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

The class attribute is used to group HTML elements and apply common styles or JavaScript functionality to them.

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

- id is unique and used to identify one specific element.
- class can be shared by many elements.

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

Yes. Multiple elements can share the same class name to apply the same style or behavior.

<p class="note">1st Paragraph 1</p>

<p class="note">2nd Paragraph 2</p>

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

Because id is used to uniquely identify an element for styling, linking, and JavaScript manipulation. Repeating it causes conflicts and unpredictable behavior.

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

<p id="intro" class="city">Welcome to the City!</p>

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

Using the # symbol in CSS.

#intro {

  color: blue;

}

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

Using the . selector in CSS and assign the class to multiple elements.

```
.city {

  font-size: 18px;

}
```

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

It defines a navigation section, usually for links like menus or site sections.

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

- Links to different sections of the same page (#about)
- Links to other pages (/contact.html)
- External links (https://example.com)

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</a>
</nav>
```

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

It groups related content together in a meaningful way, usually with a heading.

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

Use <section> when the content has a specific purpose or theme. Use <div> for general grouping.

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

```
<header>
  <h1>RGA's Website</h1>
```

```
</header>

<nav>

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

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

</nav>

<section>

  <h2>Welcome</h2>

  <p>You are viewing RGA's Website.</p>

</section>

<footer>

  <p>&copy; 2025 RGA's Website</p>

</footer>
```

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

Yes. Nested sections help divide content into subtopics or smaller parts of the main topic.

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

Semantic HTML uses meaningful tags to describe the structure and content. <nav> clearly defines navigation links, and <section> defines logical content blocks, improving readability and accessibility.

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

- id helps jump to specific content.
- class can be used by accessibility tools and scripts.
- Semantic tags provide clear content structure, improving navigation.

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

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <title>RGA's Web Page</title>
    <style>
        .navbar {
            background-color: # EEBECF;
            overflow: hidden;
        }
        .navbar a {
            float: left;
            color: white;
            text-align: center;
            padding: 14px 20px;
            text-decoration: none;
        }
        .navbar a:hover {
            background-color: # EEBECF;
        }
        .content-section {
            padding: 20px;
        }
        #intro-title {
            color: darkblue;
        }
    </style>
</head>
<body>
```

```html
    <div class="navbar">

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

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

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

    </div>

    <section class="content-section">

      <h1 id="intro-title">Welcome to RGA's Web Page</h1>

      <p class="intro-text"> Originality is nothing but judicious imitation.</p>

    </section>

</body>

</html>
```

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

It breaks uniqueness. CSS or JavaScript may only apply to the first element found, causing bugs or accessibility issues.

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

Yes, by separating them with spaces.

```html
<p class="text bold italics">This paragraph has multiple classes.</p>
```

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

```css
section {
  padding: 20px;
  background-color: #F54927;
}
div {
  border: 1px solid black;
  margin: 10px;
}
```