



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

FORMATIVE ASSESSMENT

Qualification Code : 061306T4CSC
Qualification : Computer Science Level 6
Code : ICT/OS/CS/CR/10/6/A
Unit of Competency : DEMONSTRATE WEB DESIGN SKILLS

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.

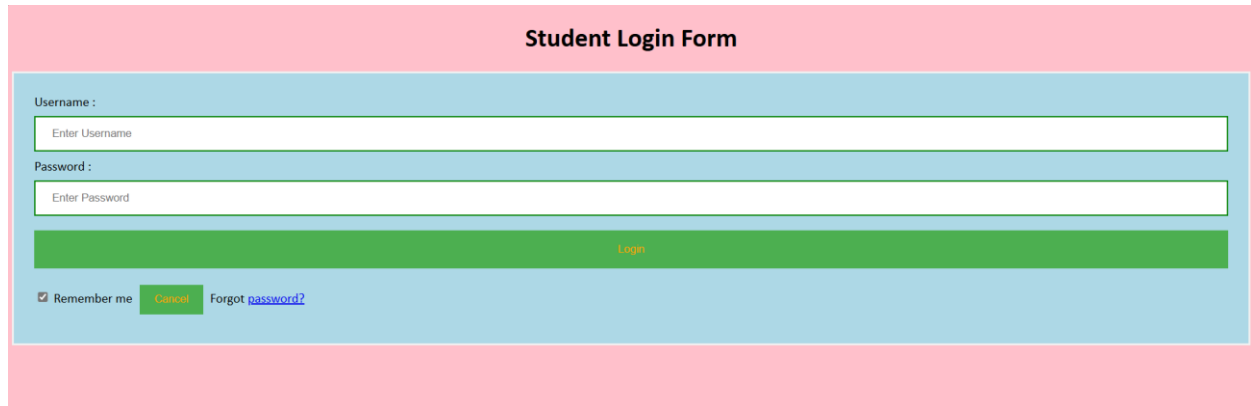
1. Define HTML and explain its purpose (4marks)
2. List the **FIVE** core HTML elements. (5 marks)
3. Highlight how the document type in an HTML file is declared. (2 marks)
4. Write a simple JavaScript code to display "Hello, World!" in an alert box. (5 marks)
5. State **FOUR** multimedia elements that can be displayed in a webpage (4 marks)
6. Highlight the differences between the following pairs of tags.
 - i. <title> and <script> (2 marks)
 - ii. <link> and <meta> (2 marks)
7. Outline **FOUR** advantages of a pure text editor when developing a website. (4 marks)
8. Outline **FOUR** reasons for gathering user requirements before building a website. (4 marks)
9. List **TWO** examples of mouse events as used in JavaScript. (2 marks)
10. Outline **FOUR** advantages of using a dynamic webpage (4 marks)
11. Outline **TWO** uses of <meta> in HTML. (2 marks)
12. Explain **TWO** ways one can use CSS in a HTML document. (4 marks)

SECTION B: (60 MARKS)

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

13.

- a. As a web developer, you are tasked with creating a simple contact form for a client's website. The form should display the following form as it appears when the code is run on a browser. (10 marks)



The screenshot shows a web form titled "Student Login Form" in a pink header bar. The form itself has a light blue background. It contains a "Username :" label above a text input field with placeholder text "Enter Username". Below this is a "Password :" label above a text input field with placeholder text "Enter Password". A green "Login" button is positioned below the password field. At the bottom left, there is a checked checkbox labeled "Remember me", a green "Cancel" button, and a blue link "Forgot password?".

- b. Write a JavaScript code embedded in HTML that assign the strings "John", "Ann", "Aaron", "Edwin", "Elizabeth" into an array. The program should display the string in the array on the screen. (10 Marks)

14.

- a) With the aid of a working HTML code, distinguish between HTML tags and HTML elements, (Use comments to explain your work.) (5Marks)
- b) Write a JavaScript program embedded in HTML that would display the comment "Even numbers less than 20." This comment should be followed by a list of the even numbers less than 20 in a single line. The program should then display a horizontal line followed by the sum of the numbers. (9 marks)
- c) You are a web developer working on a new e-commerce website. Your team is considering different approaches to build the backend of the application. Explain three advantages you would realise by using server-side programs when creating web applications .

(6 marks)

15.

- a) Distinguish between a static website and a dynamic website as used in the internet. (4 marks)

- b) Explain three methods that can be used to convert string variables to numbers in a JavaScript Program. (6 Marks)
- c) Write a html code to display the table below when run in on a web browser. Set the amount of space between the borders of the outer table cells and its content to be 10 pixels and all the borders to be red on both of the tables. (10 Marks)

Subject			Date			
<table><tr><td>Database</td><td>Computer Application</td><td>Data communication</td></tr></table>			Database	Computer Application	Data communication	12/10/2024
			Database	Computer Application	Data communication	
Communication skills			15/10/2024			

16.

- a) Table 1 shows a criterion used to allocate houses to clients by a landlord based on monthly rent.

Monthly Rent	Type of House
Greater than 5000 and less than 10000	One bedroomed House
Greater than 10,000 and less than 15000	Two bedroomed House
Greater than 15000 and less than 20000	Three bedroomed House
Any other	No allocation for that amount

Write a JavaScript program embedded in HTML that would prompt a user to enter the monthly rent. The program should determine and display the type of house on the browser. Use the if construct. (10 Marks)

- b) Write a JavaScript program embedded in HTML that would declare and assign the values 700, 120, 330, 90 and 190 into an array. The program should then compute the sum of the five values in the array and display the results through the use of an alert box. (6 marks)
- c) Differentiate between a scheme and a host as used in Uniform Resource locator (URL) structure. (4 marks)

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