

**THE INSTITUTE OF CHARTERED  
ACCOUNTANTS (GHANA)**



**MAY 2012 EXAMINATIONS  
(PROFESSIONAL)**

**PART 3**

**FINANCIAL MANAGEMENT**

**(Paper 3.4)**

**Attempt ALL Questions**

**TIME ALLOWED:**

**Reading & Planning - 15 Minutes**

**Workings - 3 Hours**

## QUESTION 1

- (a) Say Die Limited is an unlisted company with 1.5 million ordinary shares of GHC1 each currently valued at GHC2.40. The dividend of GHC432,000, which has been constant for several years, has just been paid. The company wishes to finance a new project with an amount of GHC1.8 million of 7% irredeemable debentures.

Shareholders will expect their dividend to rise by GHC36,000 as a result of the increased gearing.

### You are required to find:

- (i) the original cost of equity *(3 marks)*
- (ii) the new cost of equity *(3 marks)*
- (iii) the true marginal cost of debentures *(3 marks)*
- (iv) the weighted average cost of capital. *(4 marks)*
- (b) (i) You are looking into an investment that will pay you GHC12,000 per year for the next 10 years. If you require a 15% return, what is the amount you would pay into this investment? *(2 marks)*
- (ii) You have just celebrated your 19<sup>th</sup> birthday. Your uncle, Efo Sammy has set up a trust fund for you, which will pay you GHC150,000 when you turn 30 years. If the relevant discount rate is 9%, how much is this fund worth today? *(2 marks)*
- (iii) You have been offered an investment that will pay you 9% per year. If you invest GHC 15,000, how long will it take to accumulate GHC30,000 and GHS45,000 respectively? *(3 marks)*

**(Total: 20 marks)**

## QUESTION 2

A company plans to purchase a new machine due to the expected demand for a new product. The machine costs GHC185,000 and it is expected that the machine shall be used for five (5) years with a scrap value of GHC15,000. The company expects the demand for the product to be as follows:

Year	1	2	3	4	5
Demand (Units)	25,000	30,000	35,000	40,000	20,000

The new product will be sold for GHC22 per unit and the variable cost of production is GHC17.80 per unit. Annual fixed production cost is expected to be GHC15,000. Selling price, fixed expenses and variable cost are projected to increase as follows:

	% Increase
Selling Price	2% per year
Variable Cost of production	3% per year
Fixed production expenses	5% per year

The company's cost of capital is 10% and pays corporate tax at a rate of 25% in the related year.

**Required:** Calculate the Net Present Value (NPV) of purchasing the new machine advise whether it makes economic sense to buy the new machine. *(14 marks)*

- b. Explain the differences among the **Transaction Risk**, **Translation Risk** and **Economic Risk**. *(6 marks)*

**(Total: 20 marks)**

## QUESTION 3

(a) Quansa Ltd is reviewing its credit policy. Currently it extends credit terms of 30 days from invoice date and is considering extending this to 60 days. Currently sales are 10,000 units a month, priced at GHC12. Direct costs are 90% of sales price. The marketing director believes that if the credit period is extended sales will increase by 12%. If the current cost of funds to the company is 11%, should the company extend the credit period.

- (i) If the extended credit is only applied to new sales?
- (ii) If the extended credit is applied to existing sales as well?

*(8 marks)*

- (b) A small company borrowed GHC10,000 to expand the business. The entire principal of GHC10,000 will be repaid in 2 years but quarterly interest of GHC330 must be paid every three months.

Calculate the nominal interest rate that the company will pay. **(4 marks)**

- (c) A strategic customer has approached you, as the Director of Finance of Success Bank Ltd; for explanation on various money market instruments. Explain the following investments in the money market.

- i. Certificate of Deposit
- ii. Commercial Paper
- iii. Re-purchase Agreement
- iv. Bankers' Acceptance

**(8 marks)**

**(Total: 20 marks)**

#### **QUESTION 4**

- (a) The Ghana Government has issued a 4 year Bond with face value of GHC200 per Bond. The Bond carries a coupon rate of 12% per annum, with interest payment to be done semi-annually. If your risk premium is 8% per annum, how much are you willing to pay for the Bond today?

**(5 marks)**

- (b) Your firm has issued GHC 200 million worth of debentures with 15% annual coupon. The debt is irredeemable.

Issue cost has been 2% of the value of the debenture. In this economy, interest and cost of issue are tax deductible.

#### **Required:**

What is the cost of servicing these debentures if tax rate is 25%?

**(4 marks)**

- (c) Define capital rationing and indicate **two (2)** each from internal and external factors given rise to capital rationing.

**(5 marks)**

- (d) Define briefly the following terms:

- (i) Interest cover
- (ii) Cash flow ratio
- (iii) Gearing ratio

**(3 marks)**

- (e) Why will a company consider issuing corporate bonds instead of raising a Bank term loan?  
**(3 marks)**

(Total 20 marks)

### QUESTION 5

- (a) Diawuo Company is acquiring Ohia Company. Diawuo will issue one of its shares for every two shares of Ohia Company. The data for the two companies are given below.

	Diawuo	Ohia
Profit after tax (GHC'000)	150	30
Number of shares (thousands)	25	8
Earnings per share (GHC)	6.00	3.75
Market price of share (GHC)	78.00	33.75
Price-earnings Ratio	13	9

#### You are required to deal with the following

- (i) Calculate the earnings per share of the surviving firm after the merger. (4 marks)
- (ii) If the price-earnings ratio falls to 12 after the merger, what is the premium received by the shareholders of Ohia (using the surviving firm's new price)? (6 marks)
- (iii) Is the merger beneficial for Diawuo's shareholders? (4 marks)
- (b) Briefly describe **four (4) defences** that could be used by a company after its Board has received a take-over bid from a predator company. (6 marks)

(Total: 20 marks)