



**National University of  
Science and Technology**  
Think in Other Terms



**FACULTY OF COMMERCE**

**DEPARTMENT OF FINANCE**

**BACHELOR OF COMMERCE (HONORS) ACCOUNTING, ACTUARIAL  
SCIENCE, BANKING, FINANCE, FISCAL STUDIES, MANAGEMENT,  
MARKETING, INSURANCE & RISK MANAGEMENT  
PART II 2<sup>nd</sup> SEMESTER FINAL EXAMINATION- MAY 2012**

**CORPORATE FINANCE II [CFI 2201]**

**TIME ALLOWED: 3 HOURS**

**INSTRUCTIONS TO CANDIDATES**

1. Answer any **FOUR (4)** Questions.
2. Show all workings.
3. Write neatly and legibly.

**INFORMATION TO CANDIDATES**

1. This paper contains **SIX (6)** Questions.
2. Each full question carry **25** Marks
3. This paper contains **SIX (6)** printed pages.
4. Candidates may write on the question paper but shall not write in the answer booklet during reading time.
5. The businesses in this question paper are intended to be fictitious.

### **Question One**

a) Umguza Minerals has the following capital structure:

<b>Component</b>	<b>\$'000</b>
Ordinary Shares (200,000)	4,000
10% Preference Shares	1,000
14% Debentures	3,000

The share of the company sells for \$20. It is expected that the company will pay a dividend of \$2 per share at the end of next year which is expected to grow at 7% forever. Assume a 50% tax rate

#### ***Required***

- i. Compute a weighted average cost of capital based on the existing capital structure [5 Marks]
  - ii. Compute marginal weighted cost of capital (MWACC) if the company raises an additional \$2,000,000 debt by way of issuing 15% debentures [7 Marks]
  - iii. Compute the cost of capital in (ii) above if growth rate is expected to increase to 10% [5 Marks]
- b) Explain why there is a cost associated with retained earnings? [3 Marks]
- c) Discuss why a project should not be evaluated using the cost of finance associated with the latest portion of capital raised [5 Marks]

**[Total 25 Marks]**

**Question Two**

a) Mbuso Limited is considering financing using the following debt-equity combinations.

<b>Market Value of Equity</b>	<b>Market Value of Debt</b>	<b>K<sub>d</sub> After Tax</b>	<b>K<sub>e</sub></b>
100%	0%	0	20%
75%	25%	12%	21%
60%	40%	12%	22%
50%	50%	12%	25%
40%	60%	14%	28%
25%	75%	17%	32%

**Required:**

Determine the optimal capital structure for Mbuso Limited. [5 Marks]

b) Two companies Chicken and Licken operate in the same type of business and have identical levels of risk.

**Chicken has the following Capital Structure:**

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Book Value of Equity	\$15,000
Market Value of Equity	\$30,000
Cost of Equity Capital	12%
Issued Shares	\$120,000

**Licken has the following Capital Structure:**

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Book Value of Equity	\$40,000
Market Value of Equity	\$60,000
Market Value of Debt	\$60,000
Cost of Equity Capital	14%
Issued Shares	60,000
After Tax Cost of Debt	6%
Current Dividends	\$8,400

**Required**

- i. Explain whether the companies are operating in a Traditional or Miller & Modigliani world. [8 Marks]
- ii. Assuming the two companies are operating in a Miller & Modigliani world; discuss what advice you would give to the shareholders of Licken. [6 Marks]
  
- d) Explain the impact of Hamada Theory to the value of the firm. [6 Marks]

**[Total 25 Marks]**

**Question Three**

- a) Using Tax Preference Theory discuss the effect of taxation on dividend policy. [10 Marks]
  
- a) Ingwedu Breweries has been a fast growing firm and has been earning very high return on its investment in the past. Because of the availability of highly profitable investments internally, the company has been following a policy of retaining 70% of earnings and paying 30% of earnings as dividends. The company has now grown and matured and does not have enough profitable internal opportunities to reinvest its earnings. But it does not want to deviate from its post dividend policy on the ground that investors have been accustomed to it and any change may not be welcomed by the shareholders. The company, thus, invests retained earnings in short term government securities.

Is the company justified in following the current dividend policy? Give reasons to support your answer. [15 Marks]

**[Total 25 Marks]**

#### **Question 4**

- a) Distinguish between the following terms:
- i. Financial lease and operating lease [3 marks]
  - ii. Full service lease and Net lease [2 marks]
- b) NUST Company has decided to acquire a piece of equipment valued at \$160,000 to be used in the production of student identity cards. The company is faced with two financing options:
- 1) Lease financing
  - 2) Debt Financing

If financed with lease, the manufacturer will provide such financing over 3 years, with a before tax return to the lessor of 12%. The salvage value of the equipment at the end of the 3 years is expected to be \$40,000.

If financed with debt, NUST Company will be able to get a 14% term loan with annual amortizing payments of \$60,454. Depreciation on the asset is on a straight line basis with \$30,000 residual value

Tax rate is 40%.

Which financing option is best for NUST Company [20 marks]

**[Total 25 Marks]**

#### **Question 5**

- a) Draw the following basic profit diagrams
- i. Long Forward position [2 marks]
  - ii. Short put position [2 marks]
- b) State five (5) differences between a forward contract and a futures contract [5 marks]

- c) An investor buys a European call option with a strike price of \$60 to purchase 100 delta shares, which are currently trading at \$58 per share. Expiration date of the option is in 4 months and premium per share is \$5.
- i. What is the general payoff equation for this transaction? [3 marks]
  - ii. If at the end of the 4 months, the stock price is \$62, should the investor exercise his option? Justify your answer showing full workings. [7 marks]
- d) State and explain any three (3) uses of derivatives. [6 marks]

**[Total 25 Marks]**

**Question 6**

- a) Discuss three motives of mergers and acquisitions [10 marks]
- b) Differentiate gross working capital from net working capital [5 marks]
- c) Explain any three (3) inventory management systems [10 marks]

**[Total 25 Marks]**

**END OF EXAMINATION PAPER**