

Code.No: 43037

R07

SET-1

**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 of lead, glass, porcelain, and square on Shaft.
- b) Draw three views of hexagonal headed bolt and nut for 30 mm diameter.
2. Draw half sectional front view of solid flanged coupling used to connect shafts of 25mm diameter.
3. Draw 2-d airfoil of NACA 0009. Using the following data

Table

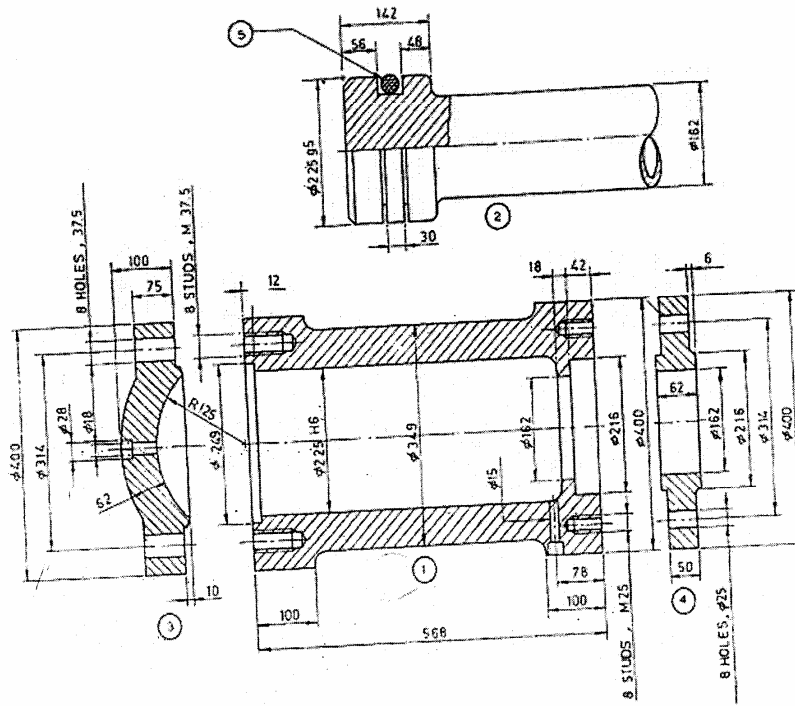
NACA - 0009.

Distance from L.E. , % chord	Upper and lower surfaces %chord
0	0
1.25	1.42
2.5	1.96
5.0	2.67
7.5	3.15
10	3.51
15	4.01
20	4.31
30	4.50
40	4.35
50	3.98
60	3.50
70	2.75
80	1.97
90	1.09
95	0.61
100	0

**PART-B**

**(40Marks)**

1. Figure gives the part drawings of loading gear hydraulic cylinder. Assemble all the parts and draw the following assembled views.
  - a) Half sectional front view
  - b) Side view



**Part List**

Part No.	Name	Material	Quantity
1	Cylinder	C.I.	1
2	Piston	Cast steel	1
3	Cylinder head	C.I.	1
4	Cylinder cover	C.I.	1
5	Packing ring	Fabric rubber	1

Hydraulic cylinder and piston