Seat No.:	Enrolment No.

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

Subject Code: 320015	Date: 26/05 /2015

Subject Code: 320015 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

Sr.	Descriptio	symbo	Dimensions to be		Designatio
No.	n	I	specified of the		n Example
			profile section		
			letter	figure	

(b) Draw piping line diagram and label different piping elements init. Write application of different piping elements

OR

- (b) Draw following weld symbols
  - 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

07

		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 $1^{\text{st}}$ angle projection system	14	
		<ol> <li>Front view</li> <li>RHSV</li> </ol>		
		3. Top plan		
		OR		
Q.3		Draw according to 1 <sup>st</sup> angle projection system projection following views of object shown in FIG-2		
		<ol> <li>Sectional elevation take section along A-A</li> <li>Sectional side view take section along B-B</li> <li>Top plan</li> </ol>		
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	
	(b)	<ol> <li>Pressure vessel</li> <li>Shell and tube heat exchanger</li> <li>Draw N or Z type nomograph of equation E=I*R</li> </ol>	07	
		Where I = 0 to 50 Amp		
		R = 0 to 100 Ohm		
		Find value of F when I=30 Amn And R=60 Ohm		

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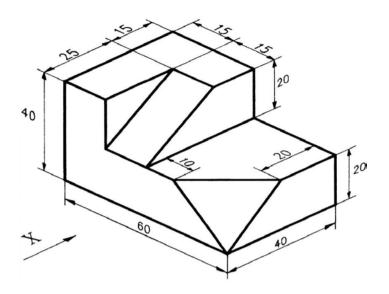


FIG-1 ALL DIMENSIONS ARE IN MM

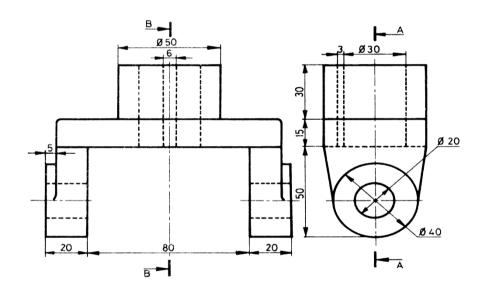


FIG-2 ALL DIMENSIONS ARE IN MM

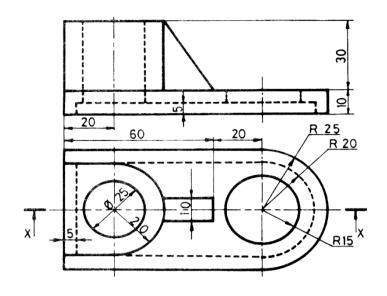


FIG-3 ALL DIMENSIONS ARE IN MM

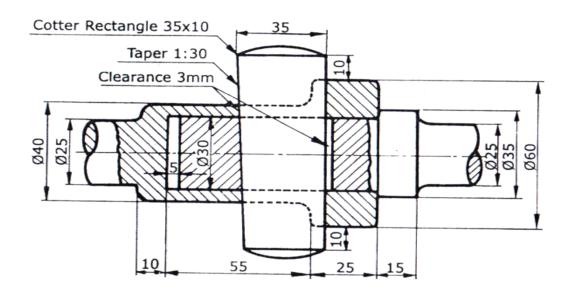


FIG-4 ALL DIMENSIONS ARE IN MM

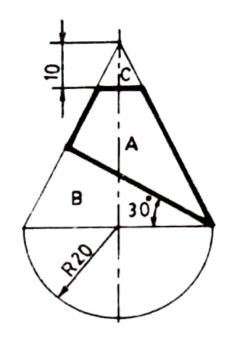


FIG-5 ALL DIMENSIONS ARE IN MM

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