

**JULY 2026 PROFESSIONAL EXAMINATIONS
MANAGEMENT ACCOUNTING (PAPER 2.2)
CHIEF EXAMINER'S REPORT, QUESTIONS AND MARKING SCHEME**

EXAMINER'S GENERAL COMMENTS

The questions covered all sections of the syllabus with needed information available in the study manual. The level of difficulty was within the competence of an average candidate. There was a fair balance between theory and computations. The overall performance was disappointing considering the fact that the questions appeared quite straight forward.

STANDARD OF THE PAPER

The standard was as good as the previous diets. Overall, the question quality and standard were straight forward, unambiguous, clear and error-free. The five questions have a wide coverage of the syllabus and the study manual provides enough information that can help learners to respond appropriately to the questions. Marks allocated to questions were appropriate. 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.

The performance of candidates was disappointing. The poor performance is wide spread with a few exceptional cases. Generally, the questions were within the competence of an average candidate and most of the candidates scored very high marks in question one but performed badly in the others.

NOTABLE STRENGTHS AND WEAKNESSES.

Strengths

Candidates normally perform well in theory questions especially where they are asked to explain or list. This reflected in the scores for question 1, 2 (b) and 5 (b) (i). The question on throughput accounting was well answered as well as 3 (a) (i), calculation of standard profit. The preparation of income statement in question 5(a) was well attempted.

Weaknesses.

Candidates lack the ability to analyse simple concepts in the theory questions. Any question that went beyond listing or explanation of a principle posed a challenge to candidates. It is probably one of the causes for the poor performance. For instance, candidates demonstrated good knowledge in the meaning of sales, materials and labour variances but they could not simply identify the interrelationship. Candidates usually have problems dealing with variances especially mix and yield (quantity for sales margin) variances. In the computation of sales volume, mix and quantity variances some use standard selling price instead of standard profit or contribution.

QUESTION ONE

- a) A retail company is planning to open a new branch in a developing community. Management wants to ensure that the decision aligns with the principles of the Triple Bottom Line (TBL).

Required:

Explain the Triple Bottom Line (TBL) as used in accounting and state **ONE** key consideration under each of the bottom lines. **(5 marks)**

- b) Kube Shopping LTD is a retail company that has recently expanded its operations by launching an online sales platform. While financial metrics such as revenue and profit margins are being tracked, Management is also interested in using non-financial performance indicators (NFPIs) to evaluate the effectiveness and sustainability of the online sales function.

Required:

Identify **FIVE** relevant non-financial performance indicators (NFPIs) that Kube Shopping LTD could use to assess the performance of its online sales function. **(5 marks)**

- c) A long-established company, currently operating under a highly centralised management structure, has experienced significant growth. As a result, the Chief Executive Officer (CEO), despite having a capable support team, is increasingly overwhelmed by the volume and complexity of strategic and operational decisions.

To address this challenge, the company is considering a structural reorganisation into profit centres. Under this proposed model, the business will be divided into product-based divisions, each led by a Divisional Managing Director. These Directors will be granted full responsibility for all activities relating to their respective products.

Required:

- i) State **THREE** types of decisions that should be delegated to the newly appointed Divisional Managing Directors to ensure the success of the reorganisation. **(3 marks)**
- ii) State **TWO** types of decisions that would be appropriate to retain under the control of the company's central head office. **(2 marks)**
- d) A newly established group of companies is considering using a single Return on Capital Employed (ROCE) rate as a benchmark to assess the performance of its various operating units, despite significant differences in their size and nature of operations. However, the group is particularly concerned with ensuring that the use of this metric provides a valid and meaningful measure of performance across all companies.

Required:

Explain **FOUR** reasons a single ROCE rate may not provide an adequate measure of a company's performance. **(5 marks)**

(Total: 20 marks)

QUESTION TWO

- a) Kontori LTD is engaged in the production and marketing of oil. Three types of oils are produced. These are Palm Oil, Coconut Oil and Palm Kernel Oil which are produced for both industrial and domestic use.

The following information relates to the month of August 2025:

- 1) Selling price and cost per unit data is as follows

Product	Palm Oil	Coconut Oil	Palm Kernel Oil
	GH¢	GH¢	GH¢
Selling price	150	190	220
Material cost	45	60	30
Labour cost	20	35	45
Other variable cost	25	35	40
Fixed cost	20	25	35

- 2) Materials cost for all the product is GH¢15 per litre and labour hour per litre for all products is GH¢20. Total materials and labour hours are limited to 80,000 litres and 35,150 hours respectively.
- 3) Expected demand is as follows:
- | | |
|-----------------|--------------|
| Palm Oil | 7,500 litres |
| Coconut Oil | 7,000 litres |
| Palm Kernel Oil | 8,000 litres |
- 4) Kontori LTD operates a just-in-time (JIT) manufacturing system with regard to the production of oils and aims to hold very little work-in-progress and no finished goods stocks whatsoever.

Required:

- i) Using throughput accounting principles, advise management of the quantities of each type of oil that should be produced which will maximise net profit. **(9 marks)**
- ii) Calculate the throughput accounting ratio for each type of product. **(4 marks)**
- b) Modern budgetary frameworks rely on active fiscal oversight to keep operational spending aligned with company financial goals. Implementing cost control and cost reduction strategies allows management to regulate outflows, curb inefficiencies and protect cash reserves.

Required:

Differentiate between *cost control* and *cost reduction*. **(2 marks)**

- c) Budget preparation is a highly structured accounting sequence that translates corporate strategy into financial targets. Management must follow a specific order of operations during the initial planning phase to ensure the final plan is realistic. A critical early step in this sequence involves addressing the **principal budget factor**.

Required:

Explain why the identification of the principal budget factor is an important part of the budget preparation process. **(5 marks)**

(Total: 20 marks)

QUESTION THREE

- a) Tono LTD manufactures and sells a range of bread directly to the public. At present, Tono LTD manufactures only three different types of bread; butter bread, sugar bread and wheat bread. Tono LTD operates a standard absorption costing system to control the manufacturing cost of its products.

The standard selling price, volumes and cost data for these three products for the last period are as follows:

Product	Butter Bread	Sugar Bread	Wheat Bread
Selling price per unit (GH¢)	150	120	180
Variable cost to sales ratio	55%	40%	45%
Labour hours per unit	30 minutes	27 minutes	33 minutes
Budgeted production and sales	12,000 units	18,000 units	22,000 units

The total fixed production overhead for the last period was estimated in the budget to be GH¢ 865,000. This was absorbed on a labour hour basis.

The following information of actual volumes, variable cost to sales ratio and selling prices for the three products in the last period was obtained.

Product	Butter Bread	Sugar Bread	Wheat Bread
Actual selling price per units (GH¢)	155.6	123.5	177
Actual variable cost to sales ratio	30%	55%	60%
Actual production and sale (units)	11,500	19,500	21,500

Management wishes to determine the variances for the period in order to analyse the sales performance of the company.

Required:

- i) Calculate standard profit per unit. **(4 marks)**
- ii) Calculate the following variances for overall sales for the last period:
- Sales profit margin variance. **(2 marks)**
 - Sales mix profit variance. **(2 marks)**
 - Sales quantity profit variance. **(2 marks)**
- b) You have recently been appointed as the Management Accountant at Funtum LTD, a company that manufactures two products: Dade and Bour. Although both products utilise the same type of raw materials and labour, they do so in varying proportions.

Given that Funtum LTD's production and sales activities are evenly distributed throughout the year, it has been agreed that the annual budget will be divided into four equal periods, each spanning 13 weeks. To assist you in preparing this budget, the Sales and Production Managers have provided the following information:

1) Sales and production data

	Dade	Bour
Budgeted sales for 13 weeks (units)	1,690	2,470
Standard material per unit (kg)	7	8
Standard labour hours per unit	8	5

2) Production labour

Due to ongoing technical issues expected to persist over the next 13 weeks, employee efficiency is currently limited to 95% of the standard level at labour rate of GH¢8 per hour.

3) Opening inventory

The production manager believes that raw materials will cost GH¢12 per kilogramme over the budget period. He also plans to revise the amount of inventory being kept. He estimates that the inventory levels at the commencement of the budget will be as follows:

Finished goods inventory:	Dade	326 units
	Bour	722 units
Raw materials:		4,656 kilogrammes

4) Closing inventory

At the end of the 13-week period closing inventories are planned to change. On the assumption that production and sales volumes for the second budget period will be similar to those in the first period:

- Raw material inventory should be sufficient for 13 days' production.
- Finished goods inventory for Dade should be equivalent to 6 days' sales volume.
- Finished goods inventory for Bour should be equivalent to 14 days' sales volume.

Required:

As the Management Accountant of Funtum LTD, prepare the following budgets:

- Production budget for Dade and Bour. **(4 marks)**
- Material purchases budget in quantities and value. **(3 marks)**
- Production labour budget. **(3 marks)**

(Total: 20 marks)

QUESTION FOUR

- a) The Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR) has over the years been researching into the reasons for the increasing trend in infection resistance to antibiotic treatments. Preliminary findings of their research point to antibiotic drug abuse as the main reason for this phenomenon.

The Pharmacy Council of Ghana is therefore contemplating the introduction of mandatory guidelines to regulate how antibiotics are dispensed to patients. Measures being contemplated include among other things a strict monitoring mechanism for doctors, pharmacists and other medical personnel involved in the prescriptions and dispensing of antibiotics. The policy is expected to be deployed for an initial five (5) years after which it will be evaluated and the necessary modifications applied.

Expert estimates of the cost and benefits are:

- 1) **Direct enforcement costs:** these are expected to be GH¢450 million in the first year. This is expected to increase by 12.5% per annum annually.
- 2) **Bureaucratic costs to doctors and other professionals:** GH¢2,250 million in year one and year two, thereafter increasing by 5% per annum for year three and year four, and 7.5% for year five.
- 3) **Patient convenience costs:** estimated at GH¢1,825 million in year one and decreasing by 2.5% annually.
- 4) **General compliance costs:** the new policy is expected to affect the local economy generally by increasing compliance costs by an estimated GH¢750 million in the first year and increasing by 1.25% annually.
- 5) **Other health benefits:** GH¢600 million per annum arising from better compliance with antibiotic prescriptions.
- 6) **Non-financial benefits:** although this is hard to quantify, experts have estimated this to be in the range of GH¢500 million to GH¢750 million per annum.
- 7) **Avoided resistance benefits:** GH¢3,500 million is estimated to accrue to the country while GH¢2,800 million in avoided resistance benefits accrue to other parts of the world. These are both expected to increase by 10% per annum.

The social discount rate for government programmes of this type has been estimated at 12% per annum.

Required:

As the Management Accountant of the Ghana Pharmacy Council:

- i) Using appropriate cost benefit analysis (CBA) computations, determine the net cost/benefits of this programme from the national perspective. **(12 marks)**
- ii) If there are no positive net benefits from the national perspective, what percentage of benefits accruing to other parts of the world would have to be considered for the programme to break even? **(2 marks)**

Note: Present Value of GH¢1 receivable for the relevant years

Year	1	2	3	4	5
DCF (12%)	0.893	0.797	0.712	0.636	0.567

- b) Variance is the difference between a planned, budgeted or standard amount and the actual result achieved. The reasons for variances might be connected and two or more variances might rise from the same cause. This is known as the interrelationship between two variances.

Required:

Explain the interrelationships between the following variances:

- i) Sales price and sales volume.
- ii) Materials price and material usage.
- iii) Labour rate and labour efficiency.

(6 marks)

(Total: 20 marks)

QUESTION FIVE

- a) Passquick Professional Centre (PPC) which was founded in 2015 is a privately Registered Company in Ghana. PPC operates a College which teaches professional courses for students who wish to pursue a career in one of the following disciplines:

CITG

CIBG

ICAG

PPC has a maximum capacity of 1,500 students per annum, and is currently one of the leading professional colleges in Ghana.

The following information is available:

- 1) A total of 1,200 students attended PPC during the year ended 31 May 2024. Student mix and fees paid are detailed below:

Student Category	% of Total Number of Students	Fee Per Student (GH¢)
CITG	30	12,000
CIBG	25	10,000
ICAG	45	6,000

- 2) Total operating costs (all fixed) during the year amounted to GH¢6,500,000.
- 3) Operating cost of PPC is expected to increase by 4% during the year ending 31 May 2025. This led to a decision by Management to increase the fees of all students by 5% with effect from 1 June 2024. Management expects the number of students and the mix of students during the year ending 31 May 2025 to remain unchanged from those of the year ended 31 May 2024.
- 4) PPC also operates a Riding School at which 240 horses are stabled with each horse doing four horse-riding lessons a day. The Riding School is open for business on 360 days per annum, other than 40 days per annum that each horse is rested, i.e. not available for the provision of riding lessons. During the year ended 31 May 2024, the Riding School operated at 80% of full capacity.

- 5) Horse-riding lessons are provided for riders in three different skill categories. These are 'Beginner', 'Competent' and 'Advanced'.

During the year ended 31 May 2024, the fee per riding lesson was as follows:

Skill Category of Horse Rider	Lesson mix	Fee Per Lesson (GH¢)
Beginner	50%	15
Competent	25%	30
Advanced	25%	50

- 6) Total operating costs of the Riding School (all fixed) amounted to GH¢5,750,000 during the year ended 31 May 2024.
- 7) It is anticipated that the operating costs of the Riding School will increase by 6% in the year ending 31 May 2025. Management have decided to increase the charge per lesson, in respect of *Competent* and *Advanced* riders by 10% with effect from 1 June 2024. There will be no increase in the charge per lesson for *Beginner* riders.
- 8) The lesson mix and capacity utilisation of the Riding School will remain the same during the year ending 31 May 2025.
- 9) An offer has been made by Bawaleshie School Complex to use the idle capacity to train their pupils at a *Beginner* fee which will come with incremental cost of GH¢950,000.

Required:

- i) Prepare a statement showing the budgeted net profit or loss for the year ending 31 May 2025. **(9 marks)**
- ii) Advise PPC if they should accept the offer from Bawaleshie School Complex. **(3 marks)**
- b) Asua Mine LTD budgeted for its surface mining by analysing past data and then adjusting for inflation. The relationship between the monthly maintenance costs and activity levels was determined to be: $y = 34,000 + 0.062x^2$

Where;

y = Total monthly maintenance costs (GH¢) and

x = Machine hours

Assume fixed cost increases by 6% in August with actual machine hours of 1,740 and actual maintenance cost of GH¢253,400.

Required:

- i) Explain ***budget overrun*** and state **TWO** causes. **(4 marks)**
- ii) Determine the budgeted maintenance cost for August. **(2 marks)**
- iii) Calculate the percentage budget overrun or underrun. **(2 marks)**

(Total: 20 marks)

SUGGESTED SOLUTION

QUESTION ONE

- a) The Triple Bottom Line (TBL) is an accounting framework that expands the traditional focus on financial performance to include social and environmental dimensions. It is often summarized as the three Ps: People, Planet, and Profit. The goal is to promote sustainable development by balancing economic success with social responsibility and environmental stewardship.

Profit (Economic Performance)

The company should assess whether the new branch will generate sustainable profits leading to shareholder value maximisation.

People (Social Responsibility)

The company should ensure it provides decent jobs, fair wages and safe working conditions for residents.

Planet (Environmental Responsibility)

The company should consider using eco-friendly materials and reducing emissions or waste in the construction and operation of the new branch.

(Explanation of TBL = 2 marks)

(Any 3 key considerations under each TBL @ 1 mark each = 3 marks)

b) **Non-financial indicators of online sales function**

- Number of visits to website.
- Conversion rates (number of sales as a percentage of number of visits).
- Number of return visits.
- Number of sales to returning customers.
- Customer satisfaction (Number of return visits/number of compliant).
- Website down time.
- Delivery times (time between an order being placed and filled).

(5 relevant points @ 1 mark each = 5 marks)

c)

i) **Types of decisions to be delegated to the newly appointed divisional directors**

- Product decisions such as product mix, promotion and pricing.
- Employment decisions, except perhaps for the appointment of senior directors.
- Short term operating decisions of all kinds such as production scheduling, subcontracting and direction of marketing effort.
- Capital expenditure and disinvestment decisions (with some constraints)
- Short term financing decisions (with some constraints)

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

ii) Types of decisions to retain under the control of the company's central head office

- Strategic investment decisions that are critical to the survival of the company as a whole
- Certain financing decisions that require that an overall view be taken. For example, borrowing commitments and level of financial gearing should be determined for the group as a whole
- Arbitration decisions on transfer pricing disputes
- Capital expenditure decisions above certain limits
- Appointment of top management
- Common services that are required by all profit centres
- Sourcing decisions such as bulk buying of raw materials if corporate interests might be served by operating central service department.

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

d) Why using a single Return on Capital Employed (ROCE) figure may not be adequate

- ROCE focuses solely on financial returns and does not account non-financial performance measures such as customer satisfaction, employee engagement, innovation, or environmental impact. These non-financial factors can significantly influence long-term success.
- Concentration on short-term ROCE at the expense of long-run profitability. Managers may be incentivised to make decisions that improve ROCE in the short term-such as cutting essential investments or reducing maintenance-at the expense of long-term sustainability and growth.
- ROCE can be affected by different accounting treatments (e.g. depreciation methods, asset revaluations), which may not reflect the true economic performance of the business. This makes comparisons across companies or periods potentially misleading.
- Operating companies may vary significantly in their nature-some may be capital-intensive (e.g. manufacturing), while others may be service-oriented with minimal capital investment. ROCE favours businesses with lower capital bases, making comparisons unfair.
- Companies operate in different industries, and a single ROCE measure might not give an adequate measure of performance.

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

(Total: 20 marks)

EXAMINER'S COMMENTS

This question covered a wide area on performance evaluation and since it is theory almost all the candidates attempted it.

- (a) The principle of Triple Bottom Line though a fairly new concept was well responded to by candidates. The components were explained with the relevant

consideration. A few who did not state the principle expressly spoke about Corporate Social Responsibility and other elements on Environment, Social and Governance (ESG). The overall performance was very good, most candidates scored all the 5 marks assigned.

- (b) This question tested candidates on how to apply theoretical concepts to different business models. A fairly good knowledge of the non-financial indicators was exhibited by candidates. In addition, basic knowledge in ICT was applied to relate the concept to on-line business model. The response did not require any explanation hence candidates needed little effort to identify them.
- (c) The preamble suggests that the types of decisions should be situated in the context of profit centres. However, some candidates viewed it as decentralisation and wrote about delegation in that direction. Responses included cost and investment centres. In its strictest sense profit centre managers will not have control over capital investment decisions.
- (d) The question was set within the context of a group with various operating units suggesting that the measurement is for intra group. Candidates included issues of historical data and time value of money which will not give advantage to any of the units within the group. Most of them seemed to suggest that ROCE has to be combined with other techniques.

QUESTION TWO

a)

i) Quantities of each type of oil to be produced to maximise net profit

	Palm Oil	Coconut Oil	Palm Kernel Oil
Material cost per litre GH¢	45	60	30
Price per Litre	15	15	15
Quantity Required	3 litres	4 litres	2 litres

	Palm Oil	Coconut Oil	Palm Kernel Oil
Labour cost per litre GH¢	20	35	45
Rate per Litre	20	20	20
Hours Required	1 hr	1.75 hrs	2.25 hrs

Utilisation rate per material

Product	Material per unit	Total Production	Materials Needed
Palm Oil	3	7,500	22,500
Coconut Oil	4	7,000	28,000
Palm Kernel Oil	2	8,000	<u>16,000</u>
Total Materials Required			66,500
Total Materials available			<u>80,000</u>
Surplus			13,500

Utilisation rate per hour

Product	Hour per litre	Total Production	Hours needed
Palm Oil	1	7,500	7,500
Coconut Oil	1.75	7,000	12,250
Palm Kernel Oil	2.25	8,000	<u>18,000</u>
Total Hours Required			37,750
Total Hours available			<u>35,150</u>
Deficit			(2,600)

The bottleneck resources / limiting factor is on Labour Hours

Throughput

Details	Palm Oil	Coconut Oil	Palm Kernel Oil
Selling price per litre (GH¢)	150	190	220
Material cost per litre (GH¢)	(45)	(60)	(50)
Throughput	105	130	170
Bottleneck Resources	1	1.75	2.25
Return per factory hour	105	74.29	75.56
Ranking	1st	3rd	2nd

Allocation of Resources

Product	Quantity	Bottleneck Resources
Palm Oil	7,500	7,500
Palm Kernel Oil	8,000	18,000
Coconut Oil (9650/1.75)	5,514.29	<u>9,650</u>
		<u>35,150</u>

Advice

Management of Kontori LTD should produce 7,500 litres, 8000 litres and 5,514.29 litres of Palm Oil, Palm Kernel Oil and Coconut Oil respectively to maximise net profit

(Marks are evenly spread using ticks = 9 marks)

ii)

$$\text{Throughput Accounting Ratio} = \frac{\text{Return per factory hour}}{\text{Cost per factory hour}}$$

$$\text{Cost per factory hour} = \frac{\text{Total Factory Cost}}{\text{Total Bottleneck Resources}}$$

$$\text{Cost per factory hour} = \frac{2,112,500}{35,150} = 60.1$$

$$\text{Throughput Accounting Ratio (Palm oil)} = \frac{105}{60.1} = 1.75$$

$$\text{Throughput Accounting Ratio (Coconut oil)} = \frac{74.29}{60.1} = 1.24$$

$$\text{Throughput Accounting Ratio (Palm Kernel oil)} = \frac{75.56}{60.1} = 1.26$$

(4 marks)

- b) *Cost control* is a process whereby a company works within the pre-determined target cost. Technique used is standard costing but *cost reduction* is the process used by organisations aiming to reduce their cost and increase profit. Technique used is Kaizen costing.

(2 marks)

- c) **Importance of identifying the principal budget factor in the budget preparation process**

The principal budget factor must be identified first because it determines which budget should be prepared first, as all other budgets are ultimately built around it. For example, where sales demand is the limiting factor, the sales budget must be prepared first, and all other functional budgets are then derived from it.

Without identifying the constraining factor, management could prepare a budget based on unrealistic assumptions. For instance, budgeting for a level of sales that production capacity cannot support, or a level of production that available raw materials or skilled labour cannot sustain.

Since all other budgets are prepared in relation to the principal budget factor, its early identification helps ensure consistency and coordination across the various functional budgets (sales, production, purchasing, labour, cash, etc.), preventing conflicting or misaligned targets between departments.

Identifying the limiting factor early allows management to focus attention and resources on managing or alleviating that specific constraint, rather than wasting time and resources on aspects of the business that are not actually limiting performance.

Recognition of the principal budget factor also informs management about areas requiring strategic intervention. For instance, if the principal budget factor is consistently production capacity, this may trigger a longer-term decision to invest in additional machinery or expand factory space, linking short-term budgeting to broader corporate strategy.

(Any two-importance identified @ 2.5 marks each = 5 marks)

(5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Question 2(a) was clear with the supporting notes well stated. The understanding of throughput accounting principles was shown in the responses. Candidates had no difficulty identifying the limiting resource and the unit of the limited resource needed to produce a unit of the products. Only a few included the other variable

cost thus using the contribution for the production plan. Some also went ahead to prepare income statement to show the profit of the optimal production which was not part of the requirement.

In question 2(c), candidates showed that they understand principal budget factor, what was lacking was their ability to justify why its identification in the budgetary process was necessary. Most of them explained the concept and gave examples of possible budget factors.

QUESTION THREE

a)

i) **Standard Profit per Unit**

Details	Butter Bread	Sugar Bread	Wheat Bread
Selling Price /Unit	150.00	120.00	180.00
Variable Cost /Unit	(82.50)	(48.00)	(81.00)
Contribution/Unit	67.50	72.00	99.00
Fixed Cost	(16.51)	(14.86)	(18.16)
Profit/Unit	50.99	57.14	80.84

WORKINGS

	Butter Bread	Sugar Bread	Wheat Bread
VC/S Ratio	55%	40%	45%
C/S Ratio	45%	60%	55%

$$\text{FOAR} = \frac{\text{Budgeted Overheads}}{\text{Budgeted Activity Level}}$$

$$\text{FOAR} = \frac{865,000}{(0.5 \times 12,000) + (0.45 \times 18,000) + (0.55 \times 22,000)}$$

$$\text{FOAR} = 33.02$$

Absorb

Butter Bread	(33.02 × 0.5hr) =	16.51
Sugar Bread	(33.02 × 0.45 hr) =	14.86
Wheat Bread	(33.02 × 0.55 hr) =	18.16

(Marks are evenly spread using ticks = 4 marks)

ii)

- **Sales price variance**

Butter Bread

AQsold - AP 11,500 @ 155.6 = 1,789,400

AQsold - SP 11,500 @ 150 = 1,725,000

Sales Profit Margin Variance **64,400 F**

Sugar Bread

AQsold - AP 19,500 @ 123.5 = 2,408,250

AQsold - SP 19,500 @ 120 = 2,340,000

Sales Profit Margin Variance **68,250 F**

Wheat Bread

AQsold - AP 21,500 @ 177 = 3,805,500

AQsold - SP 21,500 @ 180 = 3,870,000

Sales Profit Margin Variance **64,500 A**

(2 marks)

- **Sales mix profit variance**

Product	Actual mix (units)	Standard mix (units)	Difference	Variance (GH¢)
Butter Bread	11,500	12,115.38	(615.38)	31,380 A
Sugar Bread	19,500	18,173.08	1,326.92	75,825 F
Wheat Bread	21,500	22,211.54	(711.54)	57,522 A
Total	52,500	52,500.00		13,077 A

(2 marks)

- **sales quantity profit variance**

Product	Standard mix (units)	Budget (units)	Difference	Variance (GH¢)
Butter Bread	12,115.38	12,000	(115.38)	5,884 F
Sugar Bread	18,173.08	18,000	173.08	9,890 F
Wheat Bread	22,211.54	22,000	211.54	17,101 F
Total	52,500.00	52,000	500	32,875 F

(2 marks)

b)

i) Production budget

	Dade units	Bour units
Budgeted sales volume	1,690	2,470
Add Closing stock	156	532
Less Opening stock	<u>(326)</u>	<u>(722)</u>
Units of production	<u>1,520</u>	<u>2,280</u>

(4 marks)

Alternative (where 7 days in a week is assumed)

Production budget

	Dade Units	Bour units
Budgeted sales volume	1,690	2,470
Add Closing stock	111	380
Less Opening stock	<u>(326)</u>	<u>(722)</u>
Units of production	<u>1,475</u>	<u>2,128</u>

ii) **Material purchases budget**

Material consumed (kg)	28,880
Add Closing stock (kg)	5,776
Less Opening stock (kg)	<u>(4,656)</u>
Material s to be purchased (kg)	30,000
Cost per kg (GH¢)	<u>12</u>
Materials to be purchased (GH¢)	<u>360,000</u>

(3 marks)

Alternative (where 7 days in a week is assumed)

Material purchases budget

Material consumed (kg)	27,249
Add Closing stock (kg)	3,907
Less Opening stock (kg)	<u>(4,656)</u>
Material s to be purchased (kg)	26,600
Cost per kg (GH¢)	<u>12</u>
Materials to be purchased (GH¢)	<u>319,200</u>

iii) **Production labour budget**

	Hours/GH¢
Standard hours: Dade (1520 x 8 hours)	12,160 hours
Standard hours: Bour (2280 x 5 hours)	11,400 hours
Total standard hours	23,560 hours
Adjust for 95% efficiency (23,560/0.95)	24,800 hours
Labour cost @GH¢8 per hour	GH¢198.400

(3 marks)

Note:

- Number of days per period = 13 weeks x 5 days = 65.
- Number of days per period = 13 weeks x 7 days = 91.
- Closing stock: Dade (6/65) x 1690 = 156, Bour (14/65) x 2470 = 532kg
- Closing stock: Dade (6/91) x 1690 = 111, Bour (14/91) x 2470 = 380kg
- Closing stock of raw materials (13/65) x (10640 + 18240) = 5776 kg.
- Closing stock of raw materials (13/91) x (10325 + 17,024) = 3907 kg.

(Total: 20 marks)

EXAMINER'S COMMENTS

In getting the mixed and quantity variances some candidates used the selling price instead of the profit. This has been the case for most candidates in the past assuming that once the difference in selling price can be used in calculating the price variance instead of the standard profit the standard price can be used, as it is done for input, for the sales volume variance.

QUESTION FOUR

a)
i)

The Pharmacy Council of Ghana Computation of net cost/benefit of proposed regulation on antibiotics

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
	GH¢' mil	GH¢' mil	GH¢' mil	GH¢' mil	GH¢' mil	GH¢' mil
Costs:						
Direct enforcement costs	450	506	570	641	721	
Bureaucratic costs	2,250	2,250	2,363	2,481	2,667	
Convenience cost to patients	1,825	1,779	1,735	1,692	1,649	
General compliance costs	750	759	769	778	788	
Total Cost	5,275	5,295	5,436	5,591	5,825	
Benefits:						
Avoided resistance benefits	3,500	3,850	4,235	4,659	5,124	
Other health benefits	600	600	600	600	600	
Non-financial benefits [(750+500) ÷ 2]	625	625	625	625	625	
Total Benefits	4,725	5,075	5,460	5,884	6,349	
Social Discount rate @ 12%	0.893	0.797	0.712	0.636	0.567	
PV of costs	4,711	4,220	3,870	3,556	3,303	19,660
PV of benefits	4,219	4,045	3,888	3,742	3,600	19,494
Net benefit/cost	(550)	(220)	24	293	524	
PV of Net benefit/cost	(491)	(175)	17	186	297	(166)
Avoided resistance benefits to other parts of the world	280	308	339	373	410	
PV of avoided resistance benefits to other parts of the world	249	243	238	233	227	12,060

The net cost/benefits of this programme from the national perspective is (GH¢166 million)

(Marks are evenly spread using ticks = 12 marks)

ii) **Percentage of benefits accruing in other parts of the world for the programme to breakeven**

	GH¢'mil
PV of costs	19,660
PV of national benefits	19,494
Net costs/benefits	(166)
PV of non-national benefits	12,060
Percentage of non-national benefits to breakeven $= \frac{166}{12,060} \times 100$	1.38%

1.38% of benefits accruing to other parts of the world will have to be considered for the programme to break even.

(2 marks)

b)

i) **Sales price and sales volume variance**

A favourable sales price variance and an adverse sales volume variance might have the same cause. If a company increases its selling prices above the standard price, the sales price variance will be favourable, but sales demand might fall and the sales volume variance would be adverse. Similarly, in order to sell more products a company might decide to reduce its selling prices. There would be an adverse sales price variance due to the reduction in selling prices, but there should also be an increase in sales and a favourable sales volume variance.

ii) **Materials price and material usage variance**

Materials price variance and usage variance might be inter-related. For example, if a company decides to use a material for production that is more expensive than the normal or standard material, but easier to use and better in quality, there will be an adverse price variance. However, a consequence of using better materials might be lower wastage. If there is less wastage, there will be a favourable material usage variance. Therefore, using a different quality of material can result in an adverse price variance and a favourable usage variance.

iii) **Labour rate and labour efficiency variance**

If there is a change in the grade of workers used to do some work, both the labour rate and efficiency variances may be affected. For example, if a lower grade of labour is used instead of the normal higher grade: there should be a favourable rate variance because the workers will be paid less than the standard rate however the lower grade of labour may work less efficiently and take longer to produce goods than the normal higher grade of labour would usually take.

If the lower grade of labour takes longer, then this will give rise to an adverse efficiency variance. Therefore, the change in the grade of labour used results in two opposite variances, an adverse efficiency variance and a favourable rate variance.

(2 marks each = 6 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Performance of candidates in question 4(a) was average. Candidates demonstrated understanding of the variances and how they are calculated but were unable to draw out the interrelationship. Most of them stated the formula and indicated that the sum of the sub variances add up to the total.

QUESTION FIVE

a)

i) **Budgeted Income Statement for the year ended 31 May 2025**

		GH¢	GH¢
PPC			
Fee income (W1)	Student category:		
	CITG	4,536,000	
	CIBG	3,150,000	
	ICAG	3,402,000	11,088,000
Operating costs			<u>(6,760,000)</u>
Budgeted profit of college			4,328,000
Riding school			
Fees income (W2)	Rider category:		
	Beginner	1,843,200	
	Competent	2,027,520	
	Advanced	<u>3,379,200</u>	7,249,920
Operating costs			<u>(6,095,000)</u>
Budgeted profit of Riding School			<u>1,154,920</u>
Total budgeted profit			<u>5,482,920</u>

Workings

1) PPC College fee income:

CITG: $1,200 \times 30\% \times 12,000 \times 1.05 = 4,536,000$

CIBG: $1,200 \times 25\% \times 10,000 \times 1.05 = 3,150,000$

ICAG: $1,200 \times 45\% \times 6,000 \times 1.05 = 3,402,000$

2) Riding School fee income

	Number of lessons	Charge per person	Fees income
		GH¢	GH¢
240 horses x 4 per day x (360days-40days) x 80%	245,760		
Beginner (50%)	122,880	15	1,843,200
Competent (25%)	61,440	$(30 \times 1.1) = 33$	2,027,520
Advanced (25%)	61,440	$(50 \times 1.1) = 55$	<u>3,379,200</u>
			<u>7,249,920</u>

(Marks are evenly spread using ticks = 9 marks)

ii) Offer from Bawaleshie School Complex

Idle capacity			
	Number of lessons	Charge per person	Fess income
		GH¢	GH¢
240 horses x 4 per day x (360days-40days) x 20%	614,440		
Beginner	614,440	15	921,600
Incremental cost			(950,000)
Loss			(28,400)

The offer should be rejected as profit will fall by GH¢28,400 if the offer is accepted.
(3 marks)

b)

- i) A budget overrun occurs when the actual cost of a project exceeds the initially estimated or budgeted cost, which was accepted as the cost basis for project execution. In other words, a cost overrun happens when a project ends up costing more than expected.

Causes of budget overrun

- Design errors
- Unfeasible cost estimates
- Change in scope
- Project complexity

(4 marks)

ii) **Budgeted maintenance cost for August**

$$y = 34,000 \times 1.06 + 0.062 (1740^2) = \text{GH¢}223,751.20$$

(2 marks)

iii) **Percentage budget overrun**

Budgeted = GH¢223,751.20

Actual = GH¢253,400.00

Difference = GH¢29,648.80

There was budget overrun of 13.25%.

(2 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Ascertaining the income and cost from the professional programme was well answered since the number of learners and the course mix were given. The adjustment needed was in the fees which was easily handled. The challenge was

with the riding courses where candidates had to convert the number of horses to active working days making provision for the idle capacity. Some candidates added the revenue offered for the use of the idle capacity to the income statement.

Explanation of budget overrun and its causes did not pose a challenge to candidates. The estimation of the maintenance cost was well responded to and most candidates who attempted it scored some good marks.

CONCLUSION:

The overall performance was below expectation in view of the level of clarity and the standard of the paper. Most candidates may have spent too much time on question one leaving less time for the remaining four.

Candidates are advised to pay attention to their time management. It should also be appreciated that scoring the full marks in one or two questions only will not secure a candidate the pass mark of 50% and that reasonable coverage of the syllabus is essential.