

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER –II • EXAMINATION – SUMMER-2015

Subject Code: 320015**Date: 26/05 /2015****Subject Name: M.S. & P.D.****Time: 2:30 pm to 5:30 pm****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Each question carry equal marks (14 marks)

Q.1 (a) Explain format of fabrication drawing with neat sketch. **07**

(b) Explain different dimensioning methods as per BIS **07**

Q.2 (a) Explain commercial form of metal as BIS in following tabulated format **07**

Sr. No.	Description	symbol	Dimensions to be specified of the profile section		Designation Example
			letter	figure	

(b) Draw piping line diagram and label different piping elements in it. Write application of different piping elements **07**

OR

(b) Draw following weld symbols **07**

1. Butt weld
2. Square butt weld
3. Single v butt weld
4. Single bevel butt weld
5. Single V butt weld with broad root face
6. Single bevel butt weld with broad root face

7. Single U butt weld
8. Single J butt weld
9. Backing run weld
10. Fillet weld
11. Plug weld
12. Spot weld
13. Seam weld
14. Flat (flush) single V butt weld

Q.3 Draw following views of object shown in FIG-1 by using 1st angle projection system **14**

1. Front view
2. RHSV
3. Top plan

OR

Q.3 Draw according to 1st angle projection system projection following views of object shown in FIG-2 **14**

1. Sectional elevation take section along A-A
2. Sectional side view take section along B-B
3. Top plan

Q.4 Draw Isometric view of given orthographic views shown in FIG-3 **14**

OR

Q.4 Make detail drawing of cotter joint shown in FIG-4 **14**

Q.5 Draw development of Part-A of object shown in FIG-5 **14**

OR

Q.5 (a) Draw neat sketch and label different parts of following process equipment **07**

1. Pressure vessel
2. Shell and tube heat exchanger

(b) Draw N or Z type nomograph of equation $E=I \cdot R$ **07**

Where $I = 0$ to 50 Amp

$R = 0$ to 100 Ohm

Find value of E when $I=30$ Amp. And $R=60$ Ohm

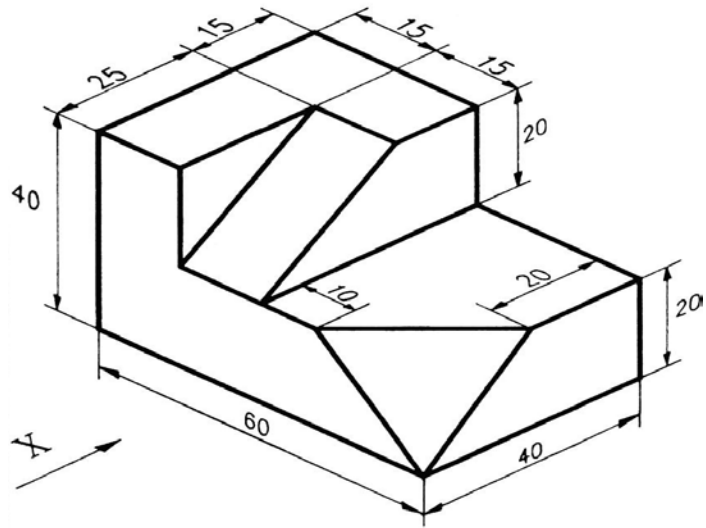


FIG-1 ALL DIMENSIONS ARE IN MM

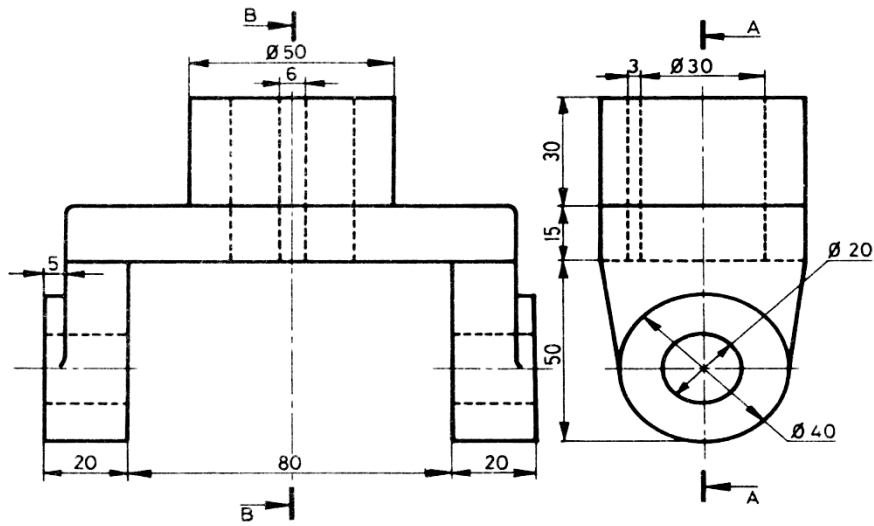


FIG-2 ALL DIMENSIONS ARE IN MM

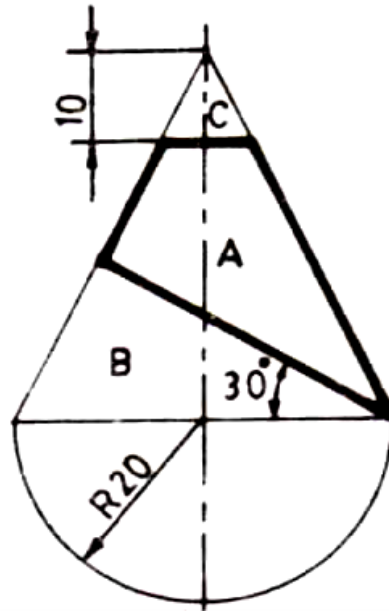


FIG-5 ALL DIMENSIONS ARE IN MM
