

Planning, Control and Performance Management

ACCA CERTIFIED ACCOUNTING TECHNICIAN EXAMINATION
ADVANCED LEVEL

TUESDAY 5 DECEMBER 2006

QUESTION PAPER

Time allowed **3 hours**

ALL FOUR questions are compulsory and **MUST** be answered

Do not open this paper until instructed by the supervisor

This question paper must not be removed from the examination
hall

The Association of Chartered Certified Accountants

Paper T7



ALL FOUR questions are compulsory and MUST be attempted

1 The Cruyff hotel provides accommodation and meals for tourists. There are two profit centres: accommodation and restaurant. Rooms are sold at a nightly rate per room and guests have the option of dining in the hotel restaurant for an extra charge. In the last year the number of rooms sold has increased but overall hotel profit has fallen. The owners of the hotel recently commissioned a consultant to introduce a system of budgetary control. Unfortunately the consultant became ill part way through the project. As an Accounting Technician employed by the hotel, you have been asked to complete the consultant's work.

The following extracts from the consultant's notes are available.

Cruyff Hotel: profit statement week 48

Room Occupancy Level	Budget		Actual
	80%	100%	95%
	£	£	£
Accommodation sales	26,880	33,600	32,000
Restaurant sales	8,064	10,080	6,100
Total sales	34,944	43,680	38,100
Accommodation costs:			
Laundry	(1,344)	(1,680)	(1,603)
Cleaning	(3,016)	(3,520)	(3,980)
Wages	(3,000)	(3,000)	(2,950)
Restaurant costs:			
Food	(4,032)	(5,040)	(4,950)
Wages	(2,000)	(2,000)	(2,050)
Common costs:			
Building maintenance	(2,000)	(2,000)	(1,950)
Management salaries	(1,500)	(1,500)	(1,500)
Operating profit	18,052	24,940	19,117

Notes

1. The hotel has 120 rooms. The rate per night is the same for all rooms. Occupancy level is expressed as a percentage of full capacity.
2. The hotel and restaurant opens for 7 nights a week and for 52 weeks per year.
3. Budgeted restaurant sales are assumed to be a fixed percentage of accommodation sales.
4. Costs are either fixed or variable, except for cleaning, which is semi-variable.

Required:

- (a) Calculate the number of room nights sold per week for 100%, 95% and 80% occupancy levels. (3 marks)
(A room night represents one room occupied for one night.)
- (b) Using the budgeted figures prepared by the management consultant as a basis, calculate
- (i) the variable cost per room-night for cleaning; (3 marks)
 - (ii) the fixed cost per week for cleaning. (1 mark)
- (c) Prepare a flexed budgeted profit statement for the Cruyff hotel for week 48 for an occupancy level of 95%. Your statement should show
- (i) the budgeted contribution for each profit centre; (8 marks)
 - (ii) the budgeted traceable profit for each profit centre; and, (6 marks)
 - (iii) the budgeted profit for the hotel in total. (2 marks)
- (d) Calculate, for the restaurant only, the variances between the actual results for week 48 and the flexed budget figures you have calculated in part (c). Comment on the performance of the restaurant. (9 marks)
- (e) Explain how zero-based budgeting could be used to set budgets. Give two advantages of using zero-based budgeting. (8 marks)

(40 marks)

- 2 A large multinational company uses return on investment (ROI) to measure the performance of its divisions. Divisional managers have control over divisional revenues, and are given limited control over costs. Cash, land and buildings are managed by group head office. Divisional managers have control over all other divisional assets and liabilities. Head office has a required rate of return of 15% for all divisions. Details of the performance of the Neeskens Division are given below.

**Neeskens division profit and loss account
Year ended 30 September 2006**

	£000
Sales	7,500
Cash operating costs	(3,600)
Depreciation: land and buildings	(40)
Depreciation: plant and machinery	(300)
Apportioned head office cost	(1,500)
	2,060
Divisional profit	2,060

**Neeskens division balance sheet as at
30 September 2005 (extract)**

	£000	£000
Fixed assets (net book value)		
Land and buildings		2,000
Plant and machinery		13,200
		15,200
Current assets		
Stock	1,200	
Debtors	1,400	
Cash	500	
	3,100	
<i>Less creditors due within one year</i>		
Trade creditors	(1,400)	
Net current assets		1,700
Net Assets		16,900

Required:

- (a) Calculate both the controllable and traceable return on investment (based upon opening investment) for the Neeskens division for the year ended 30 September 2006. (6 marks)
- (b) Calculate traceable residual income (based upon opening investment) for Neeskens division for the year ended 30 September 2006 and briefly explain what it means. (4 marks)
- (c) Explain the difference between controllable and traceable return on investment. Why is the difference important? (6 marks)
- (d) Give two advantages of residual income as a measure of divisional performance. (4 marks)

(20 marks)

- 3 (a) Rep plc is experiencing a decrease in sales for its only product. It has budgeted sales volume in the year ending 30 November 2007 to be 1 million units, which is 80% of sales volume for the year ended 30 November 2006. Budgeted cost and revenue per unit for the year ending 30 November 2007 are as follows:

	£ per unit
Selling price	129
Direct material	9
Direct labour (note 1)	30
Absorbed fixed overheads (Note 2)	40
Profit per unit	50

Notes:

- Labour is a variable cost.
- Fixed overheads are absorbed on the basis of budgeted direct labour hours. For the coming year sales and production are each budgeted at 1 million units. There are no variable overheads.
- The above selling price per unit, variable costs per unit and total fixed overheads are expected to be unchanged between the two years.

Required:

Calculate the actual profit for the year ended 30 November 2006 and the budgeted profit for the year ending 30 November 2007. (6 marks)

- (b) The sales manager of Rep plc thinks that the fall in demand is due to aggressive pricing and intensive advertising by its competitors. Two actions are being considered to increase sales:
- Reduce price by 10%. This is expected to result in a 30% increase in sales units in 2007 as compared to the existing budget.
 - Launch an advertising campaign. Spending £5 million on advertising is expected to increase 2007 sales units by 20% as compared to the existing budget.

The sales manager is uncertain about the increases in sales volumes associated with these two proposals and is considering conducting some market research to improve the reliability of the estimates.

Required:

- Calculate separately the effect of the price reduction and the increase in advertising expenditure on budgeted profit for the year ending 30 November 2007; (4 marks)
 - If the price reduction and the advertising campaign were both introduced, calculate the level of sales in units that would be required to earn a profit of £72.5 million. (4 marks)
- (c) Explain to the sales manager how the following sampling methods could be used in market research, and give one advantage of each method:
- stratified random sampling; and
 - cluster sampling. (6 marks)

(20 marks)

4 Krol plc uses a standard costing system to control its costs. In the most recent month its cost accountant has reported a large adverse direct material usage variance. An initial investigation has shown that the variance is caused by a faulty machine.

The production manager is trying to decide whether to close down the production line for one day to allow engineers to perform emergency maintenance work that could rectify the problem. Past experience of investigating raw material usage variances suggests that there is a 70% chance of correcting the fault. If the emergency maintenance work is not carried out now it is estimated that extra material costs of £60,000 per month for the next six months will be incurred. After this time the problem will definitely be corrected by scheduled maintenance work during the company's annual shut down.

Two maintenance engineers would be required to carry out the emergency maintenance work. Maintenance engineers are paid £25,000 per annum and each engineer works for 250 days each year. There is currently surplus capacity in the maintenance department. The emergency maintenance would use parts costing £10,000. These parts would have to be replaced again during the scheduled annual maintenance. Emergency maintenance would involve stopping production for a day resulting in lost production with an estimated sales value of £160,000, direct material cost of £45,000 and direct labour cost of £90,000. Direct labour would continue to be paid during the one-day stoppage. In this time the otherwise idle labour would be used to repaint the factory, saving £7,000 in outside painting contractor costs. Krol carries no finished goods stocks and is currently unable to satisfy demand for its product.

Required:

- (a) **Using relevant cost principles, calculate whether the emergency maintenance should be performed.** (9 marks)
- (b) **Suggest three potential causes of direct material usage variances.** (3 marks)
- (c) **Explain the role of control charts in the variance investigation decision.** (8 marks)
Note: Your answer should include a fully labelled sketch diagram of a variance control chart.
Graph paper is not required.

(20 marks)

End of Question Paper