



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)
University Examinations for 2015/2016

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**SECOND SEMESTER EXAMINATION FOR CERTIFICATE IN BUILDING
CONSTRUCTION TECHNOLOGY**

BCE BT 214: ENGINEERING DRAWING IV

Date: 9/12/2015

Time: 8:30 – 10:30 AM

INSTRUCTIONS:

- This paper comprises of FIVE questions.
- Question ONE is compulsory and carries 30 marks.
- Answer any other TWO questions.

QUESTION ONE

1.

- a) Make diagrammatic sketches to show the following as representative symbols for building materials:-
 - i) Natural stone
 - ii) Wrot timber
 - iii) Unwrot timber
 - iv) Concrete
 - v) Brick

(10 marks)
- b) Fig. 1 shows a block in 1st angle orthographic projection. Draw the block in One-Point Perspective drawing.

(20 marks)

2. Fig. 2 shows a block in 1st angle orthographic projection. Draw the block in two-point perspective drawing. (20 marks)
3. Make neat sketches to show the following types of foundations:
- i) Traditional strip foundation.
 - ii) Raft foundation. (20 marks)
4. Fig 3 shows two views of a wooden block and its perspective layout. Copy the layout and draw the block in two-point perspective drawing. (20 marks)
5. Make neat sketches to show the following types of single roofs showing their minimum spans.
- i) Couple roof
 - ii) Closed couple roof
 - iii) Collar roof
 - iv) King post roof (20 marks)