



TECHNICAL UNIVERSITY OF MOMBASA
**Faculty of Engineering &
Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
UNIVERSITY EXAMINATION FOR BACHELOR OF SCIENCE IN CIVIL
ENGINEERING (BSCE)

ECE 2216: ENGINEERING DRAWING IV

END OF SEMESTER EXAMINATION

SERIES: APRIL 2013

TIME ALLOWED: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions.

Answer question **ONE (COMPULSORY)** from section **A** and any other **THREE** from section **B**

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

SECTION A

Question One

- a) Using a table format, sketch the conventional symbols for the following building materials. **(10 marks)**
- (i) Ground earth
 - (ii) Hard core
 - (iii) Concrete
 - (iv) Stone wall
 - (v) Sawn timber
- b) Define the following terms used in building construction:
- (i) Foundation
 - (ii) Plinth

(iii) Damp proof course

(iv) Window sill

(v) Lintel

c) The line plan of a residential house having are bedroom is shown in figure 1.

Level of plinth level	=	450mm
Wall thickness	=	300mm
Windows	W	= 1.0m x 1.2m
Doors	D	= 1.0m x 2.0m
	D1	= 0.8m x 2.0m
Ventilation	V	= 0.8m x 0.6m
Lintel height	=	1.2m

Draw 1:50 scale, the plan of the building at sill level

SECTION B

Question Two

Draw the front elevation of the house in figure 2 at a scale of 1:50. The roof is flat

Question Three

There are different types of staircases. Name and illustrate 5 types.

Question Four

Figure 2 is a plan of a septic tank. Draw section X-X

Question Five

Figure 3 is a plan of a staircase. Draw section A-B of the staircase. Roof is flat.