

ASSIGNMENT #2

MICRO ECONOMICS

①

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18K-0363
Section D

Q1. Demand: Quantities of services or goods that people are ready to buy at various prices within some given time period. Other factors are held constant.

Supply: Quantities of services or goods that people are ready to sell at various prices within a timeframe. Other factors are constant.

→ Quantity demanded is quantity demanded by economic growth (consumers, time etc). It is a single number, demand on the other hand is function of quantity & price. It states how much will be demanded at any price.

→ Quantity Supplied: refers to amount of good a business provides at a specific price. Supply refers to an equation of line on graph at each price.

Q2. Non-Price Determinants
of Demand

- 1) Taste or preferences
- 2) Income
- 3) Price of related products
- 4) Future expectations
- 5) Number of Buyers

Non-Price Determinants
of Supply

- 1) Cost & technology
- 2) Price of other effected by seller
- 3) Future expectations
- 4) Number of sellers
- 5) Weather Conditions

(2)

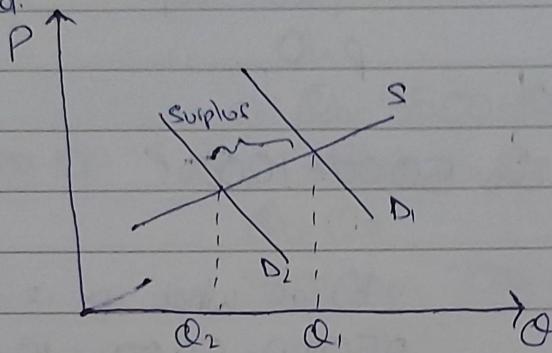
- Q3. Price and quantity demanded are inversely related because when price increases consumer tends to shift to other products which are relatively cheaper. Conversely when price of good falls consumers tend to purchase more of that good and less of relatively expensive goods.
- Q4. Competitive static analysis is a tool that can be used to analyze a system of equations. The use of comparative statics analysis on an economic model can provide valuable info on how an economic system works.
- Sensitivity analysis is a way to predict the outcome of a decision if a situation turns out to be different compared to the ~~to~~ very predictions.
- Q5. Rationing functions of a price features raising the price higher so that less of the consumable will be purchased and used by the customer and more will be rationed.
- The distribution or allocation of a limited commodity using markets and prices. Rationing is needed due to the scarcity problem. Because wants and needs are unlimited but resources aren't, available commodity should be rationed out.
- Q6. The price in a competitive market serves two very important functions, rationing and allocating. It relates to the buyers of goods, price is used to ration the limited quantity of a good amongst various buyers.

(3)

- Q7 Short term run is a period of time in which the quantity of at least one input is fixed and the quantities of the other inputs can be varied. The long run of time is a period of time in which the quantities of all inputs can be varied.
- Q8 Scarcity is a term used to mean unavailability of resources. It takes a long time to recover from it.
Shortage is used to show the unavailability of some thing which was formerly unavailable. Requires short time to recover from it.
- Q9. For managers, it is important to understand the two as they have to understand the machinery, labour and raw materials needed. It is important for them to know the statistics in order to help them plan in advance. During the two periods to ensure there is no shortage or surplus in productivity. The knowledge of the mechanism also helps in general planning of production in order to take care of market in terms of demand & supply.
- Q10. Disagreed because only small group of society can afford luxury item more than a need is a status symbol so people to keep status will buy luxury items even if government increases taxes.

④

Q11. Yes demand is used in consistent with economic theory because it refers to the supply of the product as a result of the competition this company is facing in the market and the company is applying laws of economics to browse back by stimulating the demand.



- Q12.
- a- single parent will increase demand
 - b- will increase
 - c- decline as more use of internets
 - d- increase as price decreases
 - e- decrease, can be downloaded
 - f- decrease as monthly subscription is getting famous
 - g- increase, tourism
 - h- increase, transport

- Q13.
- a- discovery of new field \rightarrow increase
 - b- hard to earn \rightarrow decline
 - c- new companies built \rightarrow increase
 - d- new hotels built \rightarrow increase
 - e- new outlet brands \rightarrow increase

(5)

NUMERICALS

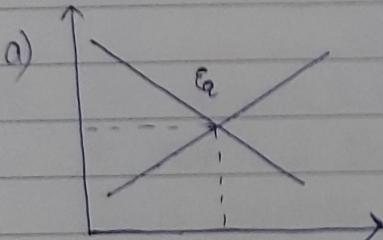
$$\textcircled{1} \quad Q_s = 2000 - 100P$$

a) at $P = 12$, $Q_s = ?$
 $Q_s = 2000 - 120$
 $= 800$

b) at $Q_s = 1000$, $P = ?$
 $1000 = 2000 - 100P$
 $P = 10$

c) at $Q_s = 0$, $P = ?$
 $P = \frac{2000}{100}$
 $P = 20$

$$\textcircled{2} \quad Q_s = 25000P \quad Q_d = 50,000 - 10,000P$$



b) at what P is $Q_s = Q_d$
 $25000P = 50,000 - 10,000P$
 $P = \$1.4$

$$\textcircled{3} \quad Q_d = 65,000 - 10,000P \quad Q_s = -25000 + 15000P$$

a) Price (\$)	Q_s	Q_d	Surplus or Shortage
6.00	5000	55000	Shortage
5.00	15000	40000	Shortage
4.00	25000	25000	equilibrium
3.00	35000	10000	Surplus
2.00	45000	-5000	Surplus
1.00	55000	-20000	Surplus

b) \$4.00

p. 831.

(6)

$$Q_4: Q_D = 3000 - 10P \quad Q_S = -1000 + 10P$$

$$a) Q_D = 0$$

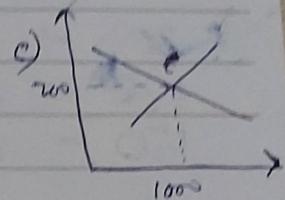
$$0 = 3000 - 10P$$

$$P = 300$$

$$b) Q_S = 0$$

$$0 = -1000 + 10P$$

$$P = 100$$



$$d) \text{ at } Q_D = Q_S$$

$$-1000 + 10P = 3000 - 10P$$

$$P = 200$$

$$e) Q_D = 3500 - 10P$$

effect on supply

$$Q_D = Q_S$$

$$3500 - 10P = -1000 + 10P$$

$$P = 225$$

(Supply increases as price increases)

$$Q_S = 1000 + 225 = 1225$$

$$Q_D = 3500 - 10(225) = 1225$$

$$f) Q_S = -500 + 10P$$

$$Q_S = Q_D$$

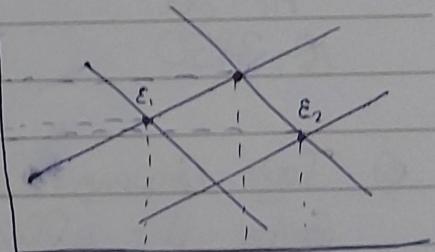
$$P = 200$$

$$Q_D = 3500 - 10P$$

$$Q_S = 1500$$

$$Q_D = 1500$$

g)



$$Q_5: Q = 1000 - 200P + 0.03Pop + 0.6I + 0.2A$$

Q : quan/month, P : price, Pop : population, I : disposable Income
 A : adversity

$$a) P = 300, Pop = 10,00,000, I = 30,000, A = 1500$$

$$Q = ? \quad Q = 1000 - 200(300) + 0.03(10,00,000) + 0.6(30,000) + 0.2(1500)$$

$$Q = 1000$$

PERB12.

Q7

b) Q at p = 200, 125, 150, 125

$$200 \rightarrow Q = 21000$$

$$125 \rightarrow Q = 26000$$

$$150 \rightarrow Q = 36000$$

c) Price it sell 45000

units

$$Q = 45000$$

$$200p = 6500 - 4500$$

$$p = \$20$$

Q6 Q = 200 - 300p + 120I + 65T - 260A_c + 140A_s

a) P = 15, J = 10, T = 60, A_c = 15, A_s = 10

$$Q = 1005100$$

b) P = 5000 rest same

$$A_c = 20$$

$$Q = 3850$$

price increased and the demand for joy as the other company advertised more.

c) Toys Company's ad budget would have to increase to counter this effect.

Q7 Price decreased due to 2 possible reasons:

① Sudden increase in supply

more supply = less demand. More supply = price increases so for equilibrium price is decreased.

② Sudden increase in demand.

demand increase = $\frac{\text{Supply}}{\text{Increase}} \text{ price} = \text{increase price}$. For equilibrium, price decreased.

Ans.

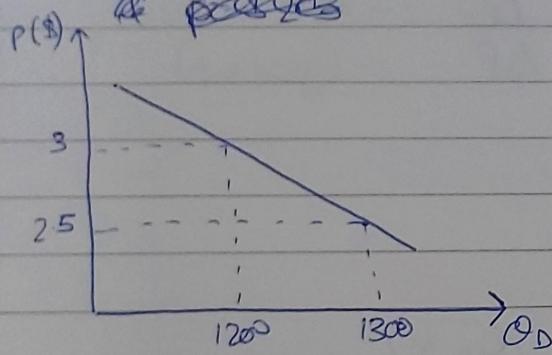
(P)

$$Q = 1000 - 3000P + 10A$$

a) $P = \$3 \quad A = 2000$

$$Q = 12000$$

& per 1000

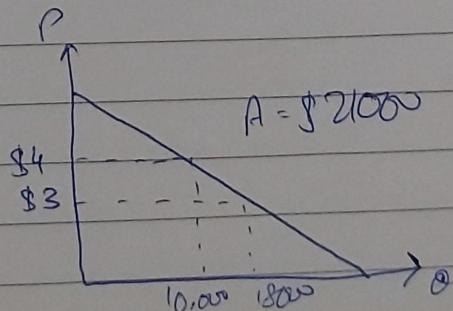
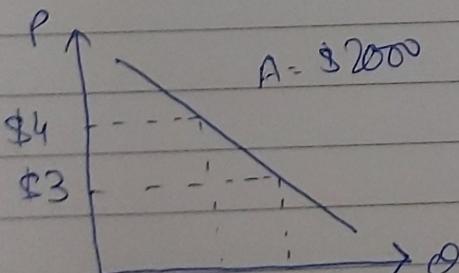


$P(\$)$	Q_D
3	1200
2.5	13500

yes it is beneficial as quantity demanded increases.

b) $P = 4 \quad A = \$21000$ (inc \$100)

P	$Q_P(2000)$	$Q_D(21000)$
\$4	9000	10,000
\$3	12000	18,000



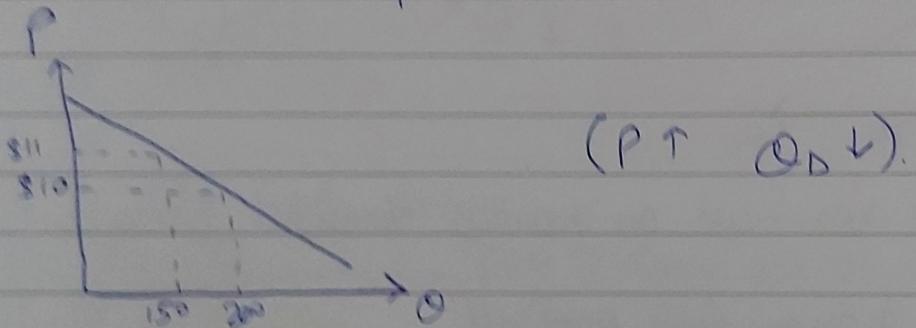
PERBL.

⑨

Q13 200 glasses at \$10
increase price ato \$11 and sold 26 less

a) $Q = 200 \quad P = \$10 \quad \frac{\Delta Q}{\Delta P} = -20$
 $Q = 180 \quad P = \$11 \quad (\text{gradient})$

$Q = 400 - 20P$



$(P \uparrow \quad Q_D \downarrow)$.

b) $P = \$15 \quad Q = ?$

$Q = 400 - 20P$

$Q = 100$

Ans.