ACCOUNTING THEORY
& PRACTICE

Professional 1
December 2001 paper

MARKING SCHEME

CIPFA

Question 1

Workings - Calculation of missing figures:

(1)
Calculation of tangible fixed assets depreciation

Tangible Fixed Assets	£m	
Balance 1 April 2000 (given in question)	3,261	½
Revaluation in year	1,900	*1*
Acquisitions in year	2,735	½
	7,896	
Disposal in year (note ii)	840	*1*
	7,056	
Balance c/d 31 March 2001	6,514	½
Depreciation 2000/2001	542	

(2)

Intangible Fixed Assets	£m	
Balance 1 April 2000 (given in question)	937	½
Acquisitions in year	228	½
	1,165	
Balance c/d	1,105	½
Amortisation 2000/2001 to balance	60	

(3)

Taxation Paid	£m	
Balanced 2000 B/F (136+17)	153	½
P & L account	220	½
	373	
Balances c/f (221+22)	243	½
Paid in year	130	

(4)

Dividends	£m	
Balance B/F	142	½
P & L account	320	½
	462	
Balance c/f	264	½
Paid in year 2000/2001	198	

Reconciliation of operating profit to net cash inflow from operating activities

	2000/2001	
Operating Profit	1,193	
Add Depreciation charges (workings 1)	542	
Add amortisation of intangible assets (workings 2)	60	
Profit on sale of tangible fixed assets	(110)	*1*
Profit on sale of current asset investment	(50)	*1*
Decrease/(Increase) in stocks	(607)	½
Decrease/(Increase) in debtors	(412)	½
Increase/(Decrease) in creditors	(538)	½
Debenture Premium	(80)	*1*
Net cash outflow from operating activities	(2)	*(4 ½)*

Cash Flow Statement for year ended 31 march 2001

	£m	
Net cash inflow from operating activities	(2)	
Returns on investment and servicing of finance (Note a)	(349)	
Taxation (working 3)	(130)	
Capital expenditure (Note a)	(2,313)	
	(2,794)	
Equity dividends paid (working 4)	(198)	
	(2,992)	
Management of liquid resources		
Purchase of short term investment	0	
Sale of short term investment	250	½
Financing (Note a)	2,440	
Decrease in cash	(302)	

Note a – Gross Cash Flows	**£m**	
<u>Returns on investment and servicing of finance</u>		
Interest received	31	½
Interest paid	(380)	½
	(349)	
<u>Capital Expenditure</u>		
Payments to acquire tangible fixed assets	(2,735)	½
Payments to acquire intangible fixed assets	(228)	½
Payments to acquire investments	(300)	*1*
Receipts from sales of tangible fixed assets	950	*1*
	(2,313)	
<u>Financing</u>		
Issue of ordinary share capital (170+1,390)	1,560	*1*
Issue of debentures (800+80)	880	*1*
	2,440	

Format and presentation 2
(21)

(b)

	2000/01	1999/00	
EPS			
Number of shares			
Original issue	150*5 = 750	150*5 = 750	*½*
New issue	170*5*0.5 = 425		*1*
Total Shares	1,175	750	
Earnings	624	613	*½*
Basic EPS	624/1,175 = 53.1p	613/750 = 81.7p	*1*

Fully Diluted EPS

Cash raised by options at option price	= 200 * £1.75 = 350	*½*
Shares purchased at average price	= 350/2 = 175	*½*
Increase in weighted average shares	200-175 = 25	

Fully diluted EPS therefore 624 / (1,175+25) = 52.0p *1*

(5)

(c)

Appendix: Relevant Ratios

	2000/2001	1999/2000
ROCE	$\frac{1,193}{5,880+3,800}$ = 12.3%	$\frac{969}{2,116+3,000}$ = 18.9%
Profit/Sales	$\frac{1,193}{7,847}$ = 15.2%	$\frac{969}{7,087}$ = 13.6%
Asset Turnover	$\frac{7,847}{9,680}$ = 0.81	$\frac{7,087}{5,116}$ = 1.39
Gross Margin	$\frac{2,158}{7,847}$ = 27.5%	$\frac{1,866}{7,087}$ = 26.3%
Expenses/Sales	$\frac{354+611}{7,847}$=12.3%	$\frac{316+581}{7,087}$=12.7%

Liquidity:	2000/2001	1999/2000	1998/99
Current Ratio	4,971:3,708 = 1.34:1	3,583:3,168 = 1.13:1	2,961:2,610=1.13:1
Quick ratio	$\frac{4,971-1,335}{3,708}$	$\frac{3,583-728}{3,168}$	$\frac{2,961-629}{2,610}$
	3,636:3,708 = 0.98:1	2,855:3168 = 0.90:1	2,332:2,610 = 0.89:1

Management Control:

Debtor turnover (using average debtors & credit sales)

$\frac{(2,316+1,904)/2}{7,847}$ * 365 = 98 days $\frac{(1,904+1,998)/2}{7,087}$ * 365 = 100days

Stock Turnover (using cost of sales and average closing stock)

$\frac{(1,335+728)/2}{5,689} * 365 = 66$ days $\frac{(728+629)/2}{5,221} * 365 = 47$ days

Creditor turnover (using average creditors & credit sales)

$\frac{(1,334+1,872)/2}{5,689} * 365 = 103$ days $\frac{(1,872+1,341)/2}{5,221} * 365 = 112$days

Gearing (excluding bank loans and overdraft):

$\frac{3,800}{3,800+5,880} = 39\%$ $\frac{3,000}{3,000+2,116} = 59\%$

Interest cover $\frac{1,224}{380} = 3.2$ times $\frac{1,053}{300} = 3.5$ times

I mark each correct pair of ratios, up to a maximum of 9
Other correct recognised ratios acceptable

Report format should be used. *2*

ROCE has reduced from 18.9% to 12.3%; at the same time the net profit margin has increased from 13.6% to 15.2% while asset turnover, already low, has dropped from 1.39 to 0.81 times a year. *2*

The gross margin has increased from 26.3% to 27.5%. The expenses have also marginally reduced as a proportion of sales, from 12.7% to 12.3% as some expenses have not increased in line with turnover. *1*

This seems to imply that Beta is able to trade profitably, buying and selling at an improving mark up on costs. While the asset turnover has declined as a result of the large increase in asset base. Beta has not yet been able to fully utilise all of the new assets acquired. The situation needs to be monitored to ensure that the assets are fully utilised in future and asset turnover and profitability both improve. *2*

As profitability has fallen liquidity has consistently increased from the 1998/99 levels. There was little change in liquidity from 1998/99 to 1999/2000, the current ratio stayed the same at 1.13 to 1 and then increased in 2000/2001 to 1.34 to 1. The quick ratio increased from 0.89 to 1 in 1998/99 to 0.98 to 1 in 2000/01. There are no liquidity problems at present, although the increase in bank loans and overdrafts needs to be monitored. *2*

Over the period management control of working capital has declined. Debtors collection time has reduced from a high level of 100 days to 98 days which is still unacceptable. Stock holding has increased from 47 days to 66 days; this may be due to the type of business Beta is in, but an increase of 19 days does seem high. Creditors payment period has been improved by 9 days, which is a good start, but the creditor payment period is still very high at 103 days. Beta will need to reduce the payment period further to avoid late payment charges and possible problems obtaining credit from suppliers. If the creditors days are reduced without a corresponding reduction in debtors Beta could have cashflow problems. It is important that Beta reduce both their debtors and creditors days outstanding.

The earnings per share has reduced from 81.7p to 53.1p, a reduction of 35%. This is the result of the new share issue to fund fixed asset acquisition. The assets have been purchased but turnover has only marginally increased. The full effect of the new investment is still to be seen. *2*

The cash flow statements show that there has been a serious reversal of cash flows from operations between 1999/2000 and 2000/2001, from +£390m to –£302m. This is mainly due to the increase in working capital; stock, debtors and creditors changed by an adverse £1,557m in 2000/01. The increase in working capital is probably due to the expansion of the business. The tangible fixed assets have increased from £2,156m to £6,514m in just two years. The cash flow shows purchases of fixed assets in 1999/2000 as £888m and in 2000/2001 as £2,735m. This large outflow of funds has been partially funded by disposals of assets and partially by issues of shares and debentures. The gearing has been reduced from 59% to 39% due to the relative size of the issues of shares and debentures. The long term expansion seems to be soundly financed by long term funds. *4*

In summary Beta has undergone rapid expansion, has managed to maintain its sound liquidity position, but profitability and EPS have fallen. *1*

Total marks maximum limited to (14)
Marks shown are maximum for each sub-section
(23)

(49)

Question 2

(i) FRS 15 - Industrial buildings, no apparent consumption of economic benefit therefore assume loss due to general change in industrial buildings market. Revalued in October 2000, therefore assume there is a balance on revaluation reserve, (£500,000 – (250,000-(250,000*19/50)) = £345,000) *1*

Record £100,000 loss in the statement of total recognised gains and losses, *1*
take it to the revaluation reserve on the balance sheet. *1*

Industrial building asset reduced by £100,000 to £400,000. The £400,000 then depreciated over the remaining 30 years at £13,333 each year. *1*

(ii) FRS 15 – Original cost £80,000 expected life 8 years, depreciation £10,000 pa. *1*

3 years later cost	£80,000	
less 3 years depreciation	<u>£30,000</u>	
NBV	£50,000	*1*

Life reduced to 5 years, write off balance £50,000 over remaining 2 years at £25,000 a year.
Alternative approach, FRS 11 carry out impairment review as evidence of impairment. Change NBV to revalued amount, write-off to P&L in year to 30 September 2001 and depreciate new balance over 1 year. *1*

(iii) FRS 10 – The question is "does the extra work add value or merely return the software to its original expected value". If there is no added value, the extra work is regarded as 'fixing' the problem and the £15,000 expenditure is regarded as an expense and charged to the profit and loss account. *2*

If the work is seen as adding value to the software it may be able to be treated as an intangible asset under FRS 10. To be treated as an intangible asset it must give future benefit. There is some doubt about the future benefit, the software has been changed but will probably have to be changed again in a year's time. This suggests that the useful life of the software is little more than one year. If that is the case even if the software were treated as a fixed asset its useful life would be one year. Prudence suggests that the expenditure on the extra work is written off to the profit and loss account in the year. *2*

(iv) All the headings listed in the question making up the invoice value of £119,510 are allowed to be capitalised according to FRS 15. *1*

When the deposit was paid the entries should have been:

Dr Tangible fixed assets	£57,050		
Cr Bank		£57,050	*1*

At the year end the entries should be:

Dr Tangible fixed assets	£62,460		
Cr Capital Creditors		£62,460	*1*

No interest will be charged to the asset account as it does not meet the criteria laid down by FRS 15, the finance is not directly attributable to the purchase. The question does not say that finance was raised specifically for the purchase of this asset. We must therefore assume that it was paid out of monies that were generally available for financing operations. Only directly attributable finance costs can be included. *2*

Depreciation would be provided for according to the companies policy. *1*

(17)

Question 3

(a)

Nominal value	£500,000	
Costs of issue	£75,000	
Net cash received	£425,000	*½*

Apportioned costs are ignored as they are not directly attributable to the issue. *½*

Redemption assumed at maximum value – premium of 15%
£500,000*15% = £75,000 *½*

Total cost of debenture over its life:

Issue costs	£75,000	*½*
Redemption costs	£75,000	*½*
	£150,000	
Annual interest – 50,000*5 =	£250,000	*½*
	£400,000	

Year	Opening Balance	Interest Paid	Charge to P&L
1	425	50	71.4
2	446.4	50	75.0
3	471.4	50	79.2

Profit and loss account:

Year 1 Charge for debenture	£71,400	*1*
Year 2 Charge for debenture	£75,000	*1*

Balance Sheet:

Year 1 10% Debentures	£446,400	*1*
Year 2 10% Debentures	£471,400	*1*

(7)

(b) The main objective of FRS 13 is to ensure that reporting entities disclose information in their financial statements that is necessary to enable users to assess:

1. The risk profile of the entity for each of the main risks that arise from financial instruments.

2. The significance of financial instruments and contracts (regardless of whether they are on or off balance sheet) to the reported financial position, performance and cash flows.

3

(c) Main requirements of FRS 13:

Entities that have their capital instruments listed or publicly traded on a domestic or foreign stock market must disclose certain information in their accounts. *½*

Narrative disclosures are required to put the entities risk profile in context.

- Role of financial instruments in creating or changing risk.
- Directors' approach to managing each risk, including any changes in objectives or policies.
- Narrative disclosures are mandatory, but may be given in statement accompanying the financial statements, eg directors' report or operating and financial review.

Narrative disclosures supplemented by numerical disclosures. *3*

Numerical disclosures

- Different disclosures required for:
  - Entities that are not financial institutions
  - Banks and similar institutions
  - Other financial institutions *½*

- Disclosures required about:
  - Interest rate risk
  - Currency risk
  - Liquidity risk
  - Fair values
  - Financial instruments used for trading
  - Financial instruments used for hedging
  - Certain commodity contracts

Aggregation is encouraged, to avoid excessive detail *3*

(7)

(17)

Question 4

(a) DY Plc
Revised statement of retained profits for the year ended 31 October 2001

		£000	
Retained profits current year		685	
Less depreciation plant and machinery	(183)		*1*
Less probable contingency	(110)		½
Less provision for doubtful debts increase	(2)	(295)	½
		390	
Add:			
Profit on sale of plant		4	½
Deferred income		2	½
		396	
Less Interest payable (7%*1200)		(84)	½
Profit before tax		312	
Less: Taxation current year	(180)		½
Deferred tax (310 –260)	(50)	(230)	½
		82	
Less proposed dividends		(350)	½
		(268)	
Retained profits b/f		810	½
Retained profits c/f		(542)	½
			(6)

DY Plc

Balance sheet as at 31 October 2001

	£000	**£000**	**£000**	**£000**	
Fixed assets	Cost/ Valuation	Deprec.			
Investment properties (5,898 +502)				6,400	½
Land (500 + 70)	570				*1*
Buildings	1330				*1*
	1,900	0		1,900	
Plant and machinery	920	368			
Disposal	(5)	(4)			½
Year's depreciation		183			½
	915	547		368	
				8,668	

Current assets

Stock	110			

Debtors (225 – 11 prov)	214			½
Cash	29			
		353		
Creditors less than one year	(195)			
Interest on debentures	(84)			½
Grant	(2)			½
Dividends	(350)			½
Tax	(180)			½
Bank overdraft	(150)	(961)	(608)	
			8,060	
Creditors greater than one year				
Grant	(6)			½
Debentures	(1,200)			
			(1,206)	
			6,854	
Provision for liabilities and charges				
Contingency legal action	(110)			½
Deferred tax	(310)		(420)	½
			6,434	
Ordinary shares			3,500	
Share premium			700	
Revaluation reserve (990+130+70+502)			1,692	*1*
				½
Retained profits			504	
			6,434	

Other figures on balance sheet not allocated marks award 1 mark in total 1
Format and presentation 1

(11)

(17)

Notes

Item (ii) nbv on TB is 2,500–800 =	1,700
Revalued nbv is 570+1,330 =	1,900
Revaluation	200

Buildings are 15 years old, remaining life is 50-15=35
Revalued amount is 1,330,000, current year depreciation therefore nil as assets revalued at year end.

(Alternative acceptable treatment is depreciate asset in year at old rate, 2,500/50 = 50
Net book value at 31/10/01 then becomes 2,500-800-50 = 1,650

Revalued to	*1,900*
Revaluation reserve increase	*250*

Item (iii) nbv after 4 years 1,000. Thus original cost £5,000 and depreciation provision £4,000

Depreciation for current year is then (920 – 5) = 915 x 20% = 183

Item (iv) Debtors 31 October 2001 = 225 provision 5% = 11 Current balance
= 9 therefore increase by 2

Item (v) Probable contingency accrue £95,000

Item (vi) Grant shown as deferred creditor with £2,000 credited to income.
Remaining £8,000 will be shown as £2,000 < 1 year and £6,000 > 1 year

Item (vii)
Number of shares is 7 million
proposed dividend is 7m * 5p = £350,000

Item (x)
Accrue £84,000 interest

Question 5

(a) The historical cost published accounts of companies have some significant limitations including the following:

(i) The information is historical; it concerns the past. Decisions can only be about the future. Historical information is therefore of limited value for decision making *1*

(ii) The information is prepared on the basis of the accounting convention of historic cost. This can cause some values in the accounts to be misleading in times of rising prices. For example the charge for the use of assets, depreciation in the P&L account will be undervalued as it is based on low asset values *2*

(iii) Accounting statements refer only to items that are readily measurable in money terms. This results in some significant factors that affect the prospects of the reporting entity being ignored completely. For example staff, experience, training, loyalty and motivation all effect the quality and volume of goods or services provided but are not included in the accounts *2*

(iv) Whilst SSAPs and FRSs have laid down standards, there is still considerable scope for differences in the way that different entities treat similar items. This limits the opportunities for comparison of accounting statements. For example FRS 15 requires regular revaluation when it is used, but there is still no requirement to revalue assets. Some companies revalue fixed assets; others do not revalue assets *2*

(v) The presentation of figures in absolute money terms makes the comparison of entities of different sizes difficult. It can also be difficult to distinguish trends from absolute values as the effect of inflation will distort comparisons between different years. *2*

(9)

(b) Bought in materials and services include:

Cost of raw materials	14,520
Rent	770
Heat and light	985
Telephone	222
	16,497

VAS plc
Value Added Statement for year ended 30 June 2001

	£000	£000	
Turnover		25,580	*½*
Less Bought in materials and services		16,497	(see above) *2*
		9,083	
Add investment income		870	*1*
Value added		9,953	
Applied in the following ways:			
To pay employees			
Wages, pensions and other benefits		6,150	*½*
To pay suppliers of capital			
Interest on loan capital	630		*½*
Dividends	615	1,245	*½*
To pay government			
Corporation tax	365		*½*
Business rate	310	675	*½*
To provide for the maintenance and expansion of assets			
Depreciation	1,443		*½*
Retained profits	440	1,883	*½*
Value Added		9,953	

Format and presentation 1
(8)

(17)