Professional Pilot Paper – Options module

Advanced Performance Management

Paper P5

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

This paper is divided into two sections:

Section A – BOTH questions are compulsory and MUST be attempted

Section B – TWO questions ONLY to 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

ACCA

Section A: BOTH questions are compulsory and MUST be attempted

1 The Westamber Hospital ('Westamber'), which is partially government-funded, specialises in the provision of ear, nose and throat operations for patients in Zonderland. Its mission statement states that the hospital 'is committed to providing high quality healthcare to all patients'. Westamber provides treatment to private fee-paying patients as well as to patients who are funded by the government.

Relevant operating data for Westamber for the year ended 30 June 2006 is as follows:

(1) The budgeted mix of operations

Type of operation	% of total operations
Ear	30
Nose	30
Throat	40

(2) Fees (budget and actual) payable to Westamber in respect of each patient who received treatment from the hospital

Type of operation:	Fee payable by private patients ($)	Fee payable by government ($)
Ear	3,000	2,000
Nose	4,000	3,000
Throat	5,000	4,000

It was budgeted that 50% of patients (for each type of operation) would have the cost of their operations funded by the government because under existing legislation they earned what the government defined as a low income.

(3) Budgeted costs for the year based on 100% capacity utilisation

	$000	Variable cost (%)	Fixed cost (%)
Surgical	35,400	25	75
Nursing	8,000	30	70
Depreciation	1,700	–	100
Administration	3,250	–	100
Sundry	5,750	20	80

Variable surgical costs include a total amount of $1,000,000 in respect of operations undertaken on an emergency basis.

(4) Actual costs incurred during the year

	Variable costs ($000)	Fixed costs ($000)
Surgical	8,284	26,550
Nursing	2,224	5,600
Depreciation		1,700
Administration		3,412
Sundry	1,116	4,912

Note: (i) $800,000 of the variable surgical costs related to the provision of emergency operations.
(ii) The proportion of emergency operations as a percentage of total operations was as per budget.

(5) Westamber had no loan finance during the year.

(6) A recently qualified accountant employed by Westamber has stated that "it is obvious that the mix of government to private patients mix is the key determinant of profitability. Next year it looks as if demand for total operations will exceed our available capacity and therefore we should give priority to private fee-paying patients as we receive more fees from them for each type of operation. It is as simple as that since there aren't any ethical issues to be considered".

(7) Other statistics relating to Westamber (all stated on an ACTUAL basis):

Capacity utilisation (%):	80%
Patient mix (%) for each type of operation:	
Government-funded patients	75%
Privately-funded patients	25%
Operation mix (%):	
Ear	35%
Nose	30%
Throat	35%

Eastgreen Hospital

Eastgreen Hospital ('Eastgreen'), is a privately owned hospital which also specialises in the provision of ear, nose and throat operations. All of its patients are responsible for the payment of their own fees. Eastgreen does not undertake operations on an emergency basis.

The summary income statement for Eastgreen on an actual basis was as follows:

	$000
Fee income	36,000
Costs:	
Surgery & nursing	25,000
Depreciation	3,400
Loan interest	500
Administration and sundry	5,100
Total costs	34,000
Net profit	2,000

(i) Eastgreen operates comparable accounting policies to those of Westamber.

(ii) The income of Eastgreen is derived from the provision of an annual healthcare scheme. Each patient pays $100 per month under a fixed term contract of three years. All contracts were renewed on 1 July 2005. There were 30,000 contracts in existence throughout the year. Note: Contracts can only be entered into on 1 July in each year.

Each hospital is comprised of 15 wards, each of which can accommodate eight patients. The average patient stay in both hospitals was three days. Each hospital is open for 365 days per annum.

Required:

(a) Prepare a statement, in columnar format, which shows comparable actual and budgeted results for Westamber for the year ended 30 June 2006. (14 marks)
(Including 2 professional marks)

(b) Explain FOUR reasons why it may be inappropriate to make a direct comparison of the financial performance of the Westamber and Eastgreen hospitals on the basis of the information provided. (6 marks)

(c) Using only information contained in the question make THREE adjustments to the income statements you have prepared in your answer to (a) that you consider would assist in the development of a more appropriate comparison of the financial performance of Westamber and Eastgreen hospitals. (6 marks)

(d) Discuss the statement of Westamber's recently qualified accountant including comments on the ethical implications of the statement. (3 marks)

(e) Excluding the number of complaints by patients, state FOUR performance measures that may be used in order to assess the surgical quality provided by a hospital indicating how each measure may be assessed. (6 marks)

(35 marks)

2 Bettaserve Limited has identified and defined a market in which it wishes to operate. This will provide a 'gold standard' focus for an existing range of services. Bettaserve plc has identified a number of key competitors and intends to focus on close co-operation with its customers in providing services to meet their specific design and quality requirements. Efforts will be made to improve the effectiveness of all aspects of the cycle from service design to after-sales service to customers. This will require inputs from a number of departments in the achievement of the specific goals of the 'gold standard' range of services. Efforts will be made to improve productivity in conjunction with increased flexibility of methods.

An analysis of financial and non-financial data relating to the 'gold standard' proposal for each of the years 2007, 2008 and 2009 is shown below.

Required:

(a) Prepare an analysis (both quantitative and discursive) of the 'gold standard' proposal for the period 2007 to 2009. You should use the information provided in the question, together with the data in Schedule 1 below. Your analysis should include the following:

(i) A definition of corporate 'vision or mission' and consideration of how the proposal may be seen as identifying and illustrating a specific sub-set of this 'vision or mission'. (5 marks)

(ii) Discussion and, where possible, quantification of the proposal in both marketing and financial terms. (5 marks)

(iii) Discussion of the external effectiveness of the proposal in the context of ways in which each of Quality and Delivery are expected to affect customer satisfaction and hence the marketing of the product. (5 marks)

(iv) Discussion of the internal efficiency of the proposal in the context of ways in which the management of each of Cycle Time and Waste are expected to affect productivity and hence the financial aspects of the proposal. (5 marks)

(b) Discuss the links, both vertical and horizontal, of the performance measures investigated in (a). The discussion should include comment on the hierarchy and inter-relationships between the measures, including internal and external aspects of the expected trends in performance.

(Note: a diagram may be used to illustrate the links, together with relevant discussion). (5 marks)
(Including 2 professional marks)

Schedule 1
'Gold Standard' proposal – estimated statistics

	2007	2008	2009
Total market size ($m)	240	250	260
Bettaserve plc – sales ($m)	30	36	40
Bettaserve plc – total costs ($m)	28.2	25.448	25.1
Bettaserve plc – sundry statistics:			
Services achieving design quality standards (%) and accepted without further rectification	95	97	98
Rectification claims from customers ($m)	0.9	0.54	0.2
Cost of after sales rectification service ($m)	3	2.5	2
Sales meeting planned completion dates (%)	90	95	99
Average cycle time: (customer enquiry to service finalisation) (weeks)	6	5.5	5
Service enquiries not taken up by customers (% of enquiries)	7.50	5.00	2.50
Idle capacity of service personnel (%)	10	6	2
Analysis of total cost:	**$000**	**$000**	**$000**
target cost – variable	12,000	14,400	16,000
target cost – fixed	4,000	4,000	5,000
Internal failure costs	3,200	1,840	1,050
external failure costs	4,000	2,208	1,050
appraisal costs	1,000	1,000	1,000
prevention costs	4,000	2,000	1,000
Total cost	28.200	25,448	25,100

(25 marks)

Section B: TWO questions ONLY to be attempted

3 (a) The Creative Division (CD) of Unique Components Ltd produces wooden components that it both sells to external customers and transfers to other divisions within its own group of companies. The production involves the preparation of timber, cutting the timber into shapes and the assembly of the shapes into components.

The total component cost for component A has been estimated as $41.21 per unit. Selling prices to external customers have been set by adding a mark-up of 35% to total estimated component cost.

Required:

Discuss the application and acceptability of each of the following transfer price bases at which component A may be offered by CD to other divisions within the same group of companies:

(i) External selling price and adjusted selling price;

(ii) Marginal cost marginal cost plus an annual lump sum; and

(iii) Dual pricing.

Your answer should incorporate illustrative values ($) for each transfer price using data provided above and additional data of your choice. (10 marks)

(b) A redesign of component A is being considered that is likely to result in changes in the quantity of timber and number of cuts, in the shaping process that will be required. A data-table analysis has been prepared to monitor the effect on unit cost for component A of a range of values for such changes. In addition, a set of subjective probabilities have been assigned to the likelihood of (i) the timber required and (ii) the number of cuts required, being at the levels shown in the data-table analysis. A matrix has been constructed showing the combined probability for each possible combination of changes of timber and number of cuts. The data-table analysis and combined probability matrix are as follows:

Data-table of values of total component cost for component A per unit ($) for a range of values of number of cuts in shaping and timber required (square metres)

Timber (square metres)	Number of cuts				
	25	30	35	40	50
0.8	47.15	47.69	48.15	48.55	49.21
0.7	43.50	44.04	44.50	44.90	45.56
0.6	39.81	40.34	40.81	41.21	41.87
0.5	36.07	36.61	37.07	37.47	38.13
0.4	32.28	32.81	33.28	33.68	34.34

Combined probability matrix showing combined probability values for a range of values of number of cuts in shaping and timber required (square metres)

Timber (square metres)		Number of cuts				
		25	30	35	40	50
	Prob.	0.2	0.3	0.3	0.1	0.1
0.8	0.1	0.02	0.03	0.03	0.01	0.01
0.7	0.2	0.04	0.06	0.06	0.02	0.02
0.6	0.2	0.04	0.06	0.06	0.02	0.02
0.5	0.4	0.08	0.12	0.12	0.04	0.04
0.4	0.1	0.02	0.03	0.03	0.01	0.01

Note: The expected value of unit cost, based on above data-table and combined probability matrix is $39.84.

You may assume that management attitudes vary as follows:

(i) Some of the management team are in favour of change provided that a reduction of at least 12% from the existing total unit cost is achieved;

(ii) Others in the management team are not in favour of change if it might lead to an increase in total unit cost from the current level of $41.21; and

(iii) The remainder of the management team are of the view that they are willing to consider the re-design change if the expected value (EV) solution is less than the current value of total unit cost.

Required:

Discuss the impact of the possible changes in the quantity of timber and number of cuts in the Shaping process caused by the re-design of component A on the total cost per unit of component A.

You should incorporate an analysis of statistics from the data-table and probability information contained in the model into your discussion with specific reference to the impact of management attitude to risk when deciding whether or not to change from the existing quantity of timber and number of cuts for component A.

(10 marks)

(20 marks)

4 The Success Education Centre (SEC), which commenced trading in 2003, provides tuition for students preparing for accountancy examinations in Homeland. In 2005, SEC established a similar semi-autonomous operation in the neighbouring country of Awayland. Divisional managers have no control over acquisition and financing policy with regard to operations under their control.

Financial data (all stated on an actual basis) in respect of the two divisions for the two years ended 30 November 2006 and 2007 are as follows:

Income statement		2006			2007	
	Homeland	Awayland	Combined	Homeland	Awayland	Combined
	$000	$000	$000	$000	$000	$000
Revenue	4,500	1,000	5,500	5,000	1,300	6,300
Salaries	1,500	600	2,100	1,575	630	2,205
Tuition materials & consumables	500	150	650	510	155	665
Other operating costs	1,000	300	1,300	1,040	300	1,340
	3,000	1,050	4,050	3,125	1,085	4,210
Marketing	250	75	325	300	100	400
Interest (Group)			150			125
Depreciation and amortisation	350	50	400	350	100	450
	600	125	875	650	200	975
	3,600	1,175	4,925	3,775	1,285	5,185
Profit	900	(175)	575	1,225	15	1,115

Summary Balance Sheets		2006			2007	
Non- current Assets	2,750	250	3,000	2,750	500	3,250
Net Current Assets	750	150	900	1,315	200	1,515
	3,500	400	3,900	4,065	700	4,765
10% Loan stock			1,500			1,250
			2,400			3,515
Capital and Reserves			2,400			3,515

Required:

(a) Provide an assessment of the financial performance of SEC and of the respective contributions of the operations in Homeland and Awayland during the two years ended 30 November 2007. (8 marks)

(b) Discuss FOUR items of additional information that would be required in order to provide a more comprehensive assessment of the financial performance of each operation. (4 marks)

(c) Discuss FOUR factors that should be taken into consideration when assessing the comparative financial performance of the two operations. (4 marks)

(d) Discuss FOUR advantages of using Earnings Before Interest, Taxation, Depreciation and Amortisation (EBITDA) as a measure of financial performance. (4 marks)

(20 marks)

5 Budgeting may be viewed as a relevant technique in facilitating the assessment of business performance from initial planning to actual results. It will be necessary, however, to consider how to overcome factors that may limit its effectiveness.

Required:

Critically discuss the arguments for the use of budgeting in the implementation of FOUR aspects of the performance cycle. (8 marks)

Highlight THREE advantages that may be claimed for the use of activity based budgeting rather than a traditional incremental budgeting system. (6 marks)

Suggest FOUR reasons why advocates of a 'Beyond Budgeting' philosophy may not regard a major annual budget preparation exercise as an effective use of resources. (6 marks)

(20 marks)

End of Question Paper

Answers

1 **(a)** Westamber Hospital

Income statement for the year ended 30 June 2006

	Budget £000	Actual £000
Revenue:		
Private patients:		
Ear	5,256	3,066
Nose	7,008	3,504
Throat	11,680	5,110
	23,944	11,680
Government patients:		
Ear	3,504	6,132
Nose	5,256	7,884
Throat	9,344	12,264
	18,104	26,280
Total revenue	42,048	37,960
Variable costs:		
Surgery	7,080	8,284
Nursing	1,920	2,224
Sundry	920	1,116
Total variable costs	9,920	11624
Contribution	32,128	26,336
Fixed costs:		
Surgery	26,550	26,550
Nursing	5,600	5,600
Depreciation	1,700	1,700
Administration	3,250	3,412
Sundry	4,600	4,912
Total fixed costs	41,700	42,174
Net Loss	(9,572)	(15,838)

(b) (i) The hospitals have differing objectives. Eastgreen is a profit-seeking organisation whereas Westamber is, in part, a not-for-profit organisation.

(ii) The hospitals have different fee structures. Westamber undertakes the treatment of government-funded patients and receives a lower fee in respect of such operations.

(iii) The level of operating costs differs as evidenced by the fact that annual depreciation in Eastgreen is 100% greater than Westamber.

(iv) Eastgreen is partially funded by loan finance as evidenced by the £500,000 of loan interest charged to its profit and loss account during the year whereas Westamber hasn't any loan finance in its capital structure.

N.B: Other reasonable explanations would be acceptable.

(c) Adjustments:

	Westamber 2007 Budget £000	Westamber 2007 Actual £000	Eastgreen 2007 Actual £000
Original Profit /(Loss)	(9,572)	(15,838)	2,000
Attributable income – subsidised operations	5,840	8,760	
Cost of emergency operations	1,000	800	
Loan interest adjustment			500
Operating profit / (loss) after adjustments	(2,732)	(6,278)	2,500

Note:
Attributable income (budget) = (Number of government funded patients = (14,600 x 80%) = 11,680 x 50% = 5,840 x £1,000 = £5,840,000.

Attributable income (actual) = (Number of government funded patients = 14,600 x 80%) = 11,680 x 75% = 8,760 x £1,000 = £8,760,000.

(d) The statement of the recently qualified accountant is correct insofar as the fees received from private paying patients are higher than those received in respect of government funded patients. However, there is an ethical issue in that government funded patients require medical treatment and that fact should always be considered especially since Westamber is a government-funded hospital. The mission statement of the hospital states that it 'is committed to providing high quality healthcare to all patients' and therefore it should not give priority treatment to private fee-paying patients.

(e) The following performance measures could be used to assess the quality of service provided by the management of either hospital:

(i) The time spent waiting for non-emergency operations which could be measured by reference to the time elapsed from the date when an operation was deemed necessary until it was actually performed;
(ii) The number of successful operations as a percentage of total operations performed which could be measured by the number of remedial operations undertaken;
(iii) The percentage of total operations performed in accordance with agreed schedules which could be measured by reference to agreed operation schedules;
(iv) The standards of cleanliness and hygiene maintained which could be measured by observation;
(v) The staff: patient ratio which could be measured by reference to personnel and patient records; and
(vi) The responsiveness of staff to requests of patients which could be measured via a patient survey.

NB: Only four performance measures were required and alternative appropriate performance measures would be acceptable.

2 (a) (i) Corporate vision may be seen as looking forward through the defining of markets and the basis on which the company will compete. Bettaserve plc has defined the 'gold standard' proposal for one of its product ranges as a specific market opportunity. It envisages competing through the identification of key competitors and by close co-operation with its customers in providing services to meet their specific design and quality standards. The corporate vision is seen as being achieved through a focus on internal efficiency and external effectiveness. The 'gold standard' proposal may be seen as illustrating a specific sub-set of the corporate mission since it:

- has its own distinct business concept and mission – the 'gold standard' focus;
- has identified the key competitors; and
- is a suitable area for the management of its own strategies – close co-operation with customers and the provision of services to meet their design requirements.

(ii) The 'gold standard' proposal may be measured in both marketing and financial terms. Will it achieve market growth and an improved market position? The projected sales (£m) in schedule 1 shows growth of 20% in 2008 (£36m/£30m) and a further 11.1 % in 2009 (£40m/£36m). In addition, market position is anticipated to improve, with a market share of 12.5%, 14.4% and 15.4% in years 2007, 2008 and 2009 respectively (eg 2007 = £30m/£240m).

The net profit/ sales percentage is also expected to increase each year. The figures are 6%, 29.3% and 37.25% for 2007, 2008 and 2009 respectively (eg 2007 = £1.8m/£30m). The profit increase is partly linked to the projected fall in quality costs, both costs of conformance (appraisal and prevention) and costs of non-conformance (internal and external failure) as shown in Schedule 1. It is also linked to the increase in volume of business as fixed costs have a reduced effect.

(iii) The marketing success of the proposal is linked to the achievement of customer satisfaction. The success will require an efficient business operating system for all aspects of the cycle from service design to after sales service to customers. Improved quality and delivery should lead to improved customer satisfaction. Schedule 1 shows a number of quantitative measures of the expected measurement of these factors:

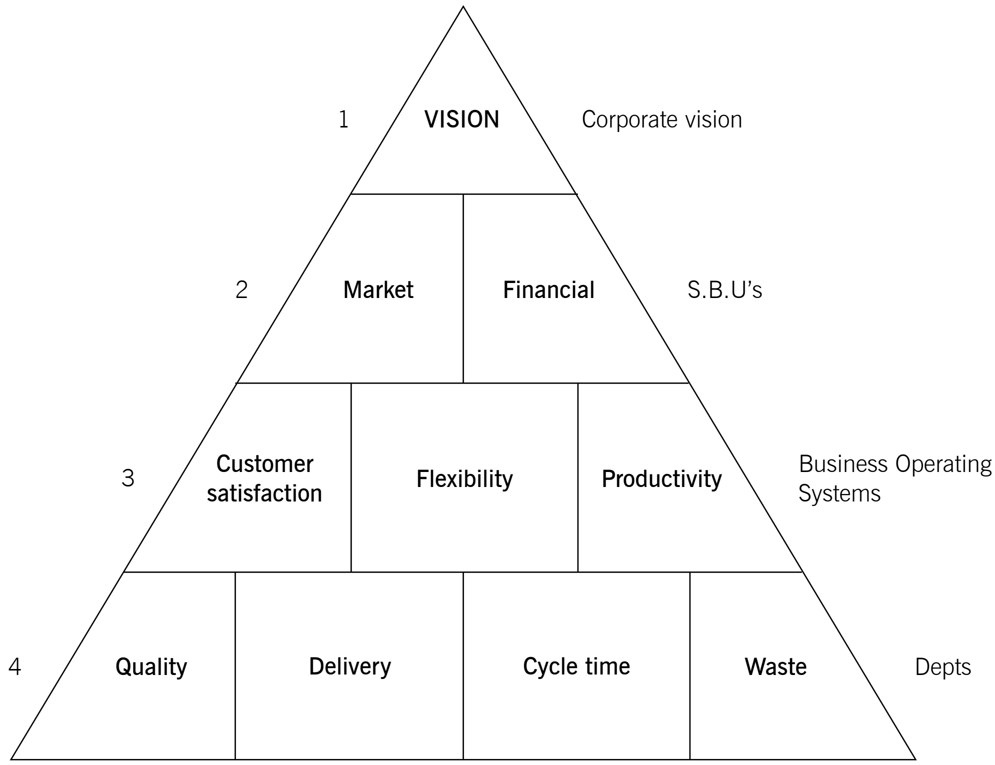
- Quality is expected to improve. The percentage of services achieving design quality standards is expected to rise from 95% to 98% between 2007 and 2009. In the same period, rectification claims from customers for faulty work should fall from £0.9m to £0.2m and the cost of after sales rectification service should fall from £3m to £2m.
- Delivery efficiency improvement may be measured in terms of the increase in the percentage of sales expected to meet planned delivery dates. This percentage rises from 90% in 2007 to 99% in 2009.

(iv) The financial success of the proposal is linked to the achievement of high productivity. This should be helped through reduced cycle time and decreased levels of waste. Once again Schedule 1 shows a number of quantitative measures of these factors:

- The average total cycle time from customer enquiry to delivery should fall from 6 weeks in 2007 to 5 weeks in 2009. This indicates both internal efficiency and external effectiveness.
- Waste in the form of idle capacity of service personnel is expected to fall from 10% to 2% between 2007 and 2009. Also, service enquiries not taken up by customers, is expected to fall from 7.5% of enquiries in 2007 to 2.5% of enquiries in 2009. These are both examples of ways in which improved productivity may be measured. Both will be linked to the prevention and appraisal costs, which are intended to reduce the level of internal and external failure costs.

(b) The analysis of the 'gold standard' proposal shows a hierarchy of performance measures. The performance pyramid shown below indicates how strategies to assist in the achievement of corporate vision may be cascaded down through a number of levels. The analysis discussed and evaluated in section (a) consists of a number of interrelated areas of focus. The marketing and financial success of the proposal is the initial focus for the achievement of corporate vision. Marketing and financial strategies must be formulated and inter-related. They must be linked to the achievement of customer satisfaction and high productivity at the next level in the hierarchy. Increased flexibility of methods should also be aimed for. This should help (internally) in achieving improved productivity and also (externally) in an improved level of customer satisfaction. High quality standards will improve customer satisfaction and in turn will assist in market retention and growth.

As discussed in part (a), customer satisfaction may be achieved through a more detailed focus on improved quality and delivery. Productivity may be improved through reductions in service cycle times and waste elements.



3 **(a)** **(i)** The existing external selling price will be £41.21 + 35% mark-up = £55.63. We may assume that at this price Creative Division is able to obtain a market for all of its production capacity. If some units are transferred to other divisions within the same group, the opportunity cost to Creative Division is the external sales value foregone. However, it is possible that Creative Division has costs that will not apply to inter-divisional transfers such as packaging and negotiating costs. For example, if such costs were £6 per unit, then a transfer price of £49.63 would leave Creative Division with the same reported profit. This adjusted selling price would enable the management at the receiving division(s) to make a decision about transfers from Creative Division rather than from external suppliers, on a basis that would lead to group profit-maximising decisions (other factors being equal).

(ii) If Creative Division has some spare capacity for which no external business is available, it may be asked to offer component A at marginal cost. Assume that this is £35 per unit. Once again, management at the receiving division(s) could make a decision about transfers from Creative Division rather than from external suppliers, on a basis that would lead to group profit maximising decisions (other factors being equal). It may be decided as part of Group policy to allow transfers to be made on the basis of marginal cost + a lump sum to allow for a share of the fixed costs of Creative Division. The size of this fixed sum would have to be agreed between management at Creative Division and each receiving division.

(iii) A dual pricing system may be used as part of Group accounting policy. In this case, Creative Division may be allowed to use the external price (£55.63) for its profit reporting. It would, however, offer to transfer at marginal cost (£35.00) if spare capacity existed. Unless an external source was available at less than marginal cost, the receiving division would buy from Creative Division. A group profit adjustment would be made on consolidation of profits at the year-end.

(b) A number of points may be raised, by examining the data-table analysis, and the combined probability matrix provided. The data- table shows the range of values of product unit cost for product A for a range of values of number of cut in Shaping AND quantity of timber (square metres) required. We can check the current value of product unit cost of £41.21 which is the value in the data-table where the number of cuts per unit in Shaping is 40 and the timber required is 0.60 square metres.

An analysis of the management team attitudes may be viewed as follows:

(i) A fall of 12% from the current level would result in a unit cost of £41.21 x 88% = £36.26. However, the combined probability of this cost level being achieved is only 18% (this can be abstracted from the probability matrix). This might, therefore, be seen as a 'risk seeking' stance if management decide to proceed with the re-design.

(ii) Other members of the management team are not willing to proceed with the re-design if it might lead to a cost increase from the current level. There is a 32% combined probability that the changes could result in a unit cost greater than the current level of £41.21. But there is also a 66% likelihood that the unit cost of product A could be less than the current level. This is a 'risk averse' stance since management are not swayed by the 66% likelihood that unit costs may fall.

(iii) The expected value solution (£39.84) is the weighted average view i.e. the sum of each possible value of unit cost x the combined probability of each occurring. This may be viewed as a 'risk neutral' view of the likely unit cost. In this case since it is less than the current value of £41.21 management would proceed with the redesign of product A.

4 (a)

	2006 Homeland	Awayland	Group	2007 Homeland	Awayland	Group
% growth in sales revenue				11.1%	30%	14.5%
Sales margin before interest (%)	20	(17.5)	13.2	24.5	1.2	19.7
Return on capital employed (%)			18.6			26.0
Earnings before interest, depreciation and amortisation (£000)			1,125			1,690
Fixed asset turnover ratio	1.6	4.0	1.8	1.8	2.4	1.9
Debt: Equity ratio			62.5			35.6
Gearing ratio			38.4			26.2

Sales revenue

The turnover in Homeland increased by 11.1% whereas the turnover in Awayland increased by 30% which is excellent bearing in mind that operations only commenced in 2005. The overall growth in turnover achieved during 2007 amounted to a healthy 14.5%.

Profits

The operation in Homeland has achieved an increase of 36% in net profit which is an excellent result given the operation only commenced during 2003. The operation in Awayland made a very small profit of £15,000 in 2007 compared with a loss of £175,000 in 2006. The overall profit of SEC has increased from £575,000 to £1,115,000, an increase of 93.9%. Non-operating costs have increased from £475,000 (2006) to £525,000 (2007), an increase of 10.5%. It is worth noting that interest payable has fallen by £25 million which is a direct result of the repayment of £250,000 of loan stock. The increased amount of marketing expenditure has enabled both operations to achieve substantial growth in turnover. EBITDA rose from £1,125 million to £1,690 million.

Costs

Tuition materials and consumables costs have only increased by 2% and 3.3% respectively in Homeland and Awayland. Bearing in mind that turnover of each operations has increased substantially then it is highly probable that SEC are benefiting from economies of scale that exist with regard to the provision of tuition materials and consumables. Salaries have increased by 5% in both Homeland and Awayland. Other operating expenses have increased by 4% in Homeland and remained static in Awayland which shows excellent cost control.

Fixed Asset utilisation

The 2007 utilisation ratios of Homeland and the overall business remain at a similar level to those of 2006 with the exception of that of Awayland which has fallen from 4 times to 2.4 times. However, this is acceptable given that operations in Awayland have only been recently established. It might well be the case that, for example, recently acquired buildings may not yet have been brought fully into use or perhaps were acquired towards the end of 2007. Awayland is clearly in a rapid-growth phase hence the need for such investments in fixed assets.

(b) It would be useful to have data relating to 2005 in order to observe a three year trend for Homeland and the full picture of Awayland. This would enable a much better assessment of current performance and the identification of significant factors that have arisen during the past four years.

It would be extremely useful to have competitor information in order to assess relative market share and establish how they are performing in the Homeland and Awayland markets compared with SEC.

It is clear that long-term borrowing has decreased during 2007 and that SEC has sufficient cash flow to be repaying loan stock. However, it would be useful to have a detailed breakdown of the working capital of each operation in order to confirm this.

It would also be useful to have future market and financial projections in respect of operations in Homeland and Awayland which should reflect the actual results achieved in 2006 and 2007.

(c) The following factors may need to be taken into account in an assessment of the comparative financial performance of the two divisions.

– The size of each market
– The number of competitors in each market
– The different types of service provision e.g. frequency and modes of course delivery, available from competitors
– The strength of the SEC brand
– The availability of resources within each country, in particular, suitably qualified lecturers.

(d) – EBITDA is easy to calculate and understand.

– The use of EBITDA (earnings before interest, taxation, depreciation and amortisation) will focus management attention on cash flow from operations and hence is a measure of underlying performance.

– Whilst taxation and interest payable remain important considerations in essence they represent distributions to the government (taxation) and a charge for financing. Neither taxation nor interest payable is relevant to the underlying success of the business of SEC.

– EBITDA is a useful measure of the managerial performance in situations like that of SEC where managers have no control over acquisition and financing policy since it excludes costs associated with assets (depreciation and goodwill) and debt finance (interest).

5 **(a)** Budgeting may be viewed as of use in planning, co-ordination, control, motivation and performance evaluation.

As a **planning aid**, the budgeting process allows for the quantification of the business plan. Alternative planning scenarios may be examined and a "what-if" analysis applied. This feed-forward view will enable a proposed plan to be compared with the level of achievement that is required in order to provide the level of return required by the organisation. If necessary amendments can be made in order that the agreed plan will achieve the required level of return.

It may be argued that the identification and quantification of factors such as customer satisfaction may limit the level of accuracy achieved.

The **co-ordination** of business activities will be aided through the budgeting process. Areas of imbalance, for example between production capacity available and that required to satisfy demand, may be identified and investigated. The co-ordination process should also avoid individual members of management making planning that are sub-optimal for the business as a whole.

The achievement of co-ordination benefits may be diminished because of factors such as lack of adequate communication, both internally between management members and externally through inadequate links with suppliers.

The **control** of business activities may be aided through the comparison of actual results against the budget plan. Any differences may be investigated and corrective action taken.

This process may not be effective because of factors such as the type of budgeting system in use or the lack of management expertise in the interpretation of the information. For example, is actual data compared against a suitably flexed budget?

The budget should act as a **motivating** device. This should be enhanced through the feeling of involvement which participation in the budgeting process will promote. Management is more likely to identify and work toward achieving, targets that has agreed in advance. It is possible however, that management may view the budget as a pressure device in trying to get them to achieve a level of performance that they do not see as achievable.

Budgets may be used a base against which to measure actual **performance**. The measures may be quantitative in both monetary and non-monetary terms. Examples might be the monitoring of cash flow or the percentage of material losses incurred. The trend of variances between budget and actual may be monitored in order to help identify whether an 'in control' or 'out of control' situation exists.

The usefulness of the measures may be limited through factors such as lack of relevant information and/or management style and attitudes.
(Alternative relevant uses and comments would be accepted.)

(b) Advantages claimed for the use of activity based budgeting include the following:

– Resource allocation is linked to a strategic plan for the future, prepared after considering alternative strategies. Traditional budgets tend to focus on resources and inputs rather than on objectives and alternatives.
– New high priority activities are encouraged, rather than focusing on the existing planning model. Activity based budgeting focuses on activities. This allows the identification of the cost of each activity. It also allows the ranking of activities where financial constraints limit the range of activities that may be achieved.
– There is more focus on efficiency and effectiveness and the alternative methods by which they may be achieved. Activity based budgeting assists in the operation of a total quality philosophy.
– It avoids arbitrary cuts in specific budget areas in order to meet the overall financial targets. Non-value added activities may be identified as those which should be eliminated.
– It tends to increase management commitment to the budget process. This should be achieved since the activity analysis enables management to focus on the objectives of each activity. Identification of primary and secondary activities and non-value added activities should also help in motivating management in activity planning and control.

The effectiveness of activity based budgeting may be limited because of its complexity and its acceptance by management. For example accurate identification of activities and the cost drivers which determine the level of resources required for each activity may be difficult to achieve.

(c) Current research on budgeting indicates that some organisations claim that they have abandoned the major annual budget preparation exercise ('Beyond Budgeting' – Hope & Fraser (2003). It has been argued that a number of adverse impacts result from the budget. Examples of such impact are:

- Annual budgeting adds little value and takes up too much valuable management time.
- Too heavy reliance on budgetary control in managing performance has an adverse impact on management behaviour.
- The use of budgeting as a base for communicating corporate goals, setting objectives, assisting continuous improvement, etc. is seen as contrary to its original purpose as a financial control mechanism.
- Most budgets are not based on a rational causal model of resource consumption and are, therefore, of little use in determining strategy.
- The process has insufficient external focus from which to derive targets or benchmarks.
- The argument may be put that increased focus on knowledge or intellectual capital through competent managers, skilled workforce, effective systems, loyal customers and strong brands is more likely to yield improved business effectiveness.

(Alternative relevant uses and comments would be accepted in all parts of the answer).

			Marks	Marks
1	**(a)**	Revenue calculations:		
		Private patients	3	
		Government patients	3	
		Variable costs	3	
		Fixed costs	2	
		Activity level (80%)	2	
		Profit/(Loss)	1	
		Professional marks	2	(maximum) 14
	(b)	Reason/explanation (4 x 1.5)	6	6
	(c)	Adjustments (3 x 2)	6	6
	(d)	Comments(on merit) (3 x 1)	3	3
	(e)	Measures/assessment (4 x 1.5)	6	6
				35
2	**(a)**	**(i)** Comments (on merit)	3 x 2	maximum 5
		(ii) Comments (on merit)	3 x 2	maximum 5
		(iii) Comments (on merit)	3 x 2	maximum 5
		(iv) Comments (on merit)	3 x 2	maximum 5
	(b)	Comments (on merit)	3	
		Professional marks	2	5
				25
3	**(a)**	Comments (on merit): External selling price	4	
		Marginal cost	4	
		Dual pricing	4	(maximum) 10
	(b)	Explanation	6	
		Calculations	6	(maximum) 10
				20
4	**(a)**	Comments (on merit) & calculations:	10	(maximum) 8
	(b)	Items of information	4 x 1	4
	(c)	Factors to be considered	4 x 1	4
	(d)	Advantages of EBITDA	4 x 1	4
				20
5	**(a)**	Four uses of budgeting	4 x 2	8
	(b)	Arguments for ABB	3 x 2	6
	(c)	Reasons	4 x 1.5	6
				20