**CSS & CSS 3**

**1. What are the benefits of Using CSS ?**

**Ans.**

**1. Easy Design Changes:**

**Quick Updates:** You can change the look of your entire website by editing just one CSS file instead of updating each page individually**.**

**2. Consistent Look:**

**Uniform Appearance:** CSS ensures that all pages on your website have the same design, like using the same fonts, colors, and layouts everywhere.

**3. Faster Page Loads:**

**Efficiency:** CSS files are usually smaller and can be reused across multiple pages, making your website load faster.

**4. Cleaner HTML Code:**

**More Organized:** By keeping design separate, your HTML code stays cleaner and easier to read, focusing only on the content.

**5. Better User Experience:**

**Responsive Design:** CSS helps make your website look good on all devices, whether it's a phone, tablet, or computer**.**

**6. Accessibility:**

**Easier Access:** CSS can improve the accessibility of your site, making it easier for people with disabilities to navigate and understand your content.

**2. What are the Disadvantages of CSS ?**

**Ans.**

**1. Browser Differences:**

**Inconsistent Design:** Not all web browsers show CSS the same way, so your website might look different depending on which browser people use.

**2. Hard to Manage in Big Projects:**

**Messy Code:** As your website grows, managing a lot of CSS can get confusing and difficult if it's not well-organized.

**3. No Security:**

**Exposed Code:** Anyone can view your CSS code, so it’s easy for others to see how you’ve designed your site.

**4. Limited Features:**

**No Advanced Logic:** CSS can't handle complex conditions or calculations like a programming language can, so you're limited in what you can do with it.

**3. What is the Difference between CSS2 & CSS3 ?**

**ANS.** CSS2 introduced a new box model which included padding, borders, and margins. CSS3 introduced the flexible box layout module, which allows for more flexible layouts.

**4. Name a few CSS style components.**

**ANS.**

**Text Color:** Changes the color of your text.

**Background Color:** Changes the color behind your content.

**Font Size:** Makes your text bigger or smaller.

**Margins:** Adds space outside an element.

**Padding:** Adds space inside an element, between the content and the border.

**Borders:** Adds a line around an element.

**Text Alignment:** Aligns your text to the left, right, or center.

**Display:** Controls how elements are shown on the page, like making them appear in a line or stacked.

**5. What do you understand by CSS opacity ?**

**ANS.** Opacity Value: It ranges from 0 to 1.

0 means completely transparent (invisible).

1 means fully opaque (completely visible).

Values in between (like 0.5) make the element partially see-through.

**6. How can the background color of an element can be changed ?**

**ANS.** To change the background color of an element in HTML, you can use the CSS background-color property:

Find the opening tag of the element you want to change

Add the attribute style=“background-color: yourcolorhere;”

Replace “yourcolorhere” with a color code or a CSS color name

**7. How can image repetition of the backup be controlled ?**

**ANS.** You can use the CSS background-repeat property to control how a background image repeats:

repeat: The image repeats in both directions

repeat-y: The image repeats vertically along the y-axis

repeat-x: The image repeats horizontally along the x-axis

no-repeat: The image does not repeat

**8. What is the use of the background-position property ?**

**ANS.**

**Imagine a Picture:** When you set a background image on an element, you might want that image to appear in a specific spot, like the top-left corner, the center, or the bottom-right corner.

**Example:**

**top left:** The image starts at the top-left corner.

**center:** The image is centered in the element.

**bottom right:** The image appears in the bottom-right corner.

**9. Which property controls the image scroll in the background ?**

**ANS.** background-attachment controls whether a background image moves when you scroll the page.

**Values:**

**scroll:** The background image moves as you scroll the page (this is the default behavior).

**Example:** The image moves up or down as you scroll.

**fixed:** The background image stays fixed in one position, even when you scroll the page.

**Example:** The image stays in place, and the content scrolls over it.

**local:** The background image scrolls with the content inside the element.

**Example:** If the element has its own scroll bar, the background moves with the element’s content.

**10. Why Should background and color be used as separate properties ?**

**ANS. background**: Sets the background (like color or image) behind the content.

**color:** Sets the color of the text.

**Why Keep Them Separate?**

**Flexibility:** You can easily change the background without affecting the text color, and vice versa.

**Clarity:** It makes your code easier to read and understand by clearly defining what each property controls.

**11. How to center block element using CSS1 ?**

**ANS. Set a Fixed Width:** Give the block element a specific width.

**Use Auto Margins:** Apply margin: 0 auto.

**12. How to maintain the CSS specification ?  
ANS.**

**1. Consistent Naming**

Use clear, descriptive names for classes and IDs (e.g., .nav-bar, .btn-primary).

**2. Organize Styles**

Group related styles together (e.g., keep all button styles in one section).

Use comments to label different sections (e.g., /\* Header Styles \*/).

**3. External Stylesheets**

Keep your CSS in external files, not inline in HTML, for better organization and easier updates.

**4. Avoid Repetition**

Reuse styles by applying the same class to multiple elements instead of writing duplicate code.

**5. Test and Validate**

Regularly test your CSS in different browsers and use tools like W3C CSS Validator to check for errors.

**13. What are the ways to integrate CSS as a web page ?**

**ANS.**

**1. Inline CSS**

Add CSS directly to an HTML element using the style attribute.

**Example:**

<p style="color: red;">Hello World!</p>

**2. Internal CSS**

Place CSS inside the <style> tag within the <head> section of the HTML.

**Example:**

<head>

<style>

p { color: blue; }

</style>

</head>

**3. External CSS**

Link to a separate .css file from the HTML document.

**Example:**

<head>

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

</head>

**14. What is embedded style sheet ?**

**ANS.** An embedded style sheet is a Cascading Style Sheet (CSS) code block that's located within the <head> section of an HTML document and applies to the entire document.

**15. What are the External Style sheet ?**

**ANS.** An external style sheet is a separate file that contains CSS style definitions for multiple HTML pages.

**16. What are the Advantages and Disadvantages of using external Style Sheet ?  
ANS.**

**Advantages of External Style Sheets:**

**Reusability:**

One CSS file can be linked to multiple HTML pages, making it easy to apply consistent styles across an entire website.

**Easier Maintenance:**

Changes made in the external CSS file automatically update styles across all linked pages.

**Cleaner HTML:**

Keeps HTML files uncluttered by separating content (HTML) from presentation (CSS).

**Faster Page Load:**

Browsers cache the CSS file, reducing load times for subsequent pages.

**Disadvantages of External Style Sheets:**

**Dependence on External File:**

If the CSS file fails to load (e.g., due to network issues), the web pages may appear unstyled or broken.

**Initial Load Time:**

The first page load may be slower because the browser needs to download the external CSS file.

**Complex Setup:**

Requires proper file organization and linking, which can be tricky for beginners or large projects.

**17. What is the meaning of the CSS selector ?**

**ANS.** It is a pattern of elements and other terms that tell the browser which HTML elements should be selected to have the CSS property values inside the rule applied to them.

**18. What are the media types allowed by CSS ?**

**ANS.**

**Common Media Types:**

**screen:**

**Description:** For computer screens, tablets, and smartphones.

**Usage:** Default media type for most web pages.

**print:**

**Description:** For print previews and printed documents.

**Usage:** Used to style documents for printing, e.g., hiding non-essential elements.

**speech:**

**Description:** For speech synthesizers and screen readers.

**Usage:** Helps style content for accessibility, such as adjusting how text is read aloud.

**19. What is the rule set ?**

**ANS.** A rule set is a collection of one or many rules that are executed together as a single unit against a specific set of records (either from one source or a set of conjoined sources) and generate several levels of statistics.