



TED (15) – 3024

(REVISION — 2015)

Reg. No. ....

Signature .....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

MACHINE DRAWING

[Time : 3 hours

(Maximum marks : 100)

[Note :— 1. All dimensions are in mm.

2. First angle projections 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 the profile of the following thread forms, take pitch  $p = 25$  mm and mark the dimensions in terms of  $p$ .

(a) ISO Metric thread

(b) British Association (BA) thread

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OR

II Draw sectional front view and top view of a single riveted double cover butt joint (chain type), take  $t = 10$  mm. Show at least three rivets in top view and insert all dimensions in terms of the diameter of the rivet. Use snap head rivet.

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UNIT — II

III An isometric view of a Gib and cotter joint shown in figure I. Draw top half sectional elevation and end view from left side.

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OR

IV An isometric view of a flanged coupling (un protected type) shown in figure II. Draw top half sectional elevation and end view from left side.

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UNIT — III

V Detailed view of a Stuffing box shown in figure III. Assemble the parts and draw left half sectional front view and prepare bill of material.

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OR

VI Full sectional front view of a Non return valve shown in figure IV. Draw the left half sectional front view and bottom half sectional top view.

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[30]

[P.T.O.]



UNIT — IV

VII Draw symbols of the following welded joints.

- (a) Square butt joint
- (b) V - butt joint
- (c) T - butt joint
- (d) Fillet weld joint
- (e) Single U - joint

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OR

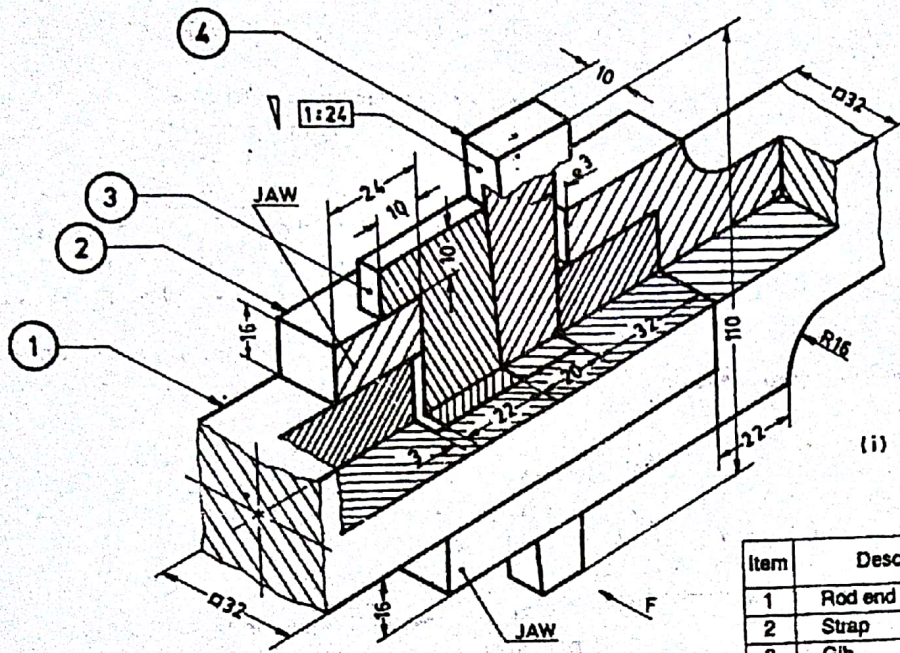
VIII Double line orthographic layout of a piping system shown in figure V. Draw the single line orthographic layout.

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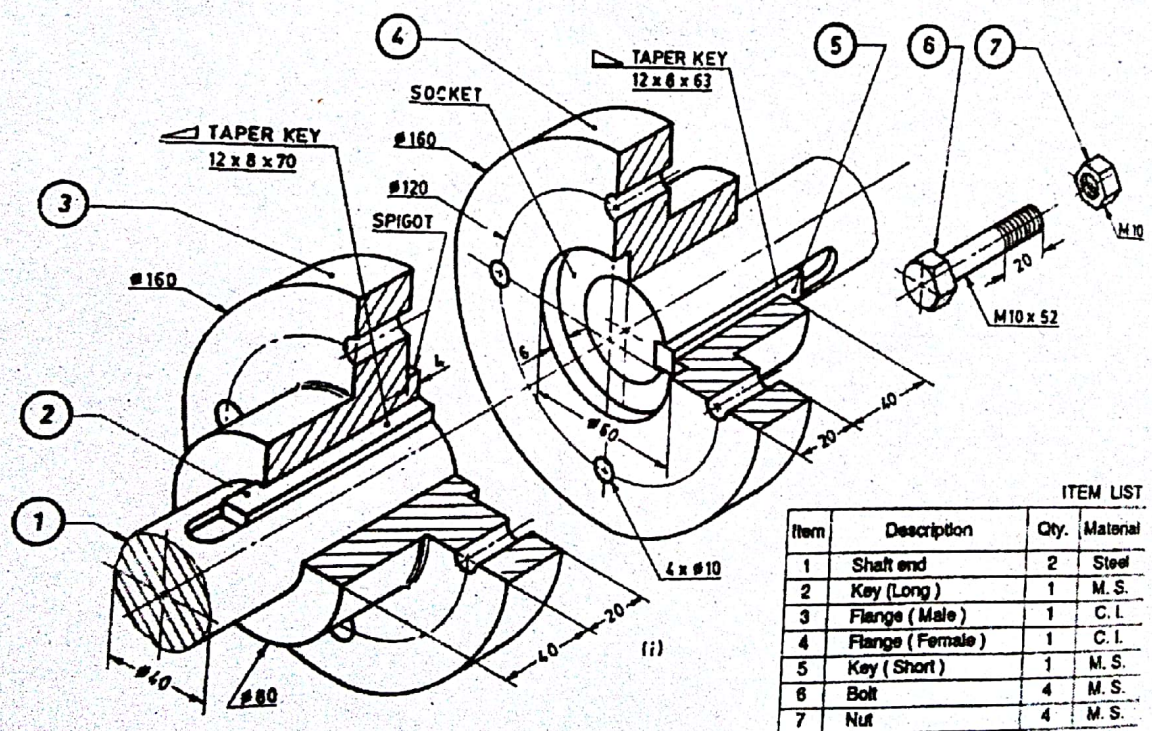
(REVISION — 2015)



ITEM LIST

Item	Description	Qty.	Material
1	Rod end (Square)	1	M. S.
2	Strap	1	M. S.
3	Gib	1	M. S.
4	Cotter	1	M. S.

Fig. I Gib and cotter joint



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. II Flanged coupling (un protected type)



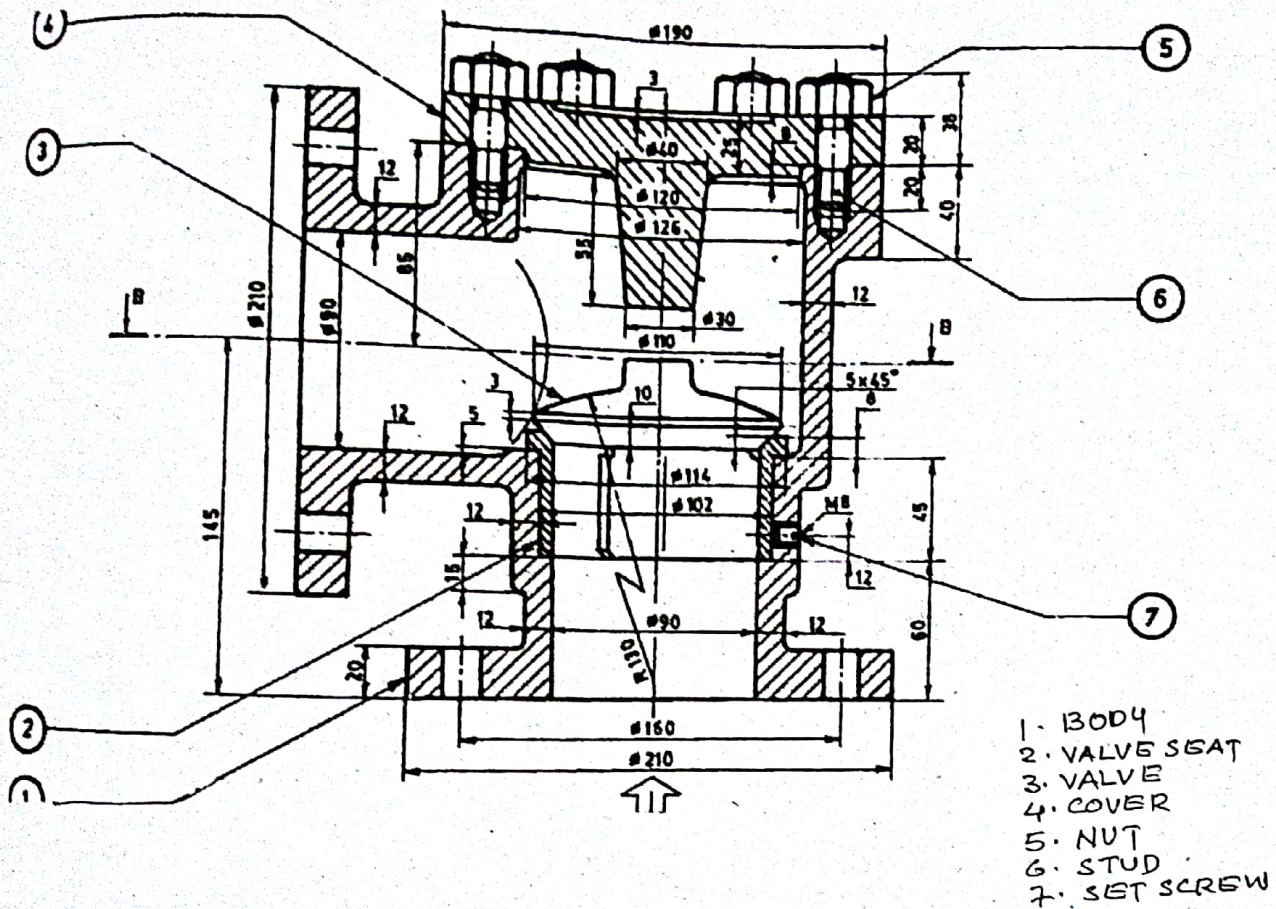


Fig. IV Non Return valve

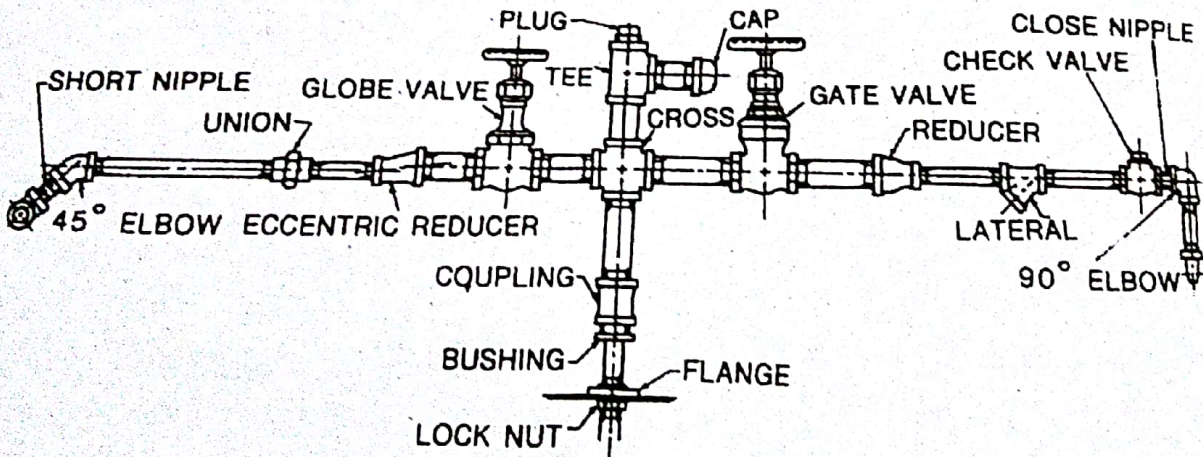


Fig. V Piping lay out