



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A Constituent College of JKUAT)

(A Centre of Excellence)

Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

HIGHER DIPLOMA IN BUILDING & CIVIL ENGINEERING

EBC 3218: 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*
- *Pocket Calculator*

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 **THREE** printed pages

Question One (20 Marks)

- a) Outline the process of bill preparation. **(10 marks)**
- b) Describe the following contract documents.
- i) Contract drawing
 - ii) Bill of quantities
 - iii) Specification
 - iv) Form of tender
 - v) Article of agreement **(10 marks)**

Question Two (20 marks)

- a) Briefly describe the following methods tendering, giving one advantage and one disadvantage of each method.
- i) Open tendering
 - ii) Selective tendering
 - iii) Negotiated tendering
 - iv) Serial tendering **(16 marks)**
- b) Describe the following terms:
- i) Preambles
 - ii) Deemed to be included items. **(4 marks)**

Question Three (20 marks)

- a) Explain the following terms:
- i) Prime cost sums
 - ii) Provisional sum
 - iii) Contingency sum **(9 marks)**
- b) Briefly describe the following types of contracts.
- i) Cost plus fixed fee contracts
 - ii) Cost plus percentage fee contracts
 - iii) Lump sum contract **(9 marks)**
- c) Define the term “Dotting on” **(2 marks)**

Question Four (20 marks)

- a) Explain the following Payment Certificates.
- i) Interim Certificates
 - ii) Penultimate Certificate
 - iii) Final Certificate **(9 marks)**
- b) Explain the following terms:
- i) Variation
 - ii) Valuation of variations

c) State the purposes of bill of quantities. **(5 marks)**

Question Five (20 marks)

a) Outline the duties of the following personnel in a project. **(10 marks)**

- i) Quantity Surveyor
- ii) Client

b) Describe the functions of a dimension paper. **(6 marks)**

c) Describe the term “taking off” **(4 marks)**