



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

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)