



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING  
DIPLOMA IN BUILDING & CIVIL ENGINEERING  
DIPLOMA IN ARCHITECTURE

EBC 2209: MEASUREMENT OF BUILDING WORKS I

**SPECIAL/SUPPLEMENTARY EXAMINATION**  
**SERIES: OCTOBER/NOVEMBER 2013**  
**TIME ALLOWED: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*
- *Pocket Calculator*
- *Standard Methods 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**

- a) Illustrate the use of dimension paper **(8 marks)**
- b) With the aid of a sketch, briefly how the following:
- (i) Adjustment of voids
  - (ii) Quarry sheet
  - (iii) Grouping descriptions **(6 marks)**
- c) Briefly explain the term “preliminary” as used in Quantity Surveying giving **THREE** examples **(6 marks)**

### **Question Two**

Take off all quantities for the drawing No 01/13 attached. **(20 marks)**

### **Question Three**

- a) State **SIX** contents of a the Bills of Quantities **(3 marks)**
- b) Outline **FIVE** function of the Bills of Quantities **(2 marks)**
- c) State and explain **THREE** payment certificates used in civil engineering **(6 marks)**
- d) State **THREE** roles of the Quantity Surveyor in each of the following stages:
- (i) Pre-construction
  - (ii) Construction
  - (iii) Post Construction **(9 marks)**

### **Question Four**

- a) Describe the following methods of tendering giving **TWO** advantages and **TWO** disadvantages:
- (i) Open tendering
  - (ii) Selective tendering **(8 marks)**
- b) Explain the “lump some contract” giving **THREE** advantages and **THREE** disadvantages. **(6 marks)**
- c) The following monies are provided for in the Bills of Quantities. Explain the purpose of each.
- (i) Prime cost sum
  - (ii) Provisional sum
  - (iii) Contingency sum **(6 marks)**

### **Question Five**

Take off all quantities for the drawing No. 02/13 attached **(20 marks)**