

Cambridge
International
AS & A Level

Cambridge Assessment International Education
Cambridge International Advanced Subsidiary and Advanced Level

ACCOUNTING**9706/33**

Paper 3 Structured Questions

May/June 2019

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.

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

Cambridge International is publishing the mark schemes for the May/June 2019 series for most Cambridge IGCSE™, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

This document consists of **16** printed pages.

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)(i)	item 1 – matching / accrual (1)	1																				
1(a)(ii)	item 2 – prudence (1)	1																				
1(b)	<p>Statement showing the revised profit for the year ended 31 December 2018</p> <table style="margin-left: 40px;"> <tr> <td>Profit for the year</td> <td style="text-align: right;">\$ 152 000</td> </tr> <tr> <td>Add: prepaid insurance $7500 \times \frac{5}{6}$</td> <td style="text-align: right;">6 250 (1)</td> </tr> <tr> <td>Less: Irrecoverable debt</td> <td style="text-align: right;">(2 000) (1)</td> </tr> <tr> <td>Less: Provision for doubtful debts $(126\,000 - 2000) \times 3\%$</td> <td style="text-align: right;">(3 720) (2) OF</td> </tr> <tr> <td>Less: Depreciation on building $(400\,000 - 150\,000) \times 4\%$</td> <td style="text-align: right;">(10 000) (1)</td> </tr> <tr> <td>Less: Depreciation on plant and machinery $(248\,000 \times 10\%)$</td> <td style="text-align: right;">(24 800) (1)</td> </tr> <tr> <td>Add: Gain on disposal of motor vehicle $13\,000 - (20\,000 - 9760)$</td> <td style="text-align: right;">2 760 (1)</td> </tr> <tr> <td>Less: Depreciation on motor vehicle</td> <td></td> </tr> <tr> <td> $[(153\,000 - 20\,000 + 25\,000) - (84\,800 - 9760)] \times 20\%$</td> <td style="text-align: right;"><u>(16 592) (1)</u></td> </tr> <tr> <td>Revised profit for the year</td> <td style="text-align: right;"><u>103 898 (1) OF</u></td> </tr> </table>	Profit for the year	\$ 152 000	Add: prepaid insurance $7500 \times \frac{5}{6}$	6 250 (1)	Less: Irrecoverable debt	(2 000) (1)	Less: Provision for doubtful debts $(126\,000 - 2000) \times 3\%$	(3 720) (2) OF	Less: Depreciation on building $(400\,000 - 150\,000) \times 4\%$	(10 000) (1)	Less: Depreciation on plant and machinery $(248\,000 \times 10\%)$	(24 800) (1)	Add: Gain on disposal of motor vehicle $13\,000 - (20\,000 - 9760)$	2 760 (1)	Less: Depreciation on motor vehicle		$[(153\,000 - 20\,000 + 25\,000) - (84\,800 - 9760)] \times 20\%$	<u>(16 592) (1)</u>	Revised profit for the year	<u>103 898 (1) OF</u>	9
Profit for the year	\$ 152 000																					
Add: prepaid insurance $7500 \times \frac{5}{6}$	6 250 (1)																					
Less: Irrecoverable debt	(2 000) (1)																					
Less: Provision for doubtful debts $(126\,000 - 2000) \times 3\%$	(3 720) (2) OF																					
Less: Depreciation on building $(400\,000 - 150\,000) \times 4\%$	(10 000) (1)																					
Less: Depreciation on plant and machinery $(248\,000 \times 10\%)$	(24 800) (1)																					
Add: Gain on disposal of motor vehicle $13\,000 - (20\,000 - 9760)$	2 760 (1)																					
Less: Depreciation on motor vehicle																						
$[(153\,000 - 20\,000 + 25\,000) - (84\,800 - 9760)] \times 20\%$	<u>(16 592) (1)</u>																					
Revised profit for the year	<u>103 898 (1) OF</u>																					
1(c)	<table style="margin-left: 40px;"> <tr> <td>Cost 1 January 2018</td> <td style="text-align: right;">\$ 153 000</td> </tr> <tr> <td>Addition</td> <td style="text-align: right;">25 000</td> </tr> <tr> <td>Disposal</td> <td style="text-align: right;"><u>(20 000)</u></td> </tr> <tr> <td></td> <td style="text-align: right;">158 000 (1)</td> </tr> <tr> <td>Accumulated depreciation</td> <td></td> </tr> <tr> <td>1 January 2018</td> <td style="text-align: right;">84 800</td> </tr> <tr> <td>Charge for the year</td> <td style="text-align: right;">16 592 (1) OF</td> </tr> <tr> <td>Disposal</td> <td style="text-align: right;"><u>(9 760)</u></td> </tr> <tr> <td></td> <td style="text-align: right;">91 632 (1) OF</td> </tr> <tr> <td>Net book value at 31 December 2018</td> <td style="text-align: right;"><u>66 368 (1) OF</u></td> </tr> </table>	Cost 1 January 2018	\$ 153 000	Addition	25 000	Disposal	<u>(20 000)</u>		158 000 (1)	Accumulated depreciation		1 January 2018	84 800	Charge for the year	16 592 (1) OF	Disposal	<u>(9 760)</u>		91 632 (1) OF	Net book value at 31 December 2018	<u>66 368 (1) OF</u>	4
Cost 1 January 2018	\$ 153 000																					
Addition	25 000																					
Disposal	<u>(20 000)</u>																					
	158 000 (1)																					
Accumulated depreciation																						
1 January 2018	84 800																					
Charge for the year	16 592 (1) OF																					
Disposal	<u>(9 760)</u>																					
	91 632 (1) OF																					
Net book value at 31 December 2018	<u>66 368 (1) OF</u>																					

Question	Answer	Marks																																																																								
1(d)	<p>Statement of financial position at 31 December 2018</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;"></td> <td style="width: 20%; text-align: right;">\$</td> <td style="width: 20%; text-align: right;">\$</td> </tr> <tr> <td>Non-current assets</td> <td></td> <td></td> </tr> <tr> <td>Land and building</td> <td style="text-align: right;">440 000</td> <td style="text-align: right;">(1) OF</td> </tr> <tr> <td>Plant and machinery</td> <td style="text-align: right;">101 600</td> <td style="text-align: right;">(1) OF</td> </tr> <tr> <td>Motor vehicles</td> <td style="text-align: right;"><u>66 368</u></td> <td style="text-align: right;">(1) OF</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;"><u>607 968</u></td> </tr> <tr> <td>Current assets</td> <td></td> <td></td> </tr> <tr> <td>Inventory</td> <td></td> <td style="text-align: right;">94 100</td> </tr> <tr> <td>Trade and other receivables</td> <td></td> <td style="text-align: right;">139 030</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;">(3)</td> </tr> <tr> <td>Cash and cash equivalents</td> <td></td> <td style="text-align: right;"><u>80 300</u></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;"><u>313 430</u></td> </tr> <tr> <td>Total assets</td> <td></td> <td style="text-align: right;"><u>921 398</u></td> </tr> <tr> <td>Equity and Liabilities</td> <td></td> <td></td> </tr> <tr> <td>Capital and reserves</td> <td></td> <td style="text-align: right;">500 000</td> </tr> <tr> <td>Ordinary shares of \$1 each</td> <td></td> <td style="text-align: right;">90 000</td> </tr> <tr> <td>Revaluation reserve</td> <td></td> <td style="text-align: right;">(1)</td> </tr> <tr> <td>Retained earnings (94 300 + 103 898)</td> <td></td> <td style="text-align: right;">(1) OF</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;"><u>198 198</u></td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;"><u>788 198</u></td> </tr> <tr> <td>Current liabilities</td> <td></td> <td></td> </tr> <tr> <td>Trade and other payables</td> <td></td> <td style="text-align: right;">(2)</td> </tr> <tr> <td></td> <td></td> <td style="text-align: right;"><u>133 200</u></td> </tr> <tr> <td>Total equity and liabilities</td> <td></td> <td style="text-align: right;"><u>921 398</u></td> </tr> </table>		\$	\$	Non-current assets			Land and building	440 000	(1) OF	Plant and machinery	101 600	(1) OF	Motor vehicles	<u>66 368</u>	(1) OF			<u>607 968</u>	Current assets			Inventory		94 100	Trade and other receivables		139 030			(3)	Cash and cash equivalents		<u>80 300</u>			<u>313 430</u>	Total assets		<u>921 398</u>	Equity and Liabilities			Capital and reserves		500 000	Ordinary shares of \$1 each		90 000	Revaluation reserve		(1)	Retained earnings (94 300 + 103 898)		(1) OF			<u>198 198</u>			<u>788 198</u>	Current liabilities			Trade and other payables		(2)			<u>133 200</u>	Total equity and liabilities		<u>921 398</u>	10
	\$	\$																																																																								
Non-current assets																																																																										
Land and building	440 000	(1) OF																																																																								
Plant and machinery	101 600	(1) OF																																																																								
Motor vehicles	<u>66 368</u>	(1) OF																																																																								
		<u>607 968</u>																																																																								
Current assets																																																																										
Inventory		94 100																																																																								
Trade and other receivables		139 030																																																																								
		(3)																																																																								
Cash and cash equivalents		<u>80 300</u>																																																																								
		<u>313 430</u>																																																																								
Total assets		<u>921 398</u>																																																																								
Equity and Liabilities																																																																										
Capital and reserves		500 000																																																																								
Ordinary shares of \$1 each		90 000																																																																								
Revaluation reserve		(1)																																																																								
Retained earnings (94 300 + 103 898)		(1) OF																																																																								
		<u>198 198</u>																																																																								
		<u>788 198</u>																																																																								
Current liabilities																																																																										
Trade and other payables		(2)																																																																								
		<u>133 200</u>																																																																								
Total equity and liabilities		<u>921 398</u>																																																																								

Question	Answer	Marks
1(d)	<p>W1 Trade receivables (126 000 – 2000) Less: Provision for doubtful debt Other receivables (12 500 + 6250)</p> <p>W2 Trade and other payables 108 000 + 13 200 + 12 000 (1) = 133 200 (1) OF</p> $ \begin{array}{r} 124\,000 \text{ (1)} \\ \underline{(3\,720) \text{ (1) OF}} \\ 120\,280 \\ 18\,750 \text{ (1)} \end{array} $	
2(a)	<p>Capital Account – Jenny</p> $ \begin{array}{r} \$ \\ 9\,750 \\ 173\,875 \text{ (1) OF} \\ \underline{183\,625} \end{array} $ <p>Revaluation W1 15 000 (1) – 500 – 875 (1) = 13 625 (1) OF</p> <p>Capital Account – Thomas</p> $ \begin{array}{r} \$ \\ 3\,750 \\ 103\,925 \text{ (1) OF} \\ \underline{107\,675} \end{array} $ <p>Cash Partnership Balance b/d Revaluation</p> $ \begin{array}{r} \$ \\ 100\,000 \\ 7\,675 \text{ (3) W2} \\ \underline{107\,675} \end{array} $ <p>Revaluation W2 9000 (1) – 1000 – 325 (1) = 7675 (1) OF</p>	8
2(b)	<p>Jenny \$240 000 – \$173 875 = \$66 125 (1) OF</p> <p>Thomas \$120 000 – \$103 925 = \$16 075 (1) OF</p>	2

Question	Answer	Marks																																																
2(c)	<p data-bbox="215 1310 247 1915">Statement of Financial Position at 1 April 2019</p> <table data-bbox="287 1220 973 1915"> <tr> <td data-bbox="287 1825 319 1915">Assets</td> <td data-bbox="287 1355 319 1388" style="text-align: right;">\$</td> <td data-bbox="287 1220 319 1344"></td> </tr> <tr> <td data-bbox="327 1825 359 1915">Non-current assets</td> <td data-bbox="327 1321 359 1467" style="text-align: right;"><u>264 000</u></td> <td data-bbox="327 1220 359 1310" style="text-align: right;">(1)</td> </tr> <tr> <td data-bbox="367 1825 399 1915">Current assets</td> <td data-bbox="367 1321 399 1467"></td> <td data-bbox="367 1220 399 1310"></td> </tr> <tr> <td data-bbox="406 1825 438 1915">Inventory</td> <td data-bbox="406 1321 438 1467" style="text-align: right;">37 000</td> <td data-bbox="406 1220 438 1310" style="text-align: right;">(1)</td> </tr> <tr> <td data-bbox="446 1825 478 1915">Trade receivables</td> <td data-bbox="446 1321 478 1467" style="text-align: right;">22 800</td> <td data-bbox="446 1220 478 1310" style="text-align: right;">(1)</td> </tr> <tr> <td data-bbox="486 1825 518 1915">Cash and cash equivalents</td> <td data-bbox="486 1321 518 1467" style="text-align: right;"><u>82 200</u></td> <td data-bbox="486 1220 518 1310" style="text-align: right;">(1) OF</td> </tr> <tr> <td data-bbox="526 1825 558 1915"></td> <td data-bbox="526 1321 558 1467" style="text-align: right;"><u>142 000</u></td> <td data-bbox="526 1220 558 1310"></td> </tr> <tr> <td data-bbox="566 1825 598 1915">Total assets</td> <td data-bbox="566 1321 598 1467" style="text-align: right;"><u>406 000</u></td> <td data-bbox="566 1220 598 1310"></td> </tr> <tr> <td data-bbox="606 1825 638 1915">Capital and liabilities</td> <td data-bbox="606 1321 638 1467"></td> <td data-bbox="606 1220 638 1310"></td> </tr> <tr> <td data-bbox="646 1825 678 1915">Capital accounts</td> <td data-bbox="646 1321 678 1467"></td> <td data-bbox="646 1220 678 1310"></td> </tr> <tr> <td data-bbox="686 1825 718 1915"> Jenny</td> <td data-bbox="686 1321 718 1467" style="text-align: right;">240 000</td> <td data-bbox="686 1220 718 1310"></td> </tr> <tr> <td data-bbox="726 1825 758 1915"> Thomas</td> <td data-bbox="726 1321 758 1467" style="text-align: right;"><u>120 000</u></td> <td data-bbox="726 1220 758 1310"></td> </tr> <tr> <td data-bbox="766 1825 798 1915"></td> <td data-bbox="766 1321 798 1467" style="text-align: right;"><u>360 000</u></td> <td data-bbox="766 1220 798 1310" style="text-align: right;">(1)</td> </tr> <tr> <td data-bbox="805 1825 837 1915">Current liabilities</td> <td data-bbox="805 1321 837 1467"></td> <td data-bbox="805 1220 837 1310"></td> </tr> <tr> <td data-bbox="845 1825 877 1915">Trade payables</td> <td data-bbox="845 1321 877 1467" style="text-align: right;"><u>46 000</u></td> <td data-bbox="845 1220 877 1310" style="text-align: right;">(1)</td> </tr> <tr> <td data-bbox="885 1825 917 1915">Total capital and liabilities</td> <td data-bbox="885 1321 917 1467" style="text-align: right;"><u>406 000</u></td> <td data-bbox="885 1220 917 1310"></td> </tr> </table>	Assets	\$		Non-current assets	<u>264 000</u>	(1)	Current assets			Inventory	37 000	(1)	Trade receivables	22 800	(1)	Cash and cash equivalents	<u>82 200</u>	(1) OF		<u>142 000</u>		Total assets	<u>406 000</u>		Capital and liabilities			Capital accounts			Jenny	240 000		Thomas	<u>120 000</u>			<u>360 000</u>	(1)	Current liabilities			Trade payables	<u>46 000</u>	(1)	Total capital and liabilities	<u>406 000</u>		6
Assets	\$																																																	
Non-current assets	<u>264 000</u>	(1)																																																
Current assets																																																		
Inventory	37 000	(1)																																																
Trade receivables	22 800	(1)																																																
Cash and cash equivalents	<u>82 200</u>	(1) OF																																																
	<u>142 000</u>																																																	
Total assets	<u>406 000</u>																																																	
Capital and liabilities																																																		
Capital accounts																																																		
Jenny	240 000																																																	
Thomas	<u>120 000</u>																																																	
	<u>360 000</u>	(1)																																																
Current liabilities																																																		
Trade payables	<u>46 000</u>	(1)																																																
Total capital and liabilities	<u>406 000</u>																																																	

Question	Answer	Marks
2(d)(i)	Jenny's share of expected profit will be $(48\,600 - 20\,000) = 28\,600 \times \frac{2}{3} = \$19\,067$ (1) + \$10 000 (1) = \$29 067 (1) OF	3
2(d)(ii)	<p>Advantages</p> <p>Economies of scale (1) Greater pool of knowledge (1)</p> <p>Max. 1 Accept other valid points.</p> <p>Disadvantages</p> <p>Jenny is worse off (1) as it results in less than average earnings. (1) Other factors may affect analysis – e.g. will profits decrease over time. (1)</p> <p>Max. 1 Accept other valid points.</p>	2

Question	Answer	Marks
2(e)	<p>Advantages</p> <ul style="list-style-type: none"> Speed (1) Accuracy (1) Automatic document production (1) Availability of information (1) Legibility (1) Efficiency (1) Staff motivation (1) <p>Max. 2 Accept other valid points</p> <p>Disadvantages</p> <ul style="list-style-type: none"> Hardware costs (1) Software costs (1) Staff training (1) Opposition from staff (1) Inputting errors (1) <p>Max. 2 Accept other valid points</p>	4

Question	Answer	Marks
3(c)	<p>Profit per screen in the home market is \$20 or \$10 000 in total. (1) Profit per screen from the consignment is \$40.30 or \$20 150. (1) OF Consignment gives an extra profit of \$20.30 or \$10 150 (1) OF The transfer price profit increases Ahmed's profit by \$10 or \$5 000 (1) OF</p> <p>A profit has been made on the consignment (1) Ahmed has built trust with Rohan (1) Rohan's knowledge of the overseas market can be used (1) Ahmed may be able negotiate a lower commission (1) or reallocate transportation costs (1) Exchange rate / political stability in India (1) Demand may not continue to increase in the long term</p> <p>Decision (1)</p> <p>Accept other valid points.</p> <p>Award 1 mark for decision, 3 marks for calculation and 4 marks for justification.</p>	8

Question	Answer	Marks
4(a)	Market price = $\frac{\text{Dividend per share}}{\text{Dividend yield}} = \frac{0.08}{0.05}$ (1) = \$1.60 (1) OF	2
4(b)(i)	Earnings per share = $\frac{180\,000}{1\,000\,000} = \0.18 (1)	3
4(b)(ii)	Price earnings ratio = $\frac{1.60}{0.18} = 8.89$ times (1) OF	
4(b)(iii)	Dividend cover = $\frac{180}{80} = 2.25$ times (1)	
4(c)	Gross margin of M plc is better (1). Due to higher selling price and / or lower cost of sales. (1) Profit margin of V plc is better. (1) V plc has better control of its expenses. (1) ROCE of V plc is better (1). Due to generating profits more efficiently from invested capital. (1) Accept other valid points. Max. 6	6
4(d)	Both companies have low gearing (1). M has no long term debt (1). Both are low risk (1). The earnings per share of V plc is better (1). The net income from each share is higher (1). The price earnings ratio of V plc is better (1). Investors are prepared to pay more in relation to earnings / have more confidence in V plc (1). The dividend cover of V plc is better (1). Greater share of profits are available to pay dividends (1). Accept other valid points.	9

Question	Answer	Marks																																												
5(c)	It arises when there is a difference between the actual hours worked (1) (labour hours or machine hours which are the overhead absorption basis) and the hours absorbed. (1)	2																																												
5(d)	<p>Statement reconciling the budgeted production costs with the actual production costs</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="text-align: center;">\$</td> <td style="text-align: center;">\$</td> <td></td> </tr> <tr> <td></td> <td style="text-align: center;">F</td> <td style="text-align: center;">A</td> <td></td> </tr> <tr> <td>Budgeted production costs</td> <td></td> <td></td> <td style="text-align: right;">553 800 (1) OF</td> </tr> <tr> <td>Material price variance</td> <td></td> <td style="text-align: right;">8 736</td> <td style="text-align: right;">(1) OF</td> </tr> <tr> <td>Material usage variance</td> <td style="text-align: right;">7 800</td> <td></td> <td></td> </tr> <tr> <td>Labour rate variance</td> <td></td> <td style="text-align: right;">8 190</td> <td></td> </tr> <tr> <td>Labour efficiency variance</td> <td></td> <td style="text-align: right;">15 600</td> <td style="text-align: right;">(1) OF</td> </tr> <tr> <td>Fixed overhead expenditure variance</td> <td></td> <td style="text-align: right;">3 040</td> <td></td> </tr> <tr> <td>Fixed overhead volume variance</td> <td></td> <td style="text-align: right;">3 200</td> <td style="text-align: right;">(1) OF</td> </tr> <tr> <td></td> <td style="text-align: right;"><u>7 800</u></td> <td style="text-align: right;"><u>38 766</u></td> <td style="text-align: right;"><u>30 966</u></td> </tr> <tr> <td>Actual production costs</td> <td></td> <td></td> <td style="text-align: right;"><u>584 766 (1)</u></td> </tr> </table>		\$	\$			F	A		Budgeted production costs			553 800 (1) OF	Material price variance		8 736	(1) OF	Material usage variance	7 800			Labour rate variance		8 190		Labour efficiency variance		15 600	(1) OF	Fixed overhead expenditure variance		3 040		Fixed overhead volume variance		3 200	(1) OF		<u>7 800</u>	<u>38 766</u>	<u>30 966</u>	Actual production costs			<u>584 766 (1)</u>	5
	\$	\$																																												
	F	A																																												
Budgeted production costs			553 800 (1) OF																																											
Material price variance		8 736	(1) OF																																											
Material usage variance	7 800																																													
Labour rate variance		8 190																																												
Labour efficiency variance		15 600	(1) OF																																											
Fixed overhead expenditure variance		3 040																																												
Fixed overhead volume variance		3 200	(1) OF																																											
	<u>7 800</u>	<u>38 766</u>	<u>30 966</u>																																											
Actual production costs			<u>584 766 (1)</u>																																											
5(e)	<p>The responses may include:</p> <p>Mechanisation (1) which reduces the labour force (1)</p> <p>Increase selling price (1) which may be difficult (1)</p> <p>Improve operational efficiency (1) reduce wastage (1)</p> <p>Accept other valid points.</p> <p>Max 2</p>	2																																												

Question	Answer	Marks																												
6(a)	<table border="0"> <thead> <tr> <th></th> <th>Cash inflows</th> <th>Cash outflows</th> <th>Net cash flows</th> </tr> <tr> <th></th> <th>\$</th> <th>\$</th> <th>\$</th> </tr> </thead> <tbody> <tr> <td>Year 1</td> <td>640 000</td> <td>240 000</td> <td>400 000</td> </tr> <tr> <td>Year 2</td> <td>660 000</td> <td>260 000</td> <td>400 000</td> </tr> <tr> <td>Year 3</td> <td>400 000</td> <td>200 000</td> <td>200 000</td> </tr> <tr> <td>Year 4</td> <td><u>300 000</u></td> <td><u>200 000</u></td> <td><u>100 000</u></td> </tr> <tr> <td></td> <td><u>2 000 000</u></td> <td><u>900 000</u></td> <td></td> </tr> </tbody> </table> <p> \$2 000 000 – \$900 000 = \$1 100 000 (1) \$1 100 000 – \$950 000 = \$150 000 (1) $\frac{\\$150\,000}{4} = \\$37\,500$ (1) OF $\frac{\\$37\,500}{\\$475\,000}$ (1) OF = 7.89% (1) OF </p>		Cash inflows	Cash outflows	Net cash flows		\$	\$	\$	Year 1	640 000	240 000	400 000	Year 2	660 000	260 000	400 000	Year 3	400 000	200 000	200 000	Year 4	<u>300 000</u>	<u>200 000</u>	<u>100 000</u>		<u>2 000 000</u>	<u>900 000</u>		5
	Cash inflows	Cash outflows	Net cash flows																											
	\$	\$	\$																											
Year 1	640 000	240 000	400 000																											
Year 2	660 000	260 000	400 000																											
Year 3	400 000	200 000	200 000																											
Year 4	<u>300 000</u>	<u>200 000</u>	<u>100 000</u>																											
	<u>2 000 000</u>	<u>900 000</u>																												
6(b)	$2 \text{ years (1) + } \frac{(\$950\,000 - \$800\,000) \text{ (1)}}{\$200\,000} \times 12 = 2 \text{ years 9 months (1)}$	3																												
6(c)	<p>Advantages</p> <p>Easy (1) Uses cash not profit (1)</p> <p>Accept other valid points.</p> <p>Disadvantages</p> <p>No account of time value of money (1) Does not take account of whole life of project (1)</p> <p>Accept other valid points.</p>	4																												

Question	Answer	Marks																																								
6(d)	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 20%;">Net cash flows</th> <th style="width: 15%;">8% discount rate</th> <th style="width: 15%;">Present value</th> <th style="width: 35%;"></th> </tr> </thead> <tbody> <tr> <td></td> <td>\$</td> <td></td> <td>\$</td> <td></td> </tr> <tr> <td>Year 0</td> <td>(950 000)</td> <td>1</td> <td>(950 000)</td> <td>(1)</td> </tr> <tr> <td>Year 1</td> <td>400 000</td> <td>0.926</td> <td>370 400</td> <td></td> </tr> <tr> <td>Year 2</td> <td>400 000</td> <td>0.857</td> <td>342 800</td> <td></td> </tr> <tr> <td>Year 3</td> <td>200 000</td> <td>0.794</td> <td>158 800</td> <td></td> </tr> <tr> <td>Year 4</td> <td>100 000</td> <td>0.735</td> <td>73 500</td> <td>(1) OF</td> </tr> <tr> <td></td> <td></td> <td>NPV</td> <td><u>(4 500)</u></td> <td>(1) OF</td> </tr> </tbody> </table>		Net cash flows	8% discount rate	Present value			\$		\$		Year 0	(950 000)	1	(950 000)	(1)	Year 1	400 000	0.926	370 400		Year 2	400 000	0.857	342 800		Year 3	200 000	0.794	158 800		Year 4	100 000	0.735	73 500	(1) OF			NPV	<u>(4 500)</u>	(1) OF	3
	Net cash flows	8% discount rate	Present value																																							
	\$		\$																																							
Year 0	(950 000)	1	(950 000)	(1)																																						
Year 1	400 000	0.926	370 400																																							
Year 2	400 000	0.857	342 800																																							
Year 3	200 000	0.794	158 800																																							
Year 4	100 000	0.735	73 500	(1) OF																																						
		NPV	<u>(4 500)</u>	(1) OF																																						
6(e)	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 20%;">Net cash flows</th> <th style="width: 15%;">7% discount rate</th> <th style="width: 15%;">Present value</th> <th style="width: 35%;"></th> </tr> </thead> <tbody> <tr> <td></td> <td>\$</td> <td></td> <td>\$</td> <td></td> </tr> <tr> <td>Year 0</td> <td>(950 000)</td> <td>1</td> <td>(950 000)</td> <td></td> </tr> <tr> <td>Year 1</td> <td>400 000</td> <td>0.935</td> <td>374 000</td> <td></td> </tr> <tr> <td>Year 2</td> <td>400 000</td> <td>0.873</td> <td>349 200</td> <td></td> </tr> <tr> <td>Year 3</td> <td>200 000</td> <td>0.816</td> <td>163 200</td> <td></td> </tr> <tr> <td>Year 4</td> <td>100 000</td> <td>0.763</td> <td>76 300</td> <td>(1) OF</td> </tr> <tr> <td></td> <td></td> <td></td> <td><u>12 700</u></td> <td>(1) OF</td> </tr> </tbody> </table> <p style="text-align: center;"> $7\% (1) + \frac{12700}{(12700 + 4500)} (1)$ OF X 1 = 7.74% (1) OF </p>		Net cash flows	7% discount rate	Present value			\$		\$		Year 0	(950 000)	1	(950 000)		Year 1	400 000	0.935	374 000		Year 2	400 000	0.873	349 200		Year 3	200 000	0.816	163 200		Year 4	100 000	0.763	76 300	(1) OF				<u>12 700</u>	(1) OF	5
	Net cash flows	7% discount rate	Present value																																							
	\$		\$																																							
Year 0	(950 000)	1	(950 000)																																							
Year 1	400 000	0.935	374 000																																							
Year 2	400 000	0.873	349 200																																							
Year 3	200 000	0.816	163 200																																							
Year 4	100 000	0.763	76 300	(1) OF																																						
			<u>12 700</u>	(1) OF																																						
6(f)	<p>Should buy Machine B (1) because of positive NPV (1) OF / higher ARR (1) OF</p> <p>However because of limited cash, emphasis should be on early recovery of cash. (1) The earlier the investment is recouped, the business can use the cash for other purpose, i.e. repayment of loan. (1)</p> <p>Payback may be better criterion to use for decision (1)</p> <p>1 mark for decision + Max. 4 for advice.</p>	5																																								