**prep week**

technical english

The following exercise contains the following subjects:

● technical english text comprehension.

**Instructions**

1. read the following text and answer the questions. The point is not that you understand the topic, rather to extract the info that you need.
2. Texts:
   1. HTML (Hypertext Markup Language) is the backbone of web development. It is used to structure content on the web and consists of various elements that define the structure and presentation of a webpage. One of the fundamental HTML elements is the "heading" element, denoted by the <h1> to <h6> tags. Headings are used to define the hierarchical structure of a webpage's content. The <h1> tag represents the highest level of heading, while the <h6> tag represents the lowest level.  
      1. What is HTML used for in web development?
      2. How are headings structured in HTML?
      3. Explain the purpose of the <h1> to <h6> tags.
      4. Which heading tag represents the highest level of heading?
      5. If you wanted to create a second-level heading, which HTML tag would you use
   2. In programming, variables are used to store and manage data. In JavaScript, a popular programming language for web development, variables are declared using the var, let, or const keyword. The var keyword was traditionally used for variable declaration, but it has been largely replaced by let and const. The let keyword is used to declare variables that can be reassigned, while the const keyword is used to declare variables that cannot be reassigned after their initial value is assigned.  
        
      1. What is the purpose of using variables in programming?
      2. Name three keywords used to declare variables in JavaScript.
      3. What is the difference between the let and const keywords when declaring variables?
      4. Explain the concept of reassigning a variable.
   3. Cascading Style Sheets (CSS) are used to control the presentation and layout of web content. CSS selectors play a crucial role in targeting specific elements on a webpage for styling. The most basic type of selector is the "element selector," which selects all instances of a particular HTML element. For instance, the selector p targets all <p> (paragraph) elements in the HTML document. Another type is the "class selector," denoted by a period (.) followed by the class name. This selector targets elements with a specific class attribute. For example, the selector .highlight would target all elements with the class attribute class="highlight".  
      1. Define an element selector and provide an example.
      2. If you wanted to select all <a> (anchor) elements on a webpage, how would you write the selector?
      3. Explain the significance of using CSS selectors in styling web content.
   4. The Hypertext Transfer Protocol (HTTP) is the foundation of data communication on the World Wide Web. It governs how data is exchanged between a web browser and a web server. When a user enters a URL in their browser's address bar, the browser sends an HTTP request to the server hosting the website. This request includes information about the requested resource, such as the page's path and hostname. The server processes the request and responds with an HTTP status code, which indicates the outcome of the request, such as success (200), redirection (302), or not found (404).
      1. Describe the process when a user enters a URL in their browser.
      2. If a server responds with a status code 403, what does it indicate?
      3. What is an HTTP request, and what information does it contain?