



ME 305 (AE 305/CE 306)

**III Semester Diploma (Mechanical/Automobile/Civil)
Examination, February 2011
ENGINEERING MECHANICS LAB**

Time : 3 Hours

Max. Marks : 75

Instructions : 1) Answer *all* questions in Part – A and Part – B and either (a) or (b) in Part – C.

2) *Each* question carries 1 (one) mark in Part – A and 5 (five) marks in Part – B and 50 (fifty) marks in Part – C.

PART – A

1. Define Hardness. (5×1=5)
2. Define torsion.
3. What is the purpose of turbine ?
4. Define deflection.
5. Define impact load.

PART – B

6. State and explain Bernoulli's theorem. (4×5=20)
7. Sketch and explain the reciprocating pump.
8. Explain the performance characteristics of impulse turbine.
9. Explain bending test on beams.

PART – C

10. a) Performance test on centrifugal pump. (1×50=50)

OR

- b) Performance test on reaction turbine.
-