

Series 2 Examination 2011

COST ACCOUNTING

Level 3

Thursday 7 April

Subject Code: 3017

Time allowed: **3 hours**

INSTRUCTIONS FOR CANDIDATES

- Answer **all 5** questions.
- All questions carry equal marks.
- Write your answers in blue or black ink/ballpoint. Pencil may be used only for graphs, charts, diagrams, etc.
- 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.
- Presentation is important.
- 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.

QUESTION 1

A company produces a single product, The company uses standard costing and has produced the following budgeted and actual Manufacturing and Trading accounts for a period.

Budgeted Manufacturing and Trading Account

Sales and production units		310
	£	£
Sales		18,600
Variable costs	10,540	
Fixed overheads	4,960	
Standard cost		<u>15,500</u>
Gross profit		<u>3,100</u>

Actual Manufacturing and Trading Account

Sales and production units		300
	£	£
Sales		18,750
Variable costs	10,490	
Fixed overheads	4,760	
Actual cost		<u>15,250</u>
Gross profit		<u>3,500</u>

The following information has also been provided:

Fixed overheads are absorbed at a predetermined rate based on direct labour hours.
Standard direct labour, is 2 hours per unit.
Actual direct labour worked was 560 hours.

REQUIRED

- (a) Calculate the following variances for the period:
- (i) sales price
 - (ii) sales volume (profit)
 - (iii) total cost.
- (6 marks)
- (b) Reconcile the budgeted gross profit with the actual gross profit using the variances calculated in part (a).
- (2 marks)
- (c) Calculate the following fixed overhead variances for the period
- (i) expenditure
 - (ii) volume
 - (iii) capacity
 - (iv) efficiency.
- (8 marks)
- (d) Briefly describe and appraise how ideal and attainable standards may be used as the basis for a standard costing system.
- (4 marks)

(Total 20 marks)

QUESTION 2

Trueflow Ltd produce a single product in a continuous process.

The following information is available for month 3, Year 11

	kg	£
Opening stock of work-in-progress (70% complete with respect to conversion costs)	1,000	7,400
Material introduced	9,000	51,390
Conversion costs		17,060
Output to finished goods	8,500	
Closing stock of work-in-progress (60% complete with respect to conversion costs)	800	

Normal scrap loss was 5% of materials introduced during this period. All scrap was sold at £0.20 per kg.

REQUIRED

For month 3, Year 11:

- (a) Calculate costs per unit for each element of cost. (6 marks)
- (b) Prepare the process account showing both quantities and values. (8 marks)
- (c) Prepare the normal and the abnormal loss/gain accounts. (6 marks)

(Total 20 marks)

QUESTION 3

Triple Products Ltd, which manufactures and sells three products (A, B, & C), has presented the following budget details for the next period.

	A	B	C
Sales (units per period)	3,000	2,500	5,000
Selling price (per unit)	£20	£24	£16
Variable cost (per unit)	£12	£12	£10
Fixed costs (per unit)	£5.10	£3.80	£2.60

REQUIRED

- (a) Calculate:
- (i) the contribution to sales ratio for each product and for Triple Products overall (5 marks)
 - (ii) the budgeted profit for the period (2 marks)
 - (iii) the break-even revenue based on the budgeted sales mix. (2 marks)
- (b) Draw a profit-volume chart for the budgeted sales mix. Indicate clearly on the chart the break-even revenue, the margin of safety, the fixed cost and the maximum profit. (8 marks)

The company is considering installing new production facilities. These facilities will increase the present output and increase total fixed cost to £55,000.

- (c) Calculate the sales revenue required, based on the budgeted sales mix, to achieve a net profit of £50,000. (3 marks)

(Total 20 marks)

QUESTION 4

Sole Products Ltd, which buys and sells a single product, has prepared the following summarised Profit & Loss budgets for the period January to April, Year 11.

	January £'s	February £'s	March £'s	April £'s
Sales	160,000	170,000	180,000	190,000
Cost of sales	<u>96,000</u>	<u>102,000</u>	<u>108,000</u>	<u>114,000</u>
Gross profit	64,000	68,000	72,000	76,000
Wages	17,600	19,800	22,000	24,200
Depreciation	6,000	6,000	6,000	6,000
Other overheads	<u>22,000</u>	<u>22,500</u>	<u>23,000</u>	<u>24,000</u>
Net Profit	<u>18,400</u>	<u>19,700</u>	<u>21,000</u>	<u>21,800</u>

The following additional information for the period is available:

- (i) 10% of the sales are for cash; credit sales are paid in month after sale
- (ii) Product purchases are paid for in the month following purchase
- (iii) Stock of product (at cost) is expected to be:

End of January	£21,000
End of February	£24,000
End of March	£26,000
End of April	£27,000

- (iv) Wages are made up of a basic piece rate plus a 10% bonus. The basic piece rate wage is paid in the month incurred and the bonus is paid the following month
- (v) 60% of the other overheads are paid in the month they are incurred the remainder being paid the following month
- (vi) Capital expenditure of £35,000 and £20,000 is forecast for January and April
- (vii) The following balances are expected at the beginning of January year 11.

Stock of products	£19,000
Debtors	£140,000
Creditors	£80,000
Wages accrued	£1,000
Overheads accrued	£8,000
Bank	£10,000 overdrawn

REQUIRED

- (a) Prepare the cash budget for each of the four months January to April, year 11. (16 marks)
- (b) State **two** advantages of having a cash budget. (4 marks)

(Total 20 marks)

QUESTION 5

Makeit Ltd uses a non-integrated accounting system. For the year ended 31 December Year 10 the cost accounts showed a profit of £90,630, and the financial account showed a profit of £100,000.

REQUIRED

- (a) Define a non-Integrated accounting system. (2 marks)

Investigations revealed the following differences between the cost and financial accounts:

- | (1) | | Cost
Accounts
£ | Financial
Accounts
£ |
|------------------|------------------|--------------------------------|-------------------------------------|
| Opening stocks - | Raw materials | 15,700 | 14,150 |
| | Work-in-progress | 9,620 | 10,740 |
| | Finished goods | 14,640 | 15,500 |
| Closing stocks - | Raw materials | 12,750 | 12,420 |
| | Work-in-progress | 10,880 | 11,840 |
| | Finished goods | 15,620 | 15,050 |
- (2) Depreciation was included in the cost accounts at £19,000 but in the financial accounts it was £18,000.
- (3) Dividends received were £3,900.
- (4) Discount allowed was £1,200 and discount received was £1,100.
- (5) The cost accounts included a notional charge of £5,000 for rent.
- (6) Production overheads had been under-absorbed by £380 and Administration overheads over-absorbed by £320 in the cost accounts. These amounts had not been written off against the cost accounts profit.

REQUIRED

- (b) Prepare a statement reconciling the cost accounts profits to the financial accounts profits for the year ended 31 December Year 10. You should begin your statement with the cost accounts profit. (14 marks)
- (c) Explain the meaning of Notional Cost. (2 marks)
- (d) Suggest a reason why the depreciation charges are different in the two sets of accounts. (2 marks)

(Total 20 marks)