



NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

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

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

FIRST OPPORTUNITY EXAMINATION QUESTION PAPER	
EXAMINERS:	M Modestus, H Namwandi & E Kangootui
MODERATOR:	P Erkie

INSTRUCTIONS	
• 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)**

Keeper manufactures two products, X and Y. Budgeted information for the next financial year is as follows:

	Product X	Product Y
	Units	Units
Budgeted sales	4 000	6 000
Budgeted closing inventory	500	300
Opening inventory	200	400
Standard Selling price	N\$25	N\$12
	Kg per unit	Kg per unit
Direct materials requirements		
Material DM1	1.2	2
Material DM2	0.8	-
	Material DM1	Material DM2
	Kg	Kg
Budgeted Closing inventory	1 000	200
Opening inventory	3 000	600
Standard Price per kg	\$0.80	\$0.50

It is expected that 10 % kg of Material DM2 will be wasted in the manufacture of Product X.

REQUIRED:		Marks
(a)	Prepare a material purchase budget for the year, showing the Total purchase cost (N\$) purchase quantity.	(15)
(b)	Briefly explain the following terms:	
	i. Flexed budget	(2)
	ii. Incremental budget	(2)
	iii. Cash budget	(2)
	iv. Activity based budgeting	(2)
	v. Principle budgeting factor	(2)
Show all your workings!		
Total		25

Question 2**(25 Marks)**

LD Co provides two cleaning services for staff uniforms to hotel and similar businesses. One of the services is a laundry service and other is dry cleaning service. Both of the service use the same resources, but in different quantities. Details of the expected resource requirements, revenue and costs of each service are shown below.

	Laundry	Dry cleaning
	N\$ per service	N\$ per service
Selling price	7.60	15.20
Cleaning materials (N\$10 per litre)	2	3
Direct labour (N\$6 per hour)	1.20	2
Variable machine cost (N\$3 per hour)	0.5	1.50
#Fixed costs	1.15	2.25
Profit	2.75	6.45

#Total annual fixed costs are N\$32 825

The maximum resources expected to be available in December 2017 are:

Cleaning materials 5 000 litres

Machine hours 5 000 hours

LD Co has one particular contract which it entered into six months ago with a local hotel to guarantee 1 200 laundry services and 2 000 dry cleaning services every month. If LD Co does not honour this contract it has to pay substantial financial penalties to the local hotel.

The maximum demand for laundry is expected to be 14 000 services.

REQUIRED:		Marks
(a)	Use the graphical method and determine the combination of Laundry and Dry cleaning service to be sold in order to make optimum profits, by determining the profit at each extreme point in the feasible region	(17)
(b)	Calculate the value of any slack and surplus and explain what they mean for LD Co.	(5)
(c)	Calculate the shadow price of a machine hour and explain what this means for LD Co.	(3)
Show all your workings!		
Total		25

Question 3**(25 Marks)**

Print Factory wants to quote for the printing of posters. The accountant has produced the following cost estimate for the posters based upon estimated requirements:

	Note	N\$
Direct materials:		
Cardboard - book value	1	7 500
Inks – purchase price	2	2 700
Direct labour:		
Skilled 250 hours at N\$40,00 per hour	3	10 000
Unskilled 100 hours at N\$30,50 per hour	4	3 050
Variable manufacturing overheads		
350 hours at N\$40,00	5	14 000
Printer		
Depreciation – 200 hours at N\$25,00 per hour	7	5 000
Fixed production costs	8	
350 hours at N\$60,00 per hour		21 000
Estimating department costs	9	400
Total estimated cost		63 650

You are aware that considerable publicity could be obtained for the company if you are able to win this order and the price quoted must be very competitive.

Notes relating to the cost estimate above:

1. The cardboard to be used is currently in stock at a value of N\$7 500. It is an unusual colour which has not been used for some time. Its scrap value is N\$2 500. The production manager does not foresee any alternative future use for the cardboard if not used for the posters.
2. The inks required are not held in stock and would have to be purchased in bulk at a cost of N\$3 000. 90% of the ink purchased would be used in printing the posters. No other use is foreseen for the remainder.
3. Skilled labour presently has 125 idle hours for which they are already paid at the normal hourly rate. If this poster printing job is accepted skilled workers will become fully employed in normal working hours. 50% of the estimated total skilled hours required for the posters would be worked at weekends when workers are paid at normal rate plus 25%.
4. Unskilled labour presently have 200 hours idle per week for which the labourers are already paid. If the poster printing work is carried out on the weekend, 25 hours of unskilled labour will be worked during this time. Unskilled labourers would not be paid for weekend hours, but will be given two hours' time off during the week for each hour worked on the weekend. The time off will reduce current idle time.
5. Variable overheads represent the cost of operating the printer.
6. When not being used by the company, the printer is hired to outside companies at a profit of N\$30,00 per hour. There is **unlimited demand** for this facility.
7. Printer depreciation represents the estimated loss in market value per hour of usage.
8. Fixed production costs will not change in total as a result of the poster printing and the rate is the predetermined hourly absorption rate.
9. The estimating department costs are an **allocation** of the department's **existing** costs based on time to be spent on the printing of the posters.

The company's policy is to apply a 20% mark-up on total production **costs** to recover administration costs and then to have a profit equal to 20% of the **selling price**. However, as

the company would like to secure the order, the mark-up to recover the administration costs will remain at 20%, but the profit mark-up will be 10% of the **selling price**.

REQUIRED:	Marks
Calculate the minimum selling price that the company should quote for the poster printing order. Give reasons for your exclusion of all costs given in the question.	(25)
Show all your workings!	
Total	25

Question 4

(25 marks)

Namibia Breweries produces and sells beverages. Namibia Breweries ventured into production of a home brand wine that it sells to the local market in 5 litre boxes. The management is concerned about the time it took them to come up with the standard cost of producing one box. After a long and stressful exercise the standard cost for each 5 litre box of wine was provided as follows;

	N\$ per box
Direct materials: 11 litres @ N\$2	22
Direct wages: 5 hours @ N\$6	30
Variable production overhead	10
Fixed production overhead	20
Standard selling price	120

The variable overhead is incurred in direct proportion to the direct labour hours worked. The box rate for fixed production overhead is based on an expected annual output of 24 000 boxes produced at an even rate throughout the year. Assume that each calendar month is equal and that the budgeted sales volume for September was 2 000 boxes.

The following were actual results recorded during September:

Number of boxes produced and sold: 1 750 boxes.

	N\$
Sales revenue	218 750
Direct materials: 19 540 litres purchased and used	41 034
Direct labour: 8 722 hours	47 971
Variable production overhead	26 166
Fixed production overhead	37 410

REQUIRED:		Marks
(a)	Help the management of Namibia Breweries to speed up their standard setting process by listing two sources of information they can use to set the following standards: i. Standard material usage. ii. Standard labour rate. iii. Standard labour times	(2) (2) (2)
(b)	Calculate the operating variances and present them in a statement which reconciles the budget and actual gross profit for September.	(19)
Show all your workings!		
Total		25

THE END

