

2903/305 2926/305

2906/305 3103

2907/305

MANAGERIAL ACCOUNTING

July 2023

Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN SUPPLY CHAIN MANAGEMENT

DIPLOMA IN BUSINESS MANAGEMENT

DIPLOMA IN CO-OPERATIVE MANAGEMENT

DIPLOMA IN HUMAN RESOURCE MANAGEMENT

MODULE III

BUSINESS EDUCATION SINGLE AND GROUP CERTIFICATE EXAMINATIONS

STAGE III

MANAGERIAL ACCOUNTING

3 hours

INSTRUCTIONS TO CANDIDATES

This paper consists of SEVEN questions.

Answer any FIVE questions in the answer booklet provided.

ALL questions carry equal marks.

Show all your workings.

Candidates should answer the questions in English.

This paper consists of 7 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

1. (a) Explain four differences between Financial Accounting and Managerial Accounting. (8 marks)

(b) The following data relates to Matupa Limited for the first six months of the year 2023.

Month	Units produced	Labour cost Ksh.
January	68,000	780,000
February	88,000	980,000
March	100,000	1,100,000
April	72,000	820,000
May	60,000	700,000
June	48,000	580,000

- (i) Determine the cost function of the firm using the high-low method.
- (ii) Assuming that the company is to produce 90,000 units, estimate the labour cost to be incurred.
- (iii) Determine the number of units to be produced in the month of August 2023, if the company intends to spend Ksh 900,000 on labour cost. (12 marks)

2. (a) Highlight four uses of decision tree diagram in a business organisation. (8 marks)

(b) Mawingo Traders manufactures a single product "Patco" that sells at Ksh 420 per unit. The standard cost of one unit of the product is as follows:

	Ksh.
Direct materials	140
Direct labour	100
Variable overheads	36

The fixed overheads per year are Ksh 1,000,000. The company expects to manufacture and sell 24,000 units in the forthcoming year.

- (i) Calculate the:
- (I) break even point in units;
 - (II) break even point in shillings;
 - (III) margin of safety in units;
 - (IV) current profit or loss.

- (ii) The company is planning to spend Ksh 200,000 on advertising and reduce the selling price by 5%. The expected units to be sold would increase by 6,000 units. Advise management on whether to continue with the plan or not. (12 marks)

3. (a) Rawani Manufacturers produces three products X, Y and Z. The following data relates to the products for the month of June 2023.

	PRODUCT			TOTAL
	X	Y	Z	
	Ksh.	Ksh.	Ksh.	Ksh.
Sales	500,000	360,000	300,000	1,160,000
Total costs	<u>400,000</u>	<u>400,000</u>	<u>240,000</u>	<u>1,040,000</u>
Profit/ loss	<u>100,000</u>	<u>(40,000)</u>	<u>60,000</u>	<u>120,000</u>

Total costs comprise 25% fixed costs.

The management of the company is considering dropping product Y.

Advise the management whether to drop product Y or not.

(8 marks)

- (b) Kologe Village is served by only one posho mill. Customers arrive at the posho mill at the rate of 3 customers after every 15 minutes. The posho mill serves the customers at an average rate of 15 customers per hour. The arrival rate follows the poisson distribution while the service time is exponentially distributed.

Calculate the:

- probability that the posho mill is idle.
- probability that the waiting time in the queue is more than 15 minutes.
- average number of customers in the queue.
- average time a customer spends in the system.
- average time a customer spends in the queue.

(12 marks)

4. ✓ (a) Explain **four** requirements of an assignment problem. (8 marks)

(b) Madona Limited intends to invest Ksh 1,000,000 in either project A or project B. The following information shows the expected net cash inflows:

Project	Net cash inflows	
	A	B
	Ksh	Ksh
1	400,000	500,000
2	500,000	300,000
3	600,000	600,000

The company's cost of capital is 10%.

(i) Determine the Net Present Value (NPV) of each project.

(ii) Advise the management on which project to invest in, based on the results in (i) above.

(12 marks)

5. ✓ (a) Explain **four** techniques applied in performance evaluation. (8 marks)

(b) Kevex Limited manufactures two products, X and Y. The company uses two materials: A and B in the manufacture of these products. The following information relates to the estimates for the year ending 2025:

(I) Budgeted sales:

Product	Quantity in units
X	20,000
Y	16,000

(II) The selling price per unit of product X and Y is Ksh 80 and Ksh 60, respectively.

(III) Material required:

	A	B
Unit cost (Ksh)	10	16
Quantity in kgs:		
X	10	6
Y	8	8

Balances of the finished products are expected to be as follows:

	1 January 2025	31 December 2025
Product : X	4,000 units	2,000 units
Y	2,000 units	1,000 units

Prepare:

- (i) sales budget;
- (ii) production budget;
- (iii) material usage budget in units;
- (iv) material purchases budget.

(12 marks)

6. (a) Explain **four** limitations of cost-volume profit analysis. (8 marks)

- (b) The following information relates to the transportation costs, per unit, of bags of cement to be transported by Magoga Logistics from various plants to various warehouses, in the month of August 2024.

Warehouse Plant	A	B	C	Supply
1	2	7	14	50
2	3	3	1	80
3	5	4	7	70
4	1	6	2	140
Demand	70	90	180	340

Using the North-West Corner rule, determine the minimum transportation cost.

(12 marks)

7. ✓ (a) Explain **four** challenges that may be encountered while implementing a budget in an organization. (8 marks)
- (b) Makos Enterprises intends to invest Ksh 150,000 in a project. The company's policy is to charge depreciation on straight line basis. Corporation tax is 30%. The following information relates to the project.

	Cash inflows Ksh
Year	
1	100,000
2	30,000
3	80,000

Determine the Accounting Rate of Return (ARR). (12 marks)

easytvet.com