
Answers

1 (a) Viagem: Consolidated goodwill on acquisition of Greca as at 1 January 2012

	\$'000	\$'000
Investment at cost		
Shares (10,000 x 90% x 2/3 x \$6.50)		39,000
Deferred consideration (9,000 x \$1.76/1.1)		14,400
Non-controlling interest (10,000 x 10% x \$2.50)		2,500
		<u>55,900</u>
Net assets (based on equity) of Greca as at 1 January 2012		
Equity shares	10,000	
Retained earnings b/f at 1 October 2011	35,000	
Earnings 1 October 2011 to acquisition (6,200 x 3/12)	1,550	
Fair value adjustments: plant	1,800	
contingent liability recognised	(450)	
	<u></u>	
Net assets at date of acquisition		(47,900)
Consolidated goodwill		<u>8,000</u>

(b) Viagem: Consolidated income statement for the year ended 30 September 2012

	\$'000
Revenue (64,600 + (38,000 x 9/12) – 7,200 intra-group sales)	85,900
Cost of sales (working)	(64,250)
Gross profit	<u>21,650</u>
Distribution costs (1,600 + (1,800 x 9/12))	(2,950)
Administrative expenses (3,800 + (2,400 x 9/12) + 2,000 goodwill impairment)	(7,600)
Income from associate (2,000 x 40% based on underlying earnings)	800
Finance costs (420 + (14,400 x 10% x 9/12 redeferred consideration))	(1,500)
Profit before tax	<u>10,400</u>
Income tax expense (2,800 + (1,600 x 9/12))	(4,000)
Profit for the year	<u>6,400</u>
Profit for year attributable to:	
Equity holders of the parent	6,180
Non-controlling interest (((6,200 x 9/12) – 450 depreciation – 2,000 goodwill impairment) x 10%)	220
	<u>6,400</u>
Working in \$'000	
Cost of sales	
Viagem	51,200
Greca (26,000 x 9/12)	19,500
Intra-group purchases (800 x 9 months)	(7,200)
URP in inventory (1,500 x 25/125)	300
Additional depreciation (1,800/3 years x 9/12)	450
	<u>64,250</u>

- (c)** The main difference in the consolidated financial statements under Rol accounting standards would be in the calculation of goodwill and the non-controlling (or minority) interest. The IFRS 'full' fair value method used by Greca in the answer to (a) is not permitted under Rol standards. The Rol rules are the equivalent of calculating the non-controlling interest at its proportion of the fair value of the subsidiary's net assets. The effect of this is that the non-controlling interest does not include its share of any consolidated goodwill and the consolidated goodwill figure itself is therefore based only on the parent's element of goodwill.

Another major difference is that (normally) goodwill under Rol rules has to be amortised over its estimated life, whereas IFRS rules do not permit the amortisation of goodwill. Instead, IFRS rules require that goodwill must be tested for impairment annually. Rol rules require consolidated goodwill to be tested for impairment at the end of the first period after acquisition and subsequently only where there is any indication that goodwill has been impaired. In the example of Greca, its goodwill has been impaired at 30 September 2012 and this has caused a write down of \$2 million. Under Rol rules, the write down would be less as it would only apply to the parent's element of goodwill (the \$2 million in the question relates to both the parent's and the non-controlling interest's goodwill). Furthermore, any Rol write down would only occur if the impairment still existed after the Rol amortisation charge had been taken into account.

2 (a) Quincy – Statement of comprehensive income for the year ended 30 September 2012

	\$'000
Revenue (213,500 – 1,600 (w (i)))	211,900
Cost of sales (w (ii))	(147,300)
Gross profit	64,600
Distribution costs	(12,500)
Administrative expenses (19,000 – 1,000 loan issue costs (w (iv)))	(18,000)
Loss on fair value of equity investments (17,000 – 15,700)	(1,300)
Investment income	400
Finance costs (w (iv))	(1,920)
Profit before tax	31,280
Income tax expense (7,400 + 1,100 – 200 (w (v)))	(8,300)
Profit for the year	22,980
Other comprehensive income	
Gain on revaluation of land and buildings (w (iii))	18,000
Total comprehensive income	40,980

(b) Quincy – Statement of changes in equity for the year ended 30 September 2012

	Share capital \$'000	Revaluation reserve \$'000	Retained earnings \$'000	Total equity \$'000
Balance at 1 October 2011	60,000	nil	18,500	78,500
Total comprehensive income		18,000	22,980	40,980
Transfer to retained earnings (w (iii))		(1,000)	1,000	nil
Dividend paid (60,000 x 4 x 8 cents)			(19,200)	(19,200)
Balance at 30 September 2012	60,000	17,000	23,280	100,280

(c) Quincy – Statement of financial position as at 30 September 2012

	\$'000	\$'000
Assets		
Non-current assets		
Property, plant and equipment (57,000 + 42,500 (w (iii)))		99,500
Equity financial asset investments		15,700
		115,200
Current assets		
Inventory	24,800	
Trade receivables	28,500	
Bank	2,900	56,200
Total assets		171,400
Equity and liabilities		
Equity		
Equity shares of 25 cents each		60,000
Revaluation reserve	17,000	
Retained earnings	23,280	40,280
		100,280
Non-current liabilities		
Deferred tax (w (v))	1,000	
Deferred revenue (w (i))	800	
6% loan note (2014) (w (iv))	24,420	26,220
Current liabilities		
Trade payables	36,700	
Deferred revenue (w (i))	800	
Current tax payable	7,400	44,900
Total equity and liabilities		171,400

Workings (figures in brackets in \$'000)

- (i) Sales made which include revenue for ongoing servicing work must have part of the revenue deferred. The deferred revenue must include the normal profit margin (25%) for the deferred work. At 30 September 2012, there are two more years of servicing work, thus \$1.6 million $((600 \times 2) \times 100/75)$ must be treated as deferred revenue, split equally between current and non-current liabilities.

- (ii) Cost of sales

	\$'000
Per trial balance	136,800
Depreciation of building (w (iii))	3,000
Depreciation of plant (w (iii))	7,500
	<u>147,300</u>

- (iii) Non-current assets

Land and buildings:

The gain on revaluation and carrying amount of the land and buildings is:

	Land \$'000		Building \$'000
Carrying amount as at 1 October 2011	10,000	(40,000 – 8,000)	32,000
Revalued amount as at this date	(12,000)	(60,000 – 12,000)	(48,000)
Gain on revaluation	<u>2,000</u>		<u>16,000</u>
Building depreciation year to 30 September 2012 (48,000/16 years)			3,000

The transfer from the revaluation reserve to retained earnings in respect of 'excess' depreciation (as the revaluation is realised) is \$1 million $(48,000 - 32,000)/16$ years.

The carrying amount at 30 September 2012 is \$57 million $(60,000 - 3,000)$.

Plant and equipment:

	\$'000
Carrying amount as at 1 October 2011 $(83,700 - 33,700)$	50,000
Depreciation at 15% per annum	(7,500)
Carrying amount as at 30 September 2012	<u>42,500</u>

- (iv) Loan note

The finance cost of the loan note is charged at the effective rate of 8% applied to the carrying amount of the loan. The issue costs of the loan (\$1 million) should be deducted from the proceeds of the loan (\$25 million) and not treated as an administrative expense. This gives an initial carrying amount of \$24 million and a finance cost of \$1,920,000 $(24,000 \times 8\%)$. The interest actually paid is \$1.5 million $(25,000 \times 6\%)$ and the difference between these amounts, of \$420,000 $(1,920 - 1,500)$, is accrued and added to the carrying amount of the loan note. This gives \$24.42 million $(24,000 + 420)$ for inclusion as a non-current liability in the statement of financial position.

Note: The loan interest paid of \$1.5 million plus the dividend paid of \$19.2 million (see (b)) equals the \$20.7 million shown in the trial balance for these items.

- (v) Deferred tax

	\$'000
Provision required as at 30 September 2012 $(5,000 \times 20\%)$	1,000
Less provision b/f	(1,200)
Credit to income statement	<u>200</u>

- 3 (a)** Below are the specified ratios for Quartile and (for comparison) those of the business sector average:

		Quartile	sector average
Return on year-end capital employed $((3,400 + 800)/(26,600 + 8,000) \times 100)$		12.1%	16.8%
Net asset turnover $(56,000/34,600)$		1.6 times	1.4 times
Gross profit margin $(14,000/56,000 \times 100)$		25%	35%
Operating profit margin $(4,200/56,000 \times 100)$		7.5%	12%
Current ratio $(11,200/7,200)$		1.6:1	1.25:1
Average inventory $(8,300 + 10,200/2) = 9,250$ turnover $(42,000/9,250)$		4.5 times	3 times
Trade payables' payment period $(5,400/43,900 \times 365)$		45 days	64 days
Debt to equity $(8,000/26,600 \times 100)$		30%	38%

(b) Assessment of comparative performance

Profitability

The primary measure of profitability is the return on capital employed (ROCE) and this shows that Quartile's 12.1% is considerably underperforming the sector average of 16.8%. Measured as a percentage, this underperformance is 28% ($(16.8 - 12.1)/16.8$). The main cause of this seems to be a much lower gross profit margin (25% compared to 35%). A possible explanation for this is that Quartile is deliberately charging a lower mark-up in order to increase its sales by undercutting the market. There is supporting evidence for this in that Quartile's average inventory turnover at 4.5 times is 50% better than the sector average of 3 times. An alternative explanation could be that Quartile has had to cut its margins due to poor sales which have had a knock-on effect of having to write down closing inventory.

Quartile's lower gross profit percentage has fed through to contribute to a lower operating profit margin at 7.5% compared to the sector average of 12%. However, from the above figures, it can be deduced that Quartile's operating costs at 17.5% ($25\% - 7.5\%$) of revenue appear to be better controlled than the sector average operating costs of 23% ($35\% - 12\%$) of revenue. This may indicate that Quartile has a different classification of costs between cost of sales and operating costs than the companies in the sector average, or that other companies may be spending more on advertising/selling commissions in order to support their higher margins.

The other component of ROCE is asset utilisation (measured by net asset turnover). If Quartile's business strategy is indeed to generate more sales to compensate for lower profit margins, a higher net asset turnover would be expected. At 1.6 times, Quartile's net asset turnover is only marginally better than the sector average of 1.4 times. Whilst this may indicate that Quartile's strategy was a poor choice, the ratio could be partly distorted by the property revaluation and also by whether the deferred development expenditure should be included within net assets for this purpose, as the net revenues expected from the development have yet to come on stream. If these two aspects were adjusted for, Quartile's net asset turnover would be 2.1 times ($56,000/(34,600 - 5,000 - 3,000)$) which is 50% better than the sector average.

In summary, Quartile's overall profitability is below that of its rival companies due to considerably lower profit margins, although this has been partly offset by generating proportionately more sales from its assets.

Liquidity

As measured by the current ratio, Quartile has a higher level of cover for its current liabilities than the sector average (1.6:1 compared to 1.25:1). Quartile's figure is nearer the 'norm' of expected liquidity ratios, often quoted as between 1.5 and 2:1, with the sector average (at 1.25:1) appearing worryingly low. The problem of this 'norm' is that it is generally accepted that it relates to manufacturing companies rather than retail companies, as applies to Quartile (and presumably also to the sector average). In particular, retail companies have very little, if any, trade receivables as is the case with Quartile. This makes a big difference to the current ratio and makes the calculation of a quick ratio largely irrelevant. Consequently, retail companies operate comfortably with much lower current ratios as their inventory is turned directly into cash. Thus, if anything, Quartile has a higher current ratio than might be expected. As Quartile has relatively low inventory levels (deduced from high inventory turnover figures), this means it must also have relatively low levels of trade payables (which can be confirmed from the calculated ratios). The low payables period of 45 days may be an indication of suppliers being cautious with the credit period they extend to Quartile, but there is no real evidence of this (e.g. the company is not struggling with an overdraft). In short, Quartile does not appear to have any liquidity issues.

Gearing

Quartile's debt to equity at 30% is lower than the sector average of 38%. Although the loan note interest rate of 10% might appear quite high, it is lower than the ROCE of 12.1% (which means shareholders are benefiting from the borrowings) and the interest cover of 5.25 times ($(3,400 + 800)/800$) is acceptable. Quartile also has sufficient tangible assets to give more than adequate security on the borrowings, therefore there appear to be no adverse issues in relation to gearing.

Conclusion

Quartile may be right to be concerned about its declining profitability. From the above analysis, it seems that Quartile may be addressing the wrong market (low margins with high volumes). The information provided about its rival companies would appear to suggest that the current market appears to favour a strategy of higher margins (probably associated with better quality and more expensive goods) as being more profitable. In other aspects of the appraisal, Quartile is doing well compared to other companies in its sector.

- (c)** Where development expenditure meets the criteria for deferment (capitalisation) under RoI rules (which are broadly similar to IFRS criteria), the directors have a choice of capitalising the expenditure or writing it off as an expense (presumably applying prudence). The effects of choosing the write off option would be to reduce the profit for the period (and therefore equity) and the intangible non-current assets. This would affect any ratios that use these figures.

The return on capital employed (ROCE) is perhaps the most obvious and important ratio affected. Both the numerator (the return) and the denominator (capital employed) would be reduced by the cost of the development expenditure written off. The overall effect would be to almost certainly report a lower ROCE. (If, in the unlikely case the ROCE was over 100%, the ROCE would be increased by the write off.)

The debt/equity ratio (one form of gearing) would also be affected. The write down would cause a reduction in equity with no effect on debt, thus increasing the gearing. (This would also be true, but by a different percentage, if gearing were measured as debt/debt + equity.)

Note: Other relevant ratios may be acceptable, but they must be ratios that would be different when applying the RoI alternative treatment for the development expenditure.

- 4 (a) The main objective of financial statements is to provide information that is useful to a wide range of users for the purpose of making economic decisions. Therefore it is important that the activities and events of the entity, as expressed within the financial statements, are understood by users, meaning that their usefulness and relevance is maximised. This can present management with a problem because clearly not all users have the same (financial) abilities and knowledge. For the purpose of understandability, management are allowed to assume users do have a reasonable knowledge of accounting and business and are prepared to study the financial statements diligently. Importantly, this characteristic cannot be used by management to avoid disclosing complex information that may be relevant in user decision-making. However, management must recognise that too much or overly complex disclosure can obscure the more important aspects of an entity's performance, i.e. important information should not be 'buried' in the detail of unfathomable information.

Comparability is the main tool by which users can assess the performance of an entity. This can be done through trend analysis of the same entity's financial statements over time (say five years), or by comparing one entity with other (suitable) entities (or business sector averages) for the same time period. This means that the measurement and disclosure (classification) of like transactions should be consistent over time for the same entity, and (ideally) between different entities. Consistency and comparability are facilitated by the existence and disclosure of accounting policies. The above illustrates the close correlation between comparability and consistency. However it is not always possible for an entity to apply the same accounting policies every year; sometimes they have to change (e.g. because of a new accounting standard or a change in legislation). Similarly, it is not practical for accounting standards to require all entities to adopt the same accounting policies.

Thus, if an entity does change an accounting policy, this breaks the principle of consistency. In such circumstances, IFRSs normally require that any reported comparatives (previous year's financial statements) are restated as if the new policy had been in force when those statements were originally reported. In this way, although there has been a change of policy, comparability has been maintained.

It is more difficult to address the issue of consistency across entities; as already stated, accounting standards cannot prescribe the use of the same policy for all entities (this would be uniformity). However, accounting standards do prohibit certain accounting treatments (considered inappropriate or inferior) and they do require entities to disclose their accounting policies, such that users become aware of differences between entities and this may allow them to make value adjustments when comparing entities using different policies.

- (b) (i) Lobden's income statement (extracts) for the year ended:

		30 September 2012
		\$million
Revenue (based on work certified)	(160 – 100)	60
Cost of sales (balance)		(48)
Profit	((50 x 160/250) – 20)	<u>12</u>

Statement of financial position (extracts) as at:

		30 September 2012
		\$million
Current assets:		
Amounts due from customers		145
Contract costs to date		<u>32</u>
Profit recognised (cumulative 20 + 12)		177
Progress billings (cumulative)		<u>(160)</u>
Amounts due from customers		<u>17</u>
Contract receivables	(160 – 150)	<u>10</u>

- (ii) The relevant issue here is what constitutes the accounting policy for construction contracts. Where there is uncertainty in the outcome of a contract, the appropriate accounting policy would be the completed contract basis (i.e. no profit is taken until the contract is completed. Similarly, any expected losses should be recognised immediately. Where the outcome of a contract is reasonably foreseeable, the appropriate accounting policy is to accrue profits by the percentage of completion method. If this is accepted, it becomes clear that the different methods of determining the percentage of completion of construction contracts are different accounting estimates. Thus the change made by Lobden in the year to 30 September 2012 represents a change of accounting estimate. This approach complies with the guidance in IAS 11 *Construction Contracts* paras 30 and 38.

5 (a) (i) Shawler statement of financial position (extract) as at 30 September 2012

	Carrying amount	
Non-current assets:	\$	
Furnace: main body	42,000	(48,000 – (60,000/10 years))
replaceable liner	4,000	(6,000 – (10,000/5 years))
Current liabilities		
Government grant	1,200	(prior year amount transferred to the income statement)
Non-current liabilities		
Government grant	7,200	(8,400 – 1,200 (12,000/10 years) transferred to current liabilities)
Environmental provision	19,440	(18,000 x 1.08)

(ii) Income statement (extract) year ended 30 September 2012

	\$
Depreciation (6,000 + 2,000)	8,000
Government grant (credited)	(1,200)
Finance costs (18,000 x 8%)	1,440

- (b)** Although the legislation requiring the fitting of the filters has been passed, it does not come into force for two years. Even if Shawler has the intention of fitting the filters within this period, this still does not constitute an obligating event; therefore no provision should be made for this future cost. Surprisingly, even if Shawler had not fitted the filters before the date required by the legislation, it would still not require a provision. However, there could be a separate provision required for a liability to a fine.

As it would be the fitting of the filters that directly causes the reduction in the environmental clean-up costs, it follows that until the filters are actually fitted, Shawler could not reduce its environmental provision.

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.

	<i>Marks</i>
1 (a) consolidated goodwill:	
consideration – share exchange	1½
– deferred	1½
– NCI	1
net assets – equity	½
– retained at acquisition	1
– fair value adjustments	1½
	7
(b) consolidated income statement:	
revenue	2
cost of sales	2½
distribution costs	1
administrative expenses	2
income from associate	1½
finance costs	1½
income tax	1
profit for year – parent	½
– NCI	2
	14
(c) 1 mark per valid point	4
Total for question	25
2 (a) statement of comprehensive income	
revenue	1½
cost of sales	2
distribution costs	½
administrative expenses	1
loss on investments	1
investment income	½
finance costs	1½
income tax expense	2
gain on revaluation of land and buildings	1
	11
(b) statement of changes in equity	
balances b/f	1
total comprehensive income	1
dividend paid	1
transfer of revaluation surplus to retained earnings	1
	4
(c) statement of financial position	
property, plant and equipment	2½
equity investments	1
inventory	½
trade receivables	½
bank	½
deferred tax	1
deferred revenue	1
6% loan note	1½
trade payables	½
current tax payable	1
	10
Total for question	25

		<i>Marks</i>
3	(a) ROCE 2 marks, all others 1 mark	9
	(b) 1 mark per valid comment	12
	(c) 1 mark per valid comment	4
Total for question		25
4	(a) 1 mark per valid point: understandability comparability	2 4 6
	(b) (i) revenue cost of sales recognised profit amounts due from customers contract receivables	2 $\frac{1}{2}$ 2 2 $\frac{1}{2}$ 7
	(ii) discussion conclusion	1 1 2
Total for question		15
5	(a) (i) furnace government grant ($\frac{1}{2}$ for split) environmental provision	1 1 1 3
	(ii) depreciation government grant (credit) finance costs	1 1 1 3
	(b) not an obligating event as legislation not yet in force need not provide for cost of filters even when it is in force may need separate provision for a fine cannot reduce the environmental provision	1 1 1 1 4
Total for question		10