



TECHNICAL UNIVERISTRY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING

DIPLOMA IN ELECTRICAL & ELECTRONIC ENGINEERING/POWER
ENGINEERING (DEEE 1/DEPE I)

EME 2105: ENGINEERING DRAWING I

END OF SEMESTER EXAMINATION

SERIES: DECEMBER 2014

TIME: 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 **TWO** printed pages

Question One (Compulsory)

- a) Construct a Lombus of sides 60mm (3 marks)
- b) Construct an octagon within a circle of radius 30mm (3 marks)
- c) Construct a tangent from a point P, 30mm from circle of diameter 50mm (3 marks)
- d) Construct an internal tangent to two circles of an equal radii, $R = 50\text{mm}$ and $r = 35\text{mm}$ with centre distance of 100mm. (9 marks)

Question Two

Figure 1 shows a mild steel bracket, draw full size in 1st angle projection.

- a) Front elevation in the direction of Arrow A
- b) End elevation in the direction of arrow B
- c) Plan in the direction of arrow (20 marks)

Question Three

Figure 2, shows two views of a Block in an angle of projection.

- a) State which angle of projection used.
- b) Draw full size the isometric view of the block (20 marks)

Question Four

Draw free hand, pictorial (isometric or oblique) sketches of the following items:

- (i) Horn speaker
- (ii) Combination pliers
- (iii) Long nose priers
- (iv) Side cutler (20 marks)

Question Five

- a) Draw electrical symbols for the following items:
 - (i) Direct current unsteady voltage (2 marks)
 - (ii) Direct current unsteady voltage (2 marks)
 - (iii) Variable resistor (2 marks)
 - (iv) Fixed Resistor (2 marks)
- b) Draw conventional symbols for:
 - (i) First angle projection (2 marks)
 - (ii) 3rd angle projection (2 marks)
- c) Differentiate between isometric and oblique drawing. (6 marks)