

ANSWER KEY

Q. No.

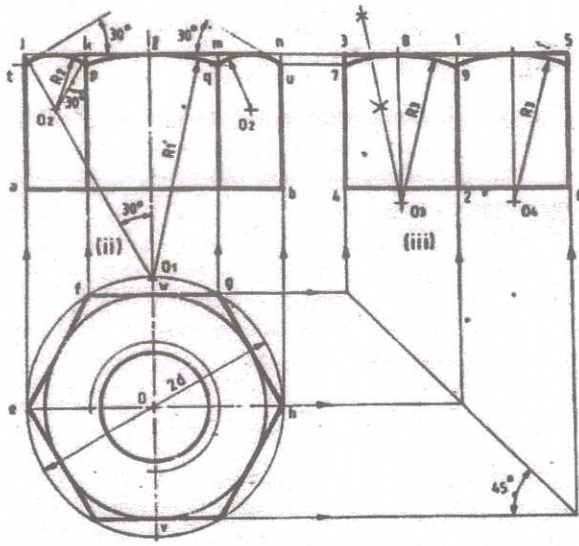
TED(15)-3024

MACHINE DRAWING

SCORE

Total.

I.

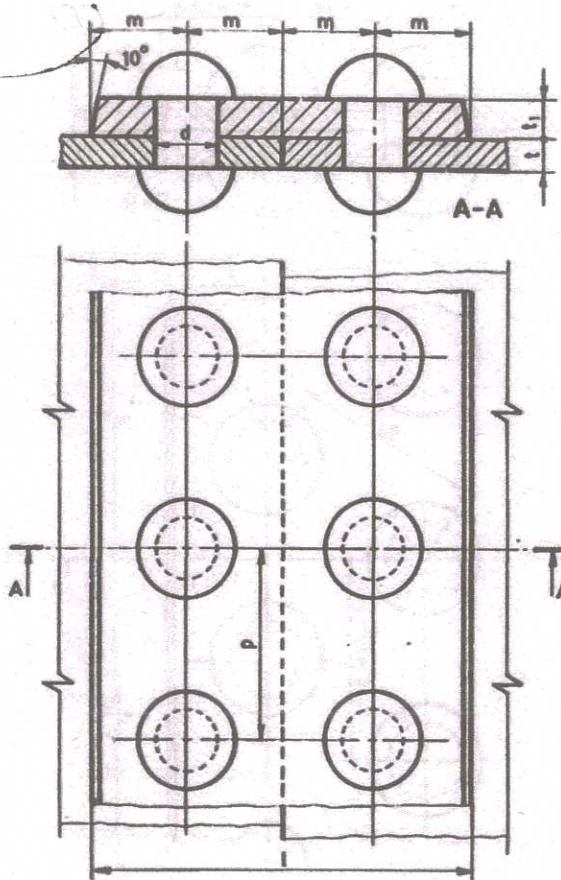


Each view = 5 marks.

5x3

15 marks

II.



= 7 marks.

= 5 marks.

$$d = 6\sqrt{t} = 6\sqrt{10} = 18.97 \text{ mm take } d = 20 \text{ mm}$$

$$l = 1.5d + 3d + 1.5 = 120 \text{ mm } \therefore m = 30 \text{ mm}$$

$$t = 1.125 \times 10 = 11.25 \text{ mm}$$

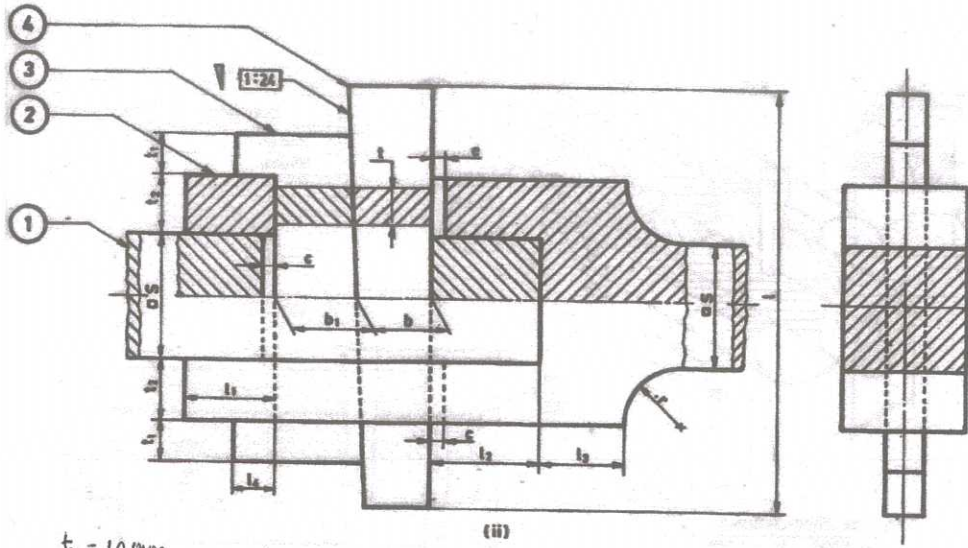
$$p = 3d = 60 \text{ mm.}$$

= 3 marks.

15 marks

~~Correct~~ Correct

III.



- (iii)
- $t = 10 \text{ mm}$
 - $t_1 = 10 \text{ mm}$
 - $t_2 = 16 \text{ mm}$
 - $r = 16 \text{ mm}$
 - $c = 3 \text{ mm}$
 - $l_1 = 24 \text{ mm}$
 - $l_2 = 32 \text{ mm}$
 - $l_3 = 22 \text{ mm}$
 - $l_4 = 10 \text{ mm}$
 - $l = 110 \text{ mm}$
 - $b = 20 \text{ mm}$
 - $b_1 = 22 \text{ mm}$
 - $\phi_s = 32 \text{ sq.}$

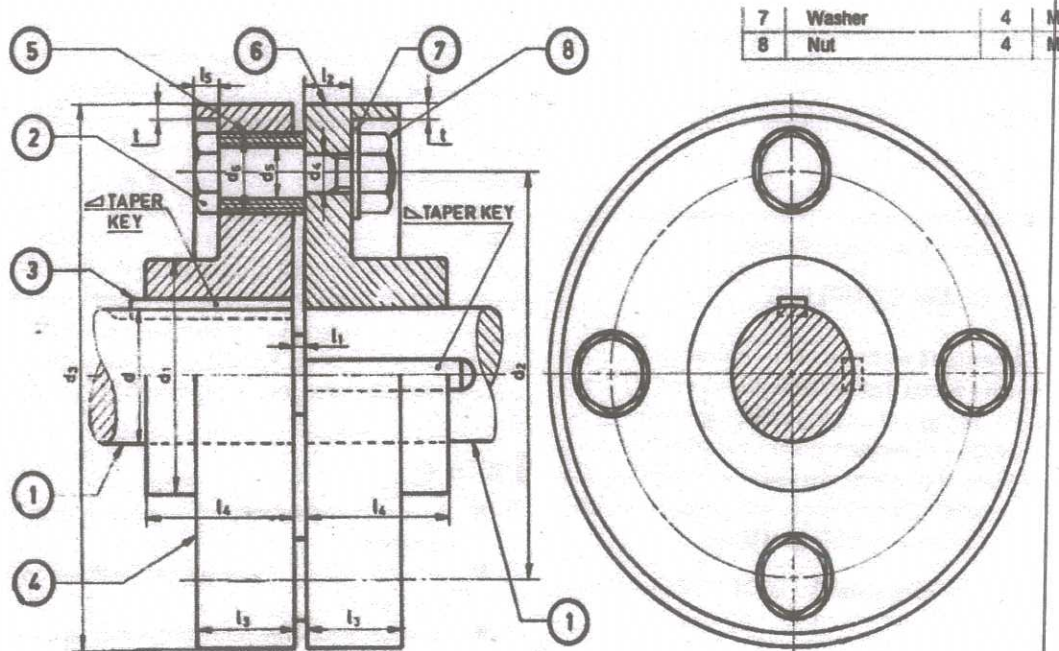
Elevation
= 25 Marks

Side view
= 5 Marks

= 30 Marks

Marks connected

IV.



7	Washer	4	N.
8	Nut	4	N.

- APPROXIMATE DIMENSIONS
- $d = 40 \text{ mm}$
 - $d_1 = 70 \text{ mm}$
 - $d_2 = 100 \text{ mm}$
 - $d_3 = 160 \text{ mm}$
 - $d_4 = 10 \text{ mm}$
 - $d_5 = 13 \text{ mm}$
 - $t = 2 \text{ mm}$
 - $l_1 = 2 \text{ mm}$
 - $l_2 = 16 \text{ mm}$
 - $l_3 = 32 \text{ mm}$
 - $l_4 = 48 \text{ mm}$
 - $l_5 = 8 \text{ mm}$

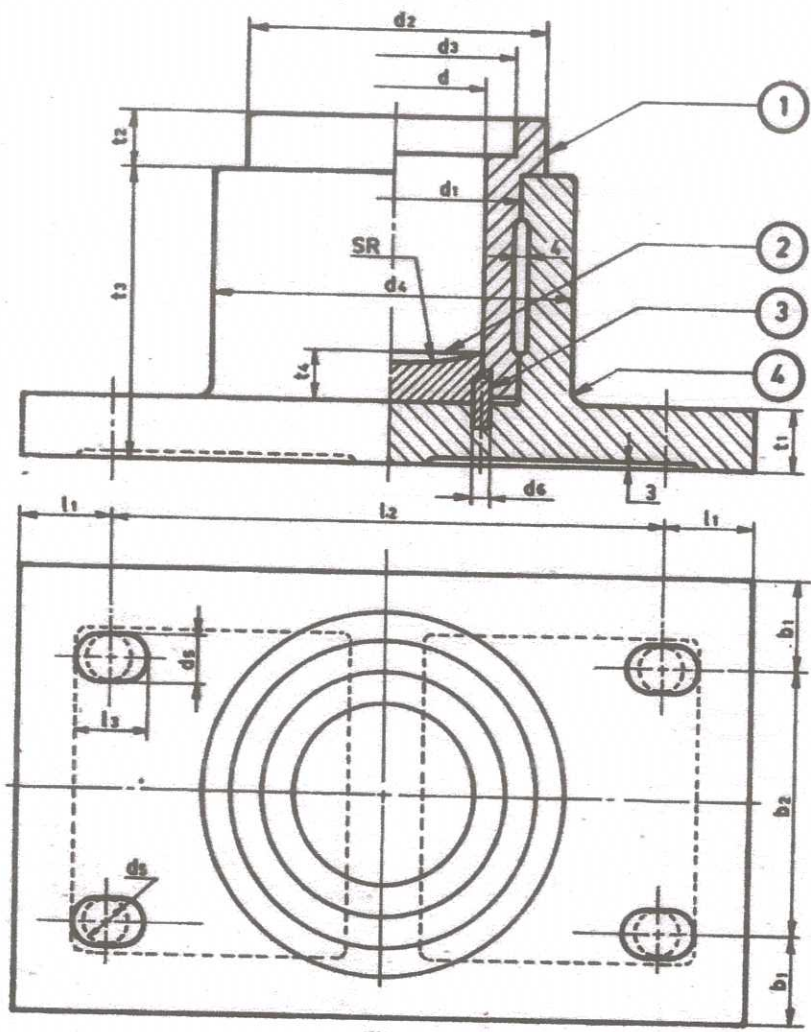
Elevation
= 25 Marks

Side view
= 5 Marks

= 30 Marks

Marks connected

V.



= 20 Marks

Notes connected

= 10 Marks

- $d = 60\text{mm}$ $d_5 = 16\text{mm}$ $l_3 = 22\text{mm}$ $t_4 = 45\text{mm}$
- $d_1 = 80\text{mm}$ $d_6 = 6\text{mm}$ $t_1 = 20\text{mm}$ $b_1 = 35\text{mm}$
- $d_2 = 100\text{mm}$ $l_4 = 30\text{mm}$ $t_2 = 18\text{mm}$ $b_2 = 90\text{mm}$
- $d_3 = 80\text{mm}$ $l_2 = 180\text{mm}$ $t_3 = 75\text{mm}$ $R = 150\text{mm}$
- $d_4 = 120\text{mm}$

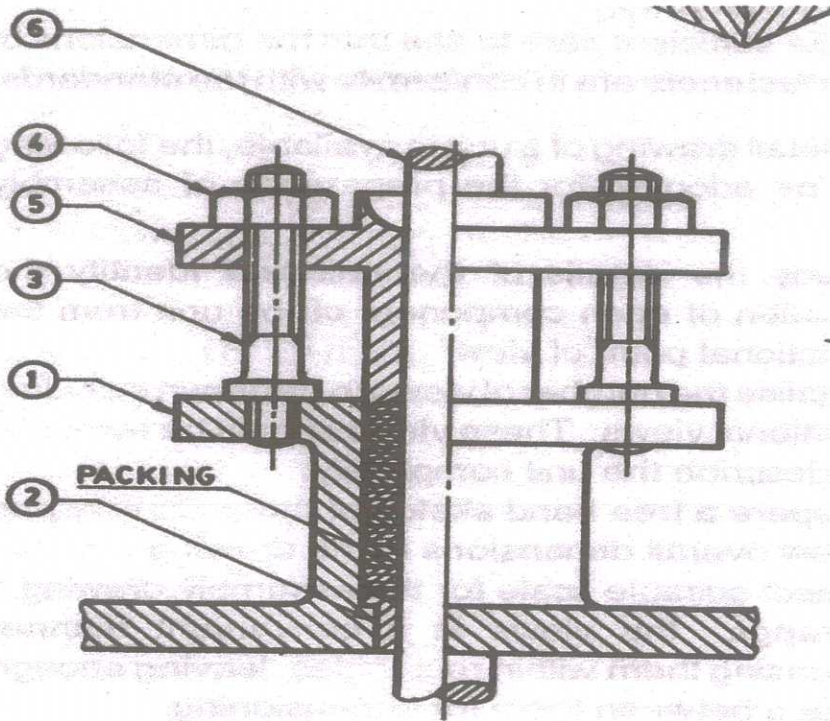
ITEM LIST

Item	Description	Qty.	Material
1	Bush	1	G. M.
2	Pad	1	G. M.
3	Snug	1	Steel
4	Block	1	C. I.

= 10 Marks

= 40 Marks

VI.



ITEM LIST






Item	Description	Qty.	Material
1	Body	1	C. I.
2	Gland bush	1	Brass
3	Stud	2	M. S.
4	Nut	2	M. S.
5	Gland	1	C. I.
6	Piston rod	1	Steel

marks
Correct
X

= 30 marks

= 10 Marks.

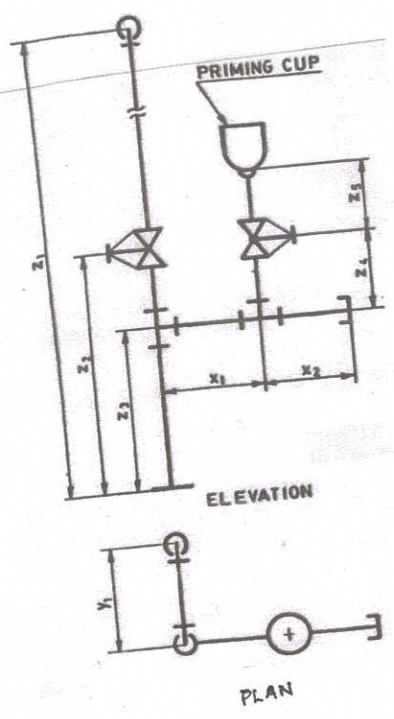
= 40 Marks

- VII. (a)  (b) ||
- (c)  (d) 
- (e)  (f) 

2 1/2 x 6

15 Marks

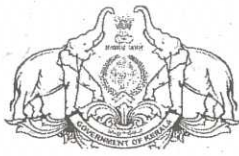
VIII.



= 10 Marks

= 5 Marks

= 15 Marks



GOVT. OF KERALA
DEPARTMENT OF TECHNICAL EDUCATION
OFFICE OF THE CONTROLLER OF TECHNICAL EXAMINATIONS
THIRUVANANTHAPURAM

DIPLOMA EXAMINATION IN ENGINEERING / TECHNOLOGY / MANAGEMENT

CORRECTION NOTE for (Scheme)

Revision & Sub code: ~~302~~ 3024 - Machine Drawing

Qn: II
thickness of cover plate $t_1 = t$ to $1.25t$
= 10 OR 11.25 mm.

Qn: III mark distribution

Half sectional Elevation	- 15
Dimensioning	- 5
End view	- 10
Total - 30 marks	

Qn: IV Mark distribution

Half sectional Elevation	- 15
Dimensioning	- 5
End view	- 10
Total - 30 marks	

Qn: V

Half sectional Elevation	- 15
Dimensioning	- 5
Plan	- 10
Dimensioning	- 5
Bill of materials	- 5
Total 40 marks	

Qn: VI :-

Left half sectional Elevation - 25 marks

Dimensioning - 5 "

Bill of materials (Item list) - 10 "

Total 40 marks,
