

**INSTITUTE OF CHARTERED  
ACCOUNTANTS (GHANA)**



**NOVEMBER 2010 EXAMINATIONS  
(PROFESSIONAL)**

**PART 3**

**FINANCIAL MANAGEMENT  
(Paper 3.4)**

**Attempt ALL Questions**

**TIME ALLOWED:**

<b>Reading &amp; Planning</b>	<b>-</b>	<b>15 Minutes</b>
<b>Workings</b>	<b>-</b>	<b>3 Hours</b>

## QUESTION 1

Pure Gold Company Ltd is engaged in mining in a deprived farming community. The company invested heavily in their concession and eventually has started recouping their investment.

The community, led by their Chiefs and Elders, have written a petition to the company for support for two key infrastructural needs.

- (a) How will the company maximise or satisfy stakeholders' expectation? (3 marks)
- (b) What will be the objective of each stakeholder identified? (3 marks)
- (c) On January 1 2010, S & P Enterprise Bought merchandise worth GHS250,000 from A & B Enterprise A & B Enterprise sold the goods to S & P Enterprise on a terms of 5/10 net 90 basis. However, S & P could not take advantage of this discount.  
Calculate the effective cost to S & P for passing up this discount. (6 marks)
- (d) Explain the following payment methods in international trade.
- i. The Commercial Letters of Credit
  - ii. Documentary Collection
  - iii. Counter Trade
  - iv. Open Account

(8 marks)

(Total: 20 marks)

## QUESTION 2

- i) The discount rate on this week's 91-day treasury bill is 12.45% p.a.
- (a) How much would one pay for a 91-day treasury bill with face value of GHS100? (3 marks)
- (b) Express the interest earned by this buyer in 91 days as a simple interest rate. (2 marks)
- (c) Express this simple interest as an annual rate. (2 marks)
- (d) Express the interest earned in 91 days as an annual compound rate. (4 marks)

(e) Explain why it is not true that treasury bills pay interest up front.

(2 marks)

ii) Recently, the Government raised GHS100 million by selling 3 year bonds in multiples of GHS10 at face value at 16% annual coupon, paid semi-annually. XX Ltd also wishes to raise GHS100 million. However, financial markets are demanding a risk premium of 2 percentage points in order to buy the bonds of XX Ltd.

(a) How much are investors willing to pay for each GHS10 at face value bond?

(4 marks)

(b) How many such bonds must XX Ltd sell in order to raise the money it needs, if in addition it must bear transaction costs of GHS0.50 per bond?

(3 marks)

(Total: 20 marks)

### QUESTION 3

The total market value of the equity of Looser Ltd is GHS6 million and the total value of debt is GHS4 million. The beta value of the equity is estimated to be 1.5 and the expected market risk premium is 10%. The risk-free rate of interest is 8%.

(a) What is the required return on the Looser equity?

(3 marks)

(b) What is the beta of the company's existing portfolio of assets?

(3 marks)

(c) Estimate the company's cost of capital.

(3 marks)

(d) Estimate the discount rate for an expansion of the company's present business.

(2 marks)

(e) Suppose that the company replaces GHS3 million debt with equity does the beta of the equity change?

(2 marks)

(f) What would the company cost of capital be now?

(3 marks)

- (g) If the company wishes to diversify into another industry with a beta value of 1.2, what would be the required rate of return?

(4 marks)

(Total: 20 marks)

#### QUESTION 4

Asuo Limited are considering investing GHS335,600 in a project at Kasoa with a five year life. The project will result in an increase in the company's turnover of GHS350,000 at additional fixed cost of GHS110,000 and a variable costs of GHS150,000.

At the end of the project in five years time, the assets will be sold for GHS35,000. The company's required rate of return is 10%.

*You are required to*

- (a) Calculate the Net Present Value of the project.

(4 marks)

- (b) Calculate the sensitivity of the investment decision in (a) to the estimates of

(i) Variable Costs

(ii) Scrap Value

(iii) Discount Rate

(12 marks)

- (c) Calculate the probability of the project not being viable if the revenue figure of GH350,000 is a mean of a normal distribution of standard deviation GHS4,800.

(4 marks)

(Total: 20 marks)

## QUESTION 5

(a) K. Asante and Co is analyzing the possible acquisition of Pumbros Ltd. Neither firm has debt in its capital structure. K. Asante estimates that purchase of Pumbros would increase K. Asante's after-tax cash flow by GHS960,000 indefinitely.

(i) What is the synergy from this merger if the discount rate for the incremental cash flow is 24%?  
(4 marks)

The current market value of K. Asante is GHS40 million, while that of Pumbros is GHS12 million. K. Asante is trying to decide whether to offer 25% of its shares or GHS15 million to shareholders of Pumbros. The share offer will mean issue of additional shares.

(ii) What is the **cost** to K. Asante of each alternative?  
(4 marks)

(iii) What is the NPV to K. Asante of each alternative?  
(4 marks)

(iv) What is the NPV to Pumbros of each alternative?  
(4 marks)

(b) How long will it take to double GHS1,000 if the interest rate is 12%?  
(4 marks)

**(Total: 20 marks)**