💸Unit 1
Basic Economic Concepts

- **scarce resources**=limited supply of resource and unlimited demand for them
- 4 factors of production: land (nat. resources), labor (physical effort), capital, and entrepreneurship
- **OC**=value of the next best alternative=expl+impl costs
- **efficiency**=producing many goods with few resources
- **free market econ**=private for-profit firms with prices determined by S&D vs **command econ**=public firms with little incentive for efficiency/profit and gov-set $
- **allocative eff**=pt society desires vs **productive eff**=pt costs are minimized (shown on PPC)
- **comp adv**=producing a good at a lower OC than others
- **absolute adv**=producing more of a good for same rsrcs
- **law of diminishing returns**=rsrcs↑, utility↓ (with time)

📈Unit 2
Supply & Demand

- **Law of demand**=price↑, Qd↓ ⇒downward sloping curve
- **Law of supply**=price↑, Qs↑ ⇒upward sloping curve
- **market equilibrium** when Qd=Qs
- supply and demand **shift** based on market changes, changing price, and/or quantity
- **PED**=how sensitive demand is to price changes=$\frac{\%\Delta Q}{\%\Delta P}$
- **PES**=how sensitive supply is to price changes=$\frac{\%\Delta Q}{\%\Delta S}$
- **IED/XED** determine normal/inferior and complements/subst.
- **indeterminate equilibrium** when both Qd and Qs shift
- **price floor/ceiling**=minimum/max price imposed on a market
- **surplus**: Qs>Qd; **shortage**: Qd>Qs; DWL when inequilibirum
- **consumer/producer surplus**=area above/below equilibrium
- **tariffs**=tax on imported goods vs **quotas**=limited amount

🏋️Unit 3
Production, Cost, & the Perfect Competition Model

- **allocative eff**: MR=MC vs **productive eff**: ATC=MC
- TC=**fixed**(const regardless of changes)+**variable costs**
- **short-run** costs=at least
- one of the inputs if fixed
- **Long-run ATC** can be used to identify **economies of scale**, **constant returns to scale**, or **diseconomies of scale**
- **economic profit** = total revenue - (explicit+implicit costs), i.e. takes into account OC; maximized (equals to 0) when MR=MC
- **MR<ATC** and **MR>AVC**: firm is not profitable, operate short- run, exit long-run; **MR<ATC** and **MR<ATC**: shutdown short-run
- **perfectly competitive firms** are price **takers** that follow the market equilibrium price with low barriers to entry
- perfect competition is **allocatively** (P=MC) **efficient** in the short run and both **allocatively** and **productively efficient** (P=minimum ATC) at long-run equilibrium

🏃‍♀️Unit 4
Imperfect Competition

- **imperfect competition** = price is not market-driven
- **monopolies** are firms that employ **prohibitive barriers to entry**, hence are **only sellers** in the market
- monopolies create **DWL** (less output at a higher price; MR<D) when they do not **price discriminate** (charge the max people are willing to pay); if they do→MR=D and DWL is eliminated (allocative efficiency)
- **natural monopolies**=high fixed costs→only 1 firm exists
- In **monopolistic competition**, many firms with high differentiation in product produce **economic profit** in the short-run and no economic profit in the long-run
- monopolistic companies are allocatively ineff. (P>MC)
- in an **oligopoly**, there are few **interdependent** sellers
- game theory: a **dominant strategy** exists when the payoff to a particular action is alway higher regardless of the other's choice
- **Nash equilibrium**=no player can increase payoff (shared dominant strategy)

💰Unit 5
Factor Markets

- in factor markets, the product is **labor**, the demand comes from **firms**, and the supply comes from **individual people**
- because there is demand for products, there is a **derived demand** for factors such as labor
- li **perfect competition factor markets**, firms are **wage takers**; workers hired↑ →marginal product produced (MRP)↓
- marginal product (MP)*price=**MRP**; wage=marginal resource cost (**MRC**); if MRP=MRC→**profit maximization**
- in **monopsonistic factor markets**, there is **one** employer and **many** workers; MC of labor has **twice** the slope of the S curve
- monopsonistic factor markets hire less people with **lower wages** than perfect competition
- the goal of **unions** is to defend workers
- unions negotiate wages, increase demand for labor, and decrease supply of labor

🏛️Unit 6
Market Failure & the Role of Government

- **externality**=indirect cost or benefit due to another party; creates **inefficient allocation of resources**
- **positive externalities** lead to underallocation of resource (solution: per-unit subsidy), while **negative externalities** lead to overallocation of resources (solutions: per-unit taxes, price floors or quotas)
- marginal social cost=marg private cost+marg external cost
- marg social benefit=marg priv benefit+marg external benefit
- **public good**=good from which many ppl benefit
- **nonexcludable good**=cannot be stopped from being used
- **common resource**=rival and nonexcludable
- **free rider**=benefiting from a public good without paying for it
- **market failure**=allocative eff is not achieved due to imperfect competition, externalities, public goods, imperfect information
- **anti-trust legislation**=restrict market power (high prices, limited quantity)
- **Lorenz curve**=measures income equality
- **Gini coeff**: from 0 (equal division of income) to 1 (no equality)

Exam Tips: when unsure about a relationship, **graph** it out! // know your **graphs** well, you will find them in MCQs and use them in FRQs in any case // be sure to practice the **mathematical** aspects of the exam (comparative advantage, cost curves, game theory, how many workers to hire, what is the price in different markets) // consumer and product surplus require knowing **area formulas** (for a triangle, A=1/2bh) // for comparative advantage, **cross-multiply**, write the product in the right column and whichever value is higher (output questions) or lower (input questions) corresponds to the country with comparative advantage (use it to check your answers!) // many of the questions test your knowledge about the **relationships** between factors and graphs, practice them well before the exam // don't let your deeper knowledge about certain industries affect your rationale, the AP readers look for **straightforward answers** corresponding to **basic** microeconomic theory