



TECHNICAL UNIVERSITY OF MOMBASA

**Faculty of Engineering &
Technology in Conjunction with
Kenya Institute of Highways and
Building & Technology (KIHBT)**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

HIGHER DIPLOMA IN BUILDING & ECONOMICS (HDBE)

EBE 3209: MEASUREMENTS I & BUILDING ECONOMICS I

END OF SEMESTER EXAMINATION

SERIES: AUGUST 2013

TIME ALLOWED: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- *Answer Booklet*

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 (Compulsory)

Take off all substructure quantities for the project shown on drawing number QS01/EE01

Question Two

Take off all quantities for the basement work shown on drawing no QS 01/EE02/2013

Question Three

Take off all quantities for the framed, match boarded door, shown on drawing number QS 01/EE03

Question Four

Take off all quantities for the roof structure, as shown on drawing no. QS 01/EE04

Question Five

- a) (i) Discuss the essence of the standard method of measurement in quantity surveying work.
(ii) Explain the requirements of the standard method of measurement of building works with respect to the following clauses.
- Excavation in stages as provided in S.M.M clause D5f
 - Glazing in panes – sizes as stipulated in S.M.M clause U3
 - Planking and strutting as provided in S.M.M d19
- (10 marks)**
- b) Describe briefly the functions of the following parties in a construction project:
- (i) Quantity surveyor
 - (ii) Estimator
- (8 marks)**
- c) With the aid of typical examples outline the stages of preparation of a bill of quantities that is:
- (i) Taking off
 - (ii) Squaring
 - (iii) Abstracting and billing
- (12 marks)**