NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF COMMERCE
DEPARTMENT OF FINANCE
BACHELOR OF COMMERCE HONOURS DEGREE IN
Accounting; Finance; Banking
Insurance & Risk Management
Actuarial Science
Marketing; Management
PART II 2ND SEMESTER FINAL EXAMINATION - MAY 2008
CORPORATE FINANCE II [CFI 2201]
TIME ALLOWED: 3HOURS

INSTRUCTIONS

- **ANSWER ANY FOUR QUESTIONS**
- **ALL QUESTIONS CARRY 25 MARKS**

QUESTION 1

1.1 The leasing decision is analogous to borrowing. RedStar is faced with a decision of whether to purchase or lease a new forklift truck. The truck can be leased on an eight year contract for $4,641.44 per annum or it can be purchased for $26,000. The salvage value for the truck after eight years is $2,000. The company uses straight line depreciation. The discount rate applied is its after tax cost of debt. The company can borrow at 15% and has a 40% marginal tax rate and a 12% cost of capital. Analyse the lease versus purchase decision, using the company's after tax cost of debt as the discount factor. [5]

1.2 Infinity Industries has just issued some $100 par preferred stock with a 10% dividend. The stock is selling on the market for $96.17 and Infinity must pay flotation costs of 6% of the market price. .

a. Why is preferred stock considered to be a hybrid security? [2]
b. Calculate the cost of financing with preferred stock? [2]
c. Why would a company prefer to finance its operations with preferred stock as opposed to issuing ordinary shares? [6]

1.3 Using examples where possible, distinguish between the following:

a. A rights issue and an initial public offering [2]
b. An organized exchange and an over the counter market [2]
c. A municipal bond and a corporate bond [2]
d. A primary listing and a secondary listing [2]
e. Equity capital and debt capital [2]

QUESTION 2

2.1 A call option on the stock of BHP has a market price of $7. The stock sells for $30 a share and the option has an exercise price of $25 a share.

a. What is the exercise value of the call option? [2]

b. What is the premium on the option? [2]

2.2 A bond dealer offers you from his portfolio, a zero coupon bond that promises to pay $1,000 in five years. The yield to maturity on bonds with same terms and credit risk is 6 percent. The dealer is offering to sell you the bond for $740. Is that a fair price? [2]

2.3 You are reviewing a printout of bond prices (per $100 of face value) in the Financial Times.

Bond	Bond Price	Coupon Rate (%)	Yield to Maturity (%)
A	$110	5	4
B	$112	7.5	8
C	$100	6	6
D	$85.50	8	11
E	$90	7.5	6
F	$100	5.5	5.75

a. You are sure that the prices of some of these bonds have not been correctly reported. Which prices are incorrectly reported? Why? [6]

b. Which sources of return are included in calculating the current yield, yield to maturity and yield to call? [3]

c. How does the yield to call differ from the yield to maturity? [2]

2.4 You are planning to buy the shares of Zimsun Corporation. Zimsun's most recent annual dividend was $5 per share. The next dividend will be paid in exactly one year. Analysts expect dividends to grow at a rate of 10% per annum for the next three years. Thereafter, dividends are expected to grow at a rate of 5% per annum indefinitely into the future. The required rate of return on Zimsun stock is 12%. Calculate the value of Zimsun stock. [8]

QUESTION 3

ii. Unilever Ltd and Lever Brothers are companies operating in the same industry and are identical in most respects apart from their financial structure. Lever Brothers has $10 billion of 5% bonds outstanding whilst Unilever is an all equity financed firm. Both companies have a net operating income (NOI) of $2 billion and the standard deviation of NOI is the same for both companies such that they are in the same risk class. All Miller & Modigliani (MM) assumptions hold. Corporate tax is charged at 40% and that the equity capitalization rate for Unilever is 10%. Also note that the 5% coupon rate is equal to the risk free rate.

a. What value would MM estimate for each firm [5]

b. Suppose VU= $8million and VL = $18 million. According to MM, do these values represent equilibrium? If not, explain the process by which equilibrium will be restored. No calculations are necessary. [5]

3.2 Amex Corporation has the following capital structure:

	Book value $ billion	Market value $ billion
Debt	500	550
Preferred stock	100	120
Common equity	1400	4330

New corporate bonds can be issued at par if they have a coupon of 7%. The current yield on newly issued preferred stock is 6%. The cost of common equity capital is 13%. Amex has a corporate tax rate of 25%,

b. What is the company's approximate weighted average cost of capital? [5]

c. Discuss the problems that could be encountered in the estimation of a company's weighted average cost of capital when the following are used as long term sources of finance: [5]
   - ii. bank overdraft
   - iii. convertible long term loans

3.3 How does the existence of asymmetric information influence a manager's decision whether to finance with debt or equity. [5]

QUESTION 4

4.1 Suppose the Miller and Modigliani (MM) Theory of dividend policy is correct. If the government declared that all companies should suspend dividend payments, how would this affect:

a. share prices on the Zimbabwe Stock Exchange? [2]

b. the volume of capital investment? [2]

4.2 Presently, the share of Oracle Inc is trading at $250. Next year's expected dividend is $20. If the required rate of return on Oracle's stock is 18% and the market prices the stock on the basis of the constant growth dividend discount model.

a. Forecast the company's future dividend growth rate. [3]

b. What are the limitations of the model you have used? [3]

4.3 Distinguish between a stock dividend and a stock split. [3]

a. Radar company stock earns $7 per share, sells for $30 and pays a $4 dividend per share. After a two for one split, the dividend will be $2.70 per share. By what percentage has the payout increased? [3]

b. Barnes & Noble Company has 500,000 shares of common stock outstanding. Its capital stock account is $500,000, and retained earnings are $2million. Barnes is currently trading at $10 per share and has declared a 10% stock dividend. After distribution of the stock dividend, what balances will the retained earnings and capital stock accounts show? [3]

4.4 What are the advantages of share repurchases over the payment of cash dividends? [6]

QUESTION 5

5.1 In the following hypothetical examples, state whether the merger is horizontal, vertical or conglomerate. [5]

a. TM acquires Greens Supermarket.
b. Edgars acquires Truworths Limited
c. PG acquires TSL Limited
d. Dairiboard acquires Cairns and Star Africa
e. Caps acquires Medtech

5.2 Beta Limited has agreed to merge with Alpha Limited. The table below gives information about the two companies prior to their merger.

	Alpha	Beta
Total earnings	$1,000,000	$750,000
Shares outstanding	1,000,000	250,000
P/E ratio	20 times	18 times

The Alpha Company will buy the Beta Company with a four for one exchange of stock. Combined earnings will initially remain at premerger level.

a. What will be the effect on EPS for Alpha shareholders? [3]
b. What will be the effect on EPS for premerger Beta Company shareholders? [3]
c. Comment on your results [2]

5.3 In the past few years, there has been a spate of demerger activity on the Zimbabwe Stock Exchange. Give reasons as to why you think companies have demerged. [12]

QUESTION 6

6.1 What are the probable effects of the following on inventory holdings? [10]

a. Manufacture of a part previously imported from a supplier in Spain.

b. Greater use of airfreight.

c. Increase from 7 to 17 of the product lines the company produces.

d. Huge price discounts to your company, a manufacturer of jerseys if the wool is purchased from December to February.

e. Increase in the cost of a key raw material component.

6.2 Inventory decision models are designed to help minimize the cost of obtaining and carrying inventory. Identify any one (1)-inventory management policy, citing its strengths and limitations. Evaluate the effectiveness of the inventory system in a hyperinflationary environment like Zimbabwe. [15]