

### **TECHNICAL UNIVERSITY OF MOMBASA**

## Faculty of Engineering and Technology

# DEPARTMENT OF MECHANICAL AND AUTOMOTIVE ENGINEERING

DIPLOMA IN MECHANICAL ENGINEERING

## EME 2105 ENGINEERING DRAWING I

**END OF SEMESTER EXAMINATIONS** 

**SERIES:** DECEMBER, 2013

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.
- Answer Question ONE is Compulsory.
   Answer Question ONE and any other TWO Questions.
- 4. This paper consists of SIX printed pages.

**Ouestion ONE** 

Figure 1 shows a machine part. Draw full size the following views in Third angle orthographic projection.

- (a) Sectional front elevation along B –B.
- (b) Plan.

Include SIX main dimensions and symbol of projection.

(20 marks)

#### **Question TWO**

A template of a paper gasket for a machine is shown in Figure 2. Construct the gasket showing clearly how the arcs and curves are obtained. (20 marks)

#### **Question THREE**

Three views of a machine bracket are shown in Figure 3. Draw an OBLIQUE view of the bracket taking oblique rules into consideration. (20 marks)

#### **Question FOUR**

A cylindrical chimney is centrally placed at a root top as shown in Figure 4. Copy the given view and draw:

- (a) End elevation from E.
- (b) True face/shape of face A A.
- (c) Surface development of the chimney.

(20 marks)

#### **Ouestion FIVE**

A truncated pentagonal base pyramid is shown in Figure 5. Copy the given views and draw:

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

(20 marks)