

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

Lab Assignment no. 6
Missing Lines and Views, Section Views and Assembly

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


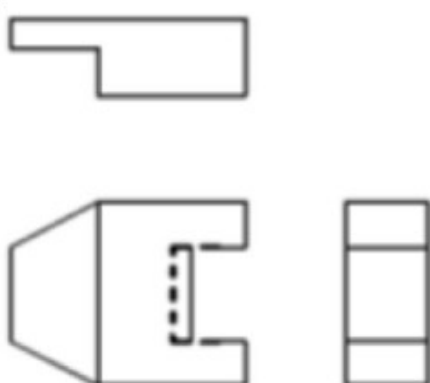
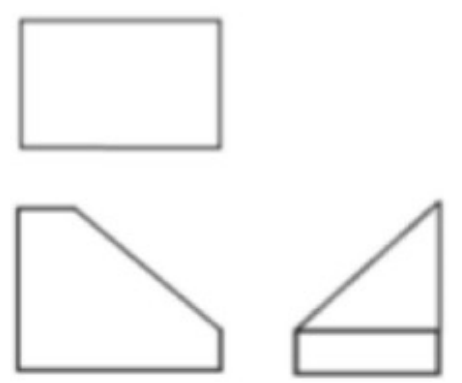
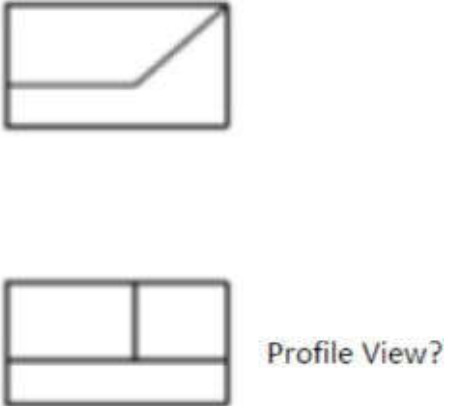

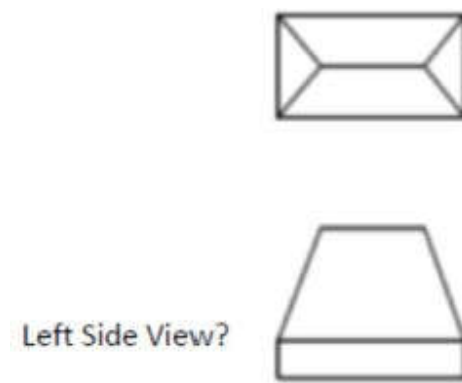
Question 1

The orthographic views shown in the top row of the list of Figures below have some missing lines. There is one missing view each of figures in the second row. For each problem,

- (a) Reproduce the incomplete orthographic views on your sheet
(b) Complete the orthographic views. Use blue colour pen to draw the missing lines or views.
(c) Draw the corresponding pictorial view.

Solutions involving the addition of a minimum number of missing lines are the correct solutions.

(6x5= 30 Marks)

		
 <p style="text-align: right;">Profile View?</p>	<p>Top View?</p> 	 <p>Left Side View?</p>

Question 2

Draw the 3 orthographic views of figure 1 and dimension the drawing. (Use first angle projection). Carefully observe the RIB feature in the part and hatch accordingly. The construction lines may pass through the Title block.

(a) Front view with full section along AA passing through the central plane.

(b) Right side view without section.

(c) Top view without section **(30 Marks)**

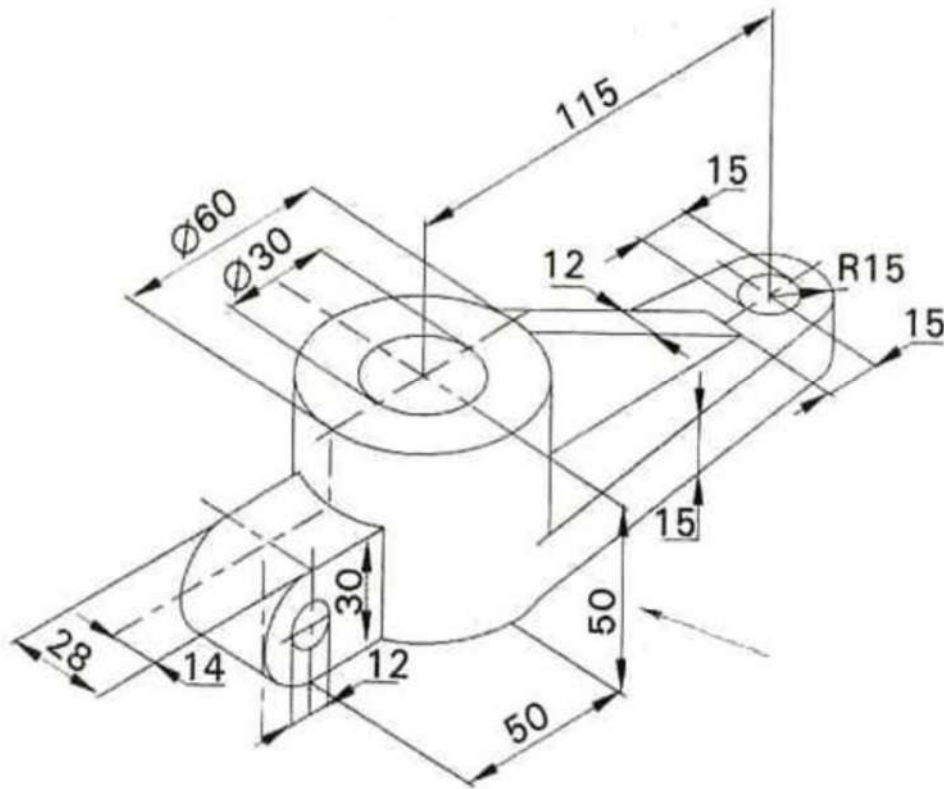


Figure-2 Machine Element

Question 3

Study the machine parts given in the Figure-3 on the next page. The sequence of assembly is as follows: The pin is inserted into the bush and they are together inserted inside the wheel. The pin, bush and wheel assembly is then mounted onto the bracket by inserting the bottom portion of the pin inside the 12 diameter hole. Finally, the taper pin is inserted inside the bottom hole of the pin. This entire arrangement ensures that the assembly stays in place. Draw the front view with a full section along the central plane of the assembly. *Do not use offset section to pass through the other holes in the bracket for simplicity. Do not dimension.* **(40 Marks)**

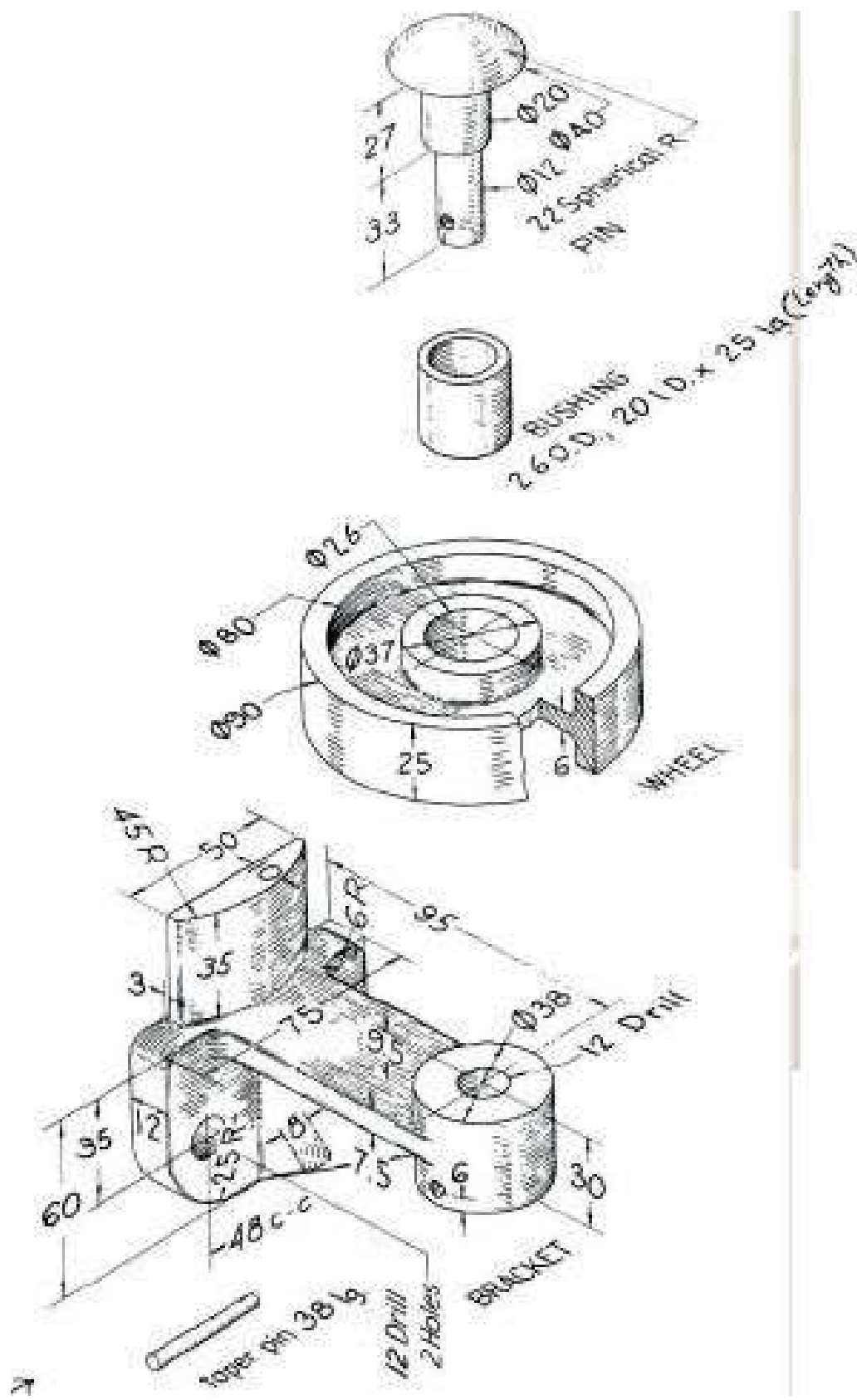


Figure-3

