



# THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of Jkuat)

*Faculty of Engineering and Technology*

DEPARTMENT OF BUILDING AND CIVIL ENGINEERING

**HIGHER DIPLOMA IN BUILDING & CIVIL ENGINEERING**

BC 3218 : MEASUREMENT OF BUILDING WORKS

**END OF SEMESTER EXAMINATION**

SERIES: AUGUST/SEPTEMBER 2011

**TIME: 3 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer booklet*

This paper consists of **FIVE** questions in **TWO** sections **A & B**

Answer question **ONE (COMPULSORY)** and any other **TWO** sections from section **B**

Maximum marks for each part of a question is as shown

This paper consists of **TWO** printed pages

## SECTION A (COMPULSORY)

### Question 1 (40 marks)

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

## SECTION B (Attempt any TWO questions)

### Question 2 (20 marks)

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

### Question 3 (20 marks)

Take off all quantities for the external works shown in drawing number 03 (20 marks)

### Question 4 (20 marks)

- a) Explain the significance of 'retention fund' in a contract (3 marks)
- b) Briefly explain **FIVE** conditions of a valid contract (15 marks)
- c) Briefly explain a 'Payment Certificate' (2 marks)

### Question 5 (20 marks)

- a) Differentiate between the following as used in provisional sums
  - (i) Defined work
  - (ii) Undefined work (3 marks)
- b) Explain the term 'contingency sum' (2 marks)
- c) (i) Explain the "Standard Schedule of rates contracts" and state **THREE** circumstances in which they may be used (6 marks)
  - (ii) Outline **TWO** disadvantages of a standard schedule of rates contract (2 marks)
- d) (i) Distinguish between 'Periodic Payments' and 'Stage Payments' as used in contracts (5 marks)
  - (ii) Comment on the suitability of the 'Stage Payment' on a multimillion shillings road project (2 marks)