



KENYATTA UNIVERSITY

EXAMINATION FOR DIPLOMA IN INFORMATION TECHNOLOGY

SIT 030: INTRODUCTION TO INTERNET TECHNOLOGY

2ND SEMESTER 2023/2024

TIME: 2 HOURS

INSTRUCTIONS: Attempt question ONE and any other TWO questions.

Question 1

- a) Explain the role of the following telecommunication equipment's in computer networks
 - i) Gateway (2 marks)
 - ii) Bridge; (2 marks)
 - iii) Router (2 marks)
- b) Outline the function of each of the following tags as used in HTML
 - i) <TABLE> (2 marks)
 - ii) <MARQUEE> (2 marks)
 - iii) (2 marks)
 - iv) (2 marks)
- c) With the aid of an example in each case distinguish between search engine and web browser as applied in the internet (4 marks)
- d) Explain THREE factors an organization should consider during the selection of a web hosting company (4 marks)
- e) Write the HTML code that would display the following form.

INVOLVEMENT IN ANY EXAMINATION IRREGULARITY SHALL LEAD TO DISCONTINUATION

STUDENT REGISTRATION DETAILS

REGNO

NAME

COURSE

SUBMIT

(8 marks)

Question 2

- a) Define each of the following terms as used in Internet technology.
- i) Internet (2 Marks)
 - ii) Intranet (2 Marks)
 - iii) Extranet (2 Marks)
- b) By use of diagrams, explain various topologies used in local-area networks giving disadvantages and advantages. (6 marks)
- c) Write the html code that generate the table output as shown below

DEPARTMENT NAME	COURSES
COMPUTING AND INFORMATION SCIENCE	BACHELOR OF COMPUTER SCIENCE
	BACHELOR OF INFORMATION TECHNOLOGY

(8 marks)

Question 3

- a) i) Define the term firewall as used in internet (2 marks)
- ii) Outline the importance of firewall in in internet technology. (4 marks)
- b) Outline **FOUR** characteristics of computer infected with virus (4 marks)
- c) i) Distinguish between ordered and unordered list as used in HTML. (4 marks)

- ii) Write the HTML code that would be used to be used to generate the following list on a web browser.

- A Cities in Kenya

 1. Nairobi
 2. Mombasa

B. Main Transport of Kenya People

 - Matatu
 - Buses
 - Rail

(6 marks)

Question 4

- a) Define each of the following terms as used in web development
- i) Tag (2 Mark)
 - ii) Element (2 Mark)
 - ii) Attribute (2 Mark)
- b) Describe four technologies used to develop web applications. (6 marks)
- c) With the aid of an example in each case distinguish between empty tag and container tag as used in HTML. (4 marks)
- d) Outline the importance of website to an organization. (4 marks)

Question 5

- a) Identify the errors in the following tags if any and re-write the codes correctly.
- i) `<U> <I> <B>The Best of web</U > </I> </B>` (2 Marks)
 - ii) `<H1>Try our WEB SERVICES</h1>` (2 Marks)
 - iii) `<IMAGE SRC="Myhouse.jpeg">` (2 Marks)
- b) Internet has proved to be a powerful source of information yet it come with numerous social challenges. Outline four of these challenges. (4 marks)
- c) State and explain any three security threats' you are likely to encounter as a systems security officer (6 marks)
- d) Distinguish between BCC and CC as used in emails. (4 Marks)