



TOPFAITH UNIVERSITY

MKPATAK, AKWA IBOM STATE, NIGERIA

B.Sc. DEGREE EXAMINATION

FACULTY:	COMPUTING AND APPLIED SCIENCES	SESSION:	2023/2024
DEPARTMENT:	DEPARTMENT OF COMPUTING	SEMESTER:	PRIMO
COURSE CODE:	TUM-CSC112	CREDIT UNIT:	2
COURSE TITLE:	WEB TECHNOLOGIES 1	TIME:	2 HOURS
INSTRUCTION:	ANSWER QUESTION 1 AND ANY OTHER TWO (2) QUESTIONS		

1. (a) Write an HTML code for the following components in the table below: (8 marks)

S/N	Expression	Answer
1	An ok button	
2	A name field	
3	A password field	
4	A dropdown list	

(b) Define by example, the complete structure of an HTML document (8 marks)

(c) In a tabular form, state the output of the following expression, given that a = 4 and b = 4. (7 ½ marks)

S/N	Expression	Answer
1	a != b	
2	a % b	
3	(a < b)? a:b	
4	a < a && a == a	

[Total = 23½ marks]

2. (a) Write a CSS class to style the components in the table described below: (8 marks)

S/N	Expression	Answer
1	A green colored label text	
2	A circular profile picture avatar	
3	A box with red-colored shadow	
4	A button that grows on mouse over	

(b) Using a flexbox approach, write a CSS style to perfectly centralize an image in oval-shaped div component (8 marks)

(c) Programmatically show the relationship between the following files – (1) style.css (2) actions.js (3) page.html (7½ marks)

[Total = 23½ marks]

3. (a) Define suitable CSS selectors for the HTML custom components in the table below: (8 marks)

S/N	Expression	Answer
1	<div class="class" > ... </div>	
2	 ... </div>	
3	<div> ... </div>	
4	 ... 	

(b) State the output of the following expression given that a = 10, b = 20. (8 marks)

S/N	Expression	Answer

1	a += b	
2	a %= b	
3	a *= 2	
4	(a--)+1	

(c) Using CSS, define a div component of size 200px by 200px. Transform the div so that the width will be twice as large without modifying the initial width property. (7½ marks)

[Total = 23½ marks]

4. (a) Write a Javascript function to change the value of a div component with id="div" to "Topfaith University" (11 ½ marks)
- (b) Write a Javascript function to find white eggs in a basket of multi-colored eggs. Eggs are stored as strings (12marks)

[Total = 23½ marks]

5. (a) Given the loop construct below: (12 marks)

```
for(var i=0; i<=N; i++){
    ...
}
```

In a tabular form, answer the questions below:

S/N	Expression	Answer
1	How many times will the loop's body get executed	
2	At what value of i will the loop terminate	
3	What will happen if i++ is replaced with i--	

(c) Using HTML, design an OTP confirmation page comprising of a page header, OTP input field, and a confirm button all centralized. (11½ marks)

[Total = 23½ marks]