Certified Accounting Technician Examination
Advanced Level

Planning, Control and Performance Management

Tuesday 4 December 2007

Time allowed
Reading and planning: 15 minutes
Writing: 3 hours

ALL FOUR questions are compulsory and MUST be attempted.

Do NOT open this paper until instructed by the supervisor.

During reading and planning time only the question paper may be annotated. You must NOT write in your answer booklet 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 Torance uses a budgeting system to control the costs and revenues of its only product, the Danny. The management accountant for Torance has asked for your assistance in producing the budget for the year ending 31 December 2008. He has provided you with the following information:

1. The standard cost card for the Danny for the year ended 31 December 2008 is as follows.

	$
Selling price	250
Direct material (4 kg at $8·00 per kg)	(32)
Direct labour (6 hours at $15·00 per hour)	(90)
Contribution	$128

2. Torance uses an additive time series analysis to forecast sales volume. The trend in sales and forecast seasonal variations for 2008 are given below.

Quarter	**1**	**2**	**3**	**4**
Trend (sales units)	1,200	1,300	1,400	1,500
Seasonal variation (sales units)	–150	+200	+300	–350

3. The sales trend figures for the first two quarters of 2009 are estimated at 1,600 and 1,700 units respectively. Quarterly seasonal variations are expected to be as for 2008.

4. It is the policy of Torance to **always** carry sufficient inventory of finished goods to meet 50% of the next quarter's forecast sales, and sufficient raw materials to meet 80% of the next quarter's forecast production.

Required:

(a) Produce the following budgets for each of the four quarters of the year ending 31 December 2008:

(i) Sales budget, showing sales units and sales revenue; (3 marks)

(ii) Production budget in units, showing opening inventory, production and closing inventory; (8 marks)

(iii) Purchasing budget, showing opening inventory, purchases and closing inventory in kilograms and purchases in cost; (10 marks)

(iv) Labour budget in hours and cost. (4 marks)

Note: You are not required to produce annual totals.
A quarter is a period of three months.

(b) Explain briefly the meaning of each of the following approaches to budgeting and give TWO advantages of each approach:

(i) Rolling (or continuous) budgeting;
(ii) Flexible budgeting;
(iii) Zero-based budgeting. (15 marks)

(40 marks)

2 Nicholson sells mobile telephones. It supplies its customers with telephone handsets and wireless telephone connections. Customers pay an annual fee plus a monthly charge based on calls made. The company has recently employed a consultant to install a balanced scorecard system of performance measurement and to benchmark the results against those of Nicholson's competitors. Unfortunately the consultant was called away before the work was finished. You have been asked to complete the work. The following data is available:

Nicholson – Operating data for the year ended 30 November 2007	
Sales revenue	\$480 million
Sales attributable to new products	\$8 million
Average capital employed	\$192 million
Profit before interest and tax	\$48 million
Average number of customers	1,960,000
Number of telephones returned for repair	10,000
Number of bill queries	12,000
Number of customer complaints	21,600
Number of customers lost	117,600
Average number of bill queries unresolved at the end of each day	118
Average number of telephones unrepaired at the end of each day	804

Required:

(a) Calculate the following ratios and other statistics for Nicholson for the year ended 30 November 2007:

(i) Return on capital employed;
(ii) Return on sales (net profit percentage);
(iii) Asset turnover;
(iv) Annual number of complaints per thousand customers;
(v) Percentage of customers lost per annum;
(vi) Average time to resolve billing queries;
(vii) Average wait for a telephone repair;
(viii) Percentage of sales attributable to new products. (12 marks)

(b) The following information is for the mobile phone industry for the year ended 30 November 2007.

Industry average statistics – Mobile Telephones	
Annual number of complaints per 1,000 customers	5
Percentage of customers lost per annum	3%
Average time to resolve billing queries	1·4 days
Average wait for a telephone repair	2 days
Percentage of sales attributable to new products	20%
Return on capital employed	15%
Return on sales (net profit percentage)	5%
Asset turnover	3 times

Required:

Using the industry average information and your answer to part (a), discuss the performance of Nicholson in the year ending 30 November 2007 under the four balanced scorecard headings of:

(i) financial success;
(ii) customer satisfaction;
(iii) process efficiency; and
(iv) organisational learning and growth.

Note: state any assumptions that you make. (8 marks)

(20 marks)

3 Kubrick uses a standard absorption costing system to control the cost of its only product. The flexed budget for production overhead for the company shows a budgeted total overhead cost of $200,000 per period when 5,000 tonnes are produced and $264,000 per period when 9,000 tonnes are produced.

In Period 9, when the actual output was 6,500 tonnes, total actual overhead cost was $245,000 ($125,000 fixed and $120,000 variable). The standard fixed overhead absorption rate is $24 per tonne.

Required:

(a) Using the high-low technique, calculate the following:

(i) the budgeted variable overhead per tonne; (2 marks)

(ii) the budgeted fixed overhead per period. (2 marks)

(b) Calculate the following:

(i) the total fixed overhead absorbed in period 9; (2 marks)

(ii) the fixed overhead expenditure variance; (2 marks)

(iii) the fixed overhead volume variance. (2 marks)

(c) Explain two possible operational causes of each of the following:

(i) an adverse fixed overhead expenditure variance; (2 marks)

(ii) a favourable fixed overhead volume variance. (2 marks)

(d) Explain the terms 'attainable standard' and 'ideal standard' and discuss which is most appropriate when setting operational performance standards. (6 marks)

(20 marks)

4 The Overlook hotel is situated in a mountain holiday resort. The hotel has 50 rooms that are let for \$120 per night regardless of the number of people occupying a room. The variable cost per occupied room is \$18 per room night. (A room night represents one room occupied for one night.)

The average number of guests per room night is 1·5. On average, each guest spends \$56·00 per night in the hotel restaurant. The restaurant contribution to sales ratio is 40%.

Demand for rooms is very seasonal with a peak in July and August but a very poor demand in February and March. At present the hotel operates for 365 days a year. Management is currently reviewing figures from the early months of 2007 with a view to closing the hotel for the months of February and March of 2008.

The fixed costs per month for 2007 were are as follows:

	$
Services (electricity, gas, water)	23,000
Insurance	12,000
Repairs and maintenance	25,400
Depreciation	24,000
Total	84,400

Actual revenue from room rentals for the first three months of 2007 was:

	January	February	March
Sales revenue	\$115,320	\$60,480	\$62,400

Room rentals were all at the standard rate of \$120 per night.

Required:

(a) **Prepare a statement showing the number of room nights rented, sales revenue and contribution from both room rental and from the restaurant, and overall profit for each of the first three months of 2007.** (8 marks)

(b) **Calculate the number of room nights per month that would have needed to be let in order to break even each month in 2007.** (3 marks)

(c) The general manager of the hotel believes that the hotel should be closed in February and March 2008 because it will make a loss.

Required:

Prepare a memorandum to the general manager stating on what basis the closure decision should be made and describing THREE items of information (qualitative or quantitative) you would require to help decide whether to close the hotel in February and March of 2008. (9 marks)

(20 marks)

End of Question Paper