

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

STANDARD OF THE PAPER

The standard was not different from previously administered papers. The questions were fairly balanced in terms of spread over the syllabus and with respect to theory and calculations. Almost all the areas in the syllabus were covered and marks were fairly allocated based on the weightings.

PERFORMANCE OF CANDIDATES.

Performance of candidates was better compared with the two previous sittings in the year. There is a marginal improvement from 33.94 % in April and 20.65 % in August to 36.37 %. Almost all the questions were fairly attempted by candidates. As indicated above the question four posed a little challenge not because candidates did not understand the NPV appraisal technique but perhaps because of the tasks involved. Most candidates did not attempt question 3 (b) under budgeting probably because the focus of the budgeting has been on manufacturing of goods with little attention on other service delivery areas.

Generally, the questions were within the competence of an average candidate.

NOTABLE STRENGTHS AND WEAKNESSES.

Most candidates performed well in the theory questions, except that the requirement in question five a); examples of relevant costs was answered as features of relevant costs.

Question one was well attempted by candidates, they demonstrated good understanding of performance evaluation using ROI and RI. On question three, the candidates did very well on the variances. Question three b) on budgeting was however poorly attempted. In fact, most candidates did not attempt it.

Candidates demonstrated fair understanding of investment appraisal under question four except that the question appeared to be loaded. Again, the application of the annuity with different cashflows posed a problem to some candidates.

The application of relevant costs in question five was satisfactory.

QUESTION ONE

- a) Ken and Yon are two divisions of a large company that operate in similar markets. The divisions are treated as investment centres and every month each division prepares an operating statement and submit to the parent company. Operating statements for the two divisions for October are stated below:

Operating Statements for October

	Ken GH¢000	Yon GH¢000
Sales revenue	900	555
Variable costs	345	312
Controllable fixed costs (includes depreciation on division assets)	433	222
Uncontrollable apportioned central costs	15	5
Divisional net assets for the year	9,760	1,260

The company currently has a target return on capital of 12% per annum. However, the company believes its cost of capital is likely to rise and it is considering increasing the target return on capital. Currently, the performance of each division and the divisional management are assessed primarily based on Return on Investment (ROI) using controllable profit.

Required:

- i) Calculate the *annualised Return on Investment (ROI)* for divisions Ken and Yon, and discuss their relative performances. **(6 marks)**
 - ii) Calculate the *annualised Residual Income (RI)* using controllable profit for divisions Ken and Yon, and evaluate their division's performances. **(6 marks)**
 - iii) Using appropriate ratios, evaluate the efficiency of the two divisions. **(3 marks)**
- b) Define the term *responsibility accounting*. **(2 marks)**
- c) State **ONE (1)** similarity and **TWO (2)** differences between *Profit centre* and *Investment centre*. **(3 marks)**

(Total: 20 marks)

QUESTION TWO

- a) Value creation activities may be classified as either direct (primary) or indirect (secondary). The indirect activities result in differentiation of services that customers are prepared to pay a premium for.

Required:

- Explain **THREE (3)** secondary activities in value chain analysis. **(9 marks)**

- b) Explain **THREE (3)** conditions that must prevail to make the operation of Just- In- Time (JIT) inventory management system successful. **(6 marks)**
- c) Explain why a standard costing system may not be considered appropriate for the following modern manufacturing environment listed below:
- i) Just-In-Time (JIT).
 - ii) Total Quality Management (TQM). **(5 marks)**

(Total: 20 marks)

QUESTION THREE

- a) Odumasi Ltd has just introduced a new standard marginal costing system to assist in the planning and control of the production activities for the single product, which the company manufactures – ‘Tekie’. The system became operational on 1 March 2021.

The Management Accountant has consulted with the Senior Engineer and they have agreed on the following standard specifications to manufacture one unit of the product ‘Tekie’.

Direct materials	4kg @ GH¢1.75 per kg
Direct labour	2 hours @ GH¢10 per hour
Variable overhead	2 hours @ GH¢8.25 per hour

According to the Marketing Director, Odumasi Ltd operates in an industry where the budgeted selling price is normally calculated to achieve a markup of 30% on cost. The budgeted level of production and sales activity has been agreed with both production managers and sales staff at 24,000 units per month.

The actual results for the month of March 2021 are as follows:

Sales	- 22,000 units yielding a total revenue of GH¢1,276,000.
Production	- 23,000 units.
Direct Materials	- 90,000 kg @ GH¢162,000.
Direct labour	- 48,000 hours @ GH¢576,000
Variable overhead	- GH¢350,000

Required:

Calculate the relevant variances for March 2021 under the headings of sales, materials, labour and overheads. **(10 marks)**

- b) Ghanaman Senior High School (SHS) which has an enrollment of 2,500 students (residential) is one of the schools that depend on the government for the supply of food items. The bursar has proposed that a 50 kilogram-bag of rice can feed 200 students per meal while the same 50 kilogram-bag of beans can be used for 350 students. Per the menu plan, rice will be served three times and beans twice a week. The SHSs will run two semesters of 16 weeks each for the year 2023.

Other information:

- i) Opening inventory:

Rice: 40 bags of 50kg
Beans: 10 bags of 50 kg

- ii) Inventory policy: Closing inventory;
Rice: 20% of annual requirement
Beans: 15% of annual requirement.

Required:

Prepare the budget for the supply of both rice and beans needed to feed students for the two semesters of the year 2023. **(10 marks)**

(Total: 20 marks)

QUESTION FOUR

- a) Kanfa Ltd received GH¢50 million as compensation from Ghana Highways Authority (GHA) when one of its properties was destroyed to pave way for the Accra – Kumasi highway construction. Management of Kanfa Ltd has, therefore, decided to invest all the amount received in one of three capital investment opportunities identified.

Project A

This is a long-term project, which would run for 20 years and will require immediate outlay of GH¢50 million and net annual cash profits as follows:

1 st to 5 th years	GH¢2 million
6 th to 10 th years	GH¢8 million
11 th to 15 th years	GH¢15 million
16 th to 20 th years	GH¢5 million

At the end of the 20th year, the project would be decommissioned at a cost of GH¢2 million.

Project B

Kanfa Ltd is considering opening a Tourist Attraction Centre in Cape Coast and the initial capital investment will be GH¢50 million. Kanfa Ltd plans to operate the Tourist Attraction Centre for five years after which it will be sold to another operator at an estimated price of GH¢5 million.

A market research survey has estimated the following visitor numbers and associated probabilities, revenue and operating costs:

Number of visitors per year	Probability
800,000	30%
600,000	50%
400,000	20%

It is expected that the number of visitors per year will remain constant for the life of the project.

The entrance fee for Tourist Attraction Centre will be GH¢40 per visitor. Each visitor is expected to spend an average of GH¢15 on souvenirs and GH¢5 on refreshments. The variable costs are estimated to be GH¢25 per visitor. This includes the variable cost of operating the Tourist Attraction Centre and the cost of souvenirs and refreshments.

Maintenance costs are estimated to be GH¢2,000,000 per annum.

Project C

Project C would involve a current outlay of GH¢50 million on equipment and GH¢15 million on working capital immediately.

The investment in working capital would be increased to GH¢21 million in year one.

Net annual cash profits would be GH¢18 million for six years. The capital equipment purchased at the start of the project could be resold for GH¢5 million a year after the end of the project.

Other information

- i) The company's cost of capital is 12% for the three projects.
- ii) Ignore taxation and inflation

Required:

Calculate the *Net Present Value* of each project, and recommend which project the company should undertake on financial grounds. **(15 marks)**

- b) Slay Mama Plc (SMP) has been using line-item budgeting since its establishment. The Chief Executive Officer (CEO) recently attended a seminar on "Achieving the best out of your budget". During the seminar, the facilitator highlighted the benefits of programme-based budgeting since it is a performance-based budgeting approach.

Required:

- i) Explain *Programme-Based Budgeting*. **(2 marks)**
- ii) Outline **THREE (3)** disadvantages of line-item budgeting. **(3 marks)**

(Total: 20 marks)

QUESTION FIVE

Semenhyia Ltd is involved in the design and manufacture of custom-built factory equipment. The company has just received an enquiry about the supply of 10 machines from one of their regular clients, Kukua Ltd.

Kukua Ltd has informed the company that the maximum price they are willing to pay is GH¢5,200 per machine. The order would need to be completed within two weeks.

The following details relates to the production of the machines:

- i) Materials per machine.
 - 10 units of Material A, which is used regularly by the company. The company has 120 units of Material A in stock, which originally cost GH¢120 per unit. The replacement cost of Material A is 20% higher than the original price.

- 5 units of Material B. The company has 40 units of Material B in stock, as it was purchased a few years ago for use in the production of other equipment, which the company no longer produces. If this material is not used in the production of this order it would never be used again. The original purchase price for the units of Material B, in stock, was GH¢190 per unit. The replacement cost of Material B is GH¢150 per unit. The net realisable value for a unit of Material B in stock is GH¢130.
 - 3 units of Material C. This type of material is regularly used, and usually cost GH¢85 per unit. However, the company's current supplier earliest delivery time for this material is in three weeks' time. An alternative supplier could deliver immediately but would charge GH¢90 per unit. Semenhyia Ltd already has 600 units in inventory but 580 units are needed to complete other existing order in the next two weeks. The remaining 20 units would not be needed until 5 weeks' time.
- ii) Labour hours per machine:
- 12 skilled labour hours would be required. Skilled workers are paid GH¢20 per hour and are part of the permanent work force. At present, there are 125 paid surplus skilled hours per month. Skilled workers are paid time and half for overtime.
 - 22 unskilled labour hours, would be required. Unskilled workers are paid GH¢15 per hour and are employed on a casual basis.
- iii) A supervisor with the necessary experience in the production of similar machines, who is currently paid GH¢56,500 per annum, would be transfer to the job. This would necessitate the hiring of a replacement supervisor for the duration of the contract at a cost of GH¢8,500.
- iv) Each machine would require 18 hours processing time on the factory equipment. If the order is not accepted, then Semenhyia Ltd would sub-contract the factory equipment to Fimi Ltd earning contribution of GH¢70 per hour.
- v) The company estimates that the depreciation charge for using the factory equipment to produce the 10 machines would be GH¢4,000.
- vi) Overheads are absorbed at a rate of GH¢35 per skilled labour hour.
- vii) The planning department of Semenhyia Ltd estimates that they have incurred costs to date of GH¢600.

Required:

- a) Explain *Relevant cost* and state **TWO (2)** examples of relevant cost in short term decision-making. **(3 marks)**
- b) Determine using relevant costing principles whether or not Semenhyia Ltd should undertake the contract. Your answer must include an explanation for the inclusion or exclusion of each of the above points. **(13 marks)**
- d) Distinguish between "*marginal cost*" and "*Differential cost*". **(4 marks)**

(Total: 20 marks)

SUGGESTED SOLUTION

QUESTION ONE

a)

i) Return on investment (ROI) = $\frac{\text{Operating profit interest and tax}}{\text{Capital employed}} \times 100$

Division Ken $\frac{\text{GH¢}0.122\text{million} \times 12\text{ months}}{\text{GH¢}9.76\text{ million}} \times 100$
= 15%

Division Yon $\frac{\text{GH¢}0.021\text{ million} \times 12\text{ months}}{\text{GH¢}1.26\text{ million}} \times 100$
= 20%

Discussion of relative performance

- Division Yon has the highest return on investment (20%) in comparison to division Ken (15%).
- Both divisions exceed the target of 12% per annum set by the parent company. However, division Ken will be at greater risk if the target return on investment is increased.
- Both are profitable and generate a positive contribution for the group.
- In absolute terms division Ken is the largest division in terms of net assets and generates a greater absolute profit than division Yon (GH¢122,000 compared to GH¢21,000 per month). This is almost six times the level of absolute profit in comparison to division Yon.

(6 marks)

ii) **Division Ken**

	GH¢ million
Profit before interest and tax (GH¢0.122 million x 12 months)	1.464
Capital employed x cost of capital (GH¢9.76 million net assets x 12%)	<u>(1.171)</u>
Residual income	<u>0.293</u>

Division Yon

	GH¢ million
Profit before interest and tax (GH¢0.021 million x 12 months)	0.252
Capital employed x cost of capital (GH¢1.26 million net assets x 12%)	<u>(0.151)</u>
Residual income	<u>0.101</u>

- Even though division Ken has a lower return on investment (15%) compared to division Yon (20%), it does create greater wealth for the group in terms of the absolute size of residual income it earns.
- This is something that return on investment considered in isolation will not demonstrate because it is a relative not absolute measure of return.
- The implications of this information is that it demonstrates that division Ken contributes greater wealth to the profits of the group and therefore its shareholder. It is a superior measure when contrasted to return on investment. However, one

single measure by itself will never allow a complete understanding of financial performance.

(6 marks)

iii) Asset Turnover = Turnover/ Assets

Ken = $(10,800,000/9,760,000) * 100\% = 1.1$ times or 110%

Yon = $(6,660,000/1,260,000) * 100\% = 5.29$ times or 529%

Alternatively:

Both divisions operate in similar markets however; division Yon has almost the same absolute level of variable cost as division Ken, even though its sales revenue is almost half the amount. Division Ken has variable cost to sales of 38.3% (GH¢0.345m ÷ GH¢0.9m) and division Yon 56.2% (GH¢0.312m ÷ GH¢0.555m). This indicates that division Ken looks more operationally efficient. Division Yon has a much lower net assets value than division Ken which could indicate that its assets are older and therefore more inefficient.

(3 marks)

b) **Responsibility accounting** is a system of accounting that segregate revenue and costs into areas of personal responsibility in order to monitor and assess the performance of each part of an organisation. (2 marks)

c) **Profit center & Investment center**

Similarity

- Both centers are responsible for effective **cost minimization and maximization of profit.**

Differences

- Investment center has additional responsibility for **capital investments and possibly for financing** whereas profit center has **no responsibility on capital investments.**
- Investment center performances are measured by its **return on investment, residual income or traceable profit** whereas profit center performances are measured on **controllable profit.**

(3 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

For the a) part of the question, the following challenges were identified with each sub-question;

- i) A few of the candidates did not annualise the income. So, using the net asset as an annual figure will produce a different outcome. A few who annualised the income also annualised the net asset. The scores were above average for those who attempted this question.
- ii) The issue of annualisation was not different from i) above.

iii) The information did not offer the candidates the opportunity to calculate more efficiency ratios. The only obvious one was the Asset Turnover Ratio which most candidates got right.

Candidates explained the responsibility accounting fairly well. The requirement on profit and investment centres was also well responded to.

QUESTION TWO

a) Secondary activities; (1 for statement and 2 for explanation)

- Technology development; ability to use technology to improve service delivery, quick response and quality products.
- Human resource management; recruitment of qualified and committed staff
- Training and development of staff to enhance competencies.
- Corporate infrastructure to create state-of-the-art working environment.
- Introduction of management systems that will facilitate quality service delivery.
- Efficient and transparent procurement system.

(Any 3 points @ 3 marks each = 9 marks)

b) key performance indicators under innovation.

- Steady production
- High quality workmanship (multi skilled)
- Glitch - free plant machinery
- Reliable suppliers
- Accurate demand forecast

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

c)

- In a JIT environment, measuring standard costing variances may encourage dysfunctional behaviour. A JIT production environment relies on producing small batch sizes economically by reducing set up times. Performance measures that benefit from large batch sizes or producing for inventory should therefore be avoided.
- In a total quality environment, standard costing variance measurement places an emphasis on cost control to the detriment of quality. Cost control may be achieved at the expense of quality and competitive advantage. A continuous improvement environment requires a continual effort to do things better rather than achieve an arbitrary standard based on prescribed or assumed conditions. In today's competitive environment, cost is market driven and is subject to considerable downward pressure. Cost management must consist of both cost maintenance and continuous cost improvement.
- In a JIT and TQM environment, the workforce is usually organised into empowered, multiskilled teams controlling operations autonomously. The feedback they require is real time.

(5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Candidates performed quite well explaining the secondary activities in value chain analysis. Also, the responses from candidates revealed their understanding of the JIT inventory management system.

The requirement for the c) part of the question was an application of standard costing to JIT and TQM and most candidates could not score the full marks.

QUESTION THREE

a) **Odumasi - Budgeted profit statement for month ended 31 March 2021**

		GH¢	GH¢
Sales	24,000@GH¢56.55		1,357,200
Direct materials	24,000@GH¢7	168,000	
Direct labour	24,000@GH¢20	480,000	
Variable overhead	24,000@16.50	396,000	<u>1,044,000</u>
Budgeted Profit			<u>313,200</u>

The standard selling price of one unit of the Creative is as follows:

		GH¢
Direct materials	4kg@GH¢1.75/kg	7.00
Direct labour	2hrs @GH¢10/hr	20.00
Variable overhead	2hrs @ GH¢8.25/hr	16.50
Standard marginal cost		43.50
Standard Contribution (Mark-up on cost 30% x GH¢43.50)		<u>13.05</u>
Standard selling price		<u>56.55</u>

Sales Price Variances		GH¢
Did Sell	22,000 units for	1,276,000
Expected to sell	22,000 x GH¢56.55	1,244,100
Variance		31,900 (F)

Sales Volume Variances based on contribution		GH¢
Did Sell	22,000 x GH¢ 13.05	287,100
Expected to sell	24,000 x GH¢13.05	313,200
Variance		26,100(A)

Materials Price Variances		GH¢
Did pay	90,000 x GH¢ 1.8	162,000
Expected to pay	90,000 x GH¢1.75	157,500
Variance		4,500(A)

Materials Usage Variances		GH¢
Did use	90,000xGH¢1.75	157,500
Expected to pay	4x GH¢1.75 x 23,000	161,000
Variance		3,500(F)

Labour Rate Variances		GH¢
Did take		576,000
Expected to pay	48,000xGH¢10	480,000
Variance		96,000(A)

Labour Efficiency Variances		GH¢
Did take	48,000xGH¢10	480,000
Expected to pay	GH¢20x 23,000	460,000
Variance		20,000(A)

Overhead Expenditure Variances		GH¢
Did cost	48,000x GH¢7.29	350,000
Expected to pay	48,000xGH¢8.25	396,000
Variance		46,000(F)

Overhead Efficiency Variances		GH¢
Did base on	48,000xGH¢ 8.25	396,000
Expected to pay	2x GH¢8.25x 23,000	379,500
Variance		16,500(A)

(10 marks)

b)

Workings;

bags of rice per meal; $2,500/200=12.5$

No. of meals a week = 3

No. of weeks in a year $16 \times 2 = 32$

Bags of beans per meal; $2,500/350 = 7.14$

No. of meals a week = 2

No of weeks in a year = 32

Budget for the supply of rice and beans

	Rice	Beans
No of bags per week	37.5	14.28
No of bags per year	37.5×32	14.28×32
Requirement (bags)	1,200 (3)	456.96 (3)
Add closing stock	240 (0.5)	68.54 (0.5)
	1,440	525.50
Less opening stock	40 (0.5)	10.00 (0.5)
To be supplied	1,400 (1)	515.50 (1)

(10 marks)

(Total: 20 marks)

EXAMINER'S COMMENT

The use of markup in sub-question a) was a bit misleading because the information provided suggest that marginal costing system was used and so the difference between the selling price and the variable costs will be contribution margin. The

requirement, calculation of relevant variances, was also open ended. Most of the candidates however calculated the sub variances which were required. It would have been more appropriate if the number and or specific variances deemed to be relevant had been stated.

Most candidates did not attempt the b) part of the question. The problem was with the calculation of the quantity of the food items required to feed the number of students. Some of the candidates preferred to calculate in kilograms which is also acceptable though a little more cumbersome.

QUESTION FOUR

a)

PROJECT A

Years		Net cash flow	Annuity/ Discount Factor	Net Present Value
		GH¢000	12%	GH¢000
0	Initial Investment	(50,000)	1.000	(50,000)
1-5	Net cash flow	2,000	3.605	7,210
6-10	Net cash flow	8,000	2.045	16,360
11-15	Net cash flow	15,000	1.161	17,415
16-20	Net cash flow	5,000	0.658	3,290
20	Decommissioning	(2,000)	0.104	(208)
NPV				(5,933)

PROJECT B

$$\text{Weighted Average No. of visitors} = (800,000 \times 0.3) + (600,000 \times 0.5) + (400,000 \times 0.2) \\ = \text{GH¢}620,000$$

GH¢

Revenue:

Entrance fee	40
Souvenir	15
Refreshment	<u>5</u>
	60
Less Variable cost	<u>25</u>
Contribution per unit	35
No. of visitors	620,000
Contribution	21,700,000
Less cost of maintenance	<u>2,000,000</u>
Profit	19,700,000

Year		GH¢000	Annuity/D.F 12%	PV (000)
0	Initial investment	(50,000)	1.000	(50,000)
1-5	Net cash flow	19,700	3.605	71,018.5
5	Scrap value	5,000	0.567	2835
NPV				23,853.5

PROJECT C

Year		GH¢000	Annuity/D.F 12%	PV (000)
0	Initial investment	(50,000)	1.000	(50,000)
0	Working Capital	(15,000)	1.000	(15,000)
1	Working Capital	(6,000)	0.893	(5,358)
1-6	Annual cash flow	18,000	4.111	73,998
6	Working Capital	21,000	0.507	10,647

7	Scrap Value	5,000	0.452	2,260
NPV				16,547

Purely, on financial ground, Adomi Ltd should invest in project B since it gives highest NPV of GH¢ 23,853,500

(15 marks)

b)

i) **Programme-based budgeting**

The budgets are prepared from the point of view of specific programmes that the organization or its units plans to undertake in a specific period and not on the various expenditure lines (not grouped into programmes).

Each programme would contain specific line items that it purports to generate revenue from and/or spend on. (2 marks)

ii) Disadvantages of Line-Item budgeting

- It is difficult to assess the budget performance.
- Possible inefficiencies when prepared on incremental basis.
- Sub-optimal spending. Managers may spend amounts in budgets when they could have been saved for fear of having their budgets reduced for subsequent years if current approved budgets levels are not spent.
- It does not easily make room for innovation.

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

(Total: 20 marks)

EXAMINER'S COMMENTS

As stated earlier the requirement was loaded considering the tasks involved and the marks allocated.

Project A: Candidates understood the question but some could not apply the annuity factor with respect to the different cash flows.

Project B: The determination of the cash flow was a problem because most candidates could not use the expected value. The contribution per tourist was also not calculated correctly by most candidates.

Project C: Candidates had difficulty with the timing of the working capital, some of the candidates used the GH¢21 million as the working capital for year one instead of the incremental amount of GH¢6 million.

For sub-question b), the response to explain programme-based budgeting was satisfactory. However, most candidates could not adequately provide satisfactory response to the disadvantages of line item budgeting.

QUESTION FIVE

- a) A relevant cost is one that we incur as a direct response to a particular decision
- Future cash flow
 - Incremental cost/Differential cost
 - Avoidable cost
 - Specific Fixed cost
 - Variable Cost (marginal Cost)
 - Opportunity cost
 - Stepped Fixed Cost
 - Extra Fixed Cost

(3 marks)

b)

	Note	GH¢
Material A	1	14,400
Material B	2	6,700
Material C	3	2,600
Skilled labour	4	0
Unskilled labour	5	3,300
Supervisor	6	8,500
Machine opportunity cost	7	12,600
Machine depreciation	8	0
Overheads (fixed)	9	0
Administration costs	10	0
Estimate	11	0
Total Cost		4,8100
Revenue	12	<u>52,000</u>
Profit		<u>(3,900)</u>

SML should undertake the contract, as they would achieve a profit of **GH¢3,900**.

Notes:

1. Material A is used regularly and if used on this project it will be replaced. Therefore, it is valued at its replacement cost. [10 machines x 10 units x GH¢144 = GH¢ 14,400]
2. As Material B is not used regularly within the company, it should be valued at its net realisable value, i.e. the value they would lose by using it on this project. The remainder would be purchased at market price (10 machines x 5 units = 50 units) (40 units x GH¢ 130) + (10 units x GH¢150) = GH¢6,700
3. 10 units of material c will have to be ordered from the alternative supplier immediately at the cost of GH¢90 per unit. However, the remaining 20 units can be used from inventory and replaced by an order from the usual supplier at a cost of ¢85 per unit, since it would not be used until 5 weeks' time. (10 x GH¢90) + (20 x

GH¢85) = GH¢2,600

4. The relevant cost of the skilled labour is 0. At present, the company has enough paid idle time to cover the job. Therefore, the company would incur no additional skilled labour costs.
5. Extra unskilled labour would be employed at a cost of GH¢ 3,300 [10 machines x 22 hours x GH¢ 15].
6. The company would only incur an additional supervising charge of GH¢ 8,500. The relevant cost of the existing supervisor is GH¢ 0 as he/she will not receive any additional payments over what they currently receive.
7. By undertaking the contract SML will have to forego [18 hours x 10 machines] x GH¢ 70 = GH¢ 12,600 from Fast Ltd (opportunity cost).
8. Depreciation is not a cash flow and therefore not a relevant cost.
9. Overheads are assumed to be fixed as question was not specific, hence considered irrelevant.
10. No additional administration costs will be incurred, only the apportionment/allocation of existing costs.
11. The time spent on the estimate is a sunk cost.
12. By undertaking the contract, the company would receive [10 machines x GH¢ 5,200] GH¢ 52,000.

(13 marks)

- c) Marginal cost represents the increase or decrease in total cost, which occurs, with one change in output. In cost accounting variable cost, represent marginal cost.

(1 mark)

Differential cost is the change (increase or decrease) in the total cost (variable as well as fixed) due to change in the level of activity, technology or production process or method of production.

(1 mark)

The main point which distinguishes marginal cost and differential cost is that change in fixed cost when volume of production increase or decrease by a unit of production. In the case of differential cost variable cost as well as fixed cost. i.e. both cost change due to change in the level of activity, whereas, under marginal costing only variable changes due to change in the level of activity.

(2 mark)

(Total: 20 marks)

EXAMINER'S COMMENT

Candidates who attempted sub-question a) explained relevant cost well but the examples were more of the features of relevant cost; e.g. avoidable cost, incremental cost. Example like direct labour cost in outsourcing would have been better.

For sub-question b), candidates who attempted it did well. The concept of relevant cost was used to price a special contract. Most of the cost elements in the questions were explained in terms of whether they are relevant or not. A few had a little problem analysing the relevant cost for materials B and C mainly because using the unit rather than the total approach does not bring out the cost clearly. The overhead as stated in the question was also not too clear. There was no information to suggest whether it was variable or specific fixed overhead. In absence of that, then it would be classified as general overheads which will be irrelevant. On the whole the scores were above average.

Candidates explained marginal cost quite well but some failed to bring out the meaning of differential cost which within the context of decision making is the difference in cost between alternatives.

CONCLUSION:

Apart from question four that required a lot more time almost all the other questions were not beyond the competence of the candidates. Facilitators and lecturers are encouraged to broaden the scope of their application areas when preparing candidates for the paper.

There is marginal improvement in the overall performance of candidates. Candidates writing this paper should note that questions are set to cover all the areas specified in the syllabus and so should be guided accordingly.