

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

MACHINE DRAWING
(Common to AV / ME)

[Time : 3 hours

(Maximum marks : 100)

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

	Marks
UNIT—I	
I Draw any two views of a hexagonal nut for a 24 mm diameter bolt.	15
OR	
II Draw sectional front view and top view of a single riveted butt joint for two 9 mm thick plates using single strap. Show at least three rivets in a row. Insert all dimensions in terms of the diameter (Use snap head rivet).	15
UNIT—II	
III Isometric view of a knuckle joint is shown in figure 1. Draw the following views :	
1. Full sectional elevation	20
2. Plan.	10
	(20+10=30)
OR	
IV An isometric view of an unprotected type flanged coupling is shown in figure 2. Draw the following views :	
1. Assembled top half sectional elevation	20
2. Assembled left hand side view.	10
	(20+10=30)
UNIT—III	
V An isometric view of a bushed bearing is shown in figure 3. Draw the following views :	
1. Full sectional elevation	25
2. Top view.	15
	(25+15=40)

OR

VI Figure 4 shows the details of a connecting rod. Assemble all the parts and draw the front top half in section.

Marks

40

UNIT—IV

VII Draw the double line orthographic symbols for the following pipe fittings :

1. 45° elbow
2. Tee
3. Reducing Tee
4. Cross
5. 90° elbow.

(5×3=15)

OR

VIII Draw any five welding symbols.

15

MADIN Polytechnic College

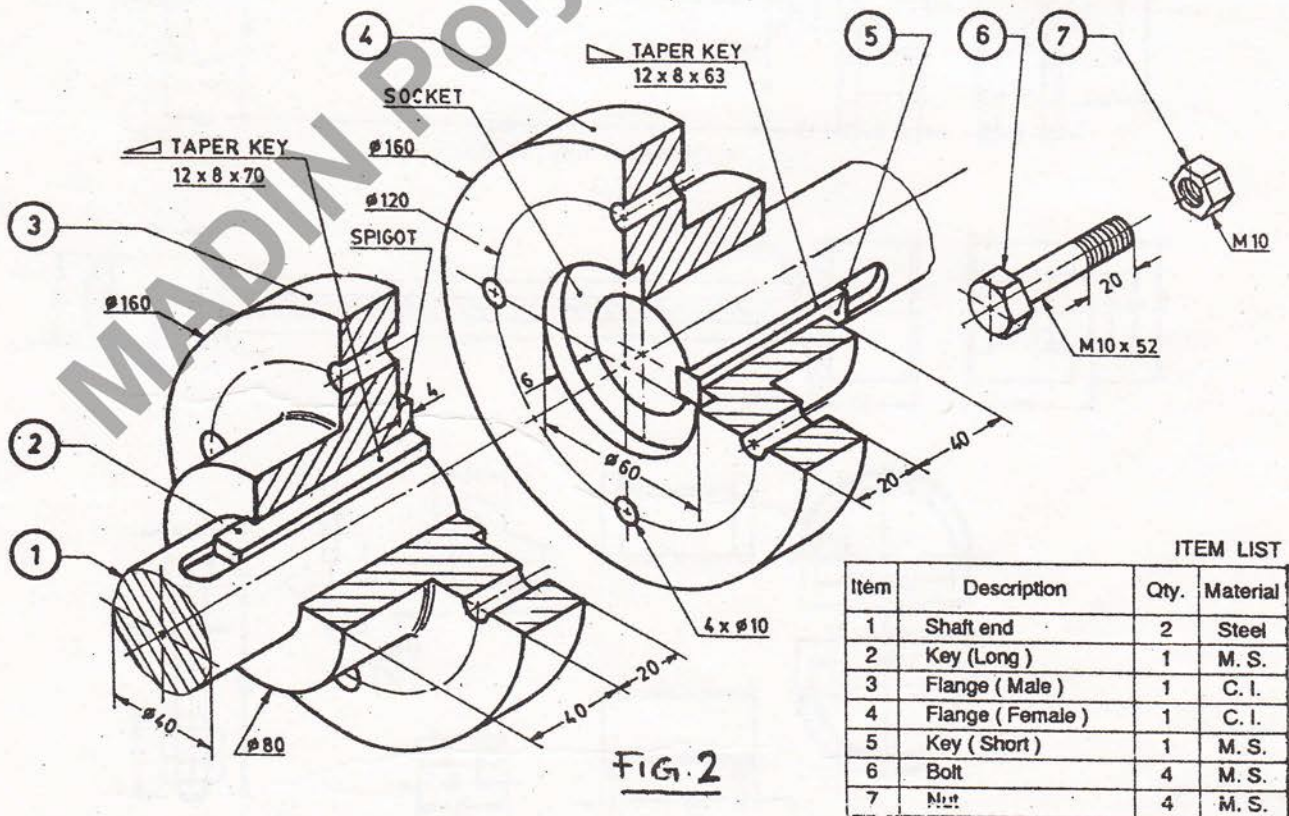
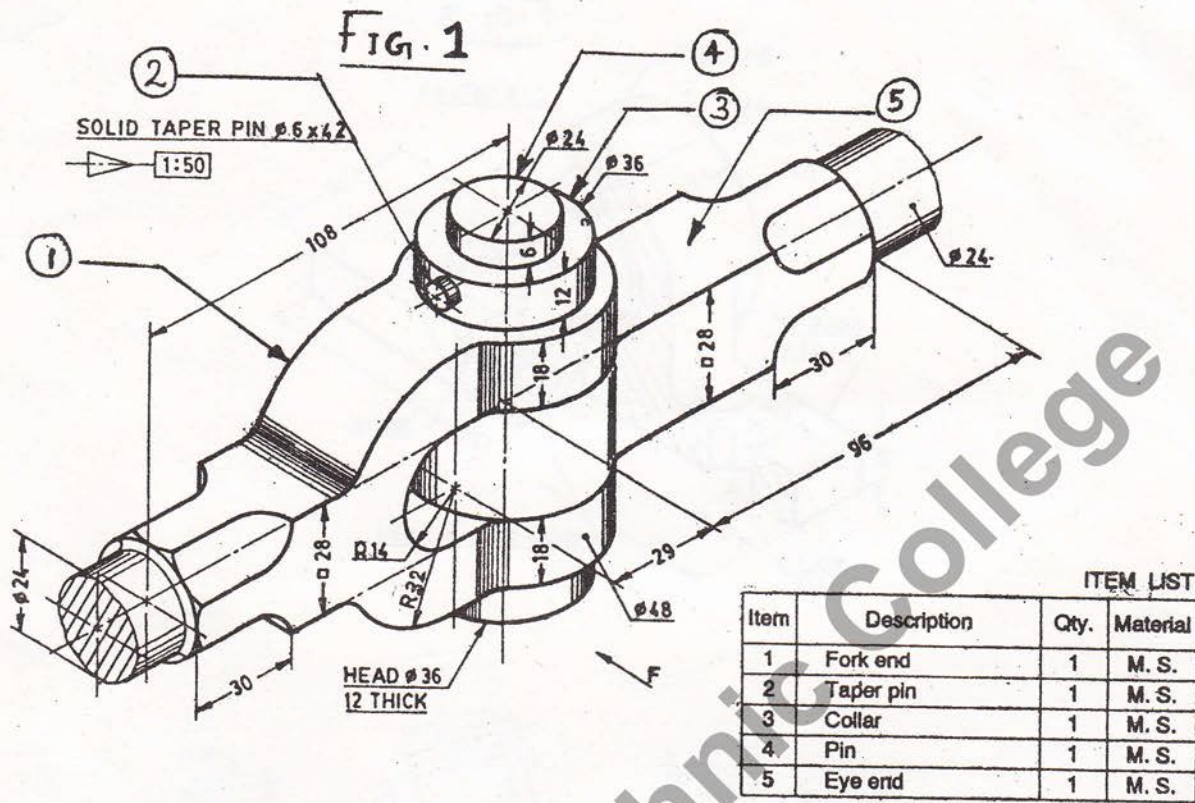


FIG. 3

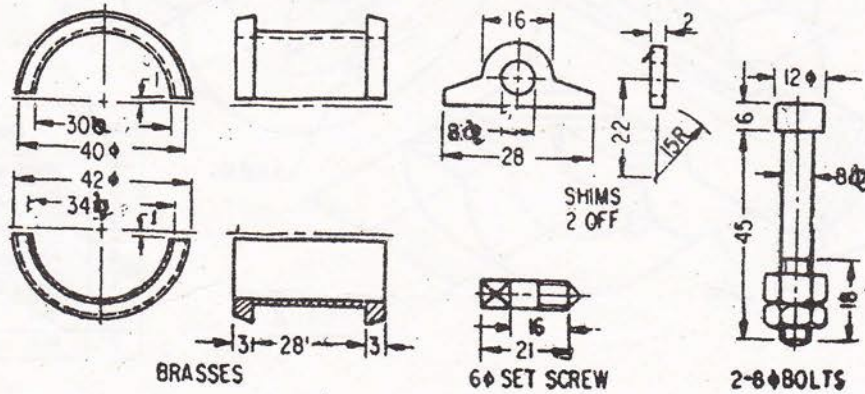
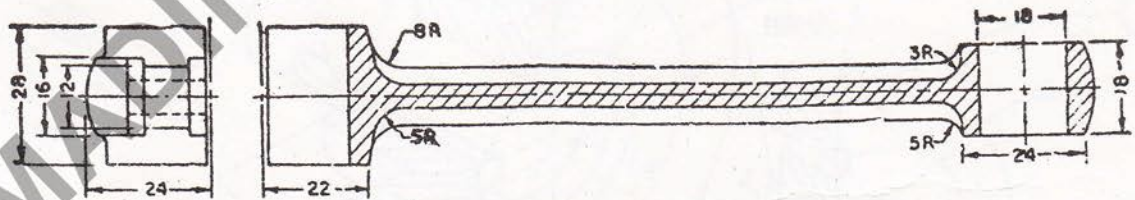
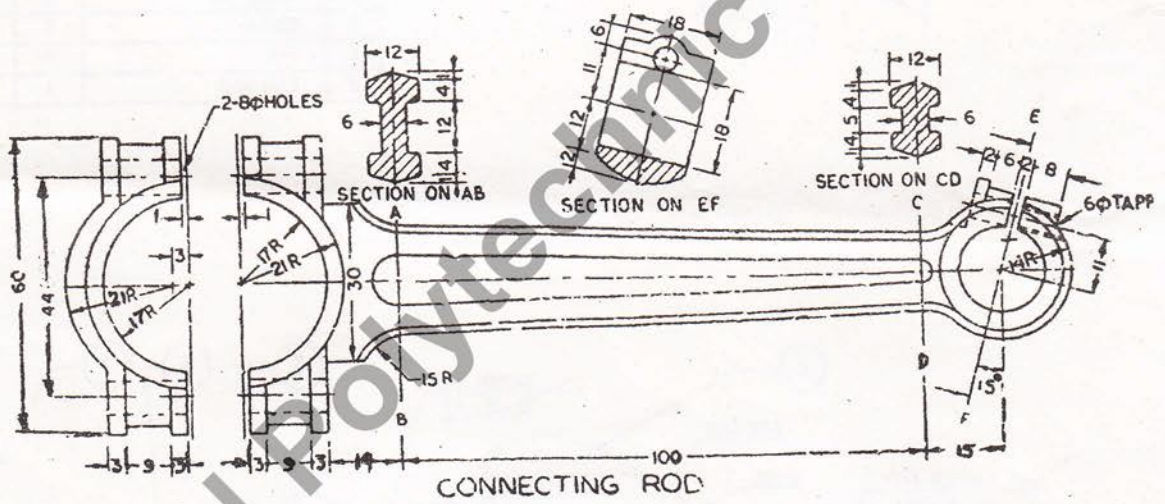
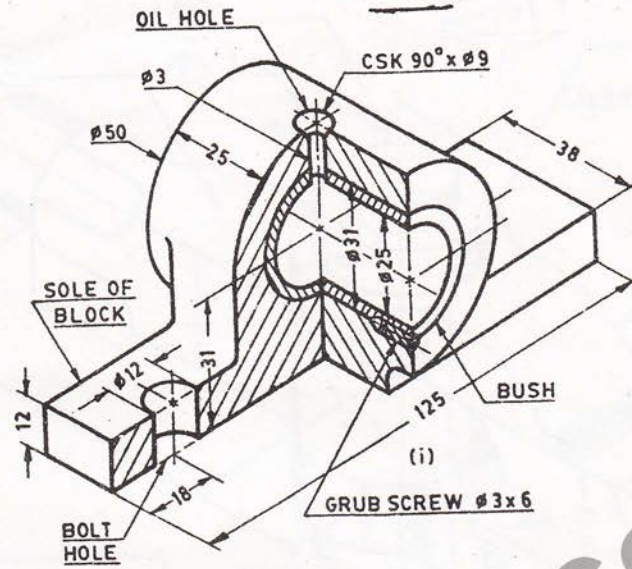


FIG. 4