

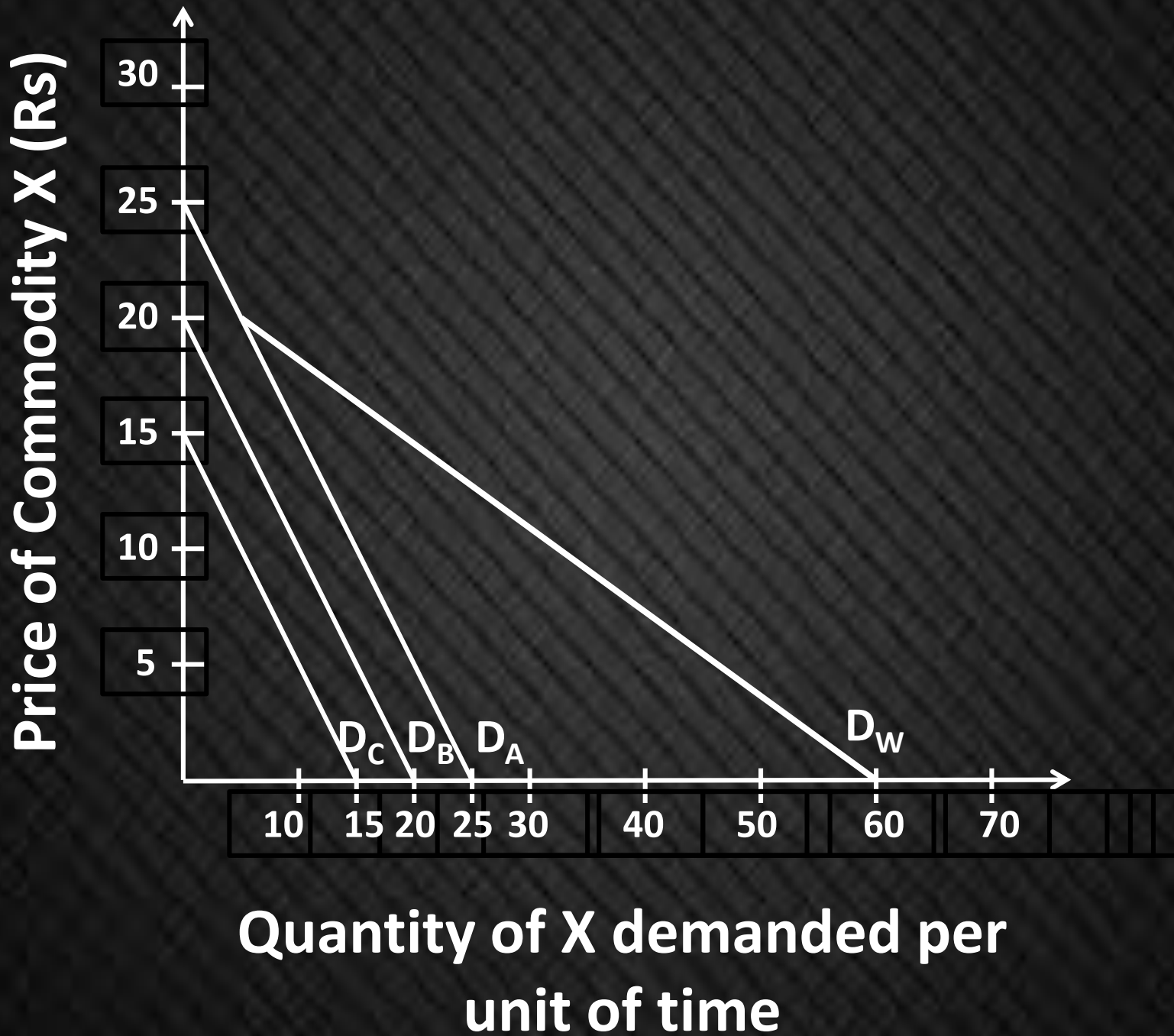
Demand Analysis

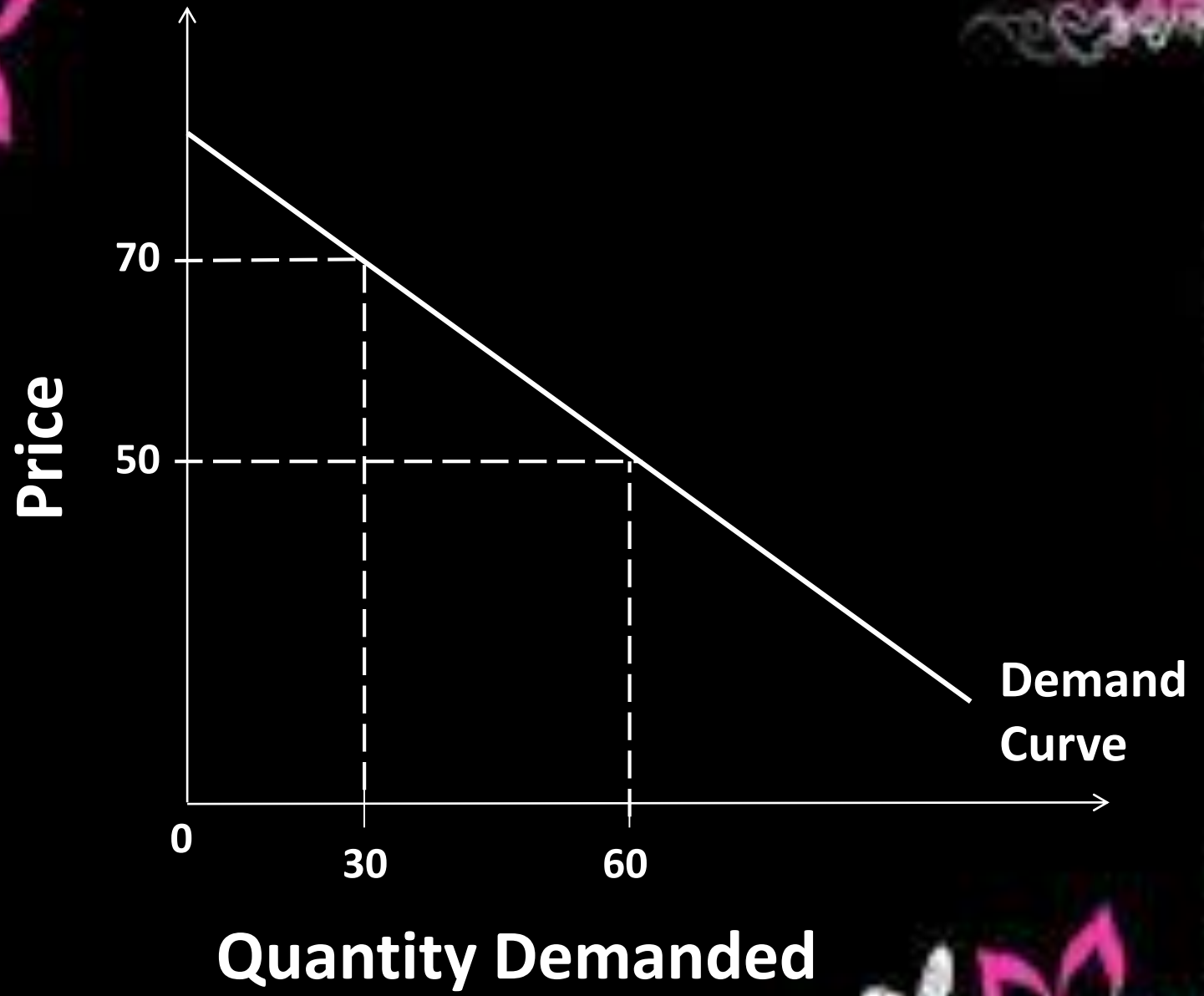
- **Demand is the desire, willingness and ability to buy a commodity.**
- **Need for a manager to comprehend demand.**
- **Consumer Demand, basis of all productive activity. Manager's need of awareness by firm on:**
- **Determinants of demands**
- **Buyers response to changes in product prices, prices of related goods, income**

Individual Demand V/s Market Demand

- Total quantity of the commodity demanded by a consumer at a particular price and point of time. Market demand implies an aggregate of individual demand at a point of time and price.
- Market Demand provides info indispensable for managerial decision making, planning future production, inventory of raw material
- $D=f(P)$ Demand is the function of Price. As the price increases, demand falls and vice-versa.

Price of X (Rs)	Quantity of X Demanded by			Market Demand = (A+B+C)
	A	B	C	
25	0	0	0	0
20	5	0	0	5
15	10	5	0	15
10	15	10	5	30
5	20	15	10	45
0	25	20	15	60

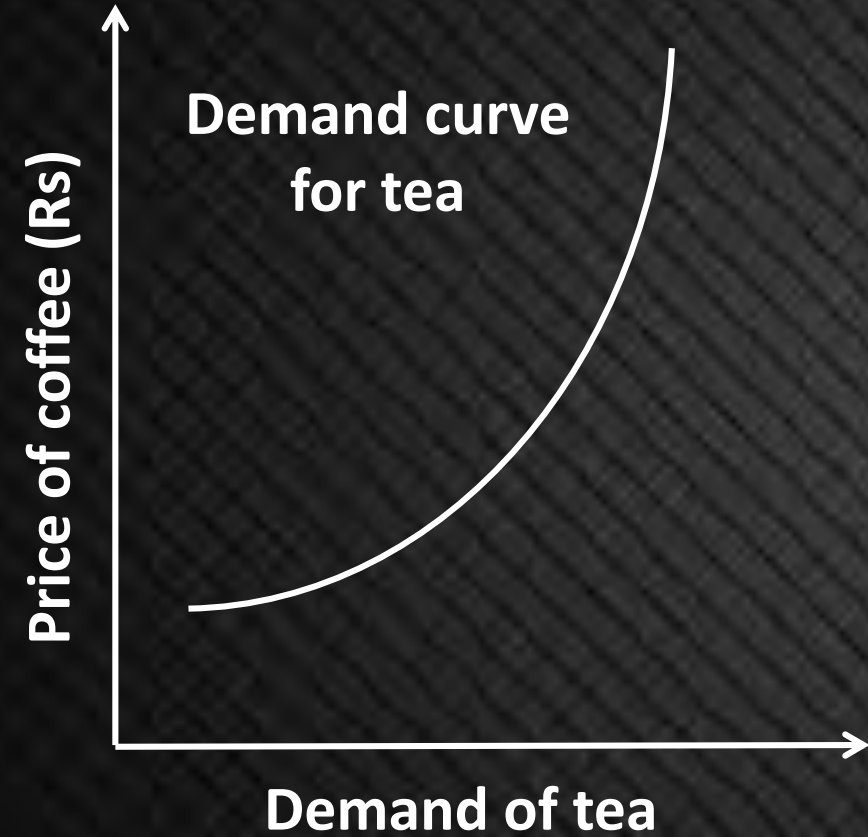




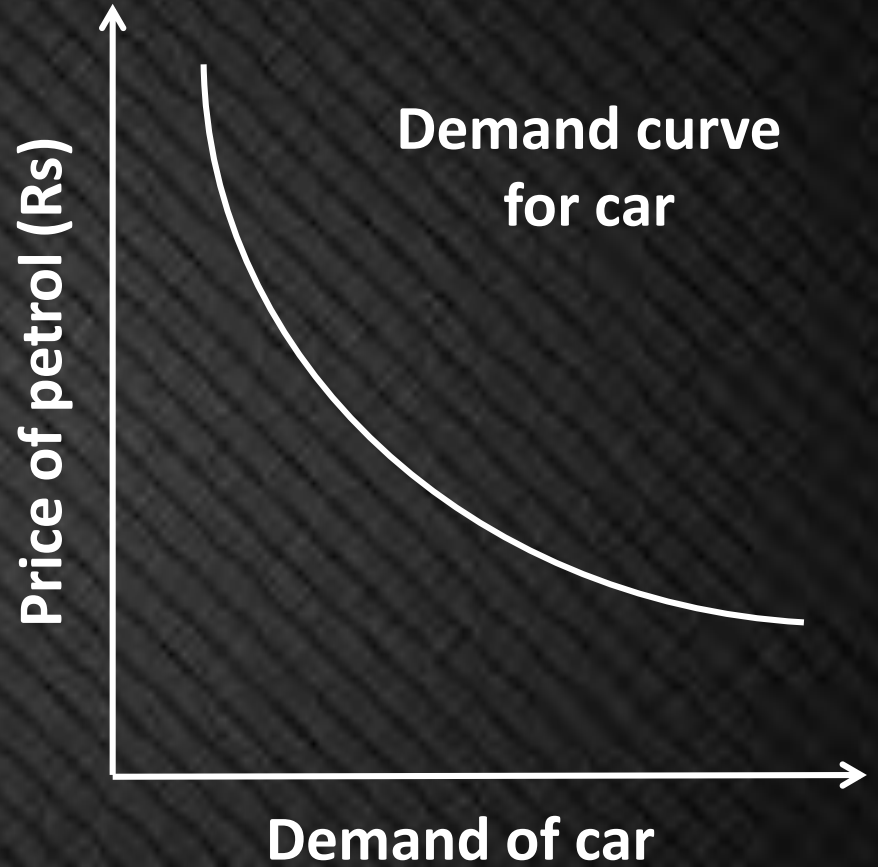
Determinants of Market Demand

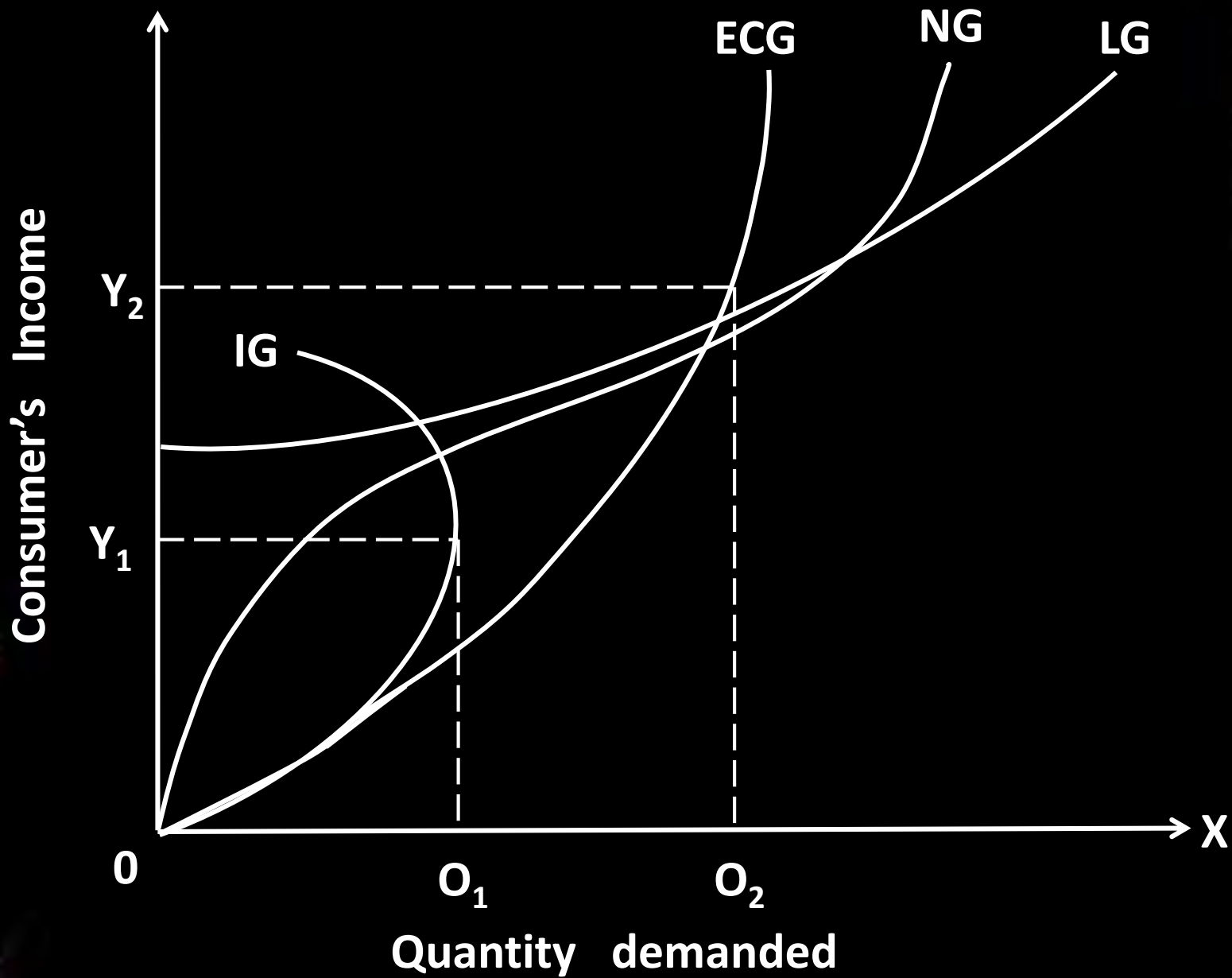
- Price of the product it sells
- Price of the related goods
- Consumer's income
- Consumer's taste and preferences
- Advertisements
- Consumer's expectations of future price and supply of products bandwagon effect
- Population and national income

(a) Substitutes



(a) Substitutes





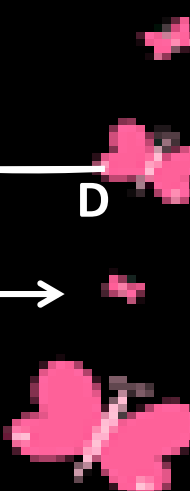
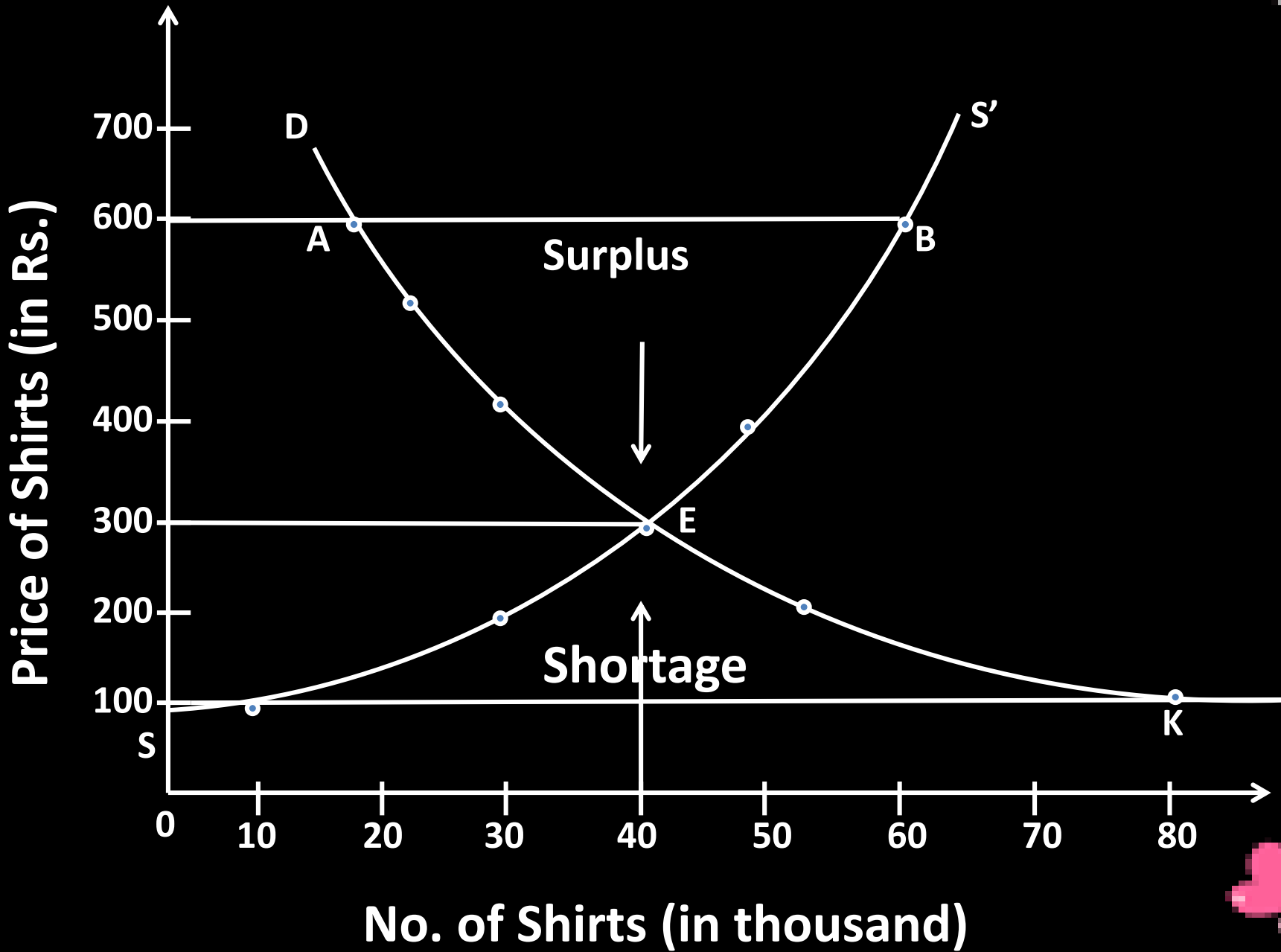
Law of Supply States-

- **Supply of a product increases and decreases with the rise and fall in price, other things remaining constant.**
- **Supply of a commodity depends upon its price and cost of production.**

Market Equilibrium

Implies a state of market in which quantity demanded of a commodity equals the quantity supplied. Equality of demand and supply produces equilibrium price- The price at which quantity demanded equals quantity supplied.

The intersection of supply and demand curve implies market equilibrium. The corresponding price is known as Equilibrium or Market Clearing Price and the quantity as the Equilibrium Quantity.



Elasticity of Demand

- Degree of responsiveness of demand for a product to changes in its determinants.

$$E_D = \frac{\text{Percentage change in quantity demanded of X}}{\text{Percentage change in determinant Y}}$$

- Price elasticity of demand=

$$e_p = \frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in Price}} = \frac{\Delta Q}{Q} \bigg/ \frac{\Delta P}{P}$$

- Determinants of Price Elasticity of Demand –

- Availability of substitutes
- Nature of commodity
- Weightage in total consumption
- Time factor
- Consumption pattern

➤ **Importance of price elasticity to a manager-**

i. Determination of price and optimum price

➤ **Cross elasticity of demand = e_{PC}**
= Percentage change in demand of commodity
Price change in price of another commodity

➤ **For substitute, cross elasticity is positive because increase in price of one good leads to increase in demand for substitute.**

For complimentary goods cross elasticity is negative because increased price of a complimentary good decreases the demand for another complimentary good.

➤ **Use of cross elasticity- If cross elasticity > 1 , managers can increase the price.**

For complimentary good, if cross elasticity > 1 , price reduction is helpful

Elasticity of Demand

- **Responsiveness of demand to changes in income = $e_Y =$
Percentage change in demand of X
Percentage change in consumer's income**
- **Income elasticity is always positive , because positive relationship exists between income and quantity demanded.
Exception- For inferior goods it is negative because of inverse substitution effect.**
- **Use of income elasticity- Production planning and management, estimating future demand.**