S.B. Roll No.....

MECHANICAL ENGINEERING DRAWING-I

3rd Exam/Mech/RAC/PROD/AUTO/0534/0053/5347/Nov'16

**Duration: 3 hrs** **M. Marks: 75**

**Note: If any dimension is not clear / missing, assume proportionate value for the same.**

## SECTION – A

**Q1 Attempt any four questions.** **7.5x4=30**

1) Explain various types of bearing.
2) Explain Tolerance, Limits and fits and Tolerance.
3) Define coupling and explain its various types.
4) Draw free hand sketch of a ball and roller bearing.
5) What do you mean by coupling? Explain its various types.
6) Draw free hand sketch of a stepped pulley.

## SECTION – B

**Q2. Attempt any two questions.** **22.5x2=45**

1) A vertical cylinder of 48mm diameter and height 90mm is completely penetrated by another cylinder of 30mm dia and 70mm long. Axis of penetrating cylinder is parallel to both H.P. and V.P. Draw the curve of intersection.
2) Draw front view and top view of a universal coupling shown in **Figure 1.**
3) Draw free hand sketch of a foot step bearing. Draw front and top view.
4) **Figure 2** shows details of a screw jack. Assemble parts and draw front view full in section and top view.

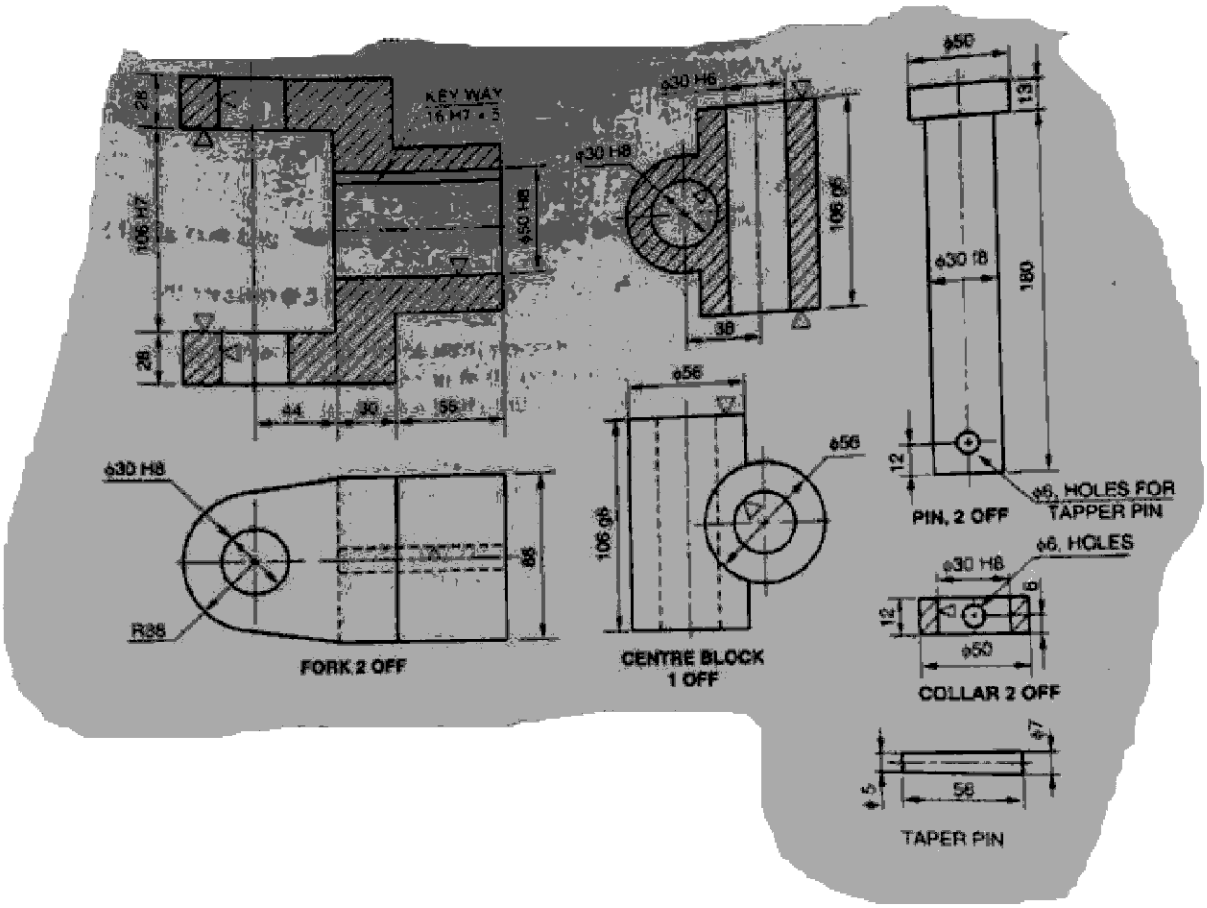


**Figure 1**

S.B. Roll No.....

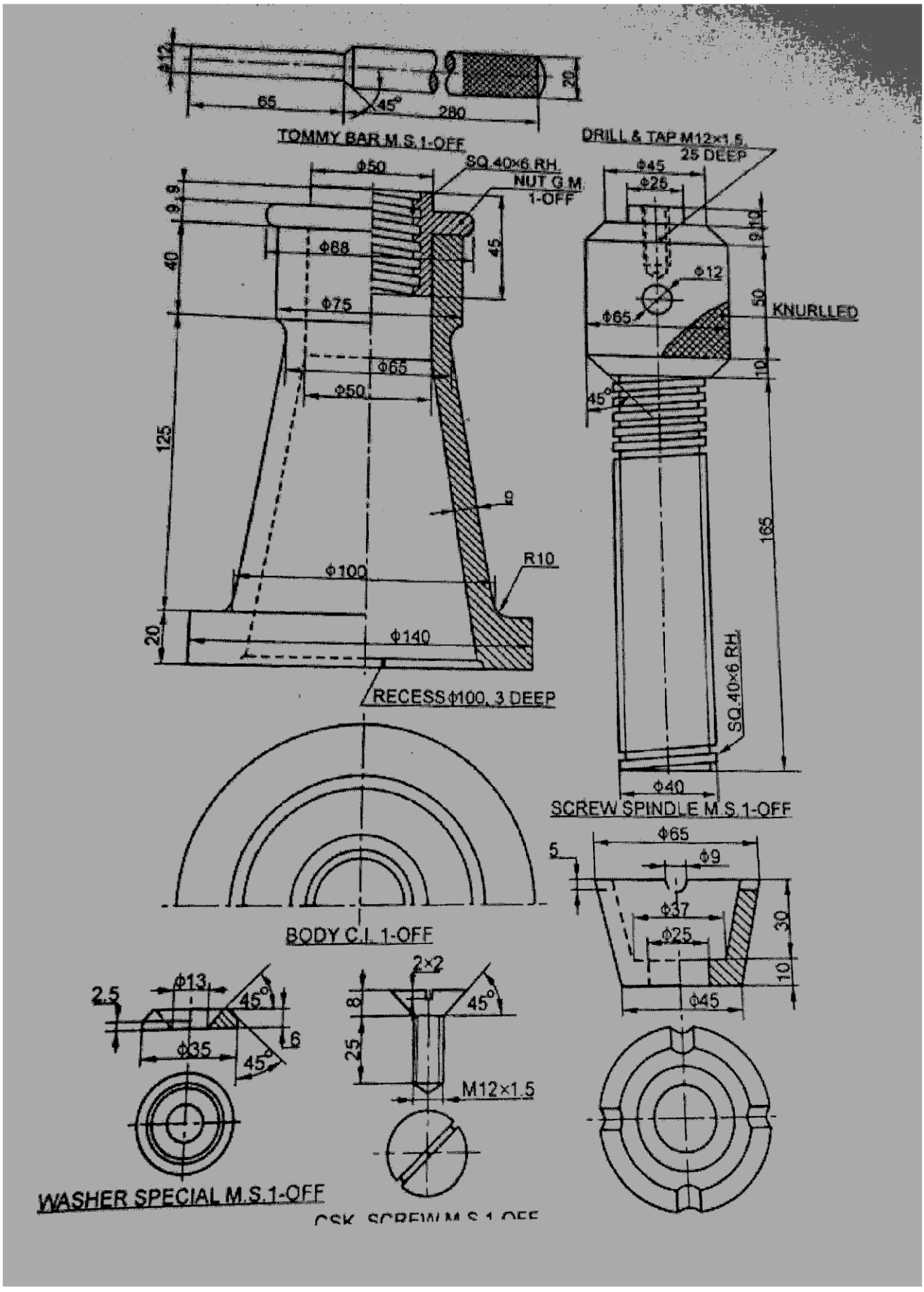


**Figure 2**