



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF BUSINESS
DEPARTMENT OF ACCOUNTING & FINANCE
UNIVERSITY EXAMINATION FOR:
BACHELOR OF COMMERCE III
BACHELOR OF IN BUSINESS ADMINISTRATION III
BAC 4203: MANAGEMENT ACCOUNTING.
END OF SEMESTER EXAMINATION
SERIES: DECEMBER, 2024
TIME: 2HOURS
DATE: DECEMBER, 2024

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question One.

Kalulu furniturer Ltd, manufactures garden products and leisure products. The budget for June estimated that 150 kilos of steel at sh.16.00 per kilo would be used and 240 metres of timber at sh.30.00 per metre. The actual usage was 160 kilos of steel purchased at sh.2,528 and 260 metres of timber purchased at sh.28.50 per metre. The budget also anticipated that 850 hours of semi-skilled labour at sh.80.00 per hour would be required, together with 1,600 hours of unskilled labour at sh.50.00 per unit. At the event, 860 hours of semi-skilled labour at sh.75.00 per hour was used and 1,500 hours of unskilled labour for a total of 78.000.

Required:

(a) (i) A calculation of the standard and the actual cost of production for the month of June.

[4marks]

(ii) A calculation of the following:

Material price variances,

(2 Marks)

Material usage variances, (2 Marks)

Labour rate variances, (2 Marks)

Labour efficiency variances. (2 Marks)

(b) Comment on the material price variances and the labour efficiency variances. [2 marks]

(c) Discuss the factors which should be taken into account when setting standards. [6 marks]

(b). Manuko Co. Ltd is trying to set the selling price for one of its products and three prices are under consideration. These are Sh.4, Sh.4.30 & Sh.4.40

The following information is also provided

Alternatives

Conditions	Sh.4.00	Sh.4.30	Sh.4.40
Best possible	16,000	14,000	12,500
Most likely	14,000	12,500	12,000
Worst possible	10,000	8,000	6,000

Fixed costs = Sh. 20,000

variable cost per unit = Sh. 2

Required:

Advise the company on the best price to set. Using:

Maximax decision rule (4 marks)

Maximin decision rule (3 marks)

Minimax Decision rule. (3 marks)

Question Two

a)Magik Bicycles developed three different products, a small bike for children and youths, a road bike, and a mountain bike. Total fixed costs for the company are sh.14, 700,000. Forecasted sales volumes and sales mix are as follows.

	Youth	Road	Mountain	Total
Forecasted volume (units)	14,000	20,000	12,000	46,000
Expected sales mix in units	35%	40%	25%	100%

The company's income tax rate is 30%. The expected unit selling prices, variable costs, and contribution margins for each product are as follows:

	Youth	Road	Mountain
Price per unit sh.	200	700	800
Variable cost per unit	<u>75</u>	<u>250</u>	<u>300</u>
Contribution margin per unit sh.	<u>125</u>	<u>450</u>	<u>500</u>

Required;

Calculate the quantity to sold in order to achieve an after tax profit of ksh. 210,000 **(12 marks)**

b). XYZ company ltd produces tubes for motor cycles. The following information was provided for the year 2006: -

	Sh.
Production	20,000 tubes
Sales	15,000 tubes
<u>Production costs</u>	
Direct materials	2,400,000
Direct labour	600,000
Variables overheads	500,000
Fixed overheads	900,000
<u>Selling and Administration</u>	
Sales commission	200,000
General expenses	120,000
Overheads (fixed)	300,000

The company sells each tube at a price of sh. 300

Required :

(i) Profit and loss account on the basis of absorption costing. (4 marks)

(ii) Profit and loss account on the basis of Marginal Costing. (4 marks)

Question Three

Hekima Ltd. has here products namely: X, Y and Z. The budgeted production costs and selling prices for the first quarter in year 2013 are as follows:

	X	Y	Z
Direct materials (sh. Per unit)	240	160	120
Direct wages			

Department 1 (sh. 40 per hour per unit)	3 hours	5 hours	2.5 hours
Department 2 (sh. 20 per hour per unit)	3 hours	8 hours	6 hours
Budgeted production units	10,000	12,000	20,000
Maximum sales units	12,000	16,000	24,000
Selling price per unit (sh.)	750	1,050	600

Additional information

1. Variable overheads are recovered at a rate of 100% and 50% of direct wages in department 1 and 2 respectively.
2. Fixed overheads amount to sh. 5,000,0000 per annum.
3. Direct labour hours in department 1 are in short supply and the budgeted volume of output envisages full utilization of the available direct labour hours.
4. In department 2 the company has committed to engage the workers to the extent of the direct hours required for the budgeted volume of production
5. In the event a product mix change is desired, the company will engage additional direct labour hours required in department 2 at normal rates. Any such surplus labour hours will be paid as idle time wages.

Required

- a) A statement of budgeted profitability. **(5 Marks)**
- b) Optimal product mix and profit at the optimal production mix **(10 Marks)**
- c) The minimum charge that should be quoted per direct labour hour if the company desires to sub-contract any surplus labour hours in department 2. **(5 Marks)**

Question Four.

(a) Salabhi Arora, Sales Manager for Green Industries, has been asked by a potential foreign customer to sell 10,000 units of a certain gear for sh.100 per unit. Green normally sells this item for sh.150 per unit, but they have had some excess manufacturing capacity in recent months. It is anticipated that this would be a one-time order from this customer. The product unit cost report for this type gear is as follows:

	ksh.
Direct materials	30
Direct labour	25
Variable manufacturing overhead	12.50
Fixed manufacturing overhead	25
Variable selling and administrative expense	17.50
Fixed selling and administrative expense	22.50
Total per unit cost	132.50

After looking at the product cost report, Salabhi advises the customer as follows:

“I may not be an accountant, but I am smart enough to know that I will lose ksh.32.50 per unit if I make this sale. Therefore, I must refuse your offer.”

Required:

Evaluate Salabhi's advice. **(10 marks)**

(b) The total profits for two levels of sales at Makuti hotel were as follows:

Sales	ksh.	120,000	200,000
Net profit	ksh.	52,500	107,500

The variable production cost per unit and the total fixed production cost both remain constant in the range of activity shown.

Required;

Calculate the break-even point in shillings for Makuti hotel. (10 marks)

Question Five

Kanorer Enterprises Ltd has two divisions Mugaa and Gwashati. Mugaa division manufactures an intermediate product for which there is no external market. Gwashati division incorporates the intermediate product into a final product, which it sells. One unit of the intermediate product is used in the production of the final product. The expected units of the final product which Gwashati division estimates it can sell at various selling prices are as follows:

Net selling Price	Quantity sold
Sh.	Units
90	2000
80	3000
70	4000
60	5000
50	6000

The variable and fixed costs of each division are as follows:

	Mugaa	Gwashati
	Sh.	Sh.
Variable cost pr unit	11	7
Fixed cost per annum	60,000	90,000

The transfer price is Sh.35 for the intermediate product, and is determined on a full cost-plus basis.

Required:

Profit statements for each division and the company as a whole for the various selling prices.

(15 marks)

Which selling prices maximize the profits of Gwashati division and the company as a whole?
Comment on why the selling price (which is selected by the company) is not selected by
Gwashati division. (5 marks)