Quiz 1: Corporate Finance

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

1. In the following questions, please make only one choice per question. (1/2 point each)
   a. Faced with evidence that many companies are accumulating cash (that they have no immediate use for), you are looking for ways to improve accountability. If your objective is to make managers more accountable to stockholders, which of the following measures on cash accumulation is most like to advance that objective?
      i. A cap on how much cash a firm is allowed to accumulate, at 10 percent of firm value. Excess cash has to be returned to stockholders.
      ii. A requirement, for all firms, that dividends be at least 50% of earnings.
      iii. A requirement that, once the cash balance hits 10% of firm value, stockholders get a binding vote on whether the cash should be returned in dividends/buybacks.
      iv. A requirement, for all firms, that any cash in excess of 10% of firm value be immediately reinvested (in projects or acquisitions).
      v. A requirement that any firm with a cash balance that exceeds 10% of firm value pay out all of its earnings as dividends.

   b. One of the enduring conflicts in a firm is that between lenders to the firm and its stockholders. Assume that you are a lender to a firm, and that the firm has a very large cash balance and an investment grade rating (AA). Which of the following actions would you most prefer the firm to take with its cash?
      i. Hold the cash (and do nothing)
      ii. Invest the money in good risky investments in existing businesses
      iii. Invest the money in good risky investments in new businesses
      iv. Pay dividends to stockholders
      v. Buy back stock

   c. Assume that a company with the large cash balance decides to invest that cash in a new business and that the stock price goes down in reaction to the announcement. This is indicative of a market that is short term.
      i. True
      ii. False

   d. There is evidence that companies delay releasing "bad" news to the market. If this the case and markets are rational, which of the following market reactions would you expect to the absence of anticipated news (earnings, dividends etc.)?
      i. The absence of news will be viewed as no news
      ii. The absence of news will be viewed as good news
      iii. The absence of news will be viewed as bad news

2. Riga Wine Inc. is a US corporation that derives all of its revenues in the United States. It is currently all-equity funded and has a US dollar cost of equity of 9.5%; the ten-year US T. Bond rate is 2% and the equity risk premium for the US is 6%. The company is considering expanding its existing business into Chile; the ten-year Chilean government bond rate (in pesos) is 4% and the Chilean sovereign rating (local and foreign currency) is A3. If the default spread for A3 rated countries is 0.75%, estimate the cost of equity for Riga Wine in Chilean pesos for its Chilean operations. (The Chilean equity index is twice as volatile as the Chilean government bond. You can assume that the beta of the business is the same in both the US and Chile.) (3 points)

3. Apple Computer has a market capitalization (market value of equity) of $420 billion. The company has no debt outstanding, a cash balance of $140 billion and is in two businesses, computers and entertainment, with the computer business having a value three times that of the entertainment business. The computer business has an unlevered beta of 1.50 and the entertainment business has an unlevered beta of 1.20.
   a. Estimate the beta for Apple's stock, given its current standing. (1 point)

   b. Assume that Apple is considering entering the television business. The median regression beta for companies in this business is 0.988, the median debt to equity ratio for these companies is 50% and the median cash as a percent of firm value is 5%. Estimate the unlevered beta of being in the television business. (The marginal tax rate for all firms is 40%) (1 point)

c. Now assume that Apple plans to borrow $80 billion to augment their cash balance and do the following:
   - Invest $ 70 billion on the iTV, a flat panel, high-resolution television, thus entering the television business.
   - Pay a special dividend of $100 billion

   Estimate the beta of Apple's equity after this transaction. (The marginal tax rate is 40%) (3 points)