Coimisiún na Scrúduithe Stáit
State Examinations Commission

Scéimeanna Marcála *Scrúduithe Ardteistiméireachta, 2003*

Cuntasaíocht *Ardleibhéal & Gnáthleibheal*

Marking Scheme *Leaving Certificate Examination, 2003*

Accounting *Higher Level & Ordinary Level*

LEAVING CERTIFICATE ACCOUNTING

MARKING SCHEME FOR THE 2003 EXAMINATION

INTRODUCTION

The solutions and marking schemes for Accounting, Higher and Ordinary levels, are attached.

The solutions are printed and the marks allocated to each line/figure are highlighted and shown in a circle like this ❻ alongside. These marks are then totalled for each section/page and shown in a square like this $\boxed{40}$.

Accounting solutions are mainly computational and most figures are made up of more than one component. If a figure is wrong per the solution, the examiners analyse the make-up of the candidate's figure and allocate some marks for each correct element included. To facilitate this, where relevant, the make-up of the figures is shown in workings attached to the solution.

In some Accounting questions there can be a number of alternative approaches and formats that can be validly used by candidates (eg A Bank Reconciliation Statement can start with either the bank statement figure or the adjusted bank account balance). The solutions provided here are based on the approaches adopted by the vast majority of teachers/candidates and alternatives are not included. In cases where a valid alternative solution is required, it is provided for the examiners, so that full marks can be gained for correct accounting treatment.

Sometimes the solution to a part of a question may depend on the answer computed in another part of that question. Where their calculation in Section (a) is incorrect, but this inaccurate information is used in the answer to Section (b), examiners give credit for analysis/decisions correctly made by the candidate on the basis of the incorrect data in this section. In this way, candidates are not penalised twice for the same error.

Accounting – Higher Level 2003

QUESTION 1

(a) 75

Trading , Profit and Loss Account the year ended 31/12/2002

		€	€	€
Sales				982,000 ❷
Less Cost of sales				
Stock 1/1/2002			67,700 ❷	
Add Purchases	W 1		640,000 ❻	
			707,700	
Less Stock 31/12/2002	W 2		(69,800) ❻	(637,900)
Gross profit				344,100
Less Expenses				
Administration				
Salaries and general expenses		194,100 ❷		
Patents written off	W 3	12,000 ❻		
Insurance	W 4	9,650 ❽		
Depreciation - buildings	W 5	19,000 ❸	234,750	
Selling and Distribution				
Loss on sale of delivery van	W 7	4,150 ❻		
Commission		24,000 ❷		
Depreciation- delivery vans	W 6	23,175 ❺	51,325	(286,075)
				58,025
Add Operating income				
Reduction in provision for bad debts	W 8			696 ❹
Rent				15,000 ❷
Discount	W 9			5,300 ❺
Operating profit				79,021
Investment income				10,500 ❸
				89,521
Mortgage interest	W 10			(22,500) ❻
Net profit for year				**67,021** ❼

(b)

45

Balance Sheet as at 31 December 2002

		Cost	Accumulated Depreciation	Net	Total
Intangible Fixed Assets		€	€	€	€
Patents (€60,000 - €12,000)					48,000 ❹
Tangible Fixed Assets					
Buildings	W 11	1,100,000❷		1,100,000	
Delivery vans		156,000❷	74,825❸	81,175	
		1,256,000	74,825	1,181,175	1,181,175
Financial Assets					
Investments					200,000 ❷
					1,429,175
Current assets					
Stock				69,800❷	
VAT	W 12			24,500❺	
Investment income due				6,000❸	
Debtors			77,600❷		
Less provision			3,104❶	74,496	
				174,796	
Creditors: amounts falling due within one year					
Creditors			86,500❷		
Mortgage interest due			18,750❸		
PRSI			2,300❷		
Bank			70,900❷	(178,450)	(3,654)
					1,425,521
Financed by					
Creditors: amounts falling due after more than one year					
9% Fixed mortgage					500,000 ❷
Capital and reserves					
Capital 1/1/2002				680,000❶	
Add Net profit				67,021❶	
				747,021	
Less Drawings				37,500❷	
				709,521	
Revaluation reserve	W 13			216,000❹	925,521
Capital employed					1,425,521

QUESTION 1 - *Workings*

1.	**Purchases**	668,000	
	Less Payment for van	(28,000)	640,000
2.	**Closing stock**	74,500	
	Less valueless stock	(4,700)	69,800
3.	**Patents**		
	(€55,500 + €4,500) ÷ 5		12,000
4.	**Insurance**	8,700	
	Add Mortgage interest	250	
	Add Discount received	700	9,650
5.	**Depreciation -buildings**		
	2 % of €950,000		19,000
6.	**Depreciation - delivery vans**		
	(€22,500 + €675) (€5,625 + €17,550) (€16,200 + €1,575 + €5,400)		23,175
7	**Loss on sale of van**		
	(€42,000 - €17,850 - €20,000)		4,150 loss
	Provision for Depreciation - vans		
	(€69,500 - €17,850 + €23,175)		74,825
8.	**Provision for bad debts**		
	(€3,800 - €3,104)		696cr
9	**Discount**	4,600	
	Add Unrecorded Discount	700	5,300
10.	**Mortgage interest**	4,000	
	Less Suspense	(250)	
	Add Interest due	18,750	22,500
11.	**Buildings**	980,000	
	Less VAT	(30,000)	
	Add Revaluation	150,000	1,100,000
12.	**VAT account**	5,500	
	Less VAT on buildings	(30,000)	24,500
13	**Revaluation reserve**		
	Land and buildings	150,000	
	Provision for depreciation (47,000 + 19,000)	66,000	216,000

QUESTION 2 – Published Accounts

(a) 38

Profit and Loss Account of North Plc for the year ended 31/12/2002

		Notes		€
Turnover				1,105,000 ❶
Cost of Sales (75,000 + 696,000 - 77,000 + 8000)		1		702,000 ❼
Gross profit				403,000
Distribution costs	W 1		50,000 ❷	
Administrative expenses	W 2		313,200 ❼	363,200
				39,800
Other operating income				
Discount				6,160 ❶
Operating profit		2		45,960
Profit on sale of land				85,000 ❷
Investment income				10,800 ❸
				141,760
Interest payable		3		16,000 ❸
Profit on ordinary activities before taxation	❶			125,760
Taxation				33,000 ❶
Profit after taxation				92,760
Dividends paid		4	27,000 ❷	
Dividends proposed		4	41,000 ❸	68,000
Profit retained for year				24,760
Profit brought forward at 1/1/2002				73,700 ❶
Profit carried forward at 31/12/2002				98,460 ❹

Notes to the Accounts

1. **Accounting policy notes** ❸

   Tangible Fixed Assets

   Depreciation is calculated in order to write off the value or cost of tangible fixed assets over their estimated useful economic life, as follows:

   Buildings - 2% per annum -straight line basis.

   Delivery vans - 20% of cost

   Stocks - Stocks are valued on a First in first out basis at the lower of cost and net realisable value.

2. **Dividends** ❹

Ordinary dividends		
Interim paid 6.0c per share	21,000	
Final proposed 10.0c per share	35,000	56,000
Preference dividends		
Interim paid 4.0c per share	6,000	
Final proposed 4.0c per share	6,000	12,000

3. **Interest payable**: ❶

Interest payable on debentures repayable during years 2008/2009	16,000

QUESTION 2 (continued)

4. **Operating profit** ❸

The operating profit is arrived at after charging:

Depreciation on tangible fixed assets	41,500
Patent amortised	8,000
Directors remuneration	84,000
Auditors Fees	7,700

5. **Profit on sale of property** ❶

The company sold land for €85,000 greater than it cost. Cost was €90,000

Workings

1. **Distribution costs**

Advertising	21,000	
Depreciation - delivery vans	29,000	50,000

2. **Administrative expenses**

Directors fees	84,000	
Salaries and general expenses	177,000	
Rent	32,000	
Auditors fees	7,700	
Depreciation - buildings	12,500	313,200

(b) $\boxed{10}$

Agencies

The Government – Legislation
The European Union – directives
The Accountancy profession – FRS's and SSAP's
The Stock Exchange – Listing Rules

QUESTION 3 – Control Accounts

(a) 35

Adjusted Debtors Ledger Control Account

		€			€
Balance b/d		33,444❶	Balance b/d		633 ❸
Dishonoured cheque	(a)	880❻	Sales overstated	(c)	180 ❻
Interest	(e)	20❻	Credit note	(d)	566 ❻
Restocking charge	(f)	24❻	Balance c/d		33,622
Balance c/d		633❶			
		35,001			35,001
Balance b/d		33,622	Balance b/d		633

(b) 25

Schedule of Debtors Account Balances

				€
Balance as per List of Debtors				27,619 ❺
Add	Dishonoured cheque	(a)	880 ❸	
	Sales - cash and credit error	(b)	3,400 ❺	
	Sales	(c)	1,680 ❸	
	Interest	(e)	48 ❷	6,008
				33,627
Deduct	Credit note	(d)	622 ❷	
	Reduction in restocking charge	(f)	16 ❸	638
Net balance as per adjusted control account				32,989 ❷

QUESTION 4 – Revaluation of Fixed Assets

(a) 60

Land and Buildings Account

		€			€
1/1/98	Balance b/d	630,000❷			
1/1/98	Revaluation Res.	120,000❷	31/12/98	Balance c/d	750,000
		750,000			750,000
1/1/99	Balance b/d	750,000	01/01/99	Disposal	250,000 ❶
			31/12/99	Balance c/d	500,000
		750,000			750,000
1/1/00	Balance b/d	500,000❶	31/12/00	Balance c/d	950,000
	Bank	340,000❷			
	Bank	80,000❷			
	Wages	30,000❷			
		950,000			950,000
1/1/01	Balance b/d	950,000	31/12/01	Balance c/d	1,045,000
1/1/01	Revaluation Reserve	95,000❷			
		1,045,000			1,045,000
1/1/02	Balance b/d	1,045,000	01/01/02	Disposal	550,000❸
1/1/02	Revaluation Reserve	125,000❸	31/12/02	Balance c/d	620,000
		1,170,000			1,170,000

Provision for Depreciation on Buildings Account

		€			€
1/1/98	Revaluation Res.	84,000❷	1/1/98	Balance b/d	84,000 ❹
31/12/98	Balance c/d	10,000	31/12/98	Profit and Loss	10,000 ❷
		94,000			94,000
31/12/99	Balance c/d	20,000	1/1/99	Balance b/d	10,000
			31/12/99	Profit and Loss	10,000 ❷
		20,000			20,000
31/12/00	Balance c/d	39,000	1/1/00	Balance b/d	20,000
			31/12/00	Profit and Loss	19,000 ❷
		39,000			39,000
1/1/01	Revaluation Res.	39,000❷	1/1/01	Balance c/d	39,000
31/12/01	Balance c/d	20,900	31/12/01	Profit and Loss	20,900 ❷
		59,900			59,900
1/1/02	Disposal	11,000❷	1/1/02	Balance b/d	20,900
1/1/02	Revaluation Res.	9,900❸	31/12/02	Profit and Loss	12,400 ❷
31/12/02	Balance c/d	12,400			
		33,300			33,300
			1/1/03	Balance b/d	12,400

QUESTION 4 – (continued)

Disposal of Land Account

		€			€
1/1/99	Buildings	250,000❶	1/1/99	Bank	320,000❶
31/12/99	P & L (Profit)	70,000❶			
		320,000			320,000

Disposal of Buildings Account

		€			€
1/1/02	Buildings	550,000❶	1/1/02	Depreciation	11,000❶
31/12/02	P & L (Profit)	51,000❶	1/1/02	Bank	590,000❶
		601,000			601,000

Revaluation Reserve Account

		€			€
1/1/98	Revenue reserve	40,000❶	1/1/98	Land and Buildings	120,000❶
1/1/02	Revenue reserve	244,000❶		Provision for Dep	84,000❶
			1/1/01	Land and Buildings	95,000❶
				Provision for Dep	39,000❶
			1/1/02	Land and Buildings	125,000❶
				Provision for Dep	9,900❶

Revenue Reserve Account

		€
1/1/98	Revenue reserve	40,000❶
1/1/02	Revenue reserve	244,000❶

QUESTION 5 – Interpretation of Accounts

(a) 50

Cash sales $\frac{\text{Debtors x 12}}{\text{Credit sales}} = 1$ Credit sales = $\frac{74{,}000 \text{ x } 12}{1}$

Credit sales = 888,000

Cash sales = 980,000 - 888,000 = **€92,000** 12

Earnings per share $\frac{\text{Net profit - Pref Div x 100}}{\text{Number of ordinary shares}} = \frac{130{,}000 \text{ x } 100}{650{,}000} =$ **20c** 10

Market Price $\frac{\text{Market price}}{\text{Earnings per share}} = 11$

$\frac{x}{20} = 11$ = **220c** 8

Dividend cover $\frac{\text{Net profit after Pref Div}}{\text{Ordinary dividend}} = \frac{130{,}000}{55{,}000} =$ **2.4 times** 10

Dividend Yield $\frac{\text{Dividend per share x 100}}{\text{Market price}} = \frac{8.46\text{p x } 100}{220\text{p}} =$ **3.85%** 10

(b) 50

I would advise my friend to buy shares in O'Gara PLC Ltd for the following reasons:

Gearing 10
Gearing is 20.6% or 0.26 to 1. The company is low geared at 20.6% and interest cover is 15.3 times. Therefore there is little risk from outside investors. Last years gearing and interest cover were 35% and 9 times respectively. These figures indicate improved situations and that the company is less at risk and is better able to pay interest in 2002 than in 2001. The prospects of being able to pay dividends are good.

Dividends 10
Dividend per share is 8.46c. The dividend per share has increased from 6.5c since 2001.
The company's dividend cover is 2.4 times and dividend yield is 3.85%. The dividend policy is such that a shareholder can expect a decent amount of profits will be paid out each year and at the same time the long term prospects of capital gain is good. The real return to ordinary shareholders would be 9.1% based on available profits

QUESTION 5 – (continued)

Profitability ⑩
O'Gara PLC is a profitable firm because its return on capital employed of 15.8% and on equity funds of 16.9% indicate that the firm is earning much more (three times) than the return from risk free investments of about 4% to 6%. These are big increase from 14% and 7.6% respectively in 2001. The earnings per share has increased by 2c from 18c in 2001 to 20c in 2002.

Liquidity ⑩
O'Gara PLC has a liquidity problem. It would have difficulty paying its immediate debts. This difficulty has worsened since 2001 and is less able to pay its immediate debts in 2002 as indicated by the acid test ratio. This ratio has worsened from 0.75 in 2001 to 0.67 in 2002. This ratio indicate that O'Gara PLC has only 67c available to pay each €1 owed immediately. The company had 75c available in 2001.

Reserves ❺
The firm is retaining profits and building up reserves which augers well in the long-term and should bring about an increase in the market price of the share. Reserves have risen by €75,000 to €119,000 since 2001.

Market Price ❺
The share value has gone up by 30c to €2.20 since 2001 and is likely to continue in its upward movement based on current year performance.

Real value of fixed assets/ Security: The real value of fixed assets and intangible assets should be questioned. There are no write offs. Although there are intangible assets valued at €160,000 there is little risk to the company as this is only 20% of the tangible fixed and this ensures that there is adequate security for the loan.

Sector
The healthcare industry is a growth area and the sector has good prospects.

Price Earnings Ratio
The price earnings ratio is 11. This means that at the present rate of earnings it would take 11 years to earn back the price of a share.

Interest Cover
Interest Cover is 15.3 times and has improved from 9 times in 2001. There should be more profits available to the shareholders.

QUESTION 6 – Final Accounts of a Service Firm

(a) 20

Statement of Capital and Reserves on 1/1/2002

		€	€
Assets			
Buildings and grounds	(520,000 – 31,200)	488,800❷	
Equipment	(90,000 – 54,000)	36,000❷	
Furniture	(25,000 – 15,000)	10,000❷	
Investments		80,000❶	
Stock - Health food for resale		1,500❶	
Stock – oil		660❶	
Contract cleaning prepaid		300❶	
Cash at bank		7,560❶	624,820
Less Liabilities			
Creditors for supplies		1,450❶	
Customers' advance deposits		5,500❶	
Loan		60,000❷	
Interest on loan	(12 months @ €400 per month)	4,800❷	
Issued capital		320,000❶	391,750
Reserves			233,070 ❷

(b) 12

Health Shop Profit and Loss Account for year ended 31/12/2002

		€	€
Shop receipts - sales			67,000❷
Less Expenses			
Cost of goods sold -	(1,500 + 41,300 – 1,800)	41,000❺	
Light and heat		220❶	
Insurance		600❶	
Telephone		360❶	
Wages and Salaries	(60% of 16,000)	9,600❷	51,780
Contribution from health shop			15,220

(c) 36

Profit and Loss Account for year ended 31/12/2002

			€	€
Income				
Interest received			2,160❶	
Profit on health shop			15,220❶	
Customers' fees W 1			264,750❹	282,130
Less Expenses				
Wages and Salaries	(88,240 – 9,600)		78,640❷	
Insurance	(6,300 - 600)		5,700❶	
Light and heat		W 2	3,270❺	
Purchases - supplies		W 3	38,750❸	
Loan interest		W 4	2,000❸	
Laundry			4,100❶	
Postage and telephone			1,520❶	
Depreciation - Buildings		W 5	12,000❶	
- Equipment			21,200❶	
- Furniture			5,000❶	
Contract Cleaning		W 6	2,600❸	174,780
Net Profit for year				107,350 ❼
Add Reserve 1/1/2002				233,070 ❶
Profit and Loss balance 31/12/2002				340,420

(d) 32

Balance Sheet as at 31/12/2002

	Cost	Depreciation	Net
Fixed Assets	€	€	€
Buildings and Grounds	700,000❶		700,000
Equipment (90,000 + 16,000)	106,000❷	75,200 ❷	30,800
Furniture	25,000❷	20,000 ❷	5,000
	692,000	107,600	735,800
Investments			80,000❷
			815,800
Current Assets			
Closing stock - shop goods	1,800❷		
- oil	360❷		
Cleaning prepaid	400❷		
Customers' fees due	650❷	3,210	
Less Creditors: amounts falling due within 1 year			
Bank overdraft	9,500 ❷		
Electricity due	290 ❷		
Customers' advance deposits	4,000 ❷		
Creditors for supplies	1,600 ❷	(15,390)	(12,180)
			803,620

Financed by

Share Capital and reserves		Authorised	Issued	
Ordinary shares		450,000 ❶	320,000❶	
Revaluation Reserve	(W 7)		143,200❸	
Profit and Loss Balance			340,420	803,620
				803,620

Workings

1	**Customers' fees** – amount received	262,600	
	Add advance deposits	5,500	
	Add fees due	650	
	Less fees prepaid 31/12/2002	(4,000)	264,750
2	**Light and heat** – amount paid	2,900	
	Add stock – heating oil 1/1/2002	660	
	Add electricity due 31/12/2002	290	
	Less stock – heating oil 1/1/2002	(360)	
	Less charge to shop	(220)	3,270
3	**Purchases** (38,600 + 1,600 - 1,450)		38,750
4	**Loan Interest** paid	6,800	
	Less interest due 1/1/2002 for 1 year @ €400 per month	4,800	2,000
5	**Depreciation** - Buildings & grounds 2% x (520,000+80,000)		12,000
	- Equipment 20% x (90,000 + 16,000)		21,200
	- Furniture 20% x (25,000)		5,000
6	**Contract Cleaning** – amount paid	2,700	
	Add amount prepaid 1/1/2002	300	
	Less amount 31/12/2002	(400)	2,600
7	**Revaluation Reserve**		
	Buildings (700,000 - 600,000 including extension)	100,000	
	Depreciation (31,200 + 12,000)	43,200	143,200

QUESTION 7 – Incomplete Records

(a) **50**

Balance Sheet as at 31 December 2002

			€	€
Intangible Assets				
Goodwill				40,000 ❸
Fixed Assets				
Buildings	(290,000 + 250,000)		540,000❸	
Equipment			12,000❸	552,000
Financial Assets				
Investments				7,575 ❹
				599,575
Current Assets				
Stock at 31 December 2002		17,200❶		
Trade Debtors		34,300❶		
Bank		68,462❶		
Rates prepaid		2,700❹	122,662	
Less Creditors: amounts falling due within 1 year				
Creditors		29,900❶		
Interest due		1,500❸		
Electricity due		560❷	(31,960)	
Working Capital				90,702
				690,277
Financed by				
Creditors: amounts falling due after more than 1 year				
Loan				300,000❷
Capital - Balance at 1/1/2002			350,000❷	
Add Capital introduced			2,500❸	
Less Drawings	W 10		(23,215)❿	329,285
				629,285
Add Net Profit	W 1			60,992
Capital Employed				690,277❼

(b) **40**

Trading and Profit and Loss Account for year ended 31 December 2002

		€	€
Sales	W 3		440,905❷
Less Cost of goods sold			
Stock at 1 January 2002		16,700 ❷	
Add Purchases (270,243 - 5,200)	W 5	265,043 ❷	
		281,743	
Less Stock 31 December 2002		(17,200) ❷	
Cost of sales	W 4		264,543❷
Gross Profit	W 2		176,362❷
Add Investment income			75❸
			176,437
Less Expenses			
Wages and general expenses	W 6	95,750❻	
Light and heat	W 7	5,820❻	
Rates	W 8	10,500❻	
Interest	W 9	3,375❻	115,445
Net Profit	W 1		60,992❶

(c) 10

O'Higgins should keep a detailed cash book and general ledger supported by appropriate subsidiary day books. This would enable O'Higgins to prepare an accurate trading and profit and loss account and therefore would avoid reliance on estimates.

Workings

				€	€
1	**Net profit for year (balancing figure in balance sheet)**				
	Total net assets			690,277	
	Less Loan			(300,000)	
	Less capital after drawings and before profit			(329,285)	60,992
2	**Gross profit**				
	Net profit + expenses - gains	=	(60,987 + 115,450 – 75)		176,362
3	**Sales**				
	Gross profit = 40% of sales	=	176,362 x 2.5		440,905
4	**Cost of sales**				
	Sales less gross profit	=	440,905 - 176,362		264,543
5	**Purchases**				
	Cost of sales + closing stock - opening stock		264,543 +17,200 – 16,700		265,043
6	**Wages and general expenses** - amount paid			98,000	
	Add college fees 30% of €4,500			1,350	
	Less wages due at 1/1/2002			(3,600)	95,750
7	**Light and heat** - amount paid			7,200	
	Add electricity due 31/12/2002			560	
	Less drawings			(1,940)	
	Profit and loss account				5,820
8	**Rates** - amount paid			10,800	
	Add rates prepaid 1/1/2002			2,400	
	Less rates prepaid 31/12/2002			(2,700)	
	Profit and loss account				10,500
9	**Interest** - amount paid			3,000	
	Add interest due			1,500	
	Less drawings			(1,125)	
	Profit and loss account				3,375
10	**Drawings**				
	College fees – family member			3,150	
	Equipment			4,000	
	Drawings of stock			5,200	
	Cash			7,800	
	Light and heat			1,940	
	Interest			1,125	23,215

QUESTION 8 - Costing

30

(a)

Purchases In Units		Cost Price €	Purchases at Cost
4,200	@	€7	29,400
3,200	@	€7	22,400
2,700	@	€8	21,600
2,300	@	€9	20,700
12,400			**94,100**

Sales In Units		Selling Price	Sales Value €
2,400	@	€11	26,400
4,150	@	€12	49,800
3,900	@	€13	50,700
10,450			**126,900**

Closing Stock in units	
Opening Stock	4,400
Add Purchases	12,400
	16,800
Less Sales	10,450
Closing stock	**6,350**

Closing Stock in €			€
2,300	@	€9	20,700
2,700	@	€8	21,600
1,350	@	€7	9,450
6,350			51,750 15

Trading Account for year ending 31 December 2002

	€	€
Sales		126,900 3
Less cost of goods sold		
Opening stock	30,800 2	
Purchases	94,100 3	
	124,900	
Less Closing stock	51,750 3	73,150
Gross profit		53,750 4

QUESTION 8 – (continued)

(b) 50

Calculation of Product Cost and Selling price

		€	€
Direct Materials			6,450.00 ❸
Direct wages:			
Department X	(90 hours @ €11)	990 ❸	
Department Y	(180 hours @ €12)	2,160 ❸	
Department Z	(50 hours @ €10)	500 ❸	3,650.00
Variable overheads			
Department X	(90 hours @ €18)	1,620.00 ❸	
Department Y	(180 hours @ €16)	2,880.00 ❸	
Department Z	(50 hours @ €20)	1,000.00 ❸	5,500.00
Fixed overheads			
Department X	(90 hours @ €8.50)	765 ❸	
Department Y	(180 hours @ €7.50)	1,350 ❸	
Department Z	(50 hours @ €4.00)	200 ❸	2,315.00
General Administration overhead (320 hours @ €4.50)			1,440.00 ❹
Total Cost	= 75% of selling price		19,355.00 ❷
Profit	= 25% of Selling Price		6,451.67
Selling Price	= 100%		25,806.67 ❷

To establish the selling price for the purpose of tendering ❼

To control costs - budget versus actual ❺
To help planning and decision making
To ascertain the value of closing stock in order to prepare final accounts

QUESTION 9

80

(i)	Direct materials	❶ Variable
	Direct wages	❶ Variable
	Production overheads	❷ Mixed
	Other overhead costs	❷ Mixed
	Administration expenses	❷ Fixed

(ii) Production overheads

	Units	Total cost
	€	€
High	17,000	110,000
Low	11,000	74,000
Difference	6,000	36,000

The variable cost of 6,000 units is €36,000, therefore the variable cost per unit is €6. ❻

	€	€	€	
	55%	**70%**	**85%**	
Total production overhead cost	74,000	92,000	110,000	
Variable cost (Units x €6)	66,000	84,000	102,000	
Therefore fixed cost	8,000	8,000	8,000	❻

(iii) Other overhead costs

	Units	Total cost
	€	€
High	17,000	54,000
Low	11,000	36,000
Difference	6,000	18,000

The variable cost of 6,000 units is €18,000, therefore the variable cost per unit is €3 ❻

	€	€	€	
	55%	**70%**	**85%**	
Total other overhead costs at	36,000	45,000	54,000	
Variable cost (Units x €3)	33,000	42,000	51,000	
Therefore, fixed cost	3,000	3,000	3,000	❻

Question 9 – (continued)

(iv) Production overheads at the required flexible budgeted level of 96% - (19,200 units)

	€	
Variable cost (19,200 units x €6)	115,200	
Fixed cost	8,000	
Total cost	123,200	*

Other overhead costs at the required flexible budgeted level of 96% - (19,200 units).

	€	
Variable cost (19,200 units x €3)	57,600	
Fixed cost	3,000	
Total cost	60,600	*

Construction of a flexible budget for a 96% activity level.

			Flexible Budget	
Activity level			**96%**	
Units			**19,200**	
			€	
Direct materials	(€13 x 19,200)		249,600	❸
Direct wages	(€9 x 19,2000)		172,800	❸
Production overheads	(€6 x 19,200)	+ 8,000	*123,200	❻
Administration overheads (fixed)			29,000	❷
Other overhead costs	(€3 x 19,200)	+ 3,000	*60,600	❻
Total cost (78% of sales)			635,200	

(v) Flexible Budget In Marginal Costing Format

	€	€
Sales		814,359 ❶
Less Variable costs		
Direct materials	249,600 ❶	
Direct wages	172,800 ❶	
Variable productions costs	115,200 ❶	
Other overhead costs	57,600 ❶	595,200
Contribution ❶		219,159
Less Fixed costs		
Production costs	8,000 ❶	
Selling and distribution costs	3,000 ❶	
Administration costs	29,000 ❶	40,000
Profit		179,159 ❸

(vi) Principal Budget Factor - Often referred to as the limiting budget factor or the key budget factor. ❼

This is the factor that limits output and therefore prevents continuous expansion. Usually the principal budget factor is sales demand. The principal budget factor could be some other limiting factor such as availability of materials

Why prepare a flexible budget and what does it show?
To compare budgeted costs and actual costs at the same level of activity ❻
To compare like with like
To help in controlling costs or to plan product levels

They show whether actual costs exceeded or were less than budgeted costs.(variances) ❸

Accounting - Ordinary Level 2003

QUESTION 1 - Final Accounts of a Sole Trader

(a) 80

Trading and Profit and Loss Account of for year ended 31/12/2002

		€	€	€
Sales less returns	(€836,000 - €6,000)			830,000 ❺
Less: Cost of Sales:				
Stock 1/1/2002			63,000 ❸	
Add Purchases less returns	(€525,000 - €4,800)		520,200 ❺	
Add Carriage In	(20% x €8,000)		1,600 ❹	
			584,800	
Less Stock 31/12/2002			71,000 ❸	
513,800				
Gross Profit				316,200
Less: Expenses				
Administration expenses ❶				
Depreciation - Buildings		7,200 ❸		
- Office Equipment		1,700 ❸		
Wages	(90% x €220,000)	198,000 ❺		
Stationery	(€2,100 - €600)	1,500 ❺		
General Expenses		48,000 ❹	256,400	
Selling and distribution expenses ❶				
Carriage on sales	(80% x €8,000)	6,400 ❹		
Advertising	(€5,400 - €1,350)	4,050 ❺		
Depreciation - Motor Vehicles		22,000 ❸		
Showroom Expenses		6,500 ❹	38,950	
Total expenses				295,350
				20,850
Add Operating Income				
Commission				3,400❸
Decrease in Provision for Bad Debts	(1,800 - 1,640)			160❺
Discount				2,800❸
Operating Profit				27,210
Interest				(9,000)❺
Net Profit for year				18,210❻

QUESTION 1 - (continued)

(b) $\boxed{40}$

Balance Sheet of at 31/12/2002

	Cost	Acc Dep	NBV	
Intangible Fixed Assets	€	€	€	€
Patents				60,000❷
Tangible Fixed Assets				
Buildings	360,000❶	7,200❶	352,800	
Motor Vehicles	110,000❶	78,000❸	32,000	
Office Equipment	24,000❶	8,700❸		15,300
	494,000	93,900	400,100	400,100
				460,100
Current Assets				
Debtors		41,000❷		
Less: Bad Debts Provision		1,640❶	39,360	
Stock of Goods			71,000❷	
Stock of Stationery			600❷	
Advertising prepaid			1,350❸	
			112,310	
Creditors: amounts falling due within 1 year				
Trade Creditors		59,000❷		
Bank		19,700❷		
VAT		6,300❷		
PRSI		2,700❷		
Interest due		3,000❷	90,700	21,610
				481,710
Financed by:				
Creditors: amounts falling due after more than 1 year				
Term Loan				120,000❶
Capital				
Capital at 1/1/2002			382,500❷	
Add: Net Profit for the year			18,210❶	
			400,710	
Less: Drawings (€17,000 +€22,000)			39,000❹	361,710
				481,710

QUESTION 2 – Control Accounts

32

Debtors Control Account

	€		€
Balance b/d	61,700❺	Discount allowed	2,100❷
Credit Sales (134,500-14,500)	120,000❻	Returns In	1,300❷
Interest	330❷	Bills Receivable	3,200❷
Cheque dishonoured	800❷	Bank	94,400❷
Balance c/d	440❶	Bad debts	520❷
		Contra	660❷
		Balance c/d	81,090❸
	183,270		183,270
Balance b/d	81,090❶	Balance b/d	440

28

Creditors Control Account

	€		€
Returns Out	3,200❷	Balance b/d	49,600❺
Discount Received	2,700❷	Credit Purchases (99,600 – 9,600)	90,000❻
Bills payable	1,900❷	Discount Disallowed	550❷
Cheques	76,000❷	Balance c/d	310❶
Contra	660❷		
Balance c/d	56,000❸		
	140,460		140,460
Balance b/d	310	Balance b/d	56,000❶

QUESTION 3 - Profit and Loss Account of a Limited Company

(a) 35

Profit and Loss Account of Arlington Ltd for the year ended 31/12/2002

		€
Net Profit for year		220,000❸
Less: Taxation		58,000❺
Profit after taxation		162,000
Less: Appropriations		
General Reserve	30,000 ❹	
Interim Ordinary Dividend 6c	30,000 ❹	
Interim Preference Dividend for half year	13,500 ❹	
Proposed Preference Dividends	13,500 ❹	
Proposed Ordinary Dividend 7c	35,000 ❹	122,000
Retained profit for year		40,000
Retained Profit 1/1/2001		75,000❹
Retained Profits carried forward		115,000❸

(b) 25

Balance Sheet extract at 31/12/2002

	€	€	€
Less: Creditors: amount falling due within 1 year			
Preference Dividend due	13,500 ❹		
Ordinary Dividend due	35,000 ❹		
Taxation due	58,000 ❹	106,500	
Financed by:			
Capital and reserves	**Authorised**	**Issued**	
Share Capital			
Ordinary Shares of €1 each	750,000❶	500,000 ❷	
8% Preference Shares	400,000❶	300,000 ❷	
General Reserve		150,000 ❹	
Profit and loss balance		115,000 ❸	1,065,000
Shareholders Funds			1,065,000

QUESTION 4 – Bank Reconciliation Statement

(a) 35

Adjusted Bank Account

	€		€
Balance b/d	3,398❻	Dishonoured cheque - J. Fahy	320❻
Interest received	140❻	Bank Charges	44❻
		Standing Order	460❻
		Balance c/d	2,714❺
	3,538		3,538
Balance b/d	2,714		

(b) 25

Bank Reconciliation Statement

			€
Balance as per Bank Statement			1,524❸
Add Unrecorded Lodgements			2,350❺
			3,874
Less Cheques not presented	No 123454	260 ❹	
	No 123457	1,140 ❹	1,400
			2,474
Add Bank error – Patricia Black			240❼
Balance as per adjusted Bank account			2,714❷

Alternative (b)

Bank Reconciliation Statement

			€
Balance as per adjusted Bank account			2,714 ❷
Add Cheques not presented	No 123454	260 ❹	
	No 123457	1,140 ❹	1,400
			4,114
Less Unrecorded Lodgements			2,350❺
			1,764
Less Bank error - Patricia Black			240❼
Balance as per Bank Statement			1,524❸

QUESTION 5 - Interpretation of Accounts

(a) 40

1 **Opening Stock** (570,000 + 76,000 – 540,000) = €106,000 ⑩

2 **Percentage Mark - up on cost**

$$\frac{\text{Gross Profit x 100}}{\text{Cost of Sales}} = \frac{160{,}000 \times 100}{570{,}000} = 28.07\%$$ ⑩

3 **Period of credit received from Creditors**

$$\frac{\text{Creditors x 365}}{\text{Credit Purchases}} = \frac{68{,}000 \times 365}{540{,}000} = 46 \text{ days}$$ ⑩

1.5 months

4 **Acid Test Ratio**

$$\frac{\text{Liquid Assets}}{\text{Current liabilities}} = \frac{36{,}000}{68{,}000} = 0.53 \text{ to } 1$$ ⑩

(b) 40

(i) Debentures (2007/2009): Debentures are long term loans. They must be repaid in full between 2007 or 2009. Normally assets are pledged to the lender up to the value of the loan. Interest at the rate of 9% per annum is paid in the meantime. ⑩

(ii) Intangible Assets: These are items of value that are not visible but saleable. They have a long-term value to a firm but do not have a physical presence e.g Goodwill, Patents. ⑩

(iii) Rate of Stock Turnover: This is the number of times during the year that the average stock is sold. The higher this figure is the better. It is calculated by dividing the Cost of sales by the average Stock. ⑩

(iv) Capital Employed: This is the total amount invested in the business. It is the shareholders' funds plus the long-term liabilities. ⑩

(c) 10

The above firm would have difficulty paying its debts because the Current Ratio and the Acid Test Ratio of 1.64 to 1 and 0.53 to 1 respectively are well below the accepted norms of 2 to 1 and 1 to 1 respectively. This means that the firm has only 53c available immediately for each €1 owed.

(d) 10

Businesses take risks and for this they expect to earn more than they could get by investing their money in risk-free securities. The Return on Capital Employed for 2002 was 19.54%. The return currently available from banks and building societies is less than 5% so the company is performing well. This figure is more than double last years figure of 8%. This is a profitable firm.

QUESTION 6 – Final Accounts of a Service Firm

(a) 30

Statement of Capital (Total Net Assets) on 1/1/2002

	€	€
Assets		
Guest House	450,000 ❹	
Holiday home	110,000 ❹	
Boats	12,000 ❸	
Stock Fuel/oil	800 ❸	
Linen and Equipment	1,200 ❸	
Cash at bank	1,160 ❺	575,160
Less Liabilities		
Advance Deposits		1,500 ❺
Capital		573,660 ❸

(b) 40

Profit and Loss Account for Year ended 31/12/2002

		€	€
Income			
Receipts from guests	**W 1**	27,250 ❹	
Rent from Holiday home	**W 2**	8,700 ❹	
Boat hire receipts		3,300 ❷	39,250
Less Expenses			
Guest house provisions	**W 3**	7,248 ❻	
Light and Heat	**W 4**	1,000 ❻	
Wages		3,400 ❷	
Laundry		490 ❷	
Advertising		550 ❷	
Repairs and maintenance		1,600 ❷	
Depreciation - Boats		2,400 ❸	
- Equipment and Linen		300 ❸	16,988
Net Profit			22,262 ❹

(c) $\boxed{30}$

Balance Sheet as at 31/12/2002

		Cost	Depreciation	Net
Fixed Assets				
Guest House		450,000❷		450,000
Holiday Home		110,000❷		110,000
Boats		12,000❷	2,400❷	9,600
Linen and equipment		1,200❷	300❷	900
		573,200	2,700	570,500
Current Assets				
Bank			2,770 ❸	
Stock of oil			750 ❸	
			3,520	
Current Liabilities				
Advance deposits for 2003		1,550❸		
Owing for provisions/creditors		260❸	1,810	
				1,710
				572,210
Financed by				
Capital			573,660 ❶	
Add Net Profit			22,262 ❶	
			595,922	
Less Drawings	W 5		23,712 ❹	572,210
				572,210

Workings

W 1	**Receipts from guests**	28,800	
	Less deposits for 2003	(1,550)	27,250
W 2	**Rent from Holiday home**	7,200	
	Add advance deposits on 1/1/2002	1,500	8,700
W 3	**Guest house provisions**	8,800	
	Add Amount owing 31/12/2002	260	
		9,060	
	Less Drawings	(1,812)	7,248
W 4	**Light and Heat** stock on 1/1/2002	800	
	Add Payment	950	
	Less stock on 31/12/2002	(750)	1,000
W 5	**Drawings** - cash	21,900	
	Add Provisions	1,812	23,712

QUESTION 7 - Cash Flow Statement

(a) 30

Reconciliation of Operating profit to net cash flow from operating activities:

	€
Operating profit	144,000 ❸
Depreciation	17,000 ❻
Increase in Stock	(24,000) ❻
Increase in Debtors	(23,000) ❻
Decrease in Creditors	(11,000) ❻
Net Cash inflow from operating activities	103,000 ❸

(b) 70

Cash Flow Statement of Arkins Ltd for the year ended 31/12/2002

		€
Operating Activities ❷		
Net cash inflow from Operating activities		103,000 ❺
Return on investments and servicing of finance ❷		
Interest paid		(8,000) ❽
Taxation ❷		
Tax paid		(24,000) ❽
Capital expenditure and Financial Investment ❷		
Purchase of fixed assets		(60,000) ❽
Equity dividends paid ❷		
Dividends paid		(20,000) ❽
Net cash outflow before liquid resources and financing		(9,000)
Financing		
Issue of Shares	50,000 ❽	
Repayment of debentures	(30,000) ❽	
Net cash inflow from financing		20,000
Increase in Cash	❸	11,000

Reconciliation of net cash to movement in net debt

Increase in cash during period	11,000 ❶
Cash paid for repayment of debentures	30,000 ❶
Change in net debt	41,000
Net debt at 1/1/2002	(95,000) ❶
Net debt at 31/12/2002	(54,000) ❶

Alternative – QUESTION 7 - Cash Flow Statement

(a) 30

Reconciliation of Operating profit to net cash flow from operating activities:

	€
Operating profit	144,000 ❸
Depreciation	17,000 ❻
Increase in Stock	(24,000) ❻
Increase in Debtors	(23,000) ❻
Decrease in Creditors	(11,000) ❻
Net Cash inflow from operating activities	103,000 ❸

(b) 70

Cash Flow Statement of Arkins Ltd for the year ended 31/12/2002

		€
Operating Activities ❷		
Net cash inflow from Operating activities		103,000 ❺
Return on investments ❷		
Interest paid	(8,000)	
Net cash outflow from return on investment		(8,000) ❽
Taxation ❷		
Tax paid	(24,000)	
Net cash outflow from taxation		(24,000) ❽
Investing activities ❷		
Purchase of fixed assets	(60,000)	
Net cash outflow from investing activities		(60,000) ❽
Equity dividends paid ❷		
Dividends paid	(20,000)	
Net cash outflow from dividends		(20,000) ❽
Net cash outflow before liquid resources and financing ❹		(9,000)
Financing		
Issue of Shares	50,000 ❽	
Repayment of debentures	(30,000 ❽	
Net cash inflow from financing		20,000
Increase in Cash	❸	11,000

QUESTION 8 - Cost -Volume- Profit Analysis (Marginal Costing)

80

(a) Contribution per unit

	€	
Selling price	35	
Variable cost	15	
Contribution	**20**	**€20** ⑩

(b) Break-even point. = $\frac{16,000}{20}$ = **800 units** ⑩

(c) Marginal Costing Statements

Production levels	**700 units**	**900 units**	**1,200 units**	**1,500 units**
Sales	24,500	31,500	42,000	52,500
Less Variable cost	10,500	13,500	18,000	22,500
Contribution	14,000	18,000	24,000	30,000
Fixed cost	16,000	16,000	16,000	16,000
Profit/Loss in €1	❺ **(2,000)**	❺ **2,000**	❺ **8,000**	❺ **14,000**

(d) Level of sales required = $\frac{\text{Fixed cost + target profit}}{\text{Contribution Per Unit}}$

= $\frac{16,000 + 8,800}{20}$

= 1,240 units @ €35 = **€43,400** ⑳

(e) Margin of safety in units = 1,240 - 800 = **440** ⑫

Margin of safety in Euro = 440 x 35 = **€15,400** ❽

QUESTION 9 –Budgeting

80

(a) **Sales Budget**

	Slim	Durable
Quantities	600	400
Expected Selling Price per unit	€140	€160
Budgeted Sales Value	**€84,000** ❼	**€64,000** ❼

(b) **Production Budget**

	Slim	Durable
Budgeted Sales (units)	600	400
Add Budgeted closing stock	110	60
	710	460
Less budgeted opening stock	120	80
Budgeted production (in units)	**590** ❽	**380** ❽

(c) **Material Usage Budget**

		Material A	Material B	
Slim	(590 x 3 gms)	1,770 gms	2,360 gms	(590 x 4 gms)
Durable	(380 x 4 gms)	1,520 gms	1,900 gms	(380 x 5 gms)
Material usage budget (in units)		**3,290 gms** ❽	**4,260 gms** ❽	

(d) **Materials Purchases Budget**

	Material A	Material B
Material usage in grams	3,290 ❷	4,260 ❷
Add Budgeted Closing stock	320 ❸	260 ❸
Less Budgeted Opening stock	(300) ❸	(240) ❸
Material Purchases Budget in grams	**3,310**	**4,280**
Purchase price	€10 ❶	€11 ❶
Material Purchases Budget in €'s	**€33,100** ❶	**€47,080** ❶

(e) **Labour Budget**

Production		
Slim	(590 x 6 hrs)	3,540 ❺
Durable	(380 x 5 hrs)	1,900 ❺
Budgeted Direct Labour (in hours)		**5,440**
		€12 ❷
Direct Labour Budget (in €'s)		**€65,280** ❷