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**JOMO KENYATTA UNIVERSITY**

**OF**

**AGRICULTURE AND TECHNOLOGY**

# University Examinations 2012/2013

**STAGE II SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY**

# BIT 2207: INTERNET APPLICATION PROGRAMMING

**DATE: AUGUST, 2012**  **TIME: 2 HOURS**

**INSTRUCTIONS: Answer Question ONE and Any Other TWO Questions.**

**Question One – 30 marks**

a) State the purpose of the following TCP/IP protocols used in internet. [3 marks]

1. http
2. ftp
3. smTp

b) Describe the concept of client/server paradigm. [4 marks]

c) Which of the following are valid variable declarations or initializations? Explain why each one is or is not valid. If invalid, show how to fix it. [4 marks]

1. my-name = “cindy”;
2. var how many = 25
3. var zip code = document.getthemen+ById(“zip”). Value
4. var1address=document.(“address1”).value;

d) State two major characteristics of java applets. [2 marks]

e) Differentiate between the following terms in relation to the internet. [4 marks]

1. World wide web
2. Intranets
3. Extranets
4. Internet

f) Differentiate between the following as used in web development. [8 marks]

1. Server side and client side
2. Javascript and java programming language
3. Web server and a host
4. Pop up and cookies

g) Discuss any five capabilities of JavaScripts. [5 marks]

**Question Two (20 marks)**

a) Explain the following terms as used in Javascript. [5 marks]

1. Properties
2. Method
3. Event
4. Variable
5. Function

b) Write a javascript code that used a function and displays the message “welcome Home” on click of a button. [8 marks]

c) Name two event handlers used in javascript and with examples, show how they can be implemented. [7 marks]

**Question Three (20 marks)**

a) i. What is CGI? [1 mark]

ii. State three benefits and thee drawbacks of using CGI. [6 marks]

b) Create a simple CGI program a message “welcome to perl CGI programming” on a web browser. [5 marks]

c) Using relevant examples, distinguish between the sequence selection and repletion control structures as used in javascript. [8 marks]

**Question Four (20 marks)**

a) Identify five objects of the Document object model (DOM) for the web browser. Explain briefly the functions of each object in web scripting. [10 marks]

b) Explain briefly five applications of java applets on the internet. [10 marks]

**Question Four (20 marks)**

a) Explain briefly three looping structures used in javascript language. Give typical examples to illustrate their usage. [6 marks]

b) i. Explain what is meant by java servlets. [4 marks]

ii. Describe the various methods in the life-cycle of java servlets. [10 marks]