

Certificate in Management Accounting

ASE3024

Level 3

Friday 7 June 2013

Time allowed: 3 hours

Information

- There are 5 questions in this examination.
 - Total marks available: 100
 - All questions carry equal marks.
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Instructions

- Do **not** open this paper until you are told to do so by the supervisor.
 - Answer **all questions**.
 - Write your answers in blue or black ink/ballpoint. You can only use pencil for graphs, charts, diagrams, etc.
 - Please ensure your answers are written clearly.
 - Begin your answer to each question on a new page.
 - All answers must be correctly numbered but need not be in numerical order.
 - Workings must be shown.
 - 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.
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Question 1

Chester Mannone Limited manufactures and sells a single product.

The following information is available for a period:

Budgeted Variable Cost £ per unit

Direct materials	36
Direct labour	21
Variable overheads	9

The company is budgeting to make and sell 8,000 units at a selling price of £120 per unit.

Fixed costs are budgeted at £351,000 for the period.

Required

- (a) Calculate for the period the budgeted:
- (i) break-even point in sales units
 - (ii) contribution/sales ratio %
 - (iii) margin of safety as a % of budgeted sales.
- (4 marks)

- (b) Assume that due to changes in the variable costs per unit, the budgeted contribution/sales ratio is now 40%, and that all the other budget details remain unchanged.

Calculate the revised budgeted:

- (i) break-even point in sales revenue
 - (ii) margin of safety as a % of budgeted sales.
- (4 marks)

Koren Simpson has prepared a budget for the coming period when it plans to make and sell two types of product.

The following details are provided:

	Product Exe £ per unit	Product Whye £ per unit
Selling price	40	90
Variable operating costs	30	40
Budgeted fixed costs per period	£936,000	

The company expects to sell **three** units of Product Exe for every **one** unit of Product Whye in the coming period.

Required

- (c) Calculate the number of units of Product Exe and of Product Whye that need to be sold by the company in order to earn a net profit of £520,000 in the coming period.
- (8 marks)
- (d) Describe **two** limitations of cost-volume-profit (CVP) analysis.
- (4 marks)

(Total 20 marks)

Question 2

Evans McLean manufactures a single product which sells for £26 per unit.

The following budgeted information has been provided for a period based on producing and selling 24,000 units:

Per unit	£
Direct materials	9.00
Direct labour	4.00
Production overhead – variable	1.60
Production overhead – fixed	7.60
Selling and administrative overhead – variable	0.60
Selling and administrative overhead – fixed	2.40

The actual activity for the period was as follows:

production 25,000 units

sales 22,000 units

The opening stock was 3,250 units, valued at the budgeted unit cost for the period.

Total fixed costs and unit variable costs actually incurred in the period were as budget.

Required

- (a) Prepare a profit statement for the period using each of the following:
- (i) absorption costing (8 marks)
 - (ii) marginal costing. (6 marks)
- (b) (i) Reconcile the two net profit figures in the statements in part (a). (2 marks)
- (ii) Explain why the profit difference has arisen. (4 marks)

(Total 20 marks)

Question 3

Fryatt McShane is considering two alternative investment projects both of which require the purchase of new equipment with a lifespan of four years.

The following information relates to the two projects:

	Project Aye	Project Bee
	£000	£000
Purchase cost of equipment - Year 0	600	720
Estimated accounting profits:		
Year 1	50	60
Year 2	125	150
Year 3	90	108
Year 4	30	36
Estimated disposal value of equipment	80	96

The company's depreciation policy is to write off the cost of equipment using the straight-line method.

Cost of capital is 15% per annum.

Discount factors:	Year	15%	20%
	1	0.870	0.833
	2	0.756	0.694
	3	0.658	0.579
	4	0.572	0.482

Required

- (a) Calculate for both Project **Aye** and Project **Bee**:
- (i) the payback period (7 marks)
 - (ii) the net present value (5 marks)
 - (iii) the internal rate of return. (6 marks)
- (b) Recommend which project should be undertaken, giving reasons for your decision. (2 marks)

(Total 20 marks)

Question 4

Stewart Brady is looking to invest in one of two companies: Gamma or Delta.

The following financial information for a recent period is available:

	Gamma	Delta
£000		
Sales	1,950	975
Cost of sales	1,410	718
Operating expenses	244	100
Fixed assets (net book value)	1,285	620
Current assets	710	305
Current liabilities	370	175

The cost of capital of Stewart Brady is 12% per annum.

Required

- (a) Calculate for each of the two companies the:
- (i) net profit to sales ratio (4 marks)
 - (ii) current ratio (2 marks)
 - (iii) return on capital employed ratio (%) (4 marks)
 - (iv) residual income (£). (4 marks)
- (b) Analyse both companies and state which company would provide the best investment opportunity, based on your calculations in part (a). (6 marks)

(Total 20 marks)

Question 5

Dudgeon Harper Limited manufactures a single product and the following standard costs apply.

For the period, production was budgeted at 15,000 units.

Direct materials	2.5 kilos at £9 per kilo
Direct labour	4.5 hours at £13.50 per hour
Budgeted fixed production overheads	£405,000

Fixed production overheads are absorbed on the basis of standard direct labour hours.

The actual data for the period, when production was 15,900 units, are as follows:

Direct materials purchased and used	41,250 kilos costing £8.70 per kilo
Direct labour	69,900 hours at a cost of £13.95 per hour
Fixed production overheads	£425,000

Required

(a) Calculate the following production cost variances for the period:

- (i) direct material total
- (ii) direct material price
- (iii) direct material usage
- (iv) direct labour total
- (v) direct labour rate
- (vi) direct labour efficiency
- (vii) fixed production overhead expenditure
- (viii) fixed production overhead volume.

(16 marks)

(b) Provide a specific reason for the variances in **each** of your calculations, (a) (ii), (iii), (v) and (vi) above.

(4 marks)

(Total 20 marks)