

## JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

# SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

# UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF INFORMATION COMMUNICATION AND TECHNOLOGY/ BACHELOR OF BUSINESS INFORMATION SYSTEMS/ BACHELOR OF COMPUTER SECURITY AND FORENCICS

1<sup>ST</sup> YEAR 1<sup>ST</sup> SEMESTER 2018/2019 ACADEMIC YEAR

(MAIN CAMPUS)

**COURSE CODE: IIT 3114** 

COURSE TITLE: HTML PROGRAMMING AND INTERNET TOOLS

**EXAM VENUE:** 

**STREAM: BIS/ICT/CSF** 

DATE: DECEMBER 2018

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**

	Define the fol	lowing	
	i.	Web page	
	ii.	Web site	
	iii.	Internet	(3 marks)
b)	Explain the ro	le of Style Sheets in Web site development.	(3 marks)
c)	Write HTML code that will do the following		
	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	
			(4 marks)
d)	Using exampl	es illustrate how you would display ordered and unordered l	ists on a web
		5 1 5	
	page using H7		(6 marks)
e)	100		
e) f)	Describe two	ſML.	(6 marks) (4 marks)
~	Describe two Explain the fu	TML. types of networks based on the geographical area covered. nction of the following html tags. Give an example of each. <a></a>	(6 marks) (4 marks)
~	Describe two Explain the fu i. ii.	TML. types of networks based on the geographical area covered. inction of the following html tags. Give an example of each. <a> <body></body></a>	(6 marks) (4 marks)
~	Describe two Explain the fu i. ii.	TML. types of networks based on the geographical area covered. nction of the following html tags. Give an example of each. <a></a>	(6 marks) (4 marks)
~	Describe two Explain the fu i. ii. iii.	TML. types of networks based on the geographical area covered. inction of the following html tags. Give an example of each. <a> <body></body></a>	(6 marks) (4 marks)
f)	Describe two Explain the fu i. ii. iii. Discuss the fu	TML. types of networks based on the geographical area covered. nction of the following html tags. Give an example of each. <a> <body> <h1> nction of the following protocols Hyper Text Transfer Protocol</h1></body></a>	(6 marks) (4 marks)
f)	Describe two Explain the fu i. ii. iii. Discuss the fu	TML. types of networks based on the geographical area covered. inction of the following html tags. Give an example of each. <a> <body> <h1> inction of the following protocols</h1></body></a>	(6 marks) (4 marks)

## **QUESTION TWO 20 MARKS**

a) Distinguish the followi	ing
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- 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:

	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) Briefly explain the function of the following Internet Protocols
  - i. Transmission Control Protocol (TCP)
  - ii. Internet Protocol (IP)

		(4 marks)
b)	Using examples explain three ways of adding cascading style sheets t	o your web site.
		(6 marks)
c)	Explain the function of each layer of the OSI reference model.	(10 marks)

(6 marks)

### **QUESTION FOUR 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. (2 Marks)
- a) An institution that offers various programs requires a web application form to capture details of an applicant. The information to be captured include:
  - Applicants name, date of birth, phone number, address and gender
  - Preferred course(BIT, BBIT, BCOM etc, campus (Nairobi, Thika, Kisumu, Rwanda, Meru, Eldoret etc) and mode of study (regular, evening or distance).
  - Comments from the applicant.

Required:

i. Draw a design of the form that	(4 marks)
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- ii. Write the HTML code for the form (6 marks)
- iii. A brief explanation on how you have applied the usability principles in your design. (2 marks)
- h) Explain how the following services operate on the internet
  - Email i.
  - ii. World Wide Web
  - iii. **Domain Name Systems**

#### **QUESTION FIVE 20 MARKS**

- a) Explain the function of the following on the internet
  - i. Server
  - ii. Client
  - iii. Search engine
  - iv. Port (4 marks)
- b) Describe the structure of IP version 4 addresses. (6 marks)
- c) Explain how you would apply the styles below on a web page.
  - i. add background color to the body

ii. Right align an entire paragraph (4 marks)d) Explain the function of each HTML element and the output of the code below: (6 marks)

```
<html>
<head>
<title>My First Webpage</title>
</head>
<body>
<h1 align="center">My First Webpage</h1>
Welcome to my first web page. I am writing this page using a text editor and
plain old html.
By learning html, I'll be able to create web pages like a pro....
</body>
</body>
</html>
```