



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

## Faculty of Engineering

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

CONSTRUCTION TECHNCIAN II

## MEASUREMENT

FINAL EXAMINATION

**SERIES:** APRIL/MAY 2010

**TIME:** 3 HOURS

### **Instructions to Candidates:**

You should have the following for this examination:

- Answer Booklet
- Pocket Calculator
- Dimension papers
- Abstracting papers
- A copy of the Standard Method of Measurement of Building Works

This paper consists of **FIVE** questions.

Question No.1 in Section **A** is Compulsory.

Answer question **ONE** in Section **A** and any other **TWO** questions in Section **B**.

Question 1 carries 40 marks while those in Section **B** carries 30 marks each.

Maximum marks for part of question are as shown.

**SECTION A**  
(Compulsory)

- Q.1 Take off all quantities for the Substructure works shown in drawing No.01C up to and including the DPC. (40 marks)

**SECTION B**  
(Answer any **TWO** questions from this Section)

- Q.2 Drawing No.02 shows the plan layout of superstructure walls and a Schedule of finishes for an office block. Take off **all** the quantities for:-
- (a) The superstructure walls up to the roof. (15 marks)
  - (b) All the floor, wall and ceiling finishes, including painting and decorating. (15 marks)
- Q.3 (a) Define **SIX** roles of the Quantity Surveyor in a Construction Project, two at each of the following stages; During design, During construction and after completion. (18 marks)
- (b) With suitable illustrations, explain how the following are used in the Traditional method of bill of Quantities preparation. (12 marks)
- (i) Grouping of dimensions
  - (ii) Grouping of descriptions
  - (iii) Dotting-on
  - (iv) Ditto
- Q.4 (a) Give **SIX** purposes of a Bill Quantities with a brief explanation of each. (18 marks)
- (b) Outline and briefly describe **THREE** sections of a Bill of Quantities which have a cost implication. (12 marks)
- Q.5 (a) Differentiate between Trade by Trade and Elemental bill giving **FIVE** examples of each. (20 marks)
- (b) Explain the meaning of the term 'Preliminaries' and list **FIVE** items which may appear in a Preliminary Bill. (10 marks)