Answers

1 (a) (i) Prodigal – Consolidated statement of comprehensive income for the year ended 31 March 2011

	$'000
Revenue (450,000 + (240,000 x 6/12) – 40,000 intra-group sales)	530,000
Cost of sales (w (i))	(278,800)
Gross profit	251,200
Distribution costs (23,600 + (12,000 x 6/12))	(29,600)
Administrative expenses (27,000 + (23,000 x 6/12))	(38,500)
Finance costs (1,500 + (1,200 x 6/12))	(2,100)
Profit before tax	181,000
Income tax expense (48,000 + (27,800 x 6/12))	(61,900)
Profit for the year	119,100
Other comprehensive income	
Gain on revaluation of land (2,500 + 1,000)	3,500
Loss on fair value of equity financial asset investments (700 + (400 x 6/12))	(900)
	2,600
Total comprehensive income	121,700
Profit attributable to:	
Owners of the parent	111,600
Non-controlling interest (w (ii))	7,500
	119,100
Total comprehensive income attributable to:	
Owners of the parent	114,000
Non-controlling interest (w (ii))	7,700
	121,700

(ii) Prodigal – Equity section of the consolidated statement of financial position as at 31 March 2011

Equity attributable to owners of the parent	
Share capital (350,000 + 320,000 share exchange)	670,000
Revaluation reserve (land) (8,400 + 2,500 + (1,000 x 75%))	11,650
Other equity reserve (3,200 – 700 – (400 x 6/12 x 75%))	2,350
Retained earnings (w (iii))	201,600
	885,600
Non-controlling interest (w (iv))	107,700
Total equity	993,300

The share exchange would result in Prodigal issuing 80 million shares at $4 each (160,000 x 75% x 2/3).

(b) FRS 103 allows (as an option) a non-controlling interest to be valued at its proportionate share of the acquired subsidiary's identifiable net assets; this carries forward the only allowed method in the previous version of this Standard. Its effect on the statement of financial position is that the resulting carrying value of purchased goodwill only relates to the parent's element of such goodwill and as a consequence the non-controlling interest does not reflect its share of the subsidiary's goodwill. Some commentators feel this is an anomaly as the principle of a consolidated statement of financial position is that it should disclose the whole of the subsidiary's assets that are under the control of the parent (not just the parent's share). This principle is applied to all of a subsidiary's other identifiable assets, so why not goodwill?

Any impairment of goodwill under this method would only be charged against the parent's interest, as the non-controlling interest's share of goodwill is not included in the consolidated financial statements.

The second (new) method of valuing the non-controlling interest at its fair value would (normally) increase the value of the goodwill calculated on acquisition. This increase reflects the non-controlling interest's ownership of the subsidiary's goodwill and has the effect of 'grossing up' the goodwill and the non-controlling interests in the statement of financial position (by the same amount). It is argued that this method reflects the whole of the subsidiary's goodwill/premium on acquisition and is thus consistent with the principles of consolidation.

Under this method any impairment of the subsidiary's goodwill is charged to both the controlling (parent's share) and non-controlling interests in proportion to their holding of shares in the subsidiary.

Workings (figures in brackets in $'000)

		$'000	$'000
(i)	Cost of sales		
	Prodigal	260,000	
	Sentinel (110,000 x 6/12)	55,000	
	Intra-group purchases	(40,000)	
	Unrealised profit on sale of plant	1,000	
	Depreciation adjustment on sale of plant (1,000/2½ years x 6/12)	(200)	
	Unrealised profit in inventory (12,000 x $10,000/$40,000)	3,000	
		278,800	
(ii)	Non controlling interest in income statement profit:		
	Sentinel's post-acquisition profit (66,000 x 6/12)	33,000	
	Less: Unrealised profit in inventory (w (i))	(3,000)	
		30,000	
		x 25%	= 7,500
	Non controlling interest in total comprehensive income		
	As above	7,500	
	Other comprehensive income (1,000 – (400 x 6/12) x 25%))	200	
		7,700	
(iii)	Retained earnings		
	Prodigal at 1 April 2010	90,000	
	Per statement of comprehensive income	111,600	
		201,600	
(iv)	Non-controlling interest in statement of financial position		
	At acquisition	100,000	
	Per statement of comprehensive income	7,700	
		107,700	

2 (i) Highwood – Statement of comprehensive income for the year ended 31 March 2011

	$'000
Revenue	339,650
Cost of sales (w (i))	(216,950)
Gross profit	122,700
Distribution costs	(27,500)
Administrative expenses (30,700 – 1,300 + 600 allowance (w (ii)))	(30,000)
Finance costs (w (iii))	(2,848)
Profit before tax	62,352
Income tax expense (19,400 – 800 + 400 (w (iv)))	(19,000)
Profit for the year	43,352
Other comprehensive income:	
Gain on revaluation of property (w (i))	15,000
Deferred tax on revaluation	(3,750)
Total comprehensive income	54,602

(ii) Highwood – Statement of changes in equity for the year ended 31 March 2011

	Share capital $'000	Equity option $'000	Revaluation reserve $'000	Retained earnings $'000	Total equity $'000
Balance at 1 April 2010 (see below)	56,000	nil	nil	7,000	63,000
8% loan note issue (w (iii))		1,524			1,524
Dividend paid (w (v))				(5,600)	(5,600)
Comprehensive income			11,250	43,352	54,602
Balance at 31 March 2011	56,000	1,524	11,250	44,752	113,526

Note: the retained earnings of $1·4 million in the trial balance is after deducting the dividend paid of $5·6 million (w (v)), therefore the retained earnings at 1 April 2010 were $7 million.

(iii) Highwood – Statement of financial position as at 31 March 2011

	$'000	$'000
Assets		
Non-current assets		
Property, plant and equipment (77,500 + 40,000) (w (i))		117,500
Current assets		
Inventory (36,000 – 2,700 + 6,000) (w (i))	39,300	
Trade receivables (47,100 + 10,000 – 600 allowance) (w (ii))	56,500	95,800
Total assets		213,300
Equity and liabilities		
Equity (see (ii))		
Equity shares		56,000
Other component of equity – equity option		1,524
Revaluation reserve		11,250
Retained earnings		44,752
		113,526
Non-current liabilities		
Deferred tax (w (iv))	6,750	
8% convertible loan note (28,476 + 448) (w (iii))	28,924	35,674
Current liabilities		
Trade payables	24,500	
Liability to Easyfinance (w (ii))	8,700	
Bank overdraft	11,500	
Current tax payable	19,400	64,100
Total equity and liabilities		213,300

Workings (figures in brackets in $'000)

(i) Cost of sales and non-current assets

	$'000
Cost of sales per question	207,750
Depreciation – building (see below)	2,500
– plant and equipment (see below)	10,000
Adjustment/increase to closing inventory (see below)	(3,300)
	216,950

Freehold property
The revaluation of the property will create an initial revaluation reserve of $15 million (80,000 – (75,000 – 10,000)). $3·75 million of this (25%) will be transferred to deferred tax leaving a net revaluation reserve of $11·25 million. The building valued at $50 million will require a depreciation charge of $2·5 million (50,000/20 years remaining) for the current year. This will leave a carrying amount in the statement of financial position of $77·5 million (80,000 – 2,500).

Plant and equipment:

	Cost $'000	Accumulated depreciation $'000
1 April 2010	74,500	24,500
Charge for year (74,500 – 24,500) x 20%))		10,000
31 March 2011	74,500	34,500

The carrying amount in the statement of financial position is $40 million.

Inventory adjustment	
Goods delivered (deduct from closing inventory)	(2,700)
Cost of goods sold (7,800 x 100/130) (add to closing inventory)	6,000
Net increase in closing inventory	3,300

(ii) Factored receivables
As Highwood still bears the risk of the non-payment of the receivables, the substance of this transaction is a loan. Thus the receivables must remain on Highwood's statement of financial position and the proceeds of the 'sale' treated as a current liability. The difference between the factored receivables (10,000) and the loan received (8,700) of $1·3 million, which has been charged to administrative expenses, should be reversed except for $600,000 which should be treated as an allowance for uncollectible receivables.

(iii) 8% convertible loan note

This is a compound financial instrument having a debt (liability) and an equity component. These must be quantified and accounted for separately:

year ended 31 March	outflow $'000	10%	present value $'000
2011	2,400	0·91	2,184
2012	2,400	0·83	1,992
2013	32,400	0·75	24,300
Liability component			28,476
Equity component (balance)			1,524
Proceeds of issue			30,000

The finance cost for the year will be $2,848,000 (28,476 x 10% rounded). Thus $448,000 (2,848 – 2,400 interest paid) will be added to the carrying amount of the loan note in the statement of financial position.

(iv) Deferred tax

credit balance required at 31 March 2011 (27,000 x 25%)	6,750
revaluation of property (w (i))	(3,750)
balance at 1 April 2010	(2,600)
charge to income statement	400

(v) The dividend paid in November 2010 was $5·6 million. This is based on 112 million shares in issue times 5 cents.

3 (a) Bengal – Statement of cash flows for the year ended 31 March 2011:

(Note: figures in brackets are in $'000)

	$'000	$'000
Cash flows from operating activities:		
Profit before tax		5,250
Adjustments for:		
depreciation of non-current assets		640
finance costs		650
increase in receivables (2,400 – 1,400)		(1,000)
increase in inventories (3,600 – 1,800)		(1,800)
increase in payables (2,800 – 2,150)		650
Cash generated from operations		4,390
Finance costs paid		(650)
Income tax paid (w (i))		(1,250)
Net cash from operating activities		2,490
Cash flows from investing activities:		
Purchase of property, plant and equipment (w (ii))	(6,740)	
Purchase of intangibles	(6,200)	
Net cash used in investing activities		(12,940)
Cash flows from financing activities:		
Issue of 8% loan note	7,000	
Equity dividends paid (w (iii))	(750)	
Net cash from financing activities		6,250
Net decrease in cash and cash equivalents		(4,200)
Cash and cash equivalents at beginning of period		4,000
Cash and cash equivalents at end of period		(200)

Workings

(i) Income tax paid:

	$'000
Provision b/f	(1,200)
Income statement tax charge	(2,250)
Provision c/f – current	2,200
Balance – cash paid	(1,250)

		$'000
(ii)	Property, plant and equipment:	
	Balance b/f	5,400
	Depreciation	(640)
	Balance c/f – current	(9,500)
	– held for sale	(2,000)
	Balance – cash purchases	6,740
(iii)	Equity dividend	
	Retained earnings b/f	2,250
	Profit for period	3,000
	Retained earnings c/f	(4,500)
	Balance – dividend paid	750

(b) Note: references to 2011 and 2010 refer to the periods ending 31 March 2011 and 2010 respectively.

It is understandable that the shareholder's observations would cause concern. A large increase in sales revenue has not led to a proportionate increase in profit. To assess why this has happened requires consideration of several factors that could potentially explain the results. Perhaps the most obvious would be that the company has increased its sales by discounting prices (cutting profit margins). Interpreting the ratios in the appendix rules out this possible explanation as the gross profit margin has in fact increased in 2011 (up from 40% to 42%). Another potential cause of the disappointing profit could be overheads (distribution costs and administrative expenses) getting out of control, perhaps due to higher advertising costs or more generous incentives to sales staff. Again, when these expenses are expressed as a percentage of sales, this does not explain the disparity in profit as the ratio has remained at approximately 19%. What is evident is that there has been a very large increase in finance costs which is illustrated by the interest cover deteriorating from 36 times to only 9 times. The other 'culprit' is the taxation expense: expressed as a percentage of pre-tax accounting profit, the effective rate of tax has gone from 28·6% in 2010 to 42·9% in 2011. There are a number of factors that can affect a period's effective tax rate (including under- or over-provisions from the previous year), but judging from the figures involved, it would seem likely that either there was a material adjustment from an under-provision of tax in 2010 or there has been a considerable increase in the rate levied by the taxation authority.

As an illustration of the effect, if the same effective tax rate in 2010 had applied in 2011, the after-tax profit would have been $3,749,000 (5,250 x (100% – 28·6%) rounded) and, using this figure, the percentage increase in profit would be 50% ((3,749 – 2,500)/2,500 x 100) which is slightly higher than the percentage increase in revenue. Thus an increase in the tax rate and increases in finance costs due to much higher borrowings more than account for the disappointing profit commented upon by the concerned shareholder.

The other significant observation in comparing 2011 with 2010 is that the company has almost certainty acquired another business. The increased expenditure on property, plant and equipment of $6,740,000 and the newly acquired intangibles (probably goodwill) of $6·2 million are not likely to be attributable to organic or internal growth. Indeed the decrease in the bank balance of $4·2 million and the issue of $7 million loan notes closely match the increase in non-current assets. This implies that the acquisition has been financed by cash resources (which the company looks to have been building up) and issuing debt (no equity was issued). This in turn explains the dramatic increase in the gearing ratio (and the consequent fall in interest cover) and the fall in the current ratio (due to the use of cash resources for the business purchase). Although the current ratio at 1·5:1 is on the low side of acceptability, it does include $2 million of non-current assets held for sale. A better comparison with 2010 is the current ratio at 1·2:1 which excludes the non-current assets held for sale. It may be that these assets were part of the acquisition of the new business and are 'surplus to requirements', hence they have been made available for sale. They are likely to be valued at their 'fair value less cost to sell' and the prospect of their sale should be highly probable (normally within one year). That said, if the assets are not sold in the near future, it would call into question the acceptability of the company's current ratio which may cause short-term liquidity problems.

The overall performance of Bengal has deteriorated (as measured by its ROCE) from 38·9% to 31·9%. This is mainly due to a lower rate of net asset turnover (down from 1·9 to 1·4 times), however when the turnover of property, plant and equipment is considered (down from 3·2 to 2·7 times) the asset utilisation position is not as bad as it first looks, in effect it is the presence of the acquired intangibles that is mostly responsible for the fall.

Further, it may be that the new business was acquired part way through the year and thus the returns from this element may be greater next year when a full period's profits will be reported. It may also be that the integration of the new business requires time (and expense) before it delivers its full potential.

In summary, although reported performance has deteriorated, it may be that future results will benefit from the current year's investment and show considerable improvement. Perhaps some equity should have been issued to lower the company's gearing (and finance costs) and if the dividend of $750,000 had been suspended for a year there would be a better liquid position.

Appendix

Calculation of ratios (figures in $'000):	2011	2010
Gross profit margin (10,700/25,500 x 100)	42·0%	40·0%
Operating expenses % (4,800/25,500 x 100)	18·8%	19·1%
Interest cover ((5,250 + 650)/650)	9 times	36 times
Effective rate of tax (2,250/5,250)	42·9%	28·6%
Return on capital employed (ROCE) ((5,250 + 650)/(9,500 + 9,000) x 100)	31·9%	38·9%
Net asset turnover (25,500/18,500)	1·4 times	1·9 times
Property, plant and equipment turnover (25,500/9,500)	2·7 times	3·2 times
Net profit (before tax) margin (5,250/25,500 x 100)	20·6%	20·3%
Current ratio (8,000/5,200)	1·5:1	2·1:1
(including non-current assets held for sale in 2011)		
Alternative current ratio (6,000/5,200)	1·2:1	2·1:1
(excluding non-current assets held for sale in 2011)		
Gearing (debt/equity) (9,000/9,500)	94·7%	27·6%

The figures for the calculation of 2011's ratios are given in brackets; the figures for 2010 are derived from the equivalent figures.

4 (a) Two important and interrelated aspects of *relevance* are its confirmatory and predictive roles. The Framework specifically states that to have predictive value, information need not be in the form of an explicit forecast. The serious drawback of forecast information is that it does not have (strong) confirmatory value; essentially it will be an educated guess.

FRS examples of enhancing the predictive value of historical financial statements are:

(i) The disclosure of continuing and discontinued operations. This allows users to focus on those areas of an entity's operations that will generate its future results. Alternatively it could be thought of as identifying those operations which will not yield profits or, perhaps more importantly, losses in the future.

(ii) The separate disclosure of non-current assets held for sale. These inform users that these assets do not form part of an entity's long-term operating assets.

(iii) The separate disclosure of material items of income or expense (e.g. a gain on the disposal of a property). These are often 'one off' items that may not be repeated in future periods. They are sometimes called 'exceptional' items or described in the Framework as 'unusual, abnormal and infrequent' items.

(iv) The presentation of comparative information (and the requirement for the consistency of its presentation such as retrospective application of changes in accounting policies) allows for a degree of trend analysis. Recent trends may help predict future performance.

(v) The requirement to disclose diluted EPS is often described as a 'warning' to shareholders of what EPS would have been if any potential (future) equity shares such as convertibles and options had already been exercised.

(vi) The Framework's definitions of assets (resources from which *future* economic benefits should flow) and liabilities (obligations which will result in a *future* outflow of economic benefits) are based on an entity's future prospects rather than its past costs.

Note: other examples may be acceptable.

Tutorial Note: *The IASB revised framework 'The Conceptual Framework for Financial Reporting' is not listed as an examinable document in 2011. However, candidates using this knowledge will be given equal credit.*

(b) (i) The estimated profit after tax for Rebound for the year ending 31 March 2012 would be:

	$'000
Existing operations (continuing only) ($2 million x 1·06)	2,120
Newly acquired operations ($450,000 x 12/8 months x 1·08)	729
	2,849

Note: the profit from newly acquired operations in 2011 was for only eight months; in 2012 it will be for a full year.

(ii) Diluted EPS on continuing operations

	2011	comparative 2010
$\frac{\$2,730,000 \text{ (see workings)} \times 100}{14,600,000 \text{ (see workings)}}$	18·7 cents	
$\frac{\$2,030,000 \text{ (see workings)} \times 100}{14,000,000 \text{ (see workings)}}$		14·5 cents

The diluted EPS should exclude discontinued operations (FRS 33, para 66), however, the discontinued EPS can be disclosed as an additional item either on the face of the statement of comprehensive income or in the notes to the financial statements (FRS 33, para 68).

Workings (figures in brackets are in '000 or $'000)

The earnings are calculated as follows:

	2011 $'000		comparative 2010 $'000
Continuing operations:			
Existing operations	2,000		1,750
Newly acquired operations	450		nil
Re convertible loan stock (see below)	280		280
	2,730		2,030

The weighted average number of shares (in '000) is calculated as follows:

At 1 April 2009 (3,000 x 4 (i.e. shares of 25 cents each))	12,000		12,000
Re convertible loan stock (see below)	2,000		2,000
Re share options (see below)	600	(weighted for six months)	nil
	14,600		14,000

Convertible loan stock:
On an assumed conversion there would be an increase in income of $280,000 ($5,000 x 8% x 0·7 after tax).

There would be an increase in the number of shares of 2 million ($5,000/$100 x 40)

These adjustments would apply fully to both years.

Share options:
Exercising the options would create proceeds of $2 million (2,000 x $1). At the market price of $2·50 each this would buy 800,000 shares ($2,000/$2·50) thus the diluting number of shares is 1·2 million (2,000 – 800).

This would be weighted for 6/12 in 2011 as the grant was half way through the year.

5 Mocca

Income statement year ended 31 March 2011

	$'000
Revenue recognised ((65% (w (i)) x 12,500) – 3,500 in 2010)	4,625
Contract expenses recognised (balancing figure)	(3,515)
Profit recognised ((3,000 (w (ii)) x 65%) – 840 in 2010)	1,110

Statement of financial position as at 31 March 2011

Non-current assets	
Plant (8,000 – 2,500 (w (iii)))	5,500
Current assets	
Receivables (8,125 – 7,725)	400
Amounts due from customers – Note 1	1,125

Note 1
Amounts due from customers:

Contract costs incurred (w (iii))	7,300
Recognised profits (3,000 x 65%)	1,950
	9,250
Progress billings	(8,125)
Amounts due from customers	1,125

Workings (in $'000)

(i) Percentage complete:

Agreed value of work completed at year end	8,125
Contract price	12,500
Percentage completed (8,125/12,500 x 100)	65%

		$'000
(ii)	Estimated profit:	
	Contract price	12,500
	Plant depreciation (8,000 x 24/48 months)	(4,000)
	Other costs	(5,500)
	Profit	3,000
(iii)	Contract costs incurred:	
	Plant depreciation (8,000 x 15/48 months)	2,500
	Other costs	4,800
		7,300

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	**(a)**	**(i)**	Statement of comprehensive income	
			revenue	2
			cost of sales	4
			distribution costs and administrative expenses	1
			finance costs	1
			income tax expense	1
			non-controlling interest in profit for year	1½
			other comprehensive income	2
			non-controlling interest in other comprehensive income	1½
				14
		(ii)	Consolidated equity	
			Equity	1
			revaluation reserve (land)	2
			other equity reserve	1
			retained earnings	1½
			non-controlling interest	1½
				7
	(b)		1 mark per valid point	**4**
			Total for question	**25**
2	**(i)**		Statement of comprehensive income	
			revenue	½
			cost of sales	4
			distribution costs	½
			administrative expenses	1½
			finance costs	1½
			income tax expense	1½
			other comprehensive income	1½
				11
	(ii)		Statement of changes in equity	
			opening balance on retained earnings	1
			other component of equity (equity option)	1
			dividend paid	1
			comprehensive income	1
				4
	(iii)		Statement of financial position	
			property, plant and equipment	2½
			inventory	1
			trade receivables	1
			deferred tax	1
			issue of 8% loan note	1½
			liability to Easyfinance	1
			bank overdraft	½
			trade payables	½
			current tax payable	1
				10
			Total for question	**25**

				Marks
3	(a)	Statement of cash flows		
		profit before tax		½
		depreciation of non-current assets		½
		finance costs added back		½
		working capital items		1½
		finance costs paid		½
		income tax paid		1
		purchase of property, plant and equipment		1½
		purchase of intangibles		½
		8% loan note		½
		equity dividends paid		1
		cash and cash equivalents at beginning of period		½
		cash and cash equivalents at end of period		½
				9
	(b)	1 mark per valid point (including up to 5 for appropriate ratios)		**16**
			Total for question	**25**
4	(a)	1 mark per valid point/example		**6**
	(b)	**(i)** profit from continuing operations		1
		profit from newly acquired operations		2
				3
		(ii) EPS for 2010 and 2011 at 3 marks each		**6**
			Total for question	**15**
5	revenue			3
	profit			1½
	plant in statement of financial position			1½
	amounts due from customers			1
	trade receivables			1
	disclosure note			2
			Total for question	**10**