CHUKA **UNIVERSITY**

UNIVERSITY EXAMINATIONS

RESIT/SPECIAL EXAMINATION

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF COMMERCE

BCOM 332: CORPORATE FINANCE

STREAMS: BCOM Y3S1 **TIME: 2 HOURS**

DAY/DATE: THURSDAY 26/07/2018 **8.30 A.M. – 10.30 A.M.**

INSTRUCTIONS:

- **Answer question ONE and any other TWO questions.**
- **Do not write on the question paper.**

QUESTION ONE

(a) Using a sustainable diagram, explain the efficient set of investment in a portfolio with many assets. (5 marks)

(b) Differentiate between systematic risk and unsystematic risk. (3 marks)

(c) U Ltd belongs to a risk class capitalization rate which is 14%. It currently has 3000 outstanding shares at Ksh. 50 each. During the year Ksh. 5 is declared as dividend per share. The net income of the company is Ksh 83, 000. For the new project, investment is required for Ksh. 120,000.
Required:
Show under MM hypothesis that the payment of dividend does not affect the value of the firm. (5 marks)

(d) The following information relates to a portfolio of two assets A and B

Probability of occurrence	A%	B%
0.1	6	14
0.2	8	12
0.4	10	10
0.2	12	8
0.1	14	8

The assets are held in a portfolio consisting of 40% A and 60% B

Required:

(i) Compute the portfolio expected return. (4 marks)

(ii) Compute the portfolio risk. (7 marks)

(e) Consider two firms which are similar in all respect expected for their capital structures. Firm L has Ksh. 4 million 7.5% debt while firm U is all equity financed. Both firms have a net operating income of Ksh. 900,000. The equity capitalization rate (ke) is 10% the corporation rate 40%

Required:

(i) Calculate the value of the two firms using Net Income approach. (4 marks)

(ii) Using MM's model. Calculate the equilibrium value of the levered firm in the presence of taxes. (2 marks)

QUESTION TWO

(a) Assume that a firm has annual net operating income of Ksh. 100,000, an average cost of capital (Ko) of 10% and an initial debt of Ksh. 500,000 at 6% rate of interest.

Required:

(i) Calculate the value of the firm under Net operating income approach. (2 marks)

(ii) Calculate the equity capitalization rate. (2 marks)

(b) Briefly explain the following dividend theories.

(i) Signalling theory (3 marks)
(ii) Clientele effect theory (3 marks)
(iii) Bird in hand theory (2 marks)

(c) XYZ Ltd is having the following information

Sales of 50,000 units at Ksh 10 each, variable cost of Kshs. 6 per unit. Total fixed costs of Ksh. 100,000 and interest of 8% on a loan of Ksh. 500,000/=

Required:

Calculate the degree of financial leverage, operating leverage and combined leverage. (6 marks)

(d) Differentiate between capital structure and financial structure. (2 marks)

QUESTION THREE

(a) Mr. Njue's investment portfolio comprises of 490 shares in ABC Ltd and Ksh. 10,000 deposited in a savings account. ABC Ltd has 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. Njue would obtain the funds needed to exercise the rights from the savings account. Similarly, proceeds from sale of rights would be credited to the savings account.

Required:

(i) The value of each right. (4 marks)

(ii) Analyse the effect of rights issue on the value of Mr. Njue's investment portfolio and hence advice him on whether to exercise, sell or ignore rights issue. Ignore interest on savings account. (6 marks)

(b) You have been provided with the following financial data for two companies.

	T Ltd	A Ltd
Earnings After Tax (sh)	700,000	1,000,000
No. of Equity shares	200,000	400,000
Earnings per share	3.50	2.50
Price-Earnings ratio	10	14
Market price per share (sh)	35	35

A Ltd is the acquiring company. The exchange ratio is based on the market prices of the shares of the companies.

(i) The exchange ratio. (1 mark)
(ii) Post merger EPS. (2 marks)
(iii) Change in EPS of A Ltd and T Ltd after merger. (2 marks)
(iv) Combined Price-Earnings Ratio (2 marks)
(v) Post merger market value (3 marks)

QUESTION FOUR

(a) Excellent Ltd is contemplating having an access to a machine for a period of 5 years. Discussions with various financial institutions have shown that the company can have the use of the machine for the stipulated period through leasing arrangement, or the requisite amount can be borrowed at 14% to buy the machine. The firm is in the 50% tax bracket. In case of leasing, the firm would be required to pay an annual end-of-year rent of Ksh. 120,000 for 5 years. All maintenance. Insurance and other costs are borne by the lessee.

In the case of purchase of the machine (which costs Ksh. 345,300), the firm would have a 14% 5-year loan, to be paid in 5 equal instalment, each instalment becoming due at the end of the year. The machine would be depreciated on a straight-line basis for tax purpose, with no salvage value.

Required:

Advice the company regarding the option it should go for. (13 marks)

(b) Outline the facets of financial planning. (7 marks)