**REAL OPTIONS IN LISBON 2013**

**Your NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**CLASS EXERCISE 1 MARCH 2013**

**An office building of 20,000 square meters in Coimbra would be worth €30 per square meter, and costs €44 per square meter to build. Duque Developments has received planning permission on a suitable plot of land which it owns. The volatility of office building values is 20%, the riskfree interest rate is 4%, and expected rental yield is 4%. What is the value of this land? At what building value should Duque start the development? Discuss any other interesting aspects of this real option valuation.**

**You are advised that “complete answers” should be given. Rather than “just the result”, show your assumptions, formulas and calculations in arriving at your answer. Each question will be marked as follows:**

**30% Review the theory behind the equation or model, and state assumptions clearly.**

**40% Provide the correct inputs to the model, and derive the correct output (showing all steps in the calculations).**

**30% Provide a reasonable interpretation of the results.**

****

****

****

****

****