Answers

Section A

1   C
2   D
3   D
4   B
5   B
6   C
7   C
8   D
9   A
10 B
11 D
12 D
13 A
14 D
15 C
16 C
17 B
18 B
19 A
20 C

Workings to computational MCQs:

5   [156,980 – (7,400 × 12.20)]

6   [(102 ÷ 6) – (126 ÷ 8)]

8   (410 × 13·00)

10 [(800^2 × 1·5) ÷ (2 × 12,000)]

14 (42,293 ÷ 2,640 = £16·02 per m/c hr) – highest rate

15 {700,000 – [(56,000 × 7·9) + 144,000]}

17 {[17·50 – (7·60 + 1·40)] ÷ (17·50 ÷ 100)}

18 (11·50 – 8·00 = 3·50 per unit) – min extra cost of buying-in

19 [14 + 6(16,000 ÷ 26,500)]

20 (8,000 × 4·791)

Section B

1 **(a)** Estimated production costs of the job

	£	£	
Direct materials		2,893	
Direct labour:			
Basic	1,680		(210 hours × £8/hr)
Bonus	252		(210 hours × £1·2/hr*)
Total		1,932	
Prime cost		4,825	
Production overhead:			
20% of prime cost	965		(£4,825 × 0·2)
£9·00 per direct labour hour	1,890		(210 hours × £9/hr)
Total		2,855	
Total production cost		7,680	

* Bonus per hour = {[(4,000 − 3,400) ÷ 4,000] × £8/hr} = £1·20 per hour

(b) Quote for the job

	£	
Total production cost	7,680	
Other overheads	1,920	(£7,680 × 0·25)
Total cost	9,600	
Profit	2,400	[(9,600 ÷ 0·8) − 9,600]
Selling price	12,000	

2 **(a)** **(i)** £400,000 (where the profit line of Company A crosses the horiontal axis)

(ii) £180,000 (the loss at zero activity for Company A)

(iii) Company A (steeper slope of profit line, compared with Company B)

(iv) £480,000 (sales at the point where the profit lines of the two companies cross)

(b) Company A – contribution/sales ratio

Contribution to break even
───────────────────────
Sales at break-even point

= £180,000 (fixed costs)
────────────
£400,000

= 45%

Thus 180,000 ÷ 0.45 = £400,000

14

3 (a) (i) A code is 'a system of symbols designed to be applied to a classified set of items to give a brief, accurate reference facilitating entry, collection and analysis' (CIMA Official Terminology).

(ii) A coding system should:
for example:
- be easy to use
- allow room for expansion
- have a unique code for each item

(b) (i) Allocated and apportioned overheads by cost centre

	P1 £	P2 £	Cost Centre Materials Store £	Employee Facilities £	Total £
Allocated	107,000	89,000	68,000	84,000	348,000
Apportioned:					
Building depreciation & insurance (on the basis of floor space occupied)	15,960	19,740	2,520	3,780	42,000
Management salaries (on the basis of number of employees)	9,000	12,000	3,000	3,000	27,000
Power to operate machinery (on the basis of machine hours)	6,510	6,090	—	—	12,600
Other utilities (on the basis of % share given)	3,290	4,230	940	940	9,400
	141,760	131,060	74,460	91,720	439,000

(ii) Re-apportionment

	P1	P2	Materials Store	Employee Facilities	Total
Employee Facilities (on the basis of number of employees)	34,395	45,860	11,465	(91,720)	
Materials Store (on the basis of % share given)	34,370	51,555	(85,925)		
	210,525	228,475			439,000

4 (a) Gross profit statement

	Product Y £	Product Z £
Sales	24,000	56,000
Joint costs	15,600	36,400
Gross profit (total)	8,400	19,600
Gross profit (per unit)	4·20	5·60

Workings:
Sales value:
Product Y   2,000 units at £12/unit   =   £24,000 (30%)
Product Z   3,500 units at £16/unit   =   £56,000 (70%)

£80,000

Joint cost apportionment:
Product Y   £15,600   (£52,000 × 0·3)
Product Z   £36,400   (£52,000 × 0·7)

£52,000

(b) Further processing decision

    (i) Using weight of output as the basis of apportionment it is irrelevant whether each joint product is covering its apportioned costs: the key is whether the joint process as a whole is profitable.

        The correct justification for further processing should be on the basis of incremental revenue and cost.

    (ii) Incremental profit is the correct basis for justifying further processing and it is correct to state that further processing of Product A, to form Product AA, is justified (on the assumption that the joint process as a whole is justified). An incremental profit arises as follows:

	£ per kg	
Incremental revenue	2·50	(11·50 – 9·00)
Incremental cost	2·10	
	0·40	

				Marks	Marks
1	**(a)**		direct materials	1	
			direct labour – basic	1	
			– bonus	4	
			production overhead – % of prime cost	2	
			– rate per labour hour	2	10
	(b)		other overhead	2	
			selling price	2	4
					14
2	**(a)**	**(i)**	breakeven		2
		(ii)	fixed costs		2
		(iii)	higher C/S ratio		3
		(iv)	common level of sales		2
	(b)		C/S ratio	3	
			breakeven	1	4
					13
3	**(a)**	**(i)**	system of symbols	1	
			classification	1	
			referencing	1	3
		(ii)	$1\frac{1}{2}$ marks for each		3
	(b)	**(i)**	allocated	1	
			apportioned – $1\frac{1}{2}$ marks for each	6	7
		(ii)	re-apportioned – 2 marks for each		4
					17
4	**(a)**		sales value	2	
			joint cost apportionment	3	
			statement	4	9
	(b)	**(i)**	correct justification – up to 2 marks		
			irrelevance of cost share – up to 2 marks		max 3
		(ii)	correct basis	1	
			correct conclusion	1	
			justification	2	4
					16