Advanced Financial Accounting
Module 11
June 2011

Suggested Solutions

Solution Question 1

		70%		Solution Group
	Pears Ltd	**Plums Ltd**	**Adjust**	**Total**
	€	€	€	€
Revenue	170,596	64,546	(12,800)	**222,342**
Cost of sales	(127,947)	(45,182)	12,800	
Unrealised Profit W/N3		(301)		**(160,630)**
Gross profit	42,649	19,063		**61,712**
Operating Expense	(11,500)	(8,000)		**(19,500)**
Operating Profit	31,149	11,063		**42,212**
Associate Company			1,800	**1,800**
Dividend-Assoc	360		(360)	**0**
Dividend-Sub	1,400		(1,400)	**0**
Interest	(4,500)		(2,767)	**(7,267)**
Profit b tax	28,409	11,063	(2,728)	**36,745**
Taxation	(3,409)	(1,364)		**(4,773)**
Profit for year	25,000	9,699	(2,728)	**31,972**
Minority Interest		2,910		**2,910**
Equity holders	25,000	6,790	(2,728)	**29,062**

Note it is only the final column that is required for the solution The other column- “Pears”,”Plums” and “adjust” are only to facilitate understanding and are not required

Allow for rounding

	Pears Ltd	Plums Ltd	Adjust	Group
Non Current assets	€	€	€	€
Land		70,000	(42,000)	**28,000**
Plant & Equipment	210,000	5,000		**215,000**
Investments				
Plums Ltd	per note			
Cherries Ltd	21,000		1,800	
			(360)	
Associate Company				**22,440**
Goodwill				**25,105**
Current Assets				
Inventory	35,000	18,500	(301)	**53,199**
Receivables	17,600	10,800		**28,400**
Bank		26,200		**26,200**
Total Assets	283,600	130,500		**398,344**
<u>Equity</u>				
Share Capital	140,000	80,000	(80,000)	
Issue of share capital			25,000	**165,000**
Share Premium**			6,250	**6,250**
Profits	56,000	20,500	(4,704)	**61,592**
	196,000	100,500		**232,842**
Minority Interest				**17,460**
Total Equity	196,000	100,500		**250,302**
Non current Liabilities				
Loans	75,000			**75,000**
Deferred cash payout			30,442	**30,442**
Current Liabilities				
Payables	8,500	30,000		**38,500**
Bank	4,100			**4,100**
Equity plus Liabilities	283,600	130,500		**398,344**

Note it is only the Group column that is required. Others for information

Notes to answer question 1
The solution is the final group column. Other columns are not required and are include to facilitate understanding

W/N1
Computation of consideration for purchase by Pear of Plum and Goodwill

Cash payout in three years time is €33,487
The present value or value at acquisition date of €33,487 paid in three years is

€33,487 [payable by 30/04/12] x PV factor 0.7513= €25,159 [as at 01/05/09]

Total Consideration is as follows

Share Capital 25,000 Ordinary shares x €1 Nominal Value equals		€25,000
Share Premium 25,000 shares x [€1.25-€1.00]	equals	€ 6,250
Present value of cash payout		€25,159
Total		**€56,409**

Net Assets acquired at acquisition date as represented by Share Capital plus Pre-Acquisition retained profits plus/minus adjustments for revaluation

Plum

Share Capital	€80,000 x 70%	equals		€56,000
Pre-acquisition profits	€ 6,720 x70%	equals		€ 4,704
Land revaluation downwards	€42,000 x 70%		(€29,400)	
Net Assets at fair value at 01/05/09				**€31,304**
Consideration [as computed above]				€56,409

Thus [positive] Goodwill is €25,105

W/N 2
Computation of Goodwill on acquisition of Associate Company and the and the amount to appear on the Financial Statement as at 30/04/11

Share Capital €50,000 x 30%		€15,000	
Profits brought forward to 01/05/10 is €11,200 x 30%	equals		€ 3,360
*Current Year €8,000 x [3months/12months] x 30%			€ 600
Total Net asset acquisition date			€18,960
Consideration		€21,000	
Thus Goodwill			€ 2,040

Note the question stated that dividends were paid out of Post acquisition profits

Computation of Goodwill on acquisition of Associate Company and the balance of Investment in Associate Company

Consideration for acquisition of Associate Company			€21,000
Post acquisition profits			
€8,000 x 9 months/12 months equals	€6,000		
Post acquisition dividend paid	(€1,200)		
Retained Post acquisition profit	€4,800	x 30%	€ 1,440
Associate company per Balance Sheet			€ 22,440

W/N 3 Computation of unrealised profit in the unsold stock

Inter Company sales €12,800 x 18% equals €2,304 sales in stock of Pears Ltd

Mark-up on Cost is 15%. Thus €2,304 x 15%/115% equals €301 [rounded]

Credit inventory Pears €301 Debit Cost of sales Plums €301

Note
Adjustment for inter-company sales [Sale by Plums Ltd Purchase by Pears Ltd]

Debit Sales Plums Ltd €12,800 Credit Purchases Pears Ltd €12,800

W/N 4 Computation of Minority interest 30%

Share Capital €80,000		x 30% equals	€24,000
Retained Profits [€20,500 less stock profit W/N 3 €301] x 30% equals			€ 6,060
Revaluation of land downwards	€42,000 x 30%	equals	(€12,600)
Balance			€ 17,460

W/N 5 Computation of Group Retained Profits as at 30/04/11

Pears Ltd				
Retained profit 30/04/11		€56,000		
Interest on deferred payout of cash				
Year 1 €25,159 x 10%	**W/N6**	(€2,516)		
Year 2 [€25,159 x 1.10] x 10%	**W/N6**	(€2,767)		
				€50,717
Plums Ltd				
Retained Profit 30/04/11			€20,500	
Cost of Control W/N 1			(€ 4,704)	
Minority interest W/N 4			(€ 6,060)	
Unrealised inventory profit W/N 3			(€ 301)	
Interest on deferred consideration				
Pear's Ltd share Plum Ltd post acquisition profits				€ 9,435
Cherries Ltd				
Retained Profit 30/04/11 €18,000 x 30% equals			€5,400	
Cost of Control[W/N 2] €3,360 +€600			(€3,960)	
Share of Post acquisition retained profits				€ 1,440
Group Retained Profits at 30/06/11				€61,592

W/N 6 Computation of Balance on deferred consideration as at 30/04/11

Date	**At start of year value**	**10% to I/S**	**Balance Sheet**	**as at**
01/05/09	€25,159	€2,516	€27,675	30/04/10
01/05/10	€27,675	€2,767	**€30,442**	**30/04/11**
01/05/11	€30,442	€3,044	€30,488**	30/04/12

**difference of €1 Allow for rounding as the final amount due to be paid in the following year end 30/04/12 is €30,487 .
The entry in that year will be Credit Bank Debit Deferred Cash Payout

Question 2 Saturn solution
Statement of Comprehensive Income of Saturn Ltd for year end 31/0311

			Continued	Discontinued	Total
			€	**€**	**€**
Revenue	**W/N 1**		957,875	220,000	1,177,875
Cost of Sales	**W/N 2(a)**		(817,064)	(146,757)	(963,821)
Gross Profit			142,311	73,243	214,554
Distribution	Ref Qn Note 9*		(27,160)	(70,840)	(98,000)
Administration	**W/N 2(b)**		(28,640)	(30,360)	(59,000)
Operating Profit/(Loss)			86,511	(27,957)	57,054
Other gains and Losses					
Foreign exchange	W/N 8 (b)		(1,500)		(1,500)
Finance Charges					
Leasehold interest **W/N 7 (a)**		6,445			
Redeemable Preference dividend **W/N 10**		8,000			
Interest paid **W/N 9**		12,960			
			(27,405)		(27,405)
Profit before tax			57,607	(27,957)	28,150
Taxation			(14,725)	€3,025	(11,700)
Loss from Continuing Operations			42,882	(24,932)	16,450
Other Comprehensive Income					
Revaluation of Land			(€85,000)		(€85,000)
			(42,119)	**(24,932)**	**(68,550)**

W/N 1 Revenue amounts

		Total	Continued	Discontinued
Sales		1,256,000	1,036,000	220,000
Adjust for after sales service	**W/N4**	(78,125)	(78,125)	
		1,177,875	**957,875**	**220,000**

* i.e note 9 in actual question

Saturn Statement of Movement in Reserves for year ended 31/03/11
[ie. extract from Statement of Changes in Equity for same period]

			Profit	Revaluation
Retained Profits as at		**01/04/10**	750,000	95,000
Prior year adjustments				
Effective interest on debentures	**W/N 9**		(12,000)	
Write back depreciation	**W/N 6**		94,500	
Restated balance as at		**01/04/10**	**832,500**	**95,000**
Profit for the year ended		**31/03/11**	16,450	(85,000)
Dividends paid	**Per T/B**		(12,500)	
Retained Profits as at		**31/03/11**	**836,450**	**10,000**

On the 15/04/11 the board proposed the payment of a final Ordinary dividend, for the year ended 31/03/11, of €0.04 per share amounting in total to €20,000

W/N 2(a) Computation of Costs of Production- Continued/ Discontinued

Analysis of Production		**Continuing**	**Discontinued**
		Production	**Production**
Per Trial Balance		540,000	
Discontinued per Question Note 9		(143,000)	143,000
Impairment of “available for sale” Asset	**see (c) below**		3,757
Additional depreciation-error in change	**W/N 6**	31,500	
Lease Machine Depreciation	**W/N 7(b)**	12,889	
Development costs-disallowed	**W/N5 (a)**	360,000	
Under recovery from future inflows	**W/N 5 (c)**	12,000	
Stock NRV test	**W/N 8 (a)**	€3,675	
		817,064	**146,757**

W/N 2 (b)Analysis of administration		55,000	
To discontinued per question note 9		(30,360)	30,360
Pension fund additional charges **W/11**		4,000	
	Total	**20,640**	**30,360**

W/N 2 (c) Impairment -per question note 9 re:”Available for sale” asset
Wind Energy per T/B [90,000-37,243] €52,757 minus €49,000 equals €3,757

Statement of Financial Position [Balance Sheet] of Saturn as at 31/03/11
[“Top half “ of the Balance Sheet ie. “Total Assets” appears on this page]

		€	€	€	€
Non Current Assets		T/B	**adjustments**	**Group**	**Group**
Non Current Assets	**W/N 3**				**1,769,556**
Intangibles- Development costs	**W/N 5**	120,000	(12,000)		**108,000**
Current Assets					
Inventories	**W/N 8**	85,000	(3,675)	**81,325**	
Trade receivables			-	**103,233**	
Total of current assets					**184,558**
Asset classified as held for sale	**W/N2(c)**	52,757	(3,757)		**49,000**
Total Assets					**2,111,113**

The “bottom half” of Balance Sheet- Equity plus Liabilities -is on the next page

Note only the amounts in ” Group”columns are required to answer (b)

W/N 3 Computation of Non Current Assets amount on Balance Sheet

			Delivery	**Wind energy**	**leased**	
	Land	**Buildings**	**Vans**	**Equipment**	**Asset**	**Total**
Per T/B Cost/ Value	985,000	1,150,000	450,000	90,000		2,675,000
Revalue **Qn note 7**	(85,000)					(85,000)
Additions-Leasing asset **W/N7**					64,445	64,445
Available for sale **Qn Note 9**				(90,000)		(90,000)
Cost/Value as at 31/03/11	**900,000**	**1,150,000**	**450,000**	**0**	**64,445**	**2,564,445**
Depreciation						
Accum.Depreciation[T/B]		575,000	270,000	37,244		882,244
						0
Additional depreciation **W/N 6**			31,500		12,889	44,389
Available for sale **Qn note 9**				(37,244)		(37,244)
Prior Year Adjustment **W/N 6**			(94,500)			(94,500)
Accum Dep. as at 31/03/11	**0**	**575,000**	**207,000**	**0**	**12,889**	**794,889**
Net Book Value at 31/03/11	**900,000**	**575,000**	**243,000**	**0**	**51,556**	**1,769,556**

The other part of the Statement of Financial Position -Equity plus Liabilities Note "Top half" of Balance Sheet appears on previous page

			Group
Equity interest			€
Capital		375,000	
Premium		250,000	
Revaluation		10,000	
Profit		836,450	
Total Equity			**1,471,450**
Non current Liabilities			
8% Redeemable Preference shares		200,000	
0% Debenture Loan **W/N 9**		174,960	
Leasing loans **W/N 7 (a)**		42,278	
Deferred Income	**W/N4**	78,125	
Retired Benefit Obligations	**W/12**	4,000	
Total Non current Liabilities			499,363
Current Liabilities			
Payables		60,678	
Leasing loans **W/N 7 (a)**		11,612	
Taxation		8,500	
VAT		45,000	
Red. Preference Dividend **W/10**		8,000	
Bank overdraft		6,512	
Total Current Liabilities			140,301
Total Equity plus Liabilities			**2,111,113**

W/N 4
Adjustment of revenues for deferred income included in contract for €314,000
with reference to question Note 4

Cost of "after sale" service plus mark-up €75,000 x €1.25	€ 93,750	
36 months of which 30 months [36-6] unexpired	x 30/36	
Deferred Income		€ 78,125

	Debit	**Credit**
Revenue	€78,125	
Deferred income		€78,125

W/N 5 [with reference to question note 8]
Development costs classification and recoverability of intangible asset

Total development costs per Trial Balance €480,000
IAS 38 recognition criteria satisfied by 31/12/10
Cost incurred evenly through out the year
Thus
(a) Disallowed as intangible asset 9months/12months x €480,000 = (€360,000)
Allowable as intangible asset €120,000
less
(b) Recoverable amount per question note 8 €108,000
equals
(c) Write down of intangible asset by € 12,000

W/N 6 [with ref to question note 5] Depreciation
Change in estimate of useful life does not require retrospective adjustment

		10% Correct	Difference	20% Incorrect
Cost per Trial Balance->		450,000		450,000
Accum. Depreciation as at 31/03/10->		(85,500)	94,500	(180,000)
N.B.V. as at 31/03/10→		364,500		270,000
Depreciation charge 31/03/11→		(a)(121,500)	(31,500)	(90,000)
Net Book Value as at 31/03/11→		243,000	63,000	180,000
Accumulated depreciation 31/03/11->		(207,000)	(63,000)	(270,000)

Journal Corrections	**Debit**	**Credit**
Retained Profits as at 31/03/10		94,500
Accumulated Depreciation 31/03/10	94,500	
Income statement year ended 31/03/11	31,500	
Accumulated Depreciation		31,500

Due to revised estimates asset has only three years left ie. 2 years already expired of five years estimated useful life. Thus €364,500/3 yrs=€121,500

Summarising
Net Book value per Trial Balance [450,000-270,000] 180,000
Add back incorrect "retrospective depreciation" 94,500
Deduct additional depreciation necessary because of error (31,500)
Revised Net Book value 243,000

W/N 7 [with reference to question note 6 Leasing]

Start of year	10%	Repayment	Balance	Year end
€64,445	€6,445	(€17,000)	€53,890	31/03/11
€53,890	€5,388	(€17,000)	€42,278	31/03/12
€42,278	€4,228	(€17,000)	€29,505	31/03/13
€29,505	€2,950	(€17,000)	€15,455	31/03/14
€15,455	€1,545	(€17,000)	€0	31/03/15

(a)Journal Entries

		€	**€**
Lease Asset		64,445	
Lease Loan			64,445
Finance Loan- Interest on year end 31/03/11			6,445
Income statement year end 31/03/11	6,445		
Rental per T/B		17,000	
Finance Loan	17,000		

Summary of Loan balances

Balance on Loan account €64,445 plus €6,445 minus €17,000 equals €53,890

Analysed as follows

Capital repayable within one year €17,000 -€5,388 €11,612

Capital repayable thereafter €42,278

(b)Depreciation

€64,445 divided by 5 year useful life equals €12,889

Allow for rounding differences

W/N 8 Inventory with reference to question note 3

		Total costs			W/Down
	Total Sales	**of delivery**	**N.R.V.**	**Total cost**	
Product Model 1	€18,275	€1,000	€17,275	€17,000	0
Product Model 2	€18,225	€1,100	€17,125	€18,000	(€875)
Product Model 3	€15,000	€1,800	€13,200	€16,000	(€2,800)
Product Model 4	€14,000	€1,200	€12,800	€11,500	0
Product Model 5	€23,700	see note	€23,700	**€22,500**	0
	€89,200	€5,100	€84,100	€85,000	**(€3,675)**

(a)Journal

Production	€3,675	
Inventory		€3,675

Each different category of stock assessed individually

(b)Foreign exchange arising on unpaid inventory purchases
Original purchase was £18,000 sterling divided by £0.80 at purchase date equals €22,500

Purchases	€22,500	
Payables		€22,500

At balance sheet rate payables is recalculated] as £18,000 divided by £0.75 equals €24,000 .

Thus exchange difference at B/S date is €24,000 minus €22,500 equals €1,500

Journals

Foreign Exchange loss	€1,500	
Payables		€1,500

W/N 9 with reference to question note 2- Effective interest

	8%	**Repayment**		**Year end**
€150,000	€12,000	€nil	€162,000	31/03/10
€162,000	**€12,960**	**€nil**	**€174,960**	**31/03/11**
€174,960	€13,997	€nil	€188,957	31/03/12
€188,957	€15,117	€nil	€204,073	31/03/13
€204,073	€16,326	(€220,399)	€220,399	31/03/14

Journals
Prior Year

Retained profits 31/03/10	€12,000	
Debenture Loan		€12,000
Profits year ended 31/03/11	€12,960	
Debenture Loan		€24,960

W/N 10 with reference to question note 1- Redeemable Preference shares

Preference share being redeemable/repayable are classified as a liability

	Dr	Cr
Sundry	200,000	
8% Redeemable Preference shares		200,000
Dividend half yearly interest expenses		
8% x 6 months/12 months	8,000	
Dividends payable		8,000

W/11 with reference to Question note 10 Defined benefit

			Asset	Liability	
Fair values as at		**01/04/10**	€122,000	€122,000	
Interest costs		11%		€13,420	
Expected return		13%	€15,860		
Current Service cost				€12,000	
Benefits paid			(€11,800)	(€11,800)	
Contributions paid			€7,500		
Expected values		**31/03/11**	€133,560	€135,620	€2,060
Actuarial gain/Loss			(€2,560)	(€620)	€1,940
Fair values as at		**31/03/11**	€131,000	€135,000	€4,000

	Debit	**Credit**
Retired Benefit obligations		€4,000
Administration expenses	€4,000	

Analysis of total income statement charge of €11,500 [€7,500 per note +€4,000]

Current service cost	€12,000
Interest cost	€13,420
Return on plan of assets	(€15,860)
Actuarial Difference	€1,940
To income statement	€11,500

W/N 12 [with reference to question note 11]
Taxation charge

	Total	**Continued**	**Discontinued**
Per note	(8,500)	(8,500)	
Tax "savings" per note (9)	0	(3,025)	3,025
Underestimation	(3,200)	(3,200)	
	(11,700)	**(14,725)**	**3,025**

Journals	**Debit**	**Credit**
Income tax expenses -continued operations	8,500	
Income Tax payable-Liabilities		8,500
Income tax expenses -continued operations	3,025	
Income tax savings-discontinued operations		3,025
Income tax -continued operations	3,200	
Income tax expense account [per T/B]		3,200

Question 3- Any four one from each heading for each year

Profitability				
Gross Profit to Sales	20.00%		25.00%	
PbIT / Sales	8.00%		11.00%	
Net Profit[**after** all interest and tax] to sales	3.27%		5.43%	
Return on Capital Employed	9.18%		11.38%	
Liquidity ratio				
Current Ratio	0.51	:1	0.28	:1
Quick asset ratio	0.29	:1	1.257	:1
Efficiency				
Stock days	48	days	30	days
Debtor days	50	days	33	days
Creditor days	25	days	35	days
Turnaround	73	days	28	days
Investor appraisal				
Gearing Ratio -Financial Risk	69%	:1	71%	:1
Interest cover	1.88		2.29	
Return on Shareholder funds	6.34%		9.58%	
Dividend Cover	1.73		2.54	
Earnings per share	€0.07		€0.10	

(b)
The company appears to be chasing volume by cutting margins and offering increased credit to customers . Its current overdraft appears to be on a permanent basis and of similar amount to its long term funds.
The banks in the current economic climate may withdraw such temporary facilities.
The company should therefore review its long term funding requirements.
In that regard it should review its current credit policies in relation to its customers and negotiate more favourable arrangements with its suppliers in order to improve its cash flow

(c)

Illustration

	€10,000	**€15,000**		**Cash**
Company	**Bought for**	**Sold on/for**	**Profit**	**Balance**
Company A	Cash	Credit	€5,000	(€10,000)
Company B	Credit	Cash	€5,000	€15,000
Company C	Credit	Credit	€5,000	€0
Company D	Cash	Cash	€5,000	€5000

Each of the four companies have each made a similar profit from a similar transaction by applying the accrual system
But each has a different cash balance due to different credit polices given and received.

A further difference between profit flow and cash flow, and which is not shown in the above illustration- is in the timing of the impact of capital expenditure
Capital expenditure of say €10,000 for a machine will, in the absence of a loan, have an immediate impact on cash flow.
In terms of profit flow however its impact as measured by the annual depreciation [non cash] charge will be over a number of years equal to the useful life of the asset..
In the long run however all profit should convert to cash. Thus in the above illustration all of the profit should [if measured accurately] result in net cash balance of €5,000
In summary if a business commenced operations on January 1st and ceased on December 31st of the same year and miraculously sold off any remaining assets paid off all its obligations on that last day then its profit or loss would be exactly equally to the cash balance or deficit.