



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

DEPARTMENT OF BUILDING & CIVIL ENGINEERING
DIPLOMA IN BUILDING & CIVIL ENGINEERING (DBCE)

EME 2105: ENGINEERING DRAWING & DESIGN I

END OF SEMESTER EXAMINATION

SERIES: APRIL 2014

TIME ALLOWED: 2 HOURS

Instructions to Candidates:

You should have the following for this examination

- Answer booklet
- Drawing instruments
- Drawing paper

This paper consists of **FIVE** questions. Answer any **THREE** questions of the **FIVE** questions

All questions carry equal marks
Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages

Question One

Figure 2 shows three views of an object in orthographic projection. To a scale of 1:1 construct an isometric drawing of the object with P as the lowest point. **(20 marks)**

Question Two

Use freehand sketches to draw pictorial drawings of the following tools:

- (i) Bench hook
- (ii) Mitre square
- (iii) Bevel square
- (iv) Try square.

(20 marks)

Question Three

Draw a line AB 150mm long and divide it into 7 equal parts in the ratio of 1:2:4. Give the measurement between 2 and 4. **(20 marks)**

Question Four

Construct a regular hexagon with 60mm distance across the corners.

(20 marks)

Question Five

Show graphical representation of the following materials:

- (i) Hardcore
- (ii) Stone
- (iii) Concrete
- (iv) Brick
- (v) Earth

(20 marks)