

# Quick Review

## Topic 3

Conceptual and analytical questions may be asked. You may be asked questions using the graphs.

### Important Concepts

- Competitive Market - Infinite buyers and sellers; No one has an influence on price and quantity in the market.
- Law of Demand, Law of Supply, Law of Supply and Demand, Demand Curve, Supply Curve, Market demand and supply (Recall the horizontal sum), Concept of equilibrium
- Exogenous variable - A variable that is not in the model (in a graph in our case)
- Endogenous variable - A variable that is in the model. We analyze the effect of an exogenous variable on endogenous variables. For instance, effect of income on price and quantity.
- Shift vs Movement along the curve
  - You shift the curve when the change is in an exogenous variable. For example, shift the demand curve if there is a change in income of people or shift a supply curve if the weather goes bad. The standard examples of exogenous variables are income, tastes, number of buyers or sellers, expectations, price of related goods.
  - You move along the curve when there is a change in price or quantity of the good you are analyzing. For instance, imposition of price controls by government.
- Related Goods - Substitutes vs Complements (This is related to price)
- Normal vs Inferior good (This is related to income)

# Topic 4

## Important Concepts

- Price elasticity of demand, Price elasticity of supply, Income elasticity and cross price elasticity of demand and supply
- Elasticity is not slope, it is more than that. It also gives you magnitude and it is different at every point on the line unlike the slope, which is the same for a line.
- **"Midpoint"** method to calculate the elasticity. Any demand elasticity would give you a negative number due to the downward sloping demand curve. Supply elasticity would give you a positive number due to an upward sloping demand curve. By the same logic, cross price elasticity of demand would give you a **positive number** if the related good is a substitute. For instance, cross price elasticity of demand for Pepsi will be positive if the related good is Coke. (because recall increase in price of Coke will **increase** the demand for Pepsi.)
- We always report elasticity in absolute magnitude unless asked otherwise.
- **Inelastic** if  $E < 1$ , **Elastic** if  $E > 1$ , and **Unit elastic** if  $E = 1$
- **Flatter the curve - More Elastic, Steeper the curve - More Inelastic**
- Can **increase the revenue in elastic region by decreasing the price** (Recall the example of Amazon Prime for Students); **can increase the revenue in inelastic region by increasing the price** (Recall the higher tax collection in case of tax on cigarettes if the group is addicted smokers)
- Demand curve for necessities would be less elastic than demand curve for luxuries.
- Demand curve for a good is more elastic if a substitute is available.
- In the short run - demand is less elastic, in the long run - demand is more elastic (Recall the example of Oil Price shock example)

# Topic 5

This is the chapter which covers everything above. Now you have tools to analyze a policy change using the model we have developed.

- Examples of policy change (Not limited to these examples) : Price Controls, Tax Policies, Effect of coronavirus

Steps to analyze a policy change

1. Start with an initial equilibrium i.e. where the initial supply and demand curves intersect.
  2. Determine the type of policy change (Policy shock)
  3. Does policy change involve endogenous variables? Think about moving along the curve. Does it involve exogenous variable? Then think about shifting the curve.
- Tax Incidence : Elasticity and Tax incidence is something to keep in mind. Who bears the burden of the tax? Here is the tip : Whoever has the inelastic curve will bear the burden of the tax. For example, if demand curve is more elastic than supply curve (Demand curve is flatter than the supply curve) then sellers will bear the burden. The intuition is that since the demand curve is more elastic (flatter) buyers will be more responsive to the price change than the sellers. **Sellers can bear the burden of the tax to keep the buyers from leaving.** (Recall the example of tax on luxury goods)

