



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

(A Centre of Excellence)

Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

DIPLOMA IN BUILDING & CIVIL ENGINEERING

DIPLOMA IN CIVIL ENGINEERING

EBC 2213: MEASUREMENT OF BUILDING WORKS I

END OF SEMESTER EXAMINATION

SERIES: AUGUST 2012

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

This paper consists of **FIVE** questions. Answer any **THREE** questions
Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages

Question One (20 marks)

Take off all quantities for drawing No. 01 attached. **(20 marks)**

Question Two (20 marks)

- a) Briefly describe the open tendering system of procurement for building and civil engineering works giving **TWO** advantages and **TWO** disadvantages. **(13 marks)**
- b) Illustrate the use of the following while taking off.
- i) Grouping dimension
 - ii) User of ditto
 - iii) Dotting on
 - iv) Grouping description. **(4 marks)**

Question Three (20 marks)

- a) Describe the term variation as used in contracts and give **TWO** reasons of its occurrence. **(5 marks)**
- b) Explain why Tenders are used in building and civil engineering and state **THREE** items included in the formal call for tenders. **(5 marks)**
- c) Briefly describe the Bills of Quantities and give **FIVE** reasons for its use in Building and Civil Engineering Contracts. **(10 marks)**

Question Four (20 marks)

- a) Briefly explain the term “Defects liability period’ **(5 marks)**
- b) Describe the **THREE** payment certificates used in building and civil engineering contracts. **(6 marks)**
- c) Briefly explain the following sums as used in the Bills of quantities.
- i) Provisional sum
 - ii) Prime cost sums
 - iii) Contingency sums **(9 marks)**

Question Five (20 marks)

Take off all quantities for the underground fame attached on drawing No. 02. **(20 marks)**