Pearson LCCI

Cost Accounting
Level 3

Wednesday 4 June 2014 **Time: 3 hours**	Paper Reference **ASE3017**

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, on the front of your answer book, the number of additional sheets attached.
- Answer **all** questions.
- Workings must be shown.

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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Answer ALL questions.

1 Blue Stock Ltd uses two different raw materials (RM1 & RM2) which it obtains from an outside supplier.

The company maintains stock records that clearly show the physical stock, allocated stock, amount on order and free stock.

The stock record card for raw material RM1 recorded the following information and balances at the beginning of Month 6:

Reorder level	300 kg of free stock
Reorder quantity	250 kg
Physical stock in stores	200 kg
Allocated stock	50 kg
Amount on order	250 kg

During Month 6 the following transactions relating to raw material RM1 took place:

Date

2nd   20 kg allocated to job number 61

3rd   50 kg issued to job number 59 (previously allocated)

4th   80 kg issued to job number 62 (not previously allocated)

8th   Materials ordered at end of Month 5 received

10th   80 kg allocated to job number 63

15th   100 kg returned to supplier as faulty; supplier agreed to replace

20th   20 kg of surplus material from job number 59 returned to stock

27th   Supplier replaced material returned on 15th of month

Required

(a) Write up the detailed stock record card for raw material RM1 for Month 6.

(8)

The following information relates to raw material RM2:

Order quantity 1,500 kg

Purchase price £10.00 per kg

Stock holding costs are 12% of the average stockholding per annum.

The lead time for delivery can vary between 4 and 10 days, and the rate of usage varies between 40 kg and 50 kg per day.

The company keeps a minimum stock as a buffer.

Required

(b) For raw material RM2, calculate:

(i) the reorder level

(1)

(ii) the minimum stock control levels

(2)

(iii) the maximum stock control levels

(3)

(iv) the annual stock holding costs.

(2)

(c) Define the following terms:

(i) Reorder level

(1)

(ii) Allocated stock

(1)

(iii) Free stock

(2)

(Total for Question 1 = 20 marks)

2 A company uses a process system to jointly produce its three main products, Products A, B and C. By-product D is also produced during the process. Each product contains two materials, P and Q, that are processed together in the weight ratio of 3:2 respectively.

Information regarding the joint process for the month of May is as follows:

Input

Direct material P	600 kg at £10.00 per kg
Direct material Q	400 kg at £6.00 per kg
Direct labour	500 hours at £8.00 per hour

Overheads are absorbed at £12.00 per direct labour hour.

Output	Quantity	Selling Price per kg
Product A	400 kg	£50
Product B	270 kg	£60
Product C	200 kg	£51
By-product D	50 kg	£16

Joint processing costs are apportioned on a basis of net sales.

All process losses (waste) are expected and are disposed of at a cost of £5 per kg.

Additional information prior to sale:

Product A requires a finishing operation and Product C needs to be packed into containers. Product B and By-product D can be sold without any further operations.

Product A requires an additional one direct labour hour per 8 kg of output for its finishing operation.

The containers for Product C hold 4 kg of the product and cost £6.00 each; 10 containers can be filled in one direct labour hour.

Required

(a) Prepare the process account for the month of May.

(13)

(b) Assuming that all products were sold, prepare a profit statement for each of the main products for the month of May.

(4)

(c) Define the terms **normal loss**, **abnormal loss** and **abnormal gain**.

(3)

(Total for Question 2 = 20 marks)

3 Triple Products Ltd, which manufactures and sells each of its three products (A, B and C) for £10 per unit, has prepared the following budget detail for Year 14.

Product	A	B	C
Sales (units)	20,000	16,000	12,000
Direct material (per unit)	£3.00	£3.50	£2.50
Direct labour (per unit)	£2.00	£3.00	£2.50

Fixed costs £112,500 for the year.

Required

(a) Calculate the contribution to sales ratio for each product and for Triple Products Ltd overall.

(4)

(b) Calculate, based on the budgeted sales mix for Year 14:

(i) the break-even revenue

(ii) the margin of safety as a percentage of sales

(iii) the budgeted profit.

(6)

The company is considering increasing its advertising on Product C. Market research suggests that this would generate a 50% increase in sales of Product C, have no effect on the sales of Product A but would reduce the sales of Product B by 25%.

The additional advertising would increase the fixed cost by £15,100 for the year.

Required

(c) Calculate the revised break-even revenue if the advertising expenditure is increased.

(5)

(d) Advise the company, using supporting calculations, whether to increase the advertising on Product C.

(2)

(e) Identify **three** limitations of break-even analysis.

(3)

(Total for Question 3 = 20 marks)

4 Comfort Travel Ltd is a transport company operating five new identical passenger vehicles. The company, located in rented offices, employs drivers contracted from an agency on an hourly basis. The company uses a traditional absorption costing system for its operational overheads, based on costs per vehicle/km, and its office overheads based on costs per contracted job.

The company has produced the following budgeted data and information regarding the business for Year 14:

Vehicle Data

Purchase price per vehicle	£85,200
Trade in value per vehicle (after five years)	£20,000

Each vehicle is budgeted to complete 50,000 km per year.

240 contracted jobs, involving all five vehicles, have been budgeted for.

Operational Overheads

Road fund licence (per vehicle per year)	£1,000
Insurance (per vehicle per year)	£2,000
Servicing (every 10,000 km per vehicle)	£600 per service
Tyres (six per vehicle renewed every 50,000 km)	£200 per tyre

Depreciation is charged at 20% annually, in equal instalments, on the purchase price of each vehicle less the cost of tyres and less its trade in value.

Office Overheads

Rent	£16,000 per year
Insurance	£12,000 per year
Administration	£20,000 per year

Budgeted Operating Data

Agency driver wages	£12 per hour
Driver time per vehicle per year	1,920 hours
Fuel consumption (at 1 litre per 5 km)	10,000 litres per vehicle
Fuel cost (at £1.40 per litre)	£14,000 per vehicle

Required

(a) Calculate, for Year 14, the predetermined overhead absorption rate for the:

    (i) Operational Overheads (km per vehicle)

                                     (3)

    (ii) Office Overheads (per contracted job).

                                       (2)

The company monitors its costs on a monthly basis and the following budgeted and actual results were recorded for Month 5, Year 14:

Budgeted

Contracted jobs	20
Agency driver time	800 hours
Total vehicle distance	20,000 km

Actual

Jobs completed	20
Driver time	775 hours
Agency driver wage	£9,400
Total vehicle distance covered	20,500 km
Fuel consumed	4,100 litres
Fuel cost	£5,330

Required

(b) Produce budgeted cost statements for:

    (i) Year 14

    (ii) Month 5, Year 14.

                                       (5)

(c) Calculate for Month 5, Year 14, the:

    (i) material (fuel) price variance

    (ii) material (fuel) usage variance

    (iii) labour (driver) rate variance

    (iv) labour (driver) efficiency variance.

                                       (6)

(d) Suggest a possible reason why **each** of the variances in (c) have occurred.

                                       (4)

(Total for Question 4 = 20 marks)

5 Twist and Turn Ltd uses a non-integrated accounting system. For the year ended 31 December, Year 10, the cost accounts showed a profit of £80,630.

Required

(a) Define what is meant by a **non-integrated accounting system**.

(2)

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) The financial accounts included dividends received of £2,900, discount allowed of £1,200 and discount received of £1,100

(4) The cost accounts included a notional charge of £6,000 for rent

(5) Production overheads had been under-absorbed by £480 and administration overheads over-absorbed by £420 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)

(c) Describe the meaning of the term **notional rent**.

(2)

(d) Describe **one** possible reason why the depreciation charges are different in the two sets of accounts.

(2)

(Total for Question 5 = 20 marks)

TOTAL FOR PAPER = 100 MARKS