

**Instructions**

1. This test consists of two(2) questions. Attempt all questions
2. Write your name and registration number on each of your answer sheet
3. This test carries 20 marks
4. Duration: **60 Minutes**

**QUESTION ONE (9.5 marks)**

(a) For each of the following, choose the most correct answer and write its letter on the answer sheet (0.5 mark each)

(i) What type of language is HTML?

- (A) Scripting Language
- ☒ (B) Markup Language
- (C) Programming Language
- (D) Network Protocol

(ii) What is the correct JavaScript syntax to change the content of HTML element below?

`<p id="demo">This is a demonstration.</p>`

- (A) `document.getElementById("p").innerHTML = "Hello World!";`
- (B) `#demo.innerHTML = "Hello World!";`
- ☒ (C) `document.getElementById("demo").innerHTML = "Hello World!";`
- (D) `document.getElementsByName("p").innerHTML = "Hello World!";`

(iii) Where is the correct place to insert a JavaScript?

- ☒ (A) The `<body>` section
- (B) The `<head>` section
- (C) The `<title>` section
- ☒ (D) Both the `<head>` section and the `<body>` section are correct

(iv) What is the correct HTML for referring to an external style sheet?

- ☒ (A) `<link rel="stylesheet" type="text/css" href="mystyle.css">`
- (B) `<style src="mystyle.css">`
- (C) `<stylesheet>mystyle.css</stylesheet>`
- (D) `<style rel="mystyle.css">`

(v) Which is the correct CSS syntax?

- ☒ (A) `body {color: black;}`
- (B) `body:color=black;`
- (C) `{body:color=black;}`
- (D) `{body;color:black;}`



(vi) What is the correct way to add 1 to the \$count variable in Javascript?

- (A) count++;
- (B) ++count
- (C) \$count +=1
- (D) \$count++;

(vii) How can you make a bulleted list with numbers in HTML?

- (A) <dl>
- (B) <ol>
- (C) <list>
- (D) <ul>

(viii) What tag is used to display a picture in a HTML page?

- (A) picture
- (B) image
- (C) img
- (D) src

(ix) Which HTML attribute is used to define inline styles?

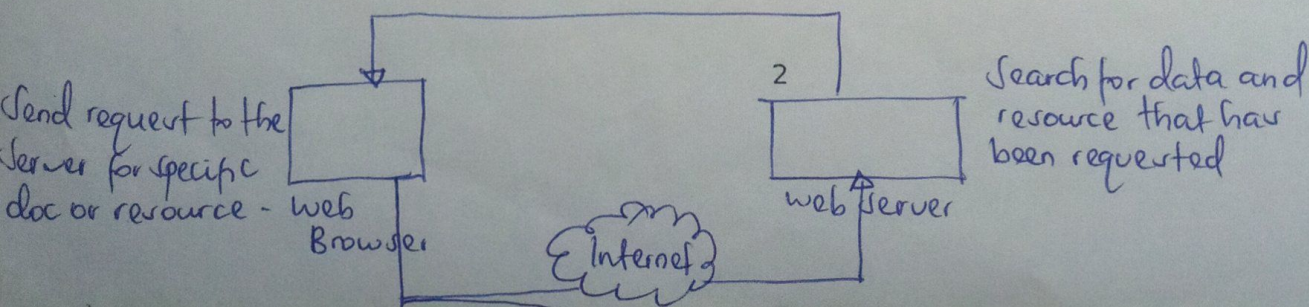
- (A) Font
- (B) Class
- (C) Styles
- (D) Style

(x) Which HTML tag produces the biggest heading?

- (A) <h7>
- (B) <h9>
- (C) <h4>
- (D) <h1>

(b) State whether each of the following statements is TRUE or FALSE. Write your answer in the answer sheet (0.5 mark each)

- (i) JavaScript does not require variables to have a type before they can be used in a script. **TRUE**
- (ii) The following are all valid variable names: `_under_bar_`, `m928134`, `t5`, `j7`, `her_sales$`, `his_$account_total`, `a`, `b$`, `c`, `z`, `z2` **TRUE**
- (iii) A valid JavaScript arithmetic expression with no parentheses is evaluated from left to right. **TRUE FALSE** ~~but evaluation based on rule of precedence~~
- (iv) `<meta>` tag cannot be defined in the `<head>` tag. **FALSE**





(c) Fill in the blanks in each of the following statements: (0.5 mark each)

- (i) Comments are used to document a program and improve its readability.
- (ii) A dialog capable of receiving input from the user is displayed with method of object Prompt
- (iii) A JavaScript statement that makes a decision is the If statement.
- (iv) Calculations are normally performed by Arithmetic operators.
- (v) A dialog capable of showing a message to the user is displayed with method of object Alert.

## QUESTION TWO (10.5 marks)

- (a) With the aid of a diagram, brief explain the Client -Server model as applied to web applications. (2 marks)
- (b) What is the function of each of the elements of a table in HTML? (0.5 mark each)
  - (i) td - To show table data
  - (ii) th - To show table header
- (c) Categorize each of the following as either an element or an attribute: (0.5 mark each)
  - (i) br is Element
  - (ii) placeholder is Attribute
- (d) What displays in the message dialog when each of the given JavaScript statements is performed? Assume that  $x = 2$  and  $y = 3$ . (0.5 mark each)
  - (i) `window.alert("x = " + x);`  $x = 2$
  - (ii) `window.alert((x + y) + " = " + (y + x));`  $5 = 5$
- (e) Write JavaScript statements that accomplish each of the following task: (0.5 mark each)
  - (i) Display the message "Enter two numbers" using the window object.
  - (ii) Assign the product of variables b and c to variable a.
- (f) Describe the following ways of passing arguments to JavaScript functions/methods: (1 mark each)
  - (i) Pass-by-value
  - (ii) Pass-by-reference
- (g) With an example, briefly explain each part of a URL (1 mark)
- (h) With examples, describe 3 ways/techniques for using CSS in HTML documents?( 1.5 marks)

i) `<script type = "text/javascript">`  
`<!--`  
`window.alert("Enter two numbers");`  
`// -->`  
`</script>`

ii) `<script type = "text/javascript">`  
`<!--`  
`var a;`  
`var b;`  
`var c;`  
`a = b + c;`  
`// -->` `</script>`

Call by Value - Means caller and callee have the Independent Variables with different same value. If the callee modifies the variable, effect reaches to the caller

Pass by Reference - Means the caller and callee have same variable and same value. If the callee modifies the variable effect is seen to the caller.