1. Sketch free hand the Front View and Side View of a Collar Stud of 20mm diameter having horizontal axis. Give standard dimensions. 7

2. Figure 1 shows the details parts of a Sleeve and Cotter Joint. Assemble all the parts correctly and then draw to scale 1:1; its following views:

   (i) Front View, upper half in section 15
   (ii) Side View looking from the left end 7

Print the title and scale used. Draw projection symbol. Give 6 important dimensions. 6
Figure 1

**OR**

Figure 2 shows the assembly of a 'Flange Pipe Joint'. Disassemble the parts correctly and then draw to scale 1:1 its following views of the following components. Keeping the same position of both Flange B and Gasket with respect to H.P and V.P.

(i) FLANGE B
   
   (a) Front view, upper half in section
   
   (b) Right side view

(ii) GASKET

   (a) Full sectional front view
   
   (b) Left side view

Print the titles of both and scale used. Draw the projection symbol. Give 6 important dimensions.
Figure 2