

Figure 12.2

**Examination: 5073**  
**Management III**  
**Marketing Management**

**Summer Semester 2006**

**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)**

An important consideration for marketing management is market share.

- (a) When scanner data is available, the Parfitt / Collins Model gives a valuable decomposition of market share into three main components (in the model these components from left to right are: A, B, and C). What is the name given to each of these three components and how are they calculated?
- (b) If you were the marketing manager responsible for a brand that has  $A = 18\%$ , what would you recommend?
- (c) If that product has  $C = 103\%$ , what does this mean and would you as marketing manager be concerned about it?

**Question 2 (8 Minutes)**



The Marriott Hotel Group describes its core values and culture in this manner:

“There is a ‘Marriott Way’. It’s about serving the associates, the customer, and the community. Marriott’s fundamental beliefs are enduring and the keys to its continued success.

It’s the Marriott experience. We do whatever it takes to provide our associates with the utmost opportunities, and our customers, with superior service.”

- (a) Explain this statement of business philosophy in the context of “Integrated Marketing”.
- (b) Relate the stated core values and culture of the Marriott Hotel Group to the “Stakeholder Approach” and the “Marketing Concept”.

**Question 3 (8 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?

**Please turn to page 2**

**Question 4 (8 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 concept called Trout and Reis’s Positioning and give an example.
- (c) What is the “copy platform”?

**Question 5 (15 Minutes)**



Founded in Sweden in 1947, H&M, today has over 1,200 stores in 22 countries. The company’s philosophy is to provide consumers with affordable, up-to-date, high-quality fashion. Suppose that the H&M store located in Magdeburg is selling two fashion products that are compliments to each other: Bikini swimsuits (B) and Suntan lotion (S). The profit-maximizing price of the Bikini swimsuits is € 25.00. On average 0.6 bottles of Suntan lotion (S) are sold every time a Swimsuit is sold. The profit-maximizing price of product S is € 4.99 and its direct variable cost is € 1.45. It has been estimated that the cross price elasticity between these two products is equal to  $(-2.91)$  and the profit maximizing price elasticity of product B is  $(-1.88)$ .

- (a) What assumptions were made when the Amoroso-Robinson Relation was derived? Explain the relation and what does it tell us about pricing?
- (b) Explain the concept of Cross Price Elasticity of Demand and what relevance does it have to the marketer?
- (c) Is it optimal for the company to charge the profit-maximizing price for Bikini swimsuits? Based on the Niehans Formula, what price would you recommend that they charge?

$$P_B^* = [\epsilon_B / (1 + \epsilon_B)](v_B) - M, \text{ where: } M = (p_S - v_S)[\epsilon_{SB} / (1 + \epsilon_B)](x_S / x_B)$$

**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.
- (a) 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.

Please turn to page 3

**Question 7 (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  $z^* = [\epsilon_z^* (P - v) S^*] / p$ ;  
Explain this result and what does it mean to the marketer.
- (c) Explain the Dorfman / Steiner Theorem  $\{B^*/P^*S^* = -\epsilon_z^* / \epsilon^*\}$ .
- (d) Why is there a negative sign on the right-hand side of the Dorfman / Steiner Theorem?

**Question 8 (15 Minutes)**

Suppose that the *Privatbrauerei Erdinger Weißbräu* 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  $p_2$ ).

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

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

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.

**Question 9 (10 Minutes)**

A German company with headquarters in Leipzig is considering the launch of a new product this summer. A marketing research firm has provided the following information. The marketing research firm projects that at a price of € 21.60, 150,000 units could be sold in the first year. The company had previously expected a higher level of sales and based on the findings of the market research firm they are now a bit concerned about the prospects for this new product. A sales agent in Magdeburg has offered to handle this product for a fixed cost of € 1,000 per month and a sales commission of 15%. The company estimates the cost of establishing an office in Magdeburg to be around € 240,000 per year. The sales person in this office would earn a monthly sales commission of 5% on all sales exceeding the € 5,000 level.

- (a) Should the company use the sales agent or not? What are the factors that must be considered when deciding whether to use a sales agent?
- (b) What is the difference between agents and merchants?

Please turn to Page 4

**Question 10 (8 Minutes)**

Harvard Business School Professor Michael E. Porter is one of the world's most influential thinkers on competitive 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 11 (10 Minutes)**

Consider a popular consumer product that has the following price response function:

$$S = 5,273,600 - 95,200 P$$

The product has a total cost of production and distribution given by the following function

$$TC = 56,800 + 7.12 S$$

where: S = sales quantity, P = selling price, and TC = total cost.

- (a) Calculate the revenue-maximizing price for this product. If the company were to charge this price, how much profit would it earn?
- (b) Calculate the profit-maximizing price for the product. If the company were to charge this price, how much profit would it earn.
- (c) Calculate the profit maximizing price elasticity and demonstrate that the Amoroso-Robinson Relation is in fact true.

**Question 12 (8 Minutes)**

Decisions concerning the Channel of Distribution are important for Marketing Management.

- (a) Explain the advantages and disadvantages of using Direct Marketing as apposed to using marketing intermediaries.
- (b) Explain the concept of Channel Levels. Name some of the factors that one must consider when designing a channel of distribution. What are the advantages of increasing channel levels, and what are the disadvantages.

**This is the end of the examination**

**GOOD LUCK !**