

Code No:07A32191

R07

B.Tech II Year - I Semester Examinations, December 2011
AIRCRAFT ENGINEERING DRAWING
(AERONAUTICAL ENGINEERING)

Time: 3 hours

Max. Marks: 80

Note: Answer any TWO Questions from PART-A
PART-B is compulsory

PART-A (Marks:40)

1. Draw the Socket and Spigot pipe joint to connect two pipes of diameter 20mm. [20]
2. Draw the sectional view for front and view from above of double riveted single strap chain butt joint for plates of 12mm thickness. [20]
3. Draw a 2-d sectional profile of NACA 2412 from the data given below. Take airfoil chord of 25 cms for your workout. [20]

NACA 2412

(Stations and ordinates given in percent of air foil chord)

Upper Surface		Lower Surface	
Station	Ordinate	Station	Ordinate
0	0	0
1.25	2.15	1.25	-1.65
2.5	2.99	2.5	-2.27
5.0	4.13	5.0	-3.01
7.5	4.96	7.5	-3.46
10	5.63	10	-3.75
15	6.61	15	-4.10
20	7.26	20	-4.23
25	7.67	25	-4.22
30	7.88	30	-4.12
40	7.80	40	-3.80
50	7.24	50	-3.34
60	6.36	60	-2.76
70	5.18	70	-2.14
80	3.75	80	-1.50
90	2.08	90	-0.82
95	1.14	95	-0.48
100	(0.13)	100	(-0.13)
100	100	0

L.E radius 1.58
Stope of radius through L.E: 0.10

PART-B (Marks:40)

4. Figure.4 gives details of a Knuckle joint, draw top and front sectional views. [40]

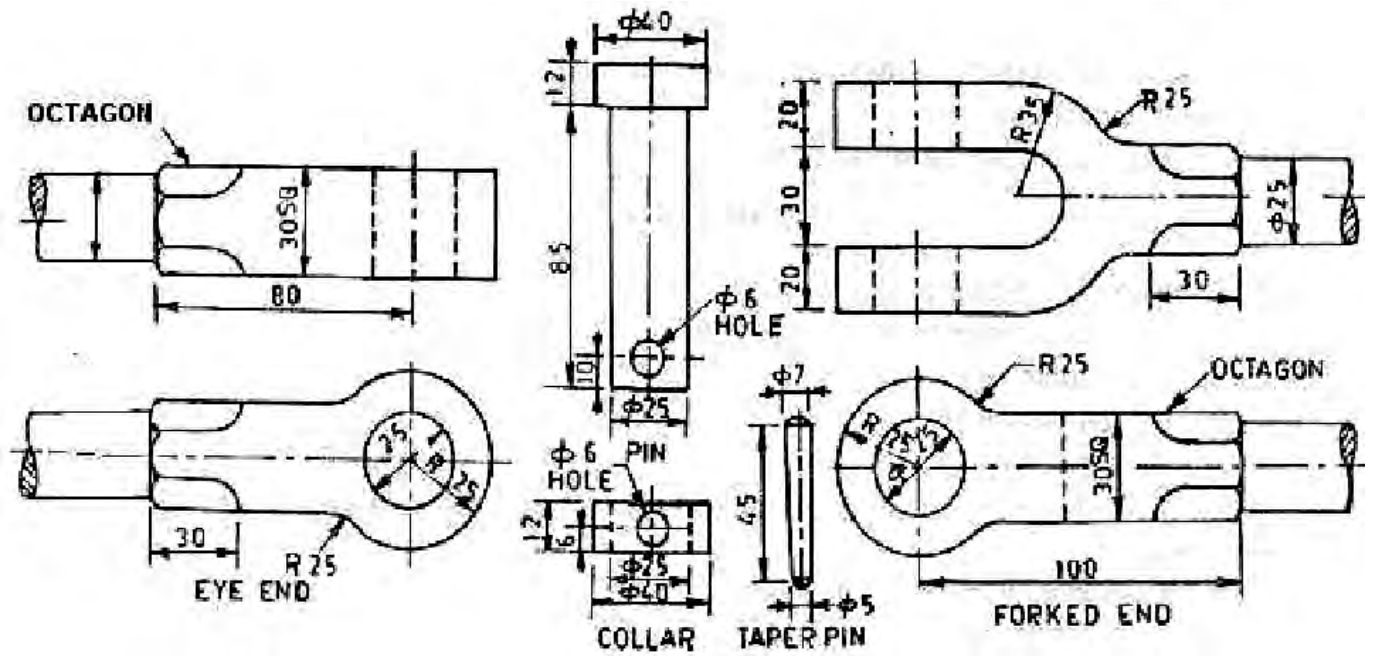


Figure: 4