Examination: 5073
Management III
Marketing Management
Summer Semester 2008
Dr. John E. Brennan

You are allowed to use a non-programmable 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 into it). **All** of the **twelve** (12) examination questions must be answered (the estimated time to spend on each question is provided). This examination consists of **four** (4) pages and must be completed within 120 minutes.

Question 1 (10 Minutes)

imagination at work

"Worldwide the people of General Electric are dedicated to turning imaginative ideas into leading products that will help solve some of the world's toughest problems." Naturally, GE's performance is measured by its financial results and its stock price. Overall corporate performance, however, is viewed in a much broader context: the health, safety and opportunities of workers, the impact of GE's operations on the environment and communities, and its interaction with governments around the world – "Our goal is to grow responsibly."

(a) Explain GE's statement of business philosophy in the context of Relationship Marketing.

(b) What is the difference in focus between a company that follows the "Selling Concept" and one that follows the "Marketing Concept"? What can you say about GE?

(c) Do you see any relationship between "ethical business practices" in general and "corporate profitability" – or are these concepts at odds with each other?

Question 2 (10 Minutes)

Harvard Business School Professor Michael E. Porter is one of the world's most influential thinkers on completive strategy.

(a) In the strategy literature the word "Synergy" often appears. Name two sources of synergy and explain each of them using examples.

(b) Professor Porter has said, "Competitive advantage is at the heart of any strategy." Explain the two generic strategies he outlined and what was his "warning" to companies?

Question 3 (10 Minutes)

The concept of Market Segmentation attempts to divide a large heterogeneous total market into groups of relatively "homogeneous" potential buyers called market segments.

(a) What do we mean by relatively "homogeneous" market segments in the above sentence?

(b) What is the significance of "lifestyle" to marketers engaging in market segmentation?

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Question 4 (10 Minutes)

The Niehans Formula for the two products X and Y is:

$$P_X^\circ = [\varepsilon_X / (1+ \varepsilon_X)](v_X) - M, \quad \text{where: } M = (P_Y - v_Y)[\varepsilon_{YX} / (1 + \varepsilon_X)](Y / X)$$

Consider the Deichmann Schuhe shop located on the ground floor of the Allee-Center-Magdeburg that has fixed costs of 1000 and sells two products (X and Y). It has been estimated that the cross price elasticity between these two products is $\varepsilon_{YX} = -1.2$ and the price response function for product X is:

$$S_X = 2000 - 110\, P_X, \text{ where } S_X = \text{Quantity Sold of product X}$$

The direct variable cost of product X is 10.5 and on average 1.5 units of product Y are sold with each unit of product X. The price of product Y is 2.8 and its direct variable cost is 1.6.

(a) Calculate the profit maximizing price of product X, P_X^*, when no consideration is given to product Y sales.

(b) Considering sales of product Y, now calculate the "best" price, P_X°, for product X.

(c) If the retailer were to charge the prices P_X° and $P_Y = 2.8$, the total profit earned by this company would be?

Question 5 (10 Minutes)

The concept of Market Segmentation attempts to divide a large heterogeneous total market into groups of relatively "homogeneous" potential buyers called market segments.

(c) What do we mean by relatively "homogeneous" market segments in the above sentence?

(d) What is the significance of "lifestyle" to marketers engaging in market segmentation?

Question 6 (10 Minutes)

All diffusion models in general have a similar structure:

$$S(t) = g(t)\,[N^* - N(t)].$$

(a) Why are diffusion models used in marketing?

(b) A very popular diffusion model used in marketing planning is the Bass Model. Explain the workings of the Bass Model.

(c) Consider product A ($p = 0.03$; $q = 0.42$) and product B ($p = 0.16$; $q = 0.42$). Which of these two products would take the least amount of time to exhaust their potential market, N^*? Explain your answer in detail with a sketch if possible.

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Question 7 (10 Minutes)

A certain drug retailer sells four popular brands of shampoo (A - D). Sales have been tracked using scanner data and the following concepts have been calculated.

Brands	Penetration	Repeat Purchase Rate	Buying Intensity Rate
A	0.4382	0.4258	1.0592
B	0.2811	0.5432	0.9643
C	0.8526	0.2264	0.9903
D	0.5759	0.7968	1.0112

(a) Which of these brands of shampoo is the market leader? Explain your answer.

(b) Which of these brands is experiencing the most difficulty penetrating the market? Outline and explain a marketing strategy that might be appropriate for this company.

(c) Assume that you are a product manager with responsibility for brand "C". Tell as much as you can about the performance of this brand from the data given in the table above and outline a strategy to increase the market share of this brand.

Question 8 (10 Minutes)

Communication theory offers a convenient way to think about a major advertising campaign.

(a) Explain Lasswell's basic communication model and explain its relevance to business communication policies (It is simply not enough to draw the picture!).

(b) What is meant by the term "competitive clutter" and give an example?

(c) Explain "two-step communication" and give an example.

Question 9 (10 Minutes)

Suppose that the Radeberger Braugruppe is currently spending an advertising budget of 14 on two available advertising media (z_1 with unit price p_1 and z_2 with unit price p_2).

$$z_1 = 5.2;\ p_1 = 2.0 \text{ and } z_2 = 1.2;\ p_2 = 3.0$$

$$S = 15.4 + 6.4\, z_1^{1/4} + 3.2\, z_2 - 0.2\, z_2^2,$$

where: S = Sales Quantity

The product sells for P = 5.5, direct variable cost is v = 4.25, and the fixed cost is $C_f = 3.8$.

(a) Is this company allocating its advertising budget optimally between these two available media? Explain and justify your answer in detail (Yes / No answers are not sufficient).

(b) Calculate the profit earned by this company.

(c) Is there a way that this company could increase its profit? Explain in detail and if so calculate the new profit.

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Question 10 (10 Minutes)

When only one advertising media, z, is available to use, the sales response function is:

$$S = f(z)$$

and profit is equal to:

$$\pi = P\, f(z) - C_f - v\, f(z) - z\, p$$

where: P = selling price and p = the price of the media (both constants).

(b) The profit maximizing quantity of the advertising media is $z^* = [\varepsilon_z^* (P - v) S^*] / p$; Explain this result and what does it mean to the marketer.

(c) Explain the Dorfman / Steiner Theorem $\{B^*/P^*S^* = -\varepsilon_z^* / \varepsilon^*\}$.

(d) Why is there a negative sign on the right-hand side of the Dorfman / Steiner Theorem?

Question 11 (10 Minutes)

In terms of Communication message strategy …

(a) Explain the concept of "inherent drama" used effectively by the Leo Burnett Company. Give an example of an effective advertising campaign based on this idea.

(b) Explain the "Un-Cola" advertising campaign.

(c) What is the "copy platform"?

Question 12 (10 Minutes)

Consider an industrial product, x, that is sold by business to business marketing that has the following price response function, x = f (p) where p = the selling price of the product:

$$x = 4{,}200{,}000 - 95{,}000\, p$$

This product has a total cost of production and distribution, TC, given by the following total cost function, TC = g (x) where x is the quantity produced and sold in the marketplace:

$$TC = 50{,}000 + 7\, x$$

(d) Calculate the revenue-maximizing price for this product. If the company were to charge this price, how much profit would they earn?

(e) Calculate the profit-maximizing price for the product. Again, if the company were to charge this price, how much profit would they earn.

(f) How many fewer units would the company sell by using the profit maximizing price rather than the revenue-maximizing price?

(g) Calculate the profit maximizing price elasticity.

This is the end of the examination

GOOD LUCK !