Pearson LCCI

Certificate in Cost and Management Accounting (VRQ)
Level 3

Monday 10 April 2017
Time: 3 hours

Paper Reference
ASE20098

Complete the details below in block capitals.

Candidate name

Centre Code

Candidate Number

Candidate ID Number

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 ▶

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

1 Twin Products manufactures and sells two products, Product A and Product B. Each product is manufactured from two raw materials, RM001 and RM002.

Twin Products has prepared the following budget information for Year 4.

	Product A	**Product B**
Sales (units)	8 000	15 000
Raw material RM001 per finished unit	4 kg	2 kg
Raw material RM002 per finished unit	2 kg	1 kg
Wastage rate of RM001 and RM002 introduced	20%	20%
Production reject rate	10%	5%
Inventory of finished goods at start of year (units)	400	800

Production is spread evenly throughout the year. All rejects occur after inspection at the end of production. It is company policy to purchase sufficient raw material at the beginning of each month to meet that month's production requirements.

Closing inventories at the end of the year for both products are planned to be 25% above those at the start of the year.

(a) Define the following terms:

(i) material wastage

(1)

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(ii) product rejection.

(1)

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(b) State **two** benefits of preparing budgets.

(2)

1 ....

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2 ....

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(c) Calculate, for Year 4, the number of good units that need to be produced for Product A and Product B.

(2)

(d) Prepare, for Year 4, the material budget, in kilograms, for RM001 and RM002.

(8)

(Total for Question 1 = 14 marks)

2 Triple Products manufactures and sells three products, Product A, Product B and Product C. All three products have a selling price of \$20 per unit.

Triple Products has provided the following budget information for Year 5.

Product	**A**	**B**	**C**
Sales mix (units)	5 000	4 000	3 000
Direct material cost (per unit)	\$6.00	\$7.00	\$5.00
Direct labour cost (per unit)	\$4.00	\$6.00	\$5.00

Fixed costs are \$54 000 for the year.

(a) Calculate the:

(i) contribution/sales ratio for each product **and** for Triple Products overall

(4)

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(ii) break-even revenue based on the overall budgeted sales mix.

(2)

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(b) Draw, on the graph paper on page 6, a **contribution break-even chart** for the overall budgeted sales mix (an additional graph page is included on page 7 if required).

Indicate clearly on the chart the:

- heading and labelled axes
- overall sales line
- total cost line
- variable cost line
- break-even point
- margin of safety
- contribution area (shaded).

(7)

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Triple Products is considering increasing its advertising expenditure for Product C.

Market research suggests that this would:

- generate a 50% increase in sales of Product C
- have no effect on the sales of Product A
- reduce the sales of Product B by 25%.

The additional advertising would increase the fixed cost to $64 000 for the year.

(c) Calculate the revised overall budgeted contribution/sales ratio if the advertising expenditure is increased.

(4)

(d) Evaluate whether Triple Products should proceed with the proposal in 2(c).

(4)

(Total for Question 2 = 21 marks)

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3 The One Product company, which produces a part for the motor industry, has budgeted to make 6 400 units in a year. The units sell for $80 each.

The standard unit variable production costs are as follows:

Direct material A	3 kg at $2.00 per kg
Direct material B	4 kg at $1.50 per kg
Direct labour	1.5 hours at $12 per hour
Variable overheads	Absorbed at $2.00 per unit

The fixed overheads are expected to be $48 000 per year, occurring evenly over the year. These are absorbed at a predetermined rate based on direct labour hours.

The following **actual** information is available for the first six months of the year:

Opening inventory	300 units
Sales	3 100 units
Closing inventory	200 units

Fixed overheads for the **six months** were equal to budget.
Variable costs per unit were as per standard production cost.
Actual direct labour hours per unit were as per budget.

(a) Calculate, for the **first six months of the year**, the:

(i) actual costs of production

(6)

(ii) over/under absorption of fixed production overheads.

(4)

(b) Prepare a trading account for the **first six months of the year** using absorption costing.

Clearly show any over/under absorption of overheads.

(7)

(c) Calculate the trading profit for the **first six months of the year** if the company had used marginal costing.

(4)

(d) Describe how absorption costing differs from marginal costing.

(3)

(Total for Question 3 = 24 marks)

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QUESTION 4 BEGINS ON THE NEXT PAGE.

4 The Blackbox Company, which manufactures a single product, has prepared the following budgeted and actual costs for period 8.

	Budget		**Actual**	
Production/sales in units	3600		3800	
	$	**$**	**$**	**$**
Sales revenue		81000		84000
Direct materials	14400		14900	
Direct labour	10800		11800	
Production overheads	19000		19700	
Administration overheads	10000		10100	
Total costs		54200		56500
Profit		26800		27500

The following additional information is available:

- The production overheads are absorbed on a per unit basis, based on a maximum capacity of 4000 units with a total cost of $20000
- The budgeted administration overheads include a fixed cost of $4600
- Actual quantity of material used was as expected for the actual output
- Actual labour hours were as expected for the actual output.

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(a) Prepare, in columnar format, a statement to show revenue, costs and profit for period 8.

The columns must show figures for:

- actual output of 3 800 units
- flexed budgeted output of 3 800 units
- variance.

(14)

(b) (i) Explain **one** reason why **each** of the following variances may have arisen, based on your period 8 statement.

(4)

Direct material variance

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Direct labour variance

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(ii) Explain **one** action that a Cost Accountant could take to reduce **each** of the following variances and make the budgets more realistic.

(4)

Direct material variance

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Direct labour variance

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(Total for Question 4 = 22 marks)

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QUESTION 5 BEGINS ON THE NEXT PAGE.

5 Trueflow manufactures its product in a single process.

The following information relates to the process:

- All materials are introduced at the start of the process
- Any losses that occur have no scrap value
- The company uses the first-in-first-out method of valuation
- Production overheads are absorbed at the rate of $12 per direct labour hour
- Direct labour is paid at the rate of $10 per hour.

The following were the actual results for month 4.

Opening inventory of work in progress (50% complete with respect to labour and overheads)	800 kg	$12 000
Material introduced	8 000 kg	$35 500
Direct labour utilised		$14 600
Transfer to finished goods	7 000 kg	
Closing inventory of work in progress (60% complete with respect to labour and overheads)	500 kg	

A normal loss of 900 kg was expected.

(a) Explain the term **process costing**.

(2)

(b) Calculate, for month 4, the:

(i) equivalent units and cost per unit for each element of cost

(7)

(ii) value of opening and closing work in progress inventory

(3)

(iii) value of the transfer to the finished goods.

(3)

Trueflow is concerned with the security and confidentiality of the management information it holds on its files.

(c) Explain **two** controls Trueflow's management can put in place to ensure that security and confidentiality are maintained when dealing with management information.

(4)

1

2

(Total for Question 5 = 19 marks)

TOTAL FOR PAPER = 100 MARKS