



Register Number:.....

B.E DEGREE EXAMINATIONS: MAY 2015

(Regulation 2013)

Third Semester

MECHANICAL ENGINEERING

U13MET304: Machine Drawing

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

1. Define third angle projection.
2. Draw the conventional representation of square threads.
3. How will you represent the convention of a round section?
4. What are the different types of surface textures?
5. Discuss the difference between lead and pitch?
6. Define the term Tolerance fit.
7. Sketch any four geometric characteristic symbols of form tolerances.
8. What are the types of geometric tolerances?
9. Sketch the symbols of welding used for drawing.
10. Discuss on position tolerance.

PART B (1 x 20 = 20 Marks)

11. a) The below Fig1 shows the assembled view of Flanged Coupling –protected type in half section with the proportions expressed in terms of the diameter “d” of the shafts. Prepare the working drawing indicating the appropriate dimensions with the tolerances wherever necessary for the following details, assuming d=30 mm. For the socket, and the shafts and flanges, the push fit is suggested. For keys and Keyways, light keying fit, and for bolts and bolts holes and close running fir are recommended.

- (i) Draw the Front view with top half in section and
- (ii) Top view.

(OR)

b) The below fig 1 shows the pictorial view of KUNCKLE JOINT. Assemble all the parts and draw the following views.

(i) Draw the Front view with top half in section and

(ii) Top view.

PART C (1 x 60 = 60 Marks)

12. a) Part details of a Rams Bottom Safety Valve are show in figure 3. Draw the front view showing one half in sections and Top view of the assembled to 1:2 scale.

OR

b) The details of Tail stock are shown in figure 4. Assemble all the parts correctly and draw the front view in section and top view of the assembled tailstock to 1: 1 scale

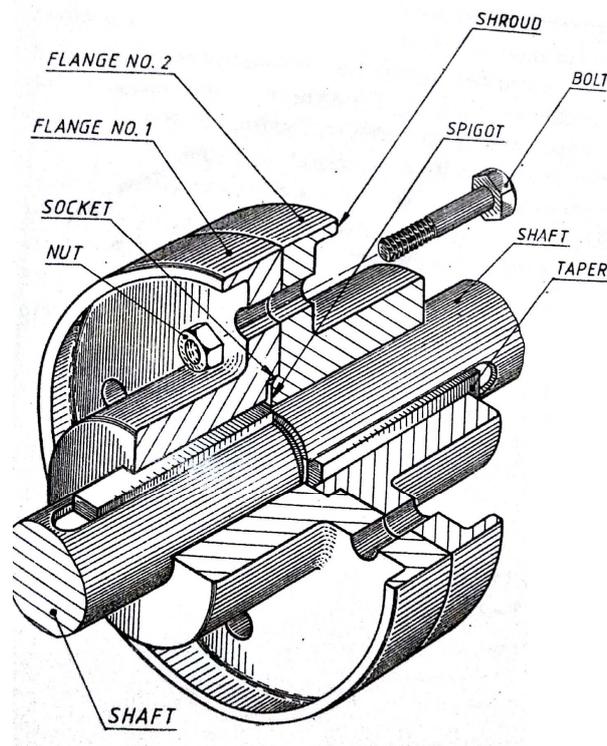


Figure 1. Flanged coupling –Protected type

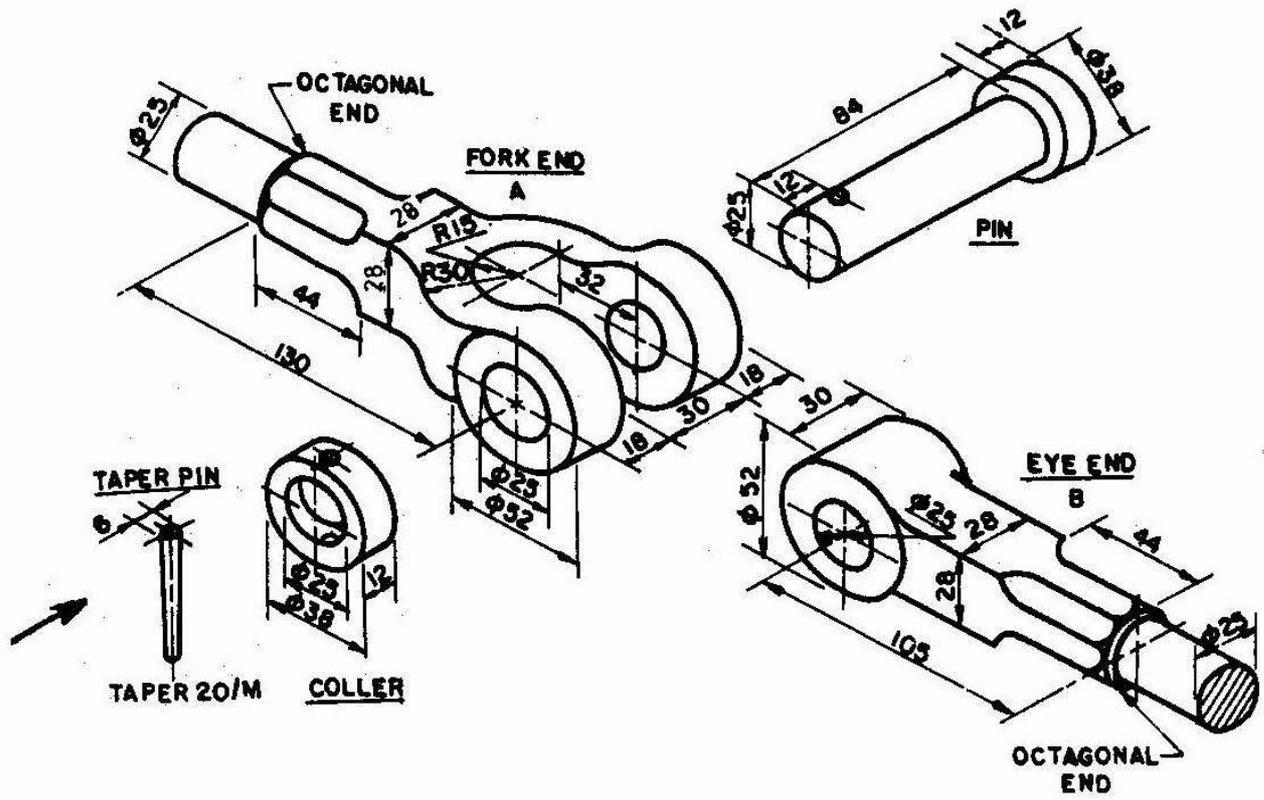


Figure 2. Parts of Knuckle Joint

