



**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR**

SECOND YEAR SECOND SEMESTER EXAMINATIONS

**FOR THE DEGREE
OF
BACHELOR OF TECHNOLOGY IN BUILDING CONSTRUCTION**

COURSE CODE: BTB 252

COURSE TITLE: WORKSHOP TECHNOLOGY

DATE: TUESDAY 10TH NOVEMBER 2020 TIME: 9.00 – 11.00 AM

INSTRUCTIONS:

1. QUESTION ONE IS COMPULSORY
2. Attempt any other THREE questions
3. Marks for each question are indicated in the parenthesis.

Examination duration is **2 Hour**

MMUST observes ZERO tolerance to examination cheating

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

QUESTION ONE (14 MARKS)

- i). briefly explain the meaning of the term “Setting out building” (1 mark)
- ii). State the 1st three steps in order of how to set out building. (3 marks)
- iii). draw any *three* named hand tools you would need for the setting out process (3 marks)
- iv). a). Make a proportional diagram of the three course block wall you constructed during your out of class practical work. (2marks)
- b). Make a table of three columns and list in it any six tools, their use(s) and safety precautions you observed during the processes of construction. (2marks)
- c). after the work, tools were washed. Explain why it was necessary that the tools had to be washed in water. (1mark)
- d). after the work, the next day water was being sprinkled on the wall. Explain why this had to be done. (1mark)
- e). what is the single technical term referred to in d) above? (1 mark)

QUESTION TWO (12 MARKS)

- i). what do you understand by the term “Cement mortars”? (1 mark)
- ii). State the use of Cement mortar (1 mark)
- iii). what is bedding in construction? (1 mark)
- iv). what are the uses of gravel bedding? (1mark)
- v). State the meaning of gravel? (1mark)
- vi). You are excavating a swimming pool pit that is 60 m long, 30 m wide, 2 m deep at the shallow end and 9 m at the deep end.
 - a). Draw to illustrate the possible shape of this swimming pool (3 marks)
 - b) Calculate the excavation volume (3 marks)

QUESTION THREE (12 MARKS)

Given the following building construction tools by their names, draw out each one of them accurately and state one safety rule to observe when using each one of them. (12 marks)

- i). Brick hammer ii). Firmer Chisel iii) Builders try square iv). Trowel v). Spade
- vi). Plumb line

QUESTION FOUR (12 MARKS)

- i). State any two advantages of using concrete blocks as house wall construction material. (2 marks)
- ii). Mention four advantages of interlocking masonry bricks (4 marks)
- iii). Draw and label a pair of interlocking masonry bricks to show their structural appearance when they form a wall (6 marks)

QUESTION FIVE (12 MARKS)

- i). what do you understand by ‘Dressing of stone?’ (1 mark)
- ii). Mention the three reasons of stone dressing. (3 marks)
- iii). Use labeled diagram to reveal any four hand tools you could use to dress stones. (8 marks)