



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

(A Centre of Excellence)

Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBC 10B)

DIPLOMA IN ARCHITECTURE (DA 10B)

EBC 2310: MEASUREMENTS II

END OF SEMESTER EXAMINATION

SERIES: AUGUST 2012

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*
- *Dimension Papers*
- *A Copy of Standard Method of Measurement Booklet for Building Works*

This paper consists of **FIVE** questions. Answer question **ONE** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **THREE** printed pages

Question One (20 Marks)

Take off all quantities for the substructure works shown on drawing No. 01 up to and including the damp proof course. **(30 marks)**

Question Two (20 marks)

- a) Briefly explain the following processes used in quantity surveying work.
- i) Taking off
 - ii) Working up **(6 marks)**
- b) With aid of a sketch, describe the functions of a dimension paper. **(4 marks)**
- c) Describe the following terms as used in taking off:
- i) “Deemed to be included” stems
 - ii) Query sheets
 - iii) Squaring dimensions. **(6 marks)**
- d) State and show with aid of a sketch the order of entering dimensions in a dimensioning paper. **(4 marks)**

Question Three (20 marks)

Take off quantities for the Roof. Show on drawing No. 02 including rainwater goods. **(20 marks)**

Question Four (20 marks)

- a) The following grid levels were recorded on a piece of plot. It was required to excavate down to a level of 2.00m, including excavating vegetable soil to a depth of 150mm. Calculate the adjusted depth. **(10 marks)**
- b) Take off the quantities of the earthworks/excavation. **(10 marks)**

Figure 1

Question Five (20 marks)

- a) Describe the following terms used in taking off.
- i) Grouping dimension
 - ii) Deductions
 - iii) Prime cost sum
 - iv) Provisions sums
 - v) Extra over stems
- (10 marks)**
- b) (i) Describe **FOUR** functions of a quantity surveyor.
- (4 marks)**
- (ii) State the purposes of bills of quantities.
- (6 marks)**