# MICROECONOMICS



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Assignment Final Term Paper

Submitted to Ms. Wajiha Amin

> Date 25<sup>th</sup> Sep 2020

DEPARTMENT OF BUSINESS ADMINISTRATION IQRA NATIONAL UNIVERSITY Session: 2017-2020

## Iqra National University



School of Management and Social Sciences (Dept. of Business Administration)

**Final term- Summer Semester 2020** 

**Course Code: 1028** 

**Course Title: Microeconomics** 

Instructor: Ms. Wajiha Amin

#### **Total Marks: 50**

#### Attempt all questions.

**Q1.** Select the best answer.

(10)

1. If an increase in the price of blue jeans leads to an increase in the demand for tennis shoes, then blue jeans and tennis shoes are

- a. complements.
- b. inferior goods.
- c. normal goods.
- d. none of these answers.
- e. substitutes.
- 2. Which of the following shifts the demand for watches to the right?
- a. an increase in the price of watches
- b. none of these answers
- c. a decrease in the price of watch batteries if watch batteries and watches are complements
- d. a decrease in consumer incomes if watches are a normal good
- e. a decrease in the price of watches

3. If the price of a good is above the equilibrium price,

- a. there is a surplus (i.e. an excess supply) and the price will rise.
- b. there is a shortage (i.e. an excess demand) and the price will fall.
- c. there is a shortage (i.e. an excess demand) and the price will rise.
- d. the quantity demanded is equal to the quantity supplied and the price remains unchanged.
- e. there is a surplus (i.e. an excess supply) and the price will fall.

4.Suppose there is an increase in both the supply and demand for personal computers. Further, suppose the supply of personal computers increases more than demand for personal computers. In the market for personal computers, we would expect

a. the change in the equilibrium quantity to be ambiguous and the equilibrium price to fall.

- b. the equilibrium quantity to rise and the equilibrium price to rise.
- c. the equilibrium quantity to rise and the change in the equilibrium price to be ambiguous.
- d. the equilibrium quantity to rise and the equilibrium price to fall.
- e. the equilibrium quantity to rise and the equilibrium price to remain constant.

5. If an increase in the price of a good has no impact on the total revenue in that market, demand must be

- a. all of these answers.
- b. price inelastic.
- c. unit price elastic.
- d. price elastic.
  - 6. Which of the following statements is true?
  - a. All costs are fixed in the short c. All costs are variable in the short run.
  - b. All costs are variable in the long d. All costs are fixed in the long run. run.
- 7. Ceteris Paribus means:
- (a) All variables are independent
- (b) All relationships are inverse
- (c) Other things are equal
- (d) That no other assumptions are made
- 8. Giffen Goods are\_\_\_\_
- (a) Superior Goods
- (b) Inferior Goods
- (c) Average Quality Goods
- (d) None of the Above

9. The law of diminishing (marginal) returns states that as more of a variable factor is added to a certain amount of a fixed factor, beyond some point:

- a. Total physical product begins to fall
- b. The marginal physical product rises
- c. The marginal physical product falls
- d. The average physical product falls

10. If the price change is 10% and the resulting demand change is 7% then the Ed=

a. Equal to unity b. Zero c. less than one

#### Indicate whether the statement is true or false (2)

1. Total revenue equals the quantity of output the firm produces times the price at which it sells its output.

2. If a firm continues to employ more workers within the same size factory, it will eventually experience diminishing marginal product.

Q2: (a) Explain the "law of supply" through an example. (5)

(b) Give few exceptions to the law of supply. (5)

Q3: Differentiate between: (3+3+4=10)

- Price ceiling and price floor
- Fixed cost and variable cost
- Perfect competition and monopolistic competition

Q4: (a) What is monopoly? Give its characteristics. (5)

(b) Briefly explain the *"law of variable proportions"*. (5)

Q5: (a) What are various stages of production in short run? In which stage the firm will produce? (5)

(b) Briefly discuss any topic of your choice in *microeconomics*. (3)

# Question #1 (Part A)

## Select the best answer.

#### Answer

- **1.** If an increase in the price of blue jeans leads to an increase in the demand for tennis shoes, then blue jeans and tennis shoes are
- a) Complements.
- b) Inferior goods.
- c) Normal goods.
- d) None of these answers.
- e) Substitutes.
- 2. Which of the following shifts the demand for watches to the right?
- a) an increase in the price of watches
- b) none of these answers
- c) a decrease in the price of watch batteries if watch batteries and watches are complements
- d) a decrease in consumer incomes if watches are a normal good
- e) a decrease in the price of watches

## 3. If the price of a good is above the equilibrium price,

- a) There is a surplus (i.e. an excess supply) and the price will rise.
- b) There is a shortage (i.e. an excess demand) and the price will fall.
- c) There is a shortage (i.e. an excess demand) and the price will rise.
- d) the quantity demanded is equal to the quantity supplied and the price remains unchanged.
- e) There is a surplus (i.e. an excess supply) and the price will fall.
- 4. Suppose there is an increase in both the supply and demand for personal computers. Further, suppose the supply of personal computers increases more than demand for personal computers. In the market for personal computers, we would expect
- a) The change in the equilibrium quantity to be ambiguous and the equilibrium price to fall.
- b) The equilibrium quantity to rise and the equilibrium price to rise.
- c) The equilibrium quantity to rise and the change in the equilibrium price to be ambiguous.
- d) The equilibrium quantity to rise and the equilibrium price to fall.
- e) The equilibrium quantity to rise and the equilibrium price to remain constant.
- 5. If an increase in the price of a good has no impact on the total revenue in that market, demand must be
- a) All of these answer.
- b) Price inelastic.
- c) Unit price elastic.
- d) Price elastic.

#### 6. Which of the following statements is true?

- a) All costs are fixed in the short run.
- b) All costs are variable in the long run.
- c) All costs are variable in the short run.
- d) All costs are fixed in the long run.

#### 7. Ceteris Paribus means:

- a) All variables are independent
- b) All relationships are inverse
- c) Other things are equal
- d) That no other assumptions are made

#### 8. Giffen Goods are.

- a) Superior Goods
- b) Inferior Goods
- c) Average Quality Goods
- d) None of the Above
- 9. The law of diminishing (marginal) returns states that as more of a variable factor is added to a certain amount of a fixed factor, beyond some point:
- a) Total physical product begins to fall
- b) The marginal physical product rises
- c) The marginal physical product falls
- d) The average physical product falls
- 10. If the price change is 10% and the resulting demand change is 7% then the Ed=
- a) Equal to unity
- b) Zero
- c) less than one

# Question #1 (Part B)

#### Indicate whether the statement is true or false.

#### Answer

- 1. Total revenue equals the quantity of output the firm produces times the price at which it sells its output. **True**
- 2. If a firm continues to employ more workers within the same size factory, it will eventually experience diminishing marginal product. **True**

# Question # 2 (Part A)

#### Explain the "law of supply" through an example.

#### Answer

#### **Definition:**

Law of supply states that other factors remaining constant, price and quantity supplied of a good are directly related to each other. In other words, when the price paid by buyers for a good rises, then suppliers increase the supply of that good in the market.

#### **Description:**

Law of supply depicts the producer behavior at the time of changes in the prices of goods and services. When the price of a good rises, the supplier increases the supply in order to earn a profit because of higher prices.



The above diagram shows the supply curve that is upward sloping (positive relation between the price and the quantity supplied). When the price of the good was at P3, suppliers were supplying Q3 quantity. As the price starts rising, the quantity supplied also starts rising.

#### For example,

A company could supply 1 million items if the price is \$200 each, but if the price doubles to \$400, they might supply 2 million items. The company would have to purchase more resources in order to produce the 2 million items, but if that does not increase its costs per unit, it would generate more sales and ultimately more profit. If prices increase and costs do not, increasing profits, suppliers will have an incentive to increase the quantity supplied and increase profits.

# **Question # 2 (Part B)**

#### Give few exceptions to the law of supply.

#### Answer.

The normal law of supply is widely applicable to a large number of Products. There are certain exceptions to law of supply, like a change in the price of a good does not lead to a change in its quantity supplied in the positive direction.

The law of supply is not a universal principle that applies to all circumstances. There are, in fact, various important exceptions to the law of supply. Some exceptions to law of supply are given below:

- Change in business
- Monopoly
- Competition
- Perishable Goods
- Legislation Restricting Quantity
- Agricultural Products
- Artistic and Auction Goods

# **Question #3**

Differentiate between;

- Price ceiling and price floor
- Fixed cost and variable cost
- Perfect competition and monopolistic competition

#### Answer

#### Price ceiling and price floor

A price ceiling is a legal maximum price that one pays for some good or service.

A price floor is the lowest price that one can legally pay for some good or service.

#### Fixed cost and variable cost

Fixed costs are predetermined expenses that remain the same throughout a specific period.

Variable costs, however, change over a specified period and are associated directly to the business activity.

#### Perfect competition and monopolistic competition

Perfect competition is a market structure in which there are numerous sellers in the market, selling similar goods that are produced/manufactured using a standard method and each firm has all information regarding the market and price, which is known as a perfectly competitive market.

Monopolistic competition is a type of imperfect market structure. In a monopolistic competition structure, a number of sellers sell similar products but not identical products. Products or services offered by sellers are substitutes of each other with certain differences. A market can be described as a place where buyers and sellers meet, directly or through a dealer for transactions.

# **Question # 4 (Part A)**

#### What is monopoly? Give its characteristics.

#### Answer

#### Monopoly

#### **Definition:**

A market structure characterized by a single seller, selling a unique product in the market. In a monopoly market, the seller faces no competition, as he is the sole seller of goods with no close substitute.

In a monopoly market, factors like government license, ownership of resources, copyright and patent and high starting cost make an entity a single seller of goods. All these factors restrict the entry of other sellers in the market. Monopolies also possess some information that is not known to other sellers.

Characteristics associated with a monopoly market make the single seller the market controller as well as the price maker. He enjoys the power of setting the price for his goods.

#### Characteristics

A monopoly can be recognized by certain characteristics that set it aside from the other market structures:

- Profit maximizer: a monopoly maximizes profits. Due to the lack of competition a firm can charge a set price above what would be charged in a competitive market, thereby maximizing its revenue.
- Price maker: the monopoly decides the price of the good or product being sold. The price is set by determining the quantity in order to demand the price desired by the firm (maximizes revenue).
- High barriers to entry: other sellers are unable to enter the market of the monopoly.

- Single seller: in a monopoly one seller produces all of the output for a good or service. The entire market is served by a single firm. For practical purposes the firm is the same as the industry.
- Price discrimination: in a monopoly the firm can change the price and quantity of the good or service. In an elastic market the firm will sell a high quantity of the good if the price is less. If the price is high, the firm will sell a reduced quantity in an elastic market.

# Question # 4 (Part B)

#### Briefly explain the "law of variable proportions".

#### Answer

The law states that keeping other factors constant, when you increase the variable factor, then the total product initially increases at an increases rate, then increases at a diminishing rate, and eventually starts declining.

#### Why is it called the Law of Variable Proportions?

As one input varies and all others remain constant, the factor ratio or the factor proportion varies. Let's look at an example to understand this well:

Let's say that you have 10 acres of land and 1 unit of labour for production. Therefore, the land-labour ratio is 10:1. Now, if you keep the land constant but increase the units of labour to 2, the land-labour ratio becomes 5:1.

Therefore, as you can see, the law analyses the effects of a change in the factor ratio on the amount of out and hence called the Law of Variable Proportions.

#### Law of Variable Proportions Explained

Let's understand this law with the help of another example:

Fixed Factor : Land (Acres)	Variable Factor: Land (Units)	TPP (Total Physical Product) (Quantity)	MPP (Marginal Physical Product) (Quantity)
1	0	0	
1	1	2	2 Stage
1	2	6	4
1	3	12	6
1	4	16	4
1	5	18	2 Stage
1	6	18	0
1	7	14	-4 Stage
1	8	8	-6

In this example, the land is the fixed factor and labor is the variable factor. The table shows the different amounts of output when you apply different units of labor to one acre of land which needs fixing.

The following diagram explains the law of variable proportions. In order to make a simple presentation, we draw a Total Physical Product (TPP) curve and a Marginal Physical Product (MPP) curve as smooth curves against the variable input (labor).



# **Question # 5 (Part A)**

# What are various stages of production in short run? In which stage the firm will produce?

#### Answer

The three stages of short-run production are readily seen with the three product curves--total product, average product, and marginal product. A set of product curves is presented in the exhibit to the right. The variable input in this example is labour.

The top panel contains the total product curve (TP). It generally rises, reaches a peak, and then falls. The bottom panel contains the marginal product curve (MP) and the average product curve (AP). Both curves rise a bit for small quantities of the variable input labour, then decline. Marginal product eventually turns negative, but average product remains positive.

The three short-run production stages are conveniently labelled I, II, and III, and are separated by vertical lines extending through both panels.



#### Most of the firm produce in stage 2 and 3.

#### **Stage One**

Stage one is the period of most growth in a company's production. In this period, each additional variable input will produce more products. This signifies an increasing marginal return; the investment on the variable input outweighs the cost of producing an additional product at an increasing rate. As an example, if one employee produces five cans by himself; two employees may produce 15 cans between the two of them. All three curves are increasing and positive in this stage.

#### Stage Two

Stage two is the period where marginal returns start to decrease. Each additional variable input will still produce additional units but at a decreasing rate. This is because of the law of diminishing returns: Output steadily decreases on each additional unit of variable input, holding all other inputs fixed. For example, if a previous employee added nine more cans to production, the next employee may only add eight more cans to production. The total product curve is still rising in this stage, while the average and marginal curves both start to drop.

#### **Stage Three**

In stage three, marginal returns start to turn negative. Adding more variable inputs becomes counterproductive; an additional source of labour will lessen overall production. For example, hiring an additional employee to produce cans will actually result in fewer cans produced overall. This may be due to factors such as labour capacity and efficiency limitations. In this stage, the total product curve starts to trend down, the average product curve continues its descent and the marginal curve becomes negative.

# **Question # 5 (Part B)**

Briefly discuss any topic of your choice in *microeconomics*.

#### Answer

#### Microeconomics

Microeconomics is a branch of economics that studies the behaviour of individuals and businesses and how decisions are made based on the allocation of limited resources. Simply put, it is the study of how we make decisions because we know we don't have all the money and time in the world to purchase and do everything. Microeconomics examines how these decisions and behaviours affect the supply and demand for goods and services, which determine the prices we pay. These prices, in turn, determine the quantity of goods supplied by businesses and the quantity of goods demanded by consumers.

## Supply and Demand

Supply and demand are the most fundamental tools of economic analysis. Many topics and economic reasoning involve supply and demand in one form or another. So what is supply and demand?

Supply and demand, in economics, relationship between the quantities of a commodity that producers wish to sell at various prices and the quantity that consumers wish to buy. It is the main model of price determination used in economic theory. The price of a commodity is determined by the interaction of supply and demand in a market. The resulting price is referred to as the equilibrium price and represents an agreement between producers and consumers of the good. In equilibrium the quantity of a good supplied by producers equals the quantity demanded by consumers.

Let's look at a simple example. In the winter, the cold causes you to heat your house for more hours than you would in other months. This is likely true not just for you, but for all of your neighbors as well. As a result, demand for heat is higher. Because demand is higher, gas companies can charge more for gas.

Similarly, an oil spill from a tanker, bad weather, or war in the Middle East may often create a short-term gas shortage, which is a reduction in supply and can affect the price you pay, also.



**End of Paper**