**ASSIGNMENT/ REVISION QUESTIONS: The assignment consists of the first 4 questions.**

1. The securities of a company have a Beta of 0.5. The return on the market portfolio is 12% and the risk free rate is 6%. Compute the cost of the company’s equity. (2 mks)
2. Government securities are assumed to be risk free. In your opinion, are government securities actually free of risk? What risks, if any, do you take by holding government securities? (6 mks)
3. Consider two bonds, bond *A* and bond *B,* with equal rates of 10 percent and the same face values of Ksh.1,000. The coupons are paid annually for both bonds. Bond *A* has 20 years to maturity while bond *B has* 10 years to maturity.

*a.* What are the prices of the two bonds if the relevant market interest rate is 10 percent? (3 mks)

*b.* If the market interest rate increases to 12 percent, what will be the prices of the two bonds? (3 mks)

*c.* If the market interest rate decreases to 8 percent, what will be the prices of the two bonds? (3 mks)

d. plot the price of a bond (Y-axis) against the market interest rate. Describe the relationship depicted on your graph. (6 mks).

e. suppose that the dividend payout for a given payout is as follows:

|  |  |
| --- | --- |
| Year | Dividend Per Share (DPS) |
| 2005 | 0.50 |
| 2006 | 0.52 |
| 2007 | 0.54 |
| 2008 | 0.56 |
| 2009 | 0.55 |
| 2010 | 0.55 |

If your required rate of return is 18%, what is the most you would pay for this share? (5 mks)

1. Consider two bonds, HI and LI. The HI bond has a 10% coupon rate and the LI bond has a 5% coupon rate. Both bonds pay interest annually and are priced to yield 10%. Suppose the following interest scenarios are possible at the point in time when both bonds have five years remaining to maturity:

Possible Interest Rate Probability of Interest Rate

5% 10%

10 50

15 40

a. Calculate the expected value for each bond.

b. Calculate the standard deviation of possible values for each bond.

c. Which bond is riskier? Why?

1. The capital structure of ABC corporation is 10% debt, 20% retained earnings, 30% common stock and 40% preffered stock. The cost of debt is 18%: the cost of retained earnings, 15%; the cost of common stock, 25%, and the cost of preferred stock is 12%. Compute the WACC for the corporation.
2. Do managers always work towards improving the welfare of shareholders? Discuss. citing reasons for your choice of answer and possible remedies you would suggest.
3. The Walla Walla Washing Company has a capital structure comprised of 40% debt and 60% equity. If the required rate of return on debt is 10% and the cost of common stock is 16%, what is the cost of capital to Walla Walla if there are no flotation costs and:

a. the marginal tax rate on corporate income is 40%?

b. the marginal tax rate on corporate income is 60%?

1. Compute the value of a 10 year, 12% bond with a face value of Ksh. 100 and interest payable semi annually when:
   1. Your required rate of return is 8%.
   2. Your required rate of return is 10%.
   3. Your required rate of return is 12%.
   4. Your required rate of return is 20%.
2. In question 8 above plot a graph of value (Price of bond) against the required rate of return and describe the relationship.