

**KABARAK**



**UNIVERSITY**

**EXAMINATIONS**

**2008/2009 ACADEMIC YEAR**

**FOR THE DEGREE OF BACHELOR OF COMMERCE**

**COURSE CODE: FNCE 310**

**COURSE TITLE: CORPORATE FINANCE**

**STREAM: Y3S1**

**DAY: WEDNESDAY**

**TIME: 2.00-4.00 P.M.**

**DATE: 17/12/2008**

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**INSTRUCTIONS:**

- 1. Answer questions ONE and any other two questions only.**
- 2. All necessary workings must be shown**

**PLEASE TURN OVER**

## QUESTION ONE

(a) Write brief explanatory notes on each of the following concepts as used in corporate finance

- (i) Systematic risks (2 marks)
- (ii) Capital structure (1 ½ marks)
- (ii) Agency costs (1 ½ marks)
- (iv) Cost of external equity (2 marks)

(b) An investor expects a risk-free rate of return of 4.5% p.a and a market rate of return of 14.5% p.a.

Two stocks A and B have the following betas and estimated returns:

Stock A	Beta	Estimated return
A	1.2	16%
B	0.8	14%

### Required

(i) Using capital asset pricing model(CAPM),use a graph to indicate the points where the stocks would be plotted on the security market line(SML) (5mrks)

(ii) State whether stock A and stock B are undervalued or overvalued (2mrks)

(c) The finance manager of Kabu Ltd plans to invest in either of two securities X and Y or a combination. He seeks the advice of a financial analyst who gives him the following data

Probability	Returns (%)	
	Security x	security y
0.2	11	-3
0.2	9	15
0.2	25	2
0.2	7	20
0.2	-2	6

### Required

Calculate the expected return and standard deviation of each of the following portfolios:-

- (i) 100% X and 0 % Y (4marks)
- (ii) 75 % X and 25% Y (4marks)
- (iii) 25% X and 75% Y (4marks)
- (iv) 0% X and 100% Y

[Total: 30 marks]

## QUESTION TWO

- (a) With the help of a diagram, differentiate between an efficient portfolio and an optimum portfolio (4marks)
- (b) Kabarak University has an investment capital of sh 1000,000. The finance manager wishes to invest in Two securities A and B in the following proportion; sh 200,000 in security A and shs 800,000 in security B .

The returns on these two securities depend on the state of the economy as shown below:-

State of economy	probability	Returns on SecurityA	Returns on Security B
Recovery	0.4	18%	24%
Normal	0.5	14%	22%
Recession	0.1	12%	21%

### Required

- (i) Compute the expected return and standard deviation for each security (5marks)
- (ii) Determine the covariance, Coefficient between security A and security B (5marks)
- (iii) Compute the expected portfolio return (2marks)
- (iv) Compute the portfolio risk (2marks)
- (v) Calculate the reduction in risk due to portfolio diversification (2marks)

[Total: 20 marks]

## QUESTION THREE

- (a) In the context of portfolio theory explain the general relationship between the gains from diversification and correlation among security returns (6marks)
- (b) Kabu Ltd is considering two investment projects A and B for which the following information has been calculated.

	Investment A sh	Investment B sh
Investment outlay	2,000,000	2,000,000
Expected return	0.20	0.20
Standard deviation	0.40	0.6
Beta of returns	1.80	1.20

The finance director has formulated a risk adjustment relationship based on the coefficient of variation as follows:

Required return on project = Risk free return + 0.04 C.v

He also takes into consideration the security market line (SML) relationship using 6% as the estimate of the risk free return and 5% as the market risk premium.

### Required

- (i) Calculate the required return on each project using separately the two alternative methods of calculating the risk adjustment factor (8marks)
- (ii) Advise the company on which projects should be accepted first by assuming that the projects are independent and second assuming that they are mutually exclusive (6marks)

### QUESTION FOUR

Lake Baringo fishmongers Ltd is considering the acquisition of Nyalenda Ltd. Currently Lake Baringo Ltd has annual earnings of kshs 51 million, 20 million ordinary shares outstanding, and each share sells for 130. Likewise the annual earnings for Nyalenda Ltd are Ksh9 million, it has 6 million ordinary shares outstanding and a market value of sh 160 per share. The earnings of Baringo Ltd are expected to grow at an annual rate of 12% in the absence of any mergers.

Lake Baringo Ltd offers 1.5 shares for each share in Nyalenda.

Assume that there are no synergistic effects likely from the merger.

### Required

- (a) Identify and briefly explain four reasons why a company seeking to maximize the wealth of its shareholders may wish to take over another company (6marks)
- (b) Determine the effects of the acquisition on each company's EPS (8marks)
- (c) Highlight six defensive tactics the directors of Nyalenda Ltd may employ to resist an unwelcome bid (6marks)

[Total:20 marks]