CHUKA UNIVERSITY COLLEGE

UNIVERSITY EXAMINATIONS

FOURTH YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF AGRIBUSINESS MANAGEMENT

AGBM 413: FINANCIAL MANAGEMENT

STREAMS: B.AGBM Y4S1 **TIME: 2 HOURS**

DAY/DATE: WEDNESDAY 8/8/2012 **11.30 A.M. - 1.30 P.M.**

INSTRUCTIONS:

(a) Answer **Question ONE** and any other **TWO** questions.
(b) Show all your workings.
(c) Do not write on the question paper.

QUESTION ONE:

(a) State and briefly discuss three measures of financial leverage showing their usage in the capital structure theory. [6 marks]

(b) What are the criticisms against the validity of Modigliani and Miller Model in the capital structure theory? Support your answer. [8 marks]

(c) XYZ limited company has total capitalization of $1,000,000 and it normally earns $100,000 before interest and taxes. The financial manager of the firm wants to take a decision regarding the capital structure. After a study of the capital market, he gathers the following data:

Amount of debt ($)	Interest Rate (%)	Equity capitalization Rate % (at given level of debt)
0	-	10
100,000	4	10.5
200,000	4	11
300,000	4.5	11.6
400,000	5	12.4
500,000	5.5	13.5
600,000	6	16
700,000	8	20

(i) What amount of debt should be employed by the firm if the traditional approach is held valid?

(ii) If the Modigliani-Miller approach is followed, what should be equity capitalization rate? Assume that corporate taxes do not exist, and that the firm always maintains its capital structure at book values. [10 marks]

(d) Explain the effect of capital structure on the value of the firm when both corporate and personal income taxes are considered. [6 marks]

QUESTION TWO:

(a) Firms A and B are similar except that A is unlevered, while B has $200,000 of 5 per cent debentures outstanding. Assume that the tax rate is 40 per cent; NOI is $40,000 and the cost of equity is 10 per cent.

(i) Calculate the value of the firms, if M-M assumptions are met.

(ii) Assume V_B = $360,000. According to M-M, do these represent equilibrium values?

(iii) How will the equilibrium be set? Explain. [10 marks]

(b) XYZ Limited has multiple products. The company's debt capacity is 50 per cent of the market value of its assets. The company's equity beta is 1.20. The risk free rate is 10 per cent and the average market premium is 9 per cent. The corporate tax rate is 30 per cent. XYZ limited so far has the practice of using WACC in evaluating the investment projects. The company is currently considering an electronic project requiring an investment of $50 billion. The project is expected to generate the after-tax free cash flows of $8.85 billion in perpetuity. According to the Finance manager, this project will add only 30 per cent debt capacity. He also feels that electronic business is more risky than the average of the firm. In his opinion, the fluctuations in the electronic business will be 1.30 times of the fluctuations in the overall business of the company.

Required:

(i) Determine XYZ's WACC.

(ii) Should the project be evaluated using the firm's WACC?

(iii) How should it be evaluated? Show calculations. [10 marks]

QUESTION THREE:

(a) Using examples state and briefly discuss FIVE limitations of WACC in firm valuation. [10 marks]

(b) Two companies X and Y are in the same industry with identical earnings per share for the last five years. X had a policy of paying 40 per cent of earnings as dividends, while Y ltd pays a constant amount of dividend per share. There is a disparity between the market prices of the shares of the two companies. The price of X's share is generally lower than that of Y, even though in some years X paid more dividends than Y. The data on earnings, dividends and market price for the two companies are as under:

Year	X Ltd EPS (Ksh)	DPS (Ksh)	Market Price (Ksh)
2000	4	1.6	12
2001	1.5	0.6	8.5
2002	5	2	13.5
2003	4	1.6	11.5
2004	8	3.2	14.5

Year	Y Ltd EPS (Ksh)	DPS (Ksh)	Market Price (Ksh)
2000	4	1.8	13.5
2001	1.5	1.8	12.5
2002	5	1.8	12.5
2003	4	1.8	12.5
2004	8	1.8	15

(i) Calculate: payout ratio, dividend ratio, dividend yield and earning yield for both companies.

(ii) What are the reasons for the differences in the market prices of the two companies' shares?

(iii) What can be done by X to increase the market price of shares? [10 marks]

QUESTION FOUR:

(a) "The primary purpose for which firm exists is the payment of dividend. Therefore, irrespective of the firm's needs and desires of shareholders, a firm should follow a policy of very dividend payout." Do you agree? Why or Why not? [10 marks]

(b) The earnings per share of a company are Ksh.10. It has an internal rate of return of 15 per cent and capitalization rate of its risk class is 12.5 per cent. If Walter's model is used:

(i) What should be the optimum payout ratio of the firm?

(ii) What should be the price of the share at this payout?

(iii) How shall the price of the share be affected if a different payout were employed? [10 marks]

QUESTION FIVE:

(a) A Ltd has decided to acquire B Ltd company. The following are the relevant data for the two companies:

	A	B
Net sales (Million Kshs)	350	45
Profit after-tax (Million Kshs)	28.13	3.75
Number of shares (millions}	7.5	1.5
Earnings per share (Ksh)	3.75	2.5
Dividend per share (Ksh)	1.3	0.6
Total Market Capitalization (Million Ksh)	420	45

Calculate:

(i) Pre-merger market value per share for both companies.

(ii) Post-merger EPS, market value per share and price-earnings ratio if B's shareholders are offered a share Ksh 30, Ksh 56 in share exchange for merger.

(iii) A's EPS if B's shareholders are offered Ksh 100, 15 per cent convertible debenture for each 3 shares held in B.

(iv) Post-merger dividend or interest available to B's shareholders with exchanges referred to in (ii) and (iii). Assume 30 per cent tax rate. [12 marks]

(b) Explain the steps involved in a financial plan. What are the merits of financial planning? [8 marks]
