AFRICA UNIVERSITY

(A United Methodist-Related Institution)

FACULTY OF MANAGEMENT AND ADMINISTRATION

COURSE TITLE: **MAC 403, FINACIAL MANAGEMENT 1**

SEMESTER 1: **FINAL EXAMINATION-NOVEMBER/ DECEMBER 2013**

PARALLEL PROGRAMME

LECTURER: **MS CHIRIMA**

TIME: **3 HOURS**

INSTRUCTIONS

Answer ONE question in Section A; ONE question in Section B and TWO questions in section C. Total marks are 60.

The marks allocated to each question are shown at the end of the question.

Credit will be awarded for logical, systematic and neat presentations.

SECTION A

Select and answer ONE question.

QUESTION 1 [15 marks]

Chemcor (Pvt) Ltd sells a variety of industrial chemical supply used for general purpose cleaning. Approximately 80% of its sales are to nonprofit organizations and government institutions. These sales are on a contract basis. Chemcor wants to initiate a system that will maximize the amount of time the company holds its cash in the form of marketable securities. Currently the company holds $4, 5 million of securities which have an expected earnings rate of 8% per annum. The company is expecting a cash shortage over the next year. Monthly cash outflows are expected at $1 325 000, but inflows are predicted to be only $1 250 000. The cost of buying and selling the securities is $62, 50 per transaction. The treasury manager has heard that the Economic Order Quantity Inventory Model can be applied to cash management. He has therefore decided to apply this model to determine the optimal value of marketable securities to be sold to replenish Chemcor's dwindling cash balance.

Required

1. Explain the costs the treasury manager is attempting to balance. [4 marks]
2. Calculate the optimal amount of marketable securities to be sold for Chemcor to replenish it cash balance. [6 marks]
3. Briefly explain the trade - off between profitability and liquidity. [5 marks]

QUESTION 2 [15 marks]

Graduandi (Ltd) has recently paid a dividend of 15 cents per share and the current market price of the ordinary share is 200 cents per share. Analysis has shown a forecast that the expected return on the share in the near future will be 22% per annum with a standard deviation of return of 6% per annum. The return on a risk free security is expected to be 6% per annum. The covariance of the company's return with the market over the past five years has been estimated at 35% on an annualized basis; the covariance is expected to rise to 39, 6 in the near future due to changes in the asset composition of the company. Government controls restricted actual dividend growth to 8% per annum between 1999 and 2003 but were lifted at the beginning of 2004. It is generally believed to be highly unlikely that dividend controls will be reintroduced in the foreseeable future. Dividend growth rates on annual basis for the past ten years have been as follows:

Years	Dividend Growth Rate
1999 - 2003	8% per annum
2004	20% per annum
2005 - 2009	16% per annum

Required

1. Estimate the cost of equity capital of Graduandi Ltd using both the Dividend Growth (Gordon) Model and the Capital Asset Pricing Model. [8 marks]
2. Comment on your answer to (1) above. [3 marks]
3. Name the factors you would consider when assessing a company's growth potential. [4 marks]

SECTION B

Select and answer ONE question.

QUESTION 3 [25 marks]

Buruka Ltd is reviewing proposals that have been submitted by divisional managers. The investment funds of the company are limited to $800 000 for the current year. Details of 3 possible investments are given below:

PROJECT 1

Requires initial investment of $300 000. It would generate the following cash flows:

Year	**1**	**2**	**3**	**4**	**5**
Cash Flows ($)	85 000	90 000	96 000	105 000	100 000

PROJECT 2

Requires initial investment of $440 000. It will result in cost savings of $144 000 for the next 5 years.

PROJECT 3

Requires initial investment of $440 000. It will result generate cash inflows of $120 000 at the end of the current year, which will increase by 5% per annum for the next 5 years.

The cost of capital of Buruka Ltd is 14%.

Required

1. Determine the best way of using the investment funds and the resultant net present value assuming the projects are divisible. [10 marks]
2. Do an analysis similar to (1) above assuming the projects are not divisible. [6 marks]
3. Discuss the reasons why capital rationing may arise. [4 marks]
4. Explain the term "relevant cash flows" in the context of investment appraisal, giving examples to illustrate your answer. [5 marks]

QUESTION 4 [25 marks]

Tiren Plc is a medium sized manufacturing company which is considering a 1: 5 rights issue at a 15% discount to the current market price of $4 per share. Issue costs are expected to be $220 000 and these costs will be paid out of the funds raised. It is proposed that the rights issue funds raised will be used to redeem some of the existing debentures at par. Financial information of the company is as follows:

Statement of Financial Position	\$000	\$000	\$000
Non – Current Assets			6 550
Current Assets		2 000	
Stock		1 500	
Debtors		300	
		3 800	
Current Liabilities			
Creditors	1 100		
Overdraft	1 250	2 350	1 450
Net Assets			**8 000**
12% Debentures			4 500
Ordinary Shares par value \$0. 50		2 000	
Reserves		1 500	3 500
			8 000

Other Relevant Information:

Price/ Earnings Ratio	\$15. 24
Overdraft Interest rate	7%
Corporate tax	30%
Debt/ Equity ratio	100%
Interest Cover	6 times

Required

1. Ignoring issue costs and any use that may be made of the funds raised by the rights issue, calculate:
    a. The theoretical ex right price per share [2 marks]
    b. The value of a right per existing share [3 marks]
2. What alternative actions are open to the owner of 1000 shares in Tiren plc as regards the rights issue? Determine the effect of each of these actions on the wealth of the investor. [6 marks]
3. Calculate the earnings per share is the rights issue funds are used to redeem some of the existing debentures [6 marks]
4. Discuss why a rights issue could be an attractive source of finance for Tiren plc. Your discussion should include an evaluation of the effect of the rights issue on the debt/ equity ratio and interest cover. [8 marks]

SECTION C

Select and answer TWO questions

QUESTION 5 [10 marks]

Omega Ltd is considering the launch of a new product. Research and Development costs incurred to date amount to $150 000. The product is expected to have a 5 year useful life before it goes into the decline stage. Omega does not wish to continue the production after this stage. Initial indications are that the probability of the product being successful in the first two years is 0, 6. The table below gives the expected probabilities of success in the final three years if the product is developed:

	P(Success in Final 3 years)
First 2 years successful	0. 8
First 2 years unsuccessful	0. 4
The expected NPV of the project is summarized below:	
Operating success	NPV ($)
Success for the first 2 years and the final 3 yrs	840 000
Success only for the initial 2 years	(150 000) *negative*
Success only for the final 3 years	100 000
Unsuccessful for both periods considered	(500 000) *negative*

Required

Determine the expected net present value and hence advise Omega on whether to introduce the product. [10 marks]

QUESTION 6 [10 marks]

Briefly explain each of the following methods of raising ordinary share capital:

a) Rights Issue [2 marks]
b) Initial Public Offer[2 marks]
c) Private placement[2 marks]
d) Offer by Tender[2 marks]
e) Stock Exchange Introduction[2 marks]

QUESTION 7 [10 marks]

If increases in dividends tend to be followed by immediate increases in share prices, how can it be said that dividend policy is irrelevant. [10 marks]

END OF PAPER