MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)
University Examinations for 2015/2016 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BUSINESS ENTREPRENEURSHIP AND MANAGEMENT SCIENCES

FIRST SEMESTER EXAMINATION FOR MASTER IN BUSINESS ADMINISTRATION (FINANCE)

BAC 819: FINANCIAL ANALYSIS

Date: **Time:**

INSTRUCTIONS:

ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS

QUESTION ONE

Three years ago, Mrs. Rehema Waziri was retrenched from the Civil Service. She invested substantially all her terminal benefits in the shares of ABC Ltd., a company quoted on the stock exchange. The dividend payments from this investment make up a significant position of Mrs Waziri's income. She was alarmed when ABC Ltd. dropped its year 2001 dividend to Sh.1.25 per share from Sh.1.75 per share which it had paid in the previous two years.

Mrs Waziri has approached you for advice and you have gathered the information given below regarding the financial condition of ABC Ltd. and the finance sector as a whole.

ABC Ltd. Balance Sheets as at 31 October

	1999	2000	2001
	Sh.'000'	Sh.'000'	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

ABC Ltd. Income Statements for the year ending 31 October

	1999	2000	2001
	Sh.'000'	Sh.'000'	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 (2001)
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

	Industry Financial rations
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%

Notes:

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 balance sheet figures.

Required:

(a) The financial ratios for ABC Ltd for the past three years corresponding to industry ratios given above. (10 marks)

(b) Arrange the ratios calculated in (a) above in columnar form and summarise the strengths and weaknesses revealed by these ratios based on:

(i) Trends in the firm's ratios (6 marks)

(ii) Comparison with industry averages. (6 marks)

(The summary should focus on the liquidity, profitability and turnover ratios).

Question Two

The management of Afro Quatro Ltd. want to establish the amount of financial needs for the next two years. The balance sheet of the firm as at 31 December 2001 is as follows:

	Sh.'000'
Net fixed assets	124,800
Stock	38,400
Debtors	28,800
Cash	7,200
Total assets	199,200
Financed by:	
Ordinary share capital	84,000
Retained earnings	35,200
12% long-term debt	20,000
Trade creditors	36,000
Accrued expenses	24,000
	199,200

For the year ended 31 December 2001, sales amounted to Sh.240,000,000. The firm projects that the sales will increase by 15% in year 2002 and 20% in year 2003.

The after tax profit on sales has been 11% but the management is pessimistic about future operating costs and intends to use an after-tax profit on sales rate of 8% per annum.

The firm intends to maintain its dividend pay out ratio of 80%. Assets are expected to vary directly with sales while trade creditors and accrued expenses form the spontaneous sources of financing. Any external financing will be effected through the use of commercial paper.

Required:

(a) Determine the amount of external financial requirements for the next two years. (8 marks)

(b) (i) A proforma balance sheet as at 31 December 2003. (10 marks)

(ii) State the fundamental assumption made in your computations in (a) and b(i) above. (2 marks)

Question Three

a) Discuss the importance of fund flow analysis in an organization. (10 marks)

b) Discuss the sources of current information financial data of a business firm. (10 marks)

Question Four

Mwongozo Limited has approached you for advice on an equipment to be purchased for use in a five year project.

The investment will involve an initial capital outlay of Shs. 1.4 million and the expected cash flows are given below:

Year	**Cash inflows**	**Cash outflows**
	Shs.	**Shs.**
1	800,000	65,000
2	750,000	80,000
3	900,000	50,000
4	1,200,000	55,000
5	1,100,000	70,000

The equipment is to be depreciated on a straight line basis over the duration of the project with a nil residual value.

The cost of capital and the tax rate are 12% and 30% respectively.

Required:

a) The net present value (NPV) of the investment. (10 marks)

b) Evaluate the project using internal rate of return and advice the management appropriately. (10 marks)

Question Five

a) In the context of budgetary control explain the main functions and importance of a cash budget. (5 marks)

b) You are in charge of making forecasts and preparing budgets. You have been supplied with cost and revenue forecasts and details of payment as follows:

1. **Forecast of revenue and costs for the quarter ending 31 March 2001**

	January	**February**	**March**
	Shs.	**Shs.**	**Shs.**
Direct			
Materials (purchases)	112,000	100,000	135,000
Wages	90,000	80,000	100,000
Overhead			
Production	34,000	32,000	40,000
Administration	22,000	20,000	27,000
Selling and distribution	13,000	11,000	18,000
Sales	360,000	350,000	440,000

2. **Forecast of revenue and costs for the quarter ending 30 June 2001**

	April	May	June
	Sh.	Sh.	Sh.
Direct			
Materials (purchases)	90,000	67,000	79,000
Wages	72,000	54,000	63,000
Overhead			
Production	45,000	36,000	40,000
Administration	22,000	25,000	27,000
Selling and distribution	13,000	11,000	16,000
Sales	350,000	360,000	360,000
Cash balance on 1 April 2001			Sh. 90,000

1. **Other details**

- Period of credit allowed by suppliers averages two months.
- Debenture to the value of Shs. 125,000 are being issued in May 2001 and the amount is expected to be received during the month.
- A new machine is being installed at the end of March 2001 at a cost of Sh 150,000 and payment is promised in early May 2001.
- Sales commission of 3% is payable within one month of sales.
- A dividend of Sh 100000 is to be paid in June 2001.
- There is a delay of one month in the payment of overheads. There is also a delay in payment of wages averaging a quarter of a month.
- Twenty per cent of the debtors pay cash, receiving a cash discount of 4% and 70% of debtors pay within one month and receive a cash discount of 2 ½%. The other debtors pay within two months.

Required:

A cash budget on a monthly basis from the second quarter of the year 2001. (15 marks)