AFRICA UNIVERSITY
A United Methodist-Related Institution
"Investing in Africa's Future"

FACULTY OF MANAGEMENT AND ADMINISTRATION

MAC 410 FINANCIAL MANAGEMENT 11

END OF SECOND SEMESTER EXAMINATIONS

APRIL/MAY 2018 (1)

LECTURER: I. RARAMI

DURATION: (3 HRS)

CONVENTIONAL

INSTRUCTIONS

Answer **ALL** questions

Start each question on a new page in your answer booklet.

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

Show all your workings

Credit will be given for presentations that are neat, logical and grammatically well constructed.

QUESTION ONE [25 MARKS]

The following information are extracted from Bond Note (Pvt) Ltd for the year ended 31 December 2016.

Sales	10 530
Operating Costs	6 750
Earnings before interest & tax (EBIT)	3 780
Interest	720
Earnings after Interest before tax (EAIBT)	3 060
Tax at 40%	1 224
Net Income	**1 836**

The corporate tax rate is 40%, the cost of equity of an equivalent un-geared firm in the same risk class is 24% and debt capital has a yield of 16%. Debt is $4 500 and Equity is $11 250.

i. What is the value of the firm according to Modigliani and Miller's proposition 1? **[3 marks]**

ii. What should be the cost of equity of the geared firm according to Modigliani and Miller's Proposition 11? **[3 marks]**

iii. What is the value of the firm according to Modigliani and Miller with corporate taxes. **[3 marks]**

iv. What is the cost of equity of the firm according to Modigliani and Miller's Proposition 11 adjusted for corporate taxes. **[3 marks]**

v. Given a tax on equity income stream of 20%, a tax on debt income streams of 30%, what is the value of the firm according to the formula derived by Miller in the article, "Debt and Taxes"? **[3 marks]**

b) There are some theories used as alternative explanations of capital structure. Clearly explain the signalling theory and the pecking order hypothesis. **[10 marks]**

QUESTION TWO [25 MARKS]

a). Explain clearly the difference between monetary and non-monetary constraints. **[5 marks]**

b). Clearly discuss what is meant by capital rationing and how capital budgeting analysis should be done when taking into account the type of capital rationing that exists in Zimbabwe. **[10 marks]**

c). You are the finance manager of Good Investments Ltd and you are asked to analyse the following investments which are independent of each other and infinitely divisible and the cost of capital is 24%. The firm has a total capital budget of $70 000 in year zero.

Yr	0	1	2	3	4	NPV
A	-$20000	10000	10000	10000	10000	4043.00
B	-$65000	25000	30000	30000	40000	7329.50
C	-$30000	10000	14000	18000	20000	5071.60
D	-$50000	15000	20000	25000	25000	-1207.00
E	-$30000	14000	14000	14000	14000	3660.20

i). Calculate the profitability index of the projects and rank them. **[4 marks]**

ii). Allocate the available funds to projects. **[3 marks]**

iii). On which investments the company should invest. **[3 marks]**

QUESTION THREE [25 MARKS]

Economy (Pvt) Ltd had the following financial statements for the year 2015 and 2016.

STATEMENT OF PROFIT OR LOSS & OTHER COMPREHENSIVE INCOME

	2015 '$000'	**2016** '$000'
Turnover	**28 000**	**32 000**
Operating Costs	26 500	34 640
Earnings before interest and Taxes	1 500	(2 640)
Interest	2 400	4 880
Earnings before tax	**(900)**	**(7 520)**
Tax 40%		
Net Profit or Loss.	**(900)**	**(7 520)**

STATEMENT OF FINANCIAL POSITION

	2015 '$000'	**2016** '$000'
Net Non Current Assets	**12 000**	**10 600**
Current Assets	**6 940**	**7 020**
Cash & cash equivalents	540	120
Receivables	4 300	6 200
Inventory	2 100	700
Current Liabilities	**12 000**	**16 600**
Payables	8 900	10 200
Short term borrowing	3 100	6 400
Long term debt	**3 400**	**5 000**
Share capital (1 million, $1 par)	1 000	1 000
Reserves	4 200	4 200
Retained earnings	(1 660)	(9 180)
Total Equity	**3 540**	**(3 980)**

a). Briefly discuss the financial statement figures that clearly show that the company is in financial problems. **[5 marks]**

b). What are the possible causes of the financial problems that are faced by the firm? **[5 marks]**

c). Suggest the issues that a reorganizational plan should address if there are possibilities of the firm being viable in the future. (Make

reasonable assumptions that you consider necessary and state them)
[5 marks]

d). Many troubled firms in Zimbabwe are sold to workers or indigenous businessman. Briefly discuss why many of the firms purchased by workers and indigenous business people end up in worse financial problems than the original problems. **[5 marks]**

e. i) Define bankruptcy. **[1 mark]**

ii). State and explain the strategies to be implemented to discourage shareholders from accepting a tender offer. **[4 marks]**

QUESTION FOUR [25 MARKS]

Dzidzai Manufacturing (Pvt) Ltd an industrial company is considering the replacement of its only machine, a manual one with an electrical machine. The marketing manager of the company, Ms Blake White has estimated that the replacement of the machine will result in an increase in sales of $100 000. The production manager Mr Archie Archie, estimated that the purchase of the new machine will result in labour and raw material savings of $80 000.

The new machine is expected to cost $600 000 plus installation costs of $20 000. The machine is expected to last 5 years and at the end of that life is expected to have a salvage value of $120 000. The new machine will require an increase of $10 000 in working capital at the beginning of the project.

The old machine is 3 years old, can last another 5 years when it will have a salvage value of zero. The machine was purchased for $400 000 but has a present market value of $175 000. A SIA of 25% per annum was granted when the machine was purchased and the company has been availing all the available SIA annually. The present SIA is also 25% per annum for 4 years. The company has a tax rate of 35% and the cost of capital of 20%.

Calculate:

a). The initial investment of the project. **[6 marks]**

b). The annual cash flows of the project. **[8 marks]**

c). The terminal cash flow of the project **[3 marks]**

d). The Net Present Value of the project **[8 marks]**

END OF PAPER