Cost Accounting

ASE3017

Level 3

Wednesday 3 April 2013

Time allowed: 3 hours

Information

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

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.

QUESTION 1

Dual Products Ltd has prepared the following four month sales budget, in units, for its two products Tee and Pee.

	April	**May**	**June**	**July**
Product Tee	500	600	650	550
Product Pee	400	200	250	350

The direct material costs per unit of product are as follows:

	Product Tee	**Product Pee**
Material A	4kg @ £4 per kg	12kg @ £4 per kg
Material B	8kg @ £5 per kg	16kg @ £5 per kg

Production during each month is budgeted at a level to ensure that finished goods at the end of each month are equal to 10% of the next month's budgeted sales.

Raw materials are purchased on a regular basis, as required for production during each month and to ensure that closing stocks are equal to 25% of the next month's production requirements.

REQUIRED

(a) Prepare for the month of May only

(i) The production budget (in units) for each of the products Tee and Pee

(3 marks)

(ii) The purchases budget (in kg's and £'s) for each of the materials A and B.

(13 marks)

(b) Briefly explain the principles of a just-in-time approach to stock management.

(4 marks)

(Total 20 marks)

QUESTION 2

True Flow Ltd manufactures a product whereby the initial raw material passes through two processes (Process One and Process Two).

The output of Process One is passed to Process Two where further raw material is added.

Direct costs and outputs for the month just ended were:

Process One

Initial raw material	1900kgs costing £40,000
Direct labour	£76,800
Expected output	85% of input
Transfer to Process Two	1575kgs

Process Two

Raw material added	1425kgs costing £60,000
Direct labour	£78,300
Expected output	90% of input and materials added
Actual output	2760kgs

There was no work in progress at either the beginning or the end of the month.

Overheads for the month, totalling £84,000, are apportioned between the two processes as follows:

Process One 60%
Process Two 40%
Losses that arise from the processes are sold for scrap
Process One losses are sold for £20 per kg
Process Two losses are sold for £18 per kg

REQUIRED

Prepare for the month just ended:

(a) Process One account

(6 marks)

(b) Process Two account

(6 marks)

(c) Normal loss/gain account

(4 marks)

(d) Abnormal loss/gain account

(4 marks)

(Total 20 marks)

QUESTION 3

Sole Products Ltd manufactures a single product. The company has anticipated that monthly production and sales will be between 4,000 and 5,000 units.

The following monthly cost budgets have been prepared covering these two levels of activity.

	Monthly costs (£'s)	
Activity level	4,000 units	5,000 units
Cost element:		
Direct materials	192,000	238,800
Direct labour	80,000	101,000
Production overheads	100,000	120,000
Administration overheads	60,000	60,000
Selling overheads	40,000	44,000

The following budgeted information is also available:

(i) Each unit requires 4kg of raw material. A 5% discount is received on the excess of purchases of raw material over 18,000kg per month.

(ii) The direct labour cost per unit increases by a fixed percentage on the excess of production over 4,750 units per month.

(iii) Production overheads consist of a variable element plus a monthly fixed cost. In addition, there is a stepped increase of £4,000 in fixed costs when production reaches 4,200 units.

(iv) Selling overheads include variable costs of £4 per unit.

(v) No stock of finished goods or raw material is held.

(vi) The selling price of each unit is £138.

During the month just ended, 4,600 units were manufactured and sold, and the following costs were incurred:

	£'s
Direct material	221,060
Direct labour	91,000
Production overheads	116,100
Administration overheads	66,000
Selling overheads	41,400

REQUIRED

(a) Prepare a statement for the month just ended showing, for each cost element, the flexed cost budget, the actual cost and the variance.

(15 marks)

(b) Calculate the budgeted break-even sales per month in both units and revenue.

(5 marks)

(Total 20 marks)

QUESTION 4

REQUIRED

(a) Briefly describe and appraise the following two performance standards:

(i) Ideal standards
(ii) Attainable standards.

(4 marks)

A company budgeted to sell 7,500 units of a product in a month at a standard selling price of £20 each. The standard cost of the product is £14 per unit. During the month actual sales of the product were 7,700 units with revenue of £152,000.

REQUIRED

(b) Calculate the following:

(i) Sales price variance
(ii) Sales volume profit variance.

(4 marks)

In the same month, the following labour cost variances were reported relating to the manufacture of the product:

Labour rate variance	£1,150 Adverse
Labour efficiency variance	£480 Favourable

The standard labour rate is £8 per hour and the labour costs of £37,150 were incurred in the manufacture of 7,600 units of the product during the month.

REQUIRED

(c) Calculate:

(i) The number of labour hours worked in the month
(ii) The standard hours per unit of product manufactured.

(9 marks)

(d) Explain and suggest possible reasons that link together the above reported labour cost variances.

(3 marks)

(Total 20 marks)

QUESTION 5

Makit Ltd operates a non-integrated accounting system. The following statement reconciles the cost accounts with the financial accounts, which have been prepared for month 1 of the financial year:

	£	**£**
Profit as per cost accounts		40,100
Add:		
Raw material closing stock difference	2,500	
Work-in-progress opening stock difference	1,500	
Work-in-progress closing stock difference	1,200	
Finished goods opening stock difference	1,600	
Selling and distribution overheads over absorbed	1,400	
Notional rent charge	7,300	15,500
Deduct:		
Raw material opening stock difference	7,500	
Finished goods closing stock difference	2,200	
Production overhead under absorbed	4,750	
Administration overhead under absorbed	2,300	(16,750)
Profit as per financial accounts		38,850

In the cost ledger, overheads are absorbed as follows:

Production overheads	£8.50 per direct labour hour
Administration overheads	15% of sales
Selling and distribution overheads	6% of sales

Any over/under absorbed overhead balance at the end of a month is carried forward to the following month. Any balance remaining at the end of a financial year is transferred to the Profit and Loss Account.

Sales in month 1 were £800,000 and 8,500 direct labour hours were worked.

In the financial ledger, the following stocks relate to Month 1:

	Opening stock	**Closing stock**
Raw materials	£102,500	£122,500
Work-in-progress	£34,500	£45,200
Finished goods	£303,400	£357,800

REQUIRED

(a) Calculate for month 1:

(i) The opening and closing stock values in the cost ledger

(9 marks)

(ii) The actual overhead expenditure.

(6 marks)

(b) Distinguish between an integrated and a non-integrated accounting system.

(2 marks)

(c) Briefly explain how absorbed overheads are calculated and define the terms ‘over absorbed’ and ‘under absorbed’ overheads.

(3 marks)

(Total 20 marks)

