Institute of Incorporated Public Accountants

Advanced Financial Accounting

Module 11

May 2014

Solutions

Instructions

Candidates must answer all three questions.

Candidates should clearly indicate the number of the question and the part of that question (a),(b),(c) etc on every page on which the answer to that part of the question is written.

Where working notes are supplied by candidates as part of their answer to a particular question then these should be numbered W/N1, W/N2 etc accompanied by a heading that will clearly indicate the purpose of that note.

If a candidate chooses to use a separate answer book for working notes then s/he must indicate the question to which the working note refers, the working note number together with a suitable description on each and every page on which that working note is written.

Example
Qn ? W/N ?? "Composition of amount for €???" shown under- say Cost of Sales- in the Statement of Comprehensive Income?

Candidates should begin each question on a new page

Marking Scheme

Question 1	20 marks
Question 2	50 marks
Question 3	30 marks
Total	100 marks

Question 1

Horton Ltd, is an electronics company which has been listed on the Irish stock exchange for the last two years since it was first established. Set out below are the Equity and Long term funds at the end of its first year of trading for year ended 30/04/13. Also set out are the Income statements and movements in reserves for the year end 30/04/13 and 30/04/14 respectively.

Required

(a) Calculate the basic earning per share EPS for the year 2013 at the amount that would have been shown in the 2013 financial statements

Number of ordinary shares is €1,920,000/€0.80 NV=2,400,000 shares

Profit for the year	€363,000
Preference dividend	€ 3,000
Profit for OSH	€360,000
Divided by	2,400,000
equals	€0.15 per share

(b) Calculate the basis earning per share for 30/04/14

Number ordinary shares are			2,400,000
Bonus issue	1 for 6		4,00,000
Revised total			2,800,000
Right issue	1 or 7	01/03/14	400,000
Revised total			3,200,000

Pre rights issue weighted $\frac{10 \text{ months}}{12 \text{ months}}$ x $\frac{\text{Cum rights}}{\text{Ex Right}}$ $\frac{€1.25}{€1.20^{(1)}}$ x 2,800,000

= 2,430,555

Plus post rights weighted $\frac{2 \text{ months}}{12 \text{ months}}$ x 3,200,000

=533,333

The total shares equals 2,963,885

(1) [[7 x 1.25] +[1 x 0.85]]/8=€1.20

$$\frac{\text{€318,500 – Preference dividend €3,000}}{\text{2,963,885 shares}}$$ equals €0.106 per share

(c) Calculate the adjusted earning per share for 2013 that would be shown in the 2014 financial statements as a comparative for the 2014 computed in (b)

$$\text{€0.15} \times \frac{6}{7} \text{ bonus issue} \times \frac{\text{ex rights}}{\text{cum rights}} \times \frac{\text{€1.20}}{\text{€1.25}}$$ equals €0.12 per share

(d) Calculate the diluted earnings per share

Profit for 2014	€318,500	
Less preference dividend	(€ 3,000)	
Profit available to OSH	€315,000	
Add back net of tax interest cost	€ 7,000	[€8,000 x [1-0.125]
Adjusted earnings	€322,000	
Additional shares from CLS	125,000	
Existing shares as per above	2,963,885	
Revised total	3,088,885	
Diluted EPS	€0.10 per share	

(e) Explain briefly the following terms

(i)

Anti-dilution

This is an increase in the EPS or a dilution in the loss per EPS resulting from the assumption that convertible instrument are converted, that options or warrants are exercised or that ordinary shares are issued upon specified conditions

(ii) Contingently issuable ordinary shares.

These are ordinary shares issued for little or no cash or consideration upon the satisfaction of specified conditions in a contingent share agreement

Group Statement of Comprehensive income y/e 30/04/14

	Oaksales Ltd	Acorns	Group
Revenue	€5,000,000	€180,000	€5,180,000
W/N 5	(€50,000)		(€50,000)
Cost of sales W/N 1	(€2,825,160)	(€90,000)	(€2,915,160)
Gross Profit	€2,124,840	€90,000	€2,214,840
Selling and distribution	(€1,012,800)	(€36,000)	(€1,048,800)
Administration expense	(€819,200)	(€3,600)	(€822,800)
Other gains and losses			
Foreign exchange gain	€8,929		€8,929
Operating profit	€301,769	€50,400	€352,169
Finance charges			
Debenture interest	(€6,000)		(€6,000)
Interest on bonds W/N 8	(€34,554)		(€34,554)
	€261,215	€50,400	€311,615
Taxation	(€30,738)	(€6,300)	(€37,038)
Deferred tax W/N 9	(€16,280)		(€16,280)
Profit for the year	€214,197	€44,100	€258,297
Other comprehensive income			
Discount on purchase of Acorn W/N 10	€6,000		€6,000
Total comprehensive income	€220,197	€44,100	€264,297

Note only the group I/S column required. Other included for info Group Statement of Changes in Equity for y/e 30/04/14

	Share Capital	Share Premium	Retained Profits	Non Con Interests	Total
Balances at 30/04/13	€1,000,000	€500,000	€500,000		€2,000,000
Prior year adjustment W/N 8			(€32,908)		(€32,908)
Restated balances at 30/04/13	€1,000,000	€500,000	€467,092	€0	€1,967,092
Issued share capital W/N10	€156,250	€93,750			€250,000
Other equity from loan stock issue W/N 8	€141,838				€141,838
Non Controlling interest W/N 11				€64,000	€64,000
Profit for the year			€255,477	€8,820	€264,297
Dividends paid per T/B			(€20,000)		(€20,000)
Balances at 30/04/14	€1,298,088	€593,750	€702,569	€72,820	€2,667,227

(i) The board proposed a dividend of €0.01 amount to €25,962. Assumption declared after year end
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Oak Furnishing Group B/S as at 30/04/14

	Oaksales Ltd	Acorns	Group	Group
Non Current assets W/N 12	€3,479,040	€300,000		€3,779,040
Acorns	€256,000			
Internally generated goodwill w/n 2		disallow		disallow
Current Assets				
Inventory	€264,600	€8,000	€272,600	
Receivables & prepaids W/N9(i)	€425,928	€15,000	€440,928	
Cash/Bank	€0	€51,647	€51,647	
				€765,175
Total Assets	€4,425,568	€374,647		€4,544,215

Equity				
Share [per SOCE]	€1,156,250	€250,000	€1,156,250	
Share premium [per SOCE]	€593,750	€0	€593,750	
Other equity W/N 8	€141,838		€141,838	
Retained [per SOCE]	€667,289	€114,100	€702,569	
Equity attib. to owners of Co.				€2,594,407
Non Controlling interest				€72,820
	€2,559,127	€364,100		€2,667,227
Non Current Liabilities				
6% Debentures	€100,000			€100,000
Warranty provision W/N 6	€90,000			€90,000
Deferred taxation W/N 9	€239,880			€239,880
Loans W/N 8	€725,624			€725,624
Training grant W/N 5	€30,000			€30,000
Current Liabilities				
Payables	€625,000	€7,397	€632,397	
Debenture interest owing	€3,000		€3,000	
[Dividend owing none]				
Tax owing		€3,150	€3,150	
Bank overdrawn	€52,938		€52,938	
				€691,485
Equity plus Liabilities	€4,425,568	€374,647		€4,544,215

Note only the Group B/S columns required. Other columns included for info only

W/N 1 analyses of costs by function

Parent company	Total	Production	Distribution	Admin
Per T/B			€1,000,000	€750,000
Inventory per T/B		€242,000		
Purchase per T/B		€2,420,000		
Royalties per T/B		€80,000		
Inventory at year end	W/N 4	(€264,600)		
Depreciation				
Buildings W/N 3	€64,000	€32,000	€12,800	€19,200
Machinery W/N 3	€245,760	€245,760	€0	€0
Training grant W/N 5		(€20,000)		
Warranty provision W/N 6		€90,000		
Goodwill in house W/N 2				€50,000
		€2,825,160	€1,012,800	€819,200
Subsidiary –Acorn per Qn		90,000	36,000	3,600
Group I/S		2,915,165	1,048,800	822,802

W/N 2-IAS 38 para 48

Internally generated goodwill is not permissible as an intangible asset

W/N 3 IAS 16

Buildings 2% x €3.2 million equals €64,000 apportioned as follows Production 50% €32,000 Distribution 20% €12,000 and admin 30% €19,200

Machinery all production €245,760 i.e. [€2,400,000-€1,171,200] x 20%

W/N 4 IAS 2

Item in closing inventory of €55,000 could be sold for €57,000 after modification costs of €3,600 requires €1,600. Thus restated closing inventory is €266,200 minus €1,600 equals €264,600

W/N 5 IAS 20
Training grant Dr Revenue €50,000 Cr Deferred Liabilities €50,000
Dr Deferred Liabilities 20/50 x€50k=€20,000 Cr Production costs €20,000

W/N 6 Warranty provision IAS 37
75% x 0 plus 20% x €250,000 plus 5% x €800,000 equals €90,000
Dr Cost of sales Cr Provision

W/N7 IAS 21 Exchange gain £50,000/.80 minus £50,000/€0.70=€8,929
Dr receivables Cr I/S-Other Gains & Losses

W/N 8-IAS 32 & IAS 8
Interest rate 5% implicit in €800,000 loan issued at nominal zero coupon.
Assuming a euro for euro swap of loan stock for ordinary share this implies that the present value of the CLS is €800,000 divided by $(1.05)^4$ equals €658,162. The difference of €141,838 [€800,000-€658,162] represents "other equity".

	Opening balance	5%Interest	Closing Balance	year end
01/05/12	€658,162	€32,908	€691,070	30/04/13
01/05/13	€691,070	€34,554	€725,624	30/04/14
01/05/14	€725,624	€36,281	€761,905	30/04/15
01/05/15	€761,905	€38,095	€800,000	30/04/16

Note only the first two rows are required. Others added for completeness only. P.V. table for 5% was not supplied but computation can be done with a calculator.

Thus 1/1.05 =.9523 for year 1 then dividing again by 1.05 =.907 for year 2 then dividing again by 1.05 for year 3=0.8638 then dividing by 1.05 for year 4=.8227. Approximations accepted as different answers depending on decimal places

Most calculators can also compute year 4 i.e $1/(1.05)^4$ in one execution. At this level candidates should be familiar with the basic functions of a calculator.

Thus €800,000 x 0.8227 equals €658,160 equals P.V. of sum invested today at 5% to pay accumulate €800,000 in value in 4 years time. The difference between the present value of €657,162 and the €800,000 represents "other equity".

W/N 9 Deferred tax IAS12

The net book value of the relevant assets as at 30/04/14 was €3,479,040

The tax written down values of those assets as at 30/04/14 was €1,500,000

Difference	€1,979,040
Corporation tax rate	12.50%
Closing deferred tax balance	€247,380

Deferred Tax

		b/d per T/B	€223,600
c/d	€247,380	c/d Losses forward	
Royalties (i)€10,000] x12.50%=	€ 1,250	(ii)€70,000 x12.50%	€8,750
		Thus I/S	€16,280
	€248,630		€248,630

Closing balance is €247,380 +€1,250 minus €8,750 equals €239,880

(i) i.e a Tax Base €nil compared with book value prepayment of €10,000 royalties which amount is assumed to be included in receivables

(ii) It is assumed that there are sufficient taxable profits in the future against which to set off the allowable tax losses incurred in the past.

W/N 10 Discount arising on acquisition

312,500Shares at an issue price of €0.80

Share issue	312,500 shares	€0.50	€156,250
Share premium at	312,500 shares	€0.30	€93,750
			€250,000

Net asset acquired

[€250,000 S.C +Pre Ac €70,000] x80% equals €256,000

Discount arising [IFR 3] € 6,000

W/N 11 Non Controlling interest

[Share Capital €250,000 plus opening ret profits €70,000] x 20% =€64,000

Share current years profit	€ 8,820
Total	€72,820

W/N 12

	SL 2%	RB 20%	Acorn	
Non- Current Assets	**Buildings**	**Machinery**	**Land**	**Group Total**
Opening balance at cost	€3,200,000	€2,400,000		€5,600,000
Additions			€300,000	€300,000
Disposals				
Revaluation	€3,200,000	€2,400,000	€300,000	€5,900,000
Accumulated depreciation	€640,000	€1,171,200		€1,811,200
Additions	€0			€0
Disposals				
Income statement	€64,000	€245,760		€309,760
	€704,000	€1,416,960	€0	€2,120,960
Net Book value 30/04/13	€2,560,000	€1,228,800	€0	€3,788,800
Net Book value 30/04/14	€2,496,000	€983,040	€300,000	€3,779,040

Note the above layout would only be required if a published "note to financial statements" was required. For example there was no requirement to give the net book values at 30/04/13. However such a requirement is necessary if a "note to financial statements" on non current assets was required in accordance with IAS 16

Other W/N layouts acceptable if relevant information given

Profit after interest and tax	
Dividends paid	
Retained net profit	
Add back depreciation	
Generated Cash flow	€75,676
Increase/Decrease inventory	
Increase/Decrease in Drs	
Increase/Decrease in Crs	
Net effect of W.C. change on cash flow	(€65,118)
Operating cash flow---------->	€10,558
Capital expenditures	
Issue of Long term Loans	
Net Capital inflows/outflows->	(€20,000)
	________
Net Cash flow for year ended 31/03/13	(€9,442)
Bank balance 31/03/10	(€39,537)
Thus Closing bank balance 31/03/14	**(€48,979)**
Closing balance	**(€48,979)**

Note IAS 7 format was not required and question requested that the commencement amount was Profit for the year ie. Profit after interest and tax.

Or other suitable format also acceptable

Ratios –
4 x 1.5 x 2 equals 12 marks

Example given on the next page. Only two from each heading for each year was requested. Set over is a sample and not a comprehensive list of ratios.

Profitability

Gross Profit to Sales	22.00%	20.00%
PBIT / Sales	9.00%	10.00%
	x	x
Capital employed turnover	3.48	4.288
	equals	equals
Return on Capital Employed	31.35%	42.88%
Net Profit[**after** all interest and tax] to sales	7.13%	8.12%

Liquidity ratio

Current Ratio	1.59	:1	0.88	:1
Quick asset ratio	0.98	:1	0.53	:1

Efficiency

Stock days	40	days	25	days
Debtor days	50	days	30	days
Creditor days	25	days	35	days
Turnaround	65	days	20	days

Investor appraisal

Gearing Ratio -Financial Risk	32.85%	:1	34.64%	:1
alternative gearing	24.73%		25.73%	
Interest cover	10.57		13.89	
Return on Shareholder funds	32.99%		46.88%	
Dividend Cover	8.04		10.15	
Earnings per share	€0.80		€0.81	

If 2014 W.C. had been maintained on same terms as 2013

	same terms	**actual terms**	**difference**
Inventory	€30,105	€48,168	(€18,063)
Receivables	€46,315	€77,192	(€30,877)
Payables	(€42,147)	(€30,105)	(€12,042)
W.C. if terms maintained	€34,273	€95,255	(€60,982)

Thus cash flow would have been €61,000 approx better off if working capital terms for 2014 had been maintained at 2013 terms viz Inventory days etc

Comment

Note other ratios that might have been selected and commentary might have had a different emphasis. The main issue however is to address the concerns of the bank

Assumptions

(i) That the financial statements have been prepared under generally acceptable accounting policies on a consistent and comparable basis between the two years under review.

(ii) That there is no unidentified bad debts within receivables or unidentified unsellable stock within inventory

The target cash requirements were

(i)	Acquisition of non current asset of	€30,000
(ii)	Reduction of current overdraft by	€23,000
	Total cash required	€50,000

This would have been achieved if current year's 20014 working capital been maintained at approximately the 2013 terms ie. inventory days etc as the previous year.

The reduction in bank overdraft to €25,000 would have improved liquidity ratios.

The avoidance of interest on additional loans and the excess of bank overdraft above the €25,000 permitted would have increased profits. This in turn would have improved the Gearing ratios because of increased equity –through profit increase-and reduction of long term loan requirements.

Recommendations to improve liquidity situation

(i) The receivable days [50 in 2014] is perhaps a composite amount. An analysis of receivables owing 20 days, 30 days, 40 days , 50 days etc may help to identify particular customers who have had a significant impact on the computation of the average of 50 days collection in 2014. Consider whether it is profitable to continue selling to such customers.

(ii) Consider a discount policy for early payments taking account of the company's current cost of overdraft.

(iii) Consider factoring of receivables and the factoring and other costs involved.

(iv) Similar to receivable days, the inventory days is possibly a composite item. Analyse the inventory by type & value and by days on hand viz 20 days, 30 days etc. This should help identify particular items of inventory and whether it is profitable to continue with selling them taking account of gross profit margin versus holding and other costs.

(v) Negotiate better terms and conditions with suppliers or if possible to seek alternative suppliers.

A selection of some comments. Other relevant comments acceptable

Profitability

Gross profit has increased from 20% to 22% but operating profit has fallen from 10% to 9%. This means that operating costs to sales has increased from 10% to 13%. Further analysis of operating expenses is therefore required

ROCE $\frac{\text{Operating profit}}{\text{Sales}}$ x 100] x $\frac{\text{Sales}}{\text{Capital employed}}$

Sales / Capital employed	€563,500 / €121,776+€40,000 =3.48	€500,000 / €86,600+€30,000 =4.28

9.00% Op Profit/sales x 3.48 10% Op Profit/sales x 4.28

Equals equals

31.32% 42.88%

A fall in operating profit by 10% ie. [(10%-9%)/10%] and a fall in capital employed turnover of 18% approx.[(4.28-3.48)/3.48] has resulted in a fall in ROCE from 42.88% to 31.28% Possible causes may be insufficient time to exploit new assets purchased.

Note the ROCE is analysed into Operating profit and Capital Employed turnover only to assist in identifying the causes in its change.
Depending on ratio selected other comments equally acceptable

Investor satisfaction

EPS has been maintained but the reduction in finance costs should improve such EPS through higher profit. Dividend cover has fallen slightly which means the reinvestment ratio [its inverse] has gone from 92% of profits about 90% Recommend the company undertake budgets to determine future capital expenditure needs and have discussions with major investors on the future plans of the company.

Further information

(i) Industry ratios would have been helpful against which to benchmark the performance.
(ii) A detailed analysis of sales by major item, showing its individual gross profit margin.
(iii) The current gross profit margins are possibly a weight average of individual margins.
(iv) An analysis of current operating costs to determine the individual percentage increases in major items in that category.