



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Engineering & Technology

DEPARTMENT OF CIVIL AND BUILDING ENGINEERING

HIGHER DIPLOMA IN CONSTRUCTION

**EB 3134 : CONSTRUCTION TECHNOLOGY
AND SERVICES III**

END OF SEMESTER EXAMINATIONS

APRIL/MAY 2010 SERIES

TIME: 2 HOURS

Instructions to Candidates

You should have the following for this examination:

- Answer booklet
- Calculator
- Drawing instruments

This paper consists of **FIVE** Questions **ONE** in Section , **A** and **FOUR** in Section **B**. Answer any **THREE** Questions choosing **ONE** from Section **A (COMPULSORY)** and any **TWO** from Section **B**.

Questions in Section **B** carry **30 Marks** and Section **B** carry **20 Marks** each. Maximum marks for each part of a question are as shown.

SECTION A - Compulsory (30 Marks)

Question ONE

- (a). Briefly describe the Building code requirements in the design of Window openings. **(6 Marks)**
- (b). Using sketches describe the construction of timber casement window. **(10 Marks)**
- (c). Describe the construction of fire resisting doors and frames. **(9 Marks)**
- (d). State **FIVE** advantages of revolving doors compared to sliding doors. **(5 Marks)**

Section B - Answer any TWO Questions (20 Marks)

Question TWO

- (a). Describe the classification of paints. **(6 Marks)**
- (b). Describe the painting system. **(9 Marks)**
- (c). State any **FIVE** common paint defects. **(5 Marks)**

Question THREE

- (a). Briefly explain the building code design requirements for stairs. **(5 Marks)**
- (b). Using sketches describe the following staircase layout arrangements:
 - (i). Straight flight stairs
 - (ii). Quarter turn stairs
 - (iii). Dog leg stairs**(12 Marks)**
- (c). Using a sketch describe the fixing of balustrade to concrete stairs. **(3 Marks)**

Question FOUR

- (a). State **FOUR** requirements in the selection of Industrial floor finishes. **(6 Marks)**
- (b). Briefly describe the laying of Terrazzo floor finish to concrete floor background. **(8 Marks)**
- (c). State **FOUR** advantages of use of ramps over staircase. **(6 Marks)**

Question FIVE

- (a). State **FIVE** factors to consider in the selection of a particular type of wall finishes. **(5 marks)**
- (b). Describe the procedure of fixing ceramic tiles to a concrete block wall surface. **(9 Marks)**
- (c). State the precautions to be observed during the ceramic tiling procedure. **(5 Marks)**