## MARCH 2023 PROFESSIONAL EXAMINATIONS FINANCIAL MANAGEMENT (PAPER 2.4) CHIEF EXAMINER'S REPORT, QUESTIONS AND MARKING SCHEME

## STANDARD OF PAPER

The quality and standard of questions in the paper measured up to the required level. Additionally, the questions were generally well spread across the syllabus. The spread between quantitative and theory or essay-based questions were generally good as well. This therefore provided opportunity to candidates who were well prepared to have more questions to answer in the exams. The paper was generally evenly distributed between calculations and theory questions. The theory-based questions carried $41 \%$ of the marks while the calculation or quantitative based questions took the remaining $59 \%$ slightly higher compared to the $57 \%$ the previous sitting.

The quality, spread and standard of the questions were appropriate to the level and, thereby affording the candidates writing the paper the opportunity to provide good answers. In terms of marks allocation, it was well done and based on difficulty and level of detail required in the answer. Those that required detailed answers carried more marks similar to the difficulty level. The marks allocated to the questions clearly showed the level of detailed answers expected from the candidates.

## PERFORMANCE OF CANDIDATES

The performance of the candidates in the paper was poor this March 2023 sitting. It was $17 \%$, a sharp decline compared to the pass rates of $66 \%$ and $48 \%$ in the last two prior sittings of December and August respectively. Strong performance by the very few candidates was largely due to good preparation and the seriousness attached to the exams by those candidates. Few candidates who were probably referral candidates exhibited good knowledge and understanding of the subject.

The composition and spread of questions were largely good in line with the trend in the prior two sittings and the examiners expected good performance from the candidates. The patterns of answers provided which were unique in nature by each candidate did not suggest any copying by candidates in the paper.

Alternative solutions were provided where necessary to ensure that the marking accommodated varied views and perspectives from the various candidates.

## NOTABLE STRENTHGS AND WEAKNESSES OF CANDIDATES

The following strengths were observed:

- The few candidates who performed well exhibited good knowledge of the theorybased questions as well as quantitative questions.
- Few candidates' demonstrated ability to generally answer all questions in the paper within the stipulated time.

Observed reasons of the strengths:

- Good exam preparation before writing by those few candidates who did well.
- Some level of improvement in the level of student's research ability and syllabus coverage.
- Few candidates availing themselves of various tuition opportunities provided by tuition providers.
- Level of deep knowledge by some few candidate suggest a prior knowledge in subject area at the degree or other higher level.

The strengths can be enhanced by:

- Enhancing the productive time of exam preparation.
- Ensuring a well-rounded coverage of exam syllabus before registering for the paper.
- Improvement in time planning and management.
- Continue to improve in the use of technology to enhance the study process.

Observed weaknesses demonstrated by candidates

- Very poor preparation and shallow answers provided suggest some candidates may have rushed to register for the paper.
- The reduced preparation time available to candidates to prepare and write might have had negative impact on performance even though this is one off and will reset to the normal period available for preparation going forward.
- Candidates' ability to identify the right formula to use in answering the questions was still a problem as wrong formula were quoted often.
- Inability of tuition centres to cover the syllabus due to the limited time available to do that due to the shifting of the exam time forward by a month.
- Very good pass rate in the last two sittings reduced significantly the number of candidates in the pool resitting leaving mainly new entrants who did not also take time to prepare well.
- Good results in the past two sitting might have created sense of comfort to candidates that negatively impacted on adequate preparations.

Remedies for observed weaknesses

- Instituting minimum period required for preparation before registering to write especially candidates with no background in the finance area.
- Future review of month of exams to be done far ahead of time to address the negative impact of time available to candidates and tuition providers for preparations.
- More productive time to be spent on identifying the right formula needed for certain specific questions without deviations.
- Learning to use and pick the correct formula from the list provided in the question paper.


## QUESTION ONE

a) The four major decisions taken by a Finance Manager are:
i) Investment Decision
ii) Financing Decision
iii) Dividend Decision
iv) Liquidity Decision

## Required:

Explain each of the above decisions citing an example of each.
(10 marks)
b) Oliso Ghana Ltd paid a dividend of $\mathrm{GH} \not \subset 120$ per share two years ago. In the previous and current year, dividend grew by $10 \%$ per annum. Starting from next year, dividend is projected to grow by $15 \%$ for the next three years and then $10 \%$ for another three years and finally settling at $12 \%$ forever. The investors expect $20 \%$ returns.

## Required:

i) Calculate the value of a share in cedis for Oliso Ghana Ltd.
ii) If an investor holds 1,500 shares of the company what will be the total value in cedis.
(Total: 20 marks)

## QUESTION TWO

a) Panpana Ltd is operating in the same industry as Finkyim Ltd but Finkyim Ltd is experiencing leadership crisis leading to poor performance. Panpana Ltd upon realising this is putting up bid to take over Finkyim Ltd. It has been agreed that Panpana Ltd will pay 0.7 of its own shares for each of the shares in Finkyim Ltd. This acquisition has no economies of scale and operating synergy. The relevant financial data of the two companies are as follows:

|  | Panpana Ltd | Finkyim Ltd |
| :--- | ---: | ---: |
| Net sales | GH $¢ 503,000$ | GH $¢ 178000$ |
| Profit after tax | GH $¢ 88,000$ | 48,000 |
| No of shares | 18,000 | 30 |
| Price per share | 50 | 8 |
| Price Earning(P/E) Ratio | 10 |  |

## Required:

Calculate the following for the combined Company:
i) Earning per share
ii) Weighted average $\mathrm{P} /$ E ratio
iii) Market value per share
iv) Total market capitalisation
v) The premium received by Finkyim Ltd
b) In a hostile takeover, management and staff of target companies go through a lot of psychological and mental trauma causing management of target companies to resist the takeover. There are certain defensive strategies that are usually used by management of the target company to ward off the predator.

## Required:

Explain THREE (3) defensive strategies that can be adapted by the target company to ward off predators.

## QUESTION THREE

a) Klassiq Fashion Plc has raised GH$\not \subset 10$ million from a share offer to its shareholders to finance market expansion projects in West Africa. The money will be deposited into an interest-bearing account and withdrawn in bits within regular time intervals during the next two years. The first withdrawal will occur at the end of the first quarter. Subsequent withdrawals will occur at the end of each of the subsequent quarters for the next two years. The fund in the account will earn interest at $18 \%$ per annum with quarterly compounding.

## Required:

i) Suppose the first withdrawal amount is GH\& 2.25 million. Compute the account balance immediately after the first withdrawal.
(3 marks)
ii) Suppose subsequent quarterly withdrawals from the account are even for the next two years, compute the size of each withdrawal.
(3 marks)
b) Trimpo Ltd can invest funds in Ghana's financial market at $15 \%$ per annum. Presently, the Treasury Manager of the company is considering investing $\mathrm{GH} \not \subset 100,000$.

## Required:

Determine the length of time it will take to double the investment (round your answer to the nearest year).
(4 marks)
c) Recently, the major stock indexes like the S\&P 500 and DJIA declined in value continuously during the first quarter of 2021 when most economies were battling the devastating effects of the COVID-19 pandemic. A similar situation happened between 2007 and 2009 when the global credit crunch occurred.

## Required:

i) State the type of market condition (i.e., a bear or a bull) described in the above preamble.
ii) Distinguish between a bear market and a bull market.
iii) Recommend to a portfolio investor TWO (2) investment strategies that can be employed to take advantage of a bull market.

## QUESTION FOUR

a) Explain the stages in Capital Investment decision making process.
b) Dragon Ltd is evaluating an investment proposal to manufacture a product called "Chiputronic" and the information below has been provided by the Research and Development team:

| Initial Investment | GH $\phi 4$ million |
| :--- | :--- |
| Selling price (current price terms) | GH $\phi 40$ per unit |
| Expected Selling price inflation | $3 \%$ per annum |
| Variable operating cost (current price terms) | GH $\phi 16$ per unit |
| Fixed Operating cost (current price terms) | GH $\phi 340,000$ |
| Expected operating cost inflation | $4 \%$ per annum |


| Year | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- |
| Annual Demand (units) | 70,000 | 90,000 | 130,000 | 50,000 |

It is expected that whatever is produced will be sold with no stock left and there will be no scrap value expected at the end of the four years. The discount rate used in the company is $15 \%$.

## Required:

i) Compute the discounted payback period.
ii) Calculate the Return on Capital Employed (Accounting Rate of Return) based on average investment.
c) Financial markets facilitate the interaction between those who need funds and those who have funds to invest.

## Required:

Explain TWO (2) categories of financial markets and give TWO (2) examples each.

## QUESTION FIVE

a) Kanzo Food Stores Plc (Kanzo) sells on credit terms of net 60 days. Kanzo's new Chief Finance Officer (CFO) thinks that the company's credit terms are too lengthy considering the industry average credit terms of net 45 days.

Kanzo's annual credit sales revenue is $\mathrm{GH} \phi 500$ million, and its receivables turnover days is 55 days. The CFO has proposed that the credit terms be revised to net 45 days. Although the tightening of the credit terms would cause annual sales revenue to drop by an estimated $\mathrm{GH} \phi 20$ million, the CFO believes that the policy change would lower the receivables turnover days to 40 days, which would bring some savings on investment in accounts receivables.
Kanzo has a variable cost ratio of $65 \%$ and a cost of capital of $20 \%$.

## Required:

i) Compute the net benefit/cost associated with the proposed change in the credit terms and recommend whether the proposed change in the credit terms be adopted.
(10 marks)
ii) The CFO is considering investing funds that would be released from trade receivables in short-term marketable securities. Explain TWO (2) characteristics of marketable securities.
(5 marks)
b) Ahuodzen Pharmaceutical Ltd (Ahuodzen) imports chemicals to produce medicines in Ghana. It has received a consignment of chemicals from a supplier in India. The invoice value of US $\$ 2$ million is payable two months from now. The Treasury Manager of Ahuodzen is worried about volatility in the cedi to US dollar exchange rate.

## Required:

Explain how local currency invoicing would be used as a strategy for managing currency risk exposures and advise the Treasury Manager on the benefit and risk of handling Ahuodzen's currency risk exposure using local currency invoicing.
(Total: 20 marks)

## SUGGESTED SOLUTION

## QUESTION ONE

## a) The decisions taken by the Finance Manager

i) Investment Decision

The investment decision covers the allocation of capital or commitment of funding to long term assets or capital investment initiatives. This are long term spends the benefits of which are accrued over long period of time. This spends are large and require thorough analysis. The two critical assessment areas are: The evaluation of the profitability or benefit of the new investment and the achievement of the hurdle rate or benchmark return acceptable for the investment. The risk and return analysis will also be done and the opportunity cost of allocating the funds. Examples of such decisions are acquisitions or replacement of plant, introduction of new products, etc

## ii) Financing Decision

This decision entails when, where and how to procure the necessary funding to undertake the capital expenditure budget or investment spending. This will involve determining the ratio or proportion of equity to debt in the funding mix or capital structure to adapt and the optimal financing structure that will optimise shareholder value. Other factors to be included in the decisions are the cost, flexibility, terms and conditions and covenants associated with the debt. Example of such decisions are using fresh equity from shareholders or retained earnings together with a debt issue in the form of loans or corporate bonds etc and the quantum of each funding.

## iii) Dividend Decisions

This involves the decision either to pay dividend or distribute profit or not and if to pay when and how and the proportion or ratio of pay out and retention for future growth of the company. What the company can also accommodate to pay without causing liquidity challenges to the company. The finance manager should ensure shareholder value maximisation and the combination of cash dividend or bonus issue or a mix.

## iv) Liquidity Decision

Liquidity management is also crucial and prudent management of current assets and liabilities profiles as well as long term assets management is important to ensure optimal operation. Excess cash or liquidity comes at a great cost and deficit cash or liquidity problems comes at a high cost and risks to the business and the finance manager will have to manage the situation to ensure that the optimal position is achieved at an acceptable risk level. There must be balance between profitability and liquidity not create one at the expense of the other.
b)
i) Computation of value of share

Dividend two years ago = GH\$120
Growth rate over the last 2 years $=10 \%$
Current dividend level $=(1.1)^{\wedge} 2 \times 120$

$$
=1.21 \times 120=\mathrm{GH} \$ 145.2
$$

Year 1 to 3 below @ 15\% growth
Year 4 to 6 below @ $10 \%$

| Year | Dividend | DF@20\% | Present Value |
| :---: | :---: | :---: | :---: |
| 1 | 167 | 0.833 | 139.11 |
| 2 | 192 | 0.694 | 133.25 |
| 3 | 221 | 0.579 | 127.96 |
| 4 | 243 | 0.482 | 117.12 |
| 5 | 267 | 0.402 | 107.33 |
| 6 | 294 | 0.335 | $\underline{98.49}$ |
|  |  |  | $\underline{\mathbf{7 2 3 . 2 6}}$ |

Price at period $\mathrm{n}=\mathrm{Pn}=\frac{\mathrm{Dn}(1+\mathrm{g})}{(\mathrm{r}-\mathrm{g})}$
Where;
P6 = ?
D6 = 294
$\mathrm{g}=12 \%$
$r=20 \%$
$P=\frac{294(1.12)}{(0.2-0.12)}$
$P=\underline{329.28}$
$0.08=\mathrm{GH} 4,116$

PV of price $=4116 \times 0.335=1,379$
Value today $=723.26+1,379$
$=\mathrm{GH} \$ 2,102.26$
(marks are evenly spread $=8$ marks)
ii) Value of 1,500 shares today $=$ no of shares $x$ value per share

$$
\begin{aligned}
& =1,500 \times 2,102.26 \\
& =\mathrm{GH} \Varangle 3,153,390
\end{aligned}
$$

## EXAMINER'S COMMENTS

This question on a), tested candidates' ability to understand and explain the four major decisions in finance namely investment decision, financing decision, dividend and liquidity decisions. This was well answered as candidates clearly demonstrated in their own words their own understanding of the subject matter. This carried a total of 10 marks. Candidates scored good marks averagely in this area and the best answered part of the question and the paper at large.
The b) part of the question which was quantitative, tested candidates ability to i) compute the value of share based on the information provided in the question and ii) determine the total value of investment if an investor held 1,500 shares. This received moderate answers. Good candidates scored good marks but the weak candidates struggled.

## QUESTION TWO

a)
i) Earnings per share (EPS) $=$ Combined earnings Combined number of shares
Shares offered to Finkyim Ltd $=0.7 \times 4,500$ shares $=3,150$ shares

$$
\begin{aligned}
& =\frac{88,000+18,000}{18,000+3,150} \\
& =106,000 / 21,150
\end{aligned}
$$

EPS $=$ GH\$5.01
ii) Weighted Average $\mathrm{P} / \mathrm{E}$ ratio

WA P/E Ratio $=\frac{[88,000 \times 10]+[18,000 \times 8]}{88,000+18,000}=\frac{1,024,000}{106,000}=9.67$
iii) Market value per share $=\mathrm{EPS} X \mathrm{P} / \mathrm{E}$ Ratio $=5.01 \times 9.67=\mathbf{G H} \$ 48.45$
iv) Total market capitalisation $=$ no of shares x price per share

$$
\begin{aligned}
& =21,150 \times 48.45 \\
& =\text { GH\$1,024,717 }
\end{aligned}
$$

v) Premium received by Finkyim Ltd

Premium received:
Value before merger $=4,500$ shares $\times 30=G H \$ 135,000$
Value after merger $=(0.7 \times 4,500) \times 48.45=G H \$ 152,618$
Premium received $=(152,618-135,000)=\quad$ GH\$17,618
b) Defensive strategies

- Convince shareholders of target companies not to sell and that the terms are not good or acceptable
- Convincing the target company shareholders to make a counter offer to the predator also known as reverse take over
- The target company can engage in white knight defense by looking for a friendly or comfortable rival bidder
- The target company can ask for a golden parachute by asking for high compensation and severance package
- They can make the target company unattractive by selling its very productive assets
(Any 3 points @ 2 marks each = 6 marks)
(Total: 20 marks)


## EXAMINER'S COMMENTS

Question two also had two sub-questions with a) part examining candidates' competency in calculating earnings per share, weighted average price earnings ratio, market value per share, total market capitalisation and calculation of premium received by an acquiree company in a company take over scenario. Answers received generally were below average and expectation.

The b) part which was theory, tested candidates on defensive strategies a target company could deploy to ward off predators. It received good answers better than the a) part.

A significant number of candidates performed woefully in this question. The questions were generally good and candidates could have scored maximum marks. This was the second worst answered question in the paper.

## QUESTION THREE

a) Klassiq Fashion Plc
iii) Computation of account balance right after the first withdrawal of GH\$2.25 million.

$$
\begin{gathered}
F V_{n}=P_{0} \times\left(1+\frac{i}{m}\right)^{n * m}-\text { Withdrawal } \\
\mathrm{FV}_{0.25}=\mathrm{GH} \$ 10,000,000 \times\left(1+\frac{0.18}{4}\right)-\mathrm{GH} \$ 2,250,000 \\
\mathrm{FV}_{0.25}=\mathrm{GH} \$ 10,450,000-\mathrm{GH} \$ 2,250,000 \\
\mathrm{FV}_{0.25}=\mathrm{GH} \$ 8,200,000
\end{gathered}
$$

$$
\text { (Computation = } 2 \text { marks; Final answer }=1 \text { mark }=3 \text { marks) }
$$

iv) Computation of the size of the quarterly withdrawal over the next two years.

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

The present value of the withdrawals, $\mathrm{PVA}_{\mathrm{n}}=$ Initial deposit $=\mathrm{GH} \$ 10,000,000$ Annual interest, $\mathrm{i}=18 \%$
Frequency, m = 4
Investment duration (in years), $\mathrm{n}=2$

$$
\begin{gathered}
\mathrm{GH} \$ 10,000,000=\mathrm{PMT}\left[\frac{1-\frac{1}{\left(1+\frac{0.18}{4}\right)^{2 \times 4}}}{\frac{0.18}{4}}\right] \\
\mathrm{GH} \$ 10,000,000=\mathrm{PMT} \times 6.595886067 \\
\mathrm{PMT}=\frac{\mathrm{GH} \$ 10,000,000}{6.595886067}=\mathrm{GH} \$ 1,516,096.53
\end{gathered}
$$

That is, the company would withdraw $\mathrm{GH} \$ 1,516,096.53$ at the end of each quarter to use up the fund in the account in two years.
(Computation = 2 marks; Final answer $=1$ mark $=3$ marks)
b) With the annual interest rate and future value interest factor, the number of years it will take Trimpo Ltd to double the initial investment can be obtained from the interest factor table.

$$
\begin{gathered}
F V_{n}=P_{0} \times(1+i)^{n} \\
\mathrm{FV}_{5}=\mathrm{GH} \$ 200,000 \\
\mathrm{P}_{0}=\mathrm{GH} \$ 100,000 \\
\mathrm{FVIF}_{\mathrm{i}, \mathrm{n}}=\frac{\mathrm{FV}_{\mathrm{n}}}{P_{0}}=\frac{\mathrm{GH} \$ 200,000}{\mathrm{GH} \$ 100,000}=2
\end{gathered}
$$

From the future value interest factor table for a single amount, it can be seen that it takes about five years for a $15 \%$ annual interest rate to compound to a FVIF of 2.

Computation FVIF ${ }_{i, n}=2$ marks
Identifying the investment period from the interest factor table $=\underline{2}$ marks
4 marks

## ALTERNATIVE:

Using the 72 factor the number of years it will take $=72 /$ interest rate $=72 / 15=$ 4.8 years. Approximately 5 years
c) Market conditions
i) The market condition described in the preamble is that of a bear market. (1 mark)
ii) A bull market refers to a financial market condition in which prices are rising or are expected to rise for an extended period. A bull market is also characterized by optimism, investor confidence, and expectations that high stock performance will continue for a more extended period.

In contrast, a bear market is a situation where stock prices are falling in a financial market. A bear market is also characterized by pessimism, lower investor confidence, and expectations that the falling prices will continue for a while.

The principal difference between the two market conditions is that the market is bullish when prices are rising, whilst the market is bearish when prices are falling.
(5 marks)
iii) Recommendation of effective investment strategies for a bull market.

Investors can employ various strategies to maximise their wealth in a bull market, including the following:
Buy and hold strategy: An investor can buy a particular security and keep it with the hope of selling it later when the price has gone up further.

Increased buy and hold: An investor can buy more and more of a security and sell them later when the price has gone up high enough to make maximum gains.

Short selling: An investor can borrow shares of a security, and sell them immediately while the market is still bullish and prices are high. The investor then buys the shares later after the market has exited the bullish state and prices have fallen.

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

(Total: 20 marks)

## EXAMINER'S COMMENT

This question was a combination of calculations and theory. The a) and b) part testing candidate's ability to calculate investment account values and the outstanding balances after certain withdrawals and the length of time it will take to double the size of investment. This part received some good answers as most candidates who passed scored very good marks.
The c) part which tested candidates' ability to identify a bear and bull market and the investment strategies to deploy in bull market received good answers as well.

## QUESTION FOUR

a) The key stages in investment decision making process are as follows:

- Identifying investment opportunities through analysis of the business environment, research and development etc
- Screening Investment proposals in line with available capital resources and corporate strategic objectives
- Analysing and evaluating investment proposals and the suitable and profitable opportunities are agreed and pass on the relevant level of authority for decisions
- Approving investment proposals. Once analysis is done and passed on to the necessary authority for approval. Approval are done based of the recommendation from the analysis and big size and high value investment might get to the board level for the right approvals
- Once approved, resources are made available for implementation and monitoring and reviewing is continuously done to ensure the desired outcomes are achieved.
(5 points @ 1 mark each = 5 marks)
b)
i) Computation of discounted payback period

| Year | 0 | 1 | 2 | 3 | 4 |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{G H \Phi}$ | $\mathbf{G H \Phi}$ | $\mathbf{G H} \boldsymbol{\Phi}$ | $\mathbf{G H \Phi}$ | $\mathbf{G H \Phi}$ |
| Investment | $(4,000,000)$ |  |  |  |  |
| Income |  | $2,884,000$ | $3,819,600$ | $5,681,000$ | $2,250,500$ |
| Operating cost |  | $(1,518,400)$ | $(1,924,744)$ | $(2,722,454)$ | $(1,333,752)$ |
| Net Cashflow | $\mathbf{( 4 , 0 0 0 , 0 0 0 )}$ | $\mathbf{1 , 3 6 5 , 6 0 0}$ | $\mathbf{1 , 8 9 4 , 8 5 6}$ | $\mathbf{2 , 9 5 8 , 5 4 6}$ | $\mathbf{9 1 6 , 7 4 8}$ |
| Discount @15\% | 1 | 0.870 | 0.756 | 0.658 | 0.572 |


| Present values | $(4,000,000)$ | $1,188,072$ | $1,432,511$ | $1,946,723$ | 524,380 |
| :--- | ---: | ---: | ---: | ---: | ---: |

Net Present Value = 1,091,686
Discounted payback period $=2+(1,379,417 / 1,946,723)=2.71$ years

Workings:

| Year | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ |
| :--- | ---: | ---: | ---: | ---: |
| Income |  |  |  |  |
| Inflated Selling price | 41.2 | 42.44 | 43.70 | 45.01 |
| Demand (units/year) | 70,000 | 90,000 | 130,000 | 50,000 |
| Income (GH¢/year) | $\mathbf{2 , 8 8 4 , 0 0 0}$ | $\mathbf{3 , 8 1 9 , 6 0 0}$ | $\mathbf{5 , 6 8 1 , 0 0 0}$ | $\mathbf{2 , 2 5 0 , 5 0 0}$ |
|  |  |  |  |  |
| Operating Cost |  |  |  |  |
| Inflated Variable cost | 16.64 | 17.30 | 18.00 | 18.72 |
| Demand (Units/year) | 70,000 | 90,000 | 130,000 | 50,000 |
| Variable cost (GHథ/year) | $1,164,800$ | $1,557,000$ | $2,340,000$ | 936,000 |
| Inflated fixed cost <br> (GHథ/year) | 353,600 | 367,744 | 382,454 | 397,752 |
| Total Operating Cost | $\mathbf{1 , 5 1 8 , 4 0 0}$ | $\mathbf{1 , 9 2 4 , 7 4 4}$ | $\mathbf{2 , 7 2 2 , 4 5 4}$ | $\mathbf{1 , 3 3 3 , 7 5 2}$ |

(Marks are evenly spread using ticks = 5 marls)
ii) Return on Capital Employed:

Total accounting profit
Year 1
$=1,365,600$
Year 2
= 1,894,856
Year 3
$=2,958,546$
Year 4
$=\frac{916,748}{7,135,750}$
Less Total depreciation
(Total cost since no scrap value)
$(4,000,000)$
Net Profit
3,135,750
Average profit $(3,135,750 / 4)=\underline{783,938 \times 100}$
Average investment $(4,000,000 / 2)=2,000,000$
Return on Capital Employed
$=39.2 \%$
c) The two financial markets are Money market and Capital market.

Money markets are financial markets where short term financial instruments are traded. The tenor usually within one year. Examples of money market instruments are: Government treasury bills, overnight placements, commercial papers, oneyear treasury notes, negotiable certificate of deposits etc.
( 2.5 marks)
(ii) Capital markets are financial markets where long tenor or dated instruments or securities are traded. The tenor over one-year and examples are; Governments Bonds, Corporate bonds, Equities or stock etc.
( 2.5 marks)
(Total: 20 marks)

## EXAMINER'S COMMENTS

The a) and b) part of the question was generally well answered. It tested candidates' ability to compute discounted payback period in investment appraisal scenario and the calculation of return on capital employed based on average investment.
The c) part which examined candidates' ability to identify two categories of financial markets giving two examples each was also well answered. This question was the best answered question in the paper.

## QUESTION FIVE

a)
i) Computation of the net benefit/cost associated with the proposed change in the credit terms and recommendation on adoption.

## Benefit associated with the proposed policy change:

The benefit from the proposed policy change is the return on capital that would be released from investment in receivables:
Current average receivables $=55 / 365 \times \mathrm{GH} \$ 500,000,000=\mathrm{GH} \$ 75,342,466$
Future average receivables $=40 / 365 \times \mathrm{GH} \$ 480,000,000=\mathrm{GH} \$ 52,602,740$
Reduction in average receivables $=$ GH\$22,739,726
Savings in investment in receivables $=$ variable cost ratio $x$ reduction in receivables Savings from investment in receivables $=0.65 \times \mathrm{GH} \$ 22,739,726=\mathrm{GH} 414,780,822$
Return on savings from investment in receivables $=0.185 \times \mathrm{GH} \$ 14,780,822=$ GH\$2,734,452

## The cost associated with the proposed policy change:

The cost associated with the proposed policy change would be the lost contribution from the estimated reduction in sales revenue:
Lost contribution $=35 \% \times G H \$ 20,000,000=G H \$ 7,000,000$
Net benefit/ (cost) $=\mathrm{GH} 2,734,452-\mathrm{GH} \$ 7,000,000=(\mathrm{GH} \$ 4,265,548)$

## Recommendation:

The CFO's proposed change to the credit policy should be rejected as its implementation would reduce profit by GH\$4,265,548.

Marks allocation:
Computation of the benefit = 6 marks
Computation of cost $=2$ marks

# Computation of net benefit/(cost) = 1 mark Recommendation $=\underline{1 \text { mark }}$ <br> 10 marks 

Alternatively;

| Sales | Current |  | Proposed million 480 |
| :---: | :---: | :---: | :---: |
|  | Million |  |  |
|  | 500 |  |  |
|  | ===== |  |  |
| Contribution | 175 |  | 168 |
| Debtors |  |  |  |
| 500/365 x 55 | 75.34 | 480/365x40 | 52.6 |
| Cost $20 \% \times 75.34$ | (15.068) | $20 \% \times 52.6$ | (10.52) |
| Net | 159.93 | 157. |  |
| Loss ( Negative (1) |  |  |  |

Implementation will reduce profit, Avoid implementation.
ii) Explanation of characteristics of marketable securities

Features of marketable securities that should be considered when deciding to invest in marketable securities are explained below:
Maturity: The shorter the maturity period, the lower the risk of locking up the money and not getting it back when needed. As the amount to be invested may only be idle temporarily, it is advisable to invest it in short-term investment assets to secure liquidity.

Risk: The principal concern when investing temporary excess cash is not getting the principal back due to default on the part of the investment (or investee) company.

Liquidity: As the amount to be invested may only be idle temporarily, it is essential to ensure that it is invested in investment assets that can be easily converted into cash. Short-term securities may be the best choice as they tend to be highly liquid or marketable.

Return (or yield): The return or yield on the investment asset should be considered as the essence of investing temporary excess cash is to earn some returns. Other things considered, investment assets that present higher yields should be preferred. It should be noted, however, that investment assets with higher yields are most likely to be of longer maturities and present a higher risk.
(Any 2 points @ 2.5 marks each = 5 marks)
b) Explanation of local currency invoicing and advice on its benefit and risk.

Local currency invoicing is an internal strategy for managing currency risk exposures that involves arranging with foreign business partners to invoice goods and services in the entity's local currency. In the case of imports from foreign suppliers, the firm can negotiate with the suppliers to have the goods invoiced and settled in the firm's local currency. In the case of exports to foreign customers, the firm invoices the goods in its local currency.

The main benefit of this strategy is that it helps the firm avoid the currency risk exposure altogether as it effectively shifts the currency risk exposure to the counterparty.

The main risk associated with this strategy is that the foreign suppliers may be unwilling to supply to the firm on credit when the exchange rate becomes volatile, and they begin to suffer heavy exchange rate losses.
(Total: 20 marks)

## EXAMINER'S COMMENTS

Sub-question a) examined candidates' application of working capital management knowledge on decision making strategy. Candidates were expected to advise Kanzo which was revising downward its account receivables days from 55 days to 45 days with its implication on revenue and cost whether that strategy was incrementally positive or negative and whether to go ahead or not, this received some good answers from some candidates but the overall performance was poor to average.

The b) part tested candidates' application knowledge on hedging. Candidates were to advise on the use of local currency invoicing as a hedging strategy to hedge risk exposure. The responses demonstrated limited knowledge and understanding of the expectation of the question. Responses were generally poor to average. This was the worst answered question. This section generally poses difficulties to candidates and requires more time and attention by candidates.

