THE INSTITUTE OF CHARTERED ACCOUNTANTS, GHANA

NOVEMBER 2015 PROFESSIONAL EXAMINATIONS

EXAMINERS GENERAL COMMENTS

FINANCIAL MANAGEMENT (2.4)

GENERAL COMMENTS

November 2015 examination is the second diet of the New Syllabus introduced by the Institute. Five compulsory questions were set in the examination, each worth 20 marks. Almost all the candidates attempted all the five questions and there was little evidence of time pressure. Many candidates performed particularly well on questions 1a, 1c, 1d, 2a ,2c, 3a, 3b, 4a (ii) 5b,5(c) and 5d. These questions were all largely written in nature. The questions candidates found most challenging were questions 1b, 2b, 3c, 4a (i), 4b, 4c and 5a. These questions were all largely numerical in nature and were perhaps challenging because some candidates lacked understanding of numerical part of the syllabus. Common issues relating to candidate's answers are highlighted as follows:

- Some candidates did not read the question requirement clearly and therefore gave irrelevant answers which scored few (if any) marks;
- Poor time management between questions. For example, some candidates wrote too much for the marks on offer;
- Illegible handwriting and poor formatting of answers.

QUESTION ONE

a. One of the key expectations of the Finance Manager is to ensure the success of the organisation. Describe **FOUR (4)** key factors that are indicative of a successful organisation. **(4 marks)**

b. The Board of Directors of Suncity Limited are reviewing the performance of their business for the year 2014 and are considering using ratio analysis for this purpose. You have been presented with the following statement of comprehensive income for the years 2013 and 2014

	2014 (GH₵'000)	2013 (GH₵'000)
Sales	42,000	30,000
Less cost of sales	33,200	21,500
Gross profit	8,800	8,500
Operating expenses	2750	2120
Profit before finance charges	6,050	6,380
Finance charges	500	700
Profit before tax	5,550	5,680
Taxation	1110	1136
Profit after tax transferred to income surplus	4,440	4,544

Required:

i. Compute common size ratios for Suncity Limited for 2013 and 2014 **(4 marks)**

ii. Comment on any four of the ratios computed **(2 marks)**

c. The quarterly report of the treasury unit of Buruwa Limited contains a paragraph on government policy targets and progress towards achievement of the targets. The Technical Director has express disagreement about the time spent in discussing these policies as wasteful because the policies have no relevance to the business activities of the confectionery company.

Required:

As Head of Finance, you have been tasked to discuss **SIX (6)** points on government revenue mobilisation policies to agree or disagree with the Technical Director's position

(6 marks)

d. Explain the following terms

i. Financial intermediation **(2 marks)**

ii. Financial disintermediation **(2 marks)**

(Total: 20 marks)

QUESTION TWO

a. A good working capital policy should facilitate successful achievement of the key short term financing objectives of an organisation.

Required

Identify the three types of working capital policies of an organisation (**5 marks)**

b. This Way Ltd is preparing a business plan to apply for a grant from EDAIF for an expansion of its rice production. Current production is 20,000 bags at a variable cost per bag of GHS12.00 and contribution sales ratio is 25%. Variable cost is for purchases. Current receivable days is 30 days and inventory turnover is 12 times. Suppliers allow 15 days credit and the company maintains absolute cash ratio of 1:1.

The funding support from EDAIF is expected to double the production capacity of the company. Inventory and absolute cash ratios would be maintained but receivables and payables days will increase to 45 days and 30 days respectively. EDAIF policy is to support only the extra working capital needs of applicants.

Required:

Determine the amount that should be applied from EADIF (**10 marks)**

c. Sankofa Ltd has a dividend cover of 4 times and recorded the following earnings after tax.

Year	**Earnings(GH₵)**
2010	100,000
2011	120,000
2012	180,000
2013	220,000
2014	300,000

Required:

Calculate the average dividend growth rate for Sankofa Ltd (**5 marks**

(Total: 20 marks)

QUESTION THREE

a. Describe **FOUR (4)** ways in which the investment appraisal approach of a Municipal Assembly will differ from a mining company (**4 marks)**

b. God is King Ltd has been printing all its magazines from Dubai due to the comparative cost advantage. The company is considering establishing its own printing department, and the R&D team have identified a printing machine which will meet the quality and cost specifications of God is King Ltd. The machine also has the capacity to print to meet the market needs of the company. The machine, which has a useful life of 5 years, will cost GHS800,000 and immediate installation cost will be GHS50,000. Fixed cost for maintaining the machine will be 170,000 per annum over the machines useful life and additional working capital of 30,000 will be introduced in year 2. The use of this machine will generate a contribution of GHS 500,000 per annum for five (5) years. Corporate income tax rate, payable in areas, is 25% and the companies after tax cost of capital is 20%. No capital allowance is permitted.

   Required:

   Calculate the NPV for the project and advise management on whether to accept or reject the project. (**10 marks)**

c. Explain the following types of contracts

   i. Mudaraba contract (**2 marks)**

   ii. Musharaka contract (**2 marks)**

   iii. Murabaha contract (**2 marks)**

(Total: 20 marks)

QUESTION FOUR

a. Dinpa Supermarket is considering acquiring a loan of GH₵300,000 from Abrempong Bank Ltd. The loan is payable in five equal annual instalments at an interest rate of 25%. Dinpa Ltd has consulted you to determine their annual repayment amount and the interest thereon.

Required:

i. Prepare a repayment schedule for Dinpa indicating clearly the interest payment and the principal repayment **(8 marks)**

ii. State **THREE (3)** advantages of a term loan over an overdraft facility **(3 marks)**

b. On 1st January 2010, Exchequers Insurance issued a 15% convertible bond quoted at GH₵123. The nominal value for each bond is GH₵100 and the conversion date for the bond is 31st December 2015 after interest have been paid. The bond is convertible at 20 ordinary shares per GH₵100 bond. The current price per share is GH₵6.

Required:

i. Determine the conversion rate. **(2 marks)**

ii. Determine the conversion premium. **(2 marks)**

iii. Comment on the possibility of bond holders converting for shares. **(2 marks)**

c. State **TWO (2)** key assumptions of the random walk theory. **(3 marks)**

(Total: 20 marks)

QUESTION FIVE

a. Explain the following terms

i. Interest rate parity **(2 marks)**

ii. Purchasing power parity **(2 marks)**

b. Skytrain, a music production company imported musical instruments from Sweden for Krona 2,100,000 at a rate of Krona 7.00 to GH₵1.00. Skytrian sold the goods for

GH₵600,000 after paying shipping cost of GH₵50,000 and bank transfer charges of GH₵5,000 and Krona 10,000. At the time of paying the bank charges, the Krona was traded at 5 to GH₵1.00.

Required

Calculate the profit or loss on this transaction **(5 marks)**

c. Identify five (5) distinguishing features of currency futures contract and a forward contract. **(5 marks)**

d. I, me, and myself have shares in a company which paid dividend of GH₵10 to its shareholders. The shares has a beta factor of 1.2. The risk free rate of return and the market return are 15% and 20% respectively.

Required:

i. Calculate the return on the shares **(4 marks)**

ii. Calculate the value of the shares **(2 marks)**

(Total: 20 marks)

SUGGESTED SOLUTIONS

QUESTION ONE

Four (4) key factors that are indicative of a successful company:

- **Profitability** – the operations of the company should be profitable to enable it pay adequate returns to its investors and retain some for reinvestment;
- **Market share** – the company should grow and maintain its market share to enable it continue to have demand for its products and thereby generate adequate revenue from its sales;
- **Growth** – growth is one of the key expectations of every organisation, expanding in its operations scope of coverage and investment size;
- **Cash flow** – have adequate cash flow to meet its operational cost, service loans and other debts as and when they fall due;
- **Customer satisfaction** – have to be competitive by meeting the expectations of customers, their changing needs and preferences. This also enhances the company's competitive advantage;
- **Quality of products** – the quality of products at the most competitive price also enables the company to attract and retain customers to enable it expand its customer base, grow to enjoy economies of scale which will lead to lower cost and increased profit;
- **Industrial relations** – industrial relationship is key to enhancing the organisations bargaining power, and obtain information about developments in the industry to enable it respond appropriately;
- **Added value** – this enable the company to position itself in society as a good cooperate citizen, providing services to society to enhance its public image;
- **Highly skilled personnel** – highly skilled improve efficiency, quality and creativity to pursue to mission of the organisation in the most cost effective manner.

(1 mark for each point up to a maximum of four (4) marks)

b. (i) Suncity Limited common size ratio for the 2014 income statement –

	Income statement		Common size ratios	
	2014 (₵'000)	**2013 (₵'000)**	**2014%**	**2013%**
Sales	42,000.00	30,000.00	100	100
Less cost of sales	33,200.00	21,500.00	79	72
Gross profit	8,800.00	8,500.00	21	28
Operating expenses	2,750.00	2,120.00	7	7
Profit before finance charges	6,050.00	6,380.00	14	21
Finance charges	500.00	700.00	1	2
Profit before tax	5,550.00	5,680.00	13	19
Taxation	1,110.00	1,136.00	3	4
Profit after tax transferred to income surplus	4,440.00	4,544.00	11	15

¼ marks for each ratio up to 16 ratios computed correctly.

b. (ii) comments on the ratios. Any **four (4)** correct commentary – Horizontal analysis – changes between 2013 and 2014, or vertical analysis for **2marks**

c. Monetary policy and its effect on business

Government aims at controlling the amount of money in circulation. Government policies to reduce money in circulation can affect business activities in several was as follows.

- Affect borrowing cost as government may increase its borrowing rates to attract patronage of government bills and bonds with the view to mopping up excess liquidity
- Policies may divert investment from the private sector as strict credit controls will limit amount available for credit
- There could be difficulties in securing funds for expansion and long term projects
- Increased borrowing cost will put pressure on share prices thereby making it difficult to raise funds from shares
- There would be decrease in consumer demand as a result of increased prices from the high interest
- Decrease in disposable income due to increase in loan and mortgage repayments
- High interest rate may increase the cost of local produce and thereby encourage consumption of imports

- The increase in consumption of imports can result in balance of payment difficulties if exports fall as a result of increase in the prices of exports. Increased imports will result in increased demand for foreign currency leading to depreciation of the local currency

(1 mark for each correct point up to a maximum of 6 marks)

d. (i) **Financial intermediaries**

Financial intermediaries are financial institutions established to mobilise funds from lenders and channel them to borrowers

(ii) **Financial disintermediation**

Disintermediation is the use of financial market for lenders and borrowers to directly transact thereby eliminating the functions of intermediaries.

EXAMINER'S COMMENT

Question One (a)

This question required candidates to describe four (4) key factors that are indicative of a successful organization. Most candidates did well on this part of question 1. Most candidates identified indicative factors of a successful organization though few of them thought the question asked for the role of the finance manager.

Question One (b)

Candidates were asked here to compute common size ratios though the topic is no more under the new syllabus. Most candidates performed poorly in answering this question.

Question One (c)

This part of question 1 required candidates to identify the importance of discussion on government policy targets and progress towards achievement of these targets. This question seemed familiar with students and answers provided by candidates generally addressed the requirement of the question.

Question One (d)

Candidates were asked to explain the terms financial intermediation and financial disintermediation. Answers to this question were generally good.

QUESTION TWO

a. Forms of working capital policy

Restrictive or aggressive approach

With a restrictive policy, current assets are financed through short term funds. Firms with restrictive working capital policies demonstrate the following:

- Keeping low cash balances and making little investment in marketable securities;
- Making small investments in inventory;
- Allowing few or no credit sales, thereby minimizing accounts receivable. **2 marks**

Flexible or conservative approach

Firms that adopt a flexible or conservative approach to the management of working capital to have a higher investment in current assets. The objective is to reduce the risk of stock out and to maintain high liquidity. Flexible or conservative approach to working capital management results in the following:

- Keeping large balances of cash and marketable securities;
- Granting liberal credit terms, which results in a high level of accounts receivable;
- Making large investments in inventory. **2 marks**

Moderate approach

This is the middle ground between the conservative and the aggressive approach **1 mark**

b. Working capital needs

	Current	**Future**	
Production	20,000.00	40,000.00	
Selling Price GHS (12/(1 - 0.25)	16	16	1 mark
Sales (GHS)	320,000.00	640,000.00	1 mark
Purchases GHS (12)	240,000.00	480,000.00	1 mark
Working capital needs			
Inventory	20,000.00	40,000.00	1 mark
Receivables	26,301.37	78,904.11	1 mark
Cash	9,863.01	39,452.05	1 mark
Current Assets	**56,164.38**	**158,356.16**	**1 mark**
Payables	(9,863.01)	(39,452.05)	1 mark
Working capital	**46,301.37**	**118,904.11**	**1 mark**

Amount required from EDAIF = 118,904.11 – 46,301.37 = **72,602.74** **1 mark**

c. Sankofa dividend growth rate

$Dividend = earnings\ x\ \frac{1}{4}$

Year	Earnings(₵)	Dividend	
2010	100,000.00	25,000.00	0.5 marks
2011	120,000.00	30,000.00	0.5 marks
2012	180,000.00	45,000.00	0.5 marks
2013	220,000.00	55,000.00	0.5 marks
2014	300,000.00	75,000.00	0.5 marks

Total for the table is 2.5 marks

Dividend growth rate = $\left[\left(\frac{dn}{d0}\right)^{1/p}\right] - 1$

Where

$dn = 75{,}000$

$d0 = 25{,}000$

$p = 4$

$Dividend\ growth\ rate = \left[\left(\frac{75{,}000}{25{,}000}\right)^{\frac{1}{4}}\right] - 1 = 31.61\%$ **2.5 marks**

EXAMINER'S COMMENT

Question Two (a)

The requirement here was for candidates to explain the three types of working capital policies of an organization. Answers to this question demonstrated good understanding of working capital policies.

Question Two (b)

This part of question 2 required candidates to determine the amount required in a given scenario. This question was difficult for most candidates and few were able to gain average marks.

Question Two (c)

This part of question 2 required candidates to calculate average dividend growth rate. Most candidates calculated the required average dividend growth rate correctly.

QUESTION THREE

a. Investment appraisal for mining company versus municipal assembly

Mining company is a profit making company but municipal assembly is a not-for-profit organization. Their investment appraisal objectives will be different

- Very few municipal assemblies' will have capital investment with the view to making financial returns. Even where this is done, the objective is not for distributing the profits to shareholders
- On the decision about mutually exclusive projects, a mining company will prefer a project with the highest NPV. But a municipal assembly will prefer the highest social benefit over financial benefit
- A municipal assembly will be dependent on an interest rate set by government for its investment appraisal analysis. But a mining company will use a commercial rate of return which may be internally determined or by market forces.
- A municipal assembly may invest in public infrastructure and community development. But a mining company may invest in noncurrent assets such as Plant and machinery, research and development and advertising
- A municipal assembly will depend on cost-benefit analysis instead of financial analysis for a decision on investment projects. But a mining company will depend on discounted cash flow analysis that takes accounts of time value of money for its analysis
- A municipal assembly may go beyond an NPV analysis to use the total welfare analysis which may include benefits not measurable in monetary terms. This may lead to prioritising a negative NPV project. A mining company with a profit focus will not accept a project with negative NPV
- Cost benefit analysis is considered superior to a municipal assembly where as a discounted cash flow analysis is considered superior for a mining company which will be profit focused.

(1 mark for each point up to a maximum of four (4) marks)

b. God is King

Years	0	1	2	3	4	5	6	
Contribution		500,000.00	500,000.00	500,000.00	500,000.00	500,000.00		**0.5mk**
Fixed cost		(170,000.00)	(170,000.00)	(170,000.00)	(170,000.00)	(170,000.00)		**1mk**
Taxable cash flow		330,000.00	330,000.00	330,000.00	330,000.00	330,000.00		**1mk**
Tax			(66,000.00)	(66,000.00)	(66,000.00)	(66,000.00)	(66,000.00)	**2mks**
Machine cost	(800,000.00)							
Installation	(50,000.00)							
Working capital			(30,000.00)			30,000.00		**1mk**
Net cash flow	**(850,000.00)**	**330,000.00**	**234,000.00**	**264,000.00**	**264,000.00**	**294,000.00**	**(66,000.00)**	**1mk**
DF (20%)	1.000	0.870	0.756	0.658	0.572	0.497	0.432	**1mk**
PV	(850,000.00)	287,100.00	176,904.00	173,712.00	151,008.00	146,118.00	(28,512.00)	**1mk**
NPV							**56,330.00**	**0.5mk**

Advise to management. Project has a positive NPV of GHS56, 550. It should therefore be implemented **1 mark**

c. Islamic finance

i. Mudaraba contract

This is a type of partnership contract where only one partner (rab al mal) contributes finance and the other partner (mudarib) contributes skills and expertise. The partner who contributes finance has no right to interfere in the day to day affairs of the partnership.

2 marks

ii. Musharaka contract

This is an equity financing contract for investment in business ventures or specific business projects and consist of at least two partners called the mushasrik. The mushariks jointly contribute capital and expertise in the business.

2 marks

iii. Murabaha contract

This is a deferred payment sales or an instalment credit sale usually for the purchase of goods for immediate use. The seller therefore sells goods to the buyer, and the buyer pay later by instalments.

2 marks

EXAMINERS COMMENT

Question Three (a)

The requirement here was for candidates to describe four (4) ways in which the investment appraisal approach of a Municipal Assembly will differ from a mining firm. General performance on this question was excellent though some few candidates failed to answer the question asked and therefore received no marks.

Question Three (b)

Candidates were asked to calculate the net present value of a project and advise management on whether to accept or reject the project. Majority of the candidates answered this part of the question fairly well.

Question Three (c)

Candidates were asked to explain three (3) terms under Islamic finance topic. Most candidates had no knowledge on Islamic finance topic in the syllabus hence provided incorrect explanations to the terms.

QUESTION FOUR

a. (i) Dinpa

Dinpa	
Loan Amount (C)	300,000
Interest rate (r)	25%
No. of years (n)	5
Annuity (DF)	2.68928 or 2.689
Annual Instalment	111,554.02

$$Annuity = \frac{(1-(1+r)^{-n}}{r}$$

$$Annuity = \frac{(1-(1.25)^{-5}}{0.25} = 2.689$$ **1 mark**

$$Annual\ instalment = \frac{C}{DF}$$

$$Annual\ instalment = \frac{300,000}{2.689} = 111,554.02$$ **1 mark**

Years	Bal B/d	interest	Principal repayment	Instalment	Balance c/d	1 mark
1	300,000	75,000	36,554.02	111,554.02	263,445.98	**1 mark**
2	263,445.98	65,861.49	45,692.53	111,554.02	217,753.45	**1 mark**
3	217,753.45	54,438.36	57,115.66	111,554.02	160,637.79	**1 mark**
4	160,637.79	40,159.45	71,394.57	111,554.02	89,243.22	**1 mark**
5	89,243.22	22,310.80	89,243.22	111,554.02	-	**1 mark**

i. (ii) Advantages of term loan over overdraft

- interest charged is not predictable, as it depends on a variable interest rate and on the amount overdrawn on each day of the charging period
- the lender may not grant the entire amount requested, as changing financial situation of the business will be taken into consideration
- overdrafts are repayable on demand, which may occur at a time when management are not ready
- company may be forced to convert a hardcore overdraft into a loan term which can affect capital structure especially where the preference for overdraft was for managing the capital structure
- management will need to spend time strictly monitoring their accounts to ensure they operate within the overdraft limit.

- time will need to be spent preparing management accounts and monitoring compliance with covenants

(1 mark for each point up to a maximum of 3 marks)

b. convertible bods

(i) $conversion\ rate = conversion\ ratio\ x\ market\ price\ per\ share$

$conversion\ ratio;\ ₵100 = 20\ ordinary\ shares$

$price\ per\ share =\ ₵6$

$\therefore conversion\ rate = 20x6 = ₵120$ **2 marks**

(ii) $conversion\ premium;\ current\ market\ value\ of\ coupon - current\ conversion\ value$

$market\ value\ of\ coupon = ₵123$

$conversion\ value = ₵120$

$\therefore conversion\ premium = 123 - 120 = ₵3$ **2 marks**

(iii) The share price is less than the bond market value. This will not be attractive to the bondholders. The share price have to increase by at least 2.5% [(3/120) x100] for it to be attractive to bond holders. **2 marks**

c. Random walk theory

The random walk theory is based on the fact that share prices will reflect every available information such that prices will alter when new information becomes available. The assumptions include the following:

- All information about a company is available to all potential shareholders;
- The intrinsic value of shares will change to reflect new information available;
- All investors will act rationally;
- There will be no insider dealings.

(1.5mark for each point up to a maximum of 3 marks)

EXAMINER'S COMMENTS

Question Four (ai)
The question required candidates to prepare repayment schedule for a company stating clearly both the interest and principal payments. This part of question 4 was poorly attempted and most candidates either had no marks or obtained very low marks.

Question Four (aii)
The requirement here was for candidates to state three (3) advantages of term loans over overdraft facility. This question was well handled by almost all the candidates.

Question Four (b)
The requirement here was for candidates to determine debenture conversion rate, premium and also comment on the possibility of bond holders converting for shares. Most candidates were unable to answer the question and therefore had no mark.

Question Four (c)
The requirement here was for candidates to state two (2) assumptions underlying the random walk theory. Most candidates were unable to provide the required assumptions and therefore had no mark.

QUESTION FIVE

a. **Interest rate and purchasing power parity**

Interest rate parity is the method of predicting foreign exchange rate based on the hypothesis the different between the interest rate in two countries should offset the difference between the spot rate and the forward foreign exchange rate over the same period.

2 marks

Purchasing power parity is the rate theory that states that the exchange rate between two currencies is the same in equilibrium when the purchasing power of currency is the same in each country. **2 marks**

b. Skytrian

Skytrain profit or loss statement	**Krona**	**rate**	**GHS**	**GHS**	
					½ mark
Sales				600,000.00	
less cost					
					1 mark
Instruments importation cost	2,100,000	7	300,000		
					½ mark
Shipping			50,000		
					½ mark
Bank transfer charges (GHS)			5,000		
					1 mark
Bank transfer charges (Krona)	10,000	5	2,000		
					½ mark
Total cost				***(357,000.00)***	
					1 mark
Profit				**243,000.00**	

c. Currency forward and futures contracts

- Currency futures is a standardized contract whereas forward contracts are customized contracts.
- Currency futures contracts take place in regulated markets whereas forwards contracts are traded over the counter.
- Currency futures contract are in foreign currency whereas forwards contracts are in local currency.
- Currency futures have flexible closeout dates but forwards have fixed close out dates.
- Underlying transactions for currency futures take place at the spot rate but for forwards the underlying transactions take place at the forward rate.
- Currency futures are cheaper than forward contracts.

(1 mark for each point up to a maximum of 5 marks)

d. I, me, and myself

(i) $Expected\ returns\ (r) = rf + \beta(rm - rf)$

Where

$rf = Risk\ free\ returns$
$\beta = Beta\ factor\ of\ the\ shares$
$rm = Market\ return$
$\therefore Expected\ returns\ (r) = 15\% + 1.2(20\% - 15\%) = 21\%$ **3 marks**

(ii) $Value\ of\ shares = \frac{D}{r}$

$Where\ D = Dividend$

$and\ r = expected\ returns$

$\therefore Value\ of\ shares = \frac{10}{0.21} = 47.62$ **2 marks**

EXAMINER'S COMMENTS

Question Five (a)
This part of the question required candidates to explain interest rate parity and purchasing power parity. Most candidates performed poorly on this question though some few candidates did well in scoring the full marks available.

Question Five (b)
This required candidates to calculate the profit or loss on a given transaction. Answers to this question were of mixed quality. Some candidates scored full marks on this question while few also had difficulty in answering the question.

Question Five (c)
The part of the question required candidates to give five (5) distinguishing features of currency futures contract and a forward contract. Most candidates performed very well on this question.

Question Five (d)
The final part of the question required candidates to calculate the return and value of given shares. Majority of candidates performed very well on this question.