1. What is the purpose of the class attribute in HTML?

The class attribute is used to assign one or more class names to an element that can be used to apply CSS styles or JavaScript functions. We can easily label elements or group them under class tag.

2. How does the id attribute differ from the class attribute?

Class- many elements can belong to the same class in html file

Id- id consists of only unique elements, elements with the same name or multiple elements cannot have the same id.

3. Can two HTML elements share the same class name? Explain with an example.

Yes, many elements can share the same class name.

<p class="line1">This is content one.</p>

<p class="line2">This is content two.</p>

4. Why should the id attribute be unique on a web page?

Because it is used to uniquely identify only one element. If we have multiple elements with the same id, CSS and JavaScript functions and styles will be confused and may give unpredictable output.

5. Write an HTML example where a paragraph uses both class and id.

<!DOCTYPE html>

<html>

<head>

<title>Class and ID Example</title>

</head>

<body>

<p id="main" class="info">Welcome to my Portfolio website!</p>

</body>

</html>

6. How do you apply CSS to an element with a specific id?

<!DOCTYPE html>

<html>

<head>

<title>Class and ID Example</title>

<style>

#imain {

color: blue;

font-size: 18px;

margin: 10px;

padding:10px;

}

.info {

Background-color: #f2f2f2;

padding: 10px;

font-size: 20px;

margin: 10px;

border: 1px solid #ccc;

}

</style>

</head>

<body>

<p id="main" class="info">Welcome to my Portfolio website!</p>

</body>

</html>

7. How do you apply the same style to multiple elements using a class?

<!DOCTYPE html>

<html>

<head>

<title> Class</title>

<style>

.color {

background-color: lightblue;

padding: 10px;

border: 1px solid blue;

margin: 10px;

}

</style>

</head>

<body>

<p class="color">color is blue</p>

<p class="color">color is yellow</p>

<div class="color">color is red</div>

<span class="color">color is pink<.</span>

</body>

</html>

8. What is the <nav> tag used for in HTML?

It’s used to wrap the website’s navigation links (that is menu,home,contact info ), that helps us to switch to different sections and navigate/move around the website.

It is a css block element.

9. List three types of links that are typically included inside a <nav> section.

1. Internal page links (#section1)
2. External website links (https://example.com)
3. Links to other pages (/about.html)

10. Write an example of a navigation bar using the <nav> tag and anchor (<a>) tags.

<nav>

<a href="index.html">Home</a>

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

<a href="contact.html">Contact Info</a>

</nav>

11. What is the purpose of the <section> tag in HTML5?

It is used to group related content together. If we add a section to each part it will be separated well and will be easy to access and view the page.

It helps to browse easily and make css tools understand the content better.

12. When should you use <section> instead of <div>?

We should use <section> when the content is described with clear purpose or topic.

We use <div> when we have to group content without having any specific meaning or purpose.

13. Write a small HTML structure with a <header>, <nav>, <section>, and <footer>.

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>My Page</title></head>

<body>

<header><h1>My Website</h1></header>

<nav>

<a href="#">Home</a> |

<a href="#">Contact Info</a>

</nav>

<section>

<h2>Introduction</h2>

<p>This section provides info about me.</p>

</section>

<footer>© 2025 My Website</footer>

</body>

</html>

14. Can you nest a <section> tag inside another <section>? If yes, why?

Yes we can.

It helps to keep the page clear and meaningful.

Also it organizes subtopics inside a larger section.

15. What is semantic HTML, and how do <nav> and <section> contribute to it?

Semantic HTML means using tags to describe what the content is. Tags like <nav> and <section> give information to the browser and screen readers what each part of the page does and what function it performs

16. How do screen readers and search engines benefit from the use of id, class, and semantic tags?

* id provides quick or fast navigation across the page.
* class is used for styling and accessing the page content easily
* Semantic tags like <nav> and <section> make the page easier to understand and browse,view through for both search engines and people using screen readers.

17. Write a simple HTML page that has:

A nav bar with links

A section with a title and paragraph

Unique id and class values

<!DOCTYPE html>

<html lang=”en”>

<head>

<meta charset="UTF-8">

<style>

.content

{

color: darkblue;

padding 10px;

}

#section

{

background-color:blue;

padding: 20px;

margin:10px

}

</style>

</head>

<body>

<nav>

<a href="#home">Home</a>

<a href="#about us">About Us</a>

</nav>

<section id="section" class="content">

<h2>Hello,Welcome</h2>

<p>This is our homepage introduction.</p>

</section>

</body>

</html>

18. What happens if you mistakenly assign the same id to multiple elements?

It is invalid to use multiple elements with the same id.

It also causes issues and the css styles and javaScript might not work correctly.

19. Can you use multiple class names in one HTML element? How?

Yes. we can have multiple class names by separating them with space.

<p class="info content introduction">My Introduction page</p>

20. How would you style a <section> element differently from a <div> in CSS?

section {

background-color: lightblue;

padding: 20px;

}

div {

background-color: lightgray;

margin: 20px;

padding:10px;

}