-triggered functions or jquery library then we should use them in the head section. If the script writes the content on the page or is not inside a function then it should be placed inside the body section at the bottom. In short, follow below three points:

Place library scripts or event scripts in the head section.

Place normal scripts that do not write anything on the page, in the head section until there is any performance issue.

Place scripts that render something on the web page at the bottom of the body section.

Q79. What are forms and how to create forms in HTML?

Ans: The HTML form is used to collect the user inputs. HTML provides a `<form>` tag to create forms. To take input from the user we use the `<input>` tag inside the form so that all collected user data can be sent to the server for processing. There are different input types like 'button', 'checkbox', 'number', 'text', 'password', 'submit' etc.

```
<form action="/submit_data.php">
```

```
<label>Enter your name: </label>
<input type="text" name="name" />
<label>Enter Mobile number </label>
<input type="number" name="mobile_no"/>
<input type="submit" value="Submit">
</form>
```

Q80. How to handle events in HTML?

Ans: HTML allows event trigger actions in browsers using javascript or JQuery. There are a lot of events like 'onclick', 'ondrag', 'onchange', etc.

```
<!DOCTYPE html>
<html>
<body style="padding-top:50px">
  <h3 id="event_demo">0</h3>
  <input type="button" onclick="myFunction()" value="Click Me" />
  <input type="reset" onclick="reset()" value="Reset" />
  <script>
    function myFunction() {
      var value = document.getElementById("event_demo").innerHTML
      value = parseInt(value) + 1;
      document.getElementById("event_demo").innerHTML = value;
    }
    function reset() {
      document.getElementById("event_demo").innerHTML = 0;
    }
  </script>
</body>
</html>
```

Q81. What is new about the relationship between the <header> and <h1> tags in HTML5?

Ans: As HTML5 was all about better semantics and arrangements of the tags and elements, the <header> tag specifies the header section of the webpage. Unlike in previous version there was one <h1> element for the entire webpage, now this is the header for one section such as

<article> or <section>. According to the HTML5 specification, each <header> element must at least have one <h1> tag.

Q82. Inline and block elements in HTML5?

Ans: Inline: Inline elements just take up the space that is absolutely necessary for the content and does not start from a new line.

Example:- , <a>, , , <button>, , <select>, <abbr>, <label>, <sub>, <cite>, <abbr>, <script>, <label>, <i>, <input>, <output>, <q>, etc.

Block: Block elements start on a new line and consume the full width of the page available.

Example:- <div>, <p>, <header>, <footer>, <h1>...<h6>, <form>, <table>, <canvas>, <video>, <blockquote>, <pre>, , , <figcaption>, <figure>, <hr>, <article>, <section>, etc.

Q83. What is the difference between <figure> tag and tag?

Ans: The <figure> tag specifies the self-contained content, like diagrams, images, code snippets, etc. <figure> tag is used to semantically organize the contents of an image like image, image caption, etc., whereas the tag is used to embed the picture in the HTML5 document.

Q84. How to specify the metadata in HTML5?

Ans: To specify we can use <meta> tag which is a void tag, i.e., it does not have a closing tag. Some of the attributes used with meta tags are name, content, http-equiv, etc.

Q85. Is the <datalist> tag and <select> tag same?

Ans: No. The <datalist> tag and <select> tag are different. In the case of <select> tag a user will have to choose from a list of options, whereas <datalist> when used along with the <input> tag provides a suggestion that the user selects one of the options given or can enter some entirely different value.

Q86. Define Image Map?

Ans: Image Map lets a developer map/link different parts of images with the different web pages. It can be achieved by the <map> tag in HTML5, using which we can link images with clickable areas.

```

<map name="workspace">
  <area shape="rect" coords="34, 44, 270, 350" , href="xyz.html" />
  <area shape="rect" coords="10, 120, 250, 360" , href="xyz.html" />
</map>
```

Q87. What are Semantic Elements?

Ans: Semantic elements are those which describe the particular meaning to the browser and the developer. Elements like <form>, <table>, <article>, <figure>, etc., are semantic elements.

Q88. Convert the below data into Tabular format in HTML5?

S.no., Language, Mostly used for

1, HTML, FrontEnd

2, CSS, FrontEnd

3, Python, BackEnd

Ans: <!DOCTYPE html>

```
<html>
<head>
  <title>Table</title>
</head>
<body>
  <table>
    <tr>
      <th>S.no.</th>
      <th>Language</th>
      <th>Mostly used for</th>
    </tr>
    <tr>
      <td>1</td>
      <td>HTML</td>
      <td>FrontEnd</td>
    </tr>
    <tr>
```

```
<td>2</td>
<td>CSS</td>
<td>FrontEnd</td>
</tr>
<tr>
<td>3</td>
<td>Python</td>
<td>Backend</td>
</tr>
</table>
</body>
</html>
```

Q89. What is the difference between `<meter>` tag and `<progress>` tag?

Ans: `<progress>` tag should be used when we want to show the completion progress of a task, whereas if we just want a scalar measurement within a known range or fraction value. Also, we can specify multiple extra attributes for `<meter>` tags like 'form', 'low', 'high', 'min', etc.

Q90. Is drag and drop possible using HTML5 and how?

Ans: Yes, in HTML5 we can drag and drop an element. This can be achieved using the drag and drop-related events to be used with the element which we want to drag and drop.

Q91. Difference between SVG and Canvas HTML5 element?

Ans: SVG:

SVG is a vector based i.e., composed of shapes.

SVG works better with a larger surface.

SVG can be modified using CSS and scripts.

SVG is highly scalable. So we can print at high quality with high resolution.

Canvas:

It is Raster based i.e., composed of pixels.

Canvas works better with a smaller surface.

Canvas can only be modified using scripts.

It is less scalable.

Q92. What type of audio files can be played using HTML5?

Ans: HTML5 supports the following three types of audio file formats:

Mp3

WAV

Ogg

Q93. What are the significant goals of the HTML5 specification?

Ans: These were the target area of the HTML5 specs:

Introduction of new element tags to better structure the web page such as <header> tag.

Forming a standard in cross-browser behavior and support for different devices and platforms

Backward compatible with the older version HTML web pages

Introduction of basic interactive elements without the dependency of plugins such as <video> tag instead of the flash plugin.

Q94. Explain the concept of web storage in HTML5.

Ans: This web storage helps in storing some of the static data in the local storage of the browser so that we do not need to fetch it from the server every time we need it. There is a size limit based on different browsers. This helps in decreasing the load time and a smooth user experience. There are two types of web storage that are used to store data locally in HTML5:

Local Storage - This helps in storing data that will be retained even though the user reopens the browser. It is stored for each webapp on different browsers.

Session Storage - This is used for one session only. After the user closes the browser this gets deleted.

Q95. What is Microdata in HTML5?

Ans: It is used to help extract data for site crawlers and search engines. It is basically a group of name-value pairs. The groups are called items, and each name-value pair is a property. Most of the search engines like Google, Microsoft, Yandex, etc follow schema.org vocabulary to extract this microdata.

Q96. Which tag is used for representing the result of a calculation? Explain its attributes.

Ans: The <output> tag is used for representing the result of a calculation. It has the following attributes:

for - It defines the relationship between the elements used in calculation and result.

form - This is used to define the form the output element belongs to.

name - The name of the output element.

```
<form oninput = "result.value=parseInt(n1.value)+parseInt(n2.value)">
```

```
  <input type = "number" name = "n1" value = "1" /> +
```

```
  <input type = "number" name = "n2" value = "2" /><br />
```

```
  The output is: <output name = "result"></output>
```

```
</form>
```

Q97. How can we include audio or video in a webpage?

Ans: HTML5 provides two tags: <audio> and <video> tags using which we can add the audio or video directly in the webpage.

Q98. Explain HTML5 Graphics.

Ans: HTML5 supports two kinds of graphics:

Canvas - It is like drawing on a whitepaper or a blank webpage. We can add different graphic designs on web pages with available methods for drawing various geometrical shapes.

```
<!DOCTYPE HTML>
```

```
<html>
```

```
  <head>
```

```
  </head>
```

```
  <body>
```

```
    <canvas width="300" height="100" style="border:2px solid;"></canvas>
```

```
  </body>
```

```
</html>
```

SVG - Scalable Vector Graphics are used mostly for diagrams or icons. It follows the XML format.

```
<!DOCTYPE html>
```

```
<html>
```

```
  <body>
```



```
<svg width="400" height="110">
  <rect width="300" height="100" style="fill:#FFF;stroke-width:2;stroke:#000" />
</svg>
</body>
</html>
```

Both of the above examples produce this output and represent two different approaches provided by HTML5 to implement graphical aspects in the webpage.

Q99. Explain new input types provided by HTML5 for forms?

Ans: Following are the significant new data types offered by HTML5:

Date - Only select date by using type = "date"

Week - Pick a week by using type = "week"

Month - Only select month by using type = "month"

Time - Only select time by using type = "time".

Datetime - Combination of date and time by using type = "datetime"

Datetime-local - Combination of date and time by using type = "datetime-local." but ignoring the timezone

Color - Accepts multiple colors using type = "color"

Email - Accepts one or more email addresses using type = "email"

Number - Accepts a numerical value with additional checks like min and max using type = "number"

Search - Allows searching queries by inputting text using type = "search"

Tel - Allows different phone numbers by using type = "tel"

Placeholder - To display a short hint in the input fields before entering a value using type = "placeholder"

Range - Accepts a numerical value within a specific range using type = "range"

Url - Accepts a web address using type = "url"

```
<form>
```

```
<div>
```

```
<label>Date:</label>
```

```
<input type="date" id="date" />
```

```
<br>
```

```
<label>Week:</label>
```

<input type="week" id="week" />

<label>Month:</label>

<input type="month" id="month" />

<label>Time:</label>

<input type="time" id="time" />

<label>Datetime:</label>

<input type="datetime" id="datetime" />

<label>Datetime Local:</label>

<input type="datetime-local" id="datetime-local" />

<label>Color:</label>

<input type="color" id="color"/>

<label>Email:</label>

<input type="email" id="email" placeholder="email address" />

<label>Number:</label>

<input type="number" id="number" />

<label>Search:</label>

<input type="search" id="search" />

<label>Phone:</label>

<input type="tel" id="phone" placeholder="Phone Number" pattern="\d{10}\$" />

<label>Range:</label>

<input type="range" id="range" />

<label>URL:</label>

```
<input type="url" id="url"/>
</div>
</form>
```

Q100. What are the New tags in Media Elements in HTML5?

Ans: <audio> - Used for sounds, audio streams, or music, embed audio content without any additional plug-in.

<video> - Used for video streams, embed video content etc.

<source> - Used for multiple media resources in media elements, such as audio, video, etc.

<embed> - Used for an external application or embedded content.

<track> - Used for subtitles in the media elements such as video or audio.

<label>

Video:

</label>

```
<video width="320" height="240" controls>
```

```
<source src="video.mp4" type="video/mp4">
```

```
<track src="subtitles.vtt" kind="subtitles" srclang="en" label="English">
```

</video>

<label>

Embed:

</label>

```
<embed type="video/webm" src="https://www.youtube.com/embed/MpoE6s2psCw"
width="400" height="300">
```


<label>

Audio:

</label>

```
<audio controls>
```

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

</audio>

Q101. Why do you think the addition of drag-and-drop functionality in HTML5 is important?
How will you make an image draggable in HTML5?

Ans: The drag and drop functionality is a very intuitive way to select local files. This is similar to what most of the OS have copy functionality thus making it very easy for the user to comprehend. Before the native drag and drop API, this was achievable by writing complex Javascript programming or external frameworks like jQuery.

To enable this functionality there is a draggable attribute in the tag and need to set ondrop and ondragover attribute to an eventhandler available in scripts.

```
<!DOCTYPE HTML>
<html>
<head>
<script>
    function allowDrop(ev) {
        ev.preventDefault();
    }
    function drop(ev) {
        ...
    }
</script>
</head>
<body>
    <div id="div1" ondrop="drop(event)" ondragover="allowDrop(event)" style="border: 1px
solid #aaaaaa; width:350px; height: 70px;"></div>
    <br>
    
</body>
</html>
```

Q102. What is the usage of a novalidate attribute for the form tag that is introduced in HTML5?

Ans: Its value is a boolean type that indicates whether or not the data being submitted by the form will be validated beforehand. By making this false, forms can be submitted without validation which helps users to resume later also.

```
<form action="" method="get" novalidate>
  Name:<br><input type="name" name="sname"><br>
  Doubt:<br><input type="number" name="doubt"><br>
  <input type="submit" value="Submit">
</form>
```

Q103. What are different approaches to make an image responsive?

Ans: Art direction - Using <picture> element the landscape image fully shown in desktop layout can be zoomed in with the main subject in focus for a portrait layout.

```
<picture>
  <source media="(min-width: 650px)" srcset="img_cup.jpg">
  
</picture>
```

Resolution switching - Instead of zoom and crop the images can be scaled accordingly using vector graphics. Also, this can be further optimized to serve different pixel density screens as well.

For example SVG

```
<svg width="100" height="100">
  <circle cx="50" cy="50" r="40"
    stroke="green" stroke-width="4" fill="yellow" />
</svg>
```

Q104. What is the Geolocation API in HTML5?

Ans: Geolocation API is used to share the physical location of the client with websites. This helps in serving locale-based content and a unique experience to the user, based on their location. This works with a new property of the global navigator object and most of the modern browsers support this.

```
var geolocation = navigator.geolocation;
```

Q105. Write HTML5 code to demonstrate the use of Geolocation API.

Ans: <!DOCTYPE html>

```
<html>
  <body>
```

```
<p>Click "try it" button to get your coordinates.</p>
<button onclick="getLocation()">Try It</button>
<p id="demo"></p>
<script>
    var x = document.getElementById("demo");

    function getLocation() {
        if (navigator.geolocation) {
            navigator.geolocation.getCurrentPosition(showPosition);
        } else {
            x.innerHTML = "Geolocation functionality is not supported by this browser.";
        }
    }

    function showPosition(position) {
        x.innerHTML = "Latitude: " + position.coords.latitude +
            "<br>Longitude: " + position.coords.longitude;
    }
</script>
</body>
</html>
```

The above example asks for user permission for accessing the location data via the geolocation API, and after clicking the button, the coordinates of the physical location of the client get displayed.