

## **TECHNICAL UNIVERSITY OF MOMBASA**

# Faculty of Engineering &

# Technology

#### DEPARTMENT OF BUILDING & CIVIL ENGINEERING

### **DIPLOMA IN ARCHITECTURE**

EBC 2225: MEASUREMENT OF BUILDING WORKS

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2014 TIME ALLOWED: 2 HOURS

#### Instructions to Candidates:

You should have the following for this examination

- Answer Booklet
- Standard Methods of Measurement of Building Works
- Pocket Calculator
- Dimension Paper

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.

#### **Question One**

a) Outline FOUR reasons bills of quantities are adopted in building and civil engineering contracts.	
<b>b)</b> Briefly describe the process of taking off.	(2 marks) (3 marks)
<ul> <li>c) Briefly explain the following:         <ul> <li>(i) Provisional sum</li> <li>(ii) Prime cost sum</li> </ul> </li> </ul>	(6 marks)
d) With the aid of an illustration, explain the following as used in taking off:	
<ul><li>(i) Use of a querry sheet</li><li>(ii) Use of "ditto"</li><li>(iii) Grouping descriptions</li></ul>	(9 marks)
Question Two	
<b>a)</b> State FIVE components of the Bills of Quantities.	(5 marks)
<b>b)</b> Explain the term "Preliminaries" giving three examples.	(5 marks)
<b>c)</b> Briefly explain the "working up" procedures.	(6 marks)
<b>d)</b> Describe the term "defects liability period" as used in Civil Engineering Contracts.	(4 marks)
Question Three	
Take off all quantities as per drawing no 011/14 attached up to sub-structures.	(20 marks)
Question Four	
Take off all quantities for the drawing 012/14 attached	(20 marks)
Question Five	
Take off quantities for the drawing 02 attached.	(20 marks)