



MAASAI MARA UNIVERSITY
UNIVERSITY EXAMINATIONS 2021/2022 ACADEMIC YEAR
SCHOOL OF PURE, APPLIED AND HEALTH SCIENCES
(REGULAR)

THIRD YEAR SEMESTER I EXAMINATIONS FOR THE
BACHELOR OF SCIENCE IN COMPUTER SCIENCE

COURSE CODE: COM 3107
COURSE TITLE: INTERNET PROGRAMMING

DATE: WED 6TH/03/2022

TIME: 2:30-4:30PM

INSTRUCTIONS TO CANDIDATES

- ANSWER Question **ONE** and any other **TWO**

QUESTION ONE (30 MARKS)

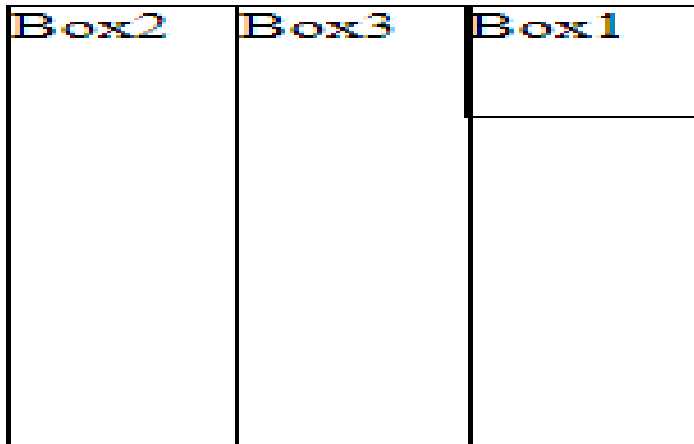
- a.) Define following terms in relations to internet programming.
 - i. Hypertext
 - ii. Web server
 - iii. HTTPS
 - iv. X.H.T.M.L
 - v. I.E.T.F

[5 marks]
- b.) You have been hired as a web app developer at IEBC; explain to the ICT Board five important things that must be considered while developing a web application.

[5 marks]
- c.) Use an example to explain how a simple rollover effect can be achieved in HTML.

[4 marks]
- d.) Write a .js function to add two numbers, and alert the user by returning the result when the user clicks a button.

[6 marks]
- e.) Write and explain CSS/HTML code that outputs the structure below:



[10 marks]

QUESTION TWO (20 MARKS)

- a.) Using a diagram, discuss the MVC architecture used in building secure web applications.

[10 marks]
- b.) Interpret the color value: 173, 102, 254, represents and explain two numeric, standardized color formats as used in web graphics.

[6 marks]

b.) Explain the purpose of the Web Accessibility Initiative (WAI), as created by the World Wide Web Consortium (W3C).

[4 marks]

QUESTION THREE (20 MARKS)

a. Write a code that can be used to create the following interface:

Name:

Email:

Date:

Preference: Reading

Surfing

Music

Doesn't smoke

Submit

[10 marks]

b.) Using an example, describe the procedure for creating a hyperlink in an web applications/documents

[6 marks]

c.) Using appropriate code examples show how to declare the following two events.

OnFocus()

OnMouseOver()

[4 marks]

QUESTION FOUR (20 MARKS)

a.) James is a class teacher and also teaches chemistry. Build for James a javascript function that returns the value of the average of four tests, and help him make a call to this function to retrieve this value. Clearly explain the steps of your code.

[8 marks]

b.) You are given the task to audit a web application for Huduma centre. Explain four key validation points you would consider as an expert in the field.

[12 marks]

end//