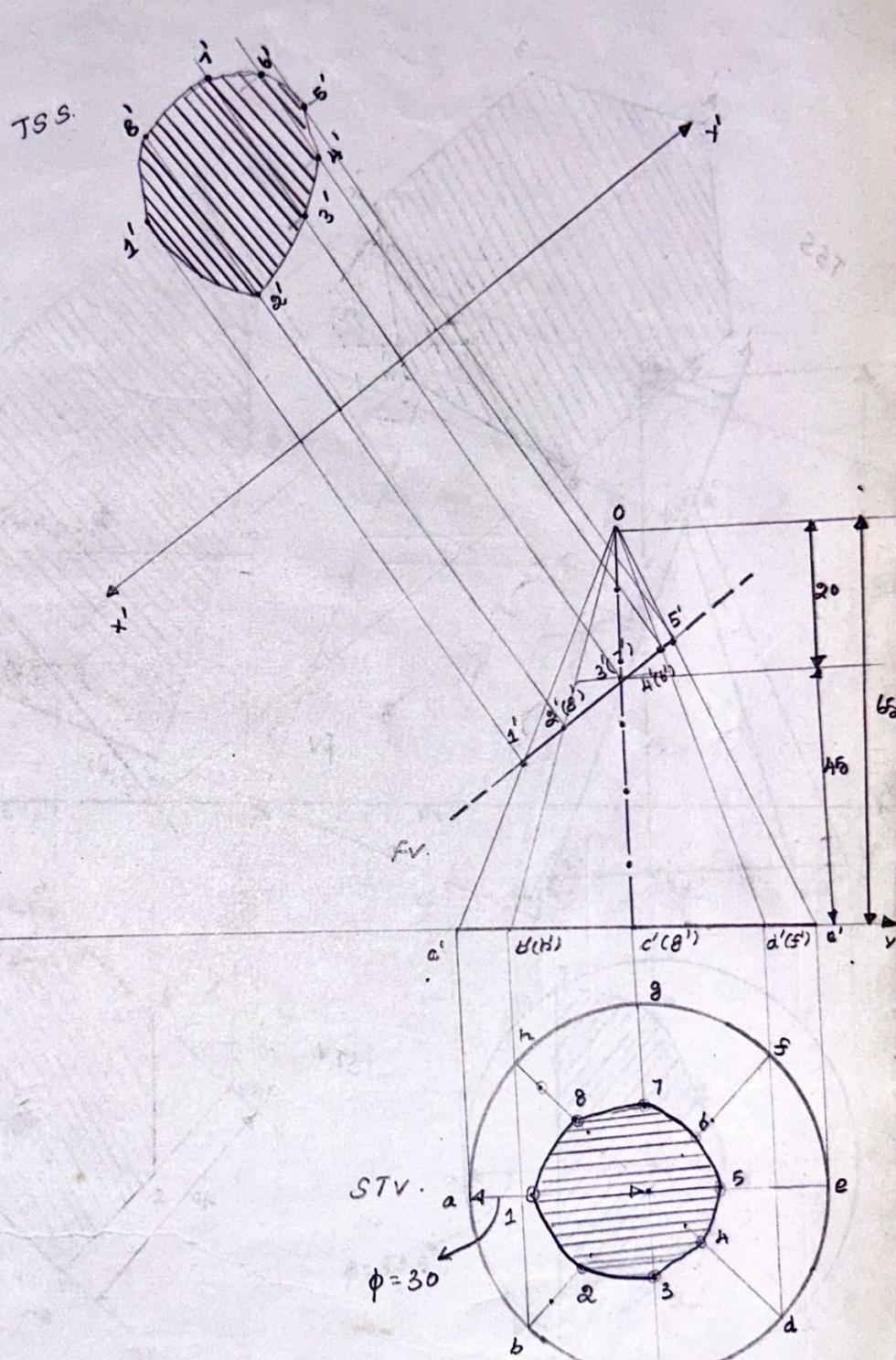


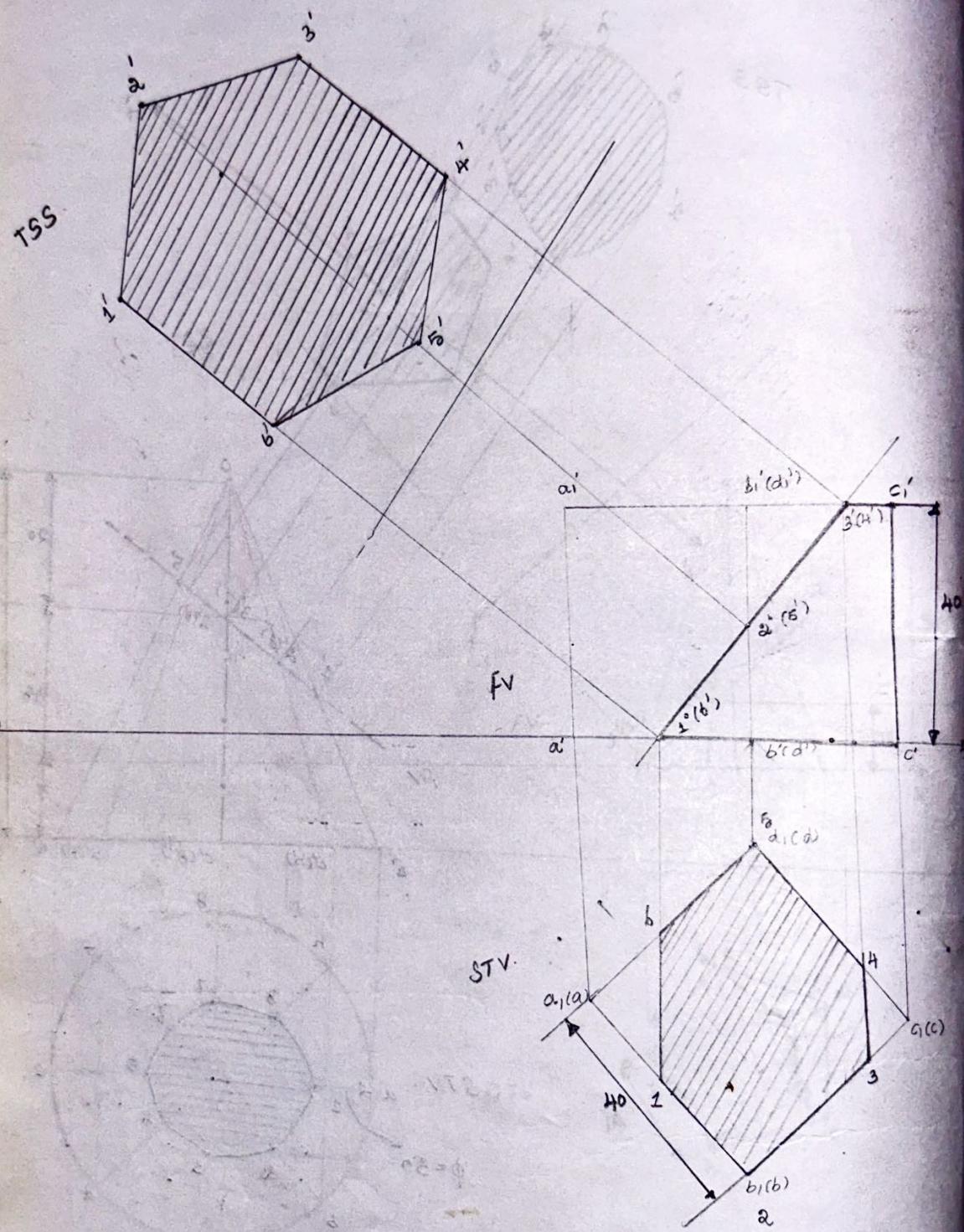
A Cone of base Ø 60mm and height 15mm rest on HP. It is cut by a plane perpendicular to VP and inclined at 45° to H.P. The cutting plane meet the axis at 40mm from the base. Draw proj.



ALL DIMENSIONS ARE IN mm

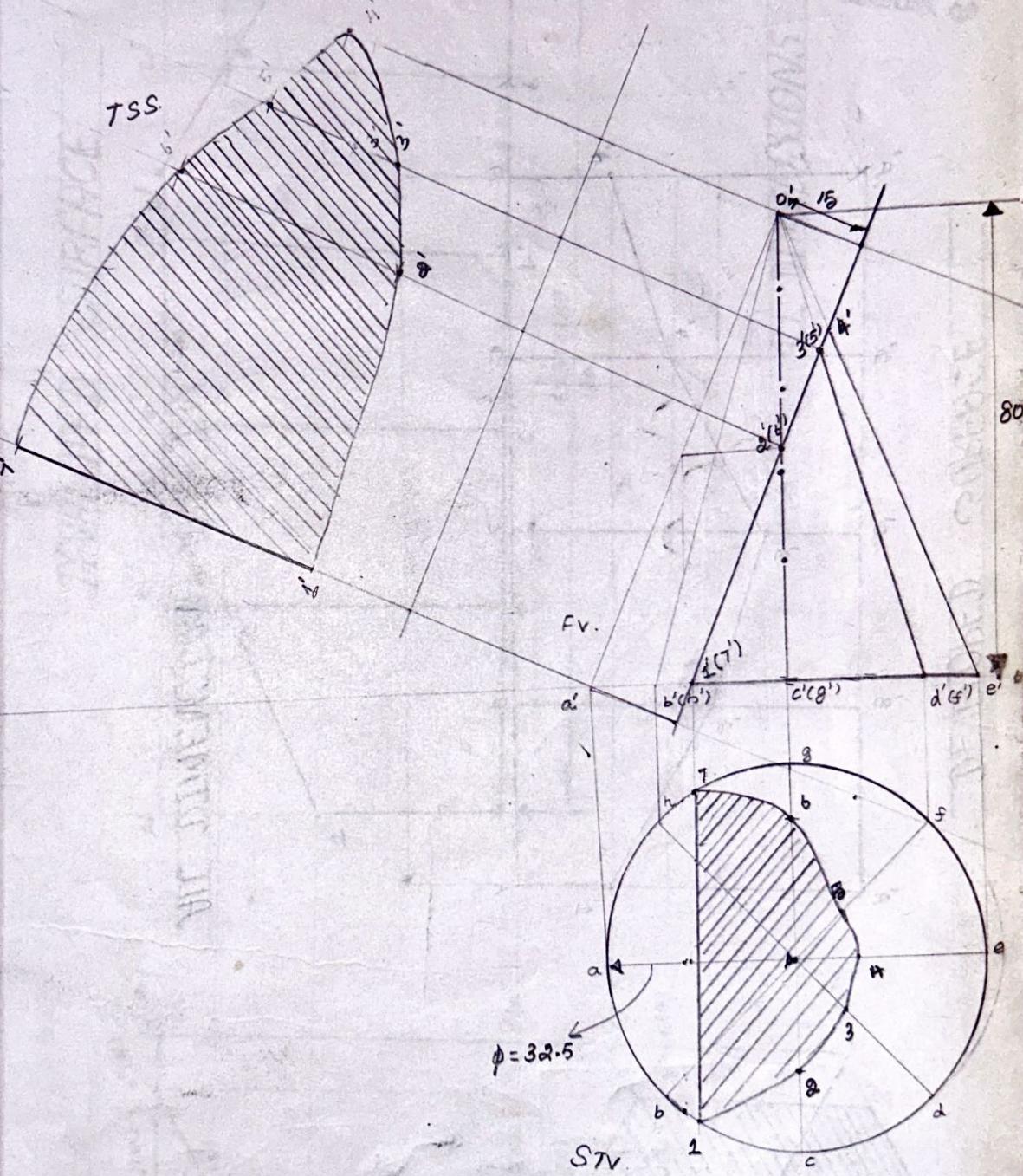
M

Special problem:
 A cube of side 40mm is resting on HP such that two of its base sides are equally inclined to VP. It is cut by a plane 1° to VP and inclined to HP such that true shape of the section is a regular hexagon. Draw the FV, STV, TSS.



ALL DIMENSIONS ARE IN mm

A cone of base diameter 65mm and height 80mm rests on its base on the ground. It is cut by a plane L₁ to V.P. and parallel to one of its extreme generators, 15mm away from it. Draw the F.V., S.T.V. and T.S.S.



ALL DIMENSIONS ARE

IN mm

development

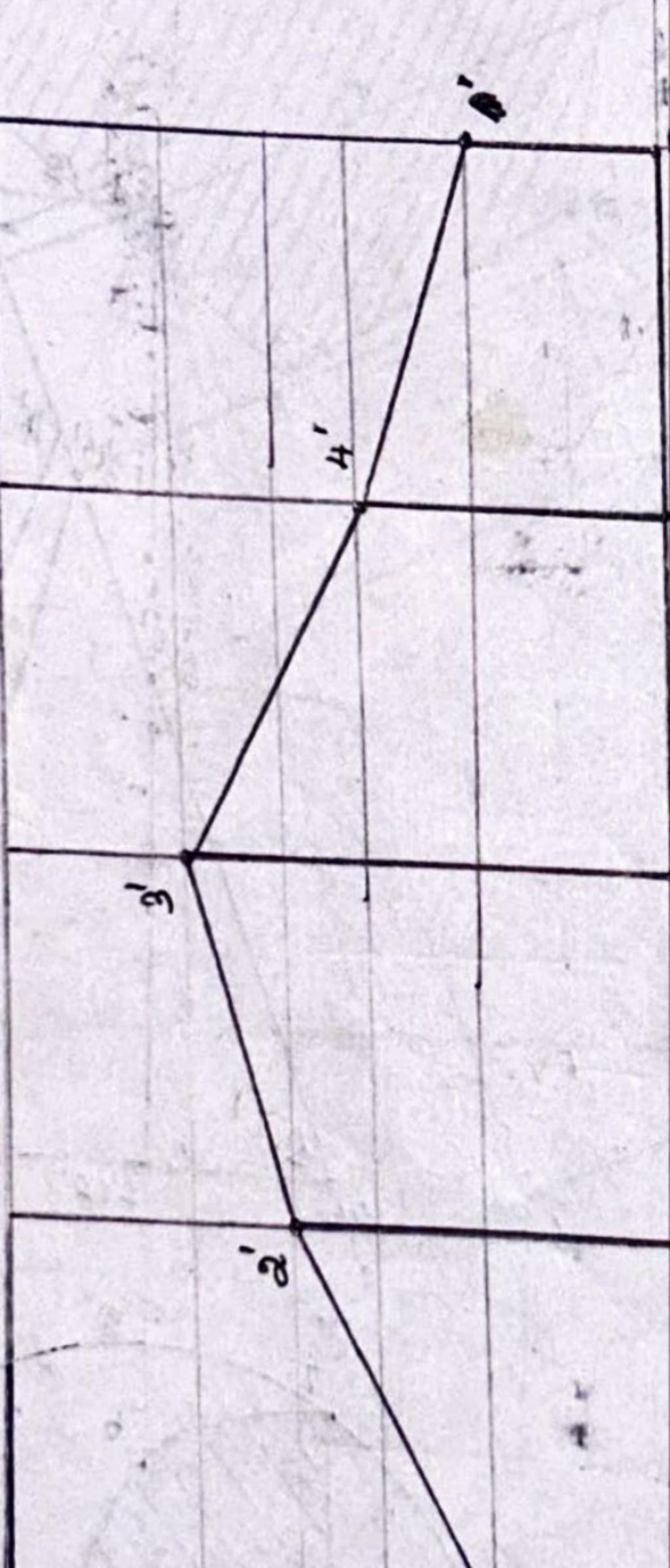
of

Surface

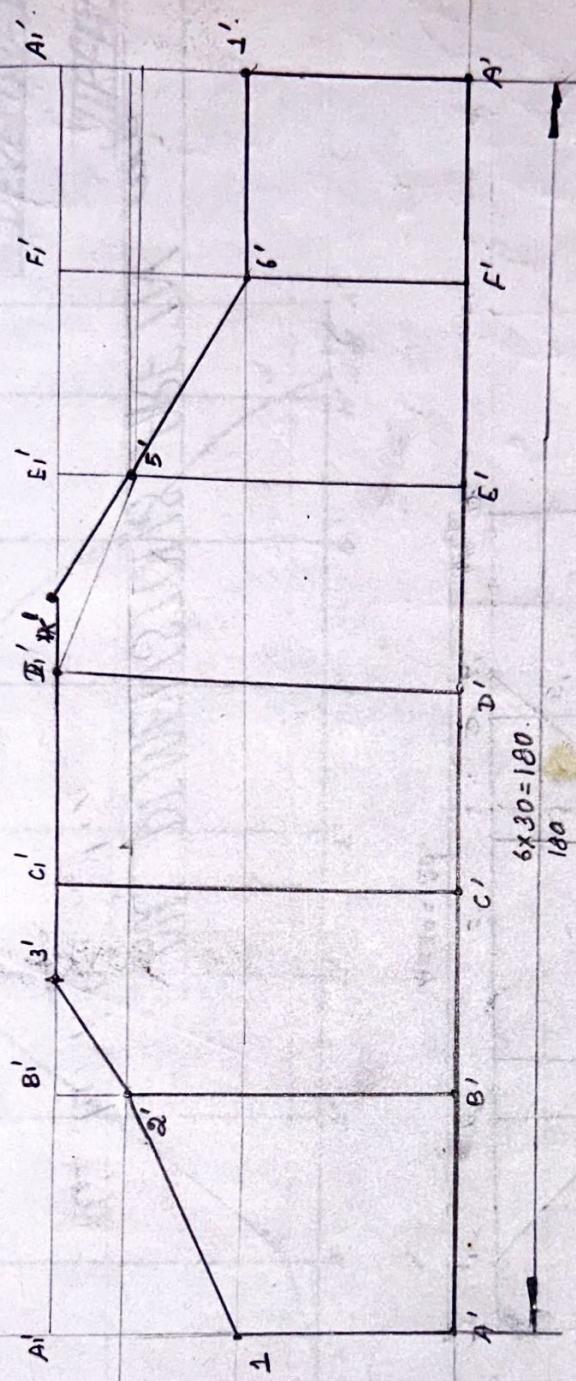
base prism 30x60'

on H.P. one of its
° to V.P. It is cut by

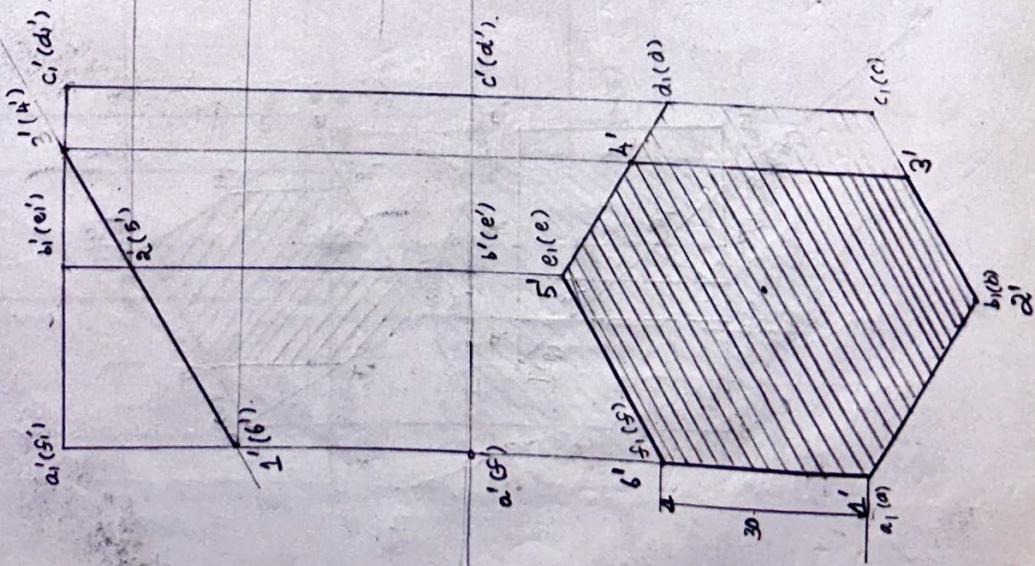
V.P. Bisecting the
al surface of the



DEVELOPED SURFACE



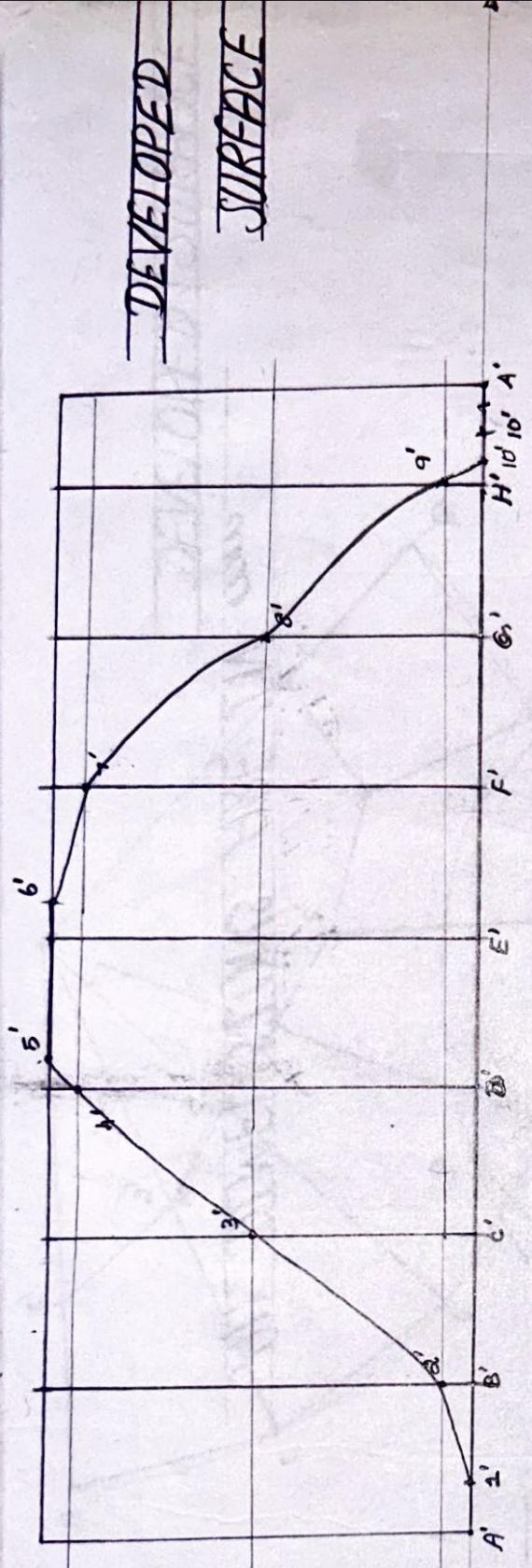
ALL DIMENSIONS ARE IN mm.



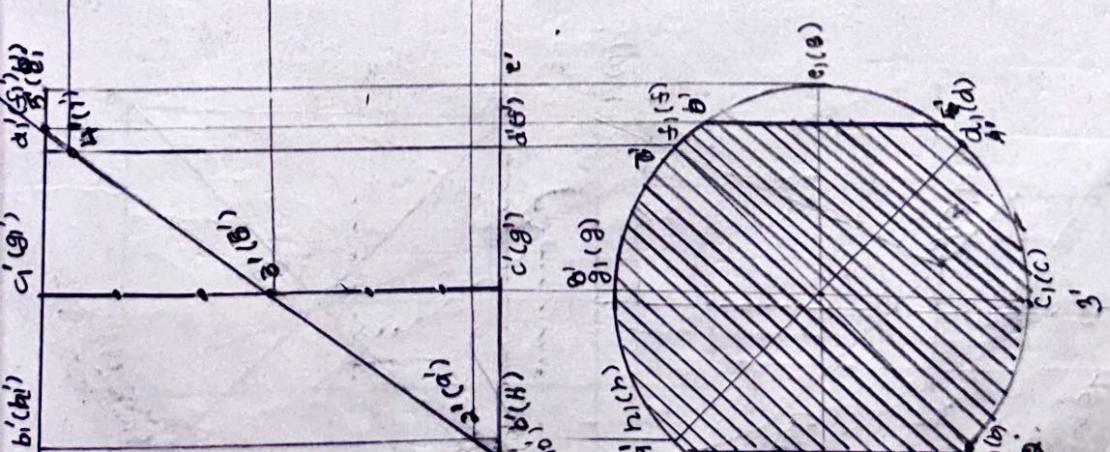


$$4 \times 30 = 120.$$

All dimensions are in mm

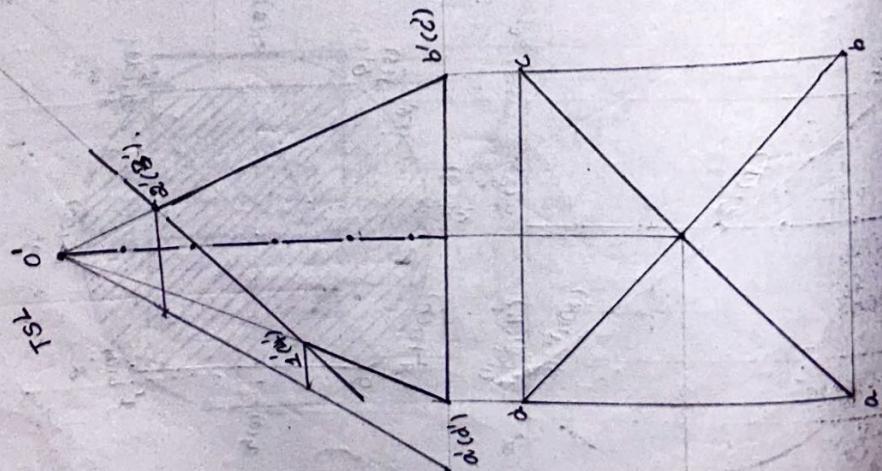
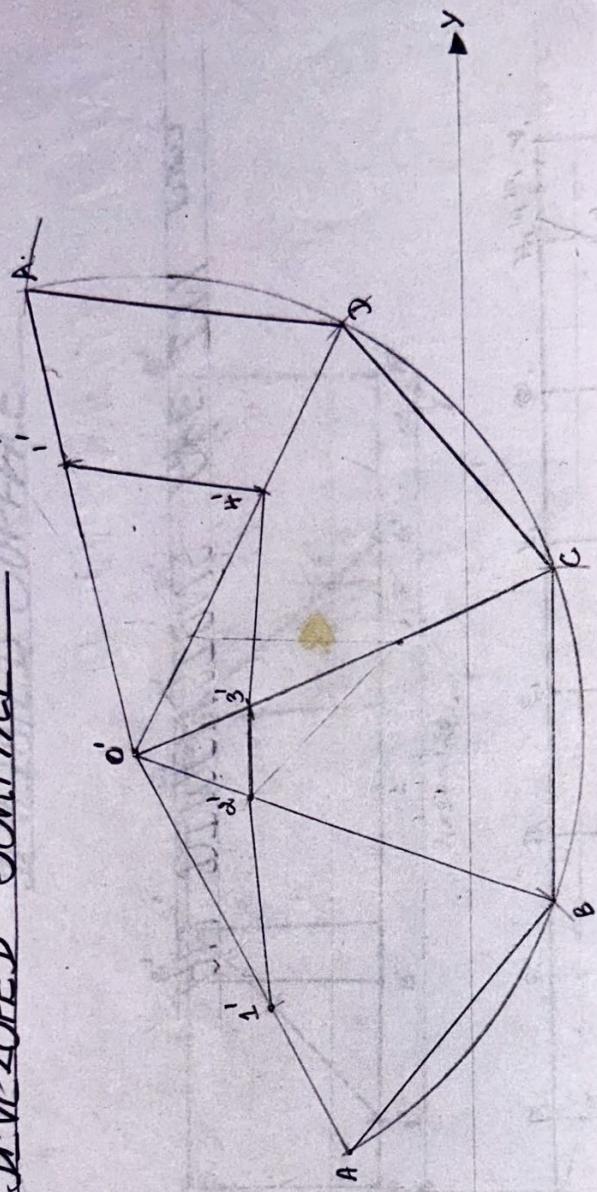


ALL DIMENSIONS ARE IN mm.



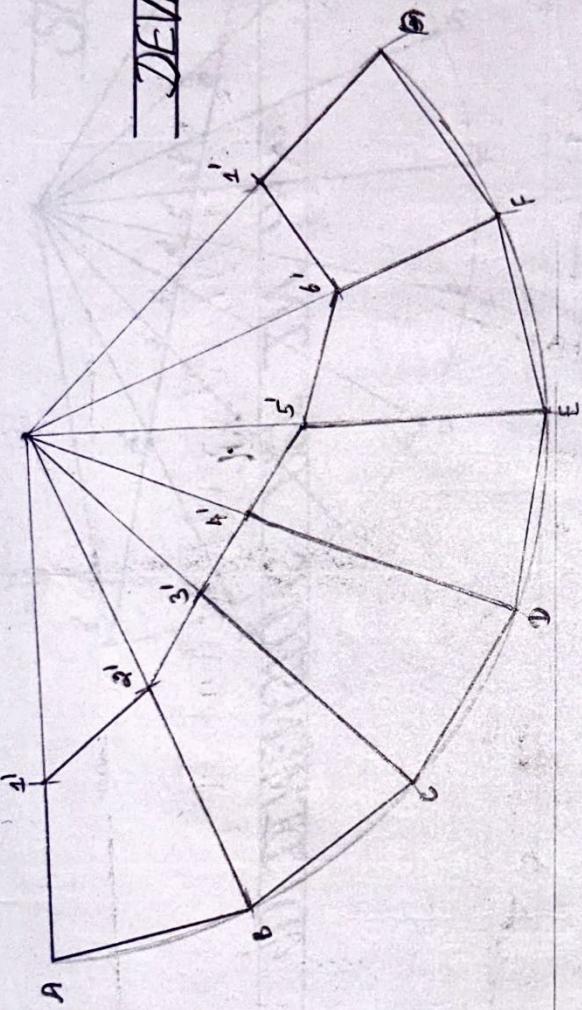
A Square Pyramid of 50x bottom resting with base on H.P. with one of its base side parallel to VP. It is cut by a plane inclined at 45° to H.P. and meet the axis of pyramid from the base, draw the development of pyramid.

DEVELOPED SURFACE

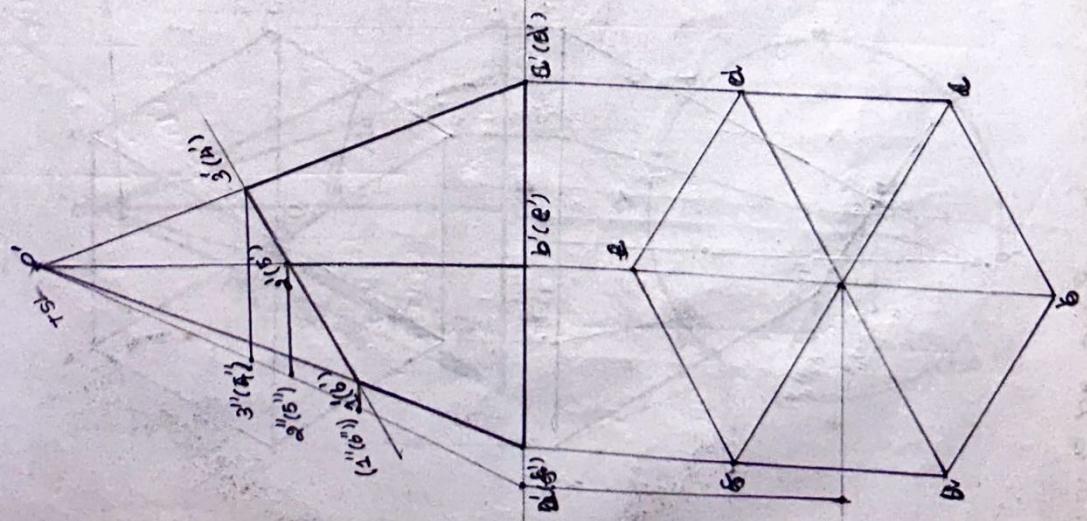


All dimensions are in mm

DEVELOPED SURFACE



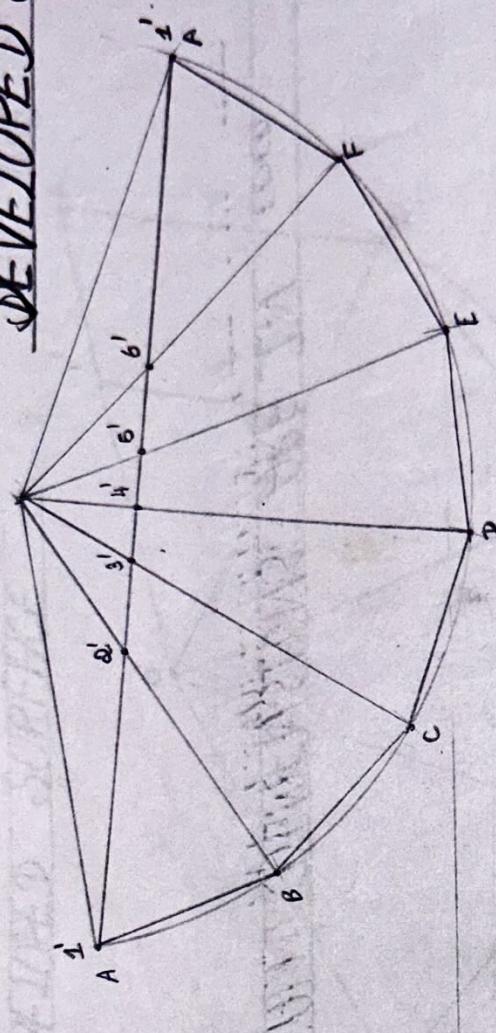
ALL DIMENSIONS ARE IN mm



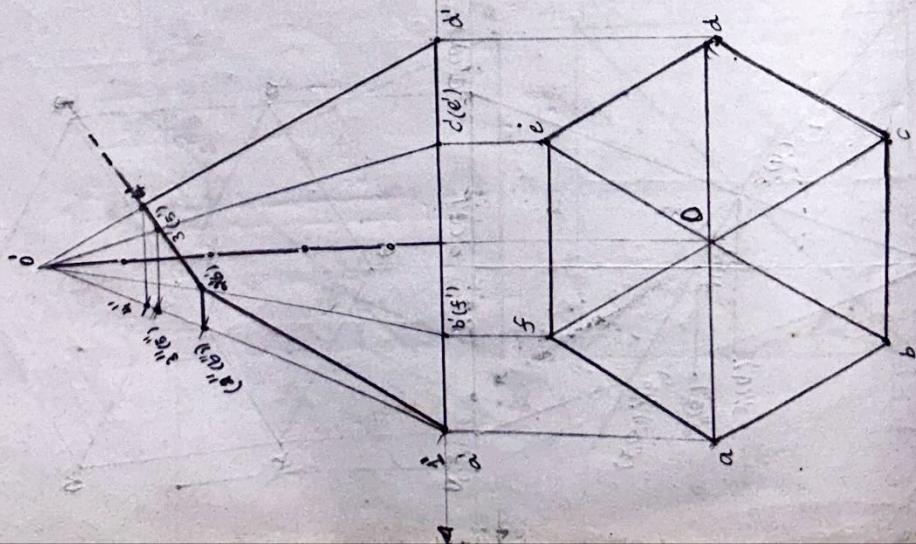
A hexagonal pyramid of base 30 mm and height 60 mm is resting on its base on H.P.

Development of Surface
A hexagonal pyramid of base 30 mm and height 60 mm is resting on its base on H.P. Two parallel plates cover half of the surface. Find the shortest distance between the two plates.

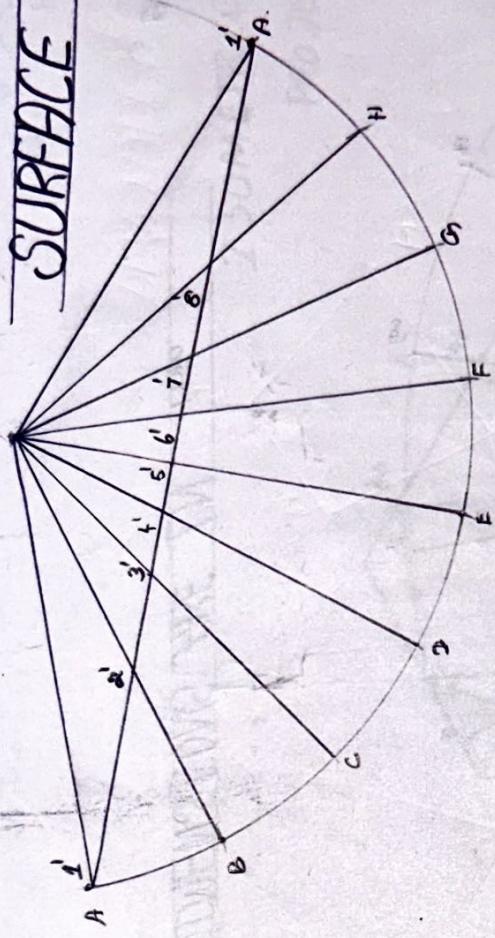
DEVELOPED SURFACE



ALL DIMENSIONS ARE IN mm

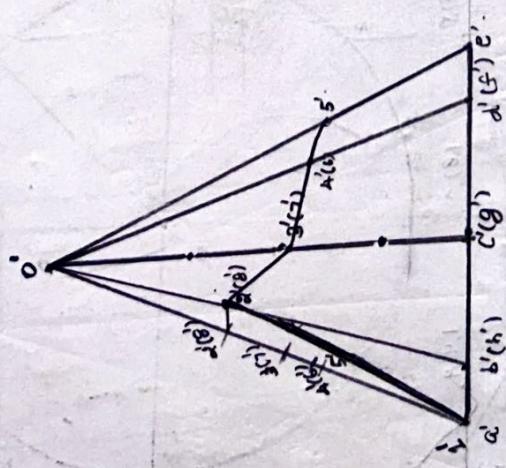
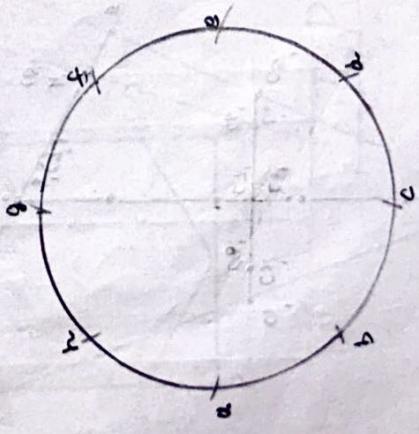


SURFACE DEVELOPMENT

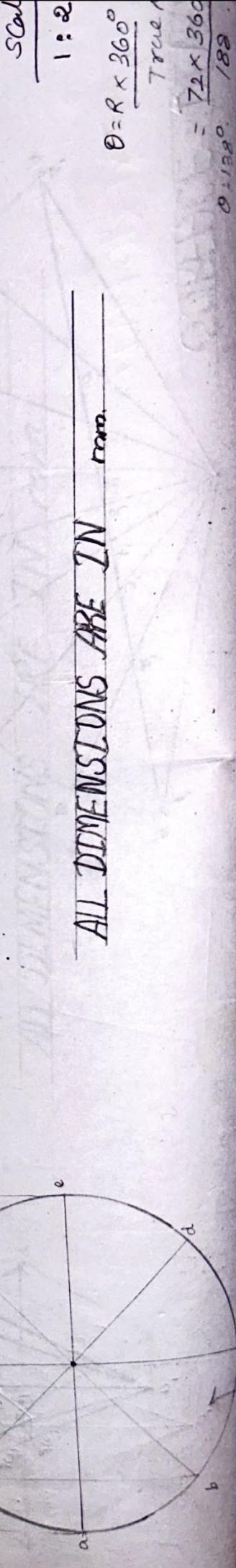
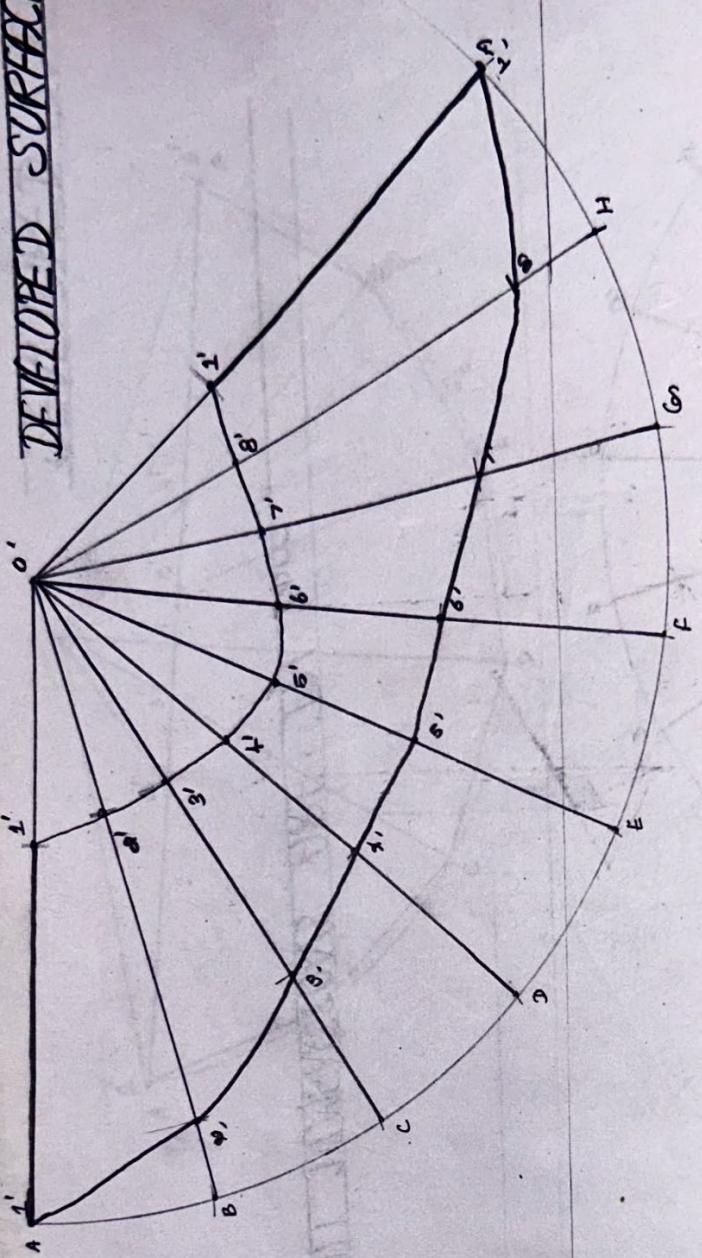


ALL DIMENSIONS ARE IN mm.

DETERMINED SURFACE



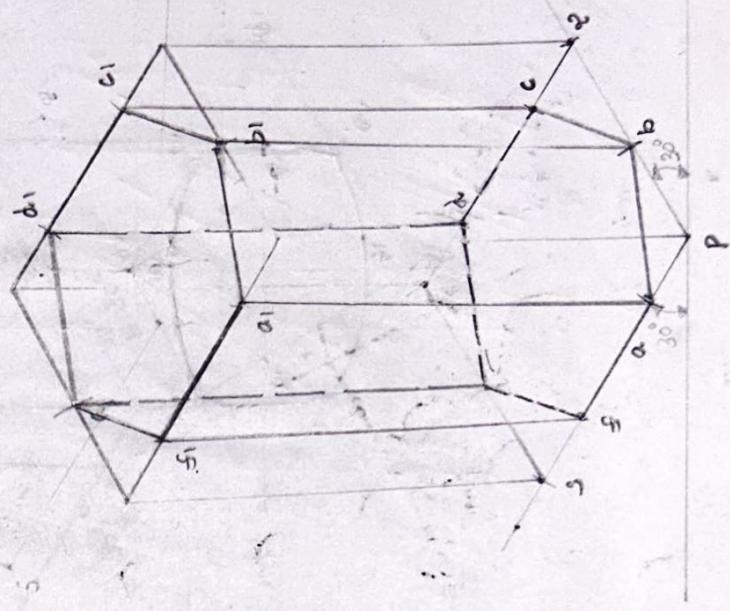
A cone of base diameter 144 mm and height 174 mm is cut by a horizontal plane at a distance of 72 mm from the apex. and another plane parallel to the base. Draw the developed surface of the cone. (use scale 1:2).



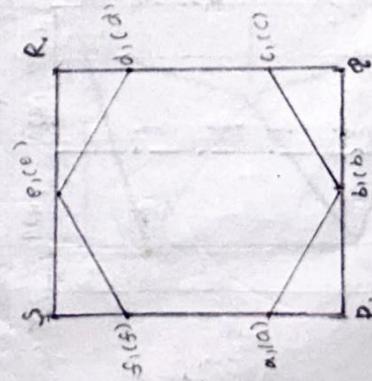
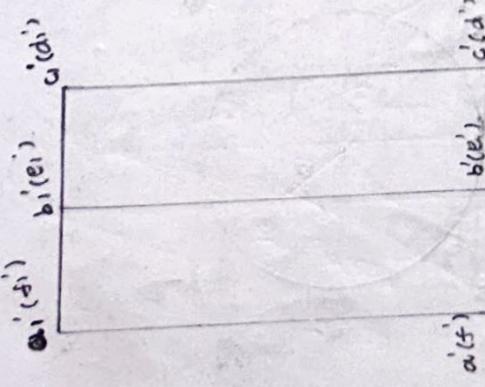
Isometric projection is base height 20x 20 mm representing on H.P. such that one of its base edges are L.V. to V.P. Draw the Isometric projection.

Unit-6 Isometric projections.

ISOMETRIC PROJECTION

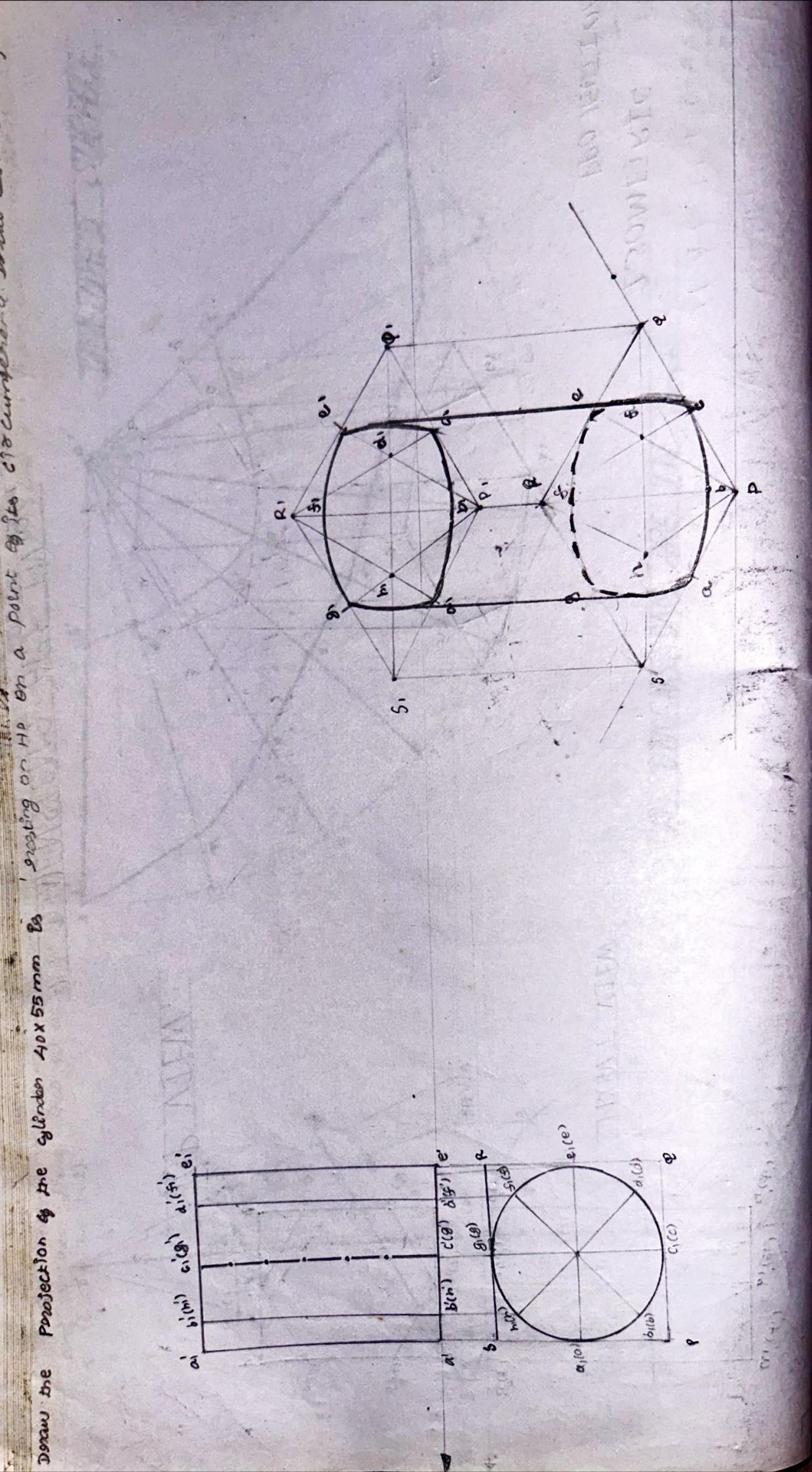


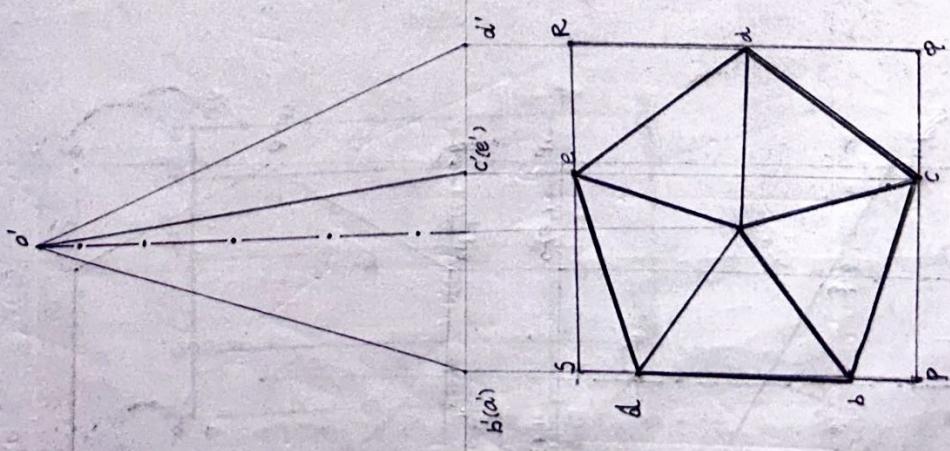
FRONT VIEW



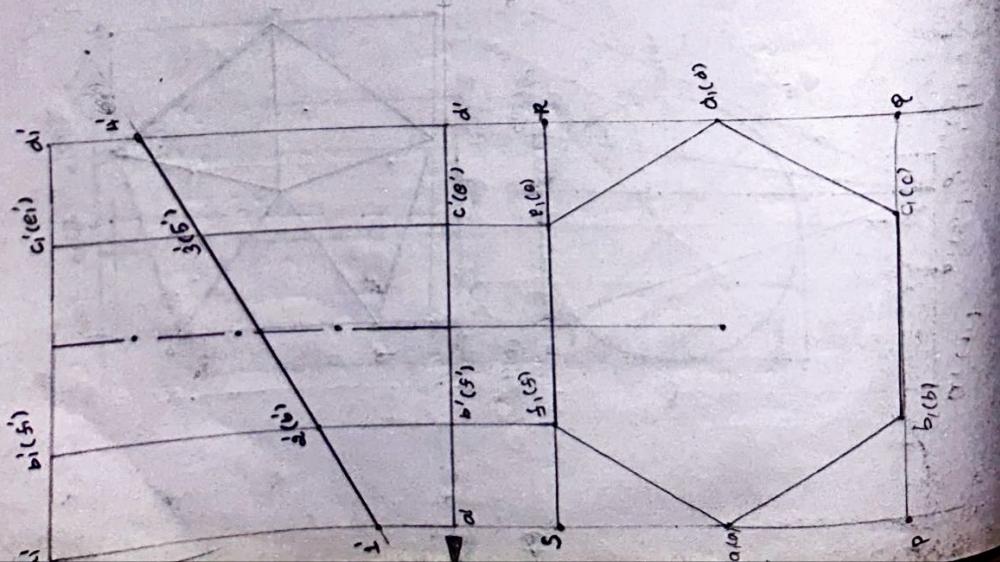
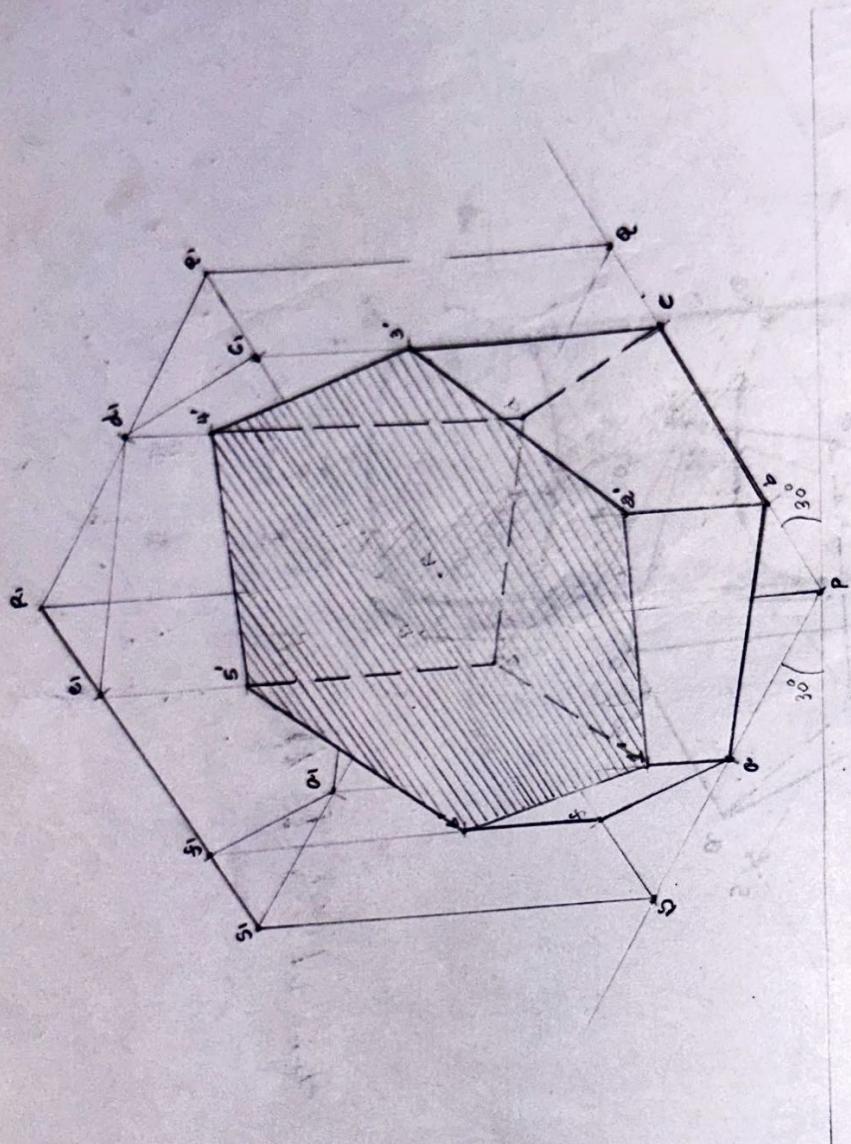
TOP VIEW

ALL DIMENSIONS ARE IN mm.

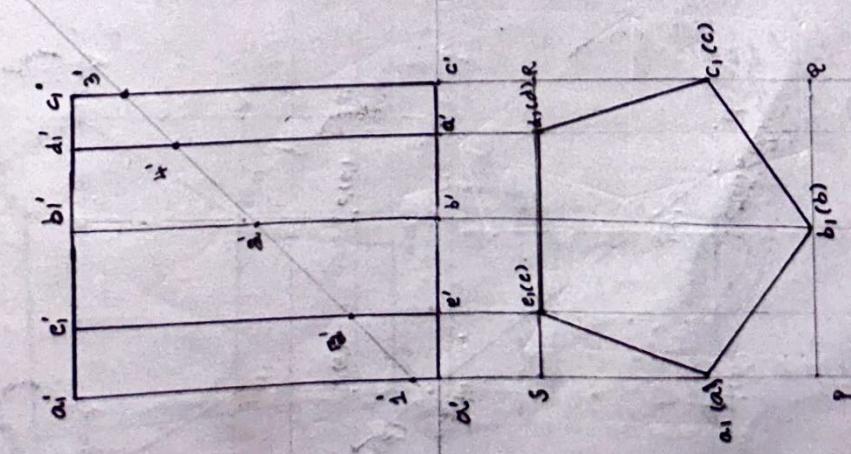
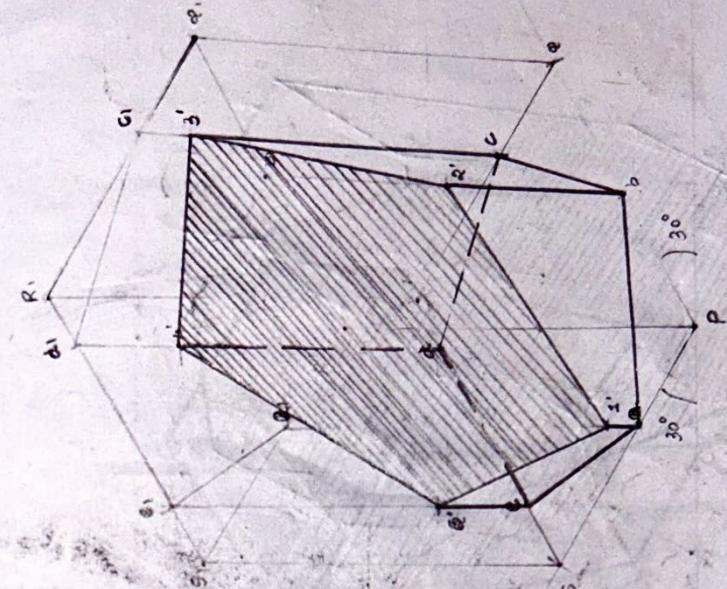




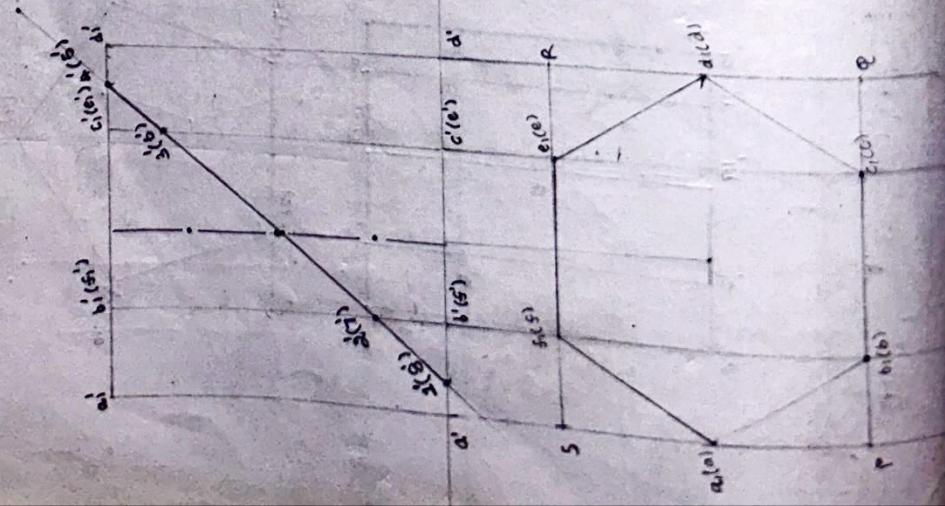
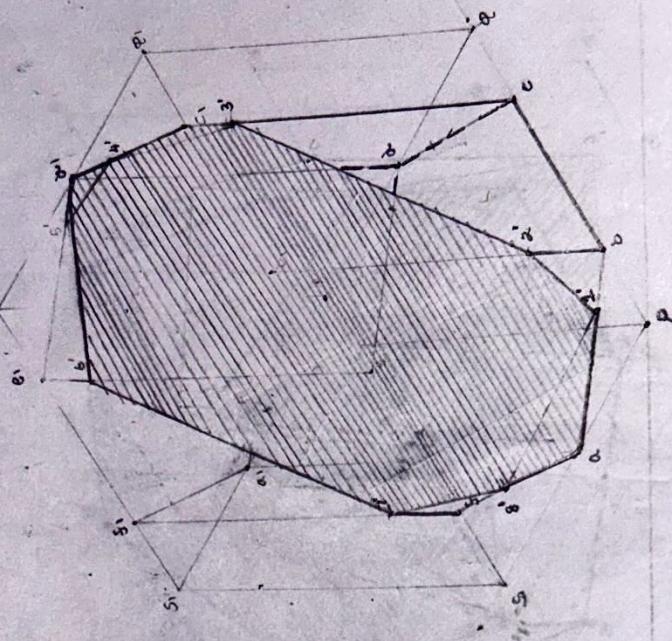
A hexagonal Prism 30x 30 mm is resting on H.P. with its base inclined at 30° to H.P. and bisecting the axes. draw Isometric projection.



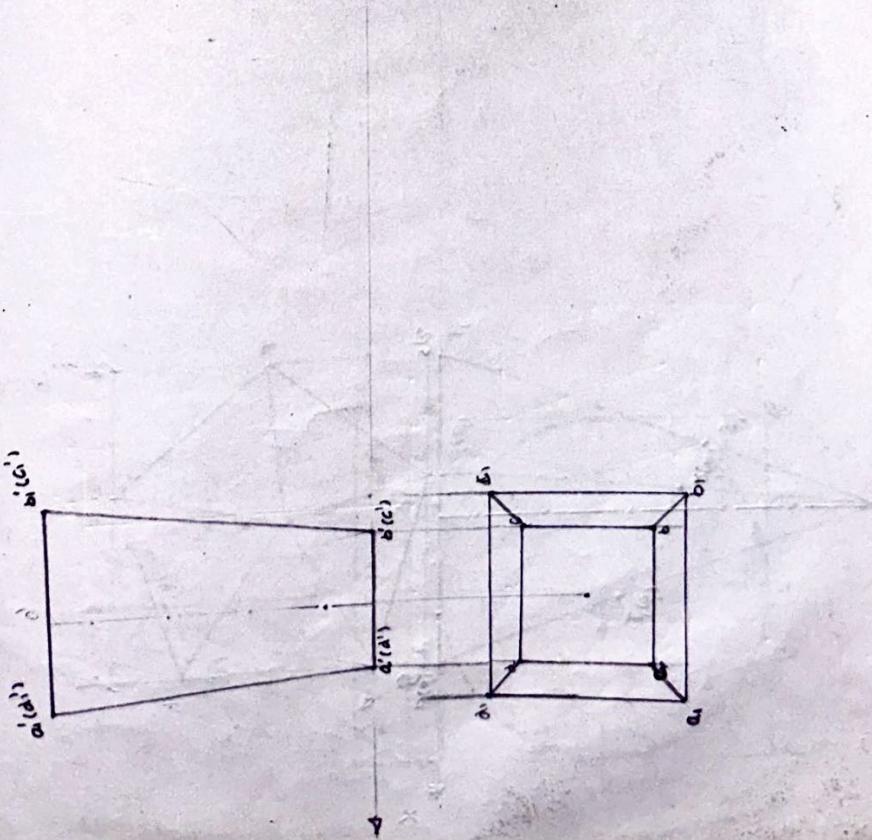
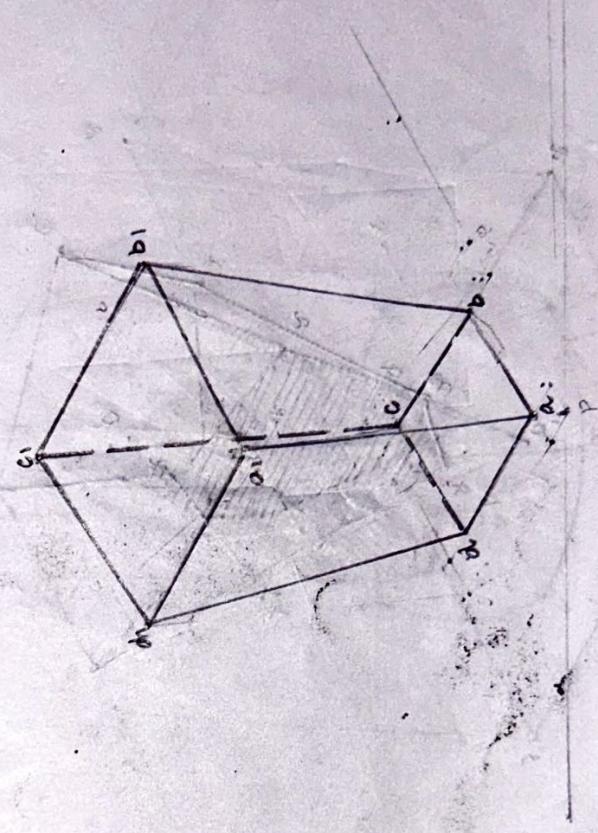
A pentagonal potter of base 25 mm and height 50 mm is resting on its base on H.P. End view is cut by sectional plane. Isolines at 45° to H.P. and bisecting the axis. Draw the isometric view and truncated part.



A hexagonal pyramid of base 25mm and axis height 50mm resting on H.P. base on N.P. side B to V.P. It is cut by a plane inclined at 50° HP and bisecting the axis. Draw the Geometric View.

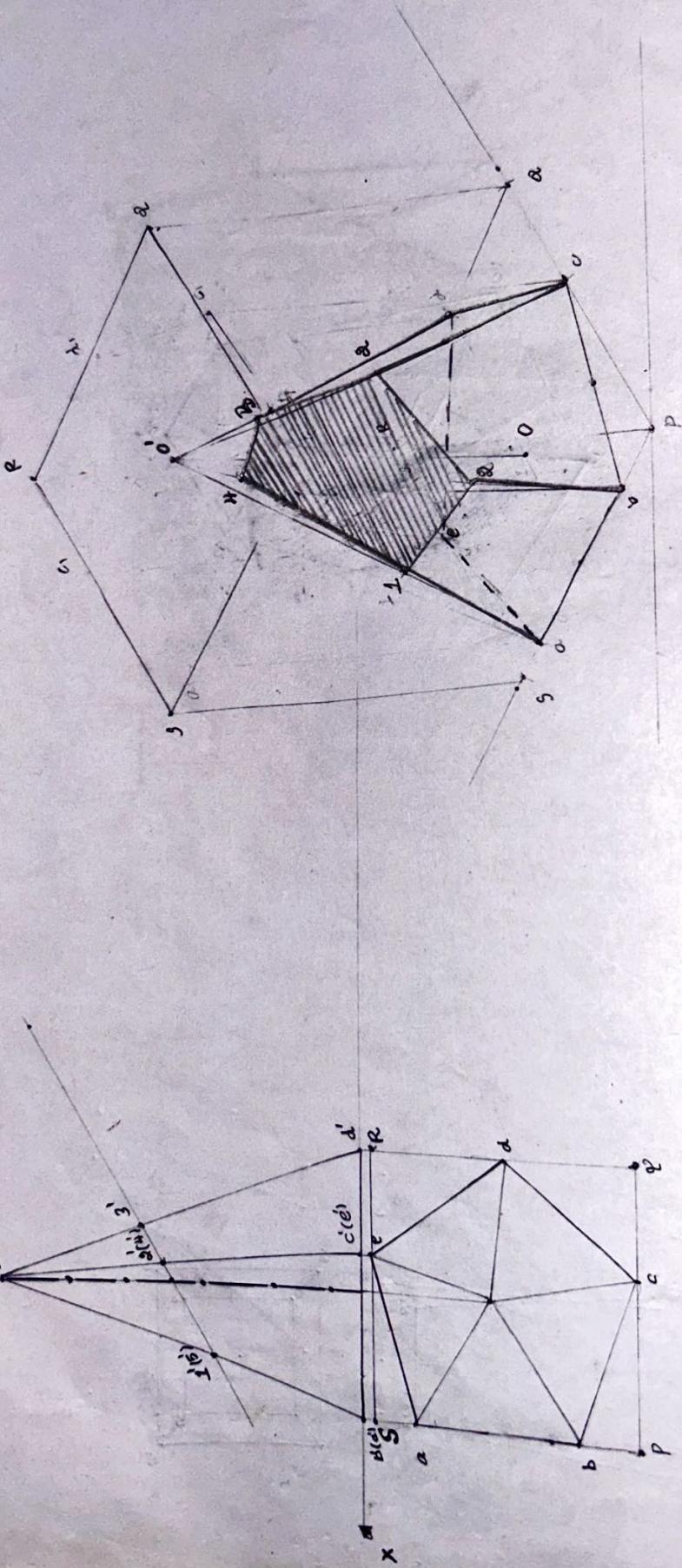


Draw the Geometric Projection of a truncated pyramid. Top side is 30mm. and bottom side is 20mm and

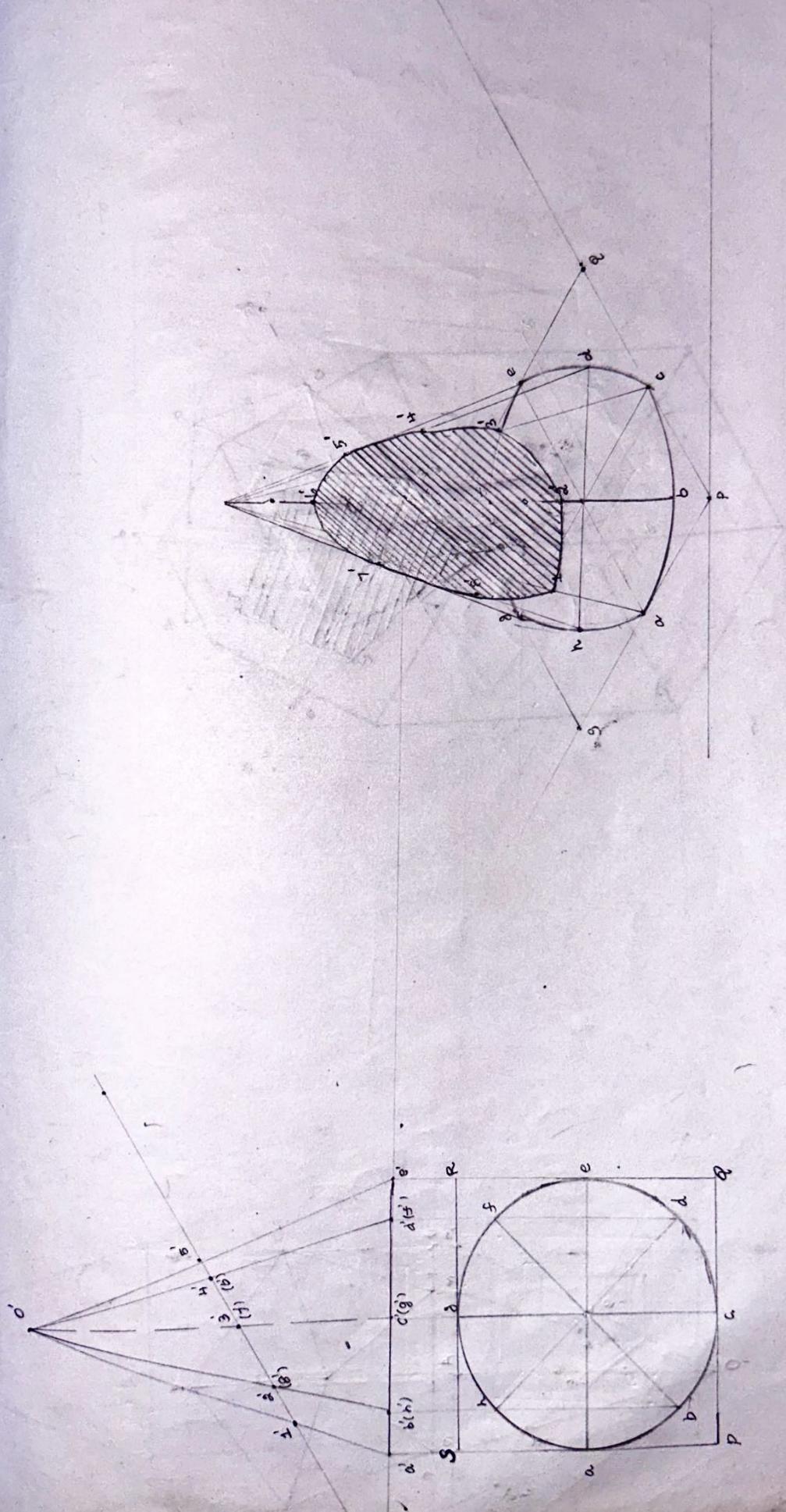


Draw the isometric projection of a truncated square pyramid as a inverted pyramid.
height of the pyramid is 3mm.

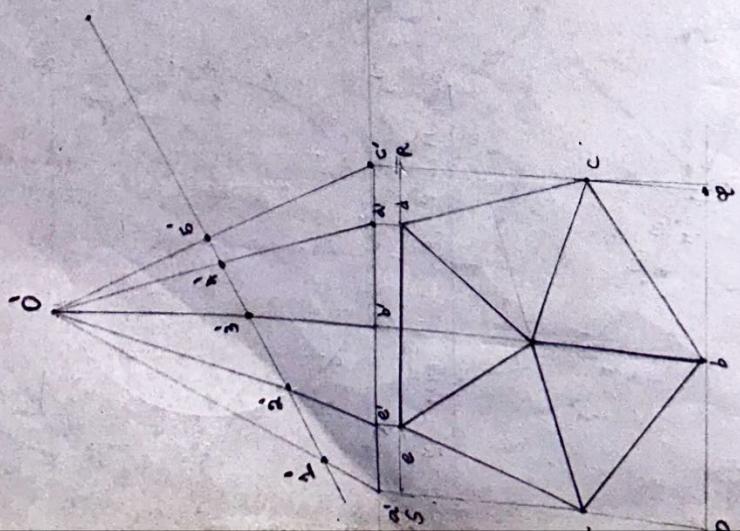
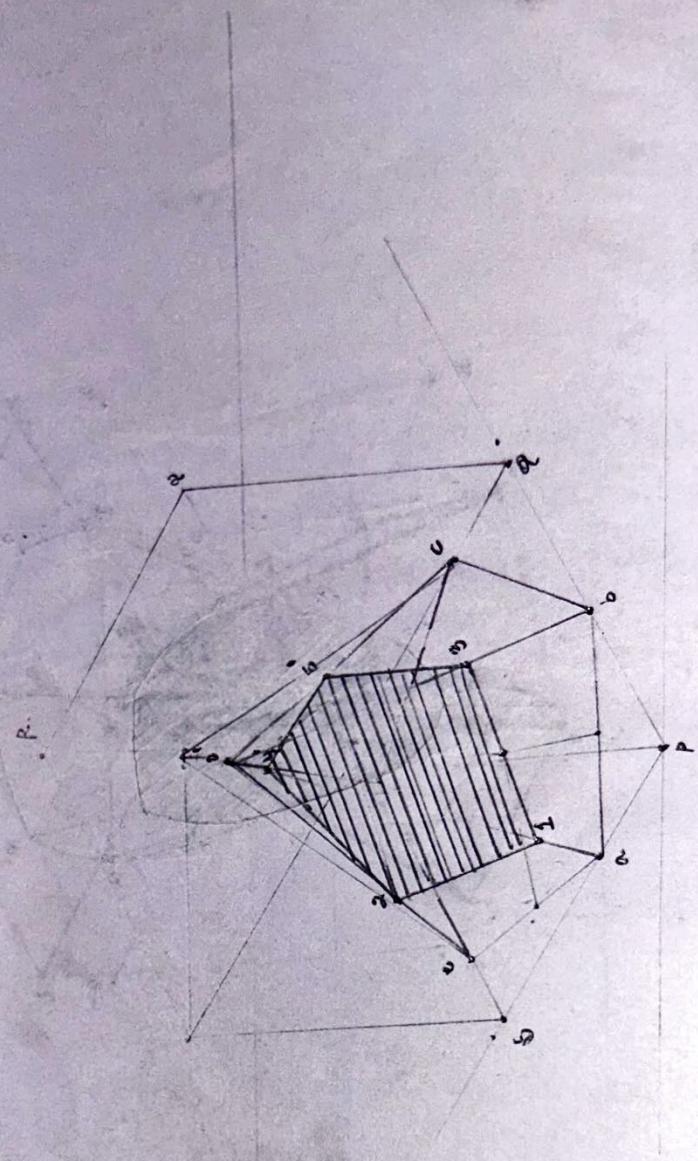
A pentagonal pyramid of 60 mm base and altitude 65 mm resting on its base on H.P. base of 96 mm and meet the axis at 30 mm from the top. Draw the geometric view.



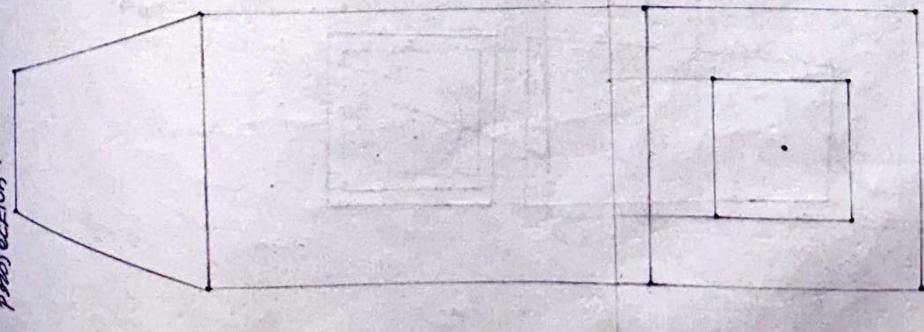
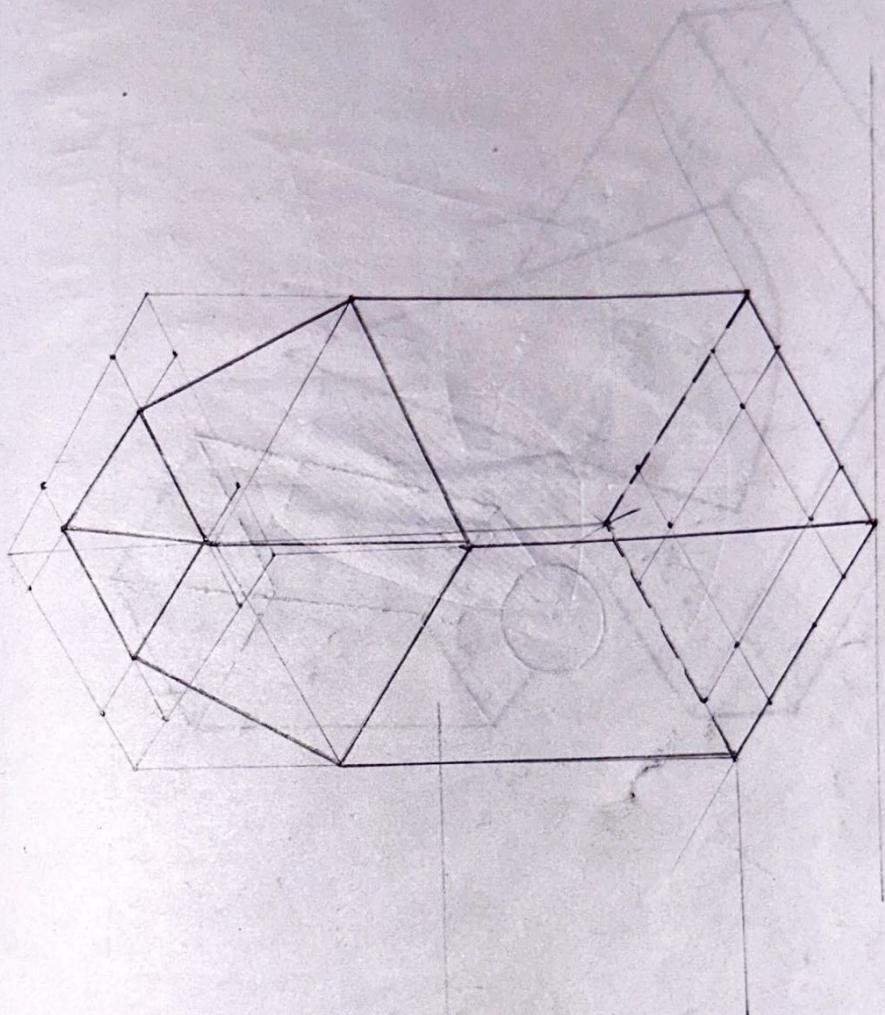
A cone of base diameter 50 mm and height 70 mm is resting on HP. It is cut by a plane inclined at 30° to HP. And meet the axis from front view. Draw the orthographic views of the truncated cone.



A pentagonal pyramid of base 30mm and altitude 50mm is resting on its base on HP with one of its base edges parallel to VP. It is cut by a plane inclined at 30° to HP and meet the axis . 30mm from the vertex. Draw the W.O.M. of the pyramid.



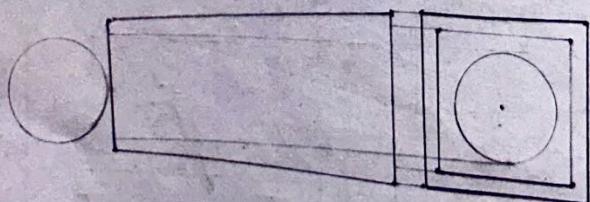
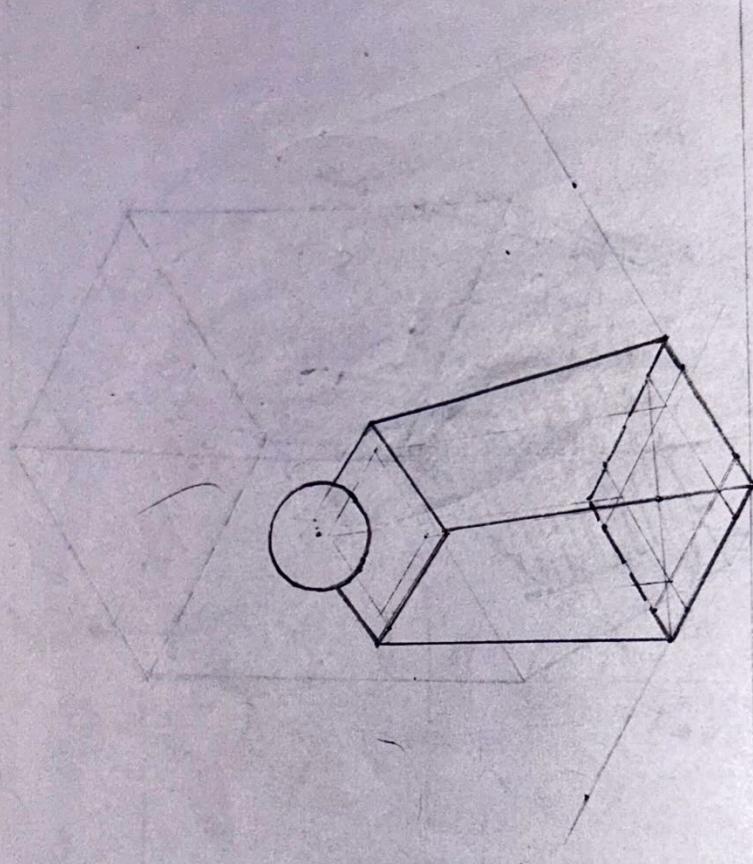
A solid is 100 mm long & a square top side at base turns up to a height of 20 mm and there other top surface is a square of 20mm side, total height of the solid is 70mm. Draw the Isometric projection.



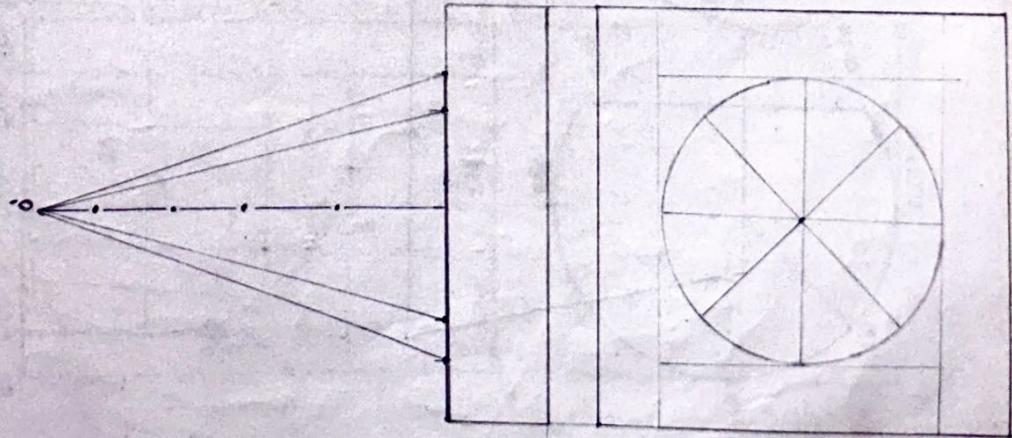
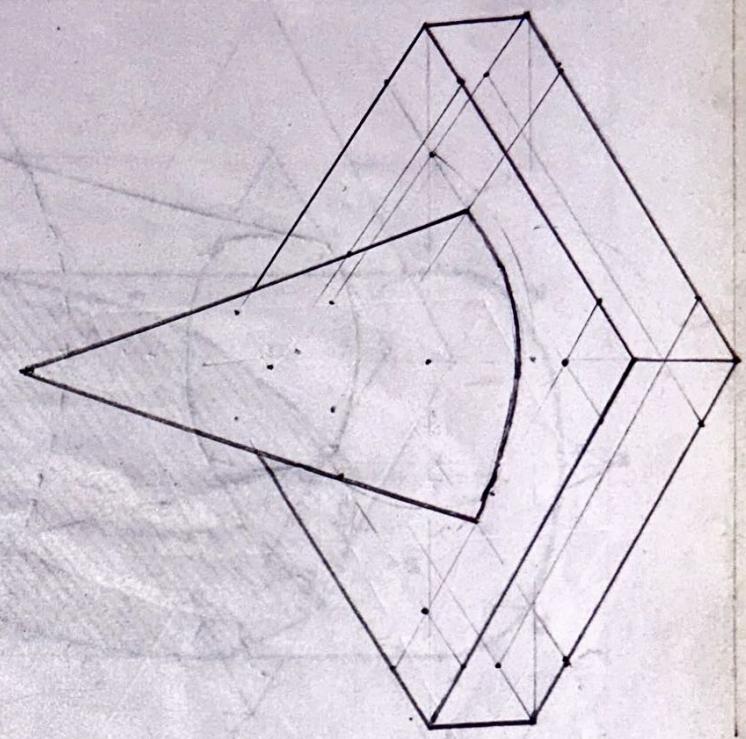
Draw the Isometric view of the Sphere of 16mm diameter with its face centrally over the top of the square pyramid of a base 25mm and height 45mm.

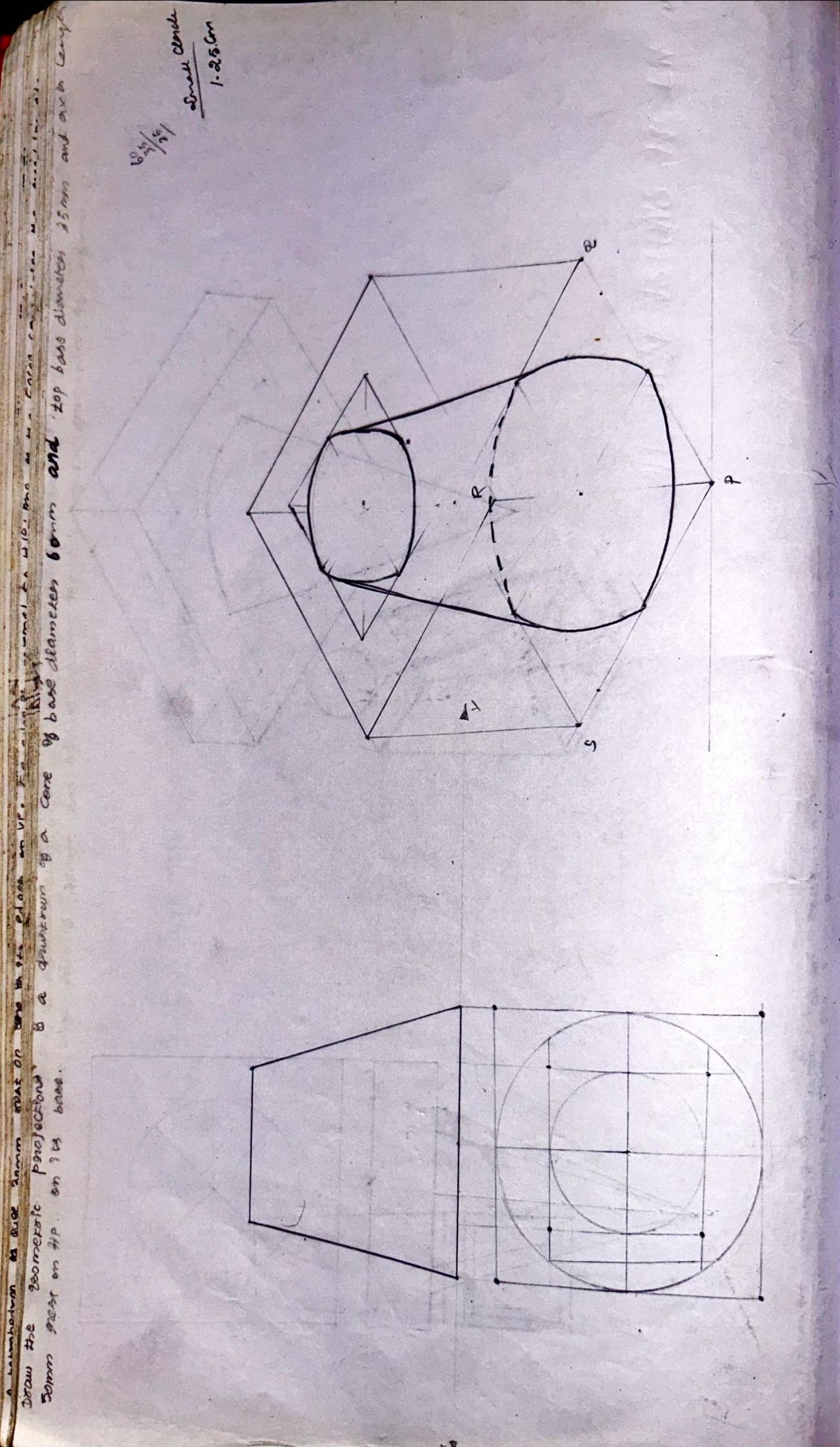
$$\frac{45}{53}$$

To find Centre
of 16 mm
diameter
base square
and
draw a
point
at
53 mm
above
the
base

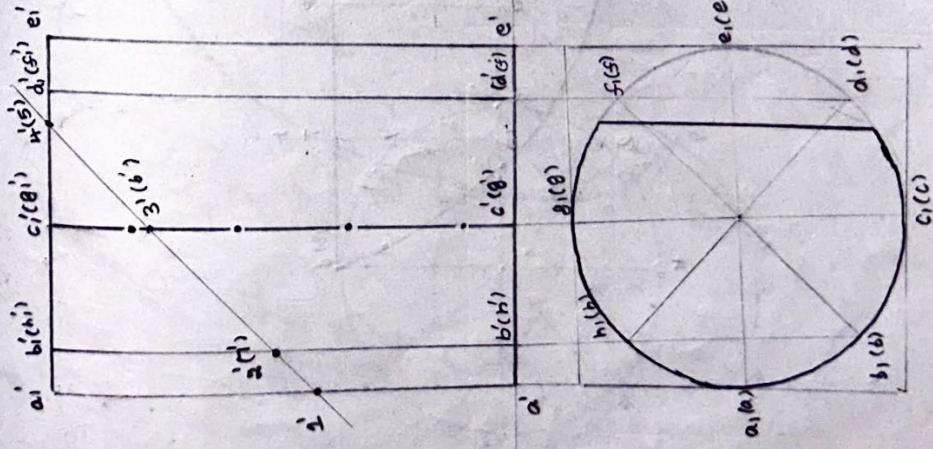


A cone of base diameter 10mm and axis 8mm is mounted centrally on the top of the square slab of side 8mm and thickness 15mm. Draw the orthographic projection of the solid.

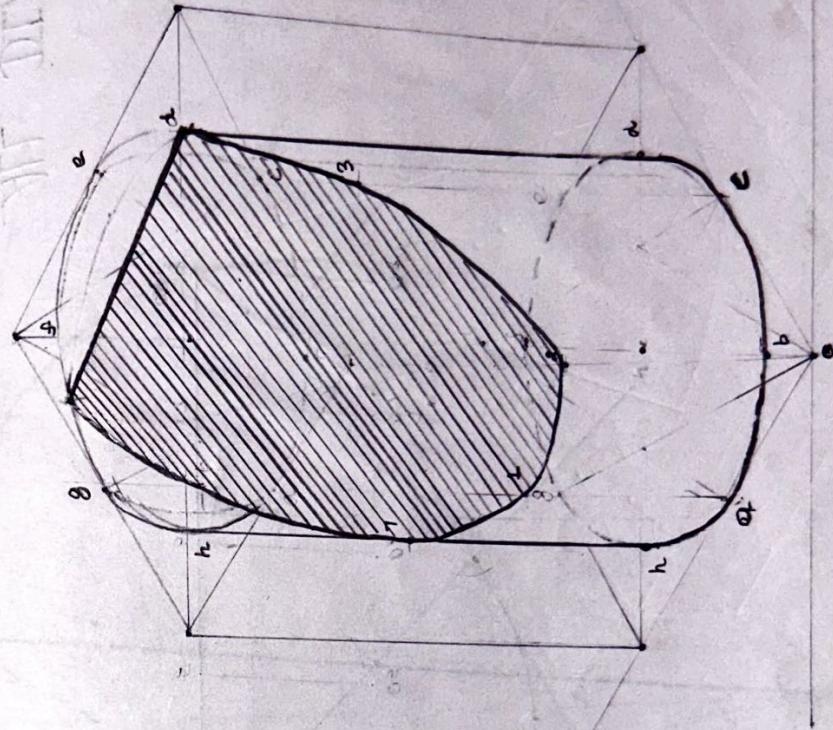




Draw the isometric projection of a cylinder which has base diameter 50mm and height 70mm, the cutting plane is $\theta = 45^\circ$ to VP and inclined at 45° to HP. Meet the axis 15mm below the top.



ISOMETRIC PROJECTION

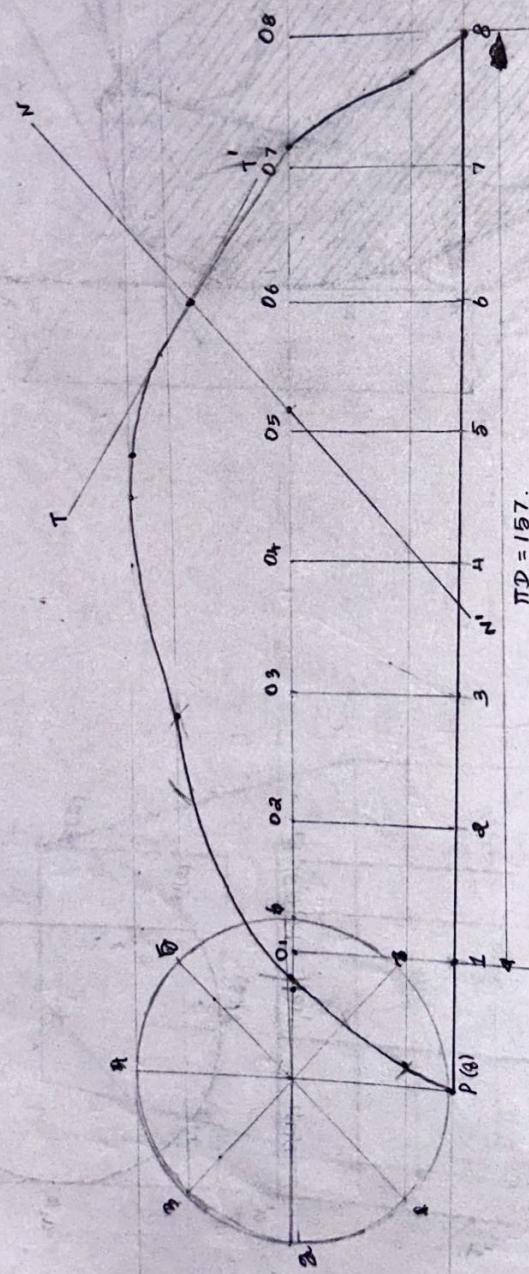


Draw a cycloid of a circle of diameter 50mm. Find the path traced by the particular point of a coin on the circumference of diameter 50mm. in moving in a horizontal plane.

Elliptic, parabolic, Hyperbolic
Cycloid, epicycloid, hypocycloid.

(Normal & Tangent series).

$$\pi D = 157.$$

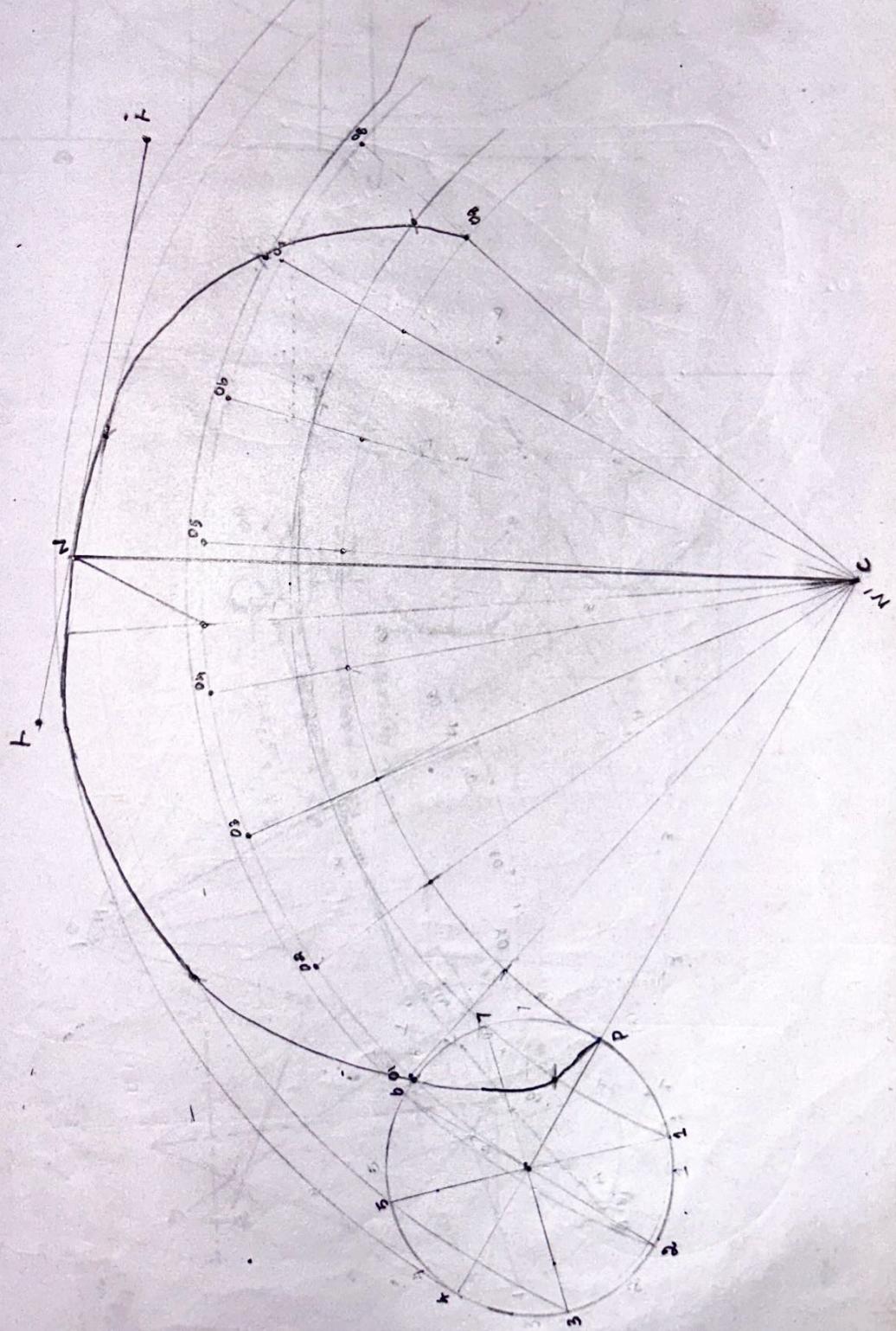


$$\pi D = 157.$$

ALL DIMENSIONS ARE IN mm

10119. A circle of diameter 10 mm without bleeding. Draw the path traced by a point

on a smaller circle.



Circle of diameter
the smaller one. Draw tangent

$$\theta = \frac{\pi \times 360^\circ}{R}$$

$$\theta = \frac{\pi \times 360^\circ}{R}$$

$$\theta = \frac{25 \times 360^\circ}{100}$$

$$= 90^\circ.$$

