

QUESTION ONE 30 MARKS

- a) Define the following
- i. Web page
 - ii. Web site
 - iii. Internet
- (3 marks)
- b) Explain the role 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 examples illustrate how you would display ordered and unordered lists on a web page using HTML. (6 marks)
- e) Describe two types of networks based on the geographical area covered. (4 marks)
- f) Explain the function of the following html tags. Give an example of each.
- i. <a>
 - ii. <body>
 - iii. <h1>
- (6 marks)
- g) Discuss the function of the following protocols
- i. Hyper Text Transfer Protocol
 - ii. Simple Mail Transfer Protocol
- (4 marks)

QUESTION TWO 20 MARKS

- a) Distinguish the following
- 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 to your web site.
- (6 marks)
- c) Explain the function of each layer of the OSI reference model.
- (10 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
 - ii. Write the HTML code for the form
 - iii. A brief explanation on how you have applied the usability principles in your design.
- (4 marks)
(6 marks)
(2 marks)
- h) Explain how the following services operate on the internet
- i. Email
 - ii. World Wide Web
 - iii. Domain Name Systems
- (6 marks)

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>
<p>Welcome to my first web page. I am writing this page using a text editor and
plain old html.</p>
<p>By learning html, I'll be able to create web pages like a pro....<br>
which I am of course.</p>
</body>
</html>
```