

Indian Institute of Technology Kanpur
TA101: Engineering Graphics
Sem II: 2021 - 2022

Lab Assignment no.3
Orthographic Projection with dimensions + Simple Isometric View

- (a) All problems to be done on A4 size drawing sheet.
- (b) Write your name, roll no. etc. in the title block using Blue Pen.

Question 1

Draw the front, top and left side views of the object given below. Use **First Angle projection scheme** and **dimension the drawing using aligned dimensioning system**. Write the dimension value within the dimension line wherever feasible. **(30 Marks)**

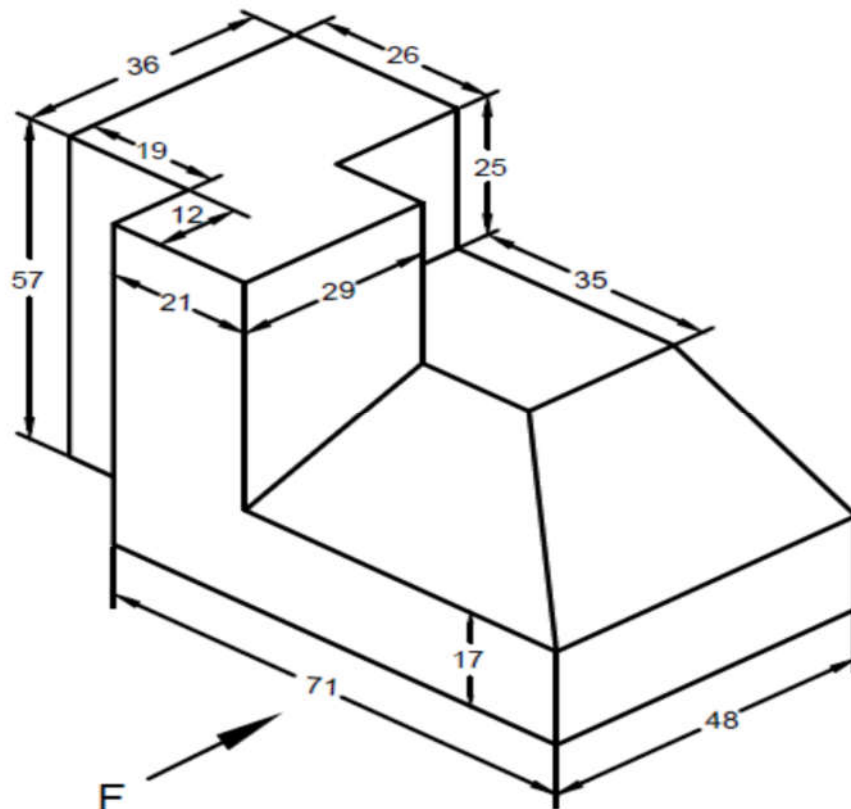
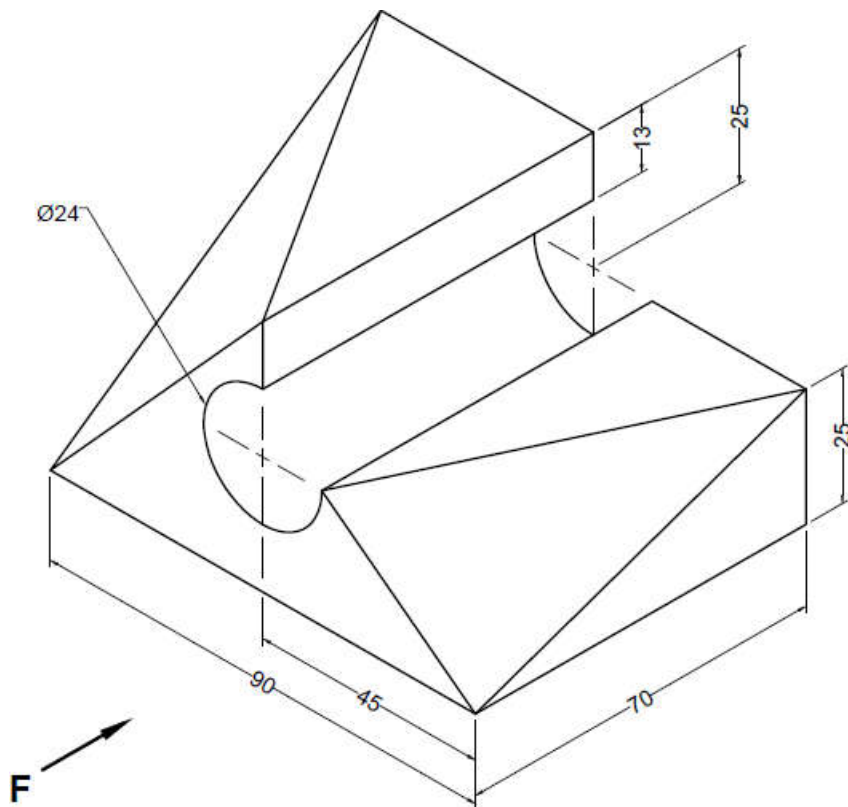


Figure-1

Question 2

Draw the three orthographic views (Front, Top and Right-side view) of the object whose pictorial view is given in Figure 2 with the arrow indicating the front viewing direction. Dimension the drawing using aligned dimensioning. **Use third angle projection.** (F= Front, T = top, R= right)
(35 Marks)



Question 3

Draw an isometric scale of length 120mm with a least count of 1mm. Divide the first 10 mm in 1mm divisions, next 40mm in 5mm divisions, and the remaining in 10mm divisions. **(10 Marks)**

Question 4

Three orthographic views of an object in the third angle projection are shown in Figure 3. Using the isometric scale drawn in question 3 above, make an isometric projection of the object. Do not dimension. **(25 Marks)**

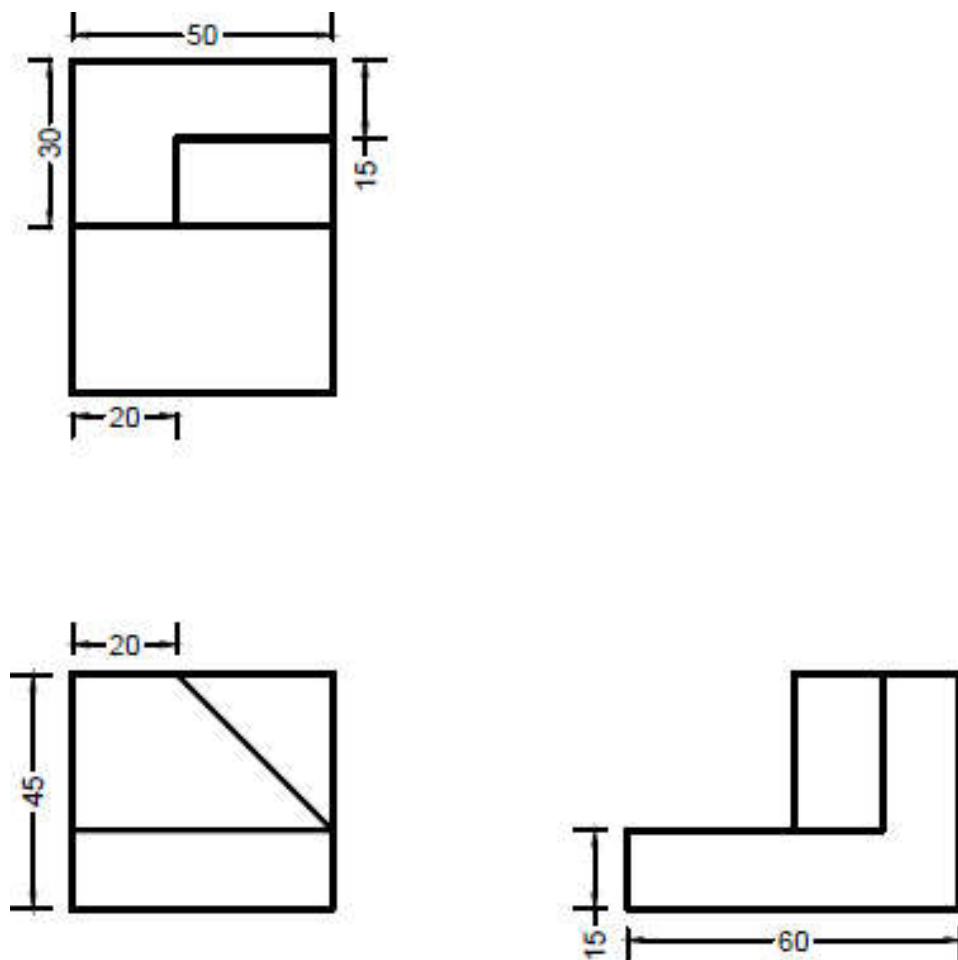


Figure 3