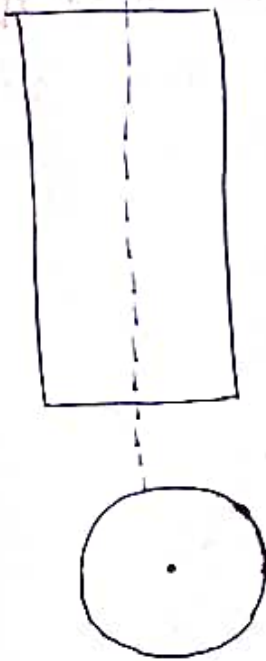


# UNIT-III Projection of Solids

Cylinder



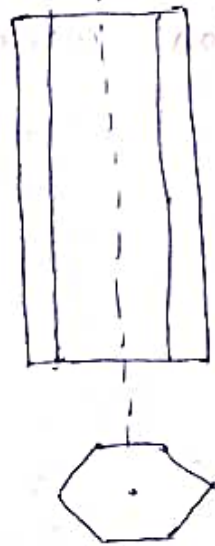
Square prism



Prism  
Pentagonal prism



Hexagonal prism



Pyramid

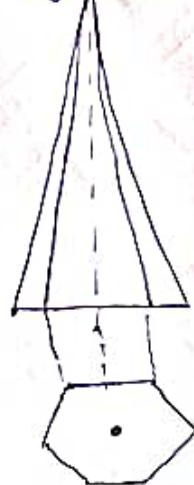
Square pyramid



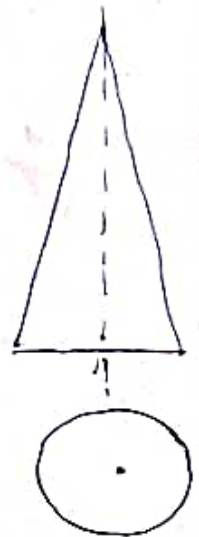
Pentagonal pyramid



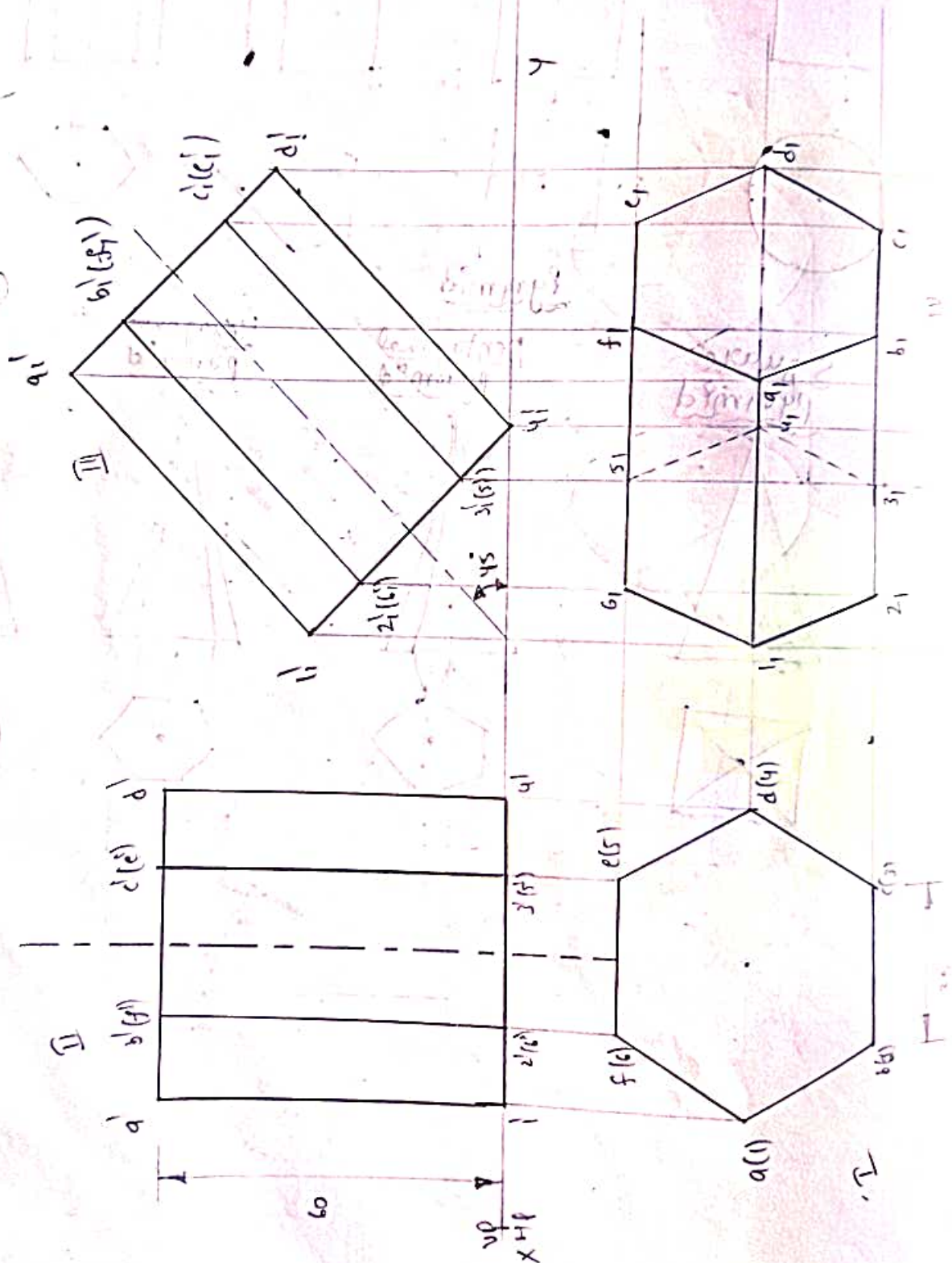
Hexagonal pyramid



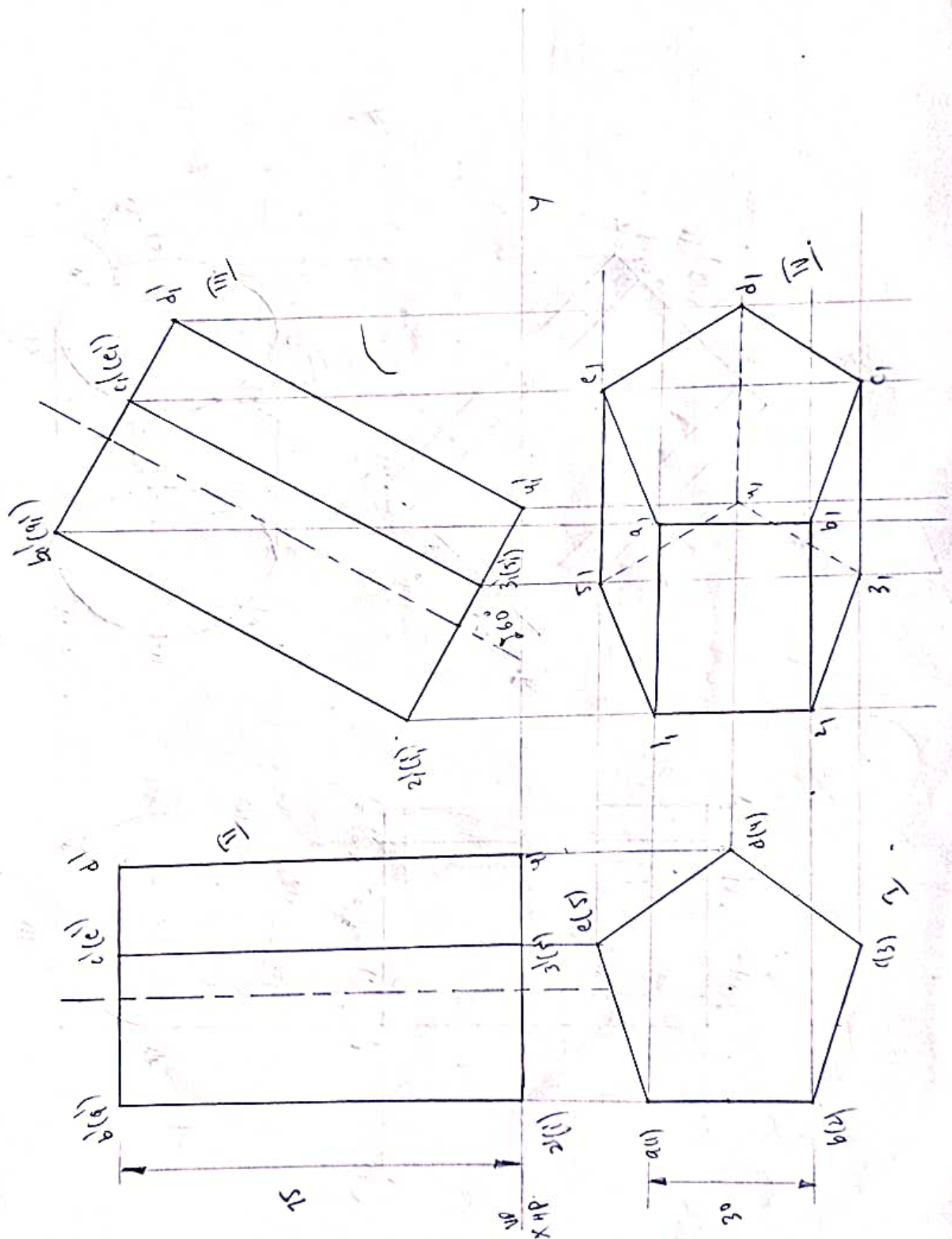
Cone



- ① Draw the projections of a hexagonal prism of base 25mm side and axis 60mm long, when it is resting on one of its base corners on HP. The axis of the solid is inclined at  $45^\circ$  to HP. Follow the change of position method.

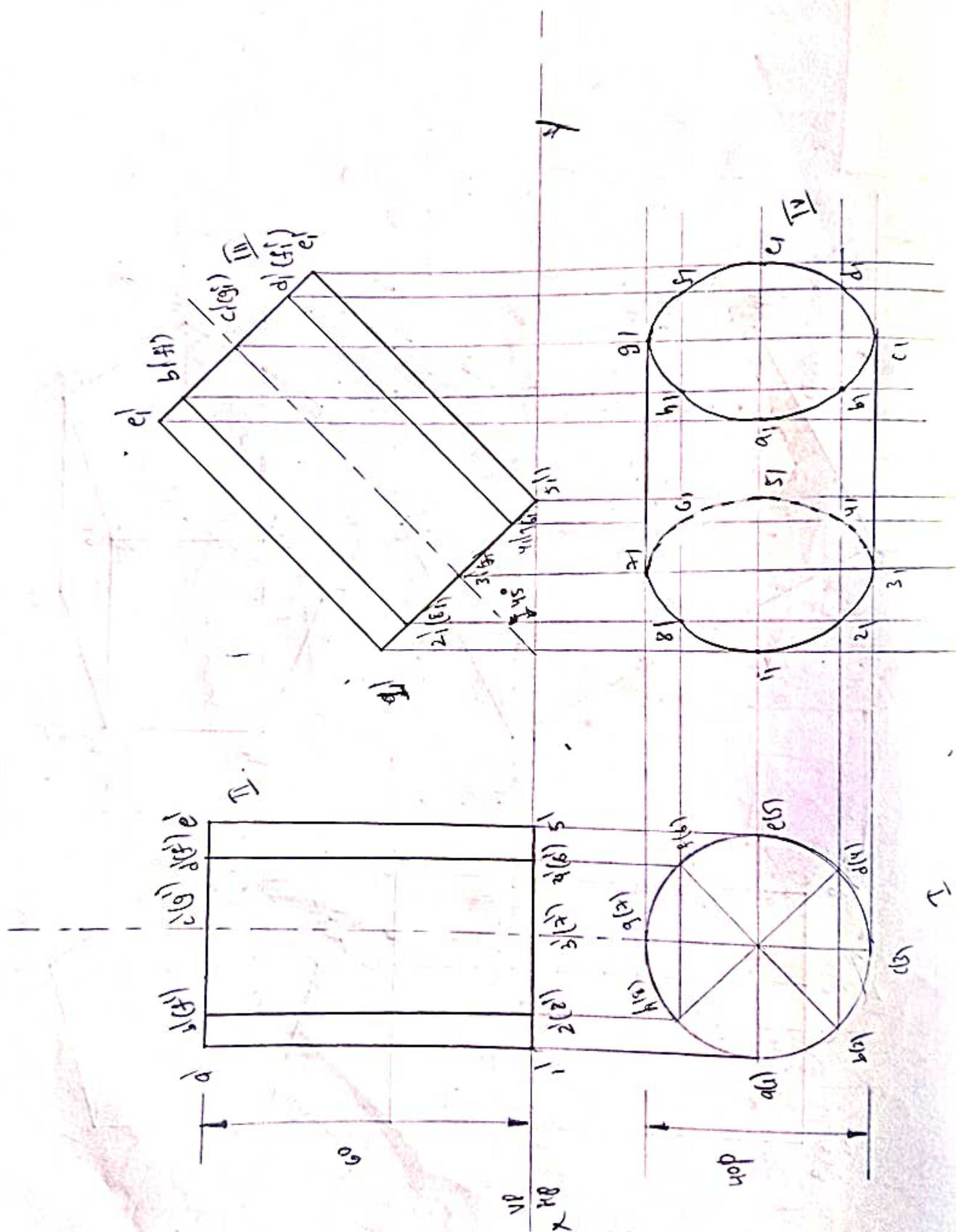


②. A pentagonal prism, having base with a 30mm side and 75mm long axis, has a corner of its base on the ground and axis is inclined at  $60^\circ$  to the H.P. Draw its projections if the plane containing that corner. The axis is parallel to the V.P.

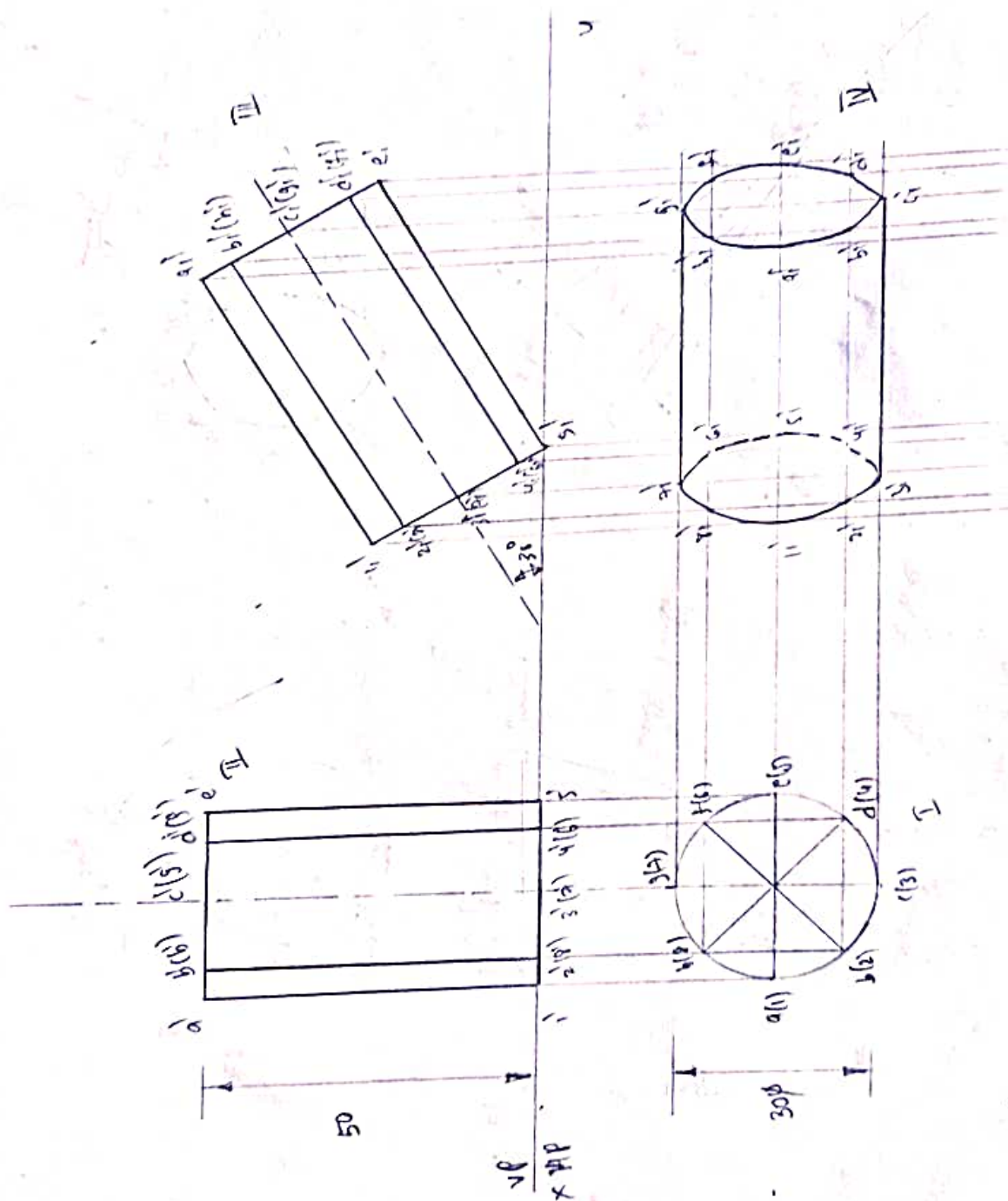




- ③ Draw the projections of a cylinder of 40mm diameter and axis 60mm long when it is lying on HP, with its axis inclined at  $45^\circ$  to HP and parallel to VP. Follow the change of position method.

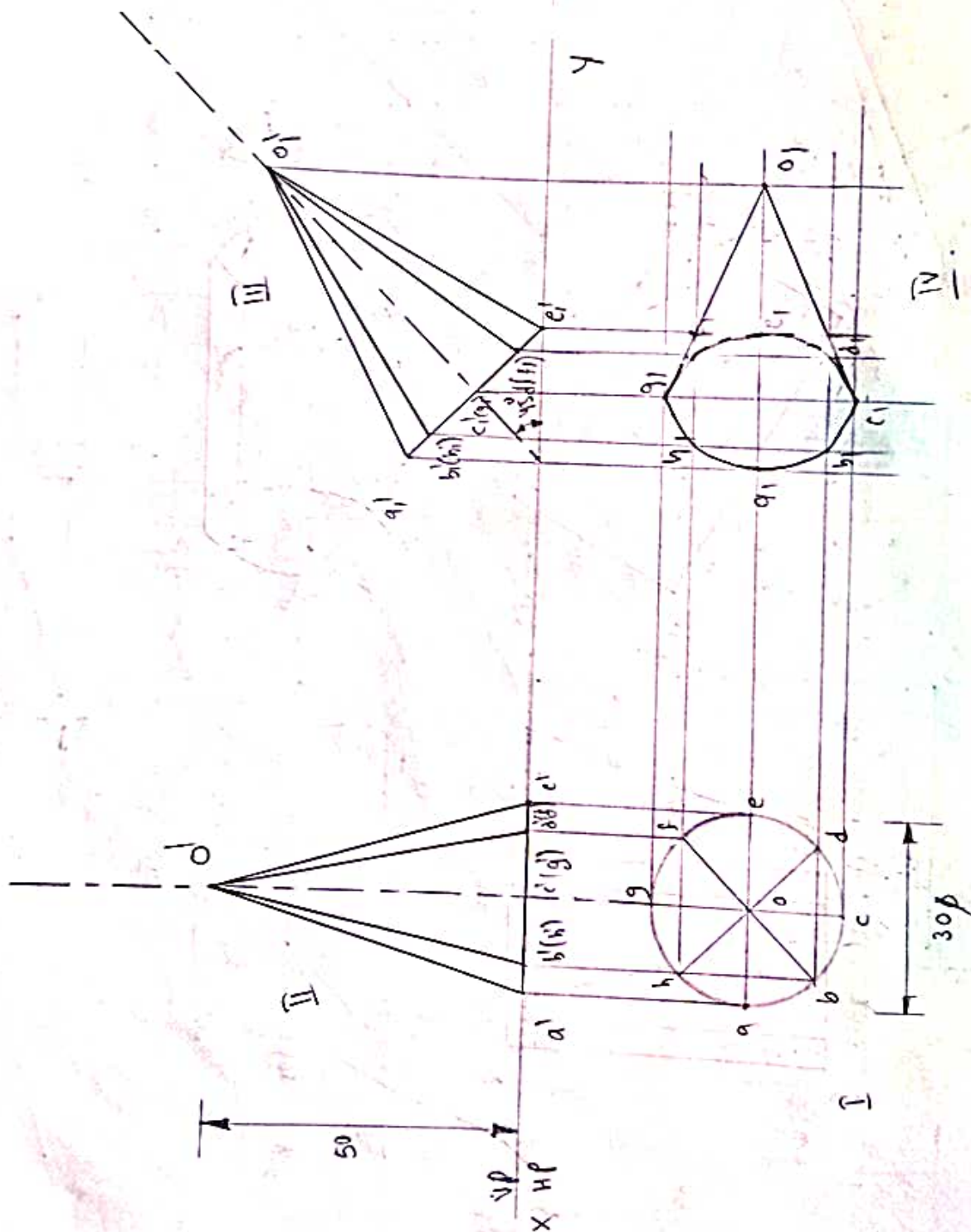


Q. Draw the projections of a cylinder base 30mm diameter and axis 50mm long, kept with a point of its base circle on HP, such that the axis is making an angle of  $30^\circ$  with HP and parallel to VP.

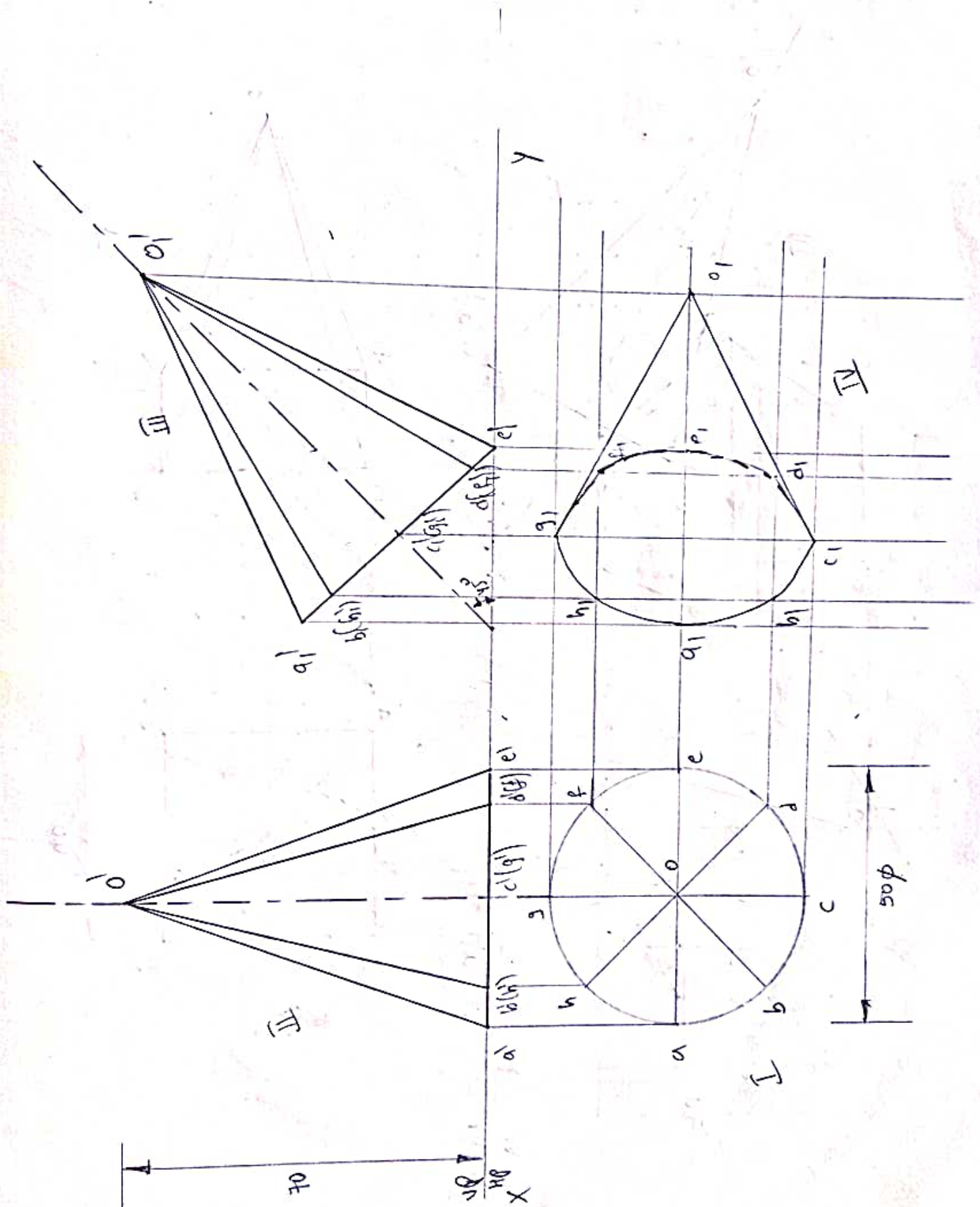




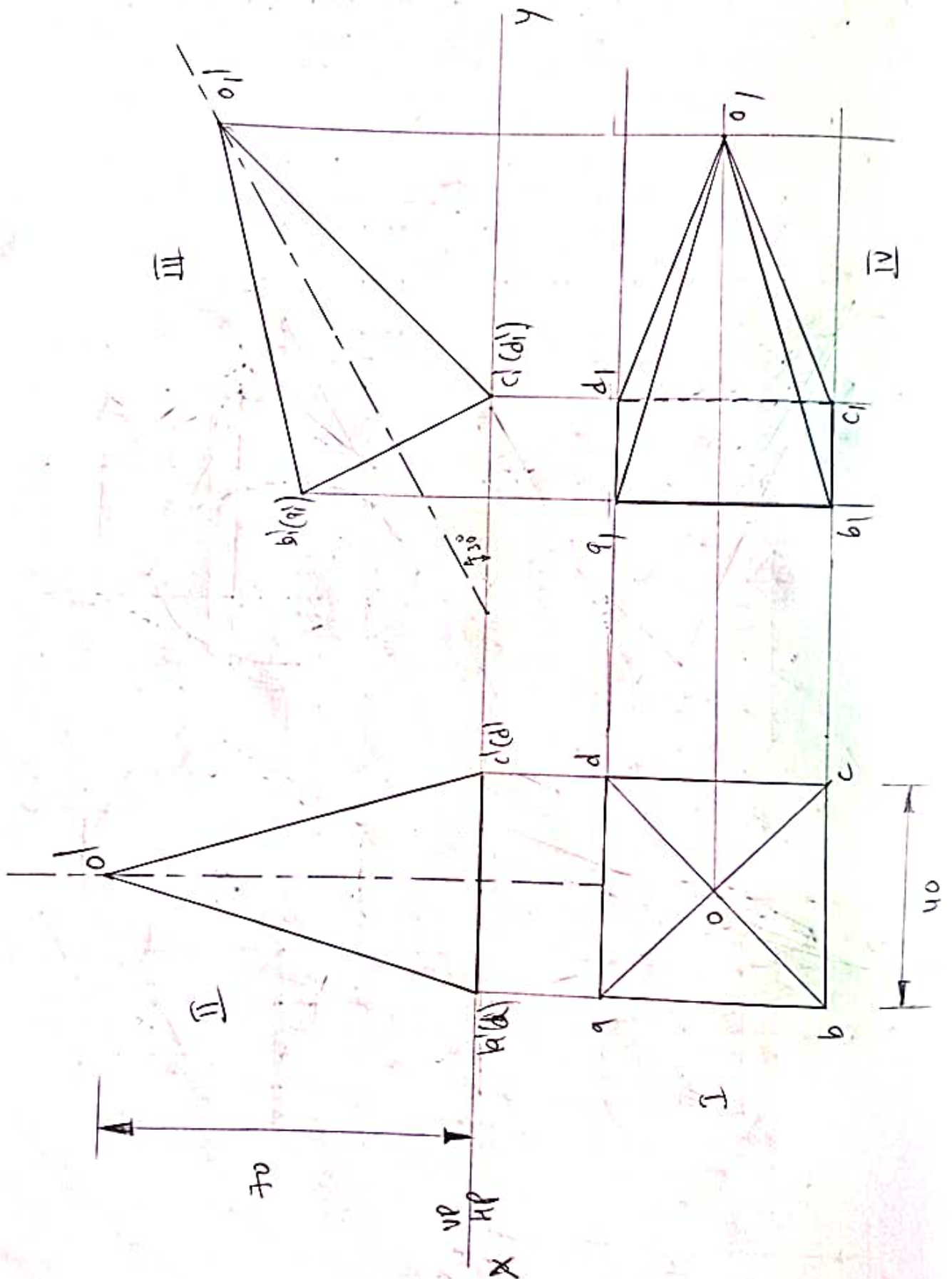
- ⑤ Draw the projections of a cone base 30mm diameter and axis 50mm long, resting on HP, on the point of its base circle with the axis making an angle of  $45^\circ$  with HP and parallel to VP.



- ⑥. A cone having 50mm diameter and 70mm long axis has a point of its base circle in the VP such that the axis is inclined at  $45^\circ$  to the HP and parallel to the VP. Draw its projections.

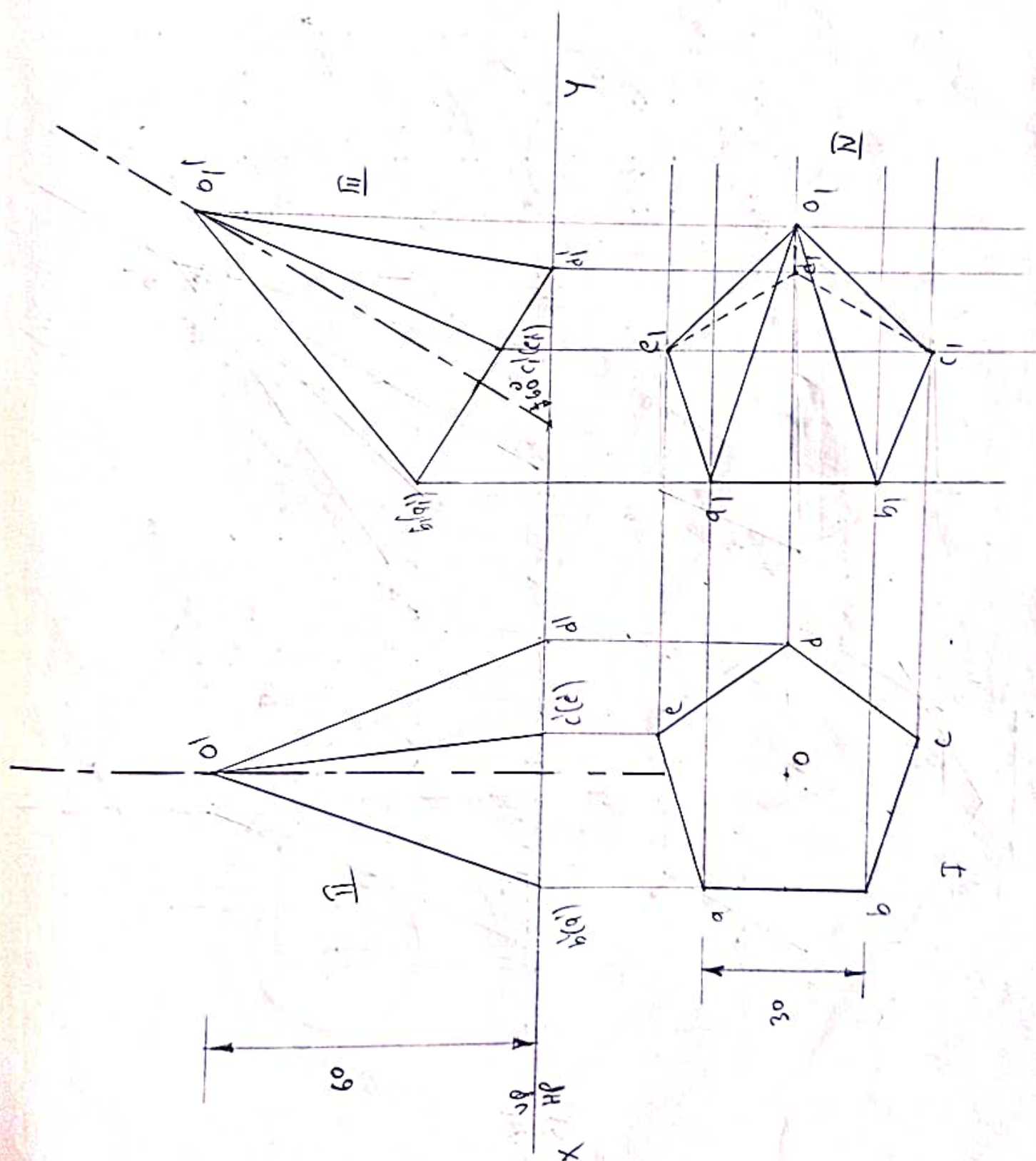


- ⑦ A square pyramid with side of base 40mm and axis 70mm long is resting on HP. Its axis is inclined at  $30^\circ$  to the HP. Draw its projections.

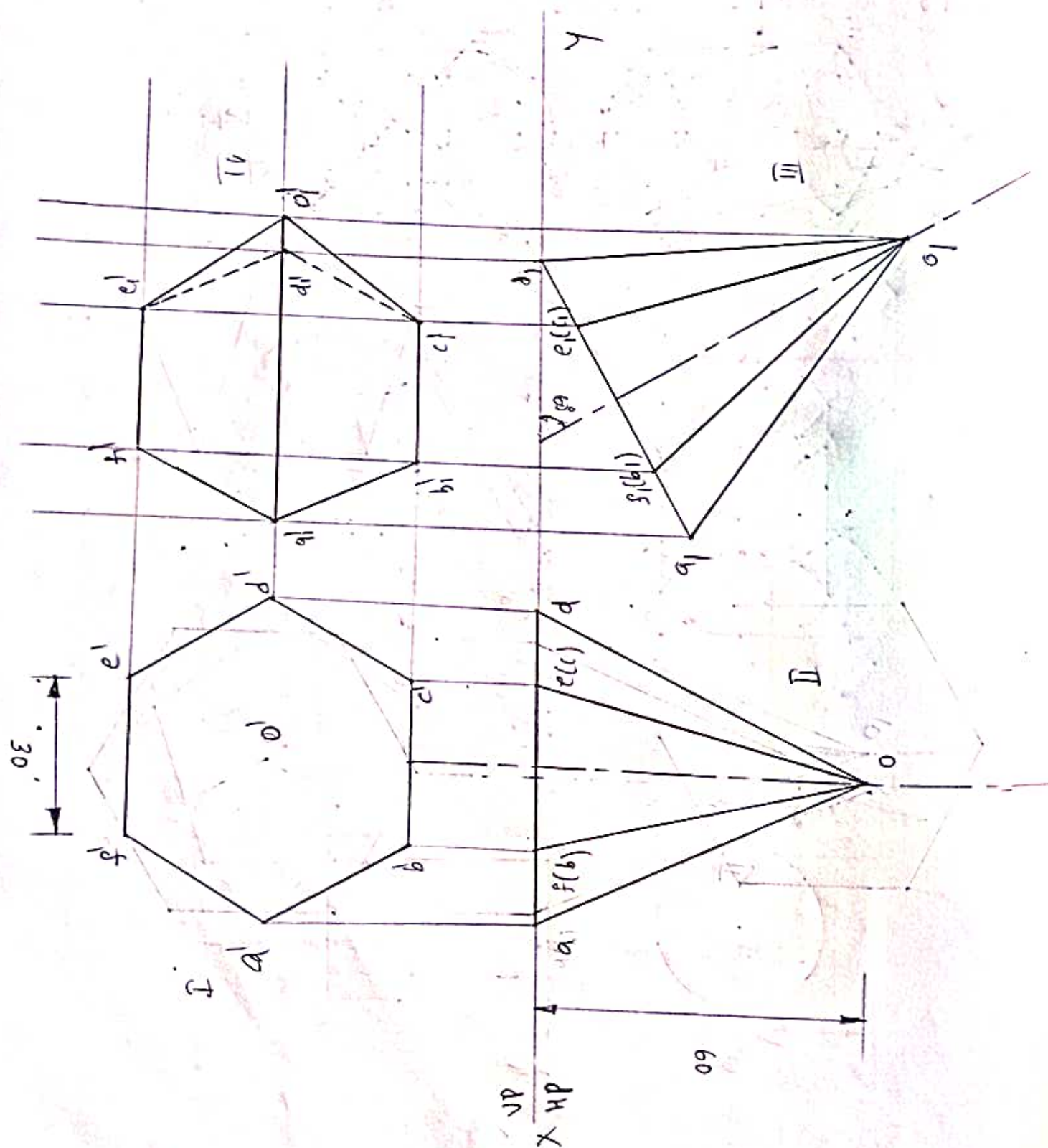




- ⑧. A pentagonal pyramid with side of base 30mm and axis 60mm long is resting on HP on an edge of its base. Its base is inclined at  $60^\circ$  to HP. Draw its projections.

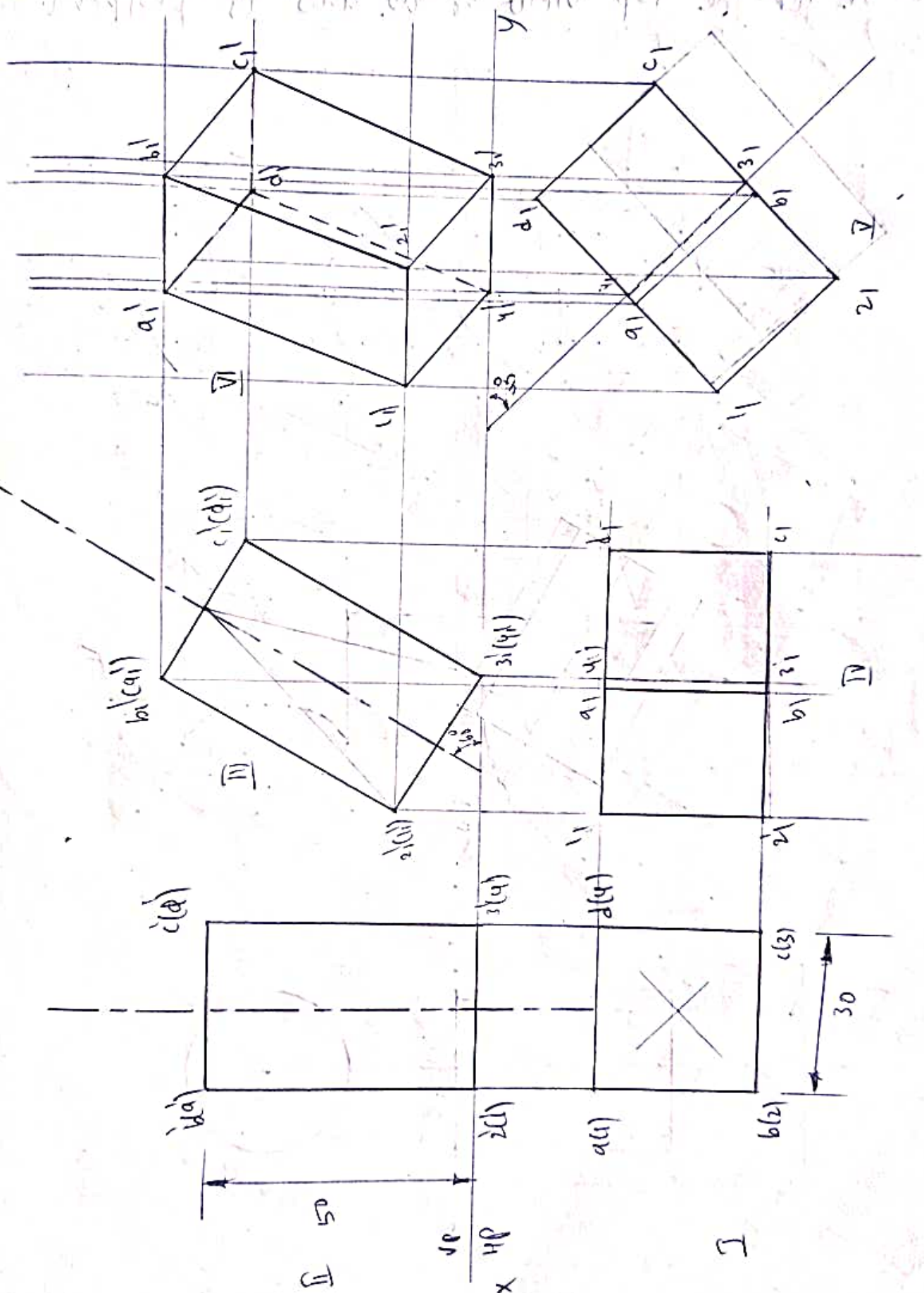


⑨ Hexagonal pyramid with side of base 30 mm and axis 60 mm long is resting on HP on an edge of its base. Its base is inclined at  $60^\circ$  to VP. Draw its projections.



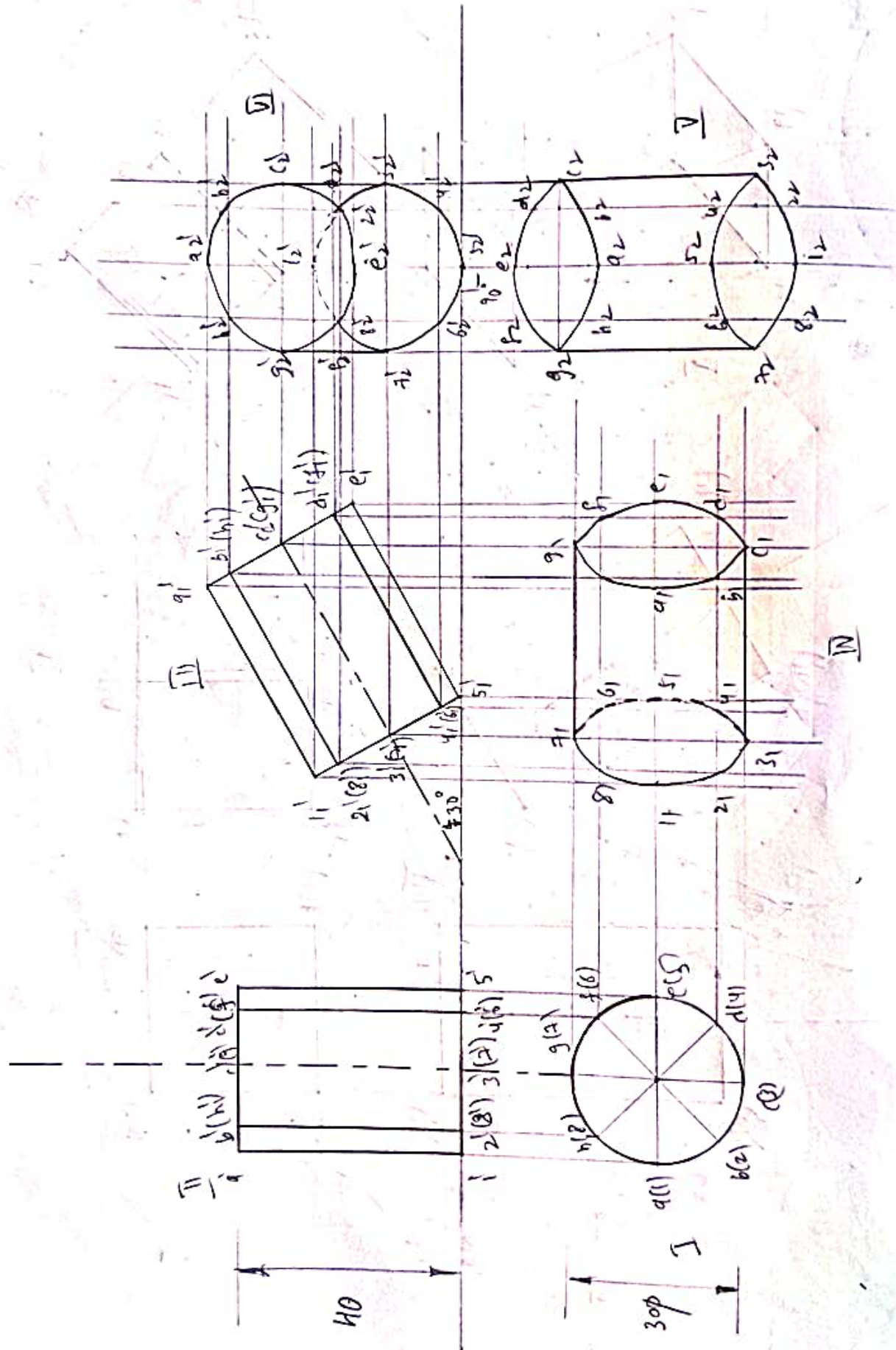


- ⑩ A square prism, side of base 30mm and axis 50mm long, has its axis inclined at  $60^\circ$  to HP. It has an edge of its base in the HP, and inclined at  $45^\circ$  to VP. Draw its projections.

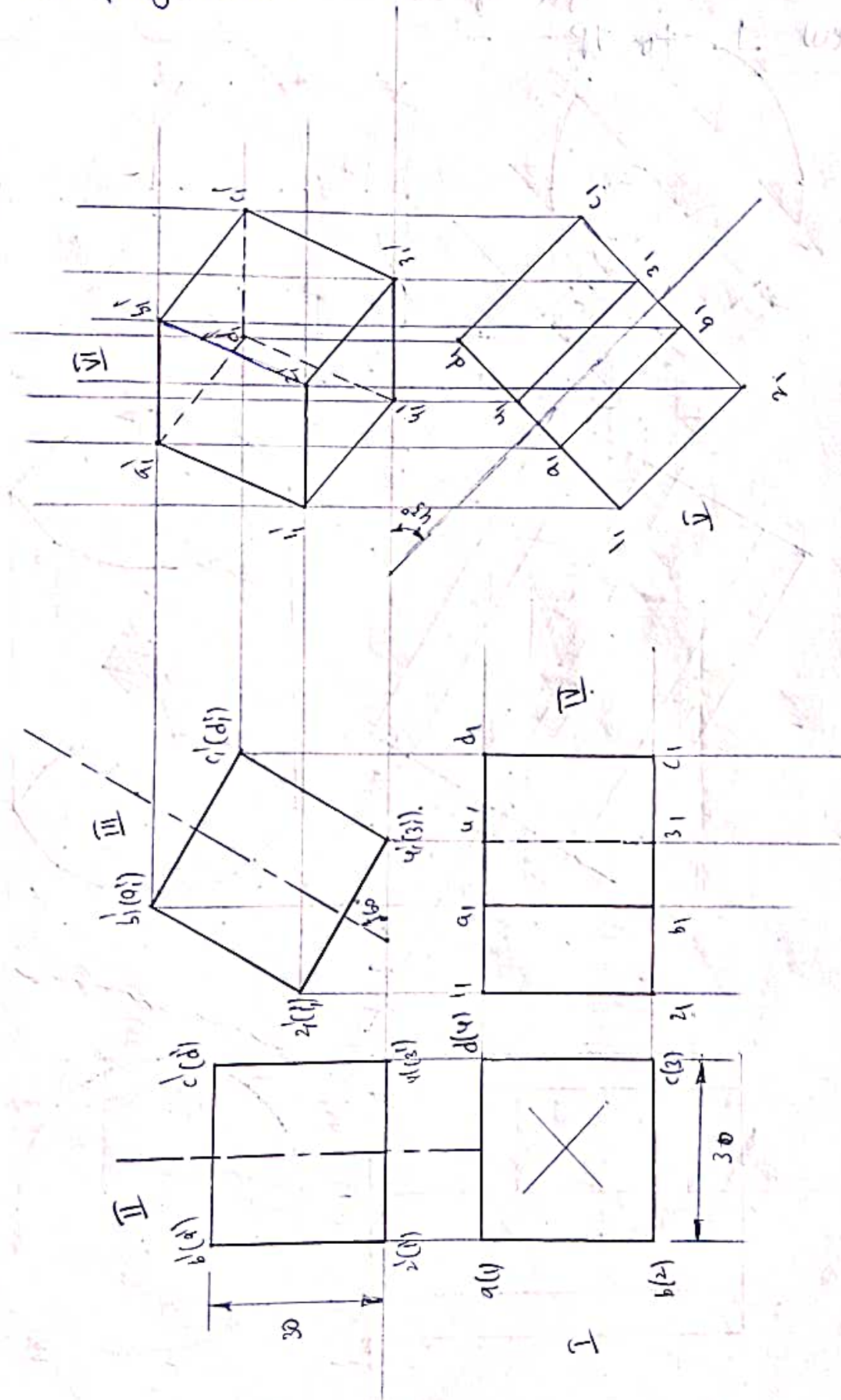




- ② Draw the projections of a cylinder of base 30mm diameter and axis 40mm long which lies on HP on a point of its rim, with its axis inclined at  $30^\circ$  to the HP. The top view of the axis is perpendicular to the HP. The top view of the axis is perpendicular to the HP.

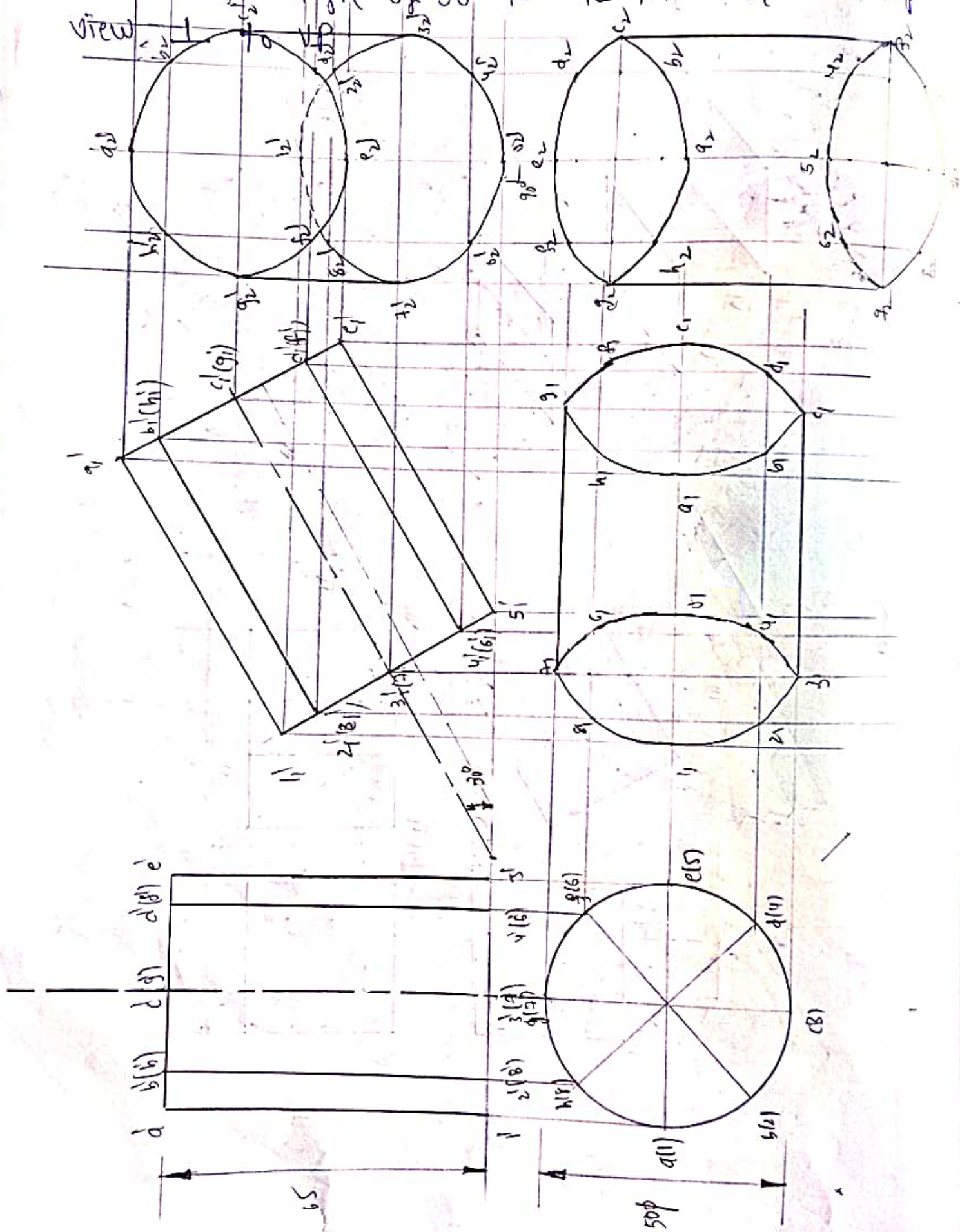


12. A cube, side of base 30mm and axis ~~from~~ 30mm long, has its axis inclined  $60^\circ$  to HP. It has an edge of its base in the HP and inclined at  $45^\circ$  to VP. Draw its projections.



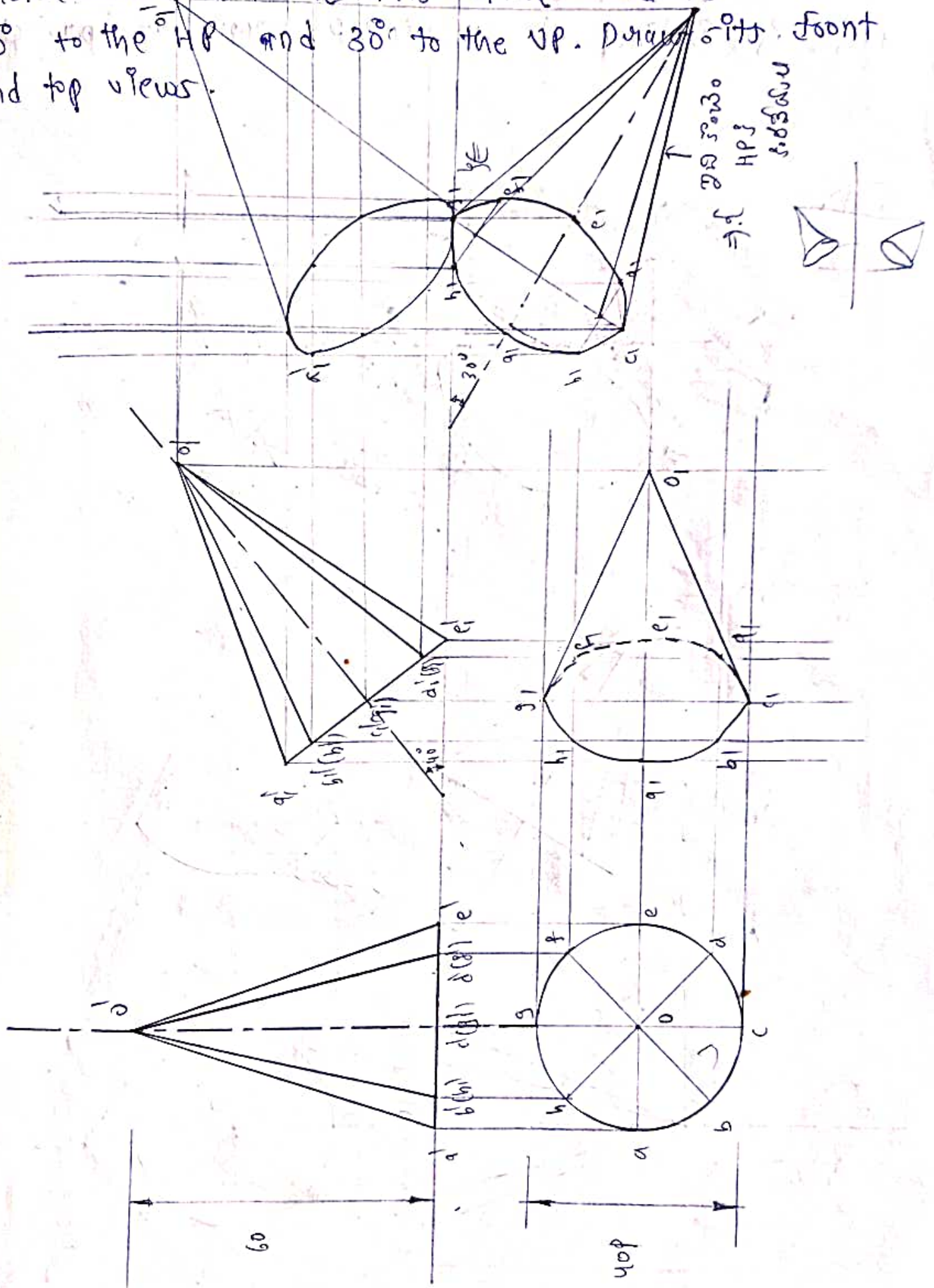


13. A cylinder having a base with a 50mm diameter and 85mm long axis rest on a point of its base circle on the HP. Draw its projections when the axis is inclined at angle of  $30^\circ$  to the HP and its top view





- (14) A cone of base diameter 40mm and axis height 60mm rest on the ground on a point of its base circle such that the axis of the cone is inclined at  $40^\circ$  to the HP and  $30^\circ$  to the VP. Draw its front and top views.



- ⑤ A cone 40mm base and axis 50mm long touches on VP on point of its base circle. The axis is inclined at  $30^\circ$  to VP and the front view of the axis is inclined at  $45^\circ$  to HP. Draw its projections.

