

**MARCH 2024 PROFESSIONAL EXAMINATIONS
FINANCIAL MANAGEMENT (PAPER 2.4)
CHIEF EXAMINER'S REPORT, QUESTIONS AND MARKING SCHEME**

STANDARD OF PAPER

- The standard and quality of the paper was good
- The structure of the questions and distributions across the syllabus was also achieved
- The spread of questions and sub questions afforded candidates good opportunity to provide good answers
- The spread of questions between theory and calculations were considered generally good with 40 marks being theory based and the remaining 60 marks being quantitative and generally consistent with historical trends of 30% to 40% of theory to calculations
- The standard of the individual questions was also considered good devoid of ambiguities and contributing to historic good performance by the candidates
- The paper was structured to ensure each question contained a number of sub questions offering each candidate the chance to attempt each question and obtain good marks
- Notwithstanding the significant improvement in performance some candidates who were ill prepared still struggled to answer the questions on mergers and acquisitions, currency risk hedging, working capital management and financial mathematics.
- The marks allocation was done consistent with the level of difficulty and details required by the question to ensure fairness in the award of marks
- Where necessary alternative answers were also provided to accommodate varying views and perspectives by the candidates

PERFORMANCE OF CANDIDATES

- The performance of the candidates was very good and considered to be historic best performance in the paper. The overall pass rate was 61% compared to the 46% in the previous session and past trends of low pass rates. Additionally, the good performance reflected generally across all questions with the highest being 73% in question four and lowest being 34% in question five reflecting a well-balanced performance across in the paper.
- Drivers of the good performance:
 - The questions were well moderated and structured to take out all ambiguities to improve candidate's comprehension of the questions
 - The candidates appeared to have prepared much better as responses generally showed better appreciation of the requirements of the questions which elicited good responses
 - The calibre and quality of candidates who sat for the paper appeared good
 - Well-rounded preparation by candidates for both theory and calculations which contributed to the improved performance

NOTABLE STRENGTHS AND WEAKNESSES OF CANDIDATES

The following strengths were observed:

- Well balanced preparations to cover both theory and calculations
- Improvement in the approach and level of detail expected based on the nature and requirements of the questions
- Good time management still featured as almost all candidates generally answered all questions within the stipulated time
- Improvement in the quality of answers provided by candidates

Observed reasons of the strengths:

- Better preparation by the candidates
- Candidates exposure and learning from the past mistakes and issues raised in the previous examiners' reports
- Better syllabus and content coverage by the tuition centres and providers
- Better use of the ICA learning materials and examinations questions and answers expected

The strengths can be enhanced by:

- Continuing thorough preparations before writing the paper
- Paying further attentions to examiners' reports to learn more on emerging issues and recommendations
- Continuing to learn more on how to answer the questions and score good marks

Observed weaknesses demonstrated by candidates

- Some candidates still used very faded pens making it difficult for examiners to read
- Some candidates still engaged in misnumbering and labelling of their answers
- Quality of some answers by some candidates still demonstrated the weak nature of some candidates registering for the paper
- Risk, mergers and acquisitions and financial mathematics areas still require more attention

Remedies for observed weaknesses

- Candidates should ensure that the pen used is not faded and hand writing should be legible
- Candidates should avoid misnumbering and mixing of answers across the answer booklets
- Tuition providers should assist new candidates in the good approach to answering ICA examination questions
- Ensure workings are clearly specified and real solutions or answers also clearly indicated

QUESTION ONE

- a) The shareholders of Abontim Ghana Ltd, who also serve as the directors of the company have been informed that good corporate governance is crucial to achieving sustainable financial performance. They want to know more about the concept of corporate governance and what needs to be done to enhance the company's corporate governance.

Required:

Explain to the shareholders and directors:

- i) The concept of *corporate governance*. **(2 marks)**
 - ii) **TWO (2)** roles the company's board of directors is expected to play in corporate governance. **(4 marks)**
 - iii) **TWO (2)** corporate governance best practices. **(4 marks)**
- b) Shanto Ghana Ltd is considering raising capital by issuing shares using the three methods below:
- i) Placement method
 - ii) Offer for sale method
 - iii) Offer for sale by tender

Required:

Explain each of the above methods citing one advantage each. **(10 marks)**

(Total: 20 marks)

QUESTION TWO

Olongon Plc (Olongon) and Kwatrikwa Plc (Kwatrikwa) are competitors listed on the Ghana Stock Exchange. Due to poor managerial decisions, Kwatrikwa's earning power has been uncertain in recent years making shareholders to contemplate selling the business. However, the management of Kwatrikwa have used various defensive tactics to block any takeover they perceive to be hostile. In the just ended Annual General Meeting (AGM), Kwatrikwa's shareholders have resolved to sell the company. Shareholders of Olongon have expressed interest in acquiring Kwatrikwa and have suggested to the board to put a proposal together for consideration in the next extraordinary meeting. Olongon's board has gathered the information below to guide the drafting of the proposal.

	Olongon	Kwatrikwa
Earnings per share	GH¢0.50	GH¢0.50
Retention ratio	0.60	0.40
Price per share	GH¢10	GH¢5
Number of shares	25,000	25,000

Required:

- a) Assuming the acquisition will be financed with shares, how many shares of Olongon should be exchanged for all the shares of Kwatrikwa based on market value? **(4 marks)**

- b) Assuming the share price of the combined business after the acquisition is the same as the share price of Olongon, calculate the market value, earnings per share and the Price/Earnings ratio of the combined business. **(6 marks)**
- c) Calculate the cost of the acquisition if Olongon pays GH¢130,000 in cash for Kwatrikwa. **(2 marks)**
- d) Explain **FOUR (4)** defensive tactics the management of Kwatrikwa can employ to prevent Olongon from acquiring the company. **(8 marks)**

(Total: 20 marks)

QUESTION THREE

- a) Onana Events Company (Onana) is purchasing a building from a real estate company. The current cash price of the building is GH¢2,500,000. Onana can obtain a GH¢2,500,000 mortgage loan to finance the payment of the cash price of the building. The loan bears a compound annual interest rate of 18% and calls for equal payments at the end of each quarter for 20 years.

Required:

- i) Compute the quarterly payment. **(4 marks)**
- ii) Compute the total interest that will be paid by Onana to the mortgage company over the life of the loan. **(2 marks)**
- iii) Suppose the real estate company is offering a credit payment plan to Onana. Per the credit terms, Onana will have to pay GH¢500,000 now and then pay GH¢110,000 at the end of each month for one year. The implicit interest rate is 20% per annum. Compute the aggregate present value of the payments under this option. **(4 marks)**
- b) Sempe Ghana Plc needs to have EUR650,000 in two months' time to settle a trade payable. The management team fears that the cedi would depreciate against the euro in the coming months. The team is however divided over whether the currency risk exposure should be hedged using a forward foreign exchange contract or a futures foreign exchange contract.

The following quotations have been obtained from Ghana's foreign exchange market:

FX quotation	Bid	Ask (Offer)
Spot rate	GH¢12.1854/EUR1	GH¢12.4854/EUR1
2-month forward rate	GH¢12.5854/EUR1	GH¢12.8854/EUR1

Required:

- i) Explain to the management of Sempe Ghana Ltd whether the foreign exchange quotations provided above are direct quotations or indirect quotations. **(5 marks)**
- ii) Suppose the company uses the forward contract to hedge its currency exposure. Compute the outcome of the forward contract hedge. **(5 marks)**

(Total: 20 marks)

QUESTION FOUR

- a) Toolo Ghana Ltd was recently formed as a special purpose vehicle (SPV) to provide a secondary market for investors involved in the domestic debt exchange programme who want to sell off their holdings for immediate cash.

The SPV was embarking on this special initiative as a one-off project; The company in year zero will acquire a total of GH¢500 million worth of bonds from investors and pay for all at the same time for cash.

Based on the projections, the expected cash inflows from the bonds are as follows:

Year 1 = GH¢100 million

Year 2 = year 1 cash flows + 20% increase

Year 3 = Year 2 cash flows + 15% increase

Year 4 = Year 3 cash flows + 25% increase

Year 5 = Year 4 cash flows + 20% increase

A special investment in systems and software, computers and other fixed assets is GH¢6 million in year zero and tax deductible depreciation is on straight line basis with a scrap value of GH¢1 million. Salaries and wages and other administrative expenses will be GH¢1 million in year 1 and grow at 15% per annum on the previous year's figure. Rent is also determined at GH¢ 0.5 million in year 1 and growing by GH¢100,000 each year.

The internal cost of capital is 22% whilst corporate tax rate is 25%.

Required:

- i) Calculate the Net Present Value (NPV) of this project and advise whether Toolo Ltd should embark on the project. **(12 marks)**
- ii) Explain **TWO (2)** reasons NPV is preferred to payback period. **(3 marks)**
- b) Soso Ghana Ltd is considering investing in project Sankofa which has been appraised to have an expected return of 25% per annum. The project's beta is 1.9 and the risk free interest rate is 14% per annum which is 9% below the average return on equity stocks on the market.

Required:

Calculate the *required return* on project Sankofa and advise Soso Ghana Ltd whether it should invest in the project. **(5 marks)**

(Total: 20 marks)

QUESTION FIVE

- a) Edziban Foods Ltd has just signed a contract to sell food items worth GH¢120,000 per month to the School Feeding Secretariat on credit. With the average collection period expected to be 45 days, the company will increase its working capital requirement by GH¢177,534. The company's managers are considering three options for financing the additional working capital requirement:

Option 1 - Trade credit: The company buys about GH¢72,000 of food items per month on terms of "2.5/20, net 60." Going forward, the company may choose to forgo the discount.

Option 2 - Factoring: The company enters a non-recourse factoring contract, under which the factor takes up the receivables to be created from the credit sales under the contract (i.e., GH¢120,000 per month) for a fee of 2% of the credit sales. The average collection period for the credit sales will remain at 45 days. The factor will advance up to 80% of the face value of the average receivables at an annual interest rate of 16%. It has been estimated that the factor's services will save the company GH¢1,500 per month in debt collection costs.

Option 3 - Bank loan: The company takes a loan of GH¢197,260 at 15% from its bankers. A 10% compensating balance will be required.

Required:

- i) Recommend the best financing option to the managers of the company based on annualised percentage cost. **(11 marks)**
- ii) Distinguish between "*without recourse*" factoring agreement and "*with recourse*" factoring agreement. **(4 marks)**
- b) Explain **THREE (3)** differences between a *forward currency contract* and a *futures currency contract*. **(5 marks)**

(Total: 20 marks)

SUGGESTED SOLUTION

QUESTION ONE

a)

- i) **Corporate governance** is the system by which companies are directed and controlled. Thus, corporate governance is concerned with the relationships among a company's shareholders, board of directors, and senior management.

(2 marks)

ii) **Roles of the company's board of directors in corporate governance**

- Hiring, firing, and setting compensation for the CEO.
- Setting company-wide policy to guide senior executives in developing operational and financial strategies and taking decisions.
- Advising the CEO and other senior executives, who manage the company's day-to-day activities.
- Reviewing and approving strategy, significant investments, and acquisitions.
- Overseeing operating plans, capital budgets, and the company's financial reports to common shareholders.

(Any 2 points @ 2marks each = 4 marks)

iii) **Corporate governance best practises**

- Separation of the board chairperson and CEO roles.
- Establishment of audit, nomination, and remuneration committees of the board of directors.
- Employment of non-executive directors.
- Requirement of annual financial reporting and financial disclosures.
- Requirement of annual external audit.
- Establishment and enforcement of a code of ethics for directors and senior executives.

(Any 2 points @ 2marks each = 4 marks)

b) **Methods of issuing shares**

- i) **Placement** is a method or strategy where shares are sold to specified or targeted group of investors usually institutional investors and selected wealthy individuals.

The advantages include:

- Cheaper to approach institutional and individual investors
- It is faster or quicker and easier
- Disclosure of information is contained and better compared to listing to the general public
- Investors sometimes feel good and consider themselves few privilege which boost the chance of success.

(3.33 marks)

ii) **Offer for sale** involves making the offer to the entire general public to buy which can be at fixed price or by tender.

Advantages:

- The pool of investors is bigger
- It improves transparency
- Keeps the management on its toes as disclosure requirement is comprehensive
- Can widen shareholder base for balanced ownership and minimise significant influence by few shareholders.

(3.33 marks)

iii) **Offer for sale by tender:** The public is invited to participate and bid for the available shares in excess above the minimum determined by the company. The price which ensures all the shares are sold out is called the strike price. Available shares are then allocated on pro rata basis

Advantages:

- Ensures transparency in pricing
- Offers opportunity to all to have access
- If successful promotes the brand of the company

(3.33 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

This question was the second-best answered question in the paper with a pass rate of 72% and 467 candidates obtaining a pass or better and was a further improvement of the 66% pass rate in the last examination.

Candidates were tested on corporate governance and were expected to demonstrate their understanding of this concept and further explain the roles the board of directors were expected to play in this regard together with the best corporate governance practices.

The (b) part of the question expected candidates to demonstrate their expertise and control over the various methods of raising capital and were limited to the placement method, offer for sale and offer for sale by tender methods. The responses from candidates for both (a) and (b) were good and varied demonstrating good application of the knowledge obtained on this subject.

QUESTION TWO

- a) Shares of Olongon that should be exchanged for all the share of Kwatrikwa.

$$\frac{\text{Target share price (Kwatrikwa)}}{\text{Predator share price (Olongon)}} = \frac{5}{10} = 0.5 \text{ per share} = 0.5 \times 25,000 \text{ shares} \\ = 12,500 \text{ shares}$$

Alternatively;

$$\frac{\text{Predator share price (Olongon)}}{\text{Target share price (Kwatrikwa)}} = \frac{10}{5} \\ = 2 \text{ shares of Kwatrikwa, for 1 share in Olongon} \\ = \frac{1}{2} \times 25,000 \text{ shares} = 12,500 \text{ shares}$$

(4 marks)

- b) Value of the combined business using the following:

- *Market value = Total shares of combined business × price per share*

$$\text{Market value} = (25,000 + 12,500) \times 10 = \text{GHS375,000}$$

- *Earnings of combined business = (0.5 × 25,000) + (0.5 × 25,000) = GHS25,000*

$$\text{EPS} = \frac{\text{Total earnings}}{\text{No. of Shares}} = \frac{25,000}{37,500} = \text{GHS0.67 per share}$$

- *P/E ratio = $\frac{\text{MPS}}{\text{EPS}} = \frac{10}{0.67} = 15 \text{ times}$*

(2 marks each = 6 marks)

- c) Cost of the acquisition if Olongon pays GH¢130,000 in cash for Kwatrikwa.

$$\text{Cost of Acquisition} = \text{Cash paid} - \text{Value of Target (Kwatrikwa)}$$

$$\text{Cost of Acquisition} = 130,000 - 125,000 = \text{GH¢5,000}$$

The acquisition is good for Kwatrikwa's shareholders, they can gain GH¢5,000 for free.

(2 marks)

- d) Defensive tactics the management of Kwatrikwa can employ to prevent Olongon from acquiring the company.

- **Staggered board:** The board is classified into three equal groups. Only one group is elected each year. Therefore, the bidder cannot gain control of the target immediately.
- **Supermajority:** A high percentage of shares, typically 80%, is needed to approve a merger.
- **Fair price:** Mergers are restricted unless a fair price (determined by formula or appraisal) is paid.
- **Restricted voting:** Shareholders who acquire more than a specified proportion of the target have no voting rights unless approved by the target's board.
- **Waiting period:** Unwelcome acquirers must wait for a specified number of years before they can complete the merger.

- **Poison pill:** Existing shareholders are issued rights that, if there is a significant purchase of shares by a bidder, can be used to purchase additional stock in the company at a bargain price.
- **Poison put:** Existing bondholders can demand repayment if there is a change of control as a result of a hostile takeover.
- **Litigation:** Target files suit against bidder for violating antitrust or securities laws.
- **Asset restructuring:** Target buys assets that bidder does not want or that will create an antitrust problem.
- **Liability restructuring:** Target issues shares to a friendly third party, increases the number of shareholders, or repurchases shares from existing shareholders at a premium.
- **Crown jewels:** Crown jewels are options under which a favored party can buy a key part of the target at a price that may be less than its market value.
- **Golden parachutes:** Golden parachutes are additional compensations to the target's top management in the case of termination of its employment following a successful hostile acquisition.

(Any 4 points @ 2 marks each = 8 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

The performance of the candidates in this question was generally average with a 1% decline in pass rate to 45% compared to the 46% in the previous sitting.

The question was on acquisition of a poor performing Kwatrikwa plc by a competitor Olongon plc. Candidates were expected to apply their knowledge on this subject area to determine the number of shares of Olongon plc (acquirer) should be exchanged for all the shares of the victim Kwatrikwa plc based on the market value.

Additionally, candidates were further expected to calculate the market value, earning per share and price earnings ratio of the combined business on the (b) part and (c) and (d) were on the determination of the cost of the acquisition and defensive tactics the victim company could apply to ward off Olongon plc from the acquisition.

Candidates generally struggled once again in the computation areas on this subject except a few very good candidates who were able to answer all scoring the maximum marks

The best answered part of the question was on the defensive strategies which received good answers across. Candidates and tutors still require more time and attention in this subject area even though the past few sitting have witnessed some gradual improvement and this was the third best answered question and contributed to the overall good pass rate in the paper

QUESTION THREE

a)

i) The quarterly payment.

$$PVA = PMT \left[\frac{1 - \frac{1}{\left(1 + \frac{i}{m}\right)^{n \cdot m}}}{\frac{i}{m}} \right]$$

The present value of the payments, PVA = Loan principal = GH¢2,500,000

Annual interest, $i = 18\%$

Frequency, $m = 4$

Mortgage duration (in years), $n = 20$

$$\text{GH¢}2,500,000 = PMT \left[\frac{1 - \frac{1}{\left(1 + \frac{0.18}{4}\right)^{20 \times 4}}}{\frac{0.18}{4}} \right]$$

$$\text{GH¢}2,500,000 = PMT \times 21.56534493$$

$$PMT = \frac{\text{GH¢}2,500,000}{21.56534493} = \text{GH¢}115,926.73$$

(Workings = 3 marks; Final answer = 1 mark = 4 marks)

ii) Total interest that will be paid over the life of the loan.

$$\text{Total interest} = \text{Total payments} - \text{Principal}$$

$$\begin{aligned} \text{Total interest} &= (\text{GH¢}115,926.73 \times 80) - \text{GH¢}2,500,000 \\ &= \text{GH¢}9,274,138.40 - \text{GH¢}2,500,000 = \text{GH¢}6,774,138.40 \end{aligned}$$

(Workings = 1 mark; Final answer = 1 mark = 2 marks)

iii) Aggregate PV of payment under vendor's credit.

$$\text{Aggregate PV} = \text{Down Payment} + \text{PV of Instalments}$$

$$\text{Aggregate PV} = \text{GH¢}500,000 + \text{GH¢}1,187,462.48 = \text{GH¢}1,687,462.48$$

$$\text{PV of Instalments} = PMT \left[\frac{1 - \frac{1}{\left(1 + \frac{i}{m}\right)^{n \cdot m}}}{\frac{i}{m}} \right]$$

$$\text{PV of Instalments} = \text{GH}\text{¢}110,000 \left[\frac{1 - \frac{1}{\left(1 + \frac{0.2}{12}\right)^{1*12}}}{\frac{0.2}{12}} \right] = \text{GH}\text{¢}1,187,462.48$$

(Workings = 3 marks; Final answer = 1 mark = 4 marks)

b)

i) Identification of FX quotation type.

A direct quotation presents the domestic currency price for a unit of the foreign currency whereas an indirect quotation presents the foreign currency price of a unit of the domestic currency.

The quotations are direct quotations since they present the cedi price of the foreign currency.

(5 marks)

ii) Computation of the outcome of the forward contract hedge.

As the company needs to have the EUR, it will have to buy it from the forward dealers at their ask rate (i.e., GH¢12.8854/EUR1):

Outcome of forward hedge = Currency Exposure × Forward rate

$$\text{Outcome of forward hedge} = \text{EUR}650,000 \times \frac{\text{GH}\text{¢}12.8854}{\text{EUR}1} = \text{GH}\text{¢}8,375,510$$

**(Selection of appropriate forward rate = 1 mark; Workings for outcome = 3;
Final answer = 1 mark; = 5 marks)**

(Total: 20 marks)

EXAMINER'S COMMENTS

Question three was on acquisition of building or property through a mortgage scheme, it assessed candidates' application of their knowledge in financial mathematics. The (a) part of the question tested candidates' ability to compute the quarterly mortgage payments expected, the total interest payable under that mortgage scheme and the computation in (a) (i) and (ii). The (a) (iii) expected the candidates to compute the aggregate present value of the payment under an option that, the estate company was rather selling the building on credit terms to the buyer instead of the mortgage option. This received mixed answers with some candidates scoring good marks

The (b) part of the question tested the ability of the candidates to provide hedging solution for a currency risk exposure by an importer who had a trade payable due in two months' time. The spot and forward rates for both bids/ask were provided to test the competency of the candidates to apply their knowledge to determine which

forward rate to use and the corresponding cedi equivalent to determine the outcome of the hedge and also whether the quotation was direct or indirect.

There was a remarkable improvement in the performance of the candidates in this area as most candidates were able to identify the type of quotation and some levels of good responses to the hedge. The difficult area to most candidates centred on whether to use the bid or ask rate provided in the question. This requires further improvement. The overall pass rate was 37% and an improvement over the previous pass rate of 11%. This was the fourth best answered question in the paper.

QUESTION FOUR

a)

i) NPV Computation

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
	GH¢000	GH¢000	GH¢000	GH¢000	GH¢000	GH¢000
Bonds	(500,000)					
Systems	(6,000)					
Bond cash inflows		100,000	120,000	138,000	172,500	207,000
Salaries & Wages		(1,000)	(1,150)	(1,322.5)	(1,520.88)	(1,749)
Rent		(500)	(600)	(700)	(800)	(900)
Depreciation allowance		(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
Net Cash flows		97,500	117,250	134,977.5	169,179	203,351
Scrap value						<u>1,000</u>
Taxable income		97,500	117,250	134,977.5	169,179	204,351
Tax @ 25%		(24,375)	(29,312.5)	(33,744.38)	(42,294.75)	(51,087.75)
PAT		73,125	87,937.5	101,233.12	126,884.25	153,263.25
Add back depreciation		<u>1,000</u>	<u>1,000</u>	<u>1,000</u>	<u>1,000</u>	<u>1,000</u>
Net cash flows	(506,000)	74,125	88,937.5	102,233.12	127,884.25	154,263.25
Disc fac @22%	<u>1.0</u>	<u>0.820</u>	<u>0.672</u>	<u>0.551</u>	<u>0.452</u>	<u>0.370</u>
Present values	(506,000)	60,782.5	59,766	56,330.50	57,803.68	57,077.4

$$\text{NPV} = (506,000) + 291,760 = \mathbf{(214,239.9)}$$

Decision: NPV is negative and the initiative should not be accepted.

(Marks are evenly spread using ticks = 12 marks)

ii) Reasons why NPV is preferred to payback period

- Considers time value of money
- considers only cash flows and not profit
- Considers cash flows after payback period
- Shows magnitude increase in shareholder value

(Any 2 points @ 1.5 marks each = 3 marks)

b) Computation of RRR

Expected return = 25%

Return (r) = $r_f + B(R_m - r_f)$

$R_f = 14\%$

$B=1.9$

$R_m = 14\% + 9\% = 23\%$

$r = 14\% + 1.9 (23\% - 14\%)$

= **31.1%**

Decision: Since the required return of 31.1% is higher than the expected return of 25% for project Sankofa, the project should be avoided.

(5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Question four was the best answered question with a pass rate of 73% with 471 candidates obtaining a pass or better and a further improvement over the previous pass rate of 65%. The (a) part tested candidates on (NPV) computations and decision making using the results and also provide reasons why NPV was preferred to the payback period. Both received good answers with most candidates scoring the maximum mark. Examiners applied some level of flexibility to accommodate the treatment of the taxation in the question.

The (b) part was to assess candidates ability to compute the required return on project Sankofa and advise whether it should be undertaken using Capital Assets pricing Model (CAPM) with the expected return provided in the question together with the project beta, risk free interest rate and percentage return the risk free rate was below average return on equity stocks. Most candidates got the computations right but struggled with the interpretation relative to the expected return provided in the question.

QUESTION FIVE

a)

i) The best financing option based on annualized percentage cost.

Trade credit:

The discount is not taken, it will cost the company 23.4% per annum to use the supplier's credit:

$$\text{Annualised cost of credit} = \frac{2.5}{100 - 2.5} \times \frac{365}{40} = 23.4\%$$

Factoring:

$$\text{Factoring fees} = 2\% \times (\text{GH}\text{c}120,000 \times 12) = 2\% \times \text{GH}\text{c}1,440,000 = \text{GH}\text{c}28,800$$

$$\text{Interest on advance} = 16\% \times (0.8 \times \text{GH}\text{c}177,534) = \text{GH}\text{c}22,724.35$$

$$\text{Savings on debt collection} = \text{GH}\text{c}1,500 \times 12 = \text{GH}\text{c}18,000$$

$$\text{Net cost} = \frac{\text{Interest} + \text{Factoring fee} - \text{Cost saving}}{\text{Average receivables}} \times 100\%$$

$$\text{Annual Net cost} = \frac{\text{GH}\text{c}22,724.35 + \text{GH}\text{c}28,800 - \text{GH}\text{c}18,000}{\text{GH}\text{c}177,534} \times 100\% = 18.88\%$$

Bank loan:

$$\text{Annual cost} = \frac{\text{Interest}}{\text{Usable funds}} \times 100\%$$

$$\text{Annual cost} = \frac{\text{GH}\text{c}197,260 \times 15\%}{\text{GH}\text{c}197,260 \times (1 - 0.1)} \times 100\% = \frac{\text{GH}\text{c}29,589}{\text{GH}\text{c}177,534} \times 100\% = 16.67\%$$

Recommendation:

The company should use the bank loan to finance the additional working capital requirements as it presents the lowest cost.

Marks allocation:

Computation of cost of trade credit = 3 marks

Computation of cost of factoring = 4 marks

Computation of cost of bank loan = 3 marks

Recommendation = 1 mark

11 marks

ii) **Distinction between a without recourse factoring agreement and a with a recourse factoring agreement:**

A "*without recourse*" factoring contract implies that the company selling the receivables to the factor would not be liable for any receivables that become uncollectible whereas a "*with recourse*" factoring contract implies that the company selling the receivables remains liable for any uncollectible accounts and the factor will only use its best efforts to collect the receivables.

Thus, the company selling the receivables bears bad debt losses when the factoring agreement is with recourse, but the factor bears bad debt losses when the factoring agreement is without recourse.

(4 marks)

b) Differences between a forward currency contract and a futures currency contract.

Forward contract	Futures contract
Forward contracts are available in over-the-counter markets.	Futures contracts are typically exchange traded.
Forward rates are fixed.	Futures rates are marked to market; and so, they are varied as the underlying asset price changes in the spot market
Forward contract size is tailored to the requirements of the counterparties	Futures contract sizes are limited to exchange-determined lots. Counterparties must buy multiples of available contract sizes to cover their exposure.
The counterparties can agree on any maturity date.	The exchange sets the maturity of contracts, and counterparties must choose from a limited list of available maturities.
No margin deposit is required.	Margin deposits are required to trade futures contracts.
Settlement occurs directly between the counterparties. Counterparty risk exists.	Settlement is done through the exchange's clearinghouse. Thus, counterparty risk is reduced if not eliminated.
Fees are usually not charged on contracts. The dealers profit from the bid-ask spread.	Counterparties are typically required to pay fees to the exchange.

(Any 3 points @ 1.67 marks = 5 marks)

(Total: 20 marks)

EXAMINER'S COMMENTS

Question five also had improved performance from low pass rate of 18% in the previous paper to the current pass rate of 34% even though it was the worst answered question in the paper.

The candidates generally struggled to compute the best financing option for the debtor's management on the (a) (i) part but mixed answers received on the debtors factoring side. A good number of candidates explained the recourse and without recourse in the opposite manner but some candidates did well and scored the maximum marks.

The (b) part of the questions was generally well answered as a good number of candidates were able to provide the three required difference between a forward contract and futures contract.