

Code.No: 43037

R07

SET-3

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**  
**II.B.TECH - I SEMESTER REGULAR EXAMINATIONS NOVEMBER, 2009**  
**AIRCRAFT ENGINEERING DRAWING**  
**(AERONAUTICAL ENGINEERING)**

**Time: 3hours**

**Max.Marks:80**

Answer any two questions from  
Part A and Part B is compulsory.

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**PART-A**

**(2X20= 40Marks)**

- 1a) Draw thread profiles of square thread, buttress thread, sharp V thread.
- b) Draw the two views of taper sunk key positioned in a shaft of diameter 25 mm and Hub of diameter and mark dimensions on it.
2. Draw the top view and sectional front view of a single riveted lap joint. Take Thickness of plate as 12 mm.
3. Draw a 2-d sectional profile of NACA 2410 from the data given below. Take Airfoil chord of 25 mm for your workout.

NACA - 2410

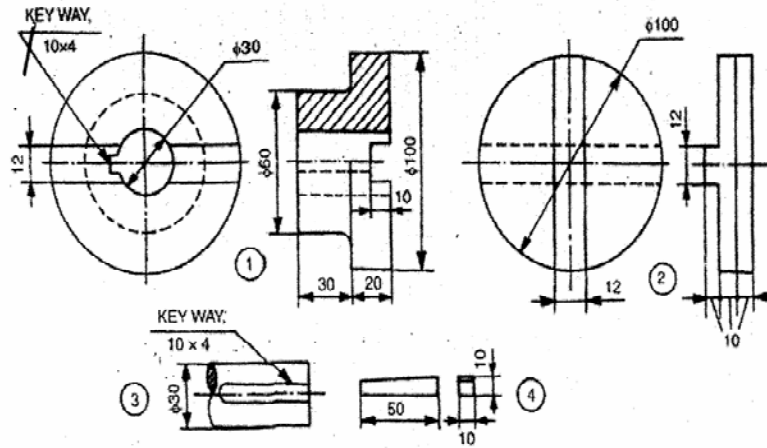
Upper Surface		Lower Surface	
Station	Ordinate	Station	Ordinate
0	0	0	0
1.098	1.694	1.402	-1.448
2.297	2.411	2.703	-1.927
4.742	3.420	5.258	-2.482
7.217	4.169	7.783	-2.809
9.710	4.766	10.290	-3.016
14.722	5.665	15.278	-3.227
19.761	6.276	20.239	-3.276
24.814	6.668	25.186	-3.230
29.875	6.875	30.125	-3.125
40.000	6.837	40.000	-2.837
50.049	6.356	49.951	-2.468
60.085	5.580	59.915	-2.024
70.102	4.551	69.898	-1.551
80.097	3.296	79.903	-1.074
90.067	1.816	89.933	-0.594
95.067	0.990	94.959	-0.352
100.000	0.105	100.000	-0.150

L.E radius : 1.10  
Slope of radius through L.E: 0.1

## PART-B

(40Marks)

1. Figure gives the part drawings of old hen coupling. Assemble all the parts and draw the following assembled views.  
 a) Sectional front view      b) Side view



Parts list

Sl. No.	Name	Matl.	Qty.
1	Flange	MS	2
2	Disc	MS	1
3	Shaft	MS	2
4	Key	MS	2