Accounting
Level 3

International Qualifications from EDI

Model Answers
Series 2 2012 (3012)

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Accounting Level 3
Series 2 2012

How to use this booklet

Model Answers have been developed by EDI to offer additional information and guidance to Centres, teachers and candidates as they prepare for LCCI International Qualifications. The contents of this booklet are divided into 3 elements:

(1)	Questions	– reproduced from the printed examination paper
(2)	Model Answers	– summary of the main points that the Chief Examiner expected to see in the answers to each question in the examination paper, plus a fully worked example or sample answer (where applicable)
(3)	Helpful Hints	– where appropriate, additional guidance relating to individual questions or to examination technique

Teachers and candidates should find this booklet an invaluable teaching tool and an aid to success.

EDI provides Model Answers to help candidates gain a general understanding of the standard required. The general standard of model answers is one that would achieve a Distinction grade. EDI accepts that candidates may offer other answers that could be equally valid.

QUESTION 1

If a trial balance does not balance there must be errors, either within the trial balance itself, or in the underlying accounting records. However, the following types of error do not cause trial balance totals to differ:

(1) error of omission
(2) error of commission
(3) error of principle
(4) reversal of entries
(5) error of original entry.

The accountant of Shrub Ltd is inexperienced and has made the following errors affecting the company's accounts for the year ended 31 March 2012:

(i) a sales invoice for £47 has been recorded as £74 in the Sales Day Book

(ii) a repairs invoice for £2,000 has been debited to Motor Vehicles at Cost Account (depreciation for the year has been charged at 20% on the closing balance on Motor Vehicles at Cost Account)

(iii) no entry has been made for bank charges of £750

(iv) an electricity charge of £827 has been debited to Postage and Stationery Account

(v) a contra of £75 between the Purchase Ledger Control Account and the Sales Ledger Control Account has been entered the wrong way round (control accounts are part of the double entry system)

(vi) closing stock costing £300 has been omitted from the stock sheets

(vii) telephone expenses of £125 have been included in Repairs Account.

None of the above errors caused the Trial Balance totals to differ.

REQUIRED

(a) Prepare Journal entries (without narratives) correcting errors (i) to (vii) above. For each Journal entry state (choosing from (1)-(5) above) which type of error you are correcting.

(16 marks)

(b) Prepare a calculation showing the change in net profit resulting from the correction of the errors.

(6 marks)

(c) Give **two** examples of types of error which cause trial balance totals to differ.

(3 marks)

(Total 25 marks)

MODEL ANSWER TO QUESTION 1
Syllabus Topic 1: Levels 1 and 2 revisited

(a) **Journal entries**

		DR £	CR £	
(i)	Sales (74 – 47)	27		½
	Sales Ledger Control		27	½
	Error of original entry (5)			1
(ii)	Repairs	2,000		½
	Motor Vehicles at Cost		2,000	½
	Motor Vehicles Accumulated Depreciation	400		½
	Depreciation (2,000 x .20)		400	½
	Error of principle (3)			1
(iii)	Bank charges	750		½
	Bank		750	½
	Error of omission (1)			1
(iv)	Electricity	827		½
	Postage and Stationery		827	½
	Error of commission (2)			1
(v)	Purchase Ledger Control (75 x 2)	150		1
	Sales Ledger Control		150	1
	Reversal of entries (4)			1
(vi)	Stock (BS)	300		½
	Stock (Trading Account)		300	½
	Error of omission (1)			1
(vii)	Telephone	125		½
	Repairs		125	½
	Error of commission (2)			1

(16 marks)

(b) **Effect on profit**

		£	
(i)	Error recording sales invoice	(27)	1
(ii)	Repairs charged to motor vehicles	(2,000)	1
	Depreciation charged on repairs	400	1
(iii)	Bank charges omitted	(750)	1
(iv)	Stock omitted	300	1
	Reduction in profit	(2,077)	1 of (unless aliens)

(6 marks)

(c) **Errors affecting balancing of trial balance**

- Incorrect calculations e.g. addition in trial balance
- Numbers differing in debit/credit for same transaction
- Only entering one half of the double entry
- Entering two debits or two credits for one transaction
- Omitting balance from the trial balance etc.

Any 2 x 1½ (3 marks)

(Total 25 marks)

QUESTION 2

Hill plc's draft Trial Balance at 31 March 2012 is as follows:

	£000 Dr	£000 Cr
Sales (all on credit)		12,000
Stock (at 1 April 2011)	2,100	
Purchases	8,100	
Operating expenses	3,000	
Fixed assets (net book value)	12,000	
Trade debtors/Trade creditors	1,700	1,100
Bank	70	
Retained earnings (at 1 April 2011)		11,870
Ordinary shares (£0.50 each)		2,000
	26,970	26,970

At 31 March 2012 Hill plc's shares were quoted at £0.70 each.

The following adjustments are required to the Trial Balance:

(1) inclusion of a further £100,000 sales, for which the money is still to be received
(2) writing off £30,000 of bad debts
(3) inclusion of a further £60,000 purchases, for which the money has still to be paid
(4) depreciation at 10% of the net book value of fixed assets
(5) contras of £10,000 between trade debtors and trade creditors.

Stock, at cost, at 31 March 2012, was £3,000,000, after taking into consideration the above adjustments. This figure needs to be reduced by 10% to allow for obsolete stock.

REQUIRED

(a) Prepare, for Hill plc, the Trading and Profit and Loss Account for the year ended 31 March 2012, and the Balance Sheet at 31 March 2012.

(12 marks)

(b) Calculate (to **two** decimal places), for Hill plc, the following ratios:

- (i) gross profit to sales percentage
- (ii) net profit to sales percentage
- (iii) current (working capital)
- (iv) liquidity (acid test)
- (v) debtors' collection period (based on closing debtors and expressed in days)
- (vi) sales to fixed assets
- (vii) earnings per share
- (viii) earnings yield
- (ix) price/earnings.

(13 marks)

(Total 25 marks)

MODEL ANSWER TO QUESTION 2
Syllabus Topic 8: Accounting ratios

(a)

Hill plc
Trading, Profit and Loss Account Year Ended 31 March 2012

		£000	£000	
Sales (12,000 + 100)			12,100	1
Less Cost of goods sold: Opening Stock		2,100		½
	Purchases (8,100 + 60)	8,160		1
		10,260		
	Closing Stock (3,000 x .90)	(2,700) 1	7,560	
Gross profit			4,540	
Less Operating expenses [3,000 + 30 + (.10 x 12,000)]			4,230	1½
Net profit			310	

Hill plc
Balance Sheet at 31 March 2012

	£000	£000	
Fixed Assets (12,000 x .90)		10,800	1
Current Assets			
Stock	2,700		½of
Trade debtors (1,700 + 100 – 30 – 10)	1,760		2
Bank	70		½
	4,530		
Current Liabilities			
Trade creditors (1,100 + 60 – 10)	(1,150) 1½	3,380	
		14,180	

	£000	
Share Capital and Reserves		
Ordinary shares (£0.50 each)	2,000	½
Retained earnings (11,870 + 310)	12,180	1
	14,180	

(12 marks)

(b) **Ratios**

(i)	Gross profit to sales percentage	(4,540/12,100) x 100	=	37.52%	1
(ii)	Net profit to sales percentage	(310/12,100) x 100	=	2.56%	1
(iii)	Current (working capital)	4,530/1,150	=	3.94:1	1
(iv)	Liquidity (acid test)	1,830/1,150	=	1.59:1	1
(v)	Debtors' collection period	(1,760 x 365)/12,100	=	53.09 days	2
(vi)	Sales to fixed assets	12,100/10,800	=	1.12 times	1
(vii)	Earnings per share	310/(2 x 2,000)	=	£0.08	2
(viii)	Earnings yield	(0.08/0.70) x 100	=	11.43%	2
(ix)	Price/earnings	0.70/0.08	=	8.75 times	2

(13 marks)

(Total 25 marks)

QUESTION 3

Meads spends £1 each week on the Lottery. In March 2012 he won £1,000,000 and decided to use it as follows:

		£
(1)	Personal spending (new car, house etc)	200,000
(2)	Purchase of government bonds	200,000
(3)	Buy a share in a business	600,000
		1,000,000

The business in which he invested would have to be one which provided him with employment, suitable for using his skills as a plumber.

Three businesses (A, B and C) have made Meads offers, under which Meads would invest and start work on 1 January 2013. Set out below are each of the business offers received by Meads.

Business A: Castle and Cary invite Meads to join their partnership on the following terms:

- no partnership agreement to be drawn up
- £400,000 to be provided as a loan
- £200,000 invested as partnership capital
- goodwill to be valued at £30,000, but not to be shown in the partnership accounts.

The expected profit of the new partnership for 2013, after interest, is £120,000.

REQUIRED

(a) Calculate:

(i) The balance on Meads' Capital Account (after adjusting for goodwill) on 1 January 2013.

(ii) Meads' expected total income from the new partnership for 2013.

(5 marks)

Business B: Heron and Water invite Meads to join their partnership on the following terms:

- a partnership agreement to be drawn up
- £600,000 to be invested as partnership capital (this was twice as much as the combined capitals of Heron and Water, before adjusting for goodwill)
- goodwill, valued at £60,000, currently unrecorded, was now to be shown in the partnership accounts
- interest on partnership capital to be allowed at 10% per year
- Meads to be entitled to a salary of £20,000 per year (this was half the salary of Heron, but four times the salary of Water)
- Meads to receive 20% of the residual profits.

The expected profit of the new partnership for 2013 is £200,000, before appropriation.

REQUIRED

(b) Calculate:

(i) The balance on Meads' Capital Account on 1 January 2013

(ii) Meads' expected total income from the partnership in 2013.

(8 marks)

QUESTION 3 CONTINUED

Business C: Bank Quay Ltd's directors invite Meads to invest in the company on the following terms:

- £400,000 to be invested in £1 Ordinary Shares, issued to Meads at a premium of £0.25 per share
- £200,000 to be invested in £0.75 Preference Shares, earning 10%, issued to Meads at a premium of £0.05 per share
- Meads to receive a salary of £30,000 per year, with a bonus equal to 20% of the net profit
- Meads would not be entitled to an ordinary share dividend in 2013.

The expected net profit of the company for 2013 is £80,000, after charging Meads' salary at £30,000 and before charging his 20% bonus.

REQUIRED

(c) Calculate:

(i) The total number of shares in Bank Quay Ltd that Meads would own on 1 January 2013

(ii) Meads' expected total income from the company in 2013.

(6 marks)

The following comments have been made:

(1) "As Meads spends money on the National Lottery neither the partnerships nor the company should consider him as an investor or employee".

(2) "Meads would be unwise to invest in preference shares issued at a premium, as dividends are only payable on their nominal value".

(3) "Limited companies offer limited liability to their investors, so Meads' capital would be more secure if invested in Bank Quay Ltd".

REQUIRED

(d) Briefly discuss the correctness, or otherwise, of **each** of the above comments.

(6 marks)

(Total 25 marks)

MODEL ANSWER TO QUESTION 3
Syllabus Topic 4: Partnerships
Syllabus Topic 5: Companies

(a) **Business A**

(i) **Capital Account Balance**

	£	
Amount invested	200,000	1
Goodwill adjustment (30,000/3)	(10,000)	1½
	190,000	

(ii) **Total Income for 2013**

	£	
Loan interest (.05 x 400,000)	20,000	1½
Share of residual profit (120,000/3)	40,000	1
	60,000	
		(5 marks)

(b) **Business B**

(i) **Capital Account Balance**

	£	
Amount invested	600,000	½
Goodwill adjustment	–	½
	600,000	

(ii) **Total Income for 2013**

	£	
Interest on capital (.10 x 600,000)	60,000	1
Salary ½ 5(workings)	20,000	½
Share of residual profit (.20 x 39,000*)	7,800	
	87,800	
		(8 marks)

Workings

	£		£	
*Budgeted profit			200,000	
Less: Salaries – Meads	20,000	½		
Heron (2 x 20,000)	40,000	1		
Water (.25 x 20,000)	5,000	1		
			65,000	
			135,000	
Interest – Meads (.10 x 600,000)	60,000	1		
Heron/Water .10 (300,000 + 60,000)	36,000	1½	96,000	
Residual profit			39,000	
				<5 marks>

(c) **Business C**

(i) **Number of shares** : Ordinary (400,000/1.25) 320,000 1½
Preference (200,000/0.80) 250,000 1½
570,000

Ordinary (400,000/1.25)	320,000	1½
Preference (200,000/0.80)	250,000	1½
	570,000	

(ii) **Total Income for 2013**

	£	
Preference dividend (250,000 x .10 x .75)	18,750	1½
Salary	30,000	½
Bonus (80,000 x .2)	16,000	1
	64,750	
		(6 marks)

MODEL ANSWER TO QUESTION 3 CONTINUED

(d) **(1) Spending**

- £1 per week is a very modest amount
- investing some of his winnings in government stock shows him to be prudent
- he has skills which may enhance the profitability of any business he joins.

1 mark per comment max 2

(2) Preference Dividend

- dividends **are** only paid on the nominal amount
- any redemption would also be based on the nominal amount
- the premium is likely to be due to 10% being above the market rate of interest for investments of equivalent risk.

1 mark per comment max 2

(3) Limited Liability

- limited liability is a feature of limited companies
- Meads' personal assets should therefore be safe
- Meads could lose £600,000 under all 3 alternatives.

1 mark per comment max 2

(6 marks)

(Total 25 marks)

QUESTION 4

Following are the summarised Trial Balances of Mary Ltd and its subsidiary Cray Ltd at 31 December 2011:

	Mary Ltd		Cray Ltd	
	£000	**£000**	**£000**	**£000**
Shares in Cray Ltd	368			
Retained earnings		124		120
Tangible fixed assets	140		120	
Current liabilities		62		28
Stock at 31 December 2011	54		104	
Ordinary shares of £1 each		680		240
Bank	64		36	
Debtors	240		128	
	866	866	388	388

Additional information:

(1) On 1 January 2011 there was a credit balance of £96,000 on the Retained Earnings Account of Cray Ltd. The profits have been assumed to accrue evenly throughout the year, as its operations are not seasonal.

(2) At 31 December 2011 the minority interest in Cray Ltd appeared as £72,000 in the draft consolidated Balance Sheet.

(3) Cray Ltd's shares were acquired by Mary Ltd on 28 February 2011.

REQUIRED

(a) Calculate:

(i) how many shares in Cray Ltd were purchased by Mary Ltd
(ii) the goodwill arising on consolidation.

(7 marks)

When reviewing the draft consolidated accounts the group accountant decided that adjustments were necessary in respect of the following:

(1) It now appears that the profits of Cray Ltd were three times as high in each of the first six months of 2011 than they were in each of the second six months of 2011.

(2) In the accounts of Mary Ltd, provision needs to be made for obsolete stock of £8,000 and bad debts of £12,000.

REQUIRED

(b) Calculate, taking into consideration the above adjustments:

(i) goodwill arising on consolidation
(ii) minority interest at 31 December 2011
(iii) the **change** in consolidated retained earnings, assuming that goodwill arising on consolidation is written off in the year of acquisition.

(7 marks)

A shareholder in Mary Ltd has suggested that the purchase of shares in Cray Ltd has not, so far, been a success.

QUESTION 4 CONTINUED

REQUIRED

(c) Based on the evidence available state (yes or no) whether the shareholder is correct, giving a reason for your choice.

(3 marks)

Pen plc acquired 80% of the ordinary shares of Mill Ltd many years ago. Extracts from the Profit and Loss Accounts of the two companies for the year ended 31 March 2012 are as follows:

	Pen Plc	**Mill Ltd**
	£000	**£000**
Turnover	5,600	1,500
Cost of sales	1,700	1,300
Administrative expenses	500	470

Additional information:

(1) Pen plc sold goods costing £80,000 to Mill Ltd for £120,000 during the year ended 31 March 2012. On that date 40% of the value of these goods remained in Mill Ltd's stock.

(2) Mill Ltd supplied administrative services costing £30,000 to Pen plc. These were charged at cost. They were recorded in Mill Ltd's books by debiting Pen plc and crediting administrative expenses. They were recorded in Pen plc's books by debiting administrative expenses and crediting Mill Ltd.

REQUIRED

(d) Calculate the following figures to be included in the Consolidated Profit and Loss Account for the year ended 31 March 2012:

(i) turnover
(ii) cost of sales
(iii) administrative expenses.

(8 marks)

(Total 25 marks)

MODEL ANSWER TO QUESTION 4
Syllabus Topic 6: Accounting for Groups of Companies

(a) (i) **Number of Ordinary Shares Purchased in Cray Ltd**

$$\frac{\text{Minority Interest}}{\text{Share Capital + Reserves}} \times 100 = \frac{\overset{½}{72}}{\underset{½}{240} + \underset{½}{120}} \times \overset{½}{100} = 20\%$$

$\therefore$ Shares purchased $= \overset{1}{.80} \times \overset{½}{240{,}000} = \underline{\underline{192{,}000}}$

(ii) **Goodwill Arising on Consolidation**

		£000	£000	
Purchase price			368	½
Less: Share capital		240		½
Retained earnings [96 + 2/12 (120 – 96)]		100		2
	.80 x	340	272	
Goodwill	½		96	

(7 marks)

(b) (i) **Revised Goodwill Arising on Consolidation**

		£000		£000	
Purchase Price				368.0	½
Less: Share capital		240.0			½
Retained earnings [96 + .25*(120 – 96)]		102.0	2½		
	.80 x	342.0	½	273.6	
Revised goodwill				94.4	

*6/24 of year

(ii) **Minority Interest**

	£000	
No change	72	1

(iii) **Change in Consolidated Retained Earnings**

	£000	
Obsolete stock	(8.0)	1
Bad debts	(12.0)	1
(Decrease)	(20.0)	

(7 marks)

(Note: the reduction in goodwill written off must be equal to the decrease in the group share of post acquisition profit)

(c) **Unsuccessful Share Purchase**

Yes. 1 Profits in Cray Ltd were three times as high in each of the first six months than they were in each of the second six months. 2

(3 marks)

(d) (i) **Turnover**

	£000	
Pen plc	5,600	½
Mill Ltd	1,500	½
Intercompany sales	(120)	1
	6,980	

(ii) **Cost of Sales**

	£000	
Pen plc	1,700	½
Mill Ltd	1,300	½
Intercompany purchases	(120)	1
Unrealised profit [.40 (120 – 80)]	16	2
	2,896	

MODEL ANSWER TO QUESTION 4 CONTINUED

(iii)	**Administrative Expenses**	**£000**	
	Pen plc	500	**½**
	Mill Ltd	470	**½**
		970	**1f**
			(8 marks)

(Total 25 marks)

QUESTION 5

Following are three criteria, all of which must be satisfied, before a capital investment project is accepted by Tan plc:

A a profit must be made in each year of the project's life

B the project must have a positive net present value at a cost of capital of 10% per year

C the project's payback period must not exceed 2 years.

Project Shelf, currently under consideration by Tan plc, is for three years and has the following budgeted figures:

- Initial investment (**Year 0**) £600,000

- Annual data –

	Year 1	Year 2	Year 3
	£ per unit	**£ per unit**	**£ per unit**
Selling price	6.00	6.25	6.50
Direct materials	2.50	2.60	2.70
Direct labour	1.30	1.30	1.40
Variable overheads	1.00	1.10	1.20
Total fixed costs	£350,000	£360,000	£370,000
Sales/Production (units)	300,000	305,000	310,000

- Residual value of initial investment (end year 3) £150,000

Total fixed costs include straight line depreciation on the initial investment. Annual cash flows are deemed to take place at the end of each year.

10% discount factors are as follows:

Year 0	1.000
Year 1	0.909
Year 2	0.826
Year 3	0.751

REQUIRED

(a) Calculate in respect of Project Shelf:

(i) the profit in each year
(ii) the net present value over the three years
(iii) the payback period.

(20 marks)

(b) Based on the calculations in (a) above, and using Tan plc's three criteria, state whether or not Project Shelf should be accepted and why.

(3 marks)

The Production Director has suggested that the procedure for selecting investment projects is too complicated. She argues that Tan plc should first calculate the payback period and, only if this is shorter than, or equal to, the project's life, should further criteria be used.

REQUIRED

(c) Discuss the Production Director's suggestion and conclude whether or not you agree with her.

(2 marks)

(Total 25 marks)

MODEL ANSWER TO QUESTION 5
Syllabus Topic 10: Introduction to decision making

(a) (i) **Profit in Each Year**

		£
Year 1	300,000 (6.00 – 4.80) – 350,000	10,000
	½ ½ 1½ ½	
Year 2	305,000 (6.25 – 5.00) – 360,000	21,250
	½ ½ 1½ ½	
Year 3	310,000 (6.50 – 5.30) – 370,000	2,000
	½ ½ 1½ ½	

(ii) **Net Present Value**

		Cash Flow £	Discount Factor	Present Value £	
Year 0	Initial investment	(600,000)	1.000	(600,000)	1
Year 1	10,000 + 150,000*	160,000	.909	145,440	2½
Year 2	21,250 + 150,000*	171,250	.826	141,452	1½
Year 3	2,000 + 150,000*	152,000	.751	114,152	1½
Year 3	Residual value	150,000	.751	112,650	1
				(86,306)	

*(600,000 – 150,000)/3

(iv) **Payback Period**

	£	
Year 0	(600,000)	½
Year 1	160,000	½
	(440,000)	
Year 2	171,250	½
	(268,750)	
Year 3	152,000	½
	(116,750)	
Year 3	150,000	½
	33,250	

Payback period therefore 3 years 1

(20 marks)

(b) The project should be rejected. 1 The net present value is negative 1 and the payback period exceeds 2 years. 1

(3 marks)

(c) **Production Director's Suggestion**
If a project does not payback it is not worth considering any further. 1 Therefore the Production Director's suggestion is valid. 1

(2 marks)

(Total 25 marks)

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