



Cambridge International AS & A Level

SUBJECT**9706/31**

Paper 3 Structured Questions

October/November 2020**MARK SCHEME**Maximum Mark: 150

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

Question	Answer	Marks																																													
1(a)	40 000 – 15 000 (1) = 25 000 (1)OF	2																																													
1(b)	$\frac{25000}{(125000 - 25000)}$ (1)OF $\times 100 = 25\%$ (1)OF	2																																													
1(c)	<p style="text-align: center;">Barry</p> <p style="text-align: center;">Income statement for the year ended 31 December 2019</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th><th style="text-align: right;">\$</th><th style="text-align: right;">\$</th></tr> </thead> <tbody> <tr> <td>Revenue</td><td></td><td style="text-align: right;">1 550 000</td></tr> <tr> <td>Inventory 1 January 2019</td><td style="text-align: right;">140 000</td><td></td></tr> <tr> <td>Production cost at transfer price</td><td style="text-align: right;">1 000 000 W1</td><td></td></tr> <tr> <td></td><td style="text-align: right;"><u>1 140 000</u></td><td></td></tr> <tr> <td>Inventory 31 December 2019</td><td style="text-align: right;"><u>125 000</u> (1)</td><td></td></tr> <tr> <td>Cost of sales</td><td></td><td style="text-align: right;"><u>1 015 000</u> (1)OF</td></tr> <tr> <td>Gross profit</td><td></td><td style="text-align: right;">535 000 (1)OF</td></tr> <tr> <td>Factory profit</td><td></td><td style="text-align: right;">200 000 (1)OF</td></tr> <tr> <td>Decrease in provision for unrealised profit</td><td></td><td style="text-align: right;">15 000 (1)</td></tr> <tr> <td>Distribution costs</td><td style="text-align: right;">212 000</td><td></td></tr> <tr> <td>Administrative expenses</td><td style="text-align: right;"><u>484 000</u> (1)</td><td style="text-align: right;"><u>696 000</u></td></tr> <tr> <td>Profit from operations</td><td></td><td style="text-align: right;">54 000 (1)OF</td></tr> <tr> <td>Finance charges</td><td></td><td style="text-align: right;"><u>20 000</u> (1)</td></tr> <tr> <td>Profit for the year</td><td></td><td style="text-align: right;"><u>34 000</u> (1)OF</td></tr> </tbody> </table> <p>W1 505 000 (1) + 283 000 (1) + 12 000 (1) + 200 000 (1)OF = 1 000 000 (1)OF</p>		\$	\$	Revenue		1 550 000	Inventory 1 January 2019	140 000		Production cost at transfer price	1 000 000 W1			<u>1 140 000</u>		Inventory 31 December 2019	<u>125 000</u> (1)		Cost of sales		<u>1 015 000</u> (1)OF	Gross profit		535 000 (1)OF	Factory profit		200 000 (1)OF	Decrease in provision for unrealised profit		15 000 (1)	Distribution costs	212 000		Administrative expenses	<u>484 000</u> (1)	<u>696 000</u>	Profit from operations		54 000 (1)OF	Finance charges		<u>20 000</u> (1)	Profit for the year		<u>34 000</u> (1)OF	14
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1(d)	<p>This suggestion would remove the link with the market price (1) and therefore be subjective (1).</p> <p>This would increase factory profit (1) but decrease gross profit (1) and leave overall profit unchanged (1).</p> <p>Any production bonuses for staff and/or the manager in the factory could be inflated (1).</p> <p>A fixed rate would be consistent year on year (1) and would avoid large fluctuations in the provision for unrealised profit (1) and would simplify the accounting function (1).</p> <p>Accept other valid points</p> <p>Max (4) for comments plus (1) for decision</p>	5																																													
1(e)	In the manufacturing account (1) within cost of raw materials consumed/added to purchase cost of raw materials (1) as it is the additional cost of purchasing the raw materials (1) Max 2	2																																													

Question	Answer	Marks
2(a)	<div><div></div><div><div>\$</div><div>Profit from operations63 000 (1)</div><div>Interest (12 – 3 + 5)14 000 (1)</div><div>Profit for the year49 000 (1)(OF)</div></div></div>	3
2(b)	<div><div>PL plc</div><div>Statement of financial position (extract) at 31 December 2019</div><div><div>Equity</div><div><div>\$</div><div>Ordinary share capital341 000 W1</div><div>Share premium59 000 W2</div><div>Revaluation reserve95 000 (1)</div><div>General reserve30 000 (1)</div><div>Retained earnings75 000 W3</div><div>600 000</div></div></div><div><div>Non-current liabilities</div><div><div>Bank loans85 000 (1)</div></div></div><div><div>Current liabilities</div><div><div>Trade and other payables72 000 W4</div><div>Bank loan20 000 (1)</div></div></div><div><div>Total equity and liabilities (1)</div><div><div>777 000 (1)(OF)</div></div></div><div><div>W1 250 000 + 60 000 (1) + 31 000 = 341 000 (1)(OF)</div><div>W2 90 000 (1) – 31 000 = 59 000 (1)(OF)</div><div>W3 76 000 + 49 000 (1)(OF)– 20 000 (1) – 30 000 (1) = 75 000 (1)(OF)</div><div>W4 67 000 (1) + 5 000 = 72 000 (1)(OF)</div></div></div>	16
2(c)	The company has purchased another business as a going concern (1) and paid a purchase consideration higher than the value of the net assets taken over (1).	2
2(d)	<div><div>Good reputation of business (1)</div><div>Good location of premises (1)</div><div>Profitability of business (1)</div><div>Efficiency of employees (1)</div><div>Good customer base (1)</div><div>Accept other valid points</div><div>Max 2</div></div>	2
2(e)	<div><div>An independent check on a business’s accounting records (1) by an independent, qualified person (1) to check for material errors and to check compliance with accounting standards and relevant legislation (1), resulting in a report (1) stating whether or not the financial statements give a true and fair view (1).</div><div>Accept other valid points</div><div>Max 2</div></div>	2

Question	Answer	Marks																																
3(a)(i)	<div>Consignment to Nakula account</div> <table><tr><td></td><td>\$</td><td></td><td>\$</td></tr><tr><td>goods on consignment</td><td>6000 *</td><td>Nakula</td><td>4000 (1)</td></tr><tr><td>bank (freight)</td><td>600 }</td><td>Bal c/d</td><td>4180</td></tr><tr><td>Nakula (selling)</td><td>400 }</td><td></td><td></td></tr><tr><td>Nakula (commission)</td><td>720 (1)</td><td></td><td></td></tr><tr><td>profit on consignment</td><td>460 *(1)both</td><td></td><td></td></tr><tr><td></td><td><u>8180</u></td><td></td><td><u>8180</u></td></tr><tr><td>Bal b/d</td><td>4180 (1)OF</td><td></td><td></td></tr></table>		\$		\$	goods on consignment	6000 *	Nakula	4000 (1)	bank (freight)	600 }	Bal c/d	4180	Nakula (selling)	400 }			Nakula (commission)	720 (1)			profit on consignment	460 *(1)both				<u>8180</u>		<u>8180</u>	Bal b/d	4180 (1)OF			5
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3(a)(ii)	<div>consignment to Pedro account</div> <table><tr><td></td><td>\$</td><td></td><td>\$</td></tr><tr><td>goods on consignment</td><td>15 000 *</td><td>Pedro</td><td>28 000 (1)</td></tr><tr><td>Pedro (freight)</td><td>1 600 }</td><td></td><td></td></tr><tr><td>Pedro (selling)</td><td>1 200 }</td><td></td><td></td></tr><tr><td>Pedro (commission)</td><td>2 800 (1)(OF)</td><td></td><td></td></tr><tr><td>profit on consignment</td><td>7 400 *(1) both</td><td></td><td></td></tr><tr><td></td><td><u>28 000</u></td><td></td><td><u>28 000</u></td></tr></table>		\$		\$	goods on consignment	15 000 *	Pedro	28 000 (1)	Pedro (freight)	1 600 }			Pedro (selling)	1 200 }			Pedro (commission)	2 800 (1)(OF)			profit on consignment	7 400 *(1) both				<u>28 000</u>		<u>28 000</u>	4				
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3(b)	<div>$\frac{2800}{28000} (1)(OF) \times 100 = 10\% (1)(OF)$</div> <div>OF relates to numerator only, denominator CF</div>	2																																
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3(d)	At lower of cost (1) plus the relevant portion of the costs of getting the inventory into a position and condition to sell (1) and net realisable value (1)	3																																
3(e)	<div>$\frac{4180 (1of)}{110 (1)} = 38 \text{ units } (1)(OF)$</div>	3																																

Question	Answer	Marks
4(a)	Absolute values may not be useful in isolation. (1) The use of ratios puts values into context. (1) Ratios may enable trends over time to be monitored. (1) Ratios enable comparisons with other companies or with industry averages. (1) Ratios may help in decision making. (1) Accept other valid points Max 3	3
4(b)(i)	$\frac{20000}{215000} (1) \times 100 = 9.30\% (1)(OF)$	2
4(b)(ii)	It shows that the company has a good ability to pay the interest out of profits. (1)	1
4(b)(iii)	gearing ratio (1)	1
4(c)(i)	$\frac{195000}{80000} (1) = 2.44 \text{ times } (1)(OF)$	2
4(c)(ii)	The company is ploughing back the majority of its profits into the business which should increase its profit generating abilities. (1)	1
4(d)(i)	$\frac{0.08}{0.75} (1) \times 100 = 10.67\% (1)(OF)$	2
4(d)(ii)	An investor will get back more than 10% of the amount he would pay now to buy shares each year. (1)	1
4(e)	earnings per share (1) $\frac{195000}{1000000} (1) = \$0.195 (1)(OF)$	3
4(f)	price earnings ratio (1) $\frac{0.75 (1)}{0.195 (1of)} = 3.85 (1)(OF)$	4
4(g)	The directors' report does give a review of performance (1) and details of dividends (1) but Fred would likely want more detail than this (1). The financial statements deal with historic data (1) and may not be a good indicator of future performance (1) but the directors' report also covers likely future developments of the company (1). Decision (1) Max (4) for comments Accept other valid points.	5

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5(a)	<table><thead><tr><th></th><th>A</th><th>B</th><th></th></tr><tr><th></th><th>\$</th><th>\$</th><th></th></tr></thead><tbody><tr><td>sales</td><td>58 000</td><td>138 000</td><td>(1) both</td></tr><tr><td>direct materials</td><td>16 000</td><td>36 000</td><td>}</td></tr><tr><td>direct labour</td><td>20 000</td><td>33 000</td><td>} (1) both</td></tr><tr><td>overheads</td><td>18 098 (1)</td><td>43 062 (1)</td><td></td></tr><tr><td>total profit</td><td>3 902</td><td>25 938</td><td></td></tr><tr><td>profit per unit</td><td>1.95</td><td>8.65</td><td>(1)(OF)both</td></tr></tbody></table> <p>Accept alternative formats</p>		A	B			\$	\$		sales	58 000	138 000	(1) both	direct materials	16 000	36 000	}	direct labour	20 000	33 000	} (1) both	overheads	18 098 (1)	43 062 (1)		total profit	3 902	25 938		profit per unit	1.95	8.65	(1)(OF)both	5
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5(c)	<p>Rent cannot be allocated under ABC (1)</p> <p>Max 2 of the following</p> <p>it is a fixed cost (1)/not affected by the level of production (1)/not subject to changes in activity level (1)/apportioned on a suitable basis i.e. floor area. (1)</p>	3																																
5(d)	<table><thead><tr><th></th><th>A</th><th>B</th><th></th></tr><tr><th></th><th>\$</th><th>\$</th><th></th></tr></thead><tbody><tr><td>old profit</td><td>3 902</td><td>25 938</td><td>*</td></tr><tr><td><i>add</i> old overheads</td><td>18 098</td><td>43 062</td><td>*(1)(OF)both</td></tr><tr><td><i>less</i> new overheads</td><td>25 150</td><td>36 010</td><td>(1)(OF)both</td></tr><tr><td>new profit/loss</td><td>(3150)</td><td>32 990</td><td>(1)(OF)both</td></tr><tr><td>new profit/loss per unit</td><td>(1.58)</td><td>11.00</td><td>(1)(OF)both</td></tr></tbody></table> <p>accept alternative formats</p>		A	B			\$	\$		old profit	3 902	25 938	*	<i>add</i> old overheads	18 098	43 062	*(1)(OF)both	<i>less</i> new overheads	25 150	36 010	(1)(OF)both	new profit/loss	(3150)	32 990	(1)(OF)both	new profit/loss per unit	(1.58)	11.00	(1)(OF)both	4				
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5(e)	<p>The changes in allocation of overheads has not changed total profit. (1)</p> <p>Product A now makes a loss per unit. (1)</p> <p>However it still has a positive contribution. (1)</p> <p>Most of the increase in the overheads for product A relate to the rent which is still apportioned rather than allocated and is therefore subjective. (1)</p> <p>Bob needs to consider what his competitors are charging/what the market can bear. (1)</p> <p>If he increased the price of A sales might fall. (1)</p> <p>If sales of A fell total contribution might decrease. (1)</p> <p>If sales of A fell the rent being a fixed cost would still have to be paid. (1)</p> <p>Accept other valid points</p> <p>Decision (1)</p> <p>Max (4) for four comments.</p>	5																																

Question	Answer						Marks						
6(a)(i)	<table><tr><td></td><td>year 1 \$</td><td>year 2 \$</td></tr><tr><td>revenue – original</td><td>800 000</td><td>913 000 (1 both)</td></tr></table>							year 1 \$	year 2 \$	revenue – original	800 000	913 000 (1 both)	1
		year 1 \$	year 2 \$										
revenue – original	800 000	913 000 (1 both)											
6(a) (ii)	<table><tr><td></td><td>year 1 \$</td><td>year 2 \$</td></tr><tr><td>revenue – revised</td><td>1 056 000</td><td>1 195 200 (1 both)</td></tr></table>							year 1 \$	year 2 \$	revenue – revised	1 056 000	1 195 200 (1 both)	1
		year 1 \$	year 2 \$										
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6(b)(i)	<table><tr><td></td><td>year 1 \$</td><td>year 2 \$</td></tr><tr><td>variable cost – original</td><td>240 000 (1)</td><td>249 000 (1)</td></tr></table>							year 1 \$	year 2 \$	variable cost – original	240 000 (1)	249 000 (1)	2
		year 1 \$	year 2 \$										
variable cost – original	240 000 (1)	249 000 (1)											
6(b)(ii)	<table><tr><td></td><td>year 1 \$</td><td>year 2 \$</td></tr><tr><td>variable cost – revised</td><td>288 000 (1)</td><td>298 800 (1)</td></tr></table>							year 1 \$	year 2 \$	variable cost – revised	288 000 (1)	298 800 (1)	2
		year 1 \$	year 2 \$										
variable cost – revised	288 000 (1)	298 800 (1)											
6(c)		incr in revenue \$	incr in var costs \$	incr in fixed costs \$	net cash flow \$	discount factor	discounted cash flow \$	8					
	y1	256 000	48 000	125 000	83 000 (1)(OF)	0.909	75 447 (1)(OF)						
	y2	282 200 (1)(OF) for both	49 800 (1)(OF) for both	125 000 (1) for both	107 400 (1)(OF)	0.826	88 712 (1)(OF)						
						NPV	164 159 (1)(OF)						
6(d)	increase in fixed costs \$125 000 increased income from existing sales [8 000 × \$10] \$80 000 \$45 000 (1) new ticket sales [45 000/(100 + 10)] 409.09 (1)(OF) total ticket sales (8 000 + 410) 8 410 (1)(OF)						3						
6(e)	It would increase the risk (1) as it involves a substantial increase in the fixed costs (1) with no guarantee that the extra revenue will happen (1) . In year 2 the ticket sales are very close to the maximum (1) . What will happen if someone wants to buy a ticket for a day which is fully booked – will he chose to book on another day? (1) Accept other valid points. Max 2						2						

Question	Answer	Marks
6(f)	<p>It increases an already positive NPV. (1) He could consider other methods of appraisal. (1) It increases the risk of the plan. (1) It is based on estimates. (1) Non-financial factors are not considered. (1) Accept other valid points Decision (1) Max (2) for comments</p>	3
6(g)	<p>It deals with forecast figures (1) to measure the effect on an outcome of a change in a variable cost or income (1). It is useful when a project lasts for a number of years (1). Accept other valid points</p>	3