



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF ENGINEERING AND TECHNOLOGY

Department of BUILDING & Civil engineering

UNIVERSITY EXAMINATIONS FOR:

BACHELOR OF TECHNOLOGY IN CIVIL ENGINEERING

TCV 4411 : CONSTRUCTION MEASUREMENT 1

END OF SEMESTER EXAMINATION

SERIES: April 2025

TIME: 2 HOURS

Instructions to Candidates

You should have the following for this examination

- *Answer Booklet, examination pass and student ID*
- *The standard method of measurement for building and related works for East Africa, (SMM 2008 edition)*
- *Answer booklet*
- *Dimension papers.*
- *Calculator*

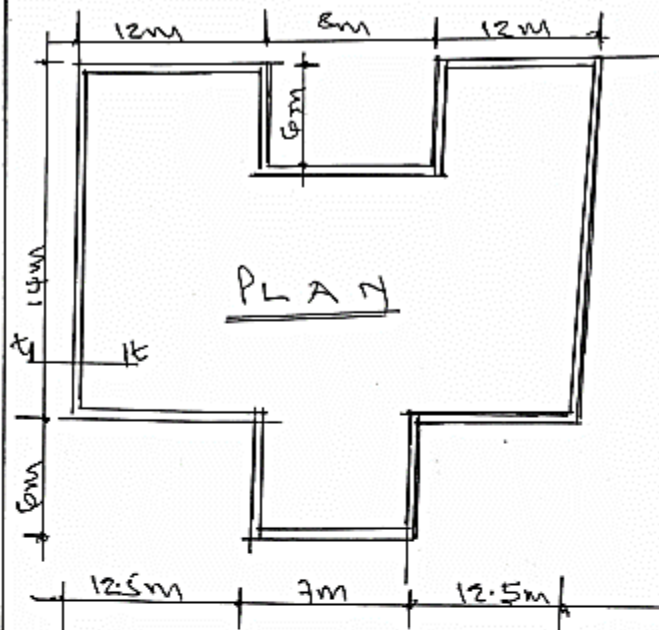
This paper consists of **four** questions.

Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

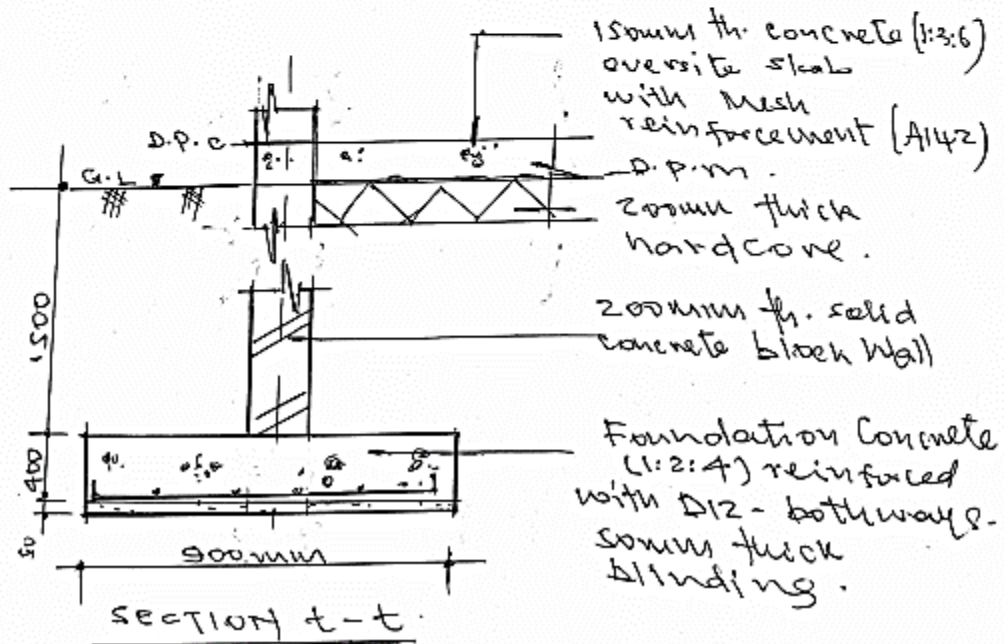
QUESTION ONE (COMPULSORY 30 MARKS)

- a) Take off all substructure quantities for the proposed Wajir county offices as shown on drawing no. MW1/01/48.2 **(30 marks)**



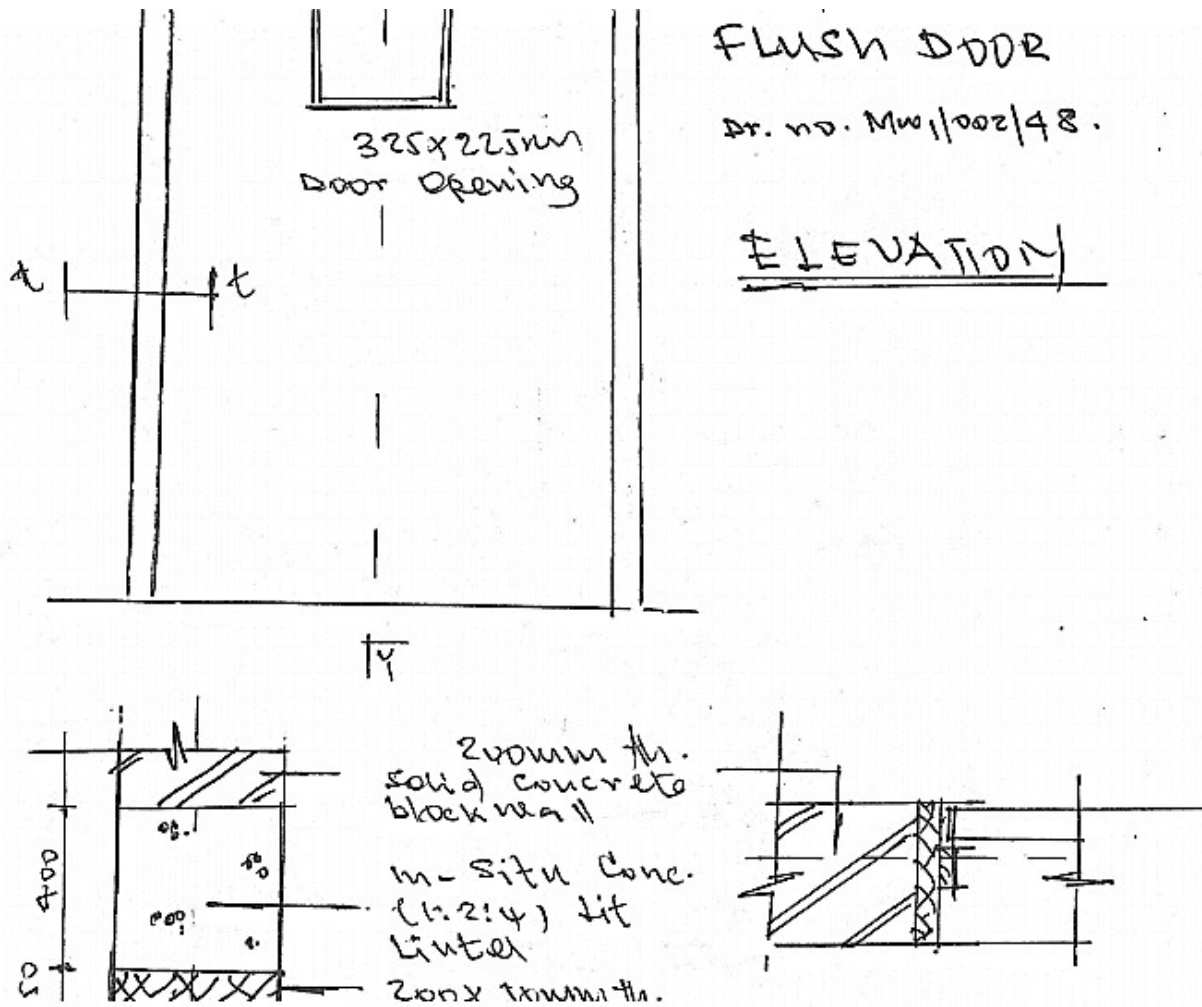
PROPOSED
WASIK COUNTY
OFFICES

Drawing
No. M/01/02/48



Question TWO, (20 marks)

- a) Take off all quantities for the flush door shown on drawing no. MW1/02/48.2 (20 marks)



Question THREE, (20marks)

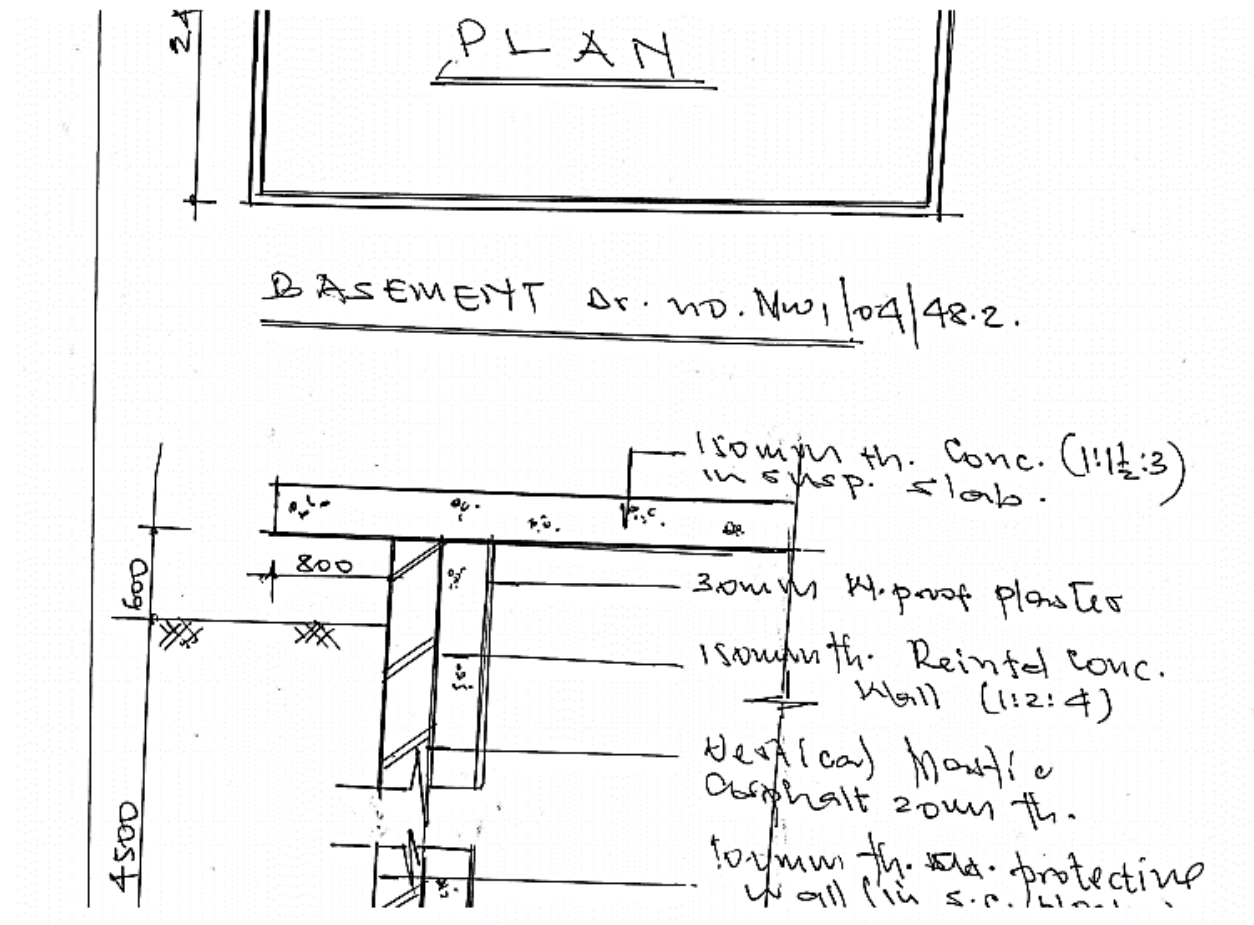
Outline the following functions of the quantity surveyor;

- i) Tendering, commencing from document preparation, advertising, to receipt of the bids, bid evaluation and tender award.
- ii) Preparation of interim certificates,
- iii) Cost control,

iv) Approximate estimating. (20 marks)

Question FOUR, (20marks)

Take off all quantities for the basement works as shown on drawing no.MW1/04/48.2 (20 marks)



Question FIVE, (20marks)

- Outline the historical development of the standard method of measurement of building works, and state its significance in measurement. (10 marks)
- Explain the following SMM, requirements;
 - Foundation excavations to be measured in successive stages of 1.5m.
 - Glazing panes to be measured , in stages exceeding .1to .5,.5 and above.

iii) Extra over items. **(10 marks)**