

UNIT 2: DETERMINATION OF PRICES

→ In open **Competitive Market**, Interaction between Demand & Supply tends to determine **Equilibrium price & Quantity**.

$$\text{Quantity Demanded} = \text{Quantity Supplied}$$

→ Equilibrium price = **Market clearing price**

→ At this price, there is **no unsold stock**.

Eg:-

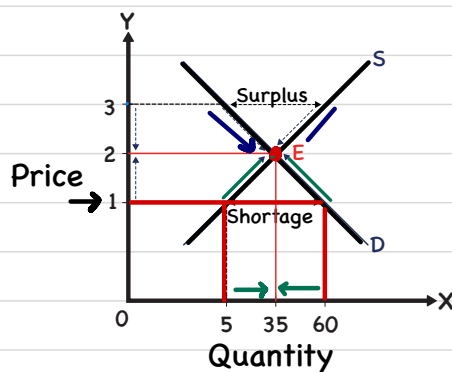
Price [₹]	Demand [units]	Supply [units]
1	60	5 → Shortage
2	35	35 → Eq. Quantity
3	20	45 → Surplus

→ In case of **Shortage** [Quantity Demanded > Quantity Supplied]

Price ↑

→ In case of **Surplus** [Quantity Supplied > Quantity Demanded]

Price ↓



Equilibrium is said to be **Stable** if any disturbance to it is **self-adjusting**, so that **original equilibrium** is re-stored.
[other things are constant]

Change in Demand & Supply

→ 1] Increase in Demand

At current price OP

$$Q.D. = OQ_2$$

$$Q.S. = OQ$$

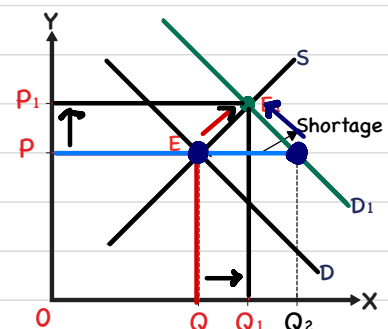
$$Q.D. > Q.S.$$

→ **Shortage**

→ **Prices ↑** → OP_1

Contraction in Demand curve

Expansion in Supply curve



- **New Equilibrium- E_1** → Eq. Price - OP_1
 → Eq. Quantity - OQ_1

↑ in Equilibrium Price
 ↑ in Equilibrium Quantity

→ 2] Decrease in Demand

At current price OP

$$Q.D. = OQ_2$$

$$Q.S. = OQ$$

$$Q.S. > Q.D.$$

Surplus

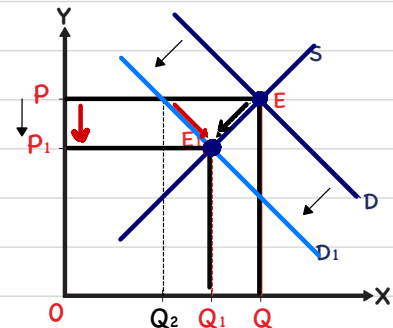
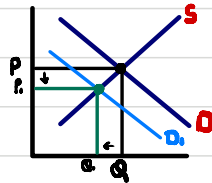
Prices ↓ → OP_1

Expansion in
Demand curve

Contraction in
Supply curve

- **New Equilibrium- E_1** → Eq. Price - OP_1
 → Eq. Quantity - OQ_1

↓ in Equilibrium Price
 ↓ in Equilibrium Quantity



→ 3] Increase in Supply

At current price OP

$$Q.D. = OQ$$

$$Q.S. = OQ_2$$

$$Q.S. > Q.D.$$

Surplus

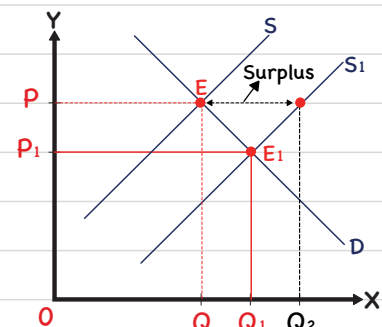
Prices ↓ → OP_1

Expansion in
Demand curve

Contraction in
Supply curve

- **New Equilibrium- E_1** → Eq. Price - OP_1
 → Eq. Quantity - OQ_1

↓ in Equilibrium Price
 ↑ in Equilibrium Quantity



→ 4] Decrease in Supply

At current price OP

$$Q.D. = OQ$$

$$Q.S. = OQ_2$$

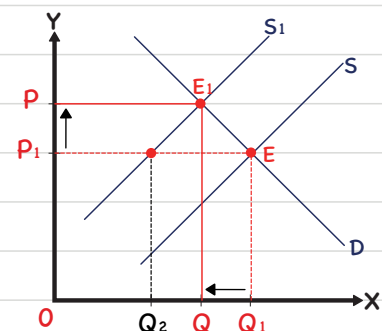
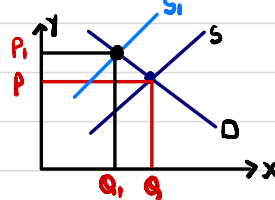
$$Q.S. < Q.D.$$

Shortage

Prices ↑ → OP_1

Contraction in
Demand curve

Expansion in
Supply curve



- New Equilibrium- E_1 → Eq. Price - OP_1
 → Eq. Quantity - OQ_1

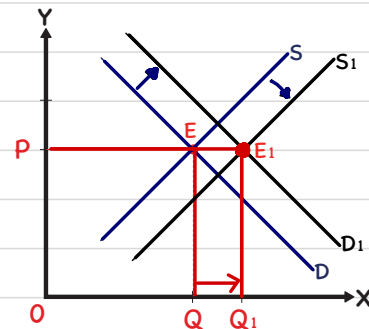
↑ in Equilibrium Price
 ↓ in Equilibrium Quantity

- Simultaneous change in Demand & Supply
 ↳ Shift in the same direction.

- 1] Increase in Demand = Increase in Supply

- New Equilibrium Prices = Old Equilibrium price
 ↳ OP

- Equilibrium Quantity ↑, from OQ To OQ_1

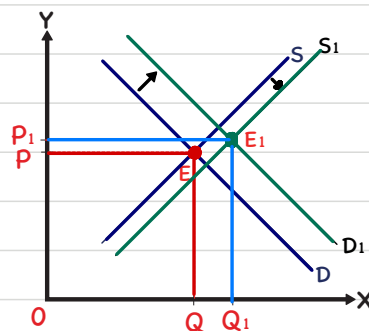


- 2] Increase in Demand > Increase in Supply

↳ Shortage

- New Equilibrium Price - OP_1 ,
 Higher than Old Equilibrium price - OP

- Equilibrium Quantity ↑, from OQ To OQ_1

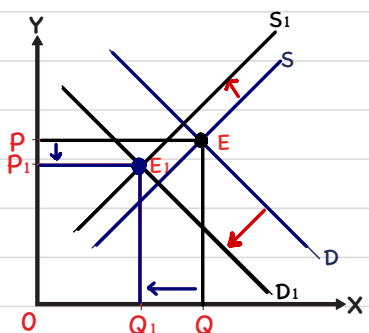


- 3] Decrease in Demand > Decrease in Supply

↳ Surplus

- Equilibrium Price ↓, from OP To OP_1

- Equilibrium Quantity ↓, from OQ To OQ_1

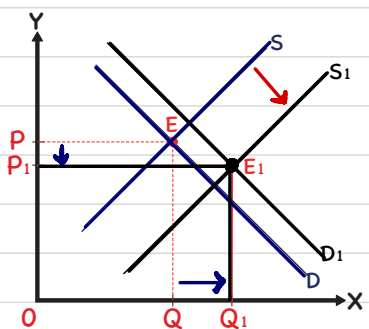


- 4] Increase in Supply > Increase in Demand

↳ Surplus

- Equilibrium Price ↓, from OP To OP_1

- Equilibrium Quantity ↑, from OQ To OQ_1

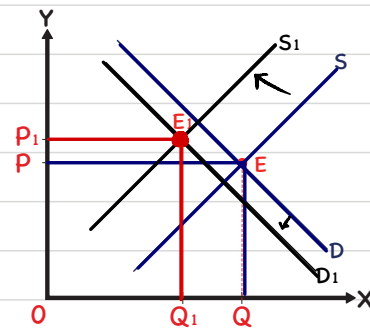


→ 5] Decrease in Supply > Decrease in Demand

Shortage

→ Equilibrium Price \uparrow , from OP To OP_1

→ Equilibrium Quantity \downarrow , from OQ To OQ_1



→ Possible outcome when Supply & Demand curve shift in the same direction:

1] Both Demand & Supply \uparrow

Equilibrium Quantity \uparrow

but, change in price is uncertain

2] Both Demand & Supply \downarrow

Equilibrium Quantity \downarrow

but, change in price is uncertain

Quantity is certain

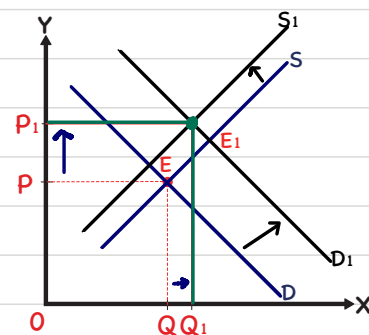
→ Shift in the Opposite direction.

→ 1] Increase in Demand > Decrease in Supply

Shortage

→ Equilibrium Price \uparrow , from OP To OP_1

→ Equilibrium Quantity \uparrow , from OQ To OQ_1

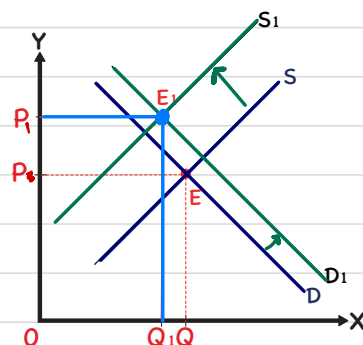


→ 2] Decrease in Supply > Increase in Demand

Shortage

→ Equilibrium Price \uparrow , from OP To OP_1

→ Equilibrium Quantity \downarrow , from OQ To OQ_1

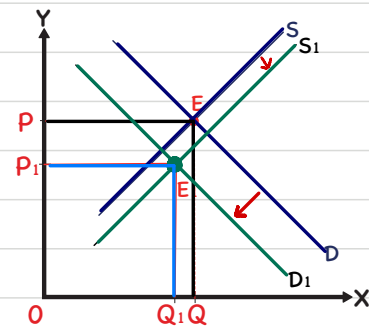


→ 3] Decrease in Demand > Increase in Supply

Surplus

→ Equilibrium Price ↓, from OP To OP_1

→ Equilibrium Quantity ↓, from OQ To OQ_1

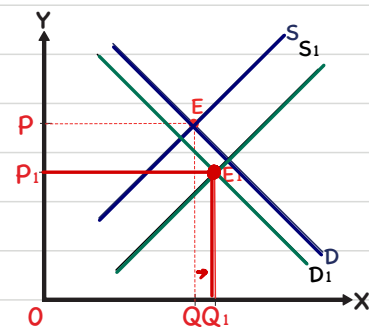


→ 4] Increase in Supply > Decrease in Demand

Surplus

→ Equilibrium Price ↓, from OP To OP_1

→ Equilibrium Quantity ↑, from OQ To OQ_1



→ Possible outcome when Supply & Demand curve shift in the Opposite direction:

1] Demand ↑ & Supply ↓ ----> ~~Surplus~~ Shortage

Equilibrium Price ↑

but, nothing certain can be said about change in Equilibrium Quantity.

2] Demand ↓ & Supply ↑ ----> ~~Supply~~ Surplus

Equilibrium Price ↓

but, nothing certain can be said about change in Equilibrium Quantity.

Unit over :