POKHARA UNIVERSITY

Level: Bachelor Semester: Spring Year : 2018
Programme:BE Full Marks: 100
Course: Engineering Drawing Pass Marks: 45
Time : 3hrs.

Candidates are required to make clear and accurate drawings in appropriate dimensions.

The figures in the margin indicate full marks.

Assume suitable data if necessary. All dimensions are in mm.

Attempt all the questions.

1. Draw a parabola, given the distance between its focus F and directrix DD as 50 mm. Also draw a tangent to the curve at a point on it. 14
2. A line AB, inclined at 30° to the VP, has its ends 50 mm and 20 mm below HP. The length of its front view is 65 mm and its VT is 10 mm below the HP. Determine the TL of AB and its inclination with the HP. 14
3. Draw the complete orthographic views (3 views) of the given object (figure 1). 30

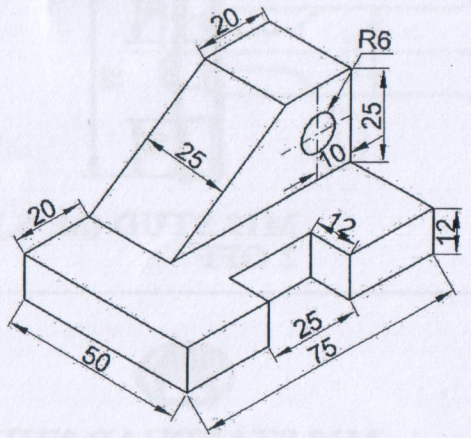


Figure 1

4. If a cutting plane cuts a right circular cone into given position,as shown in figure 2. Reproduce the given views of the object and draw sectional top view, true shape of the section and lateral surface development of the object. 18

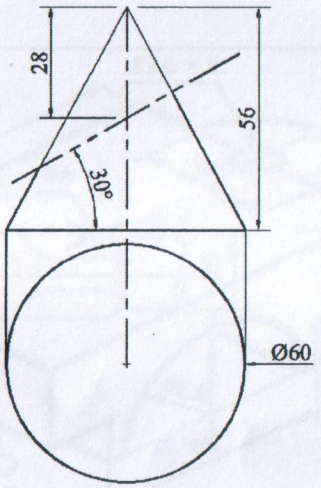


Figure 2

5. Figure 3 shows the detail of a Split Bearing. Draw the assembled front view with section. 24

OR

Assemble the parts of a knuckle joint, shown in figure 4 and draw, sectional view from the front.

Figure 3

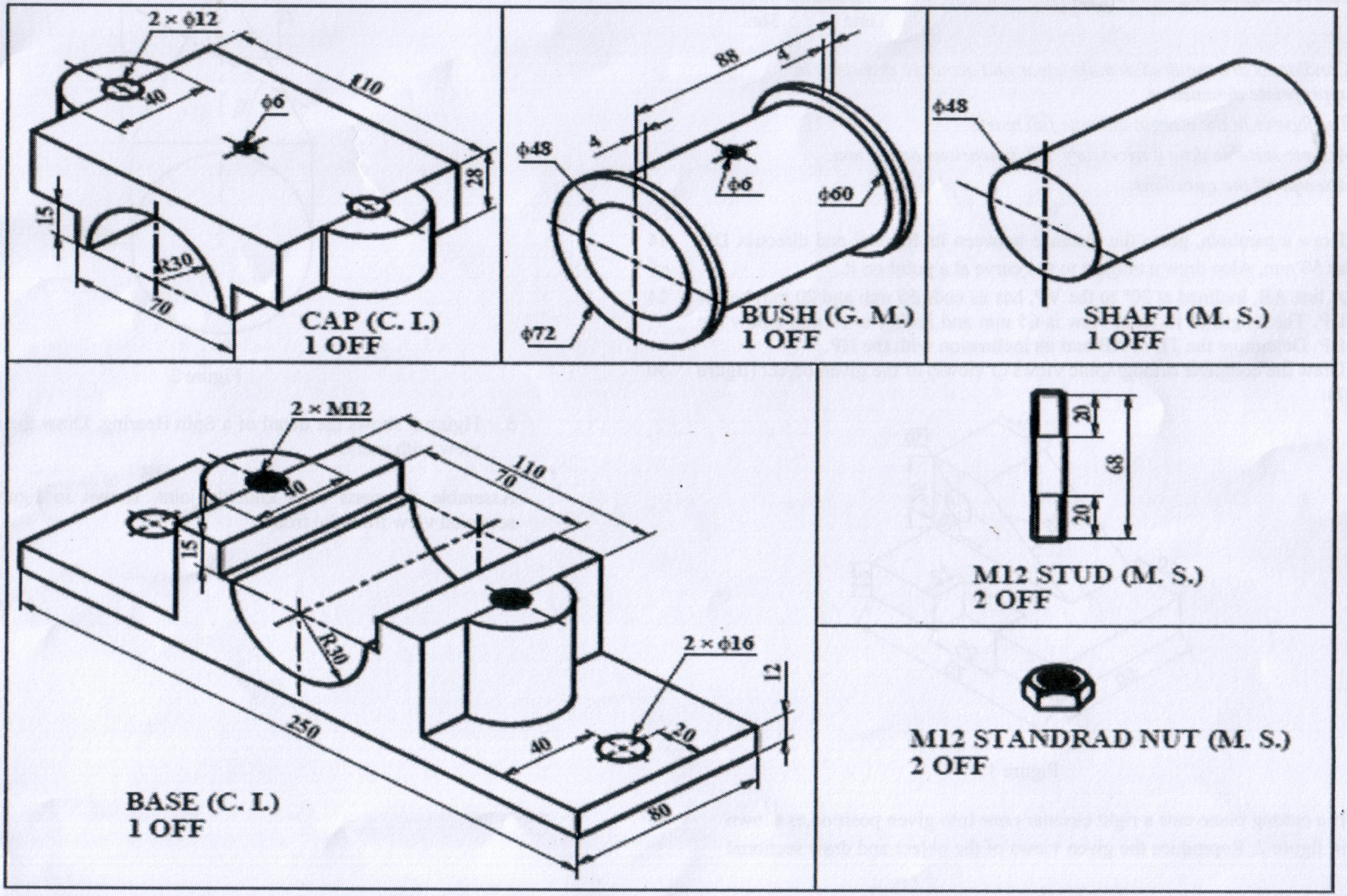
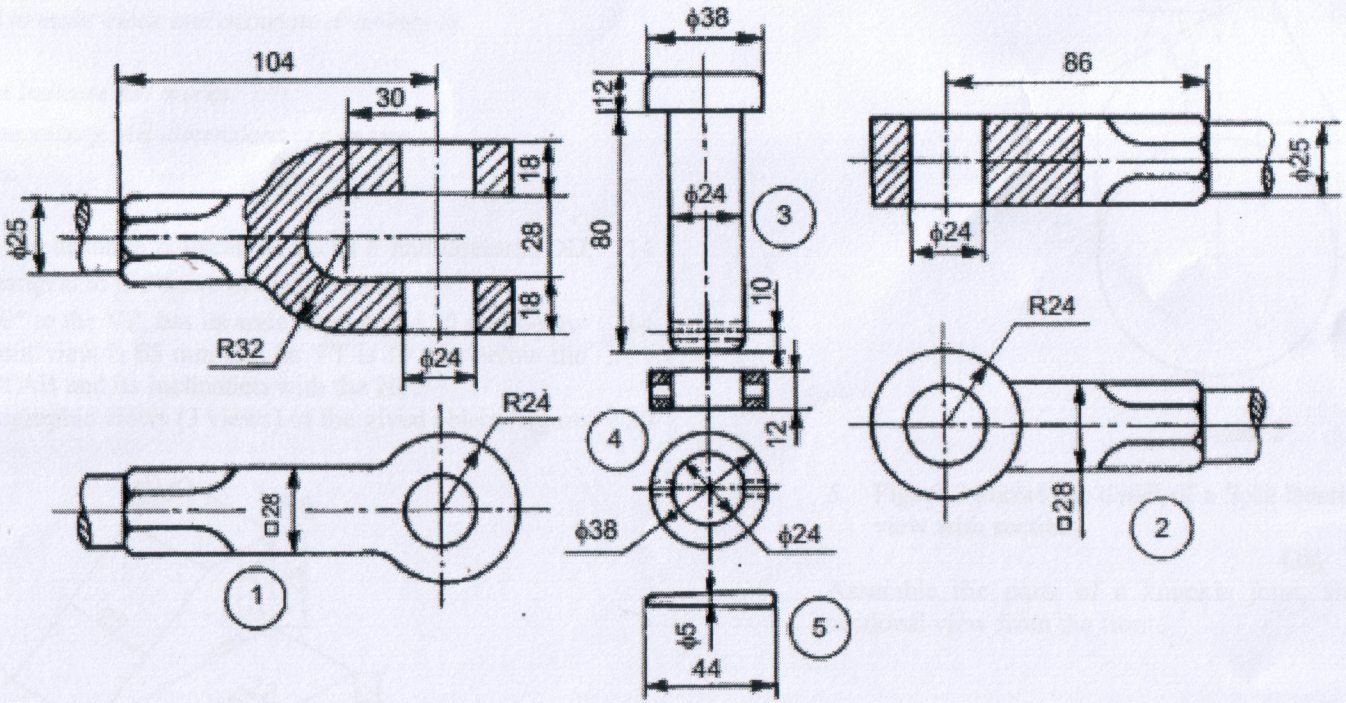

2 × ϕ12
40
ϕ6
110
28
15
R30
70
CAP (C. I.)
1 OFF
88
4
ϕ48
4
ϕ6
ϕ60
ϕ72
BUSH (G. M.)
1 OFF
ϕ48
SHAFT (M. S.)
1 OFF
2 × M12
110
70
40
15
R30
2 × ϕ16
12
250
40
20
80
BASE (C. I.)
1 OFF
20
68
20
M12 STUD (M. S.)
2 OFF
M12 STANDRAD NUT (M. S.)
2 OFF

Figure 4



Parts list

Sl. No.	Name	Matl.	Qty.
1	Fork end	Forged steel	1
2	Eye end	Forged steel	1
3	Pin	Mild steel	1
4	Collar	Mild steel	1
5	Taper pin	Mild steel	1