



**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY**

**(MMUST)**

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS**

**2021/2022 ACADEMIC YEAR**

**THIRD YEAR FIRST SEMESTER EXAMINATIONS**

**FOR THE DIPLOMA**

**IN**

**CIVIL ENGINEERING**

**COURSE CODE: DCE 088**

**COURSE TITLE: CIVIL ENGINEERING QUANTITIES**

**DATE: WEDNESDAY 27<sup>TH</sup> APRIL 2022 TIME: 8.00AM – 10.00AM**

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**INSTRUCTIONS:**

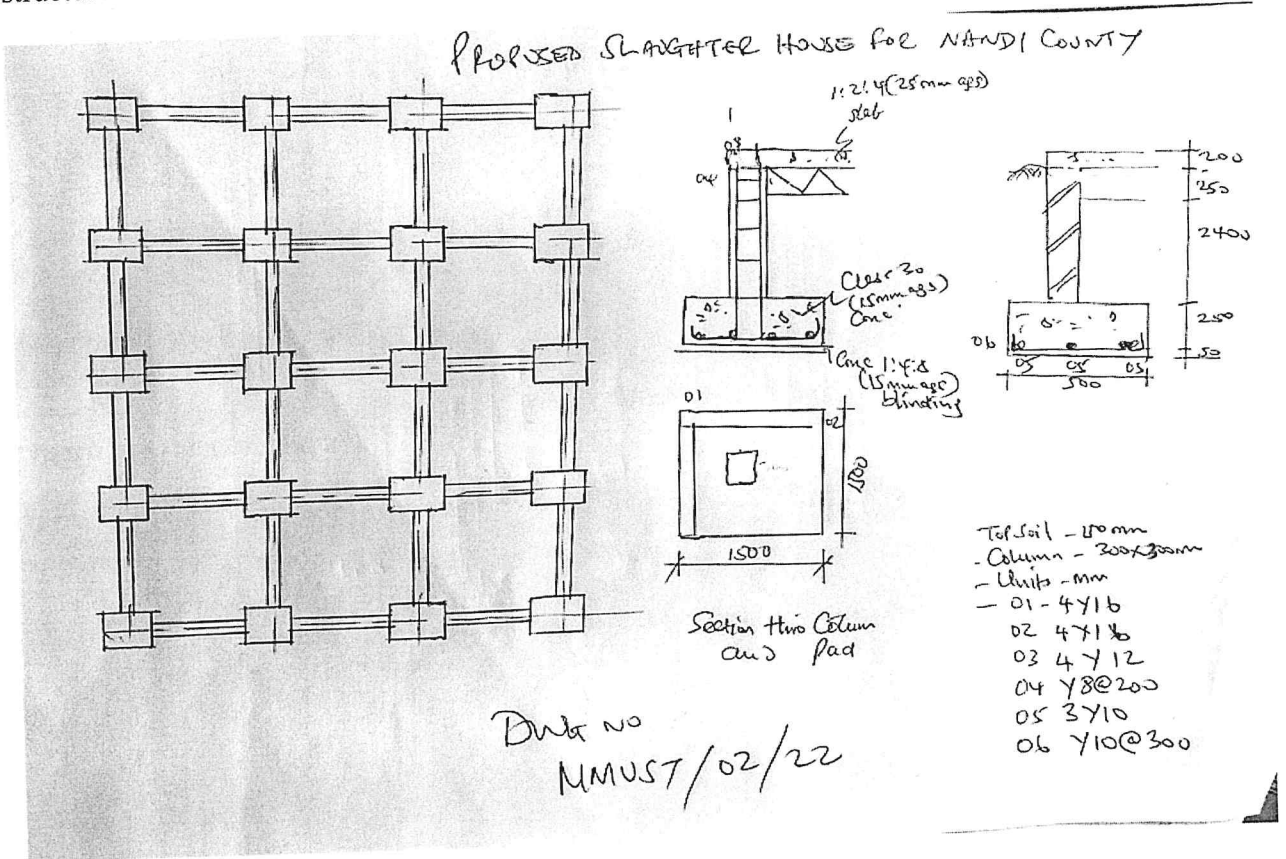
- Answer Question **ONE** any other **TWO** Questions
- Marks for each question are indicated in the parenthesis.
- Examination duration is **2 Hours**
- Use of Mobile phones is **NOT ALLOWED** in the examination room.

**MMUST observes ZERO tolerance to examination cheating**

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

**Question One (20 Marks)**

Take off the quantities of the drawing No. MMUST/02/22 for the slaughterhouse up to sub structures (20 marks)

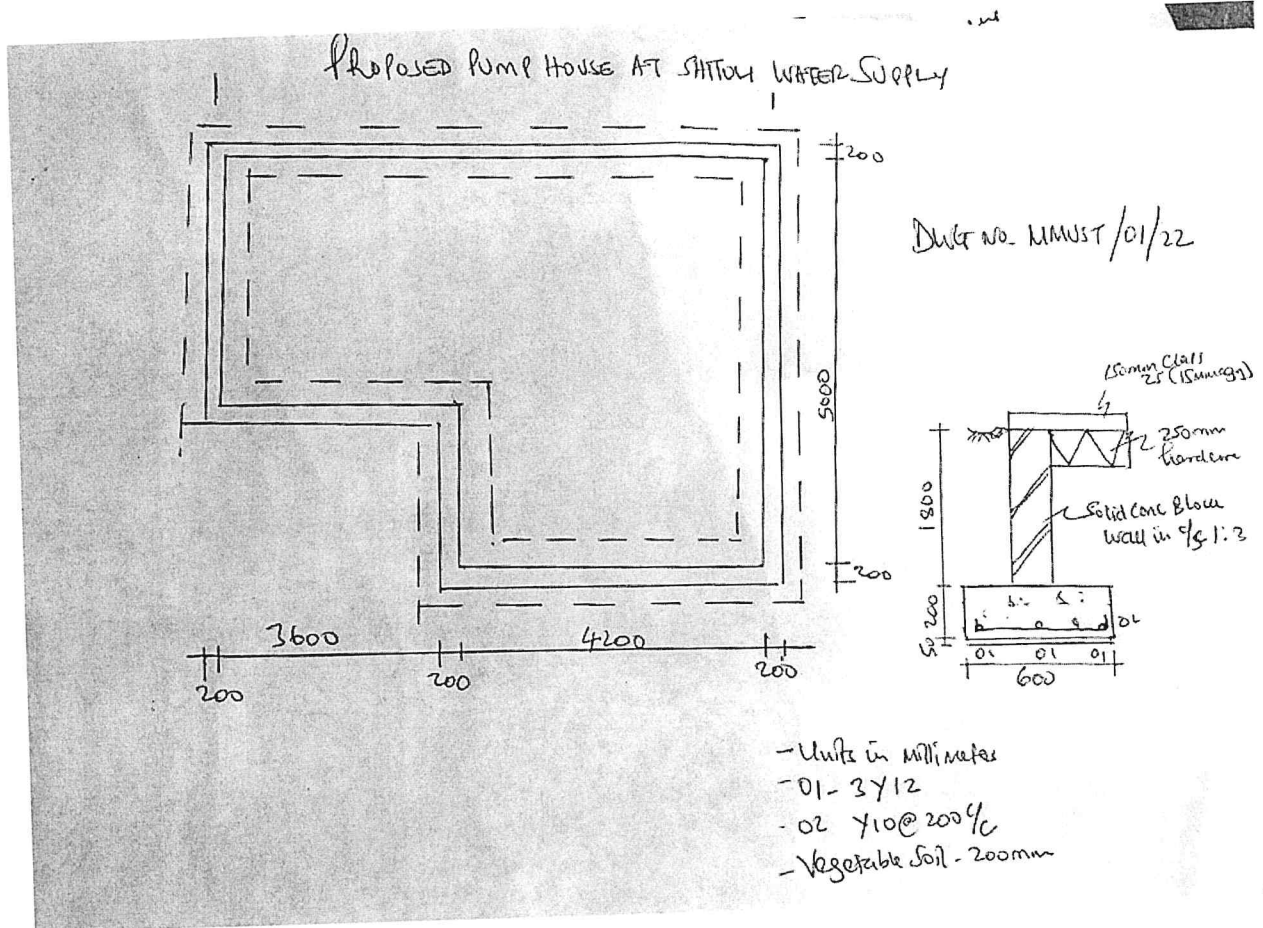


**Question Two (20 Marks)**

- Discuss the THREE types of payment certificates used in civil engineering contracts (9 Marks)
- Explain the term "taking off" in the bill preparation process (5 Marks)
- Illustrate how a wrong entry is corrected in the dimension paper (6 Marks)

**Question Three (20 Marks)**

Take off the quantities of the drawing No MMUST/01/22 for the pump house attached (20 Marks)



**Question Four (20 Marks)**

- a) Illustrate the use of the **FOUR** columns of the dimension paper (13 Marks)
- b) List seven reasons bills of quantities are preferred in civil and structural engineering contracts (7 Marks)

**Question Five (20 Marks)**

- a) State **THREE** functions of the Quantity surveyor in each of the following stages (12 Marks)
- i. Design stage
  - ii. Tendering stage
  - iii. Construction stage
  - iv. Post construction.
- b) Briefly explain why **QUERRY SHEET** is used when taking off. (5 Marks)
- a) Outline **THREE** contents that form the Bills of Quantities. (3 Marks)