



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
CERTIFICATE IN BUILDING CONSTRUCTION (CT II)

EBC 1124: MEASUREMENT OF BUILDING WORKS I

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: FEBRUARY 2013

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*
- *Standard Method of Measurement for Building Works*

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

Take off all quantities for drawing No. 03 attached up to sub-structures. **(20 marks)**

Question Two

a) Define the “Open Tendering” giving **THREE** advantages. **(5 marks)**

b) The following are provided for in the Bills of Quantities. Briefly explain what they represent.

- (i) Prime cost sum
- (ii) Contingency from
- (iii) Provisional sum **(9 marks)****

c) The following terms are used when “taking off”. Briefly explain their meaning:

- (i) Deemed to be included items
- (ii) Extra over items
- (iii) Query sheet **(6 marks)****

Question Three

Take off all Quantities for the Drawing No. 04 attached up to sub-structures level. **(20 marks)**

Question Four

a) With the aid of a sketch, describe the BS 3327:1961 stationary for quantity surveying referred as the “Dimension Paper” **(8 marks)**

b) State **FOUR** purposes for the Bills of Quantities. **(8 marks)**

c) Briefly describe “Grouping of Dimension” **(4 marks)**

Question Five

a) Using illustrations, show how the following irregular figures are booked when taking off:

- (i) Triangle with base 4m and height 3m**
- (ii) Circle 2m radius**
- (iii) Semi-circle with 2 m radius**
- (iv) Volume of a cylinder 1m diameter **(8 marks)****

b) Briefly describe the following processes of preparation of the Bills of Quantities.

- (i) Taking off**
- (ii) Working up **(9 marks)****

c) Illustrate how “dotting on” is achieved. **(3 marks)**