RECOGNISING ACHIEVEMENT

GCE

Accounting

Advanced GCE

Unit **F014:** Management Accounting

Mark Scheme for January 2013

Oxford Cambridge and RSA Examinations

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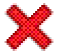
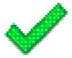
This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

Annotations

Annotation	Meaning
	Unclear
	Benefit of doubt
	Cross
	Own figure rule
	Repeat
	Noted but no credit given
	Tick

Subject-specific Marking Instructions

Every working box – whether they contain working or not – must be stamped as “seen”.

Quality of Written Communication

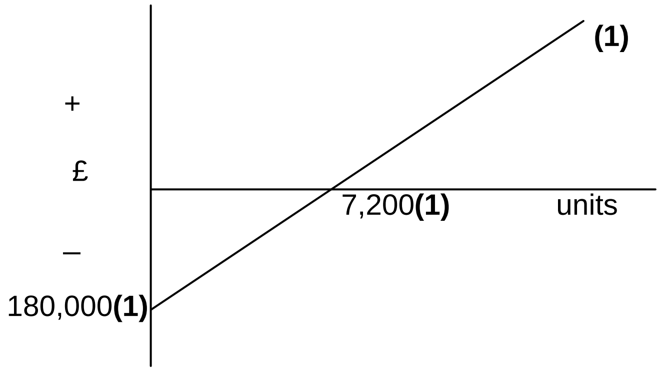
The rubric states:
** In these two questions/sub questions, you will be assessed on the quality of your written communication. In one of these questions, the focus will be on your ability to present numerical information legibly and in an appropriate accounting format. In the other, you will be assessed on the legibility and style of writing, the clarity and coherence of your arguments and the accuracy of your spelling, punctuation and grammar.*

Levels of Response for *Numerical* Questions

Level	Mark	Description
3	3	All account headings, terms and balances are included appropriately and in line with accounting conventions. All figures are legible with effective use made of columns and sub-totals. All accounts are ruled off as appropriate.
2	2	Almost all account headings, terms and balances are included appropriately and in line with accounting conventions. Figures are legible with effective use made of columns and sub-totals. Accounts are ruled off as appropriate.
1	1	Some account headings, terms and balances are included though not always adhered to accounting conventions. Most figures are legible. Some appropriate use is made of columns and sub-totals. Some accounts are ruled off as appropriate.
–	0	Responses which fail to achieve the standard required for Level 1.

Levels of Response for *Narrative* Questions

Level	Mark	Description
2	2	Ideas, some complex, are expressed clearly and quite fluently, using an appropriate style of writing. Arguments made are generally relevant and are constructed in a logical and coherent manner. There are few errors of spelling, punctuation and grammar, and those that are made are not intrusive and do not obscure meaning.
1	1	Relatively straightforward or simple ideas are expressed in a generally appropriate style of writing which sometimes lacks clarity or fluency. Arguments have some limited coherence and structure occasionally showing relevance to the main focus of the questions. There are errors of spelling, punctuation and grammar which are noticeable and sometimes intrusive but do not totally obscure meaning.
–	0	Responses which fail to achieve the standard required for Level 1.

Question			Answer	Marks	Guidance
1	(a)	(i)	Product A / Product B Selling price 80 / 90 Variable costs 60 / 65 Contribution per unit 20 / 25 Quantity 14,000 / 11,000 Total contribution 280,000 / 275,000 A Contribution 280,000**(1)** B Contribution 275,000**(1)** 555,000 Fixed costs 360,000**(1)** Profit 195,000**(1)**	4	Allow 180,000 FC deducted from A and B(1) 195,000(4)
		(ii)	Break-even $\frac{180,000}{20}$ = 9,000 units**(1)** X 80 = £720,000**(1)**	2	
	(b)			3	648,000(1)

Question			Answer	Marks	Guidance
	(c)		Material requirement: A 30 x 14,000 420,000 B 32 x 11,000 352,000 772,000 Available 85% 656,200 Contribution / L/F: A 20**(1)** / 30; B 25**(1)** / 32 .67 .78 Priority: A 2nd; B 1st **(1)** Material available 656,200**(2)** B 32 x 11,000 (352,000) 304,200 A 30 x 10,140 (304,200)**(1)** Profit Statement B 25 x 11,000 275,000**(1)** A 20 x 10,140 202,800**(1)** 477,800 Fixed costs 360,000 Profit 117,800**(2)**	10	10,140(1) 95,000(1) 22,800(1)
	(d)	(i)	Margin of safety is the difference**(1)** between a given volume of sales and break-even**(1)**. It may be expressed in units, percentage of sales or sales value**(1)**. **(2 x 1 mark)**	2	

Question			Answer	Marks	Guidance
		(ii)	It provides an assessment of risk**(1)** by indicating the extent to which expected output can fall**(1)**, before a loss is made**(1)**. It shows the ability to withstand adverse trading conditions**(1)**. The greater the margin of safety**(1)**, the greater are profits**(1)** and the safer**(1)** is the company's position. **(6 x 1 mark)**	6	
	(e)*		Total sales unlikely to be linear**(1)**. Likely that different prices will be charged to different customers**(1)**. A high volume customer is likely to pay less than a low volume customer**(1)**. Total costs are unlikely to be linear**(1)**. Variable costs are likely to fall**(1)** as quantity increases**(1)**. Fixed costs are likely to be in stepped movements**(1)** when output**(1)** exceeds a certain level**(1)**. It is difficult**(1)** to split some costs into fixed and variable**(1)**. Some costs may include both fixed and variable costs**(1)**. Most businesses make more than one product**(1)** and although multi product graphs can be prepared**(1)**, they are only reliable for a specific sales mix**(1)**. Data is estimated**(1)** and may not materialise**(1)**, this will change break-even value**(1)**. **(3 x 3 marks)** **(1 for point plus up to 2 for development)** **QWC**	9 2	
			Total	**38**	

Question			Answer	Marks	Guidance
2	(a)*		<table><tr><td></td><td>2011</td><td>2012</td></tr><tr><td>Opening stock</td><td>-</td><td>500</td></tr><tr><td>Production</td><td>10,000</td><td>12,000</td></tr><tr><td></td><td>10,000</td><td>12,500</td></tr><tr><td>Sales</td><td>9,500</td><td>11,600</td></tr><tr><td>Closing stock</td><td>500</td><td>900</td></tr><tr><td>Variable costs</td><td>290,000</td><td>432,000</td></tr><tr><td>Fixed costs</td><td>30,000</td><td>48,000</td></tr><tr><td>Total costs</td><td>320,000</td><td>480,000</td></tr></table> Marginal costing closing stock 2011 $290{,}000 \times \frac{500}{10{,}000}$ 14,500 2012 $432{,}000 \times \frac{900}{12{,}000}$ 32,400 Absorption costing closing stock 2011 $320{,}000 \times \frac{500}{10{,}000}$ 16,000 2012 $480{,}000 \times \frac{900}{12{,}000}$ 36,000	17	

Question			Answer	Marks	Guidance
			Marginal costing		

		2011		2012
Sales		570,000**(1)**		638,000**(1)**
O/stock	-		14,500	
Var costs	290,000		432,000	
	290,000		446,500	
C/stock	14,500**(1)**		32,400**(1)**	
		275,500		414,100
Contribution		294,500		223,900
Fixed costs		30,000**(1)**		48,000**(1)**
Gross Profit		264,500**(1)**		175,900**(1)**

Guidance: Allow individual variable costs

Absorption costing

		2011		2012
Sales		570,000		638,000
O/stock	-		16,000	
Var costs	290,000		432,000	
Fixed costs	30,000		48,000	
	320,000**(1)**		496,000**(1)**	
C/stock	16,000**(1)**		36,000**(1)**	
		304,000		460,000
Gross Profit		266,000**(1)**		178,000**(1)**

QWC**(3)**

Question			Answer	Marks	Guidance
	(b)		SSAP 9**(1)** – absorption costing**(1)**. Stock valuation should include a fair share**(1)** of production overhead (FC + VC)**(1)**. This is not**(1)** the case with marginal costing**(1)**, which excludes fixed costs**(1)**. Marginal costing is useful for decision making**(1)** with the use of the contribution principle**(1)**. **(6 x 1 mark)**	6	
			Total	**23**	

Question			Answer	Marks	Guidance
3	(a)	(i)	Product 63 / Product 64 Net profit: 20,000 / 40,000 Depreciation: 15,000**(1)** / 30,000**(1)** Cash flow: 35,000**(1)** / 70,000**(1)** excludes residuals	4	
		(ii)	Payback Product 63: 1 yr + $\frac{30}{35}$ = 1.86 yrs**(2)** Product 64: 2 yrs + $\frac{20}{70}$ = 2.29 yrs**(2)**	4	
		(iii)	Product 63 Year / Cash flow / Disc factor / Present value 1 / 35,000 / 0.909 / 31,815**(1)** 2 / 35,000 / 0.826 / 28,910 3 / 35,000 / 0.751 / 26,285 4 / 35,000 / 0.683 / 23,905**(1)** 4 / 5,000 / 0.683 / 3,415**(1)** 114,330 Capital cost 65,000**(1)** Net present value 49,330**(1)** Product 64 Year / Cash flow / Disc factor / Present value 1 / 70,000 / 0.909 / 63,630**(1)** 2 / 70,000 / 0.826 / 57,820 3 / 70,000 / 0.751 / 52,570 4 / 70,000 / 0.683 / 47,810 5 / 70,000 / 0.621 / 43,470**(1)** 5 / 10,000 / 0.621 / 6,210**(1)** 271,510 Capital cost 160,000**(1)** Net present value 111,510**(1)**	10	27,320(2) 49,680(2)

Question			Answer	Marks	Guidance
	(b)		No account**(1)** is taken that earnings may accrue**(1)** after the payback period**(1)** and we are not considering the full period**(1)**. No account**(1)** is taken of timing**(1)**. Cash flows in the future**(1)** will not be of the same value as money today**(1)**. Most companies limit investments**(1)** to a short**(1)** payback period. This could exclude profitable investments**(1)**, although it may be useful with changing technology**(1)**. **(2 x 3 marks)** **(1 for point plus up to 2 for development)**	6	
			Total	**24**	

Question			Answer	Marks	Guidance
4	(a)		(see table below)	20	

Cost	Basis	Total	Mach	Assy	Maint	Cant
Ind wages	Emp	900,000	337,500**(1)**	432,000**(1)**	90,000**(1)**	40,500**(1)**
Rep/Maint	M/c hrs	150,000	142,500**(1)**	7,500	-	-
Canteen	Emp	62,000	23,250**(1)**	29,760	6,200	2,790
Ins m/c	M/c cost	41,000	30,750**(1)**	10,250	-	-
Ins prem	Prem area	32,000	14,400**(1)**	12,800	3,200	1,600
Dep m/c	M/c cost	30,000	22,500**(1)**	7,500	-	-
Heat/light	Prem area	38,000	17,100**(1)**	15,200**(1)**	3,800	1,900
Cons	Alloc	12,500	6,200**(1)**	3,490	1,600	1,210
						48,000**(1)**
Reapp	Canteen		19,200**(1)**	21,600	7,200	(48,000)
					112,000**(1)**	
	Maint		89,600**(1)**	22,400	(112,000)	
			703,000	562,500		
			703,000**(1)**	562,500**(1)**		
			380,000	250,000		
			£1.85**(1)** DMH	£2.25**(1)** DLH		

Question			Answer		Marks	Guidance
	(b)			Mach	6	
			Actual overhead	690,000		
			Absorbed overhead 1.85 x 370,000	684,500**(2)**		1.85(1) 370,000(1)
				5,500 under**(1)**		
				Assy		
			Actual overhead	577,000		
			Absorbed overhead 2.25 x 260,000	585,000**(2)**		2.25(1) 260,000(1)
				8,000 over**(1)**		

Question			Answer	Marks	Guidance
	(c)		Use of estimated data**(1)**, which could be inaccurate**(1)**, leading to under/over absorption**(1)**. Over absorption, too much overhead charged to production**(1)**, overpriced and uncompetitive**(1)**, fall in demand**(1)** and subsequent loss of revenue/reduction in profit**(1)**. Under absorption, insufficient overhead charged to production**(1)**, lower price to customers**(1)**, costs not covered**(1)** and subsequent reduction in profit**(1)**. **(3 x 3 marks)** **(1 for point plus up to 2 for development)**	9	
			Total	**35**	

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