Answers

Section A

1 B

2 A

3 A

The repayment of the grant must be treated as a change in accounting estimate. The carrying amount of the asset must be increased as the netting off method has been used. The resulting extra depreciation must be charged immediately to profit or loss.

	Original		**As if no grant**		**Adjustment**
Cost	90,000		90,000		
Grant	(30,000)				
	60,000				
Depreciation	(10,000)	[1 yr]	(30,000)	[2 yr]	Dr Depn exp 20,000
Carrying amount	50,000	[1/1/X7]	60,000	[31/12/X7]	Dr PPE 10,000
					Cr Liability 30,000

4 A

5 C

710,000 + (480,000 x 3/12) – (20,000 x 3) + (20,000 x 25/125) = $774,000

6 D

7 D

8 C

Net total being paid over four years (($5,000 x 4 years) – $1,000)	19,000
Annual charge spread evenly over the lease term ($19,000/4 years)	4,750

9 A

10 A

3,250 + 1,940 + (800 – 600 x 30%) = 5,250,000

11 C

12 D

FV of NCI at acquisition		1,100
Profit for year x 30%	3,200	
Depn on FVA (1·5m/30)	(50)	
Unrealised profit	(550)	
	2,600 x 30%	780
		1,880

13 B

14 B

Retained earnings = 300 + ((150 – 90) x 75%) = 345
Total equity = 125 + 345 = 470

15 B

	$'000
Production cost of PPE	6,000
Capitalisation of borrowing costs:	
$6m x 6% x 9/12 =	270
Total cost capitalised (and carrying amount) at 30 September 20X2	6,270

Section B

16 D

Depreciation 1 January to 30 June 20X4 (80,000/10 x 6/12) = 4,000
Depreciation 1 July to 31 December 20X4 (81,000/9 x 6/12) = 4,500
Total depreciation = 8,500

17 D

18 B

VIU is lower than FV (less costs to sell), so impairment is 60,750 – 43,000 = $17,750

19 D

20 A

The impairment loss of $220m (1,170 – 950) is allocated: $35m to damaged plant and $85m to goodwill, the remaining $100m allocated proportionally to the building and the undamaged plant. The carrying amount of the plant will then be $262,500.

21 B

22 C

Yr 1 2,000,000 x 11·65% = 23,300
Yr 2 (2,000,000 + 23,000 – 55,000) x 11·65% = $19,607

23 B

24 B

25 A

Profit on sale = 120,000 (370 – 250) spread over 5 yrs = $24,000

26 A

27 B

1,000/1,500 x 1,200 = $800

28 D

500/1,500 x 1,200 = 400/2 = $200

29 C

$30,000 (400 – 500 x 30%).
Revaluation and deferred tax of headquarters goes through OCI.

30 B

$60,000 (200 x 30%)
Dr Income tax expense Cr Deferred tax liability

Section C

31 (a) Triage Co – Schedule of adjustments to profit for the year ended 31 March 20X6

	$'000
Draft profit before interest and tax per trial balance	30,000
Adjustments re:	
Note (i)	
Convertible loan note finance costs (w (i))	(3,023)
Note (ii)	
Amortisation of leased property (1,500 + 1,700 (w (ii)))	(3,200)
Depreciation of plant and equipment (w (ii))	(6,600)
Note (iii)	
Current year loss on fraud (700 – 450 see below)	(250)
Note (iv)	
Income tax expense (2,700 + 700 – 800 (w (iii)))	(2,600)
Profit for the year	14,327

The $450,000 fraud loss in the previous year is a prior period adjustment (reported in the statement of changes in equity).

The possible insurance claim is a contingent asset and should be ignored.

(b) Triage Co – Statement of financial position as at 31 March 20X6

	$'000	$'000
Assets		
Non-current assets		
Property, plant and equipment (64,600 + 37,400 (w (ii)))		102,000
Current assets		
Trade receivables (28,000 – 700 fraud)	27,300	
Other current assets per trial balance	9,300	36,600
Total assets		138,600
Equity and liabilities		
Equity		
Equity shares of $1 each		50,000
Other component of equity (w (i))	2,208	
Revaluation surplus (7,800 – 1,560 (w (ii)))	6,240	
Retained earnings (w (iv))	17,377	25,825
		75,825
Non-current liabilities		
Deferred tax (w (iii))	3,960	
6% convertible loan notes (w (i))	38,415	42,375
Current liabilities		
Per trial balance	17,700	
Current tax payable	2,700	20,400
Total equity and liabilities		138,600

(c) Diluted earnings per share (w (v)) 29 cents

Workings (monetary figures in brackets in $'000)

(i) 6% convertible loan notes

The convertible loan notes are a compound financial instrument having a debt and an equity component which must both be quantified and accounted for separately:

Year ended 31 March	outflow $'000	8%	present value $'000
20X6	2,400	0·93	2,232
20X7	2,400	0·86	2,064
20X8	42,400	0·79	33,496
Debt component			37,792
Equity component (= balance)			2,208
Proceeds of issue			40,000

The finance cost will be $3,023,000 (37,792 x 8%) and the carrying amount of the loan notes at 31 March 20X6 will be $38,415,000 (37,792 + (3,023 – 2,400)).

(ii) Non-current assets

Leased property

The gain on revaluation and carrying amount of the leased property is:

	$'000
Carrying amount at 1 April 20X5 (75,000 – 15,000)	60,000
Amortisation to date of revaluation (1 October 20X5) (75,000/25 x 6/12)	(1,500)
Carrying amount at revaluation	58,500
Gain on revaluation = balance	7,800
Revaluation at 1 October 20X5	66,300
Amortisation to year ended 31 March 20X6 (66,300/19·5 years x 6/12)	(1,700)
Carrying amount at 31 March 20X6	64,600

Annual amortisation is $3m (75,000/25 years); therefore the accumulated amortisation at 1 April 20X5 of $15m represents five years' amortisation. At the date of revaluation (1 October 20X5), there will be a remaining life of 19·5 years.

Of the revaluation gain, $6·24m (80%) is credited to the revaluation surplus and $1·56m (20%) is credited to deferred tax.

Plant and equipment

	$'000
Carrying amount at 1 April 20X5 (72,100 – 28,100)	44,000
Depreciation for year ended 31 March 20X6 (15% reducing balance)	(6,600)
Carrying amount at 31 March 20X6	37,400

(iii) Deferred tax

Provision required at 31 March 20X6:	
Revalued property and other assets (7,800 + 12,000) x 20%)	3,960
Provision at 1 April 20X5	(3,200)
Increase in provision	760
Revaluation of land and buildings (7,800 x 20%)	(1,560)
Balance **credited** to profit or loss	(800)

(iv) Retained earnings

Balance at 1 April 20X5	3,500
Prior period adjustment (fraud)	(450)
Adjusted profit for year (from (a))	14,327
Balance at 31 March 20X6	17,377

(v) The maximum additional shares on conversion is 8 million (40,000 x 20/100), giving total shares of 58 million.

The loan interest 'saved' is $2·418m (3,023 (from (w (i)) above x 80% (i.e. after tax)), giving adjusted earnings of $16·745m (14,327 + 2,418).

Therefore diluted EPS is $\frac{\$16,745,000 \text{ x } 100}{58 \text{ million shares}}$ = 29 cents

32 (a) Note: References to 20X6 and 20X5 are to the years ending 31 March 20X6 and 20X5 respectively.

Comment (1)

I see the profit for the year has increased by $1m which is up 20% on last year, but I thought it would be more as Tamsin Co was supposed to be a very profitable company.

There are two issues with this statement: first, last year's profit is not comparable with the current year's profit because in 20X5 Gregory Co was a single entity and in 20X6 it is now a group with a subsidiary. A second issue is that the consolidated statement of profit or loss for the year ended 31 March 20X6 only includes six months of the results of Tamsin Co, and, assuming Tamsin Co is profitable, future results will include a full year's profit. This latter point may, at least in part, mitigate the CEO's disappointment.

Comment (2)

I have calculated the EPS for 20X6 at 13 cents (6,000/46,000 x 100 shares) and at 12·5 cents for 20X5 (5,000/40,000 x 100) and, although the profit has increased 20%, our EPS has barely changed.

The stated EPS calculation for 20X6 is incorrect for two reasons: first, it is the profit attributable to only the equity shareholders of the parent which should be used and second the 6 million new shares were only in issue for six months and should be weighted by 6/12. Thus, the correct EPS for 20X6 is 13·3 cents (5,700/43,000 x 100). This gives an increase of 6% (13·3 – 12·5)/12·5) on 20X5 EPS which is still less than the increase in profit. The reason why the EPS may not have increased in line with reported profit is that the acquisition was financed by a share exchange which increased the number of shares in issue. Thus, the EPS takes account of the additional consideration used to generate profit, whereas the trend of absolute profit does not take additional consideration into account. This is why the EPS is often said to be a more accurate reflection of company performance than the trend of profits.

Comment (3)

I am worried that the low price at which we are selling goods to Tamsin Co is undermining our group's overall profitability.

Assuming the consolidated financial statements have been correctly prepared, all intra-group trading has been eliminated, thus the pricing policy will have had no effect on these financial statements. The comment is incorrect and reflects a misunderstanding of the consolidation process.

Comment (4)

I note that our share price is now $2·30, how does this compare with our share price immediately before we bought Tamsin Co?

The increase in share capital is 6 million shares, the increase in the share premium is $6m, thus the total proceeds for the 6 million shares was $12m giving a share price of $2·00 at the date of acquisition of Tamsin Co. The current price of $2·30 presumably reflects the market's favourable view of Gregory Co's current and future performance.

(b)

		20X6	20X5
(i)	Return on capital employed (ROCE) (7,500/74,300 x 100)	10·1%	11·3%
(ii)	Net asset turnover (46,500/74,300)	0·63 times	0·53 times
(iii)	Gross profit margin (9,300/46,500 x 100)	20·0%	25·7%
(iv)	Operating profit margin (7,500/46,500 x 100)	16·1%	21·4%

Looking at the above ratios, it appears that the overall performance of Gregory Co has declined marginally; the ROCE has fallen from 11·3% to 10·1%. This is has been caused by a substantial fall in the gross profit margin (down from 25·7% in 20X5 to 20% in 20X6); this is over a 22% (5·7%/25·7%) decrease. The group/company have relatively low operating expenses (at around 4% of revenue), so the poor gross profit margin feeds through to the operating profit margin. The overall decline in the ROCE, due to the weaker profit margins, has been mitigated by an improvement in net asset turnover, increasing from 0·53 times to 0·63 times. Despite the improvement in net asset turnover, it is still very low with only 63 cents of sales generated from every $1 invested in the business, although this will depend on the type of business Gregory Co and Tamsin Co are engaged in.

On this analysis, the effect of the acquisition of Tamsin Co seems to have had a detrimental effect on overall performance, but this may not necessarily be the case; there could be some distorting factors in the analysis. As mentioned above, the 20X6 results include only six months of Tamsin Co's results, but the statement of financial position includes the full amount of the consideration for Tamsin Co. [The consideration has been calculated (see comment (4) above) as $12m for the parent's 75% share plus $3·3m (3,600 – 300 share of post-acquisition profit) for the non-controlling interest's 25%, giving total consideration of $15·3m.] The above factors disproportionately increase the denominator of ROCE which has the effect of worsening the calculated ROCE. This distortion should be corrected in 20X7 when a full year's results for Tamsin Co will be included in group profit. Another factor is that it could take time to fully integrate the activities of the two companies and more savings and other synergies may be forthcoming such as bulk buying discounts.

The non-controlling interest share in the profit for the year in 20X6 of $300,000 allows a rough calculation of the full year's profit of Tamsin Co at $2·4m (300,000/25% x 12/6, i.e. the $300,000 represents 25% of 6/12 of the annual profit). This figure is subject to some uncertainty such as the effect of probable increased post-acquisition depreciation charges. However, a profit of $2·4m on the investment of $15·3m represents a return of 16% (and would be higher if the profit was adjusted to a pre-tax figure) which is much higher than the current year ROCE (at 10·1%) of the group. This implies that the performance of Tamsin Co is much better than that of Gregory Co (as a separate entity) and that Gregory Co's performance in 20X6 must have deteriorated considerably from that in 20X5 and this is the real cause of the deteriorating performance of the group.

Another issue potentially affecting the ROCE is that, as a result of the consolidation process, Tamsin Co's net assets, including goodwill, are included in the statement of financial position at fair value, whereas Gregory Co's net assets appear to be based on historical cost (as there is no revaluation surplus). As the values of property, plant and equipment have been rising, this effect favourably flatters the 20X5 ratios. This is because the statement of financial position of 20X5 only contains Gregory Co's assets which, at historical cost, may considerably understate their fair value and, on a comparative basis, overstate 20X5 ROCE.

In summary, although on first impression the acquisition of Tamsin Co appears to have caused a marginal worsening of the group's performance, the distorting factors and imputation of the non-controlling interest's profit in 20X6 indicate the underlying performance may be better than the ratios portray and the contribution from Tamsin Co is a very significant positive. Future performance may be even better.

Without information on the separate financial statements of Tamsin Co, it is difficult to form a more definite view.

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.

Section A			*Marks*	
	2 marks per question		**30**	
Section B				
	3 cases (5 questions each) 2 marks per question		**30**	
Section C			*Maximum marks*	*Awarded*
31	**(a)**	Schedule of adjustments to profit for year ended 31 March 20X6		
		profit before interest and tax b/f	½	
		loan finance costs	1	
		depreciation charges	1½	
		fraud loss	½	
		income tax expense	1½	
			5	
	(b)	Statement of financial position		
		property, plant and equipment	2½	
		trade receivables	1	
		other current assets (per trial balance)	½	
		equity shares	½	
		equity option	1	
		revaluation surplus	1	
		retained earnings	1½	
		deferred tax	1	
		6% loan note	1½	
		current liabilities (per trial balance)	½	
		current tax payable	1	
			12	
	(c)	diluted earnings per share	3	
			20	
32	**(a)**	2 marks for each reply to the CEO's observations	8	
	(b)	1 mark for each pair of ratios	4	
		1 mark per relevant comment on performance up to	8	
			12	
			20	