



LCCI
International
Qualifications



L2

**Pearson
LCCI Level 2 Certificate
in Cost Accounting (VRQ)
(ASE20094)**

SAMPLE ASSESSMENT MATERIALS

Issue 2

For first teaching from September 2015

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This sample assessment material is Issue 2. Key changes are sidelined in the document. We will inform centres of any changes to this issue. The latest issue can be found on our website, qualifications.pearson.com

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Pearson LCCI

Certificate in Cost Accounting (VRQ) Level 2

Sample assessment materials for first teaching
September 2015
Time: 2 hours 30 minutes

Paper Reference
ASE20094

Complete the details below in block capitals.

Candidate name

Centre Code

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Candidate Number

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Candidate ID Number

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You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen
– *pencil can only be used for graphs, charts, diagrams, etc.*
- **Fill in the boxes** at the top of this page with your name, candidate number, centre code and your candidate ID number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- Answers should be given to an appropriate degree of accuracy.

Information

- The total mark for this paper is 100.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- Calculators may be used.

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- You are advised to show your workings.
- Check your answers if you have time at the end.

Turn over ►

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SECTION A

Answer ALL questions in this section. Write your answers in the spaces provided.

- 1** The following is a list of costs at two activity levels for a company that makes a single product.

Activity level	8 000 units	10 000 units	Cost classification
Costs	\$	\$	
Electricity	31 000	37 000	
Rent and rates	38 000	38 000	
Direct material	80 000	100 000	
Direct wages	64 000	80 000	
Distribution	33 000	39 000	

- (a) Identify the **five** costs as being **fixed**, **variable** or **semi-variable**.

Record your answer in the Cost classification column.

(5)

Use this space for any workings.

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(b) Describe the purpose of a **purchase requisition note**.

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(c) Describe what is meant by the term **cost centre**.

(2)

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(d) Describe **one** internal and **one** external source of data available to a company.

(4)

Internal

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External

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(e) Explain **one** advantage of using an accounting software package.

(2)

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(Total for Question 1 = 15 marks)

BLANK PAGE
QUESTION 2 BEGINS ON THE NEXT PAGE.

2 McGregor's, a private company, produces a single product.

Inventory is currently valued using the Last In First Out (LIFO) method.

The company is considering changing to a weighted average (AVCO) method as a means of valuing the inventory.

The following transactions took place during June:

- 1 June Balance brought forward: 100 units at \$18 per unit
- 3 June Purchased 100 units at \$20 per unit
- 7 June Sold 80 units
- 8 June Purchased 180 units at \$22 per unit
- 14 June Sold 120 units
- 15 June Purchased 160 units at \$24 per unit
- 21 June Sold 140 units

(a) Prepare the entries in the Stores Ledger Record showing issues and balance (in quantity, price and value) using AVCO as the method of stock valuation.

The receipts have already been entered.

Calculations and answers should be rounded to two decimal places.

(10)

Stores Ledger Record

Date	Receipts			Issues			Balance		
June	Quantity	Price \$	\$	Quantity	Price \$	\$	Quantity	Price \$	\$
1									
3	100	20.00	2 000.00						
7									
8	180	22.00	3 960.00						
14									
15	160	24.00	3 840.00						
21									

(b) Explain the effects on profits as a result of changing from LIFO to AVCO when inventory prices are rising.

(4)

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(Total for Question 2 = 14 marks)

- 3 Campbell's, a family business, has the option of making a product in either Factory A or Factory B.

The direct material costs and the variable overhead costs per unit will be the same in both factories.

Factory A

Factory A would use a team of 24 labourers, able to produce 2 000 units per week.

The following details relate to the labourers, based on a 40-hour working week.

Labourer grade	Number of labourers	Hourly rate
Unskilled	12	\$12
Semi-skilled	7	\$16
Skilled	5	\$20

If the product was made at Factory A, the fixed overheads would be \$7 600 per week.

Factory B

Factory B would use a team of 22 labourers, able to produce 2 000 units per week.

The following details relate to the labourers, based on a 40-hour working week.

Labourer grade	Number of labourers	Hourly rate
Unskilled	12	\$6
Semi-skilled	6	\$10
Skilled	4	\$14

In addition, each labourer in Factory B would be paid a bonus of \$0.12 for every unit the factory produces.

If the product was made at Factory B, the fixed overheads would be \$8 500 per week.

(a) Calculate the total weekly cost for labour and fixed overheads for each factory based on a production of 2 000 units per week.

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(b) Explain **two** reasons why the management may choose Factory A as opposed to Factory B to produce their product.

(4)

(c) Describe what is meant by the term **piecework rate**.

(2)

(Total for Question 3 = 18 marks)

BLANK PAGE
QUESTION 4 BEGINS ON THE NEXT PAGE.

4 Jelavic & Sons is a specialist engineering company.

The following costs relate to batch B346 of one of its products:

Direct materials: \$20 550

Direct labour: Department A 610 hours at \$9 per hour

 Department B 820 hours at \$10 per hour

500 units have been produced in batch B346.

The following information has also been provided:

Factory overheads are absorbed on the basis of direct labour hours.

For Department A the budgeted factory overheads are \$96 000 based on 20 000 direct labour hours.

For Department B the budgeted factory overheads are \$64 000 based on 10 000 direct labour hours.

- (a) Prepare a statement to show the total cost of production for batch B346. You must show your workings.

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The company uses a cost plus system for establishing the selling price and expects a gross profit (sales minus factory cost) of 25% of the selling price.

(b) Calculate, showing full workings, the gross profit for the batch. Give your answer to the nearest dollar.

(4)

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(c) Compare batch costing and job costing.

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(Total for Question 4 = 16 marks)

5 Aluko Widgets produces a single product.

The company has prepared the following budgeted information based on the production and sale of 5 200 units:

Production costs	\$000
Direct labour	270
Direct material	420
Variable production overheads	272
Fixed production overheads	424

The budgeted selling price is \$450 per unit.

There are no opening or closing inventories.

(a) Calculate the contribution per unit.

(3)

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(b) Calculate the break-even point in units and sales value.

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(c) Prepare a marginal costing statement to show the profit at a budgeted level of production and sales of 3 500 units.

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(d) Calculate how many units would need to be sold to achieve a target profit of \$265 000.

(4)

(e) State **two** of the limitations of cost-volume-profit (CVP) analysis.

(2)

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(Total for Question 5 = 17 marks)

BLANK PAGE
QUESTION 6 BEGINS ON THE NEXT PAGE.

6 Dembele is considering investing in a new machine to replace an existing machine.

The details of two alternative machines being considered for purchase are:

Machine X, which would cost \$450 000 with a residual value of \$50 000.

Machine Y, which would cost \$375 000 with a residual value of \$25 000.

Both machines would have a useful working life of five years.

The company depreciates its fixed assets on a straight-line basis.

The forecast net cash flows (excluding depreciation) for each machine are as follows:

	Machine X	Machine Y
	\$000	\$000
Year		
1	100	105
2	120	110
3	120	115
4	140	120
5	120	125

(a) Calculate the payback period in years and months for each of Machine X and Machine Y.

(6)

A series of horizontal dotted lines for writing the answer.

It has already been determined that Machine Y has an accounting rate of return (ARR) of 22.50%.

(b) Calculate the ARR (using the average investment value) for Machine X.

Give your answer to two decimal places.

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(c) (i) State, with **two** reasons, which machine the company should purchase.

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(ii) Describe **two** non-financial factors that the company might take into consideration when deciding which machine to purchase.

(4)

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(Total for Question 6 = 20 marks)

TOTAL FOR PAPER = 100 MARKS



Mark Scheme

Sample Assessment Materials

Pearson LCCI
Level 2 Certificate in
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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.
- Where marks are awarded for own figure answers, these marks can only be awarded if evidence of how the candidate arrived at their values has been provided (their workings).
- If candidates fail to provide their workings when instructed in the paper, it may not be possible to achieve all marks associated with the question, even if the final answer is correct.
- For calculation questions, full marks can be awarded where correct answer is seen with no workings shown, unless question states that candidate must provide workings.

Abbreviations

of **Own Figure rule**

Accuracy marks can be awarded where the candidates' answer does not match the mark scheme, though is accurate based on their valid method.

cao **Correct Answer Only rule**

Accuracy marks will only be awarded if the candidates' answer is correct, and in line with the mark scheme.

Question	Answer (AO1) 5	Mark										
1(a)	<p>Award 1 mark for each (total 5 marks).</p> <table> <tr> <td>Electricity</td> <td>Semi-variable</td> </tr> <tr> <td>Rent and rates</td> <td>Fixed</td> </tr> <tr> <td>Direct material</td> <td>Variable</td> </tr> <tr> <td>Direct wages</td> <td>Variable</td> </tr> <tr> <td>Distribution</td> <td>Semi-variable</td> </tr> </table>	Electricity	Semi-variable	Rent and rates	Fixed	Direct material	Variable	Direct wages	Variable	Distribution	Semi-variable	(5)
Electricity	Semi-variable											
Rent and rates	Fixed											
Direct material	Variable											
Direct wages	Variable											
Distribution	Semi-variable											

Question	Answer (AO3) 2	Mark
1(b)	<p>Award maximum 2 marks, e.g.</p> <p>A purchase requisition note gives an instruction to the buying department (1) to purchase goods or services (1).</p>	(2)

Question	Answer (AO3) 2	Mark
1(c)	<p>Award maximum 2 marks, e.g.</p> <p>A cost centre is a production or service location/function/activity (1) for which costs are accumulated (1).</p>	(2)

Question	Answer (AO1) 2, (AO3) 2	Mark
1(d)	<p>Award 1 mark for identification of source and 1 mark for description.</p> <p>Any valid answers are applicable that name the data/report and describe what it contains, e.g.</p> <p>An internal source of data could be an internal payroll report (1), which includes information about the wage costs for a period (1).</p> <p>An external source of data could be employment statistics data obtained from a government department (1), giving information about employment trends/skills shortages (1).</p>	(4)

Question	Answer (AO3) 2	Mark
1(e)	<p>Award 1 mark for advantage and 1 mark for its explanation, e.g.</p> <p>An advantage of using an accounting software package could be:</p> <p>If you make the correct original entry the software will complete the double entry / it will do complex calculations / it will produce reports (1) saving you time / reducing the potential for errors (1).</p>	(2)

Question	Answer (AO2) 10	Mark
2(a)	Award 1 mark allocated per row and 1 mark for each calculated weighted average (of).	

Stores Ledger Record										MARK
Date	RECEIPTS			ISSUES			BALANCE			
June	Quantity	Price \$	\$	Quantity	Price \$	\$	Quantity	Price \$	\$	
1							100	18.00	1 800.00	(1)
3	100	20.00	2 000.00				200	19.00	3 800.00	(1)+(1)
7				80	19.00	1 520.00	120	19.00	2 280.00	(1)
8	180	22.00	3 960.00				300	20.80	6 240.00	(1)+(1)
14				120	20.80	2 496.00	180	20.80	3 744.00	(1)
15	160	24.00	3 840.00				340	22.305	7 583.70	(1)+(1)
21				140	22.305	3 122.70	200	22.305	4 461.00	(1)
										(10)

Question	Answer (AO5) 4	Mark
2(b)	<p>Award maximum of 4 marks that mention any combination of the following statement points:</p> <p>When prices are rising using LIFO as the method of stock (inventory) valuation will lead to a lower than usual profit (1).</p> <p>This is because the latest prices will be charged to cost units and in turn the cost of sales (1).</p> <p>By switching to AVCO the price changes are smoothed out (1) over a period of time making the profit figure more realistic (1).</p>	(4)

Question	Answer (AO2) 12	Mark																																																		
3(a)	<p>Award maximum 12 marks for correct figures as follows:</p> <p>Factory A</p> <table border="1"> <thead> <tr> <th>Labourer grade</th> <th>Number</th> <th>Rate (\$)</th> <th>Cost per hour</th> <th>Weekly cost (\$)</th> </tr> </thead> <tbody> <tr> <td>Unskilled</td> <td>12</td> <td>12</td> <td>144 x 40</td> <td>5 760 (1)</td> </tr> <tr> <td>Semi-skilled</td> <td>7</td> <td>16</td> <td>112 x 40</td> <td>4 480 (1)</td> </tr> <tr> <td>Skilled</td> <td>5</td> <td>20</td> <td>100 x 40</td> <td>4 000 (1)</td> </tr> <tr> <td>Subtotal</td> <td>24</td> <td></td> <td>356 x 40</td> <td>14 240</td> </tr> </tbody> </table> <p>Fixed overheads 7 600 (1)</p> <p>Total cost 21 840 (1 cao)</p> <p>Factory B</p> <table border="1"> <thead> <tr> <th>Labourer grade</th> <th>Number</th> <th>Rate (\$)</th> <th>Cost per hour</th> <th>Weekly cost (\$)</th> </tr> </thead> <tbody> <tr> <td>Unskilled</td> <td>12</td> <td>6</td> <td>72 x 40</td> <td>2 880 (1)</td> </tr> <tr> <td>Semi-skilled</td> <td>6</td> <td>10</td> <td>60 x 40</td> <td>2 400 (1)</td> </tr> <tr> <td>Skilled</td> <td>4</td> <td>14</td> <td>56 x 40</td> <td>2 240 (1)</td> </tr> <tr> <td>Subtotal</td> <td>22</td> <td></td> <td>188x 40</td> <td>7 520</td> </tr> </tbody> </table> <p>Bonus payments (\$0.12 x 2 000 units) x 22 (1) 5 280 (1)</p> <p>Subtotal 12 800</p> <p>Fixed overheads 8 500 (1)</p> <p>Total cost 21 300 (1 cao)</p>	Labourer grade	Number	Rate (\$)	Cost per hour	Weekly cost (\$)	Unskilled	12	12	144 x 40	5 760 (1)	Semi-skilled	7	16	112 x 40	4 480 (1)	Skilled	5	20	100 x 40	4 000 (1)	Subtotal	24		356 x 40	14 240	Labourer grade	Number	Rate (\$)	Cost per hour	Weekly cost (\$)	Unskilled	12	6	72 x 40	2 880 (1)	Semi-skilled	6	10	60 x 40	2 400 (1)	Skilled	4	14	56 x 40	2 240 (1)	Subtotal	22		188x 40	7 520	(12)
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Question	Answer (AO4) 4	Mark
3(b)	<p>Award maximum of 4 marks that mention any combination of the following statement points:</p> <p>Factory A has more workers devoted to the job, it has an additional semi-skilled worker and an additional skilled worker (1) which might improve the quality of the product (1).</p> <p>Factory B operates a bonus scheme, paying a much lower basic wage (1), which might affect the quality of the product as workers rush to complete the target and achieve the bonus payment (1).</p>	(4)

Question	Answer (AO1) 2	Mark
3(c)	<p>Award maximum of 2, e.g.</p> <p>The employee is paid an agreed sum (1) for each task carried out / for each unit of output produced (1)</p>	(2)

Question	Answer (AO2) 8	Mark																																													
4(a)	<p>Award maximum 8 marks for correct statement as follows (2 marks from 8 allocated to correct calculation of overheads):</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: right;">\$</td> <td></td> </tr> <tr> <td>Direct materials</td> <td></td> <td style="text-align: right;">20 550</td> </tr> <tr> <td>Direct labour</td> <td></td> <td></td> </tr> <tr> <td>Department A (610 x \$9.00)</td> <td></td> <td style="text-align: right;">5 490 (1)</td> </tr> <tr> <td>Department B (820 x \$10.00)</td> <td></td> <td style="text-align: right;">8 200 (1)</td> </tr> <tr> <td colspan="2" style="border-top: 1px solid black;">Prime cost</td> <td style="text-align: right; border-top: 1px solid black;">34 240 (1)</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td>Overheads</td> <td></td> <td></td> </tr> <tr> <td>Department A (610 x \$4.80) w1</td> <td></td> <td style="text-align: right;">2 928 (1)</td> </tr> <tr> <td>Department B (820 x \$6.40) w2</td> <td></td> <td style="text-align: right;">5 248 (1)</td> </tr> <tr> <td colspan="2" style="border-top: 1px solid black;">Total cost of production</td> <td style="text-align: right; border-top: 1px solid black;">42 416 (1)</td> </tr> <tr> <td colspan="3"> </td> </tr> <tr> <td colspan="3">Calculation of overheads</td> </tr> <tr> <td colspan="2">w1 \$96 000 ÷ 20 000 = \$4.80 (1)</td> <td></td> </tr> <tr> <td colspan="2">w2 \$64 000 ÷ 10 000 = \$6.40 (1)</td> <td></td> </tr> </table>		\$		Direct materials		20 550	Direct labour			Department A (610 x \$9.00)		5 490 (1)	Department B (820 x \$10.00)		8 200 (1)	Prime cost		34 240 (1)				Overheads			Department A (610 x \$4.80) w1		2 928 (1)	Department B (820 x \$6.40) w2		5 248 (1)	Total cost of production		42 416 (1)				Calculation of overheads			w1 \$96 000 ÷ 20 000 = \$4.80 (1)			w2 \$64 000 ÷ 10 000 = \$6.40 (1)			(8)
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Question	Answer (AO2) 4	Mark												
4(b)	<p>Award maximum 4 marks for gross profit calculation (of) (award 1 mark for arriving at 0.75 plus award one mark for dividing total cost by 0.75).</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: right;">\$</td> <td></td> </tr> <tr> <td>Sales (\$42 416 ÷ 0.75) (2)</td> <td></td> <td style="text-align: right;">56 555</td> </tr> <tr> <td>Less Costs</td> <td></td> <td style="text-align: right;">42 416 (1)</td> </tr> <tr> <td>Gross Profit</td> <td></td> <td style="text-align: right;">14 139 (1)</td> </tr> </table>		\$		Sales (\$42 416 ÷ 0.75) (2)		56 555	Less Costs		42 416 (1)	Gross Profit		14 139 (1)	(4)
	\$													
Sales (\$42 416 ÷ 0.75) (2)		56 555												
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Question	Answer (AO1) 2, (AO4) 2	Mark
4(c)	<p>Award 1 mark for each definition (maximum 2)(AO1). Award 1 mark for stating the difference, 1 mark for development (AO4).</p> <p>Batch costing occurs when a quantity of identical items (1) are repeatedly manufactured in one production run (1), whereas job costing is used for a single one-off item (1) made to a customer's specification (bespoke) (1).</p> <p>In batch costing all relevant costs are attributed to the batch (1). In job costing specific costs are attributed to the job (1).</p>	(4)

Question	Answer (AO2) 3	Mark																					
5(a)	<p>Award 3 marks for calculation of contribution as follows:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;">Variable costs</td> <td style="text-align: right;">\$</td> <td></td> </tr> <tr> <td>Direct labour</td> <td style="text-align: right;">270 000</td> <td></td> </tr> <tr> <td>Direct materials</td> <td style="text-align: right;">420 000</td> <td></td> </tr> <tr> <td>Variable production overheads</td> <td style="text-align: right;"><u>272 000</u></td> <td></td> </tr> <tr> <td></td> <td style="text-align: right;">962 000 (1)</td> <td></td> </tr> <tr> <td colspan="3">$\\$962\,000 \div 5\,200 \text{ units} = \\$185 \text{ Variable costs per unit (1)}$</td> </tr> <tr> <td colspan="3">Selling price \$450 - \$185 = \$265 Contribution per unit (1)</td> </tr> </table>	Variable costs	\$		Direct labour	270 000		Direct materials	420 000		Variable production overheads	<u>272 000</u>			962 000 (1)		$\$962\,000 \div 5\,200 \text{ units} = \$185 \text{ Variable costs per unit (1)}$			Selling price \$450 - \$185 = \$265 Contribution per unit (1)			(3)
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Question	Answer (AO2) 3	Mark
5(b)	<p>Award 3 marks for calculation of break-even point in units and sales as follows:</p> <p>Fixed costs = $\\$424\,000 \div \\$265 (1) = 1\,600 \text{ units (1)}$ $1\,600 \text{ units} \times \\$450 = \\$720\,000 (1)$</p>	(3)

Question	Answer (AO2) 5	Mark																					
5(c)	<p>Award maximum 5 marks for correct statement as follows (of):</p> <p>Marginal costing statement</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 80%;"></td> <td style="text-align: right;">\$000</td> <td></td> </tr> <tr> <td>Sales (3 500 x \$450)</td> <td style="text-align: right;">1 575.0 (1)</td> <td></td> </tr> <tr> <td>Less variable costs</td> <td></td> <td></td> </tr> <tr> <td>$(962\,000 \div 5\,200) \times 3\,500$</td> <td style="text-align: right;">647.5 (1)</td> <td></td> </tr> <tr> <td>Contribution</td> <td style="text-align: right;">927.5 (1)</td> <td></td> </tr> <tr> <td>Less Fixed costs</td> <td style="text-align: right;">424.0 (1)</td> <td></td> </tr> <tr> <td>Profit</td> <td style="text-align: right;">503.5 (1)</td> <td></td> </tr> </table>		\$000		Sales (3 500 x \$450)	1 575.0 (1)		Less variable costs			$(962\,000 \div 5\,200) \times 3\,500$	647.5 (1)		Contribution	927.5 (1)		Less Fixed costs	424.0 (1)		Profit	503.5 (1)		(5)
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Question	Answer (AO2) 4	Mark
5(d)	<p>Award 4 marks for calculation of units sold as follows:</p> <p>Required units $\text{Fixed costs } 424\,000 (1) + \text{Target profit } 265\,000 (1) =$ $689\,000 \div 265\,000 (1) =$ $2\,600 \text{ units (1)}$</p>	(4)

Question	Answer (AO1) 2	Mark
5(e)	<p>Award 1 mark for each limitation (maximum 2).</p> <ul style="list-style-type: none"> • Total fixed costs are assumed to remain constant across the range • The selling price per unit is assumed to remain constant across the range • The variable costs per unit are assumed to remain constant across the range • Costs are assumed to be divisible into fixed and variable 	(2)

Question	Answer (AO2) 6	Mark																																							
6(a)	<p>Award 6 marks for calculation of payback period as follows. Different presentations allowed.</p> <p>Payback period</p> <table border="1"> <thead> <tr> <th rowspan="2">Year</th> <th colspan="2">Machine X</th> <th colspan="2">Machine Y</th> </tr> <tr> <th>Cash flows</th> <th>Cumulative cash flows</th> <th>Cash flows</th> <th>Cumulative cash flows</th> </tr> </thead> <tbody> <tr> <td></td> <td>\$000</td> <td>\$000</td> <td>\$000</td> <td>\$000</td> </tr> <tr> <td>0</td> <td>(450)</td> <td>(450)</td> <td>(375)</td> <td>(375)</td> </tr> <tr> <td>1</td> <td>100</td> <td>(350)</td> <td>105</td> <td>(270)</td> </tr> <tr> <td>2</td> <td>120</td> <td>(230)</td> <td>110</td> <td>(160)</td> </tr> <tr> <td>3</td> <td>120</td> <td>(110) (1)</td> <td>115</td> <td>(45) (1)</td> </tr> <tr> <td>4</td> <td>140</td> <td>30</td> <td>120</td> <td>75</td> </tr> </tbody> </table> <p>Payback period for Machine X = 3 years (1) + (110 ÷ 140 x 12) 9.4 months (1)</p> <p>Payback period for Machine Y = 3 years (1) + (45 ÷ 120 x 12) 4.5 months (1)</p>	Year	Machine X		Machine Y		Cash flows	Cumulative cash flows	Cash flows	Cumulative cash flows		\$000	\$000	\$000	\$000	0	(450)	(450)	(375)	(375)	1	100	(350)	105	(270)	2	120	(230)	110	(160)	3	120	(110) (1)	115	(45) (1)	4	140	30	120	75	(6)
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Question	Answer (AO2) 8	Mark
6(b)	<p>Award 8 marks for calculation of ARR as follows. Answer must be presented to two decimal places. Different presentations allowed.</p> <p>Calculation of accounting rate of return (ARR)</p> <p>Machine X:</p> <p>Annual depreciation = 450 - 50 = 400 (1) ÷ 5 years = \$80 000 (1)</p> <p>Average accounting profit = 100 + 120 + 120 + 140 + 120 = \$600 000 (1) less depreciation 5 x 80 000 = \$400 000 = \$200 000 (1) ÷ 5 = \$40 000 per annum (1)</p> <p>Average investment value = 450 + 40 = \$490 000 (1) ÷ 2 = \$245 000(1)</p> <p>ARR = \$40 000 ÷ \$245 000 x 100% = 16.33% (1)</p>	(8)

Question	Answer (AO4) 2	Mark
6(c)(i)	<p>Award 1 mark for each reason stated, up to a maximum of 2, e.g.</p> <p>The company should choose Machine Y as it has the shorter payback (1) and a higher ARR (rate of return) (1).</p>	(2)

Question	Answer (AO3) 4	Mark
6(c)(ii)	<p>Award maximum of 4 marks for two non-financial factors identified and expanded on.</p> <p>Examples If a machine was cheaper it might not be as well made / reliable (1) this might affect the quality of the product being produced (1).</p> <p>If one of the machines was more complicated to operate (1) then more time would be taken in training the workforce (1).</p> <p>One machine may be more environmentally sustainable (1) this may be more in line with company's policies / procedures / image /reputation (1).</p>	(4)

September 2015

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