

# Engineering Drawing

*MAY, 2017*

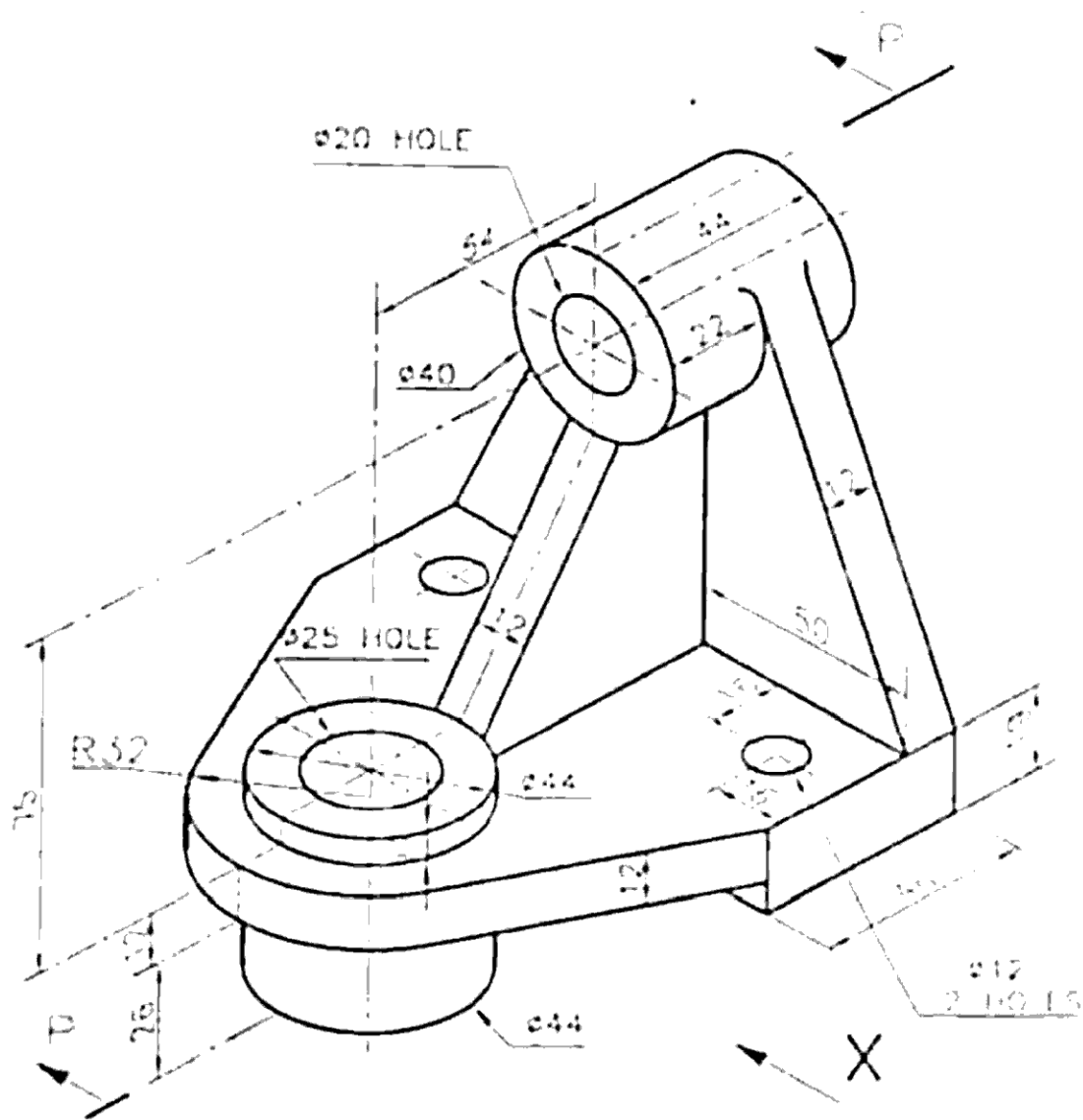
Q1] Figure given below shows two views of an object. Draw the following views to full scale:-  
15 M

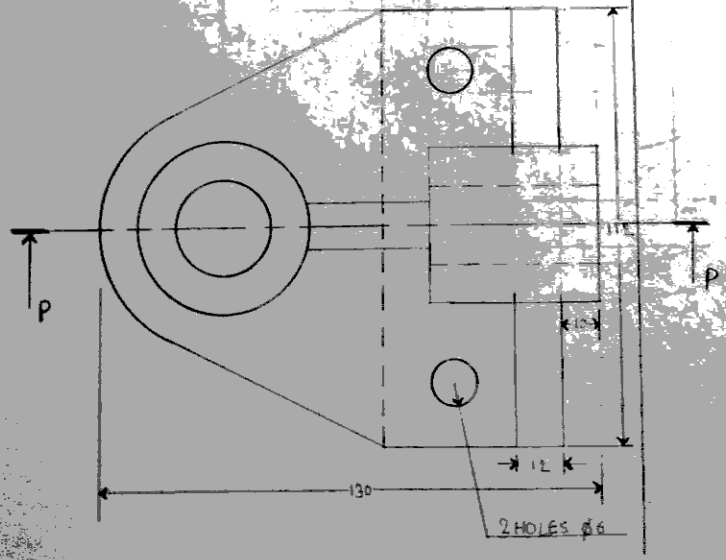
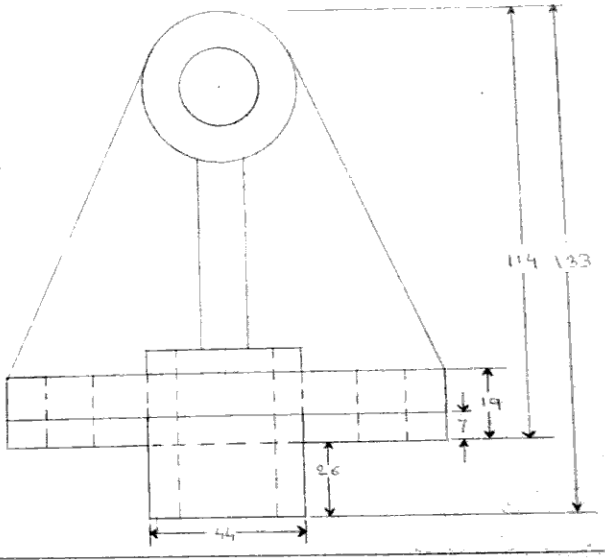
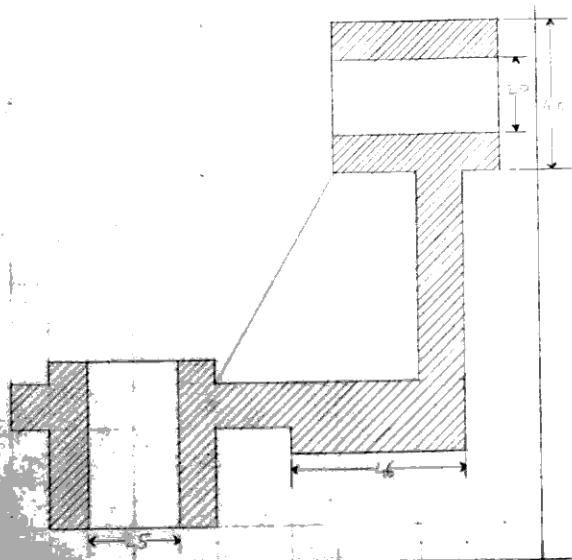
i) Sectional front view section P-P.

ii) Top view.

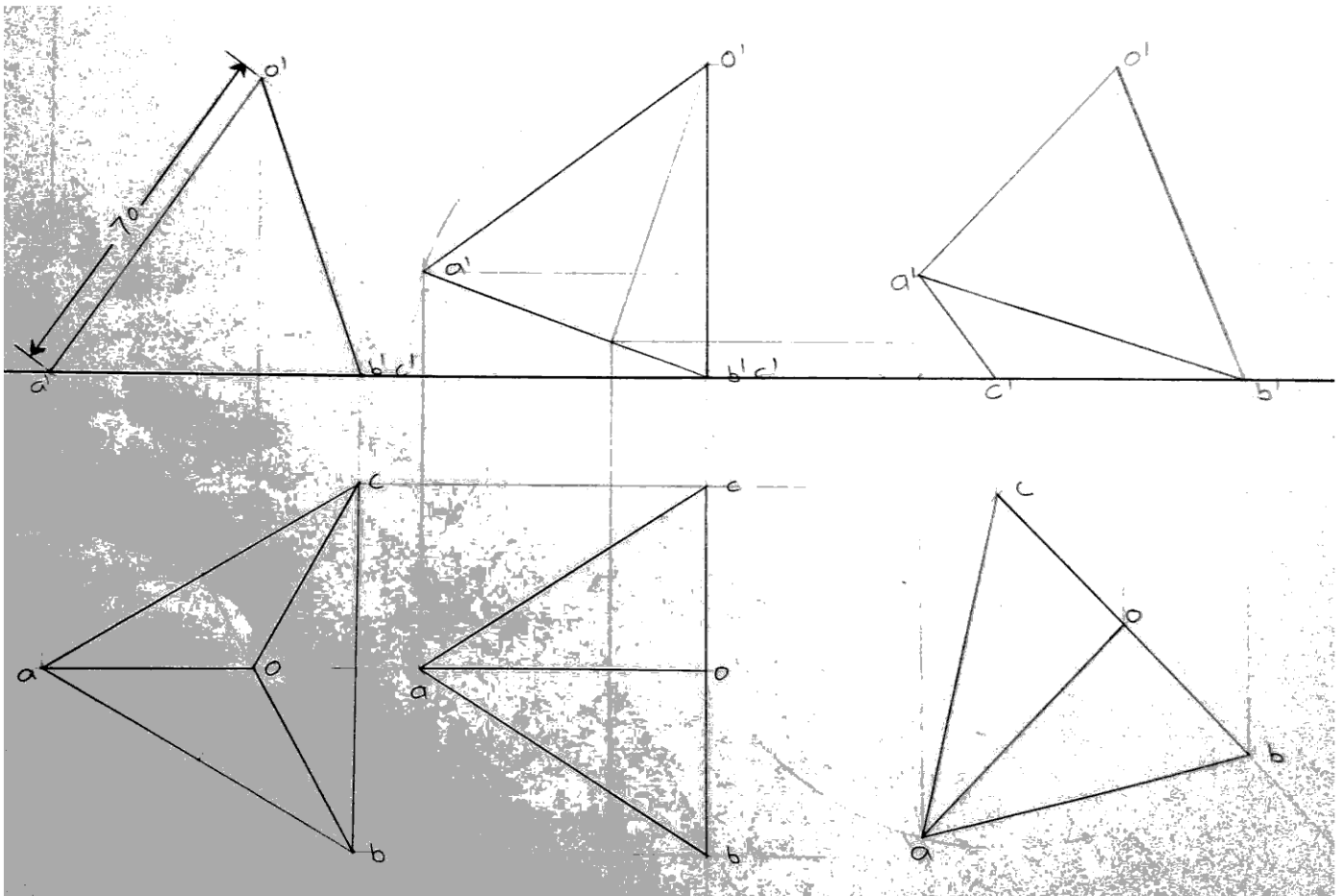
iii) Left hand side view.

iv) Insert minimum 10 dimensions.

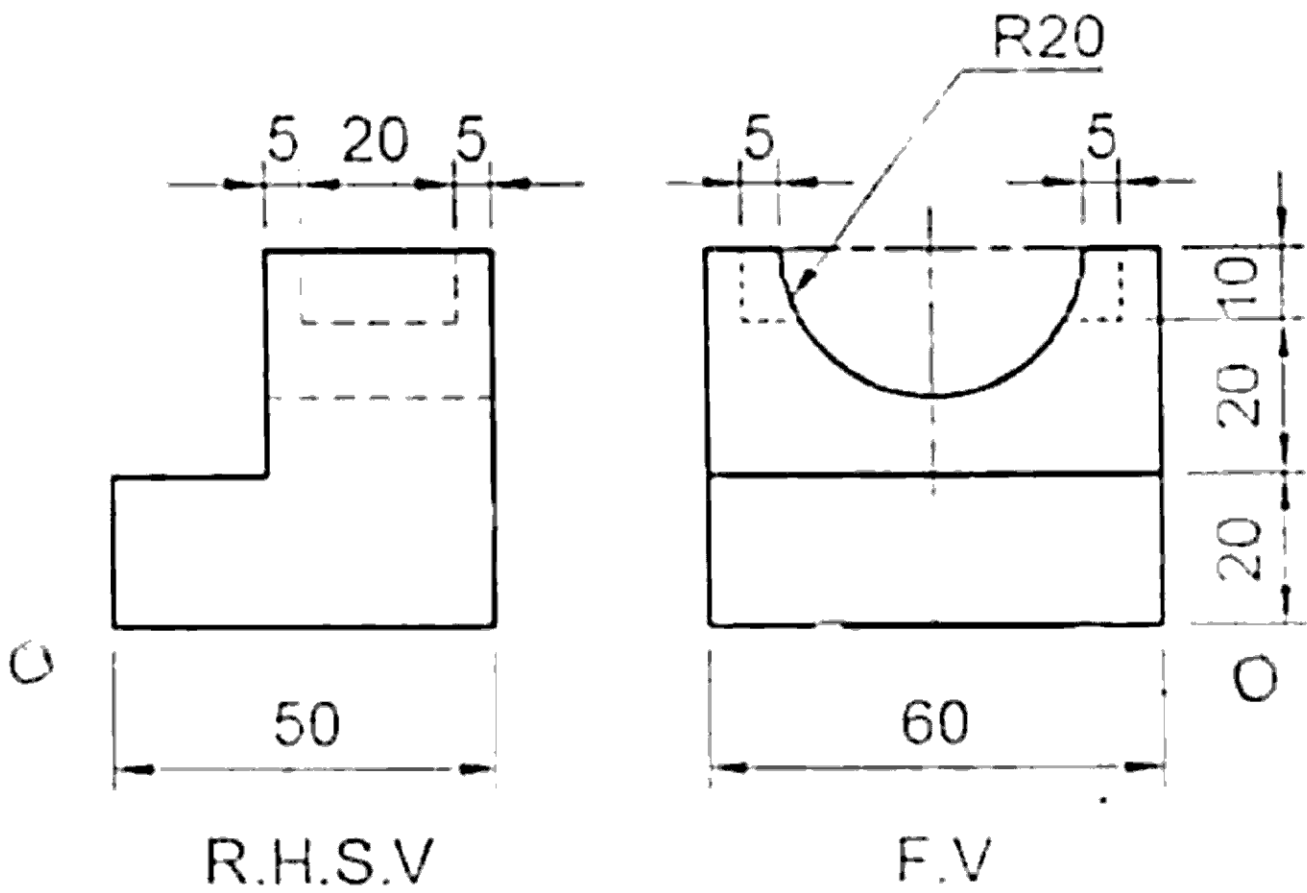


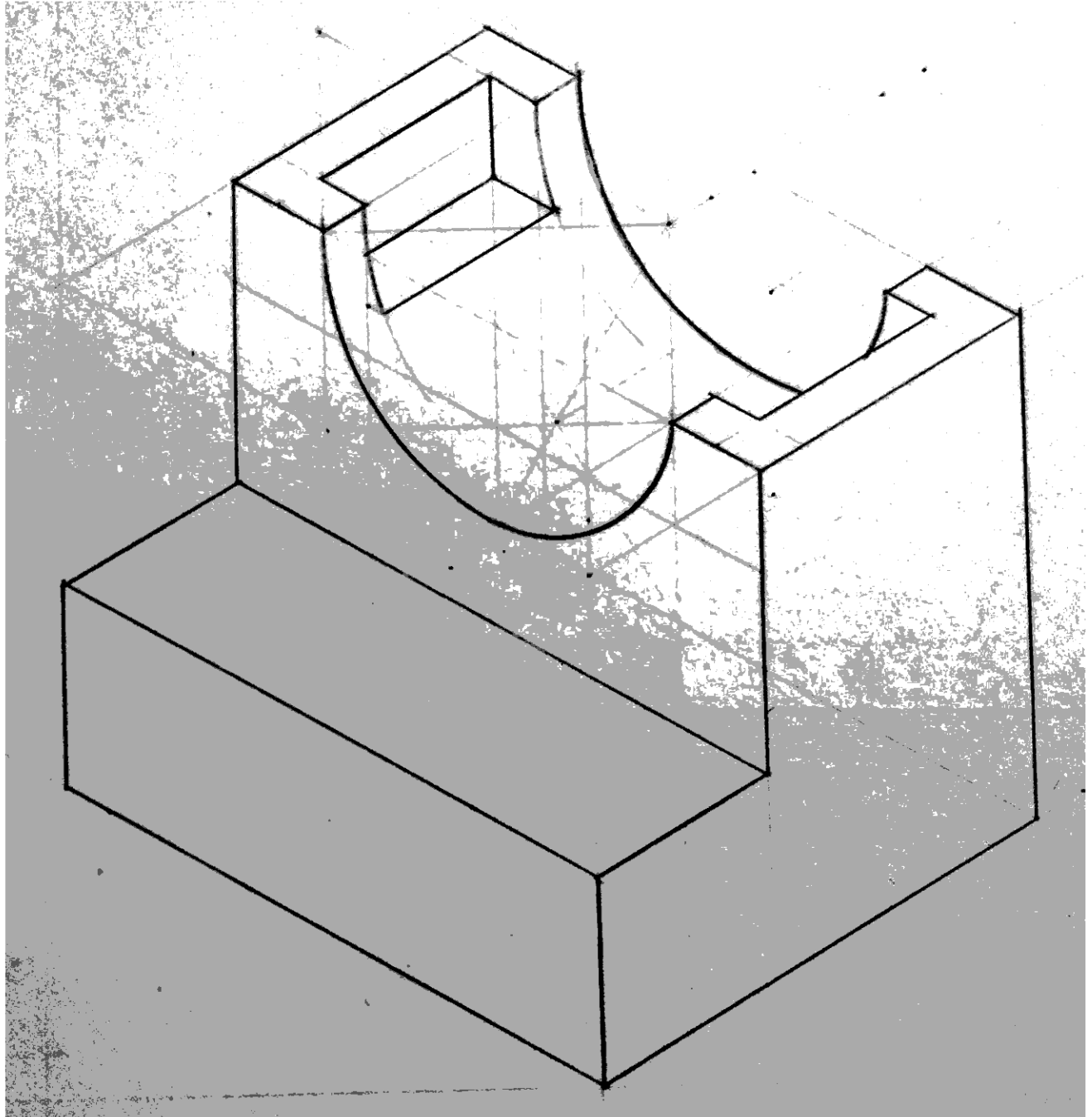


Q 2] A tetrahedron of 70 mm sides has one of its edges in HP and inclined at  $45^\circ$  to the VP. While a face containing that edge is vertical. Draw projections of the tetrahedron.  
15 M



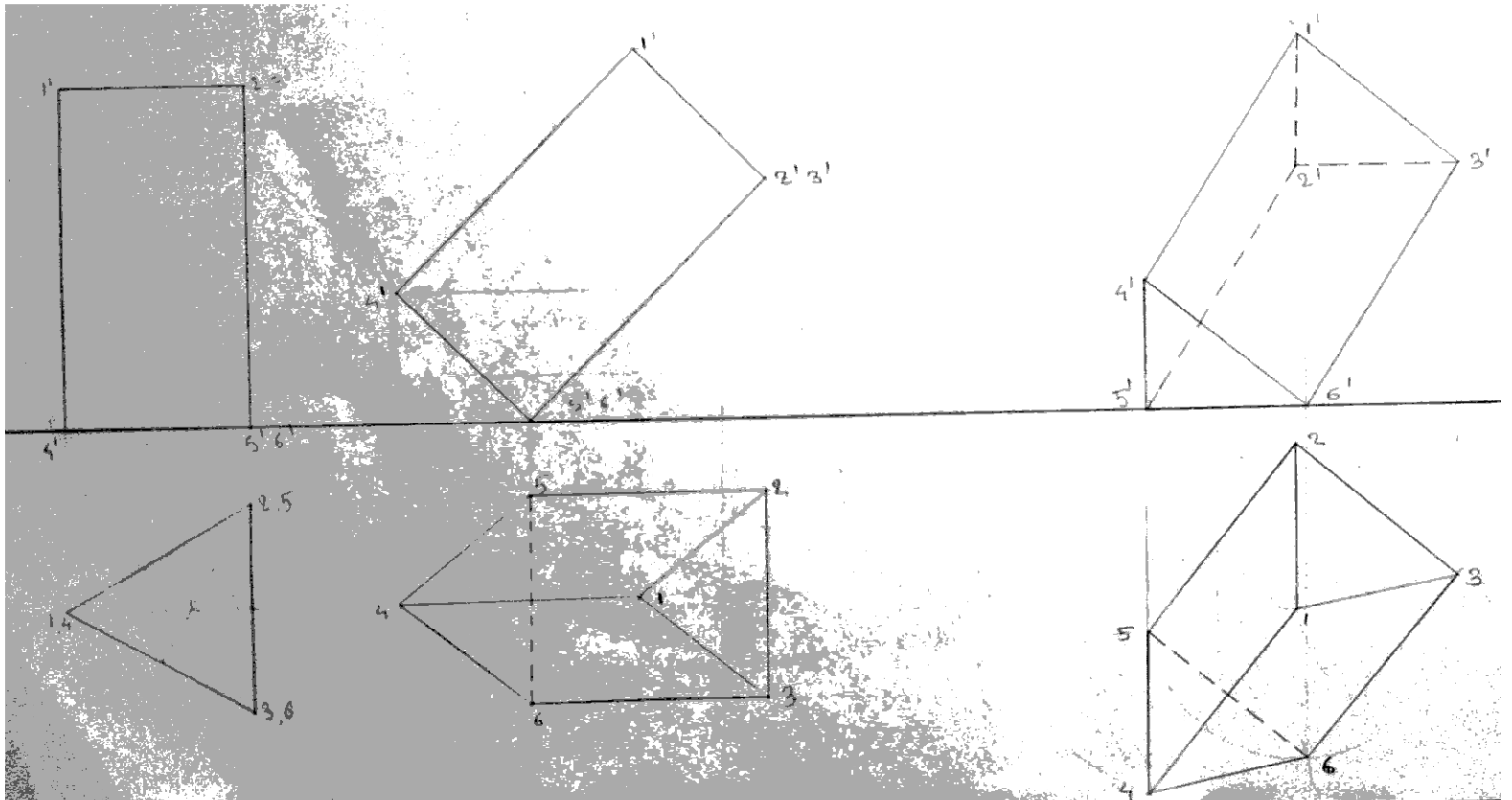
Q 3a] Draw the isometric view of the following using the natural scale.  
08 M



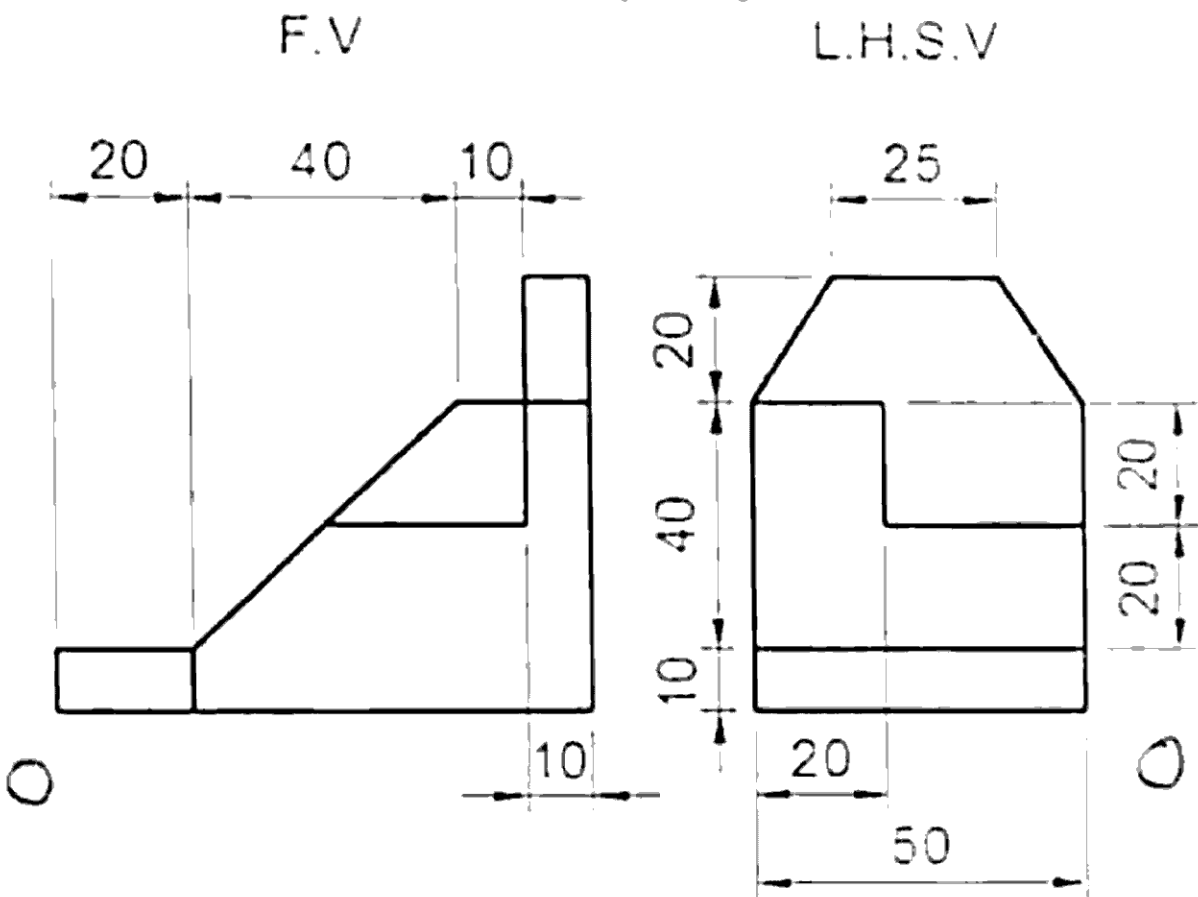


Q 3b] A triangular prism base 40 mm long and height of axis 65 mm has one of its base edges in HP and inclined at  $40^\circ$  to VP. Draw projections when the axis is inclined at  $45^\circ$  to HP.

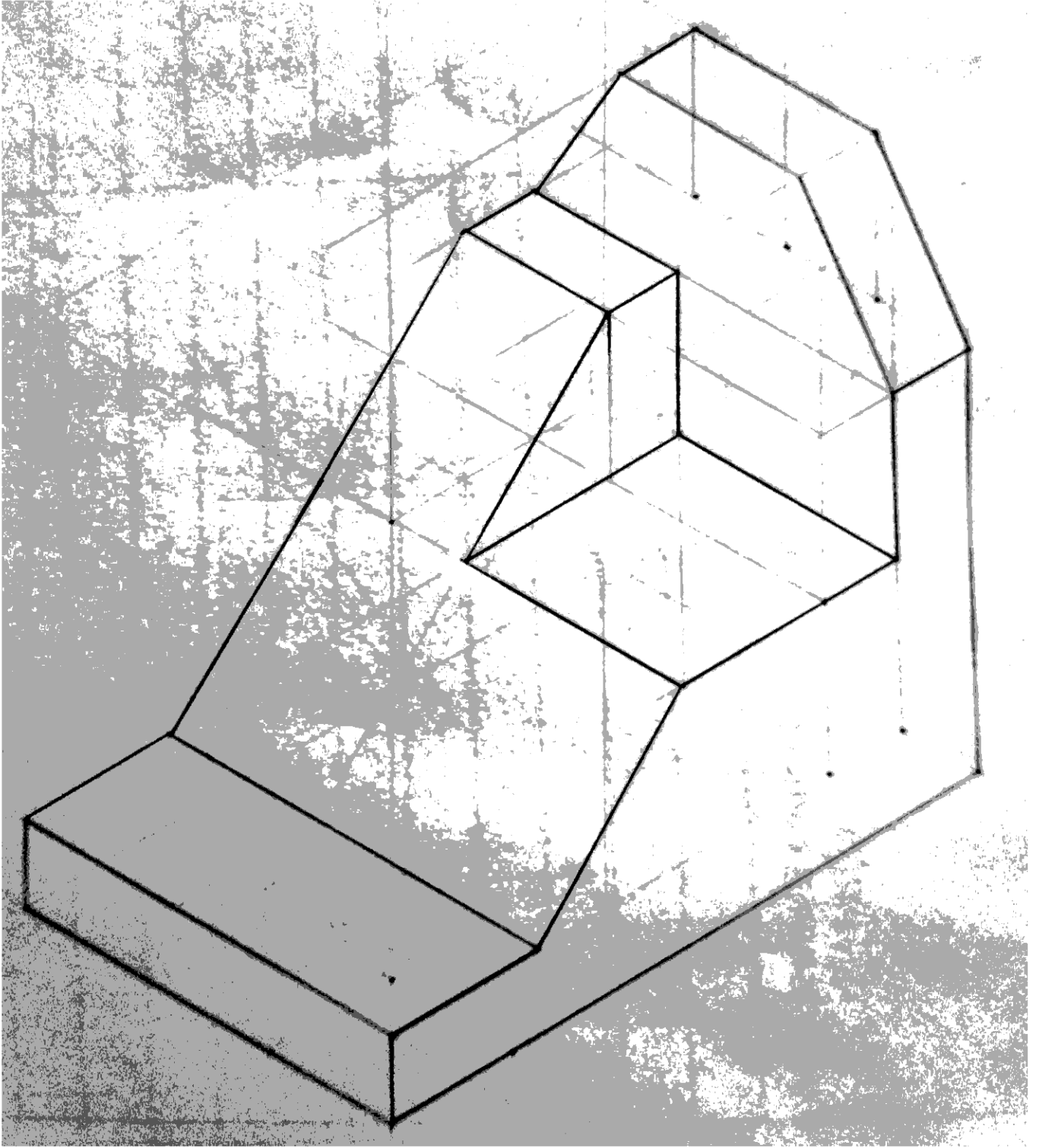
07 M



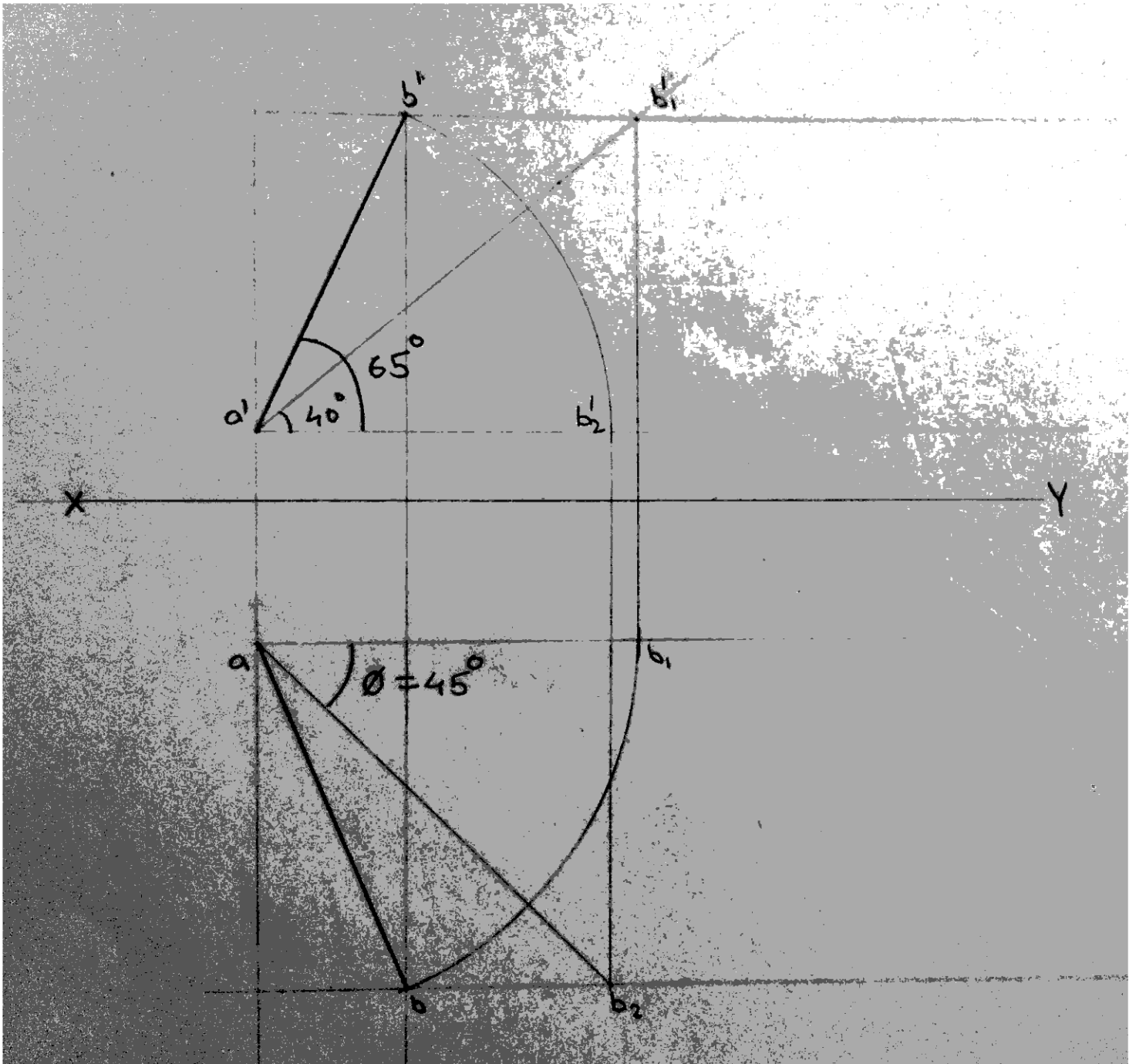
Q 4a] Draw the isometric view of the following using the natural scale.  
07 M





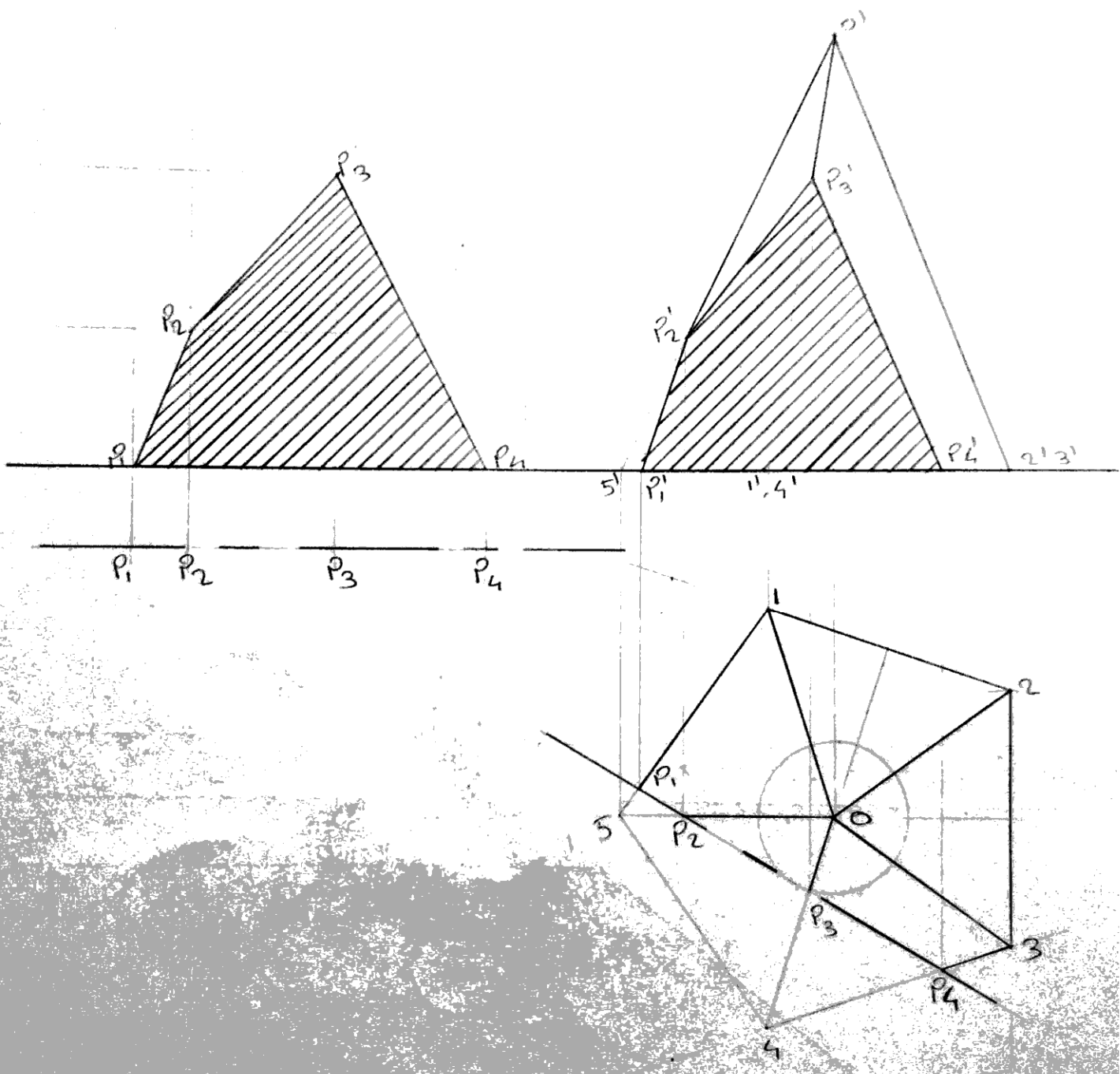


Q 4b] A line AB 70mm long has its end A 10mm above HP and 20mm in front of VP. The line AB is inclined at  $40^\circ$  to HP and its front view is inclined at  $65^\circ$  to XY. Draw its projection and find inclination of AB with VP. 08 M



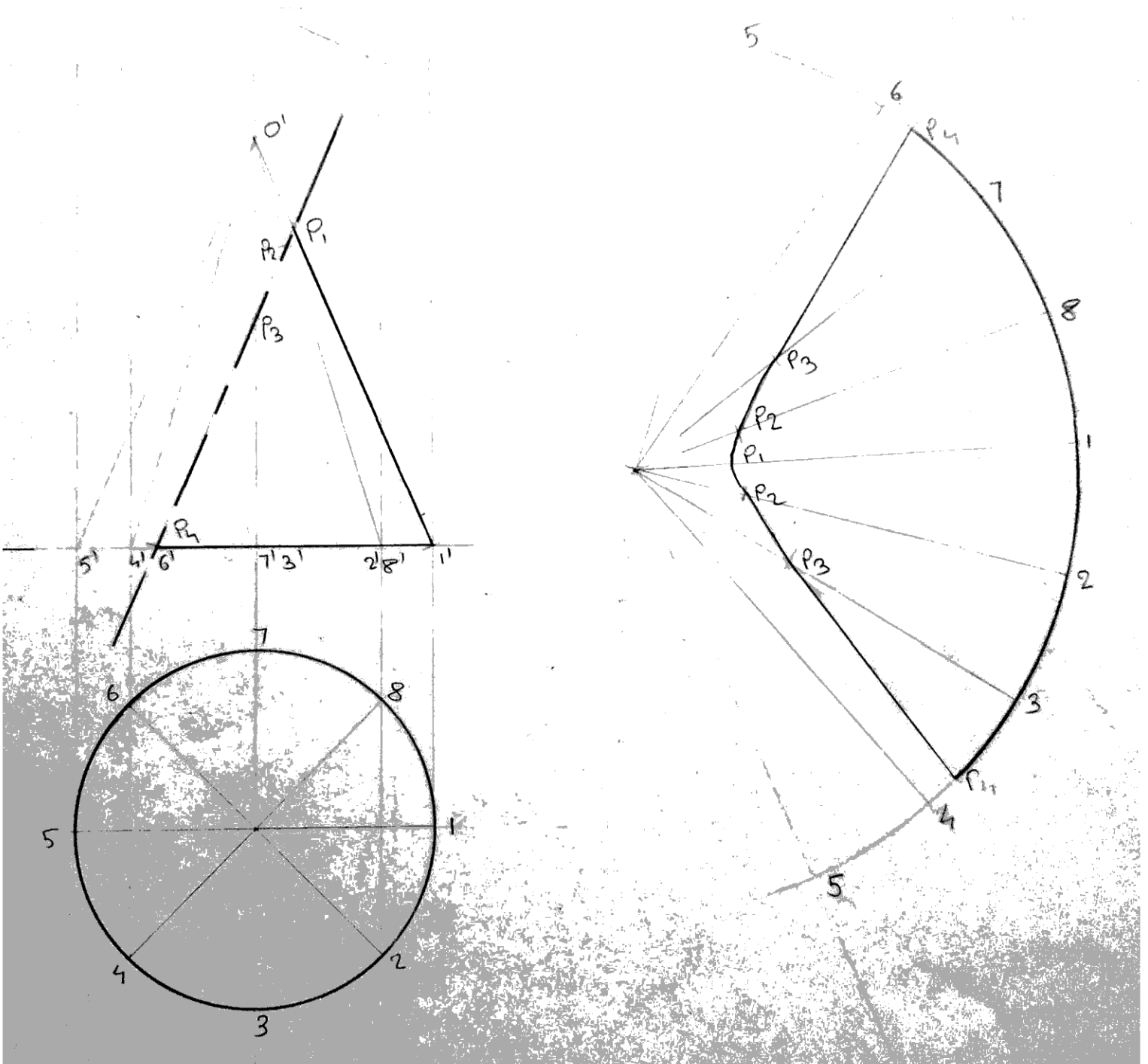
Q 5a] A pentagonal pyramid of 40mm edge of base and 70mm high stands vertically with its base on HP and an edge of base is perpendicular to VP. A section plane perpendicular to HP and inclined at  $30^\circ$  to VP cuts the pyramid such that it passes through the pyramid at a shortest distance of 12mm from the axis and in front of it. Draw sectional front view, top view showing the section, and true shape of section.

OR M



Q 5b] A cone of 70mm height of axis and base diameter 60mm is resting on its base on HP. It is cut by a section plane parallel to one of its end generators and 12mm away from it. Draw development of lateral surface of truncated solid.

07 M



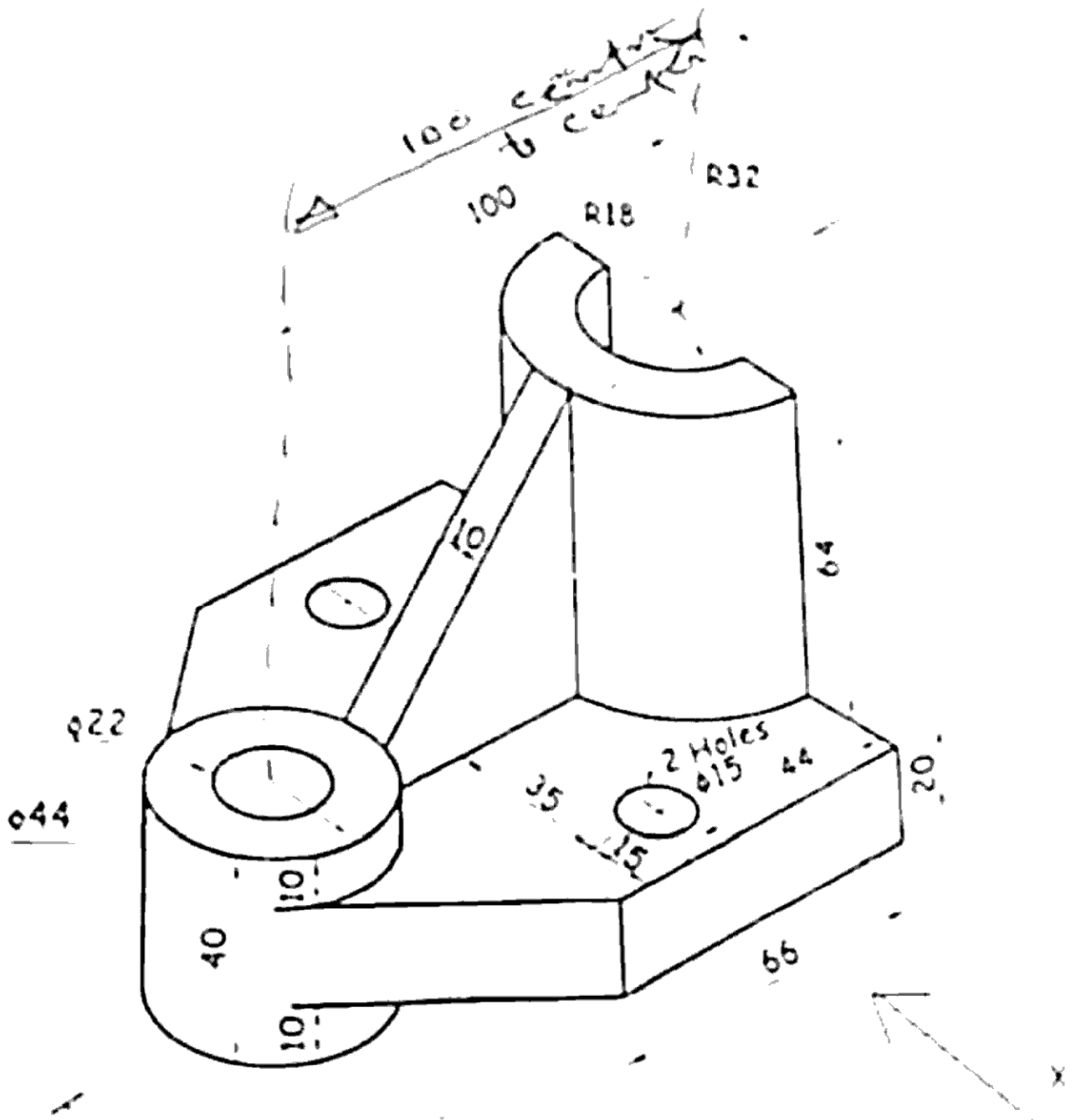
Q 6a] Figure given below shows two views of an object. Draw the following views to full scale:-

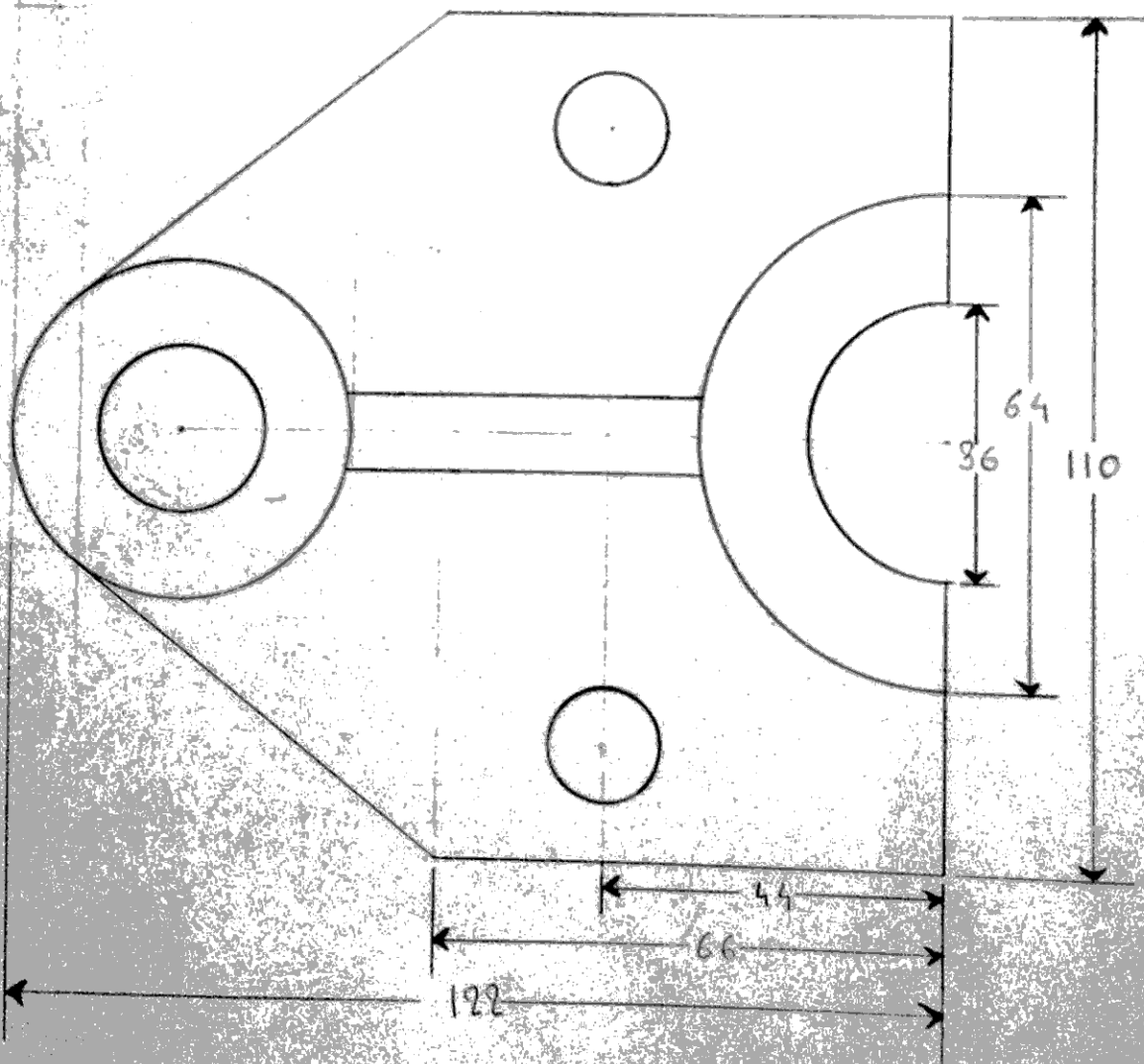
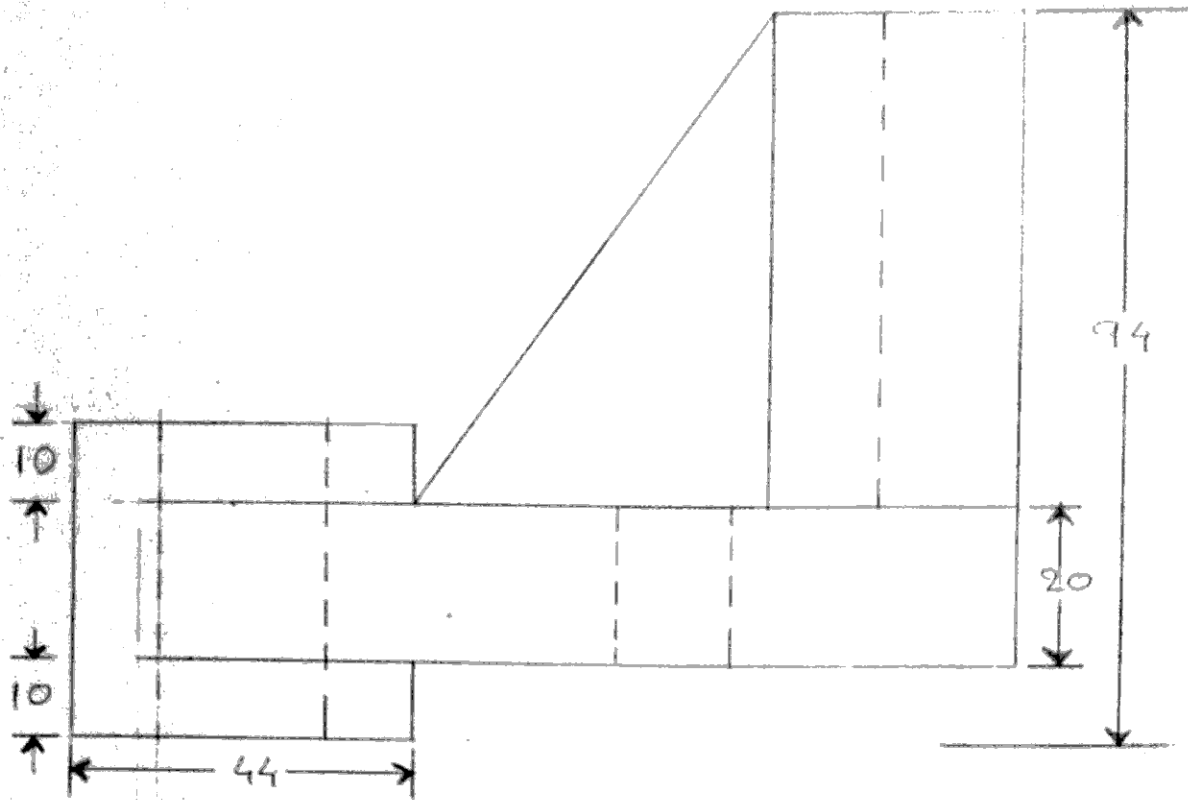
09 M

i) Front view from X.

ii) Top view.

iii) Insert minimum 6 dimensions.





Q 6b] One end of an inelastic thread of 150mm length is attached to one corner of a regular hexagonal disc having a side of 25mm. Deaw the curve traced out by the other end of the thread when it is completely wound along the periphery of the disc, keeping the thread always tight. 06 M

