CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education
Advanced Level

ACCOUNTING **9706/04**

Paper 4 Problem Solving (Supplementary Topics)

October/November 2003

2 hours

Additional Materials: Answer Booklet/Paper

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.
Write your Centre number, candidate number and name on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a soft pencil for any rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.
At the end of the examination, fasten all your work securely together.
The questions in this paper carry equal marks.
All accounting statements are to be presented in good style. Workings should be shown.
You may use a calculator.
The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **6** printed pages and **2** blank pages.

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UNIVERSITY of CAMBRIDGE
Local Examinations Syndicate

1 Information about Foggy Ltd and Compo Ltd at 31 March 2003 is as follows:

	Foggy Ltd	Compo Ltd
Share capital: ordinary shares of $1.00	$1 000 000	
ordinary shares of $0.25		$600 000
5% preference shares of $10	$400 000	
8% preference shares of $1		$300 000
10% debenture stock 2005/6	$300 000	$180 000

Additional information for the year ended 31 March 2003:

	Foggy Ltd	Compo Ltd
Operating profit	$360 000	$252 000
Dividend cover	5 times	7 times
Transferred to General Reserve	$100 000	$60 000

REQUIRED

(a) Prepare an extract of the Profit and Loss Account for the year ended 31 March 2003 commencing with the operating profit for

(i) Foggy Ltd

(ii) Compo Ltd [12]

At 31 March 2003 the market prices of the ordinary shares were as follows:

Foggy Ltd $1.60 Compo Ltd $1.35

REQUIRED

(b) Calculate the following for each company:

(i) Interest cover

(ii) Earnings per share (EPS)

(iii) Dividend paid per share

(iv) Price earnings ratio (PER)

(v) Dividend yield [11]

(c) Compare and comment briefly on the ratios for Foggy Ltd and Compo Ltd in **(b)**. [10]

(d) Explain **two** ways in which ratios may be used to assess the performance of companies. [4]

(e) State **three** items which should be contained in the directors' report which accompanies the final accounts of a company. [3]

2 Clegg is replacing one of his machines. He can choose between machine A or machine B.

Details of the machines are as follows:

	Machine A	Machine B
Cost	$80 000	$100 000
Estimated useful life	4 years	4 years
Scrap value	$4000	$8000

Annual depreciation (each machine): straight line.

Estimated receipts and payments are as follows:

Revenue receipts

	Machine A	Machine B
	$000	$000
Year 1	66 000	70 000
2	80 000	90 000
3	100 000	100 000
4	70 000	60 000

Payments

	$000	$000
Year 1	31 000	42 000
2	47 000	49 000
3	68 000	67 000
4	38 000	29 000

Clegg Ltd's cost of capital is 10%.

Discounting rates:	10%	20%
Year 1	0.909	0.833
2	0.826	0.694
3	0.751	0.579
4	0.683	0.482

REQUIRED

(a) Calculate the accounting rate of return (ARR) for each machine. [12]

(b) Calculate the payback period for each machine. [4]

(c) Calculate the net present value (NPV) of each machine. [11]

The new machine must produce an internal rate of return (IRR) of at least 22%.

REQUIRED

(d) Prepare calculations to show the internal rate of return (IRR) produced by each machine. [4]

(e) State which machine Clegg should purchase. Give your reasons. [5]

(f) Suggest why Clegg requires the new machine to produce an IRR of at least 22% if it already produces a positive NPV. [4]

3 Porridge Ltd's Balance Sheet at 31 March 2003 was as follows:

	$000	$000	$000
Fixed assets			
Land and buildings			950
Plant and machinery			535
			1 485
Current assets			
Stock		254	
Debtors		346	
Bank		280	
		880	
Creditors: amounts falling due within one year			
Trade creditors	333		
10% debentures 2002/2003	300	633	
			247
			1 732
Share capital and reserves			
Ordinary shares of $1			900
Profit and Loss Account			832
			1 732

On 1 April 2003, before any further transactions had taken place, Porridge Ltd acquired the partnership business of Korne and Flaikes. The partnership Balance Sheet at 31 March 2003 was as follows:

	$000	$000
Fixed assets		
Land and buildings		100
Plant and machinery		186
		286
Current assets		
Stock	100	
Debtors	94	
Bank	46	
	240	
Current liabilities		
Creditors	86	154
		440
Long term liability		
Loan from Korne at $12\frac{1}{2}$% per annum		100
		340
Financed by capital accounts: Korne		200
Flaikes		140
		340

Further information:

1. The assets and current liabilities were taken over at the following valuations:

	$000
Land and buildings	145
Plant and machinery	115
Stock	85
Debtors	70
Creditors	92

2. Korne received sufficient 10% Convertible Loan Stock to ensure that he continued to receive the same amount of interest annually as he had received as a partner. The terms of this issue give Korne the option to have the debenture stock converted to ordinary shares in Porridge Ltd on 1 June 2005 at $1.50 per share.

3. The balance of the purchase price was settled by the allocation of 200 000 shares in Porridge Ltd to Korne and Flaikes at $1.28 per share.

4. Immediately following the acquisition of the partnership, Porridge Ltd redeemed its 10% debentures 2002/3 at a premium of 4%. In order to preserve the capital structure of the company, a reserve equal to the amount of the debentures redeemed was created.

REQUIRED

(a) Porridge Ltd's Balance Sheet as it appeared immediately after it had acquired the partnership and redeemed the 10% debentures. (Show all workings.) [16]

Korne and Flaikes' summarised Profit and Loss Account for the year ended 31 March 2003 was as follows:

	$
Turnover	334 410
Variable expenses	(133 764)
Fixed expenses	(156 000)
Net profit	44 646

The directors of Porridge Ltd have prepared a budget for the former partnership business which should produce a return of 25% on the amount invested in the year ending 30 March 2004.

REQUIRED

(b) Calculate the turnover required to produce a return of 25% on Porridge Ltd's investment in the partnership. [12]

The profitability of Korne and Flaikes' business is sensitive to changes in revenue and expenses. The directors do not wish the accounting rate of return to fall below 20%.

REQUIRED

(c) Calculate the percentage change (to the nearest whole number) in turnover which would result in the return on investment being only 20% compared with the turnover in **(b)**. [6]

Korne is planning the future for his investments.

REQUIRED

(d) **(i)** Advise Korne whether he should exercise his option to convert his debenture stock on 1 June 2005 into ordinary shares in Porridge Ltd if the price of the shares on that date is $1.75. [3]

(ii) State the effect that this conversion would have on the Balance Sheet of the company. (3)

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