



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

*Faculty of Engineering and Technology*

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**DIPLOMA IN BUILDING & CIVIL ENGINEERING**

EBC 2310: MEASUREMENT OF BUILDING WORKS II

**END OF SEMESTER EXAMINATION**

SERIES: AUGUST/SEPTEMBER 2011

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer booklet*

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 **TWO** printed pages

## SECTION A (COMPULSORY)

### Question 1

Take off all the quantities for substructure work shown on drawing number 01 (Ignore the reinforcement) ( 40 marks)

## SECTION B (Answer any TWO questions from this section)

### Question 2

Take off all quantities for the door shown in drawing number 02 (20 marks)

### Question 3

Take off all quantities for the superstructure work shown in drawing number 03 ( 20 marks)

### Question 4

- a) (i) Define the term ‘ variations’ as used in the measurement ( 2 marks)
- (ii) Outline **FOUR** methods used in valuation of variations (4 marks)
- b) Outline the procedure for preparation of interim payment certificate (5 marks)
- c) State **FIVE** conditions that must be satisfied for a contract to be valid (5 marks)
- d) Explain the following:
  - (i) Unit rate (2 marks)
  - (ii) All- in –labor rate (2 marks)

### Question 5

- a) Briefly describe the following types of contract
  - (i) Bills of quantities contract (4 marks)
  - (ii) Lump sum contract (4 marks)
  - (iii) Cost plus percentage fee centre (4 marks)
  - (iv) Target contract (4 marks)
- b) Briefly explain ‘Open Tendering’ (4 marks)