

# Solutions to the Exercises

## Chapter 1

- 1 Obviously the scope here is almost endless. Here are three interesting definitions from the USA which students are not very likely to come across (extracted from A.R. Belkaoui (1992) *Accounting Theory*, 3rd edn, Academic Press, London). The Committee on Terminology of the American Institute of Certified Public Accounting defined accounting as follows:

*Accounting is the art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character, and interpreting the results thereof.*<sup>1</sup>

The scope of accounting from this definition appears limited. A broader perspective was offered, by the following definition of accounting as:

The process of identifying, measuring, and communicating economic information to permit informed judgements and decisions by users of the information.<sup>2</sup>

More recently, accounting has been defined with reference to the concept of quantitative information:

*Accounting is a service activity. Its function is to provide quantitative information, primarily financial in nature about economic entities that is intended to be useful in making economic decisions, in making resolved choices among alternative courses of action.*<sup>3</sup>

- 2 Accounting information is usually mainly past information, but user decisions are by definition future directed. Consider:

- relevance v. reliability
- objectivity v. usefulness
- producer convenience v. user needs.

- 3 Perhaps it all depends on what 'reasonably' means. The needs of different users are certainly different (illustration required), but greater relevance from multiple reports would need to be set against:
- (a) costs of preparation
  - (b) danger of confusion and the difficulties of user education.

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<sup>1</sup> 'Review and resume', Accounting Terminology Bulletin No.1, American Institute of Certified Public Accounts, New York, 1953, paragraph 5.

<sup>2</sup> American Accounting Association, A Statement of Basic Accounting Theory, American Accounting Association, Evanston, IL, 1966, p.1.

<sup>3</sup> financial statements of business enterprises', American Institute of Certified Public Accountants, New York, 1970, paragraph 40.

- 7 It is really much less objective than people often claim. Examples of 'unobjectivity' include:
- problem of determining purchase cost
  - overhead allocation
  - depreciation calculation
  - provisions and their estimation
  - prudence (a subjective bias by definition).

## Chapter 2

- 1 You will notice that the answer to this question will be influenced to a large extent by the national background of the student. In the Anglo-Saxon world students will more easily argue that accounting is, in essence, economics based. In those countries, accounting standards are rather broad and derived from general principles. These principles are often derived from economic valuation concepts. Students living under a codified law system and in countries with a creditor orientation will argue more often that accounting is law based. If we consider IAS we might argue that IAS is economics based (e.g. substance over form).
- 2 The answer to this question is strongly influenced by the items put forward in the section 'national differences will they still play a role in the future?' in Chapter 2. As large companies become more global and seek multi-listings, they will be strongly in favour of harmonization and even uniformity. For small local firms the national environment will remain an important factor shaping their financial reporting practices.

## Chapter 3

- 1 As so often, this is partly a matter of perception. In theory, the proposition is not correct, for two reasons. The first is that accounting regulation, and accounting practice, in Europe is bound by the contents of European Directives, especially the 4th, for individual companies, and the 7th, for groups. The second is the creation of the endorsement mechanism for emerging IFRSs, described in the text.
- Practice, however, seems set to be rather different. It should be remembered that the 4th Directive has been amended to allow consistency with IASB requirements in several respects, notably with regard to the use of fair values. The make-up of the IAS Board is also significant. Perhaps most importantly in practice, the entire IAS Board, including the European representatives, seems united on the broad thrust of developments.

## Chapter 4

- 2 The two businesses will have different depreciation charges (if they

depreciate the buildings at all) and significantly different capital employed totals. They will therefore certainly have different efficiency and return ratios, but are they, economically speaking, different situations? In one sense, yes: more money was put into one than the other; but in another sense, no: opportunity costs and future potential are logically identical. Discuss generally.

- 3 A tricky one. In one sense, a capital maintenance concept must be defined before income can be determined, suggesting separation is not possible. But since one, in a sense, leads to the other, it could be suggested that perhaps we can define one of them and then automatically deduce the other (which therefore does not need separate definition). Discussion of interrelationships is the key issue.

## Chapter 5

- 2 An interesting question. Replacement cost accounting, given rising cost levels, leads to a lower operating profit figure, which is more prudent. It also leads to higher asset figures in the balance sheet, which is *less* prudent. These two effects considered together will lead to much lower profitability and return on resources ratios, which perhaps sounds more prudent! Make them think!

- 6 **I.M Confused, computer dealer**  
**(a) Historical cost accounting**

*Profit and loss accounts for the years:*

	20X1	20X2
	€	€
Sales	3000	3600
Cost of sales	<u>(2000)</u>	<u>(2000)</u>
Gross profit	1000	1600
Expenses - rent	<u>(600)</u>	<u>(700)</u>
Net profit	400	900
Tax @ 50%	<u>(200)</u>	<u>(450)</u>
Retained profit	<u>200</u>	<u>450</u>

Balance sheets at year ends:

	20X1	20X2
	€	€
Inventory		
@ €1000	(4) 4000	(2) 2000
@ €1200	(2) 2400	(2) 2400
@ €1400	(0) 0	(2) 2800
	6400	7200
Cash	3800	3450
	10200	10650
Capital	10000	10000
Retained profits	<u>200</u>	<u>650</u>
	<u>10200</u>	<u>10650</u>

**(b) Replacement cost accounting**

*Profit and loss accounts for the years:*

	20X1		20X2
	€		€
Sales	3000		3600
Cost of sales	<u>(2200)</u>		<u>(2600)</u>
Gross profit	800		1000
Expenses - rent	<u>600</u>		<u>700</u>
Operating profit	200		300
Tax paid	<u>200</u>		<u>450</u>
Profit/(loss)	<u>0</u>		<u>(150)</u>
Realized holding gain	(2 100))	<u>200</u>	(2 x 300) <u>600</u>
Historical cost profit		<u>200</u>	<u>450</u>

Balance sheets at year ends:

	20X1		20X2
	€		€
Inventory			
@ €1000	(4) 4000		(2) 2000
@ €1200	(2) 2400		(2) 2400
@ €1400	(0) 0		(2) 2800
	6400		7200
Cash	3800		3450
	10200		10650
Capital	10000		10000
Retained holding gain	<u>200</u>		<u>650</u>
	<u>10200</u>		<u>10800</u>

Distributable profits		0	(150)
Unrealized holding gains		<u>1400</u>	<u>1200</u>
		<u>11600</u>	<u>11850</u>

The figures show that, given an intention to continue the operations of the business at the current level, the historical cost profit figure is entirely mythical - indeed in the second year the business has an operating loss on this basis.

## Chapter 6

- 3 Arguably, the suggestion would give an income statement with a useful long-run operating perspective (note that this would perhaps be even more relevant if based on future RC rather than on current RC figures!) at the same time as a balance sheet of current cash equivalents, i.e. meaningful current market values. Discuss advantages of both of these. Against this, there would be a loss of internal consistency in the reporting package, which seems significant. Discuss this too.

6 **Steward plc**

*Trading and profit and loss account for the year ended 31 December:*

	1		2
	€		€
Sales	12000		
Less: cost of sales	<u>8000</u>		
Gross profit	4000		
Expenses	1000	1200	
Depreciation (note (c))	<u>1000</u>	<u>1000</u>	
	<u>2000</u>		<u>2200</u>
	2000		1900
Holding gain (note (d))	<u>1000</u>		<u>2500</u>
	<u>3000</u>		<u>4400</u>

*Balance sheet as at 31 December:*

	1		2
	€		€
Fixed assets			
Machine at	9000		8000
NRV (note (a))			
Current assets			
Inventory at	3000	10000	
NRV (note (b))			
Bank	<u>21000</u>	<u>19400</u>	
	<u>24000</u>		<u>29400</u>
	<u>33000</u>		<u>37400</u>
Share capital	30000		30000
Profit for year	<u>3000</u>		<u>7400</u>
	<u>33000</u>		<u>37400</u>

**Notes**

(a) *Fixed assets.* At the end of each year the machine is brought into the balance sheet at its net realizable value.

(b) *Inventory.* The inventory is also brought into the balance sheet at the end of each year at its net realizable value.

31.12.1200 units x €15 = £3000

31.12.5500 units x €20 = £10000

(c) *Depreciation.* The depreciation is the difference between the NRV of the asset at the end of each year, less the NRV of the asset at the beginning of the year.

Year 1 €9000 - €10000

Year 2 €8000 - €9000

(d) *Holding gain.* In Year 1 the holding gain is the unrealized holding gain on the closing stock:

200 units €5 (i.e. €15 x €10) = €1000

In Year 2 the holding gain of Year 1 has now been realized (and therefore included in the trading account for Year 2) whilst there is an unrealized holding gain on the closing stock of:

500 units x €7 (i.e. €20 - €13) = €3500

Therefore, in Year 2 the holding gain is:

	€
Unrealized holding gain in Year 2	3500
Less unrealized holding gain from Year 1 now realized in Year 2	1000
	<u>2500</u>

If in Year 2 we were to include the €1000 holding gain from Year 1, we would be double counting the holding gain.

## Chapter 7

- 1 In essence, CPP adjustments attempt to update financial measurements for changes in the value of the measuring unit, without altering or affecting the underlying basis of valuation -usually, but not necessarily, historical cost. They do it by using general averaged index adjustments - usually, but again not necessarily, by means of a retail price index. Perhaps give or invite illustration.

- 7 **Calgary plc current cost profit and loss accounts for the year ended 30 June Year 4**

	€000	
Sales		<u>7000</u>
Profit before interest and taxation on the historical cost basis		1560
Cost of sales (note 15))	57	
Monetary working capital (note (6))	11	
Depreciation (note (2))	<u>32</u>	
		<u>100</u>
Current cost operating profit		1460
Gearing adjustment (note (7))	(10)	
Interest	<u>140</u>	
		<u>130</u>
Current cost profit before taxation		1330
Taxation		<u>300</u>

*INTERNATIONAL FINANCIAL REPORTING AND ANALYSIS, 4<sup>TH</sup> EDITION*  
ALEXANDER, BRITTON, JORISSEN

Current cost profit	1030
attributable to shareholders	
Dividends	<u>300</u>
Retained current cost profit	730
for the year	
Balance brought f forward	1420
Balance carried forward	<u>2150</u>

Current cost balance sheet a at 30 June

	Year 3		Year 4
			€000
Fixed assets			
Land (note (1))	1697		2035
Plant and machinery (note (2))	1277		1359
Less depreciation	(255)		(544)
	<u>2719</u>		<u>2850</u>
Current assets			
Inventory (note (3))	662	912	
Debtors	830	1300	
Bank	10	620	
	1502	<u>2832</u>	
Less:			
Current liabilities			
Creditors	<u>790</u>	<u>1060</u>	
		712	1772
		<u>3431</u>	<u>4622</u>
Share capital		1040	1040
Current cost reserve (note (4))		271	(note (8)) 732
Profit and loss		1420	<u>2150</u>
		<u>2731</u>	<u>3922</u>
Loan capital		<u>700</u>	<u>700</u>
		<u>3431</u>	<u>4622</u>

**Workings**

**1 Land**

Year 3: Current cost at 30 June Year 3		€000	
	1500 x	241	1697
		213	

Year 4: Current cost at 30 June Year 4			
	1500 x	289	2035
		213	

**2 Plant and machinery**

Year 3: Current cost at 30 June Year 3		€000	
	1200 x	649	<u>1277</u>
		610	
Depreciation for year	1277 x	20% =	<u>255</u>

Year 4: Current cost at 30 June Year 4			
	1200 x	691	<u>1359</u>
		610	
Depreciation for year	1359 x	20% =	<u>272</u>

Current cost depreciation at 20% straight line			272
Historical cost depreciation			240
Depreciation adjustment			<u>32</u>
Accumulated depreciation	=		<u>544</u>





**Average of net borrowings and shareholders' interest**

	<b>30 June Year 3</b>		<b>30 June Year 4</b>
	€000		€000
Total of net assets (excluding bank) in CC accounts	3439		4007
Less: net borrowings	<u>690</u>		<u>80</u>
	<u>2749</u>		<u>3927</u>
Average		3338	
Gearing ratio =	385 = 10.3%		
	3723		

**Gearing adjustment**

Current cost operating adjustments

	€000
Cost of sales	57
Monetary working capital	11
Depreciation	<u>32</u>
	<u>100</u> x 10.3% = 10

**8 Current cost reserve 30 June Year 4**

	€000
Balance at 1 July Year 3	271
Net increase arising during Year 4 on the restatement of assets to current cost:	
Land	338
Plant and machinery	33
Inventory	-
Cost of sales adjustment	57
Monetary working capital adjustment	11
Depreciation adjustment	32
Gearing adjustment	(10)
	<u>461</u>
Balance as at 30 June Year 4	<u>732</u>

## Chapter 8

- 1 There are those who regard it as essentially a practical activity. Certainly, like any service industry, financial reports have to have a practical usefulness. It is also fair to say that financial reporting cannot be theorized about in the sense that pure science can be. However, in our view, theorizing about financial reporting is essential, for two main reasons. First, it will help to produce more consistent and therefore, hopefully, more useful treatments of accounting difficulties. Second, it will make clear to us all what uncertainties and subjectivities still remain. Knowledge of one's weaknesses is always useful!
- 2 To paraphrase the question, the proposition is that we need to know what tends actually to happen, so that we can discuss what should happen instead in an informed, sensible and knowledgeable way, but automatic acceptance of what does actually happen is not acceptable. Discussion needed; we would agree with the proposition.

## Chapter 9

- 2 It is often argued that realized results must be distinguished from the results of valuation changes or capital-related movements and that the best way to do this is to produce two separate statements. The trouble with this in practice is that the existence of two statements may enable managers to put more favourable elements in the more high-profile statement (i.e. the income statement) and less favourable items in the other statement. Discussion generally.

## Chapter 10

- 6 This can be answered by determining the advantages and disadvantages of providing additional information.
- Advantages:
- promotion of harmony between users and management
  - better educated users
  - possibly easier change management
  - possible influence on users
  - users having more relevant information on which to base their decisions.
- Disadvantages:
- risk of providing information to competitors
  - possibly misleading as they are management opinion of the future in many cases
  - not audited
  - may not be produced at the appropriate level e.g. plant level, department level
  - increases costs.

- 7 The answer here is similar to the disadvantages listed in question 6. Overcoming these disadvantages is something entities are currently working on evidenced by moves towards environmental and social report auditing.

## Chapter 11

- 1 *Answer coming soon.*

## Chapter 12

- 6 It certainly seems useful, and consistent, to require the revaluation of land, which, after all, does not depreciate. Such information increases relevance, but arguably at some sacrifice of reliability. Discussion needed.
- 7 This is more difficult. There are two arguments in favour of requiring the revaluation of buildings. First, it makes balance sheet numbers more relevant and, second, through the resulting increase in depreciation changed to up-to-date cost levels, it makes the reported profit a better estimate of long-run future performance. Note that the resulting reported operating profit, being usually lower, is more prudent when upward revaluation takes place. But, again, there are reliability considerations.
- 10

**(a) Errsea – income statement extracts year ended 31 March 2007**

	\$
Loss on disposal of plant – see note below ((90,000 – 60,000) – 12,000)	18,000
Depreciation for year (wkg (i))	75,000
Government grants (a credit item) – see note below and (wkg (iv))	(19,000)

Note: the repayment of government grant of \$3,000 may instead have been included as an increase of the loss on disposal of the plant.

**Errsea – balance sheet extracts as at 31 March 2007**

	cost \$	accumulated depreciation \$	carrying amount \$
Property, plant and equipment (wkg (v))	<u>360,000</u>	<u>195,000</u>	<u>165,000</u>
Non-current liabilities			
Government grants (wkg (iv))			39,000
Current liabilities			
Government grants (wkg (iv))			27,000

**Workings**

(i) Depreciation for year ended 31 March 2007	\$
On acquired plant (wkg (ii))	52,500
Other plant (wkg (iii))	<u>22,500</u>
	<u>75,000</u>

(ii) The cost of the acquired plant is recorded at \$210,000 being its base cost plus the costs of modification and transport and installation. Annual depreciation over three years will be \$70,000. Time apportioned for year ended 31 March 2007 by  $9/12 = \$52,500$ .

(iii) The other remaining plant is depreciated at 15% on cost (b/f 240,000 – 90,000 (disposed of) x 15%)	\$ 22,500
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(iv) Government grants	
Transferred to income for the year ended 31 March 2007:	\$
From current liability in 2006 (10,000 – 3,000 (repaid))	7,000
From acquired plant (see below):	<u>12,000</u>
	<u>19,000</u>

Non-current liability	\$
b/f	30,000
transferred to current	(11,000)
on acquired plant (see below)	<u>20,000</u>
	<u>39,000</u>

Grant on acquired plant is 25% of base cost only = \$48,000	
This will be treated as:	
To income in year ended 31 March 2007 (48,000/3 x 9/12)	12,000
Classified as current liability (48,000/3)	16,000
Classified as a non-current liability (balance)	<u>20,000</u>
	<u>48,000</u>

Note: government grants are accounted for from the date they are receivable (i.e. when the qualifying conditions for the grant have been met).

Current liability	
Transferred from non-current (per question)	11,000
On acquired plant (see above)	<u>16,000</u>
	<u>27,000</u>

(v)			
	cost	accumulated	carrying
	\$	depreciation	amount
		\$	\$
Property, plant and equipment			
Balances b/f	240,000	180,000	60,000
Disposal	(90,000)	(60,000)	(30,000)
Addition (w (ii))	210,000	52,500	157,500
Other plant depreciation for year (wkg (iii))		<u>22,500</u>	<u>(22,500)</u>
Balances at 31 March 2007	<u>360,000</u>	<u>195,000</u>	<u>165,000</u>



11

- (a) The issue of depreciation of properties is dealt with in IAS 16 – *Property, plant and equipment* – and IAS 40 – *Investment property*. IAS 16 states that all property, plant and equipment with finite useful economic lives should be depreciated over those estimated lives. IAS 16 further states that land generally has an infinite useful economic life but that buildings have finite useful economic lives. IAS 16 requires that properties be split into components for depreciation purposes, the buildings component being depreciated but the land component not being depreciated. Therefore, where properties are subject to IAS 16 (properties 1 and 2) the policy of non-depreciation is not appropriate even if their market values are expected to increase.

Property 3 is being held for investment purposes and so is governed by the provisions of IAS 40. IAS 40 gives entities a choice regarding the accounting treatment of investment properties. One possibility is to use the 'cost model'. If this model is used then the properties are dealt with in accordance with IAS 16. In this case, then as already explained, a depreciation charge would be required. The other possibility is to use the fair value model. Under this model investment properties are measured at their fair values at each balance sheet date, with changes in fair value being reflected in the income statement. Therefore if the entity chooses the fair value model it would be appropriate not to depreciate property 3.

- (b) All three properties can either be valued using the cost model or using the fair value model. Under IAS 16 (applicable for properties 1 and 2) a model is applied to property, plant and equipment on a class by class basis. Properties would be regarded as a separate class of property, plant and equipment. As stated in part (a), under IAS 40 (applicable for property 3) either model would be applied to all investment properties.

#### Property 1

Where the cost model is used, upward changes in market value would be ignored. Where the fair value model is used, surpluses should be credited directly to equity. Therefore for the both years a surplus of \$1 million would be credited to equity in respect of property 1.

#### Property 2

Where the cost model is used, the increase in the year to 30 September 2005 would be ignored and the carrying amount retained at \$10 million. The fact that the market value had declined to \$9 million by 30 September 2006 may well indicate that the property has suffered impairment and an impairment review would certainly be appropriate.

If the fair value model is used, the surplus of \$1 million in respect of property 2 in the year to 30 September 2005 is taken to equity as already explained for property 1. Where a revaluation results in a deficit then the appropriate treatment depends on whether or not there is an existing surplus in the revaluation reserve relating to the same asset. To the extent that there is, then the deficit is deducted from the revaluation reserve as a movement in equity. Any other deficit is charged to the income statement as it arises. Therefore the treatment of the deficit of \$2 million arising in the year to 30 September 2006 is to deduct \$1 million from equity (the revaluation reserve) and \$1 million from income.

#### Property 3

As already explained in part (a) the appropriate treatment of the surpluses (\$1.5 million in the year to 30 September 2005 and \$1 million in the year to 30 September 2006) depends on whether the cost model or the fair value model is used for investment properties. Where the cost model is used then the surpluses would be ignored but where the fair value model is used they would be taken to the income statement.



12

#### Transaction 1

Cost of production plant – NB: All reasons come from IAS 16 – *Property, Plant and Equipment*

Component	Amount \$'000	Reason
Basic costs	10,000	Purchase costs included
Sales taxes	—	Recoverable sales taxes not included
Employment costs	800	Employment costs in period of getting the plant ready for use.
Other overheads	600	Abnormal costs <b>excluded</b>
Payments to advisors	500	Directly attributable cost
Dismantling costs	1,360	Recognised at present value where an <b>obligation</b> exists
	<u>13,260</u>	

#### Depreciation charge (income statement – operating cost)

Per IAS 16 the asset is split into two depreciable components:

3,000 with a useful economic life (UEL) of four years

10,260 (the balance) with a UEL of eight years

So the charge for the year ended 31 March 2007 is  $3,000 \times 1/4 \times 10/12 + 10,260 \times 1/8 \times 10/12 = 1,694$

#### Carrying value of asset (balance sheet – non current assets)

$13,260 - 1,694 = 11,566$

#### Unwinding of discount (income statement – finance cost)

$1,360 \times 5\% \times 10/12 = 57$

#### Provision for dismantling (balance sheet – non-current liabilities)

$1,360 + 57 = 1,417$

#### Transaction 2

Under the provisions of IFRS 5 – *Non-current Assets Held for Sale and Discontinued Operations* – the property would be classified as held for sale at 31 December 2006. This is because the intention to sell the property is clear and active steps are being taken to locate a buyer, with the property being marketed at a reasonable price. In addition there is a clear expectation that the sale will be completed within 12 months.

Where non-current assets are held for sale they need to be initially measured using up-to-date values under the current measurement basis that is being applied. In this case this basis is the revaluation model. The carrying value based on the latest valuation is \$14.76 million (\$15 million – (\$8 million  $\times$   $1/25 \times 9/12$ )). This needs to be updated to market value at the date of classification as held for sale – \$16 million. Therefore \$1.24 million (\$16 million – \$14.76 million) is credited to the revaluation reserve.

When the asset is classified as held for sale it is removed from non-current assets and presented in a separate caption on the balance sheet. The (non-mandatory) guidance in IFRS 5 shows this immediately below the current assets section of the balance sheet.

The asset is measured at the lower of its existing carrying value (\$16 million) and its fair value less costs to sell (\$16 million – \$500,000 = \$15.5 million). In this case the asset is written down by \$500,000 and this is recognised as an impairment loss in the income statement. No further depreciation is charged.

At the year end the carrying value of the asset is the lower of the previously computed amount (\$15.5 million) and the latest estimate of fair value less costs to sell (\$15.55 million – the actual net proceeds). In this case no further impairment is necessary.

The sale is recognised (and the revaluation reserve realised) on 30 April 2007 and will therefore impact on next year's financial statements.

## Chapter 13



1

Intuitively, it seems to us that goodwill is an asset. The only difficulty with this, given IASB definitions, is whether or not an enterprise can control goodwill. It certainly can be expected to give benefit.

## Chapter 14

- 3 The answer is D.

### Workings

The overall impairment loss is \$2 million [\$27 million - \$25 million]. This loss is first allocated to the asset that has suffered obvious impairment, leaving the balance of \$1 million to be allocated to goodwill.

## Chapter 15

- 1 Students should be able both to quote the IAS 17 definitions and to explain them in their own words. The essential point is that with a finance lease, the lessee is, in substance, in the same business position (but not legal position) as if it had actually bought the item.

- 7 (i) The accounting treatment of leases is an example of the application of substance over legal form. If this principle is not followed it can lead to off balance sheet financing. The treatment of a lease is determined by the extent to which party receives the risks and rewards incidental to ownership. If a lease transfers substantially these risks and rewards to the leasee it is classed as a finance lease; if not it is an operating lease.

The accounting treatment for the lessee of an operating lease is that the income statement is simply charged with the periodic rentals and there is no effect on the balance sheet other than possibly an accrual or prepayment of the rentals. By contrast a finance lease is treated as a financing arrangement whereby the lessee is treated as having taken out a loan to purchase an asset. This means that both the obligations under the lease and the related asset are shown on the lessee's balance sheet. The impact on the income statement of treating a finance lease as an operating lease is minimal. Over the life of the lease substantially the same amount would be charged to income, however the inter-period timing of the charges would differ. It is the effect on the balance sheet that is important. Treatment as an operating lease means that neither the asset nor the liability is included on the lessee's balance sheet and this would hide the company's true level of gearing and improve its return on capital employed - these are two important ratios.

The Standard gives examples of situations that would normally lead to a lease being classified as a finance lease:

- the lease transfers the ownership of the asset to the lessee at the end of the lease (in some countries these are described as hire purchase agreements)
- the lessee has the option to purchase the asset (normally at the end of the lease) at a favourable price, such that the option is almost certain to be exercised
- the term of the lease (including any secondary period at a nominal rent) is for the major part of the economic life of the asset
- the present value of the minimum lease payments to substantially the fair value of the asset
- the asset is of such a specialized nature that only the lessee could use it without major modification
- the lease is non-cancellable or only cancellable with a penalty to the lessee
- fluctuations in residual gains or losses fall to the lessee.

(ii)

<b>Gemini - Income statement extracts year to</b>		\$
<b>31 March 2003</b>		
Depreciation of leased asset (w (i))	48 750	
Lease interest expense (w (ii))	12 480	
Balance sheet extracts as at 31 March 2003		
Leased asset at cost	260 000	
Accumulated depreciation (w (i))	<u>(113 750)</u>	
Net book value	146 250	
<b>Current liabilities</b>		
Accrued lease interest (w (ii))	12 480	
Obligations under finance leases (w (ii))	47 250	
<b>Non-current liabilities</b>		
Obligations under finance leases (w (ii))	108 480	

### Workings

- (i) Depreciation for the year ended 31 March 2002 would be \$65 000 (\$260 000 x 25%)  
 Depreciation for the year ended 31 March 2003 would be \$48 750 ((\$260 000) - \$65000) x 25%)

(ii) The lease obligations are calculated as follows:

Cash price/fair value at 1 April 2001	260 000
Rental 1 April 2001	<u>(60 000)</u>
	20 000
Interest to 31 March 2002 at 8%	<u>16 000</u>
	216 000
Rental 1 April 2002	<u>(60 000)</u>
Capital outstanding 1 April 2002	156 000
Interest to 31 March 2003 at 8%	<u>12 480</u>

Interest expense accrued at 31 March 2003 is \$12 480. The total capital amount outstanding at 31 March 2003 is \$156 000 (the same as at 1 April 2002 as no further payments have been made). This must be split between current and non-current liabilities. Next year's payment will be \$60 000 of which \$12 480 is interest. Therefore capital to be repaid in the next year will be \$47 520 (60 000 - 12480). This leaves capital of \$108 480 (156 000 - 47250) as a non-current liability.

- 6 IAS 11 assumes that management can always make a judgement on contract costs, estimated costs to completion and the stage of completion, whereas USGAAP assumes there may be circumstances in which this judgement is questionable. We leave the debate to you. It is also worth noting that entities do receive stage payments for contracts and that IAS 11 treats these as income rather than a liability.

## Chapter 17

- 1 FIs have a significant impact on an enterprise's financial performance, position and cash flow. If these FIs are carried off balance sheet then the

movement in the instrument in favour of or against the enterprise can significantly change its risk profile.

- 8 Discussion should revolve around the issues of realization and the provision of useful information to users. Whether a gain or loss has to be realized before it is recognized in financial statements is at the heart of this discussion. Note that emphasis is now placed on recognition and measurement with reasonable certainty rather than realization.

## Chapter 18

- 1 Revenue is regarded by many as simply the cash that you are paid for selling things and this simple idea also implies exchange - cash for things. We have carried this idea of exchange through to the balance sheet. Consider the simple exchange of selling an item of inventory for cash: the accounting entries would be to derecognize the item of inventory in the balance sheet and recognize the asset of cash. The asset of cash would qualify as revenue and against this we would match relevant expenses to determine profit. Traditionally, we have not regarded the item of inventory as revenue until it is sold or at least until we have exchanged it for another asset, perhaps a debtor. This approach seems to equate revenue with economic activity involving exchange with a customer and ignores other items such as gains on assets that are revalued or carried at current value.

IAS 18 defines revenue as: 'The gross inflow of economic benefits during the period arising in the course of the ordinary activities of an enterprise when those inflows result in increases in equity, other than increases relating to contributions from equity participants. (para. 7)

- 8 Given that the recognition of revenue requires management to make a number of subjective decisions, it would be difficult to describe it as objective.

- 10
- (a) In this example we need to consider whether economic benefits, the £0.6m and £0.4m will flow to A entity. There is some uncertainty that this will happen as it is dependent upon Connect receiving the funding and therefore the revenue should not be recognised until the uncertainty surrounding the funding is resolved.
- (b) We need to consider here whether economic benefits will flow to A. this will not be settled until negotiations with the insurance company are complete and the amount can then be reliably measured. In this case revenue can only be recognised on completion of the negotiations not on billing.
- (c) In this example there are two distinct components, the equipment and maintenance contract. The discount on the dual purchase by the customer is £24 and we can reasonably apportion this £16 to maintenance and £8 to equipment. On delivery of the equipment Z will recognise £144 as revenue and the remaining £72 will be taken to revenue evenly over the 12-month period. This solution will also



be applied to the provision of mobile phones and the monthly service provision contract as long as we can determine stand-alone prices for the components in the mobile phone deal.

- (d) A sale has again occurred here of two components. The total package has cost £52 250 (discount £2750). The discount can be apportioned as we did for the broadband supplier, i.e:

Boat	50000/55 000 –
2750 = 2500	thus cost of boat
£47 500	

Moorings 5000/55 000 –2750 = 250 thus cost of moorings £4750.

The revenue of £47 500 will be recognised on sale of the boat and £4750 for the moorings will be recognised evenly over the year.

OR

The discount can be apportioned based on profit margins:

Boat

$(12500/912 500 + 2500) - 2750 = £2290$  thus cost of boat £47 710  
Moorings  $2500/15 000 - 2750 = £460$  thus cost of moorings £4540.

- (e) Revenue cannot be recognised as the service provided in this case is uncertain until the outcome of the court case. Revenue will only be recognised if the outcome is a 'win' situation. The outcome of the court case is the 'trigger point' for recognition of revenue, if any is to be.

- (f) A to X

A will recognise the revenue of £10 per door from X. If A buys the doors from X he will record the cost in inventory and the subsequent revenue when he sells on to the house builder.

A to Y

The transactions of sale and purchase are linked in this deal and therefore A should not recognise the £10 revenue on provision of materials to Y but retain the cost of the materials £5 in inventory and record the £10 received from Y as a liability. When the door is repurchased the additional £40 paid by A will be recorded as inventory giving an inventory total of £45. No sale or revenue will be recognised until the door is sold on to the house builder.

- (g) Members obtain a £2 discount per visit and over an estimated life of 100 visits this equates to £200. Thus the £50 paid by members on joining over and above the discount can be regarded as revenue at the point of joining. The discount of £200 should be regarded initially as a liability and then spread over the expected

two years of active membership probably on a time basis (this is in accordance with IAS 18 appendix, para. 17).

- (h) Again the answer to this problem is contained in the appendix to IAS 18 which states that where orders are taken for goods not currently held in inventory revenue cannot be recognised until goods are delivered to the buyer.
- (i) Again the answer is contained within IAS 18 appendix, para. 16. Revenue has to be recognised over the period of instruction. This if a student has paid the fee for a three-year course then this fee must be spread over the three years not recognised in full in the first year.

## Chapter 19

- 6 A provision and a contingent liability have been distinguished throughout the text, so refer to the definitions. In order to provide relevant information to users, it is generally accepted that the provision should be accounted for in the financial statements, whereas the contingent liability should only be disclosed by way of note. This is so that the accounts do not take an overly prudent view of the state of affairs at the balance sheet date.
- 9 Many people would argue that IAS 37 lacks prudence in that it does not require the recognition of and accounting for all future expenses. We would not argue this, as we view prudence as a state of being free from bias, not being overly pessimistic.

## Chapter 20

- 4 These are fully explained in the text. You are expected to demonstrate your understanding by the use of examples similar to but not identical to those used in the text.
- 7 You should set your answer out in a clear style covering the following areas:
- definition of deferred tax - what is it?
  - approach to providing for deferred tax flow through, full deferral, partial deferral?
  - provision for deferred tax - deferral vs liability?

### Liability method

Calculates deferred tax on current rate of tax thus showing the best estimate of a future liability. Emphasis on balance sheet.

### Deferral method

Calculates deferred tax at the tax rate at date difference arose. The balance on deferred tax account is not affected by change in tax rate. Emphasis on income statement.

The approach adopted by the IASB which clearly opts for a balance sheet view full provisioning where the tax is seen as a liability - not an income statement view which advocates flow-through or at best partial provision. A conclusion to the memo can be formed from questions 1 and 2 and it would be useful to make mention of discounting which reduces the effect of full provisioning.

## Chapter 21

- 1 In this assignment the terms of the arrangement provide the counterparty with a choice of settlement. In this situation a compound financial instrument has been granted, i.e. a financial instrument with debt and equity components (see discussion of IAS 39); IFRS 2 requires the entity to estimate the fair value of the compound instrument at grant date, by first measuring the fair value of the debt component, and then measuring the fair value of the equity component, taking into account that the employee must forfeit the right to receive cash in order to receive the equity instruments.

If we apply this to this assignment, we will start by measuring the fair value of the cash alternative = 3000 - €30 = €90 000. The fair value of the equity alternative is 2 500 - €28 = €70 000. The fair value of the equity component of the compound instrument is a 20 000 (€90 000 - €70 000). This share-based payment transaction will be recorded as C follows. Each year an expense will be recognized. The expense will consist of the change in the liability due the remeasurement of the liability. The fair value of the equity component is allocated over the vesting period.

The following amounts will be recognized:

Year	Calculation	Expense	Equity	Liability
1	Liability component $(3000 - €33)/3 = 33\ 000$ Equity component $(20 - 1/3) = 6\ 666$	39666	6666	33000
2	Liability component $(3000 - €36)2/3 - 33\ 000 = 39000$ Equity component $(20.000 - 1/3) = 6\ 666$	45666	13332	72000
3	Liability component $(3000 - 40) - 72\ 000 = 48\ 000$ Equity component $(20\ 000 - 1/3) = 6\ 667$	54667	20000	120000

Suppose that at the end of year 3 the directors choose the cash alternative. In that situation €20 000 will be paid to the directors and the value of the liability will be nil afterwards. The equity component remains unchanged. When the directors choose a payment in shares then 25 000 shares will be issued. The liability amount will be transferred to the equity account.

- 2 (a) Defined contribution plans:

These are relatively straightforward plans that do not present any real problems. Normally under such plans employers and employees contribute specified amounts (often based on a percentage of salaries) to a fund. The fund is often managed by a third party. The amount of benefits an employee will eventually receive will depend upon the investment performance of the fund's assets. Thus in such plans the actuarial and investment risks rest with the employee. The accounting treatment of such plans is also straightforward. The cost of the plan to the employer is charged to the income statement on an annual basis and (normally) there is no further on-going liability. This treatment applies the matching concept in that the cost of the post-retirement benefits is charged to the period in which the employer received the benefits from its employee. Postretirement benefits are effectively a form of deferred remuneration.

Defined benefit plans:

These are sometimes referred to as final salary schemes because the benefits that an employee will receive from such plans are related to his/her salary at the date they retire. For example, employees may receive a pension of 1/60th of their final year's salary for each year they have worked for the company. The majority of defined benefit plans are funded, i.e. the employer makes cash contributions to a separate fund. The principles of defined benefits plans are simple, the employer has an obligation to pay contracted retirement benefits when an employee eventually retires. This represents a liability. In order to meet this liability the employer makes contributions to a fund to build up assets that will be sufficient to meet the contracted liability. The problems lie in the uncertainty of the future, no one knows what the eventually liability will be, nor how well the fund's investments will perform. To help with these estimates employers make use of actuaries who advise the employers on the cash contribution required to the fund. Ideally the intention is that the fund and the value of the retirement liability should be matched, however, the estimates required are complex and based on many variable estimates, e.g. the future level of salaries and investment gains and losses of the fund. Because of these problems regular actuarial estimates are required and these may reveal fund deficits (where the value of the assets is less than the post-retirement liability) or surpluses. Experience surpluses or deficits will give rise to a revision of the planned future funding. This may be in the form of requiring additional contributions or a reduction or suspension (contribution holiday) of contributions. Under such plans the actuarial risk (that benefits will cost more than expected) and the investment risk (that the assets invested will be insufficient to meet the expected benefits) fall on the company. Also the liability may be negative, in effect an asset.

Accounting treatment:

The objective of the new standard is that the financial statements should reflect and adequately disclose the fair value of the assets and liabilities arising from a company's post-retirement plan and that the cost of providing retirement benefits is charged to the accounting periods in which the benefits are earned by the employees.

In the balance sheet:

An amount should be recognized as a defined benefit liability where the present value of the defined benefit obligations is in excess of the fair value of the plan's assets (in an unfunded scheme there would be no plan assets). This liability will be increased by any unrecognized net actuarial gains (see below).

Where an actuarial gain or loss arises (caused by actual events differing from forecast events), IAS 19 requires a '10% corridor test' to be made. If the gain or loss is within 10% of the greater of the plan's gross assets or gross liabilities then the gain or loss may be recognized (in the income statement) but it is not required to be. Where the gain or loss exceeds the 10% corridor then the excess has to be recognized in the income statement over the average expected remaining service lives of the employees. The intention of this requirement is to prevent large fluctuations in reported profits due to volatile movements in the actuarial assumptions.

The following items should be recognized in the income statement:

- current service cost (the increase in the plan's liability due to the current year's service from employees)
- interest cost (this is an imputed cost caused by the 'unwinding' of the discounting process; i.e. the liabilities are one year closer to settlement)
- the expected return on plan assets (the increase in the market value of the plan's assets)
- actuarial gains and losses recognized under the 10% corridor rule
- costs of settlements or curtailments.

(b) Income statement

	\$000
Current service cost	160
Interest cost (10% _ 500)	150
Expected return on plan's assets (12% _ 500)	(180)
Recognized actuarial gain in year	<u>(5)</u>
Post-retirement cost in income statement	<u>125</u>

Balance sheet

	\$000
Present value of obligation	<u>1750</u>
Fair value of plan's assets	(1650)
100	
Unrecognized actuarial gains (see below)	<u>140</u>
Liability recognized in balanced sheet	<u>240</u>
Movement in unrecognized actuarial gain	
Unrecognized actuarial gain at 1 April 2001	200
Actuarial gain on plan assets (w (i))	10
Actuarial loss on plan liability (w (i))	(65)
Loss recognized (w (ii))	<u>(5)</u>
Unrecognized actuarial gain 31 March 2002	<u>140</u>

Workings:

(i)	Plan assets	Plan liabilities
	\$000	\$000

Balance 1 April 2001	1500	1500
Current service cost		160
Interest		150
Expected return	180	
Contributions paid	85	
Benefits paid to employees	(125)	(125)
Actuarial gain (balance)	10	
Actuarial loss (balance)	—	65
Balance 31 March 2002	<u>1650</u>	<u>1750</u>

- (ii) Net cumulative unrecognized actuarial gains at 1 April 2001 200  
 10% corridor (10% \_ 1 500) 150  
 Excess 50 /10 years = \$5  
 000 actuarial gain to be recognized.

3

Year	Calculation	Expense	Equity and cumulative expense
1	$(1000 - 0.85 - 20)/3$	5666	5666
2	$(1000 - 0.88 - 20)2/3 - 5$	666	6067 11733
3	$(10 - 86 - 20) - 11$	733 5467	17200

4. Since IFRS requires the entity to recognize the services received from a counter-party who satisfies all other vesting conditions (e.g. services received from an employee who remains in service for the specified period), irrespective of whether that market condition is satisfied, it makes no difference whether the share price target is achieved. The possibility that the share price target might not be achieved has already been taken into account when estimating the fair value of the share options at grant date.

Year	Calculation	Expense	Equity
1	$(20000 - 0.98 - 48)/3$	313600	313600
2	$((20\ 000 - 0.98 - 48)2/3) - 313\ 600$	313 600	627200
3	$(1000 - 17 - 48) - 627\ 200$	188800	816000

## Chapter 22

- 1 IAS 29 is adjusting for general inflation, i.e. for the fall in the value of money. It applies a general inflation adjustment to the original, i.e. normally, historical cost figures. It is in no sense, therefore, concerned with valuation of financial statement items.

## Chapter 23

- 5 Cash flow statement must be looked at together with balance sheet and income statement. It cannot be used in isolation.

The cash flow provides additional information as follows:

- cash flow generated from operations
- cash flow effect of taxation charge
- amounts expended on capital and financial investment are nearly as great as that generated from operations
- capital expenditure and investments have been financed from operations, issued share capital and long-term debt
- minority interest payments and cash from associates can be clearly seen | whether acquisition of subsidiary has had a positive effect on cash flow.

- 10 (a) Rytetrend - Cash Flow Statement for the year to 31 March 2003:

Cash flows from operating activities			
(Note: figures in brackets are in \$000)	\$000		\$000
Operating profit per question			3860
Capitalization of installation costs			
less depreciation (300 _ 60) (w (i))			240
Adjustments for:			
depreciation of non-current assets (w (i))	7410		
loss on disposal of plant (w (i))	<u>700</u>		8110
increase in warranty provision (500 _ 150)			350
decrease in inventory (3 270 _ 2 650)			620
decrease in receivables (1 950 _ 1 100)			850
increase in payables (2 850 _ 1 980)			<u>870</u>
Cash generated from operations			14900
Interest paid			(460)
Income taxes paid (w (ii))			(910)
Net cash from operating activities			13530
Cash flows from investing activities (w (i))			<u>(15550)</u>
			(2020)
Cash flows from financing activity:			
Issue of ordinary shares (1 500 + 1 500)	3000		
Issue of 6% loan note	2000		
Repayment of 10% loan notes	(4000)		
Ordinary dividends paid (280 + (600 3 450) interim)	<u>(430)</u>		<u>570</u>
Net decrease in cash and cash equivalents			(1450)
Cash and cash equivalents at beginning of period			<u>400</u>
Cash and cash equivalents at end of period			<u>(1050)</u>
		\$000	
(i) Non-current assets - cost			
Balance b/f			27500
Disposal			(6000)
Balance c/f (37 250 + 300 re-installation)			(37550)
Cost of assets acquired			(16050)

Trade in allowance	500
Cash flow for acquisitions	(15550)
Depreciation	
Balance b/f	(10200)
Disposal (6 000 _ 20% _ 4 years)	4800
Balance c/f (12 750 + (300 _ 20%))	<u>12810</u>
Difference - charge for year	<u>7410</u>

Disposal	
Cost	6000
Depreciation	<u>(4800)</u>

Net book value	1200
Trade in allowance	<u>(500)</u>
Loss on sale	<u>700</u>

(ii) Income tax paid:	
Provision b/f	(630)
Income statement tax charge	(1000)
Provision c/f	<u>720</u>
Difference cash paid	<u>(910)</u>

(b) Report on the financial performance of Rytetrend for the year ended 31 March 2003

To:

From:

Date:

Operating performance

- (i) revenue up \$8.3 million representing an increase of 35% on 2002 figures.
- (ii) costs of sales up by \$6.5 million (40% increase on 2002) Overall the increase in activity has led to an increase in gross profit of \$1.8 million, however the gross profit margin has eased slightly from 31.9% in 2002 to 29.2% in 2003. Perhaps the slight reduction in margins gave a boost to sales.
- (iii) operating expenses have increased by \$600 000 ((\$5 440 000 \_ \$240 000) \_ \$4 600 000), an increase of 13% on 2002 figures.
- (iv) interest costs reduced by \$40 000. It is worth noting that the composition of them has changed. It appears that Rytetrend has taken advantage of a cyclic reduction in borrowing cost and redeemed its 10% loan notes and (partly) replaced these with lower cost 6% loan notes. From the interest cost figure, this appears to have taken place half way through the year.
- (v) The accumulated effect is an increase in profit before tax of \$1.24 million (up 51.7% on 2002) which is reflected by an increase in dividends of \$200 000.
- (vi) The company has invested heavily in acquiring new non-current assets (over \$15 million - see cash flow statement). The refurbishment of the equipment may be responsible for the increase in the company's sales and operating performance. Although borrowing costs on long-term finance have decreased, other factors have led to a substantial overdraft which has led



to further interest of \$200 000.

- (v) The accumulated effect is an increase in profit before tax of \$1.24 million (up 51.7% on 2002) which is reflected by an increase in dividends of \$200000.
- (v) The company has invested heavily in acquiring new non-current assets (over \$15 million - see cash flow statement). The refurbishment of the equipment may be responsible for the increase in the company's sales and operating performance.

#### Analysis of financial position

- (vii) Inventory and receivables have both decreased markedly. Inventory is now at 43 days from 75 days, this may be due to new arrangements with suppliers or that the different range of equipment that Rytetrend now sells may offer less choice requiring lower inventory. Receivables are only 13 days (from 30 days). This low figure is probably a reflection of a retailing business and the fall from the 2002 figure may mark a reduction in sales made by credit cards.
- (viii) Although trade payables have increased significantly, they still represent only 46 days (based on cost of sales) which is almost the same as in 2002.
- (ix) A very worrying factor is that the company has gone from net current assets of \$2 580 000 to net current liabilities of \$1 820 000. This is mainly due to a combination of the above mentioned items: decreased inventory and receivables and increased trade payables leading to a fall in cash balances of \$1 450 000. That said, traditionally acceptable norms for liquidity ratios are not really appropriate to a mainly retailing business.
- (x) Long-term borrowing has fallen by \$2 million; this has lowered gearing from 20% (4 000 000/19 880 000) to only 9% (2 000 000/2268000). This is a very modest level of gearing.

#### The cash flow statement

This indicates very healthy cash flows generated from operations of \$14900000, more than sufficient to pay interest costs, taxation and dividends. The main reason why the overall cash balance has fallen is that new non-current assets (costing over \$15 million) have largely been financed from operating cash flows (only \$1 million net of new capital has been raised). If Rytetrend continues to generate operating cash flows in the order of the current year, its liquidity will soon get back to healthy levels.

Note: The above analysis takes into account the net effect of capitalising the staff costs.

## Chapter 24

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- 2 (a) The objective of segment reporting is to provide information about the different types of products and services of an enterprise and the different geographical areas in which it operates. This information assists users of financial statements to:
- Understand the enterprise's past performance. - Assess the enterprise's risks and returns.
  - Make more informed judgements about the enterprise as a whole.

Many entities provide groups of products or services or operate in geographical areas that are subject to different rates of profitability, opportunities for growth, future prospects and risks. Information about an enterprise's different types of products or services and its operations in different geographical areas is relevant to assessing the risks and returns of a diversified or multinational enterprise, but may not be discernible from the aggregated data. Therefore segment information is widely regarded as necessary to meeting the needs of users of financial statements.

A key problem with segment reporting is the manner in which the reportable segments are identified. IAS14 does provide some guidance in this area, requiring an enterprise to identify segments on the basis of internal reporting systems wherever practicable. The materiality threshold for a segment is basically set at one which contributes at least 10% of total revenue, profits, or total assets. Even with this guidance however, segment identification is a somewhat subjective exercise and comparisons of segment

information provided by different entities needs to be performed with caution.

A further problem is the method of allocation of costs and assets relating to more than one segment. IAS14 requires that common costs and assets that can reasonably be allocated to individual segments should be included in arriving at results and assets on a segment by segment basis. However, the standard does allow for common items to be left unallocated and this inevitably introduces an element of subjectivity into the segment report.

(b) Segment report for Worldwide

	Europe	North America	Asia	Total
	\$'000	\$'000	\$'000	\$'000
REVENUE				
External sales (40:35:25)	266 000	232 750	166 250	665 000
Inter-segment sales	<u>20 000</u>	<u>16 000</u>	<u>13 000</u>	<u>49 000</u>
Total revenue	<u>286 000</u>	<u>248 750</u>	<u>179 250</u>	<u>714 000</u>
RESULT				
Segment result (W1)	<u>60 400</u>	<u>47 100</u>	<u>38 500</u>	<u>146 000</u>
Unallocated corporate expenses				<u>(10 000)</u>
Profit from operations				136 000
Investment income				6 000
Finance cost				(25 000)
Income taxes				(28 000)
Minority interests				<u>(8 000)</u>
Net profit				<u>81 000</u>
OTHER INFORMATION				
Segment assets (W2)	<u>204 060</u>	<u>193 320</u>	<u>139 620</u>	537 000
Unallocated corporate assets (50000 + 6 000)				<u>56 000</u>
Consolidated total assets				<u>593 000</u>
Segment liabilities (W3)	<u>26 600</u>	<u>25 200</u>	<u>18 200</u>	70 000
Unallocated corporate liabilities (176000 + 17 000)				<u>193 000</u>
Consolidated total liabilities				<u>263 000</u>

Working 1 - segment result

Europe	North America	Asia
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	\$'000	\$'000	\$'000
Segment revenue	286000	248750	179250
Segment costs:			
External*	(207600)	(181650)	(129750)
Intra-group (Note 3 to question)	<u>(18000)</u>	<u>(20000)</u>	<u>(11000)</u>
	<u>60400</u>	<u>47000</u>	<u>38500</u>

\*Total operating costs (excluding intra-group items) are 529 000 (312 000 + 99000 + 118 000).

Head office costs are 10 000.

So costs to be allocated are 519 000. The given ratio is 40:35:25.

Working 2 - segment assets - all allocated 38:36:26

	Europe	North America	Asia
	\$'000	\$'000	\$'000
Property, plant and equipment (340000)38:36:26	129200	122400	88400
Inventories (75 000)	28500	27000	19500
Trade receivables (104 000)	39520	37440	27040
Bank balances (18 000)	<u>6840</u>	<u>6480</u>	<u>4680</u>
	<u>204060</u>	<u>193320</u>	<u>139620</u>

Working 3 - segment liabilities - all allocated 38:26:26

	Europe	North America	Asia
	\$'000	\$'000	\$'000
Trade payables (38:36:26)	<u>26600</u>	<u>25200</u>	<u>18200</u>

- 3
- (a) this would be an adjusting event - since these structural problems were probably already present at year end
  - (b) would be a non-adjusting event
  - (c) there is strong indication that the customer was already unable to pay before the balance sheet date. Therefore, the provision for bad debts should be recognized at balance sheet date
  - (d) although this might look like an adjusting event, it is not because at year end, the recognition and measurement criteria of IAS 37 were not met..

## Chapter 25

- 2 This is dealt with in the text.

## Chapter 27

2. Proportional consolidation is explained in the text and amply demonstrated in Activities within Chapter 27. Equity accounting is also explained. Equity accounting is used for the consolidation of an investment in an associated enterprise. Proportional consolidation is the benchmark treatment for the consolidation of jointly controlled entities although an alternative is permitted, equity method.

## Chapter 28

4. Consolidated Balance Sheet as at 30 November 20X3

	\$m	Largo \$m
Non-current assets		
Tangible non-current assets	665.9	
Intangible non-current assets - brand	7	
Intangible non-current assets - goodwill	80.3	
Investment in associate	<u>12.6</u>	765.8
Current assets		<u>218</u>
Total assets		<u>983.8</u>
Capital and reserves		
Called up share capital		460
Share premium account		264
Accumulated Reserves		121.2
Minority interest		<u>50.6</u>
		895.8
Non-current liabilities		69
Current liabilities		<u>19</u>
		<u>983.8</u>

- (i) The business combination should not be accounted for as a uniting of interests because of the following reasons:
- (a) the fair value of the net assets of Fusion and Spine (\$315 million \$119 million) is significantly smaller than those of Largo (\$650 million). The employees of Largo number fifty per cent more than the combined total of Fusion and Spine and the market capitalization of Largo is significantly larger than that of the two companies (\$644 million, Largo, as against \$310 million, Fusion, \$130 million Spine, i.e. \$440 million).
- (b) the new board of directors comprises mainly directors from Largo. (Seven directors out of ten directors sitting on the Board.)

The arguments concerning the equity holdings are not strong enough to override the overwhelming size and control dominance set out above. The business combination should be treated as an acquisition.

- (ii) Largo acquired Fusion and Spine on 1 December 20X2 and, therefore, control was gained for the purpose of the group accounts on that day. For the purpose of the Largo Group, the date of

acquisition of Spine by Fusion is not relevant.

Shareholdings	Fusion	Spine
Largo	90%	26%
Minority Interest	10%	90% of 60% 80%
		20%

(iii) Equity of Fusion

	Total	Pre- acquisition	Post- acquisition	Minority Interest
Ordinary share capital	110	99		11
Share premium account	20	18		2
Accumulated reserves	138	122.4	1.8	13.8
Fair value adjustment (w(vii))	49	44.1		4.9
Adjustment for depreciation (w(vii))	(3.2)		(2.9)	(0.3)
Impairment of brands (w(vi))	(2)		(1.8)	(0.2)
Cost of investment (w(v))	311.8	283.5	(2.9)	31.2
Goodwill		345		
		(61.5)		

Equity of Spine

	Total	Pre- acquisition	Post- acquisition	Minority Interest
Ordinary share capital	50	40		10
Share premium account	10	8		2
Accumulated reserves	35	24	4	7
Fair value adjustment (w(vii))	29	23.2		5.8
Adjustment for depreciation (w(vii))	<u>(1.9)</u>		(1.5)	(0.4)
Cost of investment (w(v))	<u>122.1</u>	<u>95.2</u>	<u>2.5</u>	<u>24.4</u>
Cost of investment - indirect (90:10)		69		
Goodwill	<u>18.8</u>	<u>45</u>		<u>(5)</u>
				<u>19.5</u>

Minority interest is \$31.2 m \$19.4 m, i.e. \$50.6 million.

Goodwill arising on acquisition of (61.5 + 18.8) i.e. \$80.3 million.

(iv) Deferred tax and fair values

Deferred tax should be taken into account in calculation of the fair values of the net assets acquired.

The increase in the value of the net assets to bring them to fair value is attributable to the property. This increase is used to calculate deferred tax which should be deducted from the fair value of the net assets.

The fair value of the net assets should be decreased by the deferred tax on the property.

Fusion

Fair value \$330 million (tax \$15 million).

Spine

Fair value \$128 million (\$9 million).

Total increase in deferred tax provision \$24 m

(v) Cost of investment:

The group accounts are utilizing acquisition accounting which requires that the consideration should be measured at fair value. Therefore, the cost of the investments in Fusion and Spine should be measured at the market price. The market price on the day of acquisition was \$644 million ÷ (460 150 30) i.e. \$2.30 per share.

Therefore, the fair value of the consideration is:

	\$m
Fusion 150 m \$2.30	<u>345</u>
Spine 30 m \$2.30	<u>69</u>

The share premium account of Largo will then become:

Balance at 31 May 2004	30
Arising on issue of shares - Fusion	195
- Spine	<u>39</u>
	<u>264</u>

(vi) Brand name IAS22 'Business Combinations' and IAS38 'Intangible assets' require that intangible assets acquired as part of an acquisition should be recognized separately as long as a reliable value can be placed on such assets. There is no option not to show the intangible asset separately under IAS38. In this case the brand can be separately identified and sold. Therefore, it should be shown separately. Also the brand should be reviewed for impairment as its fair value has fallen to \$7 million. The brand should, therefore, be reduced to this value and \$2 million charged against the income statement.

(vii) Tangible non-current assets

	\$m
Largo	329
Fusion	185
Spine	64
Brand	(9)

Fair value adjustment

- Fusion (330 - 110 - 20 - 136)	64	
- Spine (128 - 50 - 10 - 30)	38	
Additional depreciation -		(increase in fair
Fusion	(3.2)	value \$64 m _5%)
- Spine		(increase in fair
	<u>(1.9)</u>	value \$38 m _5%)
	<u>665.9</u>	

(viii) Group reserves	1\$m
Largo	1120
Fusion	1(2.9)
Spine	12.5
	1119.6
Income from associate	11.6
	1121.2

(ix) Micro

When an associate is first acquired, the share of the underlying net assets should be fair valued and goodwill accounted for. This has not been carried out in the case of Micro.

	\$m
Fair value of shares at acquisition (40% - \$20m)	8
Goodwill	<u>3</u>
Carrying value of investment	<u>11</u>

The investments are to be marked to market by Micro and, therefore, a profit will have arisen during the period of \$24 million \$20 million, i.e. \$4 million. The investment in Micro will, therefore, be stated at (11(40% 4)) million, i.e. \$12.6 million.

10.(a) Consolidated Balance Sheet of Hapsburg as at 31 March 2004:

	\$000	\$000
Non current assets		
Goodwill (16 000 (w (i)))		16000
Property, plant and equipment (41 000 + 34800 + 3750 (w (i)))		79550
Investments:		
- in associate (w (iv))	15900	
- ordinary 3 000 + 1500 (fair value increase)	4500	<u>20400</u>



		<u>115950</u>
Current Assets		
Inventory (9 900 + 4800 - 300 (w (v)))	14400	
Trade receivables (13 600 + 8600)	22200	
Cash (1 200 + 3800)	<u>5000</u>	<u>41600</u>
Total assets		<u>57550</u>
Equity and liabilities		
Ordinary share capital (20 000 + 16000 (w (i)))		36000
Reserves:		
Share premium (8 000 + 16000 (w (i)))	24000	
Accumulated profits (w (ii))	12000	<u>36000</u>
		<u>72000</u>
Minority interests (w (iii))		9150
Non-current liabilities		
10% Loan note (16 000 + 4200)	20200	
Deferred consideration (18 000 + 1800 (w (vi)))	19800	
		<u>40000</u>
Current liabilities:		
Trade payables (16 500 + 6900)	23400	
Taxation (9 600 + 3400)	<u>13000</u>	<u>36400</u>
Total equity and liabilities		<u>157550</u>

Note: all working figures in \$000.

The 80% (24 m/30 m shares) holding in Sundial is likely to give Hapsburg control and means it is a subsidiary and should be consolidated. The 30% (6 m/20 m shares) holding in Aspen is likely to give Hapsburg influence rather than control and thus it should be equity accounted.

(i)

Investments at cost (see below)	50000	Cost of control	
		Ordinary shares (30 000 - 80%)	24000
		Share premium (2 000 - 80%)	1600
		Pre acq profit (w (ii))	3200
		Fair value adjustments (see below)	5200
		Goodwill	<u>16000</u>
			<u>50000</u>

The purchase consideration for Sundial is \$50 million. This is made up of an issue of 16 million shares (24/3 - 2) at \$2 each totalling \$32 million and deferred consideration of \$24 million (\$1 per share) which should be discounted to \$18 million (24 million \$0.75). The share issue should

be recorded as \$16 million share capital and \$16 million share premium.

Fair value adjustments:

IAS22 requires the full fair value adjustment to be recorded with the minority being allocated their share.

Fair value adjustment	Total	group share (80%)	minority (20%)
Property, plant and equipment	5000	4000	1000
Investments	<u>1500</u>	<u>1200</u>	<u>300</u>
	<u>6500</u>	<u>5200</u>	<u>1300</u>

The fair value adjustment of \$5 million to plant will be realized evenly over the next four years in the form of additional depreciation at \$1.25 million per annum. In the year to 31 March 2004 the effect of this is \$1.25 million charged to Sundial's profits (as additional depreciation); and a net of \$3.75 million added to the carrying value of the plant.

Goodwill on acquisition of Aspen:

Purchase consideration (6 million - \$2.50)			15000
Share capital		20000	
Profits up to acquisition (8 000 - (6000 - 6/12))		5000	
Net assets at date of acquisition	25000 - 30%		(7500)
Difference - goodwill			7500

(ii) Accumulated profits

Additional depreciation (w (i))	Hapsburg	Sundial	Hapsburg Per question	Sundial	
URP in inventory (w (v))	300	1250	Post acq. profit	10600	8500
Unwinding of interest (w (vi))	1800		Share of Aspen's profit (6000 - 6/12 - 30%)	900	
Minority interest ((8 500 -		1450			

1250) - 20%) Pre-acq profit		3200		
((8 500 - 4500) - 80%) Post acq profit		2600		
(4500 - 1250) - 80%) Balance c/f	<u>12000</u>			
	<u>14100</u>	<u>8500</u>	<u>14100</u>	<u>8500</u>

(iii)

		Minority interest	
		Ordinary shares (30 000 - 20%)	6000
		Share premium (2 000 - 20%)	400
		Accumulated profits (w (ii))	1450
Balance	9150	Fair value	1300
c/f		adjustments (w (i))	
	9150		9150

(iv) Unrealized profit in inventory

As the transaction is with an associate, only the group share of unrealized profits must be eliminated: \$1.6 million - 2.5 million/4 million - 30% = \$300 000

(b) In recent years many companies have increasingly conducted large parts of their business by acquiring substantial minority interests in other companies. There are broadly three levels of investment. Below 20% of the equity shares of an investee would normally be classed as an ordinary investment and shown at cost (it is permissible to revalue them to market value) with only the dividends paid by the investee being included in the income of the investor. A holding of above 50% normally gives control and would create subsidiary company status and consolidation is required. Between these two, in the range of over 20% up to 50%, the investment would normally be deemed to be an associate (note, the level of shareholding is not the only determining criterion). The relevance of this level of shareholding is that it is presumed to give significant influence over the operating and financial policies of the investee (but this presumption can be rebutted). If such an investment were treated as an ordinary investment, the investing company would have the opportunity to manipulate its profit. The most obvious example of this would be by exercising influence over the size of the dividend the associated company paid. This would directly affect the reported profit of the investing company. Also, as companies tend not to distribute all of their earnings as

dividends, over time the cost of the investment in the balance sheet may give very little indication of its underlying value. Equity accounting for associated companies is an attempt to remedy these problems. In the income statement any dividends received from an associate are replaced by the investor's share of the associate's results. In the balance sheet the investment is initially recorded at cost and subsequently increased by the investor's share of the retained profits of the associate (any other gains such as the revaluation of the associate's assets would also be included in this process). This treatment means that the investor would show the same profit irrespective of the size of the dividend paid by the associate and the balance sheet more closely reflects the worth of the investment.

The problem of off balance sheet finance relates to the fact that it is the net assets that are shown in the investor's balance sheet. Any share of the associate's liabilities is effectively hidden because they have been offset against the associate's assets. As a simple example, say a holding company owned 100% of another company that had assets of \$100 million and debt of \$80 million, both the assets and the debt would appear on the consolidated balance sheet. Whereas if this single investment was replaced by owning 50% each of two companies that had the same balance sheets (i.e. \$100 million assets and \$80 million debt), then under equity accounting only \$20 million  $((100 - 80) \times 50\%)$  of net assets would appear on the balance sheet thus hiding the \$80 million of debt. Because of this problem, it has been suggested that proportionate consolidation is a better method of accounting for associated companies, as both assets and debts would be included in the investor's balance sheet. IAS 28 'Accounting for Investments in Associates' does not permit the use of proportionate consolidation of associates, however IAS 31 'Financial Reporting of Interests in Joint Ventures' sets as its benchmark proportionate consolidation for jointly controlled entities (equity accounting is the allowed alternative).

## Chapter 29

- 3. With the temporal method exchange gains and losses are put through the income statement; unrealized gains are the problem. With the closing rate method exchange gains and losses are put through reserves as exchange rate changes will have no effect on cash flow to the holding company. This avoids distortion of income statement due to factors unrelated to trading performance. Losses are the problem with this method.
- 5. Critical appraisal is required of the concept behind closing rate as compared with temporal method.

The closing rate is based on the idea that the holding company has a net investment in the foreign operation and that what is at a risk from currency fluctuations is the net financial investment. The temporal method is based on the idea that the foreign operations are simply a part of the group, that is, the reporting entity. Thus the closing rate method assumes that business is carried on overseas by semi-independent units that are dependent on the local currencies, whereas the temporal method

assumes overseas units are extensions of the home business. The mode of business operation requires assessment to determine which method of translation should be used and the factors involved in this assessment are detailed in the regulations of IAS 21, which are covered in the text.

## Chapter 31



2 (a) Cash is exact, profits are calculated via concepts which permit various interpretations/judgements. Profit is a moving target. Cash balances can be boosted at year end quite easily by withdrawing payments, taking out loans, encouraging by incentives early debtor settlement etc.

(b) Company needs cash flow and profit to survive. Concentration on increasing cash balances is bad policy as the money will not be earning unless it is invested somehow.