

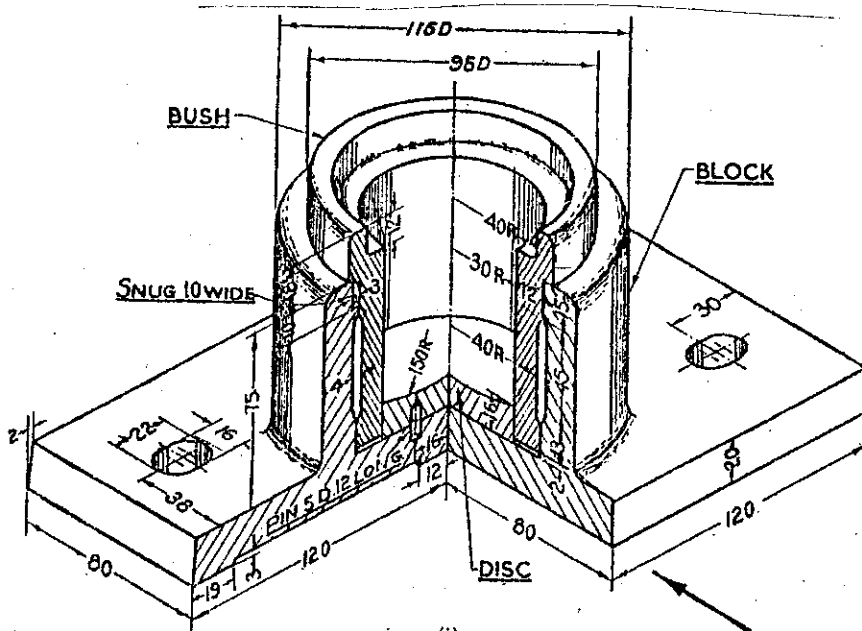
## B. Tech. Degree III Semester (Special Supplementary) Examination, August 2005

### ME 303 MACHINE DRAWING (2002 Admissions onwards)

Time: 3 Hours

Maximum Marks: 100

- I. (a) Give dimensional sketches of the following forms of screw threads  
 (i) Whitworth (ii) Unified (10)
- (b) Draw three views of a square headed ball 20 mm diameter, 120 mm long, with a hexagonal nut, lock nut, washer and a split pin, using rough rule dimensions for the nuts. The length of the threaded part of the bolt is 40 mm. (20)
- OR**
- II Sketch neatly a knuckle joint for connecting two 40 mm diameter rods. Give all important dimensions. (30)
- III (a) Draw full size, two views of an union joint for 25 mm diameter pipe (20)
- (b) Sketch a protected type flanged coupling for 80 mm diameter mild - steel shafts (10)
- OR**
- IV Draw half - sectional front views , the top view and a side view of the foot- step bearing shown in figure. (30)



(i)

(Turn



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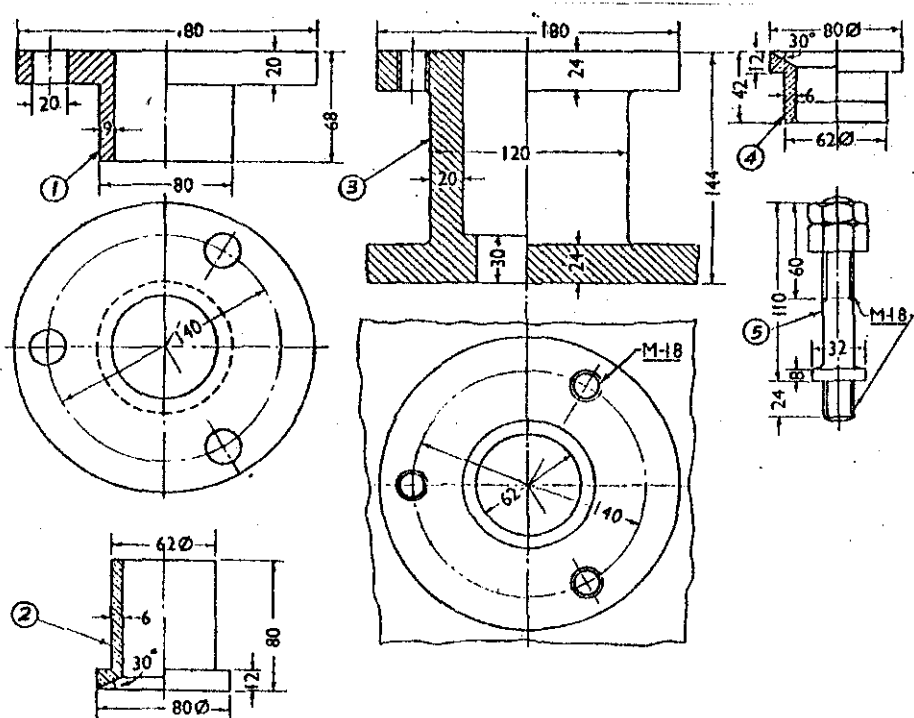
Details of a stuffing box are given in the figure below. Draw the following views of the stuffing box with all parts assembled together and showing the piston rod in position :

- (i) Sectional front view (ii) top view

Particulars of parts

No	Name	Material	No. reqd.
1	Gland	Cast Iron	1
2	Gl. Bush	Brass	1
3	Stuffing box	Cast Iron	1
4	Neck Bush	Brass	1
5	Stud and Nuts	Mild Steel	2

(40)



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