



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

SPECIAL/SUPPLEMENTARY EXAMINATION

SERIES: JULY 2014

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) State the importance of the Building Code in the design and construction of buildings. (8 marks)

- b) Briefly describe the following preliminary site works:
 - (i) Site Access
 - (ii) Existing services
 - (iii) Adjoining structures
 - (iv) Soil conditions (12 marks)

Question Two

- a) Outline the characteristics of common sub-soil conditions based on the building code (10 marks)

- b) With the aid of a sketch, describe timbering to a loose sub-soil condition (10 marks)

Question Three

- a) With the aid of a sketch describe the surveyor's instrument method of setting out simple rectangular buildings (8 marks)

- b) Briefly describe the **THREE** methods used in site leveling (12 marks)

Question Four

- a) Briefly describe the **FOUR** forms of wall construction in buildings (10 marks)

- b) Briefly describe the following features in wall openings.
 - (i) Arches
 - (ii) Lintils
 - (iii) Sills
 - (iv) Jambs (10 marks)

Question Five

- a) With the aid of a sketch describe the constructions of a solid ground floor. (8 marks)

- b) Briefly describe the process of laying gromolithic floor finish on a concrete background. (12 marks)