

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

University Examination 2013/2014

Examinations for the Degree of Bachelor of Science in Computer Security & Forensics

IIT 3214: Web Application Technologies

April 2014

3 HOURS

INSTRUCTIONS: Answer question ONE and any other TWO questions

QUESTION 1[30 MARKS]

- a) Discuss the following components of the internet
 - (i) Web Server (2Marks)
 - (ii) Cookies (2Marks)
- b) Outline the difference between XML and HTML (4Marks)
- c) You have just been promoted to be the head in web site design and development department of your company. You analyze the website for the company and advise that style sheets should be used.
 - i. What are the significance of cascading style sheets (5Marks)
 - ii. Describe different ways of creating style sheets (3Marks)
- d) JavaScript is the most popular scripting language on the internet, and works in all major browsers
 - i. State the reason behind JavaScript popularity (3Marks)
 - ii. Outline how JavaScript can be utilized (4Marks)
- e) State the advantages and disadvantages of client/server architecture (4 Marks)
- f) Write a PHP code to display "Hello World on the screen" (4 Marks)

QUESTION 2 [20 MARKS]

- a) Define Cascading Style Sheets (CSS) and write CSS syntax (3 Marks)
- b) Explain the differences between external style sheets and internal style sheets. (4 Marks)
- c) Write syntax for linking to an external style sheet. (5 Marks)
- d) Using CSS, write a style sheet that will change the color of all h1 headers to red, (4 Marks)
- e) Write CSS code to add a background image to a HTML document (4 Marks)

QUESTION 3 [20 MARKS]

- a) Critically evaluate the difference between JavaScript and Java and with respect to development of the web (4Marks)
- b) What differentiates a global variable and a local variable (4Marks)
- c) Write the JavaScript code to display the following:
If the time is less than 10, writes a "Good morning to all BSC-Computer Security Students" greeting, if the time is between 10 and 16, writes a "Good day to all BSC-Computer Security Students, otherwise, writes, "Hello World! It time to rest!" (12Marks)

QUESTION 4 [20 MARKS]

- a) Explain the role of SAX and DOM in XML document verification. (4 Marks)
- b) Explain how XML is used on the internet (6 Marks)
- c) Write a note on XML attribute. With an example differentiate between attribute and element (6Marks)
- d) Write XML code for creating the document below (4Marks)



QUESTION 5 [20 MARKS]

- a) Define a Dynamic web sites (2Marks)
- b) Discuss three types of Dynamic websites (6Marks)
- c) Differentiate between PHP \$_GET and PHP \$_POST (3Marks)
- d) Discuss PHP "Switch Case" Conditional statement. Write switch statement code to select one of many blocks of code to be executed. (8 Marks)