NOVEMBER 2023 PROFESSIONAL EXAMINATIONS
INTRODUCTION TO MANAGEMENT ACCOUNTING (PAPER 1.2)
CHIEF EXAMINER'S REPORT, QUESTIONS AND MARKING SCHEME

STANDARD OF THE PAPER

The paper was administered in this November 2023 examinations. The paper covered all relevant topics of the syllabus and the questions were standard and comparable to other accountancy examining bodies. Mark allocation to the questions followed the weighting in the syllabus: the actual marks allocated to the questions in the paper were significantly in line with the syllabus as follows**:**

Table 1: Actual mark allocation compared to that of the syllabus

	Actual Allocation	Syllabus allocation	Difference
Scope of management accounting	15	15	0
Cost Elements	15	14	1
Costing Techniques	30	25	5
Forecasting Techniques	15	15	0
Budgeting	20	20	0
Performance differences	5	11	(6)
Total marks	**100**	**100**	**0**

From Table 1 above marks were allocated fairly and appropriately to the actual examination questions in line with that of the syllabus except question on performance differences which had 6 marks less actually allocated than that allowed for the syllabus. Conversely, the examination question paper actually allocated 30 marks instead of 25 marks expected to be allocated to Costing Techniques. However, the paper was religiously in line with the expected marks allocation designed by the syllabus in connection with the scope of Management Accounting, Forecasting Techniques and Budgeting. Notwithstanding few differences in the actual and expected mark allocation, the paper adequately tested the students on more relevant, practical and basic questions.

Marks allocated to questions were commensurate with the amount of work and time required. There were no 'too loaded' and 'too generous' question. The marks were fairly and appropriately allocated to time and amount of work required from the candidates.

PERFORMANCE OF THE CANDIDATES

The November 2023 examination for Introduction to Management Accounting aimed to assess candidates' understanding of fundamental concepts, principles, and techniques in Management Accounting. The examination covered a range of topics, including cost behavior, budgeting, variance analysis, stock valuation and decision-making.
Overall, the performance of candidates in the November 2023 examination was commendable. The majority of candidates demonstrated a solid grasp of the core

principles of Management Accounting and applied them effectively to various scenarios. It was evident that a few candidates didn't get a good understanding of some of the theoretical concepts and were unable to apply them to practical situations.

The November 2023 diet for Introduction to Management Accounting witnessed a satisfactory performance by the majority of candidates. However, there were notable areas where candidates faced challenges. There was an indication that the candidates did not prepare adequately for the paper because they either could not attempt or answer Question 5a (iii) which was on calculation of the seasonal variation for day of the week. Significant number of the candidates could not transfer the computed trend into weekly schedule of trend to determine the seasonal variation.

The general performance of the candidates was above average with the reasonable number of passes. These were the following associated reasons:

- Many candidates could answer Question 4 very well and even significant number of candidates passed the paper with high marks or score.
- Next was Question 1 where significant number of candidates answered it very well most especially the (a) part which was on marginal costing and this significantly contributed to the significant number of candidates attaining passes.

NOTABLE STRENGTHS AND WEAKNESSES OF CANDIDATES

- **Nature of the strong performance and areas**: the strong performance of few candidates depended on the volume of knowledge and skill in approaching specific questions like budgeting, preparation of operating statements under marginal and absorption costing methods, and forecasting, valuation of closing inventory using FIFO as well as variance analysis. All of the strong performers exhibited accuracy, precision and better understanding of these areas.

- **Observed reasons for the strengths**: strong performers really and adequately understood the costing methods and principles; develop the skills in applying the costing principles.

- **Weaknesses demonstrated by candidates in answering the questions:**
  - ✓ Reasonable candidates did not adequately understand the costing principles required very well to enable them successfully write exams.
  - ✓ Many candidates did not take adequate time and effort to understand the requirements of the questions and therefore did not do well in some questions on the preparation of budgeted statement of profit or loss and budgeted statement of financial position from a given data. Responses from the candidates clearly indicated that many did not read the information given very well to understand.

QUESTION ONE

Alokome Plc is a company that produces and sells one product "Iga". Information relating to the operations of Alokome Plc for the first two months of 2023 are as follows:

i) Iga sells for GH₵500 per unit.
ii) There were no inventories of Iga at the end of December 2022.
iii) Other relevant information is as follows:

Standard cost per unit of Iga:	**GH₵**	
Direct material and wages	220	
Variable production overhead	30	
Budgeted and actual costs per month:		
Fixed production overhead	990,000	
Fixed selling and admin. expenses	400,000	
Variable selling expenses	12.5% of sales	
Normal capacity	110,000 units per month	
Number of units produced and sold:	**January**	**February**
Sales (units)	128,000	110,000
Production (units)	140,000	102,000

Required:

Using the information above, prepare in a columnar form profit statements for January and February 2023 using:

a) Marginal costing **(10 marks)**
b) Absorption costing **(10 marks)**

(Total: 20 marks)

QUESTION TWO

a) As organisations become larger and more complex, it is no longer possible for just one person to prepare a budget. Instead, budgeting across the organisation must be carefully coordinated among various actors. As a result, there is the need for a budget manual irrespective of the type of or approach to budgeting.

Required:

i) State **FIVE (5)** contents of a budget manual. **(5 marks)**

ii) Write short notes on the following:

- Incremental budget. **(2.5 marks)**
- Zero Based Budget. **(2.5 marks)**

b) Chico Ltd, a newly established manufacturing company with branches across Africa is preparing its first annual budget. The following information is relevant:

Sales forecast for each month:	
January to June	GH₵20,000
July to December (and thereafter)	GH₵22,000
Gross profit margin	20%
Credit given to customers	2 months
Credit taken from suppliers	2 months
Closing inventory	3 months of demand
Monthly operating expenses	GH₵1,222

At the start of the budget period, a non-current asset with cost GH₵120,000 and useful life of 6 years was purchased and transferred to one of its branches. In addition, a cash amount of GH₵80,000 was provided for the operations of Chico Ltd.

Required:

Prepare the budgeted statement of profit or loss and budgeted statement of financial position for Chico Ltd. **(10 marks)**

(Total: 20 marks)

QUESTION THREE

a) Management accounting can be described as the process of supplying the managers and employees in an organization with relevant information, both financial and non-financial, for making decisions, allocating resources, monitoring, evaluating, and rewarding performance.

Required:
In relation to the description of management accounting provided above:
State **THREE (3)** important changes that have taken place in the business environment that have influenced management accounting practice. **(3 marks)**

b) Financial Accounting and Management Accounting share important similarities since both are based on financial information and other quantitative information about business operations. However, they differ in many ways.

Required:
Identify **FOUR (4)** differences between financial accounting and management accounting. **(4 marks)**

c) Mr. Osei Nyarko, an engineer by training established Kotmat Ltd three years ago with five employees. His only source of information concerning the performance of Kotmat Ltd has been the half-yearly financial statements which he receives ten weeks after the end of each half year. A proposal has been submitted to Mr Osei Nyarko to install a cost and management accounting system.

Required:

i) Identify **FOUR (4)** benefits Mr Nyarko will derive from installing a cost and management accounting system. **(4 marks)**

ii) Enumerate **FOUR (4)** types of information which could be obtained from the cost and management accounting system which cannot be obtained from the current system**.** **(4 marks)**

d) State and explain **TWO (2)** useful (one for each) information generated by marginal and absorption costing systems. **(5 marks)**

(Total: 20 marks)

QUESTION FOUR

a) The following data has been extracted from the books of ABC Ltd for the month of October 2023.

Date	**Description**
2/10/2023	Bought 200 units @ GH₵100 per unit
5/10/2023	Bought 150 units @ GH₵120 per unit
8/10/2023	Issued 120 units
12/10/2023	Bought 100 units @ GH₵90 per unit
20/10/2023	Issued 140 units
24/10/2023	Bought 300 units @ GH₵150 per unit
28/10/2023	Issued 210 units

Required:
Using the FIFO, calculate the value of the closing inventory. **(10 marks)**

b) Identify **FOUR (4)** information that can be seen on an invoice. **(5 marks)**

c) Preka body lotion is a product produced from the combination of two materials: prekese and kakaduro. Preka body lotion has a standard direct material cost as follows:

Prekese (6 kilograms @ GH₵15 per kilogram) GH₵90
Kakaduro (10 kilograms @ GH₵10 per kilogram) GH₵100

During period one, 1,000 units of Preka body lotion were manufactured, using 11,700 kilograms of prekese and 10,000 kilograms kakaduro costing GH₵98,600 and GH₵78,000 respectively.

Required:
Calculate the following variances for prekese and kakaduro:

i) The direct material price variance **(2.5 marks)**
ii) The direct material usage variance **(2.5 marks)**

(Total: 20 marks)

QUESTION FIVE

a) A company operates from Monday to Friday. Sales data for the most recent three weeks as well as the moving total are as follows:

Day	Sales	Moving total
Day 1	78	
Day 2	83	
Day 3	89	420
Day 4	85	430
Day 5	85	440
Day 6	88	450
Day 7	93	460
Day 8	99	470
Day 9	95	480
Day 10	95	490
Day 11	98	500
Day 12	103	510
Day 13	109	520
Day 14	105	
Day 15	105	

Required:

i) State the length of the cycle. **(2 marks)**

ii) Using the moving averages, establish the trend of the historical data above. **(6 marks)**

iii) Calculate the seasonal variation for each day of the week. **(7 marks)**

b) The value of variances as a control technique for management depends on the reliability and accuracy of the standard costs. If the standard costs are inaccurate, comparisons between actual cost and standard cost will have no meaning.

Required:

Explain **TWO (2)** factors to be considered by the purchasing department in estimating the direct material costs per unit of raw material **(5 marks)**

(Total: 20 marks)

QUESTION ONE

a) **Alokome Plc**

Profit statement for January and February 2023 - Marginal Costing

	January GH₵'000	February GH₵'000
Sales revenue (128,000, 110,000 @ GH₵500 per unit)	64,000	55,000
Less Variable cost of sales:		
Beginning Inventory (- ,12,000 @ GH₵250 per unit)	-	3,000
Production cost(140,000, 102,000 @ GH₵250 per unit)	35,000	25,500
Ending Inventory (12,000, 4,000 @ GH₵250 per unit)	(3,000)	(1,000)
Variable cost of production	32,000	27,500
Variable Selling expenses (12.5% *GH₵64m, GH₵55m)	8,000	6,875
Variable cost of sales	(40,000)	(34,375)
Contribution	24,000	20,625
Less Fixed costs:		
Fixed production overhead	(990)	(990)
Fixed selling and admin. Expenses	(400)	(400)
Profit	22,610	19,235

(Marks are evenly spread using ticks = 10 marks)

b) **Alokome Plc**

Profit statement for January and February 2023 – Absorption Costing

	January GH₵'000	February GH₵'000
Sales revenue (128,000, 110,000 @ GH₵500 per unit)	64,000	55,000
Less Full cost of sales:		
Beginning Inventory (- ,12,000 @ GH₵259 per unit)	-	3,108
Production cost(140,000, 102,000 @ GH₵259 per unit)	36,260	26,418
Ending Inventory (12,000, 4,000 @ GH₵259 per unit)	(3,108)	(1,036)
Full cost of production	33,152	28,490
Gross profit – Notional	30,848	26,510
Adjustment for under/over absorption of fixed prodn o/head	270	(72)
Gross profit – Actual	31,118	26,438
Less selling and administration expenses:		
Variable Selling expenses (12.5% *GH₵64m, GH₵55m)	(8,000)	(6,875)
Fixed selling and admin. Expenses	(400)	(400)
Profit	22,718	19,163

(Marks are evenly spread using ticks = 10 marks)

Workings:

Variable production cost per unit:	GH¢
Direct material and wages	220
Variable production overhead	30
Total	250

Fixed production overhead per unit = $\text{GH¢}\frac{990,000}{110,000}$

= GH¢9 per unit

Full production cost per unit:	GH¢
Direct material and wages	220
Variable production overhead	30
Fixed production overhead per unit	9
Total	259

(Total: 20 marks)

EXAMINER'S COMMENTS

Approximately 75% of candidates struggled to comprehend and solve the questions in this section. The absorption question, in particular, proved to be problematic, with candidates facing difficulties in calculating under or over absorption figures. To address this, future exams may benefit from clearer instructions or additional examples to enhance candidates' understanding.

QUESTION TWO

a) **Content of a budget manual:**

- It defines the budget objective.
- It lists the membership of the budget committee.
- It outlines the procedure to be followed in the preparation of the annual budget.
- It outlines the various functional budgets to be prepared.
- It also outlines the timelines for the submission of the annual budget by functional managers.

(5 points @ 1 mark each = 5 marks)

b) **Incremental versus zero based budgeting:**

i) **Incremental budget:** This is the system of budgeting where the previous period's budget is used as basis for preparing the current periods' budget by making incremental adjustments as may be influenced by factors such as inflation, expansion needs, and growth. **(2.5 marks)**

ii) **Zero Based Budget**: - it is a process of budgeting whereby all activities contained in the budget is re-evaluated each time the budget is being prepared**.** Every item of expenditure must be justified in its entirety in order to be included in next year's budget. **(2.5 marks)**

c) Chico Ltd

Budgeted Statements of Profit or Loss	**GH₵**
Sales (6months x GH₵20,000)+(6months x GH₵22,000)	252,000
Cost of sales 80%	201,600
Gross profit 20%	50,400
Less Operating Expenses:	
Depreciation GH₵120,000/6	20,000
Operating expenses 12month x GH₵1,222	14,664
Budgeted profit	**15,736**

(Marks are evenly spread using ticks = 4 marks)

Budgeted Financial Position	GH₵
Non-current assets (120,000-20,000)	100,000
Current Assets:	
Inventory (3months x 22,000 x 80%)	52,800
Debtors (2months x 22,000)	44,000
Cash*	54,136
Current liabilities (2month x 22,000 x 80%)	(35,200)
Net Asset	**215,736**
Capital (120,000 + 80,000)	200,00
Budgeted profit	15,736
	215,736

Marks allocation:
Cash balance = 2 marks
Marks are evenly spread using ticks = 4 marks
6 marks

Workings:

Cash balance

Receipts:		
Balance b/d		80,000
Sales (252,000 – 44,000)		208,000
		288,000
Outflow:		
CoS	201,600	
Inventory	52,800	
	254,400	
Creditors	(35,200)	(219,200)
Expenses		(14,664)
Balance b/d		54,136

(Total: 20 marks)

EXAMINER'S COMMENTS

While Question 2 presented a standard examination format, many candidates encountered difficulties in answering the B part, which required the preparation of the budget statement of profit or loss and the budget statement of financial position for Chico Ltd. A significant number scored poorly, with only one candidate achieving full marks. The balance of cash also posed challenges for many, and candidates struggled with the A part of the question as well. To improve performance, it is recommended that future exams provide more guidance or practice questions on budget statements.

QUESTION THREE

a) The important changes in business environment:

- globalization of world trade;
- deregulation in various industries;
- changing product life cycles;
- advances in manufacturing and information technologies;
- focus on environmental and ethical issues;
- a greater emphasis on value creation; and
- the need to become more customer driven.

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

b) Differences between Financial Accounting and Management Accounting

Financial Accounting	Management Accounting
It is retrospective, reporting and summarizing in financial terms the results of past decisions and transactions.	It is both retrospective, providing feedback about past operations, and also prospective, incorporating forecasts and estimates about future events. For both retrospective reporting and prospective planning, management accounting uses both financial and nonfinancial measures.
It is primarily oriented to external stakeholders, such as investors, creditors, regulators, and tax authorities.	It is oriented to meeting the decision-making needs of employees and managers inside the organization. Ideally, a good management accounting system can become a source of competitive advantage for a company.
It must be consistent with rules formulated by standard setters such as the Financial Accounting Standards Board (FASB) in the United States and the International Accounting Standards Board (IASB) for much of the rest of the world, and local country regulatory authorities. These standard setters and regulatory authorities specify the content of the reports, the rules for how the content gets developed, and how the content will be presented.	It has no prescribed form or rules about its content, how the content is to be developed, and how the content is to be presented. All of these get determined by managers' judgments and decisions about what best meets their needs for actionable information and is defined entirely by the needs of managers using the information. No standard setter or regulator specifically influences the design of management accounting information and systems.

A detailed set of financial accounts is published annually and less detailed accounts are published semi-annually.	Management accounting reports on various activities may be ad hoc investigations or be prepared at daily, weekly or monthly intervals.
Financial accounting reports describe the whole of the business,	management accounting focuses on parts of the organization; for example, the cost and profitability of products, services, departments, customers and activities
There is a statutory requirement for public limited companies to produce annual financial accounts, regardless of whether or not management regards this information as useful.	Management accounting, by contrast, is entirely optional and information should be produced only if it is considered that the benefits it offers management exceed the cost of collecting it.

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

c)

i) A cost and management accounting system should generate information to meet the following requirements :

- To provide internal financial information service to management to assist in planning, control and decision making;
- To assist forward planning by providing cost information on matters related to relative profitability of products and departments to assist in choosing the appropriate level of production, mix of products and pricing strategies to be adopted.
- To aid control by regular reporting of product costs and profitability, the performance of different types of labour, departments and sections.
- To aid decision making by regular and special cost reports on any facet of operations.
- To provide motivation and to promote cost consciousness for all levels of staff by providing them with feedback on their performance in the form of cost reports, budget statements, variance reports etc.
- To provide a formal means of gathering detailed information on operations which is vital now that the firm is beyond the size where personal observation is sufficient.
- allocate costs between cost of goods sold and inventories for internal and external profit reporting and inventory valuation;
- provide relevant information to help managers make better decisions;
- provide information for planning, control and performance measurement.

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

ii) Types of information which could be obtained from the cost accounting system which cannot be obtained from the current system:

- Product costs in total and per unit.
- Departmental operating statements showing performance, expenditure etc.
- Efficiency statements on labour, machine and material utilisation.

- Analysis of cost trends particularly in relation to changing levels of activity.
- Product contribution and profitability statements.
- Periodic stock valuation.
- Cash budgets.
- Scrap and rectification costs.
- Special order costs

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

d) Uses of marginal and absorption costing information:

- Information generated by a marginal costing system is used by management for internal decision making, planning and control of activities.
- Information generated by absorption costing system is used by people outside the organization for decision making.
- Information generated by marginal and absorption costing systems can be used by management for pricing decision.

(Any 2 points @ 2.5 marks each = 5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Question 3, being primarily theoretical, emerged as the most challenging among the five. A substantial number of candidates did not thoroughly read the question before attempting it, resulting in lower performance. While some candidates excelled in providing comprehensive answers, the question's complexity proved to be a barrier for many. Clearer communication of the expectations and perhaps a breakdown of the question into subparts may aid candidates in approaching such theoretical questions more effectively.

QUESTION FOUR

a) Computation of closing inventory using FIFO

Date	Receipt	Issued	Balance
2/10/2023	200 @ GH₵100		200 @ GH₵100 = GH₵20,000 GH₵20,000
5/10/2023	150 @ GH₵120		200 @ GH₵100 = GH₵20,000 150 @ GH₵120 = GH₵18,000 GH₵38,000
8/10/2023		120 @ GH₵100	80 @ GH₵100 = GH₵ 8,000 150 @ GH₵120 = GH₵18,000 GH₵26,000
12/10/2023	100 @ GH₵90		80 @ GH₵100 = GH₵ 8,000 150 @ GH₵120 = GH₵18,000 100 @ GH₵90 = GH₵ 9,000 GH₵35,000
20/10/2023		80 @ GH₵100 60 @ GH₵120	90 @ GH₵120 = GH₵10,800 100 @ GH₵90 = GH₵ 9,000 GH₵19,800
24/10/2023	300 @ GH₵150		90 @ GH₵120 = GH₵10,800 100 @ GH₵90 = GH₵ 9,000 300 @ GH₵150 = GH₵45,000 GH₵64,800
28/10/2023		90 @ GH₵120 100 @ GH₵90 20 @ GH₵150	280 @ GH₵150 = GH₵42,000 **GH₵42,000**

(10 marks)

b) Information that can be seen on an invoice

- The payment due date.
- A unique invoice number.
- A description of the products or services sold.
- The quantity and price of each product/service.

(4 points @ 1.25 mark each = 5 marks)

c)

i) **Direct material price variance**

Prekese

11,700 kilograms should have cost		
(11,700 x GHS15)	175500	
But did cost	98600	
Variance	**76900**	**(F)**

Kakaduro

10,000 kilogram should have cost (10,000 x GHS10)	100000	
But did cost	78000	
	22000	**(F)**

ii) **Direct material usage variance**

Prekese

1,000 units should have used (1000units x 6kg)	6000	
But did use	11700	
Variance	5700	(A)
SC	15	
	85,500	(A)

Kakaduro

1,000 units should have used (1000 units x 10kg)	10000	
But did use	10000	
Variance	0	

(Each variance calculated @ 1.25 marks = 5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Question 4 was perceived as relatively straightforward, with only a few candidates encountering difficulties. The question focused on variances for prekese and kakaduro in terms direct material price & usage.

QUESTION FIVE

a)

i) Length of cycle is five (5) days **(2 marks)**

ii)

Day	Sales	Moving total	Trend	Variation
1	78			
2	83			
3	89	420	84	5
4	85	430	86	-1
5	85	440	88	-3
6	88	450	90	-2
7	93	460	92	1
8	99	470	94	5
9	95	480	96	-1
10	95	490	98	-3
11	98	500	100	-2
12	103	510	102	1
13	109	520	104	5
14	105			
15	105			

iii)

The seasonal variation (daily variation) is calculated as follows:

Variation	Monday	Tuesday	Wednesday	Thursday	Friday	Total
Week 1			5	-1	-3	
Week 2	-2	1	5	-1	-3	
Week 3	-2	1	5			
Average	-2	1	5	-1	-3	0
Adjustment	0	0	0	0	0	0
Seasonal adjustment	-2	1	5	-1	-3	0

Trend (evenly distributed) = 6 marks

Seasonal variation (evenly distributed) = 7 marks

b) Factors to consider in estimating direct material cost per unit of raw material

- Purchase contracts already agreed
- Pricing discussions with regular suppliers
- The forecast movement of prices in the market
- The availability of bulk purchase discounts
- The quality of material required by the production departments

(Any 2 points @ 2.5 marks each = 5 marks)

(Total: 20 marks)

CONCLUSION & RECOMMENDATION

Areas where most candidates were ill-prepared:

- Preparation of operating profit statements using absorption costing method
- Preparation of budgeted statements of profit or loss and financial position from a data and information on ratios
- Determination of trend and variation as well as preparation of schedule to determine seasonal variations.

Recommendations for the observed weakness and advice to future candidates:

- Candidates should adequately prepare for the paper by ensuring that costing principles and methods are well understood.
- Candidates should ensure that they proficiently and capably know how costing principles and methods are applied as well as budget preparation
- Candidates should take their time to understand the requirements of the questions before they start to answer them
- Candidates should attempt first the questions that relatively easier and straight-forward to them