MANE 4240 & CIVL 4240 – Introduction to Finite Elements

Rensselaer Polytechnic Institute

Instructor: Prof. S. De

Problem Set # 1

Total points : 35
Answer all questions. Note that the grade for HW #1 CANNOT be dropped.

1. Linear algebra miniquiz (10 pts)
2. Problem 2.3 (a,b,c). In part(a), derive the global stiffness matrix using the physical interpretation discussed in class. (15 pts)
3. Problem 2.15 (10 pts)