



## THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

## **Faculty of Engineering**

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

# DIPLOMA IN CIVIL ENGINEERING & COMPUTER DIPLOMA IN BUILDING AND COMPUTER

## **MEASUREMENT**

END OF SEMESTER I 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
- 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.01E up to and including the DPC.

(40 marks)

#### SECTION B

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

- Q.2 Establish the mean girth of the figures shown in drawing No.03. (30 marks)
- Q.3 (a) Explain the **FOUR** stages of bill preparation using the Traditional method. (12 marks)
  - (b) Give **SIX** differences between Building and Civil Engineering Quantities with a brief explanation of each. (18 marks)
- Q.4 (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) State and give brief explanation of **FOUR** contract documents used in the Building and Civil Engineering project. (12 marks)
- Q.5 Explain with examples the meaning of the following terms as used in a Bill of Quantities and how the Sums are expended.
  - (a) P.C Sums
  - (b) Provisional Sums
  - (c) Contingencies

(30 marks)