HTML TEST

SECTION 1:

A) Briefly describe the role of HTML, CSS and JavaScript in modern web development.

è **HTML:** This is used to make the basic structure of the website, like when you are making the frame of a house.

è **CSS:** This is used to give the frame/structure a design just like adding paint to the structure of your house

è **JavaScript**: Java script is used to make the webpage now interactable, just like adding lights and appliances to your house.

B) Analyze how these three interact during page rendering in a browser.

à HTML is the basic **structure** of a web page, like the **frame** of a house. CSS makes **it look nice** by adding colors, layout, and style, like paint and furniture. JavaScript makes it do things, like opening a door when you click it. The browser puts them all together: HTML builds it, CSS decorates it, and JavaScript makes it move.

SECTION 2:

Analyze the difference between semantic HTML and non-semantic HTML.

àSemantic html is the use of html tags that clearly define the meaning or purpose of the content they contain while non-semantic html is the use of html tags that don't provide meaning about the content they contain and are mostly used for layout and styling.

Why is semantic structure crucial for accessibility and SEO? Give at least two examples of semantic tags and their correct usage.

àit provides a clear, logical outline. Like screen readers to interpret, navigate, and describe content accurately

SECTION 3:

1. Discuss the key differences between Flexbox and Grid.

è **Flexbox** is one-dimensional layout model in **CSS** for arranging items with a container while **Grid** is a powerful **CSS** module that enables devs to create complex two-dimensional layouts on a webpage

2. Define each component (content, padding, border, margin).

Content: The actual stuff inside the box like text, images, or buttons.

Padding: Space between the content and the border it pushes the content inward.

Border: The line around the padding it outlines the box and can be styled.

Margin: Space outside the border it separates the box from other elements nearby.

3. Compare and contrast the three main methods of applying CSS (inline, internal, and external).

à Inline: inside the HTML tag (not reusable)

Internal: in a tag in the HTML head

External: in a separate .css file (best for big projects)

Most maintainable: **External CSS** — keeps code clean and reusable.