

**061006T4ICT**

**ICT TECHNICIAN LEVEL 6**

**IT/OS/ICT/CR/5/6**

**PERFORM WEBSITE DESIGN**

**JULY/AUGUST 2023**



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

**WRITTEN ASSESSMENT**

**TIME: 3 HOURS**

**INSTRUCTIONS TO CANDIDATE**

1. This paper has three sections **A** and **B**. Attempt questions in each section as per instructions given in the section.
2. You are provided with a separate answer booklet.
3. Marks for each question are indicated in the brackets.
4. Do not write on the question paper

**This paper consists of FOUR (4) printed pages**  
**Candidates should check the question paper to ascertain that all pages are**  
**printed as indicated and that no questions are missing**

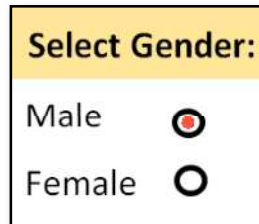
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**SECTION A: (40 MARKS)**

***Attempt ALL Questions in this section***

1. State TWO popular web scripting languages used by online application developers (2 Marks)
2. John would like to create a website for his small business. Outline TWO web authoring tools he can use. (2 Marks)
3. Differentiate between “visibility: hidden” and “display: none” in a CSS file. (4 Marks)
4. With the aid of html code snippet explain how you can integrate CSS file to your webpage. (4 Marks)
5. Differentiate between scheme and hostname components as used in a uniform resource locator. (4 Marks)
6. Outline TWO website maintenance tasks that should be conducted annually. (4 Marks)
7. Figure 1 represents a portion of a webpage in a web browser. Identify the object stating its use. (2 Marks)

Figure 1



The image shows a web form with a yellow header containing the text "Select Gender:". Below the header, there are two radio button options: "Male" and "Female". The "Male" radio button is selected, indicated by a red dot in the center of the circle.

8. Write a JavaScript function that adds two integers and displays the output in an alert box. (4 Marks)
9. Explain TWO uses of a *domain name* as used in the internet. (4 Marks)
10. Outline TWO cyber security risks that an online business website is exposed to in the internet. (4 Marks)
11. Distinguish between *method* and *object* as used in JavaScript. (4 Marks)
12. Jane intends to develop a website requiring a database, identify TWO types of databases that she can use. (2 Marks)

**SECTION B: (60 MARKS)**

*Attempt any THREE questions in this section.*

13.

- a) Using a program statement, describe how to include an external JavaScript file in your webpage. (2 Marks)
- b) With the aid of an example explain the following elements;
  - (i). Semantic elements. (3 Marks)
  - (ii). Non-semantic elements (3 Marks)
- c) Other than marketing, describe THREE uses of a website to a business. (6 Marks)
- d) John has finished developing his website and would like to transfer the web documents to a webserver. Explain THREE ways in which this can be achieved. (6 Marks)

14.

- a) Use the following statement to answer the questions that follows;

```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4. <meta charset="UTF-8">
5. <meta name="viewport" content="width=device-width, initial-scale=1.0">
6. <meta http-equiv="X-UA-Compatible" content="ie=edge">
7. <title>My Website</title>
8. </head>
9. <body>
10. <main>
11. <h1>Welcome to My Website</h1>
12. <h2><i>this is my first page</i></h2>
13. </main>
14. </body>
15. </html>
```

- (i). Identify the prominent language in this statement. (1 Mark)
- (ii). Describe the importance of this file in web design. (2 Marks)
- (iii). Explain the importance of line 1. (2 Marks)
- (iv). Outline FOUR examples of container tags used in the statement. (4 Marks)
- (v). Explain the meaning of lines 4, 5 and 6 as used in the statement. (3 Marks)
- (vi). When the statement is run in a web browser, describe the output. (2 Marks)

- b) Explain THREE benefits of using `<tables>` in developing a website. (6 Marks)

15. Figure 2 is a designed login interface for a webpage. Use it to answer the questions that follows;

Figure 2 shows a login interface with the following elements:

- Email address:** A text input field containing the text "...e@mail.com". An arrow labeled "Object 1" points to this field.
- Password:** A text input field containing the text "Password". An arrow labeled "Object 2" points to this field.
- Log in:** A green button with the text "Log in". An arrow labeled "Object 3" points to this button.
- Forgot password?:** A link located below the "Log in" button.

Figure 2

- a) Explain TWO importance of the login interface above to an online business. (4 Marks)
- b) Write html code to implement;
- (i). Object 1 (3 Marks)
  - (ii). Object 2 (3 Marks)
- c) Write a client side scripting function, to validate the data when Object 3 is clicked. (5 Marks)
- d) Write a server-side scripting program segment to validate the user name and password comparing with values in the database. (5 Marks)

16.

- a) Highlight TWO visual characteristics of a poorly designed website. (2 Marks)
- b) Explain THREE benefits of the internet to the modern industry. (6 Marks)
- c) Outline FOUR tests done on an online website. (4 Marks)
- d) Distinguish between *user requirements* and *functional requirements* in website development. (4 Marks)
- e) Identify TWO advantages that a client-side web application has over a server-side web application. (4 Marks)