Original

EXAMINATION: MANAGEMENT III: MARKETING (ENGLISH PROGRAM) WS 2000/2001

EXAMINER: PROF. DR. ERICHSON / Brennan

You are allowed to use a pocket calculator (in accordance with the instructions given by the examination office) and a translating dictionary from your native language to English (without any notes written in it).
All of the twelve exam questions must be answered (the estimated time for each question is given).
This examination has four pages.

Question 1 (8 Minutes)
It is often said that the Marketing Concept rests on four pillars: *target market, customer needs, integrated marketing, and profitability.*

(a) Explain each of these four important elements and how they relate to the Marketing Concept.
(b) How does the Marketing Concept differ from the Selling Concept?

Question 2 (10 Minutes)
When a firm sells two products that are demand related (assume that the two products are complements), this fact must be taken into account in the pricing decision. If it has been observed that consumers buy product 2 together with their purchase of product 1, then in this case the Niehans Formula tells us that the profit maximizing price for product 1 (p_1^*) must take into consideration product 2.

$$p_1^* = (e_1/(1+e_1))v_1 - (p_2-v_2)(e_{12}/(1+e_1))(x_2/x_1)$$

where:
p_1 = price of product 1
e_1 = price elasticity of demand
v_1 = variable cost of product 1
p_2 = price of product 2
v_2 = variable cost of product 2
e_{12} = cross price elasticity
x_2 = amount of product 2 sold
x_1 = amount of product 1 sold

(a) Explain under what circumstances the profit maximizing price for product 1 would not be influenced by the existence of product 2.
(b) List and explain three things that could cause the profit maximizing price of product 1 to decrease due to the existence of product 2.

Question 3 (10 Minutes)
A company must design strategies that are appropriate for each stage of the Product Life Cycle (PLC) in order to extend a product's life and profitability.

(a) Explain how the profitability that a company might expect from a product during each of the four PLC stages that it experiences during its life as a saleable product might differ.
(b) How might packaging strategies for this product differ within each of the four PLC stages? At which stage is the package likely to be the flashiest? At which stage is it likely to be the most basic, with the most attention paid to cost? When might it be redesigned the most radically and why?

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Question 4 (12 Minutes)
A product that is sold widely in the northern part of Germany has the following price response and cost functions:

$X = 1000 - 320\,P$ where: X = Sales quantity
P = Selling price
$C = 200 + 0.6\,X$ C = Total cost

(a) Calculate the revenue maximizing price.
(b) Calculate the profit maximizing price.
(c) What is the price elasticity at the profit maximizing price?

Question 5 (10 Minutes)
When performing a "situation analysis" for your company as part of the planning process, it is important to consider the industry within which your company competes for its share of the market. Industries differ in their "attractiveness" and Professor Michael Porter of Harvard University has identified five forces that determine an industry's profitability.

(a) Name and explain each of these five forces.
(b) Two of these forces involve bargaining power. Explain how this can limit your ability to earn profits in an industry.

Question 6 (14 Minutes)
A major producer of hair care products is considering whether or not to introduce a new shampoo that has been formulated for people who have especially dry hair. The preliminary market research that was done by an independent consulting firm has indicated that there is a need for such a product among people who are very active in sports and shower often. Furthermore, research has shown that at a launch price of 8.50 EUR, approximately 1,700,000 bottles could be sold in the first year. The company has already spent 2,600,000 EUR on the research and development of this new product. The Marketing Department has estimated that product launch advertising and sales promotional efforts would cost 850,000 EUR. Engineering has provided a direct variable cost estimate of 5.25 EUR for producing this new product and has indicated that a one time initial investment of 3,800,000 EUR would be required to install the new production machinery needed. As the president of this company, you must decide a course of action for this new product.

(a) Using a break-even analysis, what is the minimum quantity of this new product that must be sold before a profit can be earned (show your result both mathematically and graphically).
(b) Explain generally the concept of "sunk costs" and how this concept might be related to this decision problem.

Question 7 (10 Minutes)
A railroad company executive was quoted as saying, "We set our advertising budget each year on December 1st for the upcoming year. On that date, we add our estimate for passenger revenue expected in the current month (December) to our year-to-date total in order to get a figure for sales revenue for the year. We then take 2.0% of this figure to use as our advertising budget for the new year. We have been doing it this way for some time now and it seems to work quite well for our company."

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(a) What is this method of determining the advertising budget called?
(b) What are the advantages and disadvantages of this method?
(c) Explain what the Dorfman-Steiner Theorem tells us about this method.

Question 8 (8 Minutes)
Market researchers are often asked to provide data to be used in support of marketing decision-making.

(a) Explain the differences between primary and secondary data that could be provided by a market research study.
(b) Name some of the advantages and disadvantages of each type of data.

Question 9 (10 Minutes)
An important measure of market success is your market share. The Parfitt-Collins Model shows us that market share can be analyzed according to its three basic components.

(a) Name and explain these three main components.
(b) Explain how the elements of the marketing mix can influence two of these components and name the component that is considered to be a characteristic of the target consumer.

Question 10 (10 Minutes)
Markup pricing is the easiest method of determining the selling price and for that reason it is widely used by many businesses today. The question remains, however, "Does the use of standard markups to set prices make logical sense?"

(a) What are the disadvantages of using this method to determine price?
(b) Can you explain under what circumstances it might be possible (or is it not possible) for the markup price to equal the profit maximizing price?

Question 11 (8 Minutes)
Some people say that the concept of "Marketing Ethics" is an oxymoron (an expression where contradictory ideas are combined). It has been said that free market capitalism is highly susceptible to those who lack scruples and are willing to prosper at the expense of others. For that reason, is "ethical marketing behavior" not likely to be seen in business today?

(a) Name aspects or examples of marketing behavior that are often criticized.

(b) Is the Marketing Concept compatible with our understanding of free market capitalism? Discuss the necessity for a different or modified Marketing Concept.

Question 12 (10 Minutes)
Sales (S_t) can be thought of as coming from two different groups of consumers.

$$S_t = \text{(sales from consumer group 1)} + \text{(sales from consumer group 2)}$$
$$= (M - Y_{t-1})\,p + ((M - Y_{t-1})(Y_{t-1}/M)\,q$$

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(a) What is the name of this model and why might we use it in our marketing planning?

(b) What are the interpretations in this model for consumer groups 1 and 2? How do these groups differ in their buying behavior and how might the communications policy enacted by a company towards these two groups of consumers differ?

GOOD LUCK !