
ACCOUNTING

9706/21

Paper 2 Structured Questions

May/June 2018

MARK SCHEME

Maximum Mark: 90

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.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the May/June 2018 series for most Cambridge IGCSE™, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

IGCSE™ is a registered trademark.

This document consists of **15** printed pages.

PUBLISHED**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.

PUBLISHED

Question	Answer	Marks																																								
1(a)	<p style="text-align: center;">Ashir, Bo and Chan Income statement for the year ended 31 December 2016</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 10%; text-align: right;">\$</th> <th style="width: 10%; text-align: right;">\$</th> <th style="width: 10%; text-align: right;">\$</th> <th style="width: 20%;"></th> </tr> </thead> <tbody> <tr> <td>Gross profit</td> <td></td> <td></td> <td style="text-align: right;">171 620</td> <td></td> </tr> <tr> <td>Operating expenses</td> <td></td> <td style="text-align: right;">54 560</td> <td></td> <td style="text-align: right;">(1)</td> </tr> <tr> <td>Staff Wages</td> <td></td> <td style="text-align: right;">33 360</td> <td></td> <td style="text-align: right;">(1)</td> </tr> <tr> <td>Loan interest</td> <td></td> <td style="text-align: right;">1 200</td> <td></td> <td style="text-align: right;">(1)</td> </tr> <tr> <td>Depreciation – Fixtures and fittings</td> <td style="text-align: right;">1 100</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Depreciation – motor vehicles</td> <td style="text-align: right;"><u>16 000</u></td> <td style="text-align: right;"><u>17 100</u></td> <td></td> <td style="text-align: right;">(1)</td> </tr> <tr> <td>Profit for the year</td> <td></td> <td></td> <td style="text-align: right;"><u>65 400</u></td> <td style="text-align: right;">(1) OF</td> </tr> </tbody> </table>		\$	\$	\$		Gross profit			171 620		Operating expenses		54 560		(1)	Staff Wages		33 360		(1)	Loan interest		1 200		(1)	Depreciation – Fixtures and fittings	1 100				Depreciation – motor vehicles	<u>16 000</u>	<u>17 100</u>		(1)	Profit for the year			<u>65 400</u>	(1) OF	5
	\$	\$	\$																																							
Gross profit			171 620																																							
Operating expenses		54 560		(1)																																						
Staff Wages		33 360		(1)																																						
Loan interest		1 200		(1)																																						
Depreciation – Fixtures and fittings	1 100																																									
Depreciation – motor vehicles	<u>16 000</u>	<u>17 100</u>		(1)																																						
Profit for the year			<u>65 400</u>	(1) OF																																						
1(b)	<p style="text-align: center;">Ashir, Bo and Chan Profit and loss appropriation account for the year ended 31 December 2016</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 10%; text-align: right;">\$</th> <th style="width: 10%; text-align: right;">\$</th> <th style="width: 20%;"></th> </tr> </thead> <tbody> <tr> <td>Profit for the year</td> <td></td> <td style="text-align: right;">65 400</td> <td style="text-align: right;">(1) OF</td> </tr> <tr> <td>Interest on drawings</td> <td style="text-align: right;">Ashir 770 Bo 610 Chan <u>820</u></td> <td style="text-align: right;">2 200</td> <td style="text-align: right;">(1 for all)</td> </tr> <tr> <td>Interest on capital</td> <td style="text-align: right;">Ashir (2 400) Bo (1 800) Chan <u>(600)</u></td> <td style="text-align: right;">(4 800)</td> <td style="text-align: right;">(1 for all)</td> </tr> <tr> <td>Salary</td> <td style="text-align: right;">Chan</td> <td style="text-align: right;"><u>(12 000)</u></td> <td style="text-align: right;">(1)</td> </tr> <tr> <td>Attributable profit</td> <td></td> <td style="text-align: right;"><u>50 800</u></td> <td></td> </tr> <tr> <td>Divisible</td> <td style="text-align: right;">Ashir 25 400 Bo 19 050 Chan <u>6 350</u></td> <td style="text-align: right;"><u>50 800</u></td> <td style="text-align: right;">(1 OF for all)</td> </tr> </tbody> </table>		\$	\$		Profit for the year		65 400	(1) OF	Interest on drawings	Ashir 770 Bo 610 Chan <u>820</u>	2 200	(1 for all)	Interest on capital	Ashir (2 400) Bo (1 800) Chan <u>(600)</u>	(4 800)	(1 for all)	Salary	Chan	<u>(12 000)</u>	(1)	Attributable profit		<u>50 800</u>		Divisible	Ashir 25 400 Bo 19 050 Chan <u>6 350</u>	<u>50 800</u>	(1 OF for all)	5												
	\$	\$																																								
Profit for the year		65 400	(1) OF																																							
Interest on drawings	Ashir 770 Bo 610 Chan <u>820</u>	2 200	(1 for all)																																							
Interest on capital	Ashir (2 400) Bo (1 800) Chan <u>(600)</u>	(4 800)	(1 for all)																																							
Salary	Chan	<u>(12 000)</u>	(1)																																							
Attributable profit		<u>50 800</u>																																								
Divisible	Ashir 25 400 Bo 19 050 Chan <u>6 350</u>	<u>50 800</u>	(1 OF for all)																																							

Question	Answer								Marks																																																																	
1(c)	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Detail</th> <th style="width: 15%;">Ashir \$</th> <th style="width: 15%;">Bo \$</th> <th style="width: 15%;">Chan \$</th> <th style="width: 15%;">Detail</th> <th style="width: 15%;">Ashir \$</th> <th style="width: 15%;">Bo \$</th> <th style="width: 15%;">Chan \$</th> </tr> </thead> <tbody> <tr> <td>Balance b/f</td> <td></td> <td></td> <td>2 600</td> <td>Balance b/f</td> <td>12 300</td> <td>8 200</td> <td></td> </tr> <tr> <td>Interest on drawings (1OF for line)</td> <td>770</td> <td>610</td> <td>820</td> <td>Interest on capital (1OF for line)</td> <td>2 400</td> <td>1 800</td> <td>600</td> </tr> <tr> <td>Drawings (1 for line)</td> <td>15 400</td> <td>12 200</td> <td>16 400</td> <td>Loan interest (1)</td> <td>1 200</td> <td></td> <td></td> </tr> <tr> <td>Balance c/d</td> <td>25 130</td> <td>16 240</td> <td></td> <td>Salary</td> <td></td> <td></td> <td>12 000 (1)</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Profit for the year (1OF for line)</td> <td>25 400</td> <td>19 050</td> <td>6 350</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Balance c/d</td> <td></td> <td></td> <td>870</td> </tr> <tr> <td></td> <td style="border-top: 1px solid black;">41 300</td> <td style="border-top: 1px solid black;">29 050</td> <td style="border-top: 1px solid black;">19 820</td> <td></td> <td style="border-top: 1px solid black;">41 300</td> <td style="border-top: 1px solid black;">29 050</td> <td style="border-top: 1px solid black;">19 820</td> </tr> <tr> <td></td> <td>Balance b/d (1OF for line)</td> <td></td> <td>870</td> <td>Balance b/d</td> <td>25 130</td> <td>16 240</td> <td></td> </tr> </tbody> </table>	Detail	Ashir \$	Bo \$	Chan \$	Detail	Ashir \$	Bo \$	Chan \$	Balance b/f			2 600	Balance b/f	12 300	8 200		Interest on drawings (1OF for line)	770	610	820	Interest on capital (1OF for line)	2 400	1 800	600	Drawings (1 for line)	15 400	12 200	16 400	Loan interest (1)	1 200			Balance c/d	25 130	16 240		Salary			12 000 (1)					Profit for the year (1OF for line)	25 400	19 050	6 350					Balance c/d			870		41 300	29 050	19 820		41 300	29 050	19 820		Balance b/d (1OF for line)		870	Balance b/d	25 130	16 240		7
Detail	Ashir \$	Bo \$	Chan \$	Detail	Ashir \$	Bo \$	Chan \$																																																																			
Balance b/f			2 600	Balance b/f	12 300	8 200																																																																				
Interest on drawings (1OF for line)	770	610	820	Interest on capital (1OF for line)	2 400	1 800	600																																																																			
Drawings (1 for line)	15 400	12 200	16 400	Loan interest (1)	1 200																																																																					
Balance c/d	25 130	16 240		Salary			12 000 (1)																																																																			
				Profit for the year (1OF for line)	25 400	19 050	6 350																																																																			
				Balance c/d			870																																																																			
	41 300	29 050	19 820		41 300	29 050	19 820																																																																			
	Balance b/d (1OF for line)		870	Balance b/d	25 130	16 240																																																																				
1(d)	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 60%;"></td> <td style="text-align: right;">\$</td> <td></td> </tr> <tr> <td>Capital account</td> <td style="text-align: right;">10 000</td> <td></td> </tr> <tr> <td>Current account</td> <td style="text-align: right;">(870)</td> <td style="text-align: right;">(1)OF</td> </tr> <tr> <td>Motor vehicle</td> <td style="text-align: right;">(18 000)</td> <td style="text-align: right;">(1)</td> </tr> <tr> <td>Goodwill</td> <td style="text-align: right;">15 500</td> <td style="text-align: right;">(1)</td> </tr> <tr> <td>Due to Chan (correct label only)</td> <td style="text-align: right; border-top: 1px solid black;">6 630</td> <td style="text-align: right;">(1)OF</td> </tr> </tbody> </table>		\$		Capital account	10 000		Current account	(870)	(1)OF	Motor vehicle	(18 000)	(1)	Goodwill	15 500	(1)	Due to Chan (correct label only)	6 630	(1)OF	4																																																						
	\$																																																																									
Capital account	10 000																																																																									
Current account	(870)	(1)OF																																																																								
Motor vehicle	(18 000)	(1)																																																																								
Goodwill	15 500	(1)																																																																								
Due to Chan (correct label only)	6 630	(1)OF																																																																								
1(e)	<p>Separate entity Limited liability for owners Ability to raise finance</p> <p>1 mark for each advantage – maximum 2 marks</p>																																																																									

Question	Answer	Marks
1(f)	<p>Advice</p> <p>Yes he should maintain a full set of accounting records (1)</p> <p>Reasons</p> <p>Advantages (Max 2) Business is growing fast Enables closer monitoring of performance Enables Bilal to control the business performance Enable Bilal to maximise opportunities</p> <p>Disadvantages (Max 2) More time consuming Need to employ specialist staff</p> <p>1 mark for advice, maximum 2 marks for advantages and max 2 marks for disadvantages</p>	5
1(g)	<p>Minimises possibility of bad debts Independent check on arithmetic accuracy Reduces possibility of fraud Provides instant record of total trade receivables Facilitates preparation of financial statements</p> <p>1 mark for each benefit – maximum 2 marks</p>	2

Question	Answer				Marks																																				
2(a)					6																																				
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="text-align: center;">\$</td> <td style="width: 30%;"></td> <td style="text-align: center;">\$</td> <td colspan="2"></td> </tr> <tr> <td>Balance b/d</td> <td style="text-align: right;">124 000</td> <td>Disposal</td> <td style="text-align: right;">36 000</td> <td colspan="2"></td> </tr> <tr> <td>Bank</td> <td style="text-align: right;">28 000</td> <td>Balance c/d</td> <td style="text-align: right;">136 000</td> <td colspan="2"></td> </tr> <tr> <td>Disposal</td> <td style="text-align: right;"><u>20 000</u> (1)</td> <td></td> <td></td> <td colspan="2"></td> </tr> <tr> <td></td> <td style="text-align: right;"><u>172 000</u></td> <td></td> <td style="text-align: right;"><u>172 000</u></td> <td colspan="2"></td> </tr> <tr> <td>Balance b/d</td> <td style="text-align: right;">136 000 (1)OF</td> <td></td> <td></td> <td colspan="2"></td> </tr> </table>							\$		\$			Balance b/d	124 000	Disposal	36 000			Bank	28 000	Balance c/d	136 000			Disposal	<u>20 000</u> (1)						<u>172 000</u>		<u>172 000</u>			Balance b/d	136 000 (1)OF				
	\$		\$																																						
Balance b/d	124 000	Disposal	36 000																																						
Bank	28 000	Balance c/d	136 000																																						
Disposal	<u>20 000</u> (1)																																								
	<u>172 000</u>		<u>172 000</u>																																						
Balance b/d	136 000 (1)OF																																								
<p>Motor vehicles provision for depreciation</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="text-align: center;">\$</td> <td style="width: 30%;"></td> <td style="text-align: center;">\$</td> <td colspan="2"></td> </tr> <tr> <td>Disposal</td> <td style="text-align: right;">15 750</td> <td>Balance c/d</td> <td style="text-align: right;">54 250</td> <td colspan="2"></td> </tr> <tr> <td>Balance c/d</td> <td style="text-align: right;"><u>62 875</u></td> <td>Income statement W1</td> <td style="text-align: right;"><u>24 375</u> (1) OF</td> <td colspan="2"></td> </tr> <tr> <td></td> <td style="text-align: right;"><u>78 625</u></td> <td></td> <td style="text-align: right;"><u>78 625</u></td> <td colspan="2"></td> </tr> <tr> <td></td> <td></td> <td>Balance b/d</td> <td style="text-align: right;">62 875 (1) OF</td> <td colspan="2"></td> </tr> </table>							\$		\$			Disposal	15 750	Balance c/d	54 250			Balance c/d	<u>62 875</u>	Income statement W1	<u>24 375</u> (1) OF				<u>78 625</u>		<u>78 625</u>					Balance b/d	62 875 (1) OF								
	\$		\$																																						
Disposal	15 750	Balance c/d	54 250																																						
Balance c/d	<u>62 875</u>	Income statement W1	<u>24 375</u> (1) OF																																						
	<u>78 625</u>		<u>78 625</u>																																						
		Balance b/d	62 875 (1) OF																																						
<p>Disposal of non-current assets</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="text-align: center;">\$</td> <td style="width: 30%;"></td> <td style="text-align: center;">\$</td> <td colspan="2"></td> </tr> <tr> <td>Motor vehicle at cost</td> <td style="text-align: right;">36 000</td> <td>Motor vehicle at cost</td> <td style="text-align: right;">20 000</td> <td colspan="2"></td> </tr> <tr> <td></td> <td></td> <td>Motor vehicle provision for depreciation</td> <td style="text-align: right;">15 750 (1)</td> <td colspan="2"></td> </tr> <tr> <td></td> <td></td> <td>Income statement</td> <td style="text-align: right;"><u>250</u> (1) OF</td> <td colspan="2"></td> </tr> <tr> <td></td> <td style="text-align: right;"><u>36 000</u></td> <td></td> <td style="text-align: right;"><u>36 000</u></td> <td colspan="2"></td> </tr> </table>							\$		\$			Motor vehicle at cost	36 000	Motor vehicle at cost	20 000					Motor vehicle provision for depreciation	15 750 (1)					Income statement	<u>250</u> (1) OF				<u>36 000</u>		<u>36 000</u>								
	\$		\$																																						
Motor vehicle at cost	36 000	Motor vehicle at cost	20 000																																						
		Motor vehicle provision for depreciation	15 750 (1)																																						
		Income statement	<u>250</u> (1) OF																																						
	<u>36 000</u>		<u>36 000</u>																																						
<p>W1: 136 000 – (54 250 – 15 750) × 25% = \$24 375</p>																																									

PUBLISHED

Question	Answer	Marks
2(b)	<p>Depreciation for the year ended 31 December 2015 would be \$27 200 using the straight-line method, but \$24 375 using the reducing balance method (1).</p> <p>The loss on sale of the motor vehicle would be \$1 600 (36 000 – 20 000 – 14 400) using the straight-line method, compared to \$250 using the reducing balance method (1of).</p> <p>Using straight line depreciation 27 200 + loss 1600 = \$28 800 (1)</p> <p>Using reducing balance method 24 375 + loss 250 = \$24 625 (1)</p> <p>Profit for the year would be reduced by \$4 175 (\$28 800 – 24 625) if using the straight-line method (1of).</p>	5
2(c)	<p>Accruals / matching concept (1). The cost of using the asset should be matched to the time period of income earned by the asset (1).</p> <p>Prudence (1). Spreading the cost of an asset over its useful life avoids overstating annual profits / value of assets (1).</p> <p>Consistency (1). Enables valid comparison. (1)</p> <p>Max 4</p>	4

Question	Answer	Marks
3(a)(i)	<p>Current ratio</p> <p>$63\,580 / 28\,760$ (1) = 2.21 : 1 (1)</p>	2
3(a)(ii)	<p>Liquid (Acid) test ratio</p> <p>$5\,480 / 28\,760$ (1) = 0.89 : 1 (1)</p>	2
3(a)(iii)	<p>Rate of inventory turnover</p> <p>$265\,400 / 42\,150$ = 6.30 times per year (1) OF</p> <p>Workings: $331\,750 / 100 \times 80$ (1) = 265 400 (1)</p>	3

PUBLISHED

Question	Answer	Marks
3(b)	<p>Yuan has the higher current ratio (1) and liquid (acid) test ratio (1) Ravi has a negative liquid (acid) test ratio (1) therefore he would be less able to pay promptly (1) as he has more of his current assets tied up in inventory (1) She would need to consider that Yuan has more assets lying idle and so he may not be as efficient. (1) She should try to discover more about their long term assets and liabilities (1)</p> <p>Decision (1) mark</p> <p>Justification Max 4 marks</p>	5
3(c)	<p>Historic Window dressing Different accounting policies Different year end Different sizes</p> <p>1 mark for each point to a max of 3</p> <p>Accept other valid points</p>	3

Question	Answer	Marks																								
4(a)	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 40%;"></td> <td style="text-align: center;">\$</td> <td style="width: 20%;"></td> <td style="width: 40%;"></td> </tr> <tr> <td>Direct labour</td> <td style="text-align: right;">38 500</td> <td></td> <td></td> </tr> <tr> <td>Direct material</td> <td style="text-align: right;">24 750</td> <td></td> <td></td> </tr> <tr> <td>Variable factory cost (13 750 – 5 500)</td> <td style="text-align: right;"><u>8 250</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: right;"><u>71 500</u></td> <td style="text-align: right;">(1)</td> <td>÷ 11 000 units = \$6.50 per unit (1)</td> </tr> <tr> <td style="text-align: center;">or</td> <td style="text-align: right;">\$84 500</td> <td></td> <td>÷ 13 000 units = \$6.50 per unit</td> </tr> </table>		\$			Direct labour	38 500			Direct material	24 750			Variable factory cost (13 750 – 5 500)	<u>8 250</u>				<u>71 500</u>	(1)	÷ 11 000 units = \$6.50 per unit (1)	or	\$84 500		÷ 13 000 units = \$6.50 per unit	2
	\$																									
Direct labour	38 500																									
Direct material	24 750																									
Variable factory cost (13 750 – 5 500)	<u>8 250</u>																									
	<u>71 500</u>	(1)	÷ 11 000 units = \$6.50 per unit (1)																							
or	\$84 500		÷ 13 000 units = \$6.50 per unit																							

Question	Answer				Marks
4(b)					6
		<u>Year 1</u>		<u>Year 2</u>	
		\$		\$	
	Revenue (10 000 × \$18)	180 000	(11 000 × \$18)	198 000	(1) both
	Variable production cost (10 000 (1) × \$6.50)	(65 000)	(11 000 (1) × \$6.50)	(71 500)	
	Variable selling costs (180 000 × 5%)	<u>(9 000)</u>	(198 000 × 5%)	<u>(9 900)</u>	(1)OF both
	Contribution	<u>106 000</u> (1)OF		<u>116 600</u> (1)OF	
	Alternative layout				
		<u>Year 1</u>		<u>Year 2</u>	
	Per unit				
	\$	\$		\$	
	Selling price 18 (1)				
	Variable production costs <u>(6.50)</u>				
	11.50 × 10 000 (1)	= 115 000	× 11 000 (1)	= 126 500	
	Variable selling costs	<u>(9 000)</u>		<u>(9 900)</u> (1)OF both	
	Contribution	<u>106 000</u> (1)OF		<u>116 600</u> (1)OF	

PUBLISHED

Question	Answer	Marks																								
4(c)	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 30%; text-align: center;">Year 1</th> <th style="width: 30%; text-align: center;">Year 2</th> </tr> </thead> <tbody> <tr> <td></td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> <tr> <td style="padding-left: 20px;">Direct labour</td> <td style="text-align: right;">38 500</td> <td style="text-align: right;">45 500</td> </tr> <tr> <td style="padding-left: 20px;">Direct material</td> <td style="text-align: right;">24 750</td> <td style="text-align: right;">29 250</td> </tr> <tr> <td style="padding-left: 20px;">Factory cost</td> <td style="text-align: right;"><u>13 750</u></td> <td style="text-align: right;"><u>15 250</u></td> </tr> <tr> <td></td> <td style="text-align: right;">\$77 000</td> <td style="text-align: right;">\$90 000</td> </tr> <tr> <td></td> <td style="text-align: right;">÷ 11 000 Units</td> <td style="text-align: right;">÷ 13 000</td> </tr> <tr> <td style="text-align: right;">=</td> <td style="text-align: right;">\$7 Per unit (1)</td> <td style="text-align: right;">\$6.92 Per unit (1)</td> </tr> </tbody> </table>		Year 1	Year 2		\$	\$	Direct labour	38 500	45 500	Direct material	24 750	29 250	Factory cost	<u>13 750</u>	<u>15 250</u>		\$77 000	\$90 000		÷ 11 000 Units	÷ 13 000	=	\$7 Per unit (1)	\$6.92 Per unit (1)	2
	Year 1	Year 2																								
	\$	\$																								
Direct labour	38 500	45 500																								
Direct material	24 750	29 250																								
Factory cost	<u>13 750</u>	<u>15 250</u>																								
	\$77 000	\$90 000																								
	÷ 11 000 Units	÷ 13 000																								
=	\$7 Per unit (1)	\$6.92 Per unit (1)																								
4(d)	<p>It is more time consuming to calculate the overhead absorption rate and adjust for over / under absorption. It is more complicated to calculate and managers may need training. It is irrelevant in short term decision making as fixed costs don't change. Fixed costs relate to a period in time and so can be misleading to charge to production units. The basis used to apportion and absorb overheads may be arbitrary.</p> <p>(1 mark) × any two limitations</p> <p>Max 2</p>	2																								

PUBLISHED

Question	Answer					Marks
4(e)		Year 1 \$		Year 2 \$		7
	Revenue (10 000 × \$18)	180 000	(11 000 × \$18)	198 000	(1) row	
	Production cost (10 000 × \$7)	(70 000)	(1 000 × \$7)	(7 000)	(1)OF	
			(10 000 × \$6.92)	(69 200)	(1)OF	
	Selling costs:					
	– variable (180 000 × 5%)	(9 000)	(198 000 × 5%)	(9 900)	(1) row	
	– fixed	<u>(3 500)</u>	(3 500 × 102%)	<u>(3 570)</u>	(1) row	
	Profit	<u>97 500</u>		<u>108 330</u>	(1)OF row	
	<i>Alternative layout</i>					
		<u>Year 1</u> \$		<u>Year 2</u> \$		
	Revenue (10 000 × \$18)	180 000	(11 000 × \$18)	198 000	(1) row	
	Opening inventory –	–	(1 000 × \$7)	7 000	(1)OF	
	Purchases (11 000 × \$7)	77 000	(13 000 × \$6.92)	89 960	(1)OF	
	Closing inventory (1 000 × \$7)	<u>(7 000)</u>	(3 000 × \$6.92)	<u>(20 760)</u>	} both	
	Production cost	(70 000)		(76 200)	(1)OF	
	Selling costs:					
	– variable (180 000 × 5%)	(9 000)	(198 000 × 5%)	(9 900)	(1) row	
	– fixed	<u>(3 500)</u>	(3 500 × 102%)	<u>(3 570)</u>	(1) row	
	Profit	<u>97 500</u>		<u>108 330</u>	(1)OF row	

PUBLISHED

Question	Answer	Marks																																																	
4(f)	<p>Using marginal costing</p> <p>Closing inventory is valued at variable production cost and so shows a lower closing inventory value. (1) Fixed overheads are treated as period costs (1) and are written off in the period's income statement. (1)</p> <p>Using absorption costing</p> <p>Closing inventory is valued at full production cost and so shows a higher closing inventory value. (1) Fixed overheads are treated as part of production costs (1) and are carried forward as part of the inventory value. (1)</p> <p>Max 3</p>	3																																																	
4(g)	<p>Calculation if variable selling expenses excluded (they remain the same)</p> <p>Workings</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Lost order in year 1</th> <th></th> <th style="text-align: center;">Replacement order</th> </tr> <tr> <th></th> <th style="text-align: center;">\$</th> <th></th> <th style="text-align: center;">\$</th> </tr> </thead> <tbody> <tr> <td>Selling price</td> <td style="text-align: center;">18</td> <td style="text-align: center;">(\$18 × -7.5%)</td> <td style="text-align: center;">16.65</td> </tr> <tr> <td>Variable production cost</td> <td style="text-align: center;"><u>- 6.50</u></td> <td></td> <td style="text-align: center;"><u>- 6.65</u> *</td> </tr> <tr> <td>Contribution</td> <td colspan="2" style="text-align: center;">11.50 × 3 000 units = \$34 500</td> <td colspan="2" style="text-align: center;">10.00 × 3 000 units = \$30 000</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">*</td> </tr> <tr> <td></td> <td style="text-align: center;">Variable production cost</td> <td style="text-align: center;">6.50</td> <td></td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">Additional direct labour</td> <td style="text-align: center;"><u>0.15</u></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;"><u>6.65</u></td> <td></td> <td></td> </tr> </tbody> </table> <p>Change in budgeted profit:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">\$</th> </tr> </thead> <tbody> <tr> <td>Loss of contribution \$34 500 – \$30 000 =</td> <td style="text-align: center;">(4 500) (1)</td> </tr> <tr> <td>Increase in advertising costs</td> <td style="text-align: center;"><u>(1 000)</u> (1)</td> </tr> <tr> <td>Decrease in profit</td> <td style="text-align: center;"><u>(5 500)</u> (1)OF</td> </tr> </tbody> </table>		Lost order in year 1		Replacement order		\$		\$	Selling price	18	(\$18 × -7.5%)	16.65	Variable production cost	<u>- 6.50</u>		<u>- 6.65</u> *	Contribution	11.50 × 3 000 units = \$34 500		10.00 × 3 000 units = \$30 000						*		Variable production cost	6.50				Additional direct labour	<u>0.15</u>					<u>6.65</u>				\$	Loss of contribution \$34 500 – \$30 000 =	(4 500) (1)	Increase in advertising costs	<u>(1 000)</u> (1)	Decrease in profit	<u>(5 500)</u> (1)OF	3
	Lost order in year 1		Replacement order																																																
	\$		\$																																																
Selling price	18	(\$18 × -7.5%)	16.65																																																
Variable production cost	<u>- 6.50</u>		<u>- 6.65</u> *																																																
Contribution	11.50 × 3 000 units = \$34 500		10.00 × 3 000 units = \$30 000																																																
				*																																															
	Variable production cost	6.50																																																	
	Additional direct labour	<u>0.15</u>																																																	
		<u>6.65</u>																																																	
	\$																																																		
Loss of contribution \$34 500 – \$30 000 =	(4 500) (1)																																																		
Increase in advertising costs	<u>(1 000)</u> (1)																																																		
Decrease in profit	<u>(5 500)</u> (1)OF																																																		

Question	Answer	Marks																																							
4(g)	<p>Alternative calculation if variable selling expenses included</p> <p>Workings</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"></td> <td style="width: 35%; text-align: center;">Lost order in year 1</td> <td style="width: 35%; text-align: center;">Replacement order</td> </tr> <tr> <td></td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> </tr> <tr> <td>Selling price</td> <td style="text-align: center;">18</td> <td style="text-align: center;">16.65</td> </tr> <tr> <td>Variable production cost</td> <td style="text-align: center;">– 6.50</td> <td style="text-align: center;">– 6.65</td> </tr> <tr> <td>Variable selling expenses</td> <td style="text-align: center;"><u>– 0.9</u> *</td> <td style="text-align: center;"><u>– 0.9</u> *</td> </tr> <tr> <td>Contribution</td> <td style="text-align: center;">10.60 × 3 000 units = \$31 800</td> <td style="text-align: center;">9.10 × 3 000 units = \$27 300</td> </tr> <tr> <td></td> <td style="text-align: center;">*</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">\$9 000 / 10 000 units = 0.9</td> <td></td> </tr> <tr> <td colspan="3" style="padding-top: 20px;">Change in budgeted profit:</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">\$</td> </tr> <tr> <td>Loss of contribution</td> <td style="text-align: center;">\$31 800 – \$27 300</td> <td style="text-align: center;">(4 500) (1)</td> </tr> <tr> <td>Increase in advertising costs</td> <td></td> <td style="text-align: center;"><u>(1 000)</u> (1)</td> </tr> <tr> <td>Decrease in profit</td> <td></td> <td style="text-align: center;"><u>(5 500)</u> (1)OF</td> </tr> </table>		Lost order in year 1	Replacement order		\$	\$	Selling price	18	16.65	Variable production cost	– 6.50	– 6.65	Variable selling expenses	<u>– 0.9</u> *	<u>– 0.9</u> *	Contribution	10.60 × 3 000 units = \$31 800	9.10 × 3 000 units = \$27 300		*			\$9 000 / 10 000 units = 0.9		Change in budgeted profit:					\$	Loss of contribution	\$31 800 – \$27 300	(4 500) (1)	Increase in advertising costs		<u>(1 000)</u> (1)	Decrease in profit		<u>(5 500)</u> (1)OF	3
	Lost order in year 1	Replacement order																																							
	\$	\$																																							
Selling price	18	16.65																																							
Variable production cost	– 6.50	– 6.65																																							
Variable selling expenses	<u>– 0.9</u> *	<u>– 0.9</u> *																																							
Contribution	10.60 × 3 000 units = \$31 800	9.10 × 3 000 units = \$27 300																																							
	*																																								
	\$9 000 / 10 000 units = 0.9																																								
Change in budgeted profit:																																									
		\$																																							
Loss of contribution	\$31 800 – \$27 300	(4 500) (1)																																							
Increase in advertising costs		<u>(1 000)</u> (1)																																							
Decrease in profit		<u>(5 500)</u> (1)OF																																							

PUBLISHED

Question	Answer	Marks
4(h)	<p>Proceed or not (1)</p> <p>The campaign will result in a loss of profit but will still have positive contribution. How short term is the price decrease / is it only for this one order? Will it affect year 2 profits? Will fixed costs be covered in the long term? Will the increase in advertising be enough to generate the expected level of demand? What will the existing customers reactions be to the price decrease for new customers?</p> <p>If they do not get new customers:</p> <p>What will the morale of the existing workers be like after staff reduction? Will the quality of the goods go down if there are fewer workers? How temporary will the loss of staff be? Will Zinan be able to re-recruit the skilled staff in year 2 when new orders come in? At what extra cost?</p> <p>(1 mark) × any 4 considerations</p> <p>Max 5</p>	5