



***“Investing in Africa’s Future”***

# **COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE**

**MFN 501 - FINANCIAL MANAGEMENT**

**END OF SECOND SEMESTER EXAMINATIONS**

**MAY 2018**

**Ms. N E CHIRIMA**

**DURATION: 3 (Three)HRS**

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## ***INSTRUCTIONS***

Follow the instructions indicated at the beginning of each section.

Answers are to be presented clearly and neatly.

Answer each question on a new page.

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## SECTION A (TOTAL POSSIBLE MARKS = 90 MARKS)

*Answer all questions*

### QUESTION ONE [20 Marks]

The capital employed by Bee Ltd is as follows:

12% debentures	\$10 million
Ordinary Shares (\$2. 50 par value)	\$25 million

In 2015, the company made total sales of \$12.4 million and incurred operating costs of \$72million. 75% of the company's operating costs are fixed costs and tax is at 30%.

Required:

Determine and interpret each of the following:

- |   |         |
|---|---------|
| a) Equity to Debt Ratio   | 2 marks |
| b) Earnings Per Share   | 2 marks |
| c) Degree of Financial Leverage   | 2 marks |
| d) Degree of Operating Leverage   | 2 marks |
| e) Degree of Total (Combined) Leverage  | 2 marks |
| f) In 2016 the sales of the company are expected to increase by 25%. Determine: |         |
| a. The expected operating income in 2016  | 6 marks |
| b. The expected Earnings Per Share in 2016                                      | 4 marks |

## QUESTION TWO [15 Marks]

Baxton Limited intends to raise \$10 million to finance new projects. The company of the structure is as follows:

15% debentures (\$1 000 par value)	\$4, 8 million
14% preference shares (\$10 par value)	\$2, 4 million
Ordinary shares (\$5 par value)	\$6, 0 million
Retained Profits	\$2, 8 million
	<b><u>\$16 million</u></b>

Currently the ordinary shares are trading at \$6, 40, preference shares at \$12 and the debentures at \$960. The company can raise capital from the respective sources at the current market price for similar returns. Floation costs will be 10% for new ordinary and preference shares and 5% for debentures. They intend to maintain the current capital structure and tax is at 30%. A dividend of \$0, 96 per share has just been paid for the year just ended and the expected dividend growth rate is 8%. \$2 million is to be raised from retained earnings.

- Compute Baxton Ltd's Cost of Capital. **8 marks**
- Explain why the cost of retained earnings should be included in the cost of capital. **3 marks**
- What is the importance of cost of capital to a manager? **4 marks**

## QUESTION THREE [30 Marks]

Finance Managers make decisions partially based on the Finance Reports presented by Financial Accountants.

- Outline the three decisions made by Finance Managers and relate each one to the Financial Management objective. **5 marks**

- b) From your understanding of financial accounting, what are your thoughts about the accuracy and value of financial statements, such as the Statement of Comprehensive Income and the Statement of Financial Position, for use by the financial managers?

**10 marks**

- c) Why are the concepts of risk and time value of money important in making investment and financing decisions?

**10 marks**

- d) What assumptions are taken by the Finance Manager in his decision making? **5 marks**

#### **QUESTION FOUR [20 Marks]**

Property Investments Group Ltd is considering an investment in a small industrial property which is currently offering a gross rental of \$120 000 per year. The asking price for the property is \$1, 32 million. Operating costs such as maintenance, administration and rates are expected to amount to \$36 000 per year. Rentals and costs are expected to increase at a rate of 4% per year for the next three years. The group intends to hold onto its property for three years when the group expects to sell the property for \$1, 68 million. Tax is charged at a rate of 28% and the company will also pay Capital Gains Tax on any profit on disposal. The required rate of return is 9%.

Required:

- a. Compute the Net Present Value from investing in this property.

**10 marks**

- b. Compute the Internal Rate of Return.

**10 marks**

- c. Explain why the NPV and the IRR capital budgeting techniques are preferred to other methods of project valuation.

**5 marks**

**SECTION B (TOTAL POSSIBLE MARKS = 10 MARKS)**

*Select one question.*

- a) A 75 year old professor has recently retired from 45 years of lecturing and is expecting a pension package at the end of this year. His grandson has just completed a Finance degree and is based in the United Kingdom. He has written a long email to his Zimbabwean based grandfather encouraging him to invest his pension package in shares. In his email he has detailed all the advantages of investing on the stock exchange. In your view, is it advisable for the professor to follow his grandson's advice? Explain. **5 marks**
- b) Investigations into the issue of annual published financial reports of companies by shareholders have shown the report as an important source of information for making decisions on equity investments. Other types of study indicate that the market price of the shares in a company does not react in the short term to the publication of the companies' annual reports. Explain these findings in view of the efficient market hypothesis (EMH). **5 marks**
- c) Contrast the cash flow characteristics of a finance lease to the use of a bank loan to finance the acquisition of an asset. **5 marks**

End of Paper

## FORMULA SHEET

### **Lump Sum**

$$FV = PV (1 + r)^{NM}$$

### **Ordinary Annuity**

$$FVA = I [(1 + r)^N - 1] / r$$

### **Annuity Due**

$$FVA = \{I [(1 + r)^{N+1} - 1] / r\} - I$$

### **Lump Sum**

$$PV = FV / (1 + r)^N$$

### **Ordinary Annuity**

$$PVA = I [(1 - (1 + r)^{-N})] / r$$

### **Annuity Due**

$$FVA = \{I [1 - (1 + r)^{-N+1}] / r\} + I$$

### **Perpetuities**

$$PV = \text{Cash flow} / r$$

### **Operating Leverage**

$$\text{Contribution} / \text{EBIT}$$

### **Financial Leverage**

$$\text{EBIT} / (\text{EBIT} - I)$$

### **Combined Leverage**

$$\text{Contribution} / (\text{EBIT} - I)$$

### **Spread of cash limits**

$$\frac{3}{4}(cy^2/i)$$

### **Value of a Right**

$$\text{Current Market Price} - \text{Expected Market Price}$$

### **Earnings Per Share**

$$\text{EAIT} / \text{Number of Ord Shares}$$

### **Interest Cover**

$$\text{EBIT} / \text{Interest}$$

### **Gearing Ratio**

$$\text{Debt} / \text{Equity}$$

### **Cost of Debt**

$$R (1 - T) / P_0$$

### **Cost of Debt**

$$\frac{[R(1 - T) + 1/M (\text{FCV} - P_0)]}{[\frac{1}{2} (\text{FCV} + P_0)]}$$

### **Cost of Preference Shares**

$$D / P_0$$

### **Cost of Equity**

$$(D_1 / P_0) + g$$

### **Cost of Equity**

$$R^f + (R^M - R^f)\beta$$

### **Current Ratio**

$$\text{Current Assets} / \text{Current Liabilities}$$

### **Quick Ratio**

$$(\text{Current Assets} - \text{Stock}) / \text{Current Liabilities}$$

### **Stock Holding Period**

$$(\text{Average Stock} / \text{Cost of Sales}) \times 365 \text{ days}$$

### **Debtors Collection Period**

$$(\text{Average Debtors} / \text{Credit Sales}) \times 365 \text{ days}$$

### **Operating Cycle**

$$\text{Stock Holding Period} + \text{Debtors Collection Period}$$

### **Creditors Payment Period**

$$(\text{Average Creditors} / \text{Credit Purchases}) \times 365 \text{ days}$$

### **Cash Conversion Cycle**

$$\text{Operating Cycle} - \text{Creditors Payment Period}$$

### **Economic Order Quantity**

$$\sqrt{(2RC/h)}$$

**Co - Variance**

$$SD/ER$$

**Coefficient of Variation**

$$SD_{ur}/SD_u \times SD_r$$