GCE

Accounting

Advanced GCE

Unit **F014:** Management Accounting

Mark Scheme for January 2012

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.

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<table>
<tr><th colspan="3">Question</th><th>Answer</th><th>Marks</th><th>Guidance</th></tr>
<tr><td>1</td><td>(a)</td><td>(i)</td><td>
<table>
<tr><th colspan="2">Receipts</th><th>Sales</th></tr>
<tr><td>50@200</td><td>10,000</td><td>Qty 390</td></tr>
<tr><td>70@200</td><td>14,000</td><td></td></tr>
<tr><td>60@206</td><td>12,360</td><td></td></tr>
<tr><td>70@206</td><td>14,420</td><td></td></tr>
<tr><td>96@190</td><td>18,240</td><td></td></tr>
<tr><td>52@210</td><td>10,920</td><td></td></tr>
<tr><td>398</td><td>79,940</td><td></td></tr>
</table>
FIFO 8 @ 210(1) = 1,680(2)</td><td>3</td><td></td></tr>
<tr><td></td><td></td><td>(ii)</td><td>LIFO 8 @ 200(1) = 1,600(2)</td><td>3</td><td></td></tr>
<tr><td></td><td>(b)</td><td></td><td>Sales
July to September 200 + 50% = 300 x 178 = 53,400
October to December 300 + 3% = 309 x 212 = 65,508
118,908

Trading and Profit and Loss Account for the six months ended 31 December 2011
<table>
<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>79,940(2)</td><td></td></tr>
<tr><td></td><td>79,940</td><td></td></tr>
<tr><td>Closing stock</td><td>1,600</td><td></td></tr>
<tr><td>Cost of sales</td><td></td><td>78,340</td></tr>
<tr><td>Gross Profit</td><td></td><td>40,568</td></tr>
<tr><td>Expenses</td><td></td><td>24,000</td></tr>
<tr><td>Net Profit</td><td></td><td>16,568(1)</td></tr>
</table></td><td>5</td><td></td></tr>
</table>

Question			Answer	Marks	Guidance
	(c)		Usually unrealistic if based on assumption that the most recent purchases are sold before older stock. Stock valuation is at older prices and may not relate to current costs. Not acceptable for the purposes of SSAP 9/IAS2 or for HMRC for tax purposes **(2 x 2 marks)** **(1 for point plus, 1 for development)**	4	
			Total	**15**	

<table>
<tr><th colspan="2">Question</th><th>Answer</th><th>Marks</th><th>Guidance</th></tr>
<tr><td>2</td><td>(a)*</td><td>

Contract Account

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	32,000		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		49,000**(1)**		
		2,665,000		2,665,000
Cost to date b/d		2,178,000**(1)**	Work cert	2,500,000**(2)**
Notional profit c/d		450,000	Work not yet cert c/d	128,000
		2,628,000		2,628,000
Profit and Loss		255,000**(1)**	Notional profit b/d	450,000
Profit provision c/d		195,000		
		450,000		450,000
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)**		

</td><td>19

16
QWC
(3)</td><td></td></tr>
<tr><td></td><td>(b)</td><td>

Prudence

– formula reduces profit to allow for unforeseen circumstances. Multiplier of two-thirds reduces profit, as does cash received over work certified.

Realisation

– profit should only be realised when earned. Taking full profit early would not be allowed, possibility of problems later and additional costs

(2 x 3 marks)
(Each concept 1 mark plus up to 2 for development)

</td><td>6</td><td></td></tr>
</table>

Question			Answer	Marks	Guidance
	(c)		Local economy – 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 Labour force – health and safety at work – minimum wage rates – contract of employment, rights of employee – social programme, benefits, societies **(Each section 2 x 2 marks)** **(1 for point plus, 1 for development)**	8	
			Total	**33**	

Question			Answer	Marks	Guidance
3	(a)	(i)	Sales 18,500 Variable Costs 14,000 Contribution 4,500**(1)** Qty x 400 1,800,000 Fixed Costs 810,000**(1)** Profit 990,000**(1)**	3	
		(ii)	B/E = $\frac{810,000}{4,500}$ = 180**(1)** x 18,500 = 3,330,000**(1)**	2	
		(iii)	MOS = 400 – 180 = 220**(1)** $\frac{220}{400}$ = 55%**(1)**	2	
	(b)	(i)	| | Danport | Elton | Franley | Gomerton | Sales: 18,500 / 17,000 / 13,800 / 16,000 Var Cost: 14,000 / 15,600 / 14,000 / 15,000 Contribution: 4,500 / 1,400 / (200) / 1,000 Total Positive Contribution Danport 4,500 x 400 1,800,000**(1)** Elton 1,400 x 300 420,000**(1)** Gomerton 1,000 x 280 280,000**(1)** 2,500,000 Fixed costs 1,110,000**(1)** Profit 1,390,000**(1)**	5	

Question			Answer	Marks	Guidance
		(ii)		10	

	Danport	Elton	Gomerton
Cont	4,500	1,400	1,000
L/F	4,000	5,500	3,800
	1.125	0.255	0.263
	1st	3rd	2nd **(1 priority)**

Direct labour	3,654,000
Danport 4,000 x 400	(1,600,000)**(1)**
	2,054,000
Gomerton 3,800 x 280	(1,064,000)**(1)**
	990,000
Elton 5,500 x 180	(990,000)**(2)**

Profit Statement

Danport	4,500 x 400	1,800,000**(1)**
Gomerton	1,000 x 280	280,000**(1)**
Elton	1,400 x 180	252,000**(1)**
		2,332,000
Fixed costs		1,110,000
Profit		1,222,000**(2)**

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

<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>(i)</td><td>
Product 18
<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>26,000</td><td>26,000</td><td>26,000</td><td>26,000</td><td>26,000</td></tr>
<tr><td>Cash Flow</td><td>36,000</td><td>36,000(1)</td><td>47,000</td><td>44,000(1)</td><td>38,000</td></tr>
</table>
Product 19
<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>33,000</td><td>33,000</td><td>33,000</td><td>33,000</td><td>33,000</td></tr>
<tr><td>Cash Flow</td><td>47,000</td><td>46,000(1)</td><td>48,000</td><td>42,000(1)</td><td>39,000(+ 15,000)</td></tr>
</table>
</td><td>4</td><td></td></tr>
<tr><td></td><td></td><td>(ii)</td><td>
Product 18
$3\text{yrs} + \frac{11,000}{44,000}$ = 3.25 years(2)

Product 19
$3\text{yrs} + \frac{39,000}{42,000}$ = 3.93 years(2)
</td><td>4</td><td></td></tr>
</table>

Question			Answer	Marks	Guidance
		(iii)	Net present value Product 18 Year / CF / DF / PV 1 / 36,000 / 0.909 / 32,724**(1)** 2 / 36,000 / 0.826 / 29,736 3 / 47,000 / 0.751 / 35,297 4 / 44,000 / 0.683 / 30,052 5 / 38,000 / 0.621 / 23,598 151,407**(1)** Capital cost 130,000**(1)** Net present value 21,407**(1)**	8	

Product 19

Year	CF	DF	PV
1	47,000	0.909	42,723**(1)**
2	46,000	0.826	37,996
3	48,000	0.751	36,048
4	42,000	0.683	28,686
5	39,000	0.621	24,219
5	15,000	0.621	9,315
			178,987**(1)**
Capital cost			180,000**(1)**
Net present value			(1,013)**(1)**

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

Question			Answer	Marks	Guidance
	(b)*		Payback is useful in technological industries where a short payback is preferred. It uses cash flow which is not subjective. It considers payback period only and does not take future cash flows into account. Timing is not taken into account. Net present value recognises the time value of money and compares future cash flows with present cash flows. All cash flows are taken into account. It uses cash flow which is not subjective. Future rate of interest is likely to vary. Accounting rate of return can be compared to the profitability of the business. The full period is taken into account, but timing is not considered. Profit is subjective and depends on policies adopted. **(Each method up to 2 marks for an advantage and up to 2 marks for a disadvantage) (1 for point, plus 1 for development)** **Maximum 12 marks**	14 12 **QWC** **(2)**	
	(c)		The £20,000 has already been spent it is irrelevant**(1)**. It should be ignored in the capital expenditure decision**(1)**. It is a sunk cost**(1)**. **(3 x 1 mark)**	3	
			Total	**37**	

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