THE TECHICAL UNIVERSITY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

DIPLOMA IN ARCHITECTURE (DA 10B)
DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBC 10B)
DIPLOMA IN CIVIL ENGINEERING (DC 10B)

EBC 2310: MEASUREMENT OF BUILDING WORKS

SPECIAL/SUPPLEMENTARY EXAMINATION
SERIES: FEBRUARY 2013
TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*
- *Scientific calculator*
- *Dimension papers (to be provided)*
- *Copy of Standard Method of Measurement Booklet for Building Works*

This paper consists of **FIVE** questions.

Answer question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

Question One (Compulsory)

Take off all quantities for the drainage works shown on drawing No. 19. **(30 marks)**

Question Two

Take off all quantities for the wood casement window shown on drawing no. 1. **(20 marks)**

Question Three

Take off all quantities for the external door shown on drawing No. 16. **(20 marks)**

Question Four

a) The following grid levels were recorded on a piece of plot. It was required to excavate down to a level of 1.5m, including excavating vegetable soil to a depth of 150mm. Calculate the adjusted depth. **(10 marks)**

b) Take off the quantities of earthworks/excavation **(10 marks)**

2.6

Question Five

A cutting to be excavated for a road, 240m length and 12m in width, to an even gradient, with mean depths, calculated at 30m intervals as indicated and sides slope of 2 to 1.

Cross section	1	2	3	4	5	6	7
Mean depth (m)		2	4	6	7	5	3

(20 marks)

a) Calculate and compile a table showing the following:
Cross-section, Depth (m), width at top of cutting (m), mean width (m), weightings. **(10 marks)**

b) Describe and insert the calculated dimensions in (a) on a dimension paper **(10 marks)**