Module 4) CSS and CSS 3

1)What are the benefits of using CSS?

Ans. -consistency across web pages

-easier maintenance

-faster loading times

-responsive design capabilities

-accessibility improvements

-ability to add animations and effects.

2) What are the disadvantages of CSS?

Ans. -maintenance challenges with large files

-specificity conflicts

-potential performance overhead

-limited layout control

-security risks like CSS injection

-accessibility challenges.

3) What is the difference between CSS2 and CSS3?

Ans. -CSS3 extends CSS2 with new features like rounded corners, gradients, animations, media queries, and improved selectors. It's modularized for easier maintenance, but may lack full browser support for some features in older browsers.

4) Name a few CSS style components.

Ans. Border

Background

Color

Font-size/family/weight/style

5) What do you understand by CSS opacity?

Ans. opacity is a property used to control the transparency of an HTML element. It defines how opaque or transparent an element appears on a webpage. The opacity value can range from 0 to 1.

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

Ans. with the **background-color** property.

Ex. "Background-color: red"

7) How can image repetition of the backup be controlled?

Ans. To control the repetition of background we are using the **background-repeat** property .and it's value is **no-repeat.**

8) What is the use of the background-position property?

Ans. background-position property is used to specify the initial position of a background image within an element. It allows to control where the image is placed horizontally and vertically, using keywords (like `top`, `center`, `bottom`), length units (like `px`), or percentages. This helps in precisely aligning the background image as desired.

9) Which property controls the image scroll in the background?

Ans. The `background-attachment` property controls the scroll behavior of a background image.value in fixed.

10) Why should background and color be used as separate properties?

Ans. **background**: This property is used to define the background of an element, including background color, image, position, size, repeat, and attachment.

color: This property is specifically used to set the color of the text within an element.

11) How to center block elements using CSS1?

Ans. :1) Using margin:

Margin: 0 auto;

2)Using Transform:

Transform:Translate(-50%,-50%);

3)Using Flex box:

Display:flex;

Justify-content:center;

Align-items:center;

12) How to maintain the CSS specifications?
Ans.

1)Document thoroughly.

2)Follow consistent naming conventions.

3)Modularize code for re-usability.

4)Utilize version control.

5)Employ linting and code analysis.

6)Test across browsers and devices.

7)Integrate into CI/CD pipelines for automation.

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

Ans. **Inline CSS:** applied directly within an HTML element using the `style` attribute.
Internal CSS: placed within a `<style>` tag inside the `<head>` section of the HTML document.
External CSS: written in a separate CSS file, which is then linked to the HTML document using a `<link>` tag.

14) What is embedded style sheets?
Ans. Embedded style sheets known as internal CSS, placed within a `<style>` tag inside the `<head>` section of an HTML document.

15) What are the external style sheets?

Ans. External style sheets are written in a separate .css file, which is linked to an HTML document using a `<link>` tag within the `<head>` section. This method allows for the separation of content and design, enabling multiple HTML documents to share the same styles for consistency and easier maintenance.

16) What are the advantages and disadvantages of using external style sheets?

Ans.

 Advantages:- Keeps HTML content separate from CSS styling, enhancing maintainability.

Browsers cache external CSS files, improving load times for subsequent pages using the same styles.

Disadvantages:- if the CSS file is not accessible (e.g., due to network issues), the styles won't be applied, affecting the page's appearance.

Slightly more complex to set up compared to inline or internal styles, especially for beginners.

17) What is the meaning of the CSS selector?

Ans. A CSS selector is a pattern used to select and style HTML elements. It defines which HTML elements the CSS rules should be applied to. Selectors are a fundamental part of CSS as they allow you to target elements precisely and apply styles to them.

Ex. Element Selector, Class Selector, ID Selector…….

18) What are the media types allowed by CSS?

Ans. CSS supports various media types to apply styles depending on the device or media being used to display the content. These media types can be specified in @media rules or in the media attribute of the <link> element when linking an external stylesheet.

19) What is the rule set?

Ans.   **Selector**: This part identifies which HTML elements the style rules apply to. It can be an element name, class, ID, or other attribute.

       Declaration Block: Enclosed in curly braces **{}**, this block contains one or more declarations. Each declaration includes a CSS property and its corresponding value, separated by a colon, and ends with a semicolon.