Instructor's Manual

Financial Accounting and Reporting

Eighteenth edition

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Brief contents

PART 1

Introduction to accounting on a cash flow and accrual accounting basis

CHAPTER 1

Accounting and reporting on a cash flow basis

Question 1 – Sasha Parker

(a) *Cash budget (£000)*

	Jan	*Feb*	*Mar*	*Apr*	*May*	*June*	*Total*
Initial capital	150.00			82.50			232.50
Customers					60.00	75.00	135.00
Total receipts	**150.00**			**82.50**	**60.00**	**75.00**	**367.50**
Machinery	30.00						30.00
Motor vehicles	24.00						24.00
Premises	75.00						75.00
Drawings	1.20	1.20	1.20	1.20	1.20	1.20	7.20
Suppliers		30.00	48.00	60.00	60.00	60.00	258.00
Rates		1.20					1.20
Wages	2.25	2.25	2.25	2.25	2.25	2.25	13.50
General expenses		0.75	0.75	0.75	0.75	0.75	3.75
Insurance	–	–	–	–	–	2.10	2.10
Total payments	**132.45**	**35.40**	**52.20**	**64.20**	**64.20**	**66.30**	**414.75**
Net cash flow	17.55	(35.40)	(52.20)	18.30	(4.20)	8.70	
Balance b/f	–	17.55	(17.85)	(70.05)	(51.75)	(55.95)	
Balance c/f	**17.55**	**(17.85)**	**(70.05)**	**(51.75)**	**(55.95)**	**(47.25)**	**(47.25)**

(b) *Statement of cash flows (£000)*

Realised operating cash flows for the period ended 30 June 20X1	
Receipts from customers	**135.00**
Payments:	
Suppliers	258.00
Rates	1.20
Wages	13.50
General expenses	3.75
Insurance	2.10
	278.55
	(143.55)

For information only

Statement of financial position as at 30 June 20X1

		£000
Capital – introduced		232.50
– withdrawn		(7.20)
Net operating cash flows:	Realised	(143.55)
	Unrealised	(7.80)
		73.95
Premises (NRV)		75.00
Vehicles (NRV)		19.20
Machinery (NRV)		27.00
Net cash balance		(47.25)
		73.95

(c) *Further information regarding Sasha Parker*

Nature of business linked to Parker's business background, technical ability, special skills, know-how, existing/terminated business involvement, contacts, associates and related parties.

Type of business unit to be used, and rationale for its selection.

Sources of long- and short-term capital.

Products' life cycle and cash flow projections over product life cycle.

Initial investment in fixed assets and their terminal value at the end of the life cycle.

Parker's attitude to risk, and how this affects the choice of discount rate and payback period.

Question 2 – Mr Norman

(a) *Purchases budget (€000)*

	Jan	*Feb*	*Mar*	*Apr*	*May*	*June*
Sales	15.00	20.00	35.00	40.00	40.00	45.00
Gross profit	3.00	4.00	7.00	8.00	8.00	9.00
Purchases	12.00	16.00	28.00	32.00	32.00	36.00
Payments		**12.00**	**16.00**	**28.00**	**32.00**	**32.00**

Notes:

This is a start-up situation.

Purchases equal projected sales less a gross margin on sales at 20%.

Goods are bought in the month of sale; assume stocks remain constant.

(b) *Statement of cash flows (£000)*

	Jan	*Feb*	*Mar*	*Apr*	*May*	*June*	*Total*
Initial capital	50.00						50.00
Cash sales	7.50	10.00	17.50	20.00	20.00	22.50	97.50
Credit sales	–	7.50	10.00	17.50	20.00	20.00	75.00
	57.50	**17.50**	**27.50**	**37.50**	**40.00**	**42.50**	**222.50**
Premises	80.00						80.00
Rent and rates	2.20	2.20	2.20	2.20	2.20	2.20	13.20
Suppliers		12.00	16.00	28.00	32.00	32.00	120.00
Commission		0.30	0.40	0.70	0.80	0.80	3.00
Wages	0.60	0.60	0.60	0.60	0.60	0.60	3.60
Insurance	3.50	–	–	–	–	–	3.50
	86.30	**15.10**	**19.20**	**31.50**	**35.60**	**35.60**	**223.30**
Net cash flow	(28.80)	2.40	8.30	6.00	4.40	6.90	
Balance b/f	–	(28.80)	(26.40)	(18.10)	(12.10)	(7.70)	
Balance c/f	**(28.80)**	**(26.40)**	**(18.10)**	**(12.10)**	**(7.70)**	**(0.80)**	**(0.80)**

(c) *Statements of operating cash flows and financial position*

Realised operating cash flows for the period ended 30 June 20X8

	£000
Receipts from customers	172.50
Payments:	
Suppliers	120.00
Rates	13.20
Wages	3.60
Commission	3.00
Insurance	3.50
	143.30
	29.20

Notes:

The cash flow statement with summary attached is effectively a six-month cash budget showing the cash received, cash paid each month and the resulting month-end balances.

It is necessary to separate sales and purchase transactions into cash and on-credit, and to identify clearly the month of receipt and payment.

Commission is paid in the month after the sale is made, and all other cash flows are clearly indicated and allocated to specific months.

Note that the format of the cash flow statement brings out key figures – for management decision and control. For example:

month-end balances – assist in the control of liquidity;

cash deficiencies – identify how much must be financed;

early warning – allows management to approach appropriate sources;

cash surpluses – identify amounts to be invested on the best terms.

Statement of financial position as at 30 June 20X8

	£000	
Capital – introduction		50.00
Net operating cash flows: **Realised**		29.20
: **Unrealised**		(4.00)
	75.20	
Premises **(NRV)**		76.00
Net cash balance		(0.80)
	75.20	

Notes:

This statement shows net assets of £75,200.

Make up: premises £76,000 less the negative cash balance £800.

The negative cash balance indicates the need for overdraft arrangements.

The statement is based on cash flow concept:

It ignores accrual-based figures (£36,900 less £25,250).

Accruals are not regarded as real assets and liabilities.

Critics of the cash flow concept would maintain that its utility has, therefore, been seriously diminished.

(d) *Letter to the bank requesting an overdraft facility*

The maximum overdraft facility of £28,800:

will be required at the end of January;

will be eliminated by July.

Overdraft will fall progressively as per the cash budget.

It might be practical to request a limit of £30,000:

for the full six-month period;

reducing it to £15,000 thereafter to allow for contingencies. The facility is only to be called on as required.

Refer to the cash budget to support the request:

confirm that it is based on the most likely scenario;

agree to a repayment schedule.

Specify that collateral security is available in the form of premises if it should be required.

If not an existing customer:

give outline details of business background;

explain future plans;

market.

CHAPTER 2

Accounting and reporting on an accrual accounting basis

Question 1 – Sasha Parker

(a) *Cash budget (€000)*

	Jan	*Feb*	*Mar*	*Apr*	*May*	*June*	*Total*
Initial capital	150.00					75.00	225.00
Customers				60.00	75.00	75.00	210.00
Total receipts	**150.00**			**60.00**	**75.00**	**150.00**	**435.00**
Machinery	30.00						30.00
Motor vehicles	24.00						24.00
Premises	75.00						75.00
Drawings	1.50	1.50	1.50	1.50	1.50	1.50	9.00
Suppliers		30.00	48.00	60.00	60.00	60.00	258.00
Rates							
Wages	2.25	2.25	2.25	2.25	2.25	2.25	13.50
General expenses		0.75	0.75	0.75	0.75	0.75	3.75
	132.75	34.50	52.50	64.50	64.50	64.50	413.25
Net cash flow	17.25	(34.50)	(52.50)	(4.50)	10.50	85.50	
Balance b/f	–	17.25	(17.25)	(69.75)	(74.25)	(63.75)	
Balance c/f	**17.25**	**(17.25)**	**(69.75)**	**(74.25)**	**(63.75)**	**(21.75)**	**(21.75)**

All balances are overdrawn except for January 20X1

	Feb	*Mar*	*Apr*	*May*	*June*
o/d	**17.25**	**69.75**	**74.25**	**63.75**	**4.65**

Note:

No entries will be made for the 20X0/X1 local taxes that are paid in Feb 20X2 – this situation arose because Sasha Parker had assumed that the business would only pay the taxes from the start of the tax year, e.g. 1.4.20X1.

However, there will be an entry in the profit and loss account and the statement of financial position.

(b) *Sasha Parker – profit and loss account for six months ended 30 June 20X1*

	€000	*€000*
Sales [60.00 + (5 × 75.00)]		435.00
Purchases	378.00	
Closing inventory	(30.00)	
Cost of sales		348.00
Gross profit		87.00
Wages	13.50	
General expenses	4.50	
Local taxes (1.1.X1–30.6.X1)	4.00	
Insurance	13.20	
Depreciation:		
– Vehicles	2.40	
– Machinery	1.50	39.10
Net profit		**47.90**

Budgeted statement of financial position as at 30 June 20X1

Capital			225.00
Net profit			47.90
Less: drawings			(9.00)
			263.90
Non-current assets			
Premises			75.00
Vehicles	24.00		
Less: depreciation	2.40		21.60
Machinery	30.00		
Less: depreciation	1.50		28.50
Current assets			
Inventory	30.00		
Trade receivables (3 × 75.00)	225.00		
Insurance	13.20	268.20	
Current liabilities			
Trade payables	120.00		
Local taxes (1.1.X1–30.6.X1)	4.00		
Bank overdraft	4.65		
General expenses	0.75	(129.40)	
Net current assets			138.80
			263.90

(c) *Possible action to deal with exceeding agreed overdraft limit*

Approach the bank to re-negotiate the overdraft or arrange a loan facility for an agreed term.

The amount and the period for which additional facilities are required depend on preparing a projected cash flow statement for a longer period taking into account future plans, e.g. owner's drawings requirement and any additional capital expenditure.

In particular, consider alternatives such as the following:

Leasing vehicles and/or machinery

Mortgaging the property

Getting debts in quicker manner

Introducing more capital

Obtaining or providing loan capital.

Question 2 – Mr Norman

(a) *Purchases budget ($000)*

	Jan	*Feb*	*Mar*	*Apr*	*May*	*Jun*
Sales units	1.65	2.20	3.85	4.40	4.40	4.95
− Closing inventory		0.55	0.96	1.10	1.10	1.24
+ Closing inventory	0.55	0.96	1.10	1.10	1.24	1.38
Purchases units	**2.20**	**2.61**	**3.99**	**4.40**	**4.54**	**5.09**

		Purchases *$000*	*Sales* *$000*	
Jan	(2,200 × 40)	88.00	82.50	(1,650 × 50)
Feb	(2,610 × 40)	104.40	110.00	(2,200 × 50)
Mar	(3,990 × 40)	159.60	192.50	(3,850 × 50)
Apr	(4,400 × 40)	176.00	220.00	(4,400 × 50)
May	(4,540 × 40)	181.60	220.00	(4,400 × 50)
Jun	(5,090 × 40)	203.60	247.50	(4,950 × 50)
		913.20	**1,072.50**	

(b) *Cash flow forecast ($000)*

	Jan	*Feb*	*Mar*	*Apr*	*May*	*June*	*Total*
Initial capital	150.00						150.00
Cash sales	41.25	55.00	96.25	110.00	110.00	123.75	536.25
Credit sales		41.25	55.00	96.25	110.00	110.00	412.50
	191.25	**96.25**	**151.25**	**206.25**	**220.00**	**233.75**	**1,098.75**
Premises	80.00						80.00
Commission		1.65	2.20	3.85	4.40	4.40	16.50
Suppliers		88.00	104.40	159.60	176.00	181.60	709.60
Administration	8.00	8.00	8.00	8.00	8.00	8.00	48.00
Wages	17.00	17.00	17.00	17.00	17.00	17.00	102.00
Insurance	0.35						0.35
Total payments	**105.35**	**114.65**	**131.60**	**188.45**	**205.40**	**211.00**	**956.45**
Net cash flow	85.90	(18.40)	19.65	17.80	14.60	22.75	
Balance b/f	–	85.90	67.50	87.15	104.95	119.55	
Balance c/f	**85.90**	**67.50**	**87.15**	**104.95**	**119.55**	**142.30**	

(c) *Budgeted statement of income for six months ended 30 June 20X8*

	$000	*$000*
Sales		1,072.50
Purchases	913.20	
Closing inventory (1,380 units × £40)	(55.20)	
Cost of sales	858.00	
Gross profit		214.50
Wages	102.00	
Administration	48.00	
Commission (2% of 1,072.50)	21.45	
Insurance	0.18	
Amortisation of lease	8.00	
		179.63
Net profit		34.87

Budgeted statement of financial position as at 30 June 20X8

	$000	*$000*
Capital		150.00
Net profit		34.87
		184.87
Non-current assets		
Leasehold premises	80.00	
Less amortisation	(8.00)	
		72.00
Current assets		
Inventory	55.20	
Trade receivables	123.75	
Pre-payments − insurance	0.17	
Cash	142.30	
	321.42	
Current liabilities		
Trade payables	203.60	
Commission	4.95	
	208.55	
Net current assets		112.87
		184.87

(d) *Investment of surplus funds*

Acid test ratio

At the end of the first six-month trading, Norman's statement of financial position shows that the acid test ratio is 1.28:1 (266.22/208.55) – this is higher than the basic 1:1 ratio but it should be compared with the ratio of similar businesses in the same industry in order to establish a norm. It would appear, however, that the business has surplus funds to invest.

Amount to invest

A projected cash flow statement is required, taking into account future plans regarding the owner's drawing requirements, future capital commitments and working capital criteria, e.g. debtor collection and creditor payment terms.

Period to invest

The projected cash flow will give an indication of the period of the investment, e.g. it could range from overnight on the money market to term investments.

The important aspect is that the owner should be aware of the projected cash flows, so that return on surplus funds can be maximised.

PART 2

Preparation of internal and published financial statements

CHAPTER 3

Preparation of financial statements of comprehensive income, changes in equity and financial position

Question 1 – Old NV

(a) *Statement of income (internal) for the year ended 31 December 20X1*

		€000
Sales		12,050
Less: returns		350
		11,700
Inventory at 1.1. 20X1	825	
Purchases	6,263	
Carriage on purchases	13	
Less: returns	(313)	
	6,788	
Inventory at 31.12.20X1	1,125	
	5,663	
Depreciation of plant	313	
		5,976
Gross profit		5,724
Administration:		
Wages		738
Administration expenses (286 − 12)		274
Directors' remuneration		375
Selling:		
Salesmen's salaries		800
Distribution:		
Distribution expenses		290
Depreciation of vehicles		187
Carriage		125
Financial:		
Goodwill impairment		177
Audit fee		38
Debenture interest		25
Rent receivable		(100)
		2,929
		2,795
Tax		562
Profit for year		2,233

(b) *Statement of comprehensive income for publication*

Statement of comprehensive income of Old NV for the year ended 31 December 20X1

	€000	*€000*
Sales		11,700
Cost of sales		5,976
Gross profit		5,724
Distribution costs W1	1,402	
Administrative expenses W2	1,602	
Other operating income	(100)	
		2,904
Trading profit		2,820
Interest payable		25
Profit on ordinary activities before tax		2,795
Income tax		562
Profit for the period		2,233
Other comprehensive income:		
Land revaluation		50
		2,283

W1

Salesmen's salaries	800
Distribution expenses	290
Depreciation of vehicles	187
Carriage	125
	1,402

W2

Wages	738
Administrative expenses	274
Directors' remuneration	375
Goodwill impairment	177
Audit fee	38
	1,602

There will be a disclosure note as follows:

Profit on ordinary activities after tax is after charging	
Goodwill impairment	177
Audit fee	38
Depreciation	500
Directors' remuneration	375

Statement of financial position of Old NV as at 31 December 20X1

		€000	*€000*
Non-current assets			
Intangible assets (1,062 − 177)			885
Property, plant and equipment	Note 1		1,074
Land			150
Current assets			
Inventories		1,125	
Receivables		3,875	
Cash at bank and in hand		1,750	
Pre-payments		12	
		6,762	
Current liabilities			
Payables		738	
Provision for income tax		562	
Accrued charges		63	
		1,363	
Net current assets			5,399
Total assets *less* current liabilities			7,508
Non-current liabilities			
Debentures			250
			7,258
Equity			
Ordinary shares of €1 each			3,125
Preference shares of €1 each			625
Share premium			350
Retained earnings	Note 2		3,158
			7,258

Disclosure notes to show make-up of statement of financial position balances

Note 1: Property, plant and equipment

Property, plant and equipment	*Plant*	*Motor vehicles*	*Total*
	€000	*€000*	*€000*
Cost			
At 1.1.20X1	1,200	1,125	2,325
Additions	362		362
Disposals			
At 31.12.20X1	1,562	1,125	2,687

Accumulated depreciation			
At 1.1.20X1	738	375	1,113
Charge for year	313	187	500
At 31.12.20X1	1,051	562	1,613
Net book value			
At 31.12.20X1	511	563	1,074
At 31.12.20X0	462	750	1,212

Working*: *accrued expenses	**€000**
Audit fee	38
Debenture interest	25

Note 2: Movements on reserves

	€000
Retained earnings at 1.1.20X1	875
Amount transferred from statement of comprehensive income	2,283
Balance at 31.12.20X1	3,158

Question 2 – Formatone plc

(i) *Statement of income*

Statement of income for the year ended 30 June 20X6

	£000
Sales	9480.6
Cost of sales (N1)	(6,625.8)
Gross profit	2,854.8
Distribution cost	(529.2)
Administrative expenses	(946.8)
Operating profit	1,378.8
Taxation (N2)	(181.8)
Profit after taxation	1,197.0

N1 cost of sales

N1 cost of sales		£000
As per trial balance		5,909.4
Depreciation of buildings	(1,620/30)	54.0
Depreciation of plant	(1,728 − 504) @ 10%	122.4
Write down of intangible assets		540.0
		6,625.8

N2 taxation	
Over-provision	(14.4)
Current tax	169.2
Deferred tax	27.0
	181.8

(ii) *Statement of financial position*

Statement of financial position as at 30 June 20X6			*£000*
Non-current assets			
Land at valuation			5,400.0
Buildings at valuation	1,620.0	(54.0)	1,566.0
Plant and equipment	1,728.0	(626.4)	1,101.6
Intangible assets			270.0
Current assets:			
Inventory		586.8	
Trade receivables		585.0	
Cash		41.4	1,213.2
			9,550.8
			£000
Equity and reserves:			
Ordinary shares of 50p		2,160.0	
Share premium account		432.0	
Revaluation reserve		4,179.6	
Retained earnings		1,796.4	8,568.0
Non-current liability:			
Deferred tax			64.8
Current liabilities:			
Trade payables		532.8	
Taxation		169.2	
Dividend declared		216.0	918.0
			9,550.8

(iii) *Statement of changes in equity*

Statement of changes in equity	*Share capital*	*Share premium*	*Revaluation reserve*	*Retained earnings*	*Total*
Balance b/f	2,085.0	387.0	–	891.0	3,363.0
New issue of shares	75.0	45.0	–	–	120.0
Land and buildings	–	–	4,212.0	–	4,212.0
Transfer N3	–	–	(32.4)	32.4	–
Retained profit for the year	–	–	–	1,197.0	1,197.0
Interim dividend paid	–	–	–	(108.0)	(108.0)
Interim dividend declared	–	–	–	(216.0)	(216.0)
Balance c/f	2,160.0	432.0	4,179.6	1,796.4	8,568.0

N3 Transfer from revaluation reserve

Revaluation surplus	£972,000
Transfer 1/30	£32,400

Question 3 – Basalt plc

(i) *Statement of income for the year ended 31 December 20X0*

		£000
Turnover (962 − 27 returns)		935
Cost of sales	Note 1	460
Gross profit		475
Distribution costs	Note 2	218
Administrative expenses	Note 3	118
		139
Other operating income (i.e. rent receivable)		7
Profit on ordinary activities before tax		146
Tax on profit of ordinary activities		58
Profit for the year		88
Other comprehensive income:		
Revaluation of land		55
		143

		£000
Note 1:	Opening inventory	66
	Purchases	500
	Carriage inwards	9

	Returns out	(25)
	Closing inventory	(90)
		460
Note 2:	Warehouse wages	101
	Salesmen's salaries	64
	Distribution expenses	6
	Hire of vehicles	19
	Depreciation	28 (7/11 of 20% of £220,000)
		218
Note 3:	Administrative wages	60
	Administrative expenses	10
	Directors' remuneration	30
	Auditors' remuneration	2
	Depreciation (4/11)	16
		118

(ii) *Statement of financial position as at 31 December 20X0*

	£000	
Non-current assets		
Tangible assets		
Plant and machinery		
(cost 220 − Depreciation b/f 49 − depreciation for year 44)	127	
Current assets		
Inventory	90	
Trade receivables	326	
Cash at bank	62	
	478	
Liabilities		
Amounts falling due within one year:		
Trade payables	66	
Other payables (Audit 2 + corporation tax 58)	60	
	126	
Net current assets		352
Total assets *less* current liabilities		**479**
Equity		
Called-up share capital		300
Share premium a/c		20
General reserve		16

Retained earnings	143
	479

(a) Directors' report must deal with certain matters by law, e.g.:

Proposed dividends.

Likely future developments in the company's business.

Principal activities of the company.

Political and charitable contributions.

Consistency with other statements – reviewed by auditors.

(b) Chairman's report

May be a highly personalised review of the business, its developments and the environment in which it operates.

Not subject to audit.

(c) Auditors' report expresses an opinion as to whether the financial statements give a 'true and fair view'.

Question 4 – HK Ltd

(a) *Statement of comprehensive income for the year ended 30 June 20X1*

	$000	*$000*
Turnover		381,600
Cost of sales		
Per trial balance	318,979	
+ Hire 2,400 + depreciation 799*		
− Insurance 150*** + inventory loss 250	3,299	
	322,278	
Gross profit		59,322
Administration expenses		
Per trial balance 9,000 + directors 562 +		
Bad debt 157 + auditor remuneration 112	9,831	
Distribution costs	35,100	
	44,931	
		14,391
Profit on disposal of non-current assets		536
Profit before tax and interest		14,927
Interest payable (454 + 151 tax on interest)		605
		14,322
Other operating income**		17
Profit before tax		14,339
Income tax		5,348

Profit for the year		8,991
Other comprehensive income		
Revaluation gain		400
Total comprehensive income for the year		9,391

Note: *Depreciation consists of Buildings 94 + Plant 619 + Fixtures 86

**Development grant	85	
Transfer versus income statement		
(20% of 85)	(17)	
To statement of financial position	68	

***Insurance is treated as an adjusting event.

Statement of financial position as at 30 June 20X1

Intangible non-current assets		
Goodwill		480
Tangible non-current assets		
Freehold land		2,500
Freehold buildings	4,680	
Aggregate depreciation	648	4,032
Plant and machinery	3,096	
Aggregate depreciation	1,857	1,239
Fixtures and fittings	864	
Aggregate depreciation	259	605
		8,376
		8,856
Current assets		
Inventory to read (11,794 − 250 obsolescence)	11,544	
Receivables (7,263 + 150 insurance)	7,413	
Cash and cash equivalents	11,561	
	30,518	
Current liabilities		
Payables	2,591	
Dividends (Preference 162 + Ordinary 324)	486	
Tax	5,348	
	8,425	
Net current assets		22,093
Non-current liabilities		
9% loan		7,200
		23,749
Deferred income − government grant (see Note)		68
		23,681
Equity		
Ordinary shares 50c each		3,600
9% preference shares of $1 each		5,400

Revaluation reserve	400
Retained earnings (6,364 + 8,991 − 1,074 dividends)	14,281
	23,681

Note: The grant could be deducted from the cost of the plant under IAS 20.

(b) The usefulness of the non-current asset schedule

(i) The column headings allow the user to see the type of non-current assets owned by the business. This can give helpful initial indications, e.g.

Realisability – intangible assets might be more difficult to sell than property.

Appreciation – land is more likely to appreciate than office equipment.

Depreciation – licences are subject to amortisation and possible fall in value due to competition.

Security – land and buildings are more likely to be accepted as security for loans and overdrafts than intangible assets.

(ii) The carrying values may be at cost or revaluation.

If at cost, it may be that the statement of financial position gives too low an indication of current market values – this is often an important consideration if existing shareholders are assessing a takeover offer.

(iii) The accumulated depreciation figure when related to the cost gives an indication of the age of the assets and possible need for capital outlays to replace with cash flow implications.

(iv) Disposals may be an indication of the occurrence of replacement, which could indicate growth or maintenance of existing capacity. If there is no replacement, then consider implications for future capacity or other reasons, e.g. change of direction, and disposal of non-profit-making parts of the business.

Question 5 – Phoenix plc

(a) *Statement of comprehensive income for the year ended 30 June 20X7*

	£000
Revenue	6,465
Cost of sales (4,165 + 196 depreciation)	(4,361)
Gross profit	2,104
Distribution cost	(669)
Administration expense (1,126 + 31 depreciation + 415)	(1,572)
Operating loss	(137)
Exceptional item:	
Gain on disposal of warehouse	**75**
Dividend received	80
Profit before taxation	18

Taxation	(96)
Loss for the year	(78)
Other comprehensive income	
Revaluation gain	700
Total comprehensive income for the year	**622**

(b) *Statement of financial position as at 30 June 20X7*

Property, plant and equipment		4,243
Investment		365
Current assets		
Inventory	1,468	
Trade receivables	947	
Cash at bank	175	
Current liabilities	(868)	
Net current assets		1,722
		6,330
Share capital and reserves		
Share capital		4,500
Share premium		500
Revaluation reserve		1,270
Retained earnings		60
		6,330

(c) *Statement of movement of property, plant and equipment*

	L&B	*P&M*	*F&F*	*Total*
Balance b/f	2,400	1,800	620	4,820
Disposal	(150)			(150)
Revaluation reserve		160		160
Balance c/f	**2,250**	**1,960**	**620**	**4,830**
Accumulated depreciation				
Balance b/f		540	360	900
Revaluation reserve		(540)		(540)
P&L charge		**196**	**31**	**227**
Balance c/f		196	391	587
WDV at 30.6.20X7	**2,250**	**1,764**	**229**	**4,243**

Current assets	
Trade receivables	947
Creditors	
Trade payables	566
Taxation	122
Dividend proposed	180
	868

Balances in revaluation reserve and retained earnings are made up as follows:

	Revaluation reserve	*Retained earnings*
Balance b/f	600	488
Plant and machinery revaluation	700	
Transfer on disposal	(30)	30
Loss for year		(78)
Dividends		(380)
Balance c/f	1,270	60

Question 6 – Olive A/S

(a) *Statement of comprehensive income for the year ended 30 September 20X4*

Revenue		3,460
Cost of sales	W1	(1,557.1)
Gross profit		**1,902.9**
Distribution cost	W2	(362)
Administration expenses	W3	(917.9)
Operating profit		**623**
Exceptional items: **gain − disposal of non-current assets**		**6**
Investment income		45
Interest and similar charges		(30)
		644
Taxation (Sch 1)		(197)
Profit for the year		**447**
Other comprehensive income		
Revaluation gain on property		380
Total comprehensive income for the year		**827**

(b) *Statement of financial position as at 30 September 20X4*

Non-current assets	
Intangible assets − development costs	425
Tangible assets (Sch 2)	1,480
Investments	248
Current assets	
Inventory (364 + 40)	404
Receivables (Sch 3)	599
Cash and bank	38
Current liabilities (Sch 4)	(636)
Net current assets	**405**
	2,558
Non-current liabilities	
12% debentures	500
Net capital employed	**2,058**
Share capital: ordinary shares of £1 each	600
Share premium account	30
Retained earnings (Sch 5)	1,055
Revaluation reserve	373
	2,058

Schedule 1: Taxation charge

Income tax	185
Underprovision 20X3 (140 − 128)	12
	197

Schedule 2: Statement of movement of non-current assets

	Land and buildings	*Plant and machinery*	*Fixtures and fittings*	*Pre-payments*	*Total*
Balance b/f	600	520	80	–	1,200
Revaluation	300	–	–	–	300
Acquisitions	–	320	40	60	420
Disposal	–	(240)	–	–	(240)
Balance c/f	**900**	**600**	**120**	**60**	**1,680**
Balance b/f	80	160	26	–	266
Revaluation	(80)	–	–	–	(80)
Income charge	**15 (W4)**	**54**	**11**	–	**80**
Disposal	–	(66)	–	–	(66)
Balance c/f	15	148	37	–	200
WDV 30.9.X4	**885**	**452**	**83**	**60**	**1,480**
WDV 30.9.X3	520	360	54	–	934

Schedule 3: Receivables

Trade receivables	584
Prepaid rent	15
	599

Schedule 4: Current liabilities

Trade payables	296
Debenture interest (three months)	15
20X3 Income tax	140
20X4 Income tax	185
	636

(c) *Schedule 5: Statement of changes in equity*

	Share premium	*Revaluation reserve*	*Retained earnings*
Balance b/f	150	–	661
Formation expenses w/off	(120)	–	–
Profit for the year	–	–	447
Dividend paid	–	–	(60)
Revaluation gain	–	380	–
Transfer – extra depreciation	–	(7)	7
Balance c/f	30	373	1,055

Notes

Expenses charged in the year include the following:

Depreciation written off		€80,000
Directors' emoluments		€180,000
Directors' pension	€18,000	€198,000
Audit fees and expenses		€65,000

Company employs 646 persons, of whom 428 work at the factory and the rest work at the head office.

Land and Buildings were revalued during the year by Messrs XYZ, Chartered Valuers at open market value on existing use basis, and the surplus was recorded in a revaluation reserve.

Administration expenses include an exceptional item of €60,000 which is the under-provision for a claim that arose in a previous year and the balance of retained earnings b/f has been restated as 661,000.

Workings

W1 Cost of Sales

Inventory on 1.10.20X3	211

Purchases		925
Carriage inwards		162
Depreciation – Building		9
Depreciation – Machinery (18 + 28 + 8)		54
Salaries (55% of 820)		451
Pension cost (10% of 451)		45.1
Heat and light (80% of 80)		64
Inventory 30.9.20X4		(364)
		1,557.1

W2 Distribution cost

Advertising		112
Sales commission		92
Bad debts		158
		362

W3 Administration expenses

Depreciation – Buildings		6
Depreciation – Fixtures and equipment (8 + 3)		11
Under-provision for litigation		60
Salaries	369	
Directors' emoluments	180	549
Pension costs (10% of 549)		54.9
Heat and light		16
Audit fees and expenses		65
Stationery		28
Other administrative expenses		128
		917.9

W4 Depreciation of buildings

Original cost	400
Revaluation increase	380
	780
2% of 780 = approximately	15

Question 7 – Imecet

(a) *Statement of income for Imecet for the year ended 31 October 2005*

	$000	*$000*
Sales		10,300.0
Less:		
Opening inventory	1,100.0	
Purchases	6,350.0	
Factory wages	575.0	
Factory depreciation	135.0	
	8,160.0	
Closing inventory	1,150.0	
Cost of sales		7,010.0
Gross profit		3,290.0
Distribution costs	492.5	
Administrative expenses	176.0	668.5
Operating profit		2,621.5
Interest		200.0
Profit before tax		2,421.5
Taxation		
Income tax	350.0	
Deferred tax	75.0	425.0
Profit after tax		1,996.5

(b) *Statement of changes in equity for the year ended 31 October 2005 ($000)*

	Share capital	*Share premium*	*Accumulated profit*	*Revaluation reserve N1*	*Total*
1.11.2004	3,000.0	750.0	3,701.0	2,500.0	9,951.0
Change	1,000.0	750.0	1,996.5	1,200.0	4,946.5
31.10.2005	4,000.0	1,500.0	5,697.5	3,700.0	14,897.5

N1 – Revaluation change would be reported as other comprehensive income.

Question 8 – Scott Ross discussion points

Nathan Davison is obviously still in the family business mentality, where the affairs of the business are kept secret as far as possible. He has not taken on board the idea that now it is a public company, it is no longer his business and he has a moral obligation to keep external investors fully informed on the nature of the business and of events affecting the business and its profitability and financial stability.

Under the law, he has a legal obligation to provide accounts that show a true and fair view which means he has to review the standards compliant accounts and ask what additional information is needed for readers of the annual report in order to understand the major elements of the business.

The suggestion of a footnote should be vague or that you should do the minimum that is necessary to protect yourself from prosecution is contrary to the spirit of open markets. If you cannot keep external shareholders informed then perhaps you were immoral to take their money in the first place. It is interesting to note that the famous US investor Warren Buffett has stated that if a footnote was unclear then he would assume that it was unclear by deliberate design. Then he would not invest in the company.

Just think of what impact that could have on a share price if a number of sophisticated investors take that view.

Then the suggestion that there be a deliberate attempt to mislead investors regarding the profitability of a segment is clearly both legally and morally wrong. Further, the admission that the company has been smoothing income is an interesting moral issue. If smoothing income was just an attempt to counter the fact that during booms the company is likely to view allowances for bad debts and outstanding through rose-coloured glasses and during busts they are likely to be too pessimistic in their accruals, then perhaps it could be justified. But if the motivation is to make life easier for executives or to report rosy steady upward trends to investors that contradict the reality of the business cycle, then the objective are immoral and the results fraudulent misrepresentation. In the famous Royal Mail case, where profits were manipulated through transfers to and from reserves the managing director went to jail and the auditor avoided the same fate on a technicality that he had included a footnote mentioning the transfers. However, it is unlikely that the auditor would be able to make the same claims today by giving differences in accounting regulations and laws.

Question 9-TYV

TYV – *Statement of profit or loss for the year ended 30 September 2014 (in accordance with the requirements of IFSS)*

	$000	*$000*
Revenue		19,460
Cost of sales (W2)		(11,119)
Gross profit		8,341
Administrative expenses (W2)	(1,954)	
Distribution costs	(1,110)	
		(3,064)
Profit from operations		5,277
Finance cost (W4)		(378)
Profit before tax		4,899
Income tax expense (W5)		(971)
Profit for the period		3,928

TYV –*Statement of changes in equity for the year ended 30 September 2014 (in accordance with the requirements of IFSS)*

	Equity shares	*Share premium*	*Retained earnings*	*Total*
	$000	*$000*	*$000*	*$000*
Balance as at 30 September 2013	6,000	850	491	7,341
Profit for period			3,928	3,928
Dividend paid			(350)	(350)
Balance at end	6,000	850	4,069	10,919

TYV – Statement of financial position as at 30 September 2014 (in accordance with the requirements of IFSS)

	$000	*$000*
Non-current Assets		
Property, plant and equipment (W1)		16,415
Current Assets		
Inventory	575	
Trade receivables	2,250	
Cash and cash equivalents	272	
Non-current assets held for sale		3,097
		1,420
Total Assets		**20,932**
Equity and Liabilities		
Equity		
Share capital	6,000	
Share premium	850	
Retained earnings	4,069	
Total equity		10,919
Non-current Liabilities		
7% Loan	5,000	
Deferred tax (W5)	576	
Total non-current liabilities		5,576
Current Liabilities		
Trade payables	1,880	
Tax payable	940	
Short-term loan	1,500	
Interest	117	
Total current liabilities		4,437
Total equity and liabilities		

Workings – All figures in $000

W1 – Tangible Non-current Assets

	Land	*Buildings*	*Plant and equipment*	*Total*
Cost/Valuation				
Balance 30/9/13	11,000	6,386	7,750	
Disposal factory B	(1,120)	(325)		
Transfer factory A – held for sale	(1,375)	(455)		
Plant and equipment scrapped			(175)	
New factory building		1,099		
	8,505	6,705	7,575	
Depreciation				
Balance 30/9/13		1,700	4,510	
Disposal factory B		(286)		
Transfer factory A – held for sale		(384)		
Plant and equipment scrapped			(120)	
Charge for year		134	796	
		1,184	5,186	
Net book value at 30/9/14	8,505	5,521	2,369	16,415

Depreciation Buildings

6,705 × 2% = 134

Plant and equipment Reducing balance = 7,575 – (4,510 − 120) = 3,185 × 25% = 796

W2

	Cost of sales	*Administrative expenses*
	$000	*$000*
Balance per trial balance	10,200	1,820
Depreciation buildings (W1)		134
Loss on factory closures Factory A (W3)	46	
Loss on factory closures Factory B (W3)	29	
Loss on plant and equipment (W3)	48	
Depreciation plant and equipment (W1)	796	
	11,119	1,954

W3 Loss on factory closures

Factory A			
Carrying value:			
Land	1,375		
Buildings	455	1,830	
Less depreciation		(364)	
		1,466	
Fair value 30/9/2014		1,420	
Write down			(46)
Factory B			
Carrying value:			
Land	1,120		
Buildings	325	1,445	
Less depreciation		(286)	
		1,159	
Cash received		1,130	
Loss on disposal			(29)
Plant and equipment			
Cost	175		
Less depreciation	(120)	55	
Cash received		7	
Loss			(48)

W4 Finance cost:

Interest on long-term loan:	
Balance t/b	233
Accrued ($5,000 × 7% × 4/12)	117
	350
Finance charge on short-term loan:	
Three months – 113 × 3/12 =	28
	378

W5 Income tax expense:

Income tax for year	940	
Previous year balance	80	
	1,020	
Deferred tax decrease	(49)	
Income statement	971	
Deferred tax b/f	625	
Reduction	(49)	
Deferred tax at 30 September 2014		576

W6 Cost of new factory

Cost of new factory building		1,014
Finance charge on short-term loan,		
Nine months added to cost of building (IAS 23).		
113 × 9/12 = 84.75		85
		1,099

CHAPTER 4

Annual report: additional financial disclosures

Question 1 – IAS 10 deals with events after the reporting period

(a) The relevant period is the period between the date of the statement of financial position and the date the financial statements are approved and signed by the directors.

(b) The statement of financial position needs to adjusted if information becomes available that confirms the existence or amount of an asset or liability that existed at the date of the Statement.

(c) The disclosure of material events that have occurred in the period covered by IAS 10 is required because it is relevant to stakeholders when making their decisions on liquidity and future profitability. The disclosure should be by way of notes to the accounts.

(d) The liability for £40,000 existed at the date of the statement of financial position and, as the amount is known, the accounts should be adjusted. The £10,000 liability occurred after the year end and, if significant, should be disclosed as a non-adjusting event in the notes to the accounts.

(e) The loss did not arise until after the year end. It is, therefore, a non-adjusting event that needs to be disclosed by way of a note to the accounts.

However, there is an additional consideration if the going concern is threatened. If the business ceases to be a going concern, then the non-current assets would be restated to net realisable value.

(f) This is a non-adjusting event. Appropriate disclosure should be made in the notes to the financial statements.

Question 2 – All numbers in $000 unless otherwise stated:

(i) Redundancy costs are a direct cost and should be provided for.

(ii) Redeployment costs relate to the ongoing activities of the entity, and are not recognised as part of a closure provision. They would only be recognised as liabilities at 30 September 2008 if Epsilon had entered into enforceable obligations to incur the costs.

(iii) The anticipated loss on sale of plant (11,000 − 2,000) is not part of the closure provision. However, under the principles of IFRS 5 – *Non-current assets held for sale and discontinued* – the plant would be measured at the lower region of the carrying value (11,000) and fair value less costs to sell (2,000). The plant would be separately displayed in a new statement of financial position caption (non-current assets held for sale).

(iv) Future operating losses are not recognised as part of a closure provision as they relate to future events.

Note that there is no need to disclose the results of the business segment that is to be closed separately in the current financial year.

This is because the business segment does not satisfy the definition of a discontinued operation in the current financial year.

IFRS 5 states that a discontinued operation is a component of an entity that is disposed of or classified as held for sale before the year end.

This component is being **abandoned** rather than sold, so it will not be classified as discontinued until the closure occurs. In this case, this occurs on 31 December 2008 – the year ended 30 September 2009.

Question 3 – Reply to assistant from financial controller

Following your recent memorandum here is a response to the queries you raised:

IFRS 8 – *Operating Segments* – states that an operating segment is a component of our business:

that engages in activities from which it may earn revenues and incur expenses;

whose operating results are regularly reviewed by the chief operating decision maker (CODM); and

for which discrete financial information is available.

The term 'CODM' identifies a function, and not necessarily a manager with a specific title. The key function is allocation of resources and assessment of performance. The CODM can be an individual or a group of directors. In our case, the board of directors is the CODM.

Head office

In order to be an operating segment, a business unit must be producing revenue. Therefore, despite the relative materiality of its assets to the assets of the entire entity, Head Office is not an operating segment.

Which to report separately

Once an operating segment is identified it is necessary to report separate information about the segment if it exceeds any one of the three quantitative thresholds:

Its reported revenue is 10% or more of the combined revenue of all operating segments.

The absolute amount of its reported profit or loss is 10% or more of the greater, in absolute amount, of (i) the combined reported profit of all operating segments that did not report a loss and (ii) the combined reported loss of all operating segments that reported a loss.

Its assets are 10% or more of the combined assets of all operating segments.

If, having applied these tests to individual operating segments, the external revenue of the reportable segments is less than 75% of the external revenue of the combined entity, more operating segments should be designated as reportable until the 75% threshold is reached.

Where two or more segments exhibit similar long-term financial performance, it is necessary to aggregate them for the purposes of the size tests. Therefore, we will consider areas D and E together for these tests.

Segments A and B are separately reportable because in each case their revenue is more than 10% of the total revenue of the business. There is no need for any further consideration.

Segment C is reportable despite its revenue being less than 10% of the total. Its assets are more than 10% of the total of the assets of all operating segments. There is no need for any further consideration.

Segments D and E are considered as a single segment. They fail both the revenue and the assets tests but their profit (150 + 450 = 600) is more than 10% of the total profit of the segments that report a profit (3,000 + 2,000 + 600 = 3,600). Therefore, the segments are reportable together as a single segment. The reasons the standard has attracted such critical comments are:

Why critical comment

The identification of operating segments, and the segment information that is provided, is based around the internal business organisation. Therefore, the reports are potentially vulnerable to management discretion in terms of what is reported and inter-company comparison may be difficult or even impossible.

The standard was issued as a part of the convergence project with the US FASB, and is based very much on the equivalent US standard. Some commentators are concerned that the reason for the issue of the standard was based on pragmatism, rather than on sound theoretical principles.

The standard does not require entities to follow the measurement principles of IFRS in its segment reports, but rather the measurement principles that are used internally.

Question 4 – Filios Products plc

(a) The majority of listed and other large entities derive their revenues and profits from a number of sources (or segments). This has implications for the investment strategy of the entity as different segments require different amounts of investment to support their activities. Conventionally, produced statements of financial position and statements of comprehensive income capture financial position and financial performance in a single column of figures.

Segment reports provide a more detailed breakdown of key numbers from the financial statements. Such a breakdown potentially allows a user to:

appreciate the results and financial position more thoroughly by permitting a better understanding of past performance and thus a better assessment of future prospects;

be aware of the impact that changes in significant components of a business may have on the business as a whole; and

be more aware of the balance between the different operations and thus be able to assess the quality of the entity's reported earnings, the specific risks to which the company is subject and the areas where long-term growth may be expected.

(b) Assuming the CODM receives relevant information about the three components referred to in the question then the segment report would look like this:

	Restaurants	*Hotels*	*Leisure*	*Other*	*Total*
	£m	*£m*	*£m*	*£m*	*£m*
Revenue	508	152	368	–	1,028
Interest expense	(10)	–	–	(4)	(14)
Profit (W1)	75	45	18	(19)	119
Reportable segment assets (W2)	1,193	431	459	89	2,172
Reportable segment liabilities (W3)	(166)	(40)	(56)	(71)	(333)

Working 1 – segment profit

	Restaurants	*Hotels*	*Leisure*	*Other*	*Total*
	£m	*£m*	*£m*	*£m*	*£m*
Revenue	508	152	368	–	1,028
Cost of sales	(316)	(81)	(287)	–	(684)
Administration expenses	(43)	(14)	(38)	(15)	(110)
Distribution costs	(64)	(12)	(25)	–	(101)
Interest expense	(10)	–	–	(4)	(14)
Profit	**75**	**45**	**18**	**(19)**	**119**

Working 2 – reportable segment assets

	Restaurants	*Hotels*	*Leisure*	*Other*	*Total*
	£m	*£m*	*£m*	*£m*	*£m*
Non-current assets	890	332	364	77	1,663
Inventories and receivables	230	84	67	–	381
Bank balances	73	15	28	12	128
Reportable segment assets	1,193	431	459	89	2,172

Working 3 – reportable segment liabilities

	Restaurants	*Hotels*	*Leisure*	*Other*	*Total*
	£m	*£m*	*£m*	*£m*	*£m*
Payables	66	40	56	31	193
Long-term borrowings	100			40	140
Reportable segment liabilities	166	40	56	71	333

(c) It is clear from the ratios below that the leisure sector is underperforming compared with the other two sectors. Hotels are performing best, when measured by the return on net assets ratio. It is notable that the profit margins of the three sectors differ so significantly. This additional information illustrates the value segment reports can add compared with overall figures.

	Restaurants	*Hotels*	*Leisure*
Operating profit (£m)	85	45	18
Revenues (£m)	508	152	368
So operating profit %	**17%**	**30%**	**5%**
Revenues (£m)	508	152	368
Net assets (W2/3 above − £m)	1,027	391	403
So net asset turnover equals	**0.5 times**	**0.4 times**	**0.9 times**
Operating profit £m)	85	45	18
Net assets (W2/3 above − £m)	1,027	391	403
So return on net assets equals	**8%**	**12%**	**4%**

Question 5 – Parnell Ltd

(a) *Accounting treatment of items 1–5*

Item 1 is an unusual item:

The general rule is to include it under the format heading to which it relates:

In this case, distribution costs.

No adjustment necessary to the statement of comprehensive income but disclose bad debt by way of note.

Item 2 is profit/loss on the sale or termination of an operation, and should be:

shown separately on the face of the statement of comprehensive income (normally before interest), if the operations are classified as discontinued; and

analysed under appropriate headings as continuing or discontinued.

Item 3 enables distinction to be made between continued and discontinued operations:

Improves the comparability of current year with previous and next year.

Item 4 could be considered a change of accounting policy, and if so requires:

a depreciation charge of $6m for 20X8; and

a prior year adjustment of $12m with respect to 20X6/20X7 to be charged against retained profits brought forward.

Item 5 is an unusual item which should be charged:

as an administrative expense with respect to continuing operations; and

no adjustment is required to the statement of comprehensive income but the restructuring costs must be disclosed by way of note.

(b) *Redraft of the statement of comprehensive income for 2008*

	Continuing	*Discontinued*	*Total*	
	$m	*$m*	*$m*	
Sales	463	100	563	
Cost of sales	(280)	(30)	(310)	
	183	70	253	
Distribution costs	45		45	
Administration expense (W1)	94		94	
Operating profit	44	70	114	
Profit on disposal of asset		10	10	
Profit on ordinary activities before tax	44	80	124	
Taxation (no information to separate discontinued elements)			45	
Retained profit			79	(Reserves)

Retained earnings

	$m
At beginning of year	101
Prior year adjustment	(12)
	89
Transfer from statement of comprehensive income	79
At year-end	168

W1 78 per question + 10 being the profit on sale of distribution division to be separately disclosed + 6 depreciation on offices.

Question 6 – Springtime Ltd

(a) *Statement of comprehensive income for the year ended 31 March 20X4*

	Continuing operations	*Discontinued operations*	*Total*
Turnover	30,000	5,000	35,000
Cost of sales	(19,000)	(4,000)	(23,000)
Gross profit	11,000	1,000	12,000
Distribution costs	(3,065)	(425)	(3,490)
Administrative costs	(1,225)	(15)	(1,240)
	6,710	560	7,270
Closure costs	____	(350)	(350)
Operating profit	**6,710**	**210**	**6,920**
Investment income			1,200
			8,120
Taxation (3,200 − 200 + 150)			3,150
Profit for the year			**4,970**

Note: Tax: Income tax 3,200 − overprovision 200 + transfer to deferred tax account 150
No information is provided to allocate any income tax to discontinued operations.

Workings

	Continuing	*Discontinued*	*Total*
Distribution costs			
Delivery costs	900	300	1,200
Depreciation – vans	40		40
Depreciation – stores equipment	50		50
Storeroom costs	1,000		1,000
Delivery staff	700		700
Directors	75	25	100
Storeroom staff	300	100	400
	3,065	**425**	**3,490**
Administrative costs			
Audit	30		30
Depreciation – cars	10		10
Office expenses	800		800
Directors	300		300
Office staff	85	15	100
	1,225	**15**	**1,240**

Note: As allowed under IFRS 5, disclosures are given on the face of the statement of comprehensive income.

(b) IFRS 5 has required companies to disclose in detail the activities that are discontinued. This disclosure is both numerical and narrative, and provides a full explanation for the activities to be discontinued, the time at which the discontinuance should occur and the financial effect of the discontinuance.

This information is useful to users in enabling them to interpret the future performance of the enterprise and in assessing the performance of the management over the period. When considering the future performance of an enterprise only the continuing operations should be considered as it is only these that will continue into future periods. The management performance can be assessed to some extent by having knowledge of discontinuing activities because the users will be able to judge whether the management decision to discontinue is a good one.

Users can also get benefits from the disclosure in understanding the future strategic direction of the business. By discontinuing activities, the management may be refocusing the business towards more core areas and this would be seen through the disclosures.

Question 7 – OMEGA (numbers in $000 unless stated)

Year ended 31 March 20X7

The property that Omega is seeking to sell would be regarded as held for sale and accounted for under the provisions of IFRS 5 – *non-current assets held for sale and discontinued operations*. IFRS 5 regards a non-current asset as being held for sale when its carrying value will be recovered primarily through sale rather than through continued use. In addition, there needs to be an active programme in place to arrange the sale and there needs to be a reasonable expectation that the sale will be completed within 12 months. This essentially means that the price at which the asset is being offered is reasonable.

IFRS 5 requires that those held for sale assets be removed from non-current assets and shown separately on the balance sheet. They should be measured at the lower region of carrying value at the date of initial classification and fair value less costs to sell. The carrying value needs to be computed according to the measurement basis previously used, so wherever the revaluation model is used this essentially means revaluing the asset in accordance with IAS 16 – *property, plant and equipment* – just before reclassification.

Before such revaluation the carrying value would have been 4,880 [5,000 − (3,200 × 1/20 × 9/12)]. The depreciation for the current period up to the date of the reclassification would be recognised in the income statement.

On classification, as held for sale, the property would have to be revalued to market value (5,100), and so a revaluation surplus of 220 (5,100 − 4,880) would be credited to equity.

The new carrying value of 5,100 would be compared with the estimate of fair value less costs that equals to sale of 5,020 (5,100 − 80). The write down of 80 (5,100 − 5,020) would be taken to the income statement and separately disclosed, if material. No further depreciation would be charged beyond the date of classification as held for sale.

The year-end carrying value of the asset (still 5,020) would be compared with the latest estimate of fair value less costs that equals to sale, and any necessary write down would be made. None is necessary here.

Year ending 31 March 20X8

When the asset is sold on 10 June 20X7, it is removed from the balance sheet and a gain on sale of 130 (5,150 − 5,020) is recorded.

On the same date, any balance in the revaluation reserve relating to the asset is transferred to retained earnings in the statement of changes in equity.

Question 8 – Hoodurz

(a) *Statement of comprehensive income for the year ended 31 March 2006*

		Continuing	*Discontinued*	*Total*
		$000	*$000*	*$000*
Revenue		1,640	370	2,010
Cost of sales	(150 + 960 − 160)	(725)	(225)	(950)
Gross profit		915	145	1,060
Distribution costs	(420 + 20)	(380)	(60)	(440)
Administration expenses	(210 + 16 + 20)	(191)	(55)	(246)
Operating profit		344	30	374
Finance income		75	–	75
Interest paid		(10)		(10)
Profit before tax		409	30	439
Tax		(60)	(14)	(74)
Profit after tax		349	16	365

(b) *Balance sheet as at 31 March 2006*

			$000	*$000*
Non-current assets:				
Property, at valuation				280
Plant and equipment, at cost		(550 − 150)	400	
Plant and equipment, accumulated depreciation		(220 − 15)	(205)	195
Investments				560
				1,035
Current assets:				
Inventory			160	
Trade receivables	(470 − 70)		400	560
Assets held for sale	(150 − 15 + 70)			205
				1,800

Equity:		
Ordinary shares		600
Revaluation reserve		80
Retained earnings (see working)		345
		1,025
Non-current liabilities:		
Loans	100	
Provision for warranty claims (205 + 16)	221	321
Current liabilities:		
Tax (74 − 14)	60	
Bank overdraft (80 − 10)	70	
Trade payables (260 − 60)	200	
Accrual (staff bonus)	40	370
Liabilities held for sale (60 + 14 + 10)		84
		1,800

Working:

	$000
Retained earnings b/f	80
Profit for year	365
Dividends paid (65 + 35)	(100)
Retained earnings c/f	345

Question 9 – Omega

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 20X6. 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 × 1/25 × 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 region of its existing carrying value ($16 million) and its fair value less costs equals to sale ($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 lower than the previously computed amount ($15.5 million), and the latest estimate of fair value less costs is equal to sale ($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 20X7, and will, therefore, impact on next year's financial statements.

Question 10 – X Ltd

(a) Arthur has a business relationship with X Ltd. This does not by itself confer related party status. He owns 24% of the shares, and this would confer related party status if this shareholding enabled him to exert significant influence over the operating and financial policies of X. This is unlikely in this case, given the fact that the remaining directors own the remaining 76% of the shares. This is not totally clear cut though and the facts of the relationships would need to be examined more closely.

(b) Brenda is not a related party just because she has brought Y's significant quantities of business. There are two circumstances in which she might be considered a related party:

(i) If she were one of the key management personnel of Y. This is possible but not proven.

(ii) If she were able to exercise a significant influence over Y. This is also possible but not proven.

On balance Brenda is unlikely to be a related party of Y.

(c) Carrie is definitely a related party of Z because, as a director, she is one of the key management personnel of Z. This makes Donald a related party of Z as well since he is one of Carrie's 'close family'. The situation is slightly less clear cut regarding Emma. If she is regarded as the 'close family' of Carrie then both she and her business are related parties of Z. IAS 24 refers to 'children' as examples of 'close family' but it is unclear whether this would encompass grown up children, which Emma presumably is. Again the facts would need to be examined more closely.

(d) Fred is definitely a related party of V and W. W is not a related party of V simply because it is a major customer or because they have a common director.

Question 11 – Maxpool plc

Year ended 31 December 20X0

(a) Maxpool and Ching are in a related party relationship because they are part of the same group. Bay and Ching are in a related party relationship if Ching is Bay's associate. A 40% holding would normally be enough to allow Bay to exert significant influence over Ching – the key factor in determining associate status. Given Maxwell's capacity to control Ching, however, it is unlikely that Bay and Ching do have an associate relationship, and so they are unlikely to be related parties. There is no reason why Maxpool and Ching should be related parties at this stage.

(b) Therefore, the transaction between Bay and Ching on 30 November 20X0 would not be disclosed as a related party transaction because Bay and Ching are not related parties. The financial statements of Ching would need to disclose the controlling relationship with Maxpool.

Year ended 31 December 20X1

(c) The additional purchase of shares in Ching does not change the related party relationship between Maxpool and Ching. However, the purchase of 25% of the shares of Bay by Maxpool is likely to make Bay an associate of Maxpool, and, therefore, its related party. Therefore, Bay is also a related party of Ching, because Bay is an associate of Maxpool, a member of the same group as Ching. The transaction between Bay and Ching will be disclosed as a related party transaction in the individual financial statements of Bay and Ching (and of Maxpool, if such individual financial statements are prepared) and in the consolidated financial statements of the Maxpool. As in 20X0, the financial statements of Ching would need to disclose the controlling relationship with Maxpool.

Question 12 – Gamma

(a) Gamma and Delta are under the control of Mr and Mrs Lee. That suggests that Gamma and Delta are related parties.

IAS 24 requires the disclosure of the sales between Gamma and Delta. Those disclosures should also indicate whether the sales were on normal business terms.

Arguably, there is some ambiguity concerning the 30% discount because of the significant scale of the transactions between the companies. It is unlikely that Gamma has any similar customers who can be used to demonstrate that such a massive discount was available on large 'arm's length' transactions.

The balances outstanding as at the year-end will also have to be disclosed. Again, it would be helpful if there was some evidence to the effect that it is normal practice to provide such generous credit arrangements to large customers.

In the absence of any further evidence, it may be necessary to state that Gamma has granted Delta a substantial discount and extended terms of payment.

(b)

Sales revenue for the year ended 30 September 2011	$12.0m
Cost of sales	$8.0m/0.7 = $11.4m
Gross profit %	5%
Current assets (including bank $0.3m)	$4.0m − 0.3 = $3.7m
Trade payables	($3.0m/0.7)/3 = $1.4m
Bank	$0.3m − ($3.0m − 1.4m) = ($1.3m)
Other current liabilities	$0.8m + 1.3 (overdraft) = $2.1m
Current ratio	3.7/(1.4 + 2.1) = 1.1

If Gamma does not continue to provide Delta with that large discount in the future then Delta's gross profit will dry up, assuming that it cannot pass the increased cost on to its customers. It would appear that Mr and Mrs Lee may have conspired to create the impression that Delta was highly profitable in order to push up the business' selling price.

The current ratio is virtually unchanged, but Delta's liquidity is under much greater strain. It has gone from having a positive bank balance to having an overdraft, once the reduction in trade credit has taken effect and the figures have settled to their equilibrium level. Furthermore, a major liability that was once owed to a related party is now owed to a third party. In the past, Mr and Mrs Lee would have provided Delta with sufficient time to pay. Now they are under no particular pressure to do so.

Question 13 – IAS 8

(a)

(i) Definition of an accounting policy:

Accounting policies are the specific principles, bases, conventions, rules and practices applied by an entity in preparing and presenting financial statements.

When an IAS/ IFRS (or an Interpretation) specifically applies to a transaction, other event or condition, the accounting policy or policies applied to that item shall be determined by applying the Standard or Interpretation and considering any relevant Implementation guidance issued by the IASB for the Standard or Interpretation.

An entity shall select and apply its accounting policies consistently for similar transactions, other events and conditions, unless a Standard or an Interpretation specifically requires or permits otherwise.

The use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability. Examples include bad debts, inventory obsolescence, fair values of assets, useful lives of assets and warranty obligations. A change in accounting estimate is an adjustment of the carrying amount of an asset or a liability, or the amount of the periodic consumption of an asset, that results from the assessment of the present status of, and expected future benefits and obligations associated with, assets and liabilities.

(ii)

(1) Change in accounting policy:

An entity shall change an accounting policy only if the change:

- is required by a Standard or an Interpretation; or if it
- results in the financial statements providing reliable and more relevant information about the effects of transactions, other events or conditions on the entity's financial position, financial performance or cash flows.

An entity shall account for a change in accounting policy resulting from the initial application of a Standard or an Interpretation in accordance with the specific transitional provisions, if any, in that Standard or Interpretation. Where this does not apply, the entity shall apply the change

retrospectively. This means that the accounts must be altered so that they contain the numbers which would have been there had the new policy always been in force. However, this will not apply if it is impracticable to determine either the period specific effects or the cumulative effect of the change. The initial application of a policy to revalue assets is not dealt with in this manner.

(ii)

(2) Change in accounting estimate:

The effect of a change in an accounting estimate, shall be recognised prospectively (i.e. from the date of the change onward) by including it in profit or loss in the period of the change and future periods, if relevant.

(ii)

(3) Correction of prior period errors:

Prior period errors are omissions from, and misstatements in, the entity's financial statements for one or more prior periods arising from a failure to use, or misuse of, reliable information that:

- was available when financial statements for those periods were authorised for issue; and
- could reasonably be expected to have been obtained and taken into account in the preparation and presentation of those financial statements.

Examples of such errors include the effects of mathematical mistakes, mistakes in applying accounting policies, oversights or misinterpretations of facts and fraud.

Except to the extent that it is impracticable to determine either the period-specific effects or the cumulative effect of the error, an entity shall correct material prior period errors retrospectively in the first set of financial statements authorised for issue after their discovery. This means that the accounts must be altered so that they contain the numbers which would have been there had the error never occurred. The following actions must be taken:

- Restate the comparative amounts for the prior period(s) presented in which the error occurred.
- If the error occurred before the earliest prior period presented, restate the opening balances of assets, liabilities and equity for the earliest prior period presented.
- Adjust the opening balance in the statement of changes in equity.

Omissions or misstatements of items are material if they could, individually or collectively, influence the economic decisions of users taken on the basis of the financial statements.

(b) The effect of the fraud existed in previous periods although the directors of Sigma plc were unaware of it.

Hence, the financial statements should be corrected retrospectively. As the current financial statements will show one comparative year, both of these years will be restated. Any effect predating the earliest period presented will be adjusted for through opening equity balances. The

incremental effects of the fraud will be reported through profit or loss each year, appearing as additional expenses. The cumulative effects will appear in the statement of financial position, through a reduction of the trade receivables and retained earnings figures. The opening equity balances in the statement of changes in equity should show the original balance, adjusted by the cumulative effect of the adjustment. So users can reconcile the figures with those published in the previous year.

Statements of profit or loss and other comprehensive income for the year ended 31 July:

	2015	*2014*
	€000	*€000*
Revenue	300	275
Cost of Sales	(225)	(212)
Gross Profit	75	63
Expenses	(50)	(42)
Profit for year	25	21

Statements of changes in equity (retained earnings only) for the year ended 31 July:

	2015	2014
	€000	*€000*
Balance as at 1 August	258	236
Prior period adjustment (30)		(14)
Adjusted opening balance	228	222
Profit for the year	25	21
Dividends declared	(16)	(15)
Balance as at 31 July	237	228

Statements of financial position as at 31 July:

	2015	*2014*
	€000	*€000*
Non-current assets	294	306
Current assets	93	72
	387	378
Equity share capital	150	150
Retained earnings	237	228
	387	378

CHAPTER 5

Statements of cash flows

Question 1 – Direct plc

Extract from statement of cash flows for the year ended 30 September 20X9

Cash flows from operating activities

		€000
Cash received from customers	(316,000 + 2,000 − 1,600)	316,400
Cash paid to suppliers	(110,400 − 800 − 2,400)	(107,200)
Cash paid for other expenses		(72,000)
Cash paid for rent	(14,400 + 1,200)	(15,600)
Cash paid for advertising	(4,800 − 400)	(4,400)
Cash paid for interest	(320 − 40)	(280)
		116,920

Question 2 – Marwell plc

(a) *Statement of cash flows for the year ended 31 December 20X2*

	€m
Cash flows from operating activities	
Profit before tax	22.14
Adjustments for:	
Depreciation	22.68
Interest payable	16.20
Loss on disposal of plant	3.78
Profit on sale of buildings	(6.48)
	58.32
Changes in working capital:	
Increase in inventory	(5.94)
Increase in trade receivables	(10.26)
Decrease in trade payables	(4.86)
Cash generated from operating activities	37.26
Interest paid	(16.20)
Tax paid (8.1 − 2.7m)	(5.40)
Dividends paid	(18.36)
Net cash outflow from operating activities	(2.70)

(b) The cash flow relating to non-current assets occurs at the date that they are acquired. Depreciation is a book entry and not a source of cash. It is added back to the operating profit as a non-cash expense to show that the cash position of a business improves by the amount of operating profit before deducting depreciation.

When a non-current asset is sold, the only cash effect is the amount of the disposal proceeds. If a loss has been deducted from the operating profit, this is a non-cash entry and needs to be added back to the operating profit and, if a profit has been included in the operating profit, this needs to be deducted.

Question 3 – Radar plc

Using indirect method

Statement of cash flows for the year ended 30 September 20X9

		$000	*$000*
Cash from operating activities			
Profit before tax	(Note 2)		241
Adjustments for			
Depreciation	(Note 1)		64
Investment impairment			20
Operating profit before working capital changes			325
Decrease in inventory	(596 − 397)		199
Increase in trade receivables	(392 − 332)		(60)
Decrease in trade payables	(478 − 396)		(82)
Increase in accruals	(72 − 64)		8
Cash generated from operations			390
Tax paid	(87 + 92 − 96)		(83)
Net cash used in operating activities			*307*
Cash flows from investing activities:			
Purchase of PPE	(Note 3)	(232)	
Disposal of PPE		54	
Purchase of Investments	(Note 4)	(48)	(226)
Cash flows from financing activities:			
Share capital		150	
Share premium	(Note 5)	125	
Debentures	(300 + 75 premium)	(375)	
Dividends received		17	
Dividends paid		(25)	(108)

Net increase in cash and cash equivalents	(27)
Cash and cash equivalents at beginning of year	5
Cash and cash equivalents at end of year	(22)

Note 1: Gain on disposal calculated as:

	$000
Cost of goods sold	72,000
Less: Cash proceeds	54,000
	18,000
Gain on disposal	16,000
Accumulated depreciation	34,000

Depreciation charge for year is calculated as follows:

	$
Balance at beginning of year	288,000
Less depreciation on disposal	34,000
	254,000
Closing balance	318,000
Charge for the year	64,000

Note 2: Calculation of profit before tax:

	$
Retained earnings at beginning of the year	137,000
Less dividend paid	(25,000)
	112,000
Retained earnings at end of the year	294,000
Profit after tax	182,000
Tax expense	92,000
	274,000
Less dividend received	17,000
	257,000
Less profit on disposal	16,000
Profit before tax	241,000

Note 3: Purchase of PPE

	$
Balance at beginning of the year	760,000
Less Cost of equipment sold	72,000
	688,000
Balance at end of the year	920,000
Cash paid for new PPE	232,000

Note 4: Purchase of investments

	$
Balance at beginning of the year	186,000
Less impairment loss	20,000
	166,000
Balance at end of the year	214,000
Cash paid to acquire new investments	48,000

Note 5: Cash received as premium on the issue of shares

	$
Balance at beginning of the year	75,000
Less premium on redemption of debentures	75,000
	0
Closing balance = Cash received on share issue	125,000

Question 4 – Martel plc

(a) *Requirement*

	£000	*£000*
Cash flows from operating activities		
Net profit before tax	427	
Adjustments for		
Depreciation	292	
Profit on sale of plant	(8)	
Interest expense	52	
Operating profit before working capital changes	**763**	
Increase in trade and other receivables	(132)	
Increase in inventories	(174)	
Increase in trade payables	46	
Cash generated from operations	**503**	
Interest paid	(52)	
Taxes paid	(79)	
Net cash used in operating activities		372
Cash flows from investing activities		
Purchase of property, plant and equipment	(714)	
Proceeds from sale of equipment	20	
Purchase of government securities	(40)	
Net cash used in investing activities		(734)
Cash flows from financing activities		
Proceeds from issuance of share capital	150	
Proceeds from 9% debenture issue	82	
Dividends paid	(76)	
Net cash from financing activities		156
Net increase in cash and cash equivalents		**(206)**
Cash and cash equivalents at the beginning of the period		**22**
Cash and cash equivalents at the end of the period		**(184)**

Note 1: Cash and cash equivalents

	20X1	*20X0*
Bank	–	22
Overdraft	(184)	–
Cash and cash equivalents	(184)	22

(b) *Requirement*

Martel plc has invested heavily in non-current assets during the year, and although it has raised additional capital it has had to rely on a bank overdraft. The acid test ratio is lower in the current year (304 : 642).

However, we do not have information on the projected cash flows that supported the capital investment decisions – this is where narrative information within the annual report could be helpful in identifying the company's strategic planning for future years, for example, new markets, new products and greater productive efficiency.

Question 5 – Payne plc

(a) *Statement of cash flows for the year ended 31 March 2013*

	€000	*€000*
Cash flows from operating activities		
Cash generated from operations	2,245.5	
Interest paid (W2)	(113.0)	
Income tax paid (W1)	(230.0)	
Net cash from operating activities		1,952.5
Cash flows from investing activities		
Purchase of property plant and equipment (W3)	(2,222.5)	
Purchase of intangibles (note v)	(70.0)	
Proceeds from sale of property plant and equipment (note (iii))	900.0	
Net cash used in investing activities		(1,442.5)
Cash flows from financing activities		
Proceeds from issue of ordinary share capital		
(6,000 + 1,800) − (5,250 + 1,425)		1,125.0
Proceeds from issue of redeemable preference share capital (760 − 600)		160.0
Dividends paid (W6)	(1,800.0)	
Net cash used in financing activities		(515.0)
Net increase in cash and cash equivalents		(5.0)
Cash and cash equivalents at beginning of period (30 + 18)		48.0
Cash and cash equivalents at end of period (38 + 5)		43.0
Note: Reconciliation of profit before tax to cash generated from operations		
Profit before tax (SOCI)		873.0
Finance cost (SOCI)		108.0
Depreciation charge (note iii)		1,100.0
Amortisation charge (W4)		22.0

Profit on disposal of property plant and equipment (900 − 840.5) (note iii)	(59.5)
Decrease in inventories (1,125 − 840)	285.0
Increase in trade and other receivables (210 − 260)	(50.0)
Increase in trade and other payables (W7)	33.0
Cash generated from operations	2,245.5

W1

	Income Tax		
	€000		*€000*
Cash β	230	Bal b/d	525
Bal c/d 305	600	Income statement	
	830		830

W2

	Finance Cost		
	€000		*€000*
Cash β	113	Bal b/d	10
Bal c/d	5	Income statement	108
	118		118

W3

	PPE		
	€000		*€000*
Bal b/d	10,500.0	Disposals	840.5
Revaluation surplus (W5)	418.0	Income statement	1,100.0
Purchased on credit	50.0	Bal b/d	11,250.0
Cash β	2,222.5		
	13,190.5		13,190.5

W4

	Intangibles		
	€000		*€000*
Cash	70	Bal b/d	500
Bal b/d	452	Income statement β	22
	522		522

W5

Revaluation Surplus

	€000		*€000*
Retained earnings	24	Bal b/d	356
Bal c/d	750	PPE	418
	774		774

W6

Ordinary Dividends

	€000		*€000*
Cash	1,800	Bal b/d	600
Bal c/d	750	Retained earnings	1,950
	2,550		2,550

W7 Trade and other payables (excluding interest accrual and payables in respect of PPE)

Opening	€210,000 − €10,000 =	€200,000
Closing	€222,000 − €5,000 − €50,000 =	€167,000
Increase =		€33,000

(b) *Appropriate ratios*

	2013	*2012*
Gross profit%	$\frac{1,360}{3,400} \times 100 = 40\%$	$\frac{1,400}{2,800} \times 100 = 50\%$
Inventory days	$\frac{840}{2,040} \times 365 = 150 \text{ days}$	$\frac{1,125}{1,400} \times 365 = 293 \text{ days}$
Trade receivables		
Average collection	$\frac{260}{3,400} \times 365 = 28 \text{ days}$	$\frac{210}{2,800} \times 365 = 27 \text{ days}$
Trade payables		
Average payment	$\frac{167}{2,040} \times 365 = 29.87 \text{ days}$	$\frac{200}{1,400} \times 365 = 52.14 \text{ days}$
Trade payables		
Average payment	$\frac{222}{2,040} \times 365 = 40 \text{ days}$	$\frac{210}{1,400} \times 365 = 55 \text{ days}$
Current ratio	1,143 : 1,572	1,383:1,335
	0.72:1	1.03:1

Profitability

Sales have increased by 21% and cost of sales has risen by 46%, resulting in a fall of 3% in the gross profit.

This could be explained by a strategy of lowering sales prices to boost volumes. If so, it did not succeed, either in terms of gross profit amount, or gross margin. However, operating costs have increased by just €22,000 or 6% – much less than the percentage increase in revenue. As a result, the ratio of expenses as a percentage of revenue has fallen from 12.75% to 11.1%.

Working capital management

Cash, including the short-term investments, has reduced by €5,000, a fall of 10%. However, this is not material in the context of the large sums invested in non-current assets and paid out as dividends. Operating cash flow is healthy.

A big improvement is evident in the inventory days ratio from 2012 to 2013. However, it would seem reasonable to expect further improvement, as six months is rather a long time to be carrying inventory.

Trade receivables and payables are reasonably consistent, with a significant improvement noteworthy in the case of the payables days.

Current ratios seem rather weak; however, a cessation of dividends would be a simple way to boost cash flow should an emergency present.

Profit versus cash issue

Cash flow, as noted previously, is healthy. Operating cash flow in particular is strong. It is positive to note that the future of the business is being invested in through investment in non-current assets.

However, it seems a little strange for the entity to raise almost €1.3 million in new capital, and immediately pay out €1.8 million in dividends. It is normal for an entity to use its own resources to the fullest extent before diluting existing shareholders or asking them to contribute new cash. It may be tax-inefficient as well as being costly to the entity.

Question 6 – Saturn plc

Statement of cash flow for the year ended 30 June 20X2

		€000	*€000*
Operating activity:			
Operating profit		1,008	
Non-cash adjustments:			
Loss on asset disposal		156	
Depreciation		318	
Amortisation – development cost		102	
Cash flow from operations		1,584	
Working capital movements:			
Inventory decrease	(1,872 − 1,665)	207	
Receivables increase	(1,446 − 1,188)	(258)	
Payables increase	(1,632 − 1,104)	528	
Cash generated from operations		2,061	
Interest paid		(144)	
Dividend received		36	
Tax paid	(396 + 258 − 507)	(147)	
Dividend paid		(90)	1,716
Investing activity:			
PPE W1		(960)	
Development cost	[180 − (160 − 34)]	(54)	
Investments		(120)	
Disposal of plant W2		66	(1,176)
Financing activity:			
Share issue 300 + 330		630	
Debenture redemption		(1,320)	(690)
Cash outflow in the year:			(150)
Cash and cash equivalent at beginning			42
Cash and cash equivalent at end of period			(108)

W1

PPE		*Depreciation*	
Opening	5,880	Opening	1,380
Acquisition	960	Charge	318
Disposal	(240)	Balancing	(18)
Closing	6,600	Closing	1,680

W2 Disposal

Cost	240
Accumulated depreciation	(18)
Loss	(156)
Cash proceeds	66

(b) Because it shows how much actual cash a company has generated it indicates just how it is able to pay for its current operations and any planned future growth. A company may show a profit in the statement of income but this does not mean that it cannot experience difficulties at a later date because of insufficient cash flows.

PART 3

Regulatory framework – an attempt to achieve uniformity

CHAPTER 6

Financial reporting – evolution of global standards

Question 2

The IFRS for SMEs was assessed to be incompatible with the EU Accounting Directive. As a result, the IFRS for SME was not endorsed in EU. For more details please refer to EFRAG's 'Compatibility Analysis IFRS for SMEs and the Council Directives'.

See: www.efrag.org

Question 3

There is the question of a company's flexibility to move between UK GAAP and IFRS presentation of their financial statements.

In the UK, this is being addressed by the government

See for position in 2012 which may change over time:

www.gov.uk/government/uploads/system/uploads/attachment_data/file/259148/bis-12-928-amendment-restrictions-companies-moving-ifrs-uk-gaap-impact-final.pdf

In the United States, the comments have been made such as:

Unless the US tax laws change, it is hard to see how the switch from GAAP to IFRS will have any effect on the taxes US companies must pay, with the exception that if LIFO is eliminated as a method for determining book earnings, then companies will not be able to use it for taxes either, since use for book purposes is a prerequisite for using it for taxes.

Question 5

(i) In the UK to comply with the Act, a parent company and each of its subsidiaries must apply one of two available frameworks (the 'consistency rule'). Entities within a group could apply a mixture of FRS 102, FRS 101 and (where applicable) the FRSSE as these all fall within the same framework, i.e. Companies Act Accounts. Alternatively, all entities within a group could apply EU-IFRS, which is the second framework, i.e. IAS Accounts.

Companies can, if there are 'good reasons' use different frameworks (e.g. if there was a charity in the group since they are prohibited from adopting IFRS). It is up to the directors to form an opinion on whether there are 'good reasons' and directors must be able to justify use of inconsistent frameworks to shareholders, regulators or other interested parties. Good reasons might, for example:

include the fact that it may not be practical for a newly-acquired subsidiary to switch to EU-IFRS in the first year of acquisition; or

where some subsidiaries use EU-IFRS because their securities are publicly traded, but this does not necessarily justify use of EU-IFRS by the non-publicly traded subsidiaries; or

a subsidiary or the parent converts to EU-IFRS as it plans to apply for a listing but the rest of the group is not planning to apply for a listing.

Rationale:

This is that there should be flexibility for a company to choose the most appropriate method for the group, parent and individual subsidiaries with regard to factors such as the effect of any changes on loan covenants, distributable profits, tax position and bonus schemes based on the financial statements.

(ii) Any company of any size is eligible to use the IFRS for SMEs, provided it does not have public accountability. An entity has public accountability, and, therefore, should be using full IFRSs, if its securities are publicly traded or it is a financial institution. Although there is no quantified size test in the IFRS for SMEs, a jurisdiction could add one if it chose to do so.

The IFRS for SMEs is designed for companies that are required, or choose, to produce general purpose financial statements. Those are financial statements intended for lenders, creditors, investors, employees, governments and others outside of the company. Governments and regulators, not the IASB, decide which entities must produce general purpose financial statements. They make that decision in the light of the public interest in good financial information about companies.

See: www.ifrs.org/IFRS-for-SMEs/Documents/AGuidetotheIFRStoSMEs_March2012.pdf

CHAPTER 7

Concepts – evolution of an international conceptual framework

Question 1 – Conceptual framework

(a) Statements of principles for financial reporting that set out the concepts which underlie the preparation and presentation of financial statements for external users have been widely developed. Their primary purpose is to provide a coherent frame of reference for standard setters to use in the development and review of accounting standards. In particular, the framework provides a basis for choosing between alternative accounting treatments.

(b) In practice, the conceptual framework has provided standard setters with a framework for developing standards rather than providing a frame of reference for practitioners in resolving questions in the absence of a specific promulgated standard. Auditors are under pressure to accept practices that are commercially convenient to the client in the absence of a standard, for example, selecting favourable revenue recognition criteria, adopting merger accounting where possible and massaging income in times of recession.

Question 2 – Fairness

There is an overriding requirement that financial statements should give a true and fair view of the financial position, performance and financial adaptability of an enterprise. In the UK, the ASB considers it to be a dynamic concept whose content will evolve in response to matters such as advances in accounting and changes in business practice. The board considers that the evolution of the interpretation of the concept will be **influenced** over time by the accounting standards and other statements that the board issues.

It is an important concept in the UK because it allows companies to override statutory requirements. In such a case, the company must include a note to the accounts giving particulars of any such departure, the reasons for it and its effect. The use of the override has been considered at various times by the Financial Reporting Review Panel.

The FRRP Press Notice 42 – Sutton Harbour

The Financial Reporting Review Panel considered the 1995 accounts of Sutton Harbour Holdings plc. The panel accepted the directors' justification for their departure from the provisions of Statement of Standard Accounting Practice (SSAP) 4 in the particular circumstances of the company.

AIM Group

The Financial Reporting Review Panel considered the reports and accounts of the AIM Group plc for the year ended 30 April 1998 and discussed them with the company's directors. The primary matter at issue was the departure from compliance with Financial Reporting Standard

(FRS) 7 *Fair Values in Acquisition Accounting* and the use of the true and fair override following the company's acquisition of certain assets and business of Hunting plc.

Empirical research

There is an interesting research paper if wish to take further:

Livne, Gilad and McNichols, Maureen F., An Empirical Investigation of the True and Fair Override in the United Kingdom. *Journal of Business Finance & Accounting*, Vol. 36, Nos. 1-2, pp. 1–30, January/March 2009. Available at SSRN: ssrn.com/abstract=1378257 or dx.doi.org/10.1111/j.1468-5957.2008.02112.x

This raises the question of the feasibility of general purpose accounts to satisfy the information needs of non-equity shareholders. Discussion should embrace the interests of each of the user groups and consider the effectiveness of current measurement systems (HC/CPP/RCA/NRVA) and disclosure requirements, for example, socio-economic information, three bottom lines and environmental reporting.

Question 3 – Control of standard setting

There is no unique answer to this question – it may be approached in a number of ways.

Some of them are the following:

(i) PRO arguments

(a) **Technical requirements:** These are now complex as transactions have become more complex; for example, financial instruments that accountancy international professional firms are the only professional groups with competence in many of the areas that will require standards in the future.

(b) **Globalisation:** National standard setters do not have the breadth that exists within the international firms.

(c) **Accountability requirements:** Standards will be set that are feasible on the basis of current expertise and costs.

(d) **Liability:** Given that the main liability lies with the professional firms, it is important that they are actively involved in the formulation of standards.

(ii) CON arguments

(a) **Enforcement:** The major requirement is for effective enforcement of existing standards that can only be achieved by making the international firms accountable.

(b) **Lack of independence:** The firms are too closely allied with the client, and are, therefore, inclined to accept measurement and disclosure practices that do not comply with existing international standards.

(c) **Investor confidence:** This depends on transparency – the existence of standards, their effective enforcement and adequate monitoring of audit performance.

In practice, this requires the active participation of all parties: the companies preparing accounts, the accounting standard setters and the professional and user groups.

Question 4

Review the financial statements of a company of your choice and identify information that you consider could be eliminated without any risk to investors

Discuss whether investors would benefit if companies in their audited accounts were only required to publish information they considered to be decision useful.

Discuss the impact of requirements for Narrative Reporting on the size and usefulness of financial statements.

Other considerations could include discussion of extended use of abbreviated accounts.

Question 5 – Criticisms of the 2015 Framework Exposure Draft

1. IAS 1 – *Presentation of financial statements* – requires in paragraph 15 that financial statements should *present fairly* the financial position, financial performance and cash flows of an entity.

2. Many examples could be provided here. IAS 2 – *Inventories* – requires that inventories should be measured at the lower of cost and net realisable value.

   IAS 36 – *Impairment of assets* – requires that assets affected by the standard be measured at the lower of carrying amount and recoverable amount.

   IAS 37 – *Provisions*, *Contingent Liabilities and Contingent Assets* – requires recognition of liabilities that are probably going to result in an outflow of economic resources, but disclosure of assets that are probably going to result in an inflow of economic benefits.

3. IFRS 13 – *Fair Value Measurement* – discusses the concept from the perspective of entry and exit values. IFRS 13 is applied in almost all cases where International Financial Reporting Standards require the use of fair value as a measurement base.

4. IFRS 9 – *Financial Instruments* – requires that gains or losses on effective cash flow hedges, initially recognised in other comprehensive income, be reclassified to profit or loss in subsequent periods.

   IAS 16 – *Property, Plant and Equipment* – prohibits the reclassification of gains or losses on asset revaluations under any circumstances.

CHAPTER 8

Ethical behaviour and implications for accountants

Question 1 – Patris Zadan discussion points

The obvious possibilities are that Joe is a very successful business man or that he is channelling money from illegal activities through the Laundromats that he is running.

The first things might be to get advice about the systems you should have in place to deal with possible money laundering. If that includes seeking legal advice then you should use a lawyer who is not the lawyer for Hardiman in order to avoid any possible conflicts of interest and to avoid any suggestion that they are themselves party to money laundering.

You might also take the opportunity to walk past one of the Laundromats at different hours of the day as you go about your business in the town. In that way, you can assess the volume of legitimate trade and gauge whether it is compatible with the reported value of business.

The presence of overseas loans could represent genuine help from relatives with the establishment of the business and may not be uncommon in relation to certain ethnic groups that are known for their support for relatives. On the other hand, it might be a tax device whereby previously undeclared income was sent offshore, and was subsequently returned in the form of loans. The money could have been sent overseas by the simple device of carrying money out of the country or the raising of invoices for consulting or other services that were never performed. The needed cash would be drawn out of the overseas bank account and lent back as if it was coming from an independent source. Interest would then be charged and sent overseas. In that way, local tax could be reduced and more funds hidden overseas.

Question 2 – Joe Withers discussion points

The first problem is that the personal relationship could mean that he is not looking for the best source of loans but may be looking after his mate. Second, although there is no direct connection between the loan deals and the allocations of IPOs it would not be unreasonable for Joe to expect that he would be taken off the list if he does not continue to give business to The Swift Merchant. Thus, there is the potential for his judgements of the best source of loans to be clouded by his self interest. Finally, if he makes gains on the IPOs, should those gains flow to him as an individual or should they flow to the company? What happens if he makes a loss on the IPOs? Can he say Withco plc should bear the loss? First, if he had taken the gains he could hardly expect the company to bear the loss. If it is discovered that he had taken both gains and losses, could the company claim the gains but not the losses?

Question 3 – Kim Lee discussion points

Kim might argue that by paying the bribe Green Cocoa is better off financially and commercially because the supply is guaranteed. He might also argue that the government official is so poorly paid that he needs commissions to support his family at a very basic level. He could argue that the first responsibility of a man is to feed his family and then as a secondary responsibility to the government. Further, he would say that the government is no worse off because the transaction still occurred.

However, this may be incorrect. If the bribe is subsequently discovered, the company may suffer both fines for breaches of the law and considerable damage to its reputation. Kim may have exposed himself to criminal charges. In terms of the government employee, what he says may be true at the individual level, but if significant numbers take the same approach the government systems will fail. So, the government official has a broader responsibility for maintaining the integrity of the government systems if the country is to reach its full potential.

Further, the accountant has to be careful how he records the consulting fee. If he agrees to make the payment, he should charge it to the cost of the purchases and should not hide it in any way because once he starts fudging the system it empowers others to do likewise. It cannot be assumed that the payment will not be noticed by others in the company.

Question 4 – Jemma Burrett discussion points

The first issue should have arisen when the trust was set up. Whose name is the business in? If the business is in the name of Simon and Marie, then assets of the business should not have been diverted to the trust without the express permission of the two partners.

Then, the accountant has the problem of disclosing his previous mistake to Marie if that is the case. If the business was solely in the name of Simon then no problem would arise at the time of set up. As soon as Marie files for divorce, the accountant has the problem that he cannot act for both parties.

Then, the issue is whether he can act for either party as his independence may be, or appear to be, in question particularly if the business is going to have to be valued for the settlement. Also he needs to take legal advice regarding the obligation to advise Marie of the trust and the obligation not to disclose Simon's private information.

Of course, the accountant could try to persuade Simon to disclose the trust to Marie but not be surprised if Simon adopts an attitude that he worked hard to earn that money and is not going to share it with her.

Question 5 – George Longfellow discussion points

Obviously, if the performance does not improve in the future then the suppliers of finance will probably suffer losses, and the shareholders in the finance company will bear the loss. Regulators will look at the accounts and will question the accounting which has been done, and George may be held responsible for fraudulent accounting. The managing director and the CFO will try to distance themselves from George and claim no knowledge of the irregularities. Furthermore, fraudulent accounting often occurs incrementally.

What happens if in next year and the year after that if even bigger adjustments are necessary? It will be hard for George to resist because otherwise his earlier fraudulent accounting will come to light. This could lead to George ending up in jail.

It is argued that 20,000 people will lose their jobs. But if the company goes into receivership, it is probable that some subsidiaries will survive under new owners, and so the 20,000 is probably an overstatement. If the problem is really due to poor management, the quicker it comes to light the quicker the management will be replaced or strategies revised, thus increasing the likelihood that ultimately less jobs will be lost.

All the time shares in listed companies are being bought and sold based on the publicly available information. If the profit is overstated it is likely that the seller will receive too much and will thus benefit unfairly whilst the buyer will be disadvantaged. If the buyer subsequently finds that they paid too much then they may participate in a class action against the company.

The board of directors will be exposed to risks due to their ultimate responsibility for the accounts, and auditors will be placed at risk. The auditors face at least two risks namely the risk that they will not identify the manipulations, or if they discover them then the risk that they will be bullied into being a party to the fraud. Given this scenario, there is a strong probability that the auditors will lose the audit.

PART 4

Income and asset value measurement systems

CHAPTER 9

Income and asset value measurement: an economist's approach

Question 1 – Jim Bowater

(a) *Refer to Question 2 (a) below for description of underlying theory.*

(b) *Jim Bowater ideal economic income model*:

Investment of £36,000, cost of capital 20%

Jim's economic income (£) for each of the three years:

31 December 20X5	6,828
31 December 20X6	6,695
31 December 20X7	6,833

Jim's economic capital will be preserved at the 1 January 20X5 level of £34,144, provided.

He reinvests excess actual income of £672 on 31 December 20X5 and £34,107 on 31 December 20X7, generating a return of 20%.

An excess of actual income of £695 at 31 December 20X6 is created, in whose effect a cumulative injection of capital of (672 – 695) £23 is obtained.

He maintains his income of 20% p.a. that will necessitate an investment of £34,167 from the proceeds of the proposed sale.

Workings

(i) *Ideal economic income (i.e. conditions of certainty)*

Period	*C*	K_t	K_{t-1}	*Ye*	*C − Ye*
20X5 $t_0 - t_1$	7,500	33,472 (b)	34,144 (a)	6,828	672
20X6 $t_1 - t_2$	6,000	34,167 (c)	33,472 (b)	6,695	(695)
20X7 $t_2 - t_3$	41,000		34,167 (c)	6,833	34,167
	54,500			20,356	34,144

(a) $t_0 - t_1$ $\quad \frac{7,500}{1.2} + \frac{6,000}{1.2^2} + \frac{41,000}{1.2^3} = 34,144$

(b) $t_1 - t_2$	$\frac{6,000}{1.2}$	+	$\frac{41,000}{1.2^2}$	=	33,472
(c) $t_2 - t_3$			$\frac{41,000}{1.2}$	=	34,167

(ii) *Reinvestment under certainty to maintain 20% p.a. income*

	Economic income from Original investment	*Reinvestment total*	*Economic income*
$t_0 - t_1$	6,828	–	6,828
$t_1 - t_2$	6,695 (20% 672)	133 (approximately)	6,828
$t_2 - t_3$	6,833 (20% 23)	(5) (approximately)	6,828

Question 2 – Hicks's Concept of Income: Spock

(a) *Hick's economic model of income and capital*

Hicks's economic model of income and capital is based on his concept of 'well-offness'.

Well-offness is the maximum income enjoyed by the individual without depleting the individual's capital stock.

It is based on the precept of consumption, which embraces the opportunity for consumption as well as the actual consumption.

As an extension of Fisher's original model, it takes savings into account.

It is an *ex ante* model which usually measures expected income in advance of the period concerned.

Measurement of capital is necessitated in order to compute the income.

Income is the difference between opening and closing valuations of capital stock.

The capital stock is computed by utilising the concept of present values.

This concept adopts the idea of compound interest in order to compensate for the time element between cash flows.

Limitations

In the field of accountancy, there are serious practical limitations in measuring the accountant's version of income and capital, for example:

***Subjectivity*: The present value factor**, often referred to as the discount cash flow element, **is subjective**.

It requires the use of an interest rate and, as such, depending upon personal inclinations, it can utilise the opportunity cost of capital, the return on existing capital employed within a business entity, contemporary short-term interest rates such as that charged on bank overdrafts, the average rate pertaining to the current economic climate, or a speculative rate as assessed on the basis of the perceived risk involved.

***Unrealised and realised flows*:** The model uses a mix of unrealised and realised cash flows. Thus, it is not of practical value as a measure in determining taxation liability and dividend policy.

***Financial strategy*:** Attainment of flows as per a financial strategy is an integral part of the calculations. Targets are rarely achieved with precision. Variations from target destroy the model's accuracy. Predictions are invariably unachievable with absolute accuracy.

***Windfalls*:** Windfall flows cannot be foreseen and consequently cannot be incorporated within the model.

Statement of financial position values: Statement of financial position valuations of net assets or capital employed concern aggregations of individually valued assets and itemised liabilities.

It is not easy to apply the concept of present values across a range of individual assets and liabilities for statement of financial position discount purposes.

(b) *Calculate Spock's ideal economic income using Hicks's theorem*

Economic capital value of the business at K_0

Year	*Cash flow*	*DCF factor* $1/(1 + r)^n$	*PV*
	£		**£**
K_1	400	0.909	364
K_2	500	0.826	413
K_3	600	0.751	451
	400	0.751	300
	1,900		1,528

Economic value at X_0, i.e. at the beginning of the year is £1,528 (Note: initial capital was £1,000; therefore, subjective goodwill is £528).

Economic capital value of the business at K_1

Year	*Cash flow*	*DCF factor* $1/(1+r)^n$	*PV*
	£		£
K1	400	1.000	400
K2	500	0.909	455
K3	600	0.826	496
	400	0.826	330
	1,900		1,681

Economic value at K_1 = £1,681. So Y for Y_1 = £1,681 − £1,528 = £153
Rate of income return = £153/£1,528 = 10%

Economic capital value of the business at K_2

Year	*Cash flow*	*DCF factor* $1/(1+r)^n$	*PV*
	£		£
K1	400	1.100	440
K2	500	1.100	500
K3	600	0.909	546
	400	0.909	363
	1,900		1,849

Economic value at K_2 = £1,849. So Y for Y_2 = £1,849 − £1,681 = £168
Rate of income return = £168/£1,681 = 10%

Economic capital value of the business at K_3

Year	*Cash flow*	*DCF factor* $1/(1+r)^n$	*PV*
	£		£
K1	400	1.121	484
K2	500	1.100	550
K3	600	1.000	600
	400	1.000	400
	1,900		2,034

Economic value at K_3 = £2,034. So Y for Y_3 = £2,034 − £1,849 = £185
Rate of income return = £185/£1,849 = 10%
Note that the rate of income return is constant at 10%.

Question 3 – Jason

(a)

(i) Accounting income for Jason (using historical cost concept and applying conventional accounting by compiling an income statement account).

Statement of comprehensive income for the year ended 31 December, 20X1

	£		£
Opening inventory	10,000	**Sales less purchases**	**36,200**
Gross profit c/d	41,700	Closing inventory	15,500
	51,700		51,700
Depreciation	5,000	Gross profit b/d	41,700
Net profit	**36,700**		
	41,700		41,700

(**Note:** The **sales less purchases figure** of £36,200 is derived from the debtors/creditors account below.)

So, accounting profit = £36,700 (assumes the traditional concept of going concern).

Workings are shown below in T account form.

Cash Book

1 January 20X1 Balance	135,000	1 January 20X1	Purchase of business	130,000
				5,000
	135,000			135,000
20X1 Debtors/creditors	40,000	31 December 20X1	Drawings	25,000
			Balance	15,000
	40,000			40,000
1 January 20X2 Bal b/d	15,000			

Purchase of business

1 January 20X1 Cash	130,000	1 January 20X1	Premises	100,000
			Stock	10,000
			Debtors	4,000
			Goodwill	16,000
	130,000			130,000

Shop premises

1 January 20X1	Purchase of business	100,000	31 December 20X1	Balance	105,000
Cash					
Legal costs capitalised		5,000			
		105,000			105,000

Depreciation

31 December 20X1	Balance c/d	5,000	31 December 20X1	P&L a/c	5,000
		5,000			5,000
			1 January 20X2	Balance b/d	5,000

Inventory

1 January 20X1	Purchase of business	10,000	31 December 20X1	P&L a/c	10,000
31 December 20X1	P&L a/c	15,500			

Goodwill

1 January 20X1	Purchase of business	16,000

Capital

31 December 20X1	Drawings	25,000	1 January 20X1	Cash	135,000
	Balance c/d	146,700	31 December 20X1	P&L a/c	36,700
		171,700			171,700
			1 January 20X2	Balance b/d	146,700

Trade receivables/trade payables account
[prepared in order to derive net sales less purchases]

1 January 20X1	Purchase of business		31 December 20X1	Cash balance	40,000
	receivables	4,000			

20X1 Sales – purchases = balancing figure 36,200 (40,000-4,000+200)

31 December 20X1	Payables c/d				
		5,000	31 December 20X1	Receivables c/d	5,200
		45,200			45,200
1 January 20X2	Receivables b/d				
		5,200	1 January 20X2	Payables b/d	5,000

Drawings

31 Dec 20X1	Cash	25,000	31 Dec 20X1	Capital a/c	25,000

Statement of financial position

	(NA_0)		*(NA_1)*
	At 1 January 20X1		*At 31 December 20X1*
Premises	100,000		100,000
Add capitalisation of legal costs	5,000		5,000
	105,000		105,000
Less depreciation			5,000
	105,000		100,000
Goodwill	16,000		16,000
Inventory	10,000		15,500
Trade receivables	4,000		5,200
Cash		40,000	
Less drawings		(25,000)	15,000
Trade payables			(5,000)
	135,000		146,700

So profit **= NA_1 − NA_0 + Drawings**

= 146,700 − 135,000 + 25,000

= **£36,700** as confirmed by the profit and loss account above.

Comparing the opening and closing statements of financial position and allowing for drawings will enable the profit to be derived but it is usual for accounting profit to be shown via a profit and loss account.

It has been assumed that the traditional historical cost concept applies.

It was intended that the legal costs be capitalised, giving a fair value at 1 January 20X1 of £105,000.

Thus, depreciation is £5,000 (£105,000 − £100,000).

Alternatively, the £5,000 could have been treated as an expensed cost (i.e. written off in the profit and loss account).

The net profit would remain at £36,700, the depreciation having been replaced by the legal costs.

It was assumed that the opening statement of financial position values represent fair values (i.e. cost) of the individual assets concerned.

(ii) Realisable income

Y_{0-1} = Net RV_1 − Net RV_o + drawings

= £136,200 − £135,000 + £25,000

= £26,200

Workings: *net realisable values*

		At 1 January 20X1	At 31 December 20X1
Premises		85,000	105,000
Goodwill		16,000	16,000
Inventory		20,000	10,000
Trade receivables		5,200	4,000
Cash	40,000		
Less drawings	(25,000)	15,000	
Trade payables		(5,000)	
Net realisable values		136,200	135,000

Assumptions:

The realisable values are not based on an enforced sale.

Goodwill would possess a realisable value equivalent to its original cost in an enforced sale.

The entity is capable of being sold as a business entity in order to realise goodwill.

Note: Some commentators might dispute the validity of goodwill because the concept of realisable income contravenes the going concern concept. In this situation, the realisable income would be £10,200.

(iii) Economic income *ex ante*

$Ye = C^1 + (K^1_t - K_{t-1})$

= 25,000 + (142,361 − 139,467)

= £27,894 income for 20X1

Assumptions:

The difference of £4,467 between the actual cost of opening capital of £135,000 and its present value of £139,467 is to be treated as subjective goodwill.

The anticipated drawings represent expected cash flows.

The discount factor does not vary over the time span.

The cash flows predicted will materialise.

Only the original capital of a present value of £139,467 needs to be maintained.

All the price levels are constant.

Workings

$\mathbf{K_{t-1}}$ = Capital at 1 January 20X1 *ex ante*

$$= \frac{CF}{(1+r)^n} = \frac{25,000}{(1.2)} + \frac{25,000}{(1.2)^2} + \frac{25,000 + 150,000}{(1.2)^3}$$

= **£139,467**

$\mathbf{K^1_t}$ = Capital at 31 December 20X1 *ex ante*

$$= \frac{CF}{(1+r)^n} = \frac{25,000}{(1.2)} + \frac{25,000 + 150,000}{(1.2)^2}$$

= **£142,361**

An extension of the tabulated workings might be helpful.

Year	*C¹*	*K¹t*	*Kt − 1*	*Ye*	*W*	*Ye + W*	*C¹ − (Ye + W)*
$Y_0 - Y_1$ X1	25,000	142,361	139,467	27,894		27,894	(2,894)
$Y_1 - Y_2$ X2	35,000	175,000	175,000	35,000	32,639	67,639	(32,639)
$Y_2 - Y_3$ X3	210,000		175,000	35,000		35,000	175,000
	270,000			97,894		130,533	139,467

Workings

$Y_1 - Y_2$	20X2	(2)	175,000	175,000	(1)
$Y_2 - Y_3$	20X3			175,000	(2)

(1) $$\frac{35,000}{(1.2)} + \frac{35,000 + 175,000}{(1.2)^2} = £175,000$$

(2) $$\frac{35,000 + 175,000}{(1.2)} = £175,000$$

(iv) Economic income *ex post*

Ye = $C + (K_n - K_{n-1})$ = 35,000 + (175,000 − 175,000) = **£35,000**

Assumptions:

The difference of £40,000 between the actual cost of opening capital of £135,000 and its present value of £175,000 is to be treated as subjective goodwill.

The discount factor is not subject to change.

Price levels are constant.

Cash flows for years following 20X1 will be as predicted.

All flows occur at the year-end.

Workings

$$W1 = \frac{CF}{(1+r)^n} = \frac{35{,}000}{(1.2)} + \frac{35{,}000}{(1.2)^2} + \frac{35{,}000 + 175{,}000}{(1.2)^3}$$

$$= £175{,}000$$

$$W2 = \frac{CF}{(1+r)^n} = \frac{35{,}000}{(1.2)} + \frac{35{,}000 + 175{,}000}{(1.2)^2}$$

$$= £175{,}000$$

A tabular extension of the workings might be helpful:

Year	*C^1*	*K_n*	*K_{n-1}*	*Ye*	*W*	*Ye + W*	*C^1 – (Ye + W)*
$Y_0 - Y_1$	35,000	175,000	W2 175,000	W1	35,000	35,000	
$Y_1 - Y_2$	35,000	175,000	W3 175,000		35,000	35,000	
$Y_2 - Y_3$	35,000	–	175,000		35,000	35,000	
	175,000						
	280,000				105,000	105,000	

$$W3 = \frac{35{,}000 + 175{,}000}{1.2} = £175{,}000$$

(b) *Evaluation of the income figures*

(i) Accounting income (£36,700)

As an indicator of performance

On the basis of actual transactions in this respect, it is objective.

However, it also utilises subjective data (e.g. depreciation) which incorporate an element of estimation into the results for the year.

If such subjective data are substantial as a proportion of total costs, then the resultant profit or loss would be of reduced reliability.

Being based on historical cost, it can be misleading as an indicator of real profit in times of changing price levels.

It ignores unrealised capital gains/losses in pursuit of the going concern concept.

It could be said, therefore, that on the one hand the figure is incorrect while on the other it is realistic because there is no intention to realise the net assets.

The statement of financial position is not a valuation statement. Consequently, profit expressed as a return on capital employed may be incorrect as an indicator of performance.

As an aid in decision making

It is historic and history may not be a guide to the future.

Circumstances of trade, costs and setting prices may be subject to factors not encountered by the results to date.

However, historical trends over years may be of considerable assistance.

It does not enable precise comparisons to be made with the return yield of other businesses as historical costs can mean differing values across trade and industry as inflation develops.

In general, accounting income has a considerable degree of authenticity because:

of its objective nature;

it is traditional and it is understood.

It can be of assistance as an indicator of performance and as an aid in decision making if it is used as a base figure capable of amendment in the light of:

subjective content;

a changing price economy and anticipated future commercial trends regarding costs and sales.

(ii) Realisable income (£26,200)

As an indicator of performance

It avoids the subjective assessment of depreciation, and in this sense its measured income can be considered realistic, but it embraces unrealised capital gains and losses that can be considered irrelevant when the intention to sell does not exist.

If the going concern concept is paramount, then as an indicator, realisable value-based profit is unrealistic.

Realisable values are subjective.

As an aid to decision making

It can be said to equate asset values with opportunity cost that is relevant when considering the going concern versus the cash realisation potential of disposal.

(iii) Economic income *ex ante* (£27,894)

As indicator of performance

It is a very subjective figure in terms of future cash flows with respect to amount, timing and discount factor. These effects can make it impractical to implement as a system.

However, it can accommodate inflation by taking account of changing price levels when forecasting the future cash flows.

As an indicator it is predictive, and thus windfall gains can occur in this system when anticipated cash flows are changed by new circumstances.

It is a guide to prudent and conduct as it represents maximum consumption for a defined period without eroding the capital.

As an aid to decision making

By attempting to value a business at different time points, it takes account of a strict capital maintenance concept via a time value of money.

The possibility of profit distributions being excessive and consequently eroding the capital is thus restricted.

This is not so with historical cost.

The adoption of a discounting factor enables cash flows to be adjusted for taking account of risk.

While these two qualities are perhaps too subjective in terms of valuing the entire business entity, they can be of considerable assistance when considering investment in the individual asset where choice among alternatives or the option of buying or renting exists.

(iv) Economic income *ex ante* (£35,000)

As indicator of performance

Accuracy depends upon the validity of the forecasting cash flows as with the *ex ante* system.

However, unlike that model, adjustments can be made to past as well as future capital values.

Thus, as an indicator of performance it has the potential to better the *ex ante* concept.

By adjusting past as well as future cash flows due to windfall elements, it tends to have characteristics akin to traditional accounting. The figure of £35,000 is close to the traditional accounting figure of £36,200.

As an aid to decision making

Expectations can change over time, thereby affecting income and capital calculations.

Windfall gains and losses can influence the calculations, and thus inhibit confidence in the reliability of the measure. Will the profit be £35,000 next year?

However, the model does not pretend to be absolutely accurate; as with the *ex ante* measure, its intention is to give guidance only.

CHAPTER 10

Accounting for price-level changes

Question 1 – Raiders plc

(a) *All in £000s*

(i) Cost of goods sold

Note: *Closing **inventory** purchased on average on 31 December.*

Average index is index at 30 September 20X4, i.e. 150

Alternatively, calculate the average of indices at 1 April 20X4 and 31 March 20X5

$\frac{(138 + 162)}{(2)} = 150$

		HC ×	*Revaluation ratio*	= *Current cost*
Inventory 1 April 20X4	9,600		150/133	10,827
Purchases	39,200		150/150	39,200
	48,800			50,027
Inventory 31 March 20X5	11,300		150/156	10,865
COGS	37,500			39,162

(ii) Inventory figure in statement of financial position

Statement of financial position value	11,300	162/156	11,735

(iii) Equipment depreciation charge

	HC	× *Revaluation ratio*	= *Current cost*
Purchased 1 April 20X2	16,000	180/145	19,862
1 April 20X3	20,000	180/162	22,222
1 April 20X4	21,600	180/180	21,600
			63,684
63,684 × 200/180			70,760

CC depreciation = 15% × $\frac{[63,684 + 70,760]}{[2]}$ = 10,083

Alternatively, calculate as 15% × £70,760 = 10,614

(iv) Statement of financial position value of equipment

Purchase date	*Current cost @ 1 April 20X4*	*Gross CC (200/180)*	*Accumulated depreciation*	
1 April 20X2	19,862	22,069	(45%)	9,931
1 April 20X3	22,222	24,691	(30%)	7,407
1 April 20X4	21,600	24,000	(15%)	3,600
		70,760		20,938

Net statement of financial position value = 70,760 − 20,938 = £49,822

(b) *Evaluation of incremental informational content*

Discuss users and their decisions, and how current cost number should improve predictions and control. Should also refer to recent empirical evidence and discuss ongoing controversy within (and outside) ASB.

(c) *Consider power of providers, cost, economic companies, etc.*

Question 2 – Toy plc

(a)

(i) Cost of sales adjustment (COSA)

This is the amount by which the historic cost of goods sold and charged in the historical cost statement of comprehensive income falls short of the replacement cost of those goods as on the date of sale.

The current cost accounting (CCA) model requires all costs, assets, revenues and liabilities to be reported at their current entry value.

The COSA is, therefore, an additional charge to the statement of comprehensive income account intended to bring the historical cost of sales to its replacement cost equivalent.

The COSA is regarded as a realised holding gain, in the sense that it is a gain relating to realised assets (i.e. sold inventory) and one made during the asset holding period.

(ii) Additional depreciation

Is an amount charged to the statement of comprehensive income to make the charge for year equate to that related to the replacement cost.

(iii) Monetary Working Capital (MWCA)

This is the gain or loss from holding monetary working capital.

If prices are rising, MWCA will be a gain if net monetary liabilities are held and a charge if net monetary assets are held.

(iv) Gearing adjustment

Is an amount that is based on the proportion of the above charges that accrues to ordinary shareholders because there are lenders who bear a proportion of the charges.

(v) Accumulated current cost depreciation

This is to provide sufficient retention of funds to allow for the replacement of the fixed asset.

(vi) Current cost reserve

This is a revaluation reserve where **all** holding gains (**realised** as well as **unrealised**) are credited in order to avoid the distribution of such gains and, therefore, reserve enough funds to replace assets at their current replacement costs as they are consumed.

The composition of the CCA reserve account is likely to include realised items as follows:

Debits: backlog depreciation gearing adjustment

Credits: COSA monetary working capital adjustment and the following unrealised items:

Closing inventory revaluation increase

Non-current asset revaluation increase.

(b) It quantifies cost of sales and depreciation after allowing for changing price levels, so that the trading results are free of inflationary elements and provide a clearer picture of management performance.

Resources are maintained by eliminating the risk of disturbing profits out of real capital.

Time series and inter-firm comparisons are more indicative of management performance.

Question 3 – Parkway plc

(a) *Monetary working capital*

(i) Making and stating assumptions:

COSA provides for the maintenance of inventory levels in times of inflation.

There is a view that MWC is also an integral part of daily operating activities and should be treated similarly through a provision out of revenue, from any detrimental impact caused by rising price levels.

However, a consensus does not exist.

Some commentators maintain that MWC is not a part of the operating capital, and so should be ignored while considering the operating capital maintenance concept.

Investment in such items as debtors is not an essential ingredient of day-to-day operations.

Even where critics accept that MWC is a part of operating activities, varying views exist as to which of the assets and liabilities should be included in the MWC calculation. There are some conflicting views.

MWC should embrace monetary assets only; or

all monetary assets less all monetary liabilities should be taken into account; or

only short-term monetary liabilities should be accepted into the calculation; that long-term monetary liabilities should be part of the gearing adjustment; or

even short-term monetary liabilities should be ignored; or

only monetary assets and liabilities that have been generated by operating activities should be involved, and thus these should be segregated from other monetary assets and monetary liabilities.

(ii) Usual inclusions:

In spite of the ongoing contentious debate, there is general acceptance to include the following items as part of MWC:

trade receivables, including prepayments, trade bills receivable and VAT recoverable on trade purchases;

trade payables, including accruals, trade bills payable and VAT payable on turnover;

any stock not subject to COSA.

(iii) Usual exclusions:

Receivables and trade payables arising from fixed assets sold, bought or under construction or those arising out of any other non-trading activities.

Any cash or bank balances.

Certain investments such as long-term and short-term investments. The former will be treated as fixed assets and the latter as cash and bank balances.

Some critics formulate a case for including all or a portion of liquid resources as part of MWC:

If cash is essential to support day-to-day ordinary operations (e.g. a retail supermarket), then such cash is part of the MWC.

Similarly, if part of a bank balance or overdraft is subject to temporary but material changes as a reaction to fluctuations in levels of stock, trade debtors, trade purchases or sales, then it should be treated as MWC.

Any surplus will become part of the gearing adjustment.

Taking account of the above scenarios, the following MWCA calculation involves the assumptions stated below and corresponding reasons for making them, i.e.

MWC is part of day-to-day ordinary operating activities.

'Trade receivables' are substantial.

At £60,000; this is almost 50% of the capital invested in fixed assets (£126,000).

They amount to 63% of inventories (after eliminating an average profit content in debtors of 16% of sales, i.e. £118,000/738,000 × 100, based on the year-end debtors figure of £60,000, i.e. 84% of £60,000/£80,000 × 100) = 63%.

If COSA is considered necessary in respect of inventories of £80,000, then so is MWC in respect of trade receivables, inclusive of profit, of £60,000.

Total inventories of £80,000 are all subject to COSA.

Trade payables, being also substantial at £90,000, are deemed essential to the entity's daily operating activities. Trade payables amount to an average of 37 days' credit, i.e. [((£80,000 + 70,000)/2)/£738,000] × 365 during 20X8.

Short-term investments are not essential to MWC, i.e. they do not constitute a provision of finance for, say, imminent investment in trade receivables, as part of a marketing strategy to stimulate sales by increasing terms of credit to customers.

Cash and bank balances, and any part thereof, are essential to day-to-day ordinary activities.

The rate of credit given and taken remains unchanged over the period.

Inventories have been charged out on the basis of FIFO, and the inventory price level index is appropriate to the MWCA.

Inventory movements have been evenly spread throughout the year.

(iv) Calculation of MWCA

	30 June 20X8	*30 June 20X7*	*Change*
Trade receivables	60,000	40,000	
Trade payables	(90,000)	(60,000)	
	(30,000)	(20,000)	(10,000)

(v) Adjustment to average price levels:

$$30{,}000 \times \frac{160}{180} - \quad 20{,}000 \times \frac{160}{140}$$

$$= 26{,}667 - 22{,}857$$

= Volume change (3,810)

Reduction in MWC **6,190**

(b) *Critical evaluation of the influence of MWCA*

The concept of an MWCA acknowledges the existence of the interaction of physical assets and monetary assets by allowing for the protection of MWC against erosion by inflation, in the same way as COSA protects capital in stocks consumed.

The provision for additional MWC supplements the provision for extra depreciation and COSA in maintaining the capital substance of the entity.

The calculation is not over-prudent as it takes cognisance of the protection granted by credit suppliers in their indirect funding of credit customers.

The inclusion of monetary assets and trade payables within the inflation protection framework reduces the risk of an excess dividend being paid. This could threaten the going concern by overlooking the impact of inflation on the monetary working funds.

The concept recognises the lag between realising a sale and realising the resultant cash.

Changes in credit periods between that granted to trade receivables and that given by suppliers can be affected by inflation, and that impact may otherwise remain hidden if the MWCA were not applied.

However, a point of criticism is that when trade creditors become unstable in terms of credit given and credit received, the MWCA calculation increases in complexity and may not be so readily understood by the users of the accounts.

A further criticism lies in the determination of any cash floats and bank balance movements deemed to be part of MWC by some business entities. These may be very subjective and, consequently, inaccurate or prone to abuse by the compilers.

Question 4 – Smith plc

(i) Current purchasing power (CPP) requires the restatement of the statement of comprehensive income and statement of financial position in terms of purchasing power of money at the end of the accounting period in units of CPP.

It is rather like translating the historic figures into another currency.

CPP accounts are derived from the historic accounts by applying the general price index, and are issued as supplementary statements aimed at the shareholders.

The intention is to ensure that shareholders capital is maintained in terms of general purchasing power, and distributions would be restrained during a period of general inflation.

CPP accounts are objective/factual because they are based on historical cost (HC) figures updated to year-end values:

They can be audited as such.

They show gains and losses on monetary items not incorporated into basic CCA model.

(ii) (a) *Restate the statement of income in £CPP*

CPP statement of comprehensive income for the year ended 31 December 20X8

		HC £000	*Index*	*CPP £000*
Sales		2,000	236/228	2,070
Cost of sales				
Inventory	320		236/216	350
Purchases	1,680		236/228	1,739
	2,000		2,089	
Closing inventory	(280)		236/232	(285)
	1,720		1,804	
Gross profit		280		266
Depreciation	20		236/120	39
Administrative expenses	100		236/228	104
	120			143
Net profit		**160**		**123**

(b) *Restate the closing statement of financial position in £CPP*

Statement of financial position as at 31 December 20X8

HC £000	*Index*	*CPP*	*£000*
Non-current assets			
Land and buildings	1,180	236/120	2,321
Net current assets			
Inventory	280	236/232	284
Trade receivables	160		160
Cash/bank	120		120
	560		564
Less: Trade payables	(140)		(140)
	420		424
Net total assets	1,600		**2,745**
Equity	1,600		**2,745**

(c) *Restate the opening statement of financial position in £CPP (as at 31 December 20X8 rate)*

Statement of financial position as at 31 December 20X7

HC £000	*Index*	*CPP*	*£000*
Non-current assets			
Land and buildings (net)	1,200	236/120	2,360
Net current assets			
Inventory	320	236/216	350
Trade receivables	80	236/220	86
Cash/bank	40	236/220	43
	440		479
Less: Trade payables	(200)	236/220	(215)
	240		264
Net total assets	1,440		2,624
Equity (balancing figure)	1,440		2,624

(d) *Calculation of monetary loss as at 31 December 20X8*

Equity (balance) at 31 December 20X7 in CPP £000	2,624
Equity (balance) at 31 December 20X8 in CPP £000	2,745
Increase	121
Profit per statement of comprehensive income in CPP £000	123
Monetary loss	2

(e) *Reconciliation of monetary loss as at 31 December 20X8*

	HC £000	*Index*	*CPP £000*
Net monetary liabilities at 31 December 20X7	(80)	236/220	(86)
Increase	220	236/228	228
Net monetary assets at 31 December 20X8	140		142
Monetary loss (140 − 142)	2		

Net monetary liabilities are made up as follows:

	31 December 20X7	*31 December 20X8*
	£000	*£000*
Trade receivables	80	160
Bank	40	120
Trade payables	(200)	(140)
	(80)	140

Question 5 – Shower Ltd

				20X3					
	HC			*CPP/PLA*			*RC*		*CoCoA*
	£	£		£P	£P		£	£	£
		(i)			*(ii)*			*(iii)*	*(iv)*
Sales (8,000 units)		20,000	240/120		40,000			20,000	20,000
Inventory (4,000 units)	4,000		240/100	9,600		HC × 150/100	6,000		
Purchase (6,000 units)	9,000		240/120	18,000		HC × 150/150	9,000		
	13,000			27,600			15,00		
C Inventory (2,000 units)	3,000	10,000	240/120	6,000	21,600	HC × 150/150	3,000	12,000	10,000
		10,000			18,400			8,000	10,000
Sundry expenses		5,000	240/120		10,000	HC × 150/150		5,000	5,000
Depreciation £6,000/5		1,200	240/100		2,880	HC × 200/100		2,400	
		3,800			5,520			600	5,000

Monetary gains		Realised holding		Price variation	
		Gains		Adjustments	
Loan		FA		FA	
(8,000 × 240/100) − 8,000		2,400 − 1,200	1,200	6,000 − 2,000	(4,000)
	11,200	Inventory		Inventory	
		12,000 − 10,000	2,000	3,000 − 5,100	2,100
Monetary losses		Unrealised holding		Capital maintenance	
		Gains			
$\left(6000 \times \frac{240}{120}\right) - 6{,}000$		FA			
	(6,000)	9,600 − 4,800	4,800	2,000 × 240	
		Inventory		100	
		5,100 − 3,000	2,100	−2,000	(2,800)
Profit before adjustment	5,520			Profit before adjustment	5,000
PLA net income	10,720		10,700		300

Statements of financial position as at 31 December 20X3

		HC			*CPP/PLA*			*RCA*		*CoCoA*
Share capital		2,000	× 240/100		4,800			2,000		2,000
Retained earnings		3,800	PLA		10,720			600		300
					Realised holding		3,200			
					Unrealised holding	6,900				
								Capital maintenance		
								reserve 2,000 × 240/100	2,800	
								−2,000		
Loan		8,000			8,000			8,000		8,000
		£13,800			£23,520			£20,700		£13,100
Non-current										
asset	6,000		240/100	14,400		200/100	12,000			
Depreciation	1,200	4,800	240/100	2,880	11,520	200/100	2,400	9,600	NRV	2,000
Inventory		3,000	240/120		6,000	255/150		5,100	NRV	5,100
Cash		6,000			6,000			6,000		6,000
		£13,800			£23,520			£20,700		£13,100

Question 6 – Aspirations Ltd

(i) *Statement of income for the year ended 31 December 20X1, prepared on – RCA basis*

Sales			**868,425**
Purchases		520,125	
Less: Inventory 31 December 20X1		24,250	
			495,875
Add: Cost of sales adjustment	(W1)	7,717	
Adjusted cost of sales			503,592
Adjusted gross profit			364,833
Expenses		95,750	
Depreciation	(W2)	33,000	
		128,750	
Operating gain			236,083

Statement of financial position as at 31st December 20X1 – RCA basis

Non-current assets				
Freehold property	(W3)	975,000		
Depreciation	(W3)	9,750		
			965,250	
Office equipment		465,000		
Depreciation		23,250		
			441,750	
Current assets				
Inventories at replacement cost		24,250		
Trade receivables		253,500		
Cash		1,090,300		
	1,368,050			
Less: Current liabilities				
Payable within one year		116,250		
Net current assets		1,251,800		
Less: Non-current liabilities				
Payable after one year		500,000		
			751,800	
			2,158,800	

Issued share capital		
1,500,000 ordinary shares at £1 each		1,500,000
Holding gains	(W4)	422,717
Retained earnings		236,083
		2,158,800

Workings for RCA Model

W1 Cost of sales adjustment (COSA)

	HCA	*Indexed*	*RCA*	*Difference*
Initial stock 1 April 20X1	34,375	130/115	38,859	4,484
Purchases	485,750	130/130	485,750	–
	520,125		524,609	4,484
Closing inventory 31 December 20X1	24,250	130/150	21,017	3,233
	495,875		503,592	7,717

The calculation has utilised the device of averaging. The user of an average index assumes that inventory was consumed on average at a price that applies midway through the financial period. The increase in the cost of sales due to upward-moving price levels is £7,717. Purchases have been acquired evenly throughout the year, apart from the initial inventory; therefore, the historical cost also represents average current cost, and thus will not require any amendment. The advantages of averaging are those of speed and convenience.

W2 Depreciation

Depreciation is based on the year-end replacement cost.

	HCA Depreciation	*Indexed*	*RCA Depreciation*
Property	6,500	× 127/110	7,505
Equipment	18,750	× 145/125	21,750
	25,250		29,255

As far as the statement of financial position is concerned, however, the cumulative depreciation for one year based on year-end values would still have to be £33,000. The difference of £3,745 (£33,000 − 29,255) would constitute backlog depreciation for the current year. This is an important aspect of the calculation if average price level movements are used to determine depreciation. At first sight, many students find the concept of backlog depreciation for the current year as distinct from previous years more difficult to understand.

W3 Revaluation of non-monetary items at period-end date

	HCA		*Indexed*	*RCA*	*Difference*
Freehold property	650,000	×	165/110	975,000	325,000
Office equipment	375,000	×	155/125	465,000	90,000
	1,025,000			1,440,000	415,000
Inventory	24,250	×	145/145	24,250	

The index of 145/145 used to convert the inventory to RCA is not strictly correct. Inventories of £24,250 were part of purchases for the year, and as such were not bought on the last day of the year. However, we have assumed that the inventory was bought in the closing days of the year, and is tending towards the specific price level measured at 145. If the inventory had been bought much earlier and the amount had been considered as having a material effect on the financial performance, then it would be necessary to ascertain the index at the date of purchase.

W4 Holding gains:

	£
On stocks consumed (W1)	7,717
On stocks carried at the year-end	nil
On fixed assets (W3)	415,000
	422,717

Statement of comprehensive income for the year ended 31 December 20X1, general purchasing power (GPP) basis

		£		£
Sales			(W5)	952,466
Opening inventory	(W6)	43,287		
Purchases	(W6)	532,758		
Less: Inventory 31 December	(W6)	(24,250)		
Cost of sales			(W6)	551,795
GPP gross				400,671
Expenses	(W7)	105,016		
Depreciation	(W8)	31,796		
		136,812		
GPP net profit before loss on monetary items				263,859
Less: Loss on monetary items		**(W10)**		**142,003**
GPP net profit after loss on monetary items				121,856

Statement of financial position as at 31 December 20X1, GPP basis

Non-current assets:		*Cost*	*Depreciation*	
Freehold property	(W9)	818,518	8,185	810,333
Office equipment	(W9)	472,222	23,611	448,611
		1,290,740	31,796	1,258,944
Current assets:				
Inventories at GPP valuation	(W6)		24,250	
Trade receivables			253,500	
Cash			1,090,300	
			1,368,050	
Less: Current liabilities				
Payable within one year			116,250	
Net current assets			1,251,800	
Less: Non-current liabilities				
Payable after one year			500,000	
				751,800
				2,010,744
Issued share capital				
1,500,000 ordinary shares fully paid				1,888,888
Retained earnings				121,856
				2,010,744

Workings (W): General or current purchasing power model

With the GPP model, historic pounds must be converted into general purchasing power pounds as at the end of the financial year. Where sales are generated and costs incurred evenly throughout the year, we may convert the historic pounds by using an average general price index. However, where substantial outlays of cash are involved on a particular day, as in the case of non-current assets and initial acquisition of inventories, it will be more precise to utilise the index applying at that date, if available.

	HCA		*Adjustment*	*GPP/CPP*
W5 Sales	868,425	×	170	952,466
			155	
W6 Initial inventory acquired	34,375	×	170	43,287
			135	
Purchases	485,750	×	170	532,758
			155	
	520,125			576,045

Closing inventory	(24,250)	× 170/170 = no change		(24,250)
Cost of sales	495,875			551,795

Inventory assumed acquired on or close to 31 December

W7 Expenses	95,750	×	170/155	105,016
W8 Depreciation	25,250	×	170/135	31,796

W9 Fixed assets

	HCA Cost	*HCA Depreciation*	*NBV*	*Index*	*CPP Cost*	*CPP Depreciation*	
	£	£	£		*CPP £*	*CPP £*	*CPP £*
Freehold	650,000	6,500	643,500	× 170/135	818,518	8,185	810,333
Equipment	375,000	18,750	356,250	× 170/135	472,222	23,611	448,611
	1,025,000	25,250	999,750		1,290,740	31,796	1,258,944

W10 Gain or loss on monetary items

	£
Change in trade receivables during the year:	253,500
Change in cash occurring during the year:	
In hand at 31 December 20X1	1,090,300
Received 1 January 20X1	1,500,000
Less payments – non-current assets	(1,025,000)
– inventory	(34,375)
In hand at 1 January 20X1	440,625
Change (increase) during the year	649,675
Change in payables occurring during the year	
Trade payables (increase)	(116,250)
Other payables – loans (increase)	(500,000)
	(616,250)
Change in monetary assets occurring during the year	286,925
So,	
CPP:	
year's inflation	
286,925 × (170 − 155)/155	27,767

Add loss on holding cash during the year	
i.e. balance at 1 January was held for full year and excluded from the above calculation:	
440,625 × (170 − 135)/135	114,236
	142,003

Statement of income for the year ended 31 December 20X1 – net realisable value (NRV) basis

			£
Sales			868,425
Purchases		520,125	
Less: Inventory at31 December 20X1		24,250	
Cost of sales			495,875
Gross profit			372,550
Expenses		95,750	
Depreciation	(W11)	35,000	
		130,750	
Operating gain			241,800
Holding gain	**(W12)**		**18,188**
			259,988

Statement of financial position as at 31 December 20X1 – NRV basis

		£	£
Non-current assets			
Freehold property (W11)			640,000
Equipment (W11)			350,000
Current assets			
Inventories at NRV	(W12)	42,438	
Trade receivables		253,500	
Cash		1,090,300	
		1,386,238	
Less: Current liabilities			
Payable within one year		116,250	
Net current assets		1,269,988	
Less: Non-current liabilities			
Payable after one year		500,000	
			769,988
			1,759,988

Issued share capital		
1,500,000 ordinary shares at £1 each	1,500,000	
Retained earnings		259,988
		1,759,988

W11 Reduction in value of non-current assets at 31 December 20X1

	Freehold	*Equipment*	*Total*
	£	£	£
HCA	650,000	375,000	1,025,000
Less: NRV at 31.12.X1	640,000	350,000	990,000
	10,000	25,000	35,000

The reduction in value is treated as depreciation

W12 Holding gain in inventory at 31 December 20X1

NRV = Cost + profit content of 75%	
£24,250 + 75% of £24,250	42,438
Less: Cost	24,250
	18,188

CHAPTER 11

Revenue recognition

Question 1 – Senford plc

(a) *Purchase*

Dr	Inventory	1,440,000	
Cr	Bank/creditors		1,440,000

(Purchase of 3,000 telephones @ €480 each)

Phone revenue assessment:

Phone + service contract		120
Sale of service contract		90
Therefore, monthly phone revenue		30
Total phone revenue	24 × 30	720

Entries in the financial statements for the three months in the current financial year:

Dr	Deferred debtors	2,160,000	
Cr	Sales − phones		2,160,000

(Sale of 3,000 phones @ €720 each on deferred terms)

Dr	Cost of goods sold − phones	1,440,000	
Cr	Inventory		1,440,000

(Cost of Sales of phones on deferred terms)

Dr	Bank	1,080,000	
Cr	Deferred debtors		270,000
Cr	Service rental		810,000

(Receipt of three months of revenue of €120 on 3,000 phones
Credit to Deferred debtors of €30 for three months on 3,000 phones
Credit to service rental of €90 for three months on 3,000 phones)

Dr	Cost of goods sold	270,000	
Cr	Bank/Creditors		270,000

(Costs of €30 incurred to provide the telephone calls for 3,000 phones for three months)

(b) *Disclosure in statement of financial position*

	Next year	*Year three*
Forward contracts for telephone services		
First quarter	810,000	810,000
Second quarter	810,000	810,000
Third quarter	810,000	810,000
Fourth quarter	810,000	0
Total	3,240,000	2,430,000

Question 2 – Strayway plc

There is a sale and financing contract combined. The implied interest component is found by discounting the contract amount at 9% over two years giving a revenue before interest of 8,416,800.

Year one

Dr	Bills receivable	10,000,000	
Cr	Sales revenue		8,416,800
Cr	Interest revenue(0.09 × 8,416,800)		757,512
Cr	Deferred interest		825,688

(Recording sales revenue and interest revenue separately)

Year two

Dr	Deferred interest	825,688	
Cr	Interest revenue		825,688

(Interest revenue now current)

Dr	Bank	10,000,000	
Cr	Bills receivable		10,000,000

(Receipt of amount due on bill)

Question 3 – Penrith European Car Sales plc

Calculate revenue applicable to the car:

Total contract		41,500
Less services		
5,000 miles	800	
20,000 miles	1,200	2,000
Revenue from car sale		39,500

Dr	Bank	41,500	
Cr	Sales − vehicles		39,500
Cr	Deferred service revenue		2,000

(Sale of vehicle and two free services)

Dr	Cost of sales − vehicles	30,000	
Cr	Inventory		30,000

(Transfer of ownership of motor vehicle)

Dr	Cost of servicing	400	
Cr	Suppliers		400

(Providing first service)

Dr	Deferred service revenue	800	
Cr	Service revenue		800

(5,000 mile service now supplied)

Dr	Cost of servicing	600	
Cr	Suppliers		600

(Provision of 20,000 mile service)

Dr	Deferred service revenue	1,200	
Cr	Service revenue		1,200

(20,000 miles service now performed)

Question 4 – Henry Falk

(a)

There are several ways of allocating the revenue
As Falk has a three-year subscription it could be allocated as follows:

	Year one	*Year two*	*Year three*
Evenly	100	100	100
Based on incremental revenue	120	80	100

Year one – assuming evenness

Dr	Debtors	300	
Cr	Sales revenue		100
Cr	Deferred revenue		200
Dr	Cost of goods sold	60	
Cr	Creditors		60

(Recording revenue under method one)

Dr	Bank	?	
Cr	Debtors		300
Dr	Credit card fee	?	

(Recording receipt of cash less the merchant's fees. It would be an interesting exercise to discuss whether the revenue should be gross or net of the merchant's fees.)

Year two

Dr	Deferred revenue	100	
Cr	Sales revenue		100

(Subscription now earned)

Dr	Cost of goods sold	62	
Cr	Creditors		62

(Supplying the goods)

Year three

Dr	Deferred revenue	100	
Cr	Sales revenue		100

(Subscription now current)

Dr	Cost of goods sold	64	
Cr	Creditors		64

(Supply of services)

(b)

You want to show a constant magazine revenue but you also want to recognise the fact that the subscriber is financing the business. If the annual subscription is being discounted to reflect that then

300 = A + A/1.1 + A/1.21

A = 109.67

Year one

Dr	Debtors	300.00	
Cr	Revenue – subscriptions		109.67
Dr	Interest expense	19.03	
Cr	Deferred revenue		209.36
Dr	Cost of goods sold	60.00	
Cr	Creditors		60.00

(recording contract)

Dr	Bank	294.00	
Cr	Debtors		300.00
Dr	Credit card fees	6.00	
Cr	Debtors		300.00

(Collection from credit card company)

Year two

Dr	Deferred revenue	99.70	
Dr	Interest expense	9.97	
Cr	Revenue – subscription		109.67
Dr	Cost of goods sold	62.00	
Cr	Creditors		62.00

(Recording revenue, implied interest cost on getting the money early, and cost of goods sold)

Year three

Dr	Deferred revenue	109.66	
Cr	Revenue – subscription		109.66
Dr	Cost of goods sold	64.00	
Cr	Creditors		64.00

(recording transaction for year three)

Interest expense is explained as follows:

Initial amount paid in advance		300.00
Less first subscription		109.67
Implied financing		190.33
Interest at 10%		19.03
New balance		209.36
Less second years' subscription taken out of the fund		109.67
New balance		99.69
Interest at 10%		9.97
New balance		109.66
Third subscription taken	109.66	
Balance		nil

This calculation assumes that there are only two years of financing as subscriptions involving single payments are normally at the start of the period. Single payments do not involve a year of financing as they relate to issues going out throughout the year.

(c) *Disclosures*

	First year	*Years two and three*
Deferred revenue for a	100	100
Deferred revenue for b	109.67	109.66

(d) You could adjust for inflation so that revenue increases at the rate of inflation.

Question 5 – Henry Falk

(a) *Recording transactions*

If the invoiced amount including VAT is 300 then VAT at 7.5% = 300 × (7.5/107.5) = 20.93

Then the company revenue totals 279.07. Thus annual revenue is given by:

B + B/1.1 + B/1.21 = 279.07

Year one

Dr	Accounts receivable	297.00	
Cr	Sales revenue		102.02
Cr	Deferred revenue		177.05
Cr	VAT payable		20.93
Dr	Collection fee	3.00	
Dr	Interest expense	17.71	
Cr	Deferred revenue		17.71

(Recording Falk's subscription)

Dr	Bank	297.00	
Cr	Accounts receivable		297,00

(Collection from the credit card company less their commission)

Dr	Cost of goods sold	60.00	
Cr	Creditors		60.00

(Recording production costs)

Dr	VAT payable	20.94	
Cr	Bank		20.94

(Payment of VAT charges to the government)

Year two

Dr	Deferred revenue	102.02	
Cr	Sales revenue		102.02
Dr	Interest expense	9.28	
Cr	Deferred revenue		9.28

(Revenue no longer deferred)

Dr	Cost of goods sold	62.00	
Cr	Creditor/Bank		62.00

(Costs incurred in producing the magazine)

Year three

Dr	Deferred revenue	102.02	
Cr	Sales revenue		102.02

(Revenue previously in advance and now current)

Dr	Cost of goods sold	66.00	
Cr	Creditor/Bank		66.00

(Costs incurred in producing the magazine)

(b) *Disclosures*

	Within one year	In years two and three
Revenue in advance	102.02	102.02

Question 6 – Five G Telephones

(a) *Record purchase and sale of phone assuming no contract*

Xyz phones

Dr	Inventory Xyz phones	500	
Cr	Trade creditor/bank		500

(Purchase of a telephone)

Dr	Bank	1,000	
Cr	Sale of Xyz phones		1,000
Dr	Cost of goods sold Xyz	500	
Cr	Inventory Xyz phones		500

(Recording sale and matching cost of goods sold)

Basic Y phones

Dr	Inventory Y phones	120	
Cr	Trade creditor/bank		120

(Purchase of phone)

Dr	Bank	200	
Dr	Cost of goods sold Y	120	
Cr	Sales revenue Y		200
Cr	Inventory Y		120

(Direct sale of Y Phone)

(b) *Assuming basic connection service A*

Basic connection service 40 per month

Dr	Debtor	40	
Dr	Cost of goods sold	5	
Cr	Sales of services		40
Cr	Trade creditors/Bank		5

(Connection service for one month and variable cost of 5c per call)

(c) *Assuming basic connection service B*

Basic 15 plus 50 cents per call

Dr	Debtor	65	
Dr	Cost of goods sold	5	
Cr	Sales of services		65
Cr	Trade creditors/Bank		5

(Connection service for one month − €15 + 100 @ 50 cents and variable cost of 5c per call)

(d) *Assuming supply, connection and minimum contract*

Supply of Xyz phone and connection

Dr	Inventory of Xyz phones	500	
Cr	Trade Creditors/bank		500

(Purchase of phone)

Calculate revenue from phone and connection:

As combined contract is 79 per month or 1,896 over a 24-month contract, and the connection service is only 40, then the revenue for the sale of the phone is 79 − 40 or 39 and so for 24 months = 936.

Dr	Deferred debtor	1,896	
Cr	Sale of Xyz phones		936
CR	Sale of Connection Service		40
Cr	Deferred revenue		920

(Recording sale of phone and services)

Alternatively, it could be argued the Xyz sells alone for 1,000 and the connection service is 960 and so the total is normally 1,960. As it is being sold for 1,896; so everything is being sold at 1,896/1,960 of its normal price meaning the phone is being sold for 967.44 and the connection service is 40 × 1,896/1,960 or 38.69 per month (total of 928.56). The second method is the method suggested by the proposed standard.

Dr	Deferred debtor	1,896		Proposed
Cr	Sale of Xyz phones		936	967.44
Cr	Sale of connection service		40	38.69
Cr	Deferred revenue		920	889.87

(Recording sale of phone and services)

Note:

It has been assumed the phone is sold at the time it is handed over under the legal concept and it would also satisfy the control concept when adopted.

Other possibilities include treating half the revenue as earned, or no revenue being earned on the sale until the final payment.

It could depend on the legal terms of the contract.

An alternative of treating the Xyz phone as being sold by instalments was rejected on the basis that property and control of the phone have presumably passed to the customer.

Dr	Cost of goods sold Xyz	500	
Dr	Cost of goods − services	5	
Cr	Inventory Xyz	t	500
Cr	Trade creditors/bank		5

(Recording inventory movement and cost of services)

Dr	Bank	79	
Cr	Deferred debtors		79

(First monthly payment)

Question 7 – Five G Telephones

(a) *Recording transactions – Sale of Xyz mobile phones and Basic Y phones as per Question 6.*

Basic at 40 per month:

		Year 1		*Year 2*		*Year 3*	
Dr	Cost of goods sold (connection expenses)	5					
Cr	Bank/creditors		5				
Dr	Cost of goods sold (operating costs of 5 × 12)	60		60		60	
Cr	Bank/creditors		60		60		60
Dr	Bank/debtor	480		480		480	
Cr	Revenue connection of 40 × 12		480		480		480

Basic at 15 plus 50 cents per call:

		Year 1		*Year 2*		*Year 3*	
Dr	Cost of goods sold (connection expenses)	5					
Cr	Bank/creditors		5				
Dr	Cost of goods sold (operating costs of 5 × 12)	60		60		60	
Cr	Bank/creditors		60		60		60
Dr	Bank/debtor	780		780		780	
Cr	Revenue connection of 65 × 12		780		780		780

Xyz plus connection for 79 per month

			Year 1		*Year 2*		*Year 3*	
Dr	Cost of goods sold (connection expenses)	5						
Cr	Bank/creditors			5				
Dr	Cost of goods sold (operating Costs of 5 × 12)	60			60		60	
Cr	Bank/creditors			60		60		60
Dr	Deferred debtors (79 × 24)	1,896						
Cr	Sales revenue			1,431.72*		464.28*		
Cr/Dr	Deferred revenue			464.28	464.28			
Dr	Cost of goods sold	500						
Cr	Bank/creditors			500				
Dr	Bad/doubtful debts expenses	143.17			46.43			
Cr	Deferred debtors/Provisional DD			143.17		46.43		
Dr	Cost of goods sold	500						
Cr	Bank/trade creditors			500				

*As the connection involves payment as the service is being delivered half of that is earned and half is deferred.

Current revenue (as per Question 6) is thus:

Phone		967.44
Connection	Half of 928.56	464.28
		1431.72

(b)

	Next year	Years two and three
Sales/service contracts Xyz phone and service	464	–

Deferred debtors

Opening Balance	XXXX
New contracts	1,896
Payments	(XXXX)
Write offs	(XXX)
Cancelled contracts	(XXX)
Closing balance	XXXX

Question 8 – Penrith European Car Sales plc

Redo entries for sale and servicing

Independent contracts		Combined contracts		
Sale of car	40,000	Sale of car	40,000/42,000 × 41,500	39,524
Sale of servicing	2,000	Sale of servicing	2,000/42,000 × 41,500	1,976
Total	42,000			41,500

Entries

Dr	Inventory	30,000	
Cr	Bank/Creditor		30,000

(Purchase of car)

Dr	Bank	41,500	
Cr	Revenue − car sales		39,524
Cr	Revenue in advance − Deferred revenue		1,976

(Recording initial sale)

Dr	Cost of goods sold	30,000	
Cr	Inventory		30,000

(Transfer of car to new owner)

Dr	Deferred revenue	790	
Cr	Services revenue		790

(Services revenue calculated on the basis of [800/(800 + 1200)] × 1976 for the 5,000 mile service)

Dr	Deferred revenue	1,186	
Cr	Services revenue		1,186

Timing of the service

(20,000 mile service)

There are two possible approaches. The first is to assume the most likely timing which is after six months (that is the item with the highest probability). The second approach is to take a weighted average of 0.15 × 1/6 + 0.30 × 1/3 + 0.45 × ½ + 0.1 × 2/3 = 0.417 , that is 0.417 of a year after purchase.

Question 9 – Complete Computer Services (CCS)

Dr	Bank	950	
Cr	Sales revenue		850
Cr	Deferred revenue		100

(Sale of computer and 2 years of support service)

Dr	Cost of goods sold	620	
Cr	Bank		600
Cr	Provision for warranty costs		20

(Costs of making the sale)

Dr	Provision for warranty costs	20	
Cr	Bank		20

(As warranty costs are incurred)

Dr	Deferred revenue	50	
Cr	Services revenue		50

(Services provided over the first year)

Dr	Services expenses	30	
Cr	Bank		30

(Service expenses being incurred)

Dr	Deferred revenue	50	
Cr	Services revenue		50

(Services supplied in the second year)

Dr	Services expenses	30	
Cr	Bank		30

(Costs incurred in the second year)

Question 10 – Henry plc

(a) *Technical issues*

From a technical point of view, the issue is whether the two contracts should be considered jointly or as separate contracts. Is the fact that they were entered into at different dates sufficient to make them independent? Obviously, if they had been entered into at the same time, there would be no doubt that the intention was that they circumvent the accounting rules and, hence, they should be treated jointly. However, the lapse of time makes it less clear cut. Given the amount of capital of the company purchasing the asset and the amount of finance provided, it is clear that the transaction is not an independent one and should not be treated as a genuine sale. Further, there could be a question as to whether the amount stated in the contract was the genuine reflection of the true value of the transaction.

(b) *Ethical issues*

The ethical issues include the desirability of the auditor making suggestions that are intended to deceive the shareholders of the company. If it was not for the need of shareholders and creditors to have assurances regarding the authenticity of the accounting reports there would be little necessity for external audits. Thus, it is not only morally questionable but also undermines the reputation of external auditors, and if widespread, threatens the viability of the auditing profession. Also, when it comes to signing the audit report the auditors leave themselves vulnerable to a charge of aiding and abetting a crime (accounts that are not fair) and the possibility of being sued by shareholders and creditors.

In considering why individual auditors make such decisions it is important to not only examine how the management of the audit firm would consider the case but also how the partner in charge of the audit would view the situation. Presumably, the account being audited represents a major component of the audit partner's responsibilities and he/she would feel considerable pressure to justify his/her role by not losing the account. This could feel more pressing than ethical considerations or the possibility that there could be a future court case.

However, if a number of audit partners compromise, there is a significant probability that the audit firm will be faced with one or more substantial law suits with the cumulative effect possibly leading to the demise of the firm.

Question 11 – Exess Steel plc

The first question is whether this transaction is ethically correct as its primary purpose is to deceive by over valuing revenue and assets. The second issue is whether the existence of a supposedly independent transaction provides conclusive evidence of the revenue amount of the transaction. There is also the appropriate valuation of the assets in the hands of the new owners. Should the auditors look at substantial transactions near year end with a higher degree of scepticism than normal rather than just accepting transactions at face value?

Question 12 – New Management plc

(a) *Investor viewpoint*

The issue is whether the company had really achieved growth in sales in the last two months and how this affects the share price.

Were the shareholders of the company misled by a company that sold them on the idea that sales were turning around, stocks were at low levels and profits were almost in line with those achieved in the previous year?

(b) *Auditor viewpoint*

What proportion of the so-called sales in the last two months were really goods held by customers on behalf of the management of New Management plc?

Have such attempts to smooth results been normal management behaviour in the past?

Are bonuses or commissions based on sales recoverable if there are returns?

Is the fair view adversely affected?

Is there any going concern implications arising from returns?

Is there any implication for inventory write-downs if returns are not re-saleable?

(c) *CEO viewpoint*

Is the CEO rewarded on the basis of her performance compared with other companies in the industry?

To what extent are the management in the dark regarding the real level of sales as they do not know to what extent the sales are borrowed from the future?

How will future cash flows be affected by returns?

Question 13 – Renee Aluminium Products plc

Dr	Debtors	20,592	
Cr	Sales revenue		20,592

(Being 300 units at 66 × 1.04)

Increase in revenue per month is 792.

In addition to the entry in (a) a retrospective adjustment would be made for 792 × 4 = 3,168 so the entry would be

Dr	Debtors	3,168	
Cr	Sales revenue		3,168

(Adjustments to sales for the months of March to June)

PART 5

Statement of financial position – equity, liability and asset measurement and disclosure

CHAPTER 12

Share capital, distributable profits and reduction of capital

Question 1 – Telin plc

(a) *Ledger accounts*

Cash and bank

1/10	Balance	5,450,000	28/10	Redemption of preference shares	8,480,000
4/10	Debentures	2,340,000			
12/10	Ord. shares	6,000,000			
Share premium		600,000			
31/10	P&L a/c	275,000	31/10	Balance c/d	6,185,000
		14,665,000			14,665,000
1/11	Balance b/d	6,185,000			

10% debentures

			4/10	Bank	2,340,000
31/10	Balance c/d	2,400,000		Deb. discount	60,000
			1/11	Balance b/d	2,400,000

Discount on debentures

4/10	Debentures	60,000	6/10	Share premium	60,000

Share premium

6/10	Debenture discount	60,000	1/10	Balance	4,000,000
29/10	Premium on redemption	160,000	12/10	Cash	600,000
31/10	Balance c/d	4,380,000			-
		4,600,000			4,600,000
			1/11	Balance b/d	4,380,000

Profit and loss

6/10	Research expenses	1,400,000	1/10	Balance	4,600,000
29/10	Dividends on pref. shares	80,000	31/10	Cash (profit)	275,000
29/10	Premium on redemption	240,000			
29/10	Capital redemption reserve	1,400,000			
31/10	Balance c/d	1,755,000			-
		4,875,000			4,875,000

Product development costs

1/10	Balance	1,400,000	6/10	P&L a/c	1,400,000

Ordinary share capital

			1/10	Balance	12,000,000
			12/10	Bank	6,000,000
31/10	Balance c/f	18,900,000	30/10	(Bonus issue) CRR	900,000
		18,900,000			18,900,000
			1/11	Balance c/d	18,900,000

12% preference share capital

29/10	Redemption of shares	8,000,000	1/10	Balance	8,000,000

Redemption of preference shares

29/10	Cash	8,480,000	29/10	Pref. shares	8,000,000
				Premium on red.	400,000
				P&L a/c	80,000
		8,480,000			8,480,000

Premium on redemption

29/10	Redemption a/c	400,000	29/10	Share premium	160,000
				P&L a/c	240,000

Capital redemption reserve

30/10	Ordinary share capital bonus issue	900,000	29/10	P&L a/c	1,400,000
31/10	Balance c/d	500,000			—
		1,400,000			1,400,000
			1/11	Bal. b/d	500,000

(b) *Statement of financial position as at 31 October 20X5*

Ordinary share capital	18,900,000	Sundry assets	32,170,000
Capital redemption reserve 500,000		Cash at bank	6,185,000
Share premium	4,380,000		
Retained profits	1,755,000		
10% debentures	2,400,000		
Payables	10,420,000		
	38,355,000		38,355,000

Notes: An advantageous course of action for shareholders is not to reduce distributable profits unless there is no other course of action. Therefore, whenever legally possible, reduction has been made from share premium account.

Bonus issue was made from capital redemption reserve, as this is restricted to bonus issues only, whereas share premium can be used for some other purposes also.

(c) *Under the Companies Act*

(i) Premium on redemption of shares can be written off against share premium − maximum allowed being premium received on the issue of shares, which are now being redeemed, that is 2% of £8,000,000 = £160,000 to share premium.

Balance must be written off against profits.

(ii) Transfer to capital redemption reserve is the amount by which the aggregate receipts from specific new issue exceeds the nominal value of shares redeemed.

Nominal value of shares redeemed	8,000,000
Less: Total receipts from new issue	6,600,000
To capital redemption reserve	1,400,000
(from distributable profits)	

Question 2 – Alpha Ltd

(a) *Capital reduction and reorganisation account*

£000		*£000*	
7¾ notes	50	Ordinary shares	75
Ordinary shares – reissue	15	Ordinary shares	15
Profit and loss account	177	Preference shares	250
Shares in subsidiary company	55	Freehold property	14
Plant	57		
	354		354

(b) *Statement of financial position as on 1 July 20X8*

	£000	*£000*
Non-current assets		
Tangible assets		
Freehold property	55	
Plant	22	
	77	
Investment		
Shares in subsidiary company	45	
Loans	40	
	85	162
Current assets		
Inventory	132	
Trade receivables	106	
Bank	107	
	345	
Payables: amounts falling due within one year		
Trade payables	282	
Net current assets		63
		225
Payables: amounts falling due after one year		
7¾ notes		200
Total assets less liabilities		25
Ordinary share capital		25

Ordinary share capital

	£000		£000
Capital reduction	75	Balance b/f	75
Capital reduction	15	Bank	25
Balance c/f	25	Reissue	15
	115		115
		Balance	25

Bank

OSC	25	Balance b/f	58
7¾ notes	150	Shares in sub.	10
		Balance c/f	107
	175		175
Balance b/f	107		

7¾ notes

Balance c/f	200	Bank	150
		Capital reduction	50
	200		200
		Balance b/f	200

Question 3 – Doxin plc

This question is essentially concerned with the issue and redemption of shares by a plc where there is a trading loss that has an impact on the cash liquidity position.

Part (a) requires students to illustrate the effect on key balance sheet components.

Part (b) requires a discussion and evaluation of the effects of applying capital maintenance rules in circumstances where shares are redeemed partly out of distributable profits.

	Opening	(i)	(iia)	(iib)	(iii)	(iv)	(v)	Closing S of FP
	£000	£000	£000	£000	£000	£000	£000	£000
Ordinary shares	800	200				5		1,005
Preference shares	300		(300)					–
Capital redemption reserve				80				80
Share premium		20	(15)			(5)		–
Reserves	200			(80)			(500)	(380)
								705
Creditors	400							400
Debentures					400			400
	1,700							1,505
Bank	200	220	(315)		360		(500)	(35)
Other assets	1,500							1,500
Debenture discount					40			40
	1,700							1,505

(ii) (a) Premium on redemption:

Out of profits or

Lowest of:

premium received on issue of shares to be redeemed (£75,000);

balance of share premium account including premium on new issue (£20,000);

total proceeds of the new issue (£220,000).

(ii) (b) Capital redemption reserve:

Excess of nominal value of shares redeemed over total receipt from new issue (£300,000 − 220,000 = 80,000).

Comments on Doxin plc

(a) (i) **The issue of 200,000 ordinary shares at a premium of 10p each** increases the share capital, the share premium and cash balance. Please note that the issue must be made within specified time limits if it is to be effective in applying the capital maintenance rules that require a transfer to capital redemption reserve.

(ii) **On redemption of the preference shares, it is necessary to calculate** the extent to which the premium on redemption can be charged to the share premium account, and the transfer, if any, to the capital redemption reserve from distributable profits – in this case, from the general reserve £200,000.

The full premium on redemption can be charged to the share premium account, which was brought into existence by the replacement issue. The limitation imposed by per cent premium originally received on the shares does not apply.

The preference shares (300,000) disappear from the balance sheets and the share premium account becomes £5,000 with the bank balance reduced by £315,000.

The transfer from general reserve to CRR is always in excess of nominal value redeemed over the proceeds of other issue (made specifically for redemption).

(iii) **The issue of 7% debentures £4,000 valued at £90 results in** a long-term liability of £400,000 and a net increase in the bank balance of £360,000 with discount on debentures £40,000.

The Companies Act 1985 is silent on treatment of this item apart from the option to write it off against the share premium account. Write-off over the life of the debenture might be the appropriate treatment.

(iv) **The use of the share premium balance £5,000** to cover a bonus issue of ordinary shares is reflected by a transfer to the ordinary share capital account as permitted by the Companies Act 1985.

(v) **The trade loss** £500,000 incurred in the year is recorded as impacting on the bank balance, where it creates an overdraft of £35,000.

(b) **The interest of creditors** is protected by the creation of the CRR £80,000, which is non-distributable and can only be used to issue bonus shares.

However, because of the use of share premium account (SPA) to cover premium on redemption, £15,000, the original capital of £1,100,000, is only maintained up to £1,085,000 capital, that is, issued share capital plus undistributable reserves.

The effect of this loophole in capital maintenance regulation could be remedied by an additional transfer from distributable profit to CRR – in this case, £15,000.

Question 4

(a) *The advantages of purchasing and cancelling own shares*

It is a method of returning surplus cash that a company is unable to invest profitably within the company.

It can also overcome a problem when shares are acquired from a dissenting shareholder to remove the nuisance value.

It provides cash as a help to shareholders in liquidating their shareholding when shares have been issued to employees as part of a profit-sharing scheme and the employee wishes to convert them to cash or when they are acquired from the estate of a deceased shareholder.

It improves the share price if the directors consider that the current share prices are undervalued – on cancellation; each remaining share has a greater interest in the net assets.

It is taken as a means of increasing the earnings per share.

(b) *The advantages of purchasing and holding shares in treasury*

It provides a company with greater flexibility in managing its share capital.

It allows a company to optimise its gearing by buy-back instead of increasing or decreasing its debt.

It reduces the cost of raising new capital when the shares are reissued later through a broker instead of a more expensive placing or rights issue.

It can stimulate an inactive market particularly if existing shareholders have been finding it difficult to sell their shares.

It can lead to an increase in the earnings per share.

Treasury shares can be used to satisfy the exercise of employee share options and may be acquired at the date the option is granted and held in treasury.

Question 5 – Speedster Ltd

Calculation of distribution on liquidation

	Without planning permission	*With planning permission*
Funds realised	*£000*	*£000*
Freehold land	960	2,500
Secured creditor (loan creditor)	960	1,200
Balance available	–	1,300
Plant and equipment	1,200	1,200
Secured creditor (bank)	1,200	1,200
Balance available	–	–
Inventory	450	450
Trade receivables	1,050	1,050
Liquidation costs	(200)	(200)
Available for preferential creditors	1,300	2,600
Preferential creditors	300	300
Available for unsecured creditors	1,000	2,300

Unsecured creditors		
Payables	840	840
Bank	120	120
Loan creditor (Balance)	240	–
	1,200	960
Distribute	83p in the £	£1 in the £
Shareholders	–	1,340

Question 6 – Delta Ltd

(a) Advise the unsecured creditors of the minimum that they should accept if they were to agree to a reconstruction rather than proceed to press for the company to be liquidated.

The unsecured creditors would consider the amount available to them after the secured creditors have been discharged and the liquidation expenses have been paid.

	£000	*£000*
Total liquidation value		2,390
Less debenture		1,000
Less expenses	100	1,100
Available for unsecured creditors		1,290

This would provide about 75p in the £.

This would be the minimum that unsecured creditors would probably accept under any scheme for reconstruction.

(b) Propose a possible scheme for capital reconstruction.

The scheme should clear the debit balance of £1,100,000 and the write down of plant of £50,000.

This could be achieved by

	£000
Revalue the freehold property	400
Cancel the preference shares	500
Reduce ordinary shares	550
	1,450
Issue 6 ordinary shares for every five preference shares. Arrears of dividend to be cancelled	300
Debits cleared	1,150

Debenture holders would remain secured.

The creditors and bank would be asked to reduce their claims to 80%. Ten per cent loan stock would be offered for the balance of 20%.

Ordinary shareholders to provide £500,000 additional capital.

(c) Prepare the statement of financial position of the company as it would appear immediately after completion of the scheme.

	£000	*£000*
Intangible assets		
Development costs		300
Non-current assets		
Freehold property	1,200	
Plant, vehicles and equipment	600	1,800
		2,100
Current assets		
Inventory	480	
Trade receivables	590	
Investments	200	
Cash at bank (500 − (490 − 98))	108	
	1,378	
Current liabilities		
Trade payables (1,330 − 266)	(1,064)	
		314
10% debentures (secured on freehold premises)	(1,000)	
Unsecured loan stock (266 + 98)	(364)	(1,364)
Total assets less liabilities		1,050
Capital and reserves		
Ordinary shares of 50p each (1,600 − 1,100 + 600 + 1,000) × 50p		1,050

CHAPTER 13

Liabilities

Question 1 – World Wide Nuclear Fuels

(a) *Explanation*

(i) Need for guidance

Difficulties included:

Definition – the IASB defines provisions as a 'liability of uncertain timing or amount'.

Treatment of future operating losses – it is considered that these should be accounted for in the future.

Provisions differ from liabilities in that provisions are often subject to disclosure requirements, whereas other creditors are not, e.g. statutory requirement to disclose – may, however, be insufficient detail.

Adequate level of disclosure of movements is important as these do not always go through profit or loss once provision is established.

Unacceptable practice of big bath provisioning used to absorb expenses incurred in later years.

Management has been able to control the recognition and timing of movements, so that the user does not have a clear picture of the current year's performance – smoothing profits.

There has been inconsistency between accounting for provisions between different companies.

(ii) Recognition

IAS 37 applies *Framework approach* – provisions are an element of the liabilities and not a separate element of the financial statements. Provisions should, therefore, be recognised only when:

(i) An enterprise has a present legal or constructive obligation and benefits as a result of past events.

(ii) It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation.

(iii) A reasonable estimate of the amount required to settle the obligation can be made.

IAS 37 takes a 'net assets' perspective by concentrating on liability recognition rather than the recognition of an expense.

Criteria include the following:

An obligation exists when the entity has no realistic alternative for making a transfer of economic benefits – may be legally enforceable or constructive.

Only recognised if existing at statement of financial position date.

Must have arisen from past events.

Must exist independently from the company's future actions.

If avoidable by future actions, then no provision is recognised.

No provision should be recognised for future operating losses.

A constructive obligation for restructuring exists only when the recognition criteria laid out in IAS 37 are satisfied.

If an enterprise has a contract that is onerous, the present obligation should be recognised and measured as a provision.

(b) *Transactions*

IAS 37

Although IAS 37 states that no provision should be made for future operation losses, this does not apply if there is an onerous contract. This contract appears to be onerous and so the provision of $135m should remain in the financial statements.

With regard to the provisions for environmental liabilities, the question is whether this is a constructive obligation. There is no current obligation, but it could be argued that there is a 'constructive obligation' to provide for the remedial work because the conduct of the company has created a valid expectation that the company will clean up the environment.

We say 'could be argued' because there is no clear answer, and it may well be determined by the subjective assessment of the directors and auditors as to whether there is a 'constructive obligation'. The example 2B in IAS 37 would support making a provision.

The legal claim from the competitor appears to have a low chance of success and would, therefore, be considered to be a contingent liability. There is a present obligation as the company possibly breached the patent before the period end, and it is probable that they will have to pay out. Given the size of the insurance premium it is unlikely to be viewed as remote, however. The accounting treatment should be to disclose the claim in the financial statements but not a provision for it.

ED IAS 37

Under the ED IAS 37, the treatment of the onerous contract and the environmental liabilities would be expected to be consistent with IAS 37. The treatment of the legal claim would, however, differ.

There is a present obligation for the legal claim and, therefore, under ED IAS 37 a non-financial liability (provision) should be recognised. The amount of the liability is affected by the contingent element of the claim, which is the potential amount that may need to be paid out. The liability should be recognised at the amount it would cost to discharge the obligation at the reporting date, the best estimate of which is the potential insurance premium of $20 million.

Question 2 – Incident plc

IAS 37

Under IAS 37, there is a present obligation at the period end which is estimated to cost the company £5,000 to pay out. As a result, the company should recognise a provision of £5,000 for the claim as a liability.

The main issue, however, is whether an asset of £4,750 can be recognised to reflect the claim from the insurance company. Assets can only be recognised when they are 'virtually certain', and in this case it does not appear virtually certain that a claim will be accepted. As a result, the contingent asset may be disclosed if it is considered possible. However, an asset would not be expected to be recognised on the statement of financial position.

ED IAS 37

The liability exists, as the accident occurred before 31 December 20X6, and the company has acknowledged its responsibility for the accident. The cost of the repairs was £5,000, which would be included as a liability at the year end.

On the insurance claim, it is expected that the insurance company would reimburse the cost of the claim, so it would be an asset at 31 December 20X6. The amount expected to be received was £5,000 less the excess of £250, giving an asset of £4,750 at the year end.

The net cost of the accident will be £250 (i.e. £5,000 less £4,750), but the statement of financial position will include a liability of £5,000 and an asset of £4,750. No discounting would be necessary as the cost and the claim would normally be settled within a year.

Question 3 – Plasma Ltd

There is no constructive obligation at the date of sale to pay for repairs after the guarantee period. The company has not made this practice known to customers, and it has discretion over whether to pay for the repairs, so the customer cannot rely on the company to meet claims for repairs. This means that there is, therefore, no constructive obligation and no liability to be included in the financial statements. There would be no disclosure in the financial statements – and no liability or charge in the financial statements on the initial sale.

If repairs do occur, the cost of them will be exposed as incurred after the guarantee period.

Question 4 – Alpha AS

A decision is required as to whether this is a legal or constructive obligation.

The auditor is relying on IAS 37 para 10 which states that a constructive obligation is a present obligation that arises from an entity's past actions where the entity has created a valid expectation that the liability will be incurred.

Given that there is evidence that the decision to incur the liability is irrevocable, it falls with the constructive obligation decision. The next step would be to determine whether the liability can be measured reliably.

Question 5 – Easy View Ltd – FD's comments

1. It was agreed that the closure should take place from 1st April 2010, and should be completed by 31 May 2010.

   As this is a closure, it is not possible under IFRS 5 to treat it as a discontinued operation until the closure is complete. It can only be shown as discontinued in the next financial period.

2. The premises were freehold except for one that was on a lease with six years to run. It was in an inner city shopping complex, where many properties were empty and there was little chance of sub-letting. The annual rent was £20,000 per annum. Early termination of the lease could be negotiated for a figure of £100,000. An appropriate discount rate is 8%.

   IAS 37 provides that this is an onerous contract, and provision may be made. The amount provided is the lower of the termination cost or present value of continuing to pay rentals. The resent value at 8% is approximately £92,500. This is the amount of the provision as it is lower than the £100,000.

3. The office equipment and vans had a book value of £125,000, and it was expected to realise £90,000, which a figure tentatively suggested by a dealer who indicated that he might be able to complete by the end of April.

   As these are no longer being used to generate sales, they will be disclosed in the Statement of financial position as non-current assets held for sale under IFRS 5.

4. The staff had been mainly part-time and casual employees. There were 45 managers, however, who had been with the company for a number of years. They were happy to retrain and work with the training resources operation. The cost of retraining to use publishing software was estimated at £225,000.

   The retraining will not be able to be treated as part of the closure as it relates to the ongoing training resource operation.

5. Losses of £300,000 were estimated for the current year and £75,000 for the period until the closure was complete.

   These relate to future events, and so cannot be treated as part of any closure provision.

Question 6 – Suktor

By announcing the closure plan on 15 May 20X1, the directors have created a valid expectation that the closure will go ahead. In such circumstances, IAS 37 – *provisions, contingent liabilities and contingent assets* – requires that a provision should be made.

The provision should be for the direct costs associated with the closure. This includes the costs of terminating the employment of workers who accept termination. The amount provided in respect of this should be $12.6 million, the actual amount paid. IAS 10 – *events after the reporting date* – requires that events providing additional evidence of conditions existing at the reporting date should be reflected in the financial statements.

The retraining costs are associated with the ongoing business and should not form any part of the provision.

The lease would be regarded as an onerous contract. A provision should be made for the lower of the cost of fulfilling the contract and the cost of early termination. In this case, a provision of $4.56 million should be made.

Future operating losses relate to future events and do not form part of any closure provision.

Therefore, the total provision should be $17.16 million ($12.6 million + $4.56 million).

Question 7 – Kroner

Extracts from statement of comprehensive income for the year ended

	20X1	*20X0*
	$000	*$000*
Depreciation of leasehold improvements	195	97
Unwinding of discount on restoration liability	49	24

Extracts from statement of financial position as at 31 March

	20X1	*20X0*
	$000	*$000*
Leasehold improvements	3,508	3,703

Explanations to support the figures

The leasehold improvements of $3 million will be capitalised and depreciated from 1 October 20W9 over their useful economic lives of 19.5 years.

The completion of the improvements brings with a liability to restore the property at the end of the lease. The liability will be measured at its discounted present value of $800,000 ($2.5 million × 0.32). This will be included in the carrying value of the leasehold improvements.

The total amount capitalised will, therefore, be $3.8 million ($3 million + $800,000) and the annual depreciation charge $194,872 ($3.8 million/19.5). The charge for the year ended 31 March 20X0 will be $97,436 ($194,872 × 6/12).

As the date of payment approaches the discount on the restoration liability unwinds. The unwinding in the six months to 31 March 20X0 is $24,000 ($800,000 × 6% × 6/12) and in the year to 31 March 20X1 $49,440 ($824,000 × 6%)

Question 8 – Epsilon

The programme to close down a number of our subsidiaries would constitute a restructuring as defined in IAS 37 – *provisions, contingent liabilities and contingent assets*. IAS 37 states that an obligation to restructure arises when an entity has begun the restructuring programme or raised a valid expectation that the restructuring will occur by announcing the main features of the restructuring plan to those affected by it. This occurred on 28 February 2009, and so it is appropriate to recognise a provision in the financial statements for the year that ended on 31 March 2009.

The provision should include those amounts necessarily entailed by the restructuring and not associated with the ongoing activities of the entity. This means that in principle the costs of redundancy would be included, but the cost of relocating employees elsewhere into the group would not be. The amount that should be provided with respect to redundancy would be $22 million. Although the information about the exact amount of the redundancy was received after the reporting date, this information would be regarded as an adjusting event (IAS 10 – *Events after the reporting period*). This provision would be presented as a current liability in the statement of financial position and as an operating cost in the statement of comprehensive income. IAS 1 – *presentation of financial statements* – encourages entities to present items of expenditure separately in the statement of comprehensive income, where this would assist in the clarity of financial reporting. This would certainly apply to a restructuring provision.

Future operating losses should not be recognised as a part of a provision because IAS 37 requires that entities provide for the consequences of past events, rather than for the potential consequences of future events. On the other hand, the obligation to close the subsidiaries that are part of the restructuring programme makes the leases onerous contracts. IAS 37 states that a provision is required because of the existing obligation to make lease payments until the end of the lease without any expected future economic benefit. The provision should be for the lower cost of immediate termination of the leases ($5 million in this case) and the present value of the cost of fulfilling the leases ($6 million in this case). Therefore, the provision discussed in the previous paragraph should be increased by $5 million.

IAS 37 does not allow restructuring provisions to be reduced by the anticipated profits on the sale of non-current assets, even if they arise as part of the restructuring. Therefore, it would be inappropriate to recognise the potential profits on the sale of the properties of the subsidiaries at this stage. However, where a business is expected to make operating losses in the future, then IAS 37 reminds us that it is necessary to review its assets for evidence of impairment, using the rules outlined in IAS 36 – *impairment of assets*. The recoverable amount of the plant and equipment has higher value during use ($8 million) and fair value less costs to sell ($2 million) – in this case $8 million. Their carrying amount is $18 million, so the plant should be written down to its recoverable amount of $8 million and an impairment loss charged in the statement

of comprehensive income. It could be argued in this case that the impairment loss should be presented as part of the restructuring cost.

IFRS 5 – *non-current assets held for sale and discontinued operations* – states that business operations are classified as discontinued during the period in which they are classified as held for sale (in the case of sold operations) or in the period of abandonment (in the case of abandoned operations). These subsidiaries are not to be sold, but effectively closed down, or abandoned. Therefore, separate presentation of the results as discontinued operations is not appropriate for the year that ended at 31 March 2009. However, the results will be separately presented as discontinued operations in the financial statements of the following accounting period.

It could, however, be argued that the properties of the subsidiaries to be abandoned are held for sale, as this is how their value will be principally recovered. Therefore, the properties (as distinct from the other assets) could be moved to the 'held for sale' classification in the statement of financial position. The properties would be measured at the lower region of their current carrying value and their fair value less costs to sell. Therefore, in this case no re-measurement would take place.

Question 9 – Epsilon

As far as the closure provision is concerned the relevant financial reporting standard is IAS 37 – *provisions, contingent liabilities and contingent assets*. IAS 37 requires that provisions should be made for the unavoidable consequences of events occurring before the reporting date.

The steps taken before the reporting have effectively committed the entity to the closure. The basic principle laid down in IAS 37 is that provision should be made for the **direct** costs associated with the closure. On this basis the required provision would be:

Redundancy costs [(i) in question]	30,000
Onerous contract [(iv) in question]	5,500
	35,500

Epsilon is committed to paying 8,000 to its pension plan but this will not form part of the closure provision. This is because the payment, when made, will enable the pension plan to discharge actuarial liabilities that are measured at 7,000. This one-off additional retirement benefit cost of 1,000 (8,000 − 7,000) will be recognised in the income statement of Epsilon in the year to 30 September 2008 and the net retirement benefit obligation increased accordingly.

Redeployment costs [(iii) in the question] relate to the ongoing activities of the entity, and are not recognised as part of a closure provision. They would only be recognised as liabilities at 30 September 2008 if Epsilon had entered into enforceable obligations to incur the costs.

The lease with 10 years left to run [(iv) in the question] is an onerous contract, given the lack of sub-letting opportunities. IAS 37 requires that the provision should be the lower of the cost of fulfilling the contract (1,000 × 6.14 = 6,140) and the cost of early termination (5,500).

The anticipated loss on sale of plant [(v) in the question] of 9,000 (11,000 − 2,000) is not part of the closure provision. However, under the principles of IFRS 5 – *non-current assets held for sale and discontinued operations* – the plant would be measured at the lower region of the current carrying value (11,000) and fair value less costs to sell (2,000). The plant would be separately displayed in a new statement of financial position caption (non-current assets held for sale).

Future operating losses [item (vi) in the question] are not recognised as part of a closure provision as they relate to future events.

There is no need to disclose the results of the business segment that is to be closed separately in the current financial year. This is because the business segment does not satisfy the definition of a discontinued operation in the current financial year. IFRS 5 states that a discontinued operation is a component of an entity that is disposed of or classified as held for sale before the year end. This component is being **abandoned** rather than sold, so it will not be classified as discontinued until the closure occurs. In this case, this occurs on 31 December 2008 – the year ended 30 September **2009**.

CHAPTER 14

Financial instruments

Question 1 – DDB AG

Issue of deep discount bond

Charges to profit or loss and carrying value in the statement of financial position shown in tabular form

			Cash flows		*Finance charge*	*Liability*
			£000		*£000*	*£000*
At 1 April	1	(2,500 − 125 − 150)	2,225			2,225.000
At 31 March	1	10% of 2,500	(250)	13.14% × 2,225	292.365	2,267.365
At 31 March	2	10% of 2,500	(250)	13.14% × 2,267.365	297.932	2,315.297
At 31 March	3	10% of 2,500	(250)	13.14% × 2,315.297	304.230	2,369.527
At 31 March	4	10% of 2,500	(250)	13.14 × 2,369.527	311.356	2,430.882
At 31 March	5	2,500 + 10% of 2,500	(2,750)	13.14% × 2,430.882	319.418	2,750.299
Net cash flow			1,525		1,525	

Interpolate for finance charge %

13%

Present value of cash outflows 2,236,209 less 2,225,000 = 11,209

14%

Present value of cash outflows 2,156,691 less 2,225,000=-68,309

13% + (11,209/(11,209 + 68,309)) = 13.14%

Workings

Implicit rate has been determined by interpolation via the formula

$$\sum_{t=1}^{t=n} = \frac{\mathrm{At}}{(1+\mathrm{r})^{\mathrm{t}}}$$

The initial cost of 2,275,000 is deducted to arrive at the net present value.

Using 13%,

$$\sum_{t=1}^{t=n} = \frac{250}{1.13^1} + \frac{250}{1.13^2} + \frac{250}{1.13^3} + \frac{250}{1.13^4} + \frac{2{,}750{,}000}{1.13^5} - 2{,}275{,}000$$

= 221,239 + 195,787 + 173,263 + 153,330 + 1,492,590 − 2,275,000 = −38,791

Then using 12%,

$$\sum_{t=1}^{t=n} = 223{,}214 + 199{,}298 + 177{,}945 + 158{,}880 + 1{,}560{,}424 - 2{,}275{,}000 = 44{,}761$$

$$\text{Implicit rate} = 12\% + \left[\left(\frac{44{,}761}{44{,}761 + 38{,}791}\right) \times 1\%\right] = 12.536\% \text{ say}$$

= 12.5%

Question 2 – Fairclough plc

(a) The total finance cost is the difference between the cash repayments and the net proceeds of the loan.

Total repayments:	
Principal	10,000,000
Interest	
(3 years at 6% × 10,000,000)	1,800,000
(2 years at 5% × 5,000,000)	500,000
Less net proceeds (10,000,000 – 100,000)	(9,900,000)
Finance costs	2,400,000

(b) The cash flows included in the loan are:

Inception	Net proceeds	9,900,000
Year 1	Interest	(600,000)
Year 2	Interest	(600,000)
Year 3	Interest and principal	(5,600,000)
Year 4	Interest	(250,000)
Year 5	Interest and principal	(5,250,000)

The liability will be recognised as follows over its life in the statement of comprehensive income and the statement of financial position:

Year	*B/F*	*Interest charge at 6.07%*	*Interest paid*	*Principal paid*	*C/F*
1	9,900,000	600,697	−600,000		9,900,697
2	9,900,697	600,740	−600,000		9,901,437
3	9,901,437	600,785	−600,000	−5,000,000	4,902,222
4	4,902,222	297,450	−250,000		4,949,671
5	4,949,671	300,329	−250,000	−5,000,000	0

Question 3 – Isabelle Ltd

(a) *Interest charge for each year of the loan*

The interest charge is based on an internal rate of return calculation based on the cash flows on the loan. The cash flows are:

At inception (after arrangement fees)	98,000
Interest	
Year 1	(5,000)
Year 2	(5,000)
Year 3	(5,000)
Year 4	(7,000)
Year 5	(7,000)
Repayment	
Year 5	(100,000)

The IRR of these cash flows (discount rate at which the NPV is zero) is 6.2% (use internal rate of return function on spreadsheet or extrapolate from two rates selected).

Interest in the comprehensive income statement

	b/f	*Interest charge 6.2%*	*Interest paid*	*c/f*
Year 1	98,000	6,076	(5,000)	99,076
Year 2	99,076	6,142	(5,000)	100,218
Year 3	100,218	6,213	(5,000)	101,431
Year 4	101,431	6,288	(7,000)	100,719
Year 5	100,719	6,281*	(7,000)	100,000

*Rounding adjustment in final year interest charge.

(b) *Loan repaid*

If the loan was repaid at the end of year 3, the gain recognised in the income statement would be £1,431 (£101,431 − £100,000).

Question 4 – Henry Ltd

At 1 January 2009

The proceeds of the convertible need to be split between the debt and equity elements. The debt is discounted to present value using the rate on similar debt without the conversion option and the equity is the balance of the proceeds.

Debt value:

		Cash flow	*DCF*	*PV*
		€m	*€m*	*€m*
Year 1	Interest	10	0.935	9.35
Year 2	Interest	10	0.873	8.73
Year 3	Interest	10	0.816	8.16
Year 4	Interest	10	0.763	7.63
Year 5	Interest and capital	210	0.713	149.73
Debt value				**183.60**

Equity value:

Proceeds less debt value (200 − 183.6)	16.40

The entry on 1 January 2009 will, therefore, be:

Dr	Cash	200	
Cr	Debt		183.6
Cr	Equity		16.4

Interest charges in the statement of comprehensive income

	b/f	*Interest charge*	*Interest paid*	*c/f*
		7%	*5%*	
Year 1	183.6	12.9	(10)	186.5
Year 2	186.5	13.1	(10)	189.6
Year 3	189.6	13.3	(10)	192.9
Year 4	192.9	13.5	(10)	196.4
Year 5	196.4	13.6	(10)	200.0

Question 5 – RPS plc

Redemption of preference shares

The treatment of the finance cost of preference shares follows the pattern of loan debt. IAS 32 requires that redeemable preference shares are presented and treated as debt instruments because they are in substance debt.

Calculation of finance costs and outstanding principal sum

Balance	*(i) Cash flows £000*		*(ii) Finance charge £000*	*(iii) £000*
At 1 October 1 (1,000 − 50)	(950)		–	950
At 30 September 1 (Div 5% 1,000)	50	(6.2% × 950)	58.9	958.9
At 30 September 2 (Div 5% 1,000)	50	(6.2% × 958.9)	59.5	968.4
At 30 September 3 (Div 5% 1,000)	50	(6.2% × 968.4)	60.0	978.4
At 30 September 4 (Div 5% 1,000)	50	(6.2% × 978.4)	60.7	989.1
At 30 September	5	(1,000 + div of 5% 1,000)		
	1050	(6.2% × 989.1)	61.3	
		Adjustments*	0.4	
Net cash flow	300		300.00	

*Adjustment caused by rounding in determining implicit rate of 6.2%, namely,

$$\sum_{t=1}^{t=n} = \frac{\text{At}}{(1+\text{r})^t} - 1 = 0$$

For interest, using 6%

$$\sum_{t=1}^{t=n} = \frac{50}{1.06^1} + \frac{50}{1.06^2} + \frac{50}{1.06^3} + \frac{50}{1.06^4} + \frac{1050}{1.06^5} - 950$$

$$= 47.2 + 44.5 + 41.98 + 39.60 + 784.6 - 950 = 7.88$$

then 7% =

$$\sum_{t=1}^{t=n} = \frac{50}{1.07^1} + \frac{50}{1.07^2} + \frac{50}{1.07^3} + \frac{50}{1.07^4} + \frac{1050}{1.07^5} - 950$$

$$= 46.7 + 43.7 + 40.8 + 38.1 + 748.6 - 950 = -32.1$$

Interpolation gives rate of $6\% + \frac{7.88}{39.98} \times 1\% = 6.2\%$

Treatment of total finance costs through the lifespan of the capital instrument.

IAS 32 stipulates that the finance costs of redeemable preference shares are to be shown in the statement of comprehensive income usually separately after interest.

Finance charge for the year ended 30 September (extracts)

	Years				
	1	*2*	*3*	*4*	*5*
	£000	*£000*	*£000*	*£000*	*£000*
Interest					
Finance cost on redeemable preference shares	58.9	59.5	60.0	60.7	60.9

The statement of financial position extracts reveals the impact of the IAS regarding liabilities as follows:

Statement of financial position as at 30 September (extracts)

	Years				
	1	2	3	4	5
	£000	*£000*	*£000*	*£000*	*£000*
Long-term liabilities:					
Redeemable preference shares	958.9	968.4	978.4	989.1	–

Question 6 – Milner Ltd

Under IAS 32, if a capital raising instrument contains an obligation to pay out cash or other financial assets it is a financial liability. However, if the instrument has payments that are discretionary for the issuer it is an equity instrument.

This preference share has a liability element as there is an obligation for Milner Ltd to repay the principal sum of €1 million at the end of the life of the instrument. However, there is no obligation on Milner Ltd to pay any dividends throughout the life of the instrument. The directors of Milner Ltd could decide not to declare an ordinary dividend, in which case, no preference dividend would need to be paid. As a result the instrument also contains an equity element. IAS 32 considers the contractual obligations in instruments and not what is likely to happen in practice. As such, even if the preference shareholders expected a dividend and Milner Ltd directors expected to pay one, it would not change the classification.

To split the initial proceeds between the debt and equity elements, the debt is values by discounting the cash flows at a market rate on debt without the equity element; the equity element is then the balance of the proceeds.

Initial recognition

Debt element: €1 million × $1/1.06^{10}$	558,394
Equity element: (1,000,000 − 558,394)	441,606

Subsequent recognition

Year	*b/f*	*Interest charge*	*c/f*
1	558,394	33,504	591,898
2	591,898	35,514	627,411
3	627,411	37,645	665,056
4	665,056	39,903	704,960
5	704,960	42,298	747,257
6	747,257	44,835	792,093
7	792,093	47,526	839,618
8	839,618	50,377	889,995
9	889,995	53,400	943,395
10	943,395	56,604	1,000,000

Question 7 – Creasy plc

Under IAS 32 *Financial Instruments: Presentation* capital raising instruments can be classified as debt, equity or compound instruments (combination of debt and equity). The classification depends on the economic substance of the instruments, and in particular, whether they contain an obligation to pay out cash or other financial assets.

Debenture

The 7% debenture instrument contains an obligation to pay out both interest and principal and is, therefore, a debt instrument. Assuming that 7% is the market rate the expected accounting would be:

- *Liability*: The liability will remain on the statement of financial position at €20 million until it is repaid five years after issue.

- *Finance cost*: The statement of comprehensive income will show an interest charge of 7% of the principal, €1.4 million, each year.

Convertible debenture

The convertible debenture1 contains an obligation to pay interest and possibly repay principal and, therefore, it contains a debt instrument. However, it also gives the holder the option to take redemption in shares which means that it has equity features. This instrument is, therefore, a compound instrument.

Compound instruments are initially recognised by splitting the debt and equity proceeds and subsequently accounting for each part separately. IAS 32 specifies that to split the proceeds the debt element is valued and the equity element is made the residual of the proceeds. To value the debt, the cash flows are discounted at a market rate assuming that there was no conversion option.

Value of the debt element:

Time	*Cash flow*	*Undiscounted*	*7% discount*	*NPV*
Year 1	Interest	1,000	0.935	935
Year 2	Interest	1,000	0.874	874
Year 3	Interest	1,000	0.817	817
Year 4	Interest	1,000	0.763	763
Year 5	Interest	1,000	0.713	713
Year 5	Principal	20,000	0.713	14,260
				18,362

Value of the equity element:

Proceeds	20,000
Debt element	(18,362)
Equity element	1,638

After initial issue the debt will have interest recognised at a market rate of 7% recognised as a finance cost. The debt element will, therefore, grow to €20 million over the five-year term. The equity element will remain in equity and IAS 32 does not specify any equity reclassifications depending whether the option is exercised or not. It is not acceptable, however, to re-classify the equity element to profit or loss even if the option is not exercised.

The finance charges and liability of the life of the instrument are as follows:

Year	*b/f*	*Interest charge*	*Cash paid*	*c/f*
Year 1	18,362	1,285	(1,000)	18,647
Year 2	18,647	1,305	(1,000)	18,952
Year 3	18,952	1,327	(1,000)	19,279
Year 4	19,279	1,350	(1,000)	19,629
Year 5	19,629	1,371	(21,000)	–

Question 8 – Little Raven plc

(a) *The considerations involved in deciding how to account for the issue*:

- The issue is made at a substantial discount.
- The coupon rate is significantly below market rates.
- Adopting substance over form, the discount is effectively rolled-up interest and should be accounted for over the period of the borrowing.
- The statement of financial position should report the obligation to redeem at par and the statement of comprehensive income should report the true cost of the borrowing.

If the borrowing was accumulated for:

(i) As per the question:

	DR Cash	4,000	
	CR Debt		4,000
and each year,	DR Finance charge	300	
	CR Cash		300

neither the obligation to repay nor the true cost of the borrowing would be fairly reported.

(ii) Taking advantage of the legal point (available in some countries) that permits discount on issue to be debited to share premium account, the debt could be reported as follows:

	DR Cash	4,000	
	DR Share premium a/c	1,000	
	CR Debt		5,000
and, each year	DR Finance charge	300	
	CR Cash		300

in which case the amount of debt would be fairly reported but not the true cost of the debt.

(iii) Alternatively,

	DR Cash	4,000	
	DR Unamortised discount	1,000	
	CR Debt		5,000
And, each year,	DR Finance charge	300	
	CR Cash		300
	DR Finance charge	X	
	CR Unamortised discount		

with amortisation of discount on an appropriate basis over the period of debenture.

At each year-end, the debt would be reported as £5,000 less unamortised discount. Such accounting achieves the objective of reporting the actual amount repayable and the true cost of the debt but is not the approach adopted by IAS 32.

(iv) Under IAS 32, the approach would be:

- On issue date

DR Cash	X	
CR Debt		X

with the net proceeds of issue.

- Determine finance costs as total amounts repayable (interest plus redemption) less net proceeds of issue.

- Allocate finance costs to each period at a constant rate on the carrying amount of the debt by

DR Finance charge	X	
CR Debt	__	X
DR Debt	X	
CR Cash	__	X

with amounts paid in each period.

(b)

Period y/e	*Carrying amount at beginning*	*Finance cost (11.476%)*	*Payments*	*Carrying amount at end*
	£000	*£000*	*£000*	*£000*
30.9.X2	4,000	459	(300)	4,159
30.9.X3	4,159	477	(300)	4,336
30.9.X4	4,336	498	(300)	4,534
30.9.X5	4,534	520	(300)	4,754
30.9.X6	4,754	546	(300 + 5,000)	–
		2,500		

(300 × 5 = 1,500 + 5,000 = 6,500 − 4,000 = 2,500)

Revised statement of comprehensive income for the year ended 30 September

		20X5	*20X4 (restated)*
Turnover		6,700	6,300
Cost of sales		(3,025)	(2,900)
Gross profit		3,675	3,400
Overheads		(600)	(550)
Interest payable	− debenture	(520)	(498)
	− other	(75)	(50)
Profit for the financial year		2,480	2,302
Statement of changes in equity (extract)			
Retained profit brought forward, as previously stated	4,300		1,800
Previous year's adjustment [159 + 177] [159 + 177 + 208]	(544)		(336)
Retained profit brought forward restated		3,756	1,464
Retained profit, carried forward		6,236	3,766

Question 9 – George plc

The position in the financial statements for the three instruments is as follows:

Joshua Ltd

To determine the accounting for the investment in Joshua Ltd it is first necessary to determine whether the investment is a subsidiary, associate or joint venture. If it is, it will be governed by standards other than IFRS 9. A 15% investment would generally not be sufficient to give control or significant influence and, therefore, the investment is accounted for under IFRS 9 as a financial asset.

Under IFRS 9, equity investments by default are classified as fair value with gains and losses recognised in profit and loss. However, Joshua Ltd would be able to make an irrevocable election to measure the investment at fair value with gains and losses in other comprehensive income.

Debenture investment

The investment in debentures is a financial asset under IFRS 9. A receivable could be measured at amortised cost, fair value through other comprehensive income or fair value with gains and losses in profit and loss, depending on the characteristics and business model of Joshua.

A debenture would normally be an investment on which only interest and principal payments are made. This means that it would not be measured at fair value with gains and losses in profit and loss unless the fair value option was taken.

As the business model is stated as being to collect the interest and principal the investment would be expected to be classified and measured at amortised cost. If the business model was to collect the contractual cash flows or sell the investment it would be measured at fair value with gains and losses in other comprehensive income.

Interest rate swap

The interest rate swap is a derivative and they must be classified and measured at fair value with gains and losses in profit and loss. The swap does not act as a hedge and, therefore, hedge accounting would not be appropriate**.**

Question 10 – Hazell plc

(i) The total expected finance costs for the loan are as follows based on the expectation that it will be repaid on 1 January 2011:

Total repayments	
Interest (5,000,000 × 3% for one year)	150,000
Interest (5,000,000 × 6% for two years)	600,000
Principal repayment	5,000,000
Less net proceeds	(5,000,000)
Finance cost	750,000

The effective yield on the loan is the internal rate of return on the expected above cash flows over the three years to January 2011. This is calculated as 4.95% using the internal rate of return formula on a spreadsheet.

(ii) *Year ended 31 December 2009*

The loan would be initially recognised at €5 million on which interest of 4.95% would be recognised. This gives an interest charge of €247,500.

Interest paid was only €150,000 and, therefore, the loan balance increased to €5,097,500 (5,000,000 + 247,500 – 150,000) by 31 December 2009.

Year ended 31 December 2010

The interest charge for the year was 4.95% of 5,097,500 = €252,326.

Had there been no changes in the estimates of future cash flows on the loan, the liability would be €5,049,826 (5,097,500 + 252,326 – 300,000).

Owing to the change in estimate of future cash flows, however, the revised remaining cash flows need to be discounted at the original effective yield. Any difference between the revised present value calculated and the liability of €5,049,826 is recognised in profit and loss statement. The original effective yield on the loan is not revised.

Revised present value of future cash flows:

31/12/11	Interest	300,000	1/1.0495	285,850
31/12/12	Interest	300,000	$1/1.0495^2$	272,368
31/12/13	Interest + principal	5,300,000	$1/1.0495^3$	4,584,886
Total				5,143,104

2 and 3 show as (1.0495×1.0495) and $(1.0495 \times 1.0495 \times 1.0495)$

The liability recognised by Hazell plc at 31 December 2010 needs to be increased to €5,143,104. This results in an additional finance charge in 2010 of €93,278.

Question 11 – Baudvin Ltd

The following table summarises the expected position in the statement of comprehensive income and the statement of financial position in each period:

€000	*2008*	*2009*	*2010*	*2011*
Statement of financial position				
Available for sale investment	950	1,030	1,080	(80)
Available for sale revaluation reserve	(50)	30	80	
Statement of comprehensive income				
Profit on sale of investment				100

The accounting entries in each period are:

2008

Dr	Available for sale investment	1,000	
Cr	Cash		1,000

Initial acquisition

Dr	Available for sale revaluation reserve	50	
Cr	Available for sale investment		50

Revaluation at period end

2009

Dr	Available for sale investment	80	
Cr	Available for sale revaluation reserve		80

Revaluation at period end

2010

Dr	Available for sale investment	50	
Cr	Available for sale revaluation reserve		50

Revaluation at period end

2011

Dr	Cash	1,100	
Cr	Available for sale investment		1,080
Cr	Profit on sale		100
Dr	Available for sale revaluation reserve	80	

Disposal of investment and recycling of gain in revaluation reserve

The IFRS 9 position for the equity investment will depend on whether an election is taken to measure the investment at fair value with gains and losses in other comprehensive income.

If the option is taken the accounting treatment will be consistent with the position under IAS 39, treating the investment as available for sale.

However, if the option is not taken the investment would need to be measured at fair value with gains and losses in profit and loss. This would mean there would be no entries in the available for sale revaluation reserve and rather everything would be reflected in profit and loss for the period.

Question 12

(a) *IFRS 9 (no hedging)*

The loan would be recognised at amortised cost on the balance sheet, using the floating interest rate.

The swap would be recognised as an asset on the balance sheet with a corresponding gain in the income statement of £5m.

The extra interest charge on the floating rate as a result of interest charges increasing will not equal the gain on the swap. This is because the fair value of the swap is based on expected receipts on the swap over its whole life.

(b) *IFRS 9 (hedging)*

The loan would be recognised at amortised cost on the balance sheet, using the floating interest rate.

The swap would be recognised on the balance sheet as an asset, but the gain would be recognised in other comprehensive income. The gain would be recycled to the income statement annually to offset against the higher interest charges on the variable rate loan.

If it is perfectly effective, the impact should be that fixed rate interest is recognised in the income statement.

Question 13 – Charles plc

	£000	*Financial asset/ liability*	*IAS 32/IFRS 9?*	*Category*
Non-current assets				
Goodwill	2,000			
Intangible	3,000			
Tangible	6,000			
Investments				
Corporate bond	1,500	✓	✓	AC
Equity trade investments	900	✓	✓	FVPL/FVOCI
Current assets	13,400			
Inventory	800			
Receivables	700	✓	✓	AC
Prepayments	300	*2		
Forward contracts (note 1)	250	✓	✓	FVPL
Equity investments held for future sale	1,200	✓	✓	FVPL/FVOCI
Current liabilities	3,250			
Trade creditors	(3,500)	✓	✓	AC
Lease creditor	(800)	✓	×	
Income tax	(1,000)	*1		
Forward contracts (note 1)	(500)	✓	✓	FVPL
	(5,800)			
Non-current liabilities				
Bank loan	(5,000)	✓	✓	AC
Convertible debt	(1,800)	✓	✓	AC
Deferred tax	(500)	*1		
Pension liability	(900)	✓	×	
	(8,200)			
Net assets	**2,650**			

*[1]The income tax liability is not a financial liability because it is a statutory obligation and not a contractual obligation and, therefore, not within the definition of a financial asset or liability.

*[2]Prepayments are not usually financial assets because they give a contractual right to a good or service and not to receive a financial asset.

Question 14 – Tan plc

The accounting entries for the recognition of the expected losses differ depending on whether the investment is classified at amortised cost or fair value through other comprehensive income.

Loan receivable – amortised cost

Expected credit losses are £2,000 (2% × £100,000) at 1 January 2016. These increase to £2,500 by 31 December 2016:

1 January 2016:			
Dr	Income statement	2,000	
Cr	Loan receivable		2,000
31 December 2016:			
Dr	Income statement	500	
Cr	Loan receivable		500

Loan receivable – fair value other comprehensive income (FVOCI)

For assets measured at fair value with gains and losses in other comprehensive income (OCI), it is necessary to recognise any loss provision against OCI rather than the asset. The expected loss is £3,000 at 1 January 2016, increasing to £3,750 by 31 December 2016

1 January 2016			
Dr	Income statement	3,000	
Cr	Other comprehensive income		3,000
31 December 2016			
Dr	Income statement	750	
Cr	Other comprehensive income		750

Question 15 – Cornish plc

Investment in government bonds

The investment in government bonds could be accounted for in different ways by Cornish depending on their business model.

The investment is a debt investment and the position is as follows:

Amortised cost. This would be applicable if the only cash flows on the investment were payments of principal and interest (which seems likely), the business model was to collect the cash flows and the fair value option was not taken.

Fair value through other comprehensive income. This would be the appropriate caption if the only cash flows on the instrument were principal and interest, but the business model was to

collect contractual cash flows or sell the investment. Also, the fair value option would not be chosen for this classification.

Fair value with gains and losses in profit and loss. This classification would be appropriate if the cash flows are not solely interest and principal or where the fair value option was chosen. Also in theory, if the business model was to neither collect cash flows nor sell the investment it would be in this classification.

Investment in shares in Schaenzler plc

This is an equity investment that could either be classified or measured as follows:

Fair value through profit and loss. This is the default classification for equity investments and would be applied unless an irrevocable election is made to measure the investment at fair value through other comprehensive income.

Fair value through other comprehensive income. This would apply if the election is made.

Swap

As Cornish does not use hedge accounting the derivative would be classified and measured at fair value with gains and losses in profit and loss.

Question 16 – Measurement of financial assets and liabilities

IFRS 9 does not have the categories of financial assets and liabilities that IAS 39 has. For financial assets there are broadly three measurement options for financial assets:

Amortised cost. This is available for financial assets where the only cash flows are interest and principal payments and where the business model is to hold the asset to collect the cash flows.

Fair value with gains and losses in other comprehensive income. This category of financial asset is restricted with only the following included:

i) equity investments being allowed to be included by irrevocable election;

ii) debt investments where the contractual terms only have interest and principal cash flows and the business model is either to collect the cash flows or sell the asset.

Fair value through profit and loss. This is used for all other financial assets.

For financial liabilities the usual measurement will be at amortised cost.

For both financial assets and financial liabilities the option to measure at fair value through profit and loss has been retained where certain conditions are met. These conditions are that measurement at fair value through profit and loss removes a measurement inconsistency with a linked asset or liability, or where management manage financial assets and liabilities on a fair value basis and have a documented policy of doing so.

For financial liabilities held at fair value the IASB has refined the measurement approach. IFRS 9 does not allow changes in the fair value of liabilities due to changes in the entities own credit

risk to be reflected in profit and loss. Instead, any gains and losses are recognised in other comprehensive income.

Application to Procter Ltd

Applying the above requirements to Procter Ltd investments results in the following:

Milner plc	This investment will be measured at fair value with gains and losses in profit and loss or fair value through other comprehensive income depending on whether the election is taken. Available for sale investments are measured at fair value with gains and losses in other comprehensive income.
Government bonds	This investment could be measured at amortised cost, consistent with the 'held to maturity' approach under IAS 39. It would be an option to measure at fair value if the criteria were met.
Financial liability	The fair value option is retained in IFRS 9 and, therefore, Procter Ltd can continue to measure the liability at fair value through profit and loss. However, any changes in fair value as a result of changes in Procter Ltd's credit risk will need to be reflected directly in other comprehensive income under IFRS 9.

Question 17 – Impairment of financial assets

IAS 39 uses an 'incurred loss' model to reflect impairment. Under this approach, impairment losses are only recognised following a 'trigger event' which causes the financial asset to be impaired. Therefore, when a bank makes a loan they do not assume, at the point the loan is made, that it will be impaired. The bank provide for the loan only when an event occurs (e.g. financial difficulty of the borrower) after the loan has been given.

In the financial crisis of 2008, this approach came under intense scrutiny and calls were made for the IASB to move to an 'expected loss' model. Under an expected loss model impairment would be considered from the point a loan was made in the anticipation that some loans would go bad. Banks argued that this approach would allow their financial statements to reflect the true economic returns they make. It was claimed that under the incurred loss model income was overstated in the early years as no impairment was reflected even though lenders know from past experience that some loans would go bad. The impact when impairment did occur was then very significant in the financial statements because no provisions had been built up to reflect those expected losses.

The impairment loss approach in contentious and is still a difficult issue for the IASB.

Some of the key benefits of the incurred loss model are that (i) the model is straightforward to apply and well understood, (ii) it also gives limited room for lenders to manipulate results as impairment is only recognised based on a past event and (iii) it matches the definitions of assets in that impairment is recognised based on a past event.

Some of the key benefits of the expected loss model are that (i) it more closely reflects management assessment of performance, (ii) it is closer to the way impairment is considered by banking regulators and (iii) it is consistent with definition of assets in that it is the loan being made that is viewed to result in impairment.

In their project to replace IAS 39, the IASB has considered the arguments and decided on an expected loss model. Under IFRS 9 a loss allowance is created initially for the 12-month expected credit losses of the asset. If the credit position of the asset significantly deteriorates the lifetime expected credit losses are recognised, with a reverse to 12-month expected losses if credit positions subsequently improve.

There are some simplifying exceptions to the above, the main one being for trade receivables. For trade receivables it is appropriate to always recognise the lifetime expected credit losses.

CHAPTER 15

Employee benefits

Question 1 – Donna, Inc.

(a) Accounting for employee benefits has been an accounting area that has seen considerable evolution over the period that international accounting standards have been issued. In the year 2011, IAS 19 was most recently revised and it is this revision that caused the differences in pension accounting explained to the finance director.

Prior to its revision the recognition of actuarial gains and losses allowed two different approaches:

(i) A 10% corridor approach. Under this approach actuarial gains and losses above a 10% corridor (greater of 10% of the present value of pension obligations and 10% of the fair value of pension assets) were recognised in the income statement over the average remaining working lives of employees, or any systematic shorter period. It was also acceptable to recognise actuarial gains and losses within the corridor on the same basis.

(ii) An immediate recognition approach. Under this approach actuarial gains and losses were recognised in full in other comprehensive income.

With its revision in 2011 the 10% corridor approach was removed. Therefore, now all 'remeasurements', which include actuarial gains and losses must be recognised immediately in other comprehensive income.

(b) The impact of IAS 19 (2011) on the pension position would be as follows:

Step 1 Change in the net pension obligation

	2013	*2014*	*2015*
Present value of obligation, 1 January	300	200	(100)
Net interest cost at 6%, 5%, 4%	18	10	(4)
Current service cost	150	160	170
Contributions paid	(120)	(120)	(130)
Actuarial (gain) loss on obligation (bal fig)*	*(148)*	*(350)*	*(336)*
Present value of the obligation (asset), 31 December	200	(100)	(400)

* This includes the difference in the actual and expected return on pension assets also recognised in other comprehensive income

Step 2 Calculate the impact on the statement of comprehensive income

	2013	*2014*	*2015*
Operating costs			
Current service cost	150	160	170
Net interest cost	18	10	(4)
Profit and loss charge	*168*	*170*	*166*
Other comprehensive income			
Actuarial gains (losses)	148	350	336

Step 3 Calculate the statement of financial position

	2013	*2014*	*2015*
Present value of pension obligation, 31 December	3,600	3,500	3,200
Fair value of plan assets, 31 December	(3,400)	(3,600)	(3,600)
Liability (asset) recognised	*200*	*(100)*	*(400)*

Question 2 – Basil plc

Step 1 Change in the net pension obligation

	20X7
Present value of obligation, 1 January 20X7	600
Net interest cost at 7%	42
Current service cost	80
Past service cost	150
Contributions paid	(26)
Actuarial (gain) loss on obligation (bal fig)*	*(40)*
Present value of the obligation (asset), 31 December 20X7	806

* This includes the difference in the actual and expected return on assets

Step 2 Calculate the impact on the statement of comprehensive income

	20X7
Operating costs	
Current service cost	80
Past service cost	150
Net interest cost	42
Profit and loss charge	*272*
Other comprehensive income	
Actuarial gains (losses)	*40*

Step 3 Calculate the statement of financial position

	20X7
Present value of pension obligation, 31 December 20X7	4,192
Fair value of plan assets, 31 December 20X7	(3,386)
Liability (asset) recognised	*806*

Question 3

Plan assets at 31 March 20X6

	$m
Opening net liability balance	163
Interest cost	15
Current service costs	28
Past service costs	1
Contributions paid	(16)
Actuarial gains (net)	(21)
Liabilities at 31 March 20X6	170

(a) *Net liability recognised*

	$m
Net liability recognised at 31 March 20X6	(170)

(b) *The amounts recognised in the statement of comprehensive income*

	$m
Current service costs	(28)
Past service costs	(1)
Net Interest costs	(15)
Profit and loss charge	(44)
Other comprehensive income	
Actuarial gains	21

Question 4 – Omega

This is an equity-settled share-based payment transaction. The approach is to measure the goods and services received, and the corresponding increase in equity:

Directly at the fair value of the goods and services received, unless that fair value cannot be estimated reliably.

Indirectly, by reference to the fair value of the equity instruments granted, if the entity cannot estimate reliably the fair value of the goods and services received.

As it is a transaction with employees, the entity measures the fair value of services received by reference to the fair value of the equity instruments granted as it is not possible to estimate reliably the fair value of the services received.

In transactions with the employees, the IASB has decided that it is appropriate to value the benefit at the fair value of the instruments granted at their *grant date* and after the grant date any movements in the share price, whether upwards or downwards, do not influence the charge to the financial statements.

The cost of the grant is taken to income over the two-year vesting period. Where the grant is subject to future employment or performance conditions then the latest known estimates of the extent of performance is used to determine the total cost. This means that in this case the total charge to the income statement will be:

50 × 500 × 0.96 × 0.96 × $2 = $46,080. In the year ended 30 September 2006, half of this amount ($23,040) is debited to income as an operating cost and credited to equity.

Question 5

The total expected charge is (80 – 16) × 1,000 × £6.5 = £416,500 and half of this will be debited as cost of sales in the income statement with a credit to equity.

No entries are made to reflect the increase in the fair value of each option as it is fair value at the grant date which is the relevant figure.

Changes in the share price do not affect the financial statements. There is only an effect if the options are exercised and the company receives the £10 per share. This would only occur if the share price at the exercise date exceeds £10.

Question 6 – C plc

Item 1

This is an equity-settled share-based payment transaction. For these transactions, the value of the 'payment' is taken at the **grant date** – i.e. €3 per share.

The vesting period is from the **grant date** to the **vesting date** – 1 January 20X7 to 31 December 20X9 – **three years**. The cost is spread over this **vesting period** of three years, but the 'liability' is calculated at each year-end. The charge is the difference in the 'liability' between each year-end. The debit entry is the charge to the income statement, and the credit is to equity. The **exercise date** is when the employee receives the shares, which is 31 December 20Y0.

At 31 December 20X7:

The 'liability' = 300,000 × €3 × 80% × 1/3

= €240,000

There is no opening 'liability', so:

Charge for the year = €240,000

The accounting entries are:

Dr	Income statement	240,000	
Cr	Equity		240,000

At 31 December 20X8:

The 'liability' = 300,000 × €3 × 80% × 2/3

= €480,000

With an opening 'liability' of €240,000:

Charge for the year = €480,000 – 240,000

= €240,000

The accounting entries are:

Dr	Income statement	240,000	
Cr	Equity		240,000

At 31 December 20X9:

The 'liability' = (300,000 – 30,000) × €3 × 3/3

= €810,000

With an opening 'liability' of €480,000:

Charge for the year = €810,000 – 480,000

= €330,000

The accounting entries are:

Dr	Income statement	330,000	
Cr	Equity		330,000

Item 2

This is a cash-settled share-based payment transaction. For these transactions, the value of the payment is taken at the estimated value at the **vesting date.** This is estimated at each year-end**.**

The vesting period is from the **grant date** to the **vesting date** – 1 January 20X7 to 31 December 20X8 – two **years**. The cost is spread over this **vesting period** of two years, but the liability is calculated at each year end. The charge is the difference in the liability between each year end. The debit entry is the charge to the income statement, and the credit is to liabilities (not equity). The **exercise date** is when the employee receives the payment, which is 31 December 20X8.

At 31 December 20X7:

The liability = €85,000 × 1/2

= €42,500

There is no opening liability, so:

Charge for the year = €42,500

The accounting entries are:

Dr	Income statement	42,500	
Cr	Liabilities		42,500

At 31 December 20X8:

The liability = €5,000 × 5 × (8 – 4)
= €100,000

With an opening liability of €42,500:

Charge for the year = €100,000 – 42,500
= €57,500

The accounting entries are:

Dr	Income statement	57,500	
Cr	Equity		57,500

The bonus is paid on 31 December 20X8, so the accounting entries will be:

Dr	liabilities	100,000	
Cr	Cash book		100,000

There are no transactions in the year ended 31 December 20X9.

Question 7 – Kathryn plc

(a) The original IAS 19 approach to defined benefit pension schemes are needed to be reviewed for a number of reasons, which are as follows:

Misleading statement of financial position

The original approach to the valuation of the asset or liability for pensions in the statement of financial position was potentially misleading to users of the accounts, and did not follow the Framework Document. The profit or loss charge was 'smoothed' out across all the years of service of the employees. The concept that was being followed in doing this was the accruals concept. Problems for presentation arose when surplus or deficits arose on the pension scheme. For example, suppose a company had:

Normal contributions	£5m per annum
Surplus	£10m
Average remaining working life of staff	5 years

The actuary recommended a two-year contribution holiday.

The annual charge would be £3m (the surplus of £10m has been spread over the remaining working lives of five years), but in the statement of financial position after one year, it would be a liability of £3m. This liability would grow to £6m in the second year, and would only return to nil by the end of year 5. This liability could be understood by users of the financial statements to mean that the company owed the pension fund some money. In fact, if anything, the company had overpaid into the pension scheme.

This approach to pension accounting does not meet the *Framework Document* in two ways. First, the framework prioritises the statement of financial position over the statement of comprehensive income, whereas the original IAS 19 made the charge the key factor; and secondly, the asset or liability does not meet the definition of the item. In the above example, for instance, the liability that is created is not an *obligation to transfer economic benefits as a result of past transactions or events.*

Internationally inconsistent

The original version of IAS 19 was out of line with the approaches in US GAAP. The revised version of the standard is nearer to the requirements of US GAAP as it follows similar valuation principles for assets and obligations, although variations still exist in recognition of gains and losses.

Valuation of pension fund assets and liabilities

The original IAS 19 did not use valuation principles for assets and liabilities that were internationally consistent or the most realistic methods available. Assets were valued at actuarial value as opposed to a market value and liabilities of the pension fund were discounted at the expected rate of return on assets, which is not a realistic discount rate for liabilities.

The amended standard has addressed this by requiring pension scheme assets to be measured at market values and liabilities to be valued using the 'projected unit credit method' discounted at an appropriate corporate bond rate.

(b)

Statement of comprehensive income

	£000	*£000*
Operating cost		
Pension cost − current service cost (W)		(600)
Financing cost		
Net interest income (W)		30
Net return		(570)
Other comprehensive income		
Actuarial losses (W)		(630)

Under IAS 19 (2011), it is not necessary to include the income or expense as operating and finance costs, and it would all be acceptable under operating costs; however, this split is appropriate, given the nature of the income and expense items.

Statement of financial position

Pension liability	
Present value of obligations	(10,900)
Market value of assets	10,700
	(200)

Workings

W1 Obligations of the pension fund

Present value of the net assets as at 1 May 2013	300
Net interest income – 10%	30
Current service cost	(600)
Contributions	700
Actuarial (losses) – balancing figure	(630)
Present value of obligations as at 30 April 2014	(200)

Question 8 – Oberon

	€000
1. In statement of financial position – non-current liabilities	
Benefit obligation	41,500
Related asset	(32,500)
	9,000
2. In statement of comprehensive income – operating costs	
Current service cost	(4,000)
3. In statement of comprehensive income – finance costs/income	
Net interest cost (6% × €35 million)	300
4. In other comprehensive income	
Actuarial losses	(2,900)

Workings

Step 1 Change in the net pension obligation

	20X1
Present value of obligation, 1 April 20X0	5,000
Net interest cost at 6%	300
Current service cost	4,000
Contributions paid	(3,200)
Actuarial (gain) loss on obligation (bal fig)	*2,900*
Present value of the obligation (asset), 31 March 20X1	9,000

Question 9 – Oliver

1. Statement of financial position

	As at 31 March	
	20X1	*20X0*
	€000	*€000*
In equity	912	304

2. Statement of comprehensive income

	Year ending 31 March	
	20X1	20X0
	€000	**€000**
In operating expenses	608	304

3. Explanation

The **total** expected cost at 31 March 20X0 = €912,000 (19 × 10,000 × €4.8).

One-third is recognised in equity as this is an equity-settled share-based payment.

The **total** expected cost at 31 March 20X1 = €1,368,000 (19 × 15,000 × €4.8).

Two-third is recognised in equity at 31 March 20X1. Amounts can be shown as a separate component of equity or credited to retained earnings.

The vesting condition relating to share price is ignored in the estimation of the total expected cost as it is one of the factors that is used to compute the fair value of the share option at the grant date – i.e. it is a market-related vesting condition.

The cost recognised in 20X0 is the cost to date as this is the first year of the vesting period.

The cost recognised in 20X1 is the difference between cumulative costs carried and brought forward.

Question 10 – A plc

The expected total cost of the share-based payment is £210,000 ((50,000 − 8,000) × £5). The decline in share price is a market-related issue that is ignored in computing the expected total cost as it has been allowed for in computing the fair value of each share option.

This cost is recognised over the three-year vesting period so the amount recognised in 2008 is £70,000 (£210,000 × 1/3).

CHAPTER 16

Taxation in company accounts

Question 1 – Notes to assist in answering

The Government deliberately sets up special provisions to reduce taxes in order to encourage certain conduct. Examples might be allowance for payments into pension funds or for capital investment. The running of a company's affairs to take maximum benefit of items such as these is tax planning.

When a company alters its behaviour solely for tax purposes, with no commercial reason, with the intention of saving tax by using the tax system in a way not intended by Parliament, this is called tax avoidance.

Tax evasion is when a company illegally hides income from the tax authorities.

Tax planning is to be encouraged, and it is for an accountant to point out the opportunities to use it. Tax evasion is illegal, and an accountant is under obligation to prevent it from happening. Tax avoidance is legal; an accountant is under obligation to ensure that the steps that are illegal are not taken and that details are reported accurately to the authorities. In all dealings relating to the tax authorities, an accountant must act honestly and do nothing that might mislead the authorities, but he must do all that he can to assist his employer within these criteria.

Question 2 – Adjourn plc

(a) *Requirement*

Cost	*Accounts (Depreciation)*	*Tax (Capital allowances)*	*Difference (Timing)*
31.3.20X3 Depreciation/allowance	25,000.00	25,000.00	
	2,812.50	4,687.50	1,875.00
	22,187.50	20,312.50	1,875.00
31.3.20X4 Depreciation/allowance	3,750.00	5,078.13	1,328.13
	18,437.50	15,234.38	3,203.13
31.3.20X5 Depreciation/allowance	3,750.00	3,808.59	58.59
	14,687.50	11,425.78	3,261.72
31.3.20X6 Depreciation/allowance	3,750.00	2,856.45	(893.55)
	10,937.50	8,569.34	2,368.16
31.3.20X7 Depreciation/allowance	3,750.00	2,142.33	(1,607.67)
	7,187.50	6,427.00	760.50

Tax calculated by deferral method

		Deferred tax charge in year		*Deferred tax provision*	
31.3.20X3	1,875.00	20%	375.00	375.00	Balance at 31.3.20X3
31.3.20X4	1,328.13	30%	398.44	773.44	Balance at 31.3.20X4
31.3.20X5	58.59	20%	11.72	785.16	Balance at 31.3.20X5
31.3.20X6	(893.55)	19%	(169.77)	615.38	Balance at 31.3.20X6
31.3.20X7	(1,607.67)	19%	(305.46)	309.92	Balance at 31.3.20X7

Tax calculated by liability method

Difference as at (timing)	*As at 31.3.X3*	*As at 31.3.X4*	*As at 31.3.X5*	*As at 31.3.X6*	*As at 31.3.X7*
Tax rate	*20%*	*30%*	*20%*	*19%*	*19%*
31.3.X3	1,875.00				
31.3.X4		3203.13			
31.3.X5			3261.72		
31.3.X6				2368.16	
31.3.X7					760.50
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	375.00	960.94	652.34	449.95	144.50

(b) *Requirement*

Under the liability method the focus is on the statement of financial position (the objective being to compute the deferred tax liabilities), whereas the deferral method places the focus on the profit and loss account (the objective being to show the annual effect that has arisen in the year of account).

Question 3 – Unambitious plc

Year ended 30 June	*Depreciation in year* £	*Capital allowances* £	*Annual increase in excess* £	*Balance of total excess* £	*Deferred tax provision* £	*Deferred tax expense for year* £
2010				100,000	21,000	
2011	12,000	53,000	41,000	141,000	29,610	8,610
2012	14,000	49,000	35,000	176,000	36,960	7,350
2013	20,000	36,000	16,000	192,000	40,320	3,360
2014	40,000	32,000	(8,000)	184,000	38,640	(1,680)
2015	44,000	32,000	(12,000)	172,000	36,120	(2,520)
2016	46,000	36,000	(10,000)	162,000	34,020	(2,100)

Question 4 – Notes to assist in answering

The law has been amended to allow the Inland Revenue to accept accounts drawn up in accordance with IFRS, so that two different standards will be acceptable for some years.

Therefore, the legislation will have to provide for different treatment of specific items under UK GAAP and IFRS.

The Finance Act 2004 included a legislation which ensured that companies that adopted IFRS to draw up their accounts would receive broadly equivalent tax treatment to companies that continue to use UK GAAP. The clear intention of these provisions is to defer the major tax effects of most transitional adjustments until the tax impact becomes clearer.

It remains to be seen whether the taxation effects of any significant changes in profit resulting from the change from UK GAAP to IFRS will be deferred until UK GAAP becomes truly aligned with IFRS.

The move towards IFRS is leading to a detailed study of accounting theory and principles, so that the accounting treatment may eventually become the benchmark standard for taxation purposes, although this will take several years to be accomplished (if it proves to be attainable).

Question 5 – Notes to assist in answering

(a) *For discounting*

- Most transactions take place at fair value.
- Rational buyers and sellers will ensure that this fair value reflects the time value of money and the risk associated with the future expected cash flows, which means that market prices generally will reflect such factors.
- To be consistent, these factors also need to be reflected in the other measures that can be used to determine the carrying amount of assets (in other words, value in use and net realisable value) and the carrying amount of any liabilities measured by reference to expected future cash flows.
- It follows that, when basing carrying amounts on future cash flows, those cash flows will need to be discounted.

(b) *Against discounting*

- The reliable determination of deferred tax assets and liabilities on a discounted basis requires detailed scheduling of the timing of the reversal of each temporary difference. In many cases, such scheduling is impracticable or highly complex.
- Therefore, it is inappropriate to require discounting of deferred tax assets and liabilities.
- To permit, but not to require, discounting would result in deferred tax assets and liabilities that would not be comparable between enterprises.
- Discounting would result in deferred tax assets and liabilities that would not be comparable between enterprises unless there was a set methodology using standard prescribed discount rates.
- In some cases, where capital expenditure is uneven, an unexpected effect of discounting could be to turn an eventual liability into an initial asset.
- Discounting is not generally used in financial accounting, so its use for deferred taxation would be an exception to general accounting principles.

Question 6 – Notes to assist in answering

(a) *Requirement*

- Tax evasion is the illegal manipulation of business affairs to escape taxation.
- Tax avoidance is legal.
- The tenor of the Motion is so critical of those avoiding tax in talking about 'the protection of ordinary citizens' that it almost implies that their conduct is so reprehensible as to cross the border of legality. The essence of tax avoidance is that it is not illegal in itself, so that such an implication is incorrect.
- The natural temptation when reporting the facts about a tax avoidance exercise is to fail to report those aspects which place the avoidance exercise in a poor light. If this is done, then this incorrect reporting could result in the move from legal avoidance to illegal evasion.

(b) *Requirement*

- If citizens require such protection, then the argument that tax avoidance is immoral appears attractive on first examination.
- One issue is that of scale. Does the avoidance of a small sum of taxation by one individual prejudice the other individual taxpayers, even though the effect upon each individual taxpayer is minuscule? If one examines tax avoidance in total over the whole economy, then the suggestion of prejudice seems fair. The question is whether one can apply this principle to each small avoidance exercise. If an action is illegal (such as failing to pay a bus fare), then it can well be argued that the proportional effect is irrelevant, but it could be suggested that it would be difficult to argue this way for a legal action.
- Another issue is whether the legal use of a tax system to carry out a transaction merely for tax reduction purposes can be immoral. The tax system is designed in such a way as to introduce an element of equity and fairness. Can such an action, although legal, disturb the principle of equity and fairness, or is that principle not incumbent upon the individual taxpayers at all but the Government in designing the system? Careful reading of the Motion implies that the duty to be fair is incumbent upon the Government by suggesting an alteration in the legislation to the Government (as part of their duty to protect citizens).
- This question goes to the heart of the responsibilities of individual citizens. The question might be easy to understand, but your answer may well be prejudiced by your perception of the nature of a democratic society and the rights and duties of citizens.

Question 7 – Hanson Products Ltd

(a)

	Year:	*20X1*	*20X2*	*20X3*	*20X4*	*20X5*
	Profit	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
	Depreciation	48,000	48,000	48,000	48,000	48,000
(i)	Capital allowances	−96,000	−36,000	−27,000	−20,250	−60,750
(ii)	Taxable profit	952,000	1,012,000	1,021,000	1,027,750	987,250
(iii)	Tax at 20%	190,400	202,400	204,200	205,550	197,450

Workings

Fixed asset	240,000	192,000	144,000	96,000	48,000
Depreciation	48,000	48,000	48,000	48,000	48,000
WDV	192,000	144,000	96,000	48,000	0
Capital allowances:					
Cost/WDV	240,000	144,000	108,000	81,000	60,750
40% IA	96,000				
25% WDA		36,000	27,000	20,250	60,750
Tax WDV	144,000	108,000	81,000	60,750	0

(b) The **advantages** of not providing for deferred tax is that it is easier to calculate the tax charge and the tax liability in the statement of financial position.

The disadvantages are:

(i) It is not in accordance with IAS12 income taxes.

(ii) It gives a variable rate of tax on profits. Providing for deferred tax gives a more uniform percentage of tax on profits.

(iii) It ignores a future liability relating to timing differences.

(iv) It is wrong to argue that deferred tax does not exist. Deferred tax arises out of the difference between depreciation charged in the income statement and capital allowances, multiplied by the tax rate. Eventually, these differences will reduce to zero, thus increasing the tax charge in future years. It is wrong to ignore these differences, as they arise from the current (and past) years, and the resulting tax liability will have to be paid in the future.

(v) Ignoring deferred taxation is similar to ignoring payables in the statement of financial position. The company may have a relatively constant level of payables at each year

end, but these comprise many individual debts, which will be paid in the future and replaced by future payables from purchases. These are not ignored. In a similar way, deferred taxation should not be ignored. Applying the principle to a payable from a single supplier, it will be paid after the year-end and probably replaced by payables to the same supplier from future purchases. The 'debt' for deferred taxation is payable to the Government (like a single supplier), and it will be replaced by timing differences from future purchases of plant and equipment. These timing differences must be accounted for and not ignored.

Question 8 – Hanson Products Ltd

		20X1	20X2	20X3	20X4	20X5	
	Depreciation	48,000	48,000	48,000	48,000	48,000	
	Capital allowances	96,000	36,000	27,000	20,250	60,750	
	Timing difference	48,000	−12,000	−21,000	−27,750	12,750	
	Deferred tax at 20%	9,600	−2,400	−4,200	−5,550	2,550	
	b/fwd	0	9,600	7,200	3,000	−2,550	
(a) (i)	Deferred tax c/fwd	9,600	7,200	3,000	−2,550	0	
(ii)	Discounted (below)	8,791	6,831	2,973	−2,429	0	

					Deferred tax
Future liability	2,400	4,200	5,550	−2,550	
Disc factor	0.9524	0.9070	0.8638	0.8227	
Discounted (20X1)	2,286	3,809	4,794	−2,098	8,791
Disc factor		0.9524	0.9070	0.8638	
Discounted (20X2)		4,000	5,034	−2,203	6,831
Disc factor			0.9524	0.9070	
Discounted (20X3)			5,286	−2,313	2,973
Disc factor				0.9524	
Discounted (20X4)				−2,429	−2,429

Note: in part (a) (ii) the deferred tax balance is the discounted future annual timing differences.

(b) The **advantage** of discounting deferred tax balances is that it is consistent with the treatment of other long-term liabilities in the statement of financial position. Apart from this, there seem to be no other advantages of discounting the deferred tax balance.

The **disadvantages** of discounting the deferred tax balance are:

(i) It is a complex and time-consuming task.

(ii) The changes effected by discounting are small (see the difference between non-discounted and discounted deferred tax balances above).

(iii) The timing of the originating and reversing timing differences may not be according to the forecast. Reversing differences may be delayed by the company making taxable

losses. Also, in a 'real' example, the tax 'pool' at 20X5 will continue to be written down at 25%, rather than a reversing difference (as shown above). Disposal of the plant and the sale proceeds will affect the taxation cash flow. Normally, these will not be known when the plant is purchased.

(iv) In a practical situation, the company will have many items of plant and equipment, making the calculation more complex.

From the above discussion, discounting the deferred tax balance makes very little difference. If discounting is used, the calculations are time-consuming, complex and subject to uncertainty arising from future events. Thus, the decision in IAS 12 Income taxes not to discount deferred tax balances is a sensible solution (i.e. the costs will be high and the benefits small).

Question 9 – Deferred plc

(a) *Deferred tax*

Deferred tax:	£
Capital allowances	25,000
Depreciation	(10,000)
Temporary difference	15,000
Deferred tax £15,000 × 20%	£3,000

(b) *Income statement*

Income statement:	£	£
EBITDA		300,000
Depreciation		(10,000)
Profit before tax		290,000
Taxation		
Current tax	55,000	
Deferred tax	3,000	
		(58,000)
Profit after tax		232,000

Taxable profit:	£
Profit before tax	290,000
Add: depreciation	10,000
	300,000
Capital allowances £100,000 × 25%	(25,000)
Taxable profit	275,000
Current tax payable	£55,000

(c) *Statement of financial position*

Deferred tax:	£
Capital allowances	25,000
Depreciation	(10,000)
Temporary difference	15,000
Deferred tax £15,000 × 20% (SFP)	£3,000

CHAPTER 17

Property, plant and equipment (PPE)

Question 1 – Calculation of depreciation

(a) *Annual depreciation charge*

Year 1

Straight-line

(SF800,000 − SF104,000)/4 = SF174,000

Reducing balance

40% of SF696,000 = SF278,400

(b) *Comment to include*

- Directors responsible under IAS 16 for selecting an appropriate method.
- Little guidance given as to how to exercise the choice but the following matters may be relevant:
  - risk of technological change;
  - incidence of repairs;
  - extent to which the asset characteristics favour a particular method, e.g. a lease would be amortised evenly over its life.

Question 2 – Universal Entrepreneurs plc

(a) *The principles outlined in IAS 16*

- A non-current asset is assessed at the year-end to ensure that it has not been impaired.
- Fair charge is made to the statement of comprehensive income each year for the benefit of accruing to that accounting period for use of the asset concerned.
- In no way does the IAS address the notion of showing on the statement of financial position under the heading of 'non-current assets' either the value of the assets to the enterprise or the value at which they might be sold.

- It was this factor that caused property investment companies to feel that they were disadvantaged by the requirements of IAS 16 to depreciate buildings when these formed the major proportion of their asset structure.
    - They argued strongly that the assets were not **used** in the business but were held, like any other investment, for their income-producing value and potential capital growth.
    - As a result of these representations the IASC developed IAS 40.

(b)

- Depreciate on the basis of the rate of extraction of growth over the ten-year period in reviewing annually.
- The cost of the building (£4,000,000) should be depreciated over its useful life. It is not an investment property and the period of the lease granted is irrelevant.
- 20% per annum straight-line.
- Depreciate on the basis of actual flying hours.
- Treat as an investment property, revaluing annually but providing depreciation as it is a base of less than 20 years.

(c)

- The revalued amount of the buildings should be depreciated over the remainder of their useful lives, taking account of the amounts of depreciation already provided.
- Unless the value of the land is being consumed in some way (e.g. by mining) this should not be depreciated over the remaining period of the bases, again having account of the amounts of amortisation already provided.
- When the valuer is instructed in respect of the freehold properties, it must be made clear that interests of land need to be distinguished from those in the buildings thereon.

Question 3 – Mercury

(a) *Identifying the method*

The method of depreciation is the diminishing balance method. The following calculations show that the rate applied is at 20%.

20X6 charge	= 20% of £80,000	=	16,000
20X7 charge	= 20% of £64,000	=	12,800
Cumulative provision		=	28,800

(b) *How the accumulated depreciation in line (B) was calculated*

B/d from (a) above:

20X6	20% of £80,000		=	16,000
20X7	20% of £64,000		=	12,800
20X8	Balance b/f			£28,800
	Less: first disposal			
	20X6: £15,000 × 20% =	*£3,000*		
	20X7: £12,000 × 20% =	*£2,400*	(£5,400)	
	Less: second disposal			
	20X6: £30,000 × 20% =	*£6,000*		
	20X7: £24,000 × 20% =	*£4,800*	(£10,800)	(16,200)
				12,600
	20% of (£80,000 − £45,000 disposed of)			
	− £12,600 for accumulated depreciation			4,480
	20% of £50,000 replacement for second disposal =			10,000
	Depreciation on other asset			1,000
	Total given in question			28,080

(c) *How the figures for 20X9 are calculated*

20X9 Property, plant and equipment

	Acquired 20X6	*Acquired 20X7*	*Acquired 20X8 (balancing figure)*	*Total 20X9*
	£	£	£	£
Cost	35,000	50,000	5,000	90,000
Depreciation to date	17,080	10,000	1,000	28,080
	17,920	40,000	4,000	61,920
Charge for 20X9	3,584	8,000	800	12,384
	14,336	32,000	3,200	49,536

(d) *Calculation of profit/(loss) on disposal*

Plant disposal I

		£
Cost		15,000
Less:	Depreciation	(5,400)
	Cash	(8,000)
Loss		1,600

Plant disposal II

Cost		30,000
Less:	Depreciation	(10,800)
	Cash	(21,000)
Profit		1,800

Question 4 – Amy

(a) The figures should be the total cost of making the non-current asset usable, excluding all costs of actually using it. Therefore:

$$11{,}000 + 100 + 200 + 400 = £11{,}700$$

The additional component is the cost of the machine as it enhances the revenue-earning capacity of the asset.

The replacement parts are the cost of using the machine – hence the difference in treatment between the two. Maintenance is obviously a cost of usage.

(b) Depreciation spreads the cost (or value) of an item over its useful life, in appropriate proportion to the benefit (usefulness).

It is necessary in accordance with the matching convention – allocating expense against corresponding benefit, as part of the profit calculation.

(c) The straight-line method charges a constant percentage of the cost (or value) each year.

The diminishing balance method charges a constant percentage of the net book value (cost less accumulated depreciation brought forward).

Thus, the straight-line method has a constant charge but the diminishing balance method has a charge reducing each year of the asset life.

The two methods, therefore, make different assumptions about the usefulness, the trend or pattern of benefit, of the fixed asset concerned.

(d) Objectivity implies lack of bias. It removes the need for, and the possibility of, subjectivity, of personal opinion. For an accounting figure to be objective, it must be expected that all accountants would arrive at the same figure.

Clearly, the figure stated on an invoice has a high degree of objectivity. However, the calculation of depreciation is based on estimates of future life and future usefulness and is, therefore, highly subjective.

(e) This practice can claim the advantage of greater prudence, as the expense is always the higher of the two possibilities. However, it seems to lack consistency. Perhaps more importantly, it obviously fails to attempt to follow the matching convention. It makes no attempt to make the trend of expenses consistent with the trend of benefit or usefulness.

If the profit figure, or profit trend, is regarded as important, then it seems an unsatisfactory practice.

Question 5 – Small Machine Parts Ltd

(a)	*Year 1*	*Year 2*	*Year 3*	*Year 4*	*Year 5*
	£	£	£	£	£
Opening balance	20,000.00	17,085.57	13,733.98	9,879.65	5,447.17
Interest at 15%	3,000.00	2,562.84	2,060.10	1,481.95	817.08
	23,000.00	19,648.41	15,794.08	11,361.60	6,264.25
Depreciation	5,914.43	5,914.43	5,914.43	5,914.43	5,914.43
	17,085.57	13,733.98	9,879.65	5,447.17	349.82

The income from secondary assets is calculated at 15% of the depreciation charge less the notional interest.

	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
	£	£	£	£	£
Depreciation	5,914.43	5,914.43	5,914.43	5,914.43	5,914.43
Interest	3,000.00	2,562.84	2,060.10	1,481.95	817.08
	2,914.43	3,351.59	3,854.33	4,432.48	5,097.35
15%	437.16	502.74	578.15	664.87	764.60
		437.16	437.16	437.16	437.16
			502.74	502.74	502.74
				578.15	578.14
					664.87
		437.16	939.90	1,518.05	2,182.92

Statement of comprehensive income entries

Cash flow

	Year 1	*Year 2*	*Year 3*	*Year 4*	*Year 5*
	£	£	£	£	£
Operating CF	25,000.00	25,000.00	25,000.00	25,000.00	25,000.00
Depreciation	5,914.43	5,914.43	5,914.43	5,914.43	5,914.43
Operating profit	19,085.57	19,085.57	19,085.57	19,085.57	19,085.57
Income from					
Secondary assets		437.16	939.90	1,518.05	2,182.92
	19,085.57	19,522.73	20,025.47	20,603.62	21,268.49
Interest	3,000.00	2,562.84	2,060.10	1,481.95	817.08
Net profit	22,085.57	22,085.57	22,085.57	22,085.57	22,085.57

(b) The annuity method is recommended because it attempts to show the effect of the loss of interest suffered as a result of investing the funds in non-current assets within the organisation. It does this by charging notional interest in addition to the depreciation charge with a reduction for the estimated secondary income on the difference between the depreciation charge and the notional interest. The method suggested for charging the annual average cost is frequently met in practice but is less accurate in that it fails to take account of the opportunity cost of the interest foregone.

Question 6 – AB

(a) *IAS 36*

(i) Indicators (assuming significance in all cases)

- Market value lower than book value.
- Lower expected cash flows affecting the value in use.
- Rates of return have increased adversely affecting the recoverable amount.
- Adverse change in the environment, e.g. technological, economic or legal or in the physical state of asset, e.g. obsolescence or damage.
- Adverse change in the use to which asset is put, e.g. reorganisation programme.
- Evidence that the economic performance of the asset will be worse than expected.
- The asset has suffered considerable physical change or obsolescence or physical damage.
- Cost of construction overrun, making asset less profitable.

(ii) Recognition and measurement

IAS 36 *Impairment of Assets* says that if indicated under the above, then undertake a review to establish the extent of any impairment.

Criteria in HCA model

- An asset should not be valued at an amount greater than its cost or recoverable amount.
- The recoverable amount should be the higher of net selling price and value in use (net present value of future cash flows).

Criteria in revaluation model

- Compare the carrying value of the asset with its net selling price or value in use.
  - If the net selling price OR value in use exceeds the carrying value, no write-down is necessary.
  - If the recoverable amount is lower than the carrying value, the asset is impaired and the carrying amount of the asset should be reduced to its recoverable amount.

Recognition

- Any recognition is an impairment loss to be recognised as an expense immediately in the statement of comprehensive income.

What if it is not possible to estimate the recoverable value of an individual asset?

This can occur if the asset does not generate independent cash flows, and in such a case, the recoverable amount of the asset's **cash generating unit** should be calculated together with value in use on the same basis.

An impairment loss is only recognised where its recoverable amount is less than the carrying amounts of the items in that unit.

Allocation of impaired amount where the HCA model is being followed

Any specific impairment of assets should be dealt with initially, then allocated first to goodwill, then to intangible assets that have no active market, then to assets whose net selling price is less than their carrying value and finally to other assets on a pro rata basis.

Allocation of impaired amount where the replacement model is being followed

An impairment loss relating to a revalued asset is treated as a revaluation decrease and, therefore, charged to revaluation account. Where the impairment loss is greater than the carrying amount of the asset, a liability should only be recognised where it is required by other International Standards. After recognition of an impairment loss, the depreciation charge should be adjusted to allocate the revised carrying amount (less residual value) systematically over its remaining life. An enterprise should review the statement of financial position to assess whether a recognised impairment loss still exists or has decreased. Any reversal of an impairment loss should be recognised in the statement of comprehensive income.

(b) *AB*

(i) Impairment of machinery

Indicators are the inventory losses and the taxi business problems.

Procedure:

Compare the carrying value ($290,000) with its recoverable amount that has to be calculated. The calculation is to determine the higher of an asset's net selling price ($120,000) and its value in use. The value in use is $100,000 discounted at 10% for 3 years, that is, $248,600, approximately.

Thus, the recoverable amount would be deemed to be $248,600.

AB would, therefore, write down the asset from $290,000 (carrying value) to $248,600 (its value in use) and recognise the loss of $41,400 in the statement of comprehensive income.

(ii) Impairment of the car taxi business treated as a cash generating unit (CGI)

Impairment losses should be recognised if the recoverable amount of CGI is less than the carrying value of the items of that unit.

At 1 February 20X1

	1.1.X1	*Impairment loss*	*1.2.X1*
	$000	*$000*	*$000*
Goodwill	40	(15)	25
Intangible assets	30		30
Vehicles	120	(30)	90
Sundry net assets	40	—	40
230	(45)	185	

An impairment loss of $30,000 is recognised first for the specific asset (i.e. the stolen vehicles) and the balance ($15,000) is attributed to goodwill.

At 1 March 20X1

		1.2.X1	*Impairment*	*1.3.X1*
		$000	*$000*	*$000*
Goodwill	25	(25)		
Intangible assets		30	(5)	25
Vehicles	90		90	
Sundry net assets		40	–	40
185		(30)	155	

Note the tricky point – i.e. the net selling price of the sundry net assets has not fallen. It is, therefore, not permissible to reduce the sundry net assets.

Question 7 – Infinite Leisure Group

Impact of revaluation model on Infinite Leisure's financial statements – Sooz nightclub.

		Statement of financial position asset	*Statement of comprehensive income expense*	*Statement of financial position revaluation reserve*
		€m	*€m*	*€m*
Plant and equipment				
1 Nov 01	Cost	0.240		
	Dep. 02	0.040	0.040	
31 Oct 02		0.200		
	Dep. 03	0.040	0.040	
31 Oct 03		0.160		
1 Nov 03	Revaluation	0.120		0.120
	(€0.42m × 4/6)	0.280		
	Dep. 04 (€0.42m/6)	0.070	0.070	
31 Oct 04		0.210		0.120
	Dep. 05	0.070	0.070	
31 Oct 05		0.140		0.120
	Sale	0.100		
	Loss on sale	0.040	0.040	
	Transfer to realised reserves	—		0.120
31 Oct 06		—		—
Property				
1 Nov 01	Cost	10.000		
	Dep. 02 (€7m/50)	0.140	0.140	
31 Oct 02		9.860		
	Dep. 03	0.140	0.140	
31 Oct 03		9.720		
1 Nov 03	Revaluation	3.280		3.280
	(€4m + €9m)	13.000		
	Dep. 04 (€9m/50)	0.180	0.180	—
31 Oct 04		12.820		3.280
	Dep. 05	0.180	0.180	

31 Oct 05		12.640		3.280
	Sale	9.000		
	Loss on sale	3.640	3,640	
	Transfer to realised reserves			3.280
31 Oct 06		=		=

Note: Infinite Leisure did not become committed to a plan to sell *Sooz* until January 2006. If it had been committed prior to November 2005, IFRS 5 *non-current assets held for sale and discontinued operations* would have become active for the year ended 31 October 2005.

Question 8 – Blissopia Leisure Group

Memo

To: Directors

From:

Date:

Re: Impairment review of the Eden Hotel

Relevant standard IAS36 *Impairment of assets*

Under the standard, assets should be carried at no more than their recoverable amount. In the case of the Eden, 'assets' refers to the whole division – as a 'cash generating unit' (CGU).

The 'recoverable amount' of the hotel is the higher of its fair value less costs to sell ($3.95m) and its value in use ($3.52m), i.e. **$3.95m.**

The carrying value of the CGU is **$5,98m,** i.e. book value of assets $4.83m *plus* goodwill on acquisition $1.15m (Cost $6.90m – fair value of assets acquired $5.75m).

The Eden is, therefore, impaired by $2.03m. This amount must be written off as an expense to income and allocated to the net assets as follows:

To assets with specific impairment.

1. Goodwill.
2. Intangible assets having no active market.
3. Assets whose selling price is lower than carrying value.
4. Other assets pro rata.

Using this approach the impairment of $2.03m will be allocated to assets as follows:

In above order	*Carrying value 31.10.07*	*Impairment*	*New carrying value*
Trade receivables	0.37	0.03	0.34
Vehicles	0.09	0.03	0.06
Goodwill	1.15	1.15	–
Land and buildings[1]	3.18	0.65	2.53
Plant and equipment[1]	0.81	0.17	0.64
Cash (not impaired)	1.12	–	1.12
Trade payables (not impaired)	(0.74)	–	(0.74)
	5.98	2.03	3.95

[1] The remaining impairment $0.82m is allocated to land and buildings and plant and equipment on a pro rata basis; i.e.

Land and buildings 3.18/3.99 × 0.82 = 0.65

Plant and equipment 0.81/3.99 × 0.82 = 0.17.

Memo to cover:

1. The fall in the amount recoverable from a corporate client became known after the year-end date. Consider whether to treat as an adjusting or non-adjusting event. Appears to be an adjusting event.

2. The 30,000 loss on the vehicle has to be a charge in the Statement of income. Consider the possibility of a contingent asset if any amount is recoverable from the employee for uninsured use. If within the company's agreed use, then review all insurance policies relating to vehicles where employees are also able to use for private use.

3. The recoverable amount of 4.83 million has to be reduced by 60,000 to 4.77 million.

4. Compare the recoverable value of 4.77 million with the value in use of 3.52 million and the net realisable value of 3.95 million assuming that there is no further reduction relating to the loss on receivables and vehicles.

5. Impairment of 820,000

Question 9 – International Financial Reporting Standards

(a)

(i) Under the revaluation model of IAS 16 revaluation gains and losses are treated differently depending on whether they are originating or reversing.

An originating gain on revaluation of PPE (meaning one which is occurring for the first time, and not reversing a previously recognised loss) is recognised through "Other Comprehensive Income (OCI)" in the SPLOCI. This is then taken to a separate component of equity, usually called "Revaluation Surplus" reserve.

An originating loss on revaluation is taken to profit or loss as an expense.

A revaluation gain that is reversing a previously recognised loss is taken to profit or loss as a gain until the effect of the previously recognised loss is completely reversed. This takes into account any difference in depreciation charges arising as a result of the previous loss lowering the depreciable amount. Any gain over and above the amount recognised in profit or loss is treated as an originating gain, and taken to OCI.

A revaluation loss that is reversing a previously recognised gain is taken to OCI until the effect of the revaluation gain is reversed. This means in effect that OCI is charged with the expense until the accumulated revaluation surplus remaining in equity has been eliminated. Any further loss is treated as an originating loss and taken to profit or loss.

It should be noted that gains and losses on different assets may not be offset against each other. Any reversal must be relating to revaluations of the same asset.

(ii) Under the fair value model of IAS 40, all gains or losses on investment property are taken to profit or loss and on to Retained Earnings reserve. There is no revaluation surplus reserve where investment property is concerned. Likewise, there is no difference between originating and reversing gains and losses under IAS 40.

(iii) Under IFRS 9 financial assets may be held under the "fair value" or the "amortised cost" categories. The categorization is not optional, but depends on the type of instrument and the entity's business model for holding it. The "fair value" method is the default and applies to all financial instruments to which the "amortised cost" method does not apply.

Under IFRS 9, gains and losses on remeasurement of such assets are normally taken to profit or loss, affecting the retained earnings reserve ultimately. However there is a limited exception to this. If the financial asset in question is an equity investment, and an election has been made at the date of purchase, any gains or losses on remeasurement are taken to OCI, and on to a separate component of equity. This election is irrevocable once made, but may be applied or not as decided on the date of purchase.

(b)

(i) This property was an IAS 16 property until 1 April 2014 and an IAS 40 investment property after this date. The accounting treatment therefore changes on the date it became an investment property. Any revaluation gains or losses up to that date are accounted for under IAS 16, and any arising since are accounted for under IAS 40.

The carrying value of the property at 1 April 2014 was as follows:

Land	Building
€million	*€ million*
Cost	1.0	2.5
Depreciation to 31 March 2013 (3.5 – 1.0)/25		(0.1)
Depreciation to 31 March 2014 (same)		(0.1)
Carrying value (before revaluation)	1.0	2.3
Fair value at 1 April 2014	1.9	2.2
Revaluation gain (loss)	0.9	(0.1)

The revaluation gain would be taken to OCI and the revaluation loss to profit or loss as they were recognised in the financial year ended 31 March 2015. The depreciation relates to previous years, so its recording is not the subject of the requirement.

Journal entry 1 April 2014:	*DR €m*	*CR €m*
Dr Accumulated depreciation	0.2	
Dr Profit or loss	0.1	
Cr Buildings		0.3
Dr Land	0.9	
Cr OCI / Revaluation surplus		0.9

From 1 April 2014 the property is considered an investment property.

Journal entry 1 April 2014:	*DR €m*	*CR €m*
Dr Investment property	4.1	
Cr Land		1.9
Cr Buildings		2.2

Under IAS 40, investment property is not depreciated and is revalued to fair value at each reporting date. Any gains or losses are taken to profit or loss.

Investment property

	€million
Fair value 1 April 2014	4.1
Fair value 31 March 2015	4.8
Fair value gain	0.7

Journal entry 31 March 2015:	*DR €m*	*CR €m*
Dr Investment property	0.7	
Cr Profit or loss		0.7

(ii) Dividends received are recognised as income regardless of the treatment of the financial assets.

Journal entry to record dividends received:	*DR €m*	*CR €m*
Dr Cash	0.75	
Cr Profit or loss		0.75
Journal entry to record purchase of investments:	*DR €m*	*CR €m*
Dr Financial assets	1.6	
Cr Cash		1.6

Remeasurements are treated in accordance with the policy of the entity. We must assume that the irrevocable election required by IFRS 9 was made as this is the policy of Williamson Ltd.

Journal entry to record remeasurement and disposal:	*DR €m*	*CR €m*
Dr Financial assets (1.1 – 0.9)	0.2	
Cr Other comprehensive income		0.2

CHAPTER 18

Leasing

Question 1 – Grabbit plc

(a) The present value (PV) of the minimum future lease payments (£92,500 at the end of years one to six) is £350,000 (the cost of asset)

Statement of financial position

Assets	**£**
Cost of leased asset	350,000
Depreciation for the year (350,000/6)	58,333
	291,667
Liabilities	
PV of future lease payments	
80,435 + 69,943 + 60,820 + 52,887 + 45,989 = 310,074, say	310,000

Statement of comprehensive income

Interest on leasing obligation	
(£350,000 × 15%)	52,500
Depreciation on leased asset	58,333
Liability at year-end	110,833

(NB	350,000	Cost
	52,500	Interest
	402,500	
	(92,500)	Payment
	310,000	Balance c/f)

(b) The obligations under a long-term lease are, in substance, not different from those under a loan, but prior to the introduction of the leasing standard, they did not appear on the statement of financial position. This made the statement of financial position unreliable as one could not be confident that there were no undisclosed liabilities such as leases. Further, a business had essentially the control of an asset for a substantial period that had most, if not all, of the benefits and risks associated with ownership. It was considered a deficiency that these asset rights were not reflected in the statement of financial position, even if they were different in nature to outright ownership. Therefore, the leasing standard attempts to capture the assets and liabilities which occurred when longer-term ownership such as contracts were entered into.

(c) IFRS 16 allows lessees to leave leased assets and liabilities 'off balance sheet' if the lessee makes and appropriate election provided the leases are 'short term'. A short-term lease is one where the maximum term is 12 months or less. IFRS 16 specifically states that a lease with an extension option cannot be 'short term'. Therefore, the lessor is in error making this suggestion.

Question 2 – IFRS 16

(a) *Requirement*

The 'title' to the goods acquired on a hire purchase (HP) agreement or lease finance remains legally vested in the lessor.

Yet in commercial substance, at the point of getting custody of the asset the lessee acquires substantially all the risks and rewards of owning the asset.

Hence, accountants have preferred to overlook the legal form and focus more on the commercial substance. For example, they have accounted for assets acquired on HP terms or on finance lease terms as if the title passes to the lessee at the date of transfer of the custody of the asset.

IRFR16, while endorsing the accounting practice, changes the conceptual basis for this accounting practice. It emphasises that what the lessee capitalises, at the point of acquiring custody of the leased assets, is not the asset itself (which admittedly he does not own yet), but his own right to use that asset.

The amount at which he capitalises this right is the lower of the fair value of the asset and the present value of the minimum lease payments he commits himself to.

(b) *In accordance with IFRS 16*

A finance lease is a lease that substantially transfers all the risks and rewards of owning an asset to the lessee.

All other leases are operating leases.

The standard sets out a presumption that a lease substantially transfers all the risks and rewards of ownership to the lessee IF 'at the inception of a lease, the risks and rewards of ownership are transferred to the lessee' and if 'at the inception of a lease, the present value of the minimum lease payments, including any initial payment, amounts substantially to all of the fair value of the leased asset'.

Other criteria such as transference of legal title and the right to use the asset for all its life are also considered.

These criteria continue to be relevant in determining accounting by the lessor. However, by requiring lessees to capitalise all leasing obligations (other than on short-term and 'low-value' leases, by election) the distinction is now largely irrelevant for lessees.

(c) *Smarty plc*

Part (1)

Given that Smarty is unlikely to exercise the extension option at the inception of the lease the lease term would be five years (or ten half-years).The 'right of use asset' would be computed as the present value of 10 six-monthly payments of £50,000 at a discount rate of 4% per half-year. Using discount tables this would be £50,000 X 8.111 = £405,550. The asset will be depreciated over the shorter of its useful economic life and the lease term – five years in this case. Given the date of inception of the lease – 1 October 20X7 – the depreciation charges for the years ended 31 March 20X8 and 20X9 would be:

20X8 – £405,550 × 1/5 × 6/12 = **£40,555**
20X9 – £405,550 × 1/5 **= £81,110**

Therefore, the carrying value at 31 March 20X8 would be **£364,995** (£405,550 − £40,555) and at 31 March 20X9 **£283,885** (£364,995 − £81,110)

Parts (2) and (3)

The finance cost for the years ended 31 March 20X8 and 20X9 and the lease liability at 31 March 20X8 and 20X9 are both best computed in a table. In order to split the liability into its current and non-current components, we will need to continue the table to 31 March 20Y0. The initial lease liability will be the same as the initial right of use asset

Period ended	*Bal b/fwd*	*Finance cost (4%)*	*Rentals*	*Bal c/fwd*
	£	£	£	£
31 March 20X8	405,550	16,222	(50,000)	371,772
30 September 20X8	371,772	14,871	(50,000)	336,643
31 March 20X9	336,643	13,465	(50,000)	300,108
30 September 20X9	300,108	12,004	(50,000)	262,112
31 March 20Y0	262,112	10,484	(50,000)	222,596

This table tells us that the finance costs are as follows:

- Year ended 31 March 20X8 - £16,222.
- Year ended 31 March 20X9 – £28,336 (£14,871 + £13,465).

The liabilities at the end of each year are shown in the following table (inserting the current liability in as the balancing figure in each case).

Year ended 31 March	*20X9*	*20X8*
	£	£
Non-current liability (from table)	222,596	300,108
Current liability (balancing figure)	77,512	71,664
Total liability (from table)	300,108	371,772

Question 3 – Smarty (continued)

(a) At the date of reassessment the carrying amounts of the right of use asset and the lease liability are as follows:

- Leased asset - £405,550 – 3.5/5 X £405,550 (the right of use asset will have been depreciated for 3½ years from 1 October 20X7 to 31 March 20Y1) = **£121,665.**
- The lease liability can be computed from the table below (extending the table on from the one in question 2)

Period ended	*Bal b/f*	*Finance cost (4%)*	*Rentals*	*Bal c/f*
	£	£	£	£
30 September 20Y0	222,596	8,904	(50,000)	181,500
31 March 20Y1	181,500	7,260	(50,000)	138,760

Reassessment of the lease term will mean that we are now expecting to make the following payments:

- three payments of £50,000 per half-year in arrears; then
- four payments of £25,000 per half-year in arrears.

From discount tables the present value of these payments (at a **half-yearly** discount rate of **3%)** is:

£50,000 × 2.829 + £25,000 × 3.717 × 0.915 = £226,476. The lease liability will be re-measured to this figure, resulting in an increase of £87,716 (£226,476 − £138,760).

The right of use asset will be re-measured by the same amount to £209,381 (£121,665 + £87,716). However due to the change in the lease term the estimated remaining useful economic life of the right of use asset will be extended by two years to a further 3½ years. This means that depreciation for the year ended 31 March 20Y2 will be £59,823 (£ 209,381 X 1/3½) and the closing carrying amount of the right of use asset will be £149,558 (£209,381 - £59,823).

The finance cost for the year and liability at 31 March 20Y2 will be measured using a table as before, extended to 31 March 20Y3 to identify the current/non-current split for the liability.

Period ended	*Bal b/f*	*Finance cost (3%)*	*Rentals*	*Bal c/f*
	£	£	£	£
30 September 20Y1	226,476	6,794	(50,000)	183,270
31 March 20Y2	183,270	5,498	(50,000)	138,768
30 September 20Y2	138,768	4,163	(50,000)	92,931
31 March 20Y3	92,931	2,788	(25,000)	70,719

This means that the finance cost for the year ended 31 March 20Y2 is £12,292 (£6,794 + £5,498) and the closing liability is £138,768. £70,719 of this liability is non-current with the balance of £68,049 (£138,768 − £70,719) being current.

(b) Hirer would regard the lease as an operating lease and would recognise lease income on a straight-line basis over the lease term, which would originally be assessed as five years from 1 October 20X7 with annual rentals of £100,000 (£2 × £50,000). Hirer would recognise £100,000 as income for the years ended 30 September 20X8 to 30 September 20Y0 inclusive.

For the first six months of the year ended 30 September 20Y1, Hirer would recognise lease income of £50,000 since this period is before the date of modification of the term. From 1 April 20Y1, Hirer would regard the lease as a new lease with a term of 3½ years and total rentals of £250,000 (£50,000 × 3 + £25,000 × 4). Lease income would be recognised on a straight-line basis from 1 April 20X1 so in the six-month period ended 30 September 20X1 the lease income would be £35,714 (£250,000 × ½ / 3½). The total lease income for the year ended 30 September 20X1 would, therefore, be (£50,000 + £35,714). Since the total rentals received from Smarty in that year would have been £100,000 (2 × £50,000) there will be deferred income of £14,286 (£100,000 − £85,714) shown as a current liability.

For the remainder of the lease term, the pattern of recognition of income, and the related deferred income, can be shown in the following table.

Year ended 30 September	*Deferred income b/f*	*Rent received from Smarty*	*Rental income in P/L*	*Deferred income c/f*
	£	£	£	£
20X2	14,286	100,000	(71,429)	42,857
20X3	42,857	50,000	(71,429)	21,428
20X4	21,428	50,000	(71,428)	Nil

Question 4 – Bertie

Part (a)

The rate of interest implicit in the lease is the discount rate that, when applied to the lease payments (5 amounts of £57,000 in arrears) plus the estimated residual value of the leased asset at the end of the lease (not part of the lease payments as not guaranteed by Carter (£2,000) makes their present value equal to the fair value of the asset at the inception of the lease (£200,000) plus any initial direct costs to the lessor of arranging the lease (£1,500).

By trial and error, if we try 8% then the present value of the future rentals plus residual value is (£50,000 × 3.993 + £2,000 × 0.681) = £201,012. This is close to £201,500 (£200,000 + £1,500) but the actual rate is slightly lower than this.

If we try 7% then we get £205,143 (£50,000 × 4.1 + £2,000 × 0.713).

The difference between the two present values is £4,131. (£205,143 − £201,012). At a 7% level the difference between the computed present value and the desired present value is £3,643 (£205,143 − £201,500). £3,643/£4,131 is approximately 0.88 and the rate of interest implicit in the lease is approximately 7.9%.

Part (b)

On 1 January 20X1, Bertie recognises a financial asset – *net investment in finance leases* – as the present value of the minimum lease payments (five amounts of £50,000) plus the unguaranteed residual value (£2,000). Discounting these amounts using 7.9% gives approximately £201,500.

The income from finance leases for the year ended 31 December 20X1 and 20X2 (20X2 required to split the net investment into its current and non-current portions) would be as follows:

Year ended 31 December	*Net investment b/fwd*	*Lease income (7.9%)*	*Rental received*	*Net investment b/fwd*
	£	£	£	£
20X1	201,500	15,919	(50,000)	167,419
20X2	167,419	13,226	(50,000)	130,645

Therefore, the net investment in finance leases at 31 December 20X1 would be £167,419. £130,645 would be included in non-current assets and £36,774 (£167,419 − £130,645) in current assets.

Question 5 – Delta

Asset 1

Because this qualifies as a sale the asset would be de-recognised by Delta. Delta would recognise a lease liability equal to the present value of the minimum lease payments. This liability would be £259,740 (£60,000 × 4.329).

Delta would also recognise a 'right of use asset of £187,013 (£259,740 × £360,000/£500,000).

Overall, therefore, Delta would make the following journal entry at the start of the lease.

Debit: Cash £500,000.

Debit: Right of use asset £187,013.

Credit: Property, plant and equipment £360,000.

Credit: Lease liability £259,740.

Credit: Gain on rights transferred £67,273 – this amount is recognised in profit or loss.

The right of use asset will be depreciated over the five-year lease term so the charge for the year ended 31 March 20X2 will be £37,403 (£187,013 × 1/5). The closing balance of the right to use asset will be (£187,013 − £37,403).

The finance charge in respect of the leased asset for the year will be £12,987 (£259,740 × 5%) and the closing lease liability will be £212,727 (£259,740 + £12,987 - £60,000). Next year's

payment of £60,000 will first be applied to next year's finance cost of £10,636 (£212,727 × 5%) with the balance of £49,364 (£60,000 − £10,636) being applied to reduce the lease liability. Therefore, at 31 March 20X2, there will be a current lease liability of £49,364 and a non-current liability of £163,363 (£212,727 − £49,364).

Asset 2

This does not qualify as a 'sale', so Delta does not de-recognise the asset. Delta continues to depreciate the asset and in the year ended 31 March 20X2 Delta will charge depreciation of £54,000 (£540,000 × 1/10). The closing balance in property, plant and equipment will be £486,000 (£540,000 − £54,000).

The 'sales proceeds' will be regarded as a financial liability and the finance cost for the year ended 31 March 20X2 will be £30,000 (£600,000 × 5%). The closing financial liability will be £552,300 (£600,000 + £30,000 − £77,700). Next year's payment of £77,700 will first be applied to next year's finance cost of £27,615 (£552,300 × 5%) with the balance of £50,085 (£77,700 − £27,615) being applied to reduce the lease liability. Therefore, at 31 March 20X2, there will be a current lease liability of £50,085 and a non-current liability of £502,215 (£552,300 − £50,085).

Question 6 Charlie (C)

The cars

There are ten identified cars. The cars are explicitly specified in the contract.

Once delivered to C, the cars can be substituted only when they need to be serviced or repaired.

C has the right to use the ten rail cars for five years.

The contract contains leases of rail cars.

The engines

The engine used to transport the rail cars is not an identified asset because it is neither explicitly specified nor implicitly specified in the contract. They are not treated as leased within the contract.

CHAPTER 19

Intangible assets

Question 1 – IAS 38 Intangible assets

(a) *Requirement*

Under the provisions of IAS 38, expenditure on an intangible item can be recognised as an intangible asset if and only if, the expenditure creates an asset which:

- satisfies the definition of an intangible asset in IAS 38;
- has a cost that can be reliably measured.

An intangible asset is an identifiable non-monetary asset without physical substance. An asset is identifiable where:

- it is separable, i.e. capable of being sold without disposing of the business as a whole; or
- it arises from contractual or other legal rights, regardless of whether those rights are transferable or separable.

Inherent in the definition of an asset is the ability to obtain access to the future economic benefits flowing from the underlying resource, and to restrict the access of others to those benefits. Before an intangible item can be recognised it is necessary to demonstrate that this ability is present.

The cost of an intangible item is the cash paid to acquire the item or the fair value of any other consideration given to acquire the item. In practice, the measurement of cost depends on the method of acquisition of the item (see part (b) below).

(b) *Requirement*

Separately purchased intangible assets

The fact that an intangible asset is separately purchased usually means that the probability of economic benefits can be established due to the existence of a purchase price. The existence of a purchase price also means that 'cost' can be established, and thus, separately purchased intangible assets are recognised at cost. An example of a separately purchased asset that might be recognised is a production licence.

Intangible assets acquired as part of a business combination

The cost of the intangible asset is effectively part of the cost of the business combination. Therefore, provided the intangible asset meets the identifiability and control criteria discussed in

(a), it can be recognised separately at fair value. An example of an intangible asset of this type would be a portfolio of customers that might prove useful to competitors.

Internally developed intangible assets

IAS 38 states that internal expenditure on intangible items rarely creates an asset that satisfies the recognition criteria. Only expenditure on a development project potentially qualifies for recognition. Before such expenditure qualifies for recognition it must pass a series of stringent tests regarding the technical and commercial feasibility of the project and the economic benefits it is likely to generate. An example of an intangible asset of this type would be expenditure on a project to improve the efficiency of a production process (the economic benefits in this case being the cost savings the efficiency improvements will generate).

(c) *Requirement*

Recognised intangible assets are normally carried at cost less accumulated amortisation less any accumulated impairment losses. It is rarely possible to revalue intangible assets. This is only possible where an active market exists for the intangible asset which is not often the case.

It is necessary to assess the expected useful economic life of an intangible asset, and if this is finite, to amortise the asset over its expected life. If the expected useful economic life is indefinite no amortisation is required, but the asset must be reviewed annually for impairment.

(d) *Requirement*

Because the directors of Kappa have taken legal steps to restrict the use of the brand name, it is an identifiable intangible item as it arises from legal rights. It satisfies the definition of an asset since Kappa can control the future economic benefits derivable from the asset and these benefits are clearly evident. It has a measurable 'cost' to Iota as its fair value at the date of acquisition of Kappa by Iota can be measured. It is correct not to recognise the asset in the individual statement of financial position of Kappa since internally generated brand names do not satisfy the strict criteria for recognition of internally developed intangible assets. However, it is appropriate for Iota to recognise the asset in the consolidated statement of financial position as it arose for Iota out of a business combination. Iota will recognise the asset at its fair value of $20 million and will not amortise it since its expected useful economic life is indefinite. However, Iota will need to review the asset for impairment at 30 September 20X6.

Because the project is technically feasible, commercially viable, and the potential future economic benefits are reasonably evident, the recognition criteria for an internal development project are satisfied from 1 April 20X6. Only expenditure incurred since this date can be recognised, and so the intangible asset will be $3 million (6 × $500,000). Amortisation will commence from 31 March 20X7 – the date the project is complete. Therefore, no amortisation is charged in the current period.

Question 2 – Environmental Engineering plc

(i) *Referring to IAS 38 criteria in (ii) below, only (c) might qualify for deferral as development expenditure.*

(a) is applied research;

(b) is development cost (£1.2m) that has not yet been incorporated into a specific, separate viable project. However, the line between categories is often indistinct in practice, e.g. between development and production costs.

When looked at in general, all three relate to a specific project for which, it appears that expenditure can be separately allocated. However, the outcome is not reasonably certain as to either technical feasibility or commercial viability. We have no idea or projections of sales volume or price/revenue in total and whether it will exceed costs. It is assumed that a plc would have the necessary resources to complete the project, but there is no evidence of this.

Item (c) would not stand out from (a) and (b) and it is recommended that all be written off as expenses. It could be capitalised later when evidence is produced to the criteria for proceeds.

(ii) *IAS 38 criteria (para 45):*

(a) Technical feasibility.

(b) Intention to complete and use or sell.

(c) Ability to use or sell.

(d) Asset will generate possible future income – demonstrate existence of a market.

(e) Availability of technical, financial and other resources to complete the development or to use or sell.

(iii) *Requirement*

- Amortisation should begin with the commencement of production.
- Any write-off should be over the period in which the product is expected to be sold.
    - this implies that the amortisation costs can be included in stocks being produced for sale.
- Deferred development expenditure should be reviewed at the end of each accounting period
    - to the extent that it is not considered recoverable, it should be written off.

Question 3 – Italin NV

(a) IAS 38: Pure and applied research, always written off in period incurred; development expenditure may be carried forward in certain circumstances.

Income statement for the year ended 30 September (extract)

	20X1	*20X2*	*20X3*	*20X4*	*20X5*	*20X6*	*20X7*
Research expenditure	200						
Development cost	–	50	50	50	50	50	50
Depreciation	300	300	300	300	300	300	300

Statement of financial position as at 30 September (extract)

	20X1	*20X2*	*20X3*	*20X4*	*20X5*	*20X6*	*20X7*
Intangible non-current assets	300	250	200	150	100	50	400
Tangible non-current assets	2,200	1,900	1,600	1,300	1,000	700	400

Projects must be reviewed each year.

Treatment of non-current assets used in R&D as for any assets.

(b) Factors to consider:

(a) Technical feasibility.

(b) Intention to complete and use or sell.

(c) Ability to use or sell.

(d) Asset will generate possible future income – demonstrate existence of a market.

Availability of technical, financial and other resources to complete the development or to use or sell.

Disclosure

- Accounting policy.
- Consistency and application of IAS 38
  - amounts written off in the period;
  - pure and applied research is written off;
  - development expenditure is capitalised and written off over six years.
- Movement on development costs capitalised.
- Non-current tangible assets used are depreciated in the normal way over their useful life of seven years.

Question 4 – Oxlag plc

(a) *Research and development costs account*

	£000			*£000*
Capital costs b/f at		Capitalised costs c/f		
start of year (project C)	200	Project C		500
Costs incurred in the year:				
Project A	25	Costs written off to		
Project C	265	Income Statement		
Project D	78	Project A	35	
		Project D	98	133
Depreciation:				
Laboratory:				
Project C	20			
Equipment:				
Project A	10			
Project C	15			
Project D	20			
	633			633
Capitalised costs b/f Project C	500			

(consists of 200 b/f + 265 costs incurred + 20 laboratory depreciation and 15 equipment depreciation).

Non-current assets: specialised laboratory account

	£000		*£000*
Cost b/f at start of the year	500	Depreciation b/f at start of the year	25
Depreciation c/f at end of the year	45	Depreciation charge for the year	20
		Cost c/f at end of the year	500
	545		545
Cost b/f at start of year	500	Depreciation b/f at start of the year	45

Non-current assets: specialised equipment cost

	£000		£000
Cost b/f at start of the year:		Depreciation b/f at start of the year	
Project C	75	Project C	15
Project D	50	Project D	10
Additions:		Depreciation provided in the year:	
Project A	50	Project A	10
Project D	50	Project C	15
		Project D	20
Depreciation c/f at end of the year	70	Cost c/f at end of the year	225
	295		295
Cost b/f at start of the year	225	Depreciation b/f at start of the year	70

Market research Costs account

	£000		£000
Costs b/f at start of the year	250	Costs c/f at end of the year	325
Costs in the year	75		
	325		325
Costs b/f at start of the year	325		

Assumption is that this is a contract that will continue in future years.

(b) *Amount to be charged as research costs charged in the statement of comprehensive income for the year ended 31 January 20X2*

Per T a/c	Project A:	Costs	25	
		Dep'n	10	35
	Project C	Dep'n		15
	Project D:	Costs	78	
		Dep'n	20	98
				148

(c) *Basis of amortisation:*

- Any reasonably systematic basis of amortisation per IAS 38.
- Amount spent and written off reconciled with opening and closing balances in the balance sheets.
- Most likely basis here will be expected sales of the new drug with amortisation being calculated as the proportion of total sales during each year.

Disclosure

- Accounting policy stating basis of capitalisation and basis of write-off.

(d) *Statement of financial position amounts*

Non-current assets	**£000**
Intangible assets:	
Deferred development expenditure (recovery assured by projected future sales)	500
Tangible assets:	
Land and buildings: specialised laboratory	455
Plant and machinery: specialised laboratory equipment	155
Current assets	
Inventories:	
Long-term work-in-progress	325

(e) *Disclosures about new improved drug sales*

Identify as non-adjusting post balance sheet event that requires disclosure if material is in accordance with IAS 10, having arisen between the end of year 31 January 20X2 and the date of signing the accounts on 14.7.20X2.

This does appear to be material, therefore, the accounts will need to disclose:

- date of new drug going on sale;
- success of new drug;
- expectation that the sales of the new drug will significantly increase following year's profits.

Question 5 – Discussion of case Ross Neale

What are the disadvantages of adopting the strategies outlined? Outside parties like shareholders and government officials are misled which is ethically wrong. Other consequences include: the tax return will be wrong because the disclosure of the truth would alert the auditors to the fact that the accounts included fictions. Alternatively, if the tax return is adjusted, and the auditors become aware of the fudging and they go along with it, then they essentially become a party to dishonesty. Further enquiry is whether top management has to be informed, and are they also a party to the fraud? How are the entries recorded in the books of the subcontractors, and what moral obligations do the accountants in those firms have to inform their auditors or the auditors of Critical Pharmaceutical plc. Further, if the companies have the same auditors, what responsibility does one team have to advise the other team of the manipulations?

What is the longer term impact on morality if such juggling becomes the norm? Is it the start of a downward spiral in the moral compass of the company?

Question 6 – The brands debate

Many of the arguments for including brands in the statement of financial position are given in Section 19.12. Including brands in the statement of financial position increases shareholders' funds, and thus reduces gearing. A reduction in gearing reduces investors' and banks' perception of the risk of the company, and it is likely to increase the company's ability to borrow funds. Also, including brands in the statement of financial position shows investors and management the value of the company's brands, thus providing more information to those users of accounts, and enabling them to make more rational decisions.

A brand that has been purchased by a company can be included in the statement of financial position. Under IAS 38 *Intangible Assets,* the brand is included at cost and amortised over its useful life. The 'allowed alternative treatment' enables the brand to be revalued and reductions in the brand's valuation below its original cost are charged to the income statement.

IAS 38 says that internally generated goodwill should not be recognised as an asset (para. 36). However, the cost of developing a brand could be taken as development expenditure, and this cost could be subsequently capitalised in the statement of financial position and amortised in the income statement. So, it is possible to capitalise internally generated brands. However, the cost of developing a successful brand is likely to be considerably less than its market value (if the brand was purchased, it would be shown in the statement of financial position at its market value).

So, the treatment of purchased and internally generated brands is different, and in most situations internally generated brands will not be included in the statement of financial position (whereas purchased brands would be included).

It would be possible to include an internally generated brand in the statement of financial position at its current market value, provided it was initially included as development expenditure and the 'allowed alternative treatment' (of IAS 38) of including the brand at its fair value was included for the statement of financial position valuation. However, IAS 38 does require the fair value to be determined by reference to an active market.

On the subject of separability of brands, when a business is acquired, it is likely to be difficult to distinguish between brands and other goodwill. The total amount of goodwill, being the difference between the purchase consideration and the fair value of assets acquired, can be determined. However, dividing this total goodwill between brands and other goodwill will be difficult, and is likely to be subjective. Also, in acquiring a company, a number of brand names may be acquired, and it is likely to be very difficult (and subjective) to say how much each of the brands is worth.

The different accounting treatments for purchased and home-grown brands have been discussed above. In most situations, purchased brands will be included as an asset in the statement of financial position, whereas home-grown brands will not. As both purchased and home-grown brands have value, this different accounting treatment is not consistent. However, this different accounting treatment arises because accountants are prepared to include an item in assets when its purchase price is known (as with purchased brands) but are reluctant to include it as an asset when it has been internally generated (and its market value is not certain). For investors, ideally they would like the value of both purchased and home-grown brands to be included in the statement of financial position, but this creates the risk that directors may artificially inflate the value of home-grown brands and thus mislead investors.

As with land and buildings, some companies argue that brands have an infinite life. Current expenditure on advertising and marketing the product (e.g. a Mars Bar) maintain the value of the brand, so no amortisation of the brand's value is justified. IAS 38 says that intangible assets should be amortised over their life, which should not normally exceed 20 years. One can see that some brands have a life that is significantly less than 20 years. For instance, a 1 GHz microprocessor has a life of, at most, only a few years as it is superseded by faster processors. Although the brand of 'Intel' may have a relatively long life, the company must continue to develop its products (i.e. make the microprocessors faster) in order to keep its brand alive.

However, other brands, like the Mars Bar, have a life of significantly more than 20 years – the Mars Bar existed more than 70 years ago. For most brand names, a life of 20 years is a realistic maximum (many brands have a life of less than 20 years), but some brands may have a significantly longer life. However, although a brand may have had a life of more than 20 years, there is no certainty that it will continue to exist for another 20 years. Many computer companies which were successful 20 years ago no longer exist (e.g. Commodore, Sinclair). How many of today's well-known brands will exist in 10 or 20 years' time?

All buildings eventually fall down or are demolished, and all brands will eventually die. So, we would argue that the cost of brands should be amortised in the income statement. It is wrong not to do so, as eventually they will be worthless.

There is a further argument that even if the brand continues to be reported in the statement of financial position at the existing value, the reality is that expenditure has been currently incurred, which effectively replaces the original brand value. This means that there has been a substitution of a new brand for the old rather than maintenance of the old brand.

Question 7 – Brands plc

(i) The milk quota is traded in an active market and it would, therefore, be included in the consolidated statement of financial position at its fair value of £600,000.

(ii) The licence was acquired without any fee being required and it, therefore, had a nil cost to Countrywide. However, in the consolidation, it is necessary to consider whether there is a fair value that can be attached to it. In the circumstances given, that is difficult. This is because there is no active market in that this is the first licence to have been granted and the estimated cash flows may not be sufficiently reliable to establish an amount as the licence has only recently been granted and there is no experience to support the estimates. In the circumstances, no value could be attached to the licence in the consolidated statement of financial position.

(iii) In considering the 'Naughty but Nice' yoghurt trade, there is the advantage that there has been a sale of a similar trade name that indicates the existence of a reliable value. If this sale is accepted as evidence, then it might be that the trade name could be reported in the consolidated statement of financial position at £2m. However, justification would be required to support the increase above the current sale price comparator of £1.5m.

Question 8 – Case James Bright discussion points

The first problem is to what extent the accountants of the company would go along with the directives. Their responsibility to shareholders is to present a true and fair view and to the extent that they exaggerate the poor performance they are being unfair to sellers of shares and advantage buyers, also they are being unfair to the previous managing director whose future employment might depend on the reported results.

To the extent that the previous management presented earlier results which were viewed through rose-coloured glasses some of the additional expenses may be justified. But there is the question of the how did the previously biased results pass the accountants and auditors in the first place?

Auditors should be aware of the type of tactics new managing directors often take and should be doing everything in their power to identify and prevent over statement of expenses.

Question 9 – Cowgale company

(a)

Cowgale - Statement of Financial Position as at 31 October 2011

ASSETS	**£000**	
Non-current Assets		
Property, plant and equipment	2 461	*W 5.5*
Goodwill	350	*1*
Other intangible assets	350	*1*
Investments	1 400	*1*
	4 561	
Current assets		
Inventories	520	*0.5*
Trade receivables	1 260	*1*
Other receivables	280	*1*
Cash and cash equivalents	290	*0.5*
Total current assets	2 350	
Total assets	6 911	
EQUITY AND LIABILITIES		
Share capital	1 250	*1*
Share premium account	390	*1*
Revaluation reserve	150	*1.5*
Retained earnings	2 410	
Total equity	4 200	
Non-current liabilities		
Long-term liabilities	500	*1*
Deferred tax	375	*1*

Total non-current liabilities	875	
Current liabilities		
Trade and other payables	680	*0.5*
Current taxation	600	*0.5*
Bank loans and overdrafts	470	*1*
Short-term provisions	86	*1*
Total current liabilities	1 836	
Total liabilities	2 711	
Total equity and liabilities	6 911	***20***

Workings

Goodwill:	£000		
at cost	480		
impairment	130		
fair value	350		
Development expenditure:	470		
per trial balance	120		
written off	350		
Property, plant and equipment Land:			
per trial balance	800		
Disposed of	(100)		
	700		
Buildings:	Valuation	Deprec.	Net
per trial balance	2 200	400	
Disposals	(360)	(70)	
Depreciation	1 840	330	1 510
		92	
	1 840	422	1 418
Equipment, at cost per trial balance Disposals	Cost	Dep'n.	Net
	1 410	780	
	290	150	
Depreciation	1 120	630	490
		147	
	1 120	777	343
Land	700		*1.5*
Buildings Equipment	1 418		*3*
Total property, plant and equipment	343		*2*
	2 461		
Investment properties per trial balance value at end of year		1 330	
		1 400	
urplus to income statement		70	

Allowance for receivables			
Existing allowance		40	
New allowance		–	
Decrease in allowance		(40)	
Receivables			
per trial balance		1 580	
Specific receivables written off		(320)	
Allowance for receivables		–	
		1 260	
Deferred taxation			
Balance b/f		240	
Tax on taxable temporary differences		135	
Balance c/f		375	

(b)

		£000	
Draft profit		3 820	
Surplus/Loss on disposal of non current assets		0	*1*
(90 loss and 90 transfer from revaluation reserve)			
Depreciation		(239)	*0.5*
Bad debts		(320)	*0.5*
Reduction in allowance for doubtful debts		40	*0.5*
Development expenditure written off		(120)	*0.5*
Impairment of goodwill		(130)	*1*
Provision made		(86)	*1*
Surplus on investment property		70	*1*
		3 035	
Previous over provision for tax	110		*1*
Tax for the year	(600)		*0.5*
Transfer to deferred taxation	(135)		*1*
		(625)	
Profit after tax		2 410	
Dividends paid		(240)	*1*
Increase in retained earnings		2 170	
Opening retained earnings		240	*0.5*
Closing retained earnings		2 410	***Total 10***

Total 20 + 10 = 30

CHAPTER 20

Inventories

Question 1 – Sunhats Ltd

The principle usually followed is to include only those expenses that relate to the bringing of the product to its present condition and location in the inventory valuation. In practice, this often entails:

- Including factory (or production) expenses.
- Excluding selling, finance and administration expenses.

Sunhats Ltd factory expenses to be included in inventory valuation:

- Wages of storemen and foremen.
- Salary of production manager
- Rent and rates, repairs and depreciation; proportion relating to factory and stores would be included, for example, electric power.

Expenses to be excluded from inventory valuation:

- Salaries of sales manager, sales people, advertising and carriage outwards. These expenses are excluded as they relate to selling and distributing the goods, and not to producing them.
- Bad debts and bank interest*: these finance charges are excluded as they relate to the business as a whole and not merely to production.
- Salaries of personnel officer*, buyer*, accountant* and company secretary* and directors' fees*: these administration expenses are excluded, as they relate similar to the business as a whole.
- Development expenditure: this is excluded as it is clearly not relevant to the cost of existing inventory.

*The items marked with an asterisk are marginal. It can be argued that part of these expenses relate to production and should, therefore, be regarded as factory overheads.

It is important to ensure that the overhead expenses included in the inventory valuation are:

- Appropriate in the circumstances of the business.
- Included on a consistent basis from year-to-year.

Question 2 – Inventory valuation methods

(a)

	Receipts			*Issues*			*Balance*		
Date	*Quantity*	*Rate*	*£*	*Quantity*	*Rate*	*£*	*Quantity*	*Rate*	*£*
FIFO									
1/7	100	10	1,000				100	10	1,000
10/7				80	10	800	20	10	200
12/7	100	9.8	980				100	9.8	980
14/7				20	10	200	20	9.8	196
				80	9.8	784			
15/7	50	9.6	480				50	9.6	480
20/7	100	9.4	940				100	9.4	940
30/7				20	9.8	196	80	9.4	752
				50	9.6	480			
				20	9.4	188			
				Cost of goods sold		2,648			
LIFO									
1/7	100	10	1,000				100	10	1,000
10/7				80	10	800	20	10	200
12/7	100	9.8	980				100	9.8	980
14/7				100	9.8	980	20	10	200
15/7	50	9.6	480				50	9.8	480
20/7	100	9.4	940				100	9.4	940
30/7				90	9.4	846	20	10	200
							50	9.6	480
							10	9.4	94
				Cost of goods sold		2,626			
Weighted average									
1/7	100	10	1,000				100	10	1,000
10/7				80	10	800	20	10	200
12/7	100	9.8	980				100	9.8	980
14/7				100	9.83	983	120	9.83	1,180
							20	9.83	196.7
15/7	50	9.6	480				50	9.6	480
20/7	100	9.4	940				100	9.4	940
30/7				90	9.5	855	170	9.5	1,615
							80	9.5	760
				Cost of goods sold		2,638			

(b) *Advantages and disadvantages*

FIFO

- The movement of some inventory follows this pattern in reality, for example, perishables.
- However, the charge to cost of sales will still represent out-of-date prices.
- This means that a distribution policy based on profits calculated using this method will reduce the operating capital base.
- The balance sheet value will value inventory at approaching current values.

LIFO

- The movement of inventory does not follow this pattern, and detailed records will be required to track costs.
- The charge-to-cost of sales will represent prices prevalent at date of sale.
- This means that a distribution policy based on profits calculated using this method will tend to maintain the operating capital base.
- However, the balance sheet value will value inventory at out-of-date values.

Average cost

- This is a common compromise between the two methods.
- The advantage is that the average represents a compromise between the FIFO and LIFO methods.
- However, there is a disadvantage that the average cost has to be recalculated after each purchase.

(c) *Effect of a physical shortage of inventory*

FIFO

Closing inventory	
75 @ 9.4	705
Cost of sales increased by	
5 @ 9.4	47

LIFO

Closing inventory	
15 @ 10.0	150
50 @ 9.6	480
10 @ 9.4	94
	724
Cost of sales increased by	
5 @ 10	50

Weighted average

Closing inventory	
75 @ 9.5	712.5
Cost of sales increased by	
5 @ 9.5	47.5

Question 3 – Alpha Ltd

Principles

The basis on which the inventories are valued in this solution is the one that is most commonly used by companies; i.e. the lower of the cost and net realisable value. The term 'cost' includes those overheads that have been incurred in bringing the inventories to their existing condition, namely, manufacturing overheads. Selling and distribution expenses have been excluded from cost as it is assumed that these are not incurred until the units are sold.

Valuation details

Raw materials: 100 tons × cost £140 per ton = £14,000

The net realisable value is assumed to be greater than this amount as the finished units (which incorporate the steel) sell at a profit, as follows:

	£
Selling price	500
Less: selling and distribution expenses	60
Net realisable value	440
Manufacturing costs (see workings below)	350
Profit per unit	90

The current *replacement* price has not been taken, as it is not within the basis of the valuation stated above. However, as the replacement price has fallen, this is a suitable time to consider whether the client should be advised to amend the basis of inventory valuation to 'the lower of cost, replacement price and net realisable value', which is more conservative. On this basis, the inventory would be valued at £130 per ton.

Finished units: 100 × cost £350 = £35,000

The cost comprises the following:

	Per unit
	£
Materials	50
Labour	150
Manufacturing overheads – 100% of labour	150
	£350
Net realisable value is greater than the cost:	
Selling price	500
Less: Selling and distribution expenses	60
Net realisable value	£440

Damaged, finished units: 10 × £240 = £2,400

These units have been valued at cost less than the amount of the loss that will be incurred when the units have been rectified, and are presented below:

	Per unit	*Valuation*
	£	£
Cost of finished units	350	350
Cost to rectify	200	
Total cost	550	
Less: Net realisable value	440	
Loss	£110	110
Amount per unit included in the balance sheet		£240

Semi-finished units: 40 × cost £250 = £10,000

The cost comprises the following:

	Per unit
	£
Materials	50
Labour	100
Manufacturing overheads – 100% of labour	100
Total cost per unit so far	250

An estimate should be made of the cost required to finish the work. If the total estimated cost exceeds the net realisable value, then the excess must be provided for by deducting it from the £250 cost; this is similar in principle to the treatment of the damaged units. For example:

	Per unit
	£
Total cost per unit so far (as above)	250
Estimated costs to complete	220
Estimated total costs to completion	470
Less: Net realisable value	440
Estimated loss on completion	30
Valuation:	
Total cost per unit so far	250
Less: Estimated loss on completion	30
	220

Question 4 – Beta Ltd

1. As the raw materials will realise more than cost, they have obviously been valued at the standard cost, namely, £30,000.

2. A review of the price variance account shows that, in total, the actual cost of materials has consistently been well above the standard costs.

3. Consequently, the £30,000 standard cost of raw materials in inventory is significantly below the actual cost; and, unless the inventory figure is adjusted to the actual cost, this year's profit will be understated. (Moreover, the understatement of inventories this year will result in *next* year's profits being artificially inflated).

4. Therefore, the figure to be included in the balance sheet should *not* be the standard cost but a figure that is reasonably close to actual cost. This could be done in one of the following ways:

    - Value each item at the actual cost paid for it, by referring to the purchase invoices concerned. However, this may be too laborious, in which case method (b) or (c) should be considered.
    - If the company has revised the standard costs for use in the following year, then it may be suitable to use these revised costs for valuing the inventories in the balance sheet. (Presumably, the revised standards are based on the cost applicable around the year end).
    - If methods (a) and (b) are impracticable, a rough and ready method may be used, as follows:

	£
Balance on raw materials control account	30,000
This is equal to the goods purchased in October, November and December when the price variances totalled	2,700
Value of raw materials at year-end	32,700

Care is needed in using this method, as the price variances may have arisen over a narrow range of materials, in which case, the calculations of the adjustment needed should embrace only those materials.

Conclusion:

Standard costs are used mainly as a tool of management control; their use in the valuation of inventories for accounts purposes is merely identical. Standard costs should not be used for inventory valuation unless they are reasonably close to actual costs.

Question 5 – Uptodate Plc

Uptodate plc's financial year ended on 31 March 20X8. Revised inventory.

Inventory at 7 April 20X8		200,000
Less:		
(i) Purchases between 1.4 and 7.4	40,000	
25% received and taken into inventory	(8,000)	(8,000)
Add:		
(ii) Inventory omitted because invoices had not been received		10,000
(iii) Purchases per 31.3 yet to be received		5,000
(iv) Goods in bonded warehouse		12,000
Revised inventory as at 31 March 20X8		219,000

Question 6 – Hasty plc

Hasty plc's financial year ended on 31 March 20X8. Revised inventory.

(i) Sales invoices totalling £9,000 were raised during the 7 days after the year-end. £1,500 of this had not been dispatched by 7 April. The company policy was to add 20% to cost.

Inventory as at 7 April 20X8		100,000
Sales		
(i)		
Sales invoiced	9,000	
Not dispatched	1,800	
	7,200	
Profit loading – one-sixth	1,200	
Cost deducted		(6,000)
(ii)		
Sales returns	600	
Profit loading	(100)	
Cost deducted		(500)
(iii)		
Invoiced	6,000	
Returned	3,600	
Still on approval	2,400	
Profit loading	400	
Cost added		2,000
(iv)		
Pro forma price	850	
Cost	575	
Inventory reduced by		(275)
Revised inventory as at 31 March 20X8		95,225

Question 7 – Bottom

Bottom statement of income using FIFO inventory valuation

	$000
Revenue	75,000
Cost of sales	(37,600)
Gross profit	37,400
Other operating expenses	(9,000)
Profit from operations	28,400
Investment income	
Finance cost	(4,000)
Profit before tax	24,400
Income tax expense	(7,000)
Net profit for the period	17,400

The change from LIFO to FIFO would be a change of accounting policy. Under IAS 8 (revised), the effects of such a change should be applied retrospectively and comparative figures restated, with the opening balance of retained profits adjusted.

Working – cost of sales

	$000
As originally stated	38,000
Increase to opening Inventory	500
Increase to closing Inventory	(900)
As restated	37,600

Question 8 – Agriculture

(a) IAS 41 states that an entity should recognise a biological asset or agricultural produce when:

- It controls the asset as a result of past events.
- It is probable that future economic benefits associated with the asset will flow to the entity.
- The fair value or cost of the asset can be measured reliably.

These criteria are consistent with the IASC Framework (para. 83), which states that an element should be recognised if:

- It is probable that any future economic benefit associated with the element will flow to the enterprise.
- The element has a cost or value that can be determined reliably.

IAS 41 further states that biological assets or agricultural produce should normally be measured at fair value less estimated point of sale costs. The standard assumes that the fair value of a biological asset or agricultural produce can be measured reliably. This presumption can only be rebutted for a biological asset or agricultural produce for which market determined prices or values are not available and for which alternative measures of fair value are 'clearly unreliable'. Even then, this rebuttal must be made on initial recognition of the asset.

The measurement basis selected by IAS 41 is one that is envisaged in the IASC Framework (para 100). However, the Framework (para 101) states that the most common measurement basis used is historical cost. For this to be a basis to produce relevant and reliable financial information, the cost of the asset needs to be determinable. For many biological assets (e.g. newly born calves), the concept of 'cost' is not an easy one to apply, and so fair value seems to be more appropriate.

(b)

Extracts from the statement of comprehensive income

	$000	*$000*
Income		
Change in fair value of purchased herd (W2)	(30)	
Government grant (W3)	400	
Change in fair value of newly born calves (W4)	125	
Fair value of milk (W5)	5.5	
Total income		500.5
Expense		
Maintenance costs (W2)	500	
Breeding fees (W2)	300	
Total expense		(800)
Net income		(299.5)

Extracts from the statement of financial position

Property, plant and equipment:		
Land (W1)	20,000	
Mature herd (W2)	970	
Calves (W4)	125	
	21,095	
Inventory		
Milk (W5)		5.5

Workings

1. Land

The purchase of the land is not covered by IAS 41. The relevant standard to apply to this transaction is IAS 16 – *property, plant and equipment.* Under this standard, the land would initially be recorded at cost, and depreciated over its useful economic life. This would usually be considered to be infinite in the case of land, and so no depreciation would be appropriate. Under the benchmark treatment laid down in IAS 16, no recognition would be made of post-

acquisition changes in the value of the land. The allowed alternative treatment would permit the land to be revalued to market value, with the surplus taken to equity.

2. Cows

Under the 'fair value model' laid down in IAS 41, the mature cows would be recognised in the balance sheet at 30 September 2004 at their fair value of 10,000 × $97 = $970,000. The difference between the fair value of the mature herd and its cost ($970,000 − $1 million − a loss of $30,000) would be charged in the income statement, along with the maintenance costs of $500,000.

3. Grant

Grants relating to agricultural activity are not subject to the normal requirement of IAS 20 – *Accounting for Government Grants and Disclosure of Government Assistance.* Under IAS 41, such grants are credited to income as soon as they are unconditionally receivable rather than being recognised over the useful economic life of the herd. Therefore, $400,000 would be credited to income by Sigma.

4. Calves

They are a biological asset, and the fair value model is applied. The breeding fees are charged to income and an asset of 5,000 × $25 = $125,000 is recognised in the balance sheet and credited to income.

5. Milk

This is agricultural produce and is initially recognised on the same basis as biological assets. Thus, the milk would be valued at 10,000 × $0.55 = $5,500. This is regarded as 'cost' for the future application of IAS 2 – *Inventories* – to the unsold milk.

CHAPTER 21

Construction contracts

Question 1 – MACTAR

The solution will be calculated on two bases, the traditional method using percentage of completion and the calculations based on control of completed sections passing to the client.

Project M1

Testing whether the contract will be profitable:

Cost to date	2.1
Cost to complete	0.3
Forecast cost for the whole project	2.4
Contract price	3.0
Forecast profit	0.6

Reported profit

Percentage complete	2.1/2.4
	87.5%
Costs	2.1
Revenue	2.625
Profit	0.525

Statement of financial position

Work in progress	2.10
Plus profit	0.525
Total	2.625
Less billings	1.75
Work in progress in the S of FPn	0.875
Debtors (Billings – Receipts)	0.25

M6	Traditional
Costs to date	0.3
Forecast cost to complete	1.1
Forecast total costs	1.4
Contract revenue	2.0
Forecast profit	0.6

Profit Calculation

Percentage complete	0.3/1.4
	21.4%
Expenses	0.3
Revenue	0.429
Profit	0.129

Work in progress

Expenses to date	0.3
Plus profit	0.129
Total	0.429
Less progress billings to date	0.1
Work in progress	0.329
Debtors	0.1

M62 Traditional

Check profitability

Costs to date	2.3
Forecast costs to complete	0.8
Forecast total costs	3.1
Contract price 2.5 × 1.1	2.75
Expected loss	0.35
Percentage completion	2.3/3.1
	74.2%

Profit calculation

Revenue 0.742 × 2.75	2.04
Expenses	2.39

In the next period, the revenue would be the balance of 0.71, so the maximum expense that can be absorbed in that period is that amount. Subtracting those from the total expected expenses you get the expenses for the current period; alternatively, you can recognise the expenses to date plus the amount that won't be recoverable in the next period.

Loss for the period	0.35

Work in progress

Costs to date	2.3
Less loss to date	0.35
Billable costs	1.95
Less progress billing	1.00
Work in progress	0.95
Debtors	0.25

There would need to be a note to the accounts saying that due to major difficulties with the M62 contract 0.35 was written off.

Question 2 – Lytax Ltd

If students assume the costs incurred to date indicate the percentage of completion and the extent of control that has passed to the client then the solution is as follows.

Workings

Contract No.	*1*	*2*	*3*	*4*	*5*
	£000	*£000*	*£000*	*£000*	*£000*
Contract price	1,100	950	1,400	1,300	1,200
Costs incurred to date	664	535	810	640	1,070
Estimated further cost to complete	106	75	680	800	165
Estimated cost of post-completion work	30	10	45	20	5
	800	620	1,535	1,460	1,240
Estimated profit/(loss) On contracts	300	330	(135)	(160)	(40)
Profit/(loss) to date					
664/800 × 300	249				
535/620 × 330		285			
			(135)	(160)	(40)

Notes

Losses on unprofitable contracts are recognised in full.

(a) The statement of financial position will show the following:

Work in progress and/or liabilities

	1	*2*	*3*	*4*	*5*
	£000	*£000*	*£000*	*£000*	*£000*
Costs incurred to date	664	535	810	640	1,070
Recognised profits less foreseeable losses	249	285	(135)	(160)	(40)
Cumulative	913	820	675	480	1030
Progress billings:					
Received	(615)	(680)	(615)	(385)	(722)
Awaited	(60)	(40)	(25)	(200)	(34)
Retained	(75)	(80)	(60)	(65)	(84)
Closing balance	163	20	(25)	(170)	190

The positive balances on Contracts 1, 2 and 5, totalling £373,000, will be presented as an asset. The negative balances on Contracts 3 and 4, totalling £195,000, will be presented as a liability. The difference between total progress billings and total receipts will be shown as a receivable. (135, 120, 85, 265 and 118, respectively).

(b)	1	2	3	4	5
Cumulative revenue	913	820	675	480	1,030
CR 20X8	560	340	517	400	610
Revenue for year 20X9	353	480	158	80	420
Expenses	204	290	293	170	460
Profit (loss)	149	190	(135)	(90)	(40)

However, if the students take the cost of goods sold as the company's assessment of the extent to which control has passed to the client then the estimated profits on a cumulative basis would be:

Project 1 580/800 × 300 = 218, i.e. (cost of work available to the client/estimated cost to complete the project) times the estimated profit on completion

Project 2 470/620 × 330 = 250

Project 3 There must be a cumulative loss of 135, so if costs are 646 then revenue is 135 less or 511

Project 4 has revenue of 525 − 160 = 365

Project 5 has revenue of 900 − 40 = 860

Work in progress is cumulative costs less transfers to cost of goods sold, i.e. 84, 65, 164, 115 and 170, respectively. In other words, there is no profit element in the work in progress as it represents items which the customer does not control.

	1	2	3	4	5
Cumulative costs	664	535	810	640	1,070
Less COGS	580	470	646	525	900
Balance	84	65	164	115	170

The company would also disclose the amounts of future contract revenue in existing contracts by the periods in which they are expected.

Total contract price	1,100	950	1,400	1,300	1,200
Less already invoiced	750	800	700	650	840
Future sales	350	150	700	650	360

Only the future sales figures would need to be disclosed.

Accounts receivable would be the sum of awaiting receipts and retained by customers: 135 (i.e. 60 + 75), 120, 85, 265 and 118.

Question 3 Beavers

Work in progress under customer control

(a)

Materials	36,000	Materials in stock	3,000
Other	18,000	Not under control	19,000
Head office costs	6,000		
Depreciation*	6,400	Balance c/d	135,400
	157,400		157,400
Balance b/d	135,400		

Work in progress not under customer control

Work in progress	19,000

Stock Other

WIP	3,000

* Depreciation may be based on time as shown here or on the basis of percentage of completion or on actual usage during the period. Also, depreciation could be spread over 14 months rather than 15 months.

Applied Billings

		Debtors	180,000

	Debtors		
Applied billings	180,000	Bank	150,000
	–	Balance c/d	30,000
	180,000		180,000
Balance b/d	30,000		

	Materials
Work in progress	3,000

Check profitability of the contract

Expenses to date	154,400	(i.e. 135,400 + 19,000)
Estimated costs to complete	30,000	
Depreciation	1,600	
Forecast total costs	186,000	

Contract price = 240,000 + Incentive 10,000 = 250,000, so the project is expected to be profitable. Therefore, no adjustment for losses is necessary.

(b) and (c)

Work under the control of the customer is 180,000. The project is expected to be profitable:

Costs to date		154,400
Estimated costs to complete		
Depreciation	1,600	
Wages	10,000	
Materials	12,000	
Other	8,000	31,600
Total expected contract cost		186,000
Contract price		240,000
Forecast contract profit	54,000	

The journal entry will be:

Dr	Cost of goods sold	135,400	
Dr	Work in progress	44,600	
Cr	Revenue		180,000

Being profit on the project of 44,600 for the year

(b) In the statement of financial position:

Work in progress

Costs to date	154,400
Plus profits	44,600
Billable amount	199,000
Less billings	180,000
Net Work in progress	19,000
Materials inventory	3,000
Debtors	30,000

Plant

Cost	9,000	
Less Acc depn.	6,400	2,600

(c) 44,600

Question 4 – Newbild SA

(a) *Work in progress*

Materials	13,407		
Materials on site	5,467		
Creditors for materials	73,078		
Wages	39,498		
Administration	3,742		
Site expenses	4,693		
Accrued expenses	518		
Depreciation (nine months)	3,870		
Accrued rectification costs	3,370	Balance c/d	136,709
	142,176		142,176
Balance b/d	136,709	Loss for the period	1,909

Check on the forecast profitability of the overall contract

Costs to date	136,709	
Additional costs	490,000	
Depreciation	6,450	
Rectification on balance	16,130	
Total forecast costs	649,289	
Contract price	780,000	[so overall project is expected to be profitable]
Revenue for contract to date	134,800	
Expenses to date	136,709	
Loss for the period	1,909	

(b) Revenue	134,800
Cost of goods sold	136,709
Debtor/WIP	20,220

Additional guidance
Newbild SA received 114,580 which represents the work completed less 15% retention.
Therefore, 85% = 114,580
100% = 114,580/0.85 = 134,800
2.5% = 134,800 × .025 = 3,370

Total contract = 780,000
2.5% = 19,500
19,500 − 3370 = 16,130 still to accrue in future periods

Debtor/WIP

Work completed	134,800
Less received	114,580
Balance =	20,220

Question 5 – Quickbuild Ltd

(a) *and* (b)

(i) Contract revenue is based on the percentage stage of completion calculated as follows:

First calculate the estimated profit:

	€
Contract price	250,000
Estimated cost to complete	150,000
Estimated total profit	100,000

Then calculate the percentage completion:

Actual cost to date	70,000
Less inventories not yet used	10,000
Cost on contract work to date	60,000
Estimated total cost	150,000
% completed	40%
Contract revenue to be recognised:	
40% of €250,000	€100,000

(ii) Contract costs

Total costs incurred	70,000
Less unused inventories on hand	10,000
Contract cost recognised in the statement of comprehensive income	60,000

Dr Inventories	10,000	
Cr Contract work in progress		10,000
(Stock unused at balance date)		

Dr Contract work in progress	40,000	
Cr Contract revenue		100,000
Dr Cost of goods sold	60,000	
(Recognising costs and expenses and the estimated profit to this stage)		

Dr Debtors	60,000	
Cr Construction billing		60,000
(Billing as work progresses)		

Dr Bank	60,000	
Cr Debtors		60,000
(Receipt of money from the customer)		
In the statement of financial position:		
Inventories other		195,000
Work in progress contracts	0	
Cost	60,000	
Less billings	60,000	

Question 6 – JTM

(a) *Step 1:* The first task is to estimate whether each contract will make an overall profit or loss at the end of each year:

	Barcelona	*Faro*	*St Malo*
	€m	*€m*	*€m*
2006			
Contract value			15.00
Estimated total costs to complete			12.00
Estimated overall profit			3.00
2007			
Original contract value	12.24	10.00	15.00
Revision	0.76		
	13.00		
Estimated total costs to complete	15.50	7.00	12.00
Estimated overall profit/(loss)	(2.50)	3.00	3.00

Step 2: Assuming that the above outcomes have been estimated reliably, the next task is to recognise income based on the amount certified as controlled by the client. At the end of 2006, St Malo appears it will be profitable overall so there is no need to take into account future losses. At the end of 2007, Barcelona indicates it will make a loss overall for the project so the project needs to recognise that in the current year.

2006

Work certified for St Malo	
Revenue	*6.0*
Costs	*(6.56)*
Loss	*(0.56)*

2007

Revenue	*6.5*	*0.50*	*3.0*
Expenses	*11.5*	*1.50*	*3.94*
Loss	*(5.0)*	*(1.0)*	*(0.94)*

In the case of Barcelona, there is no need to recognise future losses as on the estimates future years will show profits.

Step3: The balance sheet figures can now be calculated:

Contracts in progress at fair value (this account reflects the fair value of work done to date).

Work in progress

Costs to date	11.5	1.5	10.5
Less losses	(5.0)	(1.0)	(1.50)
Gross work in progress	6.5	0.5	9.00
Less billings	5.0	0.5	8.76
Net work in progress	1.50	0	0.24
Accounts receivable			
Invoiced	5.0	0.50	8.76
Less payments	3.76	0	7.50
Balance	1.24	0	1.26

(b) IAS37 aims to ensure that only genuine obligations are recognised in the financial statements. At the first sight, the repair cost of €150,000 looks as if it should be a provision in the accounts of *JTM* as there is a past event, which has created a legal or constructive (not clear which it is in this case) obligation, and the amount can be estimated reliably. However, as the repair is covered by insurance, an outflow of resources will not take place. The amount and circumstances should, therefore, be disclosed as a contingent liability as *JTM* would have to settle privately if the insurance company refused to pay up.

(c) The planned disposal of the property would be disclosed in the 2007 accounts as being held-for-sale under IFRS5. The disposal price of €5m could possibly affect the amount shown as it is an adjusting event under IAS10 providing further evidence of conditions existing at the balance sheet date. IFRS would require the property to be measured at the lower of carrying amount and fair value less selling costs and disclosed separately on the face of the balance sheet.

The dividend of €1m will be disclosed as a liability in the balance sheet as an adjustment in the statement of changes in equity. It is an adjusting event under IAS10.

Whether the acquisition of *MoriceMarinas* should be recognised depends upon the circumstances. It is an event after the balance sheet date, and so its recognition depends (under IAS10) upon whether the conditions existed at that date. If the acquisition had been 'agreed', and a purchase agreement has been signed, then it may qualify for recognition as a provision under IAS37 and an obligation may have existed at that date. If it is simply an agreement between the directors to acquire the company, then it would not be recognised under IAS37 as the condition (i.e. an obligation) would not have existed at that date.

Question 7 – Backwater Construction Company

Since this is a very long contract the future revenue flows will be discounted

Current building revenue	2,500,000
Building 2 2.5/1.1	2,272,727
Building 3	2,066,116
Building 4	1,878,287
Total revenue	8,717,130

Forecast cost to complete present value of 12,000,000 = 10,460,555

Forecast loss	1,743,425 (10460,555 – 8,717,130)
Dr Debtors	2,500,000
Cr Billings	2,500,000

To invoice customer for first completed building

Dr	Cost of goods sold	4,243,425
Cr	Work in progress (Loss on contract)	1,743,425
Cr	Revenue	2,500,000

To record current loss and anticipated loss on completing the remaining three buildings

Work in progress

Costs incurred	3,000,000
Less: Losses incurred	(1,743,425)
Net	1,256,575
Less: Billlings	2,500,000

Net liability (1,243,425), which is the accrued losses still to be incurred, i.e. forecast loss 1,743,425 less the 500,000 loss already incurred

Dr	Work in progress	1,243,425	
Cr	Accrued liabilities		1,243,425

to transfer the deficiency in the work in progress account to a liability account.

Question 8– Norwik Construction plc

There are three major problems with the response of Jim Norwik. The first is that he is misleading his superiors. Secondly, if the amount is material the company may be breaching its continuous disclosure requirements and will not be producing true and fair accounts. Both these failures may lead to the company facing class actions. Thirdly, he is communicating to his subordinates that it is legitimate to hide over runs from him and he himself may in the future be completely unaware how his division is performing.

Question 9 – Boldwin Construction

(a) Since it is on Spears land presumably they have control of the item.

Check the profitability of the overall contract.

Revenue	45
Costs to date	15
Costs to complete	25
Contract expenses	40
Forecast profit	5

Revenue	0.3 × 45	13.5
Expenses		15.0
Loss		(1.5)

Work in progress	15.0
Less loss	(1.5)
Subtotal	13.5
Less billings	5.0
Net work in progress	8.5

Accounts receivable	
Billings	5.0
Less receipts	4.0
Balance	1.0

(b)

Check profitability

Contract price	45
Costs to date	15
Costs to complete	32
Total expenses	47
Forecast loss	(2)

Profit/loss calculation for the current year

Revenue	13.5	
Less: Expenses	15.0	
Future loss	0.5	31.5 − 32
Total costs	15.5	
Loss	(2.0)	

(c) (a) Since it is on Spears land presumably they have control of the item.

Check the profitability of the overall contract.

Revenue		45
Costs to date	15	
Costs to complete	23	
Contract expenses	38	
Forecast profit		7

Revenue 0.3 × 45	13.5
Expenses	15.0
Loss	(1.5)

Work in progress	15.0
Less loss	(1.5)
Subtotal	13.5
Less billings	5.0
Net work in progress	8.5

Accounts receivable	
Billings	5.0
Less receipts	4.0
Balance	1.0

(c) (b)

Check profitability – there is no additional anticipated loss to deduct in the current year as following year will report Revenue of 31.3 less expenses of 23.0 giving an overall profit of 8.5

Contract price		45
Costs to date	15	
Costs to complete	23	
Total expenses		38
Forecast profit		7

Profit/loss calculation for the current year	
Revenue	13.5
Less: Expenses	15.0
Loss	(1.5)

Question 10

LPO – Statement of profit or loss and other comprehensive income for the year ended 31 December 2013

		$000	*$000*
Revenue	W8		5,265
Cost of sales	W9		(3,355)
Gross Profit			1,910
Administrative expenses	W3	(569)	
Distribution costs		(230)	(799)
Profit from operations			1,111
Finance cost	W4		(54)
Profit before tax			1,057
Income tax expense	W5		(191)
Profit for the period			866

LPO Statement of changes in equity for the year ended 31 December 2013

	Equity shares	*Share premium*	*Retained earnings*	*Total*
	$000	*$000*	*$000*	*$000*
Balance at 1 January 2013	1,450	240	370	2,060
Profit for period			866	866
Share issue	50	10		60
Dividend paid			(360)	(360)
Balance at 31 December 2013	1,500	250	876	2,626

LPO Statement of financial position as at 31 December 2013

		$000	*$000*
Non-current assets			
Property, plant and equipment	W1		2,682
Current assets			
Inventory		562	
Short-term investments		135	
Trade receivables	(W10)	297	
Construction contract – amount due from customer	(W7)	255	
Cash and cash equivalents		215	
			1,464
Total assets			4,146
Equity and liabilities			
Equity			
Share capital		1,500	
Share premium		250	
Retained earnings		876	
Total equity			2,626
Non-current Liabilities			
Long-term borrowings		900	
Deferred tax	(W6)	231	
Total non-current liabilities			1,131
Current liabilities			
Trade payables		145	
Tax payable	(W5)	160	
Provision for legal claim		30	
Interest payable		54	
Total current liabilities			389
Total equity and liabilities			4,146

Workings – All figures in $000

W1 – Tangible non-current assets

Cost/Valuation	*Land*	*Buildings*	*Plant/Equipment*	*Total*
	$000	*$000*	*$000*	*$000*
Balance 1/1/13	900	1,600	1,055	
Disposal of assets			(46)	
			1,009	
Depreciation				
Balance 1/1/13		**(225)**	**(400)**	
Disposal of assets			**41**	
Charge for year		(48)	(195)	
Net book value 31/12/13	900	1,327	455	2,682

W2 – Loss on disposal of plant and equipment

Carrying value	5
Selling price	3
Loss	2

W3

		Cost of sales	*Administration*
Trial balance			455
Inventory 1/1/13		420	
Purchases		1,425	
		1,845	
Less inventory 31/12/13		(562)	
		1,283	
Depreciation – plant and equipment	W1	195	
Loss on disposal P&E	(W2)	2	
Buildings depreciation	(W1)		48
Bad debt			36
Legal claim			30
Totals		1,480	569

W4 Finance charge

Year's loan interest	900 × 6% = 54
Accrued interest @ 31 December 2013	54

W5 Tax

Current year	160
Increase in deferred tax	31
	191

W6 Deferred tax

Per trial balance	200
Increase in year	31
	231

W7 Construction contract

Contract revenue		5,500
Contract cost:		
Work in progress	1,875	
Cost to complete	2,700	4,575
Profit		925

% work complete = 1,875/4,575 = 41%

Recognise in statement of comprehensive income:

Revenue (5,500 × 41%) =	2,255
Cost of sales	1,875
Profit	380

Recognise in statement of financial position – amount due from customer:

Cost	1,875
Profit recognised	380
Cash received on account	(2,000)
Due from customer	255

W8 Revenue

Sales revenue	3,010
Contract revenue	2,255
	5,265

W9 Cost of sales

Cost of sales (W3)	1,480
Contract cost	1,875
	3,355

W10 Trade receivables

Balance b/f	330
Bad debt	(36)
Sale of plant and equipment	3
	297

PART 6

Consolidated accounts

CHAPTER 22

Accounting for groups at the date of acquisition

Question 1 – Parent Ltd

(a) *Parent Ltd statement of financial position as at 1 January 20X7*

Ordinary shares of 1 each	40,500
Retained earnings	4,500
	45,000
Investment in Daughter Ltd	10,800
Cash (20,000 − 10,800)	9,200
Other net assets	25,000
	45,000

Note: The investment is shown as its fair value of 10,800, and the cash has been reduced by consideration.

Consolidated statement of financial position as at January 20X7

	Parent	*Daughter*	*Add*	*Eliminate (Dr)/Cr*	*S of FP*
Ordinary shares	40,500	9,000	49,500	(9,000)	40,500
Retained earnings	4,500	1,800	6,300	(1,800)	4,500
	45,000	10,800	55,800		45,000
Investment in Daughter Ltd	10,800		10,800	10,800	
Cash	9,200	2,000	11,200		11,200
Other net assets	25,000	8,800	33,800		33,800
	45,000	10,800	55,800	0	45,000

Note: Because the cash paid exactly equals the value of the net assets acquired, there was no difference on consolidation, that is, there is no positive or negative goodwill.

(b) *Parent Ltd statement of financial position as at 1 January 20X7*

Ordinary shares of 1 each [40,500 + (10,800/2)]	45,900
Share premium	5,400
Retained earnings	4,500
	55,800
Investment in Daughter Ltd	10,800
Cash	20,000
Other net assets	25,000
	55,800

Note: The investment is shown as its fair value of 10,800 and the shares are issued at their fair value of 5,400 par value and 5,400 premium.

Consolidated statement of financial position as at 1 January 20X7

	Parent	*Daughter*	*Add*	*Eliminate (Dr)/Cr*	*S of FP*
Ordinary shares	45,900	9,000	54,900	(9,000)	45,900
Share premium	5,400		5,400		5,400
Retained earnings	4,500	1,800	6,300	(1,800)	4,500
	55,800	10,800	66,600		55,800
Investment in Daughter Ltd	10,800		10,800	10,800	
Cash	20,000	2,000	22,000		22,000
Other net assets	25,000	8,800	33,800		33,800
	55,800	10,800	66,600	0	55,800

Note: Because the value of the shares issued exactly equals the value of the net assets acquired, there was no difference on consolidation, i.e. there is no positive or negative goodwill.

Parent Ltd statement of financial position at 1 January 20X7

Answer	(a)	(b)
Business		
Other net assets	25,000	25,000
Investing:		
Investment in Daughter Ltd	10,800	10,800
Financing		
Financing assets		
Cash	9,200	20,000
	45,000	55,800
Equity		
Share capital	40,500	45,900
Retained earnings	4,500	4,500
Share premiun		5,400
	45,000	55,800

Consolidated statement of financial position at 1 January 20X7

Business		
Other net assets	33,800	33,800
Financing		
Financing assets		
Cash	11,200	22,000
	45,000	55,800
Equity		
Share capital	40,500	45,900
Retained earnings	4,500	4,500
Share premium		5,400
	45,000	55,800

Question 2 – Parent Ltd

(a) *Parent Ltd statement of financial position as at 1 January 20X7*

Ordinary shares of 1 each	40,500
Retained earnings	4,500
	45,000
Investment in Daughter Ltd	16,200
Cash (20,000 − 16,200)	3,800
Other net assets	25,000
	45,000

Note: The investment is shown as its fair value of 16,200 and the cash has been reduced by consideration.

Consolidated statement of financial position as at 1 January 20X7

	Parent	*Daughter*	*Add*	*Eliminate (Dr)/Cr*	*S of FP*
Ordinary shares	40,500	9,000	49,500	(9,000)	40,500
Retained earnings	4,500	1,800	6,300	(1,800)	4,500
	45,000	10,800	55,800		45,000
Investment in Daughter Ltd	16,200		16,200	10,800	5,400
Cash	3,800	2,000	5,800		5,800
Other net assets	25,000	8,800	33,800		33,800
	45,000	10,800	55,800	0	45,000

Note: Because the cash paid exceeded the value of the net assets acquired, there was a difference on consolidation of 5,400, which appears in the consolidated statement of financial position as an asset goodwill – this will be reviewed for possible impairment.

(b) *Parent Ltd statement of financial position as at 1 January 20X7*

Ordinary shares of 1 each (40,500 + (16,200/3))	45,900
Share premium	10,800
Retained earnings	4,500
	61,200
Investment in Daughter Ltd	16,200
Cash	20,000
Other net assets	25,000
	61,200

Note: The investment is shown as its fair value of 16,200 and the shares are issued at their fair value of 5,400 par value and 10,800 premium.

Consolidated statement of financial position as at January 20X7

	Parent	*Daughter*	*Add*	*Eliminate (Dr)/Cr*	*S of FP*
Ordinary shares	45,900	9,000	54,900	(9,000)	45,900
Share premium	10,800		10,800		10,800
Retained earnings	4,500	1,800	6,300	(1,800)	4,500
	61,200	10,800	72,000		61,200
Investment in Daughter Ltd	16,200		16,200	10,800	5,400
Cash	20,000	2,000	22,000		22,000
Other net assets	25,000	8,800	33,800		33,800
	61,200	10,800	72,000	0	61,200

Note: Because the value of the shares issued exceeded the value of the net assets acquired, there was a difference on consolidation, which is included as goodwill in the statement of financial position.

Parent Ltd statement of financial position at 1 January 20X7

Answer	(a)	(b)
Business		
Other net assets	25,000	25,000
Investing:		
Investment in Daughter Ltd	16,200	16,200
Financing		
Financing assets		
Cash	3,800	20,000
	45,000	61,200
Equity		
Share capital	40,500	45,900
Retained earnings	4,500	4,500
Share premium		10,800
	45,000	61,200

Consolidated statement of financial position at 1 January 20X7

Business		
Other net assets	33,800	33,800
Goodwill	5,400	5,400
Financing		
Financing assets		
Cash	5,800	22,000
	45,000	61,200
Equity		
Share capital	40,500	45,900
Retained earnings	4,500	4,500
Share premium		10,800
	45,000	61,200

Question 3 – Parent Ltd

(a) *Parent Ltd statement of financial position as at 1 January 20X7*

Ordinary shares of £1 each	40,500
Retained earnings	4,500
	45,000
Investment in Daughter Ltd	16,200
Cash (20,000 − 16,200)	3,800
Other net assets	25,000
	45,000

Note: The investment is shown as its fair value of 16,200, and the cash has been reduced by consideration.

Consolidated statement of financial position as at January 20X7

	Parent	*Daughter*	*Add*	*Eliminate (Dr)/Cr*	*S of FP*
Ordinary shares	40,500	9,000	49,500	(9,000)	40,500
Retained earnings	4,500	1,800	6,300	(1,800)	4,500
	45,000	10,800	55,800		45,000
Investment in Daughter Ltd	16,200		16,200	10,800	
Revaluation increase				(1,200)	4,200
Cash	3,800	2,000	5,800		5,800
Other net assets	25,000	8,800	33,800	1,200	35,000
	45,000	10,800	55,800	0	45,000

Note:

1. The net assets in the consolidated statement of financial position (S of FP) will be increased by 1,200.

2. The fair value of the shares issued (16,200) exceeded the fair value of the net assets acquired (12,000). This difference on consolidation will be reported as goodwill and reviewed for impairment.

(b) *Parent Ltd statement of financial position as at 1 January 20X7*

Ordinary shares of 1 each (40,500 + (16,200/3))	45,900
Share premium	10,800
Retained earnings	4,500
	61,200
Investment in Daughter Ltd	16,200
Cash	20,000
Other net assets	25,000
	61,200

Note: The investment is shown as its fair value of 16,200, and the shares are issued at their fair value of 5,400 par value and 10,800 premium.

Consolidated statement of financial position as at January 20X7

	Parent	*Daughter*	*Add*	*Eliminate (Dr)/Cr*	*CBS*
Ordinary shares	45,900	9,000	54,900	(9,000)	45,900
Share premium	10,800		10,800		10,800
Retained earnings	4,500	1,800	6,300	(1,800)	4,500
	61,200	10,800	72,000		61,200
Investment in Daughter Ltd	16,200		16,200	10,800	
Revaluation increase				(1,200)	4,200
Cash	20,000	2,000	22,000		22,000
Other net assets	25,000	8,800	33,800	1,200	35,000
	61,200	10,800	72,000	0	61,200

Note:

1. The net assets in the S of FP will be increased by 1,200.
2. The fair value of the shares issued (16,200) exceeded the fair value of the net assets acquired (12,000). This difference on consolidation will be reported as goodwill and reviewed for impairment.

Parent Ltd statement of financial position at 1 January 20X7

Answer	(a)	(b)
Business		
Other net assets	25,000	25,000
Investing:		
Investment in Daughter Ltd	16,200	16,200
Financing		
Financing assets		
Cash	3,800	20,000
	45,000	61,200
Equity		
Share capital	40,500	45,900
Retained earnings	4,500	4,500
Share premium		10,800
	45,000	61,200

Consolidated statement of financial position at 1 January 20X7

Business		
Other net assets	35,000	35,000
Goodwill	4,200	4,200
Financing		
Financing assets		
Cash	5,800	22,000
	45,000	61,200
Equity		
Share capital	40,500	45,900
Retained earnings	4,500	4,500
Share premium		10,800
	45,000	61,200

Question 4 – Parent Ltd

Parent Ltd statement of financial position as at 1 January 20X7

Ordinary shares of £1 each	40,500
Retained earnings	4,500
	45,000
Investment in Daughter Ltd	6,000
Cash (20,000 − 6,000)	14,000
Other net assets	25,000
	45,000

Note: The investment is shown as its fair value of 6,000 and the cash has been reduced by consideration.

Consolidated statement of financial position as at 1 January 20X7

	Parent	*Daughter*	*Add*	*Eliminate (Dr)/Cr*	*S of FP*
Ordinary shares	40,500	9,000	49,500	(9,000)	40,500
Retained earnings	4,500	1,800	6,300	(1,800)	4,500
	45,000	10,800	55,800		45,000
Investment in Daughter Ltd	6,000		6,000	10,800	(4,800)
Cash	14,000	2,000	16,000		16,000
Other net assets	25,000	8,800	33,800		33,800
	45,000	10,800	55,800	0	45,000

Note: Because the cash paid was less than the value of the net assets acquired, there was a credit difference on consolidation, that is, negative goodwill, which will be credited to the retained earnings.

Parent Ltd statement of financial position at 1 January 20X7

Business	
Other net assets	25,000
Investing:	
Investment in Daughter Ltd	6,000
Financing	
Financing assets	
Cash	14,000
	45,000
Equity	
Share capital	40,500
Retained earnings	4,500
	45,000

Consolidated statement of financial position at 1 January 20X7

Business	
Other net assets	33,800
Goodwill	(4,800)
Financing	
Financing assets	
Cash	16,000
	45,000
Equity	
Share capital	40,500
Retained earnings	4,500
	45,000

Question 5 – Parent Ltd

Parent Ltd statement of financial position as at 1 January 20X7

Ordinary shares of £1 each	40,500
Retained earnings	4,500
	45,000
Investment in Daughter Ltd	9,000
Cash [20,000 − 9,000]	11,000
Other net assets	25,000
	45,000

Note: The investment is shown as its fair value of 9,000, and the cash has been reduced by consideration.

Consolidated statement of financial position as at January 20X7

	Parent	*Daughter*	*Add*	*Eliminate (Dr)/Cr*	*S of FP*
Ordinary shares	40,500	9,000	49,500	(6,750) a	
				(2,250) b	40,500
Retained earnings	4,500	1,800	6,300	(1,350) a	
				(450) b	4,500
Non-controlling interest				2,250 b	
				450 b	2,700
	45,000	10,800	55,800		47,700
Investment in Daughter Ltd	9,000		9,000	6,750 a	
				1,350 a	900
Cash	11,000	2,000	13,000		13,000
Other net assets	25,000	8,800	33,800		33,800
	45,000	10,800	55,800	0	47,700

Note: Because the cash paid was more than the value of the net assets acquired, there was a debit difference on consolidation of 900.

(a) Represents the elimination of the shares and reserves of the company acquired against the investment in the company acquired.

(b) Represents the transfer to the non-controlling interest, that is, their 25% interest in the net assets of 108,700 in Daughter Ltd.

Parent Ltd statement of financial position at 1 January 20X7

Business	
Other net assets	25,000
Investing:	
Investment in Daughter Ltd	9,000
Financing	
Financing assets	
Cash	11,000
	45,000
Equity	
Share capital	40,500
Retained earnings	4,500
	45,000

Consolidated statement of financial position at 1 January 20X7

Business	
Other net assets	33,800
Goodwill	900
Financing	
Financing assets	
Cash	13,000
	47,700
Equity	
Share capital	40,500
Retained earnings	4,500
	45,000
Non-controlling interest	2,700
	47,700

Question 6 – Rouge plc

Statement of financial position as at 1 January 20X0

ASSETS		*€m*
Non-current assets		
Property, plant and equipment	(100 + 60)	160
Goodwill	(132 − 100)	32
Current assets	(80 + 70)	150
		342
Ordinary shares of €1 each		200
Retained earnings		52
Share capital and reserves		252
Current liabilities		90
		342

Question 7 – Ham plc

(a)

Statement of financial position as at January 20X0

ASSETS	*€000*
Non-current assets	
Property, plant and equipment (250 + 100)	350
Goodwill (90 − 110)	(20)
Current assets (100 + 70)	170
	500
€1 shares	200
Retained earnings	160
Share capital and reserves	360
Current liabilities	140
	500

(b) *See discussion in chapter*

Following recent changes in the treatment of goodwill, negative goodwill will be taken to income statement immediately.

Question 8 – Berlin plc

Statement of financial position as at 1 January 20X0

	(a)	(b)
	Cash acquisition	*Share exchange*
ASSETS	*£000*	*£000*
Non-current assets		
Property, plant and equipment	250	250
Investment in Hanover	100	100
Current assets	50	150
	400	500
Share capital	200	250
Share premium	–	50
Retained earnings	80	80
Share capital and reserves	280	380
Current liabilities	120	120
	400	500

Question 9 – Bleu plc

Statement of financial position as at January 20X0

ASSETS		*£m*
Non-current assets		
Property, plant and equipment	(150 + 120)	270
Goodwill	210 − (80% × 180)]	66
Current assets	(108 + 105)	213
		549
Share capital		300
Retained earnings		78
Share capital and reserves		378
Non-controlling interest	(20% × 180)	36
Current liabilities	(90 + 45)	135
		549

Question 10 – Base plc

Statement of financial position as at January 20X0

ASSETS		*£000*
Non-current assets		
Property, plant and equipment	(250 + 120)	370
Goodwill	[90 − (60% × 110) + (60% × 20) + (55 − 40%×130)]	15
Current assets	(100 + 70)	170
Total assets		555
Share capital		200
Retained earnings		160
Share capital and reserves		360
Non-controlling interest	[(40% × 110) + (40% × 20)] + 3	55
Current liabilities	(80 + 60)	140
Total equity and liabilities		555

Question 11– Austin Plc

Considering each of the situations:

(a) Normally, Bond would not be a subsidiary of Austin plc, as Austin does not own 50% or more of the voting shares of Bond.

(i) If another entity owned 50% or more shares of Bond, then Bond would be a subsidiary of that (other) entity, and Bond would not be a subsidiary of Austin plc. It is probable that Austin plc would treat Bond as an Associated company.

(ii) If a large number of individuals or companies owned the remaining 55% of the shares of Bond, and they were unlikely to act together, then Bond could be considered to be a subsidiary of Austin plc. The reason for this is that in a vote of shareholders, Austin's 45% holding plus some other shareholders would probably accumulate to a total of more than 50% of the votes, thus giving Austin control over Bond.

(b) In this situation, it is probable that Derby is a subsidiary of Austin.

The reason for this is that Austin owns over 50% of the voting shares of both Bradford and Coventry. Thus, Austin controls both Bradford and Coventry and they are both subsidiaries of Austin. Bradford owns 30% of the voting shares of Derby and Coventry own 30%. In a vote at a meeting of Derby Ltd, Austin will be able to control both Bradford's vote of 30% and Coventry's vote of 30% (as it has control over both companies). By exercising these two 30% votes, Austin will have control over 60% of the votes, which is a majority. So, Austin has control over Derby (as well as Bradford and Coventry).

In the individual accounts of Bradford and Coventry, Derby will be treated as an associated company.

(c) In this situation, although Austin plc owns the majority of the shares of Norwich plc, it has only 33% of the votes at a meeting of Norwich. Thus, Norwich plc is not a subsidiary of Austin. The directors of Norwich plc will have the ability to control Norwich, as they have 67% of the votes at a general meeting of Norwich.

Question 12 – Paradigm

(a) *Paradigm – Consolidated statement of financial position as at 31 March 2013*

	$000	*$000*
Assets		
Non-current assets:		
Goodwill (W1)		8,500
Property, plant and equipment		
(47,400 + 25,500 – 3,000 fair value + 500 depreciation)		70,400
Equity investments (7,100 + 3,900)		11,000
		89,900
Current assets		
Inventory (20,400 + 8,400 − 600 URP (W2)	28,200	
Trade receivables (14,800 + 9,000 − 3,700 intra-group (W3)	20,100	
Bank (2,100 + 900 cash in transit)	3,000	51,300
Total assets		141,200
Equity and liabilities		
Equity attributable to owners of the parent		
Equity shares of $1 each (40,000 + 6,000 (W1)		46,000
Share premium (W1)		6,000
Retained earnings (W4)		34,000
		86,000
Non-controlling interest (W6)		8,800
Total equity		94,800
Non-current liabilities		
10% loan notes (8,000 + 1,500 (W1)		9,500
Current liabilities		
Trade payables (17,600 + 13,000 − 2,800 intra-group (W3)		27,800
Bank overdraft		9,100
Total equity and liabilities		141,200

Workings (in $'000s)

W1 Goodwill on acquiring 75% of Strata

	$'000	$'000
Controlling interest		
Share exchange ((20,000 × 75%) × 2/5 × $2 market value)		12,000
10% loan notes (15,000 share/1,000 × 100)		1,500
Non-controlling interest (20,000 × 25% × $1·20 FV of Strata shares)		6,000
		19,500
Strata equity shares	20,000	
Pre-acquisition retained losses:		
As at 1 April 2012	(4,000)	
As 1 April to 30 September 2012	(2,000)	
Fair value reduction in value of plant	(3,000)	(11,000)
Goodwill - consideration in excess of net assets acquired		8,500

W2 Unrealised profit in inventory

At year-end, Strata held $4.6m intra-group inventory. Unrealised profit is 15/115 × $4.6m = $600,000.

W3 Intra-group current accounts

	$'000
Current account balance of Strata as in SFPn	2,800
Cash-in-transit from Strata	900
Current account balance in Paradigm	3,700

W4 Consolidated retained earnings

	$'000
Paradigm's retained earnings (19,200 + 7,400)	26,600
Strata's post-acquisition profit (11,200 (see W5) × 75%)	8,400
URP in inventory (W2))	(600)
Loss on equity investments (7,500 − 7,100)	(400)
	34,000

W5 Strata post-acquisition profits:

As reported for the year	8,000
Add pre-acquisition losses	2,000
Gain on equity investments (3,900 − 3,200)	700
Adjust for the over depreciation on FV of plant (3,000 × 6/36)	500
	11,200

W6 Non-controlling interest

	$'000
Fair value on acquisition (W1)	6,000
Post-acquisition profit (25% of 11,200)	2,800
	8,800

(b) ***The consolidated financial statements do not provide the information an adviser would require to evaluate Strata's performance or position.***

Strata has moved from making a loss to making a profit. The question is how significant has been Paradigm selling at 15 % rather than 40% mark-up which is the third party mark-up rate. If sold with a 40% markup, the monthly sales would have been $5.6m, i.e. $1m higher each month for six months.

This is a significant amount.

Further enquiries would need to be made to establish if there were other related party benefits provided by Paradigm to boost the Strata performance and position – for instance, guaranteeing Strat overdraft to obtain lower bank interest/charges.

Given the temptation to present Strata in the best light for disposal a detailed comparison of the last three years income statement would be a starting position with the usual Du Pont analysis approach and a wary eye on any unusual/unexplained per cent changes.

CHAPTER 23

Preparation of consolidated statements of financial position after the date of acquisition

Question 1 – Sweden

Statement of financial position as at 31 December 20X1

ASSETS		*Kr(m)*
Non-current assets		
Property, plant and equipment	(264 + 120)	384
Goodwill	[200 − (110 + 10 + 70) − 2]	8
Current assets	(160 + 140)	300
Total assets		692
Common Kr10 shares		400
Revaluation reserve		20
Retained earnings	(104 + 10 − 2)	112
Share capital and reserves		532
Current liabilities	(100 + 60)	160
Total equity and liabilities		692

Question 2 – Summer plc

Statement of financial position as at 31 December 20X1

ASSETS		*€000*	
Non-current assets			
Property, plant and equipment	200 + 200	400.0	
Goodwill	W1	18.0	
Current assets	100 + 140	240.0	
		658.0	
Equity shares		200.0	
Retained earnings	161 + 60% (40 − 35)	164	
Share capital and reserves		364.0	
Non-controlling interests	(40% of 220) + 6	94.0	
Current liabilities	80 + 120	200.0	
		658.0	

W1 Goodwill		
Cost of investment	141	
60% of net assets of Winter at date of acquisition (180 + 35)	129	
		12
Fair value of non-controlling interest	92	
40% of net assets of Winter at date of acquisition	(86)	6
		18

Question 3 – Gold plc

Statement of financial position as at 31 December 20X1

ASSETS			£
Non-current assets			
Property, plant and equipment (including land) (82,300 + 108,550 + 3,000)			193,850
Goodwill (Note 1)			1,240
Current assets			
Inventories	(23,200 + 10,000 − 300)		32,900
Other current assets	(5,000 + 7,500)		12,500
Total assets			240,490
Equity shares			60,000
Preferred shares			10,000
Retained earnings			
	[(75,000 + 75% (21,200 − 16,000)) − 300 − 310]		78,290
Share capital and reserves			148,290
Non-controlling interest (Note 2)			26,950
Non-current liabilitie0s	(12,500 + 14,000)		26,500
Current liabilities			
Bond interest payable (625 + 700)		1,325	
Other current liabilities (18,550 + 18,875)		37,425	38,750
			240,490

Note 1: Goodwill

		£	£
Investment in silver			46,000
Acquired	75% × 27,600	20, 700	
	30% × 20,000	6,000	
	20% × 17,500	3,500	
		30,200	
	75% × 3,000	2,250	
	75% × 16,000	12,000	
			44,450
Goodwill			1,550
Impairment @ 20%		= £310	

Goodwill at 31.12.20X1 = £1,550 − 310 = £1,240

Note 2: Non-controlling interest

	£
25% × 24,000	6,000
70% × 20,000	14,000
25% × 3,600	900
25% × 3,000	750
25% × 21,200	5,300
	26,950

Question 4 – The Prop Group

	Workings	*$m*	*$m*
ASSETS			
Non-current assets			
Plant and equipment	1		2,588.0
Intangible assets	2		184.8
Current assets			
Inventories	4	1,124.0	
Receivables	5	800.0	
Cash and cash equivalents		408.0	
			2,332.0
Total assets			5,104.8
EQUITY and LIABILITIES			
Share capital $1 Ordinary shares			2,400.0
Retained earnings	6		900.8
			3,300.8
Non-controlling interests	*7*		196.0
Total equity			3,496.8
Non-current liabilities			
Long-term borrowing			400.0
Current liabilities			
Payables	8	1,128.0	
Bank overdraft		80.0	
			1,208.0
Total liabilities			1,608.0
Total equity and liabilities			5,104.8

Workings

1. Plant and equipment:

Prop (per question)	2,100
Flap (per question)	480
	2,580
Revaluation on acquisition	40
Less depreciation on revalued plant and equipment	(32)
	2,588

2. Goodwill:

Consideration transferred		800.0
Fair value of non-controlling interest	(680 × 20% × $1.30)	176.8
	976.8	
Fair value of assets acquired:		
Share capital		680.0
Retained earnings		72.0
Revaluation on acquisition		40.0
		792.0
		184.8

3. Goodwill attributable to non-controlling interest:

Fair value of NCI (see above)	176.8
NCI share of fair value of net assets at acquisition	158.4
	18.4

4. Inventory:

Prop		880.0
Flap		280.0
Less unrealised profit	($180 × 20%)	(36.0)
		1,124.0

5. Receivables:

Prop		580.0
Flap		420.0
Less inter-company balances	($140m + $60m)	(200.0)
		800.0

6. Retained earnings:

Prop (per question)		860.0
Unrealised profit (W4)		(36.0)
Share of depreciation on revalued plant	($32m × 80%)	(25.6)
798.4		
Flap	($200m at consolidation − $72m at acquisition) × 80%	102.4
		900.8

7. Non-controlling interest in Flap:

Share capital at consolidation		680.0
Retained earnings at consolidation		200.0
Revaluation at acquisition	40.0	
Less depreciation on revalued assets	32.0	
		8.0
		880.0
NCI in Flap's identifiable net assets ($880.0 × 20%)		177.6
Goodwill attributable to NCI (W3)		18.4
		196.0

8. Payables:

Prop		1,100.0
Flap		228.0
Less inter-company balances	(W5)	(200.0)
		1, 128.0

Question 5 – Hill plc

Goodwill calculation:		*Hill plc*	*NCI*	*Total*
		£000	*£000*	
Consideration		1,300	500	
Share capital	1,000			
Retained earnings	400			
	1,400	(980)	(420)	
Goodwill		320	80	400
Write down	300	(210)	(90)	(300)
Goodwill written down		110	(10)	100

(a) The total goodwill at acquisition is £400,000, with £320,000 relating to Hill plc and £80,000 relating to the non-controlling interest.

(b) After write-down of £300,000, the total goodwill reduces to £100,000, with £110,000 relating to Hill plc and negative £10,000 relating to the non-controlling interest.

(c) The above analysis shows an anomaly in the write down of goodwill using Method 2, with positive goodwill relating to Hill plc, but negative goodwill relating to the NCI. It is probable that most companies will write down the goodwill in proportion to the respective shareholdings of the parent company and the NCI, and it could create the anomaly above. A preferable method would be to write down the goodwill in proportion to the original goodwill, rather than the respective shareholdings. This would produce the following result:

	Hill plc	*NCI*	*Total*
Original goodwill	320	80	400
Write down	(240)	(60)	(300)
Written down goodwill	80	20	100

With this method, the goodwill relating to Hill plc and the NCI would reach zero at the same time.

Question 6– Alpha Ltd

Statement of financial position as at 30 June 20X2

Property		43,400
Plant and equipment		12,320
Current assets		
Inventory	51,324	
Trade receivables	22,829	
Cash	63,560	
	137,713	
Current liabilities		
Trade payables	63,700	
Income tax	6,440	
	70,140	
Net current assets		67,573
		123,293
Share capital		56,000
Retained earnings		67,293
		123,293
Reserves at date of acquisition		
Investment	151,200	
Less shares (56,000 × 90%)	50,400	
		100,800
Goodwill		85,680
Reserves (16,800 × 90%)		15,120

Step 1: Calculate the retained earnings balance

Consolidated balance	79,884
Less Parent	35,280
	44,604
Add profit on inventory (4,200 − 3,360)	840
	45,444
Add Non-controlling interest (10% of 50,493 or 1/9 of 45,444)	5,049
Add Pre-acquisition	
Parent (90% of £16,800)	15,120
Minority (10% of 16,800) subsidiary retained earnings	1,680
	67,293

Step 2: Reconcile the non-controlling interest

Shares	5,600
Retained earnings post-acquisition	5,049
Retained earnings pre-acquisition	1,680
	12,329

Worksheet

Non-current assets

	Group	*Parent*	*Subsidiary*	*Adjustment*	*Subsidiary*
Property	127,400	84,000	43,400		43,400
Plant	62,720	50,400	12,320		12,320
Current assets					
Inventory	121,604	71,120	50,484	840	51,324
Receivables	70,429	51,800	18,629	4,200	22,829
Cash	24,360		24,360	39,200	63,560
Current liabilities					
Payables	140,420	80,920	59,500	4,200	63,700
Income tax	27,160	20,720	6,440		6,440

CHAPTER 24

Preparation of consolidated statements of income, changes in equity and cash flows

Question 1 – Hyson and Green

		£000
Revenue	(23,500 + 6,400)	29,900
Cost of sales	(16,400 + 4,700 + 200)	21,300
Gross profit		8,600
Expenses	(4,650 + 1,240)	5,890
Profit before tax		2,710
Income tax expense	(740 + 140)	880
Profit for the period		1,830
Attributable to:		
Equity shareholders of Hyson		1,800
Non-controlling interest [(320 − 200) × 25%]		30
		1,830

Additional depreciation on non-current assets £1,200,000/6 = £200,000

Question 2 – Forest and Bulwell plc

		$000
Revenue	(21,300 + 8,600 − 2,000)	27,900
Cost of sales	(14,900 + 6,020 − 1,568) (see below)	19,352
Gross profit		8,548
Expenses	(3,700 + 1,750)	5,450
Profit before tax		3,098
Taxation		1,070
Profit for the period		2,028
Attributable to:		
Equity shareholders of Forest		1,912
Non-controlling interest	(580 × 20%)	116
		2,028
		$000
Plant		2,000
Gross profit (30%)		600
Group profit in plant (80%)		480
Group cost of plant	(2,000 − 480)	1,520
Depreciation on cost	(10% × 1,520)	152
Depreciation on cost to Forest	(10% × 2,000)	200
Reduction in depreciation (and cost of sales)		48

Adjustment to cost of sales in group financial statements:

Sales	(2,000)
Less profit on plant	480
Reduced depreciation	(48)
Total adjustment to cost of sales	−1,568

Question 3 – Bill plc

Bill plc
Consolidated statement of comprehensive income for the year ended 31 December 20X1

		€
Revenue	(300,000 + 180,000 − 12,000)	468,000
Cost of sales	(30,000 + 90,000 − 12,000 + 2,000)	170,000
Gross profit		298,000
Expenses	(88,623 + 60,000)	148,623
Impairment of goodwill		3,000
Profit before taxation		146,377
Taxation	(21,006 + 9,000)	30,006
Profit after taxation		116,371
Attributable to:		
Equity shareholders of Bill		109,021
Non-controlling interest (Note 1)		7,350
		116,371

Note 1

Non-controlling interest:

	€		*NCI* €
Profit after tax	21,000		
Dividends on preferred shares	4,500	90%	4,050
Profit after dividend	16,500	20%	3,300
Non-controlling interest			7,350

Question 4 – Morn Ltd

Consolidated statement of comprehensive income for the year ended 31 December 20X1

	£
Gross profit (360,000 + 180,000)	540,000
Expenses (120,000 + 110,000)	230,000
Profit before taxation	310,000
Taxation (69,000 + 18,000)	87,000
Profit after taxation	223,000
Other comprehensive income	
Gain on revaluation	30,000
Total comprehensive income	253,000
Profit attributable to:	
Equity shareholders of Morn	217,800
Non-controlling interest	5,200
	223,000
Total comprehensive income for the period attributable to:	
Equity shareholders of Morn	247,800
Non-controlling interest	5,200
	253,000

Question 5 – River plc

River plc
Consolidated statement of comprehensive income for the year ended 31 December 20X1

		£
Sales	[100,000 + (9/12 × 60,000)]	145,000
Cost of sales	[30,000 + (9/12 × 30,000)]	52,500
Gross profit		92,500
Expenses	[20,541 + (9/12 × 15,000)]	31,791
Interest payable on 5% bonds	[9/12 × (5,000 − 500)]	3,375
Impairment of goodwill		4,000
Profit before taxation		53,334
Taxation	[7,002 + (9/12 × 3,000)]	(9,252)
Profit after taxation		44,082
Other comprehensive income		
Gain on revaluation		15,000
Total comprehensive income		59,082
Profit attributable to:		
Equity shareholders of River		43,557
Non-controlling interest		525
		44,082
Total comprehensive income attributable to:		
Equity shareholders of River		58,557
Non-controlling interest (10% × 7,000 × 9/12)		525
		59,082

Question 6 – Mars plc

Statement of financial position as at 31 December 20X2

ASSETS			
		£	£
Non-current assets	(330,000 + 157,500)		487,500
Goodwill			37,100
Current assets			
Inventories	[(225,000 + 67,500) − 3,000]	289,500	
Trade receivables	(180,000 + 90,000)	270,000	
Bank	(36,000 + 18,000)	54,000	
			613,500
Total assets			1,138,100
EQUITY AND LIABILITIES			
Capital and reserves			
Issued capital			196,000
General reserve	(245,000 + 10,800)		255,800
Retained earnings	(222,000 + 44,000)		266,000
			717,800
Non-controlling interest			51,300
Current liabilities			
Trade payables	(283,500 + 40,500)	324,000	
Taxation	(31,500 + 13,500)	45,000	
			369,000
			1,138,100

Consolidated statement of income for the year ending 31 December 20X2

W1: Cancel inter-company balances

Current accounts of £22,500

		£
Sales	(1,440,000 + 270,000 − 18,000)	1,692,000
Cost of sales	(1,045,000 + 135,000 − 18,000 + 3,000)	1,165,000
Gross profit		527,000
Expenses	(123,500 + 90,000)	213,500
Profit before tax		313,500
Taxation	(31,500 + 13,500)	45,000
Profit after tax		268,500
Attributable to:		
Equity shareholders in Mars		262,200
Non-controlling interest	(20% × £31,500)	6,300
		268,500

W2: Goodwill

		£	£
Investment in Jupiter			187,500
£1 Ordinary shares	(80% × 90,000)	72,000	
Accumulated profits	(80% × 80,000)	64,000	
General reserve	(80% × 18,000)	14,400	
			150,400
Goodwill			37,100

W3: Unrealised profit on inter-company sales

50/150 × 18,000 = 6,000.

Only half the inventory is unsold at the year-end, so 6,000/2 is the provision required against the closing stock figure.

Extracts from the consolidated statement of changes in equity for the year ended 31 December 20X2

	Mars group	*Non-controlling interest*	*Total*
	£	£	£
Opening balance (Note)	183,800	22,950	206,750
Income for the period (from the consolidated statement of comprehensive income)	262,200	6,300	268,500
Dividends paid	(180,000)	(2,250)	(182,250)
Closing balance	266,000	27,000	293,000

Note: Opening balance for the Mars group

	£
Mars's retained earnings at the start of the year	156,000
The group share of Jupiter's retained earnings since acquisition [80% × (114,750 − 80,000)]	27,800
	183,800

W4: The statement of income of Jupiter

	£	£
Balance at 31/12/20X2 as per the statement of financial position		135,000
Pre-acquisition profit held by Mars	64,000	
Non-controlling interest (20% × 135,000)	27,000	91,000
		44,000

W5: The statement of income of Mars

	£
Balance at 31/12/20X2 as per the statement of financial position	225,000
Less: Provision for unrealised profit	3,000
	222,000

W6: The non-controlling interest

	£
20% × 90,000 Shares	18,000
20% × 31,500 General reserve	6,300
20% × 135,000	27,000
	51,300

W7: Jupiter general reserve

	£
Balance at 31/12/20X2 as per statement of financial position	31,500
Less:	
Mars share of pre-acquisition 80% × 18,000 =	(14,400)
Non-controlling interest 20% × 31,500	(6,300)
	10,800

Statement of changes in equity

	Share Capital	*Retained Earnings*	*General Reserve*	*Mars Group*	*NCI*	*Total*
Opening balance	196,000	183,800	255,800	635,600	47,250	682,850
Dividends		(180,000)		(180,000)	(2,250)	(182,250)
Comprehensive income		262,200		262,200	6,300	268,500
Closing balance	196,000	266,000	255,800	717,800	51,300	769,100

Question 7 – Red Ltd & Pink Ltd

Consolidated statement of financial position as at 31 December 20X2

Assets		*$*	*$*
Non-current assets			
Tangible (145,000 + 70,000)			215,000
Intangible − Goodwill (W1)			51,200
Current assets			
Inventories (100,000 + 30,000 − 1,500) (W2)		128,500	
Trade receivables (80,000 + 40,000)		120,000	
Bank (16,000 + 8,000)		24,000	272,500
Total assets			**538,700**
Equity and liabilities			
Capital and reserves			***$***
Issued capital			176,000
General reserve	[20,000 + (75% × (14,000 − 8,000))]		24,500
Revaluation reserve			25,000
Retained earnings	[100,000 + 75% × (60,000 − 30,000 −1,500 −12,800)]		111,775
			337,275
Non-controlling interest	[(25% × (114,000 − 1,500 − 12,800)) + 12,500]		37,425
Current liabilities			
Payables	125,996 + 18,000	143,996	
Taxation	(14,004 + 6,000)	20,004	164,000
			538,700

Statement of comprehensive income for the year ending 31 December 20X2

		£
Sales	(200,000 + 120,000 −12,000)	308,000
Cost of sales	(60,000 + 60,000 −12,000 + 1,500 + 12,800)	122,300
Gross profit		185,700
Expenses	(59,082 + 40,000)	(99,082)
Profit before tax		86,618
Taxation	(14,004 + 6,000)	20,004
Profit after tax		66,614
Other comprehensive income		
Gain on revaluation		25,000
Total comprehensive income		91,614
Profit attributable to:		
Equity shareholders of Red		66,689
Non-controlling shareholders in Pink	[25% × (14,000 − 1,500 − 12,800)]	(75)
		66,614
Total comprehensive income for the period attributable to:		
Equity shareholders of Red		91,689
Non-controlling shareholders in Pink	[25% × (14,000 − 1,500 − 12,800)]	(75)
		91,614

Statement of changes in equity

	Share Capital	*Retained Earnings*	*General Reserve*	*Revaluation Reserve*	*Red Group*
Opening balance	176,000	45,086	24,500	–	245,586
Comprehensive income		66,689		25,000	91,689
Closing balance	176,000	111,775	24,500	25,000	337,275

Statement of changes in equity (continued)

	Red Group	*NCI*	*Total*
Opening balance	245,586	37,500	283,086
Comprehensive income	91,689	(75)	91,614
Closing balance	337,275	37,425	374,700

W1: Goodwill

		$
Investment in Pink		110,000
$1 Common shares (75% × 40,000)	30,000	
Accumulated profits (75% × 30,000)	22,500	
General reserve (75% × 8,000)	6,000	
		58,500
Goodwill – parent's share		51,500
Fair value of non-controlling interest at date of acquisition	32,000	
25% of net assets at date of acquisition ($40,000 + $30,000 + $8,000)	(19,500)	
Goodwill – share attributable to non-controlling interest		12,500
Total goodwill		64,000
Impairment loss (20%)		(12,800)
In consolidated statement of financial position		51,200

W2: Unrealised profit on inter-company sales

Mark-up = 9,000 × 1/3 = $3,000.

Only half the inventory is unsold at the year-end, so $3,000/2 is the provision required against the closing inventory figure = $1,500.

This is allocated 75% to Red group ($1,125) and 25% to NCI ($375).

W3: Accumulated profit brought forward

Red	69,336
Pink [75% × (51,000 − 30,000)]	15,750
	85,086

Question 8 – H and S Ltd

(a) Per cent of S Ltd owned by H Ltd = 75%

Derived from the non-controlling interest figures

Statement of comprehensive income 170/680 × 100 = 25%

Statement of financial position 555/2,220 × 100 = 25%

(b) Inter-company sales = 500

The amount eliminated in the Statement of comprehensive income Parent 4,000 + subsidiary 2,200 − group 5,700

(c) Inventory unrealised profit = 45

Parent 410 + subsidiary 420 − group 785

(d) Inter-company receivables and payables offset/eliminated

Receivables:	Parent	535	+	subsidiary	220 − group	595	=	160
Payables:	Parent	(300)	+	subsidiary	(260) − group	355	=	205

Note: If the £45 dividend is added to group payables, the difference becomes £160 which is the inter-company payables/receivables.

(e) S Ltd − retained earnings on acquisition = 960

Comprising: Cost		1,700
Less share capital	570	
Goodwill	410	980
Reserves attributable to 75%		720
Total reserves 720/75 × 100		960

Question 9 – Rumpus plc

(a) *Statement of cash flows for the year ended 31 March 2014*

	€ million	*€ million*
Cash flows from operating activities		
Cash generated from operations (see note below)	31	
Interest paid (SPLOCI)	(6)	
Income tax paid (W6)	(11)	
Net cash inflow from operating activities		14
Cash flows from investing activities		
Purchase of interest in subsidiary (W7)	(4)	
Purchase of property plant and equipment (W1)	(40)	
Purchase of interest in associate (note iv)	(13)	
Dividend received from associates (W3)	7	
Net cash outflow from investing activities		(50)
Cash flows from financing activities		
Proceeds from issue of ordinary share capital (29 + 29)	58	
Dividends paid to NCI (W4)	(3)	
Equity dividends paid (W4)	(2)	
Net cash inflow from financing activities		53
Net increase in cash and cash equivalents		17
Cash and cash equivalents at beginning of period		1
Cash and cash equivalents at end of period		18
Note: Reconciliation of profit before tax to cash generated from operations		
Profit before tax (SPLOCI)		9
Finance cost (SPLOCI)		6
Profit for year attributable to associate		(14)
Depreciation charge (note iii)		41

Goodwill impairment (W2)	3
Increase in long-term provisions (W5)	5
Decrease in inventories (22 −(19 + 8)) (W7)	5
Increase in trade and other receivables (42 − 28)	(14)
Decrease in trade and other payables (23 −33)	(10)
Cash generated from operations	31

W1

Property, Plant and Equipment

	€ million		*€ million*
Bal b/d	245	Depreciation (note iii)	41
Acquired on acquisition of Sacker plc (W7)	33		
Revaluation gains on group PPE (OCI)	13		
Acquired for cash (balancing figure)	40	Bal b/d	290
	331		331

W2

Goodwill

	€ million		*€ million*
Bal b/d	--	Impairment charge (bal fig)	3
Recognised on acquisition of Sacker plc (W7)	9	Bal c/d	6
	9		9

W3

Investments in Associates

	€ million		*€ million*
Bal b/d	40	Cash dividend received (bal fig)	7
Purchase of associate (note iv)	13	Bal c/d	64
Profit for year (non-cash flow)	14		
OCI for year	4		
	71		71

W4 – Equity Reconciliation

	Share Cap.	Share Prem.	Revaluation	R/E	NCI
	€ million	*€million*	*€ million*	*€ million*	*€ million*
Opening balance	106	---	45	65	14
Profit for year				5	1
OCI for year			17		
Issued for acquisition (W7)		25	10		
Arising on acquisition (W7)					11

Shares issued cash	29	29			
Dividend paid to NCI					(3)
Equity dividends paid	___	___	___	(2)	__
Closing balance	160	39	62	68	23

W5

Long-term provisions

	€ million		*€ million*
		Bal b/d	7
Bal c/d	12	SPLOCI (bal fig)	5
	12		12

W6

Taxation

	€ million		*€ million*
Cash paid (balancing figure)	11	Bal b/d	13
Bal c/d	5	SPLOCI	3
	16		16

W7 – Acquisition		**€ million**
Cost of investment (80%)		
Shares issued (25 share capital, 10 share premium)		35
Cash		10
		45
FV of NCI		11
FV of net assets at acquisition:		
PPE	33	
Inventory	8	
Cash	6	
		(47)
Goodwill		9

Net cash flow impact on purchase is an outflow of €4m (cash paid 10m less cash acquired 6m).

(b)	2014	2013
Current Ratio	82 : 28	48 : 46
	2.93:1	1.04:1
Acid Test Ratio	60 : 28	29 : 46
	2.14 : 1	0.63 : 1
Gearing (D/E)	50 / 329	50 / 216
	15%	23%

Liquidity

The liquidity of Rumpus plc has improved significantly over the past year.

The current ratio improved from 1.04:1 to 2.93:1.The Acid Test (Quick) ratio likewise improved from 0.63:1 to 2.14:1.

These changes transform the ratios from being worryingly low in 2013 to their present extremely healthy levels.

This change is mainly due to a share issue which contributed €58m to company funds.

Despite this share issue, the statement of cash flows shows that net cash inflow for the year was just €17m.

The main reason for the lower net cash inflow is the high level of investment made by the company in PPE and in other entities. €40m was used to purchase new PPE, and €17m cash plus a further equity issue was used to purchase a subsidiary and associate.

The fact that the company is investing in future earnings potential is positive. The fact that shareholders were willing to invest so much money at a significant premium indicates that the company is well regarded by the market.

The profit generated in 2014 would seem to be relatively poor, considering the value of the company. This profit may of course be abnormally low, and normalised profits may be higher. We have insufficient information to make this judgement.

The statement of cash flows shows that the cash flow from operations is healthy at €14m. The fact that cash flow from operations is higher than profits reflects the high depreciation charge among other things. Viewed in this light, the expenditure on PPE would seem to be little more than maintaining capacity (being roughly equal to the depreciation amount).

Gearing ratios are very conservative, and would not seem to be of concern. However, close attention should be paid to the debentures maturing in 2016. If the company is performing poorly at that time from a profit perspective, it may be difficult to refinance these. If cash is not available at that time, the company faces a risk of default or very unfavourable refinancing terms. It is important to prepare contingency plans to avoid such an eventuality.

Overall, there seems to be little liquidity pressure on this company. There is ample cash to pay short-term liabilities as they fall due. However I would recommend watching profits closely, in order to assess whether the additional investment pays off. If not, cash flow will tighten in future years.

Question 10 –Peel

Consolidated income Statement for the year ended 31 October 2011

	£m	
Revenue	180	*1*
Cost of sales	(76)	*1*
Gross profit	104	
Operating expenses	(45)	*0.5*
Investment income	8	*1*
Interest receivable	4	*1*
Finance charges	(5)	*0.5*
Net profit before taxation	66	
Taxation	(25)	*0.5*
Profit for the year	41	
attributable to		
Equity shareholders	39	*1*
Non-controlling interest	2	*1.5*
	41	***8***

Workings

Revenue	£m
Peel	125
Caval	95
Intercompany sales	(40)
	180

Cost of sales	£m
Peel	69
Caval	43
Intercompany sales	(40)
Unrealised profit	4
	76

Investment income	*£m*
Peel	21
Caval	5
Dividend from Caval to Peel	(18)
	8

Interest receivable	*£m*
Peel	4
Caval	3
Interest from Caval to Peel	(3)
	4

Finance charges	*£m*
Peel	5
Caval	3
Interest from Caval to Peel	(3)
	5

Non-controlling interest	*£m*
Caval's profit after tax	24
Non-controlling percentage	10%
	2

Check on profit attributable to the equity shareholders

		£m
Holding company's profit		39
Deduction for unrealised profit		(4)
Exclude dividend from subsidiary		(18)
		17
Subsidiary's profit	24	
Holding company's percentage	90%	
		22
		39

CHAPTER 25

Accounting for associates and joint arrangements

Question 1 – Continent plc

Statement of income of Continent plc for the year ended 31 December 20X9

	Working	€
Revenue	1	1,035,650
Cost of sales	2	(667,260)
Gross profit		368,390
Administration costs	3	(46,695)
Distribution expenses		(25,300)
Goodwill impairment	4	(4,400)
Share in associate	5	22,550
Profit before tax		314,545
Tax	6	(88,000)
Profit for the period		226,545
Attributable to:		
Shareholders of continent		206,767
Non-controlling interest	7	19,778
W1		226,545

Working

1.	€
Revenue	
Continental	825,000
Island	220,000
	1,045,000
Less fee	5,500
	1,039,500
Less inter-company sales	3,850
	1,035,650

2.		€
Cost of sales		
Continental		616,000
Island		55,000
		671,000
Less Inter-company sales		3,850
		667,150
Add unrealised profit 10% of (3,850 − 2,750)		110
		667,260

3.	€
Administration costs	
Continental	33,495
Island	18,700
	52,195
Less management fee	5,500
	46,695

4.	€
Goodwill impairment	
Island	550
River	3,850
	4,400

5.		€
Share in River		
Profit after tax	40% of 56,650	22,660
Less 40% of unrealised profit	40% of 275	110
		22,550

6.	€
Income tax	
Continental	55,000
Island	33,000
	88,000

7. Non-controlling interest 20% of (99,000 − 110) = €19,778

Question 2 – Highway plc

Statement of comprehensive income for the year ended 31 December 20X9

	Working	*$*
Revenue	1	320,400
Cost of sales	2	(67,200)
Gross profit		253,200
Administration costs	3	(17,280)
Distribution expenses		(28,800)
Goodwill impairment	4	(6,560)
Share in associate	5	8,640
Profit before tax		209,200
Tax	6	(40,000)
Profit for the period		169,200
Attributable to		
Shareholders of highway		151,600
Non-controlling interest (7)		17,600
		169,200

Working

1.	***$***
Revenue	
Highway	184,000
Road	152,000
	336,000
Less fee	7,600
	328,400
Less inter-company sales	8,000
	320,400

2.		***$***
Cost of sales		
Highway		48,000
Road		24,000
		72,000
Less inter-company sales		8,000
		64,000
Add unrealised profit	50% of (8,000 − 1,600)	3,200
		67,200

3.	*$*
Administration costs	
Highway	13,680
Road	11,200
	24,880
Less management fee	7,600
	17,280

4.	*$*
Goodwill impairment	
Road	4,800
River	1,760
	6,560

5.		*$*
Share in lane		
Profit before tax	30% of 30,400	9,120
Less 30% of unrealised profit	30% of 1,600	480
		8,640

6.	*$*
Income tax	
Highway	32,000
Road	8,000
	40,000

7. Non-controlling interest

20% of (91,200 − 3,200) = 17,600

Question 3 – Alpha, Beta and Gamma

(a)

(i) *Consolidated statement of income for the year ended 30 September 20X6*

	$000
Revenue **(W1)**	230,000
Cost of sales (balancing figure)	(168,200)
Gross profit **(W2)**	61,800
Distribution costs (7,000 + 6,000)	(13,000)
Administrative expenses (8,000 + 7,000)	(15,000)
Operating profit	33,800
Investment income (W3)	1,000
Finance cost (W4)	(6,800)
Share of profits of associate (W5)	652
Profit before tax	28,652
Income tax expense (7,000 + 1,800)	(8,800)
Profit for the period	19,852
Attributable to	
Non-controlling interests (4,200 × 25%)	1,050
Alpha shareholders (balance)	18,802
Net profit for the period	19,852

(ii) *Consolidated statement of changes in equity for the year ended 30 September 20X6*

	Parent	*Non-controlling interest*	*Total*
	$000	*$000*	*$000*
Balance at 1 October 20X5 **(W6)**	189,850	22,750	212,600
Net profit for the period	18,802	1,050	19,852
Dividends	(6,500)	(750)	(7,250)
Balance at 30 September 20X6	202,152	23,050	225,202

Working 1 – Revenue

	$000
Alpha + Beta	250,000
Sales from Alpha − Beta	(20,000)
	230,000

Working 2 – Gross profit

	$000
Alpha + Beta	62,000
Unrealised profit adjustments:	
Beta: [1/5 (3,000 − 2,000)]	(200)
	61,800

Working 3 – Investment income

	$000
As per Alpha income statement	6,450
Inter entity dividends received:	
Beta (75% × 3,000)	(2,250)
Gamma (40% × 5,000)	(2,000)
Intra-group interest receivable (6% × 20,000)	(1,200)
Residue in consolidated income statement	1,000

Working 4 – Finance cost

	$000
Alpha + Beta	8,000
Intra-group interest payable	(1,200)
	6,800

Working 5 – Share of profits of associate

	$000
Profit after tax of Gamma	9,000
Fair value adjustment (6,400 × 1/5)	(1,280)
	7,720
7,720 × 40% × 3/12 equals	772
Profit in inventory 1,500 × (25/125) × 40%	(120)
	652

Working 6 – Consolidated equity at 1 October 20X5

	$000
Alpha	122,000
Beta (75% × 91,000)	68,250
Unrealised profit on opening inventory (1/5 × 2,000)	(400)
	189,850

(b) *Part*

The treatment of Beta in the consolidated financial statements is based on the principle of control. IAS 27 – *consolidated and separate financial statements* – defines a subsidiary as an entity that is controlled by its parent. IAS 27 states that control is presumed to exist when the parent owns more than half of the voting power of another entity, but in exceptional circumstances such ownership may not constitute control, and so, Beta is not automatically a subsidiary just because Alpha owns more than half of the equity shares. In this case, however, there is no reason to suppose that voting control does not give Alpha a control over the operating and financial policies of Beta, so Beta is correctly treated as a subsidiary.

It is certainly true that Gamma should not be consolidated as a subsidiary because Alpha does not control its operating and financial policies. This is evidenced by the fact that on one occasion Gamma has pursued a policy with which Alpha did not agree. However, the fact that Alpha has a representative on the board of directors gives Alpha the ability to significantly influence those policies. Therefore, under the provisions of IAS 28 – *investments in associates* – Gamma would appear to be an associate. The ownership of 40% of the voting shares (between 20% and 50%) is also indicative of this fact, although on its own this is insufficient. As there is no contractual relationship with the other investors in Gamma, it is not a joint venture. This means that rather than being accounted for as an 'available for sale' financial asset, the investment in Gamma should be accounted for under the equity method. This means including the group share (40% in this case) of the profit after tax as a single line in the consolidated income statement. Since Gamma did not become an associate until 1 July 20X6, only three months profits should be accounted for under the equity method in this case.

Question 4 – Garden plc

Garden plc consolidated statement of financial position as at 31 December 20X9

	Group £	
Non-current assets		
Land (Garden + Rose)	420,000	
Goodwill on consolidation	33,300	W1
Investment in Petal	49,080	W2
Investment	18,000	
Current assets		
Inventories	109,200	
Trade receivables	131,400	
Inter-company receivable – Petal	2,400	
Bank (includes cash in transit 3,000)	76,800	
	840,180	
Current liabilities		
Trade payables	138,600	
Total net assets	701,580	
EQUITY		
£1 common shares	300,000	
Retained earnings	296,280	W3
Non-controlling interest	105,300	W4
	701,580	

Workings

W1

Goodwill in Rose			
Cost of investment	:	300,000	
Less:			
75% of 252,000 share capital and reserves		189,000	
Goodwill before impairment			111,000
Impairment			(77,700)
Closing goodwill			33,300

Goodwill in Petal	
Cost of investment	72,000
20% of 42,000 Fair value of assets	8,400
Goodwill before impairment	63,600
Impairment	(31,800)
Closing goodwill	31,800

	Garden	*Rose*	*Petal*
Retained earnings	270,000	216,000	57,600
Unrealised profit		(4,800)	(1,200)
Restated	270,000	211,200	56,400
Revaluation increase		90,000	
Share capital	300,000	120,000	30,000
Total equity	570,000	421,200	86,400

W2 Investment in Petal

20% of 86,400 = 17,280

Goodwill (W1)	31,800
	49,080

W3 Retained earnings carried forward

Garden		270,000
Rose	75% of (211,200 − 42,000) post-acquisition	126,900
Petal	20% of (56,400 − 12,000) post-acquisition	8,880
		405,780
	Less goodwill impairment	(109,500)
		296,280

W4 Non-controlling interest

25% of 421,200 = 105,300

Question 5 – Swish plc

(a) *Statement of income for the year ended 31 December 20X3*

		£
Revenue	(300,000 + 160,000 − 16,000)	444,000
Cost of sales	(90,000 + 80,000 − 16,000 + 3,200)	157,200
		286,800
Expenses	(95,000 + 50,000)	145,000
Group profit before taxation		141,800
Share of associated company profits	(25% × 22,000)	5,500
Profit before taxation		147,300
Taxation – Group	(30,000 + 7,000)	37,000
Profit for the year		110,300
Attributable to:		
Equity shareholders		108,000
Non-controlling interests in Broom	(10% of £23,000)	2,300
		110,300

(b) *Consolidated statement of financial position as at 31 December 20X3*

		Cost	*Dep'n*	*Net*
Non-current assets		£	£	£
Intangible: Goodwill in subsidiary (Note 1)				17,600
Tangible	(120,000 + 110,000)	500,000	270,000	230,000
Investment in Associate	(18,000 + 28,000)			46,000
				293,600
Current assets				
Inventories	[120,000 + (60,000 − 3,200)] (Note 2)		176,800	
Trade receivables	(130,000 + 70,000)		200,000	
Current account – Handle	(Note 3)	3,000		
Bank	(24,000 + 7,000)		31,000	
			410,800	

Current liabilities			
Trade payables	(132,000 + 25,000)	157,000	
Taxation payable		37,000	
		194,000	216,800
			510,400
Financed by			
£1 shares			250,000
General reserve	[30,000 + 3,600 + (25% × 4,000)] (Note 4)		34,600
Retained earnings			
	[150,000 − 3,200 + 54,000 + (25% × 20,000)] (Note 4)		205,800
			490,400
Non-controlling interest			20,000
			510,400

Notes

(1) Goodwill in Broom

Cost of investment		140,000
Share capital	60,000	
General reserve	16,000	
Retained earnings	60,000	
	136,000	
90% of 136,000		122,400
Goodwill		17,600

(2) Unrealised profit in inventory

Swish sold Broom	16,000	
Remaining unsold at year-end	12,800	
Profit element 25%		3,200

(3) The inter-company current account balance with the associated company has not been cancelled because the associated company is not a member of the group.

(4) The group's share of the retained earnings and general reserve is calculated on the **post-acquisition** accumulated profits and general reserve of Handle, i.e.

General reserve per Handle statement of financial position	12,000
Pre-acquisition (*see* Question)	8,000
Post-acquisition	4,000
Retained earnings per Handle balance sheet	50,000
Pre-acquisition (*see* Question)	30,000
Post-acquisition	20,000

Question 6 – Ant Co.

(a) *Consolidated statement of income for the year ended 31 December 20X9*

		$
Sales	(225,000 + 120,000 − 12,000)	333,000
Cost of sales	(67,500 + 60,000 − 12,000 + 2,700)	118,200
		214,800
Expenses	(70,500 + 37,500)	108,000
Group profit before taxation		106,800
Share of associated company profits	(25% × 16,500)	4,125
Profit before taxation		110,925
Taxation – Group	(22,500 + 5,250)	27,750
Profit for the year		83,175
Attributable to:		
Equity shareholders of Ant		79,725
Non-controlling interest	(20% × 17,250)	3,450
		83,175

(b) *Consolidated statement of financial position as at 31 December 20X9*

	Cost	*Dep'n*	*Net*
	$	*$*	*$*
Non-current assets			
Intangible: Goodwill in subsidiary			9,000
Tangible: (90,000 + 82,500)	375,000	202,500	172,500
Investment in Associate			34,500
			216,000
Current assets			
Inventories (105,000 + 45,000 − 2,700)		147,300	
Trade receivables (98,250 + 52,500)		150,750	
Current account – Nit (Note 1)		2,250	
Bank (17,750 + 5,250)		22,500	
		322,800	

Current liabilities			
Trade payables (99,000 + 18,750)		117,750	
Taxation payable		27,750	
		145,500	
			177,300
			393,300
Financed by			
$1 shares			187,500
General reserve			25,650
Retained earnings			149,550
			362,700
Non-controlling interest			30,600
			393,300

Notes:

- The inter-company current-account balance with the associated company has not been cancelled because the associated company is not a member of the group.
- The goodwill on acquisition of Bug is calculated as follows:

	£
Ant's Goodwill calculation:	
$90,000 − 80% ($45,000 + $45,000 + $12,000)	= 8,400
Attributable to non-controlling interest	
($21,000 − 20% × $102,000)	600
Goodwill	9,000

- The investment in Nit is $30,000 + 25% ($37,500 + $9,000 − $22,500 − $6,000) = $34,500
- The consolidated general reserve is $22,500 + 80% ($15,000 − $12,000) + 25% ($9,000 − $6,000) = $25,650
- Consolidated retained earnings are $112,500 + 80% ($90,000 − $45,000) + 25% ($37,500 − $22,500) − $2,700 (unrealised profit) = $149,550
- The non-controlling interest is (20% × $150,000) + $600 = $30,600

Question 7 – Epsilon

(a) Zeta is only 40% owned, but Epsilon controls the board and can use that control to control the company because a majority of board members can pass decisions at board meetings. Zeta is a subsidiary.

Kappa is 25% owned and Epsilon has control over one of the positions on the board. It is clear that Epsilon has influence, but there is nothing to indicate that it is controlled, so Kappa is an associate rather than a subsidiary.

Lambda is 25% owned, but the company has a 75% shareholder who appears to have outright control over the company. That suggests that Lambda is an investment and is not part of the Epsilon group.

(b)

Zeta – workings

(i) Equity acquired (40%)	
Share capital	20.0
Retained earnings	20.0
	40.0
Investment	100.0
Goodwill	60.0
(ii) Non-controlling interest (60%)	
Share capital (50 × 60%)	30.0
Retained earnings (iii) (124 × 60%)	74.4
	104.4
(iii) Retained earnings	
At 31 October 2011	124.0
Pre-acquisition	(50.0)
	74.0
Group share	29.6
(iv) Kappa – workings (25%)	
Cost of investment	55.0
Group share of post-acquisition profits	
25% × (91 − 40)	12.8
Investment in Kappa	67.8
(v) Retained earnings	
Epsilon	1,563.0
Zeta	29.6
Kappa	12.8
	1,605.4

Epsilon Group
Consolidated statement of financial position
As at 31 October 2011

	$000
Non-current assets	
Goodwill (i)	60.0
Property, plant and equipment	2,070.0
Investment in Kappa (iv)	67.8
Investment in Lamda	60.0
	2,257.8
Current assets	
Inventory	14.0
Trade receivables	17.0
Bank	9.0
	40.0
Total assets	2,297.8
Equity	
Share capital	500.0
Retained earnings (v)	1,605.4
	2,105.4
Current liabilities	
Non-current liabilities	50.0
Non-controlling interest (ii)	104.4
	154.4
Current liabilities	
Trade payables	38.0
	2,297.8

Question 8 – Hyson and Green plc

(a) *The group statement of financial position of Hyson plc and its associated company, Green plc at 31 December 20X8 is:*

	Hyson
ASSETS	£
Non-current assets	
Property, plant and equipment	650,000
Depreciation	(310,000)
	340,000
Investment in Green	40,000
Current assets	
Inventories	145,000
Trade receivables	180,000
Current account Green	5,000
Bank	25,000
Total current assets	355,000
Total assets	735,000
EQUITY AND LIABILITIES	
£1 ordinary shares	300,000
General reserve	61,500
Retained earnings	173,500
	535,000
Current liabilities	
Trade payables	163,000
Taxation payable	37,000
Total equity and liabilities	735,000

Workings

Cost of Green	90,000
Post acq: general reserve (30,000 − 25,000) × 30%	1,500
Retained earnings (−57,000 − 40,000) × 30%	(29,100)
Carrying value	62,400
Recoverable amount (in SFP)	(40,000)
Impairment (charged in IS)	22,400

Reserves:	General	Retained Earnings
Hyson	60,000	225,000
Green post acq – see above	1,500	(29,100)
Impairment (above)		(22,400)
Reserves in group SFP	61,500	173,500

(b) T*he statement of Income of Hyson and its associated company, Green for the year ended 31 December 20X8 is:*

	£
Sales	1,045,000
Cost of sales	683,000
Gross profit	362,000
Distribution expenses	42,000
Administration expenses	152,000
Share of loss of associated company after tax	(19,500)
Impairment of goodwill of associated company	(22,400)
Profit/(loss) before tax	126,100
Income tax expense	33,000
Profit for the period	93,100
Dividend paid (shown in equity)	40,000

Share of loss of associated company:

Loss after tax	(65,000)	× 30%	(19,500)

Impairment of goodwill – calculation shown in SFP workings

(c) If the recoverable amount of a 30% interest in Green is £65,000, it is more than the carrying value of £62,400 (see working of SFP), so there is no impairment of the investment in Green.

So, the investment in Green in SFP will be £62,400, and there will be no impairment charge in the income statement. Group retained earnings will be £22,400 more than in the answer to (a) above – i.e. £195,900.

There will be no other changes in either the statement of financial position or the income statement (apart from totals changed because of the changes in the figures above).

Question 9 – Arnold plc and Bunny plc

Income statement for the year ended 31 December 20X1

	£000	*£000*
Sales		1,500
Purchases	700	
Direct wages	500	
	1,200	
Less: closing inventory	(200)	
Cost of sales		1,000
Gross profit		500
Less:		
Depreciation – plant	30	
Office expenses	80	
Heat, light and telephone	70	
Motor and travelling expenses	60	
Advertising and marketing	46	
Finance costs	30	
		316
Net profit		184

Appropriation of profit

	Arnold	Bunny	Total
	£000	*£000*	*£000*
Interest	90	10	100
Share of profit	42	42	84
Total	132	52	184

The income statement of Arnold and Bunny will be 50% of the figures above down to the 'net profit', and the profit will be allocated to each partner as shown above in the Appropriation of Profit.

The Statements of Financial Position for Carlton, Arnold and Bunny at 31 December 20X1 are shown below:

Statement of Financial Position at 31 December 20X1:

	<----------Arnold---------- >		Arnold		Bunny
	£000	*£000*	*£000*	*£000*	*£000*
	Cost	Dep'n	NBV	NBV	NBV
Land	1,000		1,000	1,000	
Plant	600	30	570	570	
	1,600	30	1,570	1,570	
Inventory		200		100	100
Trade receivables		400		200	200
Cash at bank		314		212	102
		914		512	402
Trade payables		(300)		(150)	(150)
			614	362	252
			2,184	1,932	252

Capital	*£000*	*£000*	*£000*
Capital introduced	2,000	1,800	200
Share of profit	184	132	52
Capital and profit at 31 December 20X1	2,184	1,932	252

The cash at bank is divided so each partner's assets less liabilities equals the partner's capital.

CHAPTER 26

Introduction to accounting for exchange differences

Question 1 – Fry Ltd

The profit or loss on foreign exchange in these cases will be as follows:

Name of account:	*Texas Inc.*	*Alamos Inc.*	*Chicago Inc.*	*American bank*
	Payable	*Receivable*	*Payable*	*Loan payable*
Foreign currency	$40,000	$60,000	$100,000	$90,000
at exchange rate on date of initial transaction	2.60	2.60	2.40	2.40
	£15,385	£23,077	£41,667	£37,500
Foreign currency	$40,000	$30,000	$80,000	
at exchange rate on	2.40	2.40	2.30	
date of settlement	£16,667	£12,500	£34,783	
Foreign currency		$30,000	$20,000	$90,000
at exchange rate on		2.10	2.10	2.10
date of statement of financial position	000 000	£14,286	£9,524	£42,847
Profit/(loss) on foreign exchange	(£1,282)	£3,709	(£2,640)	(£5,357)

Question 2 – Fibre plc

(a) *Income statement*

Income statement	*Fibre*	*Fastlink*		*Fastlink*	*Fibre group*
	£000	*$000*	Rate	*£000*	*£000*
Sales	200,000	50,000	2.25	22,222.2	222,222.2
Opening inventories	20,000	8,000	2.5	3,200.0	23,200.0
Purchases	130,000	30,000	2.25	13,333.3	143,333.3
Closing inventories	−40,000	−6,000	2.2	−2,727.3	−42,727.3
Cost of sales	110,000	32,000		13,806.1	123,806.1
Gross profit	90,000	18,000		8,416.2	98,416.2
Other expenses	−15,000	−6,500	2.25	−2,888.9	−17,888.9
Profit before tax	75,000	11,500		5,527.3	80,527.3
Taxation	−15,000	−3,000	2	−1,500.0	−16,500.0
Profit after tax	60,000	8,500		4,027.3	64,027.3

Note: The opening inventory is translated at the rate at 1 January 20X1 as this was the date of acquisition (if the acquisition was at, say, 1 January 20X0, it would have been translated at a rate of US$1 = R$1.8)

(b) *Statement of financial position*

Statement of financial position

	Fibre	*Fastlink*		*Fastlink*		*Fibre group*
	£000	*$000*		*£000*		*£000*
Non-current assets	90,000	25,000	2	12,500		102,500
Investment in Fastlink	6,000				Goodwill N1	500
Current assets						
Inventories	40,000	6,000	2	3,000		43,000
Trade receivables	27,000	5,000	2	2,500		29,500
Cash	2,000	4,000	2	2,000		4,000
	69,000	15,000		7,500		76,500
Current liabilities						
Trade payables	35,000	11,000	2	5,500		40,500
Taxation	15,000	3,000	2	1,500		16,500
Total current liabilities	50,000	14,000		7,000		57,000
Total assets less liabilities	115,000	26,000		13,000		122,500
Share capital	20,000	1,200	2	600		20,000
Share premium		800	2	400		
Retained earnings	95,000	24,000	2	12,000		N3 99,900
	115,000	26,000		13,000		119,900
Non-controlling interest						N2 2,600
	115,000	26,000		13,000		122,500

N1 Goodwill calculation

	$000		*£000*					
Cost			15,000					
Share capital	1,200							
Share premium	800							
Retained earnings	15,500							
	17,500	× 80%	14,000	Rate	£000	Rate	£000	Gain
			---	1.1.20X1		31.12.X1		
Goodwill			1,000	2.5	400	2	500	100

Note:

(a) For the statement of financial position the goodwill is recalculated as at the rate at the year-end to give us £500,000.

(b) The difference between the goodwill as at acquisition date and closing date is taken to the retained earnings of the Parent.

N2 Non-controlling interest

NCI at 31.12.X1	$000	Rate	£000		£000
Share capital	1,200	2	600		
Share premium	800	2	400		
Retained earnings	24,000	2	12,000		
			13,000	× 20%	2,600

(c) *N3 Post-acquisition profit of subsidiary attributable to parent*

	$000	Rate	*£000*	*£000*	*£000*
Retained profit				Parent	NCI
Per income statement			4,027.3	3,221.8	805.5
At closing rate	8,500	2	4,250.0		
Gain on exchange			222.7	178.2	44.5
Gain on opening shareholders' funds					
Share capital	1,200				
Share premium	800				
Retained earnings	15,500				
		Open rate			
	17,500	2.5	7,000		
		Close rate			
		2	8,750		
Gain			1,750	1,400	350
Gain on goodwill		Open rate			
Goodwill	1,000	2.5	400		
		Close rate			
		2	500		
Gain			100	100	
Post-acquisition profit attributable to Fibre				4,900	
Post-acquisition profit attributable to NCI					1,200
Opening NCI (17,500 × 20%/2.5)					1,400
Closing NCI (26,000 × 20%/2)					2,600

	£000
Group retained profit at 31.12.X1	
Fibre	95,000
Fastlink post-acq (above)	4,900
Group retained profit	99,900

Note: There is no post acquisition share premium, as the subsidiary's balance at acquisition and at 31.12.X1 is the same at $800,000

Question 3 – Walpole Ltd

Solution – note all numbers expressed in '000s

Stage 1 – Translate the net assets of Paris into £

This is all done at the closing rate as shown below

	€000	*£000*
Non-current assets	150,000	30,000
Inventories	12,000	2,400
Trade receivables	40,000	8,000
Cash	11,000	2,200
Trade payables	(18,000)	(3,600)
Owing to Walpole	(12,000)	(2,400)
Taxation	(15,000)	(3,000)
Debentures	(10,000)	(2,000)
Net assets	158,000	31,600

Stage 2 – Compute goodwill on acquisition

Goodwill is treated as a foreign currency asset, and so this is initially done in euros:

41,050 × 2 – 90% (60,000 + 20,000 + 10,000) = 1,100 in euros. This is translated at the year-end rate to give a figure in the statement of financial position of **220** (1,100 × 1/5).

Stage 3 – Prepare the consolidated statement of financial position

		£000
Goodwill (see stage 2 above)		220
Non-current assets	(94,950 + 30,000)	124,950
Inventories	(60,000 + 2,400)	62,400
Trade receivables	(59,600 + 8,000)	67,600
Cash	(11,000 + 2,200)	13,200
Trade payables	(45,000 + 3,600)	(48,600)
Taxation	(21,000 + 3,000)	(24,000)
Debentures	(40,000 + 2,000)	(42,000)
		153,770

Share capital	80,000
Share premium	6,000
Revaluation reserve (see working 1 below)	13,600
Retained earnings (see working 2 below)	51,010
Non-controlling interest (10% × 31,600)	3,160
	153,770

Working 1 – Revaluation reserve

	£000
Walpole	10,000
Paris (90% × 12,000 × 1/3)	3,600
	13,600

Note: The revaluation reserve of Paris has been translated at the rate of exchange in force when the revaluation occurred. The exchange difference on this revaluation has been included within retained earnings. In practice, all exchange differences may well be included in a separate foreign exchange reserve.

Working 2 – Retained earnings

	£000
Walpole	67,000
Paris [90% (66,000 − 10,000) × 1/5]	10,080
Exchange loss on revaluation reserve of Paris	(1,440)
[90% (12,000/3 − 12,000/5)]	
Notional exchange difference on investment in Paris	(24,630)
(see note below)	51,010

Note: The notional exchange difference on the investment in Paris of 82,100 euros that would have arisen had the investment been retranslated at the closing rate of 5 is necessary because of the way in which goodwill on consolidation is computed and translated. All other components of the calculation are already treated at the closing rate, and so this needs to be in order too, to reconcile retained earnings.

Stage 4 – Prepare the consolidated statement of comprehensive income

Note that where foreign subsidiaries are involved, it is usually easier to take a 'two statement' approach to the preparation of the statement of comprehensive income. This is because the exchange differences are not shown in profit and loss but are included as 'other comprehensive income'. The statement of comprehensive income itself translates every item relating to Paris at the average rate for the period, which is 4 euros to £1.

	£000
Sales (317,200 + 200,000 × ¼)	367,200
Cost of sales (170,000 + 100,000 × ¼)	(195,000)
Gross profit	172,200
Depreciation (30,000 + 30,000 × ¼)	(37,500)
Other expenses (15,000 + 7,000 × ¼)	(16,750)
Interest (6,000 + 3,000 × ¼)	(6,750)
Profit before taxation	111,200
Taxation (21,000 + 15,000 × 1/4)	(24,750)
Profit for the period	86,450
Attributed to:	
Shareholders of parent company	85,325
Non-controlling interest (10% × 45,000 × 1/4)	1,125
	86,450

Stage 5 – Compute the exchange differences

These arise in two ways:

On net assets of Paris

	Euros	*Rate*	*£000*
At start of period (balancing figure in euros)	111,000	3	37,000
Revaluation of assets	12,000	3	4,000
Profit for the period	45,000	4	11,250
Dividend	(10,000)	5	(2,000)
Exchange translation difference (balancing figure in £)	Nil		(18,650)
At end of period	158,000	5	31,600

On goodwill on consolidation

	Euros	*Rate*	*£000*
At start of period (6,900 − 2,760)	1,100	3	367
Exchange translation difference (balancing figure in £)	Nil		(147)
At end of period	1,100	5	220

Step 6 – Prepare the statement of total comprehensive income

	£000
Consolidated profit for the period	86,450
Other comprehensive income [(18,650) + (147)]	(18,797)
Total comprehensive income	67,653
Attributed to:	
Shareholders of parent company	68,393
Non-controlling interest [(1,125 + 10% × (18,650)]	(740)
	67,653

Note that none of the exchange difference on goodwill is allocated to the non-controlling interest because method 1 is used to measure it.

Question 4 – IAS 21

(a) The answer is given in Section 26.4 of the text of the Chapter

(b) All the items in the statement of financial position are translated at a rate of $1 = €(Euro) 0.72425

Eufonion – Statement of financial position at 31 October 2008

ASSETS	*€m*	*Rate*	*€m*
Non-current assets	420	0.7425	565.7
Current assets			
Inventories	26	0.7425	35.0
Trade and other receivables	42	0.7425	56.5
Cash and cash equivalents	8	0.7425	10.8
	76		102.3
Total assets	496		668.0

EQUITY AND LIABILITIES			
Equity			
Share capital	200	0.7425	269.4
Retained earnings	107	0.7425	144.1
	307		413.5
Non-current liabilities	***85***	***0.7425***	***114.5***
Current liabilities			
Trade and other payables	63	0.7425	84.8
Current taxation	41	0.7425	55.2
	104		140.0
Total liabilities	189		254.5
Total equity and liabilities	496		668.0

The new shares (in dollars ($)) are likely to be a different total from those in Euros (e.g. the issued shares may be 200 million at $1 nominal each). If this is the case, then an additional reserve ($69.4m) will be added to equity in the statement of financial position. If it creates a negative reserve (i.e. 300 million shares of $1 each, which gives a negative reserve of $31.6m), then it may be deducted from retained earnings.

(c) If the British pound is used as the functional currency for the year ended 31 October 2009, the opening statement of financial position will be translated at the exchange rate ($ to £) at 1 November 2008. If the operating currency of Eufonion remains Euros, then the income statement will be translated into £s at the average rate for the year and the statement of financial position at 31 October 2009 will be translated at the rate from Euro to £s at 31 October 2009.

As a comment, it is undesirable for entities to switch functional currencies frequently unless there are good reasons for doing so.

(d) Most entities operating in a single country will use that country's currency as both its functional and presentation currency.

However, where most of the entity's shareholders are in one country but most of its operations are in a different country (with a different currency) it would be appropriate for the functional currency to be that where most of the operations take place but the presentation currency will be where the company is registered.

Another example is companies which operate in the oil industry. Most of the transactions are denominated in US dollars, and this will be the functional currency. However, if the company is registered in the UK, then the presentation currency may be UK pounds.

The financial statements may be reported in two currencies where a significant number of shareholders are resident in a different country from where the entity is registered (e.g. a UK registered company where most of the shareholders are resident in Japan).

Question 5 – Helvatia GmbH

(a) *Statement of comprehensive income and retained earnings for the year ended 31 October 2007*

	CHF (000)	*Rate*	*£000*
Revenue	8,800	0.50	4,400
Depreciation	(1,370)	0.50	(685)
Other operating expenses	(1,900)	0.50	(950)
Net income	5,530		2,765
Retained earnings as at start of year	3,760		1,222
	9,290		3,987
Dividends paid	(1,000)	0.53	(530)
Retained earnings as at end of year	8,290		3,457

(b) *Helvatia GmbH*

Statement of financial position as at 31 October 2007

Assets		*CHF (000)*	*Rate*		*£000*
Non-current assets					
Land		6,300	0.45		2,835
Buildings		12,330	0.45		5,549
		18,630			8,384
Current assets					
Receivables	550		0.45	248	
Cash	5,610		0.45	2,525	
		6,160			2,773
Total assets		24,790			11,157
Liabilities and equity					
Non-current liabilities					
Mortgage loan		10,800	0.45		4,860
Current liabilities					
Payables		700	0.45		315
Equity					
Issued share capital	5,000		0.40		2,000
Foreign exchange reserve					525*
Retained earnings	8,290	13,290			3,457
Total liabilities and equity		24,790			11,157

(c) *Helvatia GmbH*

Statement of cash flows for the year ended 31 October 2007

Operating activities		*CHF (000)*	*Rate*		*£000*
Net income		5,530	0.5		2,765
Adjustments for:					
Depreciation	1,370		0.5	685	
Decrease in receivables	1,000		0.5	500	
Increase in payables	300		0.5	150	
		2,670			1,335
Net cash from operating activities		8,200			4,100
Investing activities					
Purchase of land	(3,000)		0.53	(1,590)	
Net cash used by investing activities		(3,000)			(1,590)
Financing activities					
Increase in mortgage	800		0.53	424	
Dividends paid	(1,000)		0.53	(530)	
Net cash from financing activities		(200)			(106)
Effect of exchange rate on cash					(215)*
Increase in cash and cash equivalents		5,000			2,189
Cash at start of year		610	0.55		336
Cash at the end of the year		5,610	0.45		2,525

*Denotes balancing figures.

Question 6 – Rooster plc

Group structure:

Rooster plc – Parent

Houseton plc – 70% subsidiary for eight months, therefore, include 100% of results × 8/12

Kelson plc – 60% subsidiary, include 100 % of results for full year

Requirement (a) – *Goodwill on acquisition of Kelson 1 August 2012*	**US$ m**	**rate**	**€ m**
Cost of Investment	510	1.35	377.78
Value of NCI	300	1.35	222.22
Fair value of net assets at acquisition (555.56)	(750)	1.35	
Goodwill at acquisition 44.44	60		
Impairment losses to 31 July 2013	NIL		
Exchange gain (balancing figure)			3.56
Goodwill at 31 July 2013	60	1.25	48.00

The exchange gain of €3.56 million is recognised as other comprehensive income for the year. It is attributable to the parent and the NCI if the goodwill was calculated using the fair value method.

OR

If, however, the partial method was used the answer would be the same. In this case the NCI would not share of the gain.

(b) *Rooster plc: Consolidated statement of comprehensive income for the year ended 31 July 2013*

(100% Rooster + 100% Houseton * 8/12 + 100% Kelson)		*€ million*
Revenue	+(2,640 +450*8/12 +468.75(i) -24(iv))	3,384.75
Cost of Sales	-(1,230 +120*8/12 +210.94(i) +4(iii) -24(iv) +3(iv))	(1,503.94)
Gross Profit		1,880.81
Operating expenses	-(270 + 120 ×8/12 + 140.63 (i) +20 (ii))	(510.63)
Finance costs	-(60 + 30 × 8/12 + 15.63 (i))	(95.63)
Other income	+(20)	20.00
Investment income	+(40 − 35 (v))	5.00
Profit before taxation		1,299.55
Taxation	-(275 + 24 ×8/12 + 31.25 (i))	(322.25)
Profit for the year		977.30
Other comprehensive income (net of tax):		
Gains on revaluation of property (290 + 45 × 8/12 + 7.81 (i))		327.81
Exchange gain on translation of goodwill (see part (a) above)		9.48
Exchange gain on translation of other net assets (vi)		46.33
Total comprehensive income for the year		1,360.92
Profit for the year attributable to:		
Owners of the parent (balancing figure)		926.08
Non-controlling interest	(23.1 + 28.12) (vii)	51.22
		977.30
Total comprehensive income attributable to:		
Owners of the parent (balancing figure)		1,277.62
Non-controlling interest	(32.1 + 51.2) (vii)	83.30
		1,360.92

Working (i) – Translate Kelson's SPLOCI (use average rate for year) € million

Revenue	(600/1.28)	468.75
Cost of sales	(270 / 1.28)	(210.94)
Gross profit		257.81
Operating expenses	(180 / 1.28)	(140.63)
Finance costs	(20/1.28)	(15.63)
Profit before taxation		101.55
Taxation	(40/1.28)	(31.25)
Profit for the year		70.30
Other comprehensive income (net of tax):		
Gains on revaluation of property (10/1.28)		7.81
Total comprehensive income for the year		78.11

Working (ii)

Impairment loss on consolidated goodwill €20m is included as operating expense in year of recognition. NCI is affected as goodwill was calculated using the fair value method.

Working (iii)

Additional depreciation from fair value adjustment 24m / 4 years * 8/12 = €4m

Current year's amount included as cost of sales expense this year.

NCI is affected as it is Houseton's asset that is being adjusted.

Working (iv)

Eliminate intra-group sales and purchases (€24m) in full from group revenue and group cost of sales.

Closing unrealised profit provision required = 24m * 60/160 * 1/3 = €3m

Houseton's NCI is affected as Houseton was the internal selling company which recorded the gain.

Working (v)

Eliminate intragroup dividend from investment income 50m × 70% = €35m. No effect on NCI.

Working (vi) - Exchange gain (loss) on other net assets of Kelson (excluding goodwill)

Net assets of Kelson at acquisition:		
As translated at acquisition date	(750 / 1.35)	555.56
As translated at reporting date	(750 / 1.25)	600.00
Gain		44.44
Net assets earned during year ended 31 July 2013 (TCI):		
As translated per SPLOCI 78.11	(100/1.28) (W(i))	
As translated at reporting date	(100/1.25)	80.00
Gain		1.89
Total gain		46.33

Gain is recognised as OCI for the year. NCI shares in this gain as they are 40% shareholders in Kelson.

Working (vii) – non-controlling interest

	Houseton	*Kelson*	*Profit €m TCI €m*	*Profit €m TCI €m*
per SPLOCI	104	134	70.30	78.11
Goodwill impairment (ii)	(20)	(20)		
Exchange gain on goodwill (a)				3.56
Exchange gain on other net assets (vi)				46.33
Depreciation of FVA (iii)	(4)	(4)		
Unrealised profit in inventory (iv)	(3)	(3)		
Adjusted figures	77	107	70.30	128.00
NCI percentage	30%	30%	40%	40%
NCI amount	23.1	32.1	28.12	51.2

(c) *Functional currency:*

The functional currency of an entity can be understood literally as the currency in which the entity functions. The

choice of functional currency is a judgement which must be made under IAS 21. The judgement involves assessing the facts, and deciding the currency on which the entity is most dependent economically. For most entities, the functional currency is a clear judgement, in that most entities operate primarily within a single economy or currency zone.

However, IAS 21 does offer some guidance should the judgement prove difficult. This can happen if more than one currency is important to the entity and it is not clear which is the most significant. IAS 21 requires that the entity consider:

Primary considerations:

- The currency which most affects sales prices.
- The currency in which purchases and other costs are incurred.

Secondary considerations:

- The currency of the most significant providers of capital.
- The currency in which operating receipts are retained.

(Institute of Certified Public Accountants (CPA), Professional Stage 1 Corporate Reporting Examination, August2013)

Part 7

Interpretation

CHAPTER 27

Earnings per share

Question 1 – Alpha plc

(a) *Calculate the basic earnings per share for 20X1*

Step 1: Theoretical ex-rights calculation

The shareholders get an element of bonus at the same time as the company receives additional capital. The bonus element may be quantified by the calculation of a **theoretical ex-rights price**, which is compared with the last market price prior to the issue; the difference is a bonus.

The theoretical ex-rights price is calculated as follows:

		£
Four shares at fair value of £1 each prior to rights issue	=	4.00
One share at discounted rights issue price of 80p each	=	0.80
Therefore, five shares at fair value after issue (i.e. ex-rights)	=	4.80
The theoretical ex-rights price is £4.80/5 shares	=	0.96
The bonus element is fair value £1 less 96p	=	0.04

Step 2: The time-weighted average number of shares is calculated for the current year

				No. of shares
Shares to date of rights issue				
Shares × increase by bonus fraction	× Time adjustment			
2,000,000	×	9/12	=	1,500,000
Bonus: ((2,000,000 × 100/96) − 2,000,000)	×	9/12	=	62,500
Shares from date of issue				
2,500,000	×	3/12	=	625,000
Weighted average number of shares				**2,187,500**

Step 3: Calculate BEPS for current year

Basic earnings per share (BEPS) for 20X1 is then calculated as £5,000,000/2,187,500 shares = £2.29.

(b) *Restate the basic earnings per share for 20X0*

Step 4: Adjusting the previous year's BEPS for the bonus element of a rights issue

This bonus element will affect the comparison with the previous year's BEPS that will need to be reduced to ensure comparability. The approach is to reduce the prior year by multiplying it by

$$\frac{\text{Theoretical ex-rights fair value per share}}{\text{Fair value per share immediately before the exercise of rights}} = \frac{£0.96}{£1.00}$$

Assuming that the earnings for 20X0 and 20X1 were £4.5m and £5m respectively, the 20X0 BEPS figures will be reported as follows:

As reported in the 20X0 accounts £4.5m/2m = £2.25

As restated in the 20X1 accounts (£4.5m/2m) × (0.96/1.00) = £2.16

The same effect is achieved by increasing the number of shares in the denominator by 100/96 for 20X0:

Earnings/(Number of shares × bonus fraction)

£4,500,000/(2,000,000 × (100/96)) = £2.16

Question 2 – Beta Ltd

Beta Ltd weighted average number of shares

		Time apportion		*Bonus adjustment*		*Bonus element in rights issue*		
1 January to 31 March								
1,000,000	×	3/12	×	3/2	×	7/6	=	437,500
1 April to 30 April								
1,500,000	×	1/12	×	3/2	×	7/6	=	218,750
1 May to 31 August								
2,250,000	×	4/12	×		×	7/6	=	875,000
1 September to 31 October								
3,250,000	×	2/12	×		×	7/6	=	631,944
1 November to 31 December								
4,333,333	×	2/12	×		×		=	722,222
Weighted average number of shares								2,885,416

Note: Bonus element in rights issue calculated as follows:

Three shares at $5.60	=	16.80
One share at $2.40	=	2.40
Fair value of four shares		19.20
Theoretical ex-rights price		$4.80
Fair value		$5.60

Bonus factor = 5.6/4.8 = **7/6**

Question 3 – Nottingham Industries plc

(a) *EPS complying with IAS 33 definition of earnings*

Earnings for EPS calculation is 'profit of the period attributable to the parent company shareholders after deducting ALL preference dividends'.

Basic EPS calculation:	***£000***
Equity earnings:	
Profit after tax	580
Preference dividend (10% of £1,000,000)	(100)
	480

Weighted average number of ordinary shares (25p)

	Actual no.	*Weight time*	*Bonus factor*	*Weighted average*
1.4.X5 in issue	16,000,000	3/12	6/5	4,800,000
1.7.X5 bonus issue	3,200,000			
	19,200,000	3/12		4,800,000
1.10.X5 purchase	(500,000)			
31.3.X6 in issue	18,700,000	6/12		9,350,000
				18,950,000
Basic EPS for 20X6	£480,000/18,950,000	=	**£0.0253**	
Comparative for 20X5	= £0.022 × 5/6	=	**£0.0183**	

(b) *Diluted EPS calculation*

Equity earnings:

	£000
As for Basic EPS	480

The computation of basic and diluted EPS is as follows:

	Per share	*Earnings*	*Shares*
Net profit for 20X6		£480,000	
Weighted average shares during 20X6			18,950,000
Basic EPS (£480,000/18,950,000)	***£0.02533***		
Number of shares under option			200,000
Number that would have been issued			
At fair value (200,000 × £1.00)/ £1.10			(181,818)
Diluted EPS	**£0.0253**	**£480,000**	**18,968,182**

(c) *Usefulness of EPS figures*

It is helpful to users to have a standardised EPS figure. This is provided by applying the IIMR calculation as follows.

IIMR headline EPS

Headline EPS are based upon the headline earnings figure stated in accordance with the Institute of Investment Management and Research Statement of Practice No. 1: *The Definition of Headline Earnings* and accordingly exclude profit on sale of the major operation.

	£000
Equity earnings:	
Profit after tax	580
Exclude capital items such as profit on sale of a major operation:	
£120,000 *less* tax £38,000	(82)
IIMR Headline EPS	498
Less: preference dividend	(100)
	398

Even when standardised, the ASB considers that there is too much emphasis on a single profit figure, and encourages users to refer to the information set as a whole when appraising performance and predicting future earnings. Nevertheless, the EPS figure has remained an important figure in the eyes of many investors and analysts.

Question 4 – Simrin plc

(a) *Calculation of basic EPS*

As per IAS 33:

$$\text{EPS} = \frac{\text{Profit attributable to the ordinary shareholders}}{\text{Number of ordinary shares}}$$

$$= \frac{£79{,}000 - £9{,}000}{100{,}000}$$

Basic EPS = 70p per share

(b) *Calculation of the diluted EPS*

		£
Subscription money received	= £1.10 × 50,000	
	=	55,000
Notional number at fair value:		
£55,000/£1.28 (fair value of a share)	=	42,969
Notional number at no value	=	7,031
		50,000
Profit attributable to the ordinary shareholders		70,000
Number of shares:		
At 1 January 20X0		100,000
From warrants at no value		7,031
Total number of shares		107,031

Diluted EPS = £70,000/107,031 = 65.4p per share

(c) *(i) Need to disclose diluted EPS*

- Company able to finance projects using convertible securities that carried fixed interest rate and also future benefits causing dilution of shares on conversion in the future.
- Trend revealed by diluted EPS is more meaningful to shareholders as it enables them to identify the final effect on company's EPS by using convertible debt.

(ii) Relevance to shareholders

- Relevance is questionable.
- It shows dilution of future EPS, and it is reasonable that existing shareholders should be given a warning of the potential dilution.

(d) *Reliance on EPS as the single most important indicator of financial performance*

There is no one correct answer for this, but a discussion of the Institute of Investment Management and Research headline figure is required.

Question 5 – Gamma plc

There are two steps in arriving at the diluted EPS, namely,

Step 1 Determine the increase in earnings attributable to ordinary shareholders on conversion of potential ordinary shares.

Step 2 Determine the potential ordinary shares to include in the diluted EPS.

(a) *Convertible preference shares receive a dividend of £2.50*

Step 1: Determine the increase in earnings attributable to ordinary shareholders on conversion of potential ordinary shares

	Increase in earnings	*Increase in number of ordinary shares*	*Earnings per incremental share*
Convertible preference shares			
Increase in net profit			
50,000 shares × £2.50	125,000		
Incremental shares			
50,000/1		50,000	2.50
10% Convertible bond			
Increase in net profit			
£250,000 × 0.10 × (1 − 0.4)	15,000		
Incremental shares			
250,000/1000 × 500		125,000	0.12

Step 2: Determine the potential ordinary shares to include in the computation of diluted EPS

	Net profit attributable to continuing operations	*Ordinary shares*	*Per share*
As reported	5,000,000	1,000,000	5.00
10% Convertible loan	15,000	125,000	
	5,015,000	1,125,000	4.46 dilutive
Convertible preference shares	125,000	50,000	
	5,140,000	1,175,000	4.37 dilutive

(b) *Convertible preference shares receive a dividend of £6 per share*

Step 1: Determine the increase in earnings attributable to ordinary shareholders on conversion of potential ordinary shares

	Increase in earnings	*Increase in number of ordinary shares*	*Earnings per incremental share*
Convertible preference shares			
Increase in net profit			
50,000 shares × £6.00	300,000		
Incremental shares 50,000/1		50,000	6.00
10% Convertible loan			
Increase in net profit			
£250,000 × 0.10 × (1 − 0.4)	15,000		
Incremental shares			
250,000/1,000 × 500		125,000	0.12

Step 2: Determine the potential ordinary shares to include in the computation of diluted EPS

	Net profit attributable to continuing operations	*Ordinary shares*	*Per share*
As reported	5,000,000	1,000,000	5.00
10% convertible loan	15,000	125,000	
	5,015,000	1,125,000	4.46 dilutive
Convertible preference shares	300,000	50,000	
	5,315,000	1,175,000	4.52 anti-dilutive

- As the diluted EPS is increased when taking the convertible preference shares into account (from 4.46p to 4.52p), the convertible preference shares are anti-dilutive, and are ignored in the calculation of diluted EPS.

- The lowest figure is selected and the diluted EPS will, therefore, be disclosed as 4.46p.

Question 6 – Delta NV

(a) *Calculate theoretical ex-rights value of a share*

Market value of a share prior to rights issue was €1.10.

Shares 4 at €1.10 per share	=	4.40
Share 1 at 60p	=	0.60
Shares 5	=	5.00
Theoretical ex-rights value	=	1.00

(b) *Bonus issue factor* = *110/100*

(c) *BEPS 20X8*

440,000/(4,000,000 × 11/10) = €0.10

previously calculated as:

440,000/4,000,000 = €0.11

(d) *BEPS 20X9*

Uplift shares prior to issue by 110/100		
4,000,000 × (110/100) × 6/12 months	=	2,200,000
Weight shares after issue:		
5,000,000 × 6/12 months	=	2,500,000
Total shares for BEPS calculation	=	4,700,000
BEPS = €500,000/4,700,000	=	€0.106

Question 7 – X Ltd

(a)

	Ordinary shares	*Profit*	*EPS*	*Effect*
Net profit after tax		18,160		
Less preference dividend		(160)		
	40,000	18,000	45p	
Options (W1)	**400**			
	40,400	18,000	44.6p	Dilutive
Convertible preference shares	**3,200**	**160**		
	43,600	18,160	41.7p	Dilutive
Convertible loan stock				
Interest (6% × £20m × 0.67)		**804**		
Discount		**200**		
Shares converted [(20m/200) × 23]	**2,300**			
	45,900	19,164	**41.8p**	**Anti-dilutive**

- Since the loan stock is anti-dilutive, it is ignored in the calculation of diluted EPS.
- Diluted EPS will be reported as 41.7p.

W1

Fair value of one ordinary share	£1.50
Number of options	2,000,000
Exercise price	£1.20
Proceeds from exercise of options	£2,400,000
Number of shares assumed to be issued at fair value	1,600,000
Number of shares issued for no consideration (2m − 1.6m)	**= 400,000**

(b)

- An option is treated as if:
  - there was an issue of shares for full market value/fair value;
  - there is an issue for no consideration (a bonus issue);
  - the bonus element is treated as being the dilutive effect.

- IAS 33 is saying that by issuing options to directors/employees the company is making a bonus issue of shares plus a full issue of shares, the latter being assumed not to have a dilutive effect.

- Only potential ordinary shares that would dilute EPS should be taken into account and any anti-dilutive potential ordinary shares will be ignored.

- This procedure essentially means that certain categories of potential ordinary shares will not be used in the calculation.

- Thus, the calculation will be based on the concept of prudence rather than on the substance of what is realistically going to occur. All items of income or expense that would cease on conversion are to be added back.

- Prudent disclosure.

With regards to the ranking of potential ordinary shares from most to least dilutive and the subsequent calculations, an alternative solution would be to disclose both the fully diluted EPS and the maximum dilution of EPS. This would essentially mean that the more realistic calculation and the prudent calculation of IAS 33 would be disclosed.

Question 8 – Manfred

(a) *Calculation of current year's EPS*

Profit on ordinary activities after taxation	4,200,000
Weighted average number of shares in issue	39,331,288
EPS (4,200,000/39,331,288 × 100)	10.68 cents

Workings

Theoretical ex-rights fair value per share:

Initial holding of shares	6 at $1.66 per share	9.96
Rights issue	1 at $1.46 per share	1.46
		11.42

Therefore, theoretical ex-rights fair value per share is (11.42/7) = $1.63

Then, calculate the adjustment factor for the bonus element:

Fair value per share before exercise of rights	1.66
Theoretical ex-rights fair value per share	1.63
Adjustment factor	1.018404908

Then, calculate the weighted average number of shares:

First six months:	*$*	*$*
Shares in issue	36,000,000	
Adjustment factor	1.018404908	36,662,577
Weighting for half year	18,331,288	
Last six months		
Shares in issue		42,000,000
Weighting for half year		21,000,000
Weighted average number of shares in issue		39,331,288
Recalculation of previous year's EPS		
Profit on ordinary activities after taxation		36,000,000
Number of shares after adjusting for the bonus element		36,662,577
Restated EPS (£3,600,000/36,662,577 × 100)		= 9.82 cents

(b) *Brachly*

	Increase in earnings ($)	*Increase in number of ordinary shares*	*Earnings per incremental share (cents)*
Options (600,000 times (0.84 − 0.75)/0.84)	Nil	64,286	Nil
Convertible preference shares	85,000	1,500,000	5.67
Convertible loan notes ($2,000,000 times 12.5% after tax)	175,000	4,000,000	4.38

Increase in net profit attributable to ordinary shareholders on conversion of potential ordinary shares is calculated. Note that the larger the earnings per incremental share the smaller the dilutive effect.

Now, calculate the dilutive effect in descending order:

	Net profit from continuing operations ($)	*Ordinary shares*	*Per share cents*
Net profit	9,200,000	15,000,000	61.33
8.5% convertible preference shares	85,000	1,500,000	
	9,285,000	16,500,000	56.27 dilutive
12.5% convertible loan notes	175,000	4,000,000	
	9,460,000	20,500,000	46.15 dilutive
Options	Nil	64,286	
	9,460,000	20,564,286	46.00 dilutive

The basic EPS is 61.3 cents

The diluted EPS is 46.0 cents

Question 10 – Amethyst

(a) Amethyst

Statement of profit or loss and other comprehensive income for the year ended 31 March 2015

	$000
Revenue	818,000
Cost of sales *(w4)*	(591,000)
Gross profit	227,000
Distribution costs *(w4)*	(89,000)
Administrative expenses *(w4)*	(94,000)
Investment income	1,000
Finance costs 600 + 600 *(w6)* + 100	(1,300)
Profit before taxation	43,700
Income tax *(w7)*	(17,750)
Profit for the period	25,950
Other comprehensive income	
Revaluation of land and buildings *(w3)*	35,000
Deferred tax on revaluation *(w3)*	(7,000)
	28,000
Total comprehensive income	53,950

(b) Amethyst

Statement of changes in equity for the year ended 31 March 2015

	Share capital *$000*	*Share premium* *$000*	*Revaluation surplus* *$000*	*Retained Earnings* *$000*	*Total* *$000*
Balance at 1.4.14	100,000	–	–	40,950	140,950
Rights issue	10,000	5,000			15,000
Issue costs		(1,000)			(1,000)
TCI			28,000	25,950	53,950
Reserve transfer			(1,000)	1,000	–
Balance at 31.3.15	110,000	4,000	27,000	67,900	208,900

Note: 10 million shares were issued in the year (110,000,000/11) since the shareholders would now have 11 shares for every 10 originally held following the rights issue.

(c) Amethyst

Statement of financial position for the year ended 31 March 2015

	$000
ASSETS	
Non-current assets	
Property, plant, and equipment *(w3)*	224,000
Current assets	
Inventories *44,000 + 4,000 (w1)*	48,000
Trade receivables	17,000
	65,000
Total assets	289,000
EQUITY AND LIABILITIES	
Equity and reserves	
Equity $1 shares	110,000
Share premium	4,000
Revaluation surplus	27,000
Retained earnings	67,900
	208,900
Non-current liabilities	
6% Loan Stock	20,000
Deferred Tax *(w8)*	17,000
	37,000
Current liabilities	
Trade and other payables *25,000 + 600 (w6)*	25,600
Short-term borrowings	7,500
Current tax	10,000
	43,100
Total liabilities	80,100
Total equity and liabilities	289,000

(d) Earnings per share

	2015	*2014 (restated)*
Earnings	25,950	$2.53 ×
WA shares	10,377 (W9)	$1.77/$1.80 (W9)
	= $2.50 per share	**= $2.49 per share**

WORKINGS

W1 Omitted stock

Reduce cost of sales/increase closing inventory by $4m.

W2 Revaluation

	Land *$000*	*Buildings* *$000*	*Total* *$000*
Revalued amount	60,000	100,000	160,000
CV at 1.4.14	50,000	75,000	125,000
Revaluation	10,000	25,000	35,000

Deferred tax on revaluation $35,000 × 20% = $7,000

W3 Property, plant and equipment

	Land *$000*	*Buildings* *$000*	*Plant and equipment* *$000*	*Total* *$000*
Cost				
At 1.4.14	50,000	150,000	120,000	320,000
Revaluation	10,000	(50,000)		(40,000)
At 31.3.15	60,000	100,000	120,000	280,000
Acc depreciation				
At 1.4.14	–	75,000	40,000	115,000
Revaluation		(75,000)		(75,000)
Charge for year (w4):		4,000	12,000	16,000
At 31.3.15	–	4,000	52,000	56,000
CV at 31.3.15	**60,000**	**96,000**	**68,000**	**224,000**

W4 Expenses (P/L)

	COS	*Distribution*	*Admin.*
	$'000	*$'000*	*$'000*
Per TB	583,000	89,000	91,000
Omitted stock (w1)	(4,000)		
Depreciation:			
Buildings: $100,000 / 25 years			4,000
Plant: (120,000 – 40,000) × 15%	12,000		
Share issue costs (w5)			(1,000)
	591,000	89,000	94,000

Reserve transfer for excess depreciation

	$'000
New depreciation charge (P/L)	4,000
'Old' depreciation charge = $150,000/50yrs	3,000
Excess depreciation transfer (SOCIE)	1,000

W5 Rights issue

10 million shares have been issued & recorded at $1.50 per share (see SOCIE).

The share issue costs should be deducted from the share premium account and not expensed to P/L.

W6 Loan stock interest accrual

	$000
20,000 x 6% x 6/12	600

W7 Taxation (P/L)

	$'000
2015 CY estimate	10,000
2014 under provision	2,750
Increase in DT on plant and equipment (10,000 – 5,000)	5,000
Tax expense (P/L)	17,750

W8 Deferred Tax Liability (SOFP)

	$'000
Balance at 1.4.14	5,000
Increase in DT liability (to P/L)	5,000
	10,000
DT on revaluation see (W2)	7,000
Balance at 31.3.15	17,000

W9 Weighted average no of shares

		No shares *000*	*Time*	*BF*	*WA* *000*
1.4.14	B/f	10,000	x 9/12	x $1.80/$1.77	7,627
1.1.15	1:10 RI	1,000			
		11,000	x 3/12		2,750
					10,377

Bonus fraction

MV pre RI	$1.80
TERP	$1.77

TERP $\frac{(10{,}000 \times \$1.80) + (1{,}000 \times \$1.50)}{(10{,}000 + 1{,}000)} = \$1.77$

Note
TERP = Theoretical Ex Rights Price

CHAPTER 28

Review of financial ratio analysis

Question 1 – Flash Fashions plc

(i) Sales increase

- The approach to increasing sales by heavy trade and volume discounts are legitimate commercial decisions.
- The approach to producing graphs on a selective basis to divert attention from actual results has been a common strategy in the past. However, there is now increasing attention being paid by auditors to check that the narrative (written and graphical) does not paint a picture at variance with the financial data in the financial statements.
- Choice of a comparator – it is not clear why the comparison has not normally been made with the fashion industry unless the company has again chosen each year that a comparison makes its performance look favourable.
- It is not clear whether the sales that are made on a consignment basis are being disclosed as such to the auditors and are being treated as such in the statement of income. If the intention is to conceal the nature of the sale, this would be to misrepresent the financial statements and would be an offence.

(ii) Inventories

- In itself, the increase in sales would not lead to an increase in stock.
- The company might be relying on an apparent late surge in sales to justify higher stock levels.
- The valuation of fashion items might be affected if the company is able to use the increase in sales to avoid pressure to write stock down due to falling demand.

(iii) Sale of property

- The facts indicate that this intended to improve profitability if there is a profit element in the 30 million.
- ROCE and liquidity ratios would be improved as non-current assets are reduced by 30 million and Current liabilities increased by the same amount.
- It should be treated as a loan of 30 million.
- This illustrates the problem with related party transactions where there may be a deliberate intention to conceal the nature of both the relationship and the transaction.
- Auditors have been put on notice to approach possibility of related party transactions with a degree of scepticism as in ISA 550, *Related Parties*.
- The transaction itself is not illegal. However, it is a misrepresentation.

- The auditor should have been put on notice by the difficulties being experienced by the company that the risk of misrepresentation was high.

Question 2 – Relationship plc

Current assets are 1.5 times the current liabilities = 1.5 × 156,000 = 234,000

Liquid assets are 0.75 times the current liabilities = 0.75 × 156,000 = 117,000

Inventory is current assets less liquid assets = 234,000 – 117,000 = 117,000

The net assets are total assets less current liabilities = 587,000 – 156,000 = 431,000

Sales are 1.4 times net assets = 1.4 × 431,000 = 603,400

Weekly sales are 603,400/52 = 11,603.8

Trade receivables have a 6-week collection period = 6 × 11,603.8 = 69,622.8

Cash is liquid assets – trade receivables = 117,000 – 69,622.8 = 47,377.2

Gross profit is 20% of 603,400 = 120,680

Net profit is gross profit less administration expenses = 120,680 – 92,680 = 28,000

Opening capital is net assets – retained earnings = 431,000 – (103,000 + 28,000) = 300,000

Statement of financial position

	€	€
Non-current assets		350,000
Current assets		
Inventory	117,000	
Trade receivables	69,623	
Cash	47,377	
	234,000	
Total assets		587,000
Less current liabilities		156,000
Net assets		431,000
Capital		300,000
Retained earnings (103,000 + 28,000)		131,000
		431,000

Question 3 – Esrever Ltd

Forecast statement of comprehensive income for the year ended 30 June 20X1

			£		£
Revenue	(87,007 × 100/32)			(S3)	271,897
Opening inventory			22,040		
Purchases		(S5)	194,205		
			216,245		
Closing inventory	(184,890 × 61.9/365)	(S5)	31,355		
Cost of sales	(271,897 × 68%)			(S4)	184,890
Gross profit	(20,290 × 100/23.32)			(S2)	87,007
Depreciation					
– buildings	(132,000 × 2%)	(S6)	2,640		
– fixtures, etc.	(96,750 × 20%)	(S6)	19,350		
Loan interest	(50,000 × 12%)	(S7)	6,000		
Credit expenses (balancing figure)		(S8)	33,655		
					61,645
Profit before tax					25,362
Corporation tax	(20,290 × 20/80)	(S9)			5,072
Profit after tax	(181,808 × 11.16%)			(S1)	20,290
Dividends	(200,000 × 2.5p)	(S10)			5,000
Profit retained		(S11)			15,290
Profit retained b/f		(S12)			66,518
Retained profit c/f		(S13)			81,808

Forecast statement of financial position as at 30 June 20X1

			£		£
Non-current assets (NBV)					
Land and buildings	(132,000 − 2,640)		129,360		
Fixtures, fittings	(96,750 − 19,350)		77,400		
				(S14)	206,760
Current assets					
Inventories		(S15)	31,355		
Trade receivables [(271,897 × 42.6/365) × 1.15]		(S16)	36,494		
			67,849		

Creditors: amounts falling due in less than one year

Bank overdraft (a balance figure based on Note 2)	(S20)	9,756	
Trade payables [(194,205 + 33,655) × (29.7/365) × 115%]	(S17)	21,321	
Other payables [5,072 tax + 5,000 dividends (S18, S19) + 1,652 VAT]		11,724	
		42,801	
Net current assets			25,048
Total assets less current liabilities (per Note 3)			231,808

Creditors: amounts falling due in more than one year

12% loan		(S23)	50,000
			181,808
Ordinary shares		(S21)	100,000
Profit and loss account (balancing figure)		(S22)	81,808
			181,808
VAT: Output tax	(271,897 × 15%)		40,785
Input tax	[(194,205 + 33,655) × 15%]		34,179
Net amount for year			6,606
6,606 × 0.25			1,652

Approach to Esrever statement of comprehensive income

(S1) Start with post-tax profit, that is, 11.16% of (231,808 – 50,000) per Notes 3 and 4 = £20,290

(S2) From post-tax profit 20,290 derive gross profit as 100/23.32 × 20,292 based on Note 4 = £87,007

(S3) Next, derive turnover as 100/32 × 87,007 based on Note 6
Cost of goods sold = 68% of turnover
Therefore, turnover = 100/32 × gross profit = £271,897

(S4) From sales and gross profit derive cost of goods sold as 271,897 – 87,007 = £184,890

(S5) You can now find components of cost of sales (£184,890) as

	£	
(a) Opening inventory	22,040	(given in question)
(b) Purchases	194,205	(balance figure)
	216,245	
(c) Closing inventory	(31,355)	($\frac{61.9}{365}$ × 184,890)
Total costs of goods sold	184,890	

Note: Start with closing inventory 61.9 days based on Note 7; all other figures are derived and the opening inventory is given as £22,040.

(S6) Depreciation: 2% × 132,000 for buildings = £2,640
20% × 96,750 for fixtures, etc. = £19,350
based on Note 1 and opening asset given

(S7) Loan interest is 12% of 50,000 = 6,000

(S8) Expenses – this is a balancing figure as we already have all the other figures in the profit and loss account = 33,655

(S9) Taxation charge is 20/80 × 20,290 based on Note 5 = 5,072

(S10) Dividend – see Note 9 (200,000 × 2.5p) = 5,000

(S11) Retained profit = 15,290

(S12) Retained profit b/f is a balancing figure = 66,518

(S13) Retained profit c/d (see S22 below) = 81,808

Approach to Esrever statement of financial position

Projected statement of financial position as at 30/6/20X1 is built up as follows:

(S14) Non-current assets are derived from the opening figure less depreciation = 206,760

(S15) Inventory has already been computed at = 31,355

(S16) Trade receivables, based on Note 10, assuming 42.6 days' credit, are 42.6/365 × 271,897 = 31,734 × 1.15 to cover VAT = 36,494

(S17) Trade payables, assuming credit of 29.7 days, are 29.7/365 × 227,860 × 1.15 = (21,321)

(S18) Other payables (dividends 5,000 + tax 5,072) = (10,072)

(S19)	VAT 15% net of sales – purchases and expenses is 15% (271,897 – 194,205 – 33,655) × 0.25	=	(1,652)
			(11,724)
(S20)	Overdraft is balancing figure based on Note 2	=	(9,756)
	Current liabilities		42,801
	Total assets less current liabilities per Note 3		231,808
(S21)	Share capital given in question		100,000
(S22)	Retained earnings (balancing figure)		81,808
(S23)	12% loan		50,000
			231,808

Note: Retained profit is the balancing figure to make up £231,808.

The bank overdraft of £9,756 is the overall statement of financial position balancing figure.

Question 4 – Saddam Ltd

(a) *Profitability – ROCE*

- **Camel Ltd** is the **most profitable** of the three companies.
- An inspection of the secondary ratios shows that this is due to **efficient utilisation of assets** as its net profit ratio is well below that of the other two companies.
- Examination of gross profit percentages confirms the observation that Camel Ltd seems a **high volume, low margin** business compared with the others.

Liquidity

- **Ali Ltd** has a **current ratio** that is out of line with the other two, being very much higher, suggesting **surplus investment in working capital**.
- The acid test ratio reinforces this view, and also indicates that **Baba Ltd** appears to have a **liquidity problem** with current liabilities considerably greater than cash and debtors (despite having the greatest number of weeks' debtors outstanding of the three companies).
- **Baba Ltd** also has considerably **more** weeks of **stock** outstanding than the other two companies which may be linked with the **high level of creditors.**
- **Ali Ltd** also has **stock** levels well in excess of **Camel Ltd** explaining, in part at least, the **high current ratio**.

Dividends

Camel Ltd is paying out a higher proportion of profits in dividends, which may have the effect of raising shareholder loyalty and the bid price.

Conclusion

- **Baba Ltd** appears to have considerable liquidity problems arising out of excess investment in stock.
- **Camel Ltd** is a lean enterprise which is able to survive on a lower gross profit margin because of superior asset utilisation. Why is the gross profit margin low?

Before a final decision is made, the absolute figures in the financial statements should be studied and questions raised such as the following:

- Are the activities of the firms really the same?
- What are the relative turnovers?
- What is the growth over a period of years?
- What are the trends of all the ratios?
- How old are the assets?
- Are asset ages distorting ROCE comparisons between the companies?

Also managerial skills, product potential, etc. have to be assessed, which are not shown in the financial statements.

(b) *Why the statement of financial position is unlikely to show the true market value of the business*

The accounting policy in the United Kingdom is to state fixed assets at cost less depreciation or at historical cost (HC) modified by revaluation of all or selected classes of fixed assets.

The true market value of a listed company is available from the market capitalisation figure based on current share prices.

The true market value of an unquoted company is not readily available and would require future cash flows to be evaluated.

Question 5 – Euroc Ltd

(a) *REPORT*

FROM:

TO:

DATE:

SUBJECT: Financial performance of Choggerell

The following report is based on a series of financial ratios calculated from the financial statements of Choggerell for the financial years 2006, 2007 and 2008.

The overall performance of Choggerell as evidenced by its return on equity has fluctuated. There was a significant improvement from 2006 (13%) to 2007 (22%) due to improvements in profitability on trading (net income to sales revenue).

That improvement in overall efficiency was not maintained in 2008 and return on equity declined to 19%. This time the decrease was due to a significant decline in assets utilisation which is now at its lowest for the three-year period. Profitability on trading was maintained – although there was a marginal decline.

Earnings per share have followed a similar pattern to return on equity. There was a very significant rise in earnings per share for 2007 – but this was followed by a small decline in 2008. Dividends per share, however, have been maintained in 2008 after a significant increase in 2007.

Changes in the profitability on trading over the three-year period seem to be attributable to steadily increasing margins on sales (decreasing cost of sales relative to sales). However, progress here seems to have been offset by increases in operating expenses (operating expenses to sales revenue).

Control of working capital does not seem to have been optimal. The current and acid test ratios have fluctuated but were the lowest for the three years in 2008. Stock turnover has been falling for the past three years and the period of credit taken by customers has increased significantly. This suggests possible liquidity problems, and there seems to have been a significant overdraft at the end of 2006 and 2008. The period of credit taken from suppliers has increased significantly in 2008 and is now an average of two months which may invite pressure from suppliers for faster payment.

The fall in efficiency in the use of assets to generate sales (sales revenue to total assets) and the increasing net assets per share would, therefore, appear to be a result of increasing non-current assets and possible poor working capital management.

(b) *Recommendations for improving the performance of Choggerell*

The overall performance of Choggerell could be improved by:

- Better control of operating expenses. Reducing operating expenses would increase profitability on sales and hence overall return on equity.

- Careful monitoring of non-current assets utilisation. Increasing sales revenue to non-current assets would increase sales revenue to total assets and hence overall return on equity.

- Careful cash flow management to avoid widely fluctuating cash balances and the reliance on bank overdrafts.

(c) *Limitations*

- It has been assumed that all the data is comparable; i.e. that similar accounting policies have been used over the three years.

- It has only been possible to look at trends within Choggerell over the past three years. It would be useful to compare Choggerell's performance with its competitors – particularly the leading firms in the same industry sector with a view to knowing what is achievable.

- It would be useful to know more about the sector Choggerell operates in and general economic conditions. This would help identify what changes are attributable to changes in sector performance and general economic conditions and changes attributable to good or bad management.

- The available information is very limited. It would be useful to have additional information about the quality of Choggerell's management, its risk exposure and the prospects for the industry sector.

Question 6 – Liz Collier

(a)

Option 1	*Year 1*	*Year 2*
	£	**£**
Profit (21,000 × 140/100)	29,400	29,400
Less interest at 10% per annum	1,000	1,000
	28,400	28,400

Comments:

(i) The loan of £10,000 is paid out of incremental cash flow generated by profit in 14.5 months.

(ii) It is likely that some benefit will continue after the end of year 2 and marginally improve Liz's lifestyle.

(iii) It is assumed that the 40% increase is a reasonable and feasible forecast.

Option 2	*Year 1*	*Year 2*
	£	£
Partnership profit	39,600	39,600
(profit is £33,000 × 120/100)		
Less cost of amalgamation	(6,870)	
Less salaries		
Liz – 2% of £126,000	(2,520)	(2,520)
Joan – 2% of £72,000	(1,440)	(1,440)
	28,770	35,640
Profit share:		
Liz 3/5	(17,262)	(21,384)
Joan 2/5	(11,508)	(14,256)
Comment:		
(i) Liz will receive		
Salary	2,520	2,520
Profit share	17,262	21,384
	19,782	23,904

Liz is worse off in year 1 by £1,218 (21,000 – 19,782) and better off by £2,904 in year 2. Her share of the initial investment is £4,122, that is, 3/5 of £6,870. This investment will be repaid in 2.5 years and the benefit will accrue in perpetuity. From year 2 onwards, it generates an ROCE of 70%, that is, £2,904/£4,122. It seems a good proposal assuming the figures are reliable and that the partners are able to work in harmony. There is potential for expansion with synergy effect.

Joan will derive a benefit in year 1 and a higher return in subsequent years, that is, £3,696/£2,748 × 100 = 134% in year 2. This might indicate that the profit-sharing ratio is unfair to Liz and should be reviewed if this option is selected.

Option 3	*Year 1*	*Year 2*
Profit (£21,000 × 8/10)	16,800	16,800
Franchise profit	15,000	17,250
Less interest @ 10% per annum	(8,000)	(8,000)
Total profit	23,800	26,050

Comments:

(i) Incremental profit compared with the present position is	£2,800	£5,050

(ii) Franchise projected profit:

Year 3: £19,838; Year 4: £22,813; Year 5: £22,813

It will take six to seven years to repay £80,000 from incremental cash flows. After year 8, it could be a very profitable proposition.

(b) Option 1 gives a 40% increase over two years. It is unlikely that this increase can be maintained in year 3 and subsequent years without additional expense on advertising, etc. The initial outlay is moderate, and is repaid quickly from additional cash flow. Liz will maintain her independence, and improve her standard of living/lifestyle to some extent.

Option 2 shows a reduction in profit in year 1 compared with the present and a £2,900 increase thereafter in year 2 and subsequently. The initial outlay is moderate, and there may be longer term prospects without additional expense after year 3. There is, however, a loss of independence as a partner. There may be hidden costs not provided for and high opportunity costs.

Option 3 requires a substantial investment of £80,000, which may be repaid until about year 7 out of incremental cash flows.

(c) *Reservations*

Option 1

- The ability to increase turnover by 40% and the maintenance of the level of sales after year 2.

Option 2

- The ability to work amicably with Joan in the partnership.
- Risk of poor decisions by the other partner, which then bind the firm.

- Possibility of administration costs not included in the estimates given.
- Basis of profit-sharing ratio seems to be biased in favour of Joan.

Option 3

- Need to reduce existing sales.
- Involvement with the franchise constitutes a refocusing of the business with attendant risks.
- Reliability of the estimates, particularly after the first 2 years.

Question 7 – Chelsea plc

(a) *Profitability: ROCE*

- **Wimbledon outperformed** the industry by 8% and Kensington by 6%.

Profit margins:

- Wimbledon follows a high volume/low-profit pricing policy:
  - Low profit evidenced by extremely low profit margin.
  - High volume evidenced by the asset turnover figures of 12 and 4 for fixed assets and total assets.
- **Kensington and the industry,** in contrast, have achieved 2.3 and 1.5; and 5.1 and 2.5, respectively. Kensington is perhaps moving up market with lower volume/higher margin.

Cost control:

- Wimbledon's 7% (12 – 5) shows lower overhead costs as a percentage of sales compared with Kensington and industry averages of 14% and 13%.

Liquidity:

- **Wimbledon** has a lower debtor collection period and stockholding period – suggests better working capital management than in Kensington.
- **Kensington's** acid test ratio of 0.5 appears low compared with 0.9 in Wimbledon and the industry average of 1.3. This appears dangerously low when taking into account the long debtor collection period.

Overall, Wimbledon appears to be the better investment for the following reasons:

- Making better use of assets.
- Better cost control.
- Well-managed working capital.
- Potential for borrowing to gear up.
- Return on equity is healthy.

(b) *Matters to be investigated before a final decision can be made*

- Check if activities of companies are actually similar.
- Obtain the absolute figures (£) for turnover, profits, assets, etc.
- Determine unexpired economic lives of fixed assets in each company.
- Check quality of management and confirm whether it is likely to remain.
- Confirm management's strategy – increased markets or diversification.
- Obtain details of date of redemption of debt.

Question 8 – Chaldon District Council

Report

To Client Services Committee

From Accountant

Date

Subject Roofing Contract: Financial Appraisal of Tenderers

Introduction

(i) *Four tenderers, including CDS, have been short-listed for appraisal. The tenders have been submitted by:*

Tender	Name
A	Nutfield & Sons
B	Chaldon Direct Services (CDS)
C	Tandridge Tilers Limited
D	Redhill Roofing Contractors plc

Objective – to determine to whom the roofing contract should be awarded.

Basis of appraisal.

Tenderers will be appraised on financial and qualitative grounds. Accounting ratios will be employed to assess profitability, solvency (long and short term), speed of cash collection and payment. Details are provided in Appendix A.

Reference to limitations of approach:

- Analysis is indicative only, not definitive.
- Analysis is based on historical information.
- Need for several years' figures in order to consider trends.

Interpretation of ratios

(i) Profitability

Despite having the lowest profit margin, A's ROCE is the highest at 77% because of its very high asset turnover of 13 times per annum. This is probably a reflection of the nature of the business – a small family concern; this probably also accounts for the firm's relatively low stockholding. The asset turnover of the other two companies is similar, and C's higher ROCE is due to its higher margins. D's stock turnover is considerably higher than its competitors, which could be a cause for concern.

(ii) Long-term security

A has no long-term debt and, therefore, does not bear any interest charges. The other two companies are highly geared with C's long-term debt being equivalent to its equity finance, which is a cause for concern.

(iii) Short-term security

D has the best current ratio, although the quick ratio of the three businesses is similar, C having the lowest. Interest cover is only relevant for C and D and does not appear problematic in either given current profit level.

(iv) Cash flow ratios

A takes longer to settle its creditors and collect from its debtors than the other two companies whose ratios are similar.

Other factors

(i) An analysis of the make-up of the tenders is as follows:

	Labour	*Materials*	*Overheads*
	%	**%**	**%**
A	59	35	6
B	63	25	12
C	75	20	5
D	57	34	9

The variation between the components of the various tenders does not provide for any meaningful comparison, although CDS (B) does have the highest proportion of its bid for overheads and profit.

Nutfield and Sons (A) have been employed by the Council for small contracts that they have performed satisfactorily. However, this contract is substantially larger than others they have won and, given a workforce of only six, they may not be able to fulfil a contract of this scale.

CDS (B) is obviously well known to the authority and its management has striven to improve its financial position recently in order to achieve a satisfactory rate of return this year.

Tandridge Tilers Limited (C) have not performed satisfactorily on other contracts that they have carried out for the Council.

Redhill Roofing Contractors plc have not been employed by this authority and the standard of their work is not known.

Conclusions

Although the financial standing of Nutfield and Sons (A) does not give cause for concern, and although it has submitted the lowest tender bid, there are doubts as to whether it is capable of carrying out a contract of this scale.

Include a comparison of uses in private and public sector.

Main points should include the following:

Private sector

- Weaknesses of HC accounts in times of high inflation, undervaluing assets, overstating profits and not providing for maintenance of capital.
- Can give a better indication of actual profits earned, separates holding gains from earned profits.
- Can give better indication of value of individual assets to the business.

- Based on concept of providing useful information for users of accounts. Not accepted in public sector; accountants not able to agree on bases and methods of adjustments required or capital maintenance to use.

Public Sector

- Need to show effective use of public assets. Real-terms measure seen as more appropriate:
    - Many public sector organisations have very long-lived assets, HC is particularly misleading as a result.
    - Financial objectives of many public sector bodies are stated in real terms and test discount rates used to evaluate capital projects based on real rates of inflation.

HC is objective and services stewardship function. HC can provide information to enable users of accounts to make their own adjustments, comparisons, etc. but *fuller* disclosure of information would be required.

There is a wide range of external information available to users of private sector company accounts. This is not the case with many public sector bodies.

CCA-adjusted figures argued to be more useful bases of assessing performance.

Does this imply that the government views performance evaluation as more important for public sector bodies than investors do for private companies?

CDS (B) submitted the second lowest tender. There is no reason to suspect that it will not be able to deliver the contract to the appropriate standard.

The longer-term financial security (gearing) of Tandridge Tilers Limited (C), the second highest tenderer, and the quality of its work give major causes for concern.

The highest bid was submitted by Redhill Roofing Contractors plc and, although its financial standing does not cause concern, its quality is unknown.

Recommendation

(i) It is recommended that the contract be awarded to CDS

Appendix A: Accounting ratios

Profitability

	A	*B*	*C*
Return on capital employed (%) (ROCE)	77.1	21.2	16.5
Profit margin (%) (PM)	6.0	19.5	17.3
Asset turnover (times p.a.) (AT)	12.8	1.1	1.0
Inventory turnover (days) (ST)	17	46	94

Long-term solvency			
Gearing (%)	0.0	50.0	37.0
Short-term solvency			
Interest cover (times)	n/a	4.0	5.6
Current ratio	0.9:1	1.3:1	1.9:1
Quick ratio	0.7:1	0.6:1	0.7:1
Cash flow ratios			
Creditors' settlement period (days)	*59*	37	40
Debtors' settlement period (days)	*41*	*27*	*29*

Notes:

ROCE	=	(Operating profit/net assets) × 100
PM	=	(Operating profit/sales) × 100
AT	=	(Sales/net assets)
ST	=	(Stock and WIP × 365)/direct costs
Gearing	=	(Non-equity finance/equity finance and non-equity finance) × 100
Interest cover	=	Net profit before tax and interest/interest payable
Current ratio	=	Current assets: current liabilities
Quick ratio	=	(Current assets − stock and WIP): current liabilities
Creditors' settlement period	=	(Creditors × 365)/operating costs
Debtors' settlement period	=	(Debtors × 365/sales)

	A	*C*	*D*
	£000	*£000*	*£000*
Turnover	612	1,741	3,080
Operating profit	37	339	534
Net assets (total assets less current liabilities)	48	1,600	3,241
Non-equity finance	–	800	1,200
Equity and non-equity finance	48	1,600	3,241
Interest payable	–	85	96
Direct costs	410	1,191	1,735
Inventory and WIP	27	149	449
Operating costs	575	1,402	2,546
Current assets	96	290	690
Current liabilities	104	232	356
Current assets excluding inventory	69	141	241
Payables	93	141	280
Receivables	69	131	241

Question 9 – Dragon plc

(a) *Reconciliation of operating profit to net cash inflow from operating activities*

Reconciliation of operating profit to net cash inflow from operating activities	
	£000
Operating profit	501
Adjustments for:	
Depreciation	660
Profit on sale of investments	(7)
Operating profit before working capital changes	1,154
Increase in trade and other receivables	(236)
Increase in inventories	(305)
Increase in trade payables	420
Net cash flow from operating activities	1,033

(b) *Points for discussion*

The following are indicative ratios – others might be also appropriate.

An initial review of the accounts indicates a significant increase in borrowings and CAPEX. Attention should, therefore, be concentrated on the level of gearing and the ability to meet interest payments and whether the CAPEX programme has had an adverse effect on liquidity.

		20X5	*20X6*
Return on equity	351/1,983 × 100		17.7%
Current ratio	1,372:740	1.9:1	
	1,893:1,090		1.7:1
Acid test ratio	657:740	0.9:1	
	873:1,090		0.8:1
Debt: Equity	500:1,932	0.3:1	
	1,500:1,983		0.8:1
Interest cover	501:150		3.3:1
EBITDA/Debt	1,161:1,500		0.774:1
Cash flow ratio	1,033:2,770		0.4:1

Other ratios could, e.g. include

- Return on equity using after tax figure.
- Gearing per cent using any alternative way of expressing, e.g. debt/total capital employed.
- Interest cover using EBITDA.

Possible observations

1. Need for additional information to be able to make inter-period comparison of the return on equity. It appears healthy but needs to be able to compare.

2. Gearing has increased significantly from 0.3 to 0.8:1. The EBITDA to debt ratio of 0.774:1 is acceptable and the indications are that EBITDA in the following financial years might increase significantly so that the repayment of the loan should not be a problem.

3. Given the increase in borrowings we need to look at the probability that the company will be able to service the debt and meet its interest payments. The interest cover at 3.3:1 indicates that this should not be a problem.

4. The current position has weakened slightly with a slight fall in both the current and acid test ratios. This is not a problem in the current year. The Statement of cash flows shows that the major capital expenditure has been covered by the loan and net cash from operating activities.

5. There is a query about the adequacy of the current working capital. Given the doubling of the plant and machinery capacity future cash flows need to be reviewed to see how this increase will be financed.

Conclusion

CAPEX has been financed by long-term debt. Servicing the increase in debt does not appear to be a problem. There is currently a positive net cash flow from operations that should increase if the new plant can be used to achieve a material increase in revenue without adversely affecting pricing and profitability. Given the major change in the potential level of activity, forecast financial statements are required to assess adequacy of working capital and risk of overtrading.

Question 10 – Amalgamated Engineering plc

(a) *Statement of cash flows for the year ended 31 December 20X6*

	£000	*£000*
Net cash inflow from operating activities		495
Returns on investing and servicing of finance		
Interest paid	195	
Net cash outflow		195
		300
Taxation		
Tax paid		375
		(75)
Capital expenditure		
Payment to acquire plant	(450)	
Receipt from sale of investments	300	
		(150)
Equity dividends paid		(225)
Net cash outflow before financing		(450)
Financing		–
Increase in overdraft		(450)

Reconciliation of operating profit to net cash inflow from operating activities

Operating profit	795
Depreciation	300
Increase in inventory	(375)
Increase in trade receivables	(300)
Increase in trade payables	75
	495

(b)

	20X5		**20X6**
Liquid ratio			
Current assets − inventory	1,125		1,125
Current liabilities	1,125		1,575
	= 1	=	0.71

Interest cover

Profit before interest	885	795
Interest charge	135	195
	= 6.56 times	= 4.08 times

Return on average shareholders' funds

Profit after tax	375	300
Av. shareholders' funds	(4,575 + 4,425)/2	(4,650 + 4,575)/2
(Could revalue property)	= 8.3%	= 6.5%

Gearing ratio

Long-term loans	1,500	1,500
Shareholders' funds	4,575	4,650
	= 32.8%	= 32.3%
or		
Long-term loans	1,500 1,500	
Long-term loans and shareholders' funds	(1,500 + 4,575)	(1,500 + 4,650)
	= 24.7%	= 24.4%

Stock turnover ratio

Cost of sales	4,410	4,680
Inventory	1,125	1,500
	= 3.92 times	= 3.12 times

(c) *Main points in the report should cover the following. Most important points are marked with an asterisk.*

Profitability

- Given unchanged sales volume (cannot tell from HC accounts without date on *specific* price movements), price rises have been below the level of general inflation (4.8%). Is this deliberate policy or just poor management? If deliberate, it appears not to have improved sales.

- Cost of materials and labour also increased below the level of inflation (5% and 5.6% respectively).

More efficient use?

- Overheads increased by 10% – in line with inflation (both production and administrative) – led to falling margins (gross and net). Further information by product might help see if one particular area is a problem – or if it is right across the board.

- Increased interest has caused profit before tax to fall by 20% although interest cover still looks ok. (Is this relevant? Interest is paid from *cash.*)

- *Trends are worrying – falling margins and rising interest seem to indicate problems in the near future. How long can the firm continue to hold the dividend? (Need more years' data – long-term picture. Is this a recent trend or not?)

Solvency/liquidity

- Working capital rising – trade receivables and inventories are up a lot.
- *Reflected in worsening liquid ratio – quite a large fall. (Again, need more years' data. What is norm?)
- *Inventory turnover is getting worse – 3.85 months' inventory on hand (20X5 3.06). Need more information here – slow-moving inventory? Or is it just poor management of working capital?
- *Trade receivables' turnover ratio has got worse (20X5 7.64; 20X6 5.87). In their state they need to be collecting *more* quickly. Is there one or a few debts causing this, or is it general sloppiness?
- Flow of funds – company is investing in new equipment, and so is presumably not contracting operations. Need information as to the use the equipment is being put to, and future capital expenditure plans.
- *Purchases of assets (+ payment of tax + dividend) have been partly paid for by selling off short-term investments. This is a one-off instance – a bad sign.
- Could use previous five years' funds flow statements – trends quite important.
- *The increased overdraft is financing the increased stocks and debtors.
- Gearing ratio is ok – but the problem at the moment is one of liquidity.
- Could argue that the overdraft appears to be a permanent feature of this firm. The gearing ratio looks worse if the overdraft is included (+ an overdraft of 1,500,000 makes it look even more unhealthy). (Gearing ratios calculated using book values may not be too useful – could recalculate using market values of debt and equity, where quoted.)

General points

- *Why does the firm want to increase the overdraft? Seems to be to finance working capital. Could be risk for the bank if the firm's profitability is in a long-term decline. (Does not mean do not lend – *could* charge more interest.)
- *Or could secure the overdraft – market value of the land and buildings is well in excess of the debentures.
- *How will the firm pay off the overdraft? Need to ask for cash forecasts for next few years (firm should have – if not, poor management). Historical cost accounts are generally of little help with respect to forward-looking data.

- More data on management. Old, young? Likely to let firm stagnate? Also, need to see strategic plans – in what direction is the firm going? Do they know?

(d) *Response to director*

(i) Debt service coverage ratio

- This ratio requires the figures for interest, tax, depreciation and amortisation charge to calculate EBITDA.

- The ratio gives the bank an indication of the company's ability to meet its capital debt repayments as well as annual interest payments from its cash flow from operations.

(ii) Cash flow from operations to current liabilities

- This ratio requires the cash flow from operations.

- The ratio gives additional information to the current and acid test ratios that are static in the sense that both the numerators and denominators are based on year-end figures that are capable of manipulation or management, e.g. running down stocks or exceptional cash receipts at the year-end.

(iii) Cash recovery ratio

- This ratio requires the figures for cash flow from operations, and proceeds towards sale of non-current assets from the cash flow statement.

- The ratio gives an indication of the payback time, i.e. how quickly the company will recoup its investment in non-current assets from its cash flow. The manager would naturally regard a shorter period as less risky.

Question 11– Drucker

(a)

Gross margin		75/275 = 27.3%	100/200 = 50%
Net margin	(PBIT/Revenue)	34/275 = 12.4%	82/200 = 41%
ROCE	(PBIT/D+E)	34/270 = 12.6%	82/290 = 28.3%
ROE	(PAT/E)	25/220 = 11.4%	62/240 = 25.8%
Current ratio		92/72 = 1.28	57/52 = 1.10
Acid test		52/72 = 0.72	38/52 = 0.73
Inventory days		40/200 × 365 = 73	19/100 × 365 = 69
Receivables days		52/275 × 365 = 69	28/200 × 365 = 51
Payables days		50/200 × 365 = 91	39/100 × 365 = 142
Operating cycle (days)		73 + 69 − 91 = 51	69 + 51 − 142 = -22

Adjusted ratios (excluding the effects of the loss on disposal):

Gross margin	(75 + 15)/275 = 32.8%
Net margin	(34 + 15)/275 = 17.8%
ROCE	(34 + 15)/270 = 18.1%
Inventory days	40/(200 − 15)×365 = 78.9
Payables days	50/(200 − 15)×365 = 98.6

Excluding the effects of the loss on disposal and the movement in fair value of investments:

Net margin (34 + 15 + 5)/275 = 19.6% (82 − 10)/200 = 36%

(b)

Tom's statement is fallacious in two key respects. The total on the SOFP reflects total assets on one side, and total liabilities plus equity on the other. This total does not give any indication of the company's performance or of its value. For example, if the company were to purchase an asset and finance it by borrowing, both totals would increase. However, no additional performance need necessarily result.

A better measure of performance is the equity total. This has declined by €20 million, indicating that the book value of the business is less than previous years.

Secondly, Tom's assumption that equal value would imply equal performance is false. If the company had performed as well as the previous year, it would have earned total comprehensive income of €62 million. This would have added an equivalent amount to the book value of the

firm. Anything less than a €62 million increase in book value represents a deterioration in performance.

(c) From an analysis of the financial statements supplied and the ratios calculated above, it seems clear that the performance of Drucker plc has deteriorated from 2012 to 2013. Even allowing for the distorting effect of the loss on disposal and the negative revaluation of non-current assets does not close the gap in performance.

Profitability:

Headline gross margin has dropped from 50% to 27.3%, the latter figure being 32.8% when the loss on disposal is omitted. This is a clear consequence of the strategy of lowering prices, and a decline should have been expected.

The key question is whether this strategy was successful. In other words, was the lower margin compensated for by greater volume? Whilst we do see increased sales volume, 37.5% in fact, the overall gross profit is lower.

Gross profit has declined from €100m to €75m, the latter figure being €90m if the loss on disposal were excluded from cost of sales. This is an underlying decline of 10%.

This is not a disaster. It is possible that the new strategy and system took some time to gain traction in the market, and it would be very useful to see month by month figures to ascertain if there was an improvement over the year. It is also entirely possible that the result would have been much worse had the new strategy not been implemented. After all, the real comparison is not with last year, but with what this year would have been had no change occurred. This is probably impossible to know.

Net margins are also down substantially (from 41% to 12.4%, the latter increasing to 17.8% excluding the loss on disposal). If we further adjust these figures to exclude the gains and losses on fair value investments, the figures are 19.6% (2013) and 36% (2012). This is a smaller decline, but still significant. However, if we look at the actual PBIT figure as adjusted, it has declined by just €18m, from €72m to €54m.

This is almost entirely accounted for by the decline in gross profit (€10m) and increase in operating costs (€6m).The increase in operating costs is not surprising considering revenue has increased by 37.5% in value terms, and much more in unit terms due to the reduction in prices. Hence we can conclude that operating cost efficiency has not materially deteriorated.

Liquidity:

Headline liquidity ratios are poor. The current ratio has actually improved from 1.1:1 to 1.28:1; however, the levels are still very poor. The acid test ratio looks even worse, declining from 0.73:1 to 0.72:1. It seems that the company's cash position is also poor, with a positive €10m cash balance turning into a negative €20m over the year.

Apart from the bank overdraft, trade payables seem to be financing much of the company's liquidity needs.

However it is important to bear in mind that the company bore large one-off investments in 2013, particularly the new €40m control system. This was financed from cash flow, as neither equity nor borrowings have increased.

Also, it is likely that the increase in inventory and receivables (both absorbing cash) are related to the expansion of sales levels, and may not be repeated.

However, that said, it is vital that the company examines closely its future cash flow needs, and considers raising new equity or debt as protection against unexpected events. The company is dangerously exposed at present.

The decline in the share price may have discouraged the company from raising equity finance, and the bank may be co-operative in extending the overdraft. It would be important to know when the bank loan is due for repayment, as the company is not in a position to repay it at present.

Presumably, the investments could be sold if necessary. This provides a cushion of support.

Efficiency:

Although there have been significant increases in the figures for inventory, receivables and payables, when expressed as a percentage of revenue and cost of sales as appropriate, the increases are not that large.

However, it would be expected that an increase in sales volume would result in a proportionally lower increase in working capital needs. Hence there may be some scope for tighter inventory and receivables management.

Receivables days show the greatest disimprovement, and it is important to ensure that credit quality has not declined in the drive to increase sales volume.

When adjusted for the loss on disposal, cost of sales has reduces, causing an increase in the payables days and inventory days (as these are based on cost of sales). Payables are being paid down more quickly than 2012, albeit from a very high base. It is important to guard against risks of being charged higher prices if payment is slow.

In the case of inventory, obsolescence may be a risk, depending on the type of product being stored. Tighter inventory management reduces this risk.

Overall Comment:

Recognising the fact that the industry trends are against Drucker plc, it does seem that the company is making a credible attempt to counter the challenges it faces. Looking at the underlying financial performance (stripping out the effects of the one-off disposal and fluctuation in the value of the investments), the deterioration has been remarkably small. It will take another year to confirm the success or otherwise of the plan. Meanwhile, the company should focus on increasing sales, maintaining its margins, and controlling liquidity very tightly through strong working capital management.

(d) *Limitations of Ratio Analysis:*

- Accounts contain financial information only. There may be many other factors of a non-financial nature not reflected in the accounts, e.g. the quality of the workforce, the likelihood of new products being introduced, or the prospect of a competitor entering the market.

- The comparison of accounts may be hindered by the use of different accounting policies. Wherever possible, the analyst should adjust accounts for policy differences before calculating ratios or carrying out any other analysis.

- Comparisons are also hindered by significant once-off events which distort underlying trends. The effects of once-off items should be stripped out in order to make meaningful interpretations of trends.

- Results are aggregates in most accounts. This means trends can be masked. For example, growth in sales of 5% may be the net result of excellent growth in one product and a decline in others.

- The SOFP is only a snapshot of the business at a particular date. It may not be representative of the year as a whole.

- Different analysts may interpret things differently.

CHAPTER 29

Analysis of published financial statements

Question 1 – Belt plc and Braces plc

The aim is to interrogate the differential performance of the two companies. There is a temptation to merely comment that a ratio is better or worse than the other. In this question, it is the differential strengths and weaknesses that need to be highlighted.

(a)

	Belt	*Braces*
€m	*€m*	
Revenue	200	300
Operating expenses	180	275
Operating profit	20	25
Return on total assets	20/150 × 100 = 13.3%	25/125 × 100 = 20%
Net profit %	20/200 × 100 = 10%	25/300 = 8.3%
Turnover of total assets	200/150 = 1.33	300/125 = 2.4
Numerical relationship:		
Rate of return on total assets	10 × 1.33 = 13.3%	8.33 × 2.4 = 20%

(b) Based on these ratios Braces appears to be performing better with its rate of return on total assets being 50% higher.

However, looking at the other ratios.

Belt has a marginally better net profit percentage. It would be helpful to learn if this is due to achieving higher prices or a better control over operating cost.

Braces, on the other hand achieves a much higher asset utilisation indicating a more efficient use of the available resources.

(c) In addition to an appraisal such as that above

Potential shareholders would enquire:

- How is the operating profit split between equity and loan funding?
- What is the gearing ratio?
- What are the P/E ratios?

Potential loan creditors would enquire:

- Is there asset security available?
- What is the interest cover?

Question 2 – Quickserve plc

(a) *Main concerns of the user groups*

(i) Employees:

Job security

Training possibilities

Promotion prospects

Pay increases.

Information sought:

- Is the company profitable? If yes, job possibly safe; if not, possible redundancy, short-time working.
- What are company policies on employment, training and union membership?
- How much are the directors awarding themselves by way of salary and bonuses? Will this influence the amount we might get?
- What is the company policy on redundancy? Voluntary terms offered in the past? Any indication of future policy?
- Is there a pension scheme? What are the terms? Is it defined benefit or contribution?

(ii) Bankers: Ability to repay any existing loans and overdrafts.

Ability to pay interest and any charges due.

Feasibility of company being able to support higher loan and overdraft facilities.

Information sought:

- Current liquidity and gearing.
- Profitability sufficient to support current and possible higher interest charges.
- Is the company expanding its operations? If so, will it be safe for us to lend more?

(iii) Shareholders: Dividend trend

Capital growth

Financial statements give a fair view.

Information sought:

- EPS and dividend per share.
- CAPEX policy and commitment.

- Anticipated future growth if increase in CAPEX.
- Directors remuneration – is it consistent with performance – are their interests the same as the shareholders.
- Do the accounts have a clean audit certificate – if not, what are the implications for the company as a going concern and future earnings, dividends and share prices.

(b) *Relevant ratios could include the following:*

	20X9	*20X8*	*% change*
Gross profit %	25.0	26.0	−3.85
Profit before tax %	5.67	13.67	−58.52
Profit after tax %	3.67	8.87	−58.62
Profit after tax/total non-current assets %	9.17	17.05	−46.22
Profit after tax/shareholders funds %	6.98	18.22	−61.69
Earnings per share	4.4p	13.3	−66.92
Dividends per share	8.0p	6.0p	+33.3
Current ratio	3.5:1	2.0:1	+75.00
Acid test ratio	3.25:1	1.8:1	+80.56
Gearing %	15.87	27.40	−42.08
Debt ratio	24.10	32.41	−25.64
Return on capital employed	6.03	14.30	−57.83
Dividend cover	0.55	2.21	−75.11

Possible comments

Employee perspective:Ratios: Profitability is declining; turnover and gross profit per cent are both falling.

Administration expenses are normally reasonably fixed, so why this disproportionate rise?

Profit after tax has fallen by 58.62%. No indication as to whether there had been a profit or loss on the sale of non-current assets. Assuming these to be immaterial as not disclosed but needs to be queried.

Why are dividends being paid out in excess of the current year's after tax profit? Is this a good sign indicating that shareholders might be looked to for a rights issue?

Who were the dividends paid to? Is there a large holding by the directors?

Figures: Questions will be asked as to the reason for the increase in administration expenses. Does this include directors remuneration? Has there been losses on the sale of non-current assets included in this figure? It cannot be depreciation as assets have fallen substantially.

Response: Employees would want to establish why non-current assets are being sold. Is this the start of a reconstruction? If so, can employees be involved in any discussions? Should they start looking quietly for alternative employment?

Bankers perspective:

Ratios: Profitability is falling.

Gearing is improving.

Current and acid test ratios are higher.

However, is this due in part to the significant disposal of non-current assets?

Short-term liquidity not a problem and borrowings can be repaid.

Figures: Trade receivables are being collected more quickly. Concern about dividend policy.

Response: Short-term liquidity sound. Need more information on the long-term strategy as this is not clear just from the financial statements. A meeting is needed to clarify this and any implication for bank support by way of loan or overdraft. Any future loans would need a debt covenant to address this happening in the future.

Shareholders perspective:

Ratios: Concerned with the fall in profitability and lower EPS. A higher dividend would normally be welcome but it seems to have come out of reserves. Current ratios have improved but unclear given the disposal of non-current assets what this means for the future profitability and revenue levels.

Figures: Questions about the increase in the administration costs and falling trend in revenues.

Response: There will be pressure to learn from management what the company's medium-term strategy is and how this will impact on earnings and future dividends. Difficult to interpret from the data whether aiming to renew non-current assets or in a decaying market with prospect of reconstruction and possible call for further equity finance. Feeling of unease until management makes a statement regarding the future.

Question 3 – Bouncy plc

(a) *Ratios for a potential shareholder*

		20X6	*20X5*
(i) Return on equity	Profit after tax and preference dividends/ordinary share capital + reserves	1,300/6,700 = 19.4%	900/5,650 = 15.9%
(ii) Earnings per share	Profit after tax and preference dividends/no. of ordinary shares	1,300/6000 = 21.67p	900/6,000 = 15p
(iii) Dividend cover	Equity profits/proposed dividend	1,300/250 = 5.2 times	900/250 = 3.6 times
(iv) Gearing	Debt capital/debt + equity	1,500/8,200 = 18.3%	1,500/7,150 = 21.0%

(b) *Solvency ratios for a potential lender*

(i) Debt equity	Debt:equity	1,500:6,700 = 1:4.5	1,500:5,650 = 1:3.8
(ii) Solvency	Current assets:current liabilities	3,810:1,960 = 1.9:1	3,610:2,060 = 1.8:1
(iii) Interest cover	Profit before interest:interest	2,200/170 = 13 times	1,570/150 = 10 times
(iv) Liquidity	Current assets – stock:current liabilities	1,710:1,960 = 0.87:1	1,540:2,060 = 0.75:1

(c) *Comments from potential shareholder's viewpoint*

The return on equity has improved by approximately 25%. The dividend is well covered, and has improved in 20X6 from 3.6 in 20X5 to 5.2 in current year. The EPS figure is in line with the return on equity and is acceptable. The gearing is low at 18.3%, so that the business enjoys lower earnings risk.

Comments from viewpoint of lender

The current ratio at 1.9 and acid test ratio at 0.87 are both improving, and interest is well covered at 13 times. Gearing is low and when coupled with the improving return on equity and sound interest cover, it means that the company is able to increase its long-term borrowing.

The increase in the share price over the last three years is understandable, given the picture presented by the ratios.

(d) *Advising on scheme to choose*

It is interesting to assess the schemes from their impact on earnings per share and return on equity.

Assuming a rights issue

	£000	*£000*
Profit before interest and tax		2200
Interest expense currently	(170)	
Less: debenture interest (10% of £1.5m)	150	
Bank charge interest		(20)
		2180
Taxation	(730)	
Loss of interest allowance 40% of 150,000	(60)	
		(790)
Revised profit after tax		1390

Earnings per share:

Shares in issue £3,000,000/£0.5	=	6,000,000
New shares £6,000,000/£1.5	=	4,000,000
		10,000,000

EPS = £1,390,000/10,000,000 = 13.9p

Return on equity = 1,390/(6,700 + 6,000) × 100 = 11%

13% Debentures

	£000	*£000*
Profit before interest and tax		2,200
Interest expense (6,000 × 13%)		(780)
		1,420
Taxation	730	
Less tax savings on loan interest (780 − 170) × 40%	(244)	
		486
Revised profit		934

EPS = 934/6,000 = 15.6p

Return on equity = (934/6,700) × 100 = 14%

The decision based on EPS and return on equity supports the loan funding scheme.

Other factors to be taken into account:

Consider the increase in gearing from 18.3% to 47.2% (6,000/12,700).

Although not suggested by the question, it may be better to raise additional finance by a combination of issuing new shares and additional loan funding. It could be argued that raising only loans increases the gearing too much, issuing only shares dilutes the earnings and control of existing shareholders too much.

Question 4 – Sally Gorden

(a) *EPS*

		Ruby	Sapphire
Earnings:	Profit	£280,000	
	Preference dividend	(90,000)	
		190,000	
Number of shares:			
1.7 × 03 – 30.9 × 03:	1,500,000 × 3/12 =	375,000	
1.10 × 03 – 30.6 × 04:	+ 2,000,000 × 9/12 =	1,500,000	
		1,875,000	
£190,000/1,875,000 × 100 =			10.13p
£240,000/3,000,000 × 100 =			8p

(b) *Price/earnings ratio*

110/10.13 = 10.9

120/8 = 15

(c) *PE ratio of Sapphire plc is almost 40% more than Ruby plc*

- This would reveal that there is much higher demand for shares in Sapphire.
- This in turn indicates the greater confidence the investing public has in that company.
- This confidence may be based on:
  - The type of industry
  - Growth potential and growth rate
  - Track record of past performance
  - Diversity of its products
  - Quality of management
  - Customer attachment and so on.

(d) *Other matters that should be considered*

(i) What Sapphire's EPS would have been if there had been no bonus issue:

240,000/2,000,000 × 100 12p

Sapphire appears better than Ruby

(ii) Return on capital employed (ROCE)

PBIT/capital employed × 100

588,000/2,710,000 × 100 = 21.7%

445,000/2,450,000 × 100 = 18.2%

(iii) Return on equity capital (ROEC)

PBT less pref. div./equity cap + reserves

440,000/1,310,000 × 100 = 33.6%

385,000/1,950,000 × 100 = 19.7%

- Ruby provides a better return on equity
- But its EPS is not quite so favourable
- It is more geared
- Had borrowed at a significantly higher cost than Sapphire.

(iv) Gearing ratio

Prior charge capital/total CE × 100

1,400,000/2,710,000 × 100 = 51.66%

500,000/2,450,000 × 100 = 20.4%

- Though both companies are geared, Ruby is highly geared. This means that any fall in profit will affect equity shares more than in proportion.

(e) *Advantages of gearing*

- Equity shareholders benefit if the return on investment exceeds the cost of borrowing.
- There is no dilution of the existing shareholders interest if funds are raised by borrowing rather than by an issue to new shareholders.
- Loan interest is allowable for tax relief.

- Lenders normally obtain some form of security in the form of either a charge on assets or prior rights on liquidation. This means that their risk is lower and, therefore, their required rate of interest is lower.

Disadvantages of gearing

- Impact on the company's funding if loan covenants are breached, for example, may be required to re-negotiate the loan at a higher rate of interest or even by issuing additional ordinary shares to the lenders in recognition of their increased risk.

- Impact on company's funding if equity shareholders perceive that there is a greater risk to equity funds when there is high gearing and as a result require a higher return on their investment.

- Adverse impact on amount available for distribution to shareholders if profits fall.

Question 5 – Growth plc

(a)

(i) Net asset value basis

(i) Based on book values

Historical cost	3,600
No. of shares	2,500
Value per share	£1.44

(ii) Based on realisable values

	£000
Buildings	2,500
Other tangible non-current assets	700
Current assets	2,500
	5,700
Current liabilities	1,400
	4,300
No. of shares	2,500
Value per share	£1.72

(iii) Based on replacement costs

	£000
Buildings	2,600
Other tangible non-current assets	1,800
Current assets	2,200
	6,600
Current liabilities	1,400
	5,200
No. of shares	2,500
Value per share	£2.08

(ii) Earnings basis

(i) Based on historical earnings

P/E ratio 10 less 25% = 7.5

EPS based on historical cost profits = 750/2,500 = 30p

Value per share 30p × 7.5% = £2.25

(ii) Based on projected earnings

EPS based on a profit increase of 25%

750 × 1.25 = 937.5

937.5/2,500 = 37.5p

Value per share 37.5 × 7.5 = £2.8

(b) *Brief comment on each basis:*

Historical cost – takes little account of changes in asset values and no account of goodwill.

Realisable value – current break up values can be obtained but it is unrealistic to apply this base if there is no intention to close the business.

Replacement cost – this gives an indication of the cost of setting up in a similar business with similar age and condition assets. No account taken of goodwill.

Earnings basis requires a risk adjustment to the P/E ratio. This could well depend on current economic conditions and expectation of future growth or profit falls.

Decision is required to the level of maintainable profits, i.e. past, current or extrapolated trend.

The offer seems reasonable if growth is expected.

Question 6 – Johnson Products Ltd

(a)

(i) Sale of shares to Sonar Products Ltd

The 75% holding constitutes a controlling interest and can be valued on an earnings basis to indicate the amount that the buyer could offer and reasonably assume would be acceptable to the seller.

A valuation on an earnings basis gives a value of approximately £300,000 or 37p per share. The value is computed using the following formula:

Value = Earnings/percentage earnings yield required

For this part of the question, we need to estimate the amount of the earnings that are to be capitalised and the percentage earnings yield required from the information given in the question. The earnings could be based on the final year figure or perhaps a weighted average. For the purpose of illustration, the weighted average is being used in this solution, calculated as follows:

Earnings	*Weight*	*Product*
£		£
79,400		
(27,600)		
56,500	1	56,500
88,300	2	176,600
97,200	3	291,600
	6	524,700

Average earnings = £524,700/6 = £87,450

Note that in part (c) of the question there is a further discussion required of the principal matters that need to be taken into account when assessing future maintainable earnings.

The percentage earnings yield required is based on the information provided in the question about the three other companies:

	Gross dividend	*Retention*	*Earnings*
	% yield	*%*	*% yield*
Eastron	15	25	20
Westron	10.5	16	12.5
Northron	13.4	20	16.75

The average percentage earnings yield = (20 + 12.5 + 16.75)/3 = 16.4%.

On the basis of the estimated average earnings that are regarded as maintainable and the estimated percentage earnings yield required, the valuation of the 75% shareholding is as follows:

Value of company	= £87,450 × 100/16.4 =	£533,232
Value of 75%	= £533,232 × 75/100 =	£399,924
Less, say, 25% for lack of marketability		£99,981
		£299,943

This value is an estimate of the amount that would be acceptable to R. Johnson.

(ii) Sale of shares to the staff

- The possible sale to the staff would result in a widely held share capital with no single person holding in excess of 4% of the share capital.

- Consequently, it is felt that the shares should be valued on a dividend basis using the formula that the value of a share would be the dividend divided by the percentage dividend yield required, less 25% for lack of marketability.

- The dividend is assumed to be 5p per share and the percentage dividend yield required is estimated at 12.97 being the average of the yields for the three comparator companies.

The value of a share = 5/12.97 × 100 =	38.55p
Less 25%	9.64
Value per share	28.91
Value of 810,000 shares	£234,171.00

(iii) Sale to Divest plc

The realisable value of the business:	
Land	480,000
Premises	630,000
Equipment	150,000
Inventory	98,000
Receivables	168,000
Cash	70,000
Payables	(335,000)
Non-current liabilities	(158,000)
Realisable value	1,103,000
Less 16.7% (based on the need to obtain 20% return)	183,833
Value of business	919,167
Value of 75%	689,375

The three values are therefore:

(i)	Sale to Sonar Products Ltd	£299,943
(ii)	Sale to minority interests	£234,171
(iii)	Sale to Divest plc	£689,375

(b) It is clear that the sale to Divest plc is the most attractive option (at £689,375 on an asset basis and £524,700 on an earnings basis).

Sale to Sonar Products at £299,943 achieves only 57% of the sale to Divest plc (on an earnings basis), and the sale to the 20 employees realises even less at £234,171.

All the options realise less than the £1 nominal value of the share, when the Statement of Financial Position indicates they are worth more than £1 (i.e. £1.09 a share). Selling the shares to Divest plc could result in all the employees being made redundant (with costs to Divest). To avoid redundancy, the employees may be persuaded to increase their offer to Divest plc's offer of £524,700 (i.e. £26,235 per employee).

Maximum that would be offered by Sonar Products Ltd on the basis of information provided in the question

The valuation would be calculated on a return on capital basis to indicate the maximum amount the buyer would be prepared to offer.

The maximum that Sonar Products would be prepared to pay may be estimated by reference to the rate of return that they presently achieve. Given that they currently achieve a rate of return on capital employed of 12.5%, the amount they would regard as maximum is £524,700, calculated as follows:

Average earnings	*Capitalised at % return on capital*		*% Holding*		*Maximum value*
£87,450	× (100/12.5)	×	(75/100)	=	£524,700

(c) *Principal matters to take into account when estimating future maintainable earnings*

There are a number of matters that could be mentioned and some of them are given in this answer. There are others that could be put forward as satisfactory replies to this question.

(i) Past performance

- Past performance, i.e. past earnings, is the main indicator of future potential.
- One cannot merely carry out an extrapolation of the past three to five years.

- It is an indication of how well the company has operated in the past in comparison with other companies within the same industry.

- This means that one would need to obtain information about the earnings of the three comparator companies over, say, the past three to five years and assess how well Johnson Products Ltd has fared in comparison with these.

- One could pay attention to the compound annual growth rates in sales and operating profits and profits for the year, and look at the implication of financial and operating gearing.

(ii) Forecast for the industry

- It is important to form a view on the possible growth or decline within the industry sector in the future.

- Although the past earnings are the base from which accountants start, they also need to have regard to the expected movements within the industry in the future.

- We are attempting to estimate future maintainable earnings, and clearly, the rate of growth in the industry is important.

(iii) Changes in the activities undertaken

- The activities that generated the past earnings will be known.

- It is important to identify the extent to which these will be varied.

- There are various indicators that will be apparent from an examination of the accounts themselves, such as:
    - Research and development expenditure.
    - New fixed assets.

- Capital investment contracts outstanding at the statement of financial position date and also

- Surplus funds that are not currently invested within the business because they indicate the capacity to move into new activities or to expand the level of existing operations.

(iv) Rationalisation

- Consideration needs to be given to the likelihood of the acquirer selling off parts of the acquired company in order to:
    - improve performance; or
    - release cash for the payment of interest or for other purposes.

(v) Management and staff

- These are an important component for success in any business.
- It is possible to gain an impression from the accounts and filed documents of average wage levels and the stability of the board.
- However, to obtain more detailed information, it would be necessary to have the cooperation of the company because one would be seeking more detailed information on:
    - Service contracts
    - Performance-related pay
    - The rate of labour turnover.
    - It is clearly more fruitful if it is possible to obtain the co-operation of the management to acquire these data.

(vi) Accounting policies

- If it is assumed that the new owners will be able to control the accounting policies, then clearly it is of interest to identify how the past policies will be varied. For example, there are areas such as depreciation and long-term contracts where the company might follow a more or less conservative accounting policy.

(vii) Interim accounts

- If it is possible to obtain access, then the interim accounts, management accounts, budgets and forecasts will give an indication of the company's strategy and its success over a few months in the immediate past.
- This could give a more current feel for the company's progress.

(viii) Ratio analysis of statement of financial position

- The matters referred to in paragraphs (ii) to (vii) are specifically towards the future.
- While the emphasis is on the future, we also need to refer to the last statement of financial position to pick up items such as:
    - high gearing;
    - poor liquidity;
    - references to post statement of financial position events; or
    - contingent liabilities that might impact on the future prospects of the company.

    In conclusion, therefore, the question is to look for a recognition that the valuer needs to be forward looking and identifying as clearly as possible the future maintainable earnings.

Question 7 – Valuation of shares in NX

(a) *(i) Preferred shares*

Net realisable values

On the basis of the available information, the value per share will be capped at the face value of the shares, that is, $1 per share.

Future maintainable earnings

This should perhaps be calculated on a dividend yield basis. The only information available is that investors in similar quoted companies are expecting a dividend yield of 6%. On this basis, a share valuation would be:

Preference dividend	$10,000
Required dividend to give a yield of 6%	$12,000
Value of preference shares	$166,667
Value per preference share	$0.83

However, this company is unquoted; so, investors may require a higher dividend yield, which would reduce the value per share.

(ii) Ordinary shares

Net realisable values

Break-up value per share

	$
Property	3,000,000
Equipment	1,250,010
Motor vehicles	318,416
Inventory	400,000
Receivables	580,000
Cash	132,800
Payables	(467,700)
Current tax	(414,700)
Costs of realisation	(101,000)
Preferred shares	(200,000)
Loan note	(338,000)
	4,159,826
Number of shares	5,000,000
Value per share	$0.83

Future maintainable earnings

	Turnover	*Profit after tax*	*Preference dividend*		*Weight*	*Weighted earnings*
	$	*$*	*$*	*$*		*$*
Profit for 2004	8,218,500	1,031,000	(10,000)	1,021,000	1	1,021,000
Profit for 2005	10,273,100	1,288,720	(10,000)	1,278,720	2	2,557,440
Profit for 2006	11,414,600	991,320	(10,000)	981,320	3	2,943,960
						6,522,400
Divide by					6	
				$		
Weighted average earnings adjustments				1,087,067		
Exclude directors' remuneration				173,000		
Deduct manager's salary				(120,000)		
Extra debenture interest				(16,380)		
Future maintainable earnings for ordinary shareholders				1,123,687		
Maintainable earnings per share (in cents)				22.47	22.47	
Required PE ratio				11	7	
Value per share				$2.47	$1.57	

The value of $2.47 per share is based on the PE ratio for similar quoted companies. However, this company is unquoted and this may mean discounting the PE ratio. The value of $1.57 per share is based on a discounted PE ratio of 7.

(b)

- Harry wishes to purchase a controlling interest. However, at the moment the shares are owned equally by the two directors. It looks as though Harry will have to purchase all 100% of the ordinary shares. It is also likely that Harry will also have to purchase all the preferred shares because these too are owned by the current directors.

- The business has been successful because of the knowledge assets generated by Albert Bell. These have not been valued and included in the net realisable value calculation per share.

- The expertise of the two existing directors seems to have been crucial in the past success of the company. Both these people will be leaving the company and this may impact on the future prospects of the company.

- The two directors are setting up another company. Will this be a rival and, if so, will it be possible to impose conditions on the sale of the shares to protect the interests of NX?

- The fact that the two directors wish to set up another company may make them keen to sell. They may even need liquid funds to help establish the new company. This may help Harry negotiate a good price.

- The trend in sales is beginning to tail off. This may mean that there are limited opportunities for future sales growth.

- Profit fell significantly in 2006 after a substantial increase the previous year. This may mean that there is pressure on future profits.

- The valuations calculated are starting points only. A successful outcome will depend on factors not included in the calculations and the relative bargaining powers of the parties.

- Harry needs to question why he wishes to purchase this company given that two key players in the company will be leaving. Are there alternative investment opportunities or better uses for his money?

Question 8 – Segmental Reporting

(i) The case for segmental reporting – two arguments for:

- It will reveal in more detail how well management has performed.

- Management will not be able to hide its failures behinds its successes.

- Both will be disclosed and shareholders will be better able to judge the performance of directors.

- In addition, disclosure of segment results may encourage management to exercise greater care when making investment decisions and be more positive in correcting any mistakes.

- The first argument is, then, that segmental reporting will result in improved managerial performance.

- The data provided by segmental reporting will be more useful for the investors.

- This is because many financial statement users have said that consolidated financial information, while important, would be more useful if supplemented with disaggregated information to assist them in assessing those uncertainties that surround the timing and amount of expected cash flows.

- This would allow them, therefore, to assess the risks related to a personal investment in or a loan to an enterprise that may well operate in different industries or in different areas of work.
- The results of a diversified enterprise are composed of the results of its parts, and the financial users consequently regard financial information on a segmental basis also as important.

(ii) The case against segmental reporting

- The case against segmental reporting arises from a consideration of cost and reliability.

- An important consideration in assessing the desirability of disclosing segmental data is a comparison of the benefits arising from and the costs incurred by any such disclosure.

- If the benefits exceed the costs, then the disclosure is desirable.

- This comparison is difficult to make in practice because the benefits are enjoyed by the users while the costs are incurred by the statement providers.

- It is not surprising that users express a need for segmental data because it costs them nothing.

- Equally, it is not surprising that the statement providers do not want to incur the costs of disclosing segmental data because:
  - They are unlikely to receive any benefits.
  - Even worse, they run the risk of their managerial deficiencies being revealed.

- The costs that may be incurred by the statement providers include:
  - The costs of collecting and processing the information.
  - The costs of audit.
  - The costs of disseminating it to those who must receive it.
  - The costs of disclosure in the form of a loss of competitive advantage *vis-à-vis* trade competitors or trade unions with a consequent effect on wage demands.

- It follows that a comparison of the private costs incurred by the providers and the private benefits enjoyed by the users is likely to be inconclusive.

- A more fruitful, but again difficult, approach would be to compare the social costs with the social benefits. The social costs would be the resources consumed in the gathering, processing and publication of the segmental data. The social benefits would be the improved allocation and more efficient use of resources.

- The second major objection to the provision of segmental data is their reliability.

- It is argued that segmental data are not sufficiently reliable to justify disclosure. If this is true, the unreliable data may be just as misleading as no segmental data at all.

- The unreliability is due to the fact that there is the necessity to make arbitrary allocations of both costs and revenues among the various segments of the business.

- The degree of arbitrariness will depend upon the nature and size of the reporting segments and the amount of detail disclosed for each segment.

  There are other specific objections to the disclosure of segmental data that may be made. These include the following:

  Investors invest in a company and not in its individual segments.

  While this is correct, it cannot be denied that data about the operations of individual segments may permit investors to make better informed decisions about investments.

  The data are difficult to interpret and may confuse readers or be misunderstood with inappropriate inferences being drawn.

  It is usually assumed, however, that the statement users are technically competent and able to understand accounting data.

Segmental data cannot be prepared with sufficient reliability, and it is beyond the scope of external financial reporting to provide such analytical or interpretive data.

It is true then that there are reliability problems with producers of segmental data, but whether those problems are sufficient to warrant non-disclosure of the data is a matter of judgement.

It is sometimes maintained that the disclosure of segmental data constitutes analysis and interpretation, and is, therefore, beyond the scope of financial reporting. However, this is a matter of opinion. While analysis and interpretation do usually involve the study or reordering of existing published data, segmental reporting provides additional data not otherwise available. It is difficult to argue, therefore, that the provision of segmental data constitutes analysis and interpretation.

There may be a negative impact on corporate innovation and experimentation.

If mistakes are disclosed, management may be inclined to minimise risk to avoid mistakes, and innovation may suffer. This argument is difficult to assess. In the long run, of course, a lack of innovation will lead to poor performance and dissatisfaction with management. It seems likely that investors will be sufficiently sophisticated to realise that continued success requires innovation, which means that some risks must be taken.

The costs of providing segmental information are too high.

The objection relates primarily to a fear that disclosure of segmental data may weaken the firm's competitive position. This objection has been fairly widely researched and the general conclusion seems to be that researchers found that companies rarely 'if ever, encounter(ed) any real loss of competitive advantage as a result of segmental reporting'.

'It could be argued that the points in relation to the company are rather negative. The company is likely to provide internal reports and accounts by its principal activities, so the cost of providing this information to shareholders will be small. And, such information will be valuable to the company in managing its business. For instance, Rolls-Royce Holdings plc provides turnover, profitability and orders for each of its divisions with comparisons from the previous year. This shows the importance of each division, the related profitability and the state of future orders.'

Question 9 – Business Risk Management

(a) *Identification and prioritisation of risks*

All types of risk are relevant to an existing or potential shareholder including both downside risks (possible losses) and volatility risks (possible gains or losses). Shareholders are not protected if they only receive details of downside risks and sell their shares inappropriately.

Developments to date have been aimed at addressing a particular problem, e.g. SSAP 25 *Segmental Reporting*. This has meant that companies have had prescriptive requirements that might not have reflected the actual risks that are relevant to their company.

Risks that may be relevant include:

- Product or service failure.
- New regulations.
- Product development with heavy R&D costs before cash flows in.

Internal risks include:

- Process risks, e.g. arising from employees such as risk of losing key staff, suppliers and manufacturing process whereby products are not delivered on time or to correct specification.
- Financial risks, e.g. price, liquidity and credit risks.

External risks include:

- Social, political and economic forces, e.g. risk of new employee protection regulations.
- Financial risks, e.g. exchange rate movements.

Risk prioritisation

The normal materiality criterion applies and attention should be drawn to risks in accordance with their significance.

(b) *Managing risk*

There are different views on the nature of the disclosure. One view is that it is sufficient to confirm that the company has complied with the Combined Code.

There is also the view that there should be detailed disclosure of particular steps taken, e.g. insurance, hedging and outsourcing.

(c) *Measuring risk*

There are a wide range of measures that could be applied to measuring risk, and it is important not to concentrate only on deterministic data, e.g. potential losses on exchange, but also to consider how to report on strategic risks.

Accounting measures already exist internally, e.g. reporting provisions and contingencies and producing ratios such as gearing and liquidity, trend analysis and benchmarking.

Accounting measures also exist externally, e.g. bond rating by credit agencies and benchmarking.

Non-accounting measures are also important, e.g. price competitiveness, delivery times and level of warranty claims.

PART 8

Accountability

CHAPTER 31

Corporate governance

Question 1

Scenario one – Fred Paris discussion points

Is there a corporate governance failure and to whom is it unfair?

They believe that if the project looked really profitable to Fred they were negotiating with Paris Property and if it was just profitable they were potentially selling to FP Development.

In this scenario, FP Development can benefit if it is profitable. If the contact and business is only obtained through Fred's initiative and negotiation, do the other shareholders in FP Development have cause for complaint? If they are unhappy, presumably Fred could proceed if very profitable and look for other opportunities for himself which would be equally profitable.

Is the situation different if the shareholders in FP developments are aware of the situation?

Is the situation different if the initial contact came through FP Developments?

What further information would you seek?

Is Fred acting illegally? Unfairly? Does he have a fiduciary relationship with FP Developments?

Why is he able to negotiate for FP Developments? Is he authorised and if so, by whom?

Question 2

Scenario two – Harvey Storm discussion points

West Wings supplies the finance to the developer secured on the land. The finance to the buyers is highly risky given their poor credit history.

Middleman Properties

If the economy crashes then the property developer (Middleman Properties) could potentially fold as they have little liquid resources. West Wings has security over land but if the value has fallen below the amount advanced, it would need to look to Middleman to make good the shortfall – this would be unlikely as Middleman Properties have not built up resources for West Wings to claim as they have barely been profitable.

Harvey Storm does not declare a conflict of interest as CEO of White Wings when dealing with the loan to Middleman Properties because he does not have a financial interest in them.

Mortgagees

If the economy is bad then it is probable that many of the house purchasers will default and West Wings will be left to repossess the house. At that stage, the house value will probably be much lower than the purchase price because the original price was inflated by the liberal finance.

White Wings faces a potential loss on repossessions.

Frontman Homes

In the meantime, Frontman Homes would have been profitable without exposure to the volatility of land prices.

Question? Is there evidence of corporate governance failure? Has Harry Storm acted illegally? Has Harry Storm breached his fiduciary obligation as a CEO by making the advance to Middleman? By approving mortgage advances? Would he be financially liable to West Wings? How would the commercial arrangement come to light? Would the auditors of West Wings be expected to identify the relationship (indirect) between West Wings and Frontman Homes? Is there any corporate governance breakdown on the part of Frontman Homes?

Question 3

Scenario three – Conglomerate plc discussion points

There is a risk that, contrary to good corporate governance, the Alexander family because they effectively control the company could potentially run the company in the interest of the family rather than in the interests of all shareholders. Typically, this would be through employing family members in a paid but possibly silent role and making payments in the form of remuneration as dividend rights are the same for both A and B shares and entering into transactions with related parties.

If these were unduly excessive the minority shareholders could resort to the Court. However, if the Alexander family is careful not to blatantly exploit then it will be difficult to prove the 'family' decisions cannot be justified in terms of long-term success given that there is no certainty as to what leads to long-term success.

Question: Is there a breach if the risk of family power was known to the minority at the time they subscribed for their B shares? Are mechanisms there to protect investors who should have been aware that family businesses often run in a rather undemocratic way? Is there a problem if the family business is exceptionally profitable and offers returns that exceed average market rates – even though family members are taking excessive amounts?

Question 4

Scenario four – White plc discussion points

It is interesting that the list was entirely male and all candidates were people who had been managing directors. The scenario does not say who drew up the list but it seems surprising in this day and age that there was not a female on the list. After all, the statistics show that women are performing better than men academically, and have been doing so for a considerable period of time now. To ignore them is to exclude half the talent pool and to risk being insensitive to half the customer base. There is also a strong likelihood that a woman would bring different perspectives to a number of issues.

Further, given the number of companies who have demonstrated blind spots through their lack of anticipation of technological breakthroughs, merging of industries, and the lack of awareness of the likelihood of social groups like environmentalists, amnesty groups and consumer groups boycotting company products, it is surprising that the pool is from such a limited background. After all, if one of the roles of the board is to avoid both unnecessary and also excessive risks then a diversity of backgrounds will increase the sensitivity of the company to emerging risks.

Then there is the question as to whether the managing director should be involved in the discussions at all given the desire to get independent directors who are willing to challenge management.

Often there is emphasis on getting a harmonious board. But there is a difference between boards that are consumed in battle for control of the board and board members who have different backgrounds and are confident enough to question unrecognised assumptions. In this regard, Dr John Spate may be just the type of person who would scrutinise management's proposals most rigorously. Also, he might raise interesting questions in relation to the dynamics of society and what that will mean for the products and operations of White plc. The fact that he looks at things differently should have been a plus rather than a negative. Perhaps, the question should have been asked is whether he could get others to listen to his ideas and to take them seriously. Unless he can change the perspective of the board on some issues then his wealth of ideas would be wasted.

Lord Sperring seems to be chosen for his contacts. But there has been no assessment of what the board lacks at the moment given the responsibilities of the board. There appears to have been no evaluation of the skills of the existing board compared to an ideal board for White plc and hence what skills need to be sought in a new board member.

Question 5 – Audit firms and consultancy

(a) An audit firm can provide significant help to the audit client through consultancy work. The audit firm will know the audit client from the audit, so this will reduce the learning time when carrying out consultancy work, thus reducing its cost. Also, audit firms have knowledge in specialised areas, which would benefit the audit client. Audit firms have been developing financial and related business services as part of their consultancy business, so there are many areas where the audit firm can help the audit client. The audit firms have specialised skills in information and computer systems, and e-commerce and Internet applications. Also, audit firms have always had specialists who deal with company and

personal taxation, and accountants' skills in this area are probably better than those of any other business.

So, it can be seen that auditors can provide high-quality services to audit clients, often at a lower cost than could be provided by other consultants.

(b) The provision of consultancy services creates independence problems for the audit firm:

(i) The auditor may be reporting on his/her own work, such as when reporting on financial statements prepared by the auditor, or accounting systems which have been recommended by the audit firm. If the auditor both prepares and audits the financial statements, the quality of the audit will be less than what it would be if these two functions were undertaken by different people. This is because one is poor at checking the accuracy of one's own work. An independent person is much better at detecting errors in another person's work. Also, if the auditor finds errors in work carried out by the firm, he/she will be reluctant to highlight these errors, as they could be a sign to the audit client of the low quality of the audit firm's work. So, the audit firm may give an unqualified audit report when the audit report should have been qualified (modified) because of material errors in the financial statements.

(ii) The second problem is that with the higher fee from the combined audit and consultancy work, the auditor will be reluctant to qualify the audit report, as this could result in a loss of both the statutory audit and the consultancy work. The profitability of the non-audit work for the FTSE 100 listed companies is six times the profits from audit work.

(iii) The ethical rules of most of the accounting bodies, the IFAC and the US SEC, say the auditor should avoid making management decisions while performing consultancy work. However, there are problems in defining the situations when the auditor would be making management decisions, and it is difficult for third parties and regulators to detect whether audit firms are carrying out management decisions for the client company. The easiest solution to this problem is to prohibit auditors from carrying out consultancy work for audit clients.

(c) Audit firms want to continue to perform consultancy work because of the high profits from this work. If an audit firm has acquired a new audit, it is both a regular annual income stream from the audit, and, being auditor, the firm has a greater chance of being selected for consultancy work than competitor consultants. This is because the audit firm's consultants will be able to avoid some of the learning costs and the audit client will know the audit firm (and probably have a good relationship with the audit firm), and so they will feel more confident in awarding the consultancy work to the audit firm than to a consultant whom they have no experience with.

Question 6 – Auditor accountability

(a) Where the auditor reports to shareholders, the work the auditor carries out is determined by the information required by the shareholders. In a statutory audit (i.e. one governed by the country's legislation), the work the auditor needs to carry out is determined by the information the country's law requires the auditor to report on. In addition, it is common for the statutes to give the auditor the right of access to the company's accounting records and to obtain explanations from the company's staff, including the directors. In this situation, it is the shareholders or the country's statutes that determine the work the auditor must carry

out. In this situation, the directors cannot limit the work the auditor must carry out. This is quite different from situation (b).

(b) Where the auditor is providing consultancy services for the client company, the directors specify the work the audit firm must carry out. Thus, the audit firm's responsibility is to the directors of the company. For consultancy work, the directors can prevent the audit firm from looking at parts of the company's business. This limitation of the auditor's work is not allowed for the statutory audit. So, for consultancy work, the auditor's work is controlled by the directors. For the audit, the auditor's work is determined by statute (or the shareholders) and it cannot be limited by the directors.

If the directors tried to limit the auditor's work in carrying out an audit, the auditor would probably give a qualified (modified) report on the financial statements, stating the way the directors have restricted the auditor's work and its possible effects on the financial statements.

Question 7 – Auditors as shareholders

There is a concern that auditors should be impartial and also be seen to be impartial in carrying out their duties as auditors. This means that they should have no personal pressure to influence the reported income of the business. Although it is of course possible for an independent auditor to ignore the personal implication of the shareholding and to act professionally and objectively, the public might well take a critical view. Consequently, the professional bodies prohibit an auditor from holding shares in a client company.

CHAPTER 32

Integrated reporting: sustainability, environmental and social

Question 1 – Geoworld Enterprises plc

(a) *Geoworld Enterprises plc value added statement for the year*

Value generated			
Revenue		411,000,000	
Less: payments to outsiders			
Raw materials	100,000,000		
Subcontractors	51,000,000		
Energy	1,000,000		
Total payments		152,000,000	
Total value generated		259,000,000	
Value added distribution			
Compensation to employees		158,000,000	61.0 %
Providers of finance:			
Interest		2,000,000	
Dividends		3,000,000	
Total to providers of finance		5,000,000	1.9%
Government		16,000,000	6.2%
Reinvested in the business			
Retained earnings	79,000,000		
Depreciation	1,000,000		
Total reinvested	80,000,000		30.9 %
Total value distributed		259,000,000	100.0 %

(b) Version one

The median income is the middle income. In descending order the fulltime equivalent incomes are:

Chief executive officer		1	1,000,000
Other employees			
Senior executives		5	600,000
Other executives		10	400.000
Local fulltime		2,000	40,000
Local part-time	1,000 x .5	500	20,000
International f/t		2,000	20,000
International p/t	4,000 x .5	2,000	10,000

Total number of other equivalent employees is 6515 or actual number of other employees is 9015

The median income is the employee ranking 3257 or 4508 which falls in the international f/t or 20,000. Thus the chief executive officer is getting 1,000,000/20,000 or 50 times the median salary.

Version two is for situations where the subcontractor is not a genuine independent supplier but is a way to circumvent employment laws. Then we need to add the following to the list of employees

Subcontractors f/t	2000	17,500
Subcontractors p/t	1000	16,000

The total number of other employees becomes 9515, so the median equivalent employee is 4757 or median on the absolute numbers is 6508. Thus, based on equivalent employees it is 5 senior executives, 10 other executives, 2000 local f/t, 500 local p/t, 2000 international f/t, 242 subcontractors f/t), so the median pay is 17,500. The chief executive officer is getting 1,000,000/17,500 or 57.14 times the median income. Using the absolute number you also get a median income of 17,500.

The main justification to be discussed is whether to just take earnings on the total remuneration each person gets or whether to convert it to a fulltime equivalent wage. If the use of part-time employees is a device to keep employees submissive, or if remuneration is lower for casual part time staff although working more than half the hours worked in the location of the senior executives, then perhaps it could be argued that the wages should not be converted to fulltime equivalent. On the other hand, if employees choose to work part-time because of other commitments then perhaps the argument is stronger for using fulltime equivalents.

Then if equivalents are used for calculating the earning rate that of itself does not necessarily mean the numbers of employees has to be based on equivalent numbers rather than actual numbers.

The other area of contention is whether in some cases subcontractors are really equivalent to employees. Such a case would be where the staff of the subcontractor work in the production process of the main company and are effectively managed by the staff of the main company. Many cases might fall into the questionable category rather than being clearly in or out.

(a) Many large companies already produce employment statistics in their annual reports so presumably they already have systems to capture that information. In relation to wages it is probably possible to extract such information for employees who work the whole year based on earnings and personal taxes withheld for payment to the government.

(b) There are several ways to make the ratio smaller and they include:

a. Taking a lower salary.

b. Getting benefits which are not included in the salary such as more generous use of company money for accommodation and meals when travelling on company business.

c. By using technology more to make employees more productive, so you employ less staff but pay them more.

d. Use subcontractors to get employees off the books at lower rates of pay than you would pay if your company did it in house, or just to outsource work which is poorly paid so they do not count in the statistics although the wages paid to them are the same as before.

e. Move production to low wage rate countries where minority owned and controlled companies perform the work.

f. Move production to countries using suppliers who are located where there are less health and safety requirements so production is cheaper.

The question then asked whether the steps outlined above would be beneficial to the company. In respect of a lower salary it is a question of whether the executive is previously over paid. Would it affect motivation, would the executive seek other employment and if so, could another executive be recruited who could do the job well for the same or lower pay? These matters are difficult to judge. The best paid executives are not always the most productive as viewed by hindsight but it is harder to tell at the time of recruitment.

As stated in (b) above, there is a problem of controlling the costs and from a shareholder perspective it is not making the cost less and, if anything, it is circumventing shareholder oversight.

In relation to (c), the use of technology to improve productivity is fine as long as all the gains are not paid out as extra salary because there needs to be a reward for capital providers investing in new technology.

Subcontracting low paid jobs, in itself, will not improve returns. However, if the subcontractor is more efficient than the company there may be gains. Efficiency may come from specialisation. On the other hand, if it is perceived as a device to pay lower rates of pay this may cause resentment or lack of cooperation from remaining staff or even bad publicity causing loss of sales. In the future, it may make good potential employees harder to recruit.

Question 2

Imputed cost of funds

Year 20XX (10 × .4) + (20 × .6) = 16%

Year 20XY (10 × .4) + (20 × .6) = 16%

Year 20XZ (900/[200 × .4]) × .4 + (25 × .6) = 19.5%

	20XX	20XY	20XZ
Profit before interest and taxes	1,000,000	1,600,000	3,000,000
Cost of funds	640,000	1, 280,000	3,900,000
Net contribution to shareholders wealth	360,000	320,000	(900,000)

The cost of funds is calculated by multiplying the funds employed by the imputed cost of funds expressed as a decimal. For 20XX that is 4,000,000 × .16 = 640,000

Expressed as a net contribution it is apparent that, in the short run at least, the expansion is generating less returns to shareholders because the extra funds employed are not generating returns which are sufficient to pay the shareholders sufficient to justify the extra risk. It is interesting to note that the interest rate and the imputed cost of equity have increased during 20XZ. Those increases may be due to the reassessment of the risks associated with intellectual capital and, therefore, lead to the demands for higher compensation. It could also reflect a lack of confidence in management to invest funds wisely or that they are just interested in growth because they want a bigger business rather than focusing on ensuring all additional funds employed generate better returns than alternative investments by shareholders.

Question 3 – Hythe plc

(c) *Value added statement – year ended 31 December 20X6*

		20X6		*20X5*	
		£000	*%*	*£000*	*%*
Turnover		5,124		4,604	
Bought-in materials and services	(W1)	3,275		2,770	
Value added		1,849	100	1,834	100
Applied in the following way:					
To pay employees					
Wages and salaries	(W2)	810	43.8	796	43.4
To pay providers of capital					
Interest on loans	168		9.1	151	8.2
Preference shareholders' dividend	24		1.3	24	1.3
Equity shareholders' dividend	288		15.6	256	14.0
		480		431	

To pay government						
Corporation tax		402	21.7		393	21.4
To provide for maintenance and expansion of assets						
Depreciation	155		8.4	144		7.9
Retained profits	2		0.1	70		3.8
		157			214	
		£1,849	100.0		£1,834	100.0
Value added per employee		46,225			43,667	
Sales per employee		128,100			109,619	
Average earnings per employee		20,250			18,952	

	20X6	20X5
Workings	*£000*	*£000*
Bought-in materials and services (1)		
Materials consumed	2,934	2,482
Fuel consumed	290	242
Hire of plant and machinery	41	38
Auditors' remuneration	10	8
	3,275	2,770
Wages (2) and salaries		
Wages	607	598
Salaries	203	198
	810	796

(d)

A value added statement is a measure of the wealth created by a business. It is the amount of value added by manufacturing, distribution and other businesses to the cost of raw materials, products and services purchased. It shows the total wealth created and how it was distributed, taking into account the amounts retained and reinvested in the group for the replacement of assets and development of operations.

Financial statements have been regarded as primarily intended for equity investors, whose interest is focused on profitability, capacity to adapt and solvency. The value added statement has perhaps been seen as being of more interest to staff who have had little recognition from standard setters. Even in 2004 when there was a growing interest in social, environmental and ethical issues, there was no financial reporting standard relating to human asset accounting in the statement of financial position or value added statements.

There is a further argument that the data already appears within the existing primary reporting statements and that there is consequently little point in producing yet another statement.

Question 4

Value Added Statement for 20X5

	20X5	%	Percentage Change	20X4	%
Sales revenue	46,656		5.2	44,335	
Financial income	(188)			54	
Other income	844		(13.9)	980	
Total revenue	47,312		4.3	45,369	
Value added	16,693	100	5.6	15,809	100
Value distribution					
Employees	7,306	43.8	2.5	7,125	45.1
Capital providers	1,775	10.6	20.1	1,478	9.4
Government	1,590	9.5	(11.4)	1,794	11.3
Reinvested in the business	6,022	36.1	11.3	5,412	34.2
Total value added distributed	16,693	100	5.6	15,809	100

Notes

1. Capital providers in 2005 = interest 1351 + shareholders 424.

2. Reinvested in the business in 2005 = depreciation 4207 + retained 1815.

(b) There are no guidelines or regulations governing the production of the value added statement so it has been presented simply so as to highlight how well the company has been in generating value for customers and how prudently the surplus funds have been utilised. The sales revenue and value added have shown good progress with increases of 5.2% and 5.6%, respectively. This statement also shows that the management has been successful in improved efficiencies in the use of labour with the result that proportionately the employee share has fallen allowing increased investment in the future of the business and at the same time making modest increases in shareholder dividends.

Question 5 – David Mark

(a)

Your proposal to close the branch is ill advised. Apart from the social implications of closure referred to below, the loss accruing to your organisation based on 20X4 figures would be approximately £2,800 made up as follows:

	£	£
Contributions/gross profit lost		95,700
Expenses/costs saved:		
Salaries and wages (all)	78,540	
Rates (all)	2,865	
Advertising (specified)	1,320	
Delivery van expenses (all)	5,280	
General expenses assuming all relate to branch	1,188	
Telephone (specified)	1,056	
Wrapping materials	2,640	92,889
Loss if closed		2,811

(b) *Increased turnover if Peter's suggestion is followed*

To cover expenses of £125,500 (including presumably the extra staff required), additional gross profit of (125,500 − 111,237) £14,263 would be needed, thus requiring

	£
Sales (14,263 × 4)	57,052
But current expenses of £111,237 are not covered by currently generated gross profit because a loss of £15,537 occurs. If this is to be absorbed, then additional turnover is necessary (15,537 × 4)	62,148
Total additional turnover	119,200

This assumes that the branch will be expected to absorb existing fixed charges, that is, salary of £10,560 of D. Mark, advertising expenses of £1,320 and telephone charges of (1,584 − 1,056) £528 and, if demanded, the delivery charge of £5,280 attributable to Arton.

(Total estimated costs of £125,500 have presumably allowed for additional wages and the van charge or additional wages, without the van charge. One way or the other, the wages figure will have compensated for the van be it a plus or a minus. If van charge is included, then wage figure will be incorrectly budgeted in the data of the question, because it should have been excluded).

Extra part-time workers necessary per formula = $\frac{119,200}{30,000}$ = 4

If figures are to be based on costs of £92,889 specific to the branch, then the additional turnover will still be £119,200 because Peter's expenses of £125,500 remain unadjustable for fixed expenses, whether they are included or excluded, in this solution.

that is, (125,500 − 92,889) × 4 =	130,444
But the 92,889 already includes a contribution	
of 2,811 via sales (×4) of	11,244
So extra turnover is:	119,200

Or, required turnover of 25% gross profit content to generate absorption of Peter's estimated costs	
of £125,500 = × 4	= £502,000
Current level per accounts	= £382,800
Additional turnover	= £119,200

(c) *Comments on social implications of closure*

(i) If closed

- Loss of a local shopping amenity in village.
- Inconvenience to local residents travelling to the nearest supermarket.
- Loss of employment for eight people and loss of the benefit of their disposable income if they are local residents.
- Impact on family life with parents having to work.

(ii) If not closed

Comments on social implications of Peter's recommendation. This would avoid the problems referred to above.

Question 6 – Gettry Doffit plc

(a) Quantities of chemicals received by the company for disposal on site represent a liability for costs of disposal at the year-end. The work would be undertaken by Gettry Doffit plc on a contractual basis and, clearly, income from contracts (short-term as defined in the original SSAP 9) should not be credited to profit and loss account until the work has been completed, i.e. on the completion of the contract. Therefore, it would appear that such quantities should be carried in the statement of financial position as a liability at the higher of:

(i) invoice cost to the customer; or

(ii) estimated cost of disposal.

Applying these principles to (A) axylotl peroxide and (B) pterodactyl chlorate:

(A) This contract will give rise to a certain revenue of £87,179, i.e. 170 million won at 1,950 to the £. This is because the invoice value won has been 'sold forward' at the stated rate of the forward contract. It is, therefore, appropriate, and permissible per SSAP 20, to use the forward rate as the transaction value in the books at all dates, and given such treatment, no exchange differences will arise.

There should be a debtor and creditor for this amount in the statement of financial position, i.e. the debtor for the certain amount receivable should not be dealt with as income until the contract is completed. Any profit arising would be dealt with in the year 31 March 20X6.

Dr Debtors	£87,179
Cr Creditors – accruals and deferred income	£87,179

It is possible that the company could choose, as a matter of accounting policy, to use rates on the date of the transaction and then re-translate on settlement/statement of financial position date, giving rise to exchange differences. The alternative numbers arising are dealt with below. The costs incurred up to the year-end will be dealt with as follows:

Dr Creditors	£60,000
Cr Bank	£60,000

The creditor balance would be debited with the estimated further costs to completion of £15,000 in 20X5/X6, leaving the company with profit of £12,179 in 20X5/X6.

Also, in 20X5/X6 – 1.5.X5 – the company would receive 170 million won and realise, as per the terms of the forward contract, £87,179, thus eliminating the debtor. Had actual rates been used

Dr Debtors 170 million won @ 1,900 =	£89,473
Cr Creditors	£89,473

The balance on creditors in 20X5/X6 will then be a profit of £14,473. However, the debtor would have to be retranslated at the 20X5 year-end – 170 million won at 2,000 to the £ = £85,000, giving rise to a loss of £4,473 in that year. On settlement, the debtor will realise £87,179, giving rise to a gain of £2,179.

In total, £14,473 + £2,179 − £4,473 = £12,179 (as when the forward rate was used to start with) would be credited to profit and loss account, though in this case partly in 20X4/X5 and partly in 20X5/X6.

(b) As this is disposed of per the terms of this contract, neither a debtor nor a liability arises. The point where revenue should be recognised is the date of processing, and it is clear per the terms of the contract that no loss can arise. The costs of the break-down should, therefore, be carried forward as work-in-progress, perhaps reduced for the worth of the by-products.

- The won forward contract has been exhaustively dealt with above. As the contract to buy dollars is to be used to finance trade purchases overseas, the transaction poses no difficulties provided the dollars are used to purchase stocks whose realisable amount is greater than (70,000 @ 1.60) = £43,750. Indeed, it would make sense not to reflect such a contract in the accounts, since it is more appropriate to disclose the detail under commitments. There are, however, other pertinent points to be made.

If the dollars are not to be applied towards a trade purchase, the company would have surplus dollars, which may only be converted back to sterling at a loss. Such a loss should be recognised in accordance with the prudence concept, although there may be mitigating factors such as an alternative use for dollars.

- Given that the irrevocable letter of credit has been raised, all that the Nigerian supplier has to do is to ship the goods specified in the letter, present the bill of lading as proof of shipment, and await payment. Thus, the company must pay for goods supplied in accordance with the contract terms, and cannot cancel the contract. Therefore, a liability of (130 − 90)/130 × £65,000 = £20,000 should be recognised immediately, unless a variation can be negotiated with the supplier or an alternative use found for the chemical.

- The spillage is a post statement of financial position event. No liability should be recognised in the accounts unless the going concern concept is threatened.

However, the potential liability is so material as to require disclosure.

- In a normal joint venture, the companies trade as partners, with joint and several liabilities.

- The precise apportionment of the liability may require a contribution from Dumpet Andrunn plc.

- If they cannot pay, it is likely that Gettry Doffit plc will have to.

- The likelihood of a liability crystallising, the probable amount and any recovery from Dumpet Andrunn plc must be assessed and full details given in the notes to the accounts and referred to in the directors' report.

    - As it is probable that the company will resist the claim, the maximum amount payable should probably be disclosed as a contingent liability.

    - The possibility of an insurance recovery should also be examined.

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www.orderannualreports.com

Annual reports can be obtained by email or hard copy from this site. Search by industry or company.

www.iasplus.com

The IAS Plus website, maintained by Deloitte, provides the most comprehensive information on the Internet about international financial reporting and individual IASs and IFRSs.

It offers webcasts and podcasts on a range of developing topics and coverage of broader financial reporting issues such as sustainability and integrated reporting and Islamic accounting.

It provides a link to other bodies involved in financial reporting such as IFAC, EFRAG, IOSCO, IVSC and regional organisations such as the Asian-Oceanian Standard Setters Group (AOSSG).

www.accountingweb.com

A site that covers a range of topics with practice news and articles, discussion groups and blogs on business, tax and technology.

ec.europa.eu/about/index_en.htm

Search this site to see the work being carried out by the **European Commission** on Accounting Directives and Audit. The Commission rulings have a major impact on EU companies as when it consulted on the possible introduction of International Audit standards.

www.ifrs.org

The IFRS Foundation is an independent, not-for-profit private sector organisation whose principal objectives are to develop a single set of high quality, understandable, enforceable and globally accepted International Financial Reporting Standards (IFRSs) through its standard-setting body, the International Accounting Standards Board (IASB).

www.frc.org.uk

The FRC is the UK's independent regulator. It focuses on promoting high levels of audit quality and contributes to the international debate on the future of the audit market. It promotes high-quality corporate reporting and governance, publishing Codes and Standards that companies, auditors, actuaries and accountants adopt. The goal of the FRC's work is to foster a climate in which investment can flourish.

www.fca.org.uk

The FCA regulates financial services in the UK so that markets and financial systems remain sound, stable and resilient. It encourages transparent pricing that's easy for everyone to understand. Its aim is to help firms put the interests of their customers and the integrity of the market at the core of what they do.

www.sec.gov/edgar

EDGAR, the Electronic Data Gathering, Analysis and Retrieval system, performs automated collection, validation, indexing, acceptance and forwarding of submissions by companies and others who are required by law to file forms with the US Securities and Exchange Commission (SEC). Its primary purpose is to increase the efficiency and fairness of the securities market for the benefit of investors, corporations and the economy by accelerating the receipt, acceptance, dissemination and analysis of time-sensitive corporate information filed with the agency.

www.cch.co.uk/content/accountancy-magazine

Accountancy is the magazine for chartered accountants.

www.economist.com

This site provides access to current financial and general interest information. It is helpful with its search facility by company name such as Pfizer, industry say pharmaceuticals and topic say whistleblowing.

www.eaa-online.org/r/default.asp?iId=KJIMD

The European Accounting Association links together the Europe-wide community of accounting scholars and researchers, to provide a platform for the wider dissemination of European accounting research. The EAA publishes the **European Accounting Review (EAR).**

www.forbes.com/

The Forbes magazine is full of US news, links and features. The site provides access to current financial and general interest information. It is helpful with its search facility by company name such as Pfizer, industry say pharmaceuticals and topic say whistleblowing.

Professional bodies

Institute of Chartered Accountants of Scotland
www.icas.org.uk/icas/

The Institute of Chartered Accountants in England and Wales
www.icaew.com/

Association of Accounting Technicians
www.aat.org.uk/

The Chartered Association of Certified Accountants
www.accaglobal.com/students/student_accountant

The Association of International Accountants
www.aia.org.uk/

Chartered Institute of Public Finance and Accountancy
www.cipfa.org.uk/

Chartered Institute of Management Accountants
www.cimaglobal.com