



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

**FACULTY OF COMMERCE, HUMAN SCIENCE AND EDUCATION
DEPARTMENT OF ECONOMICS, ACCOUNTING & FINANCE**

QUALIFICATION: BACHELOR OF ACCOUNTING	
QUALIFICATION CODE: 07BOAC	LEVEL: 6
COURSE CODE: CMA612S	COURSE NAME: COST & MANAGEMENT ACCOUNTING 202
SESSION: JANUARY 2024	PAPER: PRACTICAL AND THEORY
DURATION: 3 HOURS	MARKS: 100

SECOND OPPORTUNITY EXAMINATION QUESTION PAPER	
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MODERATOR:	E Kangootui

<p style="text-align: center;">INSTRUCTIONS</p> <ul style="list-style-type: none">• This question paper is made up of four (4) questions.• Answer All the questions in blue or black ink only.• You are advised to pay due attention to expression and presentation. Failure to do so will cost you marks.• Start each question on a new page in your answer booklet and show all your workings.• Questions relating to this paper may be raised in the initial 30 minutes after the start of the paper. Thereafter, candidates must use their initiative to deal with any perceived error or ambiguities and any assumption made by the candidate should be clearly stated.

PERMISSIBLE MATERIALS

Non-programmable calculator

THIS QUESTION PAPER CONSISTS OF 6 PAGES (Including this front page)

Question 1**25 Marks**

Limehouse Ltd is a local leather products company that sells one type of leather bag. The company is preparing for its upcoming year, ending 31 December 2023.

Limehouse plans to incur the following fixed costs:

Production overheads	N\$720 000
Administration overheads	N\$480 000

Over the past 2 years, Limehouse Ltd incurred the following selling overheads:

For the year ending 31 December 2022: N\$350 000 for 10 000 units sold.

For the year ending 31 December 2021: N\$320 000 for 8 500 units sold.

The planned selling price and variable cost per leather bag is as follows:

Selling price	N\$200.00
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Variable Costs

Direct Materials – 8 meters	N\$40.00
Direct Labour – 6 Hours	N\$36.00
Production overheads	N\$14.00

Limehouse has a profit objective of N\$540 000 for the forthcoming year. A sales forecast revealed high sales in the months of March, June, September, and November; with expected sales of 10% of the total sales in each of these months. The remainder of the planned sales quantity is expected to be achieved equally in the other eight months of the year.

Each month's production is planned as follows:

- 40% of each month's sales are produced in the month before sale.
- 60% of each month's sale are produced in the month of sale.

Direct Materials purchases are planned as follows:

- 50% of each month's direct materials requirements are purchased in the month before the materials are required.
- 50% of the remaining direct materials requirement requirements are purchased in the month the materials are required.

The opening inventory levels of finished goods and direct materials for the budgeted year should be assumed to be consistent with the above policies.

All sales and purchases transactions are done on credit. With regards to credit policies, Limehouse Ltd collects 70% of sales in the month of sale and 30% in the month of after sale. 50% of the payments due to accounts payables are made in the month following purchases, while the remaining 50% is paid 2 months after purchases.

The company expects to collect N\$50,000 from receivables and pay N\$75,000 to accounts payables in the first month of the year which relate to the activities of the previous year.

REQUIRED:		Marks
Prepare the following functional budgets for the first quarter of the year (January – March):		
(a)	Sales budget (quantity and value)	(10)
(b)	Production Budget	(4)
(c)	Materials budget (quantity and value)	(8)
(d)	Material payments to accounts payable	(3)
Show all your workings!		
Total		25

Question 2

25 Marks

A prime food manufacturer is reviewing operations for the last three months of 2023. The company operates a standard marginal costing system and manufactures one product ZP for which the following standard revenue and costs have been supplied:

Selling price	N\$ 12.00
Material A	2.5 kg at N\$ 1.70 per kg
Material B	1.5 kg at N\$ 1.20 per kg
Direct labour	0.45 hrs. at N\$ 6.00 per hour

Fixed production overheads were expected to be N\$ 62,500 for the last three months.

Actual data for the last three months is as follows:

Sales and production 48,000 units of ZP were produced and sold for N\$ 580,800.

Material A 121,951 kg were used at a cost of N\$ 200 000.

Material B 67,200 kg were used at a cost of N\$ 84,000.

Labour Employees worked for 18,900 hours but only 19,200 were paid at a cost of N\$ 117,120.

Fixed production overheads for the three months were expected to be N\$ 62,500.00.

REQUIRED:		Marks
(a)	Calculate the following: i. Sales volume contribution and sales price variances. ii. Price, mix and yield variance for each material. iii. Labour rate, labour efficiency and idle time variances.	(3) (6) (3)
(b)	Prepare an Operating Statement that reconciles budgeted gross profit to actual gross profit.	(5)
(c)	Suggest possible causes of the following variances: i. Material price and yield variances for material A. ii. Labour rate and labour efficiency.	(2) (2)
(d)	Explain the difference between Basic and Ideal Standards and their impact on motivation .	(4)
Show all your workings!		
Total		25

Question 3

(25 marks)

Chineke Limited traditionally designs and manufactures lightweight aircraft. Orders for these aircraft have slackened over the past two years; so to enable the company to survive, it has been decided by Chineke's board of directors to start manufacturing a bigger aircraft.

The production manager expects the first plane to take 330,000 engineering minutes to build, and from past experience believes a 90% learning curve effect could be achieved. The relevant costs are as follows:

Direct material	N\$50 000 per aircraft
Direct labour	N\$10 per hour
Variable overheads	N\$0,50 per direct labour hour
Fixed overheads	N\$1,00 per labour hour

Profit mark-up is usually 10% per aircraft.

NB: The learning curve coefficient must be rounded off to four (4) decimals.

REQUIRED:		Marks
(a)	A local Airline (Oros CC) has offered to purchase four aircraft. Estimate the price that Chineke Limited should quote for these four aircrafts.	(6)
(b)	Oros CC was so impressed by the aircraft they had purchased in (a) above, that they immediately placed a second order for a further five aircrafts. What price should Chineke Limited quote for this next order?	(9)
(c)	Explain any two conditions that should prevail for the learning curve to be used reliably.	(2)
(d)	Identify one major area within management accounting where learning curve theory is likely to have consequences and suggest potential limitations of this theory.	(2)
(e)	Explain why it is important to consider the learning curve effect when determining the terms of the gain-sharing agreement with employees.	(6)
Show all your workings!		
Total		25

Question 4**(25 marks)**

WZ Limited (WZ) is a manufacturing company with two factories. The company's West factory currently produces a number of products. Four of the products use differing quantities of the same resources. Details of these four products and their resource requirements are as follows:

Product	J N\$/unit	K N\$/unit	L N\$/unit	M N\$/unit
Selling price	56.00	40.00	78.00	96.00
Direct labour (N\$8 per hour)	20.00	16.00	24.00	20.00
Direct material A (N\$3 per litre)	6.00	3.00	0	9.00
Direct material B (N\$5 per kg)	10.00	0	15.00	20.00
Variable overhead (note 1)				
Labour related	1.25	1.00	1.50	1.25
Machine related	1.25	2.00	0.75	1.00
Total variable cost	38.50	22.00	41.25	51.25
Other data	Per unit	Per unit	Per unit	Per unit
Direct material A (litres per unit)	2	1	-	3
Direct material B (kg per unit)	2	-	3	4
Labour hours per unit	2.5	2	3	2.5
Machine hours per unit	5	8	3	4
	Units	Units	Units	Units
Maximum demand per week	1 100	3 700	2 950	4 750

Notes:

1. An analysis of the variable overhead shows that part of it is driven by the number of labour hours and the remainder is driven by the number of machine hours.
2. Currently WZ purchases a component, "P", from an external supplier for N\$35 per component. A single unit of this component is used in producing "N", the company's only other product. Product "N" is produced in the company's other factory (East) and does not use any of the resources identified above. Product "N" currently yields a positive contribution. WZ could manufacture component "P" in its West factory, but to do so would require: 1 hour of direct labour, 0.5 machine hours, and 2kgs of direct material B. WZ purchases 500 components per week. WZ could not produce the component in its East factory.
3. The purchasing manager has recently advised you that the availability of direct materials A and B is likely to be restricted to 21 000 litres and 24 000 kilograms per week respectively. The restriction is unlikely to change for at least 10 weeks. No restrictions are expected on any other resources.
4. WZ does not hold inventory of either finished goods or raw materials.

REQUIRED		Marks
a)	Calculate: i. The net cost or saving to WZ per unit of P by manufacturing the component internally. ii. Whether either direct material A or B will be a scarce resource during the next 10 weeks. Assume that 500 P components will be produced. iii. Whether WZ should continue to purchase the component P or whether it should manufacture it internally during the next 10 weeks.	(5.5) (3.5) (5)
b)	Prepare a statement to show the optimum weekly usage of the West factory's available resources.	(4)
c)	i. Assuming no other changes, calculate the purchase price of component P at which your advice in part a) above would change. ii. Explain two non-financial factors that should be considered before deciding whether or not to manufacture the component internally.	(2) (2)
d)	If you were to solve part b) above using linear programming, state the following: i. The objective function ii. The inequality for the material A constraint iii. The inequality for the material B constraint	(3)
Show all your workings!		
Total Marks		25

THE END

~~Male~~
17/10/2023