GCE

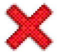
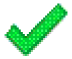
Accounting

Advanced GCE

Unit **F014:** Management Accounting

Mark Scheme for January 2013

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

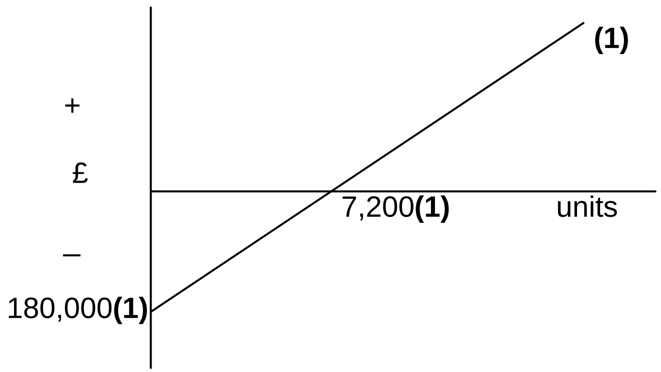
The rubric states:
* *In these two questions/sub questions, you will be assessed on the quality of your written communication. In one of these questions, the focus will be on your ability to present numerical information legibly and in an appropriate accounting format. In the other, you will be assessed 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 <u>352,000</u> 772,000 Available 85% <u>656,200</u> <u>A</u> <u>B</u> <u>Contribution</u> <u>20</u>**(1)** <u>25</u>**(1)** L/F 30 32 .67 .78 Priority 2nd 1st **(1)** Material available 656,200**(2)** B 32 x 11,000 <u>(352,000)</u> 304,200 A 30 x 10,140 <u>(304,200)</u>**(1)** <u>Profit Statement</u> B 25 x 11,000 275,000**(1)** A 20 x 10,140 <u>202,800</u>**(1)** 477,800 Fixed costs <u>360,000</u> Profit <u>117,800</u>**(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)*		(see below)	17	

	2011	2012
Opening stock	-	500
Production	10,000	12,000
	10,000	12,500
Sales	9,500	11,600
Closing stock	500	900
Variable costs	290,000	432,000
Fixed costs	30,000	48,000
Total costs	320,000	480,000

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

<table>
<tr><th colspan="3">Question</th><th>Answer</th><th>Marks</th><th>Guidance</th></tr>
<tr><td></td><td></td><td></td><td>
Marginal costing
<table>
<tr><td></td><td></td><td>2011</td><td></td><td>2012</td></tr>
<tr><td>Sales</td><td></td><td>570,000(1)</td><td></td><td>638,000(1)</td></tr>
<tr><td>O/stock</td><td>-</td><td></td><td>14,500</td><td></td></tr>
<tr><td>Var costs</td><td>290,000</td><td></td><td>432,000</td><td></td></tr>
<tr><td></td><td>290,000</td><td></td><td>446,500</td><td></td></tr>
<tr><td>C/stock</td><td>14,500(1)</td><td></td><td>32,400(1)</td><td></td></tr>
<tr><td></td><td></td><td>275,500</td><td></td><td>414,100</td></tr>
<tr><td>Contribution</td><td></td><td>294,500</td><td></td><td>223,900</td></tr>
<tr><td>Fixed costs</td><td></td><td>30,000(1)</td><td></td><td>48,000(1)</td></tr>
<tr><td>Gross Profit</td><td></td><td>264,500(1)</td><td></td><td>175,900(1)</td></tr>
</table>
Absorption costing
<table>
<tr><td></td><td></td><td>2011</td><td></td><td>2012</td></tr>
<tr><td>Sales</td><td></td><td>570,000</td><td></td><td>638,000</td></tr>
<tr><td>O/stock</td><td>-</td><td></td><td>16,000</td><td></td></tr>
<tr><td>Var costs</td><td>290,000</td><td></td><td>432,000</td><td></td></tr>
<tr><td>Fixed costs</td><td>30,000</td><td></td><td>48,000</td><td></td></tr>
<tr><td></td><td>320,000(1)</td><td></td><td>496,000(1)</td><td></td></tr>
<tr><td>C/stock</td><td>16,000(1)</td><td></td><td>36,000(1)</td><td></td></tr>
<tr><td></td><td></td><td>304,000</td><td></td><td>460,000</td></tr>
<tr><td>Gross Profit</td><td></td><td>266,000(1)</td><td></td><td>178,000(1)</td></tr>
</table>
QWC(3)
</td><td></td><td>Allow individual variable costs</td></tr>
<tr><td></td><td>(b)</td><td></td><td>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)</td><td>6</td><td></td></tr>
<tr><td></td><td></td><td></td><td>Total</td><td>23</td><td></td></tr>
</table>

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**	

<table>
<tr><th colspan="3">Question</th><th>Answer</th><th>Marks</th><th>Guidance</th></tr>
<tr><td>4</td><td>(a)</td><td></td><td>
<table>
<tr><td><u>Cost</u></td><td><u>Basis</u></td><td><u>Total</u></td><td><u>Mach</u></td><td><u>Assy</u></td><td><u>Maint</u></td><td><u>Cant</u></td></tr>
<tr><td>Ind wages</td><td>Emp</td><td>900,000</td><td>337,500(1)</td><td>432,000(1)</td><td>90,000(1)</td><td>40,500(1)</td></tr>
<tr><td>Rep/Maint</td><td>M/c hrs</td><td>150,000</td><td>142,500(1)</td><td>7,500</td><td>-</td><td>-</td></tr>
<tr><td>Canteen</td><td>Emp</td><td>62,000</td><td>23,250(1)</td><td>29,760</td><td>6,200</td><td>2,790</td></tr>
<tr><td>Ins m/c</td><td>M/c cost</td><td>41,000</td><td>30,750(1)</td><td>10,250</td><td>-</td><td>-</td></tr>
<tr><td>Ins prem</td><td>Prem area</td><td>32,000</td><td>14,400(1)</td><td>12,800</td><td>3,200</td><td>1,600</td></tr>
<tr><td>Dep m/c</td><td>M/c cost</td><td>30,000</td><td>22,500(1)</td><td>7,500</td><td>-</td><td>-</td></tr>
<tr><td>Heat/light</td><td>Prem area</td><td>38,000</td><td>17,100(1)</td><td>15,200(1)</td><td>3,800</td><td>1,900</td></tr>
<tr><td>Cons</td><td>Alloc</td><td>12,500</td><td>6,200(1)</td><td>3,490</td><td>1,600</td><td><u>1,210</u></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td>48,000(1)</td></tr>
<tr><td>Reapp</td><td>Canteen</td><td></td><td>19,200(1)</td><td>21,600</td><td><u>7,200</u></td><td><u>(48,000)</u></td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td>112,000(1)</td><td></td></tr>
<tr><td></td><td>Maint</td><td></td><td><u>89,600</u>(1)</td><td><u>22,400</u></td><td><u>(112,000)</u></td><td></td></tr>
<tr><td></td><td></td><td></td><td><u>703,000</u></td><td><u>562,500</u></td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td><u>703,000</u>(1)</td><td><u>562,500</u>(1)</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td>380,000</td><td>250,000</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td>£1.85(1)</td><td>£2.25(1)</td><td></td><td></td></tr>
<tr><td></td><td></td><td></td><td>DMH</td><td>DLH</td><td></td><td></td></tr>
</table>
</td><td>20</td><td></td></tr>
<tr><td></td><td>(b)</td><td></td><td>
<table>
<tr><td></td><td><u>Mach</u></td></tr>
<tr><td>Actual overhead</td><td>690,000</td></tr>
<tr><td>Absorbed overhead 1.85 x 370,000</td><td><u>684,500</u>(2)</td></tr>
<tr><td></td><td><u>5,500</u> under(1)</td></tr>
<tr><td></td><td><u>Assy</u></td></tr>
<tr><td>Actual overhead</td><td>577,000</td></tr>
<tr><td>Absorbed overhead 2.25 x 260,000</td><td><u>585,000</u>(2)</td></tr>
<tr><td></td><td><u>8,000</u> over(1)</td></tr>
</table>
</td><td>6</td><td>1.85(1)
370,000(1)

2.25(1)
260,000(1)</td></tr>
</table>

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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