

**Pearson LCCI**

# **Cost Accounting**

**Level 3**

Tuesday 18 November 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 ►**

**P45493A**

©2014 Pearson Education Ltd.

1/1/1/1



**PEARSON**

**Answer ALL questions.**

- 1** Twist and Turn Ltd has budgeted to use 12,000 units of component C10 in its production department during the forthcoming year. The company intends to place 12 orders of 1,000 units each, with one order at the start of each month, to cover the budgeted annual demand and to keep a closing stock of 1,000 units at the end of each month.

The following information is available regarding component C10:

- Cost of component    £12.50 each  
Ordering costs        £250.00 per order  
Stock holding costs   12% of the component cost per annum.

**Required**

- (a) Calculate:
- (i) the annual budgeted cost of using component C10 (4)
  - (ii) the average stock investment for this budgeted ordering pattern. (1)
- (b) Calculate the economic order quantity for component C10, assuming the unit price is unaffected by demand. (4)
- The supplier is prepared to reduce the unit component cost by 4% if the size of each order is increased to 4,000 units.
- (c) Compare the relevant annual total costs of using this component and advise the company on the order size and average stock investment that minimises this cost, if the 4% quantity discount is available. (7)
- (d) Explain the differences between ordering costs and holding costs. Include **two examples of each** cost that illustrate the difference. (4)

---

**(Total for Question 1 = 20 marks)**

2 Trueflow Ltd produces its product in a single process. All materials are introduced at the start of the process. The company uses the first-in-first-out (FIFO) method of valuation.

Production overheads are absorbed at the rate of £18 per direct labour hour.

Direct labour is paid at the rate of £12 per hour.

The following information is available for the month of October Year 14:

Opening stock of work in progress	800 litres	£12,000
(75% complete with respect to labour and overheads)		
Material introduced	12,000 litres	£66,000
Direct labour utilised		£20,600
Transfer to finished goods	10,000 litres	
Closing stock of work in progress	1,000 litres	
(30% complete with respect to labour and overheads)		

An output of 90% of material introduced was expected.

All losses (scrap) occurred at the end of the month and were sold for £1.00 per litre.

**Required**

(a) For the month of October Year 14 calculate:

- (i) the equivalent units of production and cost per equivalent unit for each element of cost (9)
- (ii) the value of the transfer to the finished goods and of the closing stock of work in progress. (4)

(b) Prepare the following for the month of October Year 14:

- (i) the process account (4)
- (ii) the abnormal loss account. (3)

**(Total for Question 2 = 20 marks)**

---

3 Sole Products Ltd, which produces a single component for the motor industry, has just completed its first year of trading. The summary profit & loss account for the year is set out below:

	£	£
Sales (12,000 units)		336,000
Direct costs		
Direct material	84,000	
Direct labour	60,000	
Direct expenses	24,000	
Overheads		
Production	74,000	
Administration	10,000	
Selling	<u>88,000</u>	
		<u>340,000</u>
Net loss		<u>4,000</u>

The following information is available:

- (1) All the direct costs are variable with production output.
- (2) The production overhead figure includes £50,000 fixed costs. The remaining production overheads vary with production output.
- (3) All the administration overheads are fixed.
- (4) Variable selling overheads are incurred at the rate of £4 per unit. The remaining selling overheads are fixed.
- (5) There was no closing stock of materials or components at the end of the year.

**Required**

- (a) Calculate the:
  - (i) break-even point in units and sales value (7)
  - (ii) profit that would have been earned from the sale of 14,000 units (2)
  - (iii) number of units that need to be sold to achieve a profit of £20,000. (2)

The company has set a profit objective of £26,000 for Year 2. Two suggestions have been made as to how this profit could be achieved.

**Suggestion 1**

Reduce the selling price by £3 per unit and use a less expensive material that would reduce the direct material cost by £2 per unit.

**Suggestion 2**

Increase the selling price by £1 per unit, and increase the advertising expenditure by £50,000 and use the less expensive material that would reduce the material cost by £2 per unit.

All other fixed costs and unit variable costs will remain unchanged for Year 2.

**Required**

(b) Calculate, for each suggestion, how many units need to be sold to achieve the profit objective of £26,000.

(9)

**(Total for Question 3 = 20 marks)**

---

- 4 A to Z Taxi company, which operates a fleet of eight similar motor vehicles and employs eight drivers, has prepared the following monthly flexible budget based on the number of paying journeys with customers.

Number of paying journeys (with customers)	2,000	2,200	2,400	2,600
	<b>km</b>	<b>km</b>	<b>km</b>	<b>km</b>
Vehicle travel (with customers)	24,000	26,400	28,800	31,200
Vehicle travel (without customers)	8,000	8,800	9,600	10,400
	<b>£</b>	<b>£</b>	<b>£</b>	<b>£</b>
Income from customers	18,400	20,240	22,080	23,920
Costs:				
Fuel costs	2,880	3,168	3,456	3,744
Driver wages	6,400	6,880	7,360	7,840
Vehicle maintenance	500	800	800	800
Office costs	2,000	2,000	2,000	2,000

The following information has been provided:

- (1) Income from customers is generated by charging a fixed rate per journey plus a charge proportional to the distance travelled. The fixed rate is £2 per journey.
- (2) Fuel costs are proportional to the total distance travelled.
- (3) Drivers are paid a fixed wage plus a variable wage proportional to the total vehicle distance travelled with customers.

During Month 1 the following actual data was recorded:

Number of paying journeys (with customers)	2,325
	<b>km</b>
Vehicle travel (with customers)	28,700
Vehicle travel (without customers)	9,100
	<b>£</b>
Income from customers	22,390
Fuel costs	3,498
Driver wages	7,030
Vehicle maintenance	850
Office costs	2,250

### Required

- (a) Prepare a statement for Month 1 showing, for each budgeted item, the following:
- (i) the flexed budget
  - (ii) the actual costs
  - (iii) the variance. (12)
- (b) Explain the difference between a forecast and a budget. (4)
- (c) State the meaning of the terms **fixed budget** and **flexible budget**. (2)
- (d) State **two** objectives for preparing flexible budgets. (2)

---

**(Total for Question 4 = 20 marks)**

5 The One Company Ltd, which produces a single product and uses a standard costing system, has prepared the following budgeted information for Month 1.

Sales volume	500 units
Selling price	£75 per unit
Production	520 units
Direct material cost per unit	£6 per unit
Direct labour cost per unit	£10 per unit
Variable production overhead cost per unit	£2 per unit
Fixed production overhead cost per unit	£20 per unit

Fixed and variable overheads are absorbed at a predetermined rate based on production unit output.

No stocks existed at the start of Month 1.

Actual sales, production and costs relating to Month 1 were as follows:

Sales volume	480 units
Revenue from sales	£38,400
Production	540 units
Direct material, purchased and used	£2,970
Direct labour	£4,860
Variable production overhead	£1,350
Fixed production overhead	£11,880



**Required**

For Month 1:

(a) Calculate:

(i) the budgeted gross profit (2)

(ii) the actual gross profit. (4)

(b) Calculate the following variances:

(i) sales price (2)

(ii) sales volume (2)

(iii) total direct material (1)

(iv) total direct labour (1)

(v) total variable production overhead (1)

(vi) fixed production overhead expenditure (2)

(vii) fixed production overhead volume. (2)

(c) Reconcile the budgeted gross profit with the actual gross profit using the variances calculated in (b). (3)

---

**(Total for Question 5 = 20 marks)**

---

**TOTAL FOR PAPER = 100 MARKS**

**BLANK PAGE**

**BLANK PAGE**

**BLANK PAGE**