



KENYATTA UNIVERSITY
DIGITAL SCHOOL OF VIRTUAL AND OPEN LEARNING (DSVOL)
EXAMINATION FOR THE DEGREE OF BACHELOR OF LIBRARY AND
INFORMATION SCIENCE

ISC 208: FUNDAMENTAL OF NETWORKING

1ST TRIMESTER 2022/2023

TIME: 2 HOURS

INSTRUCTIONS:

- (i) **This Examination paper has FIVE Questions.**
- (ii) **Answer Question ONE and ANY other TWO Questions.**
- (iii) **Do not write anything on the question paper.**

QUESTION ONE

(30 MARKS)

i. Define the following terms:

(2 marks each)

- (a). Node
- (b). Server

ii. Differentiate between:

(3 marks each)

- (a). Client and a workstation.
- (b). Remote client and remote host.
- (c). LAN and MAN

iii. Give four advantages and two disadvantages of computer networking.

(8 marks)

iv. (a) Explain the concept of client/server in computer networking.

(4 marks)

(b) Explain, why is a network more reliable than stand alone computers.

(5 marks)

QUESTION TWO

(20 MARKS)

a. i) With examples, describe a star network topology network.

(10 marks)

ii) Explain FIVE advantages of computer networks in a Library

(10 marks)

QUESTION THREE

(20 MARKS)

a) Explain THREE factors to consider when selecting a data transmission media

(6 marks)

c) Explain the function of a switch in networking

(4 marks)

d) Explain why a network more reliable than stand-alone computers

(6 marks)

QUESTION FOUR**(20 MARKS)**

Compare the characteristics of WAN and LAN under the following headings:

- a) Typical size or area covered and type of ownership (5 marks)
- b) Transmission Techniques (5 marks)
- c) Typical speed of transmission (5 marks)
- d) Cost of equipment (5 marks)

QUESTION FOUR**(20 MARKS)**

- a) Explain the *line of sight principle* in wireless communication. (8 marks)
- b) Using a diagram, describe the FIVE components of a data communication system. (12 marks)