Answers

1 (a) Pyramid – Consolidated statement of financial position as at 31 March 2012

	$'000	$'000
Assets		
Non-current assets:		
Property, plant and equipment (38,100 + 28,500 + 3,000 fair value – 600 depreciation)		69,000
Goodwill (w (i))		7,400
Investments – associate (w (ii))	6,600	
– fair value equity investments	2,800	9,400
		85,800
Current assets		
Inventory (13,900 + 10,400 + 1,500 GIT – 500 URP (w (iii)))	25,300	
Trade receivables (11,400 + 5,500 – 1,200 CIT – 3,200 intra group (w (iii)))	12,500	
Bank (900 + 600 + 1,200 CIT (w (iii)))	2,700	40,500
Total assets		126,300
Equity and liabilities		
Equity attributable to owners of the parent		
Equity shares of $1 each		25,000
Reserves:		
Share premium	17,600	
Retained earnings (w (iv))	36,380	53,980
		78,980
Non-controlling interest (w (v))		8,480
Total equity		87,460
Non-current liabilities		
11% loan notes (12,000 + 4,000 – 2,500 intra-group)	13,500	
Deferred tax (4,500 + 1,000)	5,500	19,000
Current liabilities		
Deferred consideration (6,400 + 640 unwinding of discount (w (iv)))	7,040	
Other current liabilities (9,500 + 5,000 + 1,500 GIT – 3,200 intra group (w (iii)))	12,800	19,840
Total equity and liabilities		126,300

Workings (figures in brackets are in $'000)

(i) Goodwill in Square

	$'000	$'000
Controlling interest		
Share exchange		24,000
Deferred consideration (10,000 x 80% x 0·88/1·1)		6,400
Non-controlling interest (10,000 x 20% x $3·50)		7,000
		37,400
Equity shares	10,000	
Pre-acquisition reserves	18,000	
Fair value adjustments – plant	3,000	
– unrecorded deferred tax	(1,000)	(30,000)
Goodwill arising on acquisition		7,400

(ii) Carrying amount of Cube at 31 March 2012

	$'000
Cost	6,000
Share post-acquisition profit (2,000 x 30%)	600
	6,600

(iii) Reconciliation of current accounts

	Pyramid $'000	Square $'000
Current account balances per question to eliminate	4,400	1,700
Goods-in-transit (GIT) (16,000 – 14,500)		1,500
Cash-in-transit (CIT) (balance required to reconcile)	(1,200)	
	3,200	3,200

The goods-in-transit sale of $1·5 million includes unrealised profit (URP) of $500,000 (1,500 x 50/150).

(iv) Consolidated retained earnings:

	$'000
Pyramid's retained earnings (16,200 + 14,000)	30,200
Square's post-acquisition profit (7,400 see below x 80%)	5,920
Cube's post-acquisition profit (2,000 x 30%)	600
Interest on deferred consideration (6,400 x 10%)	(640)
URP in inventory (w (iii))	(500)
Gain on equity investments (2,800 – 2,000)	800
	36,380

The adjusted post-acquisition profits of Square are:

As reported	8,000
Additional depreciation on plant (3,000/5 years)	(600)
	7,400

(v) Non-controlling interest

	$'000
Fair value on acquisition (w (i))	7,000
Post-acquisition profit (7,400 x 20% (w (iv)))	1,480
	8,480

2 (a) (i) Fresco – Statement of comprehensive income for the year ended 31 March 2012

	$'000
Revenue	350,000
Cost of sales (w (i))	(311,000)
Gross profit	39,000
Distribution costs	(16,100)
Administrative expenses (26,900 + 3,000 re fraud)	(29,900)
Finance costs (300 + 2,300 (w (ii)))	(2,600)
Loss before tax	(9,600)
Income tax relief (2,400 + 200 (w (iii)) – 800)	1,800
Loss for the year	(7,800)
Other comprehensive income	
Revaluation of leased property (w (ii))	4,000
Total comprehensive losses	(3,800)

(ii) Fresco – Statement of changes in equity for the year ended 31 March 2012

	Share capital $'000	Share premium $'000	Revaluation reserve $'000	Retained earnings $'000	Total equity $'000
Balances at 1 April 2011	45,000	5,000	nil	5,100	55,100
Prior period adjustment (re fraud)				(1,000)	(1,000)
Restated balance				4,100	
Rights share issue (see below)	9,000	4,500			13,500
Total comprehensive losses (see (i) above)			4,000	(7,800)	(3,800)
Transfer to retained earnings			(500)	500	
Balances at 31 March 2012	54,000	9,500	3,500	(3,200)	63,800

The rights issue was 18 million shares (45,000/50 cents each x 1/5) at 75 cents = $13·5 million. This equates to the balance on the suspense account. This should be recorded as $9 million equity shares (18,000 x 50 cents) and $4·5 million share premium (18,000 x (75 cents – 50 cents)).

The discovery of the fraud represents an error part of which is a prior period adjustment ($1 million) in accordance with HKAS 8 *Accounting policies, changes in accounting estimates and errors*.

(iii) Fresco – Statement of financial position as at 31 March 2012

Assets	**$'000**	**$'000**
Non-current assets		
Property, plant and equipment (w (ii))		62,700
Current assets		
Inventory	25,200	
Trade receivables (28,500 – 4,000 re fraud)	24,500	
Current tax refund	2,400	52,100
Total assets		114,800
Equity and liabilities		
Equity (see (ii) above)		
Equity shares of 50 cents each		54,000
Reserves		
Share premium	9,500	
Revaluation	3,500	
Retained earnings	(3,200)	9,800
		63,800
Non-current liabilities		
Finance lease obligation (w (ii))	15,230	
Deferred tax (w (iii))	3,000	18,230
Current liabilities		
Trade payables	27,300	
Finance lease obligation (19,300 – 15,230 (w (ii)))	4,070	
Bank overdraft	1,400	32,770
Total equity and liabilities		114,800

(b) Fresco – Basic earnings per share for the year ended 31 March 2012

Loss per statement of comprehensive income	$7·8 million
Weighted average number of shares (w (iv))	99 million
Loss per share	7·9 cents

Workings (figures in brackets are in $'000)

(i) Cost of sales

	$'000
Per question	298,700
Amortisation of – leased property (w (ii))	4,500
Amortisation of – leased plant (w (ii))	5,000
Depreciation of other plant and equipment ((47,500 – 33,500) x 20%)	2,800
	311,000

(ii) Non-current assets

Carrying amount 1 April 2011 (48,000 – 16,000)	32,000
Revaluation reserve	4,000
Revalued amount 1 April 2011	36,000
Amortisation year to 31 March 2012 (over 8 years)	(4,500)
Carrying amount 31 March 2012	31,500

$500,000 (4,000/8 years) of the revaluation surplus will be transferred to retained earnings (reported in the statement of changes in equity).

Leased plant:	
Fair value 1 April 2011	25,000
Deposit	(2,000)
	23,000
Interest at 10%	2,300
Payment 31 March 2012	(6,000)
Lease obligation 31 March 2012	19,300
Interest at 10%	1,930
Payment 31 March 2013	(6,000)
Lease obligation 31 March 2013	15,230

Amortisation for the leased plant for the year ended 31 March 2012 is $5 million (25,000/5 years).

Summarising the carrying amount of property, plant and equipment as at 31 March 2012:

Leased property	31,500
Owned plant (47,500 – 33,500 – 2,800)	11,200
Leased plant (25,000 – 5,000)	20,000
	62,700

(iii) Deferred tax

Provision required at 31 March 2012 (12,000 x 25%)	3,000
Provision at 1 April 2011	(3,200)
Credit (reduction in provision) to statement of profit or loss (income statement)	200

(iv) Theoretical ex-rights value:

	Shares	$	$
Holding (say)	100	1·20	120
Rights taken up	20	0·75	15
	120		135
Theoretical ex-rights value		1·125	($135/120 shares)

Weighted average number of shares:		
1 April 2011 to 31 December 2011	90 million x 1·20/1·125 x 9/12 =	72 million
1 January 2012 to 31 March 2012	108 million x 3/12 =	27 million
Weighted average for the year		99 million

3 (a) Tangier – Statement of cash flows for the year ended 31 March 2012

(Note: figures in brackets are in $ million)

	$ m	$ m
Cash flows from operating activities:		
Profit before tax		195
Adjustments for:		
Depreciation/amortisation of non-current assets		140
Finance costs		40
Increase in inventory (200 – 110)		(90)
Increase in trade receivables (195 – 75)		(120)
Increase in trade payables (210 – 160)		50
Cash generated from operations		215
Interest paid		(40)
Income tax paid (w (i))		(90)
Net cash from operating activities		85
Cash flows from investing activities:		
Purchase of property, plant and equipment (w (ii))	(305)	
Purchase of intangibles (300 – 200 + 25)	(125)	
Purchase of investment	(230)	
Net cash used in investing activities		(660)
Cash flows from financing activities:		
Shares issued (350 – 250)	100	
Issue of 10% loan notes	300	
Equity dividends paid (w (iii))	(55)	
Net cash from financing activities		345
Net decrease in cash and cash equivalents		(230)
Cash and cash equivalents at beginning of period		120
Cash and cash equivalents at end of period		(110)

Workings

		$ m
(i)	Income tax	
	Provision b/f	(110)
	Statement of profit or loss (Income statement) charge	(60)
	Tax paid (= balance)	90
	Provision c/f	(80)
(ii)	Property, plant and equipment	
	Balance b/f	410
	Depreciation	(115)
	Revaluation	80
	Acquired during year (= balance)	305
	Balance c/f	680
(iii)	Equity dividends	
	Retained earnings b/f	295
	Profit for the year	135
	Dividends paid (= balance)	(55)
	Retained earnings c/f	375

(b) Note: references to '2012' are in respect of the year ended 31 March 2012 and '2011' to the year ended 31 March 2011.

Despite an increase in revenue of 48·4% (880/1,820 x 100) in 2012, the company suffered a dramatic fall in its profitability. This has been caused by a combination of a falling gross profit margin (from 40% in 2011 to only 30% in 2012) and markedly higher operating overheads. An eight-fold increase in finance costs, caused by the increased borrowing at double the interest rate of existing borrowing and some bank overdraft interest, has led to profit before tax more than halving.

This is reflected in the ROCE falling from an impressive 61·7% in 2011 to only 19·5% in 2012 (though even this figure is respectable). The fall in the ROCE is attributable to a dramatic fall in profit margin at the operating level (from 21·9% in 2011 to only 8·7% in 2012) which has been compounded by a reduction in the non-current asset turnover, with only $2·23 being generated from every $1 invested in non-current assets in 2012 (from $2·98 in 2011).

The information in the question points strongly to the possibility (even probability) that the new contract may be responsible for much of the deterioration in Tangier's performance. It is likely that the new contract may account for the increased revenue; however, the bidding process was 'competitive' which implies that Tangier had to cut its price (and therefore its profit margin) in order to win the contract.

The costs of fulfilling the contract have also been heavy:

Investment in property, plant and equipment has increased by $270 million (at carrying amount) representing an increase of 66% (though this increase would be 46% on a comparative basis if carrying amounts in 2012 were adjusted for the effect of the property revaluation of $80 million (ignoring its depreciation)).

The licence to manufacture the new engines has cost $125 million (allowing for amortisation as shown in the statement of cash flows).

The investment in Raremetal to secure materials supplies has cost $230 million. There has been no benefit in 2012 from this investment in terms of dividends or capital growth. It is impossible to quantify the benefit of securing material supplies, which was the main reason for the investment, but it has come at a high cost. It is also questionable how the investment has 'secured' the provision of materials as an 8% equity investment does not normally give any meaningful influence over the investee. An alternative (less expensive) strategy might have been to enter into a long-term supply contract with Raremetal.

The finance cost of the additional loan to partly fund the investment in non-current assets has also reduced reported profit and increased debt/equity (one form of gearing measure) from 18·3% in 2011 to 49·7% in 2012. At this level, particularly in view of the large increase from 2011, it may give debt holders (and others) cause for concern. If it could be demonstrated that the overdraft could not be cleared for some time, this would be an argument for including it in the calculation of debt/equity, making the gearing level even worse.

It could be speculated that the 73% increase in administrative expenses may be due to one-off costs associated with the tendering process (consultancy fees, management time, etc) and the 77% increase in distribution costs could be due to additional freight/packing/insurance costs of the engines and delivery distances may also be longer (even abroad).

All of this seems to indicate that the new contact has been very detrimental to Tangier's performance, but more information is needed to be sure. The contract was not signed until June 2011 and there is no information of when production/sales started, but clearly there has not been a full year's revenue from the contract. Also there is no information on how long (or what total value) the contract is for. Unless the contract is for a considerable time, the increased investment in operating assets represents a considerable risk. There are no figures for the separate revenues and costs of the contract, but from 2012's declining performance it does not seem profitable, thus even if the contract does secure work for several years, it is of doubtful benefit if the work is loss-making. An alternative scenario could be that the early costs associated with the contract are part of a 'learning curve' and that future production will be more efficient and therefore the contract may become profitable as a result.

Salient ratios

	2012	2011
Gross profit margin (810/2,700 x 100)	30·0%	40·0%
Profit margin before interest (235/2,700 x 100)	8·7%	21·9%
ROCE (235/(805 + 400))	19·5%	61·7%
Non-current asset turnover (2,700/1,210)	2·23 times	2·98 times
Debt/equity (400/805)	49·7%	18·3%

Tutorial note:
The workings for the 2012 ratio calculations are shown, the ratios for 2011 are calculated equivalently. Alternative ratio calculations and ratios would be acceptable. For example, ROCE and non-current asset turnover for 2012 could exclude the effect of the property revaluation and/or include the bank overdraft as long-term finance. Net asset turnover (revenue/capital employed) and gearing (debt/capital employed) could be given as alternatives.

4 (a) An impairment review is the procedure required by HKAS 36 *Impairment of assets* to determine if and by how much an asset may have been impaired. An asset is impaired if its carrying amount is greater than its recoverable amount. In turn the recoverable amount of an asset is defined as the higher of its fair value less costs to sell or its value in use, calculated as the present values of the future net cash flows the asset will generate.

The problem in applying this definition is that assets rarely generate cash flows in isolation; most assets generate cash flows in combination with other assets. HKAS 36 introduces the concept of a cash generating unit (CGU) which is the smallest identifiable group of assets that generate cash inflows that are (largely) independent of other assets. Where an asset forms part of a CGU any impairment review must be made on the group of assets as a whole. If impairment losses are then identified, they must be allocated and/or apportioned to the assets of the CGU as prescribed by HKAS 36.

(b) (i) The carrying amount of the plant at 31 March 2012, before the impairment review, is $500,000 (800,000 – (150,000 x 2)) where $150,000 is the annual depreciation charge ((800,000 cost – 50,000 residual value)/5 years).

This needs to be compared with the recoverable amount of the plant which must be its value in use as it has no market value at this date.

Value in use:

		Cash flow $'000	Discount factor at 10%	Present value $'000
year ended:	31 March 2013	220	0·91	200
	31 March 2014	180	0·83	149
	31 March 2015	170 + 50	0·75	165
				514

At 31 March 2012, the plant's value in use of $514,000 is greater than its carrying amount of $500,000. This means the plant is not impaired and it should continue to be carried at $500,000.

(ii)

	Per question $'000	After plant write off $'000		After impairment losses $'000
Goodwill	1,800	1,800	write off in full	nil
Patent	1,200	1,200	at realisable value	1,000
Factory	4,000	4,000	pro rata loss of 40%	2,400
Plant	3,500	3,000	pro rata loss of 40%	1,800
Receivables and cash	1,500	1,500	realisable value	1,500
	12,000	11,500	value in use	6,700

The plant with a carrying amount of $500,000 that has been damaged to the point of no further use should be written off (it no longer meets the definition of an asset). The carrying amounts in the second column above are after writing off this plant.

After this, firstly, goodwill is written off in full.

Secondly, any remaining impairment loss should write off the remaining assets pro rata to their carrying amounts, except that no asset should be written down to less than its fair value less costs to sell (net realisable value).

After writing off the damaged plant the remaining impairment loss is $4·8 million (11·5m – 6·7m) of which $1·8 million is applied to the goodwill, $200,000 to the patent (taking it to its realisable value) and the remaining $2·8 million is apportioned pro rata at 40% (2·8m/(4m + 3m)) to the factory and the remaining plant.

The carrying amounts of the assets of Tilda, at 31 March 2012 after the accident, are as shown in the third column above.

5 (a) A rules-based accounting system is likely to be very descriptive and is generally considered to be a system which relies on a series of detailed rules or accounting requirements that prescribe how financial statements should be prepared. Such a system is considered less flexible, but often more comparable and consistent, than a principles-based system. Some would argue that rules-based systems can lead to looking for 'loopholes'. By contrast, a principles-based system relies on generally accepted accounting principles that are conceptually based and are normally underpinned by a set of key objectives. They are more flexible than a rules-based system, but they do require judgement and interpretation which could lead to inconsistencies between reporting entities and can sometimes lead to the manipulation of financial statements.

Because HKFRSs are based on *The Conceptual Framework for Financial Reporting*, they are often regarded as being a principles-based system. Of course HKFRSs do contain many rules and requirements (often lengthy and complex), but their critical feature is that HKFRS 'rules' are based on underlying concepts. In reality most accounting systems have an element of both rules and principles and their designation as rules-based or principles-based depends on the relative importance and robustness of the principles compared to the volume and manner in which the rules are derived.

(b) There are several aspects of Baxen's business strategy where adopting HKFRS would be advantageous.

It is unclear how sophisticated or developed the 'local' standards which it currently uses are, however, it is widely accepted that HKFRS are a set of high quality and transparent standards that are intended to achieve consistency and comparability across the world. They are based on, and converged with, International Financial Reporting Standards (IFRS) which have been produced in co-operation with other internationally renowned standard setters, with the aspiration of achieving consensus and global convergence. Thus if Baxen does adopt HKFRS it is likely that its status and reputation (for example, an improved credit rating) in the eyes of other entities would be enhanced.

Other more specific advantages might be:

Its own financial statements would be comparable with other companies that use HKFRS or IFRS. This would help the company to better assess and rank prospective investments in its foreign trading partners.

Should Baxen acquire (as a subsidiary) any foreign companies, it would make the task of consolidation much simpler as there would be no need to reconcile its foreign subsidiary's financial statements to the local generally accepted accounting principles (GAAP) that Baxen currently uses. The use of HKFRSs may make the audit fee less expensive.

Since HKFRS is converged with IFRS, if Baxen needs to raise finance in the future (highly likely because of its ambitions), it will find it easier to get a listing on any security exchange that is a member of the International Organisation of Securities Commissions (IOSCO) as they recognise IFRS for listing purposes. This flexibility to raise funding also means that Baxen's financing costs should be lower.

This marking scheme is given as a guide in the context of the suggested answers. Scope is given to markers to award marks for alternative approaches to a question, including relevant comment, and where well-reasoned conclusions are provided. This is particularly the case for written answers where there may be more than one acceptable solution.

			Marks
1	Statement of financial position:		
	property, plant and equipment		2
	goodwill		4½
	investments – associate		1
	– other equity		1
	inventory		2
	receivables		1½
	bank		1
	equity shares		½
	share premium		½
	retained earnings		4½
	non-controlling interest		1½
	11% loan notes		1½
	deferred tax		1
	deferred consideration		1
	other current liabilities		1½
		Total for question	**25**

2	**(a)** **(i)** Statement of comprehensive income		
	revenue		½
	cost of sales		3
	distribution costs		½
	administrative expenses		1
	finance costs		1½
	income tax relief		2
	other comprehensive income		½
			9
	(ii) Statement of changes in equity		
	balances b/f		1
	prior period adjustment		1
	rights issue		1
	comprehensive income		1
	transfer to retained earnings		1
			5
	(iii) Statement of financial position		
	property, plant and equipment		2½
	inventory		½
	trade receivables		1
	current tax		1
	non-current lease obligation		½
	deferred tax		1
	trade payables		½
	current lease obligation		½
	bank overdraft		½
			8
	(b) Basic earnings per share		
	loss per comprehensive income		½
	theoretical ex-rights value		1
	calculation of weighted average number of shares		1½
			3
		Total for question	**25**

				Marks
3	(a)	profit before tax		½
		depreciation/amortisation		1
		finance cost adjustment (added back)		½
		working capital items		1½
		interest paid (outflow)		½
		income tax paid		1
		purchase of property, property, plant and equipment		1½
		purchase of intangibles		1
		purchase of investment		½
		share issue		½
		10% loan note issue		½
		equity dividends paid		1
		cash b/f		½
		cash c/f		½
				11
	(b)	1 mark per valid point (up to 4 marks for ratios)		**14**
			Total for question	**25**
4	(a)	1 mark per valid point		4
	(b)	**(i)** carrying amount before impairment test		1
		value in use		2
		conclude not impaired and carry at $500,000		1
				4
		(ii) damaged plant written off		1
		goodwill written off		1
		patent at $1 million		1
		cash and receivables already at realisable value – no impairment		1
		calculation of remaining loss/pro rata percentage		1
		apply to building and plant only		2
				7
			Total for question	**15**
5	(a)	1 mark per valid point		4
	(b)	1 mark per valid point		6
			Total for question	**10**