



THIRD SEMESTER B.TECH. DEGREE EXAMINATION,
DECEMBER 2010

ME/AM/AN.09.304/PTME.09.303 - COMPUTER ASSISTED
MACHINE DRAWING.
(2009 Admissions)

Time : Three Hours

Maximum marks: 70

1. Draw the following views of a knuckle joint assuming the diameter of the rod $d = 20\text{mm}$. 15
 - i). Front view with top half in section
 - ii) Top view
 - iii) A view from the eye end of the rod

OR
2. Draw the following views of the Universal coupling with all the parts assembled together. 15
 - i) Front view with top half in section
 - ii) Top view
3. Suggest suitable fits for the mating components of a belt driven gear pump shown in Fig.1. 20

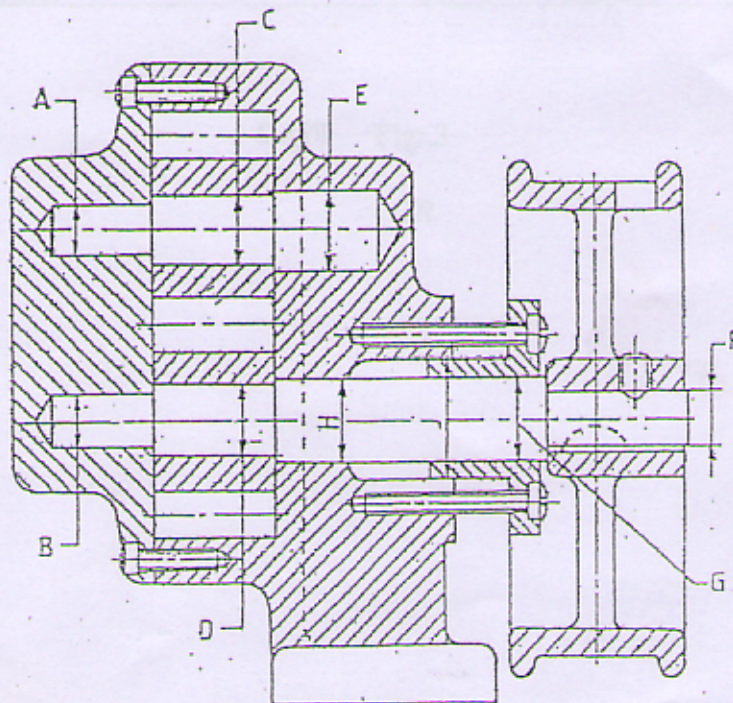
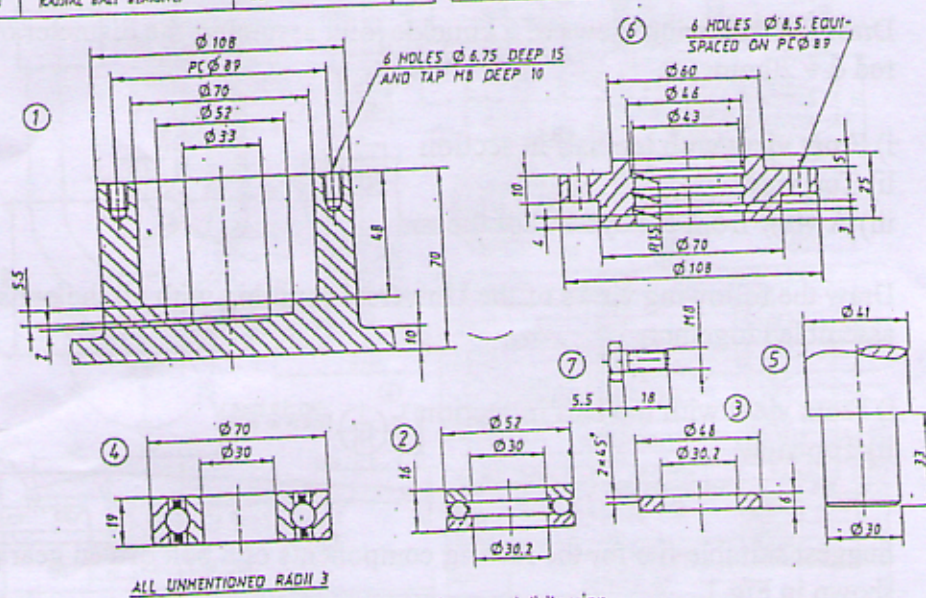


Fig. 1

4. The parts of Footstep Ball Bearing are shown in Fig.2. Assemble the parts and draw the following views.

- i) Front view in half section
- ii) Top view showing rear half in section

PART NO.	DESCRIPTION	MATERIAL	NO. OFF.	PART NO.	DESCRIPTION	MATERIAL	NO. OFF.
1	BODY	CAST IRON	1	5	SHFT	Fe 410W	1
2	THRUST BALL BEARING	COMMERCIAL	1	6	CAP	CAST IRON	1
3	THRUST PAD	Fe 410W	1	7	HEX. SCREWS M6	Fe 410W	6
4	RADIAL BALL BEARING	COMMERCIAL	1				



Details of a Footstep Ball Bearing

Fig. 2

6. Fig.4. shows the details of a Spring loaded safety valve. Draw the following views after assembling the parts.

35

- Front view in section
- Top view

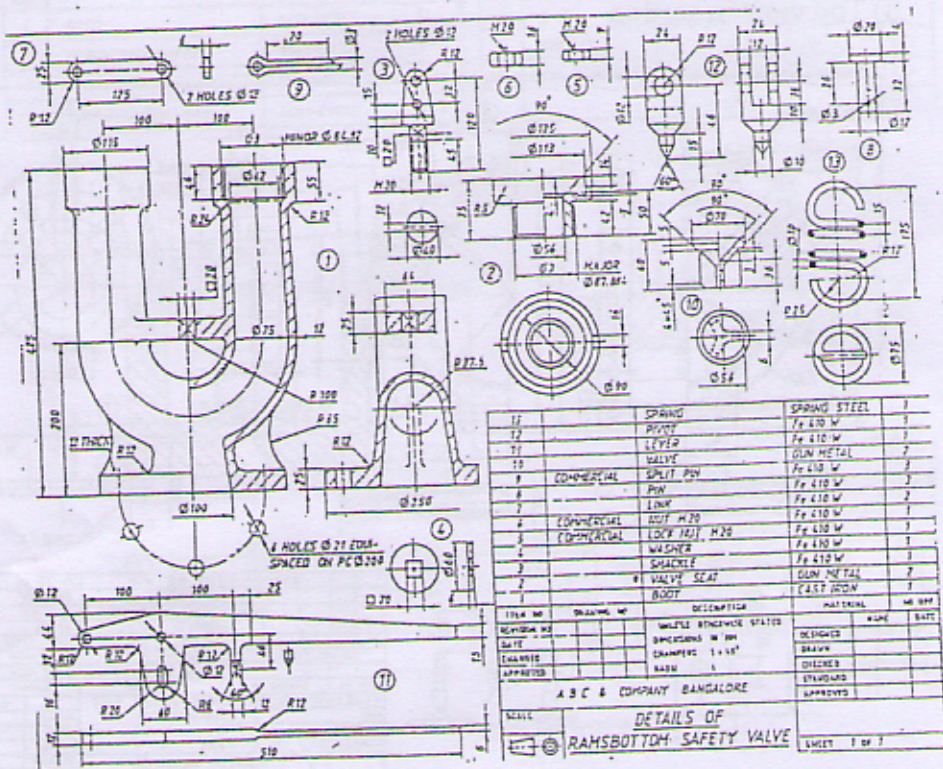


Fig. 4