# NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY FACULTY OF COMMERCE DEPARTMENT OF FINANCE <br> BACHELOR OF COMMERCE HONOURS DEGREE IN FINANCE PART II 2 ${ }^{\text {ND }}$ SEMESTER SUPPLEMMENTARY EXAMINATION - JULY 2011 CORPORATE FINANCE [CFI 2201] <br> TIME ALLOWED : 3 HOURS 

## Instructions

1. The paper is 3 hours. Candidates may write on the question paper but shall not write in the answer book during reading time.
2. Answer any FOUR questions.
3. Electronic calculators may be used.
4. All workings to be shown.
5. Answers to be written only on the top pages.

## Question One [Leverage \& Capital Structure]

1.1 Zeco Holding Ltd currently has 100,000 shares of common stock outstanding with a market price of $\$ 60$ per share. It also has $\$ 2$ million in 6 percent bonds. The company is considering a $\$ 3$ million expansion program that it can finance with:
i. All common stock at $\$ 60$ per share,
ii. Straight bonds at 8percent interest,
iii. Preferred stock at 7percent, and
iv. Half common stock at $\$ 60$ per share and half 8 percent bonds.

For an expected EBIT level of $\$ 1$ million after the expansion program, calculate the earnings per share for each of the alternative methods of financing. Assume a tax rate of $34 \%$.
[12 marks]
1.2 It has been suggested that in a world of corporate taxes only;

Value of a firm = Value of all Equity Financed + PV of the Tax shield on Debt finance
If the above equation is applied, what would be the most appropriate capital structure for a company? How far do existing capital structures of companies compare with the most appropriate structure according to the equation?
[13 marks]

## Question Two[Lease Financing]

ABC Ltd is considering to obtain new machinery which is expected to be used for the next five years, after which a decision would be made on whether to continue with the current production system, or adopt new one. If the company decides to continue with the current production, the same machine would be used, otherwise an automated machinery would
have to be procured to replace the one under consideration. There are two financing alternatives available to the firm as follows:
i. To borrow money from the bank and purchase the machinery. Borrowing would cost $12 \%$ before tax, the current competitive market rate for debt. The asset would cost $\$ 100,000$ to purchase and will have a guaranteed salvage value of $\$ 10,000$ after five years. Expenditure on the asset qualifies for a $25 \%$ writing-down allowance on a reducing balance.
ii. To lease the machinery from a leasing company. Two financial leases are being considered and the details are as follows:

| Year | Payments to be made <br> Lease A |  |
| :--- | :--- | :--- |
| 0 | $\$ 20,000$ | Lease B |
| 1 | 20,000 | $\$ 4,000$ |
| 2 | 20,000 | 8,000 |
| 3 | 20,000 | 16,000 |
| 4 | 20,000 | 30,000 |
|  |  | 50,000 |

2.1 If the asset is leased, the salvage value will accrue to the lessee. The firm's average cost of capital is $15 \%$.Advise on the best method of financing the use of the asset if the firm is subject to corporation tax at $40 \%$ with one year delay and has large taxable profits
[20 marks]
2.2 Leasing can be attractive to a lessee when he/she is faced with different cash flows from those of the lessor. State and explain any three factors that may lead to such a difference.
[5 marks]

## Question Three [Dividend Policy]

In their paper of 1961 Modigliani and Miller [MM] postulated that dividend policy is not relevant.
4.1 Discuss the critical assumptions under which Dividend Policy is irrelevant in determining share value.
[13 marks]
4.2 To what extent is the MM-dividend irrelevancy theory applicable to Zimbabwean organisations?
[12 marks]

## Question Four [Derivatives]

5.1 Explain fully the difference between:
i. A long forward position and a short forward position? [6 marks]
ii. Writing a call option and buying a put option
[6 marks]
5.2 A trader buys a European put on a share for $\$ 5$. The price is $\$ 42$ and the strike price is $\$ 40$. Under what circumstance does the trader make a profit? Under what circumstance will the option be exercised? Draw a diagram showing the variation of the trader's profit with the stock price $t$ the maturity of the option.
[3; 3; 7 marks]

## Question Five [Working Capital Management]

6.1 Explain each of the following terms :
i. Factoring with recourse
[3 marks ]
ii. Trade discount [3 marks ]
iii. Float
6.2 Triple H Trading sells its goods on credit terms of $2 / 10$, net 30 . Total annual sales were $\$ 800,000$ and $60 \%$ of the customers had made arrangements to pay on the $10^{\text {th }}$ day, and take discounts, while $40 \%$ pay(on average) 40 days after their purchases.
i. What is the firm's days of sales outstanding (DOS)?
[4 marks]
ii. Determine the firm's average investment in receivables
[4 marks]
iii. Suppose management tightens-up its collection policy, with the result that all non-discount customers paid on the $30^{\text {th }}$ day. What impact will this have on the average amount of receivables?

## End of Paper <br> Good Luck!!!!!

