2013 Accounting

Higher - Solutions

Finalised Marking Instructions

2013 Accounting

Higher – Solutions

Question 1

Glencairn plc
Trading and Profit and Loss and Appropriation Account for year ended 31 December Year 4 ✓

	£000	£000		£000	
Sales				430	***(1)***
Opening Stock		30	***(1)***		
plus Purchases		246	***(1)***		
		276			
less Closing Stock		20	***(1)***		
		256			
plus Warehouse Expenses		16	***(1)***		
COST OF SALES				272	
GROSS PROFIT ✓				158	
Plus Revenue					
Dividends due from Investments		3	***(1)***		
Discounts		4	***(1)***	7	
				165	
Less Expenses					
Administration Expenses (36-2)		34	***(2)***		
Selling and Distribution Expenses		33	***(1)***		
Rent and Rates (5+1)		6	***(2)***		
Wages		40	***(1)***		
Debenture Interest (10% x 80)		8	***(2)***		
Provision for Bad Debts increase (6-5)		1	***(2)***		
Provision for Depreciation					
Office Equipment (10% x 30)		3	***(2)***		
Motor Vehicles (20% x (50-10))		8	***(2)***	133	
NET PROFIT BEFORE TAX ✓				32	
less Corporation Tax				8	***(1)***
NET PROFIT AFTER TAX				24	
ADD Unappropriated Profit c/f				10	***(1)***
				34	
Less Appropriations					
Goodwill w/d		12	***(1)***		
Interim Ordinary Dividend		6	***(1)***		
Final Proposed Dividend - Ordinary Shares		15	***(2)***	33	
UNAPPROPRIATED PROFIT C/F ✓				1	***(27)***

Balance Sheet as at 31 December Year 4 ✓

	£000		£000		£000	
FIXED ASSETS	Cost		Depn		NBV	
Buildings	100		-10		110	***(1)***
Office Equipment	30		11		19	***(1)***
Motor Vehicles	50		18		32	***(1)***
					161	
Investments					70	***(1)***
Goodwill (20-12)					8	***(1)***
					239	
CURRENT ASSETS						
Vat	16	***(1)***				
Stock	20	***(1)***				
Debtors (60-6)	54	***(2)***				
Dividends due	3	***(1)***				
Admin Expenses prepaid	2	***(1)***	95			
LESS CURRENT LIABILITIES						
Proposed Final Ordinary Dividend	15	***(1)***				
Creditors	35	***(1)***				
Bank Overdraft (6+1)	7	***(2)***				
Corporation Tax due	8	***(1)***				
Debenture Interest owing	8	***(1)***	73			
WORKING CAPITAL					22	
TOTAL NET ASSETS					261	
FINANCED BY:						
150,000 £1 Ordinary Shares					150	***(1)***
ADD RESERVES						
Revaluation Reserve			10	***(1)***		
Unappropriated Profit			1	***(1)***		
Share Premium (30-10)			20	***(2)***	31	
					181	
LONG TERM LIABILITIES						
10% Debentures					80	***(1)***
					261	
						(23)
						(50)

Question 2

Part A

(a) (i) Mark-up Ratio

Gross Profit = 40% x £160,000 = £64,000 ***(1)***

Cost of Sales = £160,000 - £64,000 = £96,000 ***(1)***

Mark-up Ratio = £64,000/£96,000 x 100 = **66.7%** ***(1)*** ***(3)***

(ii) Opening Stock

Rate of Stock Turnover = 10 times

Average Stock = 96/10 = £9,600 ***(1)***

Opening Stock = (9,600 x 2) = £19,200 - £10,000 = **£9,200** ***(1)*** ***(2)***

(iii) Purchases

= £96,000 - £9,200 + £10,000 = **£96,800** ***(2)*** ***(2)***

(iv) Return on Capital Employed

Capital = £120,000

Expenses = 20% x £160,000 = £32,000 ***(1)***

Net Profit = Gross Profit – Expenses

Net Profit = £64,000 - £32,000 = £32,000 ***(1)***

Return on Capital Employed = 32,000/120,000 x 100 = **26.7%** ***(2)*** ***(4)***

(v) Debtors Collection Period

(1)

Credit Sales = 75% x £160,000 = £120,000

(1)

12,000/120,000 x 365 = **36.5 days** *(2)*

(vi) Fixed Asset Turnover

Sales:Fixed Assets

160,000:80,000 = **2:1** *(2)* *(2)*

(15)

(b) (i) Cost of Goods Sold

Rate of Stock Turnover = 12 times

(1)

Average Stock =£ 9,600 x 75% = £7,200

(1)

Cost of Sales = 12 x £7,200 = **£86,400** *(2)*

(ii) Gross Profit

Sales – Cost of Sales = Gross Profit

(1)

Sales = £160,000 x 115% = £184,000

(1)

£184,000 - £86,400 = **£97,600** *(2)*

(iii) Purchases

Purchases = Cost of Sales – Opening Stock + Closing Stock

(1) *(2)*

= £86,400 - £10,000 + (2x £7,200 - £10,000) = **£80,800** *(3)*

(iv) Expenses = 15% of Sales

15% x £184,000 = **£27,600** ***(2)***

(v) Net Profit

Gross Profit less Expenses

£97,600 - £27,600 = **£70,000** ***(1)***

(10)

(c) Gross Profit Ratio

£97,600/£184,000 x 100 = **53.04%** ***(2)***

3 reasons for change in Gross Profit Ratio**:**

Cheaper Supplier
Bulk buying
Less wastage
Better stock control/more security/supervision
Increase in selling prices etc

Any 3 x 1 ***(3)***

(5)

Part B

Statement of Amended Net Profit at 31 December Year 2

	£		£		
Original Net Profit			54,000	***(1)***	
Add					
Error 1 – Sales	3,600	***(1)***			
Error 4 – Rent Received	1,000	***(2)***			
Error 6 – Laptop	520	***(1)***			
Error 7 – Stock	300	***(1)***	5,420		
			59,420		
Less					
Error 2 – Wages	3,200	***(1)***			
Error 5 – Loss on Sale	700	***(2)***	3,900		
Amended Net Profit			55,520	***(1)***	***(10)***

(40)

Question 3

(a) Accumulated Fund at 1 January Year 2

Assets	£000		£000	
Subs in Arrears			2	***(1)***
Equipment			6	
Bar Stock			3	***(1)***
Bank			12	
			23	
Liabilities				
Subs in advance	3	***(1)***		
Creditors for Bar Purchases	2			
Loan	10	***(1)***		
Rent due on clubhouse	4		19	
			4	***(4)***

(b)

(i) Bar Trading Account for the year ended 31 December Year 2 ✓

	£000		£000	
Bar Sales			21	***(1)***
Less: Cost of sales				
Opening Stock	3	***(1)***		
Add Carriage on bar purchases	1	***(1)***		
Purchases for Bar (9 - 2 + 1)	8	***(3)***		
(1) (1) (1)	12			
Less: Closing Stock	2	***(1)***	10	
Gross Profit			11	
Less: Expenses				
Bar Wages (21/3)	7	***(2)***		
Electricity (10 * 3/5)	6	***(2)***	13	
Loss on Bar ✓			-2	***(11)***

(ii) Income and Expenditure Account the year ended 31 December Year 2 ✓

	£000		£000		
Income					
Profit on Dance (4 - 2)			2	***(2)***	
Profit on Raffle (3 - 1 - 1)			1	***(2)***	
Profit on Vending Machines (4 - 2)			2	***(2)***	
Subscriptions (60 ***(1)*** + 3 ***(1)*** + 4 ***(1)***)			67	***(3)***	
Life Membership Fees (20% * 20)			4	***(2)***	
			76		
Expenditure					
Loss on Bar	2	***(1)***			
Wages	14	***(1)***			
Coaches Honorarium	2	***(1)***			
Electricity (10 * 2/5)	4	***(1)***			
Stationery (2 ***(1)*** -1 ***(1)***)	1	***(2)***			
Rent of Clubhouse (24 – 4 ***(1)*** + 3 ***(1)***)	23	***(2)***			
Depreciation: Equipment (6 + (8 x 1/2) *10%	1	***(3)***	47		
Surplus ✓			29		***(22)***

(c) Bank Balance at 31 December Year 2

Opening Balance	12			
Add Receipts	115			
	127			
Less Payments	87			
	40	***(3)***		***(3)***

(40)

Question 4

(a) Stakeholders

Any Government body (once only), Partners/Owners/Investors, Suppliers/Creditor, Banks, Customers, Local Community, Employees, Managers, Lenders etc

Any 4 x 1 (4 marks max) ***(4)***

(b) Procedure for admission of new partner

- Revaluation of Assets ***(1)***
- Sharing of any profit or loss on revaluation among existing partners ***(1)***
- Valuation of goodwill ***(1)***
- Sharing of goodwill among existing partners ***(1)***
- Goodwill can be written off between the new partners ***(1)***
- Update capital accounts ***(1)***

Revision of the partnership agreement to include the financial ***(1)*** details of the new partner – capital, drawings, interest on each, salary, premium for goodwill, and the new profit sharing ratio ***(1 max)*** ***(4)***

(c) Limited Partner

A Limited Partner is one who contributes capital to the partnership but has limited liability. ***(1)*** Limited partners may not take part in the management of the partnership ***(1)*** or make contracts on behalf of the partnership ***(1)*** or withdraw or receive back any part of the capital they have invested during the lifetime of the partnership. ***(1)*** One limited partner per partnership or if a LLP all partners were limited. ***(1 only)*** **Max 2** ***(2)***

(10)

Question 5

(a) Duties of a financial accountant

- Reports to the owners of the firm the effect of managerial decisions on the performance of the firm ***(1)***
- Keeps accurate records of the daily financial transactions of the firm ***(1)***
- Checks the financial records to maintain accuracy and reduce fraud ***(1)***
- Prepares periodic financial statements to show profit/loss, balance sheet etc ***(1)***
- Prepares accounts for auditing and publication as and if required ***(1)***
- Ensures that the firm is operating within the rules laid down by legislation from government or professional bodies ***(1)***
- Taxation calculations ***(1)***
- Ratio analysis ***(1)***

(6)

Max 6

(b) Difference between Preference Shares and Ordinary Shares

Preference Shares	**Ordinary Shares**
• First to receive any dividend/return	• Last to receive any dividend/return
• Dividends are a fixed rate	• Dividends are at a variable rate
• First to be repaid capital	• Last to be repaid capital
• No voting rights at AGM	• Voting rights at AGM
• Dividends can be cumulative	• Dividends not cumulative
• Shares can be redeemable	• Shares are non-redeemable
• Less risky investment	• More risky investment

1 mark per line to a maximum of 4 (must be comparison)

(4)

(10)

Question 6

PART A

(a)

		Product R		Product S		Product T		
		£000		£000		£000		
(i)	Unit Selling Price	105	***(1)***	300	***(1)***	350	***(1)***	
(ii)	Variable Cost	60	***(1)***	205	***(1)***	250	***(1)***	
(iii)	Contribution	45	***(1)***	95	***(1)***	100	***(1)***	***(9)***

(b) Total Machine Hours 8000 x 2 16,000 ***(2)***

(c) Year 3 hours = 16,000
Increase capacity – 25% = 4,000
New machine hours = 20,000

	Product R		Product S		Product T			
Contribution per	£45/2		£95/2		£100/2			
machine hour	£22.50		£47.50		£50			
Order of Priority	3		2		1	***(1)***		
Hours allotted	6,000	***(2)***	8,000	***(2)***	6,000	***(2)***		
Units	3,000	***(2)***	4,000	***(2)***	3,000	***(2)***		
Total Contribution	£135,000	***(1)***	£380,000	***(1)***	£300,000	***(1)***	£815,000	
less Fixed Costs							430,000	***(1)***
Profit ✓							£385,000	
								(17)

(d) New contribution per unit for R = £45 + £3 = £48 **(1)**
New contribution per machine hour = £48/1 = £48
Order of Priority now T, R, S

	Product R		Product S		Product T			
Hours allotted	8000	***(1)***	6000	***(1)***	6000			
Contribution per machine hour	£48	***(2)***	£47.50	***(2)***	£50.00	***(2)***		
Total contribution	£384,000		£285,000		£300,000		£969,000	***(1)***
less Fixed Costs							430,000	
Maximum Profit							£539,000	
								(10)

(e) Yes Profit has increased ***(2)*** (by (539,000 – 385,000) = £154,000) ***(2)***

(40)

PART B

(a) **(i)** Total losses = 500 – 450 = 50 kg ***(1)***

Normal loss = 4% x 500 = 20 kg ***(1)***

Abnormal loss = 50 – 20 = 30 kg ***(1)*** ***(3)***

(ii) Cost per kg = £8160/480 = £17 ***(3)*** ***(3)***

(2) ***(1)***

(b) Cost per kg = (£8160 - £96)/480

= £16.80

Reduction ✓ = 20p per kg ***(1)*** ***(4)***

(10)

Question 7

PART A

Production Budget - July - October - Year 4

	July	August	September	October	
Sales	4,000	4,300	4,600	5,000	
plus Closing Stock	1720	1840	2000	1920	***1 line***
	5,720	6,140	6,600	6,920	
less Opening Stock	1600	1720	1840	2000	***1 line***
Production	4,120	4,420	4,760	4,920	***(1 each)***

(6)

Cash Budget for 2 months/August-September (Year 4) ✓

	August		September	
Opening Balance	12,000	***(1)***	50,460	
RECEIPTS				
Cash Sales	103,200	***(1)***	110,400	***(1)***
Credit Sales	51,840	***(2)***	55,728	***(2)***
Loan	30,000	***(1)***		
Ordinary Shares	10,000	***(1)***		
Share Premium	2,000	***(1)***		
Proceeds of Sale - Van	6,800	***(2)***		
TOTAL RECEIPTS	£203,840		£166,128	
PAYMENTS				
Materials	66,640	***(1)***	68,880	***(1)***
Labour	53,040	***(1)***	57,120	***(1)***
Variable Overheads (1)	22,100	***(1)***	23,800	***(1)***
Variable Overheads (2)	20,600	***(1)***	22,100	***(1)***
Fixed Overheads	3,000		3,000	***(1)***
Loan Repayment			2,500	***(1)***
Loan Interest			125	***(2)***
TOTAL PAYMENTS	£165,380		£177,525	
Closing Balance	£50,460		£39,063	***(24)***

(30)

TOTAL SALES	155,040	166,128

PART B

(a)

Stock at start	150	
Purchases	1,200	
	1,350	
Less: issues	1,160	
Stock at end	190	***(3)***

(3)

(b) £2.25 ***(1)*** ***(1)***

(c) Stock Record Card of Par72 for March

Date	Details	Receipts			Issues				Balance		
		Q	P	V	Q	P	V		Q	P	V
01-Mar	Balance								150	£2.00	£300
04-Mar	Purchase	400	£2.10	£840					150	£2.00	£300
									400	£2.10	£840
08-Mar	Issue				300	£2.10	£630	**(1)**	150	£2.00	£300
									100	£2.10	£210
12-Mar	Purchase	400	£2.20	£880					150	£2.00	£300
									100	£2.10	£210
									400	£2.20	£880
15-Mar	Issue				20	£2.10	£42	**(1)**	150	£2.00	£300
					400	£2.20	£880	**(1)**	80	£2.10	£168
21-Mar	Purchase	400	£2.25	£900					150	£2.00	£300
									80	£2.10	£168
									400	£2.25	£900
29-Mar	Issue				40	£2.10	£84	**(1)**	150	£2.00	£300
					400	£2.25	£900	**(1)**	40	£2.10	£84
											£384

(1)

(6)

(10)

(40)

Question 8

(a) (i) & (ii)

	A	B	C	X	Y	
	£	£	£	£	£	
Rent	36,000	54,000	27,000	18,000	9,000	***(2)***
Canteen Costs	36,000	22,500	18,000	9,000	4,500	***(2)***
Power	40,000	96,000	24,000	-	-	***(2)***
Heat and Light	9,000	13,500	6,750	4,500	2,250	***(2)***
Machine Insurance	1,500	4,500	3,000	-	-	***(2)***
Indirect Materials	7,720	7,517	13,910	8,730	3,155	***(1)***
	130,220	198,017	92,660	40,230	18,905	
X	17,880	11,175	8,940	(40,230)	2,235	***(2)***
	148,100	209,192	101,600	-	21,140	
Y	5,100	13,240	2,800	-	(21,140)	***(2)***
	153,200	222,432	104,400			

(15)

(b) Absorption rate (A) = £153,200/38,300
= £4 (per labour hour) ***(2)***

Absorption rate (B) = £222,432/26,480
= £8.40 (per machine hour) ***(2)***

Absorption rate (C) = £104,400/10,440
= £10 (per labour hour) ***(2)***
(6)

(c) Quotation

		£	£		
Direct material			192	***(1)***	
Direct labour	A 30 x £8	240 ***(3)***			
	B 15 x £10	150 ***(3)***			
	C 6 x £9	54 ***(3)***	444		
Overheads	A30 x £4	120 ***(2)***			
	B10 x £8.40	84 ***(2)***			
	C6 x £10	60 ***(2)***	264		
Total Cost			900		
Profit			600	***(3)***	
Selling Price	✓		1,500		***(19)***

(40)

Question 9

(a) Assumptions of Break-even Analysis

- All costs are classified as either fixed or variable ***(1)***
- Variable costs vary directly with output ***(1)***
- Fixed costs remain constant for all levels of output ***(1)***
- Selling price per unit is constant ***(1)***
- There is only one product ***(1)***
- All production is sold ***(1)***
- There are no changes in material or wages costs ***(1)***

Max 4

(b) Profit Volume Ratio

The PV Ratio shows the relationship between contribution and sales ***(1)***

The formula is Contribution (per unit)/Selling Price (x 100) ***(1)***

The higher the ratio, the greater the profit ***(1)***

The ratio can be improved by higher sales (or selling prices) or lower variable costs (or cost prices) ***(1)*** or by using a product mix which gives the maximum contribution ***(1)***

The ratio can be used for any level of sales and net profit can be found by deducting fixed costs from contribution ***(1)***

If a firm sells several products the ratio is useful to compare the profitability of each product ***(1)***

PV ratio is constant ***(1)***

Max 3

Margin of Safety

The Margin of Safety is the difference between the break-even point and actual sales revenue ***(1)***

It can be stated in terms of units or in terms of sales revenue ***(1)***

It may be expressed as a percentage of actual sales ***(1)***

A narrow margin of safety denotes that a small fall in sales value can have a significant effect on profits ***(1)***

A wide margin indicates a large fall in sales volume would be necessary before the BEP was reached. ***(1)***

A wide margin of safety is desirable ***(1)***

The margin of safety can be shown on a break-even chart to illustrate its size ***(1)***

Max 3

(10)

Question 10

(a) Factors to include when setting re-order quantities

- The level of demand for the product ***(1)***
- Amount of discount for bulk-buying ***(1)***
- The length of time for delivery ***(1)***
- Cost of delivery ***(1)***
- Cost of operating the stores eg wages ***(1)***
- Risk of specification of the product changing ***(1)***
- Risk of obsolescence ***(1)***
- Deterioration or wastage of the product ***(1)***
- Cost of insurance ***(1)***
- Amount of capital tied up in stores ***(1)***
- Legal restrictions on amount of stock of dangerous materials to be kept ***(1)***
- Storage space ***(1)***
- Maximum stock level ***(1)***
- Rate of consumption/usage ***(1)*** ***Max 4***

(b) Opportunity Cost

This arises when a firm is working at full capacity and proposes to introduce a new product ***(1)***

This arises when a firm has to decide whether to make or buy a product ***(1)***

This would involve a reduction in the amount which could be made of an existing product ***(1)***

The opportunity cost represents the amount of contribution lost by making less of the existing product ***(1)***

The actual cost of making the new product will include the 'extra' or opportunity cost equal to the contribution lost ***(1)***

Max 3

Semi-variable Cost

A semi-variable cost includes an element of both fixed and variable costs ***(1)***

Normally the fixed element is in the form of a standing charge ***(1)*** while the variable element depends on usage ***(1)***

Examples include bills for gas, electricity and the telephone ***(1) (max)*** ***Max 3***

(10)

[END OF MARKING INSTRUCTIONS]