Session 17A: Post Class tests

1. The Miller Modigliani theorem posits that debt policy is irrelevant, when it comes to firm value. Assume that you have a firm that is funded entirely with equity and has a beta (unlevered) of 0.90; the risk free rate is 3% and the equity risk premium is 6%. What will happen to the cost of capital, if the firm moves to a 30% debt ratio? (Remember that there are no taxes or default risk in the Miller Modigliani world).
    a. The cost of capital will remain unchanged
    b. The cost of capital will go up
    c. The cost of capital will go down

    Can you provide proof?

2. In a world with no taxes, default risk or agency costs, Miller and Modigliani argue that your debt ratio is irrelevant and that your firm value will remain unchanged as the debt ratio changes. Assume now that you introduce tax benefits for debt and that you insure firms against default, what would you expect the right mix of debt and equity to be for a firm which is fully protected against bankruptcy?
    a. Debt would still be irrelevant.
    b. The firm should be all equity funded
    c. The firm should be all debt funded.
3. There is evidence that firms have a financing hierarchy, with more preferred and less preferred sources of financing. Based on surveys, which of the following ordering of financing is closest to the actual preferences?
    a. Debt, Retained earnings, New stock issues, Convertible debt
    b. Retained earnings, New stock issues, Convertible debt, Debt
    c. Retained earnings, Debt, New stock issues, Convertible debt
    d. Retained earnings, Debt, Convertible debt, New stock issues
    e. New stock issues, Retained earnings, Debt, Convertible debt
    f. None of the above

    Can you provide a rationale for why?

4. The objective in corporate finance is to maximize the value of the business. In the standard cost of capital approach to financing, we argue that the optimal debt ratio is the one that minimizes the cost of capital. For this approach to yield the optimal, which of the following assumptions do you need to make?
    a. The bond rating of the firm will not change as the debt ratio changes
    b. The operating income of the firm will not change as the debt ratio changes
    c. The net income for the firm will not change as the debt ratio changes
    d. The beta will not change as the debt ratio changes
    e. None of the above