JULY 2025 PROFESSIONAL EXAMINATIONS
MANAGEMENT ACCOUNTING (PAPER 2.2)
CHIEF EXAMINER'S REPORT, QUESTIONS AND MARKING SCHEME

EXAMINER'S GENERAL COMMENTS

The questions covered all the areas in the syllabus and were not beyond the competence of candidates. The overall performance was poor and candidates are urged to prepare well before they write the paper.

STANDARD OF THE PAPER

The standard was consistent with previous examination diets. Overall, the question quality and standard were good. The questions were generally straight forward and error-free. The five questions had a wide coverage of the syllabus, with appropriate marks. The questions were skewed in favour of practice (30 marks theory, 70 marks for practice) and the time allotted was appropriate for the various tasks at hand. Detailed supporting information was provided for each question. An appropriate level of testing in accordance with the Bloom's taxonomy was achieved and all questions reflected the inherent difficulty of the level of qualification (application) and the requirement to attain professional competence.

PERFORMANCE OF CANDIDATES.

Performance of candidates was far below expectation compared to the previous diet. Poor performance was observed across a wide range of candidates. Most of the candidates fared badly in questions 3, 4 and 5. Majority of the candidates scored very good marks in question 2 while scores in question 1 was average.

NOTABLE STRENGHTS AND WEAKNESSES.

Candidates responded quite well in some aspects of the performance evaluation, specifically the ROI and RI. Question two which was theory was well answered indicating candidates' competence in budgeting. Most of the candidates demonstrated good knowledge in the computation of unit cost of a product using the traditional approach. They also understood the principles underlying the ABC.

The scores in EVA in question 1(c) was not encouraging even though the responses suggested enough understanding of the concept. It was observed that most of the candidates lacked the analytical ability where the question so demands. For instance, in questions 1d, 4a and 5b the attempt was generally poor. The concept of relevant cost for short term decision making in special contract was quite understood yet most of those who attempted could not analyse the figures to come out with the correct relevant costs for some of the cost elements.

QUESTION ONE

The Oliso Group (Oliso) operates a chain of hospitality units in the country grouped into Southern, Central and Northern territories. Operations in each territory offer similar services and face similar operating environments and risks. The operations of the Group are categorised into accommodation, restaurant and bar, and other services. The table below presents a summary of the financial data of Oliso for the year ended 31 December 2023.

	Southern GH¢000	**Central GH¢000**	**Northern GH¢000**	**Total GH¢000**
Revenue	2,340.00	2,730.00	5,850.00	10,920.00
Variable cost	(608.40)	(737.10)	(1,813.50)	(3,159.00)
Contribution	1,731.60	1,992.90	4,036.50	7,761.00
Fixed cost	(1,216.80)	(1,419.60)	(3,122.60)	(5,759.00)
Operating profit	514.80	573.30	913.90	2,002.00
Finance cost				(234.00)
Profit before tax				1,768.00
Income tax expense				388.96
Profit for the year				**1,379.04**

Assets:				
Non-current assets	1,300.00	3,250.00	4,290.00	8,840.00
Current assets	1,040.00	1,170.00	1,300.00	3,510.00
Total assets	2,340.00	4,420.00	5,590.00	**12,350.00**
Equity and Liabilities:				
Equity:				
Share capital				3,250.00
Accumulated reserves				5,720.00
Non-current liability:				
Long-term loan				2,340.00
Current liabilities	104.00	312.00	624.00	1,040.00
Total equity and liabilities				**12,350.00**

Relevant information:

i) The policy of Oliso is to define residual income (RI) for each territory as operating profit less the group required rate of return of 17.5% of each territory's total assets.

ii) The long-term loan is centrally managed and not split among the territories.

iii) Income tax is charged at 22% of profits.

iv) The market value of equity capital is GH¢11,700.00 whilst the cost of equity is at 20%.

v) The book value of long-term borrowing approximates the market value.

vi) The ROI generated by the central territory is of significant concern for the managers of Oliso and they are exploring the possibility of achieving an ROI of 20% by considering available options.

Required*:*

As the Management Accountant of the Oliso, prepare a report to the managers of the group in relation to the following issues:

The best performing territory in terms of:

a) Return on Investment (ROI). **(6 marks)**
b) Residual Income (RI). **(6 marks)**
c) Economic Value Added (EVA) and **(6 marks)**
d) Calculate the percentage changes in revenue, total cost and net assets during the period that would be required for the central territory to achieve a target ROI of 20%. **(2 marks)**

(Total: 20 marks)

QUESTION TWO

a) The effectiveness of budgeting and budgetary control depends largely on the behaviour and attitudes of managers and other employees. In practice, human behaviour in the budgeting process often has effects on the success of the budget.

Required:

i) Explain **FOUR** destructive behaviours in the budgeting process. **(6 marks)**
ii) Recommend how management can mitigate the impact of these negative behaviours as stated in (i) above. **(4 marks)**

b) Distinguish between ***aspirational budgets*** and ***expectational budgets*** stating one disadvantage of each. **(3 marks)**

c) Explain the differences in the objectives between budgeting in commercial organisations and budgeting in the public sector. **(2 marks)**

d) Explain the fundamental features of a typical Business Process Re-engineering in a manufacturing firm and state **THREE** critical benefits such firms are likely to gain from their implementation. **(5 marks)**

(Total: 20 marks)

QUESTION THREE

a) Mpusuo Pharmaceuticals PLC (Mpusuo), an indigenous local drug manufacturing firm produces and markets three products Lonfart DS, Ludriech CS and Lumbach HS. The firm has noted the deficiencies in traditional overhead absorption methods and has taken the decision to introduce an activity-based costing (ABC) system in order to correctly allocate costs to their products and also enhance cost control techniques.

Traditionally, the original costing method has been to allocate overheads to products using a single indirect cost pool where overheads are allocated on the basis of direct labour hours (DLH). Using the ABC approach, Mpusuo will apportion indirect costs to products using cost pools which are representative of the relevant activity areas.

Relevant information relating to the three products for the next period is as follows:

	Lonfart DS	**Ludriech CS**	**Lumbach HS**
Units to be produced and sold	156,000	97,500	39,000
Unit direct material cost	GH¢247	GH¢234	GH¢208
Unit direct labour hours	7.8	10.4	9.1
Machine hours	5.2	10.4	11.7
Number of production runs	20	39	98
Number of component receipts	59	98	468
Number of production orders	59	39	98
Direct labour per hour	GH¢10	GH¢10	GH¢10
Variable overheads per unit	GH¢44	GH¢57	GH¢49

Estimated amounts of fixed overheads are expected to be as follows:

	GH¢'000	**Cost Driver**
Set up	1,638	Production runs
Machine	10,530	Machine hours
Goods inwards	3,276	Component receipts
Packaging	2,340	Production order
Engineering	2,106	Production order
Total	**19,890**	

Required:

Calculate the unit costs of each product using:

i) Traditional Cost approach, based on direct labour hour rate. **(5 marks)**

ii) The ABC method. **(10 marks)**

b) When variances are discovered on investigation, and the cause of the variance can be controlled, action should be taken by Management.

Required:

Discuss **FOUR** conditions under which a responsible staff would take action to ensure the variances are controlled. **(5 marks)**

(Total: 20 marks)

QUESTION FOUR

a) The National Health Insurance Authority (NHIA) has through the government of Ghana (GoG) received a grant from an international development partner to implement certain projects. Consequently, the Authority is required to build the capacity of its staff and other stakeholders within its value chain to ensure the smooth execution of activities associated with the project implementation.

The Authority has organised capacity building workshops to further its intent of building the competence of its staff and stakeholders. However, the conditions attached to the grant explicitly prohibit expending any part of the grant amount on capacity building. As a result, the Authority has to find ways of funding the workshops but must not make a net loss in that endeavour.
In order not to make a loss, the Authority intends to charge concessionary fee of GH¢165 per attendee per week. The workshops will last for two weeks and it is expected that the fee charged will suffice for all related expenses.

Associated costs of organisation of the workshops are:

Food and drinks	GH¢45 per attendee per week
Hire of venue (Maximum capacity 560 attendees)	GH¢525 per week
Facilitator fees (5 facilitators)	GH¢675 per week per facilitator

Two of the facilitators have agreed to waive their fees. Each facilitator will only facilitate for one week of the workshops. Also, workshop attendees are required to be given an information pack that is expected to cost GH¢30 per pack. As well, the Authority is expected to incur general costs of GH¢15,000 in organising the workshops.

Required:
As the management accountant of the NHIA:

i) Determine the minimum number of attendees required for the Authority to at least cover its costs. **(10 marks)**

ii) Compute the fee per attendee for the NHIA not to run at a loss if the number of attendees reaches maximum capacity. **(5 marks)**

b) The distribution of limited economic resources among competing policy objectives is an inherent difficulty in public sector investment. Cost-Benefit Analysis (CBA) is an economic evaluation method used to compare the costs and advantages of different techniques. Cost-benefit analysis (CBA) is a valuable tool for making decisions and helps in the organising evaluation and control of capital and ongoing projects. However, there have been persistent challenges associated with conducting CBA analyses in the public sector.

Required:
Outline **FOUR** challenges associated with carrying out CBA in the public sector.
(**5 marks)**

(Total: 20 marks)

QUESTION FIVE

a) Ampono LTD (Ampono) manufactures a range of Juice and Salad which it sells under its own brand name in supermarkets throughout Ghana.
Recently, Zonkom, a low-cost supermarket chain, approached Ampono and asked if it would be interested in supplying this orange juice and allow it to be sold under the Zonkom brand in its supermarkets as part of a one-off, three-month promotion. To supply all of its supermarkets during the three-month promotion, Zonkom requires 50,000 bottles of orange juice at an offer price of GH¢12.5 per bottle.

The following information, relating to the production of one bottle of orange juice, is available.

i) Materials:

- Tangerine 0.125kg at GH¢11.60 per kg.
- Sugar 0.25kg at GH¢10.32 per kg.
- Sweetener 0.015 litres at GH¢15.25 per 0.75 litre bottle.

ii) The orange juice is sold in a bottle which Ampono purchases from its suppliers in batches of 100,000 for GH¢124,000. These bottles are in constant use in the production of a variety of Ampono products.

iii) Each bottle of orange juice supplied must have a Zonkom brand label. The labels cost GH¢15,000 for a batch of 500,000 and if not used for this contract they would be disposed of at the cost of GH¢2,000 regardless of the quantity.

iv) Ampono applies fixed overheads to products based on machine hours. Budgeted fixed overheads allocated to orange juice for the year amount to GH¢45,000 and the company expects that in total 100,000 machine hours will be spent producing the orange juice. The production team in Ampono calculated that on average each bottle of orange juice requires a total of six minutes of machine time. Variable manufacturing overheads have been calculated at GH¢5 per bottle.

v) Another jam producer has offered Ampono GH¢100,000 per month to lease machinery that would be required to produce the orange juice for Zonkom.

Required:
Based on the information provided above, advise whether Ampono should accept the contract to produce **orange juice** for the low-cost supermarket chain. You should provide calculations to support your recommendation. **(13 marks)**

b) Ampono currently sells a product at an all–inclusive price of GH¢164.5 each (including VAT at 17.5%) with a profit of 20% on cost. Material cost makes up 40% of the total product cost. Due to high rate of inflation, the supplier of the material is planning to increase the price of material by 10%.

Required:
Compute the new all- inclusive price of the product if Ampono needs to maintain the same profit margin if material price increment goes ahead. **(7 marks)**

(Total: 20 marks)

SUGGESTED SOLUTION

QUESTION ONE

The Oliso Group

a) Return on Investment (ROI) = $\frac{Operating\ income\ before\ inerest\ and\ tax}{Capital\ Employed}$ x 100

Southern territory = $\frac{GH¢514,800}{GH¢2,340,000-GH¢104,000}$ x 100 = 23.02%

Central territory = $\frac{GH¢573,300}{GHc4,420,000-GH¢312,000}$ x 100 = 13.95%

Northern territory = $\frac{GH¢913,900}{GH¢5,590,000-GH¢624,000}$ x 100 = 18.40%

Best performing territory is the southern territory with ROI of 23.02%

(6 marks)

b) Residual Income (RI) = Operating profit – imputed cost of capital

Southern territory = GH¢514,800 – (17.5% x 2,340,000)
GH¢105,300

Central territory = GH¢573,300 – (17.5% x 4,420,000)
(GH¢200,200)

Northern territory = GH¢913,900 – (17.5% x 5,590,000)
GH¢64,350

Best performing territory is the southern territory with RI of GH¢105,300

(6 marks)

c) Economic Value Added (EVA) = NOPAT – (capital employed x WACC)

WACC = ($\frac{2,340}{11,700+2,340}$ *0.78*1.10) + $\frac{11,700}{11,700+2,340}$ x 0.20
=0.013+.167 = 18%

	Southern Territory	**Central Territory**	**Northern Territory**
Profit	514,800	573,300	913,900
Less tax	(113,260)	(126,130)	(201,060)
	401,540	447,170	712,840
Cost of capital	(402,480)	(739,440)	(893,880)
	(940)	**(292,270)**	**(181,040)**

Best performing territory is the Southern territory with EVA of (GH¢940)

(6 marks)

d) Required Changes for Central Territory to Achieve 20% ROI

Targeted operating profit = Targeted ROI x total Assets

= 0.20 X GH¢4,420,000

= GH¢884,000

Increase in operating profit = 884,000 – 573,000 = GH¢310,700

Percentage Change in Revenue

Revenue required = $\frac{targeted\ Operating\ Profit + Fixed\ cost}{1 - variable\ cost\ ratio}$

= $\frac{884,000 + 1,149,600}{1 - \frac{737,100}{2,730,000}}$

= $\frac{2,303,600}{0.730}$

= GH¢3,156,000

% Increase in revenue = $\frac{3,156,000 - 2,730,000}{2,730,000}$ x 100 = 15.60%

Percentage Change in Total Cost

Targeted Profit = Revenue – Total Cost

GH¢884,000 = 2,730,000 – Total Cost

New Total Cost = GH¢2,730,000 – GH¢884,000

GH¢ 1,646,000

% Decrease in Total Cost = $\frac{2,156,700 - 1,646,000}{2,156,700}$ x 100

= 23.68%

Percentage Change in Net assets

New net assets = $\frac{\text{Targeted Operating Profit}}{\text{Targerted ROI}}$

= $\frac{884,000}{0.20}$ = 4,420,000

% increase = $\frac{4,420,000 - 4,420,000}{4,420,000}$ x 100 0%

(2 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

This question was familiar as most candidates were conversant with the calculation of ROI, RI and EVA. The performance of candidates was average even though most of the calculation to arrive at the figures needed to feed into the formula were provided in the question.

QUESTION TWO

a)

i) Destructive behaviours

- **Misunderstanding and worries about cost cutting:** Budgeting is often considered by the managers affected to be excuse for cutting back on expenditure and finding ways to reduce costs. Individuals often resent having to reduce their spending. And so have a hostile attitude to the entire budgeting process. This fear and hostility can exist even if senior management do not have a cost-cutting strategy.

- **Opposition to unfair targets set by senior management:** When senior managers use the budgeting process to set unrealistic and unfair targets for the year, their subordinates may unite in opposition to what the senior managers are trying to achieve. This can result in the formation of pressure groups that collectively ignore the budget, ultimately rejecting it. This can have very harmful effects for the overall organisation.

- **Blame cultures:** Performance of operational managers may be measured by comparing actual performance with the budget. The manager might be rewarded for achieving budget targets but criticized for failing to meet the budget. This tendency to 'blame' managers for failing to meet the budget targets will have an adverse effect on the motivation and the attitude of the operational managers.

- **Sub-optimisation:** There may be a risk that the planning targets for individual managers are not in the best interests of the organisation as a whole. For example, a production manager might try to budget for production targets that fully utilize production capacity. However, working at full capacity is not in the best interests of the company as a whole if sales demand is lower.

- **Budget slack (budget bias):** Budget slack is the intentional overestimation of expenses and/or underestimation of revenue in the budgeting process. Managers who prepare budgets may try to overestimate costs so that it will be much easier to keep actual spending within the budget limit. Similarly, managers may try to underestimate revenue in their budget so that it will be easier for them to achieve their revenue targets. As a result of slack, budget targets are lower than they should be.

(Any 4 well explained points 1.5 marks each = 6 marks)

ii) Mitigation against negative behaviour

- Senior managers should communicate and consult with the individuals affected by target-setting and try to win their agreement to the targets they are trying to set.
- Continuous education of employees about budget procedures and preparation
- Challenging and reasonable targets need to be set by supervisors
- The budgeting process must be well coordinated in order to avoid sub-optimal planning
- Employee participation in the budgeting process will improve motivation and so will improve the quality of budget decisions and the efforts of individuals to achieve their budget targets

(Any 4 well explained points@ 1 mark each = 4 marks)

b) **Aspirational budgets** are budgets based on performance levels and targets that senior managers would like to achieve. On the other hand, **expectational budgets** are budgets based on performance levels and targets that senior managers would realistically expect to achieve.
Aspirational budgets might be considered unfair, especially if the individuals affected have not been consulted. This will be considered unrealistically high and would not only fail to motivate the employees but could actively demotivate that individual

Expectational budgets based on current performance levels do not provide for any improvements in performance. These could be too low to provide any motivation for the employee and would not encourage improvement.

(3 marks)

c) A major difference between budgeting in commercial organisations and budgeting in the public sector is that the objective of commercial organisation is usually to make profit. In the public sector, the aim is to make the most effective use of limited resources. Governments can use the revenues they raise from taxation and other resources and may also borrow to add to their available resources, but there is a limit to what they can spend.

(2 marks)

d) Business Process Reengineering (BPR) involves an evaluation and assessment of current business processes by adapting radical and extensive overhaul of current in place of an improved new system aimed at complete change rather than minimal improvements in the current system. It is a re-design of the series of steps that are followed to carry out some tasks in a business.

(2 marks)

Benefits of BPR

- Simplification of tasks to be carried out.
- Improvements in the quality of products produced.
- Efficient cost reduction and waste management.
- Enhanced customer experience and satisfaction.

(3 points for 3 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Candidates usually do well in budgeting question and more so when it is theory. The responses to requirements (ai) and (aii) were very good. Most candidates scored almost all the marks.
Requirement (b) was equally well answered except that some candidates could not state clearly the disadvantage for each of the principles i.e. aspirational and expectational budgets.
Most candidates explained very well the fundamental feature of BPR and gave relevant benefits as required.

QUESTION THREE

a)

i) **Unit Cost Using Traditional Approach**

	Lonfart DS	Ludriech CS	Lumbach HS
	GH¢	**GH¢**	**GH¢**
Material	247	234	208
Labour	78	104	91
Variable Overhead	44	57	49
Overhead	60	80	70
Unit cost	**429**	**475**	**418**

(5 marks)

ii) **Unit cost using ABC approach**

	Lonfart DS	Ludriech CS	Lumbach HS
	GH¢	**GH¢**	**GH¢**
Material	247	234	208
Labour	78	104	91
Variable Overhead	44	57	49
Overhead	37.899	70.516	204.621
Unit cost	**406.899**	**465.516**	**552.621**

Alternative presentation (ABC)

	Lonfart DS	Ludriech CS	Lumbach HS
	GH¢	**GH¢**	**GH¢**
Set-up	1.34	4.17	26.22
Machine use	24.02	48.05	54.05
Goods inwards	1.98	5.22	62.90
Packaging	4.52	4.78	30.00
Engineering	4.06	4.30	27.00
Total	35.92	66.57	200.17
Prime cost	369.00	395.00	348.00
	404.92	**461.57**	**548.17**

(10 marks)

Workings:

Total budgeted overhead			**GH¢**19,890,000
Lonfart DS	7.8 x 156000		1,216,800 hrs
Ludriech CS	10.4 x 97500		1,014,000hrs
Lumbach HS	9.1 x 39000		354,900hrs
			2,585,700hrs

Direct labour hour rate $= \frac{\text{GH¢19,890,000}}{2{,}585{,}700\ hours}$ = GH¢7.70 per hour

	Lonfart DS	Ludriech CS	Lumbach HS
Direct labour hours per unit	7.8	10.4	9.1
Labour cost at **GH¢**10 per hour	78	104	91
Direct labour hour rate	7.7	7.7	7.7
Unit overhead cost	60.06	80.08	70.07

Total activity volumes:

	Quantity	Direct labour	Material Cost	Machine hours	Component Receipts	Production run	Production order
Lonfart DS	156,000	1,216,800	38,532,000	811,200	59	20	59
Ludriech CS	97,500	1,014,000	22,815,000	1,014,000	98	39	39
Lumbach HS	39,000	354,900	8,112,000	456,300	468	98	98
	Total	**2585700**	**69459000**	**2281500**	**625**	**157**	**196**

Cost driver rates

Activity	**Allocated overheads GH¢**	**Cost Driver**	**Activity per period**	**Overhead absorption rate (OAR)**
Set up	1,638,000	Production runs	157	10,433
Machine	10,530,000	Machine hours	2,281,500	5
Goods inwards	3,276,000	Component receipts	625	5,242
Packaging	2,340,000	Production order	196	11,939
Engineering	2,106,000	Production order	196	10,745
Total	19,890,000			

Overhead cost per unit using ABC Approach

Activity	Cost driver rate	Lonfart DS	Ludriech CS	Lumbach HS	Total cost
		156,000	97,500	39,000	
		GH¢	**GH¢**	**GH¢**	**GH¢**
Setup:					
20 Production runs	10,433	208,660			208,660
39 Production runs	10,433		406,887		406,887
98 Production runs	10,433			1,022,434	1,022,434
Total		**208,660**	**406,887**	**1,022,434**	**1,637,981**
Machine Use					
811200 Machine hrs	5	4,056,000			4,056,000
1014000 Machine hrs	5		5,070,000		5,070,000
456300 Machine hrs	5			2,281,500	2,281,500
Total		**4,056,000**	**5,070,000**	**2,281,500**	**11,407,500**
Goods inwards					
59 comp. receipts	5,242	309,278			309,278
98 comp. receipts	5,242		513,716		513,716
468 comp. receipts	5,242			2,453,256	2,453,256
Total		**309,278**	**513,716**	**2,453,256**	**3,276,250**
Packaging					
59 Production orders	11,939	704,401			704,401
39 Production orders	11,939		465,621		465,621
98 Production orders	11,939			1,170,022	1,170,022
Total		**704,401**	**465,621**	**1,170,022**	**2,340,044**
Engineering					
59 Production orders	10,745	633,955			633,955
39 Production orders	10,745		419,055		419,055
98 Production orders	10,745			1,053,010	1,053,010
Total		**633,955**	**419,055**	**1,053,010**	**2,106,020**
TOTAL		**5,912,294**	**6,875,279**	**7,980,222**	**20,767,795**
OVERHEAD COST PER UNIT		**37.899**	**70.516**	**204.621**	

b) Conditions under which a responsible staff would take action to ensure the variances are controlled:

- If the variance is material enough to significantly impact financial statements, key performance indicators, or overall business objectives, it warrants attention and corrective action. A small, insignificant variance might be acceptable, but a material variance should always be investigated and addressed.
- If the variance is a recurring issue, it indicates a systemic problem that needs to be resolved. A one-time deviation might be an anomaly, but a consistently occurring variance suggests a process or system flaw that requires intervention.
- If the variance affects critical performance metrics that are essential to the business's success, it should be addressed. For example, if a variance impacts production efficiency, customer satisfaction, or profitability, it needs to be controlled.
- Before taking action, management should assess whether the cost of implementing corrective measures is less than the potential loss or damage caused by the variance. If the cost of fixing the problem is prohibitively high, it may be more prudent to accept the variance or find alternative solutions.

(4 relevant points @ 1.25 marks each = 5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Candidates demonstrated good knowledge of the difference between the traditional and ABC approach to overhead apportionment and absorption in requirement (a). The performance was however disappointing. In table 2 the figures in column 2 were in millions of cedis yet most candidates disregarded the zeros on top and calculated the cost driver rates as if they were thousands.

Requirement (b) was poorly answered by most of the candidates. While some were discussing the controllability of variances others wrote on corrective action.

QUESTION FOUR

a)
i)

Fixed costs:		**GH¢**
Hire of Venue	GH¢525 per week @ 2 weeks	1,050
Facilitators	GH¢675per facilitator @ 3 facilitators	2,025
General costs		15,000
Total Fixed costs		**18,075**
Variable costs:		
Food and drinks	GH¢45 per week @ 2 weeks	90
Information pack	GH¢30 per pack	30
Total variable cost per attendee		120

Minimum number of attendees to cover costs = $\frac{Fixed\ costs}{contribution\ per\ unit}$

$$= \frac{\text{GH¢18,075.00}}{\text{GH¢330.00} - \text{GH¢120.00}}$$

= 87 attendees

Or

TR=TC
330n = 90n+1050+2025+30n+15,000
330n = 120n+18,075
210n =18,075
n = 86 or 87

(10 marks)

ii) Fee per attendee for the NHIA not to run at a loss at maximum capacity

$$= \frac{Total\ fixed\ costs + (maximum\ capacity\ units\ x\ variable\ cost\ per\ unit)}{Maximum\ capacity\ units}$$

$$= \frac{\text{GH¢18,075.00} + (560\ attendees\ x\ \text{GH¢120.00}\ per\ attendee)}{560\ attendees}$$

$$= \text{GH¢152.28}$$

(5 marks)

b) **Challenges associated with carrying out CBA in the public sector**

- Departments and agencies not carrying out CBA analyses for investment projects as required according to the rules relating to scale of appraisal.
- Underestimation of costs – some projects have cost significantly more than expected.
- Lack of sufficient options analysis including no definition of the 'counterfactual'.
- Lack of clarity over specific objectives for the project.
- Double counting of benefits.
- Insufficient sensitivity analysis.

4 relevant points @ 1.25 marks each = 5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Requirement (a) was a Cost-Volume-Profit analysis question; to calculate the break even in quantity and a rate/price for a given quantity. The fixed cost was not difficult to ascertain and the variable costs were easy to compute. The only item that could have confused candidates is the cost for the facilitators. Contrarily to expectation, most candidates performed so poorly. Most of the candidates stated correctly the break- even formula but could not compute the contribution margin and fixed cost. The determination of the total cost posed a problem, most candidates got the answer wrong.
Candidates who attempted requirement (b) scored some good marks.

QUESTION FIVE

a)

	Per unit	**Total**
	GH¢	**GH¢**
Price/Revenue (12.25*50,000)	12.25	612,500
Less: relevant cost of production		
0.125kg Tangerines x 50,000 bottles x 11.60	1.45	72,500
0.250kg Sugar x 50,000 bottles x GH¢10.32	2.58	129,000
0.015 litres sweetener x 50,000 bottles x GH¢20.33	0.30	15,250
50,000 bottles x GH¢1.24	1.24	62,000
Fixed overheads (incurred anyway)	0	0
Variable overheads x 50,000 bottles x GH¢5	5	250,000
Labels	0.34	17,000
Lease rental x 3 months - opportunity cost	6.00	300,000
	(16.92)	(845,750)
	(4.67)	**(233,250)**

Recommendation

Ampono LTD should not accept the contract to supply Orange Juice at a price of GH¢12.5 per bottle the company will make a loss of GH¢233,250.

(13 marks)

b)

	GH¢
Current price	164.50
Net price $\frac{164.50}{1.175}$	140.00
Cost of the product = $\frac{140*100}{100+20}$	116.67
Material cost (40% *116.67)	46.67
New material cost (1.1 * 46.67)	51.34
Other cost 60% *116.67	70.00
New product cost (51.34 +70.00)	121.34
Price without VAT $\frac{121.34}{0.8}$	145.56
Price with VAT (151.68 *1.175)	**171.03**

(7 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Requirement (a) pertained to decision making under a special contract. The amount required for the contract should be half of the cost for the batch since the item is in constant use. Since the total labels in the batch is 500,000 the total purchase amount should be used in determining the cost of branding, even though the excess of 450,000 will be disposed of. Again, the disposal cost will be additional cost incurred but some candidates treated it as savings.
The opportunity cost was well understood except that some candidates considered only one month instead of the three months.
In requirement (b), candidates could not apply the margin, mark-up concept to determine the cost before and after the material cost adjustment.
Candidates did not do well in answering this question.

CONCLUSION AND RECOMMENDATIONS

The overall performance was below expectation. If candidates had prepared well, the performance could have been better. Candidates writing this paper should note that questions are set to cover all the areas in the syllabus and marks are allotted based on the weights of the topics so should be guided accordingly.