



GCE

Accounting

Advanced GCE

Unit **F014**: Management Accounting

Mark Scheme for January 2012

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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.

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F014

Mark Scheme

January 2012

Question			Answer	Marks	Guidance																											
1	(a)	(i)	<table border="1"> <thead> <tr> <th><u>Receipts</u></th> <th><u>Sales</u></th> </tr> </thead> <tbody> <tr> <td>50@200</td> <td>10,000</td> </tr> <tr> <td>70@200</td> <td>14,000</td> </tr> <tr> <td>60@206</td> <td>12,360</td> </tr> <tr> <td>70@206</td> <td>14,420</td> </tr> <tr> <td>96@190</td> <td>18,240</td> </tr> <tr> <td><u>52@210</u></td> <td><u>10,920</u></td> </tr> <tr> <td><u>398</u></td> <td><u>79,940</u></td> </tr> </tbody> </table> <p>FIFO 8 @ 210(1) = 1,680(2)</p>	<u>Receipts</u>	<u>Sales</u>	50@200	10,000	70@200	14,000	60@206	12,360	70@206	14,420	96@190	18,240	<u>52@210</u>	<u>10,920</u>	<u>398</u>	<u>79,940</u>	3												
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		(ii)	LIFO 8 @ 200(1) = 1,600(2)	3																												
	(b)		<p><u>Sales</u></p> <p>July to September $200 + 50\% = 300 \times 178 = 53,400$ October to December $300 + 3\% = 309 \times 212 = \underline{65,508}$ <u>118,908</u></p> <p><u>Trading and Profit and Loss Account for the six months ended 31 December 2011</u></p> <table> <tbody> <tr> <td>Sales</td> <td></td> <td>118,908(2)</td> </tr> <tr> <td>Opening stock</td> <td>-</td> <td></td> </tr> <tr> <td>Purchases</td> <td><u>79,940(2)</u></td> <td></td> </tr> <tr> <td></td> <td>79,940</td> <td></td> </tr> <tr> <td>Closing stock</td> <td><u>1,600</u></td> <td></td> </tr> <tr> <td>Cost of sales</td> <td></td> <td><u>78,340</u></td> </tr> <tr> <td>Gross Profit</td> <td></td> <td>40,568</td> </tr> <tr> <td>Expenses</td> <td></td> <td><u>24,000</u></td> </tr> <tr> <td>Net Profit</td> <td></td> <td><u>16,568(1)</u></td> </tr> </tbody> </table>	Sales		118,908(2)	Opening stock	-		Purchases	<u>79,940(2)</u>			79,940		Closing stock	<u>1,600</u>		Cost of sales		<u>78,340</u>	Gross Profit		40,568	Expenses		<u>24,000</u>	Net Profit		<u>16,568(1)</u>	5	
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	(c)	<p>Usually unrealistic if based on assumption that the most recent purchases are sold before older stock.</p> <p>Stock valuation is at older prices and may not relate to current costs.</p> <p>Not acceptable for the purposes of SSAP 9/IAS2 or for HMRC for tax purposes</p> <p>(2 x 2 marks) (1 for point plus, 1 for development)</p>	4	
		Total	15	

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2 (a)*	<p style="text-align: center;">Contract Account</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; border-right: 1px solid black;">Machinery</td> <td style="width: 15%; text-align: right;">420,000</td> <td style="width: 30%; border-right: 1px solid black;">Material returns</td> <td style="width: 25%; text-align: right;">62,000(1)</td> </tr> <tr> <td style="border-right: 1px solid black;">Materials</td> <td style="text-align: right;">1,200,000</td> <td style="border-right: 1px solid black;">Materials c/d</td> <td style="text-align: right;">190,000</td> </tr> <tr> <td style="border-right: 1px solid black;">Dir labour</td> <td style="text-align: right;">740,000</td> <td style="border-right: 1px solid black;">Plant hire c/d</td> <td style="text-align: right;">5,000</td> </tr> <tr> <td style="border-right: 1px solid black;">Bal c/d</td> <td style="text-align: right;"><u>32,000</u></td> <td style="border-right: 1px solid black;">Machinery</td> <td style="text-align: right;">50,000(2)</td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;">772,000</td> <td style="border-right: 1px solid black;">Machinery c/d</td> <td style="text-align: right;">180,000(2)</td> </tr> <tr> <td style="border-right: 1px solid black;">Plant hire</td> <td style="text-align: right;">128,000</td> <td style="border-right: 1px solid black;">Cost to date c/d</td> <td style="text-align: right;">2,178,000</td> </tr> <tr> <td style="border-right: 1px solid black;">Sub contractors</td> <td style="text-align: right;">96,000(1)</td> <td></td> <td></td> </tr> <tr> <td style="border-right: 1px solid black;">Architect's fees</td> <td style="text-align: right;"><u>49,000(1)</u></td> <td></td> <td></td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;"><u>2,665,000</u></td> <td></td> <td style="text-align: right;"><u>2,665,000</u></td> </tr> <tr> <td style="border-right: 1px solid black;">Cost to date b/d</td> <td style="text-align: right;">2,178,000(1)</td> <td style="border-right: 1px solid black;">Work cert</td> <td style="text-align: right;">2,500,000(2)</td> </tr> <tr> <td style="border-right: 1px solid black;">Notional profit c/d</td> <td style="text-align: right;"><u>450,000</u></td> <td style="border-right: 1px solid black;">Work not yet cert c/d</td> <td style="text-align: right;"><u>128,000</u></td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;"><u>2,628,000</u></td> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;"><u>2,628,000</u></td> </tr> <tr> <td style="border-right: 1px solid black;">Profit and Loss</td> <td style="text-align: right;">255,000(1)</td> <td style="border-right: 1px solid black;">Notional profit b/d</td> <td style="text-align: right;">450,000</td> </tr> <tr> <td style="border-right: 1px solid black;">Profit provision c/d</td> <td style="text-align: right;"><u>195,000</u></td> <td></td> <td></td> </tr> <tr> <td style="border-right: 1px solid black;"></td> <td style="text-align: right;"><u>450,000</u></td> <td></td> <td style="text-align: right;"><u>450,000</u></td> </tr> <tr> <td style="border-right: 1px solid black;">Materials b/d</td> <td style="text-align: right;">190,000(1)</td> <td style="border-right: 1px solid black;">Dir labour b/d</td> <td style="text-align: right;">32,000(1)</td> </tr> <tr> <td style="border-right: 1px solid black;">Plant hire b/d</td> <td style="text-align: right;">5,000(1)</td> <td style="border-right: 1px solid black;">Profit provision b/d</td> <td style="text-align: right;">195,000(1)</td> </tr> <tr> <td style="border-right: 1px solid black;">Machinery b/d</td> <td style="text-align: right;">180,000</td> <td></td> <td></td> </tr> <tr> <td style="border-right: 1px solid black;">Work not yet cert b/d</td> <td style="text-align: right;">128,000(1)</td> <td></td> <td></td> </tr> </table>	Machinery	420,000	Material returns	62,000(1)	Materials	1,200,000	Materials c/d	190,000	Dir labour	740,000	Plant hire c/d	5,000	Bal c/d	<u>32,000</u>	Machinery	50,000(2)		772,000	Machinery c/d	180,000(2)	Plant hire	128,000	Cost to date c/d	2,178,000	Sub contractors	96,000(1)			Architect's fees	<u>49,000(1)</u>				<u>2,665,000</u>		<u>2,665,000</u>	Cost to date b/d	2,178,000(1)	Work cert	2,500,000(2)	Notional profit c/d	<u>450,000</u>	Work not yet cert c/d	<u>128,000</u>		<u>2,628,000</u>		<u>2,628,000</u>	Profit and Loss	255,000(1)	Notional profit b/d	450,000	Profit provision c/d	<u>195,000</u>				<u>450,000</u>		<u>450,000</u>	Materials b/d	190,000(1)	Dir labour b/d	32,000(1)	Plant hire b/d	5,000(1)	Profit provision b/d	195,000(1)	Machinery b/d	180,000			Work not yet cert b/d	128,000(1)			19	
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(b)	<p>Prudence</p> <ul style="list-style-type: none"> – formula reduces profit to allow for unforeseen circumstances. Multiplier of two-thirds reduces profit, as does cash received over work certified. <p>Realisation</p> <ul style="list-style-type: none"> – profit should only be realised when earned. Taking full profit early would not be allowed, possibility of problems later and additional costs <p>(2 x 3 marks) (Each concept 1 mark plus up to 2 for development)</p>	6																																																																													

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(c)	<p>Local economy</p> <ul style="list-style-type: none"> - employment of local labour - purchase of materials from local suppliers - charitable donations to local causes - multiplier impact on local economy - contribute to local infrastructure as part of contract <p>Labour force</p> <ul style="list-style-type: none"> - health and safety at work - minimum wage rates - contract of employment, rights of employee - social programme, benefits, societies <p>(Each section 2 x 2 marks) (1 for point plus, 1 for development)</p>	8	
	Total	33	

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		(ii)	<p>B/E = $\frac{810,000}{4,500} = 180(1)$</p> <p>x 18,500 = 3,330,000(1)</p>	2																																																								
		(iii)	<p>MOS = $400 - 180 = 220(1)$</p> <p>$\frac{220}{400} = 55\%(1)$</p>	2																																																								
	(b)	(i)	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;"><u>Danport</u></th> <th style="text-align: center;"><u>Elton</u></th> <th style="text-align: center;"><u>Franley</u></th> <th style="text-align: center;"><u>Gomerton</u></th> </tr> </thead> <tbody> <tr><td>Sales</td><td style="text-align: right;">18,500</td><td style="text-align: right;">17,000</td><td style="text-align: right;">13,800</td><td style="text-align: right;">16,000</td></tr> <tr><td>Var Cost</td><td style="text-align: right;"><u>14,000</u></td><td style="text-align: right;"><u>15,600</u></td><td style="text-align: right;"><u>14,000</u></td><td style="text-align: right;"><u>15,000</u></td></tr> <tr><td>Contribution</td><td style="text-align: right;"><u>4,500</u></td><td style="text-align: right;"><u>1,400</u></td><td style="text-align: right;"><u>(200)</u></td><td style="text-align: right;"><u>1,000</u></td></tr> <tr><td colspan="5"> <u>Total Positive Contribution</u></td></tr> <tr><td>Danport</td><td style="text-align: right;">4,500 x 400</td><td style="text-align: right;">1,800,000(1)</td><td></td><td></td></tr> <tr><td>Elton</td><td style="text-align: right;">1,400 x 300</td><td style="text-align: right;">420,000(1)</td><td></td><td></td></tr> <tr><td>Gomerton</td><td style="text-align: right;">1,000 x 280</td><td style="text-align: right;"><u>280,000(1)</u></td><td></td><td></td></tr> <tr><td></td><td></td><td style="text-align: right;">2,500,000</td><td></td><td></td></tr> <tr><td>Fixed costs</td><td></td><td style="text-align: right;"><u>1,110,000(1)</u></td><td></td><td></td></tr> <tr><td>Profit</td><td></td><td style="text-align: right;"><u>1,390,000(1)</u></td><td></td><td></td></tr> </tbody> </table>		<u>Danport</u>	<u>Elton</u>	<u>Franley</u>	<u>Gomerton</u>	Sales	18,500	17,000	13,800	16,000	Var Cost	<u>14,000</u>	<u>15,600</u>	<u>14,000</u>	<u>15,000</u>	Contribution	<u>4,500</u>	<u>1,400</u>	<u>(200)</u>	<u>1,000</u>	 <u>Total Positive Contribution</u>					Danport	4,500 x 400	1,800,000(1)			Elton	1,400 x 300	420,000(1)			Gomerton	1,000 x 280	<u>280,000(1)</u>					2,500,000			Fixed costs		<u>1,110,000(1)</u>			Profit		<u>1,390,000(1)</u>			5	
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Gomerton	1,000 x 280		280,000 (1)																																																																																
Elton	1,400 x 180		<u>252,000(1)</u>																																																																																
			2,332,000																																																																																
Fixed costs			<u>1,110,000</u>																																																																																
Profit			<u>1,222,000(2)</u>																																																																																

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Question	Answer	Marks	Guidance
(c)	<p>Jomat plc needs to consider long term demands in making its decision, not just short term demands.</p> <p>As it starts up new airports it will have higher costs and lower revenues.</p> <p>Operating on a wider base will bring more benefits to Jomat plc at other airports.</p> <p>Maximum profit will exclude Franley which is making a negative contribution although it is fairly small.</p> <p>The company may consider running Franley at an initial loss and developing over time.</p> <p>(4 points x up to max 3 marks) (1 for point, plus up to 2 for development). Maximum 9 marks</p>	9	
(d)	<p>All figures are estimates and may not materialise.</p> <p>Social factors such as global warming may decrease demand.</p> <p>Increased leisure time may lead to increase in demand.</p> <p>Competition from other transport, eg high speed train</p> <p>Creation of new jobs with multiplier impact on local communities.</p> <p>(2 x 2 marks) (1 for point, plus 1 for development)</p>	4	
	Total	35	

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Question			Answer	Marks	Guidance																																																
4	(a)	(i)	<p><u>Product 18</u></p> <table> <tr> <td>Year</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Net Profit</td> <td>10,000</td> <td>10,000</td> <td>21,000</td> <td>18,000</td> <td>12,000</td> </tr> <tr> <td>Depreciation</td> <td><u>26,000</u></td> <td><u>26,000</u></td> <td><u>26,000</u></td> <td><u>26,000</u></td> <td><u>26,000</u></td> </tr> <tr> <td>Cash Flow</td> <td><u>36,000</u></td> <td><u>36,000(1)</u></td> <td><u>47,000</u></td> <td><u>44,000(1)</u></td> <td><u>38,000</u></td> </tr> </table> <p><u>Product 19</u></p> <table> <tr> <td>Year</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>Net Profit</td> <td>14,000</td> <td>13,000</td> <td>15,000</td> <td>9,000</td> <td>6,000</td> </tr> <tr> <td>Depreciation</td> <td><u>33,000</u></td> <td><u>33,000</u></td> <td><u>33,000</u></td> <td><u>33,000</u></td> <td><u>33,000</u></td> </tr> <tr> <td>Cash Flow</td> <td><u>47,000</u></td> <td><u>46,000(1)</u></td> <td><u>48,000</u></td> <td><u>42,000(1)</u></td> <td><u>39,000(+15,000)</u></td> </tr> </table>	Year	1	2	3	4	5	Net Profit	10,000	10,000	21,000	18,000	12,000	Depreciation	<u>26,000</u>	<u>26,000</u>	<u>26,000</u>	<u>26,000</u>	<u>26,000</u>	Cash Flow	<u>36,000</u>	<u>36,000(1)</u>	<u>47,000</u>	<u>44,000(1)</u>	<u>38,000</u>	Year	1	2	3	4	5	Net Profit	14,000	13,000	15,000	9,000	6,000	Depreciation	<u>33,000</u>	<u>33,000</u>	<u>33,000</u>	<u>33,000</u>	<u>33,000</u>	Cash Flow	<u>47,000</u>	<u>46,000(1)</u>	<u>48,000</u>	<u>42,000(1)</u>	<u>39,000(+15,000)</u>	4	
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		(ii)	<p><u>Product 18</u> $3\text{yrs} + \frac{11,000}{44,000} = 3.25 \text{ years(2)}$</p> <p><u>Product 19</u> $3\text{yrs} + \frac{39,000}{42,000} = 3.93 \text{ years(2)}$</p>	4																																																	

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Question	Answer	Marks	Guidance
(iv)	<p><u>Accounting rate of return</u></p> <p><u>Product 18</u> Average net profit = $\frac{71,000}{5}$ = 14,200</p> <p>ARR $\frac{14,200}{130,000} = 10.92\%$(2)</p> <p><u>Product 19</u> Average net profit = $\frac{57,000}{5}$ = 11,400</p> <p>ARR $\frac{11,400}{180,000} = 6.33\%$(2)</p>	4	

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