

Indian Institute of Technology Kanpur
TA101AA: Engineering Graphics
2021- 2022 Sem II

Lab Assignment no.10
Intersection of Solids with Planes and Solids

- a) All problems to be done on separate A4 sheets **(USE THE DRAWING SHEET VERTICALLY IF THE DRAWING DOES NOT FIT HORIZONTALLY)**.
- b) Write your name, roll no. etc. in the title block using blue pen. (Title block is to be made horizontally as before or vertically)

Question 1

Draw the top and front views of the line of intersection between plane ABC and cone VO as shown in Figure 1, using the cutting plane method. Complete the cone and show visibility. Each square is 5 x 5 mm. **(50 Marks)**

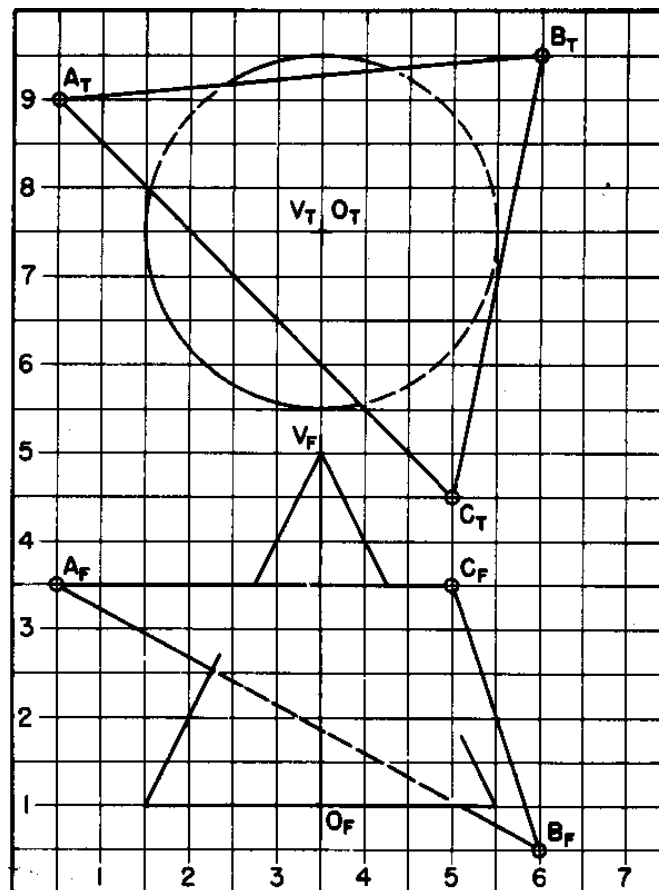


Figure 1

Question 2.

Figure 2 shows the Top and Front view depicting the orientation and location of two intersecting prisms. The views themselves could be incorrect or partial. Kindly note that the only possibility in this case is that the horizontal prism has been inserted into the vertical prism because a hole in the horizontal prism for insertion of the vertical prism will break it into distinct solids. Draw the lines of intersection between the two prisms and complete the front, top and right side views with the correct visibility for the various lines. *Use scale of 1:2. (50 Marks)*

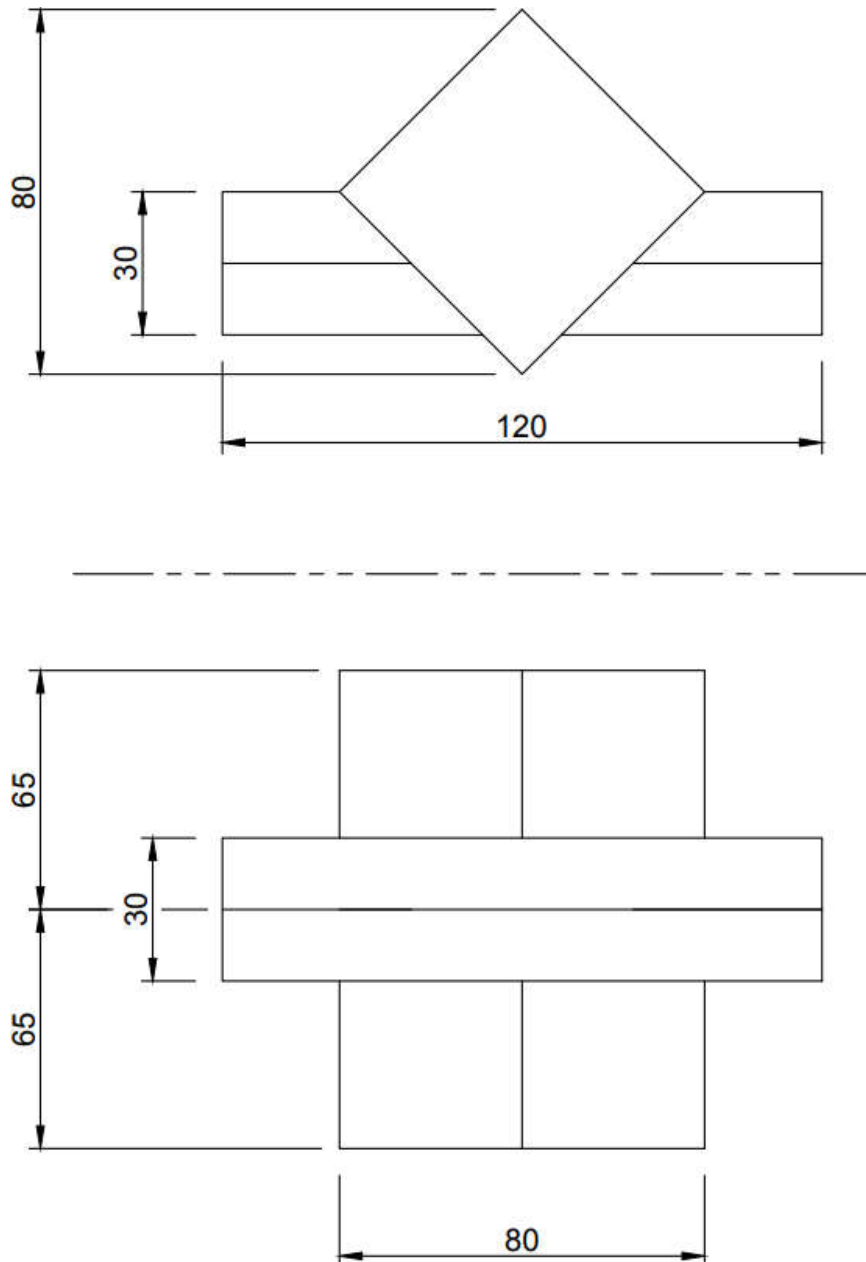


Figure 2. Intersection of prisms.