Date:

Assignment # 02

K-180318

"Micro Economics"

Qno1

Demand:

Quantities of a good or services that people are ready to buy at various price within some given time period, other factors besides Price held constant

Supply:

Quantities of a good or Services that people are ready to sell at Various prices within some given time period, Other factor beside Price held constant.

Difference b/w Demand & Quantity Demand:

In economics, Demand refers to the Demand Schedule i.e the Demand Curve while the Quantity Demanded is a point on a Single Demand curve which corresponds to a Specific point.

It is important to distinguish between the two terms because ~~the two terms~~ they refer to totally different Concepts. when we say that Demand for a product or service has changed, we mean that the whole demand curve has shifted inwards or outwards. However, when we say that there is a change quantity Demanded, we mean that due to change in price of the product, the no of units of the product which Consumers are willing to buy at the new price has changed.

Difference b/w Quantity Supply and Supply

Quantity Supplied refers to the amount of good a business provide at a Specific price. Supply refers to an equation on line on a graph Showing the different quantities provided at each possible point.

Qno2

Non- price determines of Demand.

1) Taste and preferences
2) Income 3) price of related product
4) future expactation
5) Number of buyers.

Non- price determinants of Supply.

1) Cost and technology
2) Price of Other goods offered by the seller
3) future expactation
5) weather condition.

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Qno 3

The reason is that consumers are willing and able to buy more of a good the lower the price of the good and willing less of a good the higher the price of the good. Price and quantity demanded are inversely related because when the price of a good rises, Consumers tend to shift from that good to Other goods that are now relatively cheaper. conversely when the price of a good falls, Consumer tend to purchase more of that good and less of the Other good that are now relatively more expensive.

Qno 4

Comparative Static analysis is a tool that can be used to analyze a system of equations. The use of comparative static analysis on an economic model can provide valuable information about how an economic system works. Sensitive analysis is a way to predict the outcome of a decision if a situation turns out to be different compared to the key prediction(s).

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Qno5

Rationing function of price feature raising the price higher so that less of the consumable will be purchase and used by the customers and more will be consumed or 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 are limited, available commodities must be rationed out to competing user.

Qno7

Short Run:

The Short run is a period of time in which the quantity of at least one input is fixed and the quantity of the other input can be varied.

Long Run:

The long run is a period of time in which the quantities of all inputs can be varied.

* Seller already in the market respond to a change in equilibrium price by adjusting variable inputs

* Buyers already in the market respond to change in equilibrium price by adjusting the quantity demanded for the good or Service.

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* Existing Seller may exit from the market.
* Existing Seller may adjust fixed factors of production
* Buyers may react to a change in equilibrium price by changing their taste and prefrences or buying preferences.

Q no 8

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 formely available. It takes a busines or an organization a short time to recover from it.

Q no 9

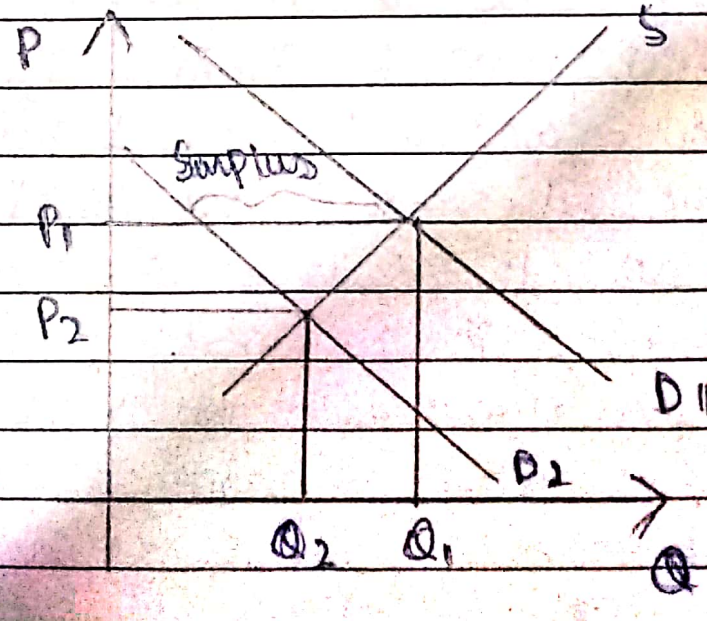
for managers, it is important to understand the two as they have to understand the machinery. Labour and raw material needed It is important for them to know this Statistics in order to help them plan in ~~academic~~ advance during the two period to ensure there is no shortage or surplus in production. The knowledge of the ~~machines~~ mechanics also helps in general planing of the production in order to take care of the market in terms of demand and supply.

Qno 10

I disagree with the statement as, only a small group of society can afford luxury ~~items~~ items. for than a need it is a status Symbol, so people to maintain the status for sure will afford to buy luxury items even if the Government increases the taxe.

Qno 11

Yes, the term demand is used in constant 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 the laws of economics to bounce back by stimulity the Demand.



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Qno 12

A Convenience food - busier life styles, two-income families Single-parent household will continue to cause demand for convenience food to increase.

B. product purchased on internet: Demand is already increasing drastically for good purchased on the internet and is pased to explode in the next five years.

C. Fax Machines: Will decline as usage of internet fax modem & email attachedments continue to rise.

D. films and Cameras: May decrease as digital Camera because less expensive and in greater demand.

E. Videos rented from retail outlets. Pay per view and Satelite TV program will continue to code video rented Demand.

F. Pay-per-View television programming: pay-per-view shall increase as board cast based connections to the home made this from of entertainment Cheapes and easies to use.

G. Airline travel with the US; airline travel with Europe. Longes jam trends point in an upward direction.

H. Gasoline: It is dificult to tell, but if

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demands for SUV and trucks continue to rise there will also be a steady increase in Demand.

Q no 13

Crude Oil:

Discovery of new source of oil: Supply increases (1) Invention of new long lasting battery for electric cars. Supply decrease (3) Mergers for acquistion .. these mergers may cause supply to increase or decrease depending on the intention of the larger companies that have even more power over supply.

Beef:

(1) Cattle declines as it become harder to earn a good return in the market for beef (2) Income in beef imports from countries such as Argentina - supple

(c) Computer Memory chips

Increase in the building of new manufacturing facilities in Asian countries such as Taiwan - supply increase.

(e) Hotel Rooms: Mergers and acquisitions in hotel industry.

(f) Fast food outlest: US of European based multinational such as MC Donalds and burger king build new restwants in an attempt to expand their global

Problems

Qno 1

Demand function:

$$Q = 2,000 - 100P$$

Q at $P = \$12$

$$Q = 2,000 - 100(12)$$

(a) $\boxed{Q = 800}$

(b) $Q = 2,000 - 100P$

at $Q = 1,000$

$$1,000 = 2,000 - 100P$$

$$1,000 - 2000 = -100P$$

$$\frac{-1000}{-100} = P$$

$$\boxed{P = 10}$$

(c) $Q = 2,000 - 100P$

at $Q = 0$

$$0 = 2000 - 100P$$

$$100P = 2,000$$

$$P = \frac{2,000}{100}$$

$$\boxed{P = 20}$$

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Qno2

Given:

$Q_S = 25,000P$

$Q_D = 50,000 - 10,000P$

(a - part)

$Q_D = 0$

$0 = 50,000 - 10,000P$

$10,000P = 50,000$

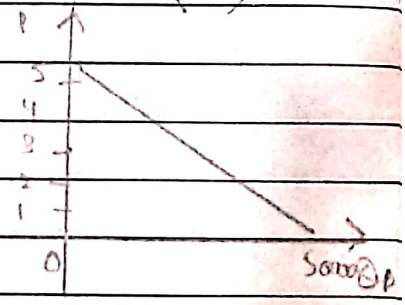
$P = \frac{50,000}{10,000}$

$P = 5$

let $P = 0$

$Q_D = 50,000 - 10,000(0)$

$Q_D = 50,000$



Demand curve

for Supply Curve

let $Q_S = 0$

$0 = 25,000P$

$P = 0$

let $P = 0$

$Q_S = 25,000(0)$

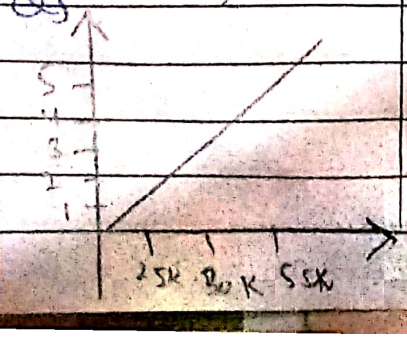
$Q_S = 0$

Assume that

$P = 5$

$Q_S = 25000 \times 5$

$Q_S = 125,000$



(b - part)

$Q_S = Q_D$

$25,000P = 50000 - 10000P$

$25,000P + 10000P = 50000$

$P = \frac{50000}{35000} = 1.428$

Put 1.428 in Q_S

$Q_S = 25,000(1.428571)$

$Q_S = 35714.28$

Equilibrium price is 1.428

Equilibrium Quantity is 35714.28

I.R Paper Product

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Q no 3

(a) $Q_D = 65,000 - 10,000P$

$Q_S = -35,000 + 15,000P$

Price	Q_S	Q_D	Surplus or Shortage.
$6.00	55000	5000	Surplus 50000 (price flows)
5.00	40000	15000	Surplus 25000 (price flows)
4.00	25000	25000	—
3.00	10000	35000	Shortage 25000 (price raises)
2.00	-5000	45000	shortage 50000 (price raises)
1.00	-20000	55000	Shortage 75000

Price ceiling

~~Q no 4~~

(b) Equilibrium price

$Q_D = Q_S$

$65,000 - 10000P = -35,000 + 15,000P$

$65,000 + 35,000 = 15,000P + 10000P$

$100000 = 25000P$

$\frac{100000}{25000} = P$

$\boxed{P = 4}$

put $P = 4$ in Q_D equation

$Q_D = 65,000 - 10000(4)$

$\boxed{Q_D = 25000}$

Equilibrium price is 4.

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Qno4

$Q_D = 3,000 - 10P$

$Q_S = -1,000 + 10P$

(a part)

(a) $Q_D = 3,000 - 10P$

$Q_D = 0$

$0 = 3,000 - 10P$

$10P = 3,000$

$P = \frac{3,000}{10}$

$\boxed{P = 300}$

(b part)

(b) $Q_S = -1,000 + 10P$

$Q_S = 0$

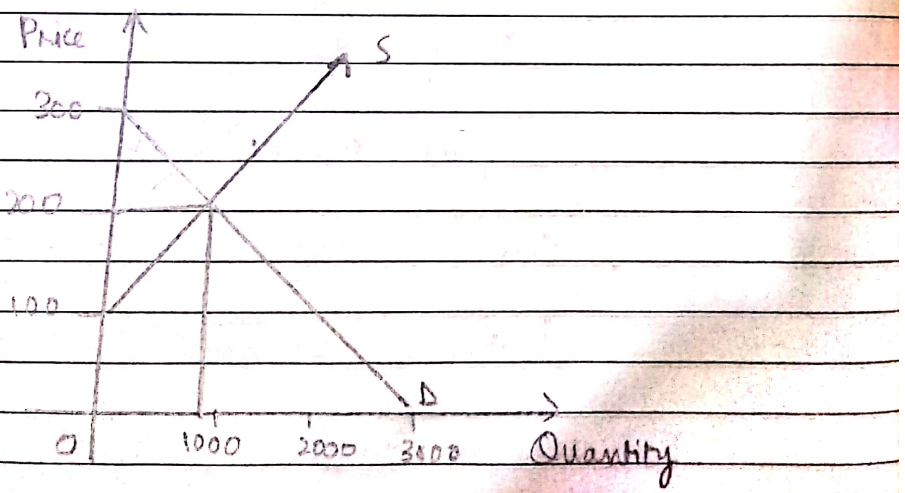
$0 = -1,000 + 10P$

$1000 = 10P$

$P = \frac{1,000}{10}$

$\boxed{P = 100}$

(c part)



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(D part)

(d) $Q_D = Q_S$

$3,000 - 10p = -1,000 + 10P$

$3,000 + 1,000 = 10P + 10P$

$4,000 = 20p$

$p = \frac{4,000}{20}$

$\boxed{p = 200}$

put $P = 20$ in demand equation

$Q_D = 3,000 - 10(200)$

$\boxed{Q_D = 1000}$

$Q_S = -1,000 + 10(200)$

$\boxed{Q_S = 1000}$

Equilibrium price is 200 and equilibrium Quantity is 1000

(E part)

(e) $Q_D = 3,500 - 10p$

$Q_S = -1,000 + 10P$

$Q_D = Q_S$

$3,500 - 10p = -1,000 + 10p$

$3,500 + 1,000 = 10p + 10p$

$4500 = 20p$

$p = \frac{4500}{20}$

$\boxed{p = 225}$

put $p = 225$ in supply eqn

$Q_S = -1,000 + 10(225)$

$Q_S = -1,000 + 2250$

$\boxed{Q_S = 1250}$ Supply increases

(f part)

$Q_S = -500 + 10P$

$Q_D = Q_S$

$3,000 - 10P = -500 + 10P$

$3,000 + 500 = 10P + 10P$

$3500 = 20P$

$P = \frac{3500}{20}$

$\boxed{P = 175}$

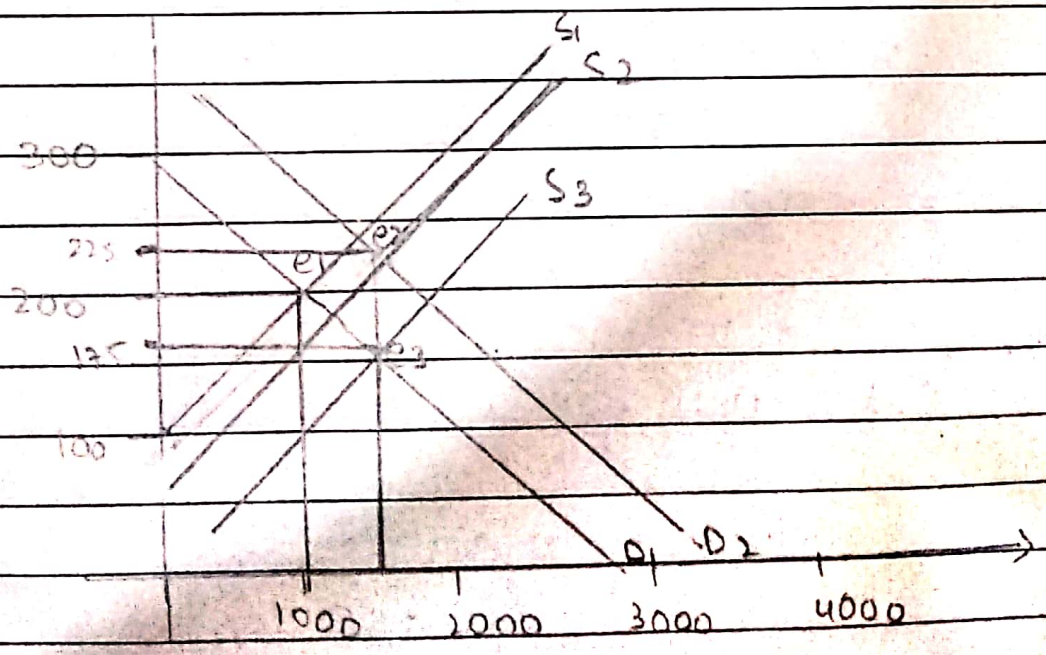
put $P = 175$ in Quantity function

$Q_D = 3,000 - 10P$

$Q_D = 3,000 - 10(175)$

$\boxed{Q_D = 1250}$

(g part)



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Q no 5

(a part)

$Q = 1,000 - 200p + 0.03pop + 0.6I + 0.2A$

$Q = 1,000 - 200(300) + 0.03(1,000,000) + 0.6(30,000) + 0.2(15,000)$

$Q = -8000 \quad 1000$

(b part)

at $200

$Q = 10,000 - 200p$

$Q = 10000 - 200(200)$

$Q = -30000$

at $175

$Q = 10000 - 200(175)$

$Q = -25000$

at $150

$Q = 10000 - 200(150)$

$Q = -20000$

at $125

$Q = 10000 - 200(125)$

$Q = -15000$

(c part)

$$Q = 10,000 - 200P$$

$$Q = 45,000$$

$$45,000 = 10,000 - 200P$$

$$200P = 10,000 - 45,000$$

$$200P = -35000$$

$$P = \frac{-35000}{200}$$

$$\boxed{P = -175}$$

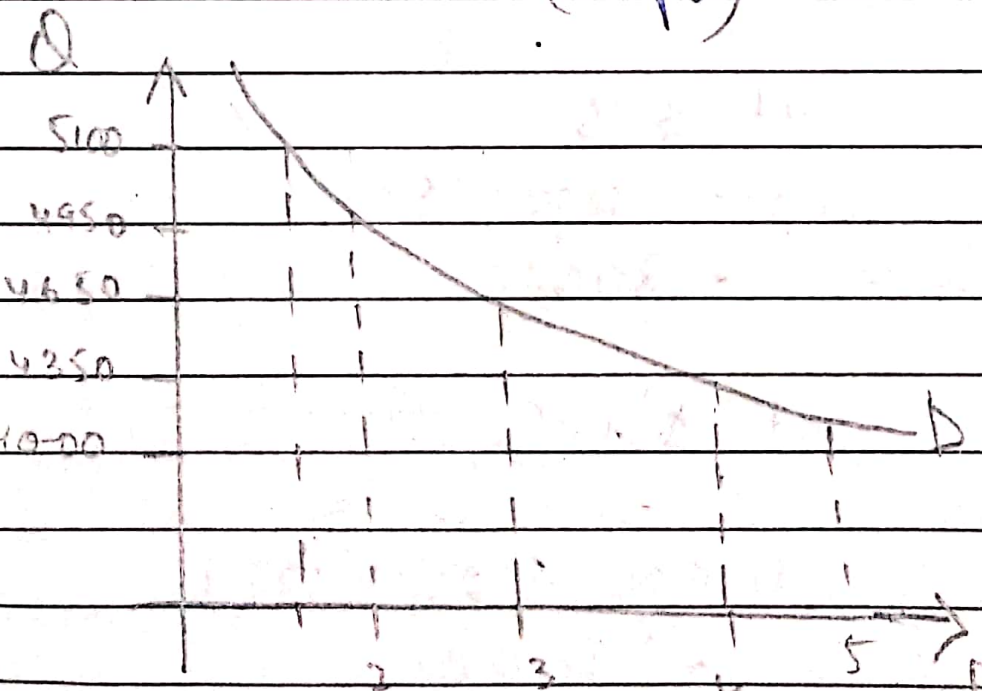
Qno6

(a - part)

$$Q = 200 - 300P + 120I + 65T - 250A_c + 400A_j$$

$$Q = 200 - 300(1.5) + 120(10) + 65(60) - 250(15) + 400(10)$$

$$Q = 5100 \text{ (cap)}$$



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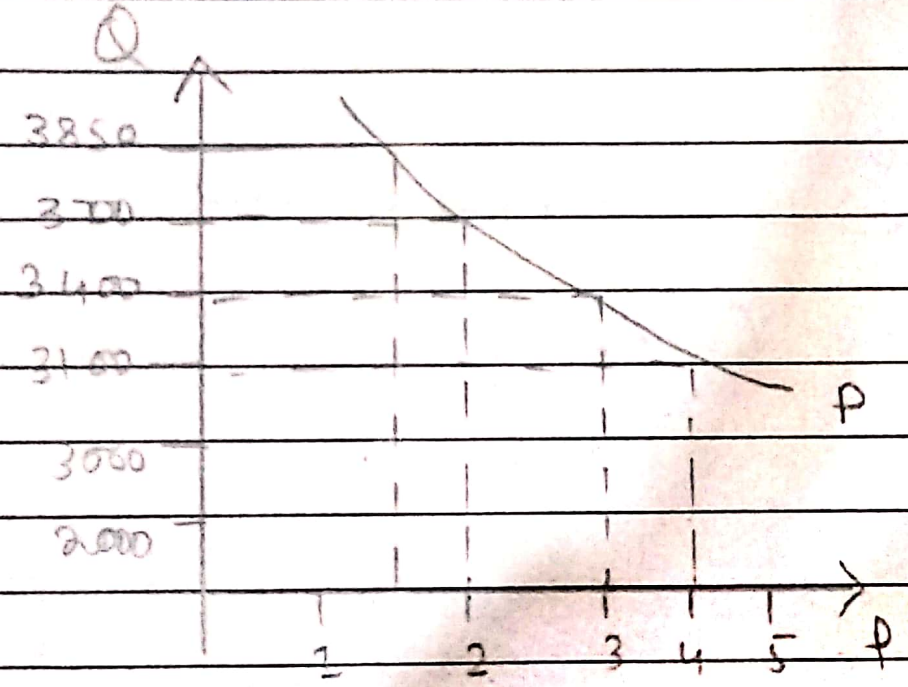
(b - part)

$$Q = 200 - 300p + 120I + 65T - 250Ac + 400Aj$$

$$Q = 200 - 300(1.5) + 120(10) + 65(60) - 250(5,000) + 400(10)$$

$$Q = 13,125$$



(c· part)

$$Q = 4850 - 3750 + 400 \times 10 = 5100$$

$$Q' = 4850 - 5000 + 400 * x = 5100x$$

$$= 13125$$

Joy is advertising expenditure should be $13,125 \times 400 = \$5256$.

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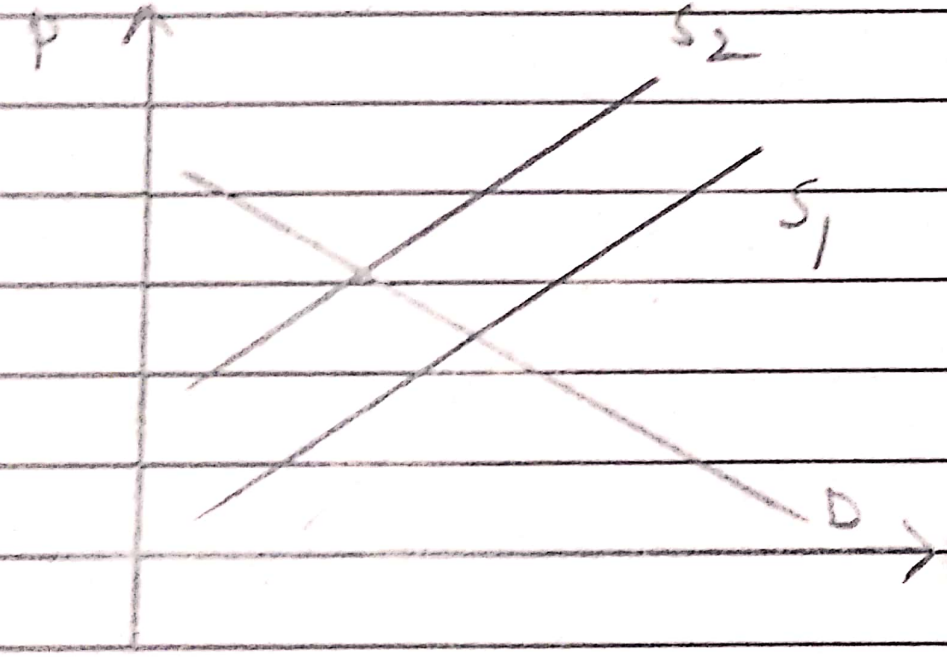
Qno 7



Market for sugar.

Date:

Q no 9

(a part)

$Q = 1000 - 3,000P + 10A$

at $P = \$3$

$Q = 1000 - 3,000(3) + 10(2,000)$

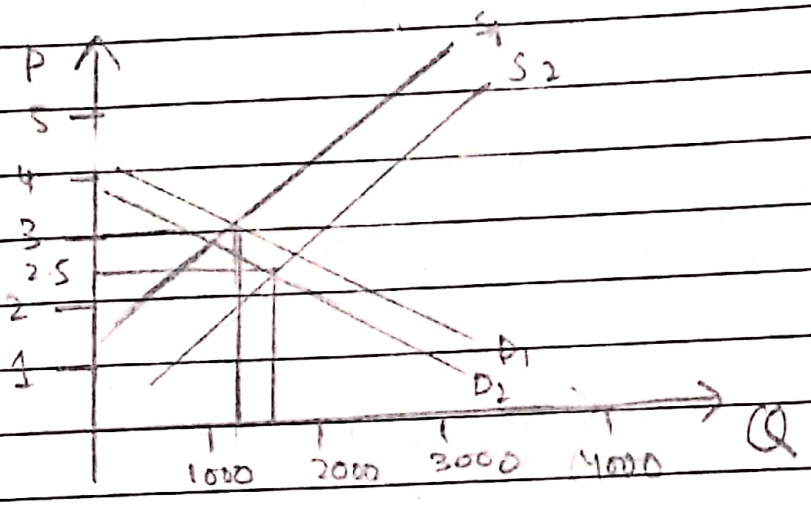
$\boxed{Q = 12000}$

at $P = \$2.50$

$Q = 1000 - 3,000(2.50) + 10(2,000)$

$Q = 13500$

Beneficial because of the Quantity Increases.



(b part)

at $P = \$4.00$ and $A = \$2,000$

$Q = 1000 - 3,000(4.00) + 10(2,000)$

$Q = 9000$

at $P = \$4.00$ and $A = \$2100$

$Q = 1000 - 3,000(4.00) + 10(2100)$

$Q = 10000$

Beneficial because Quantity Demanded

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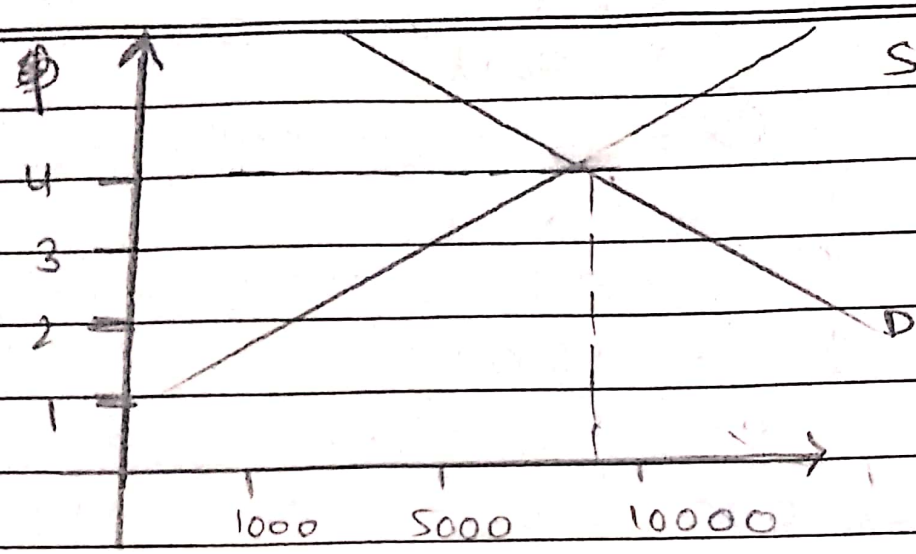
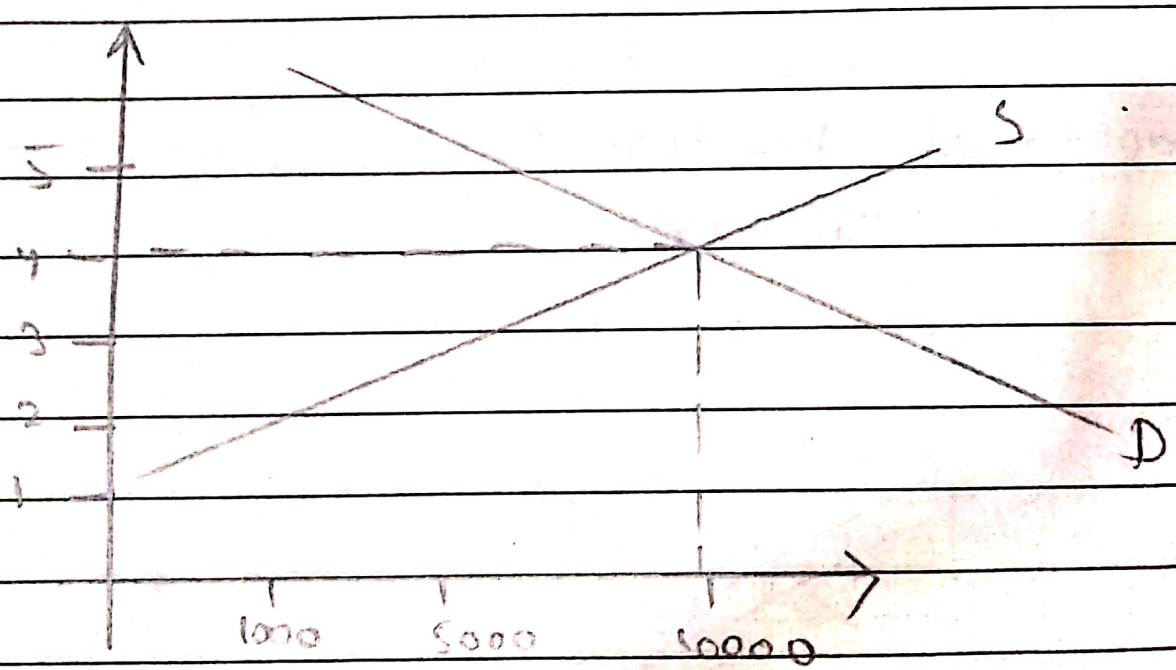




Q no 10

$$Q = 1,500 - 4P + 5A + 10I + 3P_x$$

(a part)

a' $Q = 1,500 - 4(400) + 5(20,000) + 10(15,000) + 3(500)$

$$\boxed{Q = 251400}$$

(b)

$Q = 251400$

$251400 = 15,00 - 4(400) + 5A + 10I + 3P_x$

$251400 - 1500 + 4(400) + 10(15,000) - 3(500) = 5A$

$\frac{400000}{5} = A$

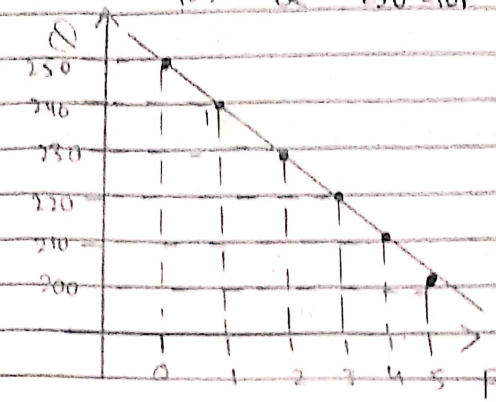
$$\boxed{A = 80000}$$

(c part)

Such other variables as change in tastes popularity of the product, change in Consumer income might be important in helping estimate the Demand.

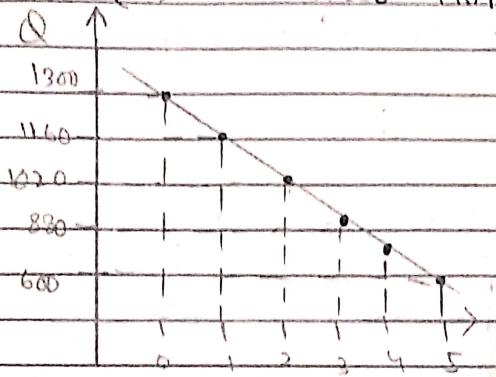
Q no 11

(a) $Q = 250 - 10P$



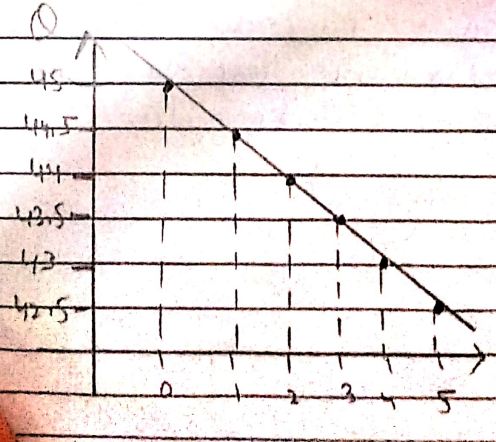
P	Q
0	250
1	240
2	230
3	220
4	210
5	200

(b) $Q = 1,300 - 140P$



P	Q
0	1,300
1	1160
2	1020
3	880
4	740
5	600

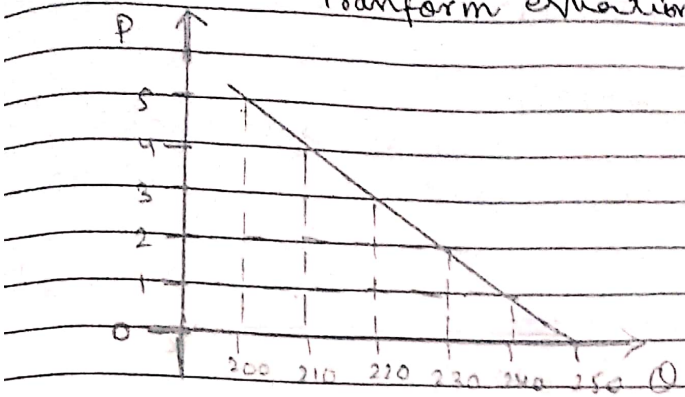
(c) $Q = 45 - 0.5P$



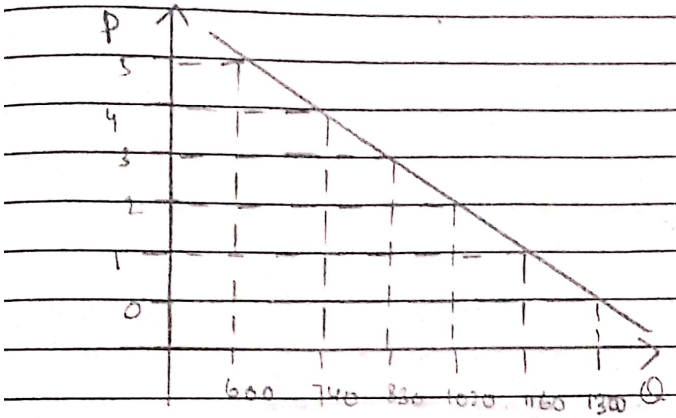
P	Q
0	45
1	44.5
2	44
3	43.5
4	43
5	42.5

Date

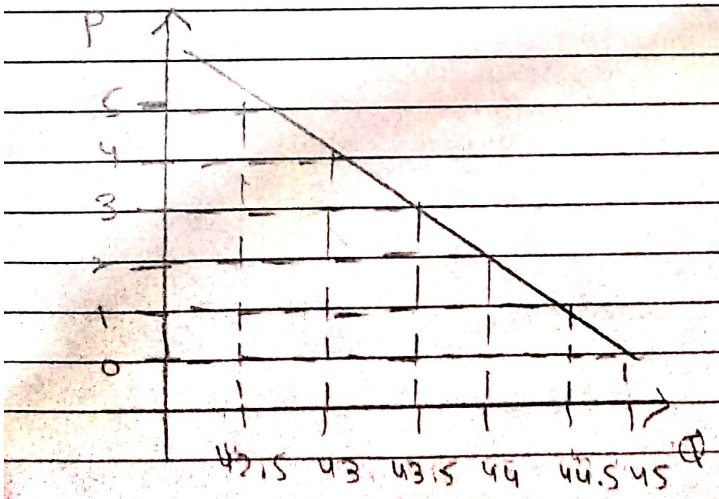
Tranform equation



P	Q
0	250
1	240
2	230
3	220
4	210
5	200



P	Q
0	1300
1	1160
2	1020
3	880
4	740
5	600



P	Q
0	45
1	44.5
2	44
3	43.5
4	43
5	42.5

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Qno 12

Non-linear equation:

Equations whose graphs are not straight lines are called non-linear function.

$$Q = 100P^{-0.3}$$

$$Q = 100P^{-0.3}$$

P	Q
0	0
1	100
2	81.225
3	71.922
4	65.97
5	61.703