

**Johnson Graduate School of Management
Sample Marketing Management Exemption Exam**

PRELIMINARIES

- Write your name AND student ID number in the space below, and in your answer book.
- Please return this document along with the answer book.

STRUCTURE OF THE EXAM: *The exam has three parts*

- Part I – Marketing Math (30 points). Please show workings clearly.
- Part II – Marketing Concepts (30 points).
- Part III – Case Questions (30 points).

HELPFUL HINTS AND STRATEGIES

1. Some questions are worth more points than other questions. It is useful to use the number of points as a guide for how much time should be allocated to the question.
2. Write legibly. Unintelligible text will not receive credit. You need to write something in order to get partial credit.
3. The answers will be graded on the quality of your recommendation, not the length of the answer or number of points covered. Do not attempt a “core dump” of every framework and analysis method that you know.
4. If you make any assumptions, please state them clearly.
5. Be sure to follow word limits wherever given.

SCORE:

Part I: _____

Name: _____

Part II: _____

Part III: _____

Student ID: _____

TOTAL: _____

**PART I – Break Even: Answer ALL Questions
(30 points in total)**

OSCAR MAYER

John Q. Analyst, is employed by Oscar Mayer in their hot dog division. His boss, Jennifer Knowsalot, assigned him the task of producing the financial analysis for launching or not launching the Oscar Mayer Chicken Hot Dog.

John Analyst knows many facts, but is not very good at analysis. He is meeting with his boss to present his numbers in just 3 hours, and he still has not begun his analysis. He has turned to you to help him save his job.

John talked to all of the different divisions at Oscar Mayer and came up with the following information. The R&D people say that they have invested \$75,000 over the last year coming up with a recipe for a chicken hotdog that tastes good. In addition, R&D and production together spent \$55,000 experimenting with and modifying some of their equipment to process chickens, and now have a machine that can be moved into full-scale production. In order to move into full-scale production, an additional \$2,250,000 in new equipment must be purchased, which would add \$375,000 in annual maintenance and \$412,000 per year in salaried employees to support it. The average piece of Oscar Mayer equipment lasts for ten years, after which it has zero value and must be scrapped. This past year, the total market for hotdogs was 120 million pounds. Oscar Mayer sells their Regular Hotdogs (beef and pork) to wholesalers for \$1.16 per pound. Variable costs for Regular Hotdogs total \$0.71 per pound.

The production manager estimated the following costs to produce a pound of new chicken dogs: 40 cents per pound for deboned chicken meat, 21 cents for processing, 8 cents for freight and packaging, and 4 cents for labor. Oscar Mayer's distributors use a 26% markup to price the product. All retailers sell the chicken-dog for a retail price of \$1.40 per pound, and retailers have margins of 10%. John believes that the company will use the chicken dog to fight off new entrants, and will therefore set an advertising budget of \$1.5 million spread evenly over three years.

John is very nervous about his first meeting with his new boss, who is a Johnson graduate, and is known throughout the company for her skill with numerical analysis. He has the following questions.

Show your work for every problem. Carry decimal values (such as contribution) to at least 3 or 4 places.

1. (8 points) What is the break even volume of chicken dogs for Oscar Mayer?
2. (2 points) John Q. Analyst thinks that Oscar Mayer's brand name will allow them to sell at least 200,000 units per week. If Oscar Mayer in fact sells this number of units per week, what will be their year one profit?
3. (10 points) Assume that the cannibalization rate of the New Chicken Dog is 25% – that is, 25% of the unit sales of the New Chicken Dog would have been sales of Regular Hotdogs. What would be the breakeven volume with cannibalization?
4. (10 points) Using the information above, give John Analyst a **BRIEF** argument for what he should tell his boss about launching or not launching the new chicken hot dog. You may assume that

Oscar Mayer's best estimate of volume is the 200,000 units/week from Q2, and that their best estimates for prices, margins, and cannibalization rates are the same as those stated in questions #1-3.

PART II: (30 points in total)

5. Market segmentation, targeting, and positioning.

- What is market segmentation? Why is it important?
- Explain the economic rationale for segmenting a market. When is it appropriate to segment? Why?
- Explain the relationship between segmentation, targeting, and positioning. After effectively performing all three steps, what is the end result? Be specific, and explain how the firm will behave differently than if it had not segmented the market.

Word limit: 500 words

Part III: Case Analysis

6. The Star Trek Transporter (30 points)

The Star Trek Transporter (STT) has just been invented by STT, Inc. The transporter works by dematerializing an object at one transporter site, and rematerializing it at a distant location. Unlike Star Trek, there must be another transporter at the other end to receive a transport. Transporters are able to move about 140 kg (300 lbs) of mass from place to place. They can also transport both living and inanimate objects. For living things, the risk of death per transport run is approximately the same as the aggregate risk of driving a car – about 1 in 1,000,000 per 15 miles transported (longer transports are riskier). For inanimate objects, there is a flat 1 in 1,000,000 probability of losing the shipment regardless of the distance. Transporters cannot currently be made smaller than about a 2 meter x 3 meter box. As long as they have power, they can be used.

At the moment, transporters are patented and cost about \$1,500,000 apiece. A transport takes about 10 seconds before the unit can be used again, and each transport can have only one destination (for example, you cannot load 20 kg of one object and 30 kg of another object onto the transporter if they are being sent to different locations). The marginal cost of the transport is \$3-5, mostly in electricity and maintenance. Each transporter does need an operator, who is paid about \$50,000 per year.

You work for STT, Inc. You have been asked to position this new device and to come up with a marketing plan. Be sure to address all 4 P's.

Some questions that you might think about in creating your positioning statement follow:

First, what do you think that would be the major issues surrounding adoption? Who will be your competitors, and how will they react? What would be a good market segmentation scheme? How would you position the STT against these segments (think of a positioning statement)? How would you price it? Does your competitive set change depending on the segment you are addressing?

Word limit: 500 words