



PAC INSTITUTE OF TECHNOLOGY AND SOCIAL STUDIES JAN – APRIL 2025 ASSESSMENT

FORMATIVE ASSESSMENT

Qualification / Course : COMPUTER PROGRAMING LEVEL 6

Unit of Competency : DEVELOP CLIENT-SIDE WEB APPLICATION

WRITTEN ASSESSMENT TIME: 3 HOURS

INSTRUCTIONS TO THE CANDIDATE:

- 1. Read all the instructions carefully before attempting the questions.*
- 2. This paper consists of two sections, A & B.*
- 3. You are allowed 3 Hours to Answer the questions.*
- 4. Marks for each question are indicated in brackets.*
- 5. Write your responses in the Separate Answer booklet provided.*
- 6. Do not write anything on this question paper.*

SECTION A: (40 MARKS)

Answer ALL questions in this section.

1. Explain the term HTML (2 Marks)
2. Explain any **TWO** JavaScript data types (4 Marks)
3. List any **THREE** attributes that can be added to the <a> tag (3 Marks)
4. Explain the purpose of lang attribute in HTML (2 Marks)
5. Distinguish between each of the following as used in Hypertext Markup Language (4 Marks)
 - a. <title> and <script>
 - b. <link> and <meta>
6. Distinguish between radio buttons and check boxes as used in HTML (4 Marks)
7. In the following code snippet, in what order will the margins be added (4 Marks)

```
p {  
    margin: 25px 50px 75px 100px;  
}
```
8. Using an example, discuss any **THREE** ways CSS can be added to HTML (6 Marks)
9. Using an example, demonstrate how one would select all <p> element tags in JQuery (2 Marks)
10. Discuss any **THREE** JQuery methods for DOM manipulation (6 Marks)
11. Using an example discuss how you would change the background color of an HTML paragraph (3 Marks)

SECTION B: (60 MARKS)

Answer any **THREE** questions in this section.

12.

a) Write html code that displays the following table when run on the browser (10 marks)

Subject			Date
Database	Networking	Operating System	25/2/2015
Communication Skills			27/02/2025

b) A web developer is designing a website that showcases different countries and their cultures. On the Kenya page, they want an alert box to display the message '**I am a Kenyan**' whenever the image of the Kenyan flag is fully loaded. Write a JavaScript program that uses an event listener and a function to achieve this behaviour. (10 Marks)

13.

a) Write a JavaScript Program that is embedded on **HTML** that prints the following pattern (10 Marks)

```
*
**
***
****
*****
```

b) Discuss **FOUR** attributes that can be used with the tag in HTML. (8 Marks)

c) Outline any advantage of using a dynamic web page (2 Marks)

14.

a) Using relevant examples discuss **FIVE** jQuery events (10 Marks)

b) Explain **FIVE** advantages of using libraries such as jQuery in developing web applications (10 Marks)

15.

a) Write **HTML** code that would display the following items as they appear when run on a browser (10 Marks)

A. Computer Programming

3. Structured Programming

2. Web Programming

- PHP

- HTML

1. Functional Programming

B. Future of Programming

Artificial Intelligence

This will involve a lot of machine learning

Web 4.0

This will also impact how we code on the web

b) Write a JavaScript program embedded in HTML that would use a function to compute the area of a triangle whose base length is 300 and height is 100. The program should display the results on a browser (10 Marks)