TECHNICAL UNIVERSITY OF MOMBASA

Faculty of Business and Social Studies

DEPARTMENT OF BUSINESS STUDIES

UNIVERSITY EXAMINATIONS FOR DEGREE IN
BACHELOR OF BUSINESS ADMINISTRATION
BACHELOR OF COMMERCE

BAC 4204: MANAGEMENT ACCOUNTING

SPECIAL/SUPPLEMENTARY EXAMINATIONS
SERIES: FEBRUARY 2015
TIME: 2 HOURS

INSTRUCTIONS:

- Answer Question **ONE (Compulsory)** and any other **TWO** questions.
- Do not write on the question paper

This paper consists of Six printed pages

QUESTION 1 (Compulsory)

a) Kalamba Ltd has established the following information regarding fixed overheads for the coming month:

Budgeted information:

Fixed overheads	sh. 18,000,000
Labour	3,000 hours
Machine	10,000 hours
Production	5,000 units

Actual fixed costs for the last month were sh. 16,000,000.

Kalamba Ltd produces many different products using highly automated manufacturing processes and absorbs overheads on the most appropriate basis.

Required:
Determine the pre-determined overhead absorption rate. **(6 marks)**

b) Chaani Ltd makes one product in a single process. The details of the process for period 2 were as follows:

There were 800 units of opening work in progress valued as follows:

Material	sh. 9,800,000
Labour	sh. 4,600,000
Production overheads	sh. 760,000

During the period 1,800 units were added to the process and the following costs were incurred:

Material	sh. 38,700,800
Labour	sh. 27,632,000
Production overheads	sh. 14,928,000

There were 500 units of closing work in progress, which were 100% complete for material, 90% complete for labour and 40% complete for production overheads.

A normal loss equal to 10% of new material input during the period was expected. The actual loss amounted to 180 units. Each unit of loss was sold for sh. 1,000 per unit.

Chaani Ltd uses weighted average costing.

Required:
Calculate the cost of the output for the period.

(6 marks)

c) Wambu Ltd makes leather products. It has drawn up the following budget for its next financial period:

• Selling price per unit	sh. 1,160
• Variable production cost per unit	sh. 340
• Sales commission	5% of selling price
• Fixed production costs	sh. 43,050,000
• Fixed selling and administration Costs	sh. 19,815,000
• Sales	90,000 units

Required:

i) Calculate the margin of safety in percentage of budgeted sales. **(3 marks)**

ii) The marketing manager has indicated that an increase in the selling price to sh. 1225 per unit would not affect the number of units sold, provided that the sales commission is increased to 8% of the selling price.

Calculate the break-even point in units (to the nearest whole number) following the above changes. **(3 marks)**

d) A newly formed company has drawn up the following budgets for its first two accounting periods:

	Period 1	**Period 2**
Sales units	9,500	10,300
Production units (equivalent to normal capacity)	10,000	10,000

The following budgeted information applies to both periods:

	Sh.
Selling price per unit	640
Variable cost per unit	360
Fixed production overhead per period	1,500,00

Required:

i) Determine the budgeted profit for period 1. **(3 marks)**

ii) In period 2, everything was as budgeted, except for the fixed production overhead, which was sh. 1,570,000. Determine the reported profit using absorption costing in period 2. **(3 marks)**

e) Identify and describe the functions of cost and management accounting system. **(6 marks)**

QUESTION 2

Changamwe Co. Ltd, which manufactures a range of products, has decided to introduce a range of products, he decided to introduce a product costing system. As a first step it wishes to analyse the behaviour of its costs.

The following data is available for the previous four periods:

	Period 1	**Period 2**	**Period 3**	**Period 4**
Total costs (sh.)	190,760	224,020	236,100	255,600
Total output (units)	64,200	79,350	80,170	85,620
Period inflation (note 1)		5%	4%	3%

Note 1: average prices in period 2 were 5% higher than period 1 etc

Required:

a) Adjust the total costs in each period to period 4 price levels. **(4 marks)**

b) Using the high-low method, applied to the adjusted costs in answer to part (a) establish a linear function of the form:
$y = a + bx$
To represent total costs. **(4 marks)**

c) Plot the adjusted costs for the four periods (i.e at period 4 prices) on scattergraph and draw the linear cost function, established in part (b), on the graph. **(4 marks)**

d) Using the linear function established in (b) above, estimate costs in the following period (period 5) when output is expected to be 87,500 units and period inflation is forecast at 2%. **(4 marks)**

e) Outline limitations of the analysis carried out in answer to parts (a) to (d).
(4 marks)

QUESTION 3

"Because information produced by management accountants must be judged in the light of its ultimate effect on the outcomes of decisions, a necessary precedent to an understanding of management accounting is an understanding of the decision-making process (Drury, 2008).

Discuss the above statement by identifying the stages involved in the decision making, planning and control process by management of an organization.
(20 marks)

QUESTION 4

Wote Company Ltd manufactures and sells telephone answering machines. The company's contribution format income statement for the most recent year is given below:

	Total Sh.	**Per unit Sh.**	**Percent of sales**
Sales (20,000 units)	1,200,000	60	100%
Less variable expenses	900,000	45	?%
Contribution margin	300,000	15	?%
Less fixed expenses	240,000		
Net operating income	60,000		

Management is anxious to improve the company's profit performance and has asked for an analysis of a number of items.

Required:

a) Compute the company's CM ratio and variable expenses ratio. **(4 marks)**

b) Compute the company's break-even point in both units and sales shillings. Use the equation method. **(4 marks)**

c) Assume that sales increase by sh. 400,000 next year. If cost behaviour patterns remain unchanged, by how much will the company's net operating income increase? Use the CM ratio to determine your answer. **(4 marks)**

d) Refer to the original data. Assume that next year management wants the company to earn a minimum profit of shs. 90,000. How many units will have to be sold to meet this target profit figure? **(4 marks)**

e) Refer to the original data. Compute the company's margin of safety in both shillings and percentage form. **(4 marks)**

QUESTION 5

Mbiri Co. Ltd, a manufacturing firm, operates a standard marginal costing system. It makes a single product, L1, using a single raw material AN.

Standard costs relating to L1 have been calculated as follows:

Standard cost schedule – L1

	Per unit
	Sh.
Direct material, AN, 100Kg at sh. 5 per kg	500
Direct labour, 10 hours at sh. 8 per hour	80
Variable production overhead, 10 hours @ sh. 2 per hour	20
	600

The standard selling price of L1 is sh. 900 per unit and the company produces 1,020 units a month.
During December, 1,000 units of L1 were produced. Relevant details of this production are as follows:

Direct material AN

90,000 Kgs costing sh. 720,000 were bought and used.

Direct labour

8,200 hours were worked during the month and total wages were sh. 63,000.

Variable production overhead

The actual cost for the month was sh. 25,000

Inventories of the direct material AN are valued at the standard price of sh. 5 per Kg.

Each L1 was sold for sh. 975

Required:

Calculate the following for the month of December.

a) Variable production cost variance. **(4 marks)**

b) Direct labour cost variance, analysed into rate and efficiency variances. **(4 marks)**

c) Direct material cost variance, analysed into price and usage variances. **(3 marks)**

d) Variable production overhead variance, analysed into expenditure and efficiency variances. **(3 marks)**

e) Selling price variance **(3 marks)**

f) Sales volume contribution variance. **(3 marks)**