**BBM 206: PRINCIPLES OF FINANCE**

**QUESTION ONE**

a) The equity beta for Naivasha Company is 1.29. Naivasha has a debt-to-equity ratio of 1.0. The expected return on the market is 13 percent. The risk-free rate is 7 percent. The cost of debt capital is 7 percent. The corporate tax rate is 35 percent.

* + What is Naivasha’s cost of equity? (2 mks)
  + What is Adobe Naivasha’s weighted average cost of capital? (3 mks)

b. Calculate the weighted average cost of capital for the Luxury Porcelain Company. The book value of Luxury’s outstanding debt is Ksh.60 million. Currently, the debt is trading at 120 percent of book value and is priced to yield 12 percent. The 5 million outstanding shares of Luxury stock are selling for Ksh.20 per share. The required return on Luxury stock is 18 percent. The tax rate is 25 percent. (5 mks).

c. In your opinion, do managers always strive towards maximizing the wealth of shareholders? Discuss, citing reasons, and suggesting TWO major ways in which the shareholders may motivate managers to improve the value of the firm. (5 mks)

d. How does the agency conflict between shareholders and bondholders arise, and how can the conflict be minimized. (5 mks)

e. Abel, an astute investor, buys bonds and always holds them to maturity. He claims that because he holds these bonds to maturity, there is no risk. Is he correct? Explain, citing any THREE risks (if any) assumed. (5 mks)

**QUESTION TWO**

* 1. Consider the Plum Computer Company’s sales for three months:

January: Ksh. 100,000.00

February: Ksh: 180,000.00

March: Ksh 80,000.00

April: Ksh. 120,000.00

May: Ksh. 150,000.00

90% of Plum’s sales are for credit. 80% of all credit sales are paid the following month and the remainder are paid two months after the sale. Estimate Plum’s cash flow for the months from these sales. (6 mks)

* 1. A temporary downturn in a company’s fortunes may be suggested by the presence of a negative operating cash flow and positive cash flows from investing and financing activities. Explain how these cash flows may suggest a temporary financial problem. (5 mks)
  2. Define the term “Short term solvency” and explain two financial ratios that can be used to measure financial solvency. (4 mks)

RITTER CORPORATION

Statement of financial position (all figures in Millions Ksh)

December 31

20X2 20X1

Assets

Current assets 150 100

Net fixed assets 200 100

Total assets 350 200

Liabilities and Equity

Current liabilities 75 50

Long-term debt 75 0

Stockholders’ equity 200 150

Total liabilities and equity 350 200

Required:

Compute and interpret the following ratios for each of the years;

1. Quick Ratio (2 mks)
2. Current ratio given inventories are Ksh. 80, 000,000.00 (3 mks)
3. The debt to equity ratio (2 mks)

**QUESTION THREE**

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)

**QUESTION FOUR**

1. Discuss three sources of short term finance, and three sources of long term finance (9 mks)
2. Preference shares do not benefit the organization with a tax shield. Why do corporations still issue preference shares, and not just issue debt? (3 mks)
3. Compute the expected return and risk associated with the following probability distribution of cash flows for a firm A.

|  |  |  |
| --- | --- | --- |
| Cash flow A | Cash Flow B | Probability |
| 10,000 | 3,000 | 0.6 |
| 3,000 | 6,000 | 0.1 |
| 20,000 | 5,000 | 0.3 |

**QUESTION FIVE**

* 1. Suppose an you have an opportunity to invest Ksh.1,000 today an get Ksh.1,200 one year from today. If your required rate of return on investments of similar risk is 10%, should you make this investment? Why? (3 mks)
  2. Suppose you have the opportunity to invest in a project that provides you with Ksh.4,000 every year forever. If you require an 8% return on investments with similar risk, what is the most you would be willing to pay for this project? (4 mks)
  3. Suppose you invest Ksh.10,000 in an investment that provides a return of 10% in the first year, 15% in the second and third years, and 12% in the fourth year. The investment has no cash flows, but rather the value of the investment grows each year.
* What is your investment worth at the end of the fourth year? (3 mks)
* What is the average annual return on this investment? (3 mks)

1. Discuss the scope of finance, highlighting on the everyday work of a finance manager (8 mks).

**QUESTION SIX**