

6247

BOARD DIPLOMA EXAMINATIONS

DME-THIRD SEMESTER

SEPTEMBER/OCTOBER - 2020

MACHINE DRAWING

Time: 3 hours

Max. Marks: 60

PART – A

4 X 5 = 20

- Instructions:**
1. Answer *all* questions.
 2. Each question carries *Five Marks*.
 3. All dimensions are to be in *mm*.

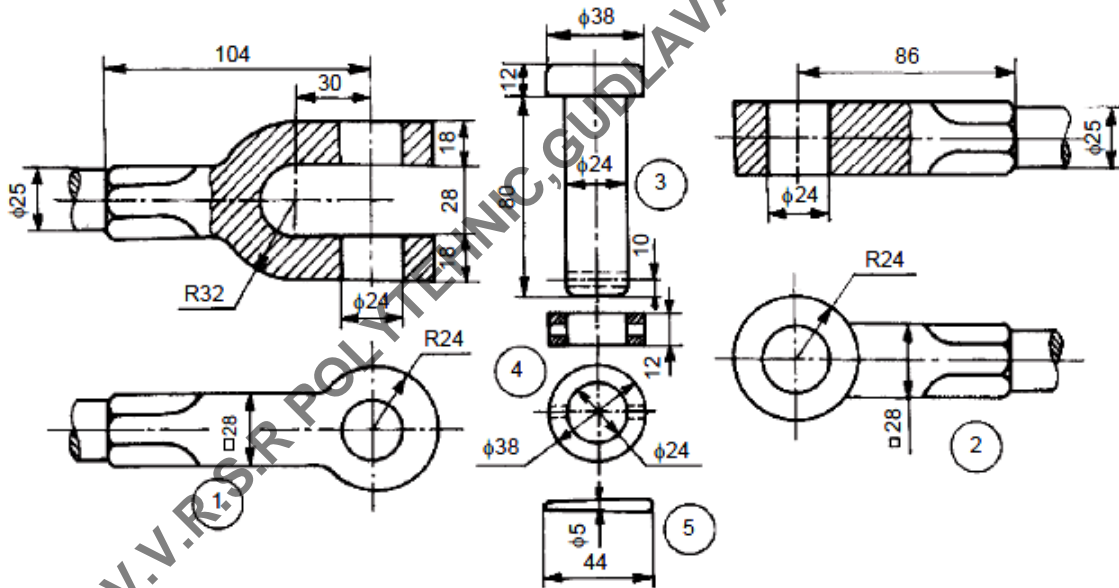
1. Draw a Hexagonal headed bolt with a nut and washer in a position taking Nominal diameter is 20 mm and length 80 mm
2. Draw the following rivet heads with a suitable proportions:
 - a) Snap head
 - b) Pan head
3. Draw the following weld symbols:
 - a) Back or backing weld
 - b) Convex double V – butt weld
 - c) Seam weld
 - d) Fillet weld
 - e) Single J – butt weld.
4. Draw the symbols for the following pipe fittings (single line) :
 - a) Globe Valve
 - b) Gate Valve
 - c) Check Valve
 - d) Reducer
 - e) Union

[Cont.,

- Instructions:**
1. Answer any **Five** questions
 2. Each question carries **FORTY** Marks.
 3. All dimensions are given in mm.
 4. Choose suitable Scale.
 5. Assume missing dimensions suitably.

5. Fig. shows details of Knuckle Joint .Assemble all the parts and draw the following views of the assembly to full scale.

- a) Sectional Front View (20 M)
- b) Top View (15 M)
- c) Dimension (5 M)



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 |

Fig. Knuckle joint

6. Fig. shows details of Plummer Block. Assemble all the parts and draw the following views.

- a) Half sectional front view, with left half in section (20 M)
- b) Top View (15 M)
- c) Dimensions (5 M)

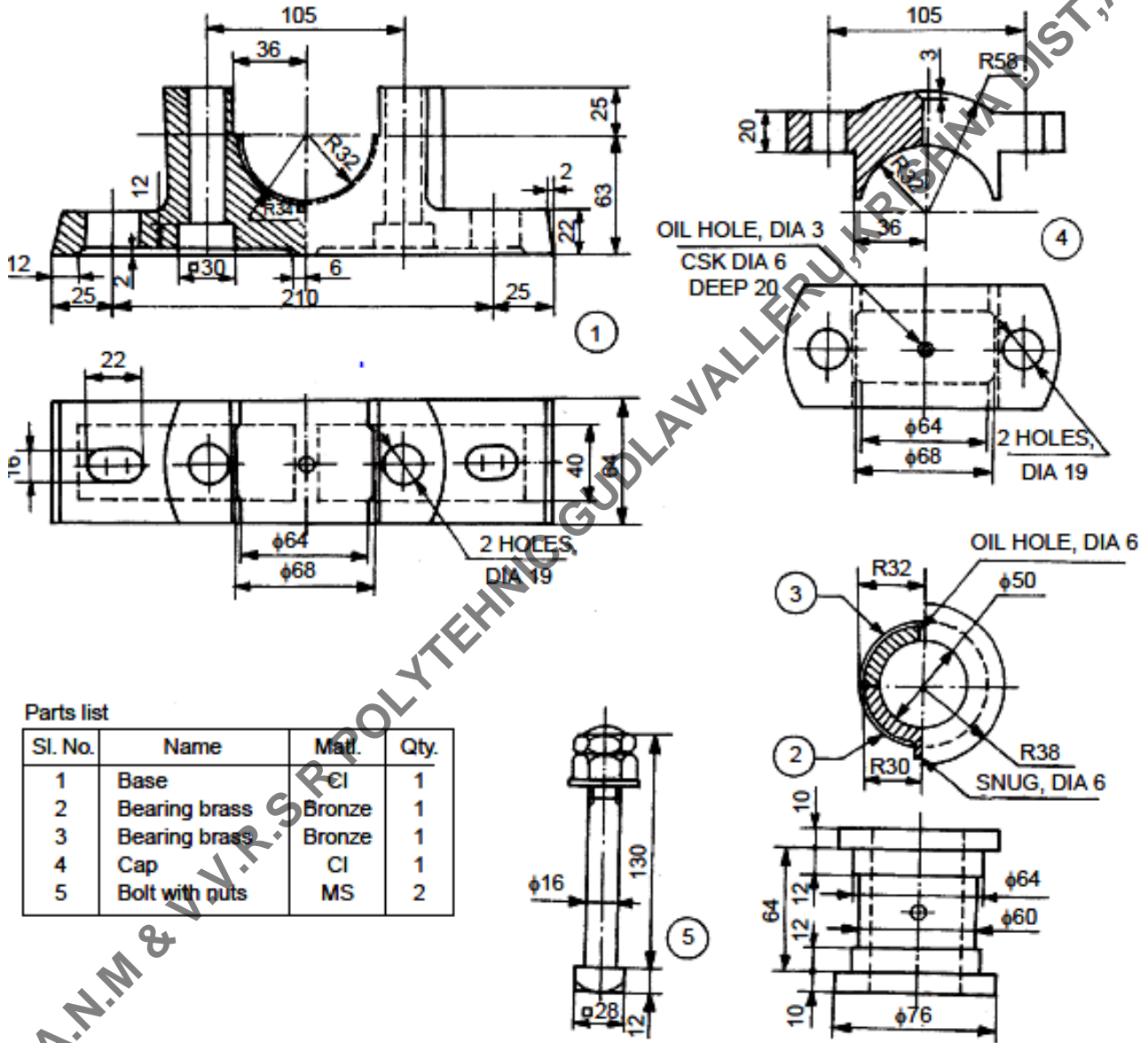


Fig. Plummer Block