

**JULY 2026 PROFESSIONAL EXAMINATIONS
FINANCIAL MANAGEMENT (PAPER 2.4)
CHIEF EXAMINER'S REPORT, QUESTIONS AND MARKING SCHEME**

STANDARD OF PAPER

The quality and standard of the Paper was generally good and in line with the required standard expected. The questions were generally precise, unambiguous, and easy to understand. The spread of the questions across the syllabus was considered good and the standard noted to be of high quality with a number of sub questions for ease of answering to improve performance. The candidates performed better in the essay-based questions compared to the calculation based areas demonstrating a possible weakness in the quantitative based areas which require more work by candidates for future improvement.

PERFORMANCES OF CANDIDATES

The overall performance was poor and below expectation based on the nature of the questions that were set. Only 30% of the candidates passed and a sharp decline from the previous sitting pass rate of 50% and 55% earlier reflecting a deteriorating trend in the last few sittings which require attention.

NOTABLE STRENGTHS AND PERFORMANCE OF CANDIDATES

The following strengths were observed:

- Improved appreciation of the requirements of the questions by few candidates who performed well.
- Few candidates demonstrated strong knowledge both quantitative and essay-based aspects of the paper.
- Further improvement in providing appropriate answers in line with requirements of the answers expected in the solution.

Observed weaknesses demonstrated by students:

- Poor preparation and understanding of the quantitative areas.
- Inadequate preparation before writing the paper.
- Unnecessary over writing and workings not required per the requirements of the questions showing candidates poor appreciation of the requirements of the questions.
- Poor presentation and arrangement of answers including wrong numbering of answers.
- Weaknesses in the calculation-based questions.

Remedies for observed weaknesses

- Taking time to properly number their answers in line with the question numbers.
- Thorough study of the texts, coverage of the syllabus and improving their knowledge and focus on the quantitative or calculation-based areas.
- Candidates should spend more time to prepare and utilise available accredited tuition providers.
- Avoid rushing to sit for the paper without adequate preparation.
- Utilise the time provided for reading to properly understand and provide the required answers to avoid deviations or providing unnecessary answers

QUESTION ONE

a) Atuabo Textiles LTD seeks to mobilise GH¢8 million to finance critical technology upgrades. The company has EPS of 0.2 which is expected to remain constant into the foreseeable future and is evaluating three financing alternatives:

- **Rights Issue:** A 1-for-4 offer at GH¢1.20 per share (market price: GH¢1.60).
- **Corporate Bond:** A 10-year instrument with a 14% coupon, yielding 15%, with issuance costs of 2%.
- **Term Loan:** The financing cost for a collateralised facility is 16% per annum.

The current corporate tax rate is 25% per annum

Required:

i) Compute the cost of each financing option and recommend which financing option to select. **(7 marks)**

ii) Explain how the following affect the profitability of a firm:

- Interest rate volatility
- Exchange rate volatility
- Regulatory changes
- Foreign currency liquidity

(8 marks)

b) At a recent board meeting of Tannuro PLC, a listed pharmaceutical company involved in the production of vaccines and diagnostic tools, a non-executive director proposed that the company's remuneration committee should consider scrapping the company's current share option scheme, since executive directors could be rewarded by the scheme even when they did not perform well.

Another non-executive director disagreed, saying the problem was that even when directors acted in ways which decreased the agency problem, they might not be rewarded by the share option scheme if the stock market were in decline.

Required:

i) Explain the nature of the agency problem. **(2 marks)**

ii) Discuss the use of share option schemes as a way of reducing the agency problem in a stock-market listed company such as Tannuro PLC. **(3 marks)**

(Total: 20 marks)

QUESTION TWO

The Directors of Akwaabi Resources LTD (Akwaabi) are considering a proposal to develop and operate a new gold mine in the Western North Region of Ghana. The development phase of the mine requires capital expenditure (CAPEX) of GH¢20 million immediately and GH¢168 million in Year 1.

Operations are scheduled to begin in Year 2, with a planned five-year operational life before a potential sale to a strategic investor at the end of year 6.

Below are the estimated real operating cash flows of the mine during the five years of operation:

Cash flow	Year 2	Year 3	Year 4	Year 5	Year 6
Gold sales (GH¢' million)	220	235	210	200	180
Operating expenditure, excluding depreciation (GH¢' million)	(120)	(125)	(118)	(115)	(110)

Akwaabi will be granted capital allowances on the CAPEX at 20% per annum on a straight-line basis and required to pay tax on profits from the mine at the rate of 35%.

The sale of the mine at the end of year 6 is expected to rake in a pre-tax cash consideration of GH¢120 million in real terms.

The company's real cost of capital is 15%.

Inflation is expected to average at 12% annually in the coming years.

Required:

- Compute the nominal (money) cost of capital of Akwaabi Resources LTD. **(3 marks)**
- Prepare a schedule of after-tax nominal (money) cash flows for the proposed mining project. **(9 marks)**
- Appraise the project using the net present value (NPV) method. **(3 marks)**
- Discuss **TWO** non-financial factors the Directors of Akwaabi Resources LTD should consider when approving the project for implementation. **(5 marks)**

(Total: 20 marks)

QUESTION THREE

- a) Banda Merchants LTD, a Ghanaian company, expects to receive USD500,000 from an overseas customer in 3 months' time (one lump sum payment). The company is concerned that the Ghana Cedi (GHS) might appreciate against the US Dollar in three months' time thus reducing the GHS value of the payment when converted. The current spot rate is GHS10.20 = USD 1. The 3-month forward rate is GHS10.00 = USD 1. Ghanaian 3-month interest rates are around 12% p.a. and US 3-month rates are around 4% p.a. Banda Merchants LTD has access to money markets for borrowing or depositing in both currencies.

Required:

- i) Calculate the amount of Ghana Cedis the company would receive in 3 months if it hedges using:
- a forward contract
 - a money-market hedge.
- (Show all workings).

(8 marks)

- ii) Briefly advise Banda Merchants LTD on whether to hedge this receivable, and which hedging method might be preferable, taking into account the outcome of your calculations and any other considerations.

(2 marks)

- b) In Public Expenditure and Financial Accountability (PEFA) framework, ***budget reliability*** (Pillar I) and ***predictability and control in budget execution*** (Pillar V) have considerable impact on overall public financial management performance.

Required:

In reference to the above, explain the outlined pillars and how they are assessed.

(10 marks)

(Total: 20 marks)

QUESTION FOUR

- a) Corporate restructuring often requires a shift in ownership structure to unlock hidden value, streamline operations or facilitate a smooth founder exit. When a business goes through this transition, selling the enterprise to its existing leadership team represents a highly distinct strategic path compared to a standard third-party acquisition. Executing **management buy-outs** heavily alters the operational, cultural and financial trajectory of an organisation during its next phase of growth.

Required:

Outline **FOUR** potential advantages of management buy-outs.

(2 marks)

- b) Bubiduru LTD is a leading pharmaceutical manufacturing company in Ghana, known for its research and development of essential drugs. As part of a strategic financial evaluation, the company's Board is reviewing its capital structure and seeking to assess its cost of capital to guide future investment decisions.

The following financial information refers to Bubiduru LTD:

Statement of Financial Position

	GH¢'000
Assets	
Non-current assets	101,000
Current assets	
Inventory	11,000
Trade receivables	21,000
Cash	<u>10,000</u>
Total assets	<u>143,000</u>
Equity and liabilities	
Ordinary share capital	50,000
Preference share capital	25,000
Retained earnings	<u>19,000</u>
Total equity	94,000
Non-current liabilities	
Long-term borrowings	20,000
Current liabilities	
Trade payables	22,000
Other payables	<u>7,000</u>
Total current liabilities	29,000
Total liabilities	<u>49,000</u>
Total equity and liabilities	<u>143,000</u>

Bubiduru LTD has just paid a dividend of GH¢0.66 per share and has a cost of equity of 12%. The company's dividends have grown at an average rate of 3% per annum in recent years and will continue at this rate forever. The nominal value of each ordinary share is GH¢0.50, and an ex-div market value of GH¢8.30 per share.

The long-term borrowings of Bubiduru LTD consist of 7% bonds that are redeemable in six years at their nominal value of GH¢100 per bond. The current ex-interest market price of the bond is GH¢103.50

The preference shares have a nominal value of GH¢0.50 per share and pay an annual dividend of 8%. The ex-div market value of the preference shares is GH¢0.67 per share.

Bubiduru LTD is subject to corporate tax rate of 25%.

Required:

- i) Calculate the equity value of Bubiduru LTD using the following business valuation methods:
 - Dividend growth model.
 - Net asset value.

(4 marks)
- ii) Calculate the after-tax cost of debt of Bubiduru LTD.

(4 marks)
- iii) Calculate the weighted average after-tax cost of capital of Bubiduru LTD.

(5 marks)
- c) Fentuo Pharmaceutical LTD (Fentuo), a leading local pharmaceutical manufacturer, plans to borrow GH¢15 million in two months' time to settle the invoice value for a shipment of imported active pharmaceutical ingredients for producing one of its medicines. The company has secured a borrowing arrangement with Agooji Bank. The term of the loan is set to six months, and the interest on the loan is set at the Ghana Reference Rate plus 3.5%.

The Ghana Reference Rate is 20.5% currently. However, management is concerned about potential hikes in interest rates before the loan drawdown date. To hedge this exposure, Fentuo has entered into a forward rate agreement (FRA) with Sidi Bank, locking in an FRA traded interest rate of 21.5% on the spot date.

Required:

Compute the outcome of the FRA and the effective interest rate if the Reference Rate settles at 21.1% in two months' time.

(5 marks)

(Total: 20 marks)

QUESTION FIVE

- a) Sohori LTD has annual credit sales of GH¢10 million. Its normal credit terms are net 30 days, but large customers often delay payment up to 60 days. As a result, the company incurs GH¢100,000 annually in credit administration costs. Bad debts have been 3% of credit sales. Sohori LTD finances its receivables with an overdraft at 8% per annum. The company is considering a factoring arrangement to improve receivables management and liquidity:

Option 1

Factor handles all invoicing and collections with recourse. The factor will charge a service fee of 1% of credit sales and is expected to reduce the average collection period to 30 days. Sohori LTD can eliminate its GH¢100,000 credit administration cost if this option is chosen. No financing (advance) is provided by the factor in this option.

Option 2

Factor handles invoicing and collections without recourse and will advance 80% of each invoice immediately. The factor's service fee is 2% of credit sales in this case. The factor charges 10% annual interest on advances. The average collection period would also drop to 30 days. Sohori LTD can eliminate its GH¢100,000 credit administration cost.

Assume 360 days in a year.

Required:

- i) Calculate the annual costs and benefits of each factoring option versus the current situation, and recommend whether Sohori LTD should enter the factoring arrangement and, if so, which option. **(11 marks)**
- ii) Discuss **THREE** advantages and **TWO** disadvantages of using factoring as a receivables management tool. **(4 marks)**
- b) Ghana's rapid digitalisation drive has transformed the financial services landscape, with mobile money transactions surpassing GH¢1.9 trillion in 2024 and Fintech solutions increasingly replacing cash-based systems. At the same time, the Bank of Ghana has introduced new regulatory frameworks such as the Payment Systems and Services Act, 2019 (Act 987) to improve oversight of electronic transactions.

Required:

Explain **FOUR** ways in which Ghana's growing digital financial ecosystem may influence corporate financial management decisions and the cost of capital. **(5 marks)**

(Total: 20 marks)

SUGGESTED SOLUTION

QUESTION ONE

a)

i) **Cost of each financing option**

Rights Issue (Equity)

Cost of equity via rights issue:

$K_e = \text{Earnings per share} / \text{Market Price}$

$= 0.2 / 1.6$

$= 12.5\%$

Alternative (using ex right price)

$0.2 / 1.52 = 13.16\%$

(2 marks)

Corporate Bond (Debt)

Net proceeds $= (100 - 2) = 98$

Cost of debt (K_d): $= 14 / 98$

$= 14.29\%$ (before tax)

K_d (after-tax) $= 14.29\% \times (1 - 0.25) = 10.72\%$

Alternative

Issue cost $= 2\% \times 8m = 160,000$

Coupon $= 14\% \times 8m = 1,120,000$

Cost of debt before tax $= 1,120,000 / (8,000,000 - 160,000)$
 $= 14.29\%$ (before tax)

K_d (after tax) $= 14.29 \times (1 - 0.25) = 10.72\%$

(2 marks)

Term Loan

Interest rate $= 16\%$ p.a.

After-tax cost:

$16\% \times (1 - 0.25) = 12\%$

(2 marks)

Recommendation

Based on the computations. Bond is the cheapest.

(1 mark)

(7 marks)

ii) Effect on the profitability of the firm

Interest Rate Volatility

Fluctuations in interest rates affect a firm's profitability through several channels:
Cost of borrowing: Where a firm has variable-rate loans or overdrafts, a rise in interest rates increases finance costs, directly reducing net profit. Conversely, a fall in rates reduces interest expense and boosts profitability.

Investment income: Firms holding interest-bearing investments earn more income when rates rise, positively affecting profitability, and less when rates fall.

Cost of capital and investment decisions: Higher interest rates increase the discount rate used to appraise projects, which can render previously viable projects unprofitable, reducing future earnings potential.

Exchange Rate Volatility

For firms engaged in international trade or holding foreign-denominated assets/liabilities, exchange rate movements affect profitability through:

Transaction exposure: A firm that imports raw materials or goods will see its costs rise if the local currency depreciates against the foreign currency of purchase, squeezing profit margins. Conversely, an exporter benefits from depreciation as foreign sales translate into more local currency.

Translation exposure: Firms with foreign subsidiaries must translate the subsidiary's financial results into the parent's reporting currency. Exchange rate fluctuations can cause translation gains or losses that affect reported group profitability, even without any change in underlying operations.

Economic exposure: Sustained currency volatility can affect a firm's long-term competitiveness. For example, strong local currency may make exports less competitive internationally, reducing future revenue and profitability.

Regulatory Changes

Changes in laws, policies, and regulatory requirements can significantly impact profitability:

Compliance costs: New regulations such as environmental standards and data protection law changes often require firms to invest in new systems, processes or staff training, increasing operating costs.

Taxation policy: Changes in corporate tax rates, VAT and import duties directly affect the firm's after-tax profit. An increase in tax rates or introduction of new levies reduces net profitability.

Market access and competition: Deregulation may open a market to more competitors, eroding market share and margins, while stricter regulation may create barriers to entry that protect incumbent firms' profitability.

Foreign Currency Liquidity

This refers to the availability or scarcity of foreign currency needed by a firm to meet its obligations in importing inputs, servicing foreign loans or repatriating profits

Black market costs: Scarcity often forces firms to source foreign currency at a premium over the official rate, increasing the effective cost of imports and reducing profit margins.

Delayed repatriation of profits: For multinational firms or foreign investors, illiquidity in the foreign exchange market can delay the repatriation of dividends or profits, affecting group-level returns and investor confidence.

Operational disruption: Inability to secure foreign currency promptly can disrupt supply chains, reducing output and sales, thereby lowering profitability.

(2 marks each = 8 marks)

b)

- i) The primary financial management objective of a company is usually taken to be the maximization of shareholder wealth. In practice, the managers of a company acting as agents for the principals (the shareholders) may act in ways which do not lead to shareholder wealth maximization. The failure of managers to maximise shareholder wealth is referred to as the agency problem.

The agency problem arises because the objectives of managers differ from those of shareholders: because there is a separation of ownership from control in modern companies; and because there is an asymmetry of information between shareholders and managers that prevents shareholders being aware of most managerial decisions.

(2 marks)

- ii) One way to encourage managers to act in ways that increase shareholder wealth is to offer them share options. These are rights to buy shares on a future date at a price which is fixed when the share options are issued. Share options will encourage managers to make decisions that are likely to lead to share price increases (such as investing in projects with positive net present values), since this will increase the rewards they receive from share options.

(3 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Question one was mainly essay based. The (i) part of (a) examined candidates' ability to compute the cost of financing for three different scenarios involving rights issue, corporate bond and term loan with candidates expected to recommend the best financing option. This was fairly well answered. The (ii) part of (a) tested the candidate's knowledge on how interest rate, exchange rate, regulatory changes and foreign currency liquidity affect the profitability of a firm. This received broad responses from candidates with most candidates emphasising how it improves profitability instead of both sides.

The (b) part was on agency problem and how share scheme could be used to mitigate the problem. This part was also well answered.

QUESTION TWO

a) Computation of the nominal cost of capital

Based on the Fisher equation, the nominal cost of capital is 28.8%:

$$1 + i = (1 + r)(1 + h)$$

$$i = (1 + r)(1 + h) - 1$$

$$i = (1 + 0.15)(1 + 0.12) - 1 = 0.288$$

(3 marks)

b) Schedule of after-tax nominal (money) cash flows (in millions)

	0	1	2	3	4	5	6
	GH¢	GH¢	GH¢	GH¢	GH¢	GH¢	GH¢
Investments:							
CAPEX	(20.00)	(168.00)					
Operating cash flows:							
Revenue	-	-	275.97	330.15	330.44	352.46	355.28
Operating expenditure, excluding depreciation	-	-	(150.53)	(175.61)	(185.67)	(202.66)	(217.12)
Capital allowance	-	-	(37.60)	(37.60)	(37.60)	(37.60)	(37.60)
Operating income	-	-	87.84	116.94	107.16	112.20	100.57
Tax @ 35%	-	-	(30.74)	(40.93)	(37.51)	(39.27)	(35.20)
After-tax operating income	-	-	57.10	76.01	69.66	72.93	65.37
Add back capital allowance	-	-	37.60	37.60	37.60	37.60	37.60
Annual after-tax NOCF	-	-	94.70	113.61	107.26	110.53	102.97
Terminal cash flow:							
After-tax consideration							153.96
After-tax NCF	(20.00)	(168.00)	94.70	113.61	107.26	110.53	256.92

Supporting Workings:

1. Nominal sales revenue:

EOY	0	1	2	3	4	5	6
Real sales revenue	-	-	220.00	235.00	210.00	200.00	180.00
Inflation factor, $i = 12\%$	1.0000	1.1200	1.2544	1.4049	1.5735	1.7623	1.9738
Nominal sales revenue	-	-	275.97	330.15	330.44	352.46	355.28

2. Nominal operating expenditure

EOY	0	1	2	3	4	5	6
Real operating expenditure	-	-	(120.00)	(125.00)	(118.00)	(115.00)	(110.00)
Inflation factor, $i = 12\%$	1.0000	1.1200	1.2544	1.4049	1.5735	1.7623	1.9738
Nominal operating expenditure	-	-	(150.53)	(175.61)	(185.67)	(202.66)	(217.12)

3. Nominal CAPEX:

EOY	0	1	2	3	4	5	6
Real CAPEX	(20.00)	(150.00)	-	-	-	-	-
Inflation factor, $i = 12\%$	1.0000	1.1200	1.2544	1.4049	1.5735	1.7623	1.9738
Nominal CAPEX	(20.00)	(168.00)	-	-	-	-	-

4. Capital Allowance:

EOY	0	1	2	3	4	5	6
Beginning value	-	20.00	188.00	150.40	112.80	75.20	37.60
Addition	20.00	168.00	-	-	-	-	-
Depreciable value	20.00	188.00	188.00	150.40	112.80	75.20	37.60
Capital allowance @ 20%			(37.60)	(37.60)	(37.60)	(37.60)	(37.60)
Ending value	20.00	188.00	150.40	112.80	75.20	37.60	-

5. After-tax Consideration

EOY	0	1	2	3	4	5	6
Real pre-tax consideration	-	-	-	-	-	-	120.00
Inflation factor, $i = 12\%$	1.0000	1.1200	1.2544	1.4049	1.5735	1.7623	1.9738
Pre-tax nominal consideration	0.00	0.00	0.00	0.00	0.00	0.00	236.86
Tax on consideration @ 35%	-	-	-	-	-	-	(82.90)
After-tax nominal consideration	-	-	-	-	-	-	153.96

(9 marks)**c) The project's viability based on the net present value method**

EOY	0	1	2	3	4	5	6
After-tax NCF	(20.00)	(168.00)	94.70	113.61	107.26	110.53	256.92
DF @ 28.8%	1.0000	0.7764	0.6028	0.4680	0.3634	0.2821	0.2190
PV @ 28.8%	(20.00)	(130.43)	57.08	53.17	38.97	31.18	56.27
NPV	86.25						

Recommendation:

The NPV of the project is positive, which implies that the implementation of the project will add value to the firm. Thus, it should be accepted for implementation.
(3 marks)

d) Non-financial factors to be considered

Below are some common non-financial factors the company's directors should consider when approving the new mining project proposal.

Environmental Stewardship

Compliance with Environmental Laws: Ensuring all activities meet Ghana's environmental regulations and permit conditions.

Minimisation of Adverse Environmental Footprint: Adopting operational practices that reduce land disturbance, dust emissions, and unnecessary vegetation loss.

Biodiversity Awareness: Identifying ecologically sensitive areas and avoiding unnecessary interference.

Responsible Water Use Practices: Monitoring consumption, preventing contamination, and efficiently using existing water infrastructure and resources.

Community and Social Relations

Transparent Communication: Maintaining open, honest, and regular dialogue with local communities and traditional authorities.

Local Employment and Skills Development: Prioritising local hiring and offering training programmes to build local capacity.

Community Investment: Supporting infrastructure, education, and health initiatives in host communities.

Respect for Cultural Heritage: Avoiding damage to culturally significant sites, sacred lands, or community heritage areas.

Social Licence to Operate: Building trust through consistent ethical behaviour and respect for community norms.

NGO and Civil Society Engagement: Addressing concerns of advocacy groups proactively to reduce reputational risks.

Regulatory and Legal Compliance

Adherence to Mining and Environmental Regulations: Strictly following the requirements of the Minerals and Mining Act, environmental guidelines, and other sectoral laws.

Adherence to Licensing Conditions: Strict compliance with permit requirements and reporting obligations to regulators.

Following Labour and Safety Laws: Ensuring shift structures, rest periods, and safety protocols comply with statutory provisions.

Internal Policy Enforcement: Applying company codes of conduct and operational standards consistently across teams.

Health and Safety Culture

Promoting Safety Mindset: Encouraging workers to identify hazards and report near-misses without fear of reprisal.

On-the-Job Safety Practices: Using existing tools and protocols correctly rather than investing in new equipment.

Emergency Readiness: Conducting regular drills and ensuring clear signage and procedures are in place.

Governance and Ethical Standards

Anti-corruption Measures: Enforcing internal ethical guidelines and rejecting improper offers or inducements.

Transparency in Operations: Sharing accurate, timely information with regulators and communities.

Board-Level Oversight of ESG Matters: Ensuring directors actively review environmental and social performance indicators alongside production data.

(Maximum of 2.5 marks for each of 2 factors explained = 5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Candidates were required to compute the nominal interest rate, the cash flows from the project and appraise the project using the net present value approach. Additionally, they were to provide the nonfinancial factors to be considered in the project appraisal.

The most challenging aspect of the question to the candidates was the computation of the nominal interest rate which was not provided and required candidates to compute. They were also expected to compute the projected cash flows from year two to year six. Most candidates assumed the cash flows provided for those years in the table were already inflation adjusted and applied the same without further computation. Most candidates struggled to answer the question with most candidates failing to score a pass in the question.

QUESTION THREE

a)

i) Receivable: USD500,000 in 3 months

Spot rate: GHS10.20 to USD1.00

Three-month forward rate: GHS10.00 to USD1.00

GHS interest rate = 12% p.a. = $0.12 \times \frac{3}{12} = 0.03 = 3\%$

USD interest rate = 4% p.a. = $0.04 \times \frac{3}{12} = 0.01 = 1\%$

- **Forward hedge**

Lock in the forward rate for 3 months

= $500,000 \times 10$

= **GHS5,000,000**

- **Money market hedge**

1) Borrow an amount in USD today that, with 3 months' interest, will grow to exactly USD 500,000. This loan will be repaid using the USD receipt when it is received.

USD 500,000/1.01

= USD495,049.50

2) Convert the borrowed USD to GHS immediately at the spot rate

$495,049.50 \times 10.20 = \text{GHS}5,049,504.95$

3) **Place the GHS amount on deposit for 3 months at the Ghanaian interest rate**

$\text{GHS}5,049,504.95 \times 1.03$

= GHS 5,200,990.10

(In 3 months, the USD 500,000 received from the customer is used to repay the USD loan ($495,049.50 \times 1.01 = 500,000$), while the GHS deposit matures to GHS 5,200,990.10, which the company keeps.)

(8 marks)

ii) **Recommendation**

Hedge the receivable to eliminate foreign exchange risk. The money market hedge is preferable here.

(2 marks)

b) **Pillar I: Budget reliability**

Budget reliability assesses whether the government's budget is realistic and is implemented as intended. It measures the extent to which actual revenue collected and expenditure incurred correspond to the amounts originally approved in the budget. A reliable budget is one where the gap between what was planned and what actually happened is small, indicating credible budget planning and disciplined execution.

How it is Assessed

- **PI-1: Aggregate expenditure outturn** – Compares actual total expenditure to the originally approved budgeted expenditure over the past three years. Large deviations suggest poor budget forecasting or weak expenditure control.
- **PI-2: Expenditure composition outturn** – Assesses how actual expenditure is distributed across:
 - Functional/administrative classification (i.e. did spending go to the sectors/agencies originally budgeted for?)
 - Economic classification (i.e. was the split between wages, goods and services, capital expenditure as planned?)
 - Contingency reserve usage (whether unallocated reserves were used appropriately)
- **PI-3: Revenue outturn** – Compares actual domestic revenue collected against the original budget forecast, both in aggregate and by revenue type/category.

Significance: Poor performance in Pillar I signals that budget documents cannot be relied upon for planning purposes, undermining confidence of Parliament, development partners, and citizens in the entire budget process.

Pillar V: Predictability and control in budget execution

This pillar assesses whether the budget, once approved, is implemented in an orderly and predictable manner, with adequate mechanisms of control, stewardship, and use of public funds. It focuses on the internal systems, procedures, and controls that govern revenue collection, cash/resource management, payroll, procurement, and expenditure during the execution phase of the budget cycle.

How it is assessed

- **PI-19: Revenue administration** – Assesses the clarity of taxpayer obligations, effectiveness of taxpayer registration, risk-based tax audits, and procedures for revenue collection, accounting, and reconciliation.
- **PI-20: Accounting for revenue** – Assesses how comprehensively revenue collected is recorded, reported, and reconciled between collecting agencies and the Treasury.
- **PI-21: Predictability of in-year resource allocation** – Assesses whether spending agencies receive reliable information on and access to resources (cash) for budget execution, including effectiveness of cash flow forecasting and in-year budget adjustments.
- **PI-22: Expenditure arrears** – Assesses the stock and monitoring of expenditure arrears (unpaid obligations), which indicate weak commitment controls.
- **PI-23: Payroll Controls** – Assesses the integrity of personnel/payroll data, controls over changes to payroll records, and internal controls to prevent "ghost workers" and payroll fraud.

- **PI-24: Procurement management** – Assesses transparency, competition, value for money, and monitoring in public procurement, including complaint/appeals mechanisms.
- **PI-25: Internal controls on non-salary expenditure** – Assesses effectiveness of segregation of duties, commitment controls (to prevent overspending/arrears), and compliance with payment rules and procedures.
- **PI-26: Internal audit** – Assesses the coverage, quality, and management response to internal audit functions across government.

Significance: Weaknesses in Pillar V create opportunities for misuse, leakage, or misallocation of public funds, even where the original budget (Pillar I) was well-designed. Strong controls here ensure that approved budgets translate into actual, well-managed service delivery.

(5 marks for each pillar = 10 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

The question tested the candidates' ability to provide a hedging solution to risk exposure to foreign currency receivables in three months' time and expected candidates to calculate the amount of Cedis that will be received by using a forward rate or money market strategy and based on the outcome either to hedge the receivable and if yes which method. This received good answers as most candidates were able to get a significant number of the variable correct and some got all. There were however some candidates who did not understand what to do and provided wrong solution.

The (b) part examined the candidates on public expenditure and financial accountability and the response was generally moderate to good answers.

QUESTION FOUR

a) Advantages of management buy-outs

- Buy-out might result in a higher disposal price, and has the social effect of protecting jobs.
 - Selling part of the organization might allow the company to focus on its core competence.
 - Current Managers, with their existing expertise of the markets, relationships with client may have a better chance of successfully operating the company.
 - Buy-out may offer tax advantages.
 - Current managers are likely to be highly motivated through their significant equity holdings, and by the potential for large capital gains if the company succeeds.
- (1/2 mark each for any 4 points = 2 marks)**

b)

i)

• Dividend growth model

$$P_0 = D_0 (1 + g) / (r_e - g)$$

$$= 0.66(1.03) / (0.12 - 0.03)$$

$$= \text{GH}¢7.55 \text{ per share}$$

$$\text{Number of ordinary shares} = \text{GH}¢50,000,000 / \text{GH}¢0.5 = 100,000,000 \text{ shares}$$

$$\text{Value of Bibiduru LTD} = 100,000,000 \times \text{GH}¢7.55 = \text{GH}¢755,000,000$$

(2 marks evenly distributed)

• Net Asset Value

$$= \text{Total assets less total liabilities}$$

$$= \text{GH}¢143,000,000 - (\text{GH}¢49,000,000 + \text{GH}¢25,000,000)$$

$$= \text{GH}¢69,000,000$$

(2 marks evenly distributed)

ii) The after-tax cost of debt is calculated as the internal rate of return of the cash flows of purchasing the debt and receiving the interest and redemption payments

$$\text{The annual after-tax interest payment} = \text{GH}¢7(1 - 0.25) = \text{GH}¢5.25$$

Year	Cash flow	5% DF	PValue
0	(103.5)	1.000	(103.5)
1-6	5.25	5.076	26.65
6	100	0.746	<u>74.60</u>
			<u>(2.25)</u>

Year	Cashflow	4% DF	PValue
0	(103.5)	1.000	(103.5)
1-6	5.25	5.242	27.52
6	100	0.790	<u>79.00</u>
			<u>3.02</u>

$$\begin{aligned}
IRR &= L + [N_L / (N_L - N_H)] \times (H - L) \\
&= 4 + [3.02 / (3.02 + 2.25)] \times (5 - 4) \\
&= 4 + 0.57 \times 1 \\
&= 4.6\%
\end{aligned}$$

After-tax cost of debt = 4.6%

(4 marks evenly distributed)

iii) WACC

Annual preference dividend = 8% x GH¢0.50 = GH¢0.40 per share

Cost of preference shares = $(4/67) \times 100 = 6\%$

Number of ordinary shares = GH¢50,000,000 / GH¢0.50 = 100,000,000

Market value of equity = $V_e = 100,000,000 \text{ shares} \times \text{GH¢}8.30 = \text{GH¢}830,000,000$

Number of preference shares = GH¢25,000,000 / GH¢0.50 = 50,000,000 shares

Market value of preference shares = $V_p = \text{GH¢}0.67 \times 50,000,000 = \text{GH¢}33,500,000$

Market value of long-term borrowings = V_d

= $\text{GH¢}20,000,000 \times \text{GH¢}103.5 / \text{GH¢}100$

= GH¢20,700,000

Total market value of company = $(V_e + V_d + V_p)$

= $(\text{GH¢}830,000,000 + \text{GH¢}33,500,000 + \text{GH¢}20,700,000)$

= GH¢884,200,000

WACC = $k_e [V_e / (V_e + V_d + V_p)] + k_p [V_p / (V_e + V_d + V_p)] + k_d [V_d / (V_e + V_d + V_p)]$

= $12[830/884.2] + 6[33.5/884.2] + 4.6[20.7/884.2]$

= 11.6%

(5 marks)

c) The net outcome of the FRA hedge and the effective interest rate

Outcome of the FRA hedge:

FRA traded rate = 21.5%

FRA reference rate = set to Ghana Reference Rate (GRR) in two months' time = 20.9%

As the Reference rate falls below the FRA rate in three months' time, Fentuo will get the actual loan at a lower rate. Thus, Fentuo will pay the excess of the FRA traded rate over the GRR to Sidi Bank:

$$\text{Settlement to Sidi Bank} = 21.1\% - 21.5\% = 0.4\%$$

Effective interest rate:

Fentuo will take the actual loan in two months' time at its borrowing cost, GRR + 3.5%:

$$\text{Cost of actual loan} = 21.1\% + 3.5\% = 24.6\%$$

The net cost of the loan, considering the outcome of the FRA, would be 25.0%:

$$\text{Net cost (effective interest rate)} = 24.6\% + 0.4\% = 25.0\%$$

Alternative approach:

	GH¢'m
Payment on actual loan (GH¢15m × 24.6% × 6/12)	(1.845)
Payment to FRA counterparty (GH¢15m × 0.40% × 6/12)	(0.030)
Net payment	(1.875)

$$\text{Effective interest rate} = \frac{\text{GH¢1.875m}}{\text{GH¢15m}} \times \frac{12}{6} = 0.25$$

(5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

This question tested candidates' ability to provide advantages of management buyout and computation of equity using dividend valuation model and net assets' value approaches. Additionally, candidates were expected to determine after tax cost of debt and the weighted average cost of capital. Candidates struggled to answer the question.

The (c) part which was on forward rate agreement received moderate to good answers. The candidates performed poorly in this question. This was the worst answered question and historically has been poorly answered.

QUESTION FIVE

a)

i)

Item	Current Situation	Option 1: With Recourse (1% fee, no advance)	Option 2: Without Recourse (2% fee, 80% advance, 10% interest)
	GH¢	GH¢	GH¢
Credit administration cost	100,000	-100,000 (<i>saving</i>)	-100,000 (<i>saving</i>)
Bad debt cost	300,000 (3% × 10m)	300,000 (<i>still with recourse? see note</i>)	0 (<i>factor without recourse absorbs bad debts</i>)
Financing cost on receivables	133,600 (8% × 1.67m)	66,667 (8% × 0.833m)	13,333 (80% × 0.833m × 8%)
Factor's service fee	-	100,000 (1% × 10m)	200,000 (2% × 10m)
Interest on advance from factor	-	-	66,667 (80% × 0.833m × 10%)
Total annual cost	533,600	366,667	120,000 (<i>benefit</i>)
Net saving vs current	-	166,933 (<i>net cost savings</i>)	413,600 (<i>net benefit earned</i>)

Option 1:

Net annual cost under Option 1: GH¢100,000 (fee) + 66,667 (interest) + 300,000 (bad debts) = GH¢466,667. GH¢100,000 savings in admin, net effective cost = 466,667 - 100,000 = **GH¢366,667**.

Comparison to current: Current cost GH¢533,333 vs Option 1 GH¢366,667.

Option 1 saves GH¢166,666 per year. This reflects lower interest due to faster collections and admin savings outweighing the factor's fee.

Option 2:

Net annual cost under Option 2: GH¢200,000 (fee) + 66,667 (factor interest) + 13,333 (own interest) = GH¢280,000. After subtracting savings (300,000 bad debts + 100,000 admin = 400,000 saved), the net effect is a GH¢120,000 net benefit.

Recommendation:

Option 2 (non-recourse factoring) is financially the best choice.

Workings

Receivables value

Annual sales = 10,000,000

Current: 60 days sales = $10,000,000 \times 60 / 360 = 1,666,667 \approx \text{GH¢}1.67\text{m}$.

Option 1 (With Recourse, No Financing): The factor's involvement will shorten the collection period from 60 to 30 days. Average receivables will drop to about GH¢0.83 million ($30 / 360 \times 10\text{m}$).

Option 2 (Non-Recourse with 80% Advance): The factor now provides financing and bad-debt protection. Collection period still 30 days (average AR = GH¢833,333). The factor advances 80% of invoices and charges 10% on those advances. The remaining 20% is received after 30 days (we assume Sohori finances that portion itself at 8% until receipt). Bad debts (3% of sales) are eliminated for Sohori, as the factor covers them.

Bad debt cost – Current:

$$3\% \times 10\text{m} = 300,000.$$

Option 1: With recourse – *still liable for bad debts*, so keep same cost.

Option 2: Without recourse – bad debts = 0.

Financing cost on receivables – Current:

Overdraft rate = 8%.

Financing cost = $1.67\text{m} \times 8\% = 133,333$ (rounded above to 133,600 in table).

If collection period drops to 30 days: Receivables = $10,000,000 \times 30 / 360 = 833,333$
 $10,000,000 \times 30 / 360 = 833,333 \rightarrow \text{financing cost} = 833,333 \times 8\% = 66,667.$

Factor's service fee:

Option 1: $1\% \times 10\text{m} = 100,000.$

Option 2: $2\% \times 10\text{m} = 200,000.$

Interest on factor advance (Option 2 only):

Advance = $80\% \times 833,333 = 666,667.$

Interest at 10% p.a. = 66,667.

(Marks are evenly spread using ticks = 11 marks)

ii)

Advantages of factoring

- Immediate cash inflow improves liquidity.
- Outsources credit control, reducing admin workload.
- Bad debt protection if non-recourse.
- Predictable cash flow aids planning.
- Possible improvement in debtor days.

(3 relevant points @ 0.8 mark each = 2.4 marks)

Disadvantages of factoring

- Costly fees and interest may exceed overdraft rates.
- May signal weak credit control to stakeholders.
- Loss of direct contact with customers could harm relationships.
- Contract terms may limit flexibility in sales.
- Over-reliance can erode internal credit management skills.

(2 relevant points @ 0.8 mark each = 1.4 marks))

- b) **How Ghana's growing digital financial ecosystem may influence corporate financial management decisions and the cost of capital.**

Improved Liquidity and Working Capital Management

Mobile money and fintech platforms improve collection efficiency, reduce receivable periods, and enhance cash flow visibility – lowering liquidity risk and cost of short-term borrowing.

Reduced Transaction Costs

Digital platforms reduce reliance on cash handling and banking charges. Lower operating costs improve profitability, which can reduce perceived risk and the cost of equity financing.

Increased Access to Credit

Fintech innovations and mobile-based lending products expand funding sources for firms, especially SMEs. Easier access to credit may reduce dependence on expensive bank loans, lowering overall cost of capital.

Enhanced Investor Confidence through Transparency

Digital systems provide better audit trails and compliance reporting, lowering information asymmetry and investor risk perception, which reduces required returns.

Regulatory Compliance Costs

New rules under the Payment Systems and Services Act may impose compliance costs, slightly increasing financing needs. However, regulatory certainty may also reduce perceived risk premiums.

Capital Raising Opportunities

The growth of digital platforms may enable innovative funding sources such as crowdfunding and digital bonds, diversifying financing strategies and lowering reliance on traditional costly debt.

(4 relevant points @ 1.25 = 5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

This part of the paper examined the candidates' ability to make decision on account receivable management on whether to maintain debts collection in house or outsource to a factor and were also expected to provide advantages and disadvantages of a factor. This was generally well understood by candidates as they provided good answers.

The (b) part which was on how growing digital finance ecosystem will influence corporate financial management also received good answers.