Answers

The case study can be answered in various ways and the outline solution provided is only suggestive.

Section 1

1 (a) A comparison of the performance and position of Emmanuel Hire plc with that of Hughes Hire Ltd using ratio analysis can be carried out. Emmanuel Hire plc and Hughes Hire Ltd have the following profitability and gearing ratios:

	Emmanuel Hire %	Hughes Hire %
Gross profit		
(28,650/35,730) x 100%	80·2	
(10,330/12,810) x 100%		80·6
Operating profit to sales		
(5,455/35,730) x 100%	15·3	
(2,330/12,810) x 100%		18·2
Return on shareholders' funds		
(4,013/26,164) x 100%	15·3	
(1,665/5,015) x 100%		33·2
Gearing ratio		
[(1,500/(26,164 + 1,500)] x 100%	5·4	
[2,200/(2,200 + 5,015)] x 100%		30·5

In addition, the two companies have the following efficiency and liquidity ratios.

	Emmanuel Hire	Hughes Hire
Sales to capital employed		
(35,730/27,664)	1·3 times	
(12,810/7,215)		1·8 times
Debtors' settlement period		
(10,540/35,730) x 365	108 days	
(3,850/12,810) x 365		110 days
Current ratio		
(10,764/6,270)	1·7 times	
(3,920/3,035)		1·3 times

Various points arising from the ratio analysis could be made including:

- The relatively good profitability ratios of Hughes Hire Ltd
- The high debtors settlement period for both companies and the prospect that some of the debtors to be taken over from Hughes Hire Ltd may be bad
- The impact of the lack of investment on the ROSF ratio and sales to capital employed ratio of Hughes Hire Ltd
- The relatively high gearing ratio of Hughes Hire plc and its impact on ROSF

Other issues that might be discussed include:

- The impact of expected sales increases and cost savings on the future performance of Hughes Hire Ltd
- The impact of lack of investment on the quality of assets taken over

A discussion of the price paid for the assets of Hughes Hire Ltd may include the following points:

- The total assets of the company, as shown on the balance sheet, are £10·25 million. The suggested price of £12 million is close to the book value of the assets. Book values tend to be conservative values as assets may be recorded at historic cost and certain valuable resources (such as goodwill) may be omitted from the balance sheet.
- The P/E ratio of Emmanuel Hire plc is 12 times. Using this ratio as a basis of valuation, the value of a share in Hughes Hire Ltd is:

  Po = P/E ratio x EPS
  = 12 x (£1,665/1,000)
  = £<u>19·98</u>

  If a discount of (say) 30% is applied to take account of the lack of marketability of shares in Hughes Hire Ltd the share value is £<u>13·99</u>

- If we assume that a price of £12 million is to be paid, the amounts available to ordinary shareholders in Hughes Hire Ltd, after paying the company's creditors is £12,000,000 – (£3,035,000 + £2,200,000) = £6,765,000
  The amount paid for a share in the company is = £6,765,000/1,000,000
  = £<u>6·77</u>
- It seems that Emmanuel Hire plc has acquired a profitable business at a cheap price.

(b) The factors to be considered when choosing between ordinary share capital and loan capital include:

- Dilution of control
- Market conditions for raising each type of finance
- Availability of security for loan finance
- Whether there are likely to be sufficient profits and resources to cover loan interest payments and capital repayments
- Relative cost of servicing loan capital and ordinary share capital
- Relative cost of issuing loan capital and ordinary share capital
- Attitude of investors towards additional financial risk
- Loan covenants – either restricting issue of further loan capital or imposing limits on management's ability to make decisions.

(c) (i) The borrowing rates for each company are:

	Fixed %	Floating %
Emmanuel Hire plc	6·5	LIBOR +0·7
Fitzwilliam plc	8·1	LIBOR +1·4
Difference	1·6	+0·7

The table below shows how these differences in interest rates can benefit both companies.

	%
Difference between fixed and floating rates (1·6 – 0·7)	0·9
Less Bank commission	0·3
Available for division between the two companies	0·6
Emmanuel Hire plc	0·3
Fitzwilliam plc	0·3
	0·6

Emmanuel Hire plc has the larger comparative advantage with fixed-rate borrowing and so should borrow at the fixed rate. The total interest cost for the company will be as follows:

	£000	£000
Interest paid on fixed rate loan (£12m at 6·5%)		780
Interest received from swap bank (£12m x 6·1%)	(732)	
Interest paid (LIBOR) to swap bank (£12m x 5·8%)	696	(36)
Total interest cost (Variable at LIBOR +0·4%)		744

(ii) In answering this part, various hedging methods could be discussed such as a forward rate agreement and interest rate options.

(d) In preparing the forecast profit and loss accounts and forecast cash flow statements, it is assumed:

- The 20% increase in sales and 10% cost savings for Hughes Hire Ltd will be achieved
- The existing gross profit ratios of 80·2% for Emmanuel Hire plc and 80·6% for Hughes Hire Ltd will apply
- The contract with the construction business will generate an additional £3 million in sales
- Other sales and costs will stay the same as the preceding year
- The corporation tax rate is 25%

Loan capital option

Forecast profit and loss account for the year ended 31 January 2006

	£000	£000
Sales [35,730 + 3,000 + (12,810 x 1·2)		54,102
Cost of sales		10,651
Gross profit (80·2% x £38,730) + (80·6% x £15,372)		43,451
Less:		
Selling and distribution expenses [3,350 + (1,260 x 0·9)]	4,484	
Administration expenses [19,845 + (6,740 x 0·9)]	25,911	30,395
Operating profit		13,056
Financing expenses (105 + 744)		849
Net profit before tax		12,207
Corporation tax (25%)		3,052
Net profit after tax		9,155
Dividends		3,052
Retained profit for the year		6,103

Forecast cash flow statement for the year ended 31 January 2006

	£000	£000
Operating profit before interest and tax		13,056
Depreciation (3,850 + 960)		4,810
		17,866
Decrease in trade debtors [(3/12 x 51,102) + (4/12 x 3,000) – (10,540 + 3,850)]	615	
Increase in trade creditors [3,520 – (40% x 13,776)]	1,990	2,605
Cash flow from operations		20,471
Loan capital		12,000
		32,471
Interest	849	
Taxation	1,100	
Capital expenditure	12,000	
Dividends	1,650	15,599
		16,872

Ordinary share option

Forecast profit and loss account for the year ended 31 January 2006

	£000	£000
Sales [35,730 + 3,000 + (12,810 x 1·2)		54,102
Cost of sales		10,651
Gross profit (80·2% x £38,730) + (80·6% x £15,372)		43,451
Less:		
Selling and distribution expenses [3,350 + (1,260 x 0·9)]	4,484	
Administration expenses [19,845 + (6,740 x 0·9)]	25,911	30,395
Operating profit		13,056
Finance expenses		105
Net profit before tax		12,951
Corporation tax (25%)		3,238
Net profit after tax		9,713
Dividends		3,238
Retained profit for the year		6,475

Forecast cash flow statement for the year ended 31 January 2006

	£000	£000
Operating profit before interest and tax		13,056
Depreciation (3,850 + 960)		4,810
		17,866
Decrease in trade debtors [(3/12 x 51,102) + (4/12 x 3,000) – (10,540 + 3,850)]	615	
Increase in trade creditors	1,990	2,605
Cash flow from operations		20,471
Ordinary share capital		12,000
		32,471
Interest	105	
Taxation	1,100	
Capital expenditure	12,000	
Dividends	1,650	14,855
		17,616

Rights issue

The market value of a share in Emmanuel Hire plc	= P/E ratio x EPS
	= 12 x (£4,013/20,000)
	= £2·41
No. of shares to be issued	= 20,000 x 2/5
	= 8,000
Issue price	= £12,000/8,000
	= £1·50

	Loan option	Share option
EPS		
(£9,155/20,000)	£0·46	
(£9,713/28,000)		£0·35
ROSF		
[£9,155/(26,164 + 6,103)] x 100%	28·4%	
[£9,713/(26,164 + 6,475 +12,000)] x 100%		22·8%
Interest cover ratio		
(£13,056/849)	15·4 times	
(£13,056/105)		124·3 times
Gearing ratio		
[(1,500 + 12,000)/(26,164 + 1,500 + 12,000 + 6,103)] x 100%	29·5%	
[(1,500/(26,164 + 1,500 + 12,000 + 6,475)] x 100%		3·3%

Comments may include:

- The strong cash flows for the year under each option
- Whether there is a need for extra long-term finance given the strong cash flows
- The need to consider investment of surplus cash
- The beneficial effect of gearing on returns to shareholders
- The relatively low level of financial risk associated with the loan option

(e) The advantages of a risk-based management approach include:

- Making the business more flexible and responsive to a changing environment
- Improving the responses of the business to risk
- Aligning the risk appetite of the business with strategic goals
- Providing a clearer link between risk, and return
- Making the risk appetite of the business explicit
- Increasing the likelihood of achieving strategic goals
- Avoiding unnecessary risks and incurring fewer unwelcome surprises
- Lowering the cost of capital

To implement a risk-based management approach requires:

- Development of a risk management strategy
- Preparation and dissemination of risk policy documents
- Providing senior management with reporting systems that allow early warning of problems
- Widespread consultation with staff concerning the risk appetite of the business and risk management policies
- Changing the culture to align with the risk appetite and risk policies of the business
- Reviewing the internal control system to ensure that it supports the risk policies of the business

(f) The key operational risks in the acquisition of the assets of Hughes Hire Ltd include:

- Problems concerning the quality and range of tangible assets taken over
- Problems concerning the quality of the workforce taken over
- Hostility from the workforce of Hughes Hire Ltd to the change of ownership
- Loss of key staff in Hughes Hire Ltd arising from the change of ownership
- Adverse reaction from the customers of Hughes Hire Ltd to the change of ownership
- Inability to reduce the cost base or increase sales as predicted
- Inability to implement changes in the culture and systems of Hughes Hire Ltd
- Lack of management skills to manage the integration process.

The management of each of these risks should be discussed.

			Marks
1	**(a)**	10 marks consideration of financial performance and position of Hughes Hire Ltd, 8 marks consideration of price paid	18
	(b)	1 mark per point (max. 7 marks)	7
	(c)	5 marks swap arrangement, 2 marks interest paid, 3 marks alternative	10
	(d)	12 marks forecast statements, 8 marks ratios, 5 marks discussion	25
	(e)	12 marks advantages, 8 marks key tasks	20
	(f)	8 marks risk identification, 12 marks management of risks	20
			100