

# MANE 4240 & CIVL 4240 – Introduction to Finite Elements

Rensselaer Polytechnic Institute

Instructor: Prof. S. De

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## Problem Set # 1

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*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)