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CERTIFIED ACCOUNTING TECHNICIAN
STAGE 3 EXAMINATIONS
S3.2: MANAGEMENT ACCOUNTING
DATE: THURSDAY, 27 APRIL 2023
MARKING GUIDE AND MODEL ANSWERS

SECTION A

Marking Guide

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

Award 2 Marks for each question

Model answers

QUESTION ONE

The correct answer is C

A is not correct because cost per unit of activity is a financial indicator of efficiency

B is not correct because cost per unit of activity is a financial indicator of efficiency

D is not correct because comparison with benchmark information is a financial indicator of efficiency

QUESTION TWO

The correct answer is B

A is not correct because it is a definition of efficiency

C is not correct because it is a definition of economy

D is not correct because B is the correct answer

QUESTION THREE

The correct answer is D

A is not correct because all are correct

B is not correct because all are correct

C is not correct because all are correct

QUESTION FOUR

The correct answer is A

B is not correct because growth and launch have been interchanged

C is not correct because launch and development have been interchanged

D is not correct because launch and growth have been started yet they should follow development stage

QUESTION FIVE

The correct answer is B

Description	Quantity
Sales	24,000
Closing Inventory, finished goods	6,000
	30,000
Opening Inventory, finished goods	(3,000)
Production required of output	27,000
Total production required (27,000*100/90)	30,000

A is not correct because opening stock has been added instead of being deducted from sales and the closing stock has been deducted instead of being added to sales

C is not correct because both opening stock and closing stock have been added to sales

D is not correct because the required production has not been adjusted the scrapped materials

QUESTION SIX

The correct answer is C

Description	Hours
Standard hours per unit	3
Total standard hours required (3 * 3,000)	9,000
Productivity ratio	0.9
Actual hour required (9,000*100/90)	10,000

A is not correct because instead of multiplying 100 and divide 90, they reversed.

B is not correct because they divided by 100 instead of multiplying with 100 and divide by 90.

D is not correct because C is the correct answer

QUESTION SEVEN

The correct answer is A

Description	Amount-FRW
Material (1.5m*1800)	2,700
Labour (3hrs*700)	2,100
Variable overhead(3hrs*400)	1,200
Fixed overhead (FRW200,000/500)	400
Standard costs	6,400
Standard profit	3,000
Standard Selling price	9,400

B is not correct because it does not multiply required material and labour hours per unit

C is not correct because it does not multiplied required labour per unit on variable cost

D is not correct because A is correct

QUESTION EIGHT

The correct answer is C

A is not correct because it is the definition of ideal not basic standard

B is not correct because it is the definition of current not basic standard

D is not correct because it is a definition of attainable not basic standard

QUESTION NINE

The correct answer is C

A is not correct because costs of running a customer service department is an example of external failure cost

B is not correct because costs of running a customer service department and product liability costs are examples of external failure costs

D is not correct because costs of running a customer service department

QUESTION 10

The correct answer is C

Description	Amount-FRW
Inspection costs	60,000
Lost contribution on second 4,000units*(FRW300-FRW200)	400,000
Total	460,000

A is not correct because it does not consider lost contribution but sales from defected sandwiches

B is not correct because it does not consider lost contribution but the normal sales from defected sandwiches

D is not correct because C is correct

SECTION B

QUESTION 11

Marking Guide

Q N	Description	Marks allocation
a	Award 1 mark for each well explained point. Award 0.5 Mark for the unexplained point. Max 5 Marks	5
b	Award 1 mark for each well stated point. Max 5 Marks	5
	Total Marks	10

Model Answers

(a) Five possible poor attitudes that managers and employees may show towards the accounting control information

The attitude of managers and employees towards the accounting control information they receive might reduce the information effectiveness

The following are the possible poor attitudes that managers and employees may show towards the accounting control information:

1. Management accounting control reports could well be seen as having a relatively **low priority** in the list of management tasks. Managers might take the view that they have more pressing jobs on hand than looking at routine control reports.
2. **Managers might resent control information:** They may see it adds part of a system of trying to find fault with their work. This resentment is likely to be particularly strong when budgets or standards are imposed on managers without allowing them to participate in the budget setting process
3. If budgets are seen as **pressure devices** to push managers into doing better, control reports will be resented
4. Managers may **not understand the information** in the control reports because they are unfamiliar with accounting terminology or principles.
5. **Managers might have a false sense of what their objectives should be.** A production manager might consider it important to maintain quality standards regardless of cost. They would then dismiss adverse expenditure variances as inevitable and unavoidable.
6. If there are flaws in the system of recording actual costs, **managers will dismiss control information as unreliable,**
7. **Control information might be weeks after the end of the period to which it relates,** in which case managers might regard it as out of date and no longer useful.
8. Managers might be held responsible for variances out of their control.

(b) Five functions of the budget committee

The coordination and administration of budgets is usually the responsibility of a budget committee. **The functions of budget committee are outlined below:**

1. The budget committee is responsible of coordination of the preparation of budgets, which includes the issue of the budget manual,
2. The budget committee is responsible of issuing of timelines for the preparation of functional budgets,
3. The budget committee is responsible for allocation of responsibilities for the preparation of functional budgets,
4. It is also responsible for the provision of information to assist in the preparation of budgets
5. It is responsible for all communication of final budgets to the appropriate managers,
6. Budget committee is responsible of making continuous assessment of the budgeting and planning process, in order to improve the planning and control function.

QUESTION 12

Marking guide

QN	Description	Marks allocation
a	Award 0.5 marks for definition and 0.5 Marks for example to each item.	5
b	Award 0.5 marks for each well classified cost.	5
	Total Marks	10

Model answers

a) Definitions of management accounting terms

- i. Direct costs:** Direct costs are those which are directly involved with the making of a product or service. The sum of the direct costs is equal to the Prime Cost. **Example:** A company manufacturing breads, cost of wheat flour, cost of cook, cost of factory electricity are direct costs
- ii. Production overheads:** Production costs relate to costs that are incurred in the manufacture of goods or the delivery of a service. They are incurred as a result of manufacture and therefore should be included in the cost of sales in the income statement and should also be included as part of the inventory valuation. **Example:** Rent of factory premises, depreciation of factory machines etc.
- iii. Stepped fixed costs:** Stepped costs are fixed costs over a wider activity range. Some fixed costs will increase once the level of activity goes above a certain threshold. **An example of this might be a supervisor in a factory on a salary.** Each supervisor is in charge of 20 workers. As soon as we employ more than 20 workers, we need to employ another supervisor
- iv. Variable costs:** Variable costs are those costs which vary in proportion to the level of activity. As activity increases, total variable cost will increase. Variable cost per unit usually remains constant. **For example,** if it costs FRW 50,000 to make 1 unit we assume that it costs FRW 100,00 to make 2 units, FRW 500,000 to make 10 units and so on.

v. **Semi-fixed costs:** A semi-variable cost contains a fixed and a variable element. An example of this would be an electricity bill where we pay a fixed charge per period plus a variable charge for each unit of electricity consumed

b) **Classify the following costs in the following cost classifications: production costs, Selling and distribution costs, Administration costs and Research and development costs**

Cost	Classification
1. Depreciation of factory machineries	Production costs
2. Trade discounts given to different customers	Selling and distribution costs
3. Protective clothing for factory machine operators	Production costs
4. Salary of scientist in laboratory	Research and development costs
5. Salary of supervisor working in factory	Production costs
6. Cost of chemicals used in the laboratory	Research and development costs
7. Insurance of company premises	Administration costs
8. Salary of secretary of the Director of Finance	Administration costs
9. Commission paid to sales agents	Selling and distribution costs
10. Rent of finished goods and showroom	Selling and distribution costs

SECTION C

QUESTION 13

MARKING GUIDE

QN	Description	Marks allocation
a	Award 1 mark for each well explained limitation of financial ratio maximum 4 marks)	4
b	Return on capital employed (ROCE)	2
	Debt to equity ratio	2
	Current ratio	2
	Payable payment period	2
	Receivable collection period	2
	Interest cover	2
	Gross profit margin	1
	Net profit margin	2
	Format of the report, Award 1 professional Mark to the good report	1
Total	20	

Marking guide

(a) Four limitation of financial analysis using ratio

The following are some of the limitations of using ratios as a basis of financial performance measure:

- 1. Comparing like with like:** If ratios are to be compared then they must be calculated in the same way, using comparable figures. When comparing ratios in an organization, if there has been a change in accounting policies over the period then this may have an impact on the ratios.
- 2. Inflation:** If ratios are being compared over time on the basis of historical cost accounting figures, then adjustments must be made using an appropriate index in order to restate all the figures in terms of one particular price level.
- 3. Representative figures:** In many cases we use year-end figures from a statement of financial position in order to calculate ratios. These year-end figures may not be representative of the average value for the year.
- 4. Accounting adjustments:** When year-end figures are used to calculate ratios, just one significant accounting adjustment or transaction before the year end can alter the position shown by the statement of financial position and the resulting ratios.

5. **Age of non-current assets:** If we are comparing one company to another using ratio analysis, the figures may not be entirely comparable unless the non-current assets are of similar age (and their depreciation policies are similar)

6. **Key performance indicators and the behavior of manager:** The way in which managers are assessed on their performance can have a major influence on the decisions that they make.

7. **Comparing over time:** If businesses use ratios to compare performance over time and the ratios are improving, this can lead to complacency. Competitors may be improving by a greater margin so caution should be taken when only comparing against yourself.

b) Report appraising the financial performance for the year ended December 2022 of Clinton Manufacturing Co.

From: Finance Officer

TO: Board of Directors

Date: 01/01/2022

Re: Performance analysis of Clinton Manufacturing Co

1. **Return on capital employed:** This is a key measure of profitability. It is the operating profit as a percentage of the capital employed. The ROCE shows the operating profit that is generated from each FRW1 of assets employed. A high ROCE is desirable. Clinton Manufacturing company has the ROCE of 40% in the year 2022 which is below the industry average by 5%. This should be improved by improving the profitability which is achieved by either by minimizing costs as the revenues and prices are beyond company's control.

2. **Debt to equity ratio:** This is a gearing ratio. This measures the percentage of long-term debts in company's capital structure. It appears that Clinton Manufacturing company is highly geared compared with the industry average with 80% to 40% respectively. This is very far, with the available information, we cannot conclude that it is good or bad as it depends on the other factors like cost of capital, shareholders attitude to risks etc.. but again if you check on the interest cover of 1.2 times, it is clear that the profit is almost cleared by the interest. The company should seek other financing alternatives other than loans like issue of shares etc.....

3. **Current ratio:** This is a liquidity ratio. It measures how the company can use the current assets to pay off its short-term liabilities. It is clear that Clinton Manufacturing Company has 4:1 compared to 2:1 of the industry average. This is very huge and bad as this high current ratio shows that the company has the idle cash. The cash management model like Miller-Orr and Baumol model should be used to determine the optimum level of cash to be kept, otherwise the excess assets should be invested in short term investments.

4. **Payable payment period:** This is a measure of long it takes a company to pay its trade payable. For Clinton Manufacturing Company, it is far below the industry average with 45 days and 52 days respectively. It is very good as the company is paying its suppliers as early as possible. This would increase morale and trust from the side of suppliers.
5. **Receivable collection period:** This is a measure of how long it takes a company to collect its cash from its customers. For Clinton Manufacturing Company, it is beyond the industry average with 60 days and 45 days respectively. This shows that the company is inefficient in collecting receivables or it is putting much pressure to its customers. If this is not well managed, it would end up losing customers. In fact, the duration is longer than the industry set duration and even longer than creditors repayment period.
6. **Interest cover:** This is the operating profit (profit before finance charges and tax) divided by the finance cost. It is clear that the interest cover for Clinton Manufacturing Co of 1.2 times is far below the that of the industry average of 10 times. The ratio could be improved by taking steps to increase the operating profit, e.g. through better management of costs, or by reducing finance costs through reducing the level of debt as we realized that the company has higher level of debts and interest expenses.
7. **Gross profit margin:** This is the gross profit as a percentage of turnover. A high gross profit margin is desirable. It indicates that either sale prices are high or that production costs are being kept well under control. Clinton Manufacturing Company has 58% compared to 60% of the industry average. Company should keep the momentum paying attention to cost of sales.
8. **Net profit margin:** This is the net profit as a percentage of turnover. A high net profit margin is desirable. It indicates that either sale prices are high or that operating expenses are being kept well under control. Clinton Manufacturing Company has 10% compared to 25% of the industry average. Company should try to minimize costs by looking much on interests. The gross profit margin was okay the issue then should be checked in the operating expenses.

Yours sincerely,

Finance Officer

QUESTION 14

Marking Guide

QN	Description	Marks allocation
a	Award 2 marks to a well explained Variance investigation factor, (1 mark to state, 1 mark to explain)	6
b	(i) Material Price variance	3
	(ii) Material usage variance	3
	(iii) Labour rate variance	3
	(iv) Labour efficiency variance	3
c	Award 1 marks for each well explained term	2
	Total	20

Model answers

a) Three main aspects of variances that should be taken into account when deciding whether or not to investigate variance

The following are the main three aspects of variances that should be taken into account when deciding whether or not to investigate variances:

- 1. The materiality or significance of the variance:** Only material/significant variance to company's operations and results should be investigated. The level should be set as either a percentage of standard cost or an absolute figure like a variance of FRW 20,000.
- 2. The trend:** Sometimes, a variance in a particular period may not appear to be material. However, if the trend of the variance is the same in each period, either favorable or adverse, although each individual variance itself is not material, the trend indicates that there is an underlying reason for the variance rather than simply random factors. Therefore, management may decide that the cause of the variance should in fact be investigated.
- 3. The controllability of the variance:** If is the responsibility of divisional manager to investigate the variance in his/her profit center, then the manager will go ahead and investigate variance. Otherwise, he/she will not. Sometimes the cause of the variance may be outside the control of the manager.
- 4. Type of the variance:** Setting of ideal standards may result into variances being adverse because ideal standards may not be achievable.
- 5. Interrelationship between the variances:** A favourable price variance may result to an adverse quantity or usage variance. For example, reduction of selling price may result into adverse sales price variance and favourable sales volume variance.

b) Report summarizing the e calculated variances

(i) Material Price variance

Material	Formula	Calculation	Variance
Material K	AQAP	915,000	915,000
	AQSP	(7500*120)	900,000
Material P	AQAP	203,000	203,000
	AQSP	(4,100*50)	205,000

(ii) Material usage variance

Material	Formula	Calculation	Variance
Material K	AQSP	900,000	900,000
	SPSQ	(700*10*120)	840,000
Material P	AQSP	205,000	205,000
	SPSQ	(700*6*50)	210,000

(iii) & (iv) Labour rate and efficiency variance

Labour rate variance			
	AHAP	278,800	278,800
	AHSR	(3,400*80)	272,000
Labour Efficiency variance			
	AHSR	272,000	272,000
	SHSR	(700*5*80)	280,000

c) Differentiate feedback and feedforward in the context of variance analysis.

Feedback: It is the process of continual comparison of actual results to budgeted results, The budget period is normally for the forthcoming year but the feedback process should take place on a much fluent, regular basis. While

Feedforward: It is the process of using the information which is being received about the current performance of the business in terms of the current actual results and then be used to influence the budget for the future periods.

QUESTION 15

Marking Guide

QN	Description	Marks allocation
a	Sales amount and Variance	2
	Materials and variance and their workings 1 mark each	3
	Labour and variance and their workings 1 mark each	3
	Production costs and variance and their workings 1 mark each	3
	Selling and distribution expenses and variance and their workings 1 mark each	3
b	Award 2 marks for a well explained problem of flexing, 1 mark for stating and 1 mark for explanation	6
	Total	20

Model Answers

a) Flexible budget for the month of March 2022 and comment on variance

Description	Note	Flexed budget	Actual	Variance
Output		32,000	32,000	
		FRW'000	FRW'000	FRW'000
Sales	1	192,000	198,400	-6,400
Materials	1	81,920	103,040	-21,120
Labour	2	49,000	44,600	4,400
Production Expenses	3	10,000	9,100	900
Gross profit		51,080	41,660	9,420
Selling and distribution expenses	4	16,333	18,600	-2,267
Operating Profit		34,747	23,060	11,687

Workings

1. Material and Selling Price

	Original budget	Revised budget
Selling Price per unit	$(150,000,000/25,000) = 6,000$	$(168,000,000/25,000) = 6,720$
Material price per unit	$(64,000,000/25,000) = 2,560$	$(71,680,000/28,000) = 2,560$

2. Separation of fixed and variable element in Labour

	Original budget	Revised budget
Output	25,000	28,000
Total costs	42,000,000	45,000,000
Difference in units	3,000	
Difference in FRW	3,000,000	
$Y = a + bX$		
$b(3,000,000/3,000)$	1,000	
a	17,000,000	
$Y = 17,000,000 + 1000x$		

3. Separation of fixed and variable element in Production cost

	Original budget	Revised budget
Output	25,000	28,000
Total costs	7,200,000	8,400,000
Difference in units	3,000	
Difference in FRW	1,200,000	
Y=a+bX		
b (1,200,000/3,000)	400	Cost per unit
a	(2,800,000)	
Y=(2,800,000)+400x		

4. Separation of fixed and variable element in selling and distribution cost

	Original budget	Revised budget
Output	25,000	28,000
Total costs	12,600,000	14,200,000
Difference in units	3,000	
Difference in FRW	1,600,000	
Y=a+bX		
b(1,600,000/3,000)	533.3	Cost per unit
a	(733,333.3)	
Y=(733,333.3)+ 533.3x		

b) Four problems of budget flexing

The following with budget flexing include the following:

1. Splitting mixed costs is not always straightforward which may be very hard for some managers to apply flexed budgeting systems,
2. Fixed costs may behave in a step line fashion as activity levels increase/decrease
3. Consideration must be given to the assumptions upon which the original fixed budget was based. Such assumptions might include the constraint posed by limiting factors, the rate of inflation, judgements about future uncertainty, or demand for the organization's products.
4. By flexing a budget, a manager is effectively saying 'if I knew then what I know now, this is the budget I would have set'. It is a useful concept but can lead to some concern as managers can become confused and frustrated if faced with continually moving targets.

END OF MARKING GUIDE AND MODEL ANSWERS.