



TECHNICAL UNIVERSITY OF MOMBASA
**Faculty of Engineering &
Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
CERTIFICATE IN BUILDING & CIVIL ENGINEERING

EBC 1107: QUANTITY SURVEYING I

END OF SEMESTER EXAMINATION

SERIES: APRIL 2015

TIME ALLOWED: 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 of the **FIVE** questions

Maximum marks for each part of a question are as shown
Use neat, large and well labeled diagrams where required
This paper consists of **TWO** printed pages

Question One

- a) Outline FIVE functions of the bill of quantities **(5 marks)**
- b) State FOUR roles of the Quantity Surveyor in each of the following stages **(12 marks)**
- c) Briefly define the “Bills of Quantities” as applied in the construction industry **(3 marks)**

Question Two

- a) Briefly explain any FOUR forms of tendering giving TWO advantages and TWO disadvantages in each case **(12 marks)**
- b) Illustrate the use of the following on the dimension paper **(8 marks)**
 - (i) Grouping descriptions
 - (ii) Grouping dimensions
 - (iii) Use of ditto
 - (iv) Use of Nil

Question Three

- a) Outline SIX differences between SMM for Civil Engineering works and SMM for building works. **(6 marks)**
- b) Illustrate the booking of the following in the dimension paper:
 - (i) Area of a triangle base 5m and height 4m
 - (ii) Area of a circle, radius 7m
 - (iii) Circumference of a semi-circle, radius 5m
 - (iv) Volume of a cylinder 2m diameter, 5m high **(10 marks)**
- c) Explain the term “variation” giving examples **(4 marks)**

Question Four

- a) Briefly describe any TWO types of bill of quantities **(4 marks)**
- b) Briefly describe FIVE conditions in which negotiated mode of tendering may be considered appropriate in the construction industry **(15 marks)**
- c) Differentiate between Taking off and abstracting as used in quantity surveying **(1 mark)**

Question Five

- a) Briefly explain any FIVE construction contracts that are mostly used in the construction industry **(15 marks)**
- b) List any FIVE effects of variations in the construction industry **(5 marks)**