

THIRD SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/
TECHNOLOGY—OCTOBER, 2012

MACHINE DRAWING
(Common to AU and ME)

[Time : 3 hours

(Maximum marks : 100)

- [Note : 1. All dimensions are in mm.
2. First angle projection method is to be followed.
3. Missing data if any may be suitably assumed.
4. Both sides of the drawing sheet may be used.
5. Sketch to be accompanied.]

Marks

UNIT—I

- I Draw any two views of a hexagonal bolt of size M 20 length of the bolt 80 mm and thread length is 40 mm. 15

OR

- II Draw Sectional front view and top view of a double riveted chain lap joint for plates having 10 mm thickness. Show all dimensions in terms of diameter of the rivet. Draw atleast three rivets in a row. Use snap head rivets. 15

UNIT—II

- III Exploded view of a sleeve and cotter joint is shown in figure 1. Draw the following views after assembling the joint : 20
(a) Full sectional Elevation 10
(b) Top view. 10
(20+10=30)

OR

- IV Isometric view of a protected flange type coupling is shown in figure 2. Draw the following views : 20
(a) Full sectional Elevation 10
(b) Left hand side view 10
(20+10=30)

UNIT—III

- V Draw the following views of a bushed bearing shown in figure 3. 20
(a) Full sectional Elevation 10
(b) Left hand side view
Left half in section 10
(c) Top view. 10
(20+10+10=40)

OR

VI Exploded view of a plumber block is shown in figure 4. Draw the assembled :

(a) Front view right half in section

25

(b) Top view.

15

(25+15=40)

UNIT—IV

VII Draw any five elementary welding symbols.

(5×3=15)

OR

VIII Draw single line orthographic symbols of the following pipe fittings :

(a) 90° Elbow flanged

(b) Tee screwed

(c) 45° Elbow screwed

(d) Cross screwed

(e) Joint/coupling flanged.

(5×3=15)

MADIN Polytechnic College

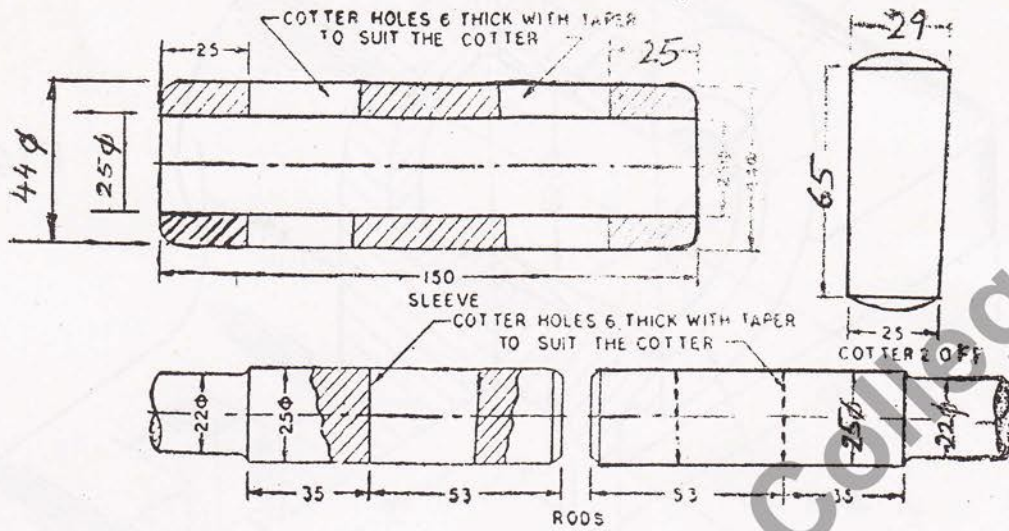
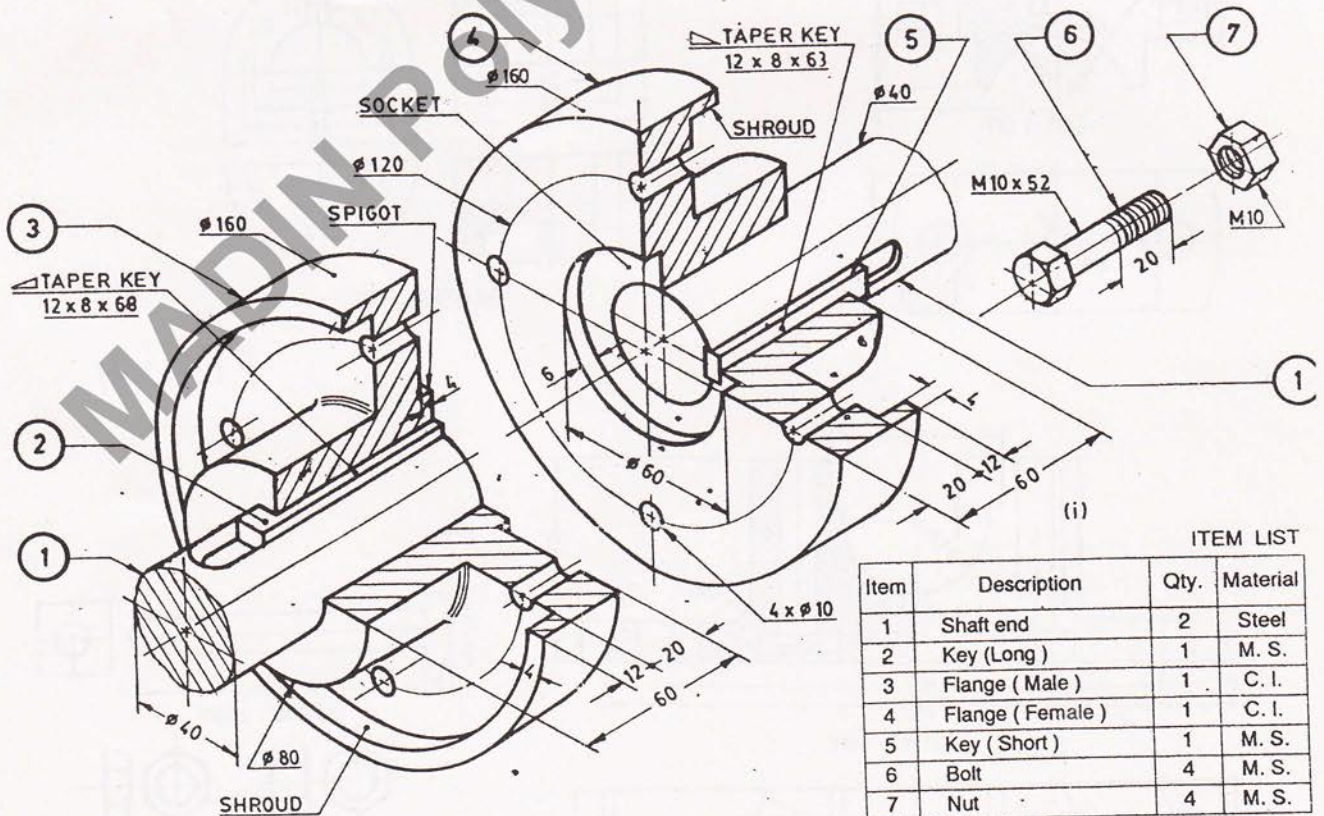


Fig 1



ITEM LIST

Item	Description	Qty.	Material
1	Shaft end	2	Steel
2	Key (Long)	1	M. S.
3	Flange (Male)	1	C. I.
4	Flange (Female)	1	C. I.
5	Key (Short)	1	M. S.
6	Bolt	4	M. S.
7	Nut	4	M. S.

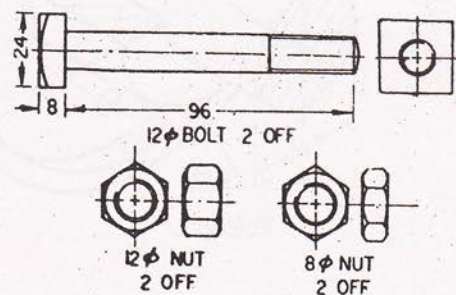
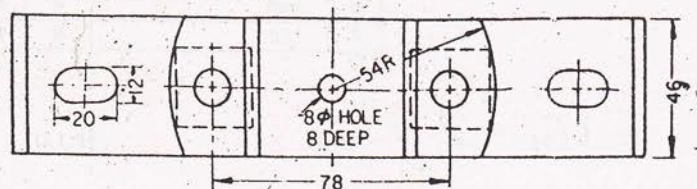
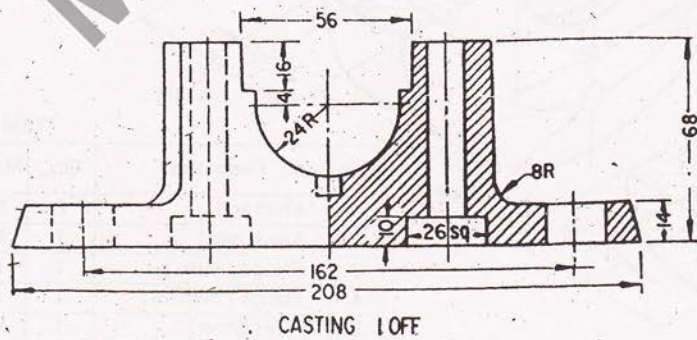
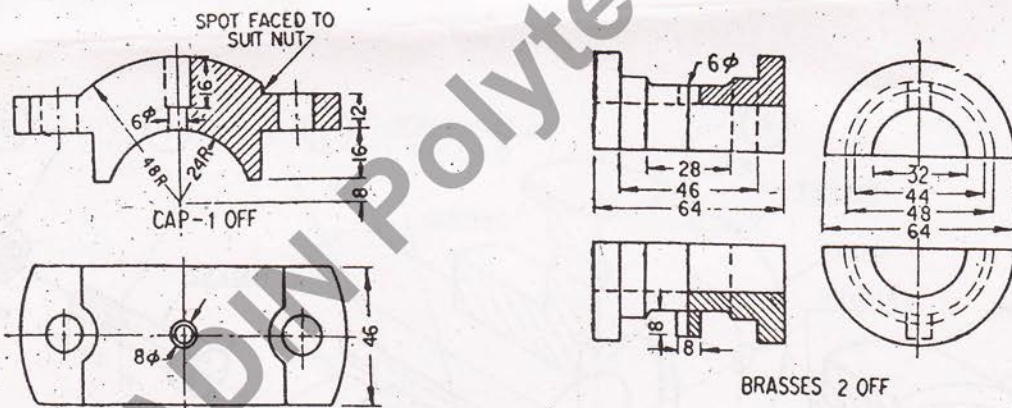
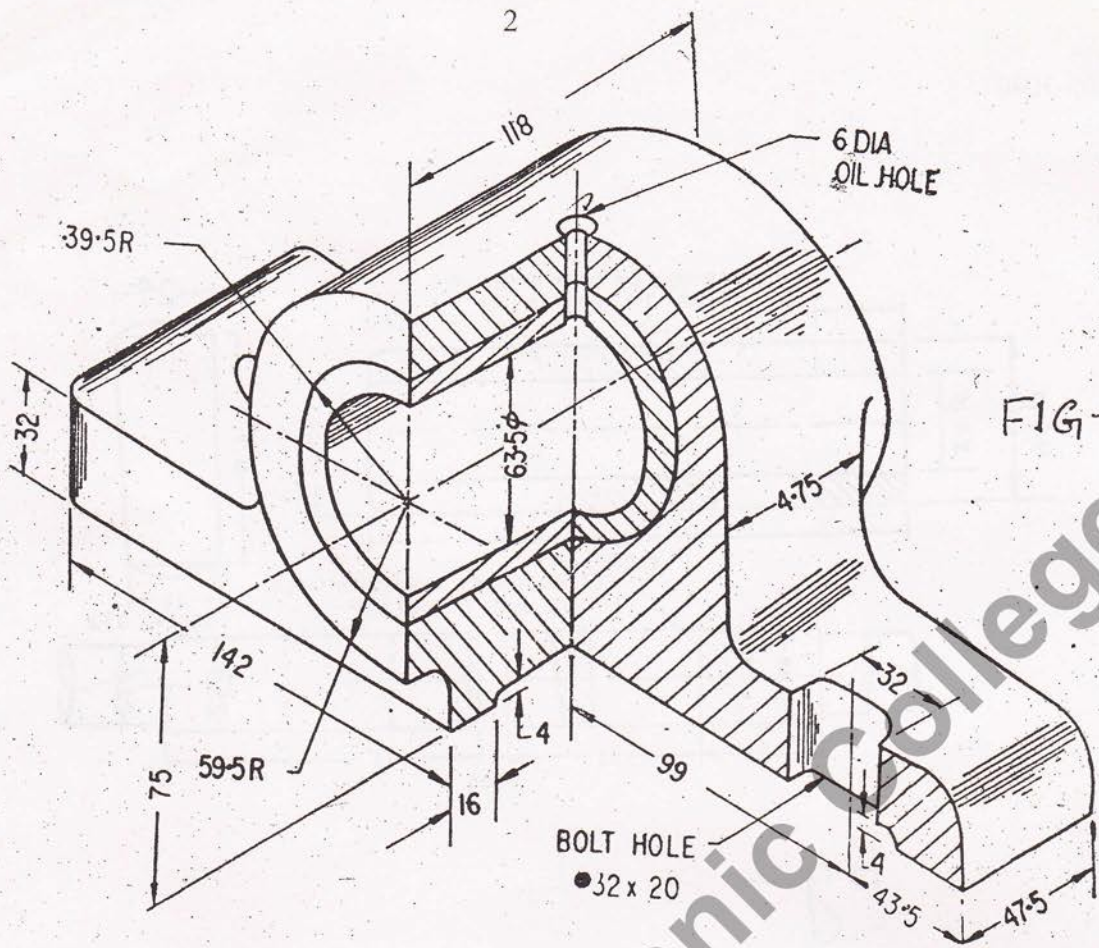


FIG-4