KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2018/2019

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE (FINANCE) AND MASTER OF BUSINESS ADMINISTRATION

BAC 819: FINANCIAL ANALYSIS

DATE: Thursday, 28th March 2019 **TIME:** 5.30 p.m. - 8.30 p.m.

INSTRUCTIONS:

Answer all the questions in the separate booklet provided.
Clearly show all your workings in the booklet.

QUESTION ONE

The directors of Matkolelei Ltd are concerned with the ability the ability of continue as a going concern in the log term due to qualitative aspects observed. The board has engaged as a financial analyst to carry out analysis of the company's financials that would assist the board in gaining an understanding of the company's financial health. The board has provided you with the following information which has been extracted from the accounts of the company for the last two years. (years ended 31 December 2018 and 2017).

Income statement for the year ended 31 December

	2018	2017
	Sh.'000'	Sh.'000'
Sales	115,200	72,000
Cost of goods sold	70,800	42,000
Gross profit	44,400	30,000
Less: Trading expenses	19,800	16,200
	24,600	13,800
Less: Debenture interest	900	900
Net profit before taxation	23,700	12,900
Less: Corporation tax	11,520	5,760
Net profit after taxation	12,180	7,140
Less: Ordinary share dividend	6,300	4,500
Undistributed profit for the year	4,880	2,640

Statement of financial position as at 31 December

		2018		2017	
		Sh.'000'	Sh.'000'	Sh.'000'	Sh.'000'
Non-current assets at cost			44,400		33,600
	Depreciation		9,000		7,200
			35,400		26,400
Current assets:					
	Stock	19,800		14,400	
	Debtors	12,600		9,000	
	Cash	-	32,400	2,880	26,280
			67,800		52,680
Less:	Current liabilities				
	Creditors	7,200		5,220	
	Taxation	11,520		5,760	
	Proposed dividends	6,300		4,500	
	Bank overdraft	2,340	27,360	-	15,480
Net assets			40,440		37,200
Financed by:					
Ordinary share capital:					
Authorised, issued and fully paid (Sh.25 per share)			18,000		18,000
Retained profits			16,080		10,200
			34,080		28,200
Long-term loan:					
10% debentures (secured)			6,260		9,000
			40,440		37,200
Market price per share			28		24.5

Required:

i. Calculate the Altman Z-score for 2018 and 2017 **(6 marks)**

ii. Comment on the company's stability and probability of bankruptcy. **(2 marks)**

iii. Outline two limitations of using the Altman Z-score as a model of bankruptcy prediction. **(3 marks)**

iv. Discuss qualitative indicators of financial distress of a company. **(4 marks)**

(Total: 15 marks)

QUESTION TWO

a) Common-size analysis is an important tool in financial analysis. Describe a common-size financial statement and explain how one is prepared. **(2 marks)**

b) Three years ago, Jacob Jones was retrenched from his employment. He invested substantially all his terminal benefits in the shares of Kidko Ltd., a company quoted on the securities exchange. The dividend payments from this investment makes up a significant position Jacob Jones income. He was alarmed when Kidko Ltd. dropped its year 2018. Jacob Jones has approached you for advice and you have gathered the information given below regarding the financial condition of Kidko Ltd. and the finance sector as a whole.

KidkoLtd. Statement of financial position as at 31 December

	2016 Sh.'000'	2017 Sh.'000'	2018 Sh.'000'
Cash	15,250	14,400	8,000
Accounts receivable	80,320	87,800	134,400
Inventory	98,600	158,800	254,000
Total current assets	194,170	261,000	396,400
Land and buildings	25,230	27,600	25,000
Machinery	33,800	36,400	30,600
Other fixed assets	14,920	18,200	16,400
Total assets	268,120	343,200	468,400
Accounts and notes payable	34,220	73,760	135,848
Accruals	15,700	34,000	67,000
Total current liabilities	49,920	107,760	202,848
Long term debt	60,850	60,858	81,720
Ordinary share capital	115,000	115,000	115,000
Retained earnings	42,350	59,582	68,832
	268,120	343,200	468,400

KidkoLtd **Income Statements for the year ending 31 October**

	2016 Sh.'000'	2017 Sh.'000'	2018 Sh.'000'
Sales (all on credit)	827,000	858,000	890,000
Cost of sales	(661,600)	(710,000)	(712,000)
Gross profit	165,400	148,000	178,000
General administrative and selling expenses	(63,600)	(47,264)	(51,200)
Other operating expenses	(25,400)	(31,800)	(38,200)
Earnings before interest and tax (EBIT)	76,400	68,936	88,600
Interest expense	(12,800)	(26,800)	(63,600)
Net income before taxes	63,600	42,136	25,000
Taxes	(25,400)	(16,854)	(10,000)
Net income	38,200	25,282	15,000
Number of shares issued	4,600,000	4,600,000	4,600,000
Per share data:			
Earnings per share (EPS)	Sh. 8.30	Sh. 5.50	Sh. 3.26
Dividend per share	Sh. 1.75	Sh. 1.75	Sh. 1.25
Market price (average)	Sh.48.90	Sh.25.50	Sh.13.25

	Industry Financial Ratios (2018)
Quick ratio	1.0
Current ratio	2.7
Inventory turnover	7 times
Average collection period	32 days
Fixed asset turnover	13.0 times
Total assets turnover	2.6 times
Net income to net worth	1.8%
Net profit margin on sales	3.5%
Price-Earnings (P/E) ratio	6 times
Debt/Equity ratio	50%

Additional information:

1. Industry ratios have been roughly constant for the past four years.
2. Inventory turnover, total assets turnover and fixed assets turnover are based on the year-end statement of financial position figures.

Required:

Calculate the following ratios for Kidko Ltd for the three years

i) Quick ratio **(2 marks)**
ii) Current ratio **(2 marks)**
iii) Inventory turnover **(2 marks)**
iv) Average collection period **(2 marks)**
v) Fixed asset turnover **(2 marks)**
vi) Total assets turnover **(2 marks)**

(b) Comment on the strengths and weaknesses revealed by these ratios based on the above analysis. **(4 marks)**

(c) Briefly explain the limitations of ratio analysis as a tool of financial analysis **(2 marks)**

(Total: 20 marks)

QUESTION THREE

Majimatamu Chemicals Ltd. is in the process of forecasting its financial needs for the coming year ending 31 March 2019. The company attained a turnover ofSh.300 million for the current-year ended 31 March 2018.

The following are the summarized financial statements of the company for the year ended 31 March 2019:

	Income statement Sh.'million'
Turnover	300
Profit before tax	54
Taxation	18
Profit after tax	36
Dividend	9
Retained profit	27

	Statement of financial position	
	Sh.'million'	**Sh.'million'**
Net Assets:		
Fixed assets (net)		190
Current assets	146	
Current liabilities	103	43
		233
Financed by:		
Issued ordinary shares		50
Reserves		90
		140
Medium and long-term debt		93
		233

From past experience, it has been disclosed that each additional Sh.1 of sales made by the company requires, on average, a total investment in fixed assets, stocks and debtors of Sh.1.50. The Sh.1 additional sales also results in the generation of automatic financing of 40 cents as various creditors spontaneously arise with the increase in sales.

The net profit margin after tax and the dividends payout ratio which apply for the year ended 31 March 201 8 will also be relevant into the foreseeable future.

Required:

(a) The amount of external finance that will be needed during the year ending 31 March 2018 if sales are expected to increase by 15% in the year. **(4 marks)**

(b) The maximum expected sales growth that can be achieved in the year ending 31 March 2018 if only internally generated funds are used. **(6 marks)**

(c) The maximum growth in sales that can be achieved in the year ending 31 March 2018 if the company wishes to maintain its current level of financial gearing. **(6 marks)**

(d) Briefly comment upon the weaknesses of the method of forecasting used above. **(4 marks)**

(Total: 20 marks)

QUESTION FOUR

a) Define following types of cash flows
   i. Operating cash flows **(2 marks)**
   ii. Free cash flow to equity (FCFE **(2 marks)**
   iii. Free cash flow to the firm (FCFF) **(2 marks)**

b) Within the context of equity analysis distinguish between fundamental analysis and technical analysis **(2 marks)**

c) Discuss and illustrate the importance of Dupont analysis in Financial analysis of a firm. **(2 marks)**

(Total: 10 marks)