

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

### **UNIVERSITY EXAMINATION 2012/2013**

# ${f 1}^{ST}$ YEAR ${f 1}^{ST}$ 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 follow	ving abbreviatio	ons as applies to	Web Deve	elopment
	[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]

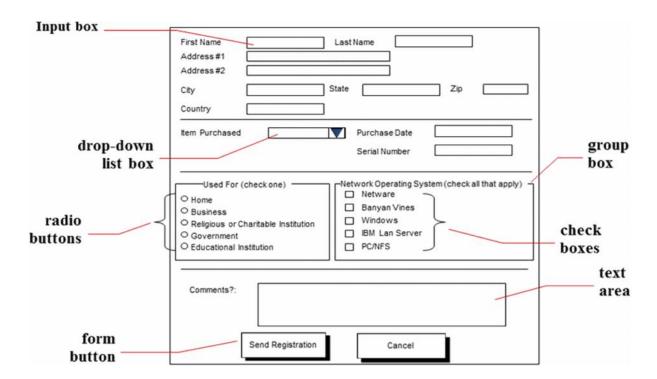
- (i) Webmaster and Web Developer
- (ii) Web Host and Domain Identifier
- (b) What is the significant role of HTP in web exploration? What its in web transactions?

[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]



# **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]