



THE MOMBASA POLYTECHNIC UNIVERSITY COLLEGE

(A CONSTITUENT COLLEGE OF JKUAT)

Faculty of Engineering and Technology

DEPARTMENT OF MECHANICAL AND AUTOMOTIVE ENGINEERING

Certificate in Mechanical Engineering (Production Option)
Certificate in Mechanical Engineering (Plant Option)
Certificate in Mechanical Engineering (Automotive Option)
Certificate Mechanical in Chemical Engineering

EME 1105 ENGINEERING DRAWING II

SPECIAL/SUPPLEMENTARY EXAMINATIONS

YEAR 1 SEMESTER II

SERIES: MARCH, 2012

TIME: 2 HOURS

Instructions to Candidates:

You should have the following for this examination:

- Drawing Paper (A2)
- Drawing Instruments
- Scientific Calculator

This paper consists of **FIVE** Questions. Answer Question **ONE (Compulsory)** and any other **TWO** Questions.

Maximum marks for each part of question are as shown.

This paper consists of **THREE printed pages.**

Question ONE

Figure 1 shows a bracket. Draw the following full size:

- (a) Front sectional view along the cutting plane A-A.
- (b) End elevation-arrow E.
- (c) Plan

(30 Marks)

Question TWO

Figure 2 shows a 90° bend. Draw the following:

- (a) Surface development of the bend part marked H.
- (b) True shape of the slanting surface.

(20 Marks)

Question THREE

Figure 3 shows orthographic views of a shaped block. Draw full size, an isometric projection of the block.

(20 Marks)

Question FOUR

Figure 4 shows a front elevation of a right pyramid. Draw the following:

- (a) Surface development of the slanting surface of the pyramid. Start development from the shortest side.
- (b) True shape.

(20 Marks)

Question FIVE

- (a) Sketch the following types of machine screws:
 - (i) Pan head
 - (ii) Counter sink head
 - (iii) Cheese head

(b) Use sketches to illustrate the following terms:

- (i) Chamfer
- (ii) Counterbove
- (iii) Countersink

(c) Write the following abbreviations in full:

- (i) A/F
- (ii) ASSY
- (iii) DRG
- (iv) MIN
- (v) PCD

(20 Marks)