



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)**