CERTIFIED ACCOUNTING TECHNICIAN

STAGE 3 EXAMINATIONS

<u>S3.2: MANAGEMENT ACCOUNTING</u>

MARKING GUIDE AND MODEL ANSWERS

SECTION A

Marking Guide

QN	Answer	Marks
1	C	2
2	B	2
3	A	2
4	D	2
5	A	2
6	C	2
7	A	2
8	D	2
9	B	2
10	B	2
		20

Model Answers

QUESTION ONE

The correct answer is C

i) Describes characteristic of financial accounts
ii) Describes characteristic of management accounts
iii) Describes characteristic of management accounts
iv) Describes characteristic of financial accounts

QUESTION TWO

The correct answer is B

A is not correct because it defines primary data
C is not correct because it describes secondary data
D is not correct because it describes continuous data

QUESTION THREE

The correct answer is A

Target cost= selling price- target profit

Selling price= 27,500,000

Profit mark-up= 25%

We need profit margin which is profit on sales

Profit margin= 25/100+25= 25/125=20%

Profit= 20%*27,500,000=5,500,000

Target cost= 27,500,000-5,500,000=22,000,000

B is not correct because it uses profit markup instead of margin then the markup added to selling price
C is not correct because it uses margin then margin is added to selling price
D is not correct because it uses markup instead of margin then markup is deducted from selling price

QUESTION FOUR

The correct answer is D

Details	A	B
Sales units	8000	6000
Less opening inventory units	2500	1800
Add closing inventory units	3000	1500
Production units	8500	5700

A is not correct because it adds opening inventory to sales of A and deducts closing inventory

B is not correct because its production budget of A and not B

C is not correct because it adds opening inventory to sales of B and deducts closing inventory

QUESTION FIVE

The correct answer is A

Details	A	B
Production units	8,500	5,700
Quantity per unit	15	18
Materials usage budget	127,500	102,600

B is not correct because its materials usage of B

C is not correct because it uses 7,500 as production units of A instead of 8,500 units then multiplied by 15

D is not correct because it used 6,300 as production units then multiplied by 18

QUESTION SIX

The correct answer is C

A is not correct because multistage is a probability sampling method

B is not correct because cluster is a probability sampling method

D is not correct because stratified is a probability sampling method

QUESTION SEVEN

The correct answer is A

b=2.6

a= ∑y/n-b∑x/n

a= 400/5-2.6*100/5=28

Total= (2.6*x) +28

Total cost = (2.6*20) +28=80

B is not correct because it uses total cost = (5 * 20) + 28 = 128

C is not correct because it uses total cost = (28 * 20) + 2.6 = 562.6

D is not correct because it uses total cost = (2.6 * 28) + 20 = 92.8

QUESTION EIGHT

The correct answer is D

A is not correct because it’s the best basis of apportionment of rent or rates

B is not correct because it is the best basis of apportionment of machine costs

C is not correct because it is the best basis of apportionment of material handling costs

QUESTION NINE

The correct answer is B

A is not correct because it explains value analysis

C is not correct because it explains total quality management

D is not correct because it explains target cost

QUESTION 10

The correct answer is B

A is not correct because it explains efficiency

C is not correct because it explains economy

D is not correct because it explains efficiency like A

SECTION B

QUESTION 11

Marking Guide

QN	Description	Marks
a	Reapportionment using repeated distribution method	
	2 marks awarded for correct posting to each department	8
b	Difference between general and specific overheads	
	Correct explanation of each overhead (0.5 mark *2)	1
	Example given for each overhead (0.5 mark *2)	1
	Total	**10**

Model Answers

a) Reapportionment of overheads using repeated distribution method

Description	Amount	Production department		Service department		
		A	B	C	X	Y
	FRW "000"	FRW "000"	FRW "000"	FRW "000"	FRW 000"	FRW 000"
Allocated and apportioned overheads	1,150,000	450,000	280,000	320,000	60,000	40,000
Reapportion X (30%/45%/15%/10%)		18,000	27,000	9,000	- 60,000	6,000
						46,000
Reapportion Y (30%/25%/20%/25%)		13,800	11,500	9,200	11,500	- 46,000
					11,500	
Reapportion X (30%/45%/15%/10%)		3,450	5,175	1,725	- 11,500	1,150
						1,150
Reapportion Y (30%/25%/20%/25%)		345.0	287.5	230.0	287.5	- 1,150.0
					287.50	
Reapportion X (30%/45%/15%/10%)		86.25	129.38	43.13	- 287.50	28.75
						28.75
Reapportion Y (30%/25%/20%/25%)		8.55	7.13	5.70	7.13	- 28.75
					7.13	-
Reapportion X (30%/45%/15%/10%)		2.14	3.21	1.07	- 7.13	0.71
					-	0.71
Transfer Y to A		0.71	-		-	- 0.71
Reapportioned overhead costs	1,150,000	485,692.65	324,102.22	340,204.90	-	-

b) Differences between general and specific overheads, giving examples

- **General overhead:** Are overhead costs incurred in more than one cost center. An example of general overhead is rent. The business pays rent as a lump sum for all the departments. The landlord receives one amount for all the departments. General overheads should therefore be apportioned (shared out to all the departments).
- **Specific overhead:** Overheads incurred in the individual departments. An example is the salary of indirect workers. The business knows where each employee works, and the cost can be transferred to that specific cost center. Specific overheads should be allocated (transferred to their respective departments)

QUESTION 12

Marking Guide

QN	Description	Marks
a	Purposes of setting up robust internal control system	
	Award 2 marks each for any three explained points	6
b	Difference between cost control and cost reduction	
	2 marks awarded each for a clear distinction between the two	4
	Total	**10**

Model Answers

a) Purposes of setting up robust internal control systems

- Reduce systemic weaknesses in the accounting system, including the scope for errors. Errors will be significantly reduced with robust internal control systems
- Reduce the risk of loss or fraud. Mitigating measures are set by the systems in place and therefore staff will know that there is a system to detect any suspect occurrence
- Ensure that the accounting system operates appropriately. Checks and balances ensure the system is not faulty and used correctly
- Ensure the accounting system can change in line with the environment and organizational requirements
- Ensure that ethical standards are met within an organization

Note: Organizations need to have strong internal controls to prevent fraud from taking place, with particular focus on the importance of the segregation of duties within the accounting function.

b) Difference between cost control and cost reduction as used in cost management

Cost control

Cost control is concerned with regulating the costs of operating a business and keeping costs within acceptable limits.

Cost reduction

Cost reduction is a planned and positive approach to reducing expenditure.
Cost reduction should not be confused with cost control. The limits will usually be the standard cost or target cost limits set out in the formal operational plan or budget. If actual costs differ from planned costs by a significant amount, cost control action will be necessary. You might like to think of cost control as an exercise in good housekeeping; the wasteful use of valuable resources is avoided and efficiency and cost consciousness are encouraged.

Cost reduction, in contrast, starts with an assumption that current cost levels, or planned cost levels, are too high, even though cost control might be good and efficiency levels high.

SECTION C

QUESTION 13

Marking Guide

QN	Description	Marks
a	Financial performance of the business	
	Explanation of growth	2
	Explanation of profitability	2
	Explanation of liquidity	2
	Clear conclusion which summarises performance	2
	Maximum marks awarded in part a	8
b	Non-financial performance of the business	
	3 marks awarded for each of the perspectives:	
	Customer knowledge	3
	Learning and growth	3
	Internal business processes	3
	Maximum marks awarded in part b	9
c	Advantages of non-financial information	
	1 mark awarded for well explained points	3
	Total	20

Model Answers

a) Using financial information only, comment on financial performance of the business (growth, profitability and liquidity)

Growth: There was a 5.1% ({945,500 – 900,000}/ 900,000 * 100) growth in sales between the year 2021 and 2022. The growth in sales was caused by the increase in average fee level. However, the increase in the fees led to a decrease in number of customers.

Profitability: The gross profit margin in 2021 was 42% (378,000 / 900,000 * 100) while in 2022 it was 40% (378,200 / 945,500 * 100). There was therefore a decrease in gross profit margin by 2% (42% - 40%) between the two years. This may have been caused by increase in cost of offering the services.

The profit after tax margin was 12.2% (109,620 / 900,000) in 2021 while in 2022 the profit after tax margin was 10% (94,550 / 945,500). This is an indicator that the administrative expenses and finance costs had increased thus this may have caused the decrease in profit margin by 2.2% (12.2% - 10%) between the two years. However, even the profit margin of 12.2% in 2021 is relatively low. It shows that costs account for 87.8% (100% - 12.2%) of revenue.

Liquidity: Receivables period reduced by 4 days between 2021 and 2022. Receivables period measures the number of days it takes the business to collect cash from the customers. The shorter the period the more liquid the business is. Reduction in the period enables the business to have more cash to meet its obligations as they fall due.

The industry receivables period is higher than the receivables period of the business. This shows that the business is more efficient in collection of its debts from the customers compared to competitors.

Conclusion

In terms of financial performance Smart Accounting Ltd performance in 2022, there was a growth in revenue between the two years. The level of profitability declined for both gross profit and profit after tax margin. Finally, in terms of liquidity the business performed better in 2022.

b) Using non-financial information, comment on the performance of the business. Include comments on customer knowledge, learning and growth, internal business processes

Customer knowledge: There was a decrease in the number of customers by 18.7% ({750 – 610} / 750). This decrease may have been caused by the increase of the fees charged from an average of Frw 1,200,000 to Frw 1,550,000. There was an increase in fees by 29.2%. This is a significant increase and it may have forced some clients to drop out.

The market share has also decreased by 6% (20% - 14%). This means that there may have been an increase in the number of competitors or the increase in fees may have forced the customers to move to competitors.

Learning and growth: There was a decrease in percentage of revenue from non-core work by 1% (5% - 4%). This may be tied to decrease in market share and also decrease in number of customers. It may be that the regular customers were also giving out non-core business to Smart Accounting Ltd. When the number of customers declined, it also led to decline of non-core services.

When the percentage of revenue from non-core work is compared to industry average, it shows that the business was performing poorly as the industry average is increasing from 25% TO 30% WHILE Smart percentage is decreasing from 5% to 4%.

The employee retention rate has decreased from 80% to 60%, this means that Smart Accounting Ltd is having some challenges which makes employees to leave. This low retention rate may also affect performance of the business and may have also contributed to the decline in the number of customers.

Internal business processes: Average job completion time has decreased by 3 weeks. Even though the decrease in the completion time is a good performance indicator, if robust internal controls are not put in place it may lead to poor delivery of services. This may therefore explain the increase in percentage of errors between the two years.

c) Explain any three advantages of non-financial information as a performance measure for Smart Accounting Ltd

- They focus the attention of management on the areas such as quality which will lead to better long-term performance. Quality is an important aspect of performance measurement which is not always captured by financial performance measure. If the quality of products and services are poor, this will also eventually affect financial performance in the long run.

- Using only financial performance measures may lead to excessive cost cutting that may harm the business in the long term. Cost cutting in the short term may improve financial performance but at the expense of long-term performance of the business.
- Non-financial reports can generally be compiled more quickly than financial reports. These performance measures do not need detailed financial reports as they can be extracted from the normal transaction postings and even observation of what happens.

QUESTION 14
Marking guide

Details	Marks
a) preparation of marginal costing profit statement	
Sales for the period 1	0.5
Sales for the period 2	0.5
Variable cost of sales for the period 1	0.5
Variable cost of sales for the period 2	0.5
Variable production cost per unit (W1)	1
Variable selling cost for period 1	0.5
Variable selling cost for period 2	0.5
Contribution for period 1	0.5
Contribution for period 2	0.5
Fixed production cost for period 1	0.5
Fixed production cost for period 2	0.5
Fixed non production cost (selling) for period 1	0.5
Fixed non production cost (selling) for period 2	0.5
Marginal costing profit/loss for period 1	0.5
Marginal costing profit/loss for period 2	0.5
Maximum marks awarded for part a	8
b) preparation of absorption costing profit statement	
Sales for the period 1	0.5
Sales for the period 2	0.5
Cost of sales for period 1	1
Cost of sales for period 2	1
Total production cost per unit (W2)	1
Gross profit for period 1	0.5
Gross profit for period 2	0.5
Non production fixed cost for period 1	0.5
Non production fixed cost for period 2	0.5
Non production variable cost for period 1	0.5
Non production variable cost for period 2	0.5
Absorption costing profit/loss for period 1	0.5
Absorption costing profit/loss for period 2	0.5
Maximum marks for part b	8
c) reconciliation of profits	
Computation of change in inventory period 1	0.5
Computation of change in inventory period 2	0.5
Computation of difference in profits period 1	0.5
Computation of difference in profits period 2	0.5
Balancing of AC and MC profits/loss for period 1	1
Balancing of AC and MC profits/loss for period 2	1
Maximum marks for part c	4
Total Marks	**20**

Model Answer

a) Marginal Costing profit statement for period 1 and 2

Muvumba ltd marginal costing profit statement

Details	Period 1	Frw	Frw	Period 2	Frw	Frw
Sales	(20,000*8,000)		160,000,000	(27,500*8,000)		220,000,000
Variable cost of sales						
Opening inventory	(0*4,000)			(5,000*4,400)	22,000,000	
Add production	(25,000*4,400)	110,000,000		(25,000*4,400)	110,000,000	
Less closing inventory	(5,000*4,400)	22,000,000	88,000,000	(2,500*4,400)	11,000,000	121,000,000
Less variable selling costs	(20,000*600)		12,000,000	(27,500*600)		16,500,000
Contribution			60,000,000			82,500,000
Less Fixed costs						
Production		40,000,000			40,000,000	
Non production (selling)		36,000,000	76,000,000		36,000,000	76,000,000
Profit/loss			(16,000,000)			6,500,000

W1, Variable production cost per unit= 1,200+2,400+800= 4,400

b) Absorption Costing profit statement for period 1 and 2

Muvumba ltd absorption costing profit statement

Description	Period 1	Period 1 Frw	Period 2	Period 2 Frw
Sales	(20,000 * 8,000)	160,000,000	(27,500 * 8,000)	220,000,000
Opening inventory	(0 * 6,000)	-	(5,000 * 6,000)	30,000,000
Add: Production	(25,000 * 6,000)	150,000,000	(25,000 * 6,000)	150,000,000
Less: Closing inventory	(5,000 * 6,000)	30,000,000	(2,500 * 6,000)	15,000,000
Gross profit		40,000,000		55,000,000
Fixed costs		36,000,000		36,000,000
Variable costs	(20,000 * 600)	12,000,000	(27,500 * 600)	16,500,000
Absorption costing profit/loss		(8,000,000)		2,500,000

W2, Total production cost per unit = 4,400+1,600= 6,000

c) Reconciliation of marginal costing and absorption costing profits for period 1 and 2

Details	Workings	Period 1		Workings	Period 2
Opening inventory units				5000	
Closing inventory units		5,000		2500	
Change in inventory	(0-5,000) increase	5,000	(5,000-2,500) decrease	2500	
AC profit higher than MC when there is increase			MC higher when decrease		
MC loss		(16,000,000)	MC loss		6,500,000
Add: difference in profit	(5,000*1,600)	8,000,000	Less difference	(2,500*1,600)	4,000,000
AC profit/loss		(8,000,000)			2,500,000

QUESTION 15

Marking Guide

Details	Marks
a) Explanation of approaches to budgeting and functional budgets	
i) Explanation of incremental budget	2
ii) Explanation of rolling budget	2
iii) Explanation of activity based budget	2
iv) Explanation of zero based budget	2
v) Explanation of material usage budget	2
Maximum marks awarded for part a	10
b) Preparation of cash budget	
Calculation of total cash inflow	1
Correct allocation of purchases in arrears of one month	1
Allocation of salaries	0.5
Calculation of total cash inflows	1
Calculation of surplus / (deficit)	1.5
Accounting for all opening cash balances	1
Accounting for all closing cash balances	1
Calculation of cash received from sales for Oct, Nov & Dec (W1)	1.5
Calculation of cash paid for fixed overheads, depreciation deducted (W2)	1.5
Maximum marks awarded for part b	10
Total	20

Model Answer

a) Explanation of the following approaches to budgeting

i) Incremental budget: A budget that is prepared by adjusting the previous period actual figures by either adding or subtracting a percentage to obtain the current period's budget. It is the most appropriate to use if the primary cost drivers do not change from period to period

ii) Rolling budget: A rolling budget or continuous budget is a budget that is updated on a regular, ongoing basis. Gradually extend the current year's budget by adding a new budgeting period as the previous period expires, such as anticipating the budget for the next month or quarter.

iii) Activity-based budget: An activity-based budget is a top-down type of budget that determines the amount of inputs required to support the targets or outputs set by the business. The business will need to first determine the activities that need to be undertaken to meet the target and then find out the costs of carrying out these activities.

iv) Zero-based budget: Zero-based budget starts with the assumption that all department budgets are zero and must be rebuilt from scratch. Managers must be able to justify every single expense. No expenditure is automatically allowed.

v) Material usage budget: Material usage budget is a type of functional budget that is prepared by identifying the quantity of goods to be produced, then multiplying by the quantity consumed or used per unit produced.

b) Cash budget for three months from October 2023 to December 2023

Nyange Ltd

Cash budget for the year ended 31st December 2023

	October	November	December	Total
CASH INFLOW	**Frw**	**Frw**	**Frw**	**Frw**
Sales (W1)	2,040,000	2,062,000	2,064,000	6,166,000
Total cash inflow	2,040,000	2,062,000	2,064,000	6,166,000
CASH OUTFLOW				
Purchases	1,150,000	1,280,000	1,160,000	3,590,000
Salaries	240,000	240,000	250,000	730,000
Fixed overheads (W2)	360,000	360,000	405,000	1,125,000
Total cash outflows	1,750,000	1,880,000	1,815,000	5,445,000
Surplus / (Deficit)	290,000	182,000	249,000	721,000
Add: Opening cash balance	600,000	890,000	1,072,000	
Closing cash balance	890,000	1,072,000	1,321,000	

W1

Cash received from sales	August	September	October	November	December
	Frw	**Frw**	**Frw**	**Frw**	**Frw**
Credit sales	1,200,000	1,450,000	1,600,000	1,620,000	1,500,000
Same Month (60%)	720,000	870,000	960,000	972,000	900,000
After One Month (50% of Balance)	-	240,000	290,000	320,000	324,000
After Two Months (50% of Balance)	-	-	240,000	290,000	320,000
Cash received from credit sales	720,000	1,110,000	1,490,000	1,582,000	1,544,000
Cash sales	-	500,000	550,000	480,000	520,000
Total cash received	720,000	1,610,000	2,040,000	2,062,000	2,064,000

W2

Cash paid for fixed overheads	August	September	October	November	December
	Frw	**Frw**	**Frw**	**Frw**	**Frw**
Fixed overheads incurred	-	400,000	400,000	400,000	450,000
Less Depreciation (10%)	-	40,000	40,000	40,000	45,000
Cash paid for fixed overheads	-	360,000	360,000	360,000	405,000

END OF MARKING GUIDE AND MODEL ANSWERS