THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)
Faculty of Engineering and Technology

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

CONSTRUCTION TECHNICIAN PART II

EBC 1110: MEASUREMENT OF BUILDING WORKS

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2011

TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
- *Answer Booklet*
- *Pocket Calculator*
- *Dimension papers*
- *A copy of the Standard Method of Measurement for Building Works*

This paper consists of **FIVE** questions
Answer question **ONE (COMPULSORY)** from **SECTION A** and any other **TWO** questions from **SECTION B**
Maximum marks for each part of a question are clearly shown

This paper consists of **TWO** printed pages

SECTION A (COMPULSORY)

Question 1 (40 marks)

Take off all quantities for the drainage works shown in drawing No. 01   (40 marks)

SECTION B (Attempt any TWO questions)

Question 2 (30 marks)

Take off all quantities for the Pitched roof in drawing No. 02   (30 marks)

Question 3 (30 marks)

Take off all quantities for the finishes shown in drawing No. 03   (30 marks)

Question 4 (30 marks)

a) Outline **FOUR** purposes of the Bill of quantities   (8 marks)

b) Describe the following types of Bills.
      (i)   Elemental
      (ii)   Operational
      (iii)   Traditional   (9 marks)

c) Describe the following processes of Bill
      (i)   Squaring
      (ii)   Abstracting
      (iii)   Billing   (9 marks)

d) With suitable illustrations, explain what is meant by "running through the dimensions".
                    (4 marks)

Question 5 (30 marks)

a) Briefly explain the following types of building and civil engineering contracts:
    (i)   Lump sum contracts
    (ii)   Schedule contracts
    (iii)   All-in contracts
    (iv)   Target contracts   (12 marks)

b) Give **ONE** example of a provisional sum and **TWO** examples of a prime cost sum showing how they could be entered in a dimension paper   (8 marks)

c) (i) Explain Negotiated contract as a method of procurement of Tender

    (ii) Outline **THREE** common types of negotiated contracts   (10 marks)