



C09-M-307/C09-MET-307

3251

**BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—2018
DME—THIRD SEMESTER EXAMINATION
MACHINE DRAWING**

Time : 3 hours]

[Total Marks : 60

PART—A

5×4=20

Instructions : (1) Answer **all** questions.

(2) Each question carries **five** marks.

(3) Take suitable scale whenever required.

(4) All dimensions are in mm.

1. Draw the following thread profiles with standard proportions :

(a) Knuckle thread

(b) Worm thread

2. Draw the double-riveted chain lap joint top view.

3. Draw the single-line symbols for the following pipe fittings :

(a) Coupling

(b) Cap

(c) Plug

(d) 90° elbow

(e) Reducer

4. Draw the weld symbols for the following types of welds :

(a) Concave

(b) Single V-butt weld

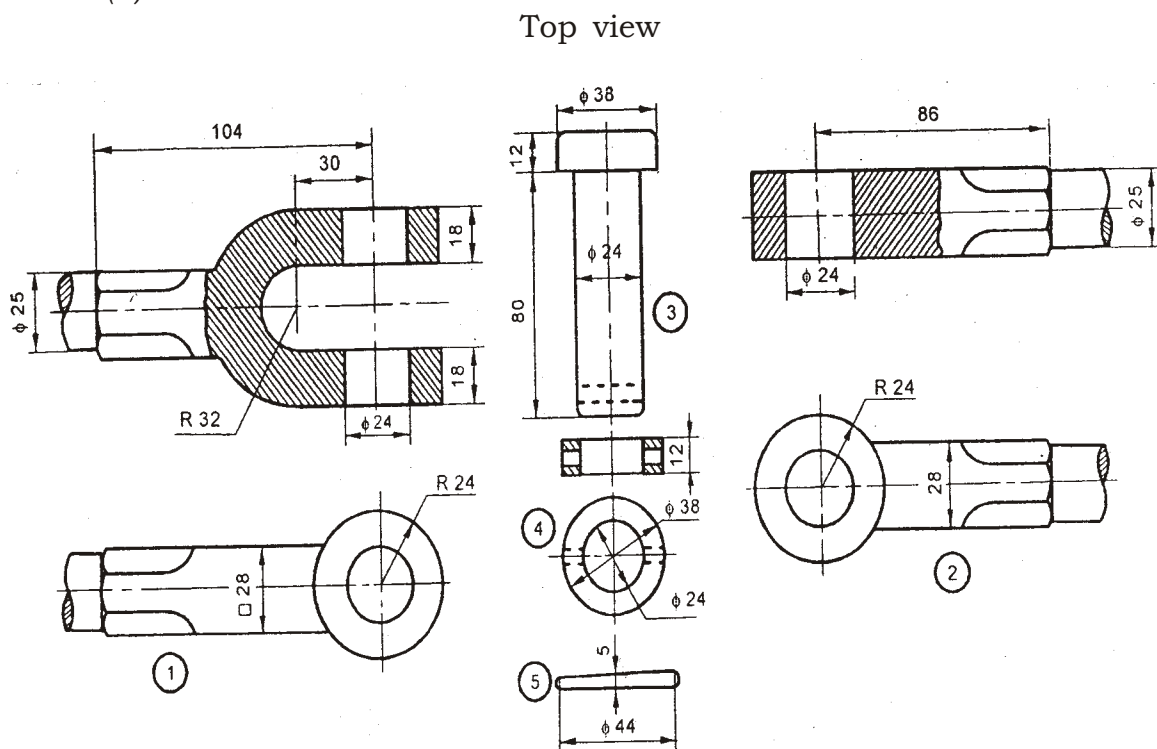
(c) Convex double V-butt weld

(d) Plug weld

(e) Single bevel butt weld

- Instructions :** (1) Answer *any one* question.
 (2) Each question carries **forty** marks.
 (3) Take suitable scale whenever required.
 (4) All dimensions are in mm.

- 5.** The parts of a knuckle joint are shown in the figure. Assemble the parts and draw the following views : 25+15
 (a) Sectional front view
 (b)

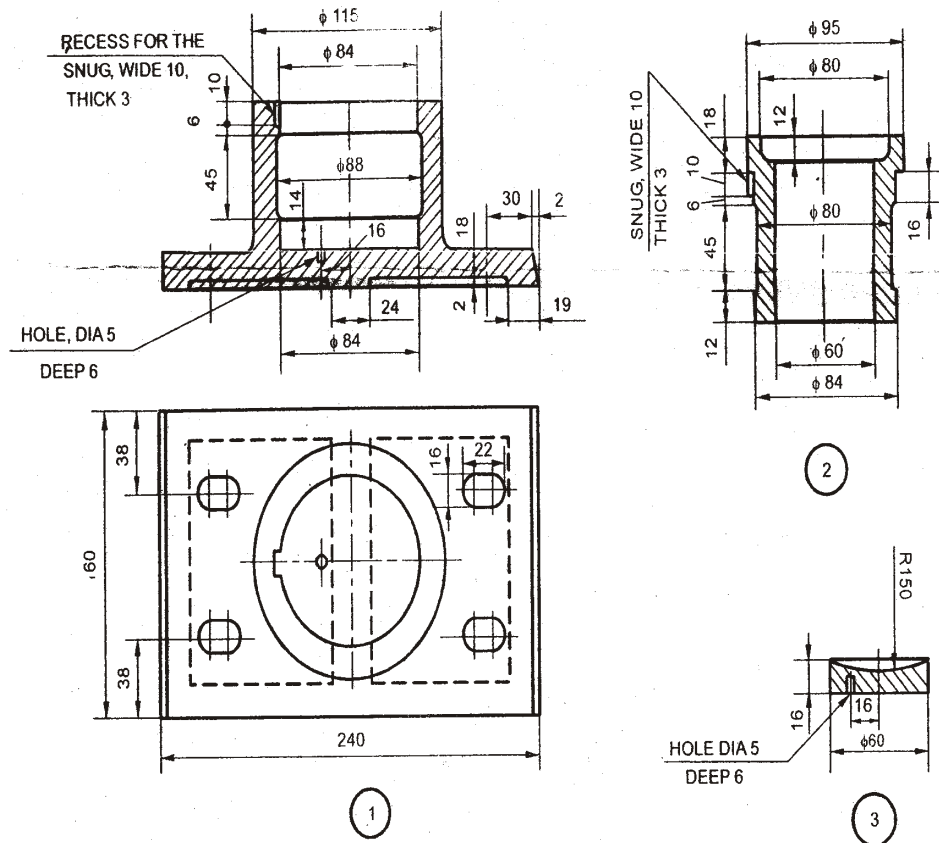


Knuckle Joint

| <i>Parts list</i> | | | |
|-------------------|-------------|-------------|------------|
| <i>No.</i> | <i>Name</i> | <i>Matl</i> | <i>Qty</i> |
| 1. | Fork end | FS | 1 |
| 2. | Eye end | FS | 1 |
| 3. | Pin | MS | 1 |
| 4. | Collar | MS | 1 |
| 5. | Taper pin | MS | 1 |

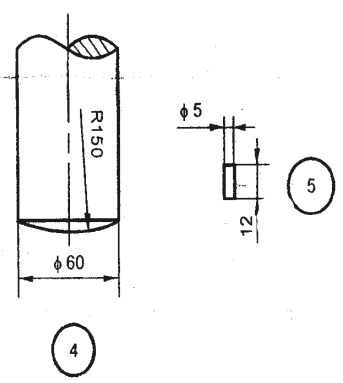
6. Assemble the parts of a footstep bearing shown in the figure below and draw the following views : 20+20

- (a) Sectional front view
 (b) Top view



Parts List

| No. | Name | Material | Qty |
|-----|-------|------------|-----|
| 1 | Body | Cast Iron | 1 |
| 2 | Bush | Brass | 1 |
| 3 | Disc | P Bronze | 1 |
| 4 | Shaft | Mild Steel | 1 |
| 5 | Pin | Mild Steel | 1 |



Footstep Bearing
