(*University of Choice*)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS
2021/2022 ACADEMIC YEAR

SECOND YEAR SECOND SEMESTER EXAMINATIONS

FOR THE

DIPLOMA

IN

CIVIL ENGINEERING / BUILDING CONSTRUCTION

COURSE CODE: DCE 074/DBC 074

COURSE TITLE: BUILDING TECHNOLOGY

DATE: THURSDAY 28TH APRIL 2022 TIME: 8.00AM – 10.00AM

INSTRUCTIONS:
1. This paper contains **FOUR** questions
2. Question **ONE** is **COMPULSORY**
3. Attempt any other **TWO** questions
4. Marks for each question are indicated in the parenthesis.
5. Examination duration is **2 Hours**

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

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QUESTION ONE (COMPULSORY) - 30 MARKS

a) State **four** functions of a window (4 Marks)

b) Differentiate between English and Flemish bond as used in building construction (4 Marks)

c) Differentiate between dump proof membrane and dump proof course (4 Marks)

d) Discuss **five** parties of a building team (10 Marks)

e) State **three** functions of mortar (3 Marks)

f) State **four** functions of a fireplace (2 Marks)

g) Explain **three** types of door frames (3 Marks)

QUESTION TWO – 20 MARKS

a) Define the term timbering (2 Marks)

b) State and explain **three** methods of leveling a building site (9 Marks)

c) Describe the following in the building process:
   i. Site clearing
   ii. Site investigation
   iii. Setting out of the building (9 Marks)

QUESTION THREE – 20 MARKS

a) With the aid of sketches, describe the following methods of setting out of buildings; (16 Marks)

   i. Builders square
   ii. 3:4:5 method

b) Explain **four** reasons of fencing a construction site (4 Marks)

QUESTION FOUR – 20 MARKS

a) Define the term foundation (2 Marks)

b) Explain **two** functions of a foundation (2 Marks)

c) With the aid of sketches, describe following types of foundations
   i. Pad foundation
   ii. Stepped foundation
   iii. Raft foundation
   iv. Strip foundation (16 Marks)