



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

DIPLOMA IN CIVIL ENGINEERING

EBC 2305: MEASUREMENT OF BUILDING WORKS

END OF SEMESTER EXAMINATION

SERIES –APRIL 2016

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination

- Answer booklet
- Pocket calculator
- Standard method of measurement for building works

This paper consists of **FIVE** questions

Answer any **THREE** questions

Maximum marks for each part of a question are as shown



QUESTION ONE

Take off all quantities for the substructures works shown in drawing no 01. **(20marks)**

QUESTION TWO

Take off all quantities for the flush door shown in drawing no 02 including adjustments
(20marks)

QUESTION THREE

Take off all quantities for the flat roof shown in drawing no 03 including rain water goods.
(20marks)

QUESTION FOUR

a) Outline FOUR uses of a bill of quantities **(6marks)**

b) Describe the following types of Bills of quantities

- i) Elemental
- ii) Traditional
- iii) Operational **(6marks)**

c) With suitable illustrations explain what is meant by running through dimension
(3marks)

d) Describe the uses of a dimension paper **(5marks)**

QUESTION FIVE

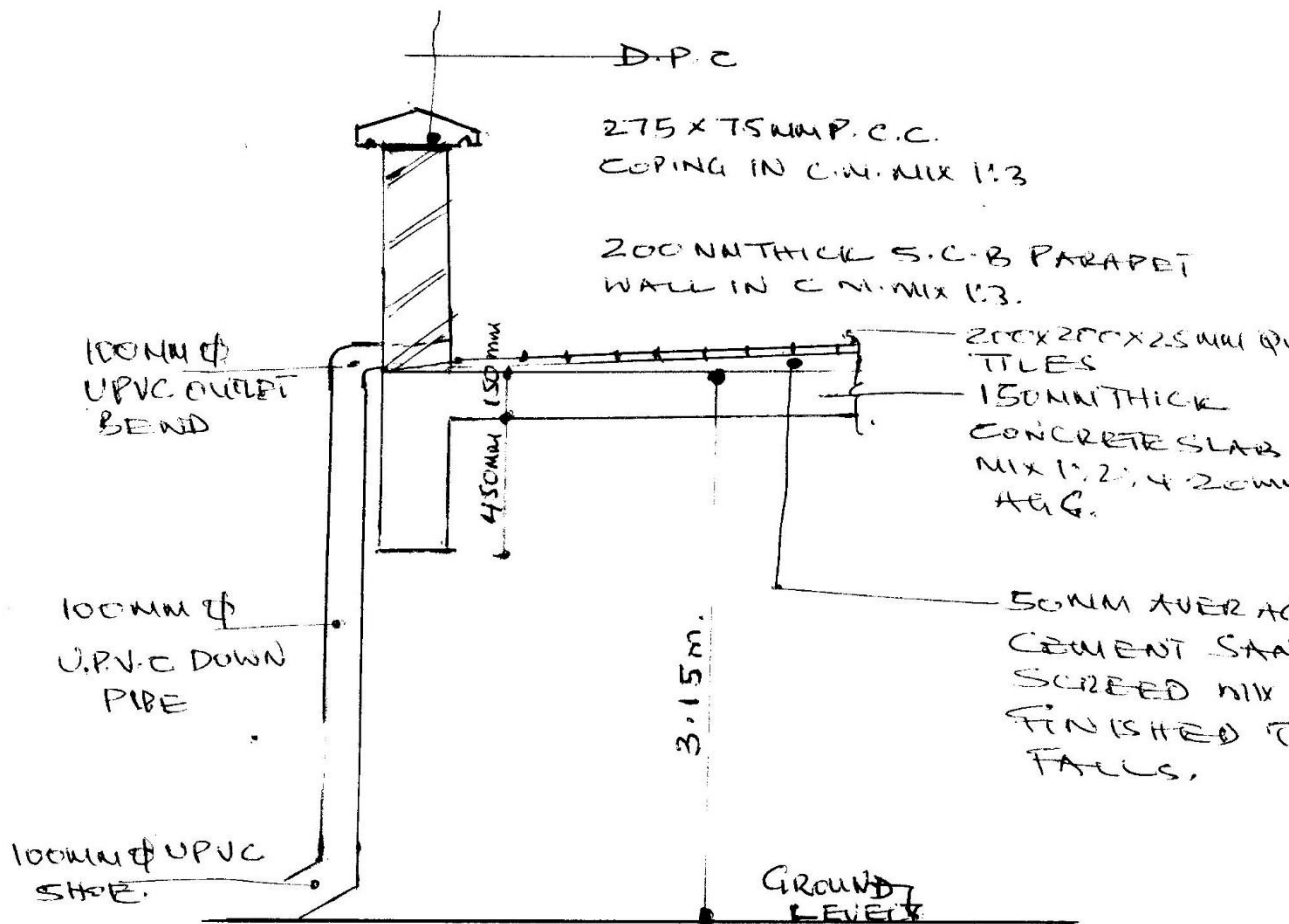
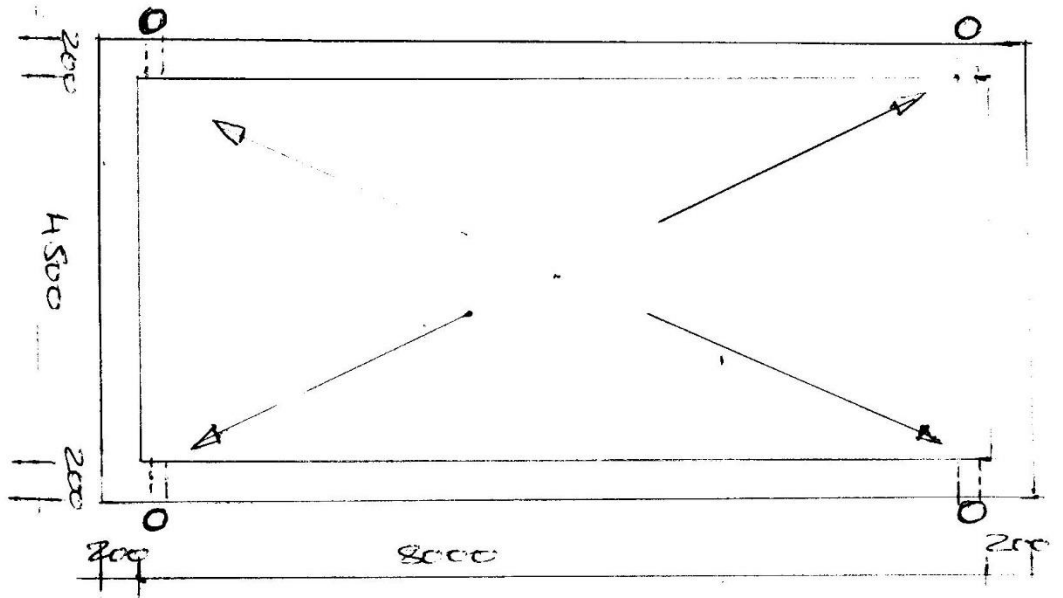
i) Outline the term “variations” **(2marks)**

ii) Outline any ‘four’ processes of valuing variations **(6marks)**

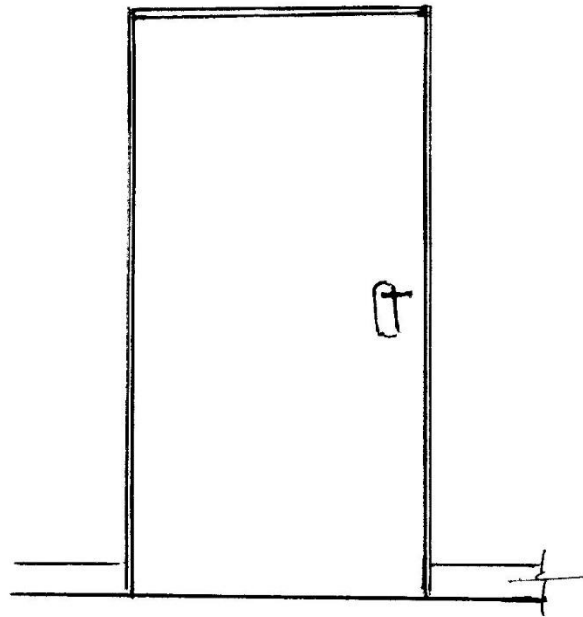
iii) Describe any FOUR contract documents used in building contracts. **(12marks)**



FLAT CONCRETE ROOF



FLUSH DOOR [INTERNAL]



100 X 25mm
HARDWOOD
SKIRTING.

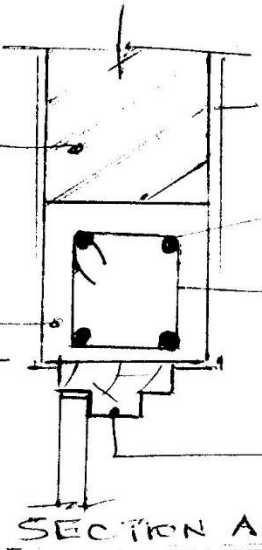
850 X 2040 X 45mm
PAINTED FLUSH DOOR

12mm PLASTER

SECTION

200mm
THICK SOLID
CONCRETE
BLOCK WALL

200 X 300mm
INSULATION
MIX 1:2:4



NOTES

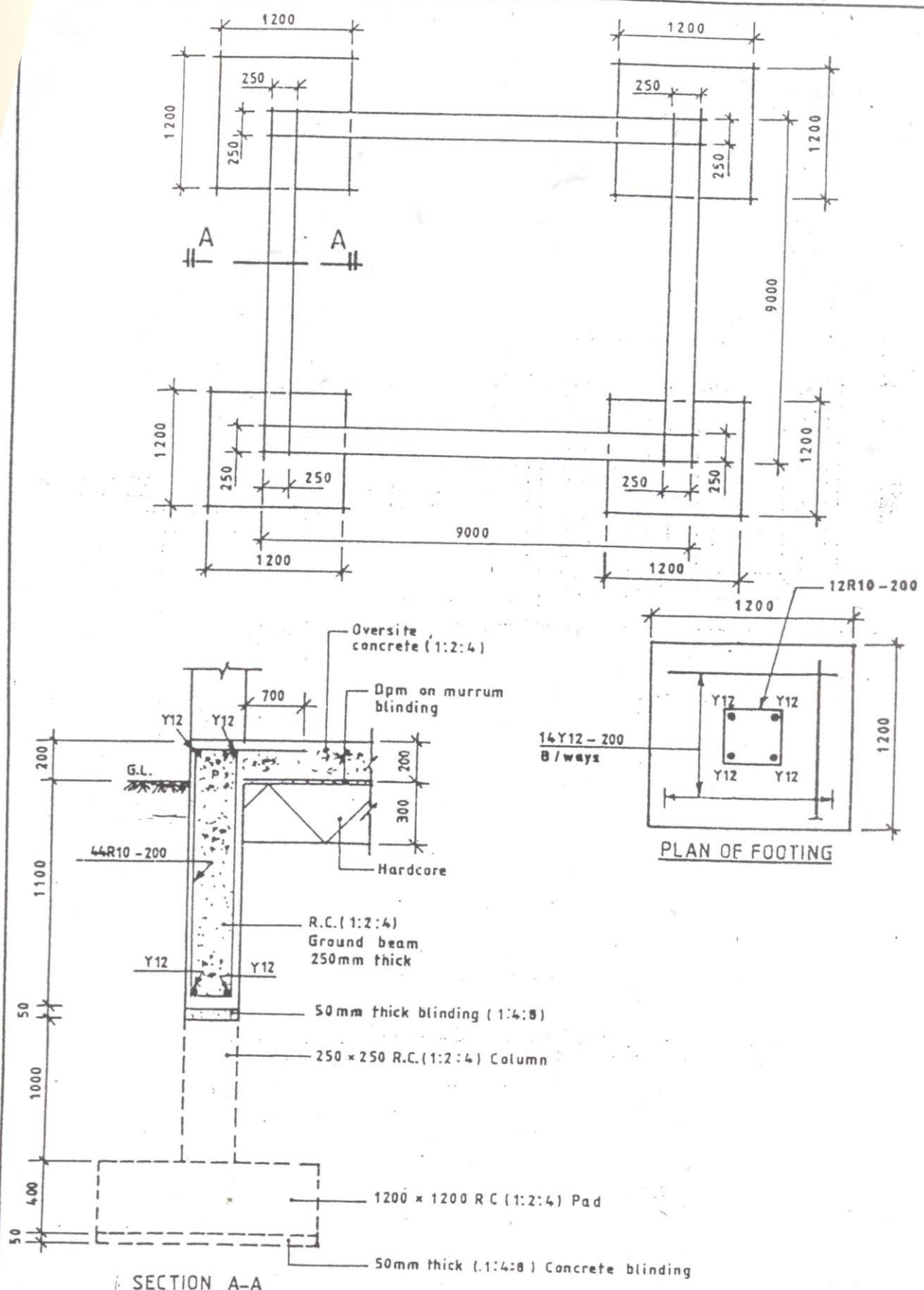
IRONMONGERY: Supply and
Fix the following ironmongery
items

1. 100mm wide brass butt hinges.
2. 3 lever mortice lock
3. 38mm rubber door stop
4. Automatic door closer type.

A198.

5. 150mm long brass barrel

bolt



SECTION A-A

PLAN OF FOOTING

NOTE

1. Site is to be cleared.
2. Vegetable soil 200 mm depth

