GUJARAT TECHNOLOGICAL UNIVERSITY Diploma Engineering - SEMESTER-I&II • EXAMINATION – WINTER • 2014			
Sı	ıbject	Code: 320015 Date: 20-12-2014	
	•	Name: Mechanical Structure and Piping Drafting	
	1. At 2. M 3. Fi	0:30 am - 01:30 pm  Total Marks: 70  ins:  Itempt any five questions.  Itake suitable assumptions wherever necessary.  Igures to the right indicate full marks.  ach question carry equal marks (14 marks)	
Q.1	(a) (b)	Draw a typical fabrication drawing and prepare its BOM (Bill of Material) Draw neat sketch of following process equipment setup & fit-up  1. Shell to shell long seam setup  2. Shell to shell circular seam setup	07 07
Q.2	(a)	Draw following riveted joint  1. Single riveted lap joint  2. Double riveted chained lap joint  3. Double riveted zigzag lap joint  4. Triple riveted chained lap joint  5. Triple riveted zigzag lap joint  6. Single riveted double strap butt joint  7. Double riveted double strap(equal) butt joint chain riveting	07
	(b)	Explain different types of piping flanges with neat sketch  OR	07
	(b)	Explain different dimensioning methods as per BIS	07
Q.3		Draw following views of object shown in FIG-1 by using 1 <sup>st</sup> angle projection system  1. Front view 2. RHSV 3. Top plan OR	14
Q.3		Draw according to 1 <sup>st</sup> angle projection system projection following views of object shown in FIG-2  1. Front view 2. Sectional side view take section along A-A 3. Top plan	14
Q.4		Draw Isometric view of given orthographic views shown in FIG-3 OR	14
Q.4		Make detail drawing of cotter joint shown in FIG-4	14
Q.5		Draw development of object shown in FIG-5 OR	14
Q.5	(a)	Draw neat sketch and label different parts of following process equipment  1. Shell and tube heat exchanger	07

2. Evaporative type crystallizer

R = 0 to 100 Ohm

(b)

Draw N or Z type nomograph of equation E=I\*R Where I=0 to 80 Amp

1/3

**07** 

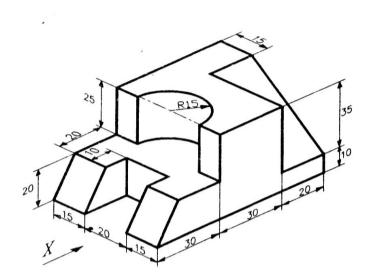


FIG-1 ALL DIMENSIONS ARE IN MM

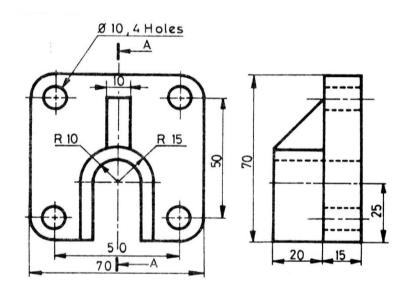


FIG-2 ALL DIMENSIONS ARE IN MM

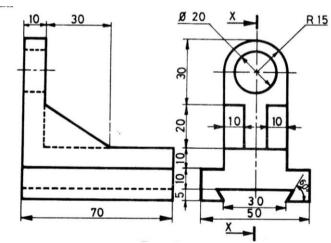


FIG-3 ALL DIMENSIONS ARE IN MM

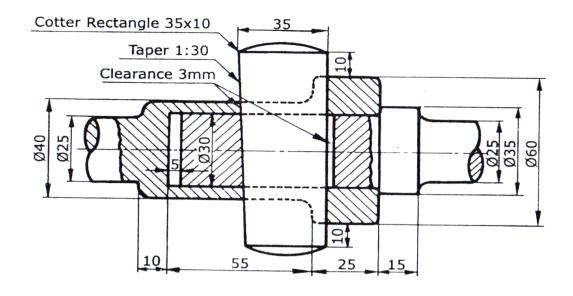


FIG-4 ALL DIMENSIONS ARE IN MM

