

**KENYA METHODIST UNIVERSITY
END OF TRIMESTER I EXAMINATION, APRIL 2008**

Faculty : Science and Social Studies
Department : Computer and Information Science
Course Code : COMP 444
Course Title : Internet Application Programming
Time : 2 hours

Instructions : Answer question one and any other two questions

QUESTION ONE

- a.** Critically evaluate the difference between HyperText Markup Language (HTML) and JavaApplet and with respect to Internet Application Programming the suitability or otherwise of each language [4 marks]
- b.** Clearly differentiate between FTP and TELNET. [4 marks]
- c.** Give a description of the following [8 marks]
- i. URL
 - ii. Web browser
 - iii. World Wide Web
 - iv. HTML
- d.** Explain the usage of the following HTML tags [5marks]
- i.
 - ii.
 - iii. <HR>
 - iv.
 - v.
- e.** Sketch the output of the following [5marks]
- <HTML>
- ```
<HEAD>
 <TITLE> JavaScript Exercise 3 </TITLE>
 <PRE>
 <SCRIPT LANGUAGE = "JavaScript">
 <!--
 document.writeln("<CENTER><H1>Welcome to</H1>");
 document.writeln("<H2>Informatics Computer School</H2><HR>");
 document.writeln("JavaScript is fun!!!!!!!!!!!!");
 document.write("I am learning JavaScript, ");
 document.write("and this is the third exercises.</CENTER>");
 // -->
 </SCRIPT>
```

</HEAD>  
</HTML>

- f.**
- i)** As a web site developer explain your understanding of a CGI language and why you need them. Quote examples of CGI's [2marks]
  
  - ii)** Using an example demonstrate how you can submit a form to a CGI program. [2marks]

### **QUESTION TWO**

- a)** In setting up an internet connection, you need to provide the information below. Explain the significance of each to your connection. [4 marks]
- i)** Public IP address
  - ii)** Domain name
- b)** Date is a JavaScript objects.
- i)** Demonstrate how you create a Date object [2 marks]
  - ii)** Using the Date object methods and the alert window method; display the system time (in the format hh:mm:ss) of your computer. [6 marks]
- c)** Create an HTML document to implement a web page containing three text boxes and a button; allowing entry of two numbers in the first two text boxes and on clicking the button on the page the sum of the two numbers is displayed in the third text box. Use a function to perform the addition [8 marks]

### **QUESTION THREE**

- a)** Differentiate absolute pathname and relative pathname as used in creation of links in HTML documents, highlight the merits and demerits of each method [4 marks]
- b)** Why is it important to use the alt attribute to display a text alternative for an image? [2 marks]
- c)** A document provides the user with a text box in which to enter the radius of a circle. Write a JavaScript function to calculate the area and the circumference of the circle and also place them in text boxes. Use a button to invoke the function [8 marks]
- d)** Including use an illustration diagram, discuss the structure of the Document object model and say why it's important to understand it [6 marks]

**QUESTION FOUR**

- a. Create an HTML that will generate the following output

**Feedback Form**

Please fill out this form to help us improve our site.

Name:

Comments:

Email Address:

**Things you liked:**  
Site design  Links  Ease of use  Images  Source code

(10 marks)

- b. Write a JavaScript code that will authenticate the information on the controls of the form above so that on submission to the server no null values will be forwarded

(10 marks)

**QUESTION FIVE**

- a. Explain the following events in Javascript
- i. onBlur
  - ii. onChange
  - iii. onClick
  - iv. onFocus
  - v. onLoad

[10 marks]

- b. i) Define the term Applet [2 marks]  
ii) Describe the life cycle of an applet [8 marks]  
iii) Write an applet program that gets and compute the sum of two numbers [2 marks]