MANAGEMENT ACCOUNTING

Foundation
June 1999

MARKING SCHEME

CIPFA

Question 1

(a) **Cash budget for 6 months July to December 1999**

	Jul £	Aug £	Sep £	Oct £	Nov £	Dec £	
Balance b/f	4,000	6,900	11,760	11,280	(4,800)	(23,760)	
Sales	17,200	18,000	22,320	21,840	20,800	24,240	*3*
Scrap sale		2,000					*½*
Receipts total	17,200	20,000	22,320	21,840	20,800	24,240	
Purchases	12,000	12,000	16,800	13,200	14,400	18,000	*1*
Wages	2,000	2,800	2,200	2,400	3,000	3,000	*1*
Office exps	300	340	200	320	360	360	*1*
Electricity			3,600			2,600	*2*
Equipment				22,000	22,000		*½*
Tax						1,600	*½*
Payments total	14,300	15,140	22,800	37,920	39,760	25,560	
Balance c/f	6,900	11,760	11,280	(4,800)	(23,760)	(25,080)	*1*

NB: Depreciation must NOT be included in cash budget. *½*

1 mark for layout, etc.

(12)

Workings

Sales

	Amount	Jun	Jul	Aug	Sep	Oct	Nov	Dec
May	16,000	9,600	6,400					
Jun	18,000		10,800	7,200				
Jul	18,000			10,800	7,200			
Aug	25,200				15,120	10,080		
Sep	19,600					11,760	7,840	
Oct	21,600						12,960	8,640
Nov	26,000							15,600
Dec	26,000							
		9,600	17,200	18,000	22,320	21,840	20,800	24,240

(b) **Action to overcome cash deficits** (reference to be made to (a))

- Notify bank regarding cash deficits and renegotiate overdraft if possible.

- Try to get debtors to pay earlier (possibly by offering a small cash discount for prompt or cash payments).
- Delay payments to creditors (although need to be aware of possible loss of supplier goodwill and reputation as a poor payer).
- Can purchase of equipment be delayed? Can payment be spread over longer period? Can equipment be rented or leased?

(1 mark per valid comment up to maximum of 4 marks)

Why cash budgets are important (reference to be made to (a))

- Shows cash inflows and outflows;
- Shows cash balances (eg cash deficits from October to December);
- Establishes whether surpluses or deficits are forecast;
- Enables action to be taken
    Loans to be arranged to cover deficits
    Investments to be made with surpluses;
- Avoids problem of "paper" profits but cash flow difficulties.

(1 mark per valid comment up to maximum of 4 marks)

(8)

(c)   **Difference between Financial Accounting and Management Accounting**

- Legally required   cf   not required

- Laid down formats   cf   Any formats

- Backward looking   cf   Forward looking

- Whole business   cf   Parts

- External consumption   cf   Internal

- Accurate   cf   Approximate

(1 mark per valid comparison up to maximum of 5 marks)

(5)

(25)

Question 2

(a)

	£		
Present position:			∴ SP = £115
Sales (100,000)	11,500,000		
less Variable costs (100,000 @85)	8,500,000		
= Contribution	3,000,000	Production	1,200,000
less Fixed costs	2,500,000	Administration	700,000
Profit	500,000	Marketing	600,000

3

Suggestions:

(i)   Financial Director

	£		
Sales (120,000 × 126.5)	15,180,000	∴ SP = £126.50	
less Variable costs (120,000 × 85)	10,200,000		
= Contribution	4,980,000	Production	1,500,000
less Fixed costs	3,200,000	Administration	950,000
Profit	1,780,000	Marketing	750,000

4

(ii)   Production Director

	£		
Sales (125,000 × 103.50)	12,937,500		
less Variable costs (125,000 × 85)	10,625,000		
= Contribution	2,312,500	Production	1,300,000
less Fixed costs	2,650,000	Administration	700,000
Loss	337,500	Marketing	650,000

4

(iii) Marketing Director

	£		
Sales (105,000 × 115)	12,075,000		
less Variable costs (105,000 × 77.50)	8,137,500		
= Contribution	3,937,500	Production	1,500,000
less Fixed costs	2,875,000	Administration	700,000
Profit	1,062,500	Marketing	675,000

4

(b)   **Comments**

Finance Director's suggestion (increase price) seems to indicate greatest profit. Need to be sure how accurate forecasts of sales will be? Will fixed costs move as predicted? Can production cope with increase? Will more intensive advertising campaigns (at extra cost) be needed in future to maintain effect? Are the individual directors more concerned with "own" area rather than firm as a whole?

(1 mark per valid comment up to maximum of 5 marks)

(20)

Question 3

(a) **Material variance:** (AQ x AP) - (SQ x SP)

Filling ⊠	£6,400 - £6,250	**= £150 ADV**	*1½*
Chocolate ⊠	£7,500 - £7,500	**= nil**	*1½*

Material price variance:

Filling ⊠	£6,400 - (2,600 @ £2.50)	**= £100 FAV**	*1½*
Chocolate ⊠	£7,500 - (3,800 @£2)	**= £100 FAV**	*1½*

Material usage variance:

Filling ⊠	(2,600 kg - 2,500 kg) @ £2.50	**= £250 ADV**	*1½*
Chocolate ⊠	(3,800 kg - 3,750 kg) @ £2	**= £100 ADV**	*1½*

Labour variance: (AH x AR) - (SH x SR)

⊠	£8,400 - £8,333.33	**= £66.67 ADV**	*1*

Labour rate variance:

⊠	850 hrs. (×£10) - £8,400	**= £100 FAV**	*1*

Labour efficiency:

⊠	(850 hrs. - 833.33 hrs.) @ £10	**= £166.67 ADV**	*1*

(12)

(b) The chocolate cost centre seem to buy 'better' but use inefficiently (see price and usage variances). Possibly buying cheaper (+ inferior?) materials and having to use more. Standards could be in need of revision. Cheaper labour may have been employed (labour rate) but generally less efficient (labour efficiency variance is adverse).

(1 mark per valid comment up to maximum of 4 marks)
4 marks for comments

(c)

Profit centre -   includes responsibility for income/prices as well as costs
Investment centre -   includes responsibility for investments/capital spending as   well as costs and income.

(2 marks per valid definition)
4
(20)

Question 4

(a)   **Process A a/c**

		£		£	
½	Crude oil (10,000L)	2,500	Normal loss (1,000L)	40	1
½	Labour	1,600	Abnormal loss (500L)	270	1
½	Production overhead	800	Transfer to B (8,500L)	4,590	½
		4,900		4,900	

Cost per unit

$$\frac{£4,900 - £40}{9000L} \quad \text{(scrap value of normal loss)}$$

54p per litre   *1*

(5)

Process B a/c

		£		£	
½	Transfer from A (8500L)	4,590	Normal loss (3300L)	66	1
½	Reagents (8000L)	800	Transfer to finished goods		½
			(13300L)	7,980	
	Labour	1298			
½	Overhead	1298			
1	Abnormal gain (100L)	60			
		8046		8046	

Cost per unit

$$\frac{£7986 - £66}{13200L}$$

60p per litre   *1*

(5)

Normal loss a/c				Abnormal loss a/c				Abnormal gain a/c			
	£		£		£		£		£		£
Process A	40	Scrap sales	40	Process A	270	Scrap sales	20	Normal loss	2	Process B	60
Process B	66	Scrap sales	64			Costing p+l	250	Costing p+l	58		
		Ab. gain	2								
	106		106		270		270		60		60

                2   *2*   *2*

(b)   Alternative treatment of scrap value.

This refers to Section 4.4.6 of the Open Learning Material.

Scrap value is normally credited to the process account. This is technically correct and essential if of a significant amount. However in practice scrap values may be relatively small and only realised from time to time. In such cases it is possible to credit an overhead income account and reduce overheads for the period. Can be justified if the cost of recording outweighs the benefits of such recording. (Using the FA doctrine of materiality)

(Maximum of 4 marks for clear, well expressed explanation of alternative treatment)
4

(20)

Question 5

(a) **Marginal costing**

		£			£	
		Period 1			**Period 2**	
½	Sales	(18,000x£30)	540,000	Sales	(22,000x£30)	660,000	½
				Opening stock		34,000
	Production cost			Production cost		
		(20,000x£17)	340,000		(20,000x£17)	340,000
		(20,000x£3)	60,000		(20,000x£3)	60,000
1			400,000	Cost of sales		434,000	1
1	less Closing stock	(2,000x£17)	34,000			
	Cost of sales		366,000			
		PROFIT	174,000		PROFIT	226,000

4 marks for marginal costing statement

Absorption costing

		£			£	
		Period 1			**Period 2**	
½	Sales	(18,000x£30)	540,000	Sales	(22,000x£30)	660,000	½
				Opening stock		40,000
	Production cost			Production cost		
		(20,000x£17)	340,000		(20,000x£17)	340,000
		(20,000x£3)	60,000		(20,000x£3)	60,000
1			400,000	Cost of sales		440,000	1
1	less Closing stock	(2,000x£20)	40,000			
	Cost of sales		360,000			
		PROFIT	180,000		PROFIT	220,000

4 marks for absorption costing statement

(*8*)

(b) **Reconciliation of Reported Profits**

Period 1	£	
Absorption costing profit	180,000	
Less fixed costs absorbed in closing stock (2,000 units x £3)	6,000	
Marginal costing profit	174,000	*1½*

Period 2	£	
Absorption costing profit	220,000	
Plus fixed costs absorbed in opening stock	6,000	
Marginal costing profit	226,000	*1½*

(3)

(3)

(c)   **Advantages and disadvantages of each approach**

Absorption : Pros -   Shows full cost (for pricing);
                        Managers responsible for all resources consumed in
                        product/service;   *1*
             Cons -   Arbitrary apportionment and absorption bases.   *1*

Marginal: Pros -   Useful for short run decisions;
                        Best for pricing spare capacity/special orders.   *1*
             Cons -   Might ignore fixed costs;
                        Might underprice and not recover fixed overheads.   *1*

NB: For external reporting usual to use absorption approach which matches revenue with
        expenditure.

(4)

(15)