

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

CPA (U) EXAMINATIONS

LEVEL TWO

FINANCIAL ANALYSIS – PAPER 9

TUESDAY, 17 JUNE 2003

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) Systematic risk is one that:
 - (a) Is inherent risk, and cannot be diversified away.
 - (b) Is part of the total risk and can be diversified away.
 - (c) Will be eliminated with ease through diversification.
 - (d) Is associated with new and big risky investments only.
- (ii) Which of the following is likely to improve a project's IRR?
 - (a) Downward change in cost of capital.
 - (b) Decrease of the required return on equity.
 - (c) Decrease in the weighted average cost of capital.
 - (d) Decrease of the required initial capital outlay.
- (iii) Which of the following will shorten the "working capital cycle"?
 - (a) Decrease in period of credit from suppliers.
 - (b) Decrease in cash at hand and at bank.
 - (c) Decrease in debtors' payment period.
 - (d) Increase in cheque clearing days.
- (iv) Businesses will extend credit to customers for various reasons. However such a strategy is least likely to be targeted at:
 - (a) Expansion of sales volume and the customer base.
 - (b) Encouraging sales and clearing off the excess or old inventory.
 - (c) Making friends and associates benefit from the business.
 - (d) Encouraging consumption of a new product, as a promotion strategy.
- (v) The Bank of Uganda recently advertised auction results for 273-day treasury bills, saying the weighted average price was "89.951 per 100". If a company had bid for Shs 800 million at the weighted average price, how much money was invested, and what was the interest rate to be earned?
 - (a) Shs 89,951,000 10.049%.
 - (b) Shs 719,608,000 14.936%.
 - (c) Shs 719,608,000 11.172%.
 - (d) Shs 800,000,000 12.439%.
- (vi) Which of the following is the least likely role for which the Uganda Securities Exchange was created?
 - (a) Facilitate trading in shares of listed companies.
 - (b) Facilitate meeting of savers and borrowers.
 - (c) Create employment opportunities for Ugandans.
 - (d) Support the divestiture of formerly state-owned enterprises.

- (vii) Which of the following will reduce financial gearing of a company, holding other factors constant?
- (a) Script dividend and a Stock split.
 - (b) Stock dividend and a downward revaluation of non-current assets.
 - (c) A rights issue and an upward revaluation of non-current assets.
 - (d) A mixture of a cash dividend and a stock dividend.
- (viii) Which of the following is the best description of “optimal capital structure”?
- (a) The debt to equity ratio at which the value of the firm is minimized.
 - (b) The mix of debt, preference share capital and ordinary share capital that minimizes the weighted cost of its capital employed.
 - (c) The level of debt and equity capital that minimizes the cost of debt.
 - (d) The amount of capital that minimizes cost of debt but maximizes returns to the shareholders.
- (ix) Which of the following considerations is irrelevant in assessing how to invest short-term cash surpluses?
- (a) The risks associated with calling in the investment early.
 - (b) The length of time for which the funds are available.
 - (c) The return offered on the investment in relation to the investment involved.
 - (d) The return offered in the capital markets.
- (x) Which of the following will not influence the interest rate charged by the lender?
- (a) Inflation or the loss in money's purchasing power.
 - (b) The risk of the capital sum not being repaid.
 - (c) The gross profit margins of the borrower.
 - (d) The time value of money.

SECTION B

Question 2

HCL Ltd's market share is being threatened by entry of new competitors. In a bid to safeguard its market share, the company's management is considering investing in a new project, aimed at adding a new product to its existing portfolio.

The following data have been extracted from the project proposal:

- (i) The machine is expected to cost Shs 120 million.
- (ii) Revenue, which is currently at Shs 100 million per year, will increase to Shs 350 million in the first year, Shs 700 million in the second year, and to Shs 1.2 billion in the third year. The project is to last three years with terminal cash flows of Shs 20 million.
- (iii) Variable operating costs are estimated to be 60% of each year's revenue. Currently, fixed overheads amount to Shs 400 million per year and will remain constant for each of the next three years.
- (iv) Working capital funds will be required as follows:

Year	Shs
0	20 million
1	30 million
2	50 million
3	80 million

- (v) The project paid Shs 25 million for the recently concluded market survey.
- (vi) The risk free rate (equivalent to the discount rate on treasury bills) is 8%. The expected return on the market as a whole is 14%. The beta (β) of the project is 2. (Ignore tax)

Required:

- (a) State any three assumptions of the Capital Asset Pricing Model.
(6 marks)
- (b) Using Capital Assets Pricing Model determine the appropriate discount rate that should be used to evaluate the project.
(2 marks)
- (c) Using the rate calculated above, compute the project's Net Present Value and advise the management of HCL Ltd on the viability of the project.

(12 marks)
(Total 20 marks)

Question 3

The following information is available from Bwana Ltd, for the years indicated.

Balance Sheet as at 31 December

	2002 Ushs 000	2001 Ushs 000
ASSETS		
Non-current Assets		
Property, plant & Equipment	14,050	10,272
Goodwill	<u>4,600</u>	<u>5,000</u>
	<u>18,650</u>	<u>15,272</u>
Current Assets		
Inventories	2,393	530
Trade and other receivables	22,292	19,671
Prepayments	2,100	2,560
Cash and Bank	<u>5,500</u>	<u>2,108</u>
	<u>32,285</u>	<u>24,869</u>
Total Assets	<u>50,935</u>	<u>40,141</u>
EQUITY AND LIABILITIES		
Capital and reserves		
Issued Capital	5,000	5,000
Revenue reserves	<u>21,900</u>	<u>13,831</u>
	26,900	18,831
Non-current liabilities		
Mortgages	13,000	16,000
Current liabilities		
Trade and other payables	5,835	2,310
Short-term borrowings	<u>5,200</u>	<u>3,000</u>
	<u>11,035</u>	<u>5,310</u>
Total Equity and Liabilities	<u>50,935</u>	<u>40,141</u>

Income Statement, for period ended 31 December

	2002 Shs '000	2001 Shs '000
Revenue	77,883	70,184
Cost of sales	<u>(27,675)</u>	<u>(36,429)</u>
Gross profit	50,208	33,755
Distribution costs	(19,670)	(11,300)
Administrative costs	(16,560)	(10,200)
Other operating Expenses	<u>(2,450)</u>	<u>(2,900)</u>
Profit from operations	11,528	9,355
Income tax expense	<u>(3,457)</u>	<u>(2,806)</u>
Net profit for the period	<u>8,069</u>	<u>6,549</u>

Required:

- (a) Compute the following for each of the years:
- (i) 2 liquidity ratios. **(12 marks)**
 - (ii) 2 management efficiency ratios. **(4 marks)**
 - (iii) 2 profitability ratios. **(4 marks)**
- (b) Comment on the performance of the company over the two years. **(Total 20 marks)**
- (c) Advise the management on how to improve on the company's liquidity and profitability. **(4 marks)**

Question 4

- (a) Explain the following terms:
- (i) Mutually exclusive projects. **(2 marks)**
 - (ii) Independent projects. **(2 marks)**
 - (iii) Capital rationing. **(4 marks)**
 - (iv) Marginal cost of capital. **(2 marks)**
- (b) ICPAU Ltd is planning to construct a building complex along Rotary Road in Kampala. The complex will cost Shs 1.8 billion. ICPAU Ltd's current capital structure is as follows:

	Shs '000
Debt	3,840,000
Ordinary shares	4,800,000
Retained Earnings	<u>960,000</u>
	<u>9,600,000</u>

The following information has also been provided:

- New debt will be raised from the issue of debentures at an interest rate of 15%. No additional cost will be incurred.
- Ordinary shares have a current market price of Shs 300 per share with a dividend of Shs 50 per share and are expected to grow at a rate of 5% per annum. Floatation costs amount to 4%.

Required:

- (i) How much of the Shs 1.8 billion must be raised by equity if the capital structure is to remain unchanged. **(3 marks)**
 - (ii) How much of the capital must be raised via debentures. **(3 marks)**
 - (iii) How many new ordinary shares have to be floated in order to raise the required portion of the equity capital. **(4 marks)**
- (Total 20 marks)**

Question 5

Worcap Ltd, a manufacturing company, is investigating the possibility of reducing its operating cycle (the working capital cycle), and you are part the team responsible.

Required:

- (a) What is meant by the operating working capital cycle? **(3 marks)**
- (b) Why should a company be concerned about the length of its operating cycle? **(2 marks)**
- (c) The following has been extracted from Worcap Ltd's financial statements:

	Shs '000
Inventories:	
Raw materials	500,000
Work in progress	300,000
Finished goods	600,000
Purchases	800,000
Cost of goods sold	700,000
Sales	900,000
Trade receivables	250,000
Trade payables	200,000

All sales are assumed to be on credit

Required:

Calculate the length of Worcap Ltd's operating cycle (assume a 360-day year).

- (9 marks)**
- (d) List two possible actions that Worcap Ltd might take to reduce the length of the operating cycle, and the possible limitations of each.

(6 marks)
(Total 20 marks)

SECTION C

Question 6

- (a) Explain the role of commercial banks in the economic development of your country.
(12 marks)
 - (b) State and explain any four reasons why loan performance in Uganda's banks is poor.
(8 marks)
- (Total 20 marks)**

Question 7

- (a) Explain the term "efficiency of capital markets".
(2 marks)
 - (b) Explain the different forms of market efficiency.
(9 marks)
 - (c) Distinguish between Primary and Secondary capital markets and indicate the importance of each.
(9 marks)
- (Total 20 marks)**