



**THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE**

(A Constituent College of JKUAT)

# **Faculty of Engineering & Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

**DIPLOMA IN BUILDING & CIVIL ENGINEERING  
[Institutional Based Programmes]**

EBC 2323: BUILDING TECHNOLOGY V

**END OF SEMESTER EXAMINATION**

**SERIES: DECEMBER 2012**

**TIME: 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 **THREE** printed pages

**Question One (30 marks)**

- a) Explain **TWO** methods of maintaining building. **(8 marks)**
- b) State **FOUR** reasons for maintaining buildings. **(4 marks)**
- c) Outline the procedure of writing a maintenance survey report. **(8 marks)**

**Question Two (20 marks)**

- a) State **FIVE** factors that will encourage fire in a building. **(5 marks)**
- b) Define the following terms related to fire.
  - (i) Fire grading
  - (ii) Fire load
  - (iii) Fire stop
  - (iv) Fire protection
  - (v) Fire intensity **(5 marks)**
- c) Explain the uses of fire fighting equipments. **(10 marks)**

**Question Three (20 marks)**

- a) Explain the following defects in a lecture hall.
  - (i) Dead spots
  - (ii) Formation of echoes
  - (iii) Reverberation **(10 marks)**
- b) Explain the following modes of sound transmission.
  - (i) Impact
  - (ii) Air born **(6 marks)**
- c) Define the following:
  - (i) Reverberation time
  - (ii) Absorbent **(4 marks)**

**Question Four (20 marks)**

- a) Explain the properties of the following thermal insulating materials.
  - (i) Quits
  - (ii) Boards
  - (iii) Insulating plaster
  - (iv) Loose fills
  - (v) Light weight concrete **(10 marks)**
- b) Define the following:

- (i) Surface resistance
  - (ii) Thermal resistance
  - (iii) Thermal resistivity
  - (iv) Thermal conductivity
- (10 marks)**

**Question Five (20 marks)**

- a) With the aid of sketches, describe the construction of a car park. **(10 marks)**
  
- b) Explain the following:
  - (i) Land scaping
  - (ii) Fencing

**(10 marks)**