Answers

1 **(a)** Both forms of unbundling involve disposing the non-core parts of the company.

The divestment through a sell-off normally involves selling part of a company as an entity or as separate assets to a third party for an agreed amount of funds or value. This value may comprise of cash and non-cash based assets. The company can then utilise the funds gained in alternative, value-enhancing activities.

The management buy-in is a particular type of sell-off which involves selling a division or part of a company to an external management team, who will take up the running of the new business and have an equity stake in the business. A management buy-in is normally undertaken when it is thought that the division or part of the company can probably be run better by a different management team compared to the current one.

(b) **Report to the board of directors (BoD), CIGNO CO**

This report assesses the potential value of acquiring Anatra Co for the equity holders of Cigno Co, both with and without considering the benefits of the reduction in taxation and in employee costs. The possible issues raised by reduction in taxation and in employee costs are discussed in more detail below. The assessment also discusses the estimates made and the methods used.

Assessment of value created

Cigno Co estimates that the premium payable to acquire Anatra Co largely accounts for the benefits created from the acquisition and the divestment, before considering the benefits from the tax and employee costs' saving. As a result, before these savings are considered, the estimated benefit to Cigno Co's shareholders of $128 million (see appendix 3) is marginal. Given that there are numerous estimations made and the methods used make various assumptions, as discussed below, this benefit could be smaller or larger. It would appear that without considering the additional benefits of cost and tax reductions, the acquisition is probably too risky and would probably be of limited value to Cigno Co's shareholders.

If the benefits of the taxation and employee costs saved are taken into account, the value created for the shareholders is $5,609 million (see appendix 4), and therefore significant. This would make the acquisition much more financially beneficial. It should be noted that no details are provided on the additional pre-acquisition and post-acquisition costs or on any synergy benefits that Cigno Co may derive in addition to the cost savings discussed. These should be determined and incorporated into the calculations.

Basing corporate value on the price-earnings (PE) method for the sell-off, and on the free cash flow valuation method for the absorbed business, is theoretically sound. The PE method estimates the value of the company based on its earnings and on competitor performance. With the free cash flow method, the cost of capital takes account of the risk the investors want to be compensated for and the non-committed cash flows are the funds which the business can afford to return to the investors, as long as they are estimated accurately.

However, in practice, the input factors used to calculate the organisation's value may not be accurate or it may be difficult to assess their accuracy. For example, for the free cash flow method, it is assumed that the sales growth rate, operating profit margin, the taxation rate and incremental capital investment can be determined accurately and remain constant. It is assumed that the cost of capital will remain unchanged and it is assumed that the asset beta, the cost of equity and cost of debt can be determined accurately. It is also assumed that the length of the period of growth is accurate and that the company operates in perpetuity thereafter. With the PE model, the basis for using the average competitor figures needs to be assessed, for example, have outliers been ignored; and the basis for the company's higher PE ratio needs to be justified as well. The uncertainties surrounding these estimates would suggest that the value is indicative, rather than definitive, and it would be more prudent to undertake sensitivity analysis and obtain a range of values.

Key factors to consider in relation to the redundancies and potential tax savings

It is suggested that the BoD should consider the impact of the cost-savings from redundancies and from the tax payable in relation to corporate reputation and ethical considerations.

At present, Cigno Co enjoys a good reputation and it is suggested that this may be because it has managed to avoid large scale redundancies. This reputation may now be under threat and its loss could affect Cigno Co negatively in terms of long-term loss in revenues, profits and value; and it may be difficult to measure the impact of this loss accurately.

Whilst minimising tax may be financially prudent, it may not be considered fair. For example, currently there is ongoing discussion and debate from a number of governments and other interested parties that companies should pay tax in the countries they operate and derive their profits, rather than where they are based. Whilst global political consensus in this area seems some way off, it is likely that the debate in this area will increase in the future. Companies that are seen to be operating unethically with regard to this, may damage their reputation and therefore their profits and value.

Nonetheless, given that Cigno Co is likely to derive substantial value from the acquisition, because of these savings, it should not merely disregard the potential savings. Instead it should consider public relations exercises it could undertake to minimise the loss of reputation, and perhaps meet with the government to discuss ways forward in terms of tax payments.

Conclusion

The potential value gained from acquiring and unbundling Anatra Co can be substantial if the potential cost savings are taken into account. However, given the assumptions that are made in computing the value, it is recommended that sensitivity analysis is undertaken and a range of values obtained. It is also recommended that Cigno Co should undertake public relations exercises to minimise the loss of reputation, but it should probably proceed with the acquisition, and undertake the cost saving exercise because it is likely that this will result in substantial additional value.

Report compiled by:

Date:

Appendix 1: Estimate of value created from the sell-off of the equipment manufacturing business

Average industry PE ratio = $2·40/$0·30 = 8
Anatra Co's equipment manufacturing business PE ratio = 8 x 1·2 = 9·6

Value from sell-off of equipment manufacturing business
Share of pre-tax profit = 30% x $2,490 million = $747m
After tax profit = $747 million x (1 – 0·22) = $582·7m
Value from sell-off = $582·7 million x 9·6 = $5,594m (approximately)

Appendix 2: Estimate of the combined company cost of capital

Anatra Co, asset beta = 0·68

Cigno Co, asset beta:
Equity beta =1·10
Proportion of market value of debt = 40%; Proportion of market value of equity = 60%
Asset beta = 1·10 x 0·60/(0·60 + 0·40 x 0·78) = 0·72

Combined company, asset beta
Market value of equity, Anatra Co = $3 x 7,000 million shares = $21,000m
Market value of equity, Cigno Co = 60% x $60,000 million = $36,000m
Asset beta = (0·68 x 21,000 + 0·72 x 36,000)/(21,000 + 36,000) = 0·71 (approximately)

Combined company equity beta = 0·71 x (0·6 + 0·4 x 0·78)/0·6 = 1·08

Combined company, cost of equity = 4·3% + 1·08 x 7% = 11·86%
Combined company, cost of capital = 11·86% x 0·6 + 6·00% x 0·78 x 0·4 = 8·99, say 9%

Appendix 3: Estimate of the value created for Cigno Co's equity holders from the acquisition

Anatra Co, Medical R&D value estimate:

Sales revenue growth rate = 5%
Operating profit margin = 17·25%
Tax rate = 22%
Additional capital investment = 40% of the change in sales revenue
Cost of capital = 9% (Appendix 2)
Free cash flow growth rate after four years = 3%
Current sales revenue = 70% x $21,400m = $14,980m

Cash flows, years 1 to 4 ($ millions)

Year	1	2	3	4
Sales revenue	15,729	16,515	17,341	18,208
Profit before interest and tax	2,713	2,849	2,991	3,141
Tax	597	627	658	691
Additional capital investment	300	314	330	347
Free cash flows	1,816	1,908	2,003	2,103
Present value of cash flows (9% discount)	1,666	1,606	1,547	1,490

Value, years 1 to 4: $6,309m
Value, year 5 onwards: [$2,103 x 1·03 / (0·09 – 0·03)] x $1·09^{-4}$ = $25,575m
Total value of Anatra Co's medical R&D business area = $31,884m

Total value of Anatra Co following unbundling of equipment manufacturing business and absorbing medical R&D business: $5,594m (appendix 1) + $31,884m = $37,478m (approximately)

Anatra Co, current market value of equity = $21,000m
Anatra Co, current market value of debt = $9,000m
Premium payable = $21,000m x 35% = $7,350m

Total value attributable to Anatra Co's investors = $37,350m

Value attributable to Cigno Co's shareholders from the acquisition of Anatra Co before taking into account the cash benefits of potential tax savings and redundancies = $128m

Appendix 4: Estimate of the value created from savings in tax and employment costs following possible redundancies

Cash flows, years 1 to 4 ($ millions)

Year	1	2	3	4
Cash flows (4% increase p.a.)	1,600	1,664	1,731	1,800
Present value of cash flows (9%)	1,468	1,401	1,337	1,275

Total value = $5,481m

Value attributable to Cigno Co's shareholders from the acquisition of Anatra Co after taking into account the cash benefits of potential tax savings and redundancies = $5,609m

(c) The feasibility of disposing of assets as a defence tool against a possible acquisition depends upon the type of assets sold and how the funds generated from the sale are utilised.

If the type of assets are fundamental to the continuing business then this may be viewed as disposing of the corporation's 'crown-jewels'. Such action may be construed as being against protecting the rights of shareholders (similar to the conditions discussed in part (d) below). In order for key assets to be disposed of, the takeover regulatory framework may insist on the corporation obtaining permission from the shareholders first before carrying it out.

On the other hand, the assets may be viewed as not being fundamental to the core business and may be disposed off to generate extra funds through a sell-off (see part (a) above). This may make sense if the corporation is undertaking a programme of restructuring and re-organisation.

In addition to this, the company needs to consider what it intends to do with the funds raised from the sale of assets. If the funds are used to grow the core business and therefore enhancing value, then the shareholders would see this positively and the value of the corporation will probably increase. Alternatively, if there are no profitable alternatives, the funds could be returned to the shareholders through special dividends or share buy-backs. In these circumstances, disposing of assets may be a feasible defence tactic.

However, if the funds are retained but not put to value-enhancing use or returned to shareholders, then the share price may continue to be depressed. And the corporation may still be an attractive takeover target for corporations which are in need of liquid funds. In these circumstances, disposing of assets would not be a feasible defence tactic.

(d) Each of the three conditions aims to ensure that shareholders are treated fairly and equitably.

The mandatory-bid condition through sell out rights allows remaining shareholders to exit the company at a fair price once the bidder has accumulated a certain number of shares. The amount of shares accumulated before the rule applies varies between countries. The bidder must offer the shares at the highest share price, as a minimum, which had been paid by the bidder previously. The main purpose for this condition is to ensure that the acquirer does not exploit their position of power at the expense of minority shareholders.

The principle of equal treatment condition stipulates that all shareholder groups must be offered the same terms, and that no shareholder group's terms are more or less favourable than another group's terms. The main purpose of this condition is to ensure that minority shareholders are offered the same level of benefits, as the previous shareholders from whom the controlling stake in the target company was obtained.

The squeeze-out rights condition allows the bidder to force minority shareholders to sell their stake, at a fair price, once the bidder has acquired a specific percentage of the target company's equity. The percentage varies between countries but typically ranges between 80% and 95%. The main purpose of this condition is to enable the acquirer to gain 100% stake of the target company and prevent problems arising from minority shareholders at a later date.

Note: *Credit will be given for alternative, relevant approaches to the calculations, comments and suggestions/recommendations*

2 (a) (i)

Owed by	Owed to	Local currency m	$ m
Armstrong (USA)	Horan (South (Africa)	US $12·17	12·17
Horan (South Africa)	Massie (Europe)	SA R42·65	3·97
Giffen (Denmark)	Armstrong (USA)	D Kr21·29	3·88
Massie (Europe)	Armstrong (USA)	US $19·78	19·78
Armstrong (USA)	Massie (Europe)	€1·57	2·13
Horan (South Africa)	Giffen (Denmark)	D Kr16·35	2·98
Giffen (Denmark)	Massie (Europe)	€1·55	2·11

Owed to	Owed by Giffen (De) $m	Armtg (US) $m	Horan (SA) $m	Massie (Eu) $m	Total $m
Giffen (De)			2·98		2·98
Armtg (US)	3·88			19·78	23·66
Horan (SA)		12·17			12·17
Massie (Eu)	2·11	2·13	3·97		8·21
Owed by	(5·99)	(14·30)	(6·95)	(19·78)	
Owed to	2·98	23·66	12·17	8·21	
Net	(3·01)	9·36	5·22	(11·57)	

Under the terms of the arrangement, Massie, as the company with the largest debt, will pay Horan $5·22m, as the company with the smallest amount owed. Then Massie will pay Armstrong $6·35m and Giffen will pay Armstrong $3·01m.

(ii) The Armstrong Group may have problems if any of the governments of the countries where the subsidiaries are located object to multilateral netting. However, this may be unlikely here.

The new system may not be popular with the management of the subsidiaries because of the length of time before settlement (up to six months). Not only might this cause cash flow issues for the subsidiaries, but the length of time may mean that some of the subsidiaries face significant foreign exchange risks. The system may possibly have to allow for immediate settlement in certain circumstances, for example, if transactions are above a certain size or if a subsidiary will have significant cash problems if amounts are not settled immediately.

(b) Need to hedge against a fall in interest rate, therefore buy call options. Require 50 contracts (25,000,000/1,000,000) x 6/3.

As Massie is looking to invest on 30 November, December contracts are needed.

Basis
Current price (1 September) – futures price = basis
(100 – 3·6) – 95·76 = 0·64
Unexpired basis = 1/4 x 0·64 = 0·16

Option
Amount received will be (LIBOR – 0·4%) x 25,000,000 x 6/12

If interest rates increase by 0·5% to 4·1%
Expected futures price = (100 – 4·1) – 0·16 = 95·74

Exercise price	97·00	96·50
Futures price	95·74	95·74
Exercise option?	No	No
Gain in basis points	–	–
	€	€
Interest received		
(€25m x 6/12 x (4·1 – 0·4)%)	462,500	462,500
Gain on options	–	–
Premium		
(3·2 x €25 x 50)	(4,000)	
(18·2 x €25 x 50)		(22,750)
Net receipt	458,500	439,750
Effective interest rates	3·67%	3·52%

If interest rates fall by 0·5% to 3·1%

Expected futures price = (100 – 3·1) – 0·16 = 96·74

Exercise price	97·00	96·50
Futures price	96·74	96·74
Exercise option?	No	Yes
Gain in basis points	–	24
	€	€
Interest received		
(€25m x 6/12 x (3·1 – 0·4)%)	337,500	337,500
Gain on options		
(0 and 24 x €25 x 50)	–	30,000
Premium		
(3·2 x €25 x 50)	(4,000)	
(18·2 x €25 x 50)		(22,750)
Net receipt	333,500	344,750
Effective interest rates	2·67%	2·76%

Using a collar

Buy December call at 97·00 for 0·032 and sell December put at 96·50 for 0·123. Net premium received = 0·091.

If interest rates increase to 4·1%

	Buy call	**Sell put**
Exercise price	97·00	96·50
Futures price	95·74	95·74
Exercise option?	No	Yes
	€	
Interest received	462,500	
Loss on exercise		
(76 x €25 x 50)	(95,000)	
Premium		
(9·1 x €25 x 50)	11,375	
Net receipt	378,875	
Effective interest rate	3·03%	

If interest rates fall to 3·1%

	Buy call	**Sell put**
Exercise price	97·00	96·50
Futures price	96·74	96·74
Exercise option?	No	No
	€	
Interest received	337,500	
Loss on exercise	–	
Premium		
(9·1 x €25 x 50)	11,375	
Net receipt	348,875	
Effective interest rate	2·79%	

Summary

	97·00	**96·50**	**Collar**
Interest rates rise to 4·1%	3·67%	3·52%	3·03%
Interest rates fall to 3·1%	2·67%	2·76%	2·79%

The option with the 97·00 exercise price has a higher average figure than the option with the 96·50 exercise price, and can be recommended on that basis, as its worst result is only marginally worse than the 96·50 option. There is not much to choose between them. The collar gives a significantly worse result than either of the options if interest rates rise, because Massie cannot take full advantage of the increase. It is marginally the better choice if interest rates fall. The recommendation would be to choose the option with the 97·00 exercise price, unless interest rates are virtually certain to fall.

3 (a) (i) SOFP if Gupte VC shares are purchased by Flufftort Co and cancelled

	$m
Assets	
Non-current assets	69
Current assets excluding cash	18
Cash	–
Total assets	87
Equity and liabilities	
Share capital	40
Retained earnings	5
Total equity	45
Long-term liabilities	
Bank loan	30
Loan note	5
Total long-term liabilities	35
Current liabilities	7
Total liabilities	42
Total equity and liabilities	87

(ii) SOFP if full refinancing takes place

	$m
Assets	
Non-current assets	125
Current assets excluding cash	42
Cash (balancing figure)	5
Total assets	172
Equity and liabilities	
Share capital	90
Retained earnings	5
Total equity	95
Long-term liabilities	
Bank loan	65
Loan note	–
Total long-term liabilities	65
Current liabilities	12
Total liabilities	77
Total equity and liabilities	172

(iii) Projected SOPL

	2017	2018
	$m	$m
Operating profit	20·0	25·0
Finance cost	(6·5)	(6·5)
Profit before tax	13·5	18·5
Taxation 20%	(2·7)	(3·7)
Profit after tax	10·8	14·8
Dividends	–	–
Retained earnings	10·8	14·8

(b) Current situation

Initial product developments have not generated the revenues required to sustain growth. The new Easicushion chair appears to offer Flufftort Co much better prospects of commercial success. At present, however, Flufftort Co does not have the resources to make the investment required.

Purchase of Gupte VC's shares

In the worst case scenario, Gupte VC will demand repayment of its investment in a year's time. The calculations in (a) show the financial position in a year's time, assuming that there is no net investment in non-current assets or working capital, the purchase of shares is financed solely out of cash reserves and the shares are cancelled. Repayment by this method would mean that the limits set out in the covenant would be breached (45/35 = 1·29) and the bank could demand immediate repayment of the loan.

The directors can avoid this by buying some of Gupte VC's shares themselves, but this represents money which is not being put into the business. In addition, the amount of shares which the directors would have to purchase would be greater if results, and therefore reserves, were worse than expected.

Financing the investment

The calculations in (a) show that the cash flows associated with the refinancing would be enough to finance the initial investment. The ratio of equity to non-current liabilities after the refinancing would be 1·46 (95/65), in line with the current limits in the bank's covenant. However, financing for the subsequent investment required would have to come from surplus cash flows.

Shareholdings

The disposition of shareholdings will change as follows:

	Current shareholdings		Shareholdings after refinancing	
	Number in million	%	Number in million	%
Directors	27·5	55·0	42·5	47·2
Other family members	12·5	25·0	12·5	13·9
Gupte VC	10·0	20·0	30·0	33·3
Loan note holder	–	–	5·0	5·6
	50·0	100·0	90·0	100·0

Gupte VC's percentage shareholding will rise from 20% to 33·3%, enough possibly to give it extra rights over the company. The directors' percentage shareholding will fall from 55% to 47·2%, which means that collectively they no longer have control of the company. The percentage of shares held by family members who are not directors falls from 25% to around 19·5%, taking into account the conversion of the loan note. This will mean, however, that the directors can still maintain control if they can obtain the support of some of the rest of the family.

Position of finance providers

The refinancing has been agreed by the chief executive and finance director. At present, it is not clear what the views of the other directors are, or whether the $15 million contributed by directors will be raised from them in proportion to their current shareholdings. Some of the directors may not be able to, or wish to, make a significant additional investment in the company. On the other hand, if they do not, their shareholdings, and perhaps their influence within the company, will diminish. This may be a greater concern than the board collectively losing control over the company, since it may be unlikely that the other shareholders will combine to outvote the board.

The other family shareholders have not been actively involved in Flufftort Co's management out of choice, so a reduction in their percentage shareholdings may not be an issue for them. They may have welcomed the recent dividend payment as generating a return on their investment. However, as they appear to have invested for the longer term, the new investment appears to offer much better prospects in the form of a capital gain on listing or buy-out than an uncertain flow of dividends. The new investment appears only to have an upside for them in the sense that they are not being asked to contribute any extra funding towards it.

Rajiv Patel is unlikely to be happy with the proposed scheme. He is exchanging a guaranteed flow of income for an uncertain flow of future dividends sometime after 2018. On the other hand, his investment may be jeopardised by the realisation of the worst case scenario, since his debt is subordinated to the bank's debt.

The most important issue from Gupte VC's viewpoint is whether the extra investment required is likely to yield a better outcome than return of its initial investment in a year's time. The plan that no dividends would be paid until after 2018 is a disadvantage. On the other hand, the additional investment seems to offer the only prospect of realising a substantial gain either by Flufftort Co being listed or sold. The arrangement will mean that Gupte VC may be able to exercise greater influence over Flufftort Co, which may provide it with a greater sense of reassurance about how Flufftort Co is being run. The fact that Gupte VC has a director on Flufftort Co's board should also give it a clear idea of how successful the investment is likely to be.

The bank will be concerned about the possibility of Flufftort Co breaching the covenant limits and may be concerned whether Flufftort Co is ultimately able to repay the full amount without jeopardising its existence. The bank will be concerned if Flufftort Co tries to replace loan finance with overdraft finance. The refinancing provides reassurance to the bank about gearing levels and a higher rate of interest. The bank will also be pleased that the level of interest cover under the refinancing is higher and increasing (from 2·0 in 2016 to 3·1 in 2017 and 3·8 in 2018). However, it will be concerned about how Flufftort Co finances the additional investment required if cash flows from the new investment are lower than expected. In those circumstances Flufftort Co may seek to draw on its overdraft facility.

Conclusion

The key players in the refinancing are Gupte VC, the bank and the directors other than the chief executive and the finance director. If they can be persuaded, then the scheme has a good chance of being successful. However, Rajiv Patel could well raise objections. He may be pacified if he retains the loan note. This would marginally breach the current covenant limit (90/70 = 1·29), although the bank may be willing to overlook the breach as it is forecast to be temporary. Alternatively, the refinancing would mean that Flufftort Co just had enough spare cash initially to redeem the loan note, although it would be more dependent on cash surpluses after the refinancing to fund the additional investment required.

4 (a) An annual cash flow account compares the estimated cash flows receivable from the property against the liabilities within the securitisation process. The swap introduces leverage into the arrangement.

Cash flow receivable	$ million	Cash flow payable	$ million
$200 million × 11%	22·00	A-rated loan notes	
Less: Service charge	(0·20)	Pay $108 million (W1) × 11% (W2)	11·88
		B-rated loan notes	
		Pay $27 million (W1) × 12%	3·24
		C-rated loan notes	
		Pay $27 million (W1) × 13%	3·51
	21·80		18·63
		Balance to the subordinated certificates	3·17

Workings

1. Loan notes

		$million
A	$200m × 0·9 × 0·6	108
B	$200m × 0·9 × 0·15	27
C	$200m × 0·9 × 0·15	27

2. Swap

Pay fixed rate under swap	9·5%
Pay floating rate	LIBOR + 1·5%
Receive floating rate under swap	(LIBOR)
Net payment	11%

The holders of the certificates are expected to receive $3·17million on $18 million, giving them a return of 17·6%. If the cash flows are 5% lower than the non-executive director has predicted, annual revenue received will fall to $20·90 million, reducing the balance available for the subordinated certificates to $2·07 million, giving a return of 11·5% on the subordinated certificates, which is below the returns offered on the B and C-rated loan notes. The point at which the holders of the certificates will receive nothing and below which the holders of the C-rated loan notes will not receive their full income will be an annual income of $18·83 million (a return of 9·4%), which is 14·4% less than the income that the non-executive director has forecast.

(b) Benefits

The finance costs of the securitisation may be lower than the finance costs of ordinary loan capital. The cash flows from the commercial property development may be regarded as lower risk than Moonstar Co's other revenue streams. This will impact upon the rates that Moonstar Co is able to offer borrowers.

The securitisation matches the assets of the future cash flows to the liabilities to loan note holders. The non-executive director is assuming a steady stream of lease income over the next 10 years, with the development probably being close to being fully occupied over that period.

The securitisation means that Moonstar Co is no longer concerned with the risk that the level of earnings from the properties will be insufficient to pay the finance costs. Risks have effectively been transferred to the loan note holders.

Risks

Not all of the tranches may appeal to investors. The risk-return relationship on the subordinated certificates does not look very appealing, with the return quite likely to be below what is received on the C-rated loan notes. Even the C-rated loan note holders may question the relationship between the risk and return if there is continued uncertainty in the property sector.

If Moonstar Co seeks funding from other sources for other developments, transferring out a lower risk income stream means that the residual risks associated with the rest of Moonstar Co's portfolio will be higher. This may affect the availability and terms of other borrowing.

It appears that the size of the securitisation should be large enough for the costs to be bearable. However Moonstar Co may face unforeseen costs, possibly unexpected management or legal expenses.

(c) **(i)** Sukuk finance could be appropriate for the securitisation of the leasing portfolio. An asset-backed Sukuk would be the same kind of arrangement as the securitisation, where assets are transferred to a special purpose vehicle and the returns and repayments are directly financed by the income from the assets. The Sukuk holders would bear the risks and returns of the relationship.

The other type of Sukuk would be more like a sale and leaseback of the development. Here the Sukuk holders would be guaranteed a rental, so it would seem less appropriate for Moonstar Co if there is significant uncertainty about the returns from the development.

The main issue with the asset-backed Sukuk finance is whether it would be as appealing as certainly the A-tranche of the securitisation arrangement which the non-executive director has proposed. The safer income that the securitisation offers A-tranche investors may be more appealing to investors than a marginally better return from the Sukuk. There will also be costs involved in establishing and gaining approval for the Sukuk, although these costs may be less than for the securitisation arrangement described above.

(ii) A Mudaraba contract would involve the bank providing capital for Moonstar Co to invest in the development. Moonstar Co would manage the investment which the capital funded. Profits from the investment would be shared with the bank, but losses would be solely borne by the bank. A Mudaraba contract is essentially an equity partnership, so Moonstar Co might not face the threat to its credit rating which it would if it obtained ordinary loan finance for the development. A Mudaraba contract would also represent a diversification of sources of finance. It would not require the commitment to pay interest that loan finance would involve.

Moonstar Co would maintain control over the running of the project. A Mudaraba contract would offer a method of obtaining equity funding without the dilution of control which an issue of shares to external shareholders would bring. This is likely to make it appealing to Moonstar Co's directors, given their desire to maintain a dominant influence over the business.

The bank would be concerned about the uncertainties regarding the rental income from the development. Although the lack of involvement by the bank might appeal to Moonstar Co's directors, the bank might not find it so attractive. The bank might be concerned about information asymmetry – that Moonstar Co's management might be reluctant to supply the bank with the information it needs to judge how well its investment is performing.

Professional Level – Options Module, Paper P4
Advanced Financial Management **September/December 2015 Marking Scheme**

					Marks
1	**(a)**	Up to 2 marks for distinguishing the two forms of unbundling			4
	(b)	**(i)**	Appendix 1		
			Anatra Co, Manufacturing business, PE ratio		1
			Estimate of the value created from sell-off		3
			Appendix 2		
			Cigno Co asset beta		1
			Combined company asset beta		1
			Combined company equity beta		1
			Combined company cost of capital		1
			Appendix 3		
			Sales revenue, years 1 to 4		1
			Operating profit, years 1 to 4		1
			Taxation, years 1 to 4		1
			Capital investment, years 1 to 4		1
			Value from years 1 to 4		1
			Value from year 5 onwards		1
			Value for Cigno Co shareholders before impact of savings from tax and employee cost reduction		2
			Appendix 4		
			Value created from tax and employee cost savings		1
			Value for Cigno Co shareholders after impact of savings from tax and employee cost reduction		1
					18
		(ii)	Discussion of values for the equity holders, additional costs/benefits not given		3–4
			Methods used and assumptions made		4–5
				Max	8
		(iii)	Reputation factors		1–2
			Ethical factors		1–2
			Comment on value		1–2
				Max	4
		Professional marks for part (b)			
		Report format			1
		Structure and presentation of the report			3
					4
	(c)	1 to 2 marks per point		Max	6
	(d)	Up to 2 marks for explaining the purpose of each condition			6
				Total	**50**

					Marks
2	(a)	(i)	Dollar amounts owed and owing		2
			Totals owed and owing		3
			Net amounts owed		1
			Payments and receipts		2
					8
		(ii)	1–2 marks per problem discussed	Max	3
	(b)		Recommendation to purchase calls		1
			Number and month of contracts		1
			Calculation of basis		1
			Options contracts calculations		4
			Collars approach and calculations		5
			Comments and conclusion		2–3
				Max	14
				Total	**25**
3	(a)	(i)	SOFP if shares purchased and cancelled		
			Cash and other assets		2
			Equity		1
			Liabilities		1
					4
		(ii)	SOFP if full refinancing takes place		
			Cash and other assets		2
			Equity		1
			Liabilities		1
					4
		(iii)	2017 forecast		2
			2018 forecast		2
					4
	(b)		Up to 2 marks for each well discussed point	Max	13
				Total	**25**
4	(a)		Calculation of receivable		1
			Loan note amounts attributable to the A, B and C tranches		1
			Impact of swap		2
			Calculation of interest payable on interest for tranches A, B and C-rated tranches		3
			Estimation of return to subordinated certificates		1
			Comments and calculation relating to sensitivity		3
					11
	(b)		Benefits of securitisation		3–4
			Risks associated with securitisation		2–3
				Max	6
	(c)	(i)	Explanation/discussion of suitability of Sukuk finance		2–3
			Discussion of investors' views		1–2
				Max	4
		(ii)	Explanation/discussion of suitability of Mudaraba contract		2–3
			Discussion of bank's views		1–2
				Max	4
				Total	**25**