TECHNICAL UNIVERSITY OF MOMBASA

INSTITUTE OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR:

BACHELOR OF MATHEMATICS AND COMPUTER SCIENCE (BMCS)

EIT 4202, ICS 2203: WEB APPLICATION PROGRAMMING

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: SEPTEMBER 2018

TIME: 2HOURS

DATE: Sep2018

<u>Instructions to Candidates</u>
You should have the following for this examination
-Answer Booklet, examination pass and student ID
This paper consists of **FIVE** questions. Attemptquestion ONE (Compulsory) and any other TWO questions.
Do not write on the question paper.

Question ONE

a) Explain three ways in which Web applications are revolutionary compared to traditional applications.   (3 Marks)

b) Explain Three different ways that CSS supports the DRY (Don't Repeat Yourself) principle.
                                                                                                                                    (3 Marks)

c) The CSS box model has four parts. State the four parts from the inside to the outside   (4 Marks)

d) Describe a simple attack that could be executed if browsers did not implement the same- Origin Policy.
                                                                                                                                    (4 Marks)

e) Write HTML and JavaScript code that shows and hides a paragraph over all other elements when a button is clicked.   (6 Marks)

f) List two elements that are used to get user inputs.   (2 Marks)

g) Explain the term session hijacking and state how to prevent it   (2 marks)

h) Explain three HTML tags used for formatting text when preparing Web pages   (6 Marks)

Question TWO

a) Differentiate between the following terms   (**8 Marks**)
    i.   XHTML and HTML5
    ii.   Web Service and Add ons
    iii. Cookie and a Pop up Blocker
    iv.   Dynamic and static web page

b) Write a JavaScript program using a while loop to output 10 even numbers, starting from number 10 downwards to 1.   (4Marks)

c) Explain general format of a JavaScript function by giving example using event mousemove event   (4 Marks)

d) Describe the JavaScript object model, giving examples using event mousemove event   (4 marks)

Question THREE

a) List four font characteristics permitted in style sheets.   (4Marks)

b) Write a JavaScript program to illustrate variable assignment   (4 Marks)

c) State and briefly explain any *six(6)* characteristics of a web programming language you would consider to use to build a web application   (6 Marks)

d) Explain Three areas in which HTML falls short as a tool for web application development   (6 Marks)

Question FOUR
   a) Explain differences between   (6 Marks)
      i.   Cellspacing and cellpadding
      ii. Strike and underline tags
      iii. Emp and strong tags
   b) Explain the advantages of using cascading sheets with an example   (6 marks)
   c) Describe four tools used for web development   (8 Marks)

Question FIVE
a) List four factors to consider when designing a user friendly web page interface   (4Marks)
b)   Using examples describe Java script alert boxes   (6 marks)
c) Explain using an example any five form attributes   (5 Marks)
d) List the technologies that make up 'DHTML'   (3 Marks)

e) Explain 'frameset' and describe its use   (2 Marks)