

061306T4CSC

COMPUTER SCIENCE LEVEL 6

ICT/OS/CS/CR/10/6/A

ICT/OS/CS/CR/10/6/B

Demonstrate Web Design Skills

July/August 2025



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

WRITTEN ASSESSMENT

Time: 3 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 75⁰ and H₂O on the screen. (4 marks)
2. Attributes are used to enhance the functionality of a tag in HTML. State FOUR attributes that can be used in the tag. (4 marks)
3. Using comments in web design enhances code readability. Apply single line and multi-line comments to appropriate comments in the code extracts given below: (4 marks)

Program to calculate the area of a rectangle

Program written by Misha Shiro

Function to calculate area

```
function getArea()
```

```
{
```

```
  area = length * width;
```

```
  document.write ("Area" +getArea());
```

```
}
```

Execute the function

```
getArea();
```

4. An array has Orange, Banana, and Mango as elements. Write a JavaScript code using the push() function to add another element called Lemon, then display all elements of the array. (4 marks)
5. Write TWO HTML statements to illustrate the use of <p> and
 tags in formatting web pages. (4 marks)
6. An object called person has two attributes name and age which are initialized as Willy and 34 respectively. Write JavaScript statement to declare and initialise the object and display its values on the screen. (4 marks)
7. A user wants to integrate window events in a web page to make it interactive. Illustrate the window events that load a document and resize a document respectively. (4 marks)
8. Style Sheets plays a crucial role by ensuring reusability and accessibility in web pages. Given oranges.css as an external file, write HTML statements to link the CSS file. (4 marks)
9. Data Object Model is a feature that assist web developers to dynamically execute web pages. Write TWO sample statements to add an element and delete the element from a tree structure. (4 marks)

10. By the use of a program segment, explain the syntax of a JavaScript function.

(4 marks)

SECTION B (60 MARKS)

Answer Any THREE Questions in This Section

11. a. Write HTML statements to implement the list structure given below. (12 marks)

Food Categories

1. Carbohydrates

a. Ugali

b. Potatoes

c. Cassava

2. Proteins

i. Meat

ii. Eggs

iii. Milk

3. Vitamins

- Onions
- Tomatoes
- Fruits

b. Write a HTML code to create a document to display the format given below.

(8 marks)

Customer	MONEY	
	Ksh	Cts
David	1000	NIL
Milly		
Jane	1200	
	1400	

12. a. Write a JavaScript program to store the marks 45,55,44,78 and 56 in an array. The program should then calculate the sum, average marks and print the list of marks and sum on the screen by using for loop. (12 marks)

b. Write HTML statements to display the output shown below. (8 marks)

EMPLOYEE ENTRY FORM

Number

Name

Salary

Gender Male

 Female

13. a. Tags and attributes enhance the functionality of a webpage. By giving sample statements, illustrate how the following attributes as used in HTML. (6 marks)
- i. <header>
 - ii. <nav>
 - iii. <section>
- b. Write HTML statements to display the output given below. (6 marks)

Select Course

Course

- Computer Science
- Electrical
- mechanical
- Business

- c. Given that the country is "Kenya" and the city is "Nairobi", write JavaScript statements to initialise the country, city and combine the two words to form a sentence. (8 marks)
14. a. Data types are components used to classify data in programming. Explain THREE data types used while programming in JavaScript by giving a corresponding statement in each case. (6 marks)
- b. Write a JavaScript program to display odd numbers between 1 and 99. Use for loop. (8 marks)
- c. Illustrate the use of the following HTML tags giving an example in each case. (6 marks)
- i. <a>
 - ii. <hr>
 - iii. <body>