



MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE (COMPUTER SCIENCE)

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)

SCO 207: WEB DEVELOPMENT TECHNOLOGIES,

SIT 209: WEB DESIGN

DATE: 23/3/2021

TIME: 2:00 – 4:00 PM

INSTRUCTIONS

This paper consists of FIVE questions

*Answer **question one** and other **two** questions in this paper*

QUESTION ONE (30 MARKS)

- a) For each of the below listed protocols, give a hyperlink example (4 marks)
 - i. HTTP
 - ii. HTTPS
 - iii. FTP
 - iv. E-mail
- b) An ICT graduate just created his company and was advised to register the domain name with the authorities
 - i. State the meaning of the term **domain name**. (2 marks)
 - ii. Explain **TWO** benefits of registering the company's domain name (4 marks)
 - iii. Highlight the steps involved in registering a domain name. (4 marks)
- c) Write a HTML code that prompts the following actions:
 - i. Input a name (2 marks)
 - ii. Select one out of a limited choice (radio button) (2 marks)
 - iii. Checking **** one may check boxes (2 marks)
- d) There are several ways in which CSS compliments HTML in web design, explain **TWO** (4 marks)
- e) Define SSL (2 marks)
- f) Discuss two ways of battering webometrizz ranking. (4 marks)

QUESTION TWO (20 MARKS)

- a) State and explain any THREE types of websites. (6 marks)
- b) Discuss any FIVE features of a good website. (5 marks)
- c) Describe FIVE qualities of a good web designer. (5 marks)
- d) Describe each of the following types of server
 - i. Web server
 - ii. DNS server (4 marks)

QUESTION THREE (20 MARKS)

- a) State and explain any TWO ethical issues when using the internet. (2 marks)
- b) Highlight how modern organizations respond to business pressures in this era of globalization (6 marks)
- c) Describe FOUR factors to consider when choosing an ISP. (8 marks)
- d) Discuss the benefits of outsourcing web development services. (4 marks)

QUESTION FOUR (20 MARKS)

- a) URL is a term commonly used during web design and development.
 - i. Define the term URL (2 marks)
 - ii. Using an example, state and explain THREE major components of a URL (4 marks)
- b) Illustrate how a web browser works in a client-server architecture. (10 marks)
- c) Distinguish between an e-mail and web mail, stating an advantage of each (4 marks)

QUESTION FIVE (20 MARKS)

- a) Below are some of the common operating signs used in java script, explain the uses of each.
 - i. +
 - ii. =
 - iii. -
 - iv. ++
 - v. * (5 marks)
- b) Using an illustration explain:
If..... else if.....else statement (5 marks)
- c) Describe the steps and procedures in project management (10 marks)