Web Development quiz answers (answers in Red, questions in black, and examples in Blue.)

Section 1: Understanding Web Development

1a) Describe what happens after a user enters a URL and presses Enter.

1. The browser looks for the website's address on the internet.
2. It connects to the server where the website is stored.
3. It asks the server to send the webpage files
4. The server sends those files back.
5. The browser shows the webpage on the screen.
6. Then you have a variety of options of the result of what you searched for in ur screen then enjoy your day

b) Explain how the DOM, CSSOM, and render tree interact to produce the visual output.

DOM gives the content, CSSOM gives the style, and the render tree combines them to display the final page.

Different browsers may display the same page differently.

2.Discuss the main factors that cause cross-browser inconsistencies and propose two practical methods to minimize them.

Cross-browser problems happen because each browser works differently. They use different engines to display webpages, and they don't all support the same HTML, CSS, or JavaScript features.
Also, browsers have different default styles, which can change how a page looks.

3.Explain the importance of responsive web design in today's multi-device environment.

Include at least two CSS or design techniques that make a page responsive.

Responsive web design is important because people use many different devices like phones, tablets, and laptops. A responsive website adjusts its size and layout so it looks good and is easy to use on any screen. This improves the user experience and makes the website more accessible for everyone.

Techniques to make the page responsive is by using :

- **Media Queries (CSS)**
- **Flexible layouts**

Section 2: Understanding HTML (15 marks)

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

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

Semantic HTML improves accessibility and SEO because it gives meaning to the content, and search engines and assistive tools can understand the structure better.

2.Evaluate how HTML attributes (both global and tag-specific) enhance functionality and interactivity of web pages.
Provide examples to support your argument.

HTML attributes give extra information to elements and help control how they look and behave.
They make web pages more functional and interactive for users.

For example:
`id`: uniquely identifies an element so CSS or JavaScript can target it

`class`: groups elements for styling

Tag-specific attributes only work on certain elements and add special features.

For example;

On an image:

```
<img src="photo.jpg" alt="My Profile Picture">
```

3.Given the following HTML snippet, identify and correct at least three semantic or structural errors :

```
  <body>
    <div>
        <h5>Main Title</h1>
        <p><b>This page explains HTML.</strong>
        <img alt=Campus src="campus.jpg">
    </section>
</body>
```

Errors are underlined