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 – JUNE 2007 <u>CORPORATE FINANCE II [CFI 2201]</u> TIME ALLOWED: 3 HOURS 10 MINUTES

INSTRUCTIONS

- 1. This Paper Is 3 Hours 10 Minutes, Of Which 10 Minutes Is Reading Time.
- 2. This Paper Contains Six [6] Questions.
- 3. Attempt Any Four [4] Questions.
- 4. Each Question Carries 25 Marks.
- 5. Show All Your Workings.

QUESTION 1

- 1.1 The ZESA Power utility issued a 6 percent coupon bond with a \$1,000 face value 25 years ago. Coupon payments are made semi annually. You have researched other semi-annual pay bonds of similar maturity and credit quality and determine that the appropriate yield to maturity is 5 percent.
 - a. Assuming the bond now has 10 years remaining until maturity, what price would you be willing to pay for this bond.? [4]
 - b. Calculate the current yield of the bond. What are the drawbacks of the current yield measure?.
- 1.2 Define reinvestment risk. Which has more reinvestment rate risk, a 1-year bond or a 10-year bond? Explain. [3]
- 1.3 Define interest rate risk. Which bond has more interest rate risk, a 1-year bond or a 30-year bond? Explain.[3]
- 1.4 Assume that the current market price of Schweppes preference shares is \$85, with a dividend of \$7. What would be the expected rate of return if an investor's required rate of return is 8%? Should the investor consider buying the preferred stock? [3]
- 1.5 Barclays current stock price is \$36 and its last dividend was \$2.40. In view of Barclay's strong financial position and its consequent low risk, its required return is only 12%. If dividends are expected to grow at a constant rate in the future and if the required rate of return is expected to remain at 12%, what is Barclay's stock price 5 years from now? [5]
- 1.6 State three limitations of the model used in [1.5] [3]

OUESTION 2

- 2.1 A company is planning a \$50million dollar expansion, which is to be financed by selling \$20million in new debt and \$30 million in new common stock. The before tax required rate of return on debt is 9% and 14% for equity. The company is in the 40% tax bracket. Also note the following:
 - The company has a target capital structure of 40% debt and 60% equity
 - Bonds pay a 10% coupon (semi annual payout) mature in 20 years and are currently selling for \$849.54

The company is a constant growth firm that has just paid a dividend of \$2.00 and sells for \$27 per share and has a growth rate of 8%

- a. Explain why the company's bonds are trading at a discount to par value. [2]
 b. Calculate the firm's after tax cost of debt. [3]
 c. If flotation costs for new equity are 10%, calculate the new cost of equity [2]
 d. Calculate the company's weighted average cost of capital. (WACC) [2]
- 2.2 Using a diagram, explain what is meant by the "traditional capital structure theory" [6]
- 2.3 Assuming a world without taxes, and that all the underlying assumptions of the Miller and Modigliani are met.
 - a. Calculate the value of Delta Ltd, an all equity financed firm which has an annual net operating income of \$1,000 million with an overall capitalization rate of 10%. [2]
 - b. What are the critical conclusions made from this proposition? [5]
 - c. What are the main implications for a financial manager who accepts the arguments of Miller and Modigliani in a world with no taxes approach?[3]

QUESTION 3

- 3.1 Distinguish between the following:
 - a. A primary and secondary market. [2]
 - b. A foreign bond and a Eurobond. [2]
 - c. A stock dividend and a stock split. [2]
 - d. An put option and a call option. [2]
- e. Target capital structure and optimal capital structure. [2]
- 3.2 Identify the key motives for financing with convertibles? [3]
- 3.3 Compare and contrast warrants and convertible bonds. [3]
- 3.4 Under what circumstances would an issuer redeem callable bonds? [3]
- 3.5 State reasons as to why an investor would purchase puttable bonds? [3]
- 3.6 State the advantages of equity financing over debt financing. [3]

QUESTION 4

- 4.1 Distinguish between linear derivatives and non-linear derivatives [5]
- 4.2 Define a swap. What are the drawbacks of this derivative instrument? [5]
- 4.3 Define an option. What are the advantages of using this derivative instrument? [5]
- 4.4 Compare and contrast futures and forward contracts. [10]

QUESTION 5

- 5.1 Explain, using illustrations where necessary, the methods you would employ to finance current assets.
- 5.2 Explain, giving reasons on how you would expect a firm's cash balances to respond to the following changes?
 - a. Interest rate increase. [3]
 - b. The volatility of daily cash flow decreases. [3]
 - c. The transaction cost of buying or selling marketable securities goes up.
 - [3]
- 5.3 Discuss the concept of concentration banking. [6]

QUESTION 6

- 6.1 Distinguish between a tax-free and a taxable merger. Are there circumstances in which you would expect buyer and seller to agree to a taxable merger? [4]
- 6.2 Assess whether it matters that an acquisition is made with cash or with common stock?[3]
- 6.3 As a shareholder in a company, would you like it to have anti takeover amendments? What are some of these devices?
- 6.4 NUST Storage Company is considering the acquisition of MSU Wire Corporation with common stock. Relevant financial information is as follows:

	NUST	MSU	
Present Earnings (000)	\$4,000	\$1,000	
Common shares outstanding (000)	2,000	800	
Earnings per share	\$2.00	\$1.25	
Price/earnings ratio	12	8	

NUST plans to offer a premium of 20% over the market price of MSU stock.

- a) What is the ratio of exchange of stock? How many new shares will be issued? [4]
- b) What are earnings per share for the surviving company immediately following the merger?
- c) If the P/E ratio for NUST stays at 12, what is the market price per share of the surviving company? What would happen if the P/E ration went to 11? [4]