Quiz 1: Equity Instruments

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

1. Each of the following is worth 1 point.
   
   a. When valuing a Spanish company that derives the bulk of its revenues from sales in the United States, you have to value the company
      - In pesetas, because that is the local currency
      - In Euros, because it is the currency of the European Union, of which Spain is a member.
      - In U.S. dollars, because its revenues are in that currency
      - In any currency, as long as your growth rates, cash flows and discount rates are estimated in that currency.

   b. If you are asked to be market-neutral (i.e., assume that the market is, on average, correct) in your valuations, which of the following would you use as your equity risk premium (in computing the cost of equity)?
      - The historical risk premium earned by stocks over bonds.
      - The implied equity risk premium, estimated based upon the current level of the market and expected dividends.
      - The average implied equity risk premium over the last 40 years.
      - None of the above

   c. When estimating the beta (to use in the CAPM) for a small technology company listed on the NASDAQ, which of the following indices would you use as your market index?
      - The Dow 30
      - The S&P 500
      - The NASDAQ Composite
      - A Technology Index
2. Lewis Clark Enterprises is a firm in the hospitality business. It generates 60% of its revenues from hotels and 40% from a travel magazine that it publishes – its total revenues last year were $2 billion. You have collected the following information about the average beta, debt to equity and value to sales ratios for comparable firms in both businesses:

<table>
<thead>
<tr>
<th>Business</th>
<th>Beta</th>
<th>D/E</th>
<th>Enterprise Value/Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hotel</td>
<td>1.20</td>
<td>25%</td>
<td>1.50</td>
</tr>
<tr>
<td>Publishing</td>
<td>1.50</td>
<td>10%</td>
<td>3.00</td>
</tr>
</tbody>
</table>

Lewis Clark has 100 million shares outstanding trading at $30 per share – the rest of its capital comes from long term debt. If the tax rate for all firms is 40%, estimate the beta for Lewis Clark. (4 points)
3. Lewis Clark reported earnings before interest and taxes of $60 million last year, but you have uncovered the following additional items about the firm:

- The firm had operating lease expenses of $50 million last year and has a commitment to make equivalent payments each year for the next 8 years.
- The firm reported capital expenditures of $30 million and depreciation of $50 million last year in its statement of cash flows. However, the firm also made two acquisitions, one funded with cash for $50 million and another, funded with a stock swap, for $30 million. The amortization of these acquisitions is already included in the current year’s depreciation.
- The total working capital increased from $180 million at the start of last year to $200 million at the end of the year. However, the firm’s cash balance was a significant portion of this working capital and increased from $80 million at the start of last year to $120 million at the end. (The cash was invested in T.Bills)
- The tax rate is 40%, the firm’s pre-tax cost of debt is 6% and its cost of capital is 10%.

Estimate the free cashflows to the firm last year. (3 points)