Potential Questions/topics:

- I may ask a similar question to those on exam 1.
- Problems similar to the homework regarding:
  - Buckling (I will provide equations)
  - Hertzian contact stresses (I will provide equations)
  - Impact loading.

This is from the 2014 exam. It is the only question of relevance for 2015 exam 2:

A set of springs, producing a non-linear stiffness, is used to reduce impact force of moving objects. The force-displacement curve is shown below. If a 10 kg object is moving horizontally (without friction) and strikes the springs, what is the maximum velocity it can be moving prior to impact such that the peak force during impact does not exceed 1500N? STATE ALL CRITICAL ASSUMPTIONS.

![Force-displacement curve](image-url)