ACCA REVISION MOCK

Advanced Performance Management

June 2012

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.

This question paper must not be removed from the examination hall.

Kaplan Publishing/Kaplan Financial

KAPLAN PUBLISHING

SECTION A

BOTH questions are compulsory and MUST be answered

QUESTION 1 – SANCO

Two of the divisions of Sanco Ltd are the Intermediate division and the Final division.

The intermediate division produces three products, A, B and C. The products are sold to overseas specialist producers as well as to the Final division at the same prices. The Final division uses products A, B and C in the manufacture of products X, Y and Z respectively.

Recently the Final division has been forced to work below capacity because of difficulties in obtaining sufficient supplies of products A, B and C. Consequently the Intermediate division has been instructed by the board of directors to sell all its products to the Final division.

The price and cost data is as follows:

Intermediate division

	Product A	*Product B*	*Product C*
	$	$	$
Transfer price	20	20	30
Variable manufacturing cost per unit	7	12	10
Fixed costs	50,000	100,000	75,000

The Intermediate division has a maximum monthly capacity of 50,000 units. The processing constraints are such that capacity production can only be maintained by producing at least 10,000 units of each product. The remaining capacity can be used to produce 20,000 units of any combination of the three products.

Final division

	Product X	*Product Y*	*Product Z*
	$	$	$
Final selling price	56	60	60
Variable costs per unit:			
Internal purchase	20	20	30
Processing in Final division	10	10	16
Fixed costs	100,000	100,000	200,000

The Final division has sufficient capacity to produce up to 20,000 units more than it is now producing but, because of the lack of products A, B and C, is limiting production. Further, the Final division is able to sell all the products that it can produce at the final selling prices.

Required:

(1) From the viewpoint of the Intermediate division, compute the products and quantities which would maximise its divisional profits and calculate the total company profit, given that all Intermediate's production is transferred internally; (6 marks)

(2) From the viewpoint of the Final division, compute the products and quantities purchased from the Intermediate division which would maximise its divisional profits and indicate the effect on the total company profits; (4 marks)

(3) Compute the product mix which would maximise the total company profits assuming all transfers were internal; (7 marks)

(4) If there were no transactions costs involved for either division in buying or selling A, B or C outside the company, what, if anything, is lost by the policy of internal transfers only? (7 marks)

(5) Discuss the effectiveness or otherwise of the transfer pricing system currently used at Sanco Ltd. (6 marks)

(Total: 30 marks)

QUESTION 2 – NAHC

New Apple Health Clubs (NAHC) is a chain of fitness centres that operate in Bigland, a wealthy, developed nation that has a reputation for obesity amongst its population.

The government has recently announced their intention to tackle the problem by charging those individuals deemed obese for using the National Health Authority facilities, and introducing tax concessions for companies that provide services that correct the failing health of its members. To qualify for the concession these companies must demonstrate a 15% weight reduction in members, over a given period of time.

Each NAHC centre is located in a prime location, usually close to local shopping, entertainment and business districts. It aims to attract a high end clientele with large disposable incomes. The centres are equipped with state of the art fitness equipment, a heated swimming pool and luxury spa facilities. The centres also have on-site catering facilities, which have developed a reputation for the quality of the cuisine.

The company is committed to “enhancing the health of its members” and prides itself on recruiting and retaining the highest caliber personal trainers. They are paid a basic salary by the centre, and receive 60% of the revenue received for each client consultation. The personal trainers are graded by bookings received, with no other performance indicators used. The personal trainers take home pay usually exceeds that of the General Manger.

Each centre has a General Manager (GM) who is responsible for the entire operation, and is remunerated via a basic salary and a bonus linked to the achievement of the budgeted profit. Budgets are produced at Head Office level, with no involvement of the GM. There is usually a high turnover of GM’s, with the vast majority remaining in their post for a period of less than 18 months.

The new Guernsey centre has received their budget for the next financial year, ending 31 May 20X1, and the expected profit is $1.5m. However, there is a degree of uncertainty regarding the economic outlook within Bigland. Commentators believe that the recent recovery may be misleading and that in fact a double dip recession is likely. If this occurs, then NAHC anticipate a 50% reduction in profit. If conditions remain stable, then profit will be unchanged, and in the unlikely event of economic growth, profit could rise by 10%.

Further the government incentives may lead to competitors emerging to challenge existing health clubs, which would lead to a loss of members and subsequently profit would reduce by $0.5m regardless of the economic conditions.

Economic Outlook		**New Entrants to Market**	
Outcome	*Probability*	*Outcome*	*Probability*
Double Dip Recession	0.4	Increase in Competition	0.7
Stable	0.5	No Change	0.3
Growth	0.1		

Required:

(a) **Comment on how the Government initiative could both impair and improve the performance of NAHC.** **(6 marks)**

(b) **Briefly discuss the problems inherent within the current budgeting process and reward systems at NAHC, explaining how they could be improved.** **(12 marks)**

(c) **Prepare a summary table which shows the various possible net profit or loss outcomes and the combined probability of each potential outcome for the year ending 31 May 20X1, stating any assumptions made.**

The table should also show the expected value of net profit or loss for the year.

Using your table, briefly assess the likelihood that the GM will receive a bonus and comment on your findings. **(9 marks)**

(d) **Briefly comment on the usefulness of the expected values, making reference to the validity of the outcomes and probability data used** **(3 marks)**

(30 marks)

(Total Section A: 60 marks)

SECTION B

TWO QUESTIONS ONLY TO BE ANSWERED

QUESTION 3 – DDD

DDD is a relatively small, specialist manufacturer of chemicals that are used in the pharmaceutical industry. It does not manufacture any pharmaceutical products itself since these are made by different processes and under different conditions. DDD obtains its raw materials, which are quite simple, from large chemical companies, and modifies them by a number of patented processes before selling them on to a few pharmaceutical companies. DDD makes significantly higher margins than its suppliers, which manufacture in bulk. Several patents are due to expire in the next three years. The large pharmaceutical companies, which are DDD's customers, are suffering reduced profits as governments reduce the price they are prepared to pay for drugs. As a result, the pharmaceutical companies are pressuring DDD to reduce its prices. The majority of the shares are owned by members of the family which started the business some years ago and who still take an active part both as managers of the business and as development chemists. There is a share option scheme for the employees and this is well supported.

Required:

(a) Advise the Board of Directors of the possible threats related to the patent expiries;

(7 marks)

(b) Evaluate suitable courses of action that DDD might take to maintain its profits in the face of the threats identified in (a); (10 marks)

(c) From your analysis recommend, with a brief justification, the most appropriate course of action for DDD. (3 marks)

(Total: 20 marks)

QUESTION 4 – FIRE MUSIC

Fire Music is a large international music company which covers all aspects of the business including finding and managing artists, producing music albums/singles for sale online and via its own high street presence and the publicity of concerts and merchandise. The industry in which Fire operates has always been a lucrative one, and for this reason they are experiencing increased competition. In addition artists are becoming increasingly difficult to manage as they make higher and higher demands. Company sales are approximately $350 million, with customers purchasing on average $15 per of music per online/retail transaction, although this is often higher during concert tours. The company experiences a peak selling time of November and December when this average is often doubled.

The mission of the organisation is *'to produce and release a wide range of music in a variety of forms that appeals to the majority of the population'*. To meet these objectives, Fire has two main critical success factors (CSF's):

(a) Increased customer satisfaction

(b) Gross profit of 40% of sales

The set level of 40% is slightly above the industry standard, but the management decided on this target to ensure the overall competitiveness of the business.

Fire does not currently operate its own retail website but sells its music via other websites.

Required:

(a) Recommend two Performance Indicators (PIs) that can be used to support each of the critical success factors (CSF's) of Fire Music, discussing why these performance indicators are appropriate to the company. (6 marks)

(b) Explain the information systems that will be required in order to achieve the PI's suggested in your answer (a) and hence meet the overall mission of the company.

(10 marks)

(c) Identify two sources of information that Fire could use to help them to determine this CSF and PI's (4 marks)

(Total: 20 marks)

QUESTION 5 – BIG CHEESE CHAIRS

Big Cheese Chairs (BCC) manufactures and sells executive leather chairs. They are considering a new design of massaging chair to launch into the competitive market in which they operate.

They have carried out an investigation in the market and using a target costing system have targeted a competitive selling price of $120 for the chair. BCC wants a margin on selling price of 20% (ignoring any overheads).

The frame and massage mechanism will be bought in for $51 per chair and BCC will upholster it in leather and assemble it ready for despatch.

Leather costs $10 per metre and two metres are needed for a complete chair although 20% of all leather is wasted in the upholstery process.

The upholstery and assembly process will be subject to a learning effect as the workers get used to the new design. BCC estimates that the first chair will take two hours to prepare but this will be subject to a learning rate (LR) of 95%. The learning improvement will stop once 128 chairs have been made and the time for the 128th chair will be the time for all subsequent chairs. The cost of labour is $15 per hour.

The learning formula is shown on the formula sheet and at the 95% learning rate the value of b is –0.074000581.

Required:

(a) Calculate the average cost for the first 128 chairs made and identify any cost gap that may be present at that stage. (8 marks)

(b) Assuming that a cost gap for the chair exists suggest six ways in which it could be closed.

(6 marks)

(c) The production manager denies any claims that a cost gap exists and has stated that the cost of the 128th chair will be low enough to yield the required margin.

Calculate the cost of the 128th chair made and state whether the target cost is being achieved on the 128th chair. (6 marks)

(Total: 20 marks)

(Total Section B: 40 marks)