



TECHNICAL UNIVERSITY OF MOMBASA

School of Business

Department of Management Science

UNIVERSITY EXAMINATION FOR: DIPLOMA IN SUPPLY CHAIN MANAGEMENT

BAC 31102: MANAGEMENT ACCOUNTING

END OF SEMESTER EXAMINATION

SERIES: JULY 2025

TIME: 2 HOURS

DATE: APRIL 2025

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

a) The total cost of making a new product in the factory is Kshs 2100 given below:

	Kshs
Material	1000
Labour	600
Production overhead	500

60% of production overhead is fixed. A foreign supplier has offered to supply this component at Kshs 1700.

Required:

Advise the management whether to make or buy from the foreign manufacturer.

7 marks

b] Mtopanga manufactures makes a single product which it sells at Kshs 10 per unit. Fixed costs are Kshs 48000 and the product has a contribution to sales ratio of 40%. Actual sales for the period was Kshs 140000.

Required:

- | | | |
|------|---------------------------------|---------|
| i) | Break-even point in sales value | 3 marks |
| ii) | Break-even point in units | 3 marks |
| iii) | Margin of safety in units | 3 marks |

c) Mla Leo Ltd has some material which originally cost Kshs 45000. This is now a sunk cost. The material has a scrap value of Kshs 12500 but if reworked at a cost of Kshs 7500, it could be resold for Kshs 17500.

Required:

What would be the incremental effect of reworking and selling the material? 4 marks

d) Explain the following terms as used in Management accounting:

i) Sunk cost

ii) Relevant cost

iii) Fixed budget

iv) Flexible budget

10 marks

QUESTION TWO

a) A Company manufactures three products, Alif, Bei and Tei all of which pass the same finishing process.

Maximum demand in units for each product is 4500. The number of hours available in the finishing process is 6000.

Data relating to each product is as follows:

Product	Alif	Bei	Tei
Selling price per unit Kshs	30	36	41
Variable costs per unit Kshs	20	27	35
Minutes in the finishing process per unit	45	36	25

Required:

Determine the production plan that will maximize profits.

14 marks

b) List three advantages of a cash budget.

6 marks

QUESTION THREE

a) The total costs for two activity levels are given below:

Output units	Total costs
11500	Kshs 102476
14000	Kshs 113201

Required:

i) Using the high-low method analyse costs into fixed and variable components.

4marks

ii) Estimate the cost of production for 15000 units

2 marks

b) La pip'ip'a' papa has the following data:

	UNITS	TOTAL COST Kshs
Jan	10	25
Feb	15	34
Mar	20	40
Apr	17	36
May	13	30

Required:

Using regression analysis estimate the cost of producing 50 units for June. (14 marks)

QUESTION FOUR

The following are the standards of one unit for a company that manufactures a single product:

Standard quantity of raw materials to produce one unit	12 kgs
Standard price per kg of raw materials	Kshs 9
Standard labour hours to produce one unit	10 hours
Standard labour rate per hour	Kshs 4

Actual production costs for one accounting period were:

Material used	3770 kgs
Material cost	Kshs 35815
Hours worked	2755

Wages paid
The actual output was 290 units.

Kshs 11571

Required:

- i. Material price variance.
 - ii. Material usage variance,
 - iii. Labour rate variance.
 - iv. Labour efficiency variance. 8 marks
- b) Msichana wa Kwehu Ltd has excess capacity 20000 machine hours which is expected to be absorbed by the domestic market in a few years. The company has received inquiries from abroad. Omusajja has offered to buy 210000 units of product Nun at Kshs 0.60 per unit, Omuchala has offered to buy 300000 units of product Wau at Kshs 0.70 per unit. Msichana wa kwehu Ltd can only accept one of these offers. The estimated costs per unit for these products are:

	Nun(kshs)	Wau(kshs)
Material	0.25	0.35
Direct labour	0.10	0.12
Factory overhead	0.20	0.28

Factory overhead is applied on a machine hours basis at Kshs 5.60 per hour. 75 percent of factory overhead is fixed. Which order should the company accept?

12 marks).

QUESTION FTVE

In many instances NPV and IRR will give consistent rankings, but at times conflicts in rankings between the two will occur. Consider two mutually exclusive investment proposals, Sinni and shinni:

	SINNI (kshs)	SHINNIkshs	9%discounting
Year 0	-35000	-35000	0.000
1	20000	5000	0.917
2	15000	10000	0.842
3	10000	15000	0.772
4	5000	25000	0.708

Required: Indicate which is a better project you would choose under:

- i) NPV 10 marks
- ii) IRR 5 marks
- iii) Is there any conflict between the two, if so, why does this conflict arise? 5 marks