



**JARAMOGI OGINGA ODINGA UNIVERSITY
OF SCIENCE & TECHNOLOGY
UNIVERSITY EXAMINATIONS 2012/2013**

**1ST YEAR 1ST SEMESTER EXAMINATION FOR THE DEGREE OF
BACHELOR OF SCIENCE (COMPUTER SECURITY AND AUDIT)
(KISUMU L.CENTRE)**

COURSE CODE: IIT 3114

COURSE TITLE: HTLM PROGRAMMING & INTERNET TOOLS

DATE: 14/8/2013

TIME: 9.00-11.00 AM

DURATION: 2 HOURS

INSTRUCTIONS

- 1. This paper consists of 5 Questions.**
- 2. Answer Question 1 (Compulsory) and any other 2 questions.**
- 3. Write your answers on the answer booklet provided.**

QUESTION 1: 30 marks

- a) What is a web page 4 marks
- b) Explain why CSS is currently a major component (requirement) in a website design as opposed to plain html? 2 marks
- c) Explain structure of HTML document 4marks
- d) With use of a syntax explain a group box labels 4marks
- e) What is definition List? Using syntaxes demonstrate how to use definition list 6marks
- f) Explain the working Simple Mail Transfer Protocol in email communication 4marks
- g) Each Computer has a unique IP address, Convert the following 32-bit Internet address to a binary format equivalent 192.168.100.254 (4marks)
- h) The following is an extract of HTML code explain head and title tags
`<head><title> My First Page</tiles></head>` (2marks)

Question2: 20marks.

- a) Discuss the role of each layer in the TCP/IP OSI Model. (6 marks)
- b) Explain any four data types in JavaScript (4 marks)
- c) Explain Dynamic Website and explain any four advantages associated with it 6marks
- d) Write the code to generate the following output 4marks
$$X^2+Y^2 =Z$$
$$X_3+Y_3= B$$

Question3:20marks

_What do the following tags stand for in HTML?

- i. `
` (2 marks)
- ii. `` (2marks)
- iii. `` (2marks)
- iv. `` (2 marks)
- v. `<p></p>` (2 marks)
- a) What is the difference between HTML and XHTML? (2 marks)

- b) Explain the difference between GET and POST in web data transmission? 4 marks)
- c) Explain any two images attributes in web development 4marks

Question 4 20marks

- a) What are filters and transmissions in web technology and how are they applied in order to create a more robust user experience using I.E (Internet Explorer)? 4marks
- b) Write a html and JavaScript code to generate the form and to validate it such that when the form is not appropriately filled up it give a pop up message as shown 10marks

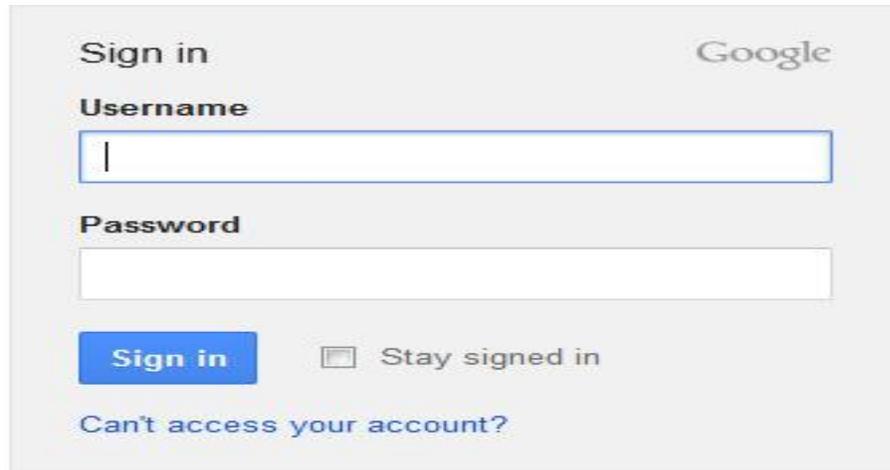
- c) Data Binding is critical in dynamic websites explain why is it a necessary technology in modern age 2 marks
- d) Explain any four distinctive features of Java programming language 4marks

Question 5: 20marks

- a) Write short notes on your understanding of the following acronym in Web design and development 8marks
- i. Mime
 - ii. CSS
 - iii. FTP
 - iv. SGML
- b) Comments are generally good practice in programming, show how multi line and single line commenting is done 2marks

c) Write a syntax for creating a frameset in programming 2marks

d) Daniel a Programmer with PeopleSoft Solution in Nairobi was told to develop a login interface as shown below. Generate a html code to give the login interface 8marks



The image shows a screenshot of a web login form. At the top left, it says "Sign in" and at the top right, it says "Google". Below this, there are two input fields: "Username" and "Password". The "Username" field contains a single vertical bar character "|". Below the "Password" field, there is a blue "Sign in" button and a checkbox labeled "Stay signed in". At the bottom, there is a link that says "Can't access your account?".