



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY**

(MMUST)

MAIN CAMPUS

UNIVERSITY SPECIAL/SUPPLEMENTARY EXAMINATIONS

2021/2022 ACADEMIC YEAR

SPECIAL/SUPPLEMENTARY EXAM

FOR THE DIPLOMA

IN

INFORMATION TECHNOLOGY

COURSE CODE: DBT 074

COURSE TITLE: COMPUTER SYSTEM SECURITY

DATE: TUESDAY 02/08/2022

TIME: 11AM – 1PM

INSTRUCTIONS TO CANDIDATES

Answer Questions ONE and ANY OTHER TWO IN SECTION B.

TIME: 2 Hours

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 3 Printed Pages. Please Turn Over. ►

Section A Answer all questions from this section

Question one

- a) Indicate ways of securing digital data (4 marks)
- b) Explain password mistakes that make a system vulnerable to attacks (3 marks)
- c) Briefly explain following concepts
 - (i) Spyware
 - (ii) Denial of service
 - (iii) Cybercrime
 - (iv) Rootkit (8 marks)
- d) What is computer security (2marks)
- e) State any three malware fighting tools (3marks)
- f) State and explain any three types of computer security (6Mks)

Section B Answer any two questions from this section

Question Two

- a) What are the advantages of storing data digitally (10 Mks)
- b) Discuss ways of safe guarding data from digital threats (8 Mks)

Question Three

- a) Describe what is a firewall and explain the THREE states of connection (10 marks)
- b) Explain the following terms and state how they can be prevented
 - (i) Man in the middle attack (4marks)
 - (ii) Spoofing attack (4 marks)

Question Four

- a) Describe user behavior elements that can lead to security threats or attacks (18mks)

Question Five

- a) Describe risks involved in storing files in the clouds (10Mks)
- b) Describe Four elements of an effective security system (8Mks)