

TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering and Technology

DEPARTMENT OF MECHANICAL AND AUTOMOTIVE ENGINEERING

DIPLOMA IN MECHANICAL ENGINEERING

EME 2108 ENGINEERING DRAWING I

SPECIAL/SUPPLEMENTARY EXAMINATIONS SERIES: MARCH, 2014 TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

- 1. You should have the following for this examination:
 - Answer Booklet
 - Scientific Calculator
 - Drawing Instruments
- 2. This paper consists of **FIVE** Questions.
- 3. Answer Question **ONE** is Compulsory.
 - Answer Question **ONE** and any other **TWO** Questions.
- 4. This paper consists of SIX printed pages.

Question ONE

A machine BRACKET is shown in Figure 1. Draw full size in first angle orthographic projection the following views:

- (a) Sectional front elevation along X X
- (b) Plan

Include SIX major dimensions and symbol of projection.

Question TWO

A template of an anchor arm is shown in Figure 1. Copy the arm showing clearly how the curve centres are obtained. (20 marks)

Question THREE

Figure 3 shows the frustum of a cone. Copy the given view and draw:

- (a) Complete plan
- (b) End elevation from E
- (c) True shape
- (d) Surface development

(20 marks)

(20 marks)

Question FOUR

Two views of a machine bracket are shown in Figure 4. Draw an OBLIQUE view of the bracket taking oblique rules into consideration. (20 marks)

Question FIVE

Two views of a truncated heptagonal base pyramid are shown in Figure 5. Copy the given views and draw:

- (a) Complete plan
- **(b)** End elevation from EE
- (c) True shape
- (d) Surface development

(20 marks)