

**APRIL 2022 PROFESSIONAL EXAMINATIONS
MANAGEMENT ACCOUNTING (PAPER 2.2)
CHIEF EXAMINER'S REPORT, QUESTIONS AND MARKING SCHEME**

INTRODUCTION

This report covers observations made on the standard of the April 2022 Management Accounting Paper as well as candidates' performance in the paper.

STANDARD OF THE PAPER

The paper was generally similar in standard to previous papers written in recent diets. Marks allocated to the questions were generally fair and matches the effort required of candidates. The questions were made up of theory and practice in the proportion of 42% to 58%, respectively.

PERFORMANCE OF CANDIDATES

Generally, the performance of candidates in this diet was much improved than in the November 2021 Examinations. This, notwithstanding, candidates generally appeared to have had difficulty in dealing with questions that required the application of concepts learned to solve real problems. Specifically, the questions on management decision-making especially Question 5A posed a challenge for candidates. Also, the challenge of dealing with performance evaluation still persists even when the practice question on variance was generally considered to be fundamental.

Some candidates appeared to have difficulty in expressing themselves or communicating their ideas. This was shown in their poor sentence construction and the struggle by examiners to make meaning of sentences written by candidates.

It was also apparent that candidates were not guided by the actual requirements of questions. Some candidates listed points that they were required to explain and were excessively brief on areas in which they should have offered justifications for their responses.

QUESTION ONE

- a) Gyakie Ltd (Gyakie) operates a chain of fitness clubs in Oti Region. Managers at the fitness clubs receive a quarterly bonus if their fitness club achieves or exceeds all of the following financial targets:

| | |
|------------------------------------|--------------------------|
| Return on Capital Employed (ROCE): | 8% (based on net assets) |
| Asset turnover: | 40% |
| Operating profit margin: | 20% |

Summary of the actual performance for Quarter 3 of the current year for one of the fitness club in Papase is detailed below:

| | GH¢ |
|---------------------|------------|
| Revenue | 36,000 |
| Staff costs | 12,000 |
| Other fixed costs | 22,000 |
| Net assets | 110,000 |
| | |
| Number of customers | 600 |

The quarterly financial targets are set by the head office finance team and all fitness clubs are given the same target. Gyakie is currently forecasting the performance of its fitness clubs in Quarter 4. The following information will be used to forecast the performance for each of its fitness clubs in Quarter 4:

- The average revenue per customer will increase by 10% on Quarter 3.
- Customer numbers will increase by 5% on Quarter 3.
- Staff costs and net assets are expected to remain at the same level as Quarter 3.
- Other fixed costs are expected to decrease by 5% on Quarter 3.
- Staff and other costs are fixed (they are not related to the number of customers).

Required:

Justify whether the manager of the fitness club in Papase should receive a bonus in Quarter 4 based on the forecast performance. Your computation should include operating profit margin, ROCE and asset turnover for Quarter 4.

(8 marks)

- b) The manager of the fitness club in Papase is dissatisfied with the quarterly bonus system and does not perceive it to be fair. He argues that the financial targets are based on a regional view of all Gyakie fitness clubs and do not take account of specific local circumstances. For instance, the fitness club in Papase is located in a less affluent area of the region. Managers also complain about using solely financial indicators in setting targets. The manager of fitness club in Papase would like to see participation from all fitness club managers in the development of quarterly financial and non-financial targets.

Required:

- i) Discuss the potential impact on Gyakie for involving the fitness club managers in the preparation of their quarterly financial targets. **(3 marks)**
 - ii) Explain **THREE (3)** disadvantages of using financial performance indicators alone to assess performance. **(3 marks)**
- c) Gyakie currently faces a tough competition with the major players in its market. To secure

or increase its market position, the CEO has suggested benchmarking exercise although he has little knowledge in benchmarking exercise.

Required:

Explain the meaning of the following types of benchmarking to the CEO.

- i) Internal benchmarking
- ii) Competitive benchmarking
- iii) Functional benchmarking

(6 marks)

(Total: 20 marks)

QUESTION TWO

- a) The Pikambi Hospital serves a community with a population of about 20,000. For Out Patients Department (OPD) services, there are three basic stages to seeing the doctor which have been described below:

Stage 1

Records: This is where files of patients are kept. On arrival, a patient presents the identity card together with the National Health Insurance Scheme (NHIS) card. There are two biometric verification machines to confirm the validity of the card and recording of basic personal data on the claim forms. The process takes approximately 10 minutes per machine. Workers here work from 6:00 am to 4:00 pm.

Stage 2

Vitals: Here vital personal information about the patient's current health status is checked; i.e. temperature, pulse, blood pressure, weight, and sugar levels. There is one machine with 5 nurses. It takes some 6 minutes for one patient to go through the process. The unit also works from 6:00 am to 4:00 pm.

Stage 3

Consultation: There are six doctors who run six-hour shift a day. Each doctor spends an average of 15 minutes to see a patient. The community has been complaining about the turnaround period and blames it on the incompetence of the nurses to the extent that sometimes patients stay in queues for long hours and return home unattended to.

Required:

- i) With appropriate computations, evaluate and assess the bottleneck resource(s) at Pikambi Hospital. **(6 marks)**
- ii) Suggest **THREE (3)** ways by which the turnaround time can be reduced at the hospital. **(6 marks)**

- b) Drogo uses the Throughput Accounting technique for efficient allocation of scarce resources. In the second quarter of 2021, the throughput per bottleneck resource for its three products were given as follows: A-GH¢4, B-GH¢6 and C-GH¢9
The total factory cost was GH¢67,500 and the bottleneck resource was 15,000 machine hours.

Required:

Calculate and comment on the Throughput Accounting Ratios of the three products.

(3 marks)

- c) Standards are one of important quantitative tools that management uses to control and measure performance of business operations. Most often than not, it is the wish of management that actual results equate to standards. However, this is often not the case.

Required:

Explain **THREE (3)** advantages and **TWO (2)** disadvantages of standard costing.

(5 marks)

(Total: 20 marks)

QUESTION THREE

- a) Plytimba manufactures high quality wooden chair using odum sourced from sustainable forests. The company began trading two years ago having identified a niche market for the product.

During the year, Plytimba was forced to purchase wood from a different company as the usual supplier did not have sufficient stock available. The company operates a standard variable costing system and details relating to the most recent financial period are shown below.

Budgeted information:

| | |
|---|------------|
| Production in units | 134,400 |
| | GH¢ |
| Direct materials: 10,080 square metres odum wood | 282,240 |
| Direct labour: 33,600 hours | 483,840 |
| Variable production overhead (based on direct labour hours) | 225,792 |
| Fixed production overhead | 29,200 |

Actual information:

| | |
|--|------------|
| Production in units | 135,000 |
| | GH¢ |
| Direct materials: 10,800 square metres odum wood | 300,240 |
| Direct labour hours: 27,000 hours | 486,000 |
| Variable production overhead | 194,400 |
| Fixed production overhead | 30,150 |

Required:

- i) Prepare Standard Cost Card for one wooden chair. **(4 marks)**
ii) Calculate **SIX (6)** variances in as much detail as the information above permits.

(6 marks)

- b) Kankum industries is considering switching from Incremental Budgeting to Activity-Based Budgeting (ABB) because of the argued pricing specificity of ABB approach. The Chairman of the Finance Sub-Committee of the board, who does not have accounting background has contacted you for clarification on some key issues relating to ABB in order to assist in his explanation to the board.

Required:

In a report to the Chairman of the Finance Sub-Committee;

- i) Differentiate between *Activity Based Budgeting* and *Incremental Budgeting*. (3 marks)
 ii) Explain the process in ABB. (3 marks)
 iii) State **TWO (2)** arguments in favour and **TWO (2)** arguments against ABB. (4 marks)

(Total: 20 marks)

QUESTION FOUR

- a) Phil Company is considering replacing its existing machine on the introduction of a new product. The existing machine would be sold for GH¢2 million and replaced with a new machine at the beginning of the year at the cost of GH¢16 million. This new machine would be sold at the end of year 4 for GH¢1million.

A market research recently carried out at a cost of GH¢1.5 million indicates a unit selling price of GH¢300 in year 1, rising by 10% per annum. Sales volume for the four-year life of the project has been estimated as follows:

| Year | Units |
|------|--------|
| 1 | 60,000 |
| 2 | 85,000 |
| 3 | 85,000 |
| 4 | 80,000 |

Possible unit variable costs are as follows:

| Probability | GH¢ |
|-------------|-----|
| 0.4 | 240 |
| 0.6 | 260 |

Incremental fixed cost as a result of the project is GH¢15 per unit plus GH¢1,000,000 per annum staff cost.

The introduction of the new product is expected to reduce the market demand for an existing product by 5,000 units per annum. The existing product has a unit contribution of GH¢75.

Other annual fixed costs associated with the new product include the following:

| | GH¢ |
|--------------------------|----------------|
| Amortization of goodwill | 50,000 |
| Depreciation | 250,000 |
| | 300,000 |

Phil Company's cost of capital is 12%.

Required:

Evaluate the acceptability of the project.

(15 marks)

- b) Most CEOs and their Deputies feel reluctant to allow employees of their entities to participate in the Budgeting Process. They are of the opinion that such "openness" may expose them to pressure from staff on what is due them.

Required:

Explain **THREE (3)** factors that will be considered when involving staff in the budgeting process.

(5 marks)

(Total: 20 marks)

QUESTION FIVE

- a) Kuntu Ltd manufactures one standard product, the standard marginal cost of which is as follows:

| | |
|------------------------------|---------------------|
| | GH¢ |
| Direct material per unit | 10.00 |
| Direct wages per unit | 7.50 |
| Variable production overhead | <u>1.25</u> |
| | <u>18.75</u> |

The budget for the year includes the following:

Output (units) 80,000

| | |
|------------------------|------------|
| | GH¢ |
| Total fixed Overheads: | |
| Production | 1,000,000 |
| Advertising | 600,000 |
| Marketing | 500,000 |
| Contribution | 2,500,000 |

In reviewing the budget for the coming year, management is dissatisfied with the results likely to arise. Emergency board meeting was held to discuss possible strategies to improve the situation and the following strategies were proposed:

Strategy 1

The Production Manager suggested that the selling price of the product should be reduced by 10%. This could increase the output by 25%. It is estimated that these changes would result in increase of fixed production overhead and fixed marketing overhead by GH¢50,000 and GH¢25,000 respectively.

Strategy 2

The Director of Finance suggested that the selling price should be increased by 10%. Additionally, with increase in advertising cost by GH¢400,000, sales units would increase to 90,000 units. It is also estimated that this strategy would increase the fixed production overhead by GH¢25,000 and marketing overhead by GH¢20,000.

Strategy 3

The Marketing Director suggested that with an appropriate increase in advertising expenditure, sales could be increased by 20% and a profit on turnover of 15% obtained. It is estimated that fixed production overhead would increase to GH¢1,040,000 and marketing overhead would increase by GH¢25,000.

Strategy 4

The Managing Director seeks a profit of GH¢600,000. He would like to know at what selling price the target profit could be achieved given the following estimates:

An increase in advertising expenditure by GH¢360,000 would result in a 10% increase in sales. However, fixed production and marketing overheads would increase by GH¢25,000 and GH¢17,000 respectively

Required:

- i) Prepare a forecast profit statement for **Strategy 1 and 2.** (6 marks)
 - ii) Estimate the additional expenditure on advertisement to achieve results in **Strategy 3.** (5 marks)
 - iii) Estimate the selling price that is required to achieve a profit of GH¢600,000 in **Strategy 4.** (5 marks)
- b) Cost measurement reflects the relationships between inputs and outputs. It is designed to provide more accurate information about production, support activities and product cost so that management can focus its attention on the products and processes with the most leverage for increasing profits.

Required:

Explain **FOUR (4)** reasons why organisations need to measure cost. (4 marks)

(Total: 20 marks)

SOLUTION TO QUESTIONS

QUESTION ONE

a)

| | Quarter 4 | Workings |
|---------------|-------------|----------|
| | GH¢000 | |
| Revenue | 41.58 | 1 |
| Less: | | |
| Staff cost | 12.00 | |
| Other costs | 20.90 | 1/2 |
| Profit | 8.68 | 1/2 |

(2 marks)

| | | | |
|------------------|---|---|---------------------|
| Net asset | | | GH¢110,000 |
| No. of customers | | | 630 |
| Quarterly ROCE | $\frac{PROFIT}{NET ASSET} \times 100\%$ | $= \frac{8,680}{110,000} \times 100\%$ | 7.9% (1½ marks) |
| Profit Margin | $\frac{PROFIT}{SALES} \times 100\%$ | $= \frac{8,680}{41,580} \times 100\%$ | 20.9% (1½ marks) |
| Asset turnover | $\frac{SALES}{NET ASSET} \times 100\%$ | $= \frac{41,580}{110,000} \times 100\%$ | 37.8% (1½ marks) |

Based on the forecast performance in quarter 4, only one of the three financial targets will be achieved. Therefore, a bonus will not be awarded to the manager of health club at Papase. (1½ marks)

(Total: 8 marks)

Workings:

- Q3 Average revenue per customer = GH¢360,000/600 = GH¢60
 Increase of 10% (GH¢60 x 1.6) = GH¢66
 Customer 600 x 1.05 = 630
 Revenue 630 x GH¢66 = GH¢ 41,580

- Other costs GH¢ 22,000x 0.95 = GH¢20,900

b)

- The managers' involvement with setting the quarterly financial target could mean that the target will be more **accurate** and **realistic**. This is because the managers will be close to the operations of the fitness clubs and will be able to use their specialist knowledge to advise on regional variations to targets. For example, a national

assumption of an increase of 10% in average revenue per customer may not be appropriate for fitness club at Papase and should not automatically be factored in to target setting. This involvement of managers could result in more accurate forecast information that can be used by the finance team in devising the financial targets. However, it is possible that the input of the managers may result in unrealistic financial targets. The managers may attempt to influence the targets in order to attain a bonus more easily. The fitness club managers may also not have an overall picture of the fitness club market or Gyakie's strategic outlook.

(3 marks)

ii)

- **Short-termism**

Linking rewards to financial performance may tempt managers to make decisions that will improve short-term financial performance but may have a negative impact on long-term profitability.

For example, a manager may decide to delay investment in order to boost the short-term profits of their division.

- **Internal focus**

Financial performance measures tend to have an internal focus. In order to compete successfully it is important that external factors (such as customer satisfaction and competitors' actions) are also considered.

- **Manipulation of results**

In order to achieve target financial performance (and hence their reward), managers may be tempted to manipulate results.

For example, the recording of the costs incurred in the current year may be deferred to the next year's accounts in order to improve current year performance.

- **Do not convey the whole picture**

The use of financial performance indicators has limited benefit to the company since they do not convey the full picture regarding the factors that drive long-term success and maximisation of shareholder wealth, e.g. customer satisfaction, ability to innovate, quality.

- **Lagging indicators.** Financial performance measures are also lagging indicators. They determine the outcome of managers' actions after a period of time.

(Any 3 points @ 1 mark each = 3 marks)

c)

- **Internal Benchmarking**

This involves comparison of one business unit with another unit of the same organisation, especially as part of "rolling out" of process improvements or of a highly structured business model. It is less about benchmarking in a true sense (which by definition involves "trying to improve") than about trying to replicate an existing process which is already perceived as optimal.

(2 marks)

Competitive benchmarking

Competitive benchmarking is the process of comparing your company metrics against competitors and the overall market. Essentially, it is a method that helps businesses evaluate their performance, pinpoint best industry practices, and initiate their adoption to keep an edge over the competition. **(2 marks)**

Functional benchmarking

This type of benchmarking is carried out with another business partner where there are common business processes but no competition between the firms involved because of the markets they serve. **(2 marks)**

(Total: 20 marks)

QUESTION TWO

a)

i) **Stage 1:** Available time = 10 hrs. $\times 60$ mins $\times 2$ machines = 1200 mins.

Time taken to process one patient 10 mins.

Total number to be attended to $1,200 \div 10 = 120$ **(1½ marks)**

Stage 2: Available time = 10 hrs. $\times 60$ mins = 600 mins.

Time taken to attend to a patient = 6 mins.

Total number that can be attended to in a day $600 \div 6 = 100$ **(1½ marks)**

Stage 3: Available time = 6 doctors $\times 6$ hrs. $\times 60$ mins = 2,160 mins.

Time taken to attend to patient 15 mins

Total number to be attended to $2,160 \div 15 = 144$ **(1½ marks)**

The bottleneck resource is stage 2. **(1½ marks)**

(Total: 6 marks)

ii) Steps to improve turnaround time.

- Deal with the bottleneck resource
- Add more machines at stage 2.
- Ensure daily attendance does not exceed 100
- Ensure stage two equipment functions efficiently.
- Increase the working hours of stage 2
- Train more nurses
- Run shift
- Do overtime

(Any 3 points @ 2 marks each = 6 marks)

- b) Throughput Accounting Ratio; it is a relative measure that shows how many times the throughput per limited resource can cover the factory cost per limited resource. (throughput per bottleneck ÷ factory cost per bottleneck)
If the TPAR is greater than 1 then the product is profitable if it is less than 1 it is not.

| | A | B | C |
|-----------------------------|------|------|-----|
| Throughput per bottleneck | 4 | 6 | 9 |
| Factory cost per bottleneck | 4.5 | 4.5 | 4.5 |
| TPAR | 0.89 | 1.33 | 2 |

Comment; product A is not profitable, B and C are profitable but C is more profitable than B.

(Factory cost per bottleneck is $67,500 \div 15,000 = 4.5$)

(3 marks)

- c) Advantages and Disadvantages of Standard Costing

Advantages

Improved cost control: Companies can gain greater cost control by setting standards for each type of cost incurred and then highlighting exceptions or variances – instances where things did not go as planned. Variances provide a starting point for judging the effectiveness of managers in controlling the costs for which they are held responsible. Further investigation should reveal whether the exception or variance was caused by the inefficient use of materials or resulted from higher prices due to inflation or inefficient purchasing. In either case, the standard cost system acts as an early warning system by highlighting a potential hazard for management.

More useful information for managerial planning and decision making: When management develops appropriate cost standards and succeeds in controlling production costs, future actual costs should be close to the standard. As a result, management can use standard costs in preparing more accurate budgets and in estimating costs for bidding on jobs. A standard cost system can be valuable for top management in planning and decision making.

More reasonable and easier inventory measurements: A standard cost system provides easier inventory valuation than an actual cost system. Under an actual cost system, unit costs for batches of identical products may differ widely. For example, this variation can occur because of a machine malfunction during the production of a given batch that increases the labor and overhead charged to that batch. Under a standard cost system, the company would not include such unusual costs in inventory. Rather, it would charge these excess costs to variance accounts after comparing actual costs to standard costs.

Thus, in a standard cost system, a company assumes that all units of a given product produced during a particular time period have the same unit cost. Logically, identical physical units produced in a given time period should be recorded at the same cost.

Possible reductions in production costs: A standard cost system may lead to cost savings. The use of standard costs may cause employees to become more cost

conscious and to seek improved methods of completing their tasks. Only when employees become active in reducing costs can companies really become successful in cost control.

(Any 3 points @ 1 mark each = 3 marks)

Disadvantages

Controversial materiality limits for variances: Determining the materiality limits of the variances may be controversial. The management of each business has the responsibility for determining what constitutes a material or unusual variance. Because materiality involves individual judgment, many problems or conflicts may arise in setting materiality limits.

Non-reporting of certain variances: Workers do not always report all exceptions or variances. If management only investigates unusual variances, workers may not report negative exceptions to the budget or may try to minimize these exceptions to conceal inefficiency. Workers who succeed in hiding variances diminish the effectiveness of budgeting.

Low morale for some workers: The management by exception approach focuses on the unusual variances. Management often focuses on unfavorable variances while ignoring favorable variances. Workers might believe that poor performance gets attention while good performance is ignored. As a result, the morale of these workers may suffer.

A dynamic environment makes it difficult to stick to one standard.
Extensive research can be time-consuming and expensive.

(Any 2 points @ 1 mark each = 2 marks)

(Total: 20 marks)

QUESTION THREE

- a)
i) Standard cost card for one wooden chair

| | Per unit GH¢ |
|--|--------------------|
| Direct materials: (10,080 sq mtrs/134,400 units) = 0.075x (GH¢282,240/10,080 sq mtrs) = GH¢28/sq mt | 2.10 |
| Direct labour: (33,600 hrs/134,400 units) = 0.25hrs x (GH¢483,840/33,600 hrs) = GH¢14.40/hr | 3.60 |
| Variable production overhead: 0.25hr x (¢225,792/33,600 hrs) = GH¢6.72/'hrs | <u>1.68</u> |
| Total product cost | <u>7.38</u> |

(4 marks)

| | |
|---|----------|
| ii) Variances | GH¢ |
| Direct material price variance (SP - AP) X AQ GH¢28 - (GH¢ 300,240/10,800)) X 10,800 | 2,160 F |
| Direct material usage variance (SQ-AQ) XSP ((0.075sq mtrs x 135,000)- 10,8000x GH¢ 28 = | 18,900 A |
| Direct labour rate variance (SR- AR) XAH (GH¢14.40 - (GH¢486,000/27,000)) x 27,000 = | 97,200 A |
| Direct labour efficiency variance (SH -AH) X SH ((0.25hr x 135,000) - 27,000 x GH¢ 14.40 = | 97,200 F |
| Variable overhead expenditure variance (SR - AR) X AH (GH¢6.72 - (194,400/27,000)) x 27,000 | 12,960 A |
| Variable overhead efficiency variance (SH - AH) X SR ((0.25hrs x 135,000) - 27,000) x GH¢6.72 | 45,360 F |
| Fixed production overhead expenditure variance (BFO - AFO) (GH¢29,200 - ¢30,150) | 950 A |
| (Any 6 variance @ 1 mark each = 6 marks) | |

b)

i) Activity-Based Budgeting (ABB) is a method of budgeting based on activity framework, using cost driver data in the budget setting and variance feedback processes. But in Incremental Budgeting (IB), previous period's (base year's) budget informs the preparation of current year's budget by adjusting the base year by an expected variable in the current year. **(3 marks)**

ii) An organization that uses an ABB needs to:

- identify the various activities that lead to cost;
- accumulate costs into cost pools (put together similar cost);
- ascertain the events that lead cost to either increase or decrease (cost driver) and assign cost on them;
- calculate the cost per cost driver and;
- prepare the budget by assigning cost based on activities

(3 marks)

iii) Arguments in favour of ABB

- It enables control to be exercised at the exact unit that actually incurred the cost.
- ABB ensures efficiency because justification should be offered for incurring certain activities and in certain magnitudes and not on previous levels of certain functions.
- It is useful to organisations that want to use low-cost leadership strategy to achieve competitive advantage.

(2 marks)

Arguments against ABB

- It is expensive to prepare activity-based budgets because it consumes a lot of time and requires resources to analyse costs into activities.
- It is a complex budget which makes preparation and administration cumbersome.

(2 marks)

(Total: 20 marks)

QUESTION FOUR

a)

| YEAR | 0 | 1 | 2 | 3 | 4 |
|---------------------------|---------------------|----------------|------------------|------------------|------------------|
| | GHC | GHC | GHC | GHC | GHC |
| SP/ unit | | 300 | 330 | 363 | 399.3 |
| VC (w1) | | 252 | 252 | 252 | 252 |
| Contribution | | 48 | 78 | 111 | 147.3 |
| Demand | | 60,000 | 85,000 | 85,000 | 80,000 |
| Total Contribution | | 2,880,000 | 6,630,000 | 9,435,000 | 11,784,000 |
| Less FC | | 900,000 | 900,000 | 900,000 | 900,000 |
| Loss of contribution (w2) | | 375,000 | 375,000 | 375,000 | 375,000 |
| Less FC (wages / rent) | | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 |
| Initial investment(w3) | (14,000,000) | | | | 1,000,000 |
| Free cash flow | (14,000,000) | 605,000 | 4,355,000 | 7,160,000 | 1,050,900 |
| D.F (12%) | 1.000 | 0.893 | 0797 | 0712 | 0.636 |
| Present Value | <u>(14,000,000)</u> | <u>540,265</u> | <u>3,470,935</u> | <u>5,097,920</u> | <u>6,683,724</u> |

NPV = 1,792,844

Recommendation: The project is acceptable in view of positive NPV

Working 1. Expected variable cost per unit = (GH¢240 × 0.4) + (260 × 0.6) = GH¢252

Working 2. Loss contribution 5,000 × GH¢75 = GH¢375,000

Working 3. Initial cost - disposal (16,000,000- 2,000,000) = GH¢14,000,000

(Marks are evenly spread using ticks = 15 marks)

- b) Factors to consider when involving staff in the budgeting process.
- **Nature of task;** in highly programmed tasks participation may not be needed. Participation is better in flexible and innovative tasks.
 - **Organizational structure;** participation is better in highly decentralized organizations, where the structure is centralized participation may not be required.
 - **Technical capacity of employees;** where the employees are well informed they may be involved. But where employees especially in small organizations do not have the skills participation will not be useful.

(5 marks)

(Total: 20 marks)

QUESTION FIVE

a) Contribution per unit = $\frac{\text{GH}\text{c}2,500,000}{80,000} = \text{GH}\text{c}31.25$

Selling price = $\text{GH}\text{c}31.25 + \text{GH}\text{c}18.75$
 = $\text{GH}\text{c} 50$ per unit

| | |
|---|-----------------------|
| i) Strategy 1 | GH¢ |
| Sales revenue $\text{c}50 \times 90\% \times 80,000 \times 125\%$ | 4,500,000 |
| Total variable cost $100,000 \times \text{c}18.75$ | <u>1,875,000</u> |
| Contribution | 2,625,000 |
| Less: fixed cost | 2,100,000 |
| Extra Production fixed cost | 50,000 |
| Extra Marketing fixed cost | <u>25,000</u> |
| Profit | <u>450,000</u> |

Strategy 2

| | |
|--|-----------------------|
| | GH¢ |
| Selling price $\text{GH}\text{c}50 \times 1.1$ | 55.00 |
| Less variable cost | <u>18.75</u> |
| Contribution per unit | 36.25 |
| Sales unit | 90,000 |
| Contribution | 3, 262,500 |
| Less Fixed Cost: | 2,100,000 |
| Extra advertising | 400,000 |
| Extra fixed production | 25,000 |
| Extra marketing | <u>20,000</u> |
| Profit | <u>717,500</u> |

(6 marks)

Strategy 3

| | GH ¢ |
|------------------------------------|-----------------------|
| Selling price | 50 |
| Less variable cost | <u>18.75</u> |
| Contribution per unit | 31.25 |
| Sales unit 80,000 x 1.2 | 96,000 |
| Contribution | 3,000,000 |
| Less fixed cost: | |
| Extra Fixed production | 1,040,000 |
| Marketing | 525,000 |
| Existing Advertising | 600,000 |
| Extra Advertising | <u>?</u> |
| Profit 15% x 96,000 x GH¢50 | <u>720,000</u> |

Extra Advertising = GH¢3,000,000 - GH¢1,040,000 - GH¢525,000 - GH¢600,000 - GH¢720,000 = GH¢115,000 (5 marks)

Strategy 4

| | |
|-------------------------|-----------------------|
| Selling price | ? |
| Less variable cost | <u>18.75</u> |
| Contribution per unit | ? |
| Sales unit 80,000 x 1.1 | 88,000 |
| Contribution | ? |
| Less Fixed Cost | 2,100,000 |
| Extra advertising | 360,000 |
| Extra fixed production | 25,000 |
| Extra marketing | <u>17,000</u> |
| Profit | <u>600,000</u> |

Profit = (Sp - vc) Q - FC
600,000 = (Sp - 18.75) 88,000 - 2,502,000
600,000 = 88,000sp - 1650000 - 2502,000
600,000 + 4152000 = 88,000SP
Selling price = GH¢54 per unit

(5 marks)

b) **Organisations need to measure cost for a number of reasons;**

Valuation: companies need to value inventory and work in progress for financial reporting purposes at the end of each reporting period.

Profit measurement: the measurement of cost of inventory and work-in-progress is closely linked to the measurement of reported profit.

Decision making: Selling price must be set at a level which covers the cost of producing goods and services.

Control: an organization needs to measure cost of goods and services being produced in order to compare them to the expected cost of those goods and services in order to take any corrective action as necessary.

(4 points @ 1 mark each = 4 marks)

(Total: 20 marks)

RECOMMENDATIONS

- Candidates must solve more practice questions and monitor their timing of such exercises.
- Revision classes must deliberately emphasize how to answer questions.