



TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Engineering and Technology
Department of Electrical & Electronics engineering
UNIVERSITY EXAMINATION FOR:
Certificate in Electrical & Electronics Engineering
EME 1101 : Engineering Drawing I
END OF SEMESTER EXAMINATION
SERIES: AUGUST 2019
TIME: 2 HOURS
DATE: Pick Date Aug 2019

Instruction to Candidates:

You should have the following for this examination

- *Student I.D. Card & Examination Pass*
- *Answer booklet*
- *Non-Programmable scientific calculator*

This paper consists of **FIVE** questions. Attempt question **ONE** and any other **TWO** questions.

Maximum marks for each part of a question are as shown.

Do not write on the question paper.

Question ONE

Figure 1 shows a V block. Draw in 1st angle projection the following views: **(30 marks)**

- a) Front elevation as shown by arrow C.
- b) An end elevation from arrow A.
- c) A plan shown by arrow B.

Question TWO

- a) Construct an Octagon given the distance across the flats as 40 mm **(3 marks)**
- b) Construct a Heptagon inside a circle of diameter 60 mm. **(3 marks)**
- c) Construct a regular Pentagon given the length of one side as 60 mm. **(6 marks)**
- d) Construct an Internal tangent to two circles of unequal radii. **(8 marks)**

Question THREE

Sketch any two of the following tools found in mechanical engineering workshops:

- a) Engineer's caliper
- b) An anvil
- c) Engineers hand drill

(20 marks)

Question FOUR

Figure 2 shows two views in orthographic projection. Draw the isometric view of the block.

(20 marks)

Question FIVE

Draw free hand, pictorial Isometric sketches of any two of the following Items:

- a) Micrometer screw gauge
- b) Side cutter
- c) Engineer's hand drill

(20 marks)

FIGURES

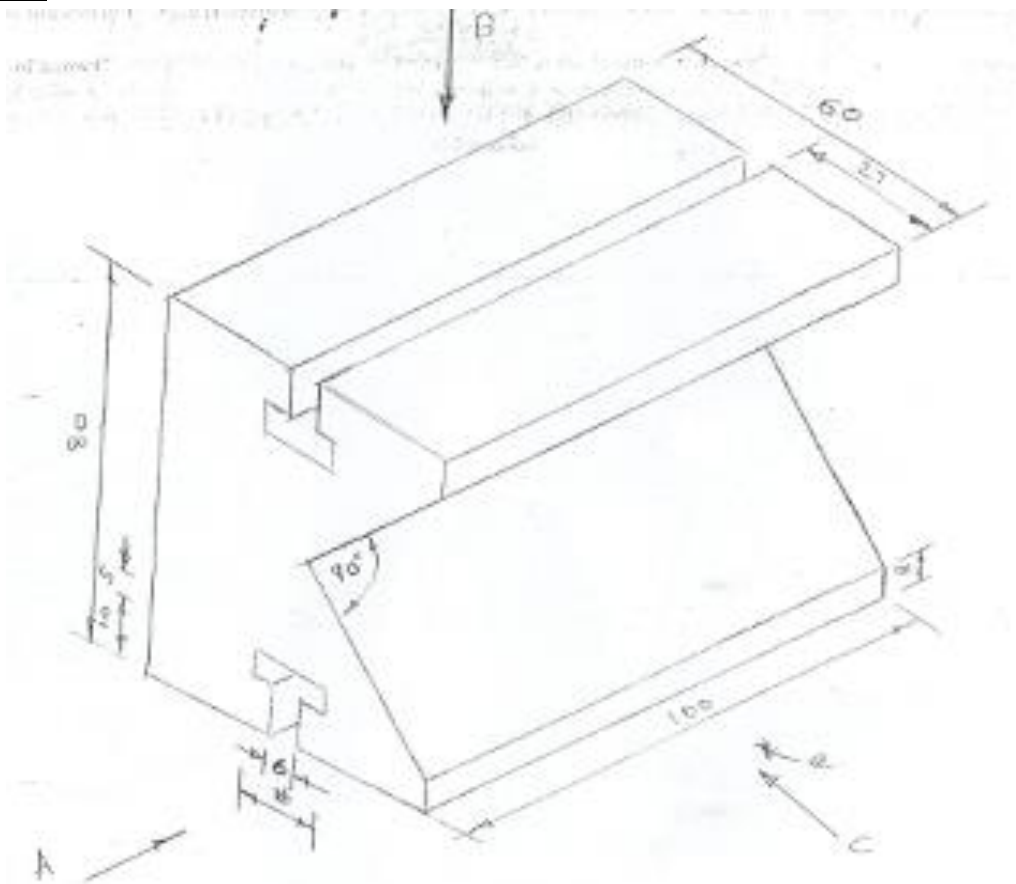


Figure 1

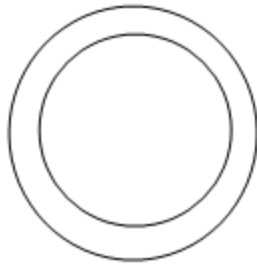


Figure 2