

JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA
PGDM / PGDM (M)/ PGDM (SM)
FIRST TRIMESTER (Batch 2022-24)
END-TERM EXAMINATIONS, NOVEMBER 2022

Course Name	Managerial Economics	Course Code	ECO20401
Max. Time	2 hours	Max. Marks	40 MM

INSTRUCTIONS: All questions are compulsory.

SECTION I

Q.1(a). Why do long-run elasticities of demand differ from short-run elasticities? Consider two goods: paper towels and televisions. Which is a durable good? Would you expect the price elasticity of demand for paper towels or televisions to be larger in the short run or in the long run and why? **[2+1+2 Marks]**

(b) Suppose the demand curve for a product is given by :

$$Q = 10 - 2P + P_s$$

where P is the price of the product and P_s is the price of a substitute good.

The price of the substitute good is Rs 2.00. Suppose $P = \text{Rs } 1.00$. Calculate what is the price elasticity of demand? What is the cross-price elasticity of demand?

[3+2 Marks]

Q.2 (a). A USA based company decided to sell its well known shampoo in India through a retail chain. The marketing department tells them that the quarterly demand of an individual person is

$$Q_{d_m} = 30 - 0.25P$$

And the quarterly demand of an average woman is

$$Q_{d_w} = 40 - 0.5P$$

The market consists of 10,000 men and 10,000 women. Determine how many bottles of shampoo can they expect to sell quarterly if they charge Rs 60 per bottle. **[5 Marks]**

(b) What happens to the equilibrium price and quantity of ice cream in response to each of the following? Explain your answers.

1. The price of dairy cow fodder increases.
2. Concerns rise about the fat content of ice cream. Simultaneously, the price of sugar (used to produce ice cream) increases. **[2.5+2.5 Marks]**

Q.3. Analyze how does having a menu that is uniform around the country provide McDonald's with economies of scale? Illustrate how is menu planning made more complex by expanding into other countries? **[2+3 Marks]**

Q.4 Conigian Boxer Company produces cardboard boxes that are sold in bundles of 1000 boxes. The market is highly competitive, with boxes currently selling for \$100 per thousand. Conigan's total and marginal cost curves are:

$$TC = 3,000,000 + 0.001Q^2$$

$$MC = 0.002Q$$

where Q is measured in thousand box bundles per year.

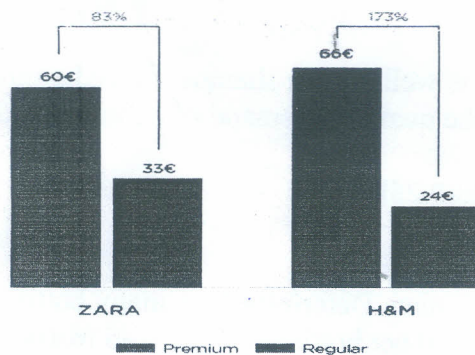
Calculate 1. Conigian profit maximizing quantity and the quantity at which Average Variable Cost (AVC) is minimum. [5 Marks]

SECTION II

Zara and Hennes & Mauritz (H&M): How do these two retail giants differ?

The owners of Zara (Inditex) and H&M (H&M Group) are the world's two biggest players in fashion retail, and as such are under intense scrutiny as the market undergoes changes accelerated by the health crisis. By dissecting the fashion assortment sold online by these two fashion giants, analyst Retviews by Lectra reveals similar trends, but also different strategies.

Average Prices Premium vs. Regular Collections



The main difference in their offerings is the selling prices. Due to supply chain related difficulties (materials, transport, etc.), many brands are passing these price increases on to their customers. From August to December 2021, H&M saw its average price per item increase by 13% (from €24 to €27), while Zara, whose positioning is slightly higher than that of its rival, recorded a jump of 23% (with an average price rising from €31 to €38).

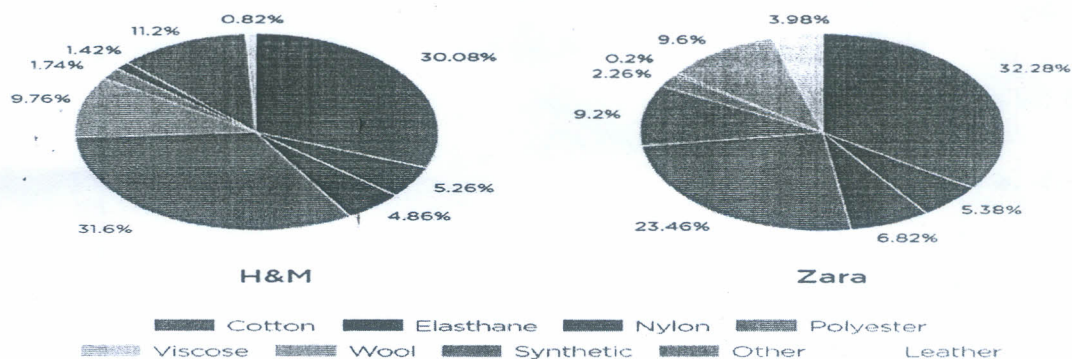
In addition to the difficulties caused by the pandemic, it seems that Zara's elevated prices are also due to its increasing higher quality, since the garments are therefore made with more expensive materials. The premium products offered by the Spanish retail chain, which launched the 'Zara Origins' collection last year, now represent 4.8% of its product portfolio, compared to 4.1% a year ago, an increase of 17%. H&M's premium offerings, on the other hand, have increased by only 2%, reaching 5.6% of the total assortment.

Average Price Variation



Now let's dive into the fibers. What are the materials most used by the two brands in their overall assortment? They are cotton (32% at Zara and 30% at H&M) and polyester (31.6% at H&M, and 23% at Zara), which are both well ahead of other textiles, such as viscose (around 10% for both), nylon, elastane or wool (only 1 to 2% of the supply).

Fabric Mix



In the niche of high-end materials, Retviews by Lectra noted a 44% jump in one year of the presence of cashmere in Zara's e-commerce product offering, and +29% at H&M, despite these knitwear items representing less than 1% of the overall offer. Similarly, leather (which represents 4% of Zara's offer and 0.8% at H&M), made a small breakthrough, from +16% at Zara to +32% at H&M.

When it comes to markdowns, products made from these higher-quality materials are discounted less. This is especially the case at H&M, which discounts around 7% of these items (compared to 22% for other products), while Zara discounts 19% of pieces made with premium materials, compared to 23% for the rest of its products.

In terms of their eco-labeled products (which are included in the main range and in specific lines), H&M appears to be a little further ahead than Zara: the former has 21% of its items labeled 'Conscious', while the latter has 16% of products stamped by its 'Join Life' label.

Adapted from (Fashion Network, published on 10 Feb, 2022)

Q.5(a). Examine the market structure in which Zara and H&M are operating in India. Validate with suitable arguments.

[5 Marks]

Q.5(b). Define Market Power. Identify the sources from where Zara is earning its market Power?

[5 Marks]