

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF ICT/BIS/CSF

1ST YEAR 1ST SEMESTER 2022/22023 ACADEMIC YEAR (MAIN CAMPUS)

COURSE CODE: ICB 3107

COURSE TITLE: HTML PROGRAMMING AND INTERNET TOOLS

EXAM VENUE: STREAM: BIS/ICT/CSF

DATE: EXAM SESSION:

TIME: 2 HOURS

INSTRUCTIONS

- 1. Answer Question 1 (Compulsory) and ANY other TWO questions
- 2. Candidates are advised not to write on the question paper
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room

QUESTION ONE 30 MARKS

- a) Define the following
 - i. Web page
 - ii. Web site
 - iii. Web server (6marks)
- b) Explain the role of Style Sheets in Web site development. (4 marks)
- c) Write HTML code that will do the following

- (6 marks)
- i. Make the text "Hello World" bold and italic
- ii. Add a link to send email to you.
- iii. Change the background color of a page to red
- iv. Set the title of the web page to your names
- d) Write a HTML code that would produce the table below the table width is 80% of the screen width the image is saved as penguin.jpeg also .consider using Rowspan ans colspan as required (6 marks)

	Country	Penguin Population
	Uganda	3
	Kenya	6
	Tanzania	12

E) Using HTML code generate the following Ordered list

(4 marks)

A. Brand of Computers

- 1. Del Computers
- 2. HP Computers
- 3. SamSung

B. Types of Software

- 1. Operating Systems
- 2. Application software
- F) Discuss the function of the following protocols used in web serve technology
 - i. Hyper Text Transfer Protocol
 - ii. Simple Mail Transfer Protocol

(4 marks)

QUESTION TWO 20 MARKS

- a) Explain the difference of the web based development terminologies
 - i. HTML element and HTML attribute.
 - ii. JPEG images and GIF images
 - iii. Client side scripting and server side scripting
 - iv. Static and dynamic web pages

(8 marks)

b) Define a HTML code excerpt for following table layout:

Items	Price	VAT
Sugar per bag	Kshs. 2000.00	16%
Rice per bag	Kshs. 3500.00	0%
Unga per bundle	Kshs. 820.00	0%
Total		16

(6 marks)

c) Discuss any three principles of user Interface Design that you would apply to improve the usability of web based forms. (6 marks)

QUESTION THREE 20 MARKS

- A) Write the correct HTML code for the following:
 - i. Adding and image saved as logo.gif with an alternative name 'JOOUST Logo'
 - ii. Adding a hypertext link on a page that leads to JOOUST's homepage.
 - iii. Adding a background color to a page
 - iv. Changing the font color of the entire page to color red.

(4 marks)

B) Describe the Domain Name System as used on the Internet. (6 marks)

C) Explain the function of each layer in the OSI reference model. (10 marks)

QUESTION FOUR 20

20 MARKS

- a) "Sockets play significant role in the client-server model". Using any <u>two</u> types of sockets you know, explain in support of this statement. (6 marks)
- b) Explain the difference between the following
 - i. JavaScript and Java
 - ii. document.getElementById() and document.write()
 - iii. onClick and onBlur event

(6 marks)

- c) Write JavaScript codes that will perform the following
 - i. Get two numbers from the user through a prompt box then display the sum and average of these numbers on the web browser. (4 marks)
 - ii.Define a JavaScript function that receives a person's age and if the age is less than or equal to 18 it displays the word "Child" on the browser else it displays "Adult"

(4 marks)

QUESTION FIVE

20 MARKS

- a) A form statement is found to have the following content;
 <FORM METHOD=POST ACTION="http://192.168.13.101/cgi-bin/demoapp.pl">
 Explain the elements of the above statement.
- b) Write a HTML code that will yield the form in the figure below. (10marks)

Your Comments
First Name:
Last Name
Phone Number
What did you like about the site
□ Colour
□ Design
Which is your best color
© Red
Blue Green
Your Comments
Submit Clear

c) Discuss four principles that you would consider when designing the user interface.

(4 marks)