



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE
AND TECHNOLOGY**

UNIVERSITY EXAMINATION 2012/2013

**1ST YEAR 1ST SEMESTER EXAMINATION FOR THE DEGREE
OF MSC IN IT SECURITY FORENSIC AND AUDIT**

KISUMU LEARNING CENTRE

COURSE CODE: IIT 3114

TITLE: HTML PROGRAMMING AND INTERNET TOOLS

DATE: 18/4/2013

TIME: 9.00-12.00NOON

DURATION: 3 HOURS

INSTRUCTIONS

- 1. This paper contains FIVE (5) questions**
- 2. Answer question 1 (Compulsory) and ANY other 2 Questions**
- 3. Write all answers in the booklet provided**

QUESTION ONE [30 MARKS]

- (a) “A web page is identified by a unique address called URL”. Support this statement by detailing components of mentioned *unique address*.

[2 marks]

- (b) Explain your understanding of the following abbreviations as applies to Web Development

[6 Marks]

- | | |
|------------|----------|
| (i) MIME | (iv) CSS |
| (ii) DTD | (v) DOM |
| (iii) SGML | (vi) API |

- (c) Using an appropriate example, demonstrate how the listed tags below can be implemented in Web Development. [8 Marks]

- (i) `<colspan>`
(ii) `<script>.....</script>`
(iii) `<form>.....</form>`
(iv) `<marquee>.....</marquee>`

- (d) “A socket is a file descriptor that lets an application read or write data from or to the network”. With the aid of a suitable example, support the statement above.

[5 Marks]

- (e) Name THREE examples of Web Development tools that can be used in developing a dynamic website. [3 Marks]

- (f) Below is an extract code that was retrieved from a website source code. Explain the significance of its application.

[2 Marks]

```
if (isIE5 || isNS6) {  
    elm=document.getElementById("testDIV");  
    elm.style.visibility = "visible";  
}
```

- (g) What is the difference between *java* and *javascript*? Provide sample codes in each to distinguish between the two. [4 Marks]

QUESTION TWO [20 MARKS]

- (a) Distinguish the roles of the following in web development [4 Marks]
- (i) Webmaster and Web Developer
 - (ii) Web Host and Domain Identifier
- (b) What is the significant role of HTTP in web exploration? What its in web transactions? [4 Marks]
- (c) Explain how a website can published over an Intranet. [2 Marks]
- (d) Below is a diagram that can be used to capture information from users and send over to target destination. Provide a web source code that can produce the same. [10 Marks]

The diagram shows a registration form with the following elements:

- Input boxes:** First Name, Last Name, Address #1, Address #2, City, State, Zip, Country.
- Drop-down list box:** Item Purchased.
- Form buttons:** Send Registration, Cancel.
- Group box:** Network Operating System (check all that apply).
- Check boxes:** Networkware, Banyan Vines, Windows, IBM Lan Server, PC/NFS.
- Radio buttons:** Used For (check one): Home, Business, Religious or Charitable Institution, Government, Educational Institution.
- Text area:** Comments?.

QUESTION THREE [20 MARKS]

- (a) In Java programming, what is the significance of a *compiler*? Give an example of Java compiler you know. [4 Marks]
- (b) Javascript is very good at processing user input in the web browser. Provide an example that supports this statement. [4 Marks]

- (c) Use your knowledge of Javascript to; [10 Marks]
- (i) create a web page that contains a title of “Welcome to Javascript”, a Javascript to ask the user for their name and a personalized welcome message to the user.
 - (ii) create another page that combines image swap and function example. Have the function called from the button switch the images
- (d) Name any other TWO web scripting languages that can be used in web development. [2 Marks]

QUESTION FOUR [20 MARKS]

- (a) HTML is an evolving standard. Discuss briefly how it has evolved over the past twenty four (24) years. [4 Marks]
- (b) “There three types of document type definitions XHTML documents”. Do you agree with the statement above? Support your answer. [6 Marks]
- (c) What is the relevance of *embedded style sheet* as applies in web development? [2 Marks]
- (d) Create a web page with an external style sheet that does the following: [8 Marks]
- All paragraph text is white with a blue background and centered
 - All links get bigger and change colours when hovered over
 - Background colour is “aliceblue”
 - Creates a style “redstyle” that makes text 16px red Garamond.
 - All h1 text is centered and underlined.

QUESTION FIVE [20 MARKS]

- (a) “Java servlets are one technology for producing dynamic server responses”. Use a diagram to support your expansion on this statement. [4 Marks]
- (b) Provide a sample code to demonstrate your explanation in question 5(a) above. [4 Marks]
- (c) What is *image caching*? What are the three steps used in realizing image caching? [4 Marks]
- (d) Use a well labeled diagram to distinguish between *A Simple Web Request* from *A Dynamic Web Request* in client/server architecture. [4 Marks]
- (e) What are the principles that applies in the scenario given in question 5 (d) above for establishing, listening and accepting a TCP connection. [4 Marks]

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