Pearson LCCI

Friday 12 July 2019

Time: 3 hours | Paper Reference **ASE20098**

Certificate in Cost and Management Accounting (VRQ)

Level 3

Please check the examination details above before entering your candidate information

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.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- Answers should be given to the 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 Powell and Sons Ltd manufactures a single product.

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

	$ per unit
Selling price	150
Direct materials	20
Direct labour	50
Variable overheads	20

Sales and production 6 000 units

Fixed overheads $160 200

(a) Calculate the:

(i) break-even point in sales units

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

(2)

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The company is considering introducing a new machine, which would decrease the direct labour costs per unit by 40%, but would also increase fixed overheads by 40%.

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

(b) Calculate, based on the introduction of the new machine, the:

(i) break-even point in sales units

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

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(c) Prepare **ONE profit/volume chart**, showing output from 0 to 6 000 units, using your calculations in parts (a) and (b) to plot the results of using **each** of the above alternatives.

Clearly label, on the graph paper provided on pages 4 and 5, the:

- break-even points (in units) for **each** alternative
- fixed costs (in $ value) for **each** alternative
- profit for **each** alternative (in $ value) at 6 000 units.

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(d) Evaluate whether the company should introduce the new machine.

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Positive factors

Negative factors

Conclusion

(Total for Question 1 = 20 marks)

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2 Gribble Brothers makes and sells a single product.

The actual production and sales for June 2019 were:

Production 4 000 units Sales 4 000 units

The forecasts for the next four months are shown below.

Month	July	August	September	October
Production (units)	5 000	6 000	6 000	6 500
Sales (units)	4 000	5 000	6 000	6 500

Further information

- The selling price is currently $40 per unit. This is planned to increase to $42 per unit from 1 September. 20% of sales are for cash, the remaining 80% being paid by customers one month after the sale.
- Raw material costs are currently $12 per unit, rising to $14 from 1 September. Material is purchased and paid for one month before being used in production.
- Wages and other variable production costs are currently $16 per unit, rising to $18 per unit from 1 August. 80% of these costs are paid in the month of production, with the remaining 20% paid in the following month.
- A new machine costing $125 000 is to be purchased and paid for on 1 July. This will be financed by a loan, with total interest of 20% on the original sum. This is repayable monthly, over one year in 12 equal instalments. Payments will commence in August.
- This new machine, which has no residual value, will be depreciated on a straight line basis over three years, starting immediately. The depreciation charge for the new machine has been included in the fixed costs below.
- Fixed costs will be $28 972 per month from July. These are paid for in the month in which they are incurred.
- Any negative balance (overdraft) will incur an interest charge of 1.5% per month, charged on the previous month's closing balance (rounded to the nearest $).
- Any positive cash balance will receive an interest of 0.75% per month, on the previous month's closing balance (rounded to the nearest $).
- On 1 July the firm expects to have $25 000 in the bank.

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(a) Prepare a Cash Budget for the three months July, August and September 2019.

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(b) Explain **two** reasons why it is important for Gribble Brothers to manage its cash efficiently.

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3 Grosicki operates a non-integrated accounting system.

At the end of Period 2 the profit shown in the **cost accounts** was $383 545

Examination of the two sets of accounts for Period 2 revealed the following inventory valuations.

	Cost accounts $	**Financial accounts** $
Opening inventory valuations:		
Raw materials	126 050	131 700
Work-in-progress	74 180	70 960
Finished goods	99 410	89 450
Closing inventory valuations:		
Raw materials	118 450	110 680
Work-in-progress	87 785	81 590
Finished goods	107 350	103 150

The following items had been recorded in the **financial accounts** only:

- a loss on the sale of assets totalling $10 700
- discounts allowed to customers totalling $16 350
- discounts received from suppliers totalling $12 320
- sundry investment income of $19 000
- interest charges for a bank loan amounting to $9 750

The following items had been recorded in the **cost accounts** only:

- a notional rent charge of $15 300
- under absorbed production overheads totalling $8 980 had been carried forward to the next accounting period.

Further investigations revealed that:

- depreciation in the cost accounts was recorded as $64 600, whilst in the financial accounts it was recorded as $58 350

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(a) Prepare a Profit Reconciliation Statement for Period 2 to show the profit in the financial accounts.

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(b) Explain **two reasons** why a business needs to undertake a profit reconciliation in a non-integrated accounting system.

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4 Bowen and Pugh manufactures a single product that is sold for $180 per unit.

Details of the costs and revenues for Period 4 are shown below.

Variable costs (per unit)	**$**
Direct material	40
Direct labour	30
Production overhead	18
Selling and distribution overhead	6

These variable costs have been the same for the previous two periods.

Fixed costs (per period)	**$**
Production overheads	48 000
Selling and distribution overheads	30 000

Fixed production overheads are absorbed on the basis of 2 000 budgeted units of production per period.

The actual activity for Period 4 was as follows:

Sales	2 000 units
Production	2 200 units

The opening inventory was 500 units.

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(a) Prepare for Period 4:

(i) a Profit Statement, using absorption costing

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(ii) a Profit Statement, using marginal costing.

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(b) Prepare a statement reconciling the profit calculated using absorption costing with the profit calculated using marginal costing.

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(c) Explain the reason for the difference in the reported profit figure calculated using absorption costing and the reported profit figure calculated using marginal costing.

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(Total for Question 4 = 20 marks)

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5 Dawson McGuire is considering investing in new equipment.

This new equipment will require an initial investment of $2 000 000, and has an expected life of 5 years.

The expected revenues for this investment are as follows:

Year	**$000**
1	360
2	640
3	820
4	1 150
5	830

- Additional installation costs of $300 000 would be required before the start of the project.
- Costs of $30 000 per year are expected for years 1 to 5
- The equipment will have a residual value of $450 000 after 5 years.
- The cost of capital is **15%** per annum.

The following discount factors are provided:

Year	**15%**	**20%**
1	0.870	0.833
2	0.756	0.694
3	0.658	0.579
4	0.572	0.482
5	0.497	0.402

(a) Calculate, for the investment in the new equipment, the:

(i) net present value

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(ii) internal rate of return

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(iii) discounted payback period.

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(b) Evaluate the investment using all **three** appraisal techniques in (a) and recommend whether the investment is worthwhile.

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(c) Explain why the internal rate of return (IRR) and the net present value (NPV) do not necessarily rank projects in the same order.

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(Total for Question 5 = 23 marks)

TOTAL FOR PAPER = 100 MARKS

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