



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

**CONSTRUCTION TECHNICIAN II (CTI I12M)**

EBC 1307: CONSTRUCTION TECHNOLOGY III

**END OF SEMESTER EXAMINATION**

**SERIES: APRIL 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

- a) State the **THREE** principal requirements of a fire-place and fuel (6 marks)
- b) Explain procedures adopted when inspecting smoky chimney. (10 marks)
- c) Explain the following:
  - (i) Chimney stack
  - (ii) Purpose of flue lining (4 marks)

### Question Two

- a) Explain the following:
  - (i) Door hanging
  - (ii) Fixing timber skirting (6 marks)
- b) State **FOUR** reasons for using suspended ceiling. (4 marks)
- c) With the aid of a sketch, briefly describe the construction of open ceiling. (10 marks)

### Question Three

- a) State the principle factors influencing the use of steel and concrete framed structure materials. (6 marks)
- b) With the aid of sketches, briefly explain the following elements of steel stanchion parts.
  - (i) Slab or bloom base
  - (ii) Stanchion cap
  - (iii) Stanchion cap
  - (iv) Stanchion splice
  - (v) Beam to stanchion connection (14 marks)

### Question Four

- a) State **SIX** requirements of form-work. (6 marks)
- b) With the aid of a sketch, describe typical beam form work. (8 marks)
- c) State **SIX** building code requirement of walls. (6 marks)

### Question Five

- a) State the functions of cladding. (6 marks)
- b) State the factors considered when designing panel (6 marks)
- c) With the aid of sketch, briefly describe concrete cladding panel. (8 marks)