



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL INFORMATICS AND INNOVATIVE SYSTEMS
UNIVERSITY EXAMINATION FOR THE DEGREE OF SCIENCE
COMPUTER SECURITY & FORENSICS
2ND YEAR 1ST SEMESTER 2013/2014 ACADEMIC YEAR
CENTRE: MAIN

COURSE CODE: IIT 3214

COURSE TITLE: WEB APPLICATION TECHNOLOGIES

EXAM VENUE: LR 6

STREAM: BSc. Computer Security & Forensics

DATE: 19/12/2013

EXAM SESSION: 11.30 – 1.30 PM

TIME: 2 HOURS

Instructions:

- 1. Answer question 1 (Compulsory) and ANY other 2 questions.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

QUESTION ONE

- a) What is Web 2.0? (2 Marks)
- b) i) What is Web Client-side application (2 Marks)
- ii) The following is a simple javascript

```
<HTML>
<HEAD>
  <TITLE>Simple JavaScript Button</TITLE>
<SCRIPT TYPE="text/javascript">
<!--
function dontClick() {
alert ("I told you not to click !");
}
//-->
</SCRIPT>
</HEAD>

<BODY BGCOLOR="RED">
<H1>Simple JavaScript Button</H1>

<FORM>
  <INPUT TYPE="BUTTON"
    VALUE="Don't click Me"
    onClick="dontClick () ">
</FORM>
</BODY>
</HTML>
```

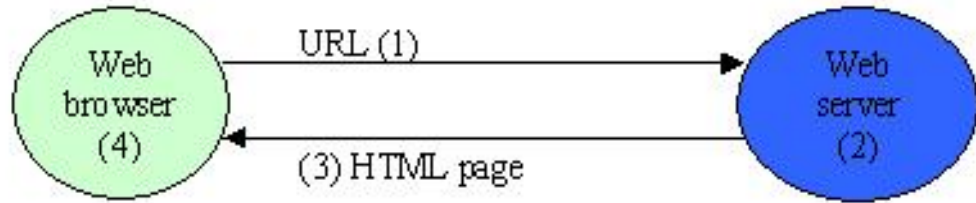
- i) When executed which heading will be displayed for the above script (2 Marks)
- ii) When clicked which event will occur. (2 Marks)
- c) Define the following Terms as used web Applications:
- i) The web and the Internet (4 Marks)
- ii) Web Client (2 Marks)
- iii) Web Server (2 Marks)
- iv) Web Page (2 Marks)
- v) Web Development (2 Marks)
- vi) The SCRIPT Tag and give an example (2 Marks)
- d) State three ways to add JavaScript commands to your Web Pages. (3 Marks)
- e) i) What is Java Class? (2 Marks)
- ii) What does Java Class Consist (2 Marks)
- iii) Give a Template of a java class called Dipondo: (2 Marks)

Question TWO

- i) What does HTML stands for (2 Marks)
- ii) Identify the in the element, attribute name and attribute value in the following HTML Element / Tag (3 Marks)

<p align="right"> </p>

- iii) Explain four Limitations of client-side technologies (8 Marks)
- iv) The figure below shows the sequence of Client side processing



Explain what happens at every scripting stage numbered 1,2 ,3 and 4

(8 Marks)

QUESTION THREE

- i) Write the following abbreviations in full and state the functions of each. (6 Marks)
 - a. AJAX
 - b. ASP
 - c. CSS
- ii) Explain the differences between client – side code and server side code. (4 Marks)
- iii) The following is a simple java program.

```
1. public class Welcome {  
2. public static void main(String[] args) {  
3. // Display message Welcome to Java! to the console  
4. System.out.println("Hello World !");  
5. }  
6. }
```

Explain the meaning of each line

(10 Marks)

QUESTION FOUR

- a) i) State four functions of JavaScript (4 Marks)
- ii) Can JavaScript read and write files ? (1 Mark)
- b) i) What are Java Servlets (2 Marks)
- ii) Explain four advantages of Java Servlets (8 Marks)
- c) What does XHTML stands for ? (2 Marks)
- d) How does CSS save Web site developers time? (3 Marks)

QUESTION FIVE

- a) Why is Ajax an important tool in Web site development? (4 Marks)
- b) How are HTML, SGML, XHTML, and XML used in Web site development? (2 Marks)
- c) What is the difference between Java and JavaScript? (4 Marks)
- d) How do ASP, PHP, and SQL relate to database? (8 Marks)
- e) State four reasons why most Web site developers choose to use open source programs? (4 Marks)

QUESTION SIX

- a) Write the following abbreviations in full. (4 Marks)
 - i) XML
 - ii) DOM
 - iii) DTD
 - iv) ASP
- b) Explain The following Parts of a basic HTML web page structure (4 Marks)

SN	HTML Document	Explanation (i.e Encloses which part)
1	<html> </html>	
2	<body> </body>	
3	<title> </title>	
4	<head> </head>	

- c) i) Define a Web Server (2 Marks)
 - ii) State for functions of a web server (4 Marks)
- d) i) Who defines the web standards? (2 Marks)
 - ii) Explain two long term goals which necessitated the definition of web standards. (4 Marks)