

# **United International University**

## **Department of CSE**



### **Assignment On**

## **Assignment 1**

**Course Title: Economics**

**Course Code: ECO 4101**

#### **Submitted To**

**Tanzila Amir**

Lecturer

Department of Economics

United International University

#### **Submitted By**

**Talha Jubayer**

ID: 0112410062

241 Batch

Department of CSE

United International University

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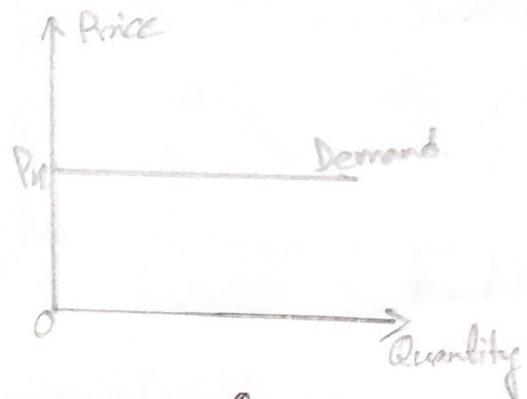
①

Ans no 1 (a)

$$E = \frac{\% \Delta Q}{\% \Delta P} = \frac{10\%}{0\%} = \infty$$

Perfectly Elastic

Perfectly flat curve. Buys only at price  $P_0$ . If price increases  $Q_d = 0$

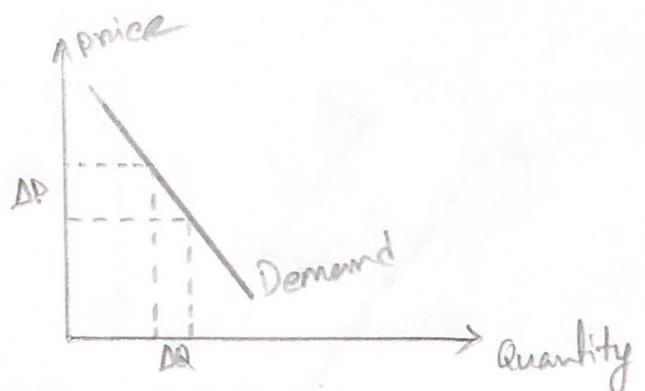
Ans no 1 (b)

$$E = \frac{10\%}{20\%} = 0.5$$

Inelastic.

Relatively steep downward.

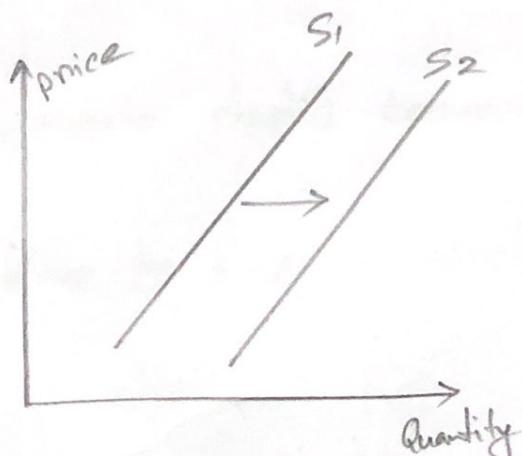
Quantity changes less than price changes.

Ans no 2 (a)

Technology improved.

Supply increases.

Supply curve shift right.



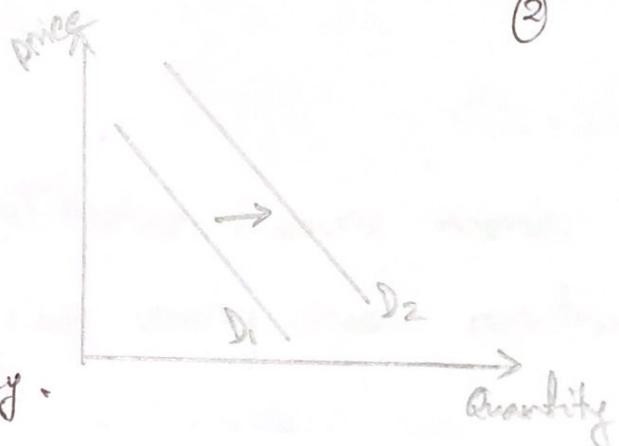
②

Ans no 2(b)

Demand increases.

Demand Curve shift right.

People need to buy immediately.

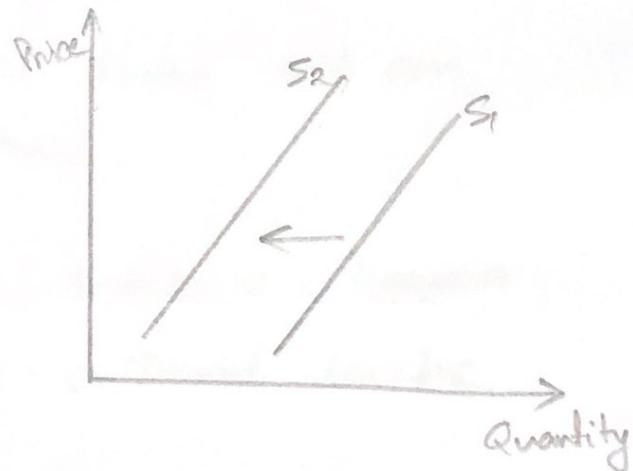


Ans no 2(c)

Factory damages. Climate issue.

Fewer factories. Supply drops.

Supply Curve shift left.



Ans no 3(a)

The longer the time period, more elastic demand becomes.

Because people gets enough time to find alternative.

Umbrella demand in winter is elastic. People don't need umbrella in winter so they will stop buying umbrella in winter if price increases.

(9)

Ans no 3(b)

Availability of close substitutes means more elastic demand. People can easily choose another if one's price increases.

Simple example of brand of coffee and general category -

Brand - Starbucks. It is elastic and can change to Brew or KBC.

General Category - Coffee. Inelastic. Fewer substitute of caffeine contained drinks.

Ans no 3(c)

$$\% \text{ change in price} = \frac{3.75 - 3.00}{\frac{3.75 + 3}{2}} \times 100\% \\ = 22.22\%$$

$$\% \text{ change in demand} = \frac{8 - 10}{\frac{8+10}{2}} \times 100\% \\ = 22.22\%$$

(4)

$$\therefore \text{Elasticity } E = \frac{\% \Delta D}{\% \Delta P} = \frac{22.22\%}{22.22\%} = 1$$

$\therefore$  Unit Elastic

Her total spending remains the same.

Ans no 3 (d)

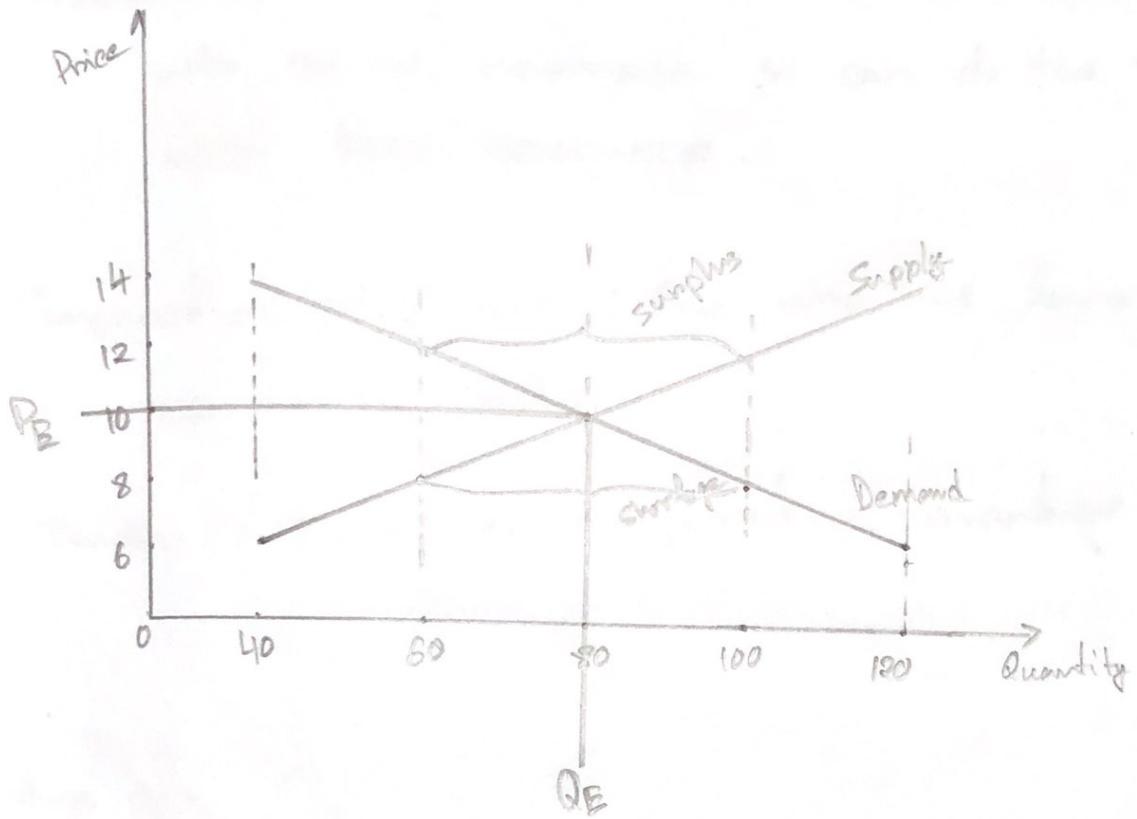
$$\% \text{ change in demand} = \frac{\text{price}}{\frac{900+1000}{2}} \times 100\% \\ = -10.5\%$$

$$\% \text{ change in price} = \frac{\text{demand}}{\frac{650+500}{2}} \times 100\% \\ = 26.08\%$$

$$\text{Cross price elasticity} = \frac{26.08\%}{-10.5\%} = -2.483$$

Sign is negative. Products are complement of each other and strongly related.

(5)

Ans no 4(a)

Equilibrium price \$10

Equilibrium Quantity 80

Ans no 4 (b)Price at \$12  $\rightarrow$  Surplus of  $(Q_s - Q_d) = (100 - 60) = 40$  burgersPrice at \$8  $\rightarrow$  Shortage of  $(Q_s - Q_d) = (60 - 100) = 40$  burgers

(6)

Ans no 5(a)

Absolute advantage: One who can produce more with same resource or can do the same with less resource.

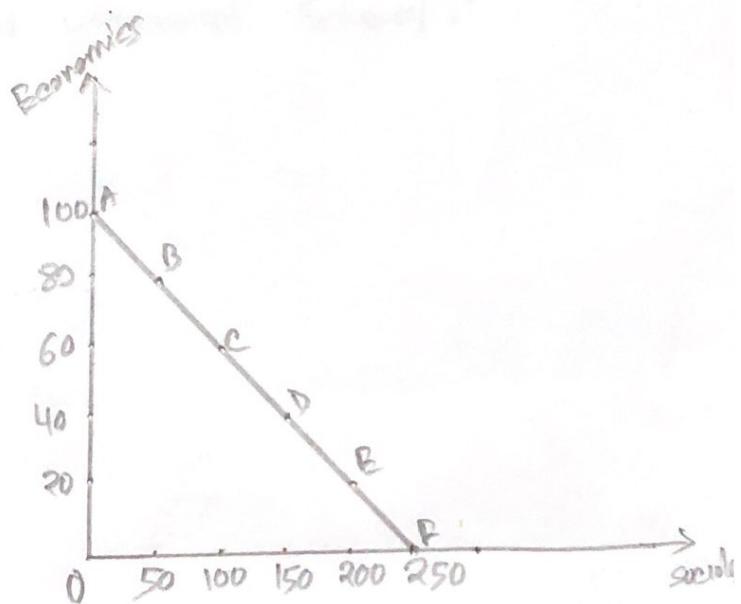
Comparative advantage: One who has lower opportunity cost.

Trade is based on comparative advantage.

Ans no 5(b)

i)

Economics	Sociology
100	0
80	50
60	100
40	150
20	200
0	250



A

ii)

50 page sociology = 20 page economics

100 page sociology = 40 page economics.

Ans no 5 (e)

Positive : Raw observed data / statement.

- "Unemployment is 5% in Bangladesh"

Normative : Opinion based, gives/suggest a solution.

"Government should increase School."