Pearson LCCI

Certificate in Cost and Management Accounting (VRQ)
Level 3

Thursday 7 December 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 Clucas Diomande Ltd manufactures and sells four products. The company is currently preparing its production schedule for the next period.

The details of the four products are as follows:

Per unit	**Product P** $	**Product Q** $	**Product R** $	**Product S** $
Selling price	240	400	360	259
Direct material	60	100	92	65
Direct labour ($10 per hour)	50	100	80	60
Variable overheads	40	80	60	50

Total fixed overheads are expected to be $284 000 for the next period.

Sales demand (units)	1 150	1 800	2 500	3 160

The sales figures **include** the following units, which the company must supply to customers in the next period.

Product P	250 units
Product Q	350 units
Product S	400 units

The availability of direct labour will be **limited** to 33 150 hours for the next period.

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

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

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

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(d) Explain the meaning and importance of the term **principal budget factor**.

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2 Ranocchia operates a non-integrated accounting system.

Examination of the two sets of accounts revealed the following differences in the inventory valuations.

	Cost accounts $	Financial accounts $
Opening inventory valuations:		
Raw materials	85 380	89 250
Work-in-progress	56 100	54 000
Finished goods	66 250	72 950
Closing inventory valuations:		
Raw materials	71 400	73 200
Work-in-progress	58 900	64 000
Finished goods	84 300	83 100

Further investigations revealed the following:

- Depreciation in the cost accounts was recorded as $48 450, whilst in the financial accounts it was recorded as $45 325
- Discounts allowed to customers totalling $9 650 and discounts received from suppliers totalling $8 160 had only been recorded in the financial accounts.
- Sundry investment income of $7 250 had only been recorded in the financial accounts.
- Dividends received totalling $8 250 had only been recorded in the financial accounts.
- Interest charges for a bank loan amounting to $6 500 had only been recorded in the financial accounts.
- A notional rent charge of $7 650 had only been recorded in the cost accounts.
- Over absorbed production overheads totalling $9 300 had been carried forward in the costs accounts.
- At the end of the accounting period the profit shown in the financial accounts was $406 650

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(a) Prepare a profit reconciliation statement to determine the profit shown in the cost accounts.

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(b) Explain why it is necessary to undertake a profit reconciliation statement in a non-integrated accounting system.

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(Total for Question 2 = 22 marks)

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3 Jakupovic Ltd is considering investing in new equipment with an estimated lifespan of 5 years.

The new equipment will cost $740 000 with a residual value of $100 000 at the end of 5 years.

The forecast contribution for this new equipment is as follows:

Year	**$000**
1	180
2	252
3	288
4	324
5	288

The company is also budgeting for additional annual fixed costs of $64 000 (excluding straight line depreciation of the new equipment).

Assume that net cash inflows occur at the end of the years to which they relate.

The company's cost of capital is **15%** per annum.

The discount factors for 12% and 15% are shown below.

Year	**12%**	**15%**
1	0.893	0.870
2	0.797	0.756
3	0.712	0.658
4	0.636	0.572
5	0.567	0.497

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

(i) Net Present Value (NPV)

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(ii) Internal Rate of Return (IRR).

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(b) Advise the company if the new equipment should be introduced.

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(c) Explain why Internal Rate of Return (IRR) and Net Present Value (NPV) do not necessarily rank projects in the same order.

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4 Henrikkson manufactures a single product and is budgeting to produce and sell 60 000 units during the next year.

The production costs for the year are as follows:

	$000s
Direct materials	950
Direct labour	520
Production overheads	690

The following information is also available:

- The selling price will be $48.00 per unit.
- Production and sales will take place evenly throughout the year. Assume that 1 year = 365 days.
- Direct materials to be held in inventory for an average of 8 days before being issued to production.
- Work-in-progress will take an average of 10 days before production is complete.
- Work-in-progress will be 100% complete in terms of direct material; 60% complete in terms of direct labour; and 40% complete in terms of production overheads.
- Finished products will be in inventory for an average of 14 days before their sale.
- The company plans to grant its customers an average credit period of 45 days.
- The company will take an average of 35 days to pay its direct material suppliers.

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(a) Calculate the company's total working capital budget requirement for the coming year (in $).

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(b) Evaluate the importance of managing the three elements (inventory, trade receivables and trade payables) of the working capital cycle.

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(Total for Question 4 = 16 marks)

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5 Niasse N'Diaye Ltd makes three products.

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

	Product One	Product Two	Product Three
Production units	2 000	1 600	1 200
Per unit:			
Direct material Aye @ $15 per kg	5 kg	7 kg	6 kg
Direct material Bee @ $15 per kg	4 kg	2 kg	5 kg
Direct labour hours @ $12.50 per hour	2.5 hours	2 hours	1.5 hours
Machine hours	1.5 hours	3 hours	2 hours

The following production costs for **one unit** of **each product** have been calculated, using absorption costing.

	Product One $/unit	Product Two $/unit	Product Three $/unit
Direct material Aye	75.00	105.00	90.00
Direct material Bee	60.00	30.00	75.00
Direct labour	31.25	25.00	18.75
Production overhead	94.50	75.60	56.70
Production cost	**260.75**	**235.60**	**240.45**

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

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

Activities	**Costs ($)**	**Cost drivers**
Material Aye handling	78 100	Quantity of material Aye used
Material Bee handling	65 360	Quantity of material Bee used
Inspection/Set up	115 200	Number of production runs
Machining	51 000	Number of machine hours
Packaging	68 340	Number of orders

You are also given the following additional information for the period.

	Product One	Product Two	Product Three
Number of production runs	80	60	60
Number of orders	130	90	80

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(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 the company should change from absorption costing to activity based costing (ABC).

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(Total for Question 5 = 22 marks)

TOTAL FOR PAPER = 100 MARKS

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