

CHUKA

UNIVERSITY



## UNIVERSITY EXAMINATIONS

### EXAMINATION FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION

**MBAD 832: ADVANCED FINANCIAL MANAGEMENT**

**STREAMS: MBAD Y2S1**

**TIME: 3 HOURS**

**DAY/DATE: MONDAY 4/12/2017**

**2.30 P.M – 5.30 P.M**

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#### INSTRUCTIONS:

- Answer all questions
- Don not write on the question paper
- Present value tables are provided

1. (a) Omni corporation is considering a project that requires a ksh 400,000 cash outlay and is expected to produce cash inflow of ksh 150,000 per year for the next four years. Omni's tax rate is 35% and the before tax cost of debt is 6.5%. The current share price for Omni's stock is ksh 36 per share, and the expected dividend next year is ksh 2 per share. Omni expects growth rate through out the life of the stock. Assume Omni finances the project with 50% debt and 50% equity, and that the floatation cost for equity are 4.5%.

#### Required :

- (i) Calculate the NPV of the project and advise the management of Omni corporation. [8marks]
- (b) Calculate operating leverage financial leverage and combined leverage when the fixed costs are ksh 10,000 total assets of ksh 30,000, asset turn over is 2 times and variable cost as a percentage of sales is 60%. The financial plans are:

Plan A	Plan B	
10% debentures ksh 10,000	ksh 30,000	
Equity ksh 30,000	ksh 10,000	[6marks]
(c) Explain the determinants of working capital needs of a firm.		[6marks]
(d) The following information relates to a new equipment whose net cash flow has been estimated.		

Year 1		Year two	
Cash f low	Probability	Cash flow	Probability
		8000	0.5
10000	0.4	12000	0.5
		16000	0.4
12000	0.6	20000	0.6

The equipment has a life of two years and costs ksh 20000 . The cost capital is 10%. Calculate the expected NPV of the project. [5marks]

## QUESTION TWO

Mr. Wanga's investment portfolio comprises of 490 shares in company ABC ltd and ksh 20,000 deposited in his savings account .ABC ltd had declared a rights issue of one share for every five shares held at an issue price of ksh 20 per share. The current market price per share of ABC ltd is ksh 35. Mr Wanga would obtain the funds required to exercise the rights from the savings account similarly proceeds from sale of the rights would be deposited (credited) to his savings account.

**Required :**

- (i) Calculate the value of each right. [4marks]
- (ii) Analyze the effect of rights issue on the value of Mr. Wanga's investment portfolio and hence advise him on whether to exercise, sell or ignore rights issue. [6marks]

(b) XYZ Company ltd is interested in acquiring the use of an asset costing ksh 500,000. It has two options:

- I. to borrow the amount at 18% interest per annum payable in 5 equal year end installments, and use the amount to buy the asset or
- II. To make the asset on lease for a period of 5 years at the year end lease rentals of ksh 20,000.

The corporate tax is 50% and depreciation is allowed on written down value of the asset at a rate of 20%. The asset will have a salvage value of ksh 180,000 at the end of 5 years.

**Required :**

- Advice the company on whether to buy or lease the asset. [12marks]
- (c) Differentiate between escalator lease step up –lease. [3marks]

**QUESTION THREE**

(a) ABC ltd wants to diversify into fertilizer business and organize as a new division. The company formed a compared fertilizer company of roughly the same characteristics as the proposed division. It has an equity beta of 1.35 and a debt ratio of 0.72. The corporate tax rate is 35% . ABC ltd will have a debt ratio of 0.5 for the proposed fertilizer business. The risk free rate 8% and the market risk premium is 10%.

**Required :**

- Calculate the cost equity for the proposed new division. [6marks]
- (b) Explain the following defensive targets applied by a target firm during a take over.
- (i) Golden parachutes [2marks]
- (ii) Poison pills [2marks]
- (iii) Getting a white knight. [2marks]
- (c) You have been provided with the following data for two companies.

	T ltd	A ltd
EAT (sl)	700,000	1,000,000
No.of equity shares	200,000	400,000
EPS	3.50	2.50
P/E Ratio	10	14
Market price per share (ksh)	35	35

A ltd is to acquire T ltd .The exchange ratio is based on the market prices of the shares of the companies.

**Required : Determine**

- (i) The exchange ratio. [1mark]
  - (ii) Post merger EPS [2marks]
  - (iii) Change in EPS of A ltd and T ltd after merger. [2marks]
  - (iv) Combined P/E ratio [2marks]
  - (v) Post merger market value. [3marks]
- (d) Differentiate between allocative efficiency and operational efficiency. [3marks]

**QUESTION FOUR**

(a) Consider two firms which are similar in all respect except for their capital structure. Firm L has debt while firm U is an all equity financial company. Both firms have an EBIT of ksh 900,000. The equity capitalization rate ( $k_e$ ) is 10% and the corporate tax rate is 40%.

**Required:**

- (i) Calculate the value of the two firms using net income approach. [4marks]
  - (ii) Using MM's model, calculate the equilibrium value of the levered firm (L) [2marks]
  - (iii) Show how an investor owning 10% of the shares of the overvalued company can increase his returns without increasing risk. [5marks]
- (b) Huruma ltd sells merchandize on credit terms of net 50 while the industrial average is net 30.

The company makes average sales of ksh 3,000,000 per annum. The average number of days sales in accounts receivable is 60 days.

The company is considering changing its credit terms to net 30 on all sales. The change of credit is expected to result in the following;

-sales would reduce to ksh 2.6 million p.a

-accounts receivable would drop to 35 days of sales.

**Additional information**

- The variable cost ratio is 70%
- The corporation tax 30 %
- Interest on funds invested in accounts receivable is at rate of 11% per annum.
- Assume a year has 360 days .

**Required :**

Assess whether the company should change its credit terms to net [8marks]

(c) Explain any four methods of incorporating risk in capital budgeting. [6 marks]

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