



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

Faculty of Engineering & Technology

DEPARTMENT OF CIVIL AND BUILDING ENGINEERING

DB/DC/DA (Part II's)

SEMESTER I EXAMINATIONS

APRIL/MAY 2010 SERIES

BUILDING TECHNOLOGY II

TIME: 3 HOURS

Instructions to Candidates

You should have the following for this examination:

- Answer booklet
- Scientific Calculator

This paper consists of **FIVE** Questions.

Answer **THREE** Questions.

Question **ONE** is **COMPULSORY**.

Maximum marks for each part of a question are as shown.

Question ONE

- (a). (i). With the aid of a sketch, outline the working of a fire place.
(ii). State **THREE** causes which may reduce the efficiency of a chimney. **(15 Marks)**
- (b). Outline the procedure of hanging a casement window. **(10 Marks)**
- (c). Sketch a rubber wall. **(5 Marks)**

Question TWO

- (a). State **THREE** advantages of each of the following:
- (i). Load bearing wall structures
(ii). Framed structures
(iii). Pre-cast concrete units **(9 Marks)**
- (b). State **FIVE** requirements of a formwork. **(5 Marks)**
- (c). Outline the procedure of fixing a wooden skirting. **(6 Marks)**

Question THREE

- (a). Differentiate the following;
- (i). Solid ground floor from upper floor.
(ii). First carpenter's fixing from 2nd carpenters fixing.
(iii). Masonary wall from monolithic walls.
(iv). Curtain wall from cladding.
(v). Painting from plastering. **(10 Marks)**
- (b). Sketch and label the parts of a self centering upper floor. **(10 marks)**

Question FOUR

- (a). Describe the construction of a reinforced concrete wall. **(10 Marks)**
- (b). Sketch and label the connection of a stanchion to a stanchion using bolts and nuts. **(10 Marks)**

Question FIVE

- (a). Sketch and label the parts of a typical splice detail for pcc portal frame. **(10 Marks)**
- (b). Outline the procedure of constructing a reinforced concrete column base. **(10 Marks)**