Pearson LCCI

Certificate in Management Accounting

Level 3

Tuesday 8 April 2014
Time: 3 hours

Paper Reference
ASE3024

You will need:
An answer book

Instructions

- Do **not** open this examination paper until you are told to do so by the supervisor.
- Use **black/blue** ink or ball-point pen
  - *pencil can only be used for graphs, charts, diagrams, etc.*
- Ensure your answers are written clearly.
- Begin your answer to each question on a new page.
- Write on both sides of the page.
- All answers must be correctly numbered but need not be in numerical order.
- If you need more space, use the additional sheets provided. Write your name, candidate number and question number on each sheet and attach them to the inside of your answer book. State the number of additional sheets attached on the front of your answer book.
- Workings must be shown.
- Answer **all** questions.

Information

- The total mark for this paper is 100.
- There are five questions in this question paper.
  - *each question carries equal marks.*
- The marks for **each** question are shown in brackets
  - *use this as a guide as to how much time to spend on each question.*
- You may use a calculator provided the calculator gives no printout, has no word display facilities, is silent and cordless. The provision of batteries and their condition is your responsibility.

Advice

- Read each question carefully before you start to answer it.
- Check your answers carefully if you have time at the end.

Turn over

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PEARSON

Answer ALL questions.

1 Mafukidze can manufacture 30,000 units of its single product per period, when operating at full (100%) capacity. At full capacity, the following costs are incurred:

	£
Direct materials	386,100
Direct labour	286,650
Variable overheads	204,750
Fixed overheads	315,900

It can be assumed that total direct costs and total variable overheads vary in proportion to activity, and that total fixed overheads remain unchanged, over the relevant range of activity.

Required

(a) At a selling price for the product of £46.80 per unit, and **65% capacity** utilisation, calculate the:

(i) total cost of direct materials and direct labour

(2)

(ii) total cost per unit

(2)

(iii) total profit for the period.

(2)

Shu Ying makes a single product that sells for £120.00 per unit. In the last period, 3,000 units were produced and sold. The following information is available for the period:

Total fixed costs	£81,000
Variable costs (per unit):	
Direct materials	£50.40
Direct labour	£12.60
Variable overheads	£21.00

Required

(b) Calculate for the last period, the:

(i) net profit

(2)

(ii) break-even point (units).

(2)

Changes in costs are expected from the start of the **next period** as follows:

Direct materials	7.5% per unit increase
Direct labour	5% per unit increase
Variable overhead	£0.66 per unit decrease
Fixed costs	£6,720 increase

Required

(c) On the assumption that leaving the selling price per unit unchanged will result in sales **increasing** to 3,200 units in the next period, calculate the:

(i) expected net profit

(3)

(ii) expected break-even point (units).

(2)

(d) On the assumption that the selling price is **increased** to £127.50 per unit for the next period, calculate the **total sales units** required to earn a profit of £37,095.

(3)

(e) Explain what is meant by the term **relevant range of activity** in the context of cost–volume–profit (CVP) analysis.

(2)

(Total for Question 1 = 20 marks)

2 The following information has been extracted from the financial accounts of Yoshida Ahmadi for 2013.

	£000
<u>Current assets</u>	
Stock	1,260
Trade debtors	1,380
Cash at bank	60
<u>Current liabilities</u>	
Trade creditors	1,170

Sales for 2013 totalled £5,700,000, all of which were on credit. The company made a Gross Profit margin of 40%. Assume that 1 year = 365 days.

Required

(a) Calculate for 2013 the working capital cycle (rounded to whole days).

(4)

The company is considering whether to grant extended credit facilities to its customers for 2014.

It is estimated that increasing the collection period for trade debtors by 24 days will result in a 15% increase in sales.

However, stocks will also have to be increased by 20% to cope with the new demand.

In order to finance the increase in stocks and debtors, the company will increase the payment period to its trade creditors by 12 days.

Required

(b) Calculate for 2014, the expected change in:

(i) the working capital cycle (workings to be rounded to whole days)

(4)

(ii) the net working capital investment in stock, trade debtors and trade creditors (workings to be rounded to the nearest £000).

(5)

(c) Explain what is meant by the term **working capital management**.

(2)

Nicholson Ltd has prepared a budgeted profit statement, based on the sale of 6,000 units of its single product for a period.

	£000	£000
Sales		900
Cost of sales:		
Direct materials	360	
Direct labour	240	
Variable overhead	100	
Fixed overhead	180	(880)
Budgeted net profit		20

The company has decided to change its production process, which will result in the following:

- the cost of direct materials will reduce by 15% per unit
- the direct labour cost will reduce by 10% per unit
- the selling price will reduce by 5% per unit
- the sales volume will decrease by 8%.

Required

(d) Prepare a revised budgeted profit statement for the period.

(5)

(Total for Question 2 = 20 marks)

3 Mousa Dembele is considering investing in a new machine to replace existing machinery.

Details of two alternative machines being considered for purchase are as follows:

	Machine Exe	**Machine Whye**
Cost	£900,000	£750,000
Useful life	5 years	5 years
Residual value	£100,000	£50,000

Forecast of net cost savings (excluding depreciation) for each machine are as follows:

	Machine Exe	**Machine Whye**
	£000	**£000**
Year		
1	200	210
2	240	220
3	240	230
4	280	240
5	440	250

The company depreciates its fixed assets on a straight line basis.

The cost of capital is 10% per annum.

Discount factors for 10%:

Year	
1	0.909
2	0.826
3	0.751
4	0.683
5	0.621

Required

(a) Calculate for each of Machine Exe and Machine Whye the:

(i) accounting rate of return (using average investment value)

(6)

(ii) net present value.

(6)

(b) (i) Calculate the profitability index for each of Machine Exe and Machine Whye.

(2)

(ii) Using your calculations in (b)(i), state which machine represents the best investment opportunity for the company.

(1)

(c) Determine the maximum investment amount necessary to justify the purchase of Machine Whye in preference to Machine Exe (assuming that all other cash flow estimates remain unchanged).

(3)

(d) Provide **one** example of how **risk** might be incorporated into the capital investment appraisal process.

(2)

(Total for Question 3 = 20 marks)

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4 Sessegnon Ltd manufactures a single product that is sold for £40 per unit. Details of the costs for the product are as follows:

Variable costs per unit:

Production	£20
Selling and administration	£4

Monthly fixed costs:

Production	£50,000
Selling and administration	£6,500

Fixed production costs are absorbed on the basis of 6,250 budgeted units of production per month.

During Month 5 the actual production was 6,000 units and 5,500 units were sold. The opening stock was 1,000 units and 1,500 units remained in stock at the end of the month.

Required

(a) Prepare profit statements for Month 5 using:

(i) absorption costing

(6)

(ii) marginal costing.

(4)

(b) Prepare a statement that reconciles the absorption costing profit and marginal costing profit for Month 5 as calculated in (a).

(2)

(c) Briefly explain why the difference in profits has arisen.

(2)

(d) Discuss the usefulness of marginal costing for short-term decision making.

(6)

(Total for Question 4 = 20 marks)

5 Kakaka Ltd manufactures a single product, and has prepared the following budget for the next period.

Production and sales in units	3,360	
	£	**£**
Sales revenue		840,000
Direct materials	134,400	
Direct labour	100,800	
Production overheads	123,900	
Selling, distribution and admin costs	106,200	
Total Costs		(465,300)
Profit		**374,700**

The following information should also be taken into account.

The above budget is based on **80%** utilisation of the maximum operating capacity.

The direct costs vary proportionally with the level of activity.

The production overhead is a semi-variable cost. At the **maximum capacity** the budgeted overhead would be £140,700.

The selling, distribution and administration costs include a fixed element of £28,920.

Required

(a) Prepare a flexible budget for the period, using the high-low method, based on a **90%** utilisation of operating capacity.

(8)

(b) Describe the difference between a fixed budget and a flexible budget.

(2)

Idowu is a company comprising of two divisions.

The following information relates to the budgeted operations of Division Exe for the next period:

Divisional investment	£2,250,000
Sales	30,000 units at a selling price of £80 per unit
Variable costs	£57.50 per unit
Fixed costs	£315,000

The cost of capital is 12% per annum.

Required

(c) Describe what is meant by the terms:

(i) return on capital employed (ROCE)

(2)

(ii) residual income (RI).

(2)

(d) Calculate for Division Exe, for the next period, the expected:

(i) return on capital employed

(4)

(ii) residual income.

(2)

(Total for Question 5 = 20 marks)

TOTAL FOR PAPER = 100 MARKS

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