## LAIKIPIA UNIVERSITY COLLEGE

BUST 412: FINANCIAL MANAGEMENT

CONTINOUS ASSESSMENT TEST 1

Attempt ALL questions

**TOPIC 3: EVALUATING PROJECTS**

1. The management of Kericho LTD is contemplating the purchase of a tea leaves picking machine to replace the manual labor it currently employs. The machine goes for Ksh. 100,000,000.00, the residual value of the machine is nil, and has a useful life of 10 years.

The labor that is currently employed costs the company Ksh. 12,000,000.00 per annum. The cost of capital for the company is 16%. Take the corporation tax rate to be 30%.

**REQUIRED:**

1. The annual cash flows to be generated by investing in the new machine (8 mks).
2. Using the annual cash flows computed in (a) above, compute the payback period (in years) for the investment in the tea picking machine (5 mks).
3. Using the present value method, advice the company’s management whether it would be wise to invest in the machine. Justify your recommendation (8 mks).
4. State and explain TWO advantages of using the present value method as opposed to the payback period method of evaluating investments (4 mks)

**TOPIC 8: COST OF CAPITAL**

1. Laikipia Corporation is estimating its WACC. Its target capital structure is 20 percent debt, 20 percent preferred stock, and 60 percent common equity. Its bonds have a 12 percent coupon, paid semiannually, a current maturity of 20 years, and sell at par for Ksh.1000. The firm sells, at par, Ksh.100 preferred stock which pays a 12 percent annual dividend. Rollins is a constant-growth firm which just paid a dividend of Ksh.2.00, sells for Ksh.27.00 per share, and has a growth rate of 8 percent. The firm's marginal tax rate is 30 percent.
   1. What do you understand by the term “Cost of capital?” (2 mks)
   2. Calculate the cost of the bonds in issue for Laikipia Corporation (4 mks).
   3. What is the cost of preference shares for Laikipia Corporation (1 mk).
   4. Compute the cost of common equity (ordinary shares) for Laikipia corporation (5 mks)
   5. Compute the Weighted Average Cost of Capital (WACC) for Laikipia Corporation (4 mks).
   6. Discuss the term Marginal cost of capital. How is it different from the weighted average cost of capital? (4 mks).
2. Dhawal World Inc. has growth rate of 15%.its Ksh. 50 ordinary shares are selling at par. This year the company gave Ksh. 0.10 per share as dividend.
   1. What is the cost of retained earnings of this company as per GDG Model approach?
   2. The company is has floated shares of Ksh, 50 par value at a discount of Ksh. 5. The floatation costs are ksh. 3 per share. Compute the cost of the ordinary shares for the company.
3. Goti Global Inc. issues 20% preference shares at a premium of 5% redeemable after 10 years. He will redeem these at 10% premium. What is the cost of capital? Assume the par value of the shares is Ksh. 100.
4. You are provided the following information:

Risk free rate of return = 10%

Market Portfolio rate of return for software companies = 15%.

If Kap Software has beta of 1.75, what is the cost of capital of Kap Software using CAPM?

1. Vinod & Pankaj Inc. have beta of 1.1. Market rate is 14%. Risk free rate is 8%. What is the cost of capital of this company as per CAPM?
2. EABL Ltd. has a plan to raise debt. The bonds will have a par value of Ksh. 100 and a coupon of 12%. The company will pay 30% tax to the government of Kenya? What will be EABL cost of debt?
3. Sarika Global Inc. has 15% debt of Ksh. 20 billion, 18% Preference shares of Ksh. 10 billion, and Equity of Ksh. 90 billion. Cost of equity is 20%. Tax rate is 30%. What is the overall cost of capital (WACC)?
4. Water's Beginning LTD has:

– 1 million shares of common stock outstanding: price Ksh.12 per share.

– The firm's outstanding bonds have ten years to maturity, a total face value of debt = Ksh.5 million, face value per bond of Ksh.1, 000, current price = Ksh.985 with a coupon rate of 10%.

– The risk-free rate is 7%, and analysts' expected return for the market is 14%.

– Water's Beginning stock has a beta of 1.2 and is in the 30% marginal tax bracket.

What’s the WACC?

1. The following are the projected incremental earnings before interest, depreciation and tax (EBDIT) for a firm that is contemplating a factory automation project. The project is expected to cost Ksh. 10 million, and this cost is to be written off over a period of 5 years.

|  |  |
| --- | --- |
| YEAR | EBDIT (CASH INFLOW/ OUTFLOW (Ksh. Millions)) |
| 0 | -10 |
| 1 | 3 |
| 2 | 4 |
| 3 | 7 |
| 4 | 3 |
| 5 | 4 |

The cost of capital for the firm is 12%, and the tax rate is 30%.

REQUIRED

1. The cash flows for the company for each of the years 1- 5 (5 mks)
2. An evaluation of whether the project is viable using the NPV method of evaluating investments (13 mks).
3. Discuss the limitations of the capital asset pricing model (12 mks)

KEY TERMS

1. A **tax shield** is the reduction in [income taxes](http://en.wikipedia.org/wiki/Income_tax) that results from taking an allowable [deduction](http://en.wikipedia.org/wiki/Itemized_deduction) from [taxable income](http://en.wikipedia.org/wiki/Taxable_income).

For example, because interest on [debt](http://en.wikipedia.org/wiki/Debt) is a tax-deductible expense, taking on debt creates an **interest tax shield (ITS)**. Since a tax shield is a way to save [cash flows](http://en.wikipedia.org/wiki/Cash_flows), it increases the value of the business, and it is an important aspect of [business valuation](http://en.wikipedia.org/wiki/Business_valuation).

Since depreciation (in the form of capital allowances) is an allowable expense in tax computation, it gives rise to the **depreciation tax shield (DTS).**

1. Valuation of Preference Shares

A company may issue two types of shares,

* Preference shares.
* Ordinary shares.

Preference shares have preference over ordinary shares in terms of payment of dividend and repayment of capital. They may be issued with or without a maturity period.

* Redeemable preference shares with maturity.
* Irredeemable preference shares are shares without any maturity.
* Cumulative preference shares unpaid dividends accumulate and are payable in the future.
* Not cumulative shares do not accumulate dividends.

Following are the features preference shares,

* Preference shareholders have claim on assets and income prior to ordinary shares.
* The dividend rate is fixed in case of Preference shares.
* A company can issue convertible Preference shares.
* Both redeemable and irredeemable Preference shares can be issued.

Valuation of irredeemable preference shares

Po = D/ Kp

**COST OF CAPITAL**

Is the required rate of return by the providers of capital. It is used in capital budgeting (NPV/IRR) calculations.