



CERTIFIED PUBLIC ACCOUNTANT
ADVANCED LEVEL 2 EXAMINATIONS
A2.2: STRATEGIC PERFORMANCE MANAGEMENT
DATE: THURSDAY 29, AUGUST 2024
MARKING GUIDE AND MODEL ANSWERS

SECTION A

QUESTION ONE

Marking guide

1	(a)(i)	Calculation of the tangent	1
		Calculation of maximum units at the turning point	1
		Calculation of the highest profit	2
		Calculation of the lowest profit	1
		Strategies at decline phase(3*1)	3
		Total	8
1	(a)(ii)	Grouping research and development sub costs(8*0.5)	4
		Grouping decommissioning sub costs costs(4*0.5)	2
		Correct total cost	2
		Correct cost per unit	1
		Correct computed price	1
		Correct price differences	1
		Total	11

Model answers

1(a)

(i)

$$10X^2 - 50000X + 144,000 = 0$$

Finding the gradient line/tangent at the stagnant stage in year three.

$$dy/dx = 20X - 50,000 = 0$$

$$20X - 50,000 = 0$$

$$20X = 50,000$$

$$X = 50,000 / 20 = 2,500$$

Maximum profit (Turning point of the curve)

$$10(2500)(2500) - 50,000 + 144,000 = \text{FRW } 62,594,000$$

1a(ii) Cost gap = (Current market Price - Life cycle cost per unit)

$$= (3,800 - 8,363) = \text{FRW } 4,563$$

Decline phase

The decline stage begins in year three with the maximum profit of FRW 62,594,000 all the way to year five. This is a sharp decline. To increase profitability, the firm can apply the following strategies.

- i. Rebranding-Nguvu can be rebranded by Chan ganging the packaging in order to attract new sales
- ii. The firm can create new markets especially the export ones
- iii. The firm can work on its operations costs, invest in robotics and use cheap power in order to reduce the cost per unit leaving a Significant markup as profit
- iv. Minimize time to the market by speeding up the research process.
- v. Minimize breakeven point
- vi. Maximize the length of the life span of the product

- vii. Design or reengineer costs out of the product with an intention of reducing them without compromising on quality.

Product life cycle cost per unit, cost gap and grouping of costs.

Year	2024	2025	2026	2027	2028	Total
	FRW	FRW	FRW	FRW	FRW	
Enhancement costs of Nguvu power	3,000,000	2,000,000				5,000,000
Special equipment and additives used in research	85,000,000	25,500,000				110,500,000
Designing costs and remodeling costs	5,500,000	5,000,000				10,500,000
Payment paid to a laboratory that tested the product quality	500,000	500,000				1,000,000
Finance costs that directly funded the research and development	10,000,000	2,000,000				12,000,000
Original design and development of the of Nguvu power	40,000,000	8,000,000				48,000,000
Contingencies	35,000,000	4,000,000				39,000,000
Project management costs	14,000,000	-				14,000,000
Staff costs for the lead research consultant	7,000,000	3,000,000				10,000,000
Total research and development costs	200,000,000	50,000,000				250,000,000
Transporting equipment to their final storage point						1,400,000
Cost of disassembling equipment						1,000,000
Cost of planting tree after decommission the project						1,400,000

Year	2024	2025	2026	2027	2028	Total
	FRW	FRW	FRW	FRW	FRW	
Cleanup costs after decommissioning the project						1,200,000
Total decommissioning costs						-
Production cost per unit						
Material cost per unit(FRW)	200	200	200	200	200	
Total material cost	1,000,000	5,000,000	12,000,000	300,000	100,000	18,400,000
Labor cost per unit (FRW)	1,500	1,500	1,500	1,500	1,500	
Total labour cost	7,500,000	37,500,000	90,000,000	2,250,000	750,000	138,000,000
Overhead cost per unit(FRW)	300	280	220	250	450	
Total overhead cost	1,500,000	7,000,000	13,200,000	375,000	225,000	22,300,000
Clients additional cost per unit (FRW)	190	170	170	170	170	
Total client cost	950,000	4,250,000	10,200,000	255,000	85,000	15,740,000
Cost per unit	10,002,190	49,502,150	115,202,090	2,927,120	1,077,320	
Production and sales quantities	5,000	25,000	60,000	1,500	500	92,000
Total cost						699,440,000
Cost per unit						7,603
Mark up percentage						0
Mark up						760
Selling price per unit						8,363
Current selling price						3,800
Gain in sales value						4,563

Advice

The board should launch Nguvu power. The will generate an extra sales value of FRW 203 per unit.

1 (b)

Marking guide

1b	(i)	Formulation of the correct objective function	1
		Formulation of the correct constraints(6*0.5)	3
		Calculating coordinates(4*0.5)	2
		Showing the constraints on a Cartesian plan(4*0.5)	2
		Showing the scale	1
		Calculating correct profits at the corner points(4*0.5)	2
		Calculating maximum profits	1
1b	(ii)	Identifying non-binding constraints	1
		Defining shadow price and slack(2*1)	2
		Total marks	15

Model answer

Formulation of the objective function

The objective is to maximize the contribution

Let the total units of cream produced be C

Let the total units of lotion produced be L

Let Z be the total contribution for C and L

Therefore, the objective function

$$Z=9,000C+8,000L$$

Subject to the following constraints:

Silk powder	$3C+2L \leq 5,000,000$
Silk amino acid	$C+0.5L \leq 1,600,000$
Aloe vera	$4C+2L \leq 8,000,000$
Skilled labor	$4C+5L \leq 9,600,000$
Demand for lotion	$L \geq 2,000,000$ Maximum
Non negativity	$C \geq 0$
Non negativity	$L \geq 0$

Converting inequalities to equations and calculating coordinates

$$3C+2L=5,000,000$$

When

$$C=1,666,667 \quad L=0$$

$$C=0 \quad L=2,500,000$$

$$C+0.5L=1,600,000$$

When

$$C=1,600,000$$

$$L=0$$

$$C=0$$

$$L=3,200,000$$

$$4C+2L=8,000,000$$

When

$$C=2,000,000$$

$$L=0$$

$$C=0$$

$$L=4,000,000$$

$$4C+5L=9,600,000$$

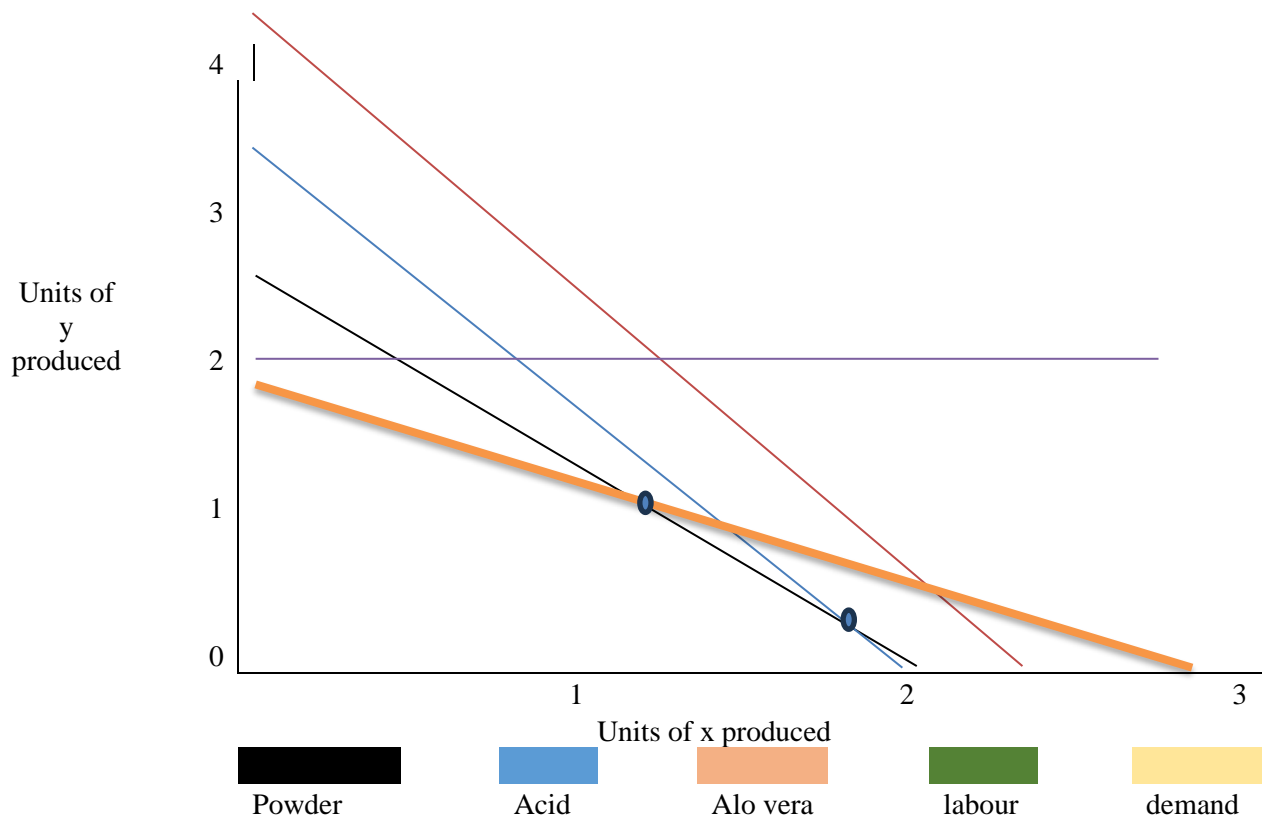
When

$$C=2,400,000$$

$$L=0$$

$$C=0$$

$$L=1,920,000$$



$$4C+5L=9,600,000$$

$$C+0.5L=1,600,000$$

The optimal production mix can be found by solving the two equations given for C and L. Where there is minimal productions given the constraints which is at

Silk amino acid, $C + 0.5L = 1,600,000$ (i)

Skilled labour, $4C + 5L = 9,600,000$(ii)

Multiplying the equation (i) by 10 produces:

$$10C + 5L = 16,000,000 \quad \text{(iii)}$$

$$4C + 5L = 9,600,000 \quad \text{.....(iv)}$$

Subtract equation (iv) for (iii):

$$6L = 6,400,000$$

$$L = 1,066,667$$

Substitute in equation (i) to find y

$$Y = 1,066,667$$

The optimal solution is when 1,066,667 lotions 1,066,667 creams are produced.

The contribution gained is Frw 18.133 billion:

$$C = 9,000C + 8,000L$$

$$C = (9000 * 1,066,667) + (8,000 * 1,066,667)$$

$$C = 18.133 \text{ billion}$$

If leaner answers this question using any other acceptable method, elect to award marks.

Non-binding constraints

Silk powder and maximum demand for lotion are non-binding. The two do not affect or pass through the feasible region.

Unskilled labor has no effect in our analysis. Its plenty in supply it's not a constraint.

Silk powder, Alo vera and demand are not binding variables and are not fully utilized, these are referred to as slack variables

On the other hand, Skilled labour and Amino acid and binding constraints, limiting production, a single unit of each that can be obtained externally would increase contribution, the increment in contribution is also known as shadow price of the limiting variable

1 (c)

Activity based costing

This is an alternative to traditional absorption costing.

ABC is a method of costing which involves identifying the costs of the main support activities and factors that drive the cost of each activity.

Ideas behind ABC

- i. Activities cause costs
- ii. Manufacturing products create demand for support activities
- iii. Costs are assigned to the products on the basis of the product's consumption of these activities.

Steps towards ABC

- i. Identify the organizations major activities
- ii. Use cost allocation and apportionment to charge overheads to each of these activities
- iii. Identify the factors which determine the size of the cost of an activity. These are known as cost drivers.
- iv. For each cost activity pool or activity cost center, calculate the absorption rate per unit of each cost driver.
- v. Charge the overhead cost to each product.

Reasons for using ABC

- i. Many resources used in most firms are currently non volume related.
- ii. The falling costs of information processing.

Throughput accounting

Throughput accounting supports a production management system which aims to maximize throughput and therefore cash generation from sales.

The concept of throughput accounting has been developed from the theory of constraints (TOC) as an alternative system of cost and management accounting in a just in time production environment.

Theory of constraints (TOC) is an approach to production management which aims to maximize sales revenue less material costs. It focuses on bottleneck (binding constraint) which act as a constraint to the maximization of throughput. Throughput is money generated from sales revenue less material cost.

- i. Steps towards theory of constraints.
- ii. Identify the constraint (bottleneck resource)
- iii. Make a decision on how to exploit the bottleneck in order to maximize throughput.
- iv. Synchronize everything else to the decision made in step II
- v. Evaluate the performance constraint.
- vi. If the constraint has shifted during any of the above steps, go back to step 1.

Throughput accounting concepts

- i. Profitability is determined based on the rate at which money is generated through sales.
- ii. The ideal inventory is zero. No stocks are kept in throughput accounting,
- iii. In the short run, all factory costs are fixed.

Conclusion

- i. Throughput accounting tends to give production priority to products that generates the highest throughput.
- ii. Throughput accounting has a short term focus.
- iii. ABC tends in improving all activities in a firm while throughput accounting tends to isolate some of the activities.
- iv. ABC policy is to reduce cost per unit while TOC focus is reducing overall costs of a firm.
- v. TOC ignores operation costs. ABC considers all operation costs.

1 (d)

Benchmarking

Benchmarking can be defined as a scientific approach of setting objectives which will act as targets in production management.

Benchmarking can also be defined as a concept that describes comparisons made in regard to a firm that represents best practice. Its related to performance evaluation. The directors of Muhima Group Ltd (MGL) recently met and agreed to benchmark their internal operations with those of Sohpyriah Ltd. This means Sohpyriah Ltd internal processes represent best practice.

Steps in benchmarking.

- i. Planning-Involves selecting an activity to be benchmarked,
- ii. Analysis-Identifying the extent to which the firm is under performing.
- iii. Action-Involved putting up measures towards improving performance.
- iv. Review-Monitoring progress against plans making changes where needed.

Muhima Group Ltd (MGL) has already identified a French conglomerate in similar business as a basis of benchmarking. This company has invested in cut edge technology and thus able to reduce its operations cost, staff costs and energy costs.

Looking at the analysis previously given by Sohpyriah Ltd, after automation of the processes and investment in solar power, the total costs reduced drastically.

Before automation

	\$	Percentage on sales
Turnover	1800000	
Energy costs	200,000	11%
Labour costs	295,000	16%
Operation costs	780,000	43%

After automation

	\$	Percentage on sales
Turnover	1,800,000	
Energy costs	10,000	1%
Labor costs	55000	3%
Operation costs	465,000	26%

Likewise, if Muhima Group Ltd (MGL) makes similar steps in uptake of automation and use of clean energy, in the long run, they can bring down the operations and production costs. Investments in robotic can also bring down labor costs in Muhima Group Ltd (MGL) which is a huge as compared to material and overhead costs per unit.

This benchmarking come with its equal measure of difficulties.

The major one being inability to get all data required in comparison.

Firms maintain a lot of secrets or information that be used against their competitive advantage.

Differences in management attitudes and level of skill and competences can hinder objective benchmarking.

National culture of being cost conscious and level of technology and its related costs can be another big obstacle to benchmarking.

SECTION B

QUESTION TWO

Marking guide

2a	(i)	Description	Marks	Total
		(Contribution/limiting factor)		
		Correct hours spent to produce a unit of;		
		Cabro stones	0.5	
		Building block	0.5	
		Tile	0.5	
		Correct total hours for actual production	1.5	
		Correct deficit hours	1	
		Correct variable overhead cost per unit	1.5	
		Correct total variable cost	1.5	
		Correct contribution	1.5	
		Correct contribution per limiting factor	1.5	
		Total		10
		Optimal production mix		
		Correct ranking(0.5*3)	1.5	
		Fixed cost per unit(0.5*3)	1.5	
		Total fixed cost (0.5*3)	1.5	
		Loss for optimal mix(0.5*3)	1.5	
		Total		6
2a	(ii)	COST OF MANUFACTURING-VIRUNGA		
		Calculating the correct labor cost per unit	0.5	
		Calculating the total overhead cost per unit	0.5	
		Calculating variable overhead cost per unit	1	
		Calculating the total variable cost per unit	1	
		Calculating the cost saved	1	
		Total		4
		Comment that they should not cease production	1	
		Comment on why NCL should not worry	1	
		Correct description of costs used in make or buy decision(2*1)	2	
		State two non-cost factors that should be considered in make or buy decisions(2*0.5)	1	
		Total		5
		Total		25

Model answers

(a)	CABRO	BUILDIN	TILE	TOTAL
	STONE	G		
		BLOCK		
UNITS PRODUCED	20,000	30,000	50,000	
LABOR COST PER UNIT	6,000	8,000	4,000	
LABOR RATE PER HOUR	2,000	2,000	2,000	
HOURS SPENT TO PRODUCE A UNIT OF EACH PRODUCT	3	4	2	
TOTAL HOURS FOR ACTUAL PRODUCTION	60,000	120,000	100,000	280,000
AVAILABLE LABOR HOURS				200,000
DEFICIT OF LABOR HOURS				80,000
PRODUCTION ANALYSIS	CABRO	BUILDING	TILE	
	STONE	BLOCK		
PRICE (FRW)	14,000	18,500	20,400	
VARIABLE COSTS				
MATERIAL COST	3,000	4,000	5,000	
LABOUR COST	6,000	8,000	4,000	
OVERHEAD COSTS	10,000	15,000	18,000	
PERCENTAGE OF VARIABLE OVERHEAD	0	0	0	
VARIABLE OVERHEAD COSTS	3,000	4,500	5,400	
TOTAL VARIABLE COSTS	12,000	16,500	14,400	
CONTRIBUTION	2,000	2,000	6,000	
LIMITING FACTOR PER UNIT	3	4	2	
CONTRIBUTION/LIMITING FACTOR PER UNIT	667	500	3,000	
RANK		2	3	1
PRODUCTION MIX				

RANK	PRODUCT	HRS/UNIT	UNITS	TOTAL HRS
1	TILE	2	50,000	100,000
2	CABRO STONE	3	20,000	60,000
3	BUILDING BLOCK	4	10,000	40,000
	CABRO STONE	BUILDING BLOCK	TILE	TOTAL
OPTIMAL MIX	20,000	10,000	50,000	
CONTRIBUTION PER UNIT (FRW)	2,000	2,000	6,000	
TOTAL CONTRIBUTION	40,000,000	20,000,000	300,000,000	
FIXED COST PERCENTAGE	0.7	0.7	0.7	
FIXED COST PER UNIT	7000	10500	12600	
TOTAL FIXED COST	140,000,000	105,000,000	630,000,000	
PROFIT -OPTIMAL MIX (FRW)	(100,000,000)	(85,000,000)	(330,000,000)	(515,000,000)
COST OF MANUFACTURING-VIRUNGA CONSTRUCTION LTD				
MATERIAL COST PER UNIT	3,500			
LABOR RECOVERY RATE	0.6			
LABOR COST	2,100			
OVERHEAD RECOVERY RATE	1.8			
TOTAL OVERHEAD	3,780			
VARIABLE OVERHEAD RATE	0.65			
VARIABLE OVERHEAD	2457			
TOTAL VARIABLE COST PER BUILDING BLOCK	8,057			
BUYING PRICE	18,500			
COST SAVED	10,443			

Nyamagabe construction Ltd (NCL) should not cease production of any of the three products. It will become worse of in terms of losses incase such a decision is taken. Amongst the three products, building stone gives the lowest contribution per limiting factor thus a good candidate of being dropped incase such a decision has to be made.

Nyamagabe construction Ltd (NCL) should worry about the thoughts of the board of Virunga super house Ltd since their marginal costs of production are less than the price Nyamagabe construction Ltd (NCL) is charging. NCL has a direct competitor who was previously a major customer.

The following are features of costs that can be used in buy or make decisions

- i. Marginal costs-variable costs
- ii. Cash flows-inflows or outflows
- iii. Costs that change.
- iv. Any other correct description.

Non cost factors to consider in buy or make decisions

- i. Quality
- ii. What to with freed staff and Assets-Psychological effect on workers.
- iii. Reliability of the external supplier,
- iv. Any other corrected answer given
- v. Level of competition

If leaner answers this question using any other explanations e.g. based on quality of the product, competition etc. elect to award marks.

QUESTION THREE

Marking guide

3(a)	Description	Marks	Total
	Calculation of the correct contribution in the fixed budget	1	
	calculation of the correct profit in the fixed budget	1	
	Total		2
	Calculation of the actual contribution	1	
	Calculation of the actual profit	1	
	Total		2
	Calculation of correct flexed sales figure	0.5	
	Calculation of correct flexed material cost figure	0.5	
	Calculation of correct flexed labor cost	0.5	
	Calculation of correct flexed variable overhead cost	0.5	
	Calculation of correct flexed fixed overhead cost	0.5	
	Total		2.5
	Calculation of the correct sales variance	0.5	
	Calculation of correct material cost variance	0.5	
	Calculation of correct labor cost variance	0.5	
	Calculation of correct variable overhead cost variance	0.5	
	Calculation of correct fixed overhead cost variance	0.5	2.5
	Comparison		
	Fixed budget verses actual variances and		
	Flexed budget verses actual variances		
	Sales	0.5	
	Material cost	0.5	
	Labor cost	0.5	
	Variable overhead cost	0.5	
	Fixed cost	0.5	2.5
	General justification of management accountants behaviour		
	Each right comment award 1 mark(Maximum 3 comments)	3	
	Neatness of presentation(Discretion of the marker)	0.5	
	Total		3.5
	Total		15
3(b)	Conversion of actual minutes paid to hours	0.5	
	Conversion of actual minutes worked to hours	0.5	
	Calculation of correct labor idle time variance	1	

	Total		2
3(c)	Description of		
	Current standards	2	
	Basic standard	2	
	Attainable standard	2	
	Ideal standard	2	
	Total		8
	Total		25

Model answer

3	(a)			PRICE/UNIT
		FIXED BUDGETED PROFIT STATEMENT		COST/UNIT
		SALES	200,000,000	100,000
		LESS COSTS		
		MATERIAL COST	80,000,000	100,000
		LABOR COST	40,000,000	100,000
		VARIABLE OVERHEAD COST	20,000,000	100,000
		TOTAL MARGINAL COST	140,000,000	100,000
		CONTRIBUTION	60,000,000	100,000
		FIXED COST	50,000,000	100,000
		BUDGETED PROFIT	10,000,000	100,000

ACTUAL PROFIT STATEMENT					
SALES	380,000,000				
LESS COSTS					
MATERIAL COST	285,000,000				
LABOR COST	95,000,000				
VARIABLE OVERHEAD COST	38,000,000	190,000			
TOTAL MARGINAL COST	418,000,000				
CONTRIBUTION	(38,000,000)				
FIXED COST	189,284	(190,000-140,000)/10,000*20,000=FRW 80,000+109,284			
ACTUAL LOSS	(38,189,284)				

x	y	xy	x ²
90,000	175,000	15,750,000,000	15,750,000,000
50,000	165,000	8,250,000,000	8,250,000,000
40,000	125,000	5,000,000,000	5,000,000,000
64,000	170,000	10,880,000,000	10,880,000,000
244,000	635,000	39,880,000,000	39,880,000,000
Y=a+bx			
A=109,284			
B=0.81			

FLEXED BUDGET	ACTUAL	FLEXED	VARIANCE
SALES	390,000,000	380,000,000	(10,000,000)
LESS COSTS			
MATERIAL COST	285,000,000	152,000,000	(133,000,000)
LABOR COST	95,000,000	76,000,000	(19,000,000)
VARIABLE OVERHEAD COST	38,000,000	38,000,000	-
TOTAL MARGINAL COST	418,000,000	266,000,000	(152,000,000)
CONTRIBUTION	(38,000,000)	114,000,000	152,000,000
FIXED COST	50,000,000	189,284	(49,810,716)
ACTUAL PROFIT	(38,189,284)	64,000,000	102,189,284

3(b) There is no idle time since the hours paid were less than those worked, meaning idle time was not

paid for so it irrelevant in the analysis

Comment on the behaviour of the management accountant

The management accountant is justified in showing his anger and frustrations and annoyance because; The initial variance analysis conducted was in relation to the fixed budget and the actual budget-This comparison is erroneous and cannot give a good picture of the performance of Rukundo Public Ltd Company (RPLC).

The correct analysis should be between the flexed budget and the actual result. This analysis gives the correct picture of the performance of Rukundo Public Ltd Company (RPLC as shown in the analysis.

Description of standards

Standard costs are benchmarks for variance analysis. There are four main standards:

- i. Ideal standards-these standards are based on perfect working conditions. It's not possible to find such an environment in any firm.
They help in motivating employees to improve their performance with more responsibility.
- ii. Basic standards-these are standards which have been in use for a long duration of time without being adjusted. This standard does not reflect the current working conditions of a firm.
They provide a good basis for comparison with actual results over a number of year.
- iii. Current Standards-These are standards which take into consideration of current working conditions and inefficiencies e.g. disruptions. This standard is realistic.
- iv. Attainable Standards-These are standards which are attainable under efficient working conditions. These standards do not attempt to improve on the current level of efficiency or cost.

QUESTION FOUR

Marking Guide

	Total		2
	Calculation of the correct material mix variance for material AYE	1	
	Calculation of the correct material mix variance for material BEE	1	
	Calculation of the correct material mix variance for material CEE	1	
	Calculation of the correct total material mix variance	1	
	Total		4
	Material yield variance		
	Calculation of the correct standard cost per unit	1	
	Calculation of the correct material yield variance	2	
	Total		3
	Activity usage variance-Deliveries		
	Calculation of correct standard quantity in the actual production	1	
	Calculation of correct standard deliveries	0.5	
	Calculation of the correct std deliveries for actual production	1	
	Calculation of the correct activity usage variance-deliveries	1	
	Total		3.5
	Activity usage variance-dispatches		
	Calculation of the correct standard dispatches	0.5	
	Calculation of the correct standard dispatches in actual production	1	
	Calculation of standard dispatch cost per dispatch	1	
	Calculation of the correct activity usage variance-deliveries	1	
	Material price planning variance	2	
	Material price operating variance	2	
	Material usage operating variance	2	
	Total		9.5
4(b)	Clear explanation of any three points (Each award 1 marks)		
	Mention that the performance prism is a framework	1	
	Mention of the five facets of the performance prism	1	
	Brief explanations on how the performance prism can be used by CSCL	1	3
	Total		25

Model answers

ADVANCED VARIANCES							
MATERIAL MIX VARIANCE							
MMV=(REVISED STD MIX-ACTUAL MIX)							
STANDARD PRICE	WEIGHTS	REVISED MIX	ACTUAL MIX	DIFFERENCE	SP	VARIANCE	
AYE	0.32	1,600	2,850	(1,250)	50,000	(62,500,000)	ADV
BEE	0.50	2,500	1,250	1,250	40,000	50,000,000	FAV
CEE	0.40	2,000	2,000	-	35,000	-	FAV
TOTAL	1.22	6,100	6,100			(12,500,000)	FAV
MATERIAL YIELD VARIANCE							
(ACTUAL YIELD-STD YIELD)STANDARD COST							
	WEIGHTS	SP	WEIGHTED				
AYE	0.32	50,000	16,000				
BEE	0.5	40,000	20,000				
CEE	0.4	35,000	14,000				
STANDARD COST PER UNIT			50,000				
STANDARD YIELD							
TOTAL QUANTITY OF MATERIAL	QTY	SQ PER OUTPUT	STD YIELD				
AYE	2850	0.32					
BEE	1250	0.5					
CEE	2000	0.4					
	6100	1.22	5,000				

ACTUAL YIED			8,200					
DIFFERENCE			3,200					
STANDARD COST PER UNIT			50,000					
MATERIAL YIELD VARIANCE			160,000,000					F A V
OVERHEAD EXPENDITURE VARIANCE	BUDGETE D OH	ACTUAL OH	VARI ANCE					
OHEXPV=BOH-AOH	FRW	FRW	FRW					
DELIVERIES	40,000,000	50,000,000						
DISPATCHES	80,000,000	90,000,000						
OHEXPV=BOH-AOH	120,000,000	140,000,000	(20,000,000)					A D V
ACTIVITY USAGE VARIANCES(AUV)								
ACTIVITY USAGE VARIANCES(AUV)- DELIVERIES								
AUV(D)=(SD-AD)STD COST PER DELIVERY								
STANDARD INPUT OF MATERIAL	1.22							
STANDARD OUTPUT	8,000							
STANDARD QUANTITY	9,760							
STD QUANTITY PER DELIVERY	800							
STANDARD DELIVERIES	12							
STD DELIVERIES FOR ACTUAL PRODUCTION								
(8,200*12.2/8,000)	13							
ACTUAL DELIVERIES	10							

DIFFERENCE	3							
STANDARD COST PER DELIVERY	50,000							
AUV(D)=(SD-AD)STD COST PER DELIVERY	150,250	FAV						
TOTAL STD COST OF DELIVERIES	40,000,000							
TOTAL DELIVERIES	800							
STD COST PER DELIVERY	50,000							
ACTIVITY USAGE VARIANCE(AUV)-DISPATCHES								
TOTAL STD COST OF DISPATCHES	80,000,000							
QTY PER DISPATCH	400							
STD COST PER DISPATCH	200,000							
STD QUANTITY TO BE PRODUCED	8,000							
STD QTY OF DISPATCH	400							
STD DISPTACHES	20							
STD DISPTACHES FOR ACTAUL PRODUCTION								
(8,200*20/8,000)	21							
ACTUAL DISPATCHES	23							
DIFFERENCE	(2)							
STD COST PER DISPATCH	200,000							
ACTIVITY USAGE VARIANCE(AUV)-DISPATCHES	(400,000)	ADV						
Material price planning variance								
Original standaed price	40,000							

Revised standard price	45,000							
Material price planning variance	(5,000)							
Actual quantity	2,600							
Total material price planning variance	(13,000,000)	ADV						
Material price operating variance								
2,600litres of materials should cost 2600*45,000	117,000,000							
They did cost	115,400,000							
Material price operating variance	1,600,000	FAV						
Material usage operating variance								
8,200 units of Amelia should use 8,200*0.5 Liters of Bee	4,100							
They did use(Litres of Bee)	2,600							
Variance	1,500	FAV						
Original standard price per Kg	40,000							
Material usage operating variance	60,000,000	FAV						

The comment should be either the variance is Adverse (ADV) or Favorable (FAV). Some learners may opt to use the term Unfavorable (UFAV) instead of Favorable (FAV).

4.
(b)

The performance prism is a second-generation measurement framework designed to assist in performance measurement selection. Its beneficial since it can assist the management team is selecting the right measure of performance.

The performance prism contains five facets:

- i. Stakeholder satisfaction.
- ii. Strategies facet.
- iii. Process facet.
- iv. Capabilities facet.
- v. Stakeholder contribution facet.

Cardel industrial soap company Ltd (CSCL) can apply this framework in understanding each stakeholder (customers, banks, government, creditors staff, shareholders and potential investors) needs and then develop strategies that can satisfy this needs. It emphasizes a two-way stakeholder relationship. It's a shift from reliance of Financial performance indicators.

- i. Some farmers have started uprooting this trees and replacing them with food crops -This is in relation to low prices offered by the firm. The firm should look for ways of paying better prices to the farmers.
- ii. The revision of the prices will motivate farmers into not going on with uprooting exercise.
- iii. A survey done by the ministry of agriculture have found that Cardel industrial soap company Ltd (CSCL) is involved in massive deforestation. This is a risk to the firm. Court cases and multiple concern from lobbyists can injure operations. The firm should look for ways of supporting afforestation exercise,
- iv. The staff are ever complaining of salary cuts and delays. Recently they lost key staff to a competitor in Zambia-The firm should pay their staff on time and stop salary cuts in order to motivate them.

End of Marking Guide and Model Answer