TECHNICAL UNIVERSITY OF MOMBASA

School of business

DEPARTMENT OF ACCOUNTING AND FINANCE

UNIVERSITY EXAMINATIONS FOR DEGREE IN BACHELOR OF COMMERCE/BUSINESS ADMINISTRATION & MATHS, BACHELOR OF BUSINESS AND INFORMATION TECHNOLOGY AND FINANCE

BAC4203: MANAGEENT ACCOUNTING

ORDINARY EXAMINATIONS

SERIES; AUGUST 2024

TIME; 2 HOURS

Instructions;

Answer question one and any other TWO questions
Do not write on this paper

Cost Volume Profit & Contribution: Question 1

Question One

Compact Discs is a thriving music business, buying and selling CDs to the public. They sell 2 ranges of CDs, Classical and Popular. The following information is available to you:

	Classic	**Popular**
Classical Popular		
Selling price per CD	sh.4	sh.10
Buying price per CD	sh.2	sh.6
Contribution per CD	sh.2	sh.4

For every 4 CDs sold, 3 are popular and 1 is classical. The shop's fixed costs for wages, rent etc. are sh.50,000.

Required:

i) Calculate the breakeven point for the business, in terms of CDs to be sold **(3 Marks**)

ii) What would the shop's profit / loss be, if they sold 22,000 CDs in a year? **(4 Marks)**

iii) If the business decided to open another shop in a nearby town – Shaw Heath – which was to have annual running costs of sh.36,000, what would the combined breakeven point of the 2 shops be? **(4 Marks)**

iv) if the business desires a net profit after tax of sh. 105,000 and the tax rate is 30%, calculate the sales level to achieve the desired profit **(6 Marks)**
b) Briefly explain the weaknesses of the model used in answering part a above **(8 marks)**
c) "Management Accounting is unnecessary expense which should be eliminated if the fir wants to maximise shareholders wealth" Critically evaluate this assertion **(5 marks)**
Cost Volume Profit & Contribution: Question 2.
Summer Chair Designer plc manufactures a single product, with the following sales and production cost data:
Current planned sales 8,000 units
Selling price £550 per unit
Variable production costs £125 per unit
Fixed production cost £1,200,000 per annum

Question Two
Eleplanters Limited produces plant display units formed in the shape of elephants. The production process involves the mixing and shaping of the raw material using a computerised shaper and the subsequent manual finishing of the product.
Three grades of the Eleplanter are produced: the Deluxe, Standard and Economy models. The following budgeted data has been obtained for the year ended 31 December 2005.

	Deluxe	Standard	Economy
Direct materials (kg/unit)	8	12	6
Direct materials (£/unit)	18	26	14
Direct labour (minutes/unit)	40	90	120
Shaping machine time (minutes/unit)	15	30	45
Production quantity (units)	1,800	2,400	600
Units per production run	200	400	100

Budgeted production overheads:
Inspection costs sh.34,000
Computerised shaper costs sh.48,120
Material handling costs sh.26,200
Budgeted wage rate is sh.7.50 per hour.
Overhead costs for inspection, computerised shaping and material handling are presently absorbed by product units using rates per direct labour hour.
Eleplanters Limited are considering implementing a system of activity based costing. Cost drivers for the production overheads have been identified as follows:
Inspections costs Number of production runs
Computerised shaper costs Shaping machine hours
Material handling costs Quantity of material handled
You are required to:

(a) Calculate the unit costs for each grade of planter using:
(i) the existing absorption costing approach**; (5 marks)**
(ii) the proposed ABC approach; **(7 marks)**
(b) Briefly explain merits and demerits of activity based costing as compared to tradional method **(8 Marks)**

Cost Volume Profit & Contribution: Question 2.
Summer Chair Designer plc manufactures a single product, with the following sales and production cost data:
Current planned sales 8,000 units
Selling price £550 per unit
Variable production costs £125 per unit
Fixed production cost £1,200,000 per annum

Question Three
The following standard data are available:

Product:		Able	Baker
Direct materials per unit		sh.10	sh.30
	Rate per hour		
Direct labour:			
Grinding	sh.5.0	7 hours	5 hours
Finishing	sh.7.5	15 hours	9 hours
Selling price - per unit		sh.206.5	sh.168
Budgeting production		1200 units	600 units
Maximum sales for the period		1500 units	800 units

Notes
(1) No closing stocks are anticipated.
(2) The skilled labour used for the grinding processes is highly specialised and in short supply, although there is sufficient to meet the budgeted production. However, it will not be possible to increase the supply for the budget period.

Required:
(a) Prepare a statement showing the contribution from each product based on the budgeted production. **(6 marks)**
(b) Prepare a statement showing the total contribution that could be obtained if the best use was made of the skilled grinding labour **(10 marks)**
(c) briefly explain the demrits of budgeting **(4 marks)**

Question Four
Newcastle Patterns Limited manufactures a single product that has the following standard cost specifications (per unit).

	sh.
Direct materials 15 square metres at sh.3 per square metre	45
Direct labour 5 hours at sh.4 per hour	20
	65

During June, the following actual data have been recorded in the production of 1,400 units:

Direct materials 22,000 square metres at sh.4 per square metre
Direct labour 6,800 hours at a total cost of sh.34,000

Required:

i) What is the materials usage variance? **(2 marks)**
ii) What is the materials price variance? **(2 marks)**
iii) What is the labour rate variance? **(2 marks)**
iv) What is the labour efficiency variance? **(2 marks)**

(b) The following relate to Buda Ltd,

Period	**Sales**	**Net profit**
1	1,200,000	600,000
2	1,800,000	1,200,000

Required:

(i) Calculate the company's Break –even point in sales **(4 mark)**
(ii) If the company's desired profit for period 3 is sh. 2,100,000 and the selling price is sh.500 per unit, calculate the number of units to be sold to achieve the desired profit for period 3 **(8 marks)**

Question Five

KOJOS ltd produces 2 products, product x and y and the following budget

has been prepared ·	X	Y	Total
Sales units	120,000	40,000	160,000
	Sh.	sh.	sh.
Sales @ Ksh. 6, ksh 10	720,000	400,000	1,120,000
V ar1able cost @ Ksb 4.50 Ksh 3	540,0000	120,000	660,000
	180,000	280,000	460,000
Total fixed cost			350,000
Profit			110,000

Required:

i) Compute the break-even point for each of the products **(3 marks)**

ii) The company proposes to change the sales mix in units to 1:1 for products x and y, advice the company on whether this change is desirable **(7 Marks)**

(b) BOKO Ltd produces tubes for motor vehicles. The following information was provided for the year 2024. Ksh.

Production	200,000	tubes
Sales	170,000	tubes

Production costs

Direct materials	2,400,000
Direct labour	600,000
Variable overheads	500,000
Fixed overheads	1,000,000

Selling and administration expenses

Sales Commission	350,000
General expenses	200,000
Overheads (fixed)	280,000

The company sells each tube at a price of Ksh. 450

Required:

i. Profit and loss account on the basis of absorption costing (4marks)

ii. Profit and loss account on the basis of marginal costing (4 marks)

iii. Reconcile the profit (2 marks)

Cost Volume Profit & Contribution: Question 2.
Summer Chair Designer plc manufactures a single product, with the following sales and production cost data:
Current planned sales 8,000 units
Selling price £550 per unit
Variable production costs £125 per unit
Fixed production cost £1,200,000 per annum
Calculate the following:

a) The profit at 6,000 units.
b) The break-even point in units.
c) The break-even point in pounds (£) of sales given that the fixed production costs increase to £1,500,000.
d) What is the margin of safety at the current level of planned sales.
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