



MACHAKOS UNIVERSITY

University Examinations for 2017/2018

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

SECOND YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF SCIENCE

(INFORMATION TECHNOLOGY)

SCS 209: INTERNET TECHNOLOGY

DATE:19/12/2017

TIME: 2.00-4.00 PM

INSTRUCTIONS: Answer Question one (Compulsory) and any other two Questions

QUESTION ONE (30 MARKS)

- You are part of a design team for a company that makes customized computer for their clients. At the planning stage you are asked to describe the possible logical units that will make up the machine. (6 marks)
- One of your clients has asked you to optimize their website in order to increase their sales. Describe the link building techniques you may use to optimize their website (6 marks)
- Describe the ways you can use to declare document styles with regard to the presentation of a website. (3 marks)
- Briefly describe five CSS media types? (5 marks)
- Write html code that produces the following output in a web browser. (10 marks)

This is the table caption.

Picture of a Camel	Camel Information			
	# of Humps	Indigenous region	Spits?	Produces Wool?
Camels (bactrian)	2	Africa/Asia	Yes	Yes
Llamas	1	Andes Mountains	Yes	Yes

QUESTION TWO (20 MARKS)

- a) Write a simple program which creates a dynamic welcome page that obtains the user's name, then displays it on the page. (10 marks)
- b) Briefly explain the difference between inline-level and block level elements (4 marks)
- c) Describe the types of errors you are likely to encounter in a programming environment. (6 marks)

QUESTION THREE (20 MARKS)

- a) Write a simple script which prompts the user for two whole numbers which it then uses to perform any arithmetic calculation of your choice and also displays the results. (5 marks)
- b) Write HTML code that demonstrates the use of images as hyperlinks and also a hyperlink to an email address? (5 marks)
- c) Briefly describe five types of translators? (10 marks)

QUESTION FOUR (20 MARKS)

- a) Write a program that uses the **for loop** to sum the even integers from 2 to 100. (10 marks)
- b) The project manager in the project you are working on asks you to briefly describe to a team member all the forms of control needed to implement an algorithm for a program. (6 marks)
- c) Describe the ways used by programmers of high level languages to pass arguments to functions. (4 marks)

QUESTION FIVE (20 MARKS)

- a) Write a script that implements a programmer defined function that is able to find the square of numbers 1 to 10. (10 marks)
- b) Using relevant examples, explain the types of lists available in web development. (6 marks)
- d) Briefly explain the difference between the **do while** and the **while repetition loops** using a relevant example. (4 marks)