

Pearson LCCI

Certificate in Cost and Management Accounting (VRQ) Level 3

Friday 9 December 2016

Time: 3 hours

Paper Reference

ASE20098

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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PEARSON

Answer ALL questions. Write your answers in the spaces provided.**1** Powell and Sons manufactures a single product.

The following budgeted information has been prepared (per unit) for the next period:

	\$
Selling price	106.00
Direct materials	23.50
Direct labour	38.00
Variable overheads	14.50

Sales and production are planned to be 7 000 units and fixed overheads \$102 500 for the period.

(a) Calculate the budgeted:

(i) break-even point in sales units and sales revenue

(3)

(ii) margin of safety as a percentage of sales

(2)

(iii) profit, if sales and production are 7 000 units.

(2)



The company is considering installing new machinery, which would reduce the direct labour costs by 25% and increase total fixed overheads by 30%.

All other costs per unit and the selling price would remain unchanged.

(b) Calculate, based on the installation of the new machinery, the expected:

(i) break-even point in sales units and sales revenue

(3)

(ii) margin of safety as a percentage of sales

(2)

(iii) profit, if sales and production are 7 000 units.

(2)

(c) Using your calculations in parts (a) and (b), plot **both** of the above options on **the same profit/volume chart** (on the graph paper provided on the following page), clearly labelling the:

(i) break-even points (in units) for both options

(ii) fixed costs (in \$ value) for both options

(iii) potential profit for each option (in \$ value) at 7 000 units.

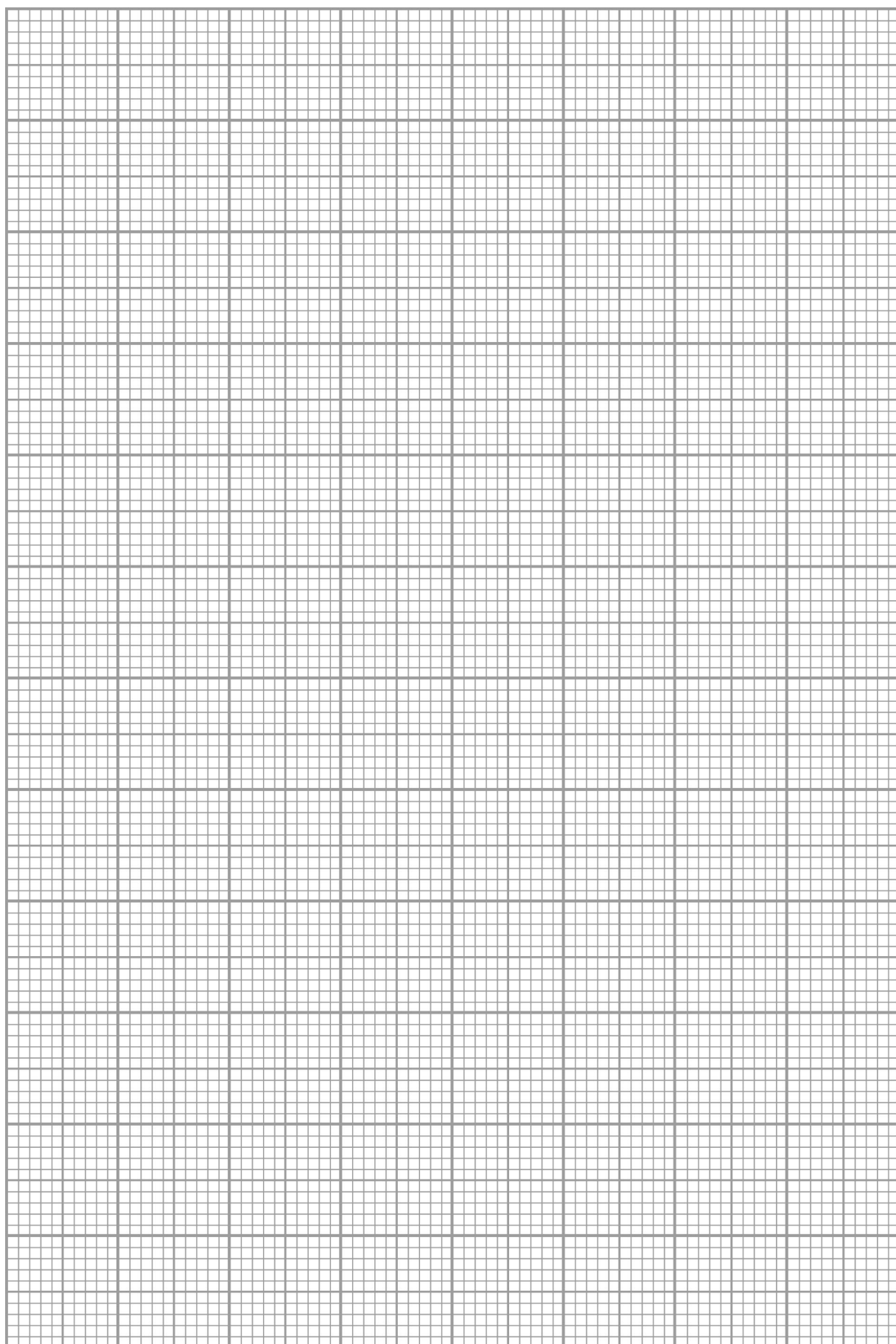
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- (d) Evaluate the proposed introduction of new machinery and include a recommendation as to whether or not the company should proceed with the installation.

(4)

(Total for Question 1 = 24 marks)



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2 The Maloney Company operates an integrated accounting system.

The following information is available for period 8:

Opening inventory:

	\$
Raw materials	61 800
Work-in-progress	36 390
Finished goods	45 960

During period 8, the following transactions took place:

	\$
Purchases of raw materials	183 900
Production overheads absorbed	43 250
Direct wages incurred	37 365
Materials written off	1 875
Indirect production expenses incurred	6 450
Indirect wages and salaries incurred	13 850
Indirect materials issued to production overheads	9 750
Depreciation on production machinery	12 780

Closing inventory:

	\$
Raw materials	108 645
Work-in-progress	9 935
Finished goods	18 960

(a) Prepare the following accounts for period 8:

(i) Raw materials

(3)

Details	\$	Details	\$



(ii) Work-in-progress

(3)

Details	\$	Details	\$

(iii) Finished goods

(2)

Details	\$	Details	\$

(iv) Production overheads

(4)

Details	\$	Details	\$



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(b) Explain the term **integrated accounting system**.

(2)

(Total for Question 2 = 14 marks)



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3 Hernandez Aluko Ltd manufactures a single product.

The following standard costs apply:		\$/unit
Direct materials	5 kg at \$4 per kg	20.00
Direct labour	4 hours at \$6 per hour	24.00
Fixed overheads	4 direct labour hours at \$5.50 per hour	<u>22.00</u>
Total standard production cost		<u>66.00</u>

For October, production and sales were budgeted at 10 000 units.

The actual data for October is as follows:

- Production and sales 10 600 units
- Direct materials purchased and used 55 000 kg costing \$209 000
- Direct labour 41 340 hours costing \$256 308
- Fixed production overheads \$224 470

(a) Calculate the following variances for October:

- (i) total direct material (1)

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- (ii) direct material price (2)

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- (iii) direct material usage (2)

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(iv) total direct labour

(1)

(v) direct labour rate

(2)

(vi) direct labour efficiency

(2)

(vii) fixed overhead expenditure

(2)

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(viii) fixed overhead volume.

(2)

(b) Explain the following terms:

(i) standard cost

(2)

(ii) standard hour.

(2)

(c) Explain **one** reason why the investigation of variances is important in a standard costing system.

(2)

(Total for Question 3 = 20 marks)



- 4 The following information has been extracted from the financial accounts of Benajuin Ltd for Year 14:

Statement of profit or loss	\$000
Revenue	4 275
Cost of sales	2 565

Current assets	\$000
Inventory	455
Trade receivables	630
Cash at bank	45

Current liabilities	\$000
Trade payables	475

All revenue and goods purchased were on credit.

The company made a gross profit margin of 40%.

Assume that 1 year = 365 days.

- (a) Calculate the working capital cycle (rounded to whole days) for Year 14.

(4)

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The company is considering whether to allow extended credit facilities to its customers for Year 15.

It is estimated that increasing the collection period for trade receivables by 24 days will result in a 15% increase in revenue and a 15% increase in the cost of sales.

However, the value of inventory will have to be increased by 20% to cope with the new demand.

In order to finance the increase in inventory and trade receivables, the company will need to increase the payment period of its trade payables by 12 days.

- (b) Calculate the expected change in the working capital cycle, in days, for Year 15 (workings to be rounded to whole days).

(4)

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- (c) Calculate the total change in the working capital investment showing the changes in inventory, trade receivables and trade payables for Year 15 (workings to be rounded to the nearest \$000).

(6)

- (d) Explain what is meant by the term **working capital management** and why this is important to the company.

(6)

(Total for Question 4 = 20 marks)



5 Elmoahady Ltd makes three products.

The budgeted details for these three products for period 10 are as follows:

	Product One	Product Two	Product Three
Production units	4 000	3 200	2 400
Per unit:			
Direct material X at \$7.50 per kg	5 kg	9 kg	6 kg
Direct material Y at \$15 per kg	4 kg	2 kg	9 kg
Direct labour hours at \$7.50 per hour	5 hours	4 hours	3 hours
Machine hours	1.5 hours	3 hours	2 hours

The following production costs (to two decimal places) for **one unit** of **each product** have already been calculated, using absorption costing:

	Product One	Product Two	Product Three
	\$/unit	\$/unit	\$/unit
Direct material X	37.50	67.50	45.00
Direct material Y	60.00	30.00	135.00
Direct labour	37.50	30.00	22.50
Production overheads	<u>53.50</u>	<u>42.80</u>	<u>32.10</u>
Production cost	188.50	170.30	234.60

The company is now considering using activity based costing (ABC) to calculate the production costs of each product.

The following gives a breakdown of the production overhead costs for period 10:

Activities	Costs (\$)	Cost Drivers
Material X handling	75 840	Quantity of material X used
Material Y handling	63 800	Quantity of material Y used
Set up	115 200	Number of production runs
Machining	102 000	Number of machine hours
Packaging	71 160	Number of orders

Additional information for period 10:

	Product One	Product Two	Product Three
Number of production runs	160	120	120
Number of orders	100	75	60



(a) Calculate the production costs (to two decimal places) for **one unit** of **each product** using activity based costing (ABC).

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(b) Evaluate if it might be more appropriate for the company to use activity based costing (ABC) instead of absorption costing.

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(Total for Question 5 = 22 marks)

TOTAL FOR PAPER = 100 MARKS

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