Quiz 1: Corporate Finance

Answer all questions and show necessary work. Please be brief. This is an open books, open notes exam.

1. Respond to the following questions. (Each question is worth 1/2 a point)
   a. Which of the following objectives makes the most sense in an inefficient market where lenders are not fully protected from stockholder expropriation?
      i. Maximize firm value
      ii. Maximize bondholder wealth
      iii. Maximize stock prices
      iv. Maximize stockholder wealth

   b. The marginal investor in a company has a large stockholding and trades a lot. Traditional risk and return models in finance (like the CAPM) work best for companies where the marginal investor is
      i. An institutional investor
      ii. The founder/owner of the company
      iii. A small individual investor
      iv. The employee pension fund
      v. The Government

   c. The conflict between managerial and stockholder interests is at the heart of the corporate governance problems. In which of the following firms is the conflict between the two likely to be greatest?
      i. A publicly traded firm with widely dispersed but activist institutional stockholders
      ii. A privately owned business where the owner is the manager.
      iii. A publicly traded firm that is widely held by institutions but where the largest stockholder is also the CEO.
      iv. A publicly traded firm that is widely held by institutions and managers hold little stock in the firm.

   d. Well-managed firms with stock that has outperformed the competition are more likely to be targets of hostile acquisitions than badly managed firms.
      i. True
      ii. False
2. You have run a regression of quarterly stock returns for the last 10 years on Wiley Gold Mining Corporation against the S&P 500 and arrived at the following results:

\[
\text{Return}_{\text{Wiley}} = -0.65\% - 0.10 \times \text{Return}_{\text{S&P 500}} \quad R^2 = 15\%
\]

The treasury bond rate today is 4.25\% and the average annualized treasury bill rate over the last 10 years was 2\%.

a. On an annualized basis, estimate Jensen’s alpha for Wiley Gold over the last 10 years. (1 point)

b. What is the expected return on Wiley Gold for the future, if you assume that stocks will continue to earn their historical risk premium (over treasury bonds) of 4.82\% each year? (1 point)

c. How would you respond to a friend who suggests to you that your expected return calculation is wrong because it is less than the riskfree rate?

i. Gold is not a risky investment. Therefore, the expected return is low.

ii. The demand for gold is non-discretionary

iii. Your friend is right. The expected return on a risky investment should never be less than the riskless rate.

iv. You are buying insurance against inflation with this stock. You have to settle for less than the riskfree rate.
3. Liberty Media is a company that owns television and radio stations around the country. The firm has $200 million in debt and $400 million in equity currently and its current levered beta (which reflects its current debt to equity ratio) is 1.56. The firm has an ambitious CEO who plans a major expansion of the firm. He wants to acquire Big Apple Movies, a New York-based movie company; Big Apple has 10 million shares outstanding, trading at $10 a share, $300 million in debt and a levered beta of 2.10. The tax rate for both firms is 40%.

   a. If Liberty plans to assume Big Apple’s debt and borrow money to cover the cost of the acquisition, estimate the beta for Liberty after the transaction. (3 points)
b. How would your answer change if you were told that Liberty plans to **issue** shares to cover the cost of the transaction and that it plans to **retire** Big Apple’s **debt** right after the transaction?