1. Are the HTML tags and elements the same thing?
HTML tags are used to hold the HTML element. HTML element holds the content. HTML attributes are used to describe the characteristic of an HTML element in detail. Whatever written within a HTML tag are HTML elements.

2. What are tags and attributes in HTML?
HTML tags are like keywords which defines that how web browser will format and display the content.
HTML attributes are special words used inside the opening tag to control the element's behaviour. HTML attributes are a modifier of a HTML element type.

3. What are void elements in HTML? With Example?

A void element is an element whose content model never allows it to have contents under any circumstances
void element do not need a closing tag.
example. hr , img , input, meta etc…

4. What are HTML Entities? With Example.
HTML entities are the reserved characters that are used in the HTML document.
HTML entity is a piece of text ("string") that begins with an ampersand (&) and ends with a semicolon (;)

Example. To display a less than sign (<) we must write: < or <

5. What are different types of lists in HTML? With Example.
The three list types

unordered list — used to group a set of related items in no particular order.

ordered list — used to group a set of related items in a specific order.

description list — used to display name/value pairs such as terms and definitions.

6. What is the 'class' attribute in HTML? With Example.
The HTML class attribute is used to specify a class for an HTML element.
example.
<html>

<head>

        <style>

                h1.intro {

                                color: blue;

                        }

        </style>

</head>

<body>

```html
                    <h1 class="intro">Header 1</h1>

</body>

</html>
```

7. What is the difference between the 'id' attribute and the 'class' attribute of HTML elements? With Example
A Class name can be used by multiple HTML elements, while an ID name must only be used by one HTML element within the page.

Example..

```html
<html>

<head>

        <title>

                Id demo

        </title>

        <style>

                #idName{

                        color:green;

                }
        .className{

                        color:orange;

                 }

</style>

</head>

<body>

                <h1>Get element by Id</h1>

                <p id="idName">Demo for Id selector</p>

                <p class="className">Demo for class selector</p>

</body>

</html>
```

8. What are the various formatting tags in HTML?

- <b> - Bold text.
- <strong> - Important text.
- <i> - Italic text.
- <em> - Emphasized text.
- <sub> - Subscript text

<sup> - Superscript text

<small> - Smaller text.

9. How is Cell Padding different from Cell Spacing? With Example

Cellpadding basically defines the space present between a table cell's border and the content present in it.
Cellspacing basically defines the space present between individual cells.

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

It can be done by using the rowspan and colspan attribute in HTML.
The rowspan is used to merge or combine the number of cells in a row.
The colspan is used to merge column cells in a table.

11. What is the difference between a block-level element and an inline element?

Block elements always start from a new line. Inline elements never start from a new line.
Block elements cover space from left to right as far as it can go. Inline elements only cover the space as bounded by the tags in the HTML element.

12. How to create a Hyperlink in HTML? With Example.

To make a hyperlink in an HTML page, use the <a> and tags.
example..
<html>

<body>

        <h1>HTML Links</h1>

                <p>Click Here</p>

</body>

</html>

13. What is the use of an iframe tag? With Example

The iframe in HTML stands for Inline Frame.
iframe is used to embed another document within the current HTML document.
Example..
<html>

<body>

                <h1>The iframe element</h1>

                <iframe src="Website Path">

                </iframe>

</body>

</html>

14. What is the use of a span tag? Explain with example?
span tag is an inline container used to mark up a part of a text, or a part of a document.

Example..
```
<html>

<body>

        <h1>The span element</h1>

                <p> Welcome To <span style="color:red"> india <span> </p>

</body>

</html>
```

15. How to insert a picture into a background image of a web page? With Example.
To set the background image of a webpage, use the CSS style. Under the CSS <style> tag, use the property background-image.

Example..
```
<html>

  <head>

    <style>

      body {

        background-image: url("path/image_name");

      }

    </style>

  </head>

  <body>

    <h1>Heading 1</h1>

  </body>

</html>
```

16. How are active links different from normal links?
The default color for normal and active links is blue.
An active link is active when we click on this link.

17. What are the different tags to separate sections of text?

 tag –
 tag is used to separate the line of text. It breaks the current line and the flow to the next line.

<p> tag – This contains the text in the form of a new paragraph.

18. What is SVG?
SVG stands for Scalable Vector Graphics .
SVG is used to define vector-based graphics for the Web.

19. What is difference between HTML and XHTML?
HTML stands for Hypertext Markup Language
XHTML stands for Extensible Hypertext Markup Language
HTML is SGML based, whereas XHTML is an XML-based language.

20. What are logical and physical tags in HTML?
Logical Tag :- <acronym>,<cite>,<pre>,<q> etc…
Physical Tag :- <b>,<i>,<strike>,<sub> etc..

CSS

1. What are the benefits of using CSS?
  Faster Page Speed. More code means slower page speed. …

  Better User Experience. CSS not only makes web pages easy on the eye, it also allows for user-friendly formatting. …

  Quicker Development Time. …

  Easy Formatting Changes. …

2. What are the disadvantages of CSS?
some styles sheet are supported by Browser and some are not.
CSS works differently on different browsers. IE and Opera supports CSS as different logic.

3. What is the difference between CSS2 and CSS3?
CSS3 has compatibility with external font styles through google fonts and typecast.
The selectors in CSS3 has increased compare to CSS2.
CSS2 had 'simple selectors', CSS3 calls the components as 'a sequence of simple selectors'.

4. Name a CSS style components.
Selector: class name, id name or element name that is target.

Attribute: name of the attribute you want to style for example border, color,background, position etc.

Value of Property: value that will be assigned to attribute.

5. What do you understand by CSS opacity.
it is used to specify the transparency of an element. In simple word, we can say that it specifies the clarity of the image.

6. How can the background color of an element be changed
use the CSS background-color property.

7. How can image repetition of the backup be controlled?
image repetition of the backup be controlled by using background-repeat property.

8. What is the use of the background-position property?
The use of background-position property is to sets the starting position of a background image.

9. Which property controls the image scroll in the background?
background-attachment property.

10. Why should background and color be used as separate properties?
It enhances the legibility of style sheets. The background property is a complex property in CSS, and if it is combined with color, the complexity will further increase.
Color is an inherited property while the background is not.

11. How to center block elements using CSS1?
we can simply use the <center> tag.

12. How to maintain the CSS specifications?

13. What are the ways to integrate CSS as a web page?
CSS can be Integrated to HTML documents in 3 ways:
Inline - by using the style attribute inside HTML elements.
Internal - by using a <style> element in the <head> section.
External - by using a <link> element to link to an external CSS file.

14. What is embedded style sheets?
It allows you to define styles for a particular HTML document as a whole in one place.
This is done by embedding the <style></style> tags containing the CSS properties in the head of our document.

15. What are the external style sheets?
external style sheet is a separate CSS file and it can be linked to multiple HTML documents.
we can use external style sheet file inside the <link> element, inside the head section.

16. What are the advantages and disadvantages of using external style sheets?
Advantages :-
we can create classes of styles that can then be used on many different HTML elements.
improved load times because the css file is downloaded once and applied to each relevant page as needed.
one change to the style sheet will change all linked pages.

Disadvantages:
Our pages may not be rendered correctly until the external CSS is loaded.
Uploading or linking to multiple CSS files can increase our site's download time.

17. What is the meaning of the CSS selector?
CSS selectors are used to find or select the HTML elements which we want to style.

18. What are the media types allowed by CSS?
all   Used for all media type devices.
print   Used for printers

screen Used for computer screens, tablets, smart-phones etc.

speech Used for screenreaders that "reads" the page out loud.

19. What is the rule set?
A ruleset identifies, stores, and manages the set of rules that define an application or a significant portion of an application.

HTML5

1. What are the new tags added in HTML5?
<footer>   It represents the footer section of the webpage.
<header>   It defines the introductory or navigational content of the webpage.
<main>   It specifies the main content of the HTML document.
<section>   It defines a generic section within an HTML document.
<datalist>   It represent predefined list for input <option> element.
<audio>   It defines sound content.
<video>   It defines video content within HTML document.

2. How to embed audio and video in a webpage?
To embed audio in HTML, we use the <audio> tag.
To embed video in HTML, we use the <video> tag. It contains one or more video sources at a time using <source> tag.

3. Semantic element in HTML5?
A semantic element clearly describes its meaning to both the browser and the developer.
Examples :- <form>, <table>, and <article>

4. Canvas and SVG tags
The canvas tag in HTML5 is used to draw graphics on a web page using JavaScript. It can be used to draw paths, boxes, texts, gradients, and adding images.

The <svg> tag defines a container for SVG graphics. SVG has several methods for drawing paths, boxes, circles, text, and graphic images.

JavaScript Basic

1. What is JavaScript?
JavaScript is the Programming Language for the Web. it can update and change both HTML and CSS. JavaScript can calculate, manipulate and validate data.

2. What is the use of isNaN function?
isNaN() Function is used to check whether a given value is an illegal number or not. It returns true if the value is a NaN else returns false.

3. What is negative Infinity?

it is a special numeric value that is returned when an arithmetic operation or mathematical function generates a negative value greater than the largest representable number in JavaScript

4. Which company developed JavaScript?

JavaScript was created at Netscape in 1995

5. What are undeclared and undefined variables?

Undeclared: when we try to access any variable that is not initialized or declared.

Undefined: when a variable has been declared but not assigned any value.

6. Write the code for adding new elements dynamically?

New elements can be created in JS by using the createElement() method.

example..

let newDiv = document.createElement("div");

7. What is the difference between ViewState and SessionState?

ViewState is to manage state at the client's end, making state management easy for end-user

It is maintained at only one level that is page-level.|

SessionState manages state at the server's end, The information is stored within the server and can be accessed by any person that has access to the server where the information is stored.

8. What is === operator?

=== is a comparison operator.

this operator check the whether two operands are having same value and same type.

9. How can the style/class of an element be changed?

The add() method: It adds one or more classes.

The remove() method: It removes one or more classes.

The toggle() method: If the class does not exist it adds it and returns true.

10. How to read and write a file using JavaScript?

FileReader.readAsText(): Reads the contents of the specified input file. The result attribute contains the contents of the file as a text string.

FileReader.readAsDataURL(): Reads the contents of the specified input file. The result attribute contains a URL representing the file's data.

The writeFile() functions is used for writing operations.

11. What are all the looping structures in JavaScript?

for - loops through a block of code a number of times.

for/in - loops through the properties of an object.

for/of - loops through the values of an iterable object.

while - loops through a block of code while a specified condition is true.

12. How can you convert the string of any base to an integer in JavaScript?
To convert a string to an integer parseInt(), Number() function is used in javascript.

13. What is the function of the delete operator?
delete operator on an object deallocates its memory.
The delete operator removes a property from an object.

14. What are all the types of Pop up boxes available in JavaScript?
There are three types of pop-up boxes in JavaScript.
Alert Box, Confirm Box and Prompt Box.

15. What is the use of Void (0)?
"javascript: void(0)" is similar to void(). in javascript void(0) means return undefined as a primitive value.

16. How can a page be forced to load another page in JavaScript?
we can use window. location object to force a page to load another page, We can also use the location object to set the URL of a new page.

17. What are the disadvantages of using innerHTML in JavaScript?
Event handlers attached to any DOM element are preserved.
Replacement is done everywhere.
It is not possible to append innerHTML.
Breaks the document.
Used for Cross-site Scripting.

BOOTSTRAP

1. What are the advantages of Bootstrap?
Easy initiation. Coding is a hurricane task for a person who is unbeknownst to web development. ...
Responsiveness. ...
Highly customizable. ...
Extremely user-centric. ...
Cross-browser compatibility. ...
JavaScript plugins to your rescue. ...
Far-reaching popularity.

2. What is a Bootstrap Container, and how does it work?
In Bootstrap, container is used to set the content's margins dealing with the responsive behaviors of your layout.
It contains the row elements and the row elements are the container of columns (known as grid system). The container class is used to create boxed content.

3. What are the default Bootstrap text settings?
Bootstrap uses a default font-size of 16px, and its line-height is 1.5. The default font-family is "Helvetica Neue", Helvetica, Arial, sans-serif.

4. What do you know about the Bootstrap Grid System?
Bootstrap's grid system uses a series of containers, rows, and columns to layout and align content.

It's built with flexbox and is fully responsive.

5. What is the difference between Bootstrap 4 and Bootstrap 5

BASIS OF	BOOTSTRAP 4	BOOTSTRAP 5
Grid System	It has 5 tier (xs, sm, md, lg, xl).	It has 6 tier (xs, sm, md, lg, xl, xxl).
Color	It has limited colors.	Extra colors added with the looks, A card improved color palette. there are various shades available to choose.
Gutter	We use .glutter with fontsize in px	We use .g* with fontsize in rem

6. What is a Button Group, and what is the class for a basic Button Group?
Button groups allow multiple buttons to be stacked together on a single line.
n Bootstrap is a class of name "btn-group" which is used to create a series of buttons in groups (without spaces) vertically or horizontally.

7. How can you use Bootstrap to make thumbnails?
Add an <a> tag with the class of . thumbnail around an image.
This adds four pixels of padding and a gray border.
On hover, an animated glow outlines the image.

8. In Bootstrap 4, what is flexbox?
flexbox can use to create a row or a column axis layout.
Bootstrap 4 now uses flexbox, instead of floats, to handle the layout. The Flexible Box Layout Module, makes it easier to design flexible.

9. How can one create an alert in Bootstrap?
Bootstrap provides an easy way to create predefined alert messages.
Alerts are created with the .alert class.

10. What is a bootstrap card and how would you create one?
A card is a flexible and extensible content container. It includes options for headers and footers, a wide variety of content, contextual background colors, and powerful display options.