# Pearson LCCI

## Certificate in Cost and Management Accounting (VRQ)
**Level 3**

Friday 8 September 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*

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

**1** Dawson Clucas Ltd has budgeted to produce and sell 3 500 units of a product in a period.

The following standard and budgeted information has been prepared for the period.

| | |
|---|---|
| Selling price | $80 per unit |
| Direct labour | 2 hours per unit at $6 per hour |
| Direct materials | 2 kg per unit at $8 per kg |
| Variable production overheads | $8 per direct labour hour |
| Fixed overheads for period | $81 000 |

(a) Calculate for the period the budgeted:

(i) contribution/sales ratio percentage

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(ii) break-even point in units

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(iii) margin of safety as a percentage of sales.

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(b) Calculate the sales units required if the company wishes to make a profit of $36 000

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(c) Prepare a conventional **break-even chart**, using the graph paper on the next page, for output from 0 to 3 500 units, using the budgeted information, that clearly shows:

- fixed costs
- total costs
- total revenue
- the break-even point (in units)
- the margin of safety (in units).

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(d) Evaluate the extent to which the preparation of a break-even chart can provide Dawson Clucas Ltd with useful management information.

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(e) State **two** assumptions made in cost-volume-profit (CVP) analysis.

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**(Total for Question 1 = 20 marks)**

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**QUESTION 2 BEGINS ON THE NEXT PAGE.**

**2** Maloney Weir Ltd manufactures and sells four products: Q, R, S and T.

The company is preparing its production schedule for the next period.

The availability of direct labour will be limited to **32 000** hours for the period.

The details for the four products are as follows:

| | Product Q | Product R | Product S | Product T |
|---|---|---|---|---|
| **per unit** | **$** | **$** | **$** | **$** |
| Selling price | 128 | 74 | 240 | 192 |
| Direct material | 24 | 18 | 42 | 30 |
| Direct labour ($10 per hour) | 40 | 20 | 80 | 60 |
| Variable overheads | 32 | 16 | 30 | 48 |
| Fixed overheads | 20 | 10 | 40 | 30 |
| Sales demand (units) | 1 500 | 2 250 | 1 875 | 1 750 |

The fixed overhead per unit has been calculated on the basis of the sales demand for each product.

(a) Calculate the order of priority for production in the period with the objective of maximising contribution.

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(b) Prepare the optimum production schedule that will enable the company to maximise its profit.

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(c) Calculate the profit resulting from the production schedule in (b).

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(d) Explain the meaning of the following terms, giving an example of each

(i) sunk cost

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(ii) differential/incremental costs.

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**QUESTION 3 BEGINS ON THE NEXT PAGE.**

**3** Grosicki operates a non-integrated accounting system.

Examination of the two sets of accounts, for Period 1, revealed the following inventory valuations.

| | Cost accounts $ | Financial accounts $ |
|---|---|---|
| **Opening inventory valuations:** | | |
| Raw materials | 128 050 | 133 700 |
| Work-in-progress | 84 180 | 80 960 |
| Finished goods | 109 410 | 99 450 |
| **Closing inventory valuations:** | | |
| Raw materials | 128 450 | 120 680 |
| Work-in-progress | 97 785 | 91 590 |
| Finished goods | 127 350 | 123 150 |

Further investigations revealed the following:

- Depreciation in the cost accounts was recorded as $64 600, whilst in the financial accounts it was recorded as $58 350
- The following items had been recorded in the **financial accounts** only:
  - a loss on the sale of assets totalling $13 700
  - discounts allowed to customers totalling $16 350
  - sundry investment income of $29 000
  - interest charges for a bank loan amounting to $9 750
  - discounts received from suppliers totalling $16 320
- The following items had been recorded in the **cost accounts** only:
  - a notional rent charge of $15 300
  - under absorbed production overheads totalling $13 980 had been carried forward to the next accounting period.

At the end of Period 1 the profit shown in the **financial accounts** was $486 000

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(a) Calculate the profit that would be shown in the **cost accounts**, for Period 1, by means of a profit reconciliation statement.

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(b) Explain **one** possible reason why the depreciation charges are different in the two sets of accounts.

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**QUESTION 4 BEGINS ON THE NEXT PAGE.**

**4** Tymon McGuire Ltd manufactures and sells three products, using two types of raw material and two grades of labour.

The company is preparing its budgets for Period 3 and has provided the following information.

| | **Product Aye** | **Product Bee** | **Product Cee** |
|---|---|---|---|
| **Sales (units)** | 3 000 | 2 000 | 3 600 |
| **Direct materials per unit** | | | |
| Material Exe ($16.50 per kg) | 2.5 kg | 2.0 kg | 3.0 kg |
| Material Whye ($24.50 per kg) | 1.5 kg | 2.1 kg | 1.4 kg |
| **Direct labour per unit** | | | |
| Skilled ($17.25 per hour) | 1.2 hours | 3.5 hours | 2.5 hours |
| Unskilled ($12.50 per hour) | 0.8 hours | 1.5 hours | 0.8 hours |
| **Inventory holding** | **Product Aye** | **Product Bee** | **Product Cee** |
| Start of Period | 575 units | 550 units | 680 units |
| End of Period | 725 units | 360 units | 480 units |
| **Inventory holding – materials** | Material Exe | Material Whye | |
| Start of period | 3 400 kg | 4 000 kg | |
| End of period | 4 450 kg | 4 575 kg | |

(a) Prepare the following budgets for Period 3:

(i) production (units of each product)

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(ii) purchases of Material Exe (quantity in kg and total cost)

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(iii) unskilled direct labour (quantity in hours and total cost).

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(b) Explain **two** benefits, apart from dealing with overdrafts or cash surpluses, that a company might obtain from preparing budgets.

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(c) Identify **two** factors that might influence the company's choice of budget period.

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**5** The following information has been extracted from a retail company's financial records for Year 3.

| | **$000** |
|---|---|
| Trade receivables | 320 |
| Closing inventory | 312 |
| Trade payables | 242 |

**Additional information**

Cost of sales during the year was $2 520 000 and a gross profit of 30% was earned on sales (gross profit margin 30%).

40% of all sales were for cash and the remainder were on credit.

All purchases were on credit.

The opening inventory was $240 000

Assume 1 year = 365 days.

(a) Calculate the company's working capital cycle for Year 3 (rounded to whole days).

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The company is considering allowing the collection period for trade receivables to increase by 12 days for Year 4. This would result in:

- a 20% increase in total revenue and a 20% increase in the cost of sales
- the value of inventory increasing by 15% to cope with the new demand
- the payment period for trade payables increasing by 18 days to finance the increase in inventory and trade receivables.

(b) Calculate the expected change, indicating whether this is an increase or decrease, in the working capital cycle for Year 4 (rounded to whole days).

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(c) Calculate the change in value of the working capital investment for Year 4, showing the changes in inventory, trade receivables and trade payables (rounded to the nearest $000).

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(d) Evaluate whether the company should proceed with the proposal for Year 4, commenting on all three elements/aspects of the working capital cycle.

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**(Total for Question 5 = 23 marks)**

**TOTAL FOR PAPER = 100 MARKS**

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