



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING  
**CERTIFICATE IN BUILDING & CIVIL ENGINEERING (CBCE)**

EBC 1107: QUANTITY SURVEY I

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**SERIES: FEBRUARY 2015**

**TIME ALLOWED: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*
- *Scientific Calculator*
- *Standard Method of Measurement for Building Work*

This paper consists of **FIVE** questions. Answer any **THREE** questions of the **FIVE** questions

All questions carry equal marks

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**

Take off all quantities for the substructure works shown in drawing No 01 **(20 marks)**

### **Question Two**

- a) Briefly describe the following types of contracts:
- (i) Lump sum contract
  - (ii) Sum plus fluctuating fee contract
  - (iii) Sum plus fixed fee contract
  - (iv) Package deal contract **(12 marks)**
- b) Differentiate between Civil Engineering S.M.M and Building S.M.M **(4 marks)**
- c) State any FOUR roles of a quantity surveyor in a project **(4 marks)**

### **Question Three**

Take off all quantities for the basement shown in drawing No 02 **(20 marks)**

### **Question Four**

Take off all quantities for the substructure works shown in drawing No 03 **(20 marks)**

### **Question Five**

- a) Briefly describe the FOUR columns of a dimension paper **(4 marks)**
- b) Illustrate the use of the following in taking off: **(6 marks)**
- (i) Grouping descriptions
  - (ii) Group dimensions
  - (iii) Dotting on
- c) Briefly describe the following contract documents:
- (i) Specifications
  - (ii) Bills of quantities
  - (iii) Contract drawings
  - (iv) Tender forms **(10 marks)**