THE TECHICAL UNIVERSITY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

DIPLOMA IN ARCHITECTURE (DA 12M)
DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBC 12M)

EBC 2515: BUILDING TECHNOLOGY II

SPECIAL/SUPPLEMENTARY EXAMINATION
SERIES: FEBRUARY 2013
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

a) With the aid of a sketch, outline the working of a fire place. **(10 marks)**

b) State **FIVE** causes of failure of a chimney. **(5 marks)**

c) State the use of the following in a fire place:
- **(i)** Throat
- **(ii)** Hearth
- **(iii)** Flue
- **(iv)** Fire back
- **(v)** Gathering **(5 marks)**

Question Two

a) With the aid of a sketch, outline the fixing of a wooden skirt in a room. **(10 marks)**
b) With the aid of a sketch, explain the process of plastering a block wall. **(10 marks)**

Question Three

a) Differentiate the following:
- (i) Cornice from Skirting
- (ii) Door frame from Door Lining
- (iii) False ceiling from dado rails
- (iv) Plastering from rendering
- **(v)** Carpenter's 2nd fixing from Interior design. **(10 marks)**

b) With the aid of a sketch, explain the construction of a self centering upper floor. **(10 marks)**

Question Four

a) (i) State **FIVE** advantages of framed structures.
(ii) Explain the preparation of a pad foundation for a framed structure. **(10 marks)**

b) Sketch the following in relation to framed structures,
- (i) Gusset base
- (ii) Bloom base
- (iii) Typical PCC
- **(iv)** Splice of a portal frame **(10 marks)**

Question Five

a) With the aid of a sketch describe the construction of a non-self centering upper floor. **(10 marks)**

b) Define the following:
- (i) Cladding
- (ii) Curtain walling

(iii) Facings
(iv) Precast units
(v) Metal lath **(10 marks)**