

# THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

*A Committee of the Council of ICPAU*

## CPA (U) EXAMINATIONS

### LEVEL TWO

#### FINANCIAL ANALYSIS – PAPER 9

**WEDNESDAY, 15 DECEMBER 2004**

#### INSTRUCTIONS TO CANDIDATES

1. Time allowed: **3 hours**
2. Attempt **all** questions in Section **A**, any **three** questions from Section **B** and **one** question from Section **C**.
3. Section **A** has **ten** compulsory questions; each carrying 2 marks.
4. Section **B** has **four** questions and only **three** questions are to be attempted. Each question carries 20 marks.
5. Section **C** has **two** questions and only **one** question is to be attempted. Each question carries 20 marks.
6. Please read further instructions on the answer book.

**SECTION A****Question 1**

- (i) Find the price of a share given that the current dividend is Shs 353 per share, the required rate of return is 13.8 %, and the growth rate in dividends is 7.4 %.
- (a) Shs 4,533.
  - (b) Shs 4,963.
  - (c) Shs 5,516.
  - (d) Shs 5,934.
- (ii). Which of the following is correct about a Company's cost of capital?
- (a) Government taxation policies hardly affect a firm's cost of capital in a free- market economy.
  - (b) The capital structure of a firm is irrelevant to the cost of capital computation.
  - (c) Floatation costs do influence the cost of capital.
  - (d) The cost of capital is the cost of using funds provided by long-term creditors, but not the shareholders funds.
- (iii) Find the Beta ( $\beta$ ) of a security  $i$  given that the expected return on the security  $i$  is 20.54 %, the expected return on the market portfolio is 15.5% and the risk-free rate is 9.2%.
- (a) 1.12
  - (b) 1.80
  - (c) 2.39
  - (d) 3.57
- (iv) Which of the following is false about risk?
- (a) An asset's total risk consists of both systematic and unsystematic risk.
  - (b) Systematic risk is also called market risk and is that portion of total risk that cannot be eliminated through diversification.
  - (c) Unsystematic risk is the portion of an asset's total risk that can be eliminated through diversification.
  - (d) Systematic risk is that portion of an asset's total risk that can be eliminated through diversification.
- (v) What would be the Internal Rate of Return (IRR) for a three-year project with an initial investment of Shs 1 billion, and annual cash flows of Shs 420 million?
- (a) 42%.
  - (b) 12.51%.
  - (c) 14%.
  - (d) Impossible to tell, since the cost of capital is not given.

- (vi) The following table provides a probability distribution for the returns on Securities A and B.

State	Probability	Return on A	Return on B
1	20%	5%	50%
2	30%	10%	30%
3	40%	15%	10%
4	10%	20%	10%

What is the expected return on Securities A and B respectively?

- (a) 20.0%, 50.0%.
  - (b) 12.5%, 20.0%.
  - (c) 12.0%, 22.0%.
  - (d) Uncertainty is high, and it is not possible to tell.
- (vii) Which of the following statements is correct?
- (a) Dividend cover estimates the number of times that the dividends are covered by the gross profit.
  - (b) Current earnings per share can be affected by directors' decision to declare more dividends.
  - (c) Both the interest cover and the dividend cover are used to measure the solvency of the company.
  - (d) Dividend cover estimates the number of times dividends are covered by the profit attributable to shareholders.
- (viii) According to Modigliani and Miller theory:
- (a) There is an optimal capital structure and managers must regularly review it.
  - (b) The payment of dividends decreases the value of the firm since cash goes out of the firm.
  - (c) Payment of dividends significantly increases the value of the firm since shares of the firm become more attractive.
  - (d) The expected rate of return on equity increases proportionately with the gearing level.
- (ix) Which of the following is correct in relation to actors on the Uganda Securities exchange?
- (a) Bulls will sell shares anticipating lower prices in future or general market decline.
  - (b) Stags buy existing shares anticipating lower prices for shares in future.
  - (c) Bears sell the shares they hold when they anticipate a share price decline.
  - (d) Bulls earn a commission on the shares they sell on behalf of their clients when share prices rise.

- (x) Which of the following may not lead to hard capital rationing?
- (a) Difficulties with raising money from the securities market say, if share prices are depressed.
  - (b) Restrictions on bank lending, for example due to central bank restrictions.
  - (c) Management's unwillingness to issue additional share capital, say if it leads to dilution of earnings per share.
  - (d) Lending institutions may refuse to grant further loan facilities, say if an organization is considered more risky.

## SECTION B

### Question 2

A four-year project initiated by Uganda PBP Union, at a cost of Shs 1.1 billion, was expected to yield accounting losses of Shs 200 million at the end of each of the first three years, and a profit of Shs 850 million at the end of the fourth year. There is a scrap value of Shs 100 million and depreciation is estimated on a straight-line basis.

#### Required:

- (a) Determine the Payback Period and the Accounting Rate of Return of the project.  
(7 marks)
- (b) Explain the meaning and reasons behind the “discounting” of cash flows.  
(6 marks)
- (c) What is the above project's Internal Rate of Return and under what circumstances would the project be acceptable?  
(7 marks)

**(Total 20 Marks)**

### Question 3

Marko Traders (U) Ltd, a company in the media industry has ordinary shares with an estimated Beta of 1.5. The risk-free rate of return is 3% while the expected return on the market is 9%.

The Company is planning an Expansion of its operations and are considering raising more capital in the following proportions:

Debt	40%
Preferred shares	10%
Ordinary shares	50%

The cost of debt is expected to be 3.6% while that of preference shares shall be 8%.

Ignore Taxation.

**Required:**

- (a) Determine the expected cost of ordinary shares. **(4 marks)**
- (b) Estimate the Company's weighted average cost of capital. **(4 marks)**
- (c) Explain any other three sources of finance that Marko Traders (U) Ltd could raise / use for their Expansion Programme, highlighting the appropriateness of each. **(12 marks)**
- (Total 20 marks)**

**Question 4**

The following summarised income statement of EPSO Limited was recently published in the print media, for the year ended 31 August 2004 (their first year of trading):

	<b>Shs '000</b>
Sales	1,245,600
Less: Cost of sales	<u>(687,500)</u>
Gross profit	558,100
Administration expenses	(135,500)
Selling and distribution	<u>(126,600)</u>
Earnings before interest and tax	296,000
Interest charges payable	<u>(24,000)</u>
Net profit before taxation	272,000
Corporation tax	<u>(94,000)</u>
Net profit after taxation	178,000
Proposed dividend	<u>(155,000)</u>
Retained profit for the year	<u><u>23,000</u></u>

Information available also indicates that the company has the following capital structure:

Share capital:	Shs 150 million.
Retained Earnings	Shs 23 million.
Revaluation reserves	Shs 197 million.
12% Debentures	Shs 200 million.

Note: Nominal value per ordinary share is Shs 2,000, while market value is Shs 7,500 each.

**Required:**

- (a) Compute the following:
- (i) The Earnings Per Share (EPS).
  - (ii) The Dividend Yield.
  - (iii) Return on Equity.
  - (iv) Net Profit Margin.
  - (v) Interest Cover.
  - (vi) The Debt Ratio.
- (12 marks)**

- (b) Outline measures EPSO Ltd may take to improve return on capital employed.

**(4 marks)**

- (c) Give two benefits and two limitations of ratio analysis.

**(4 marks)**

**(Total 20 marks)**

### Question 5

Uganda Millers of Grain Ltd (UGML) has in the past had problems with their debtors, with 30% of them turning out to be written-off as bad debts. Management is considering a set of procedures to enable them reverse these trends; and the cash operating cycle has continued to worsen. Their average figures for the past two years are given as follows:

	<b>2004</b>	<b>2003</b>
Total sales (Shs million)	1,600	1,500
Percentage of credit sales	25%	20%
Total purchases (Shs million)	812.5	562.5
Percentage of credit purchase	20%	25%
Average inventory (Shs million)	80	75
Average trade payables (Shs million)	54	56
Average Trade Receivables (Shs million)	200	170

### Required:

- (a) Estimate UGML's working capital cycle.

**(6 marks)**

- (b) Comment on the your results in (a) above.

**(4 marks)**

- (c) What would be the change in investment in working capital by reducing both the inventory turnover and debtors collection period by five days each?

**(5 marks)**

- (d) Outline measures the company can put in place before, during or after the selling process to ensure they reverse the trend of bad debts.

**(5 marks)**

**(Total 20 marks)**

**SECTION C****Question 6**

Securities markets are said to be efficient markets, but they can also be described as “primary” or “secondary” markets.

- (a) Distinguish between primary and secondary markets and outline the importance of each to an economy like Uganda.

**(7 marks)**

- (b) Explain the term “efficiency market hypothesis” and outline the forms of efficiency.

**(7 marks)**

- (c) To what extent are the Ugandan Securities markets efficient?

**(6 marks)**

**(Total: 20 marks)**

**Question 7**

- (a) Briefly explain four determinants of working capital.

**(4 marks)**

- (b) Why do companies give trade credit?

**(5 marks)**

- (c) What factors may a company consider before making short-term investment decisions?

**(4 marks)**

- (d) Give and explain two types of securities traded on the Uganda Securities Exchange. Give two advantages and two disadvantages of each.

**(7 marks)**

**(Total 20 marks)**