

Code.No: 43037

R07

SET-2

**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)**

- 1.a) Draw the conventional representation for diamond knurling, straight knurling, Wood, holes on circular pitch.  
b) Draw the sketches of look bolt and eye bolt.
2. Draw the sectional front view of muff coupling to connect shafts of 30mm Diameter.
3. Draw a 2-d sectional profile of NACA 2415 from the data given below. Take Airfoil chord of 25cm for your workout.

NACA - 2415

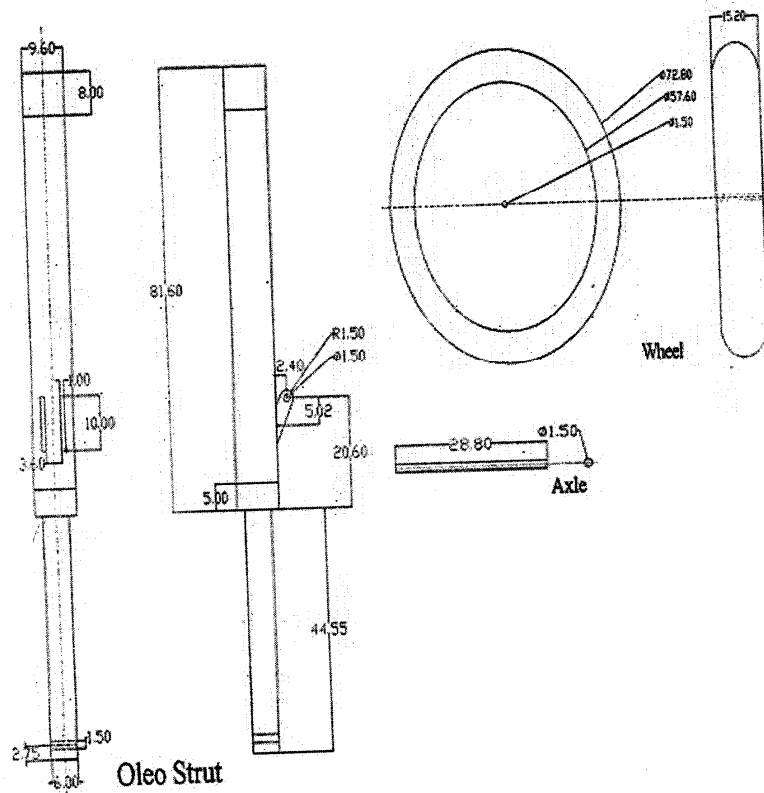
Upper surface		Lower surface	
Station	Ordinate	Station	Ordinate
0	.....	0	0
1.25	2.71	1.25	-2.06
2.5	3.71	2.5	-2.86
5.0	5.07	5.0	-3.84
7.5	6.06	7.5	-4.47
10	6.83	10	-4.90
15	7.97	15	-5.42
20	8.70	20	-5.66
25	9.17	25	-5.70
30	9.38	30	-5.62
40	9.25	40	-5.25
50	8.57	50	-4.67
60	7.50	60	-3.90
70	6.10	70	-3.05
80	4.41	80	-2.15
90	2.45	90	-1.17
95	1.34	95	-0.68
100	(0.16)	100	(-0.16)
100	.....	100	0

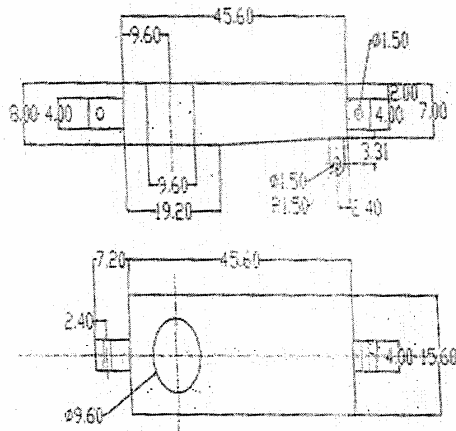
L.E. radius: 2.48  
Slope of radius through L.E.:0.10

## PART-B

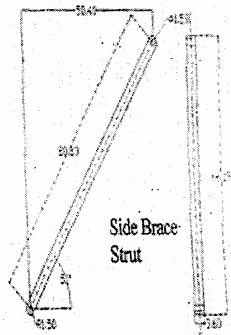
(40Marks)

1. Figure gives the part drawings of single wheel landing gear. Assemble all the parts and draw the following assembled views.
  - a) Front view
  - b) Side view

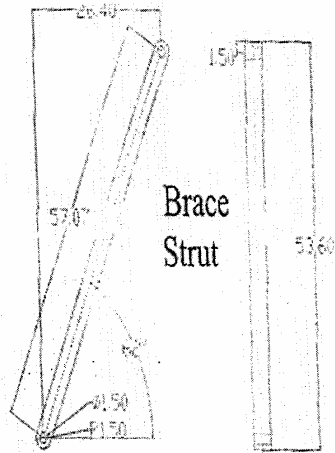




Supporting Frame



Side Brace Strut



Brace Strut

PART LIST

SI NO.	PART NAME	QTY
1	Supporting Frame	1
2	Oleo Strut	1
3	Side Brace Strut	1
4	Brace Strut	1
5	Axle	1
6	Wheel	1