



*

C20-M-307

7262

BOARD DIPLOMA EXAMINATION, (C-20)

JUNE/JULY—2022

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) All dimensions are given in mm.

1. Draw a M20 hexagonal headed bolt with standard proportions. 5
2. Draw locking arrangement by using lock nut with standard proportions. 5
3. Draw the following weld symbols : 1×5=5
 - (a) Single J-butt weld
 - (b) Butt weld between plates with raised edges
 - (c) Seam weld
 - (d) Fillet weld
 - (e) Flat single V-butt weld with flat backing run
4. Draw the following pipe fitting symbols : 1×5=5
 - (a) Plug
 - (b) 40° Elbow
 - (c) Gate valve
 - (d) Union
 - (e) Coupling

/7262

1

[Contd...

*

PART—B

40×1=40

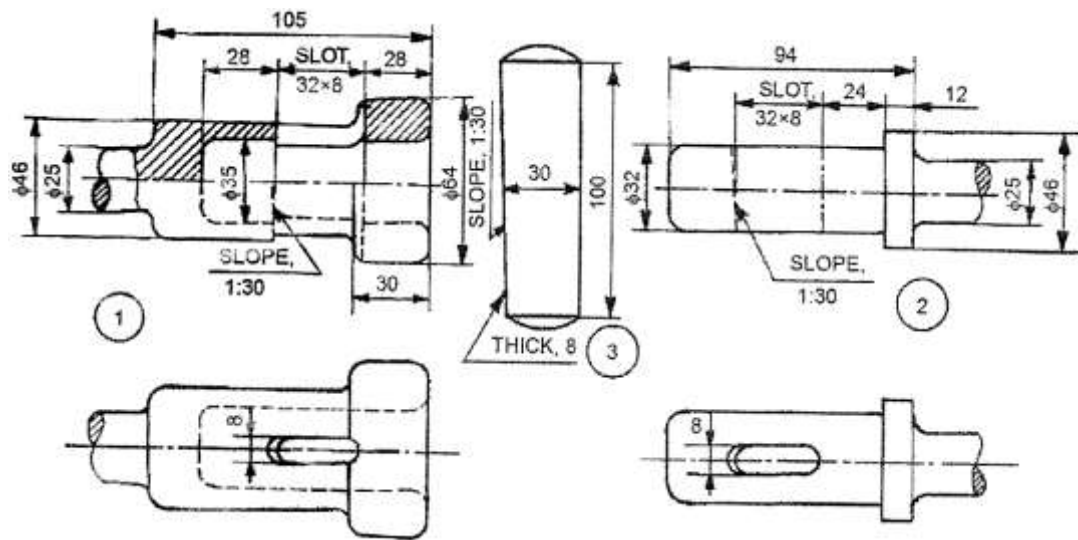
Instructions : (1) Answer *any* one question.

(2) All dimensions are given in mm and choose suitable scale.

(3) Assume missing dimensions suitably.

5. Assemble the parts of Socket and Spigot joint by using the part drawing given in the figure below (page 2) and draw the following :

- (a) Half sectional front view with top half in section 20
- (b) Top view 15
- (c) Dimensioning 5



Parts list

Sl. No.	Name	Matl.	Qty.
1	Socket end	MS	1
2	Spigot end	MS	1
3	Cotter	HCS	1

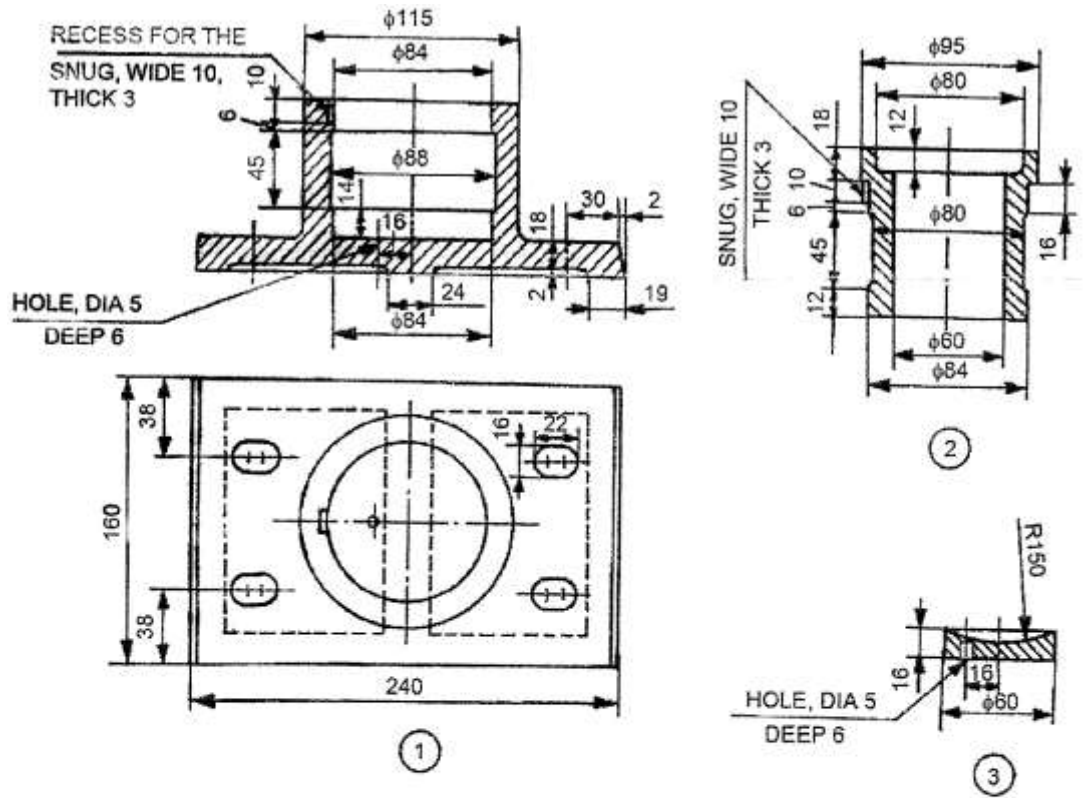
Socket and spigot joint

*

*

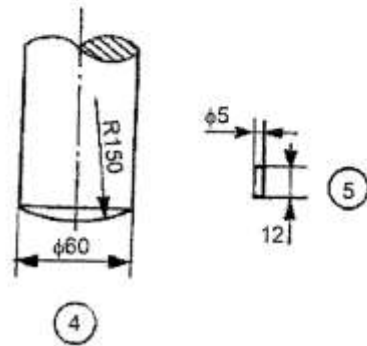
*

6. Assemble the parts of Foot step Bearing by using the part drawing given in the figure below (page 3) and draw the following :
- (a) Full sectional front view 20
 - (b) Top view 15p
 - (c) Dimensioning 5



Parts list

Sl. No.	Name	Matt.	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



Foot-step bearing

★ ★ ★