

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF BACHELOR OF SCIENCE LIBRARY
SCIENCE

ACSC 226: WEB DESIGN AND DEVELOPMENT

STREAMS: BSC LINS

TIME:2 HOURS

DAY/DATE: TUESDAY 17/12/2024

11.30 A.M. –1.30 P.M.

Instructions: Answer Question one and any other two questions

Question 1 [30 Marks]

- (a) Write html code that changes the background color of a webpage to orange and the color of the text to green. [3 Marks]
- (b) Write an internal CSS that makes all paragraphs to be sized 18 pixels and colored blue. [3 Marks]
- (c) Assuming there is a picture named library.jpg, write the html code that:
- i. Places this picture on a webpage. [2 Marks]
 - ii. Makes it possible to open the Website of Chuka University when the picture is clicked. [2 Marks]
 - iii. Makes the picture a background picture of the webpage. [2 Marks]
- (d) Highlight any four reasons why a website may fail to load an image. [4 Marks]
- (e) Write a JavaScript function that adds two integers given through a prompt dialog box. [5 Marks]
- (f) Explain any three disadvantages of having animations in a website. [3 Marks]
- (g) Write the html code that produces a simple login form. [4 Marks]

(h) Explain why Apache is needed in web design and development. [2 Marks]

Question 2 [20 Marks]

- (a) A website gives visitors a chance to send a compliment or a complaint through a web form. Write html code that creates a web form which captures the following details: email address of the visitor, country, gender and complaint/complement; then sends the captured details to a remote server. Use a html table to define the layout structure. [10 Marks]
- (b) Write JavaScript code that calculates area of a circle. [5 Marks]
- (c) Write an external CSS that makes all images of a website to be of width 200 pixels, height 250 pixels and a border 2 pixels. [5 Marks]

Question 3 [20 Marks]

- (a) Write CSS code to change the case of the text:
- i. “CHUKA UNIVERSITY” to Lowercase. [2 Marks]
 - ii. “chuka university” to Uppercase. [2 Marks]
- (b) Write JavaScript code that prompts a user to key in their name. Then use an alert dialog box to display the name keyed in. [6 Marks]
- (c) Write the code to create the following table using html. [10 Marks]

Chuka University			
Student Name	Reg. Number	County	Age
Aline Mwenda	CB6/1234/21	Mombasa	19
	CB6/1056/21	Malindi	20
Sandra Achieng		Tharaka Nithi	

Question 4 [20 Marks]

- (a) Write CSS code to create a selector class known as “bold” which makes text to be bold. Apply the class to html code. [4 Marks]
- (b) POST and GET are both used in web forms to send data to the server. Highlight the difference between POST and GET. [4 Marks]
- (c) Explain any four reasons why JavaScript is used in web development. [4 Marks]
- (d) Describe any four reasons why comments are needed in JavaScript code. [4 Marks]

(e) Write code that shows how to implement the following in JavaScript:

- i. Single line comment. [2 Marks]
- ii. Multi line comments. [2 Marks]

Question 5 [20 Marks]

(a) Identify the types of html headings demonstrating them through html code. [3 Marks]

(b) Implement an inline CSS that makes the size of a marquee text to be size 24. Consequently, demonstrate how the marquee alternates from one side of the web page to another.

[7 Marks]

(c) Highlight any two frameworks of JavaScript. [2 Marks]

(d) Explain why the following are needed in web design:

- i. Loopback address. [2 Marks]
- ii. Web Server. [2 Marks]
- iii. Protocols. [2 Marks]
- iv. URL. [2 Marks]
