Spring 2024 Name:

Quiz 1: Corporate Finance

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

1. Corporate Governance/Risk Basics section.
Each multiple-choice question is worth ½ point. Please pick only one answer for each question.

a. In utopian corporate finance, shareholders are given primacy, with their interests driving decision-making. Which of the following is the <u>best justification for this focus</u>?
i. Managers are hired by shareholders, and thus cater to their interests
ii. Shareholders are exposed to more risk than any of the other stakeholders
iii. Shareholders have a residual claim on cashflows, i.e., they get the cash flows that are left after all other claimholders have received their claims
iv. It allows companies to focus on profits (the bottom line)
v. None of the above

b. You have been appointed as the head of the SEC. Which of the following actions on voting at annual meetings would you take <u>to improve corporate governance</u>?
i. Allow only shareholders who have held their shares for longer than a year to vote
ii. Allow only shareholders who have held their shares less than a year to vote
iii. Require proxies that are not returned to be counted as votes for management
iv. Require proxies that are not returned to be counted as votes against management
v. Do not count proxies that do not get returned as votes

c. Elon Musk's compensation package with Tesla was struck down by a Delaware court judge. If the court's interests lie in preserving Tesla shareholder rights (corporate governance), which is <u>the most legitimate reason for striking down the contract, on governance grounds</u>?
i. The compensation package is too large (estimated to be $50 billion +)
ii. It grants Musk additional shares in the company and dilutes the ownership interests of other shareholders
iii. The board of directors did not get a fair assessment (at the time of grant) of the compensation contract's value before granting it.
iv. The compensation package is tied to Tesla's market capitalization
v. Shareholders did not get a direct vote on the compensation package

d. The Jensen's alpha for a stock <u>measures the actual returns earned by a stock in a period against its expected return in that period</u>. How is this expected return computed?
i. The average return earned by that stock in earlier periods
ii. The actual return on the market during the period
iii. The return the stock should have earned in the period, given what the market earned, and the risk of the stock
iv. The riskfree rate in that period
v. None of the above

2. Universal Studios has had success with its theme parks in the United States and is considering building a new theme park in Sao Paulo, Brazil. You have collected the following information, to help you estimate a hurdle rate:

- The Brazilian Government has ten-year bonds <u>in US dollars, with an interest rate of 6.5%</u>, and <u>in Brazilian Reais, with an interest rate of 11%</u>.
- Universal has (correctly) estimated a cost of equity of 9.4%, in US dollars, for its US theme parks, based upon the US treasury bond rate of 4% and an equity risk premium for the US of 4.5%.

Assuming that equities in emerging markets are 1.2 times more volatile than emerging market government bonds, **estimate the cost of equity for the Brazilian theme park in Brazilian Reais. (3 points)**

3. Crockett Inc. is a company that operates in the hotel business, and *it currently has a market capitalization of $2 billion and debt outstanding of $500 million*. The average levered beta of publicly traded hotel companies is 1.10, and the average debt to equity ratio for these companies is 50%. If the marginal tax rate for all companies is 25%, **estimate the levered beta for Crockett**. (2 points)

4. CS Software is a publicly traded software company, trading at a market capitalization of $1.5 billion and with $500 million in debt. The company currently has a beta of 1.375, but drawn by the allure of AI, the company is considering borrowing $500 million and buying an AI firm with the debt. If the unlevered beta of AI companies is 1.40, and the marginal tax rate is 25%, **estimate the levered beta for CS Software after the acquisition**. (3 points)