**American University of Beirut**

**Olayan School of Business**

**FINA 210: Business Finance**

**Spring 2011**

# Quiz 2

**Instructor:** Dr.Walid Saffar **Length:**  45 minutes

**Date:** May 26, 2011

**This quiz counts for 5 points.**

**Indicate on page 2 which of the available choices best answers the question:**

1. The Color Spectrum uses a combination of common stock, preferred stock, and debt financing. The company wants preferred stock to represent 5 percent of the total financing. It also wants to structure the firm in a manner that will produce a weighted average cost of capital of 8 percent. The aftertax cost of debt is 4.6 percent, the cost of preferred is 8.2 percent, and the cost of common stock is 10.4 percent. What percentage of the firm's capital funding should be debt financing?   
a. 34.06 percent  
b. 39.48 percent  
c. 42.02 percent  
d. 44.14 percent  
e. 47.28 percent

2. Swenson's currently has a weighted average cost of capital of 9.2 percent based on a combination of debt and equity financing. The firm has no preferred stock. The current debt-equity ratio is .72 and the aftertax cost of debt is 5.8 percent. The company just hired a new president who is considering eliminating all debt financing. All else constant, what will the firm's cost of capital be if the firm switches to an all-equity firm?   
a. 11.65 percent  
b. 12.29 percent  
c. 12.87 percent  
d. 13.33 percent  
e. 13.67 percent

3. Baker's Footwear has 8,000 shares of common stock outstanding at a price per share of $64 and a rate of return of 15 percent. The firm has 2,000 shares of 6 percent preferred stock outstanding at a price of $54 a share. The preferred stock has a par value of $100. The outstanding debt has a total face value of $100,000 and a market price equal to 102 percent of face value. The yield-to-maturity on the debt is 9.36 percent. What is the firm's weighted average cost of capital if the tax rate is 35 percent?   
a. 12.34 percent  
b. 12.41percent  
c. 12.88 percent  
d. 13.16 percent  
e. 13.32 percent

4. You own a portfolio consisting of the securities listed below. The expected return for each security is as shown. What is the expected return on the portfolio?   
  
     
a. 7.14 percent  
b. 7.67 percent  
c. 8.30 percent  
d. 8.64 percent  
e. 9.47 percent

5. Given the following information, what is the standard deviation of a portfolio that is invested 40 percent in stock A, 25 percent in stock B, and 35 percent in stock C?   
  
     
a. 1.11 percent  
b. 2.89 percent  
c. 3.46 percent  
d. 3.59 percent  
e. 4.01 percent

6. Stock X has a beta of 1.6 and an expected return of 19 percent. Stock Y has a beta of 1.2 and an expected return of 15.5 percent. What is the risk-free rate if these securities both plot on the security market line?   
a. 4.0 percent  
b. 4.2 percent  
c. 4.5 percent  
d. 4.8 percent  
e. 5.0 percent

**Answers:**

**1.**

**2.**

**3.**

**4.**

**5.**

**6.**