



TECHNICAL UNIVERSITY OF MOMBASA
**Faculty of Engineering &
Technology**

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBC 13J)

EBC 2104: ENGINEERING DRAWING II

SPECIAL/SUPPLEMENTARY EXAMINATION
SERIES: OCTOBER 2013
TIME ALLOWED: 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

a) (i) Briefly explain the need for building designers to comply with the building code by-laws. **(4 marks)**

(ii) Explain the primary functions of the following in a building:

- Door
- Window
- D.P.C
- Wall
- Foundations

(10 marks)

b) With the aid of sketches, illustrate the symbols for the following materials in section:

(i) concrete

(ii) unwrot timber

(iii) glass (large section)

(6 marks)

Question Two

a) Write in full the following abbreviated terms as applied in building training:

(i) w.c

(ii) S.V.P

(iii) V.R.C

(iv) F.F.L

(v) V.R.C

(5 marks)

b) With the aid of sketches illustrate the following on plan:

(i) Double door with a double swing

(ii) Double bowl, double drain kitchen sink

(iii) Two way switch

(iv) Switched socket outlet

(v) Water closet

(10 marks)

c) Explain the procedure to be followed when determining the size of a particular room in a residential building. **(5 marks)**

Question Three

Briefly outline the procedure for the approval of building plans by the local authorities in Kenya.

(20 marks)

Question Four

To a scale of 1:10, draw the front elevation and a vertical section of a typical 2100 x 900mm framed, ledged and match-boarded timber door **(20 marks)**

Question Five

An open-well stair case is required for a commercial building. The following information relates to the stairs:

- (i) Width of flight = 1200mm
- (ii) Size of trade = 300mm
- (iii) Waist = 150mm
- (iv) Storey height = 4500mm

To a scale of 1:20, draw a cross-section of the stair case from the ground floor to the first floor level.
(20 marks)