



**PAC INSTITUTE OF TECHNOLOGY AND SOCIAL STUDIES SEPTEMBER –
DECEMBER 2024 ASSESSMENT**

FORMATIVE ASSESSMENT

Qualification Code : IT/OS/CP/CR/08/6/A
Qualification : COMPUTER PROGRAMMING
Code : ICT/CU/CP/CR/08/6/A
Unit of Competency : CLIENT-SIDE WEB APPLICATIONS

**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. **DEFINE** the following terms and concepts of the web. (4 marks)

- (i) Coding
- (ii) Client-Side Scripting
- (iii) Surfing
- (iv) Search Engine Crawling

2. **EXPLAIN** what HTML attributes are by giving three examples. (4 marks)

3. Using appropriate **EXAMPLES**, demonstrate comments in JavaScript. (4 marks)

4. **DISCUSS** the CSS syntax rule (4 marks)

5. Write what will be **DISPLAYED** by the following code (4 marks)

```
<script>
  for (i=10; i<=1; i++)
  {
    Document. Write (i+"<br/>")
  }
</script>
```

6. Give **TWO REASONS** why scripting languages are very vital in internet applications programming (4 marks)

7. **DIFFERENTIATE** between (4 marks)

- i. HTML and JavaScript
- ii. Class selector and ID selector

8. JavaScript **TWO** types of data types. Discuss (4 marks)

9. The CSS background properties are used to define background effects for elements.

IDENTIFY any **TWO** background properties. (3 marks)

10. JavaScript in most websites exists as external files. What **ADVANTAGES** does this have over having scripts in the same file as html? (3 marks)

11. **DEFINE** the term client in web development (2 marks)

SECTION B: (60 MARKS)

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

QUESTION TWELVE (20 MARKS)

- a) You have been contracted to develop a website to capture student details. Write a simple form that captures the student's age, name, and phone no. Write a JavaScript function that checks that the name and age is **NOT BLANK**. (10 Marks)
- b) Write a **CSS** script that applies a red background color, a white font color, and font size of 14 to all <p> elements in a html file. (5 Marks)
- c) As a JavaScript programmer, write a JavaScript function that returns the **SUM OF THREE NUMBERS**. (4 Marks)

QUESTION THIRTEEN (20 MARKS)

- a) The IT Department has contracted you to develop a website that registers students for a unit. Write a simple website that captures the student's name, registration number, course and date of admission. Write a JavaScript function that ensures that these values are **REQUIRED** (10 Marks)
- b) Write a **HTML** file that contains JavaScript function that is called when a button is clicked. (8 Marks)
- c) What does the **ACRONYM CSS** stand for? (2 Mark)

QUESTION FOURTEEN (20 MARKS)

- a) The government has contracted you to develop a website that registers citizens for a national event. Write a simple website that captures the citizens first name and ID number and when the button of submit is clicked it should **ALERT** registered. (10 Marks)
- b) **DEVELOP** a CSS script that set the text shadow of all h1 HTML elements to 1px. (4 Marks)
- c) **DEVELOP** a CSS script that sets the transparency of an image HTML element to 50% (5 Marks)

QUESTION FIFTEEN (20 MARKS)

- a) **IDENTIFY** any **SIX** examples of JavaScript events. (6 Marks) b) JavaScript can access the **DOM** of a HTML page. Assuming we have a p tag in our HTML page that has the id 'hero', write a JavaScript program that changes its text to "**HERO'S PAGE**". (8 Marks)
- c) In JavaScript, we can access elements in HTML by specifying either their id or class name. write JavaScript statement for:
- i. Finding an element with the id "**paperID**" (3 Marks)
 - ii. Finding an element belonging to the class "**paperClass**" (3 Marks)