



TECHNICAL UNIVERSITY OF MOMBASA

SCHOOL OF BUSINESS
DEPARTMENT OF ACCOUNTING & FINANCE
UNIVERSITY EXAMINATION FOR:
DIPLOMA IN SUPPLY CHAIN MANAGEMENT
BAC 2210: COST ACCOUNTING
END OF SEMESTER EXAMINATION
SERIES APRIL 2022
TIME:2HOURS
DATE:Pick DateApr2022

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) i) Define marginal costing and give its limitations. (marks 6)
ii). The following data relate to Kenya Ltd for the year ended 31 December 2021

Sales	24,000
Less: Total costs	<u>4,000</u>
Net profit	<u>4,000</u>

Required:

- i. Margin of safety. (2 marks)
ii. Break-even point in sales (2 marks)
iii. Sales required to earn profit of Sh 6,000,000. (2 marks)
iv. In order to increase sales, the management has the following two options
1. To increase sales by 25% on incurring a sales promotion cost of Sh 2,500,000.
2. To increase sales by 15% on reducing selling price by 5%.

Advise the management on which option they should take. (8 marks)

b) Explain the assumptions behind the determination of Economic Order Quantity (EOQ). (4 marks)

c). The following information is given for material Y-20.

Consumption:

Annual	360,000 units
Maximum	1,200 units/day
Minimum	800 units/day
Normal	900 units/day
Re-order period	12 - 24 days
Re-order quantity	32,000 units

Required:

- i) Re-order level. (2 marks)
- ii) Minimum stock level. (2 marks)
- iii) Maximum stock level (2 marks)

(Total 30 marks)

Question TWO

a) Kanga Ltd has three production departments and two service departments. The following is their budgeted factory overheads for the year ended 30 September 2020:

		Shs.	Shs.
Production departments			
	A	240,000	
	B	180,000	
	C	<u>220,000</u>	640,000
Service departments			
	X	86,000	
	Y	<u>44,000</u>	<u>130,000</u>
			770,000

The service department costs are to be re-apportioned as per the following percentages:

	A	B	C	X	Y
X	20	30	35	-	15
Y	30	30	30	10	-

Required:

Re-apportion the service department costs to the production departments using the simultaneous equation method. (10 marks)

b) You are informed that the overheads are absorbed on the basis of the direct labour hours and the budgeted direct labour hours for the departments as given below:

Department	A	1000 hours
	B	2500 hours
	C	4000 hours

Required:

Determine the overhead absorption rates per hour for the three production departments.
(10 marks)

(Total 20 marks)

QUESTION THREE

a) Differentiate the following terminologies:

- (i) Relevant costs and irrelevant costs (5marks)
- (ii) Cost center and cost unit. (5 marks)
- (iii) Semi-fixed and semi variable costs. (5 marks)
- (iv) Sunk costs and product costs (5 marks)

(TOTAL 20 MARKS)

QUESTION FOUR

a) Describe the duties of a cost accountant in an organization. (4 marks)

b). Nyali Mbali Ltd. are retailers who sell ceramic tiles. During the months of July to September 2021, there were price fluctuations. Due to the above problem the company had to adjust its selling prices

The following transactions took place during the period.

3 July Opening stock was 5,000 tiles valued at Sh 825,000.

10 July Orders placed with the company increased, so extra tiles had to be obtained from Mombasa. Therefore 22,000 tiles were purchased at a cost Sh 140 each but in addition, there was a freight and insurance charge of Sh 5 per tile.

31 July During the month 20,000 tiles were sold at a price of Sh 220 each.

4 August A new batch of 14,000 tiles was purchased at a cost of Sh 175 per tile.

30 August The sales for the month of August were 14,000 tiles at a selling price of Sh 230 each.

1 September A further 24,000 tiles were purchased at a cost of Sh 195 each.

30 September 270,000 tiles were sold during September at price of Sh 240 each. The cost accountant of Nyalı Mbali Ltd decided he would apply first-in-first-out basis and weighted average methods of material pricing for purposes of comparison.

Required:

- (i) A stores ledger account using the two methods and showing stock values at 30 September 2021. (10 marks)
- (ii) The trading accounts using each of the above methods. (6 marks)

QUESTION FIVE

Samba Ltd. produces three joint products in two processes. All the units pass through process I to process II. At the end of process II, the joint products emerge. The data below relates to the operations for the first quarter of 2021.

	Process I	Process II
	Shs.	Shs.
Direct materials (40,000kg @ Sh 2.50)	100,000	-
Direct labour	60,000	92,000
Overheads	40,000	118,000
Normal loss as a percentage on input	10%	-
Scrap value per unit	Sh 2	
Output in units:	35,000	

No loss is expected in process II.

There were no opening or closing work-in-progress. The output and the selling prices were as follows:

Joint product	Output (Kg)	Selling price (Sh)
X	10,000	20
Y	16,000	15
Z	9,000	16

Required:

- a) Process I account. (6 marks)
- b) Abnormal loss/gain account. (4 marks)

- c) Determine the profits or losses from each joint product if costs are apportioned using sales value method (6 marks)
- d) Briefly explain how the physical limits method is different from sales value method in (c) above. (4 marks)

(Total: 20 marks)