



Cambridge
International
AS & A Level

Cambridge Assessment International Education
Cambridge International Advanced Subsidiary and Advanced Level

ACCOUNTING**9706/31**

Paper 3 Structured Questions

October/November 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 October/November 2019 series for most Cambridge IGCSE™, Cambridge International A and AS Level components and some Cambridge O Level components.

This document consists of **18** 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)	Possible answers: A not for profit organisation has an accumulated fund instead of capital. (1) It is represented by the difference between the assets and liabilities. (1) A surplus of income over expenditure is added to the fund and a deficit is deducted. (1) Accept other valid points. Max 2	2																																				
1(b)	<table><tr><td></td><td>\$</td><td>\$</td></tr><tr><td>Non-current assets</td><td>14 500</td><td></td></tr><tr><td>Inventory</td><td>2 200</td><td></td></tr><tr><td>Prepayment</td><td>300</td><td></td></tr><tr><td>Subscriptions in arrears</td><td><u>150</u></td><td></td></tr><tr><td></td><td></td><td>17 150 (1)</td></tr><tr><td>Bank overdraft</td><td>3 600</td><td></td></tr><tr><td>Payables</td><td>2 250</td><td></td></tr><tr><td>Accrual</td><td>1 550</td><td></td></tr><tr><td>Subscriptions in advance</td><td><u>100</u></td><td></td></tr><tr><td></td><td></td><td><u>(7 500)</u> (1)</td></tr><tr><td>Accumulated fund at 1 April 2018</td><td></td><td><u>9 650</u> (1) OF</td></tr></table>		\$	\$	Non-current assets	14 500		Inventory	2 200		Prepayment	300		Subscriptions in arrears	<u>150</u>				17 150 (1)	Bank overdraft	3 600		Payables	2 250		Accrual	1 550		Subscriptions in advance	<u>100</u>				<u>(7 500)</u> (1)	Accumulated fund at 1 April 2018		<u>9 650</u> (1) OF	3
	\$	\$																																				
Non-current assets	14 500																																					
Inventory	2 200																																					
Prepayment	300																																					
Subscriptions in arrears	<u>150</u>																																					
		17 150 (1)																																				
Bank overdraft	3 600																																					
Payables	2 250																																					
Accrual	1 550																																					
Subscriptions in advance	<u>100</u>																																					
		<u>(7 500)</u> (1)																																				
Accumulated fund at 1 April 2018		<u>9 650</u> (1) OF																																				
1(c)	Subscriptions Account <table><tr><td>2016</td><td></td><td>2016</td><td></td></tr><tr><td>April 1 Balance b/d</td><td>150 (1)</td><td>April 1 Balance b/d</td><td>100 (1)</td></tr><tr><td>2017</td><td></td><td>2017</td><td></td></tr><tr><td>March 31 Income and expenditure a/c (1)</td><td>14 150 (1) OF</td><td>March 31 Receipts and payments</td><td>13 900 (1)</td></tr><tr><td>March 31 Balance c/d</td><td><u>50</u></td><td>March 31 Irrecoverable debt</td><td>50 (1)</td></tr><tr><td></td><td><u>14 350</u></td><td>March 31 Balance c/d</td><td><u>300</u></td></tr><tr><td>April 1 Balance b/d</td><td>300 (1)</td><td></td><td><u>14 350</u></td></tr><tr><td></td><td></td><td>April 1 Balance b/d</td><td>50 (1)</td></tr></table>	2016		2016		April 1 Balance b/d	150 (1)	April 1 Balance b/d	100 (1)	2017		2017		March 31 Income and expenditure a/c (1)	14 150 (1) OF	March 31 Receipts and payments	13 900 (1)	March 31 Balance c/d	<u>50</u>	March 31 Irrecoverable debt	50 (1)		<u>14 350</u>	March 31 Balance c/d	<u>300</u>	April 1 Balance b/d	300 (1)		<u>14 350</u>			April 1 Balance b/d	50 (1)	8				
2016		2016																																				
April 1 Balance b/d	150 (1)	April 1 Balance b/d	100 (1)																																			
2017		2017																																				
March 31 Income and expenditure a/c (1)	14 150 (1) OF	March 31 Receipts and payments	13 900 (1)																																			
March 31 Balance c/d	<u>50</u>	March 31 Irrecoverable debt	50 (1)																																			
	<u>14 350</u>	March 31 Balance c/d	<u>300</u>																																			
April 1 Balance b/d	300 (1)		<u>14 350</u>																																			
		April 1 Balance b/d	50 (1)																																			

PUBLISHED

Question	Answer	Marks
1(d)	\$ Current assets (1) Subscriptions in arrears 300 (1) OF Current liabilities (1) Subscriptions in advance 50 (1) OF	4
1(e)	Possible answers: Seek to increase membership of the club (1) subject to interest from the possible new members. (1) Increase the subscription. (1) However, this may result in the loss of members. (1) Offer more services (e.g. cafe) or events (e.g. dance). (1) However, there are costs associated with these and income should exceed expenditure. (1) Control costs more efficiently (1) e.g. review the wages of staff or any other suitable example. (1) Accept other valid points. Max 2 ways x 2 marks (1 for identifying + 1 for development)	4
1(f)	Possible answers: The proposed accounting treatment is incorrect. (1) The amount received should be credited in full (1) to a life membership account (1) as a liability in the statement of financial position. (1) Each year a portion of this amount should be credited as income in the income and expenditure account. (1) This follows the accounting concept of matching. (1) Accept other valid points. Max 4	4

PUBLISHED

Question	Answer	Marks																																																	
2(a)(i)	Stewardship occurs when the owners (shareholders) do not take part in the day-to-day running of the company and appoint directors to manage the company affairs on their behalf (1). The directors have the duty of care to manage the business resources to the best of their ability on behalf of the shareholders. (1) Accept other valid answers. Max 2	2																																																	
2(a)(ii)	Examine the financial statements. (1) Verify the assets of the company. (1) Issue an audit report to the shareholders. (1) Accept other valid answers. Max 2	2																																																	
2(b)	Extract from Income Statement for the year ended 31 December 2018 <table><tr><td></td><td>\$</td><td></td></tr><tr><td>Profit from operations</td><td>65 250</td><td></td></tr><tr><td>Finance costs</td><td><u>12 000</u></td><td>(1)</td></tr><tr><td>Profit before tax</td><td>53 250</td><td></td></tr><tr><td>Tax</td><td><u>14 700</u></td><td></td></tr><tr><td>Profit for the year</td><td><u>38 550</u></td><td>(1) OF</td></tr></table>		\$		Profit from operations	65 250		Finance costs	<u>12 000</u>	(1)	Profit before tax	53 250		Tax	<u>14 700</u>		Profit for the year	<u>38 550</u>	(1) OF	2																															
	\$																																																		
Profit from operations	65 250																																																		
Finance costs	<u>12 000</u>	(1)																																																	
Profit before tax	53 250																																																		
Tax	<u>14 700</u>																																																		
Profit for the year	<u>38 550</u>	(1) OF																																																	
2(c)	Statement of changes in equity for the year ended 31 December 2018 <table><tr><td></td><td>Ordinary shares \$</td><td>Share premium \$</td><td></td><td>General reserve \$</td><td>Retained earnings \$</td><td></td></tr><tr><td>Balance b/f</td><td>200 000</td><td>20 000</td><td></td><td>54 000</td><td>96 000</td><td></td></tr><tr><td>Bonus issue</td><td>10 000</td><td>(10 000)</td><td>(1)</td><td></td><td></td><td></td></tr><tr><td>Ordinary share dividend paid</td><td></td><td></td><td></td><td></td><td>(6 250)</td><td>(1)</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>Profit for the year</td><td></td><td></td><td></td><td></td><td>38 550</td><td>(1) OF</td></tr><tr><td>Balance c/f</td><td>210 000</td><td>10 000</td><td></td><td>54 000</td><td>128 300</td><td>(1) OF for all</td></tr></table>		Ordinary shares \$	Share premium \$		General reserve \$	Retained earnings \$		Balance b/f	200 000	20 000		54 000	96 000		Bonus issue	10 000	(10 000)	(1)				Ordinary share dividend paid					(6 250)	(1)								Profit for the year					38 550	(1) OF	Balance c/f	210 000	10 000		54 000	128 300	(1) OF for all	4
	Ordinary shares \$	Share premium \$		General reserve \$	Retained earnings \$																																														
Balance b/f	200 000	20 000		54 000	96 000																																														
Bonus issue	10 000	(10 000)	(1)																																																
Ordinary share dividend paid					(6 250)	(1)																																													
Profit for the year					38 550	(1) OF																																													
Balance c/f	210 000	10 000		54 000	128 300	(1) OF for all																																													

Question	Answer	Marks
2(d)	Statement of financial position at 31 December 2018 \$ Assets Non-current assets Land and buildings 425 000 Plant and machinery 25 000 Vehicles <u>16 000</u> <u>466 000</u> (1) Current assets Inventory 65 000 Trade receivables 42 000 Cash and cash equivalents <u>37 000</u> <u>144 000</u> Total assets <u>610 000</u> Equity and liabilities Equity Ordinary shares 210 000 (1) OF Share premium 10 000 (1) OF General reserve 54 000 Retained earnings <u>128 300</u> (1) OF <u>402 300</u> Non-current liabilities 8% Debentures (2025) <u>150 000</u> (1) Current liabilities Trade payables 35 000 Other payables <u>22 700</u> (1) <u>57 700</u> Total equity and liabilities <u>610 000</u>	6

Question	Answer	Marks																				
2(e)	Net book value \$15 000 Resale value \$(8000 – 1200) = \$6800 (1) Value in use <table><tr><td>Year</td><td>Cash flow \$</td><td>Discount factor</td><td>Net present value \$</td></tr><tr><td>1</td><td>4 000</td><td>0.909</td><td>3 636</td></tr><tr><td>2</td><td>5 000</td><td>0.826</td><td>4 130</td></tr><tr><td>3</td><td>3 000</td><td>0.751</td><td><u>2 253</u></td></tr><tr><td>Total</td><td></td><td></td><td><u>10 019</u></td></tr></table> Therefore, value in use \$10 019 is higher than fair value \$6800 (1) OF. The recoverable amount is \$10 019 (1). The impairment loss is \$(15 000 – 10 019) = \$4981 (1) OF.	Year	Cash flow \$	Discount factor	Net present value \$	1	4 000	0.909	3 636	2	5 000	0.826	4 130	3	3 000	0.751	<u>2 253</u>	Total			<u>10 019</u>	4
Year	Cash flow \$	Discount factor	Net present value \$																			
1	4 000	0.909	3 636																			
2	5 000	0.826	4 130																			
3	3 000	0.751	<u>2 253</u>																			
Total			<u>10 019</u>																			
2(f)	Possible answers: The loss on the value of non-current assets is an adjusting event (1) in accordance with IAS10 (1) especially as the amount is more than 33% of the plant and machinery total value. (1) The accounts have not yet been authorised for issue or presented to the shareholders (1) as the time is February and the AGM is on 31 March 2019. (1) IAS 36 impairment of assets. (1) Accept other valid points. Max 5 marks	5																				

Question	Answer	Marks																																	
3(a)	Equity and Liabilities section \$ <table> <tr> <td>Equity and liabilities</td><td></td><td></td></tr> <tr> <td>Equity</td><td></td><td></td></tr> <tr> <td>\$0.50 ordinary shares</td><td>500 000</td><td>(1)</td></tr> <tr> <td>Share premium</td><td>(200 000 + 125 000)</td><td>325 000 (1)</td></tr> <tr> <td>Retained earnings</td><td><u>267 000</u></td><td>(1) OF (Balancing figure)</td></tr> <tr> <td>Total equity</td><td><u>1 092 000</u></td><td></td></tr> <tr> <td>Non-current liabilities</td><td></td><td></td></tr> <tr> <td>12% debentures</td><td>250 000</td><td></td></tr> <tr> <td>Current liabilities</td><td>$\left(\frac{420\,000}{1.75} \right)$</td><td>240 000 (1)</td></tr> <tr> <td>Total liabilities</td><td><u>490 000</u></td><td>(1) OF</td></tr> <tr> <td>Total equity and liabilities</td><td><u>1 582 000</u></td><td></td></tr> </table>	Equity and liabilities			Equity			\$0.50 ordinary shares	500 000	(1)	Share premium	(200 000 + 125 000)	325 000 (1)	Retained earnings	<u>267 000</u>	(1) OF (Balancing figure)	Total equity	<u>1 092 000</u>		Non-current liabilities			12% debentures	250 000		Current liabilities	$\left(\frac{420\,000}{1.75} \right)$	240 000 (1)	Total liabilities	<u>490 000</u>	(1) OF	Total equity and liabilities	<u>1 582 000</u>		5
Equity and liabilities																																			
Equity																																			
\$0.50 ordinary shares	500 000	(1)																																	
Share premium	(200 000 + 125 000)	325 000 (1)																																	
Retained earnings	<u>267 000</u>	(1) OF (Balancing figure)																																	
Total equity	<u>1 092 000</u>																																		
Non-current liabilities																																			
12% debentures	250 000																																		
Current liabilities	$\left(\frac{420\,000}{1.75} \right)$	240 000 (1)																																	
Total liabilities	<u>490 000</u>	(1) OF																																	
Total equity and liabilities	<u>1 582 000</u>																																		
3(b)(i)	Dividend cover $\frac{204\,000}{45\,000}$ (1) = 4.53 times (1)	7																																	
3(b)(ii)	Gearing ratio $\frac{250\,000}{1342\,000}$ (1) OF $\times 100 = 18.63\%$ (1) OF																																		
3(b)(iii)	Price earnings ratio earnings per share = $\frac{204\,000}{1000\,000} = 0.204$ PER = $\frac{2.50 (1)}{0.204 (1)} = 12.25 (1) \text{ OF}$																																		

PUBLISHED

Question	Answer	Marks
3(c)	Possible answers: J plc has a dividend cover of 4.53 times which compares the amount of profit earned by the ordinary shareholder with the amount of dividend held. This is reasonable (1) and indicates that the company will be able to continue to pay the current level of ordinary dividends even if profits fall. (1) Max 2 The gearing ratio is 18.63% which is the relationship between fixed cost capital and total capital. In this case J plc has low gearing which means that the company has a low borrowing as a proportion of its total capital and long term finance (1). J plc is a low risk company (1) with interest having a smaller effect on the amount of profit available for ordinary shareholders. (1) Max 2 The price earnings ratio is 12.25 which compares the market price of the shares with the earnings per share. This means that it takes 12.25 years to recover the market price of the shares with earnings. (1) Buyers of shares are paying 12.25 times the earnings to acquire shares in J plc. (1) This indicates expected future growth. (1) Max 2 The current ratio is 1.75 : 1 which means that the business is liquid (1) having \$1.75 of short term current assets to every \$1 of short term current liabilities. (1) The business is therefore able to pay its short term debts with its inventory, trade receivables and cash and cash equivalents. (1) Max 2 Accept other valid points.	8

PUBLISHED

Question	Answer	Marks
3(d)	Possible answers: Dividend will be \$300 000 (1) and the company does not have sufficient cash to pay this (1) without raising additional funds (1). In order to satisfy the group of shareholders the directors could issue bonus shares. (1) They have sufficient reserves to do this (1). Accept other valid points. Max 4 for justification + 1 mark for decision	5

Question	Answer					Marks																																																		
4(a)	<table><thead><tr><th></th><th>Original value</th><th>Realised value</th><th>Gain / (loss)</th><th></th></tr><tr><th>Assets / Liabilities</th><th>\$</th><th>\$</th><th>\$</th><th></th></tr></thead><tbody><tr><td>Non-current assets</td><td>142 000</td><td>148 000</td><td>6 000]</td><td></td></tr><tr><td>Inventory</td><td>38 000</td><td>41 000</td><td>3 000]</td><td>(1)</td></tr><tr><td>Trade receivables</td><td>49 000</td><td>47 000</td><td>(2 000)</td><td>]</td></tr><tr><td>Trade payables</td><td>31 000</td><td><u>30 000</u></td><td>1 000</td><td>(1)</td></tr><tr><td>Net assets at fair value</td><td></td><td><u>206 000</u></td><td></td><td></td></tr><tr><td>Goodwill</td><td>0</td><td><u>34 000</u></td><td><u>34 000</u></td><td>(1)</td></tr><tr><td>Fair value of business</td><td></td><td>240 000</td><td></td><td></td></tr><tr><td>Realisation gain</td><td></td><td></td><td><u><u>42 000</u></u></td><td>(1) OF</td></tr></tbody></table>						Original value	Realised value	Gain / (loss)		Assets / Liabilities	\$	\$	\$		Non-current assets	142 000	148 000	6 000]		Inventory	38 000	41 000	3 000]	(1)	Trade receivables	49 000	47 000	(2 000)	]	Trade payables	31 000	<u>30 000</u>	1 000	(1)	Net assets at fair value		<u>206 000</u>			Goodwill	0	<u>34 000</u>	<u>34 000</u>	(1)	Fair value of business		240 000			Realisation gain			<u><u>42 000</u></u>	(1) OF	4
	Original value	Realised value	Gain / (loss)																																																					
Assets / Liabilities	\$	\$	\$																																																					
Non-current assets	142 000	148 000	6 000]																																																					
Inventory	38 000	41 000	3 000]	(1)																																																				
Trade receivables	49 000	47 000	(2 000)	]																																																				
Trade payables	31 000	<u>30 000</u>	1 000	(1)																																																				
Net assets at fair value		<u>206 000</u>																																																						
Goodwill	0	<u>34 000</u>	<u>34 000</u>	(1)																																																				
Fair value of business		240 000																																																						
Realisation gain			<u><u>42 000</u></u>	(1) OF																																																				
4(b)	<table><thead><tr><th></th><th colspan="2">Capital account</th><th></th><th></th></tr><tr><th></th><th>Amy</th><th>Beth</th><th>Amy</th><th>Beth</th></tr><tr><th></th><th>\$</th><th>\$</th><th>\$</th><th>\$</th></tr></thead><tbody><tr><td>Current account</td><td></td><td>1 500 *</td><td>120 000</td><td>80 000</td></tr><tr><td>Ordinary shares</td><td>112 500</td><td>112 500 (1)</td><td>Current account</td><td>3 500 *</td></tr><tr><td>Bank</td><td>35 000 (1) OF</td><td></td><td>Realisation gain</td><td>24 000</td></tr><tr><td></td><td></td><td></td><td>Bank</td><td>18 000</td></tr><tr><td></td><td></td><td></td><td></td><td><u>16 000</u></td></tr><tr><td></td><td><u>147 500</u></td><td><u>114 000</u></td><td><u>147 500</u></td><td><u>114 000</u></td></tr></tbody></table>						Capital account					Amy	Beth	Amy	Beth		\$	\$	\$	\$	Current account		1 500 *	120 000	80 000	Ordinary shares	112 500	112 500 (1)	Current account	3 500 *	Bank	35 000 (1) OF		Realisation gain	24 000				Bank	18 000					<u>16 000</u>		<u>147 500</u>	<u>114 000</u>	<u>147 500</u>	<u>114 000</u>	5					
	Capital account																																																							
	Amy	Beth	Amy	Beth																																																				
	\$	\$	\$	\$																																																				
Current account		1 500 *	120 000	80 000																																																				
Ordinary shares	112 500	112 500 (1)	Current account	3 500 *																																																				
Bank	35 000 (1) OF		Realisation gain	24 000																																																				
			Bank	18 000																																																				
				<u>16 000</u>																																																				
	<u>147 500</u>	<u>114 000</u>	<u>147 500</u>	<u>114 000</u>																																																				

PUBLISHED

Question	Answer	Marks
4(c)	X Limited Statement of financial position at 1 January 2018 \$ Assets Non-current assets – tangibles 802 000 (1) (654 000 + 148 000) Goodwill 34 000 (1) OF Current assets Inventory 123 000 (1) (82 000 + 41 000) Trade receivables 130 700 (1) (83 700 + 47 000) Cash and cash equivalents <u>83 400</u> (1) (98 400 – 15 000* (1)) <u>337 100</u> *240 000 – 90 000 × 2.5 Total assets <u>1 173 100</u> Equity and liabilities Ordinary shares of \$1 each 790 000 (1) (700 000 + 90 000) Share premium 135 000 (1) (90 000 × (2.5 – 1)) Retained earnings <u>144 500</u> <u>1 069 500</u> Current liabilities Trade payables <u>103 600</u> (1) (73 600 + 30 000) Total equity and liabilities <u>1 173 100</u>	9

PUBLISHED

Question	Answer	Marks
4(d)	Possible answers: Responses may include: Economies of scale (1) Synergy (1) Broader range of products / service (1) Increase the market share / eliminate competitor (1) Acquiring the knowhow / technology / expertise / good location etc., of the acquired company (1) If the acquired business is a new business to the acquiring company, there is no need to start from the scratch (1) Accept other valid points. Max 2	2
4(e)	Possible answers: Profit for the year has decreased by \$23 000 or 13.69%. (1) Dividend paid has decreased by \$7 500 or 7.14% (1). Retained earnings have increased by \$47 500 (1). May have struggled to integrate the partnership. (1) Eliminated a competitor. (1) Amy / Beth may argue over decisions made by directors. (1) Accept other valid points. Max 2 for calculations + 1 for decision + Max 2 for comments	5

PUBLISHED

Question	Answer					Marks																																				
5(a)	<table><thead><tr><th></th><th>Year 1</th><th>Year 2</th><th>Year 3</th><th>Year 4</th><th></th></tr><tr><th></th><th>\$</th><th>\$</th><th>\$</th><th>\$</th><th></th></tr></thead><tbody><tr><td>Annual receipts</td><td>390 000</td><td>420 000</td><td>460 000</td><td>370 000</td><td></td></tr><tr><td>Annual payments</td><td>280 000</td><td>280 000</td><td>270 000</td><td>250 000</td><td></td></tr><tr><td>Depreciation</td><td><u>100 000</u></td><td><u>100 000</u></td><td><u>100 000</u></td><td><u>100 000</u></td><td>(1) for all</td></tr><tr><td>Profit</td><td><u>10 000</u></td><td><u>40 000</u></td><td><u>90 000</u></td><td><u>20 000</u></td><td>(1) for all</td></tr></tbody></table> Average profit = $\frac{(\\$10\,000 + \\$40\,000 + \\$90\,000 + \\$20\,000)}{4} = \\$40\,000$ (1) Average investment = $\frac{\\$400\,000}{2} = \\$200\,000$ (1) Accounting rate of return = $\frac{\\$40\,000}{\\$200\,000} = 20\%$ (1)						Year 1	Year 2	Year 3	Year 4			\$	\$	\$	\$		Annual receipts	390 000	420 000	460 000	370 000		Annual payments	280 000	280 000	270 000	250 000		Depreciation	<u>100 000</u>	<u>100 000</u>	<u>100 000</u>	<u>100 000</u>	(1) for all	Profit	<u>10 000</u>	<u>40 000</u>	<u>90 000</u>	<u>20 000</u>	(1) for all	5
	Year 1	Year 2	Year 3	Year 4																																						
	\$	\$	\$	\$																																						
Annual receipts	390 000	420 000	460 000	370 000																																						
Annual payments	280 000	280 000	270 000	250 000																																						
Depreciation	<u>100 000</u>	<u>100 000</u>	<u>100 000</u>	<u>100 000</u>	(1) for all																																					
Profit	<u>10 000</u>	<u>40 000</u>	<u>90 000</u>	<u>20 000</u>	(1) for all																																					
5(b)	Possible answers: Advantages: easy to calculate (1) profitability of capital investment can be compared with the business profitability (1) Disadvantages: it ignores the time value of money (1) timing of cash inflows and cash outflows are ignored (1) items such as depreciation is subjective, i.e. depends on the company's depreciation policy (1) Accept other valid advantages and disadvantages. Max 2 for advantages and Max 2 for disadvantages					4																																				

PUBLISHED

Question	Answer	Marks																																																	
5(c)	<table><thead><tr><th></th><th>Inflows \$</th><th>Outflows \$</th><th>Net \$</th><th>Discount factor 10% \$</th><th>PV \$</th><th></th></tr></thead><tbody><tr><td>Year 0</td><td></td><td>400 000</td><td></td><td>1</td><td>(400 000)</td><td></td></tr><tr><td>Year 1</td><td>390 000</td><td>280 000</td><td>110 000</td><td>0.909</td><td>99 990</td><td>(1)</td></tr><tr><td>Year 2</td><td>420 000</td><td>280 000</td><td>140 000</td><td>0.826</td><td>115 640</td><td>(1)</td></tr><tr><td>Year 3</td><td>460 000</td><td>270 000</td><td>190 000</td><td>0.751</td><td>142 690</td><td>(1)</td></tr><tr><td>Year 4</td><td>370 000</td><td>250 000</td><td>120 000</td><td>0.683</td><td><u>81 960</u></td><td>(1)</td></tr><tr><td></td><td></td><td></td><td></td><td>NPV</td><td><u>40 280</u></td><td>(1)</td></tr></tbody></table>		Inflows \$	Outflows \$	Net \$	Discount factor 10% \$	PV \$		Year 0		400 000		1	(400 000)		Year 1	390 000	280 000	110 000	0.909	99 990	(1)	Year 2	420 000	280 000	140 000	0.826	115 640	(1)	Year 3	460 000	270 000	190 000	0.751	142 690	(1)	Year 4	370 000	250 000	120 000	0.683	<u>81 960</u>	(1)					NPV	<u>40 280</u>	(1)	5
	Inflows \$	Outflows \$	Net \$	Discount factor 10% \$	PV \$																																														
Year 0		400 000		1	(400 000)																																														
Year 1	390 000	280 000	110 000	0.909	99 990	(1)																																													
Year 2	420 000	280 000	140 000	0.826	115 640	(1)																																													
Year 3	460 000	270 000	190 000	0.751	142 690	(1)																																													
Year 4	370 000	250 000	120 000	0.683	<u>81 960</u>	(1)																																													
				NPV	<u>40 280</u>	(1)																																													
5(d)	$\frac{10\% + (16\% - 10\%) \text{ (1) OF} \times 40\,280}{(40\,280 + 13\,130) \text{ (1) OF}} = 14.52\% \text{ (1) OF}$	3																																																	
5(e)	P Limited should purchase Machine X because: It has higher NPV (1) but ARR is lower than Machine Y. (1) IRR exceeds the required IRR of 13% for both machines but is greater for X. (1) Initial capital investment is lower. (1) Accept other valid points. Max 4 marks for reasons and 1 mark for decision	5																																																	
5(f)	Annual receipts = $\frac{\\$100\,000}{2.486} \text{ (1)} = \\$44\,248 \text{ (1)}$ Annual receipts = \$44 248 + \$45 000 = \$89 248 (1) OF	3																																																	

PUBLISHED

Question	Answer	Marks
6(a)	Possible answers: Not suitable if product is not uniform. (1) May be difficult to ascertain standard costs. (1) Costly. (1) Time consuming. (1) Max 2 Accept other valid points.	2
6(b)(i)	Material price variance = $230\,000 - 212\,500 = \\$17\,500$ (A) (2) 1 mark for amount + 1 mark for direction	2
6(b)(ii)	Material usage variance = $(42\,500 - 43\,800) \times 5 = \\$6\,500$ (F) (2) 1 mark for amount + 1 mark for direction	2
6(b)(iii)	Labour rate variance = $236\,000 - 256\,000 = \\$20\,000$ (F) (2) 1 mark for amount + 1 mark for direction	2
6(b)(iv)	Labour efficiency variance = $(32\,000 - 29\,200) \times 8 = \\$22\,400$ (A) (2) 1 mark for amount + 1 mark for direction	2
6(b)(v)	Total labour variance = $\\$2\,400$ (A) (1) OF	1

PUBLISHED

Question	Answer	Marks
6(c)(i)	Possible answers: Shortage of material forcing price up (1). Different supplier (1). Higher quality material (1). Higher transportation costs (1). Accept other valid points. Max 1	1
6(c)(ii)	Possible answers: Higher quality materials used (1) More skilled labour force used (1) More efficient machinery used (1) Accept other valid points. Max 1	1
6(c)(iii)	Possible answers: Less skilled labour force used (1) Labour rate in the market may have fallen (1) Standard cost may be set too high (1) Accept other valid points. Max 1	1

PUBLISHED

Question	Answer	Marks																																								
6(c)(iv)	Possible answers: Less skilled labour force used (1) Poor morale in work force (1) Work force not motivated (1) A stoppage may cause idle time (1) Accept other valid points. Max 1	1																																								
6(d)	Statement to reconcile standard costs with actual costs <table><tr><td></td><td></td><td>\$</td><td></td></tr><tr><td>Standard material cost ($7\,300 \times 6 \times 5$)</td><td></td><td>219 000</td><td>(1)</td></tr><tr><td>Standard labour cost ($7\,300 \times 4 \times 8$)</td><td></td><td><u>233 600</u></td><td>(1)</td></tr><tr><td></td><td></td><td>452 600</td><td></td></tr><tr><td>Material Price Variance</td><td>17 500</td><td>(1) OF</td><td></td></tr><tr><td>Labour Efficiency Variance</td><td><u>22 400</u></td><td>(1) OF</td><td>39 900</td></tr><tr><td>Material usage variance</td><td>6 500</td><td>(1) OF</td><td></td></tr><tr><td>Labour rate variance</td><td><u>20 000</u></td><td>(1) OF</td><td><u>(26 500)</u></td></tr><tr><td></td><td></td><td><u>13 400</u></td><td></td></tr><tr><td>Actual cost</td><td></td><td><u>466 000</u></td><td>(1) OF + (1) cf</td></tr></table>			\$		Standard material cost ($7\,300 \times 6 \times 5$)		219 000	(1)	Standard labour cost ($7\,300 \times 4 \times 8$)		<u>233 600</u>	(1)			452 600		Material Price Variance	17 500	(1) OF		Labour Efficiency Variance	<u>22 400</u>	(1) OF	39 900	Material usage variance	6 500	(1) OF		Labour rate variance	<u>20 000</u>	(1) OF	<u>(26 500)</u>			<u>13 400</u>		Actual cost		<u>466 000</u>	(1) OF + (1) cf	8
		\$																																								
Standard material cost ($7\,300 \times 6 \times 5$)		219 000	(1)																																							
Standard labour cost ($7\,300 \times 4 \times 8$)		<u>233 600</u>	(1)																																							
		452 600																																								
Material Price Variance	17 500	(1) OF																																								
Labour Efficiency Variance	<u>22 400</u>	(1) OF	39 900																																							
Material usage variance	6 500	(1) OF																																								
Labour rate variance	<u>20 000</u>	(1) OF	<u>(26 500)</u>																																							
		<u>13 400</u>																																								
Actual cost		<u>466 000</u>	(1) OF + (1) cf																																							
6(e)	Oscar should change. (1) He should update the standard costs because his standards will be more realistic. (1) or Variances are not significant, (1) therefore no need to change. (1) Accept other valid points. 1 mark for decision + 1 mark for justification	2																																								