



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
CERTIFICATE IN BUILDING & CIVIL ENGINEERING (CBCE 13M)

EBC 1108: BUILDING TECHNOLOGY 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*
- *Drawing Instruments*

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) Briefly describe the following stages of the building process:
- (i) Inception stage
 - (ii) Conception stage
 - (iii) Design stage
 - (iv) Construction stage** **(10 marks)**
- b) State the measures to be taken to ensure Quality Assurance in the building processes described above. **(10 marks)**

Question Two

- a) State the importance of site investigation in the preliminary stage of construction. **(10 marks)**
- b) Briefly describe the works involved in site investigation. **(10 marks)**

Question Three

- a) With the aid of sketches, describe the design of a traditional strip foundation. **(12 marks)**
- b) Briefly describe the **TWO** techniques of dewatering in excavation of foundations. **(8 marks)**

Question Four

- a) Briefly describe the 3-4-5 method of setting out simple rectangular buildings. **(10 marks)**
- b) With the aid of sketches, describe the following methods in site leveling: **(10 marks)**
- (i) Cut and fill
 - (ii) Cut
 - (iii) Fill** **(10 marks)**

Question Five

- a) Briefly describe the **FOUR** forms of wall construction in buildings. **(10 marks)**
- b) Explain the various methods used to prevent moisture penetration in buildings. **(10 marks)**