



TECHNICAL UNIVERSITY OF MOMBASA
SCHOOL OF BUSINESS
DEPARTMENT OF ACCOUNTING & FINANCE
UNIVERSITY EXAMINATION FOR:
BACHELOR OF COMMERCE &
BACHELOR OF IN BUSINESS ADMISTRATION
BAC 4203: MANAGEMENT ACCOUNTING
SPECIAL/SUPPLEMENTARY EXAMINATION
SERIES: JULY, 2025
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. Attemptquestion **ONE** (Compulsory) and any other **TWO** questions.

Do not write on the question paper.

Question One

(a) The BBA Co. manufacturers a product that passes through two processes. The following information relates to the two processes.

	A	B
Opening Work in Progress	-	-
Units introduced into the process	14,000	10,000
Units completed and transferred to the next process/FG inventory	10,000	9,000
Material Costs added	210,000	108,000
Conversion costs	144,000	171,000

Additional Information:

Materials are added at the start of process.

A & B and conversion costs are added uniformly throughout the processes. The closing WIP is estimated to be 50% complete for both processes. Units introduced were acquired at sh. 50 per unit.

Required:

Prepare the process accounts for the two processes. **(10 marks)**

(b) Sanders Ltd is a manufacturing company producing two joint products P₁ and P₂ in the ratio of 3:1 at the split-off point. The two products are taken to the mixing plant for blending and refining after the split off point. The following information is also provided:

	Product P ₁	Product P ₂
Sales volume (litres)	300,000	100,000
Selling price per litre	Sh.3,500	Sh.7,000
Joint process costs*	Sh.300,000,000	Sh.100,000,000
Blending and refining costs	Sh.250,000,000	Sh.250,000,000
Other separable costs (all variable)	Sh.50,000,000	Sh.20,000,000

*Joint costs are apportioned on the basis of volume

There are only 5000 hours available in the mixing plant. Usually 4000 hours are taken in processing of Product P₁ and P₂, 2000 hours for each product while the remaining 1000 hours are used for other work that generates a contribution of Sh.100,000 per hour.

The company is now planning to change the production mix of the joint process to 3:2 for product P₁ and P₂ respectively. This change will result in an increase in the joint cost by Sh.500 for each additional litre of P₂ produced.

Required:

Advise the company on whether to change the production mix. **(10 marks)**

(c) Jambo Ltd manufactures a product (X) which they sell for 25/= per unit. Current output is 20,000 units per month which represent 100% capacity. They have received an order for 20,000 units which they can produce by working extra time during the month. The Selling Price total of this order is 48,000/=. Total costs for the last month were 420,000/= which included fixed cost of

70,000/= . If the special order is accepted, the variable costs per unit will increase by 20% but the fixed cost will remain unchanged.

Required:

Advise the company whether to accept or reject the order. (10 marks)

Question Two

Basic analysis ltd produces and sells one product only, the BBT, the standard cost for one unit being as follows:

	Sh.
Direct material A- 10 kg at Sh.20 per kg	200
Direct material B- 5 litres at Sh.6 per litre	30
Direct wages- 5hrs at Sh.6 per hour	30
Fixed production overhead	<u>50</u>
Total standard cost	<u>310</u>

The fixed overhead included in the standard cost is based on an expected monthly output of 900 units

During April Year 1 the actual results were as follows.

Production	800 units
Material A	7,800 kgs used, costing Sh.159,900
Material B	4,300 units used costing Sh.23,650
Direct wages	4,200 hrs worked for Sh.24,150
Fixed production overhead	Sh.47,000

REQUIRED:

Calculate price and usage variances for each material (8 marks)

Calculate labour rate and efficiency variances (4 marks)

Calculate fixed production overhead expenditure and volume variances (8 marks)

Question Three

a). A firm is considering whether to manufacture or purchase a particular component B54. This would be in batches of 10,000 and the buying price would be kshs.6.50 @. The total cost of producing the unit of B54 is as follows:

Direct material	sh.	3.00
Direct labour	sh.	1.50
Indirect fixed costs	sh.	<u>1.00</u>
Total		<u>6.00</u>

In addition, the manufacturing a batch of B54 would mean that sales of product 524 would be reduced by 1000 units. 524 have a marginal cost of sh.60 per unit and sells at sh.82 per unit.

Required:

Advise the company on whether to manufacture or buy. Show all your workings. **(10 marks)**

Amazing Products Company has a maximum productive capacity of 100,000 units per year. Normal capacity is 90,000 units per year. Standard variable manufacturing costs are sh.20 per unit. Fixed factory overhead is sh.450,000 per year. Variable selling expense is sh.10 per unit and fixed selling expense is sh.300,000 per year. The unit sales price is sh.50. The operating results for the year are as follows: Sales, 80,000 units; Production 85,000 units and beginning inventory 5,000 units.

All variances are written off as additions to (for deductions from) the standard cost of sales.

Required:

- (i) What is the break-even point expressed in rupees sales? **(4 marks)**
- (ii) How many units must be sold to earn a net income of sh.50,000 per year? **(8 marks)**
- (iii) Prepare a formal income statement for the year ended December 31, 2008, under the following:
 - (a) Absorption costing **(4 marks)**.
 - (b) Variable costing. **(4 marks)**

Question Four

L Ltd. and M Ltd. are subsidiaries of the same group of companies. L Ltd. produces a branded product sold in drums at a price of sh. 20 per drum.

Its direct product costs per drum are:

Raw material from M Ltd.: At a transfer price of sh. 9 for 25 litres.

Other products and services from outside the group: At a cost of sh.3.

L Ltd.'s fixed costs are sh.40,000 per month. These costs include process labour whose costs will not alter until L Ltd.'s output reaches twice its present level.

A market research study has indicated that L Ltd.'s market could increase by 80% in volume if it were to reduce its price by 20%.

M Ltd. produces a fairly basic product, which can be converted into a wide range of end products. It sells one third of its output to L Ltd. and the remainder to customers outside the group. M Ltd.'s production capacity is 1,000,000 kilolitres per month, but competition is keen and it budgets to sell no more than 750,000 kilolitres per month for the year ending 31 December. Its variable costs are sh.0.20 per Kilolitre and its fixed costs are sh.60,000 per month. The current policy of the group is to use market prices, where known, as the transfer price between its subsidiaries. This is the basis of the transfer prices between M Ltd. and L Ltd.

Required:

- (a) the monthly profit position for each of L Ltd. and M Ltd. if the sales of L Ltd. are
- (i) at their present level, and **(6 marks)**
 - (ii) at the higher potential level indicated by the market research, subject to a cut in price 20%. **(6 marks)**
- (b) (i) Explain why the use of a market price as the transfer price produces difficulties under the conditions outlined in (a) (ii) above; **(4 marks)**
- (ii) Explain briefly, as Chief Accountant of the group, what factors you would consider in arriving at a proposal to overcome these difficulties; **(4 marks)**

Question Five

Budgeted sales and cost of two companies are provided as follows::

Companies	H	B
Sales (units)	10,000	10,000
Selling price (shs.)	2	2
Variable cost / unit	1.25	1.00
Total fixed cost (shs)	5,500	8,000
Capacity	80%	80%

Required:

- i) Budgeted profits **(4 marks)**

- ii) Budgeted Break-even point in shillings **(4 marks)**
- iii) Show the impact of increasing or decreasing sales by a 10% margin. **(6 marks)**
- iv) Margin of safety as a percentage of total capacity. **(6 marks)**