



**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

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**SERIES: OCTOBER 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 (Compulsory - 30 marks)**

Take off quantities for the door shown on drawing No. 02 including painting work and ironmongery

**(30 marks)**

**Question Two (20 marks)**

a) State the purposes of bills of quantities. **(6 marks)**

b) Describe **FOUR** functions of a quantity surveyor. **(4 marks)**

c) Describe the following terms used in taking off.

i) Prime cost items

ii) Preambles

iii) Prime cost sum

iv) Provisions sums

v) Extra over stems

**(10 marks)**

**Question Three (20 marks)**

Drawing numbered Q1 (a) and 01(b) show layout of a domestic drainage system take off all quantities for the drainage work. **(20 marks)**

**Question Four (20 marks)**

a) The following grid levels were recorded on a sloping site. It was required to excavate down to a level of 3.0m including excavating vegetable soil to a depth of 150mm. Calculate the adjusted depth.

b) Take off the quantities of the earthworks to be excavated. **(20 marks)**

7.0m

**Question Five (20 marks)**

a) Explain the following terms used in taking off:

- i) Timesing
- ii) Quantities
- iii) Query sheets
- iv) Squaring dimensions
- v) Working up

**(10 marks)**

b) Briefly discuss forms of bill of quantities.

**(10 marks)**