



THE TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF BUILDING & CIVIL ENGINEERING

DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBC 10B)
DIPLOMA IN ARCHITECTURE (DA 10B)

EBC 2131: ENGINEERING DRAWING I

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 question **ONE (COMPULSORY)** and any other **TWO** questions

Maximum marks for each part of a question are as shown

This paper consists of **TWO** printed pages

Question One (Compulsory)

Drawing in figure 1 shows details of a V-block. Draw full-size using 1st angle projection, the following views.

- a) A plan
- b) A front elevation
- c) An end elevation

Fully dimension the drawing

Arrow A points to the end view while

Arrow B points to the plan view

(30 marks)

Question Two

Figure 2 shows two orthographic views of a block. Draw full size, the isometric view of the block, with point X in the foreground. **(20 marks)**

Question Three

- a) Show the conventional symbols representing both first and third angle projections. **(4 marks)**
- b) Construct a tangent to a circle of diameter 60mm **(4 marks)**
- c) Figure 3 shows two views in orthographic projection. Draw a pictorial view of the project in oblique cabinet method. **(12 marks)**

Question Four

Make free hand pictorial sketches of any four of the following hand tools found in building and civil engineering workshop.

- a) Flat screw – driver
- b) Star screw – driver
- c) Round file
- d) Hand drill
- e) File handle
- f) Painting brush

(20 marks)

Question Five

- a) Draw the surface development of the right pyramid shown in figure 4 (a) below. **(10 marks)**
- b) If the pyramid in figure 4(a) is now cut obliquely as shown in figure 4(a), draw:
 - (a) The true shape of cut on Front Elevation
 - (b) Plan
 - (c) Front elevation **(10 marks)**

