(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS 2021/2022 ACADEMIC YEAR

FOURTH YEAR SECOND SEMESTER SPECIAL/SUPPLEMENTARY EXAMINATIONS

FOR THE DEGREE OF BACHELOR OF TECHNOLOGY IN BUILDING CONSTRUCTION

COURSE CODE: BTB 454

COURSE TITLE: COMPUTER APPLICATIONS IN BUILDING CONSTRUCTION

DATE: 5ᵀᴴ OCTOBER 2022   **TIME:** 12 – 2 P. M

INSTRUCTIONS:
1. This paper contains FOUR questions
2. **Question ONE (1) is Compulsory**
3. **Attempt a total of THREE questions in this booklet.**
4. Marks for each question are indicated in the parenthesis.

Examination duration is **2 Hours**

MMUST observes ZERO tolerance to examination cheating

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

Question 1   **COMPULSORY**   **(20 marks)**

A). Differentiate between hardware and software giving examples to softwares usefull to building construction field   (6 mks)

B) What is mean by the term "program" define and give examples in buiding construction
                                                                            (4mks)

c). Differentiate the following; Utility program, operating system software and application software with examples   (10 mks)

Question 2   **(20 marks)**

A). Differentiate between a <u>class</u> and a <u>function</u> in python programming language.
                                                                            (6 mks)

B). The command line is useful for running different types of utility programs or instructions to the computer.

i)	Differentiate the following commands	`dir > list.txt`
		 and
		 `dir >> list.txt`
			(4mks).

ii)	What would be the effect of the following commands	`type list.txt | more`
		 and
		 `type list.txt`
			(4marks).

iii)	What are 'key-words' in programming, give 6 examples		(6marks).

Question 3   **(20 marks)**

Programming methodology

a) What are the steps to solving a problem using programming   (10 mks)

b) Illustrate the steps in 3(a) above with an example of '<u>multiplying two numbers</u>"
                                                                            (10 mks

Question 4   **(20 marks)**

a) What do you understand by the term algorithm?   (3mks)
b) What do you understand by the term flow Chart   (2mks)
c) what do the following symbols mean in 'flow charts"   (5 mks)

Symbol

d) Prepare and algorithm and a flow chart for a programming solution to calculate the monetary value of properties under construction by a county government if you are given a database of all constructions in the country.   (10 mks)

-- **end** --