PGDM (RM) (2014-16)

RETAIL ECONOMICS

Subject Code: RM-505

Trimester – V, End-Term Examination: December 2015

Time allowed: 2 Hrs 30 Min **Max Marks:** 50

Roll No:

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means.** Please use answer sheet for rough work.

SECTION-A

Sections	No. of Questions to attempt	Marks	Marks
A	3 out of 5(Short Questions)	5 Marks each	3*5=15
B	2 out of 3(Long Questions)	10 Marks each	2*10=20
C	Compulsory Case Study	15 Marks	15
		Total Marks	**50**

1. The "Secular World" is a retailer of spiritual books with stores in several states. SW sells books directly to the public and also through religious and other social organizations, or given away as promotional items. Operating experience during the past year suggests the following demand function for SW books:

$$Q = 5,000 - 4,000\ P + 0.02\ Pop + 0.5\ I + 1.5\ A,$$

where Q is quantity, P is price (Rupees), Pop is population, I is disposable income per household (Rupees), and A is advertising expenditures (Rupees).

A. Determine the demand faced by SW in a new market in which it expects; P = Rs10, Pop = 1,000,000 persons, I = Rs 30,000, and A = Rs 10,000. (2.5)

B. Calculate the level of demand if SW increases annual advertising expenditures from Rs 10,000 to Rs 15,000. (2.5)

2. The Retail Banking Ombudsman Committee Chairman approaches you with a bill that proposes setting limits on what ATM owners can charge non-account holders, over and above what banks charge their own customers. Currently, large banks charge noncustomers an average fee of Rs1.35 per transaction in addition to the fees the customer's own bank imposes. He asks you to look at a proposal that would place a Rs0.50 cap on the fees ATM owners can charge noncustomer for accessing their money. If this legislation is enacted, what would be the likely effects? (Use a diagram)

3. What pricing' strategy would you recommend a retailer to enhance profitability when the retailer has cost-complementarities and demand for products is interrelated? Discuss (cite an example)

4. Discuss the utility and implications of optimal input substitution principle in retail-business.

5. How can a retailer use returns to scale to derive economies in costs, transaction baskets and inventories?

SECTION-B

1. A retail organisation is akin to a Multi-product firm. Discuss critically and explain the constituent's elements of inputs and outputs of retail production function.

2. Critically examine any two forecasting techniques. What microeconomic and macroeconomic factors must a retailer consider in its, own sales and profit forecasting?

3. The manager of Collins import autos a graduate from Kellogg business school and has been tasked with devising a plan to improve sales across all dealerships. He believes the number of cars sold on a day (Q) depends on two factors: a) The number of hours the dealership is open (H) and b) The number of salespersons working that day(S). He decides to test his hypothesis. After collecting data for two months (53) days the manager estimates the following log-linear model (LN): $Q = a H^b S^c$

The computer output for the multiple regression analysis is shown below:

Dependent Variable: LN Q		R^2	F-Ratio	P-Value on F
Observations:	53	0.82	45.97	0.0003
Variable	**Coefficients**	**Std Error**	**T-Ratio**	**P-Value**
Intercept	0.916	0.2413	3.80	0.0005
LN H	0.3517	0.1021	3.44	0.0012
LN S	0.2550	0.0785	3.25	0.0041

a. Transform this model $Q = a H^b S^c$ into a log linear model for multiple regression analysis. (1)

b. interpret coefficients *b* and *c*? (2)

c. If the dealership increases the number of sales persons by 20 percent what will be the percentage increase in daily sales? (1)

d. If the dealership decreases its hours of operations by 10 percent, what is the expected impact on daily sales? (1)

e. What percent of the total variation in daily auto sales is explained by the regression equation? Explain (2)

f. If H & S both equal 0 are sales expected to be zero? Why or why not? (1)

g. What other factors would you have included and why? (2)

SECTION-C

Case Study

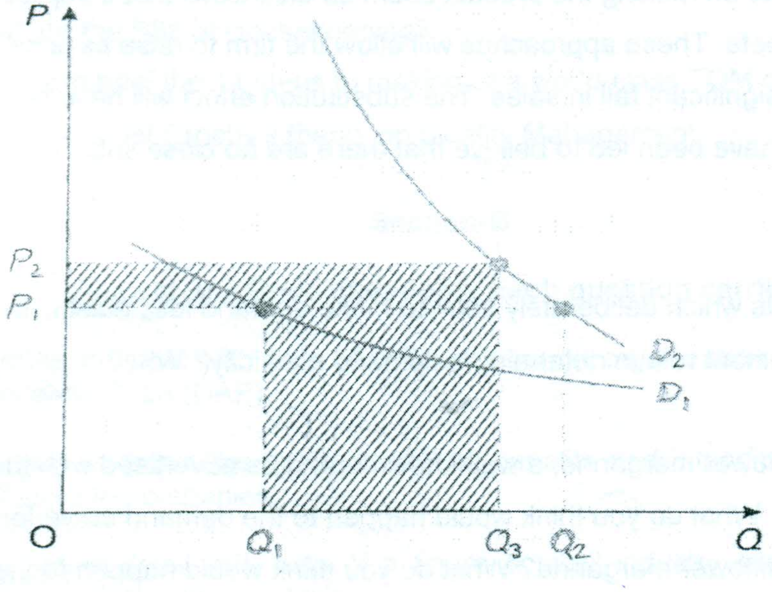
Advertising and its effect

How to increase sales and price

When we are told that brand X will make us more beautiful, enrich our lives, wash our clothes whiter, give us get-up and–go, help us attract more friends, make us the envy of our friends, give us a new taste sensation or allow us to save the planet, just what are the advertisers up to? 'Trying to sell the product', you may reply. In fact there is a bit more to it than this. Advertisers are trying to do two things:

- Shift the product's demand curve to the right.
- Make it less price elastic.

This is illustrated in the diagram. *Effect of advertising on the demand curve*



D_1 shows the original demand curve with price at P_1 and sales at Q_1. D_2 shows the curve after an advertising campaign. The rightward shift allows an increased quantity (Q_2) to be sold at the original price. If the demand is also made highly inelastic, the firm can also raise its price and still have a substantial increase in sales. Thus in Effect of advertising on the demand curve the diagram, price can be raised to P_2 and sales will be Q_3 – still substantially above Q_1. The total gain in revenue is shown by the shaded area.

How can advertising bring about this new demand curve?

It is important here to refer to the existing theoretical literature on the subject. There have traditionally been two dominant views of the role of advertising, which we refer to as the "information" and the "market power" views. In the information view (see Stigler (1961), Nelson (1970, 1974), Grossman and Shapiro (1984)), non-price advertising provides information about the existence of a brand or about its quality. This leads to increased consumer awareness of attributes of available brands, reduced search costs and expanded consideration sets, which, in turn, results in more elastic *demand. The market power view of advertising is that it creates or augments the perceived degree of differentiation among brands. This will increase brand "loyalty" which, in turn, will reduce demand elasticities, increase mark-ups of price over marginal cost, increase barriers to entry and reduce consumer welfare (see, e.g., Bain 1956; Comanor and Wilson 1979).*

Shifting the demand curve to the right

As such, in this particular case this can occur in two ways. First, if the advertising brings the product to more people's attention, then the market for the good grows and the demand curve shifts to the right. Second, if the advertising increases people's desire for the product, they will be prepared to pay a higher price for each unit purchased.

Making the demand curve less elastic.

This will occur if the advertising creates greater brand loyalty. People must be led to believe (rightly or wrongly) that competitors' brands are inferior. This can be done directly by comparing the brand being advertised with a competitor's product. Alternatively, the advertisements may concentrate on making the product seem so distinctive that it implies that no other product can compete. These approaches will allow the firm to raise its price above that of its rivals with no significant fall in sales. The substitution effect will have been lessened because consumers have been led to believe that there are no close substitutes.

Questions:

1. Think of some advertisements which deliberately seek to make demand less elastic. In retail what factors play the dominant role in determining demand elasticity? Why? (5)

2. Imagine that 'Sunshine' sunflower margarine, a well-known brand, is advertised with the slogan 'It helps you live longer'. What do you think would happen to the demand curve for a supermarket's own brand of sunflower margarine? What do you think would happen to the demand curve for a super-market's own brand of sunflower margarine? Consider both the direction of shift and the effect on elasticity. Will the elasticity differ markedly at different prices? How will this affect the pricing policy and sales of the supermarket's own brand? (7)

3. What do you think might be the response of government to the slogan? (3)