



(The University of Choice)
**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)
UNIVERSITY EXAMINATIONS**

MAIN CAMPUS

2021 /2022 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER EXAMINATIONS

FOR THE DIPLOMA

OF

INFORMATION TECHNOLOGY

COURSE CODE: DIT 060

COURSE TITLE: DATA COMMUNICATION & NETWORKS I

DATE: 19/04/2022

TIME: 8:00a.m-9:30a.m

INSTRUCTIONS TO CANDIDATES

Answer questions ONE and any other TWO questions.

TIME: 1 Hour 30 Minutes

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

Section A Answer all questions from this section

Question one

- a) State any 4 wireless IEEE standards (4 marks)
- b) Explain any disadvantages of VSAT technology (3 marks)
- c) Briefly explain following cable media and an example where used
 - (i) STP (6 marks)
 - (ii) UTP (2marks)
 - (iii) Coaxial (3marks)
- d) Explain FTP
- e) Describe any THREE communication media
- f) Describe the three necessary fundamental characteristics of effective data communication (6Marks)

Section B Answer any two questions from this section

Question Two

- a) What makes a network effective and efficient? (8 Mkks)
- b) How many layers are in TCP/IP? (4Mks)
- c) Describe any THREE disadvantages 5GHZ wireless communication (3mks)
- d) What is a computer Network and describe modes of data transmission (3mks)

Question Three

- a) What is the difference between domain and workgroup? (10 marks)
- b) Differentiate between extranet and intranet (2Mks)
- c) What are the advantages of Distributed Processing? (6Mks)

Question Four

- a) Using examples explain classes of IP addresses (9 marks)
- b) Taking consideration of MMUST scenario explain how a student is able to browse On yahoo on MMUST network indicating devices in which data will pass through In their order (6 Marks)
- c) Describe any THREE advantages of cable medium to wireless (3Mks)

Question Five

- a) What are the different types of networks? (14 Mkks)
- b) Which are the different factors that affect the performance of a network? (4 Mkks)