"Investing in Africa's Future"

COLLEGE OF BUSINESS, PEACE, LEADERSHIP AND GOVERNANCE

MFN 501 - FINANCIAL MANAGEMENT

END OF SECOND SEMESTER EXAMINATIONS

MARCH 2018

Ms. N E CHIRIMA

DURATION: 3 (Three)HRS

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.

SECTION A (TOTAL POSSIBLE MARKS = 20 MARKS)

Answer any two questions.

Question 1 (10 possible marks)

How can the efficiency with which a company measures its working capital be measured? ***10 marks***

Question 2 (10 possible marks)

a) The value of a company is the present value of future dividends. How is this inconsistent with the proposition that dividends are irrelevant? ***7 marks***

b) What factors affect a dividend decision? ***3 marks***

Question 3 (10 possible marks)

a) To what extent is financial information useful to a financial manager in meeting his objective? 10 marks

Question 4 [10 possible marks]

a) Compare and contrast the Net Present Value with the Internal Rate of Return. ***5 marks***

b) Specify which of the two methods mentioned in (a) will, in your opinion; take precedence should the two methods have conflicting results. Explain. ***5 marks***

SECTION B (TOTAL POSSIBLE MARKS = 55 MARKS)

Answer ALL Questions

Question 5 (10 possible marks)

Joan Limited wishes to invest in equipment worth $20 000. The cost of capital has been estimated at 12%. The following economic condition estimates have been made:

In the first year – There is an even chance of the economy being bad or good

In the second year – there is a 70% chance of the economy being good if it was good in the first year; there is a 30% chance of the economy being bad if it was good in the first year; there is a 25% chance of the economy being good if it was bad in the first year; there is a 75% chance of the economy being bad if it was bad in the first year;

If the economy is good in the first year, demand is estimated at $25 000,

If the economy is bad in the first year, demand is estimated at $5 000,

If the economy is good in the second year, provided it was good in the first year, demand is estimated at $30 000,

If the economy is good in the second year, provided it was bad in the first year, demand is estimated at $3 000,

If the economy is bad in the second year, provided it was bad in the first year, demand is estimated at $1 000,

If the economy is bad in the second year, provided it was good in the first year, demand is estimated at $15 000.

Required

a. Compute the Expected Net Present Value of the equipment. ***6 marks***
b. Recommend to Joan Limited whether or not to invest in the equipment, giving your reasons. 1 ***mark***
c. What is the probability of the project operating at a loss? ***1 mark***
d. Briefly explain how the Breakeven Analysis is used to try and ascertain the risk levels of a project to be implemented. ***2 marks***

Question 6 (10 possible marks)

Big Boy Limited has provided you with the following information as on 31 December 2011:

	$000
12% Bonds ($1 000 par value)	10 000
15% Preference Shares ($50 par)	8 000
Ordinary Share Capital ($10 par)	50 000
Retained Profit	12 000
	80 000

The management of the company considers the current capital structure to be optimal and Big Boy Limited can raise $50 million required for investment as below:

Bonds

New 14% bonds ($1 000 par value) can be issued at a price of $920.

Preference Shares

Current market price per share is $75. 15% preference shares can be issued at the same market price. Floatation costs will be 12%.

Ordinary Shares

The ordinary shares, whose Beta factor is 1. 4, are currently trading at $64. Dividends of $5 per share for the year to 31 December 2011 have just been paid. Dividends have been growing at a constant rate of 9% and management believes that new shares can be issued at $60 per share. The risk – free rate is 8%, expected market returns 15% and corporate tax is at a rate of 30%.

Required

i. Compute the cost of each of the three sources of finance. Determine the cost of equity using both the dividend growth model. ***6 marks***

ii. Determine the weighted average cost of capital of the company. ***1 mark***

iii. Clearly explain its importance ***3 marks***

Question 7 (10 possible marks)

Kupa Limited wants to raise $324 million for investment. The management does not wish to consider the option of raising the money through borrowing due to the current high level of interest rates on debt. The managing director has suggested that the funds be raised through a rights issue of 2 ordinary shares for every 5 shares currently in issue. Currently Kupa Limited has 6 million share (par value $20) in issue, with a current market value of $240 per share.

Required:

i. Determine the price at which the shares are to be issued in order to raise the funds. ***2 marks***
ii. Compute the theoretical ex – right price. ***4 marks***
iii. What factors should be considered when choosing a source of finance for a project? ***4 marks***

Question 8 (25 possible marks)

Nelly Ltd has identified 3 projects for investment. Her cost of capital is 15%. Details of the projects are as follows:

	Project X	**Project Y**	**Project Z**
Initial investment	$40 000	$40 000	$40 000
Year	**Cash Inflows**		
1	$13 000	$7 000	$19 000
2	$13 000	$10 000	$16 000
3	$13 000	$13 000	$13 000
4	$13 000	$16 000	$10 000
5	$13 000	$19 000	$7 000

Required:

i. Calculate each project's discounted payback period. Which project is preferred according to this method? ***7 marks***
ii. Calculate the Net Present Value (NPV) of each project. Which project is preferred according to this method? ***10 marks***
Comment on your findings in (a) and (b) and Evaluate which project is desirable.***2 marks***
iii. Explain why the use of cash flows is preferred to the use of accounting profits in making investment decisions. ***6 marks***

SECTION C (TOTAL POSSIBLE MARKS = 25 MARKS)

Answer ALL questions

a) Briefly state the following terms:
   - *i.* Debt Factoring — ***1/2 marks***
   - *ii.* Credit policy — ***1/2 marks***
   - iii. Split Issue — ***1/2 marks***
   - iv. Capital Rationing — ***1/2 marks***

b) Briefly state 2 ways in which a public issue can be made. — ***2 marks***

c) The Financial Manager uses Financial Reports prepared by accountants to make decisions.

   i. Outline three financial analysis techniques s/he can use**.** — ***3 marks***
   ii. Indicate three limitations of Financial Reports. — ***3 marks***

d) Distinguish between risk and uncertainty. — ***1 mark***

e) Comment (and illustrate) on the view that the risk an investor faces by investing in a single asset differs from the risk he faces by investing in a portfolio**.** — ***5 marks***

f) Following extensive analysis and forecasting, you have established that an investment in Mills Limited offers the following probability distribution of returns, given different states of the economy:

State of the economy	Probability of state of economy	Conditional return
Super - boom	10%	50%
Boom	20%	35%
Normal	45%	20%
Recession	15%	10%
Severe Recession	10%	-5% (negative)

Required:

- ***i.*** Compute the Expected Return — ***1 mark***
- ii. Compute risk using standard variance — ***5 marks***
- iii. Compute risk using the coefficient of variation — ***2 marks***
- iv. Which measure of risk is more favorable? — ***1 marks***

End of Paper

FORMULA SHEET

Lump Sum

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

Ordinary Annuity

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

Annuity Due

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

Lump Sum

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

Ordinary Annuity

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

Annuity Due

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

Perpetuities

PV = Cash flow/ r

Operating Leverage

Contribution/ EBIT

Financial Leverage

EBIT/ (EBIT – I)

Combined Leverage

Contribution/ (EBIT – I)

Spread of cash limits

$¾(cy^2/i)$

Value of a Right

Current Market Price – Expected Market Price

Earnings Per Share

EAIT/ Number of Ord Shares

Interest Cover

EBIT/ Interest

Gearing Ratio

Debt/ Equity

Cost of Debt

$R (1 - T)/ P_o$

Cost of Debt

$[R(1 - T) + 1/M (FCV - P_o)]/ [½ (FCV + P_o)]$

Cost of Preference Shares

D / P_o

Cost of Equity

$(D_1 / P_o) + g$

Cost of Equity

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

Current Ratio

Current Assets / Current Liabilities

Quick Ratio

(Current Assets – Stock)/ Current Liabilities

Stock Holding Period

(Average Stock /Cost of Sales) x 365 days

Debtors Collection Period

(Average Debtors/ Credit Sales) x 365 days

Operating Cycle

Stock Holding Period + Debtors Collection Period

Creditors Payment Period

(Average Creditors / Credit Purchases) x 365 days

Cash Conversion Cycle

Operating Cycle – Creditors Payment Period

Economic Order Quantity

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

Co – Variance

SD/ER

Coefficient of Variation

$SD_{ur}/ SD_u X SD_r$