

Kasarani Campus Off Thika Road P. O. Box 49274, 00101 NAIROBI Westlands Campus Pamstech House Woodvale Grove Tel. 4442212 Fax: 4444175

KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY UNIVERSITY EXAMINATIONS, 2024/2025 ACADEMIC YEAR SECOND YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE (COMPUTER SCIENCE)

KCS 2209: INTERNET APPLICATION PROGRAMMING

DATE: 6TH DECEMBER, 2024

TIME: 11:30AM-1:30PM

INSTRUCTIONS TO CANDIDATES

ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS

QUESTION ONE: COMPULSORY (30 MARKS)

a). Differentiate between HTTP and HTTPs

(2 Marks)

b). There are various HTTP request methods in existence, the two most common HTTP methods are **GET** and **POST**. Provide two key differences between these two methods and cite their applicability.

(4 Marks)

c). Create an HTML code that displays the following output;

Hint: Use CSS border property to add a border to the table and apply.

Student Details

| Firstname | Lastname | Date Of Birth |
|-----------|-----------|---------------|
| Ryan | Cheruiyot | 1999 |
| Collins | Mwangi | 2000 |
| Calvin | Otieno | 1998 |

(4 Marks)

- d). Write a PHP code to display "Hello and Welcome to Web Applications Programming Class of September December 2024!" (3 Marks)
- e). Briefly outline any FOUR features of the WWW.

(4 Marks)

- f). With an aid of a diagram, explain the concept of Client/Server Architecture, identifying all its components. (4 Marks)
- g). Write an HTML code to;
 - i) To create a link to "https://www.kwust.ac.ke" with the text "Click here to register at KWUST".

(3 Marks)

ii) Display an image with the file name "cat.jpg" and includes the alternative text "My cat".

(3 Marks)

- h) In the context of Web programming, explain the following terms giving examples; (3)
- (3 Marks)

- i) Client server
- ii) Internet
- iii) Cascading Style Sheet (CSS)

QUESTION TWO: 20 MARKS

a). Write a PHP script to add three numbers whose values are; 8, 10 and 6 respectively. **Hint:** declare three variables to store your values. (8 Marks)

- b). Create a basic login form that allows users to enter their login credentials (username and a password) and select a gender. The form should prompt users to fill in all fields before submission. Set up the form to send data for processing upon submission, using a placeholder path.

 (6 Marks)
- c). Provide <u>two</u> key differences between JavaScript and VBscript languages. (2 Marks)
- d). How do you add a comment in HTML, and what is it used for? Briefly demonstrate. (2 Marks)
- e). Provide two benefits of using JavaScript in your website. (2 Marks)

QUESTION THREE: 15 MARKS

- a). Write a JavaScript code that can evaluate temperature readings to determine if one's body temperature is within the range or not. (7 Marks)
 - i). The program should prompt the user to enter temperature values
- ii). In case the entered value is equal or less than 37 degrees Celsius then the user should get a message that, "You have normal body temperature"
- iii). In case the entered value is greater than 37 degrees Celsius, then the user should get the message, "You have high temperature visit hospital for check-ups".
- iv). The page title should read Temperature
- v). Use h3 to define your headings.
- b) In the context of Web programming, explain the following terms giving examples; (3 Marks)
 - i). WWW
 - ii). URL
 - iii). Web browser
- c). Provide THREE key differences between Server-side scripting and Client-side scripting. Give an example of languages used in each case. (7 Marks)
- d). What is an iframe? Use HTML code to demonstrate how iframe works. (3 Marks)

QUESTION FOUR: 20 MARKS

- a). Demonstrate how you can practically apply external CSS to a webpage. **Hint**: Use HTML code and create two separate documents. (8 Marks)
- b). Write codes for the below HTML Output list;

(4 Marks

Dog

Loyal and friendly companions, available in many breeds and sizes.

Cat

Independent and playful, with excellent agility.

Rabbit

Gentle and social, with soft fur and playful behavior.

c). Identify and explain any Four TCP/IP protocols.

(4 Marks)

d). Differentiate between HTML tags and HTML elements giving examples of each.

(4 Marks)

QUESTION FIVE: 20 MARKS

a). Create a reversed ordered list that starts with 10 and contains the following numbers: 10, 9, 8, 7, 6.

(4 Marks)

b). Write HTML code to create a drop-down menu with the following options:

(4 Marks)

- Apple
- Banana
- Orange
- Mango
- c). What are variables in JavaScript? Explain the difference between var, let, and const. (6 Marks)
- d). With an aid of an example, explain the purpose of the action and method attributes in HTML forms.

(4 Marks)

e). Differentiate between legend and fieldset elements as used in HTML forms. (2 I

(2 Marks)