

### 1.What is HTML?

HTML stands for Hyper Text Markup Language, is the standard markup language for creating Web pages. It describes the structure of a Web page and consists of a series of elements.

### 2.What is the purpose of the declaration?

The `<!DOCTYPE html>` declaration defines that this document is an HTML5 document.

### 3.Differentiate between HTML and HTML5.

HTML 4	HTML 5
It didn't support audio and video without the use of flash player support.	It supports audio and video controls with the use of <code>&lt;audio&gt;</code> and <code>&lt;video&gt;</code> tags.
It uses cookies to store temporary data.	It uses SQL databases and applications cache to store offline data.
Does not allow Java Script to run in the browser.	Allows JavaScript to run in the background due to JS web worker API in HTML5.
It does not allow drag and drop effects.	It allows drag and drop effects.
It is impossible to draw shapes like circle, triangle, rectangle, etc	Vector graphics are additionally an integral part of HTML 5 like SVG and Canvas.

### 4.What is the `<head>` element used for?

The `<head>` element contains meta information about the HTML page.

### 5. Explain the purpose of the `<meta charset="UTF-8">` tag.

The `<meta>` tag defines metadata about an HTML document. Metadata is data (information) about data. The `charset` attribute specifies the character encoding for the HTML document. The HTML5 specification encourages web developers to use the UTF-8 character set, which covers almost all of the characters and symbols in the world.

### 6. What are semantic elements in HTML5?

A semantic element clearly describes its meaning to both the browser and the developer. Eg: `<form>`, `<table>`

7.How do HTML 5 improve web forms?

HTML5 handles basic validation on the client side and enhances the user experience of web forms by providing instant feedback to users regarding input errors.

8.What is the canvas elements in HTML5 used for?

The canvas elements is used to draw graphics on a web page. It is only a container for graphics.

9.Explain the purpose of the <figure> and <figcaption> elements.

The <figure> tag specifies self-contained content like illustrations, diagrams, photos, code listings, etc. The <figcaption> tag defines a caption for a <figure> element.

10.How can you embed audio in HTML5

The <audio> tag is used to embed sound content in a document. In a similar manner to the <img> element, we include a path to the media we want to embed inside the src attribute; we can include other attributes to specify information such as whether we want it to autoplay and loop, whether we want to show the browser's default audio controls, etc.

11.What is the purpose of the alt attribute in the <img> tag/

The alt attribute provides the alternative information for an image if a user for some reason cannot view it.

12.What is the purpose of the <details> and <summary> elements?

The <details> and <summary> elements in HTML5 are important for creating collapsible content sections. The <details> elements acts as a container for content that can be hidden or revealed, and the <summary> provides visible heading or label for the collapsible section.

13. What is the difference between <span> and <div>?

A div element is used for block-level organization and styling of page elements, whereas a span element is used for inline organization and styling.

14.How can you create a hyperlink in HTML.

The <a> tag defines a hyperlink which is used to link from one page to another.

15. What is the purpose of target="\_blank" attribute in an anchor tag?

A target="\_blank" opens a new browser tab or window. The target attribute specifies where the linked document will open when the link is clicked.

16. Explain the purpose of <nav> element.

The <nav> HTML element represents a section of a page whose purpose is to provide navigation links, either within the current document or two other documents.

17. What is the purpose of the <aside> elements in HTML5?

The <aside> tag defines some content aside from the content it is placed in.

18. How do you embed a video in HTML5?

The HTML <video> element is used to embed video in web documents.

19. What is the purpose of <time> element in HTML5?

The <time> tag defines a specific time (or date time).

20. How can you create a numbered list in an HTML5?

- Use the HTML <ol> element to define an ordered list.
- Use the html type attribute to define the numbering type
- Use the html <li> element to define a list item.
- List can be nested.
- List items can contain other html elements.

21. Explain the concept of responsive web design?

Responsive web design responds to user needs by adapting to different screen-sizes, orientations, layouts, and platforms.

22. What is the purpose of colspan and rowspan attributes in a table?

Colspan attribute in html specifies the number of columns a cell should span. Rowspan attribute in html specifies the number of rows a cell should span.

23. How do you comment in HTML?

An HTML comment begins with <!-- and the comment closes with -->.

24. What is the purpose of <abbr> element?

The <abbr> HTML element represents an abbreviation or acronym.

25. How do you add a line break in HTML?

The `<br>` tag inserts a line break.

26. What is the purpose of the `< mark>` element?

The mark element defines the text that is marked or highlighted in an HTML document.

27. How can you disable a form element in an html?

In the form element's tag, type `disabled="disabled"`.

28. What is the purpose of autocomplete attribute in a form element?

The autocomplete attribute specifies whether a form should have autocomplete on or off.

29. How do you embed an SVG image in html?

To embed an SVG via an `<img>` element, you just need to reference it in the src attribute as you would expect.

30. What is the purpose of the download attribute in an anchor tag?

The download attribute specifies that the target will be downloaded when a user clicks on the hyperlink.