



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). Sketch and label the parts of a fireplace. **(8 Marks)**
- (ii). State **FOUR** causes of failure of a chimney. **(4 Marks)**
- (b). With the aid of a sketch, outline the procedure of door hanging. **(8 Marks)**
- (c). With the aid of a sketch, outline the construction of a cavity wall. **(10 Marks)**

Question TWO

- (a). (i). State **SIX** advantages of framed structures.
- (ii). State the **FOUR** design principles of framed structures. **(10 Marks)**
- (b). Sketch a section and label the parts of a formwork to a beam. **(10 Marks)**

Question THREE

- (a). (i). Differentiate between: self-centering upper floor from non-self-centering upper floor.
- (ii). With the aid of sketches outline the construction of a self centering upper floor. **(16 Marks)**
- (b). Sketch and label the parts of a flint rubble wall finishing. **(4 Marks)**

Question FOUR

- (a). Sketch and label a boxed framed structure. **(6 Marks)**
- (b). State the **FOUR** painting techniques. **(6 Marks)**

Question FIVE

- (a). (i). State **FOUR** advantages of pre-cast units in construction.
- (ii). State **FOUR** areas in construction where pre-cast units may be used. **(8 Marks)**
- (b). (i). Differentiate, cladding from curtain walling.
- (ii). With the aid of a sketch, show the connection of glass to a beam in curtain walling. **(12 Marks)**