



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

(A Centre of Excellence)

Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

CERTIFICATE IN BUILDING CONSTRUCTION I

EBC 1132: ENGINEERING DRAWING II

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2012

TIME: 3 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*
- *Drawing Paper size A2*

This paper consists of **FIVE** questions.

Answer question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

Question One (Compulsory)

- a) (i) Sub-divide a line 150mm long into proportions of 2:3:6
(ii) Indicate the dimension of the second proportion. **(4 marks)**
- b) Construct an octagon circumscribing a circle of 80mm. **(6 marks)**
- c) Construct a plain scale in which 25mm 200mm = 1m, with a maximum reading of 2.5m. On the scale, indicate the following readings. **(10 marks)**
(i) 1.65m
(ii) 3.05m

Question Two

Show by sketches conventional indication of the following materials.

- (i) Concrete
(ii) Stone
(iii) Plaster
(iv) Hardcore
(v) Earth **(20 marks)**

Question Three

Use free hand sketches to show the following tools.

- (i) Wooden hawk
(ii) Wooden float
(iii) Steel float
(iv) Bat and closer gauge **(20 marks)**

Question Four

Figure 1 shows an elevation of a framed braced and battened door. To scale of 1:10 draw front elevation, sections A-A and B-B. Dimension all the sizes. **(20 marks)**

Question Five

Figure 2 shows a plan and sectional elevation of a bus stop shelter. To a scale of 1:10 draw the detail 'X'. Dimension and name all the parts. **(20 marks)**