



**THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE**

**(A Constituent College of JKUAT)**

(A Centre of Excellence)

# **Faculty of Engineering & Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

**DIPLOMA IN BUILDING & CIVIL ENGINEERING**

EBC 1119: BUILDING TECHNOLOGY IV

**SPECIAL/SUPPLEMENTARY EXAMINATION**

**SERIES: OCTOBER 2012**

**TIME: 2 HOURS**

**Instructions to Candidates:**

You should have the following for this examination

- *Answer Booklet*

- *Scientific Calculator*

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 (20 Marks)**

- a) State **EIGHT** the functional requirements of walls. **(8 marks)**
- b) (i) Briefly describe the construction of reinforced concrete walls.  
(ii) For 1b (i) show the arrangement of bars at: - return wall.  
- Closing at end of wall. **(12 marks)**

**Question Two (20 Marks)**

- a) Briefly describe the construction of panel walling. **(8 marks)**
- b) With the aid of sketches, describe the construction of plasterboard partition. **(12 marks)**

**Question Three (20 Marks)**

- a) With the aid of a sketch, describe dry lining partition (timber stud partitions) **(10 marks)**
- b) With the aid of sketches describe the following methods of strutting timber joists of suspended timber floors.  
i) Solid strut  
ii) Herring bone strutting **(10 marks)**

**Question Four (20 Marks)**

- a) With the aid of a sketch, describe the following types of facings.  
i) Brick facing  
ii) Marble stone **(14 marks)**
- b) State **SIX** functional requirements of formwork. **(6 marks)**

**Question Five (20 Marks)**

With the aid of sketches, describe the following types of form-work.

- a) Beam formwork **(10 marks)**
- b) Slab formwork **(10 marks)**