

**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.

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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.

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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: 60%;"></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: 10%;"></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 style="text-align: right;">(1)</td> <td style="text-align: right;"><u>106 220</u></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;"><b>(1) OF</b></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)	<u>106 220</u>	Profit for the year			<u>65 400</u>	<b>(1) OF</b>	<b>5</b>																									
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1(e)	<p>Separate entity Limited liability for owners Ability to raise finance</p> <p><b>1 mark for each advantage – maximum 2 marks</b></p>																																																																									

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1(f)	<p>Advice</p> <p>Yes he should maintain a full set of accounting records <b>(1)</b></p> <p><b>Reasons</b></p> <p><b>Advantages (Max 2)</b>            Business is growing fast            Enables closer monitoring of performance            Enables Bilal to control the business performance            Enable Bilal to maximise opportunities</p> <p><b>Disadvantages (Max 2)</b>            More time consuming            Need to employ specialist staff</p> <p><b>1 mark for advice, maximum 2 marks for advantages and max 2 marks for disadvantages</b></p>	<b>5</b>
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><b>1 mark for each benefit – maximum 2 marks</b></p>	<b>2</b>

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2(a)					<b>6</b>																																				
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<p><b>W1:</b> <math>136\,000 - (54\,250 - 15\,750) \times 25\% = \\$24\,375</math></p>																																									

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

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



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

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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;"><b>(1)</b></td> <td>÷ 11 000 units = \$6.50 per unit <b>(1)</b></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>	<b>(1)</b>	÷ 11 000 units = \$6.50 per unit <b>(1)</b>	or	\$84 500		÷ 13 000 units = \$6.50 per unit	<b>2</b>
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Question	Answer				Marks
4(b)					<b>6</b>
		<u>Year 1</u>		<u>Year 2</u>	
		\$		\$	
	Revenue (10 000 × \$18)	180 000	(11 000 × \$18)	198 000	<b>(1) both</b>
	Variable production cost (10 000 <b>(1)</b> × \$6.50)	(65 000)	(11 000 <b>(1)</b> × \$6.50)	(71 500)	
	Variable selling costs (180 000 × 5%)	<u>(9 000)</u>	(198 000 × 5%)	<u>(9 900)</u>	<b>(1) OF both</b>
	Contribution	<u>106 000</u>	<b>(1) OF</b>	<u>116 600</u>	<b>(1) OF</b>
	<b>Alternative layout</b>				
		<u>Year 1</u>		<u>Year 2</u>	
	Per unit				
	\$	\$		\$	
	Selling price 18 <b>(1)</b>				
	Variable production costs <u>(6.50)</u>				
	11.50 × 10 000 <b>(1)</b>	= 115 000	× 11 000 <b>(1)</b>	= 126 500	
	Variable selling costs	<u>(9 000)</u>		<u>(9 900)</u>	<b>(1) OF both</b>
	Contribution	<u>106 000</u>	<b>(1) OF</b>	<u>116 600</u>	<b>(1) OF</b>

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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> <tr> <th></th> <th style="text-align: center;">\$</th> <th style="text-align: center;">\$</th> </tr> </thead> <tbody> <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 <b>(1)</b></td> <td style="text-align: right;">\$6.92 Per unit <b>(1)</b></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 <b>(1)</b>	\$6.92 Per unit <b>(1)</b>	<b>2</b>
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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><b>(1 mark)</b> × any two limitations</p> <p><b>Max 2</b></p>	<b>2</b>																								

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Question	Answer					Marks
4(e)		Year 1 \$		Year 2 \$		<b>7</b>
	Revenue (10 000 × \$18)	180 000	(11 000 × \$18)	198 000	<b>(1) row</b>	
	Production cost (10 000 × \$7)	(70 000)	(1 000 × \$7)	(7 000)	<b>(1)OF</b>	
			(10 000 × \$6.92)	(69 200)	<b>(1)OF</b>	
	Selling costs:					
	– variable (180 000 × 5%)	(9 000)	(198 000 × 5%)	(9 900)	<b>(1) row</b>	
	– fixed	<u>(3 500)</u>	(3 500 × 102%)	<u>(3 570)</u>	<b>(1) row</b>	
	Profit	<u>97 500</u>		<u>108 330</u>	<b>(1)OF row</b>	
	<i>Alternative layout</i>					
		<u>Year 1</u> \$		<u>Year 2</u> \$		
	Revenue (10 000 × \$18)	180 000	(11 000 × \$18)	198 000	<b>(1) row</b>	
	Opening inventory –	–	(1 000 × \$7)	7 000	<b>(1)OF</b>	
	Purchases (11 000 × \$7)	77 000	(13 000 × \$6.92)	89 960	<b>(1)OF</b>	
	Closing inventory (1 000 × \$7)	<u>(7 000)</u>	(3 000 × \$6.92)	<u>(20 760)</u>	<b>} both</b>	
	Production cost	(70 000)		(76 200)	<b>(1)OF</b>	
	Selling costs:					
	– variable (180 000 × 5%)	(9 000)	(198 000 × 5%)	(9 900)	<b>(1) row</b>	
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4(f)	<p>Using marginal costing</p> <p>Closing inventory is valued at variable production cost and so shows a lower closing inventory value. <b>(1)</b> Fixed overheads are treated as period costs <b>(1)</b> and are written off in the period's income statement. <b>(1)</b></p> <p>Using absorption costing</p> <p>Closing inventory is valued at full production cost and so shows a higher closing inventory value. <b>(1)</b> Fixed overheads are treated as part of production costs <b>(1)</b> and are carried forward as part of the inventory value. <b>(1)</b></p> <p><b>Max 3</b></p>	<b>3</b>																																			
4(g)	<p><b>Calculation if variable selling expenses excluded (they remain the same)</b></p> <p>Workings</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 35%; text-align: center;">Lost order in year 1</th> <th style="width: 35%; text-align: center;">Replacement order</th> </tr> <tr> <th></th> <th style="text-align: center;">\$</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;">16.65</td> </tr> <tr> <td>Variable production cost</td> <td style="text-align: center;"><u>- 6.50</u></td> <td style="text-align: center;"><u>- 6.65</u> *</td> </tr> <tr> <td>Contribution</td> <td style="text-align: center;">11.50 × 3 000 units = \$34 500</td> <td style="text-align: center;">10.00 × 3 000 units = \$30 000</td> </tr> <tr> <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> </tr> <tr> <td></td> <td style="text-align: center;">Additional direct labour</td> <td style="text-align: center;"><u>0.15</u></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;"><u>6.65</u></td> </tr> </tbody> </table> <p>Change in budgeted profit:</p> <table style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 40%; text-align: center;">\$</th> </tr> </thead> <tbody> <tr> <td>Loss of contribution \$34 500 – \$30 000 =</td> <td style="text-align: center;">(4 500) <b>(1)</b></td> </tr> <tr> <td>Increase in advertising costs</td> <td style="text-align: center;"><u>(1 000)</u> <b>(1)</b></td> </tr> <tr> <td><b>Decrease in profit</b></td> <td style="text-align: center;"><u>(5 500)</u> <b>(1)OF</b></td> </tr> </tbody> </table>		Lost order in year 1	Replacement order		\$	\$	Selling price	18	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) <b>(1)</b>	Increase in advertising costs	<u>(1 000)</u> <b>(1)</b>	<b>Decrease in profit</b>	<u>(5 500)</u> <b>(1)OF</b>	<b>3</b>
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<b>Question</b>	<b>Answer</b>	<b>Marks</b>
4(h)	<p>Proceed or not <b>(1)</b></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><b>(1 mark)</b> × any 4 considerations</p> <p><b>Max 5</b></p>	<b>5</b>