January 1985 – Oral Exam
A three story building is subjected to a sudden ground acceleration, see the figure below.

a. Describe how you would establish the displacement response of the building and the forces generated in the columns.

b. Make some reasonable assumptions (such as the floors are infinitely rigid) and establish the corresponding equations of motion that describe the response of the building.

c. Describe in detail how you would solve the equations of motion.