THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA
DIPLOMA IN TECHNICAL EDUCATION EXAMINATION

788 **TECHNICAL DRAWING**
(SUPPLEMENTARY)

Time: 3 Hours **Year: 2020**

Instructions

1. This paper consists of **six (6)** questions.
2. Answer question **one (1)** and any other **three (3)** questions.
3. All drawings should be drawn in a standard paper A_3-size and Question number 1 should be presented in a well labelled title block.
4. Question number 1 carries **forty (40)** marks while the other questions carry **twenty (20)** marks each.
5. All communication devices, programmable calculators and any unauthorised materials are **not** allowed in the examination room.
6. Write your **Examination Number** on every page of your answer booklet(s).



...11mu2020

Scanned with CamScanner

1. Figure 1 shows two views of Machine bracket in First angle projection. Using a full size scale and the same angle of projection, draw:

(a) the front elevation.

(b) the section view B-B.

(c) the section view A-A.

Note: Fillet radii 3. **(40 marks)**

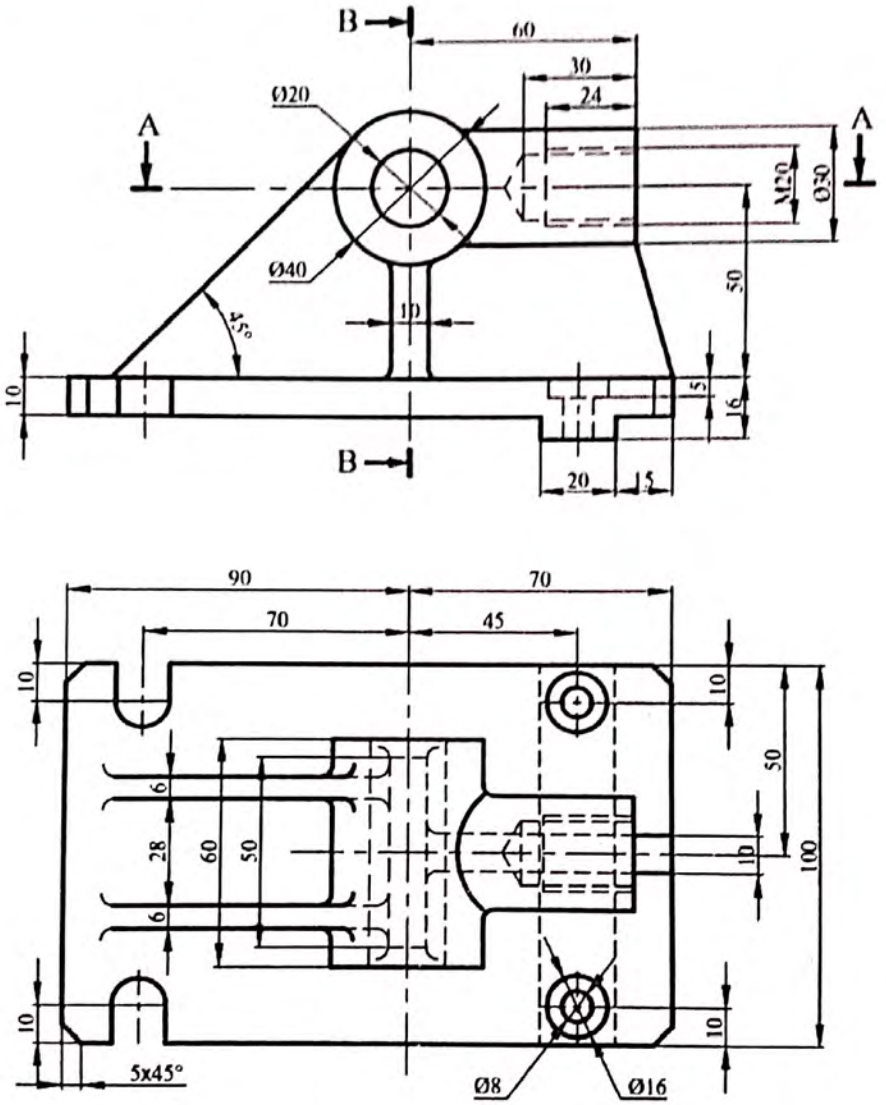
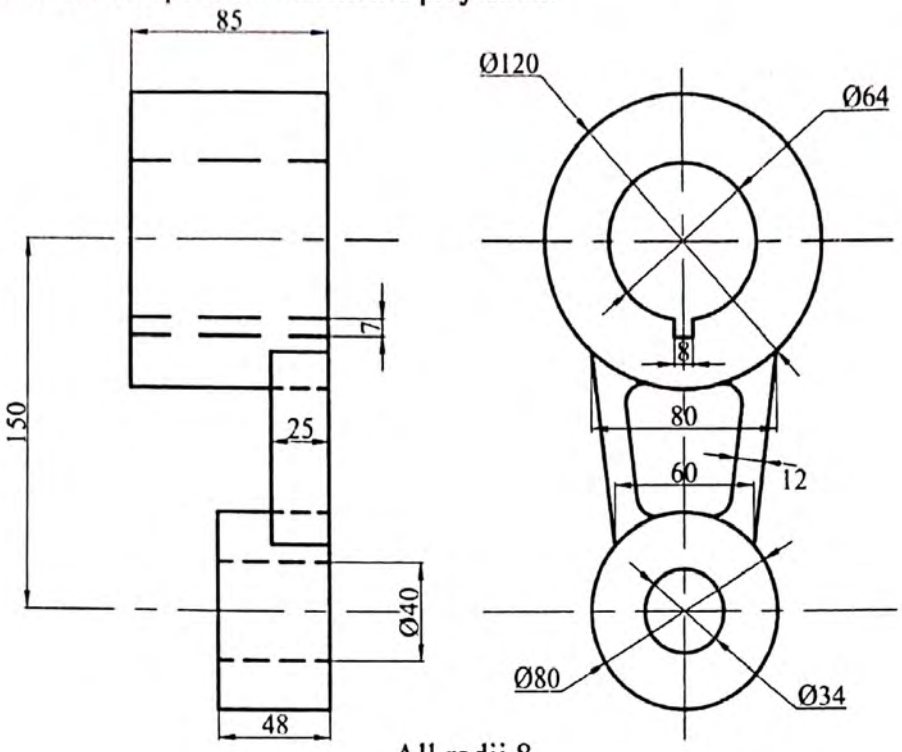


Figure 1

Scanned with CamScanner

2. Figure 2 shows two views of a machine link drawn in orthographic projection. Use a full size scale to draw the component in isometric projection. **(20 marks)**



All radii 8

Figure 2

Scanned with CamScanner

3. Figure 3 shows a link mechanism of a machine. The cranks AB and CD are fixed at A and D respectively. Construct the locus of the point O if the cranks AB and CD will rotate one complete revolution. It is given that: AB = 40, CD = 20, BO = 28. **(20 marks)**

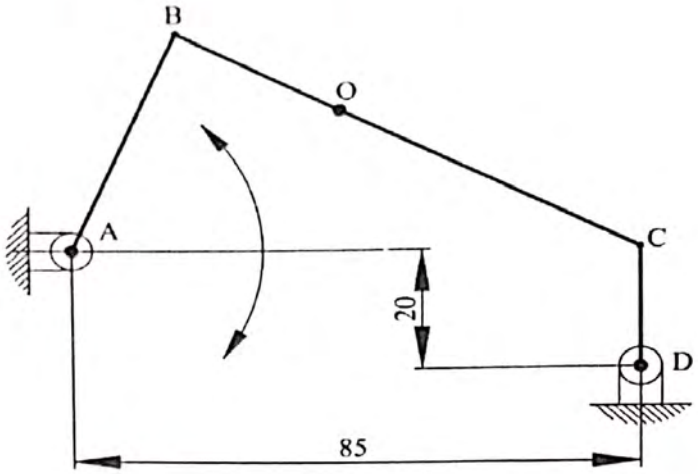


Figure 3

4. Figure 4 shows two views of machine component in first angle projection. Using full size scale and third angle projection draw an auxiliary view of the plan projected at 45°. **(20 marks)**

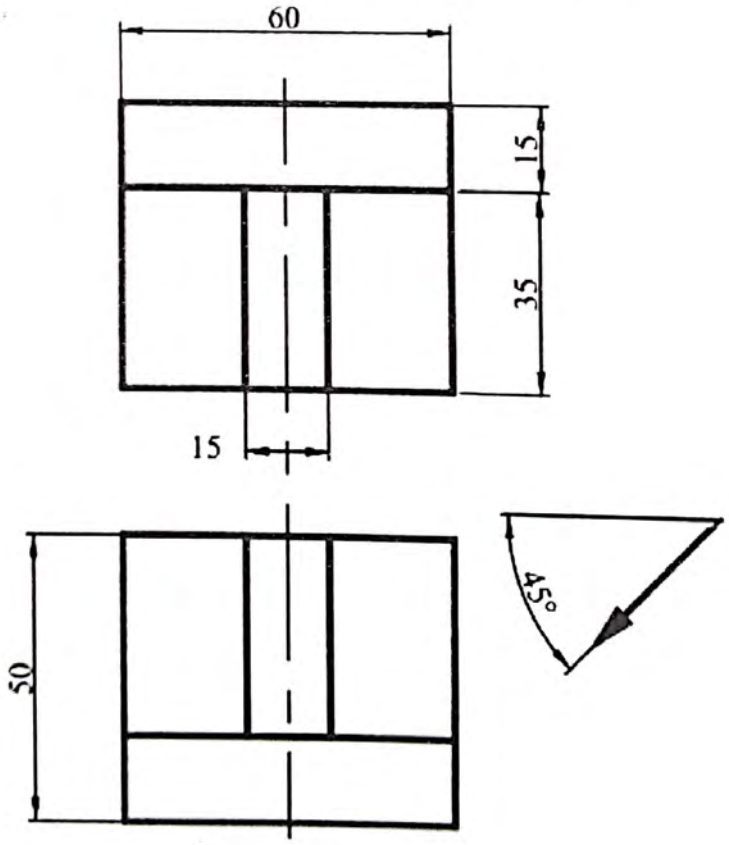


Figure 4

Scanned with CamScanner

5. Figure 5 shows an elevation of a cylinder interpenetrated by cone at right angle. Using full size scale and first angle projection draw:

(a) an intersection curve of the given view.

(b) a plan showing an intersection curve.

(c) an end elevation looking from left side. **(20 marks)**

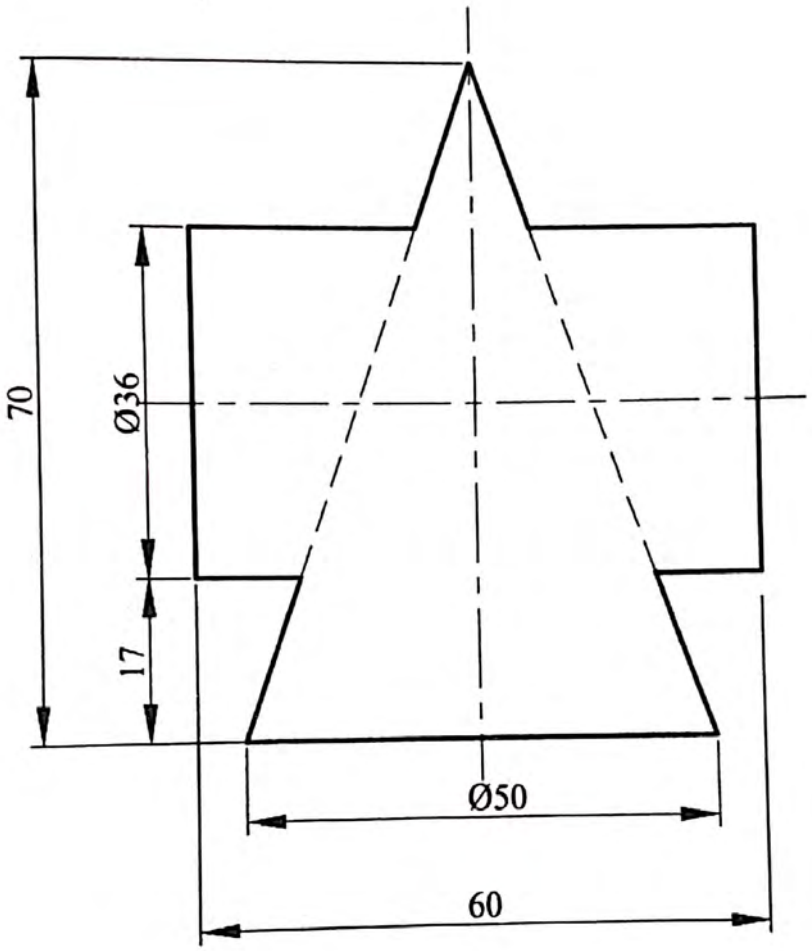


Figure 5

Scanned with CamScanner

6. Figure 6 shows two views of front and plan of the hexagonal pyramid cut on the top and bottom. The views are drawn in first angle projection. Using full size scale, complete the plan and draw the development of the pyramid taking A-A as the cutting plane. **(20 marks)**

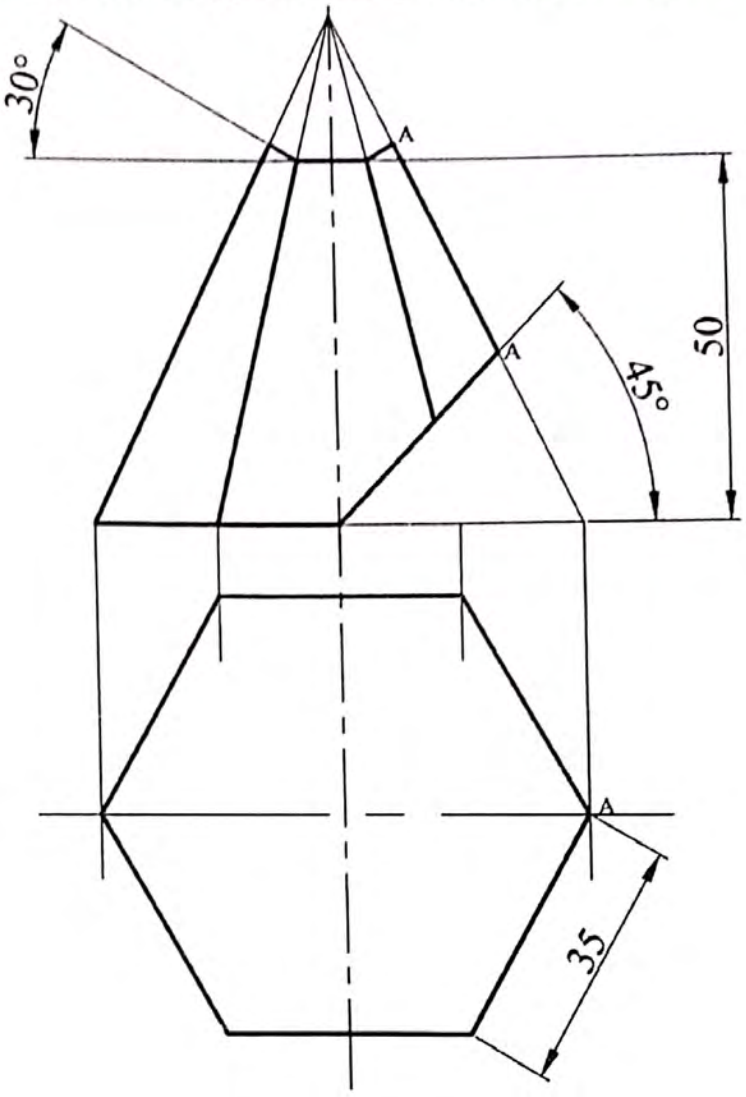


Figure 6

Scanned with CamScanner