

**061306T4CSC**

**COMPUTER SCIENCE LEVEL 6**

**ICT/OS/CS/CR/10/6**

**Demonstrate Web Design Skills**

**March/April 2026**



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION  
COUNCIL (TVET CDACC)**

**WRITTEN ASSESSMENT**

**Time: 2 HOURS**

**INSTRUCTIONS TO CANDIDATE**

1. The paper consists of **TWO** sections: **A** and **B**.
2. Answer **ALL** questions in section A and any **THREE** (3) questions in section B.
3. Marks for each question are indicated in the brackets.
4. Candidates are provided with a separate answer booklet
5. Do not write on this question paper.

**This paper consists of FOUR (4) printed pages**

**Candidate should check the question paper to ascertain that all pages  
are printed as indicated and that no questions are missing.**

## SECTION A (40 MARKS)

*Answer ALL the questions in this section.*

1. Write HTML statements to display  $X^3$  and  $CO_2$  on the screen. (4 marks)
2. State Four attributes that can be used with the `<a>` (anchor) tag in HTML. (4 marks)
3. Explain the difference between block-level elements and inline elements in HTML, giving ONE example of each. (4 marks)
4. An array contains the values 10, 20, 30, and 40. Write JavaScript code using the `pop()` function to remove the last element and then display all remaining elements of the array. (4 marks)
5. Write TWO HTML statements illustrating the difference between the `<div>` and `<span>` tags as used in web page structure. (4 marks)
6. An object called student has two properties: name with value "Alice" and grade with value 85. Write JavaScript statements to declare and initialize this object, then display both property values on the screen. (4 marks)
7. A web developer wants to use mouse events to make a webpage interactive. Write HTML and JavaScript code to illustrate the `onclick` event and the `onmouseover` event. (4 marks)
8. Given a CSS file named `design.css`, write the complete HTML statements needed to link this external CSS file to an HTML document. (4 marks)
9. The Document Object Model allows dynamic manipulation of web pages. Write TWO JavaScript statements: one to create a new paragraph element and another to append it to the body of the document. (4 marks)
10. By using a code example, explain the difference between function declaration and function expression in JavaScript. (4 marks)

**SECTION B (60 MARKS)***Answer Any THREE Questions in This Section*

11.

- a) Write HTML code to implement the table structure shown below. (12 marks)

| Product Name | Quantity | Unit Price |
|--------------|----------|------------|
| Rice         | 5 kg     | 150        |
| Sugar        | 2 kg     | 200        |
| Cooking Oil  | 1 litre  | 350        |
| <b>Total</b> |          | <b>700</b> |

- b) Create an HTML document to display an ordered list showing three programming languages (Python, JavaScript, Java), where each language has an unordered nested list showing two uses of that language. (8 marks)

12.

- a) Write a JavaScript program that stores five student scores (67, 72, 85, 90, 78) in an array. The program should use a for loop to find and display the highest score and the lowest score. (12 marks)

- b) Write HTML statements to create a form with the following fields:

- A text input field for "Username"
- A password input field for "Password"
- A submit button labeled "Login"

Ensure all form elements have appropriate labels.

(8 marks)

13.

- a) By giving coded examples, explain the purpose and usage of the following HTML5 semantic elements: (9 marks)

- i. <article>
- ii. <footer>
- iii. <aside>

- b) Write a JavaScript program using a while loop to display all even numbers from 2 to 20 on the screen. (6 marks)

- c) Given two variables: firstName with value "John" and lastName with value "Doe", write JavaScript code to concatenate these variables and display the full name in the format "Full Name: John Doe". (5 marks)

14.

- a) Explain FOUR JavaScript data types by providing a variable declaration example for each.  
(8 marks)
- b) Write a JavaScript function called `calculateRectangleArea` that accepts two parameters (length and width) and returns the area. Include code to call this function with values 12 and 8, and display the result using `document.write()`.  
(6 marks)
- c) Using CSS, write code to style a paragraph element with the following properties:  
(6 marks)
  - Font size: 18 pixels
  - Text color: blue
  - Text alignment: center
  - Background color: light gray

Show both the CSS code and the HTML paragraph element that uses this styling.