PRINCIPLES OF ECONOMICS

Chapter 1: BASIC PRINCIPLES OF ECONOMICS

Economics is the study of how society manages its scarce resources. The goal of this chapter is to introduce the fundamental ideas that govern economic thinking.

1.1 Scarcity and Choice

Scarcity is the fundamental problem in economics. It means that society has limited resources (land, labor, capital, entrepreneurship) and therefore cannot produce all the goods and services people wish to have. Because of scarcity, people must make **choices** about how to allocate these limited resources. This necessary act of choosing is the basis of all economic activity.

1.2 Trade-offs

Making a decision requires trading off one goal against another. When students decide to spend time studying for an exam, they are trading off study time for leisure time.

A classic trade-off society faces is between **"Guns and Butter"**: The more society spends on national defense ("guns") to protect its borders, the less it can spend on consumer goods ("butter") to raise the standard of living at home.

1.3 Efficiency and Equity

When allocating resources, society often faces a trade-off between two important goals:

1. **Efficiency:** The property of society getting the maximum benefits from its scarce resources. This refers to the size of the economic pie.
2. **Equity:** The property of distributing economic prosperity fairly among the members of society. This refers to how the economic pie is sliced.

Policies designed to achieve greater equity (like welfare or income taxes) often reduce efficiency by discouraging work and lowering output, demonstrating the perpetual trade-off between the two.

1.4 The Opportunity Cost

Because people face trade-offs, making decisions requires comparing the costs and benefits of alternative courses of action. The cost of something is what you give up to get it.

Opportunity Cost is the value of the next best alternative that must be forgone as a result of making a particular choice.

- *Example:* The opportunity cost of going to college for four years is not just tuition, books, and living expenses, but also the salary you could have earned if you had worked instead.

1.5 Micro versus Macro Economics

Economics is studied on two main levels:

- **Microeconomics:** The study of how households and firms make decisions and how they interact in specific markets. (e.g., How does a rise in the price of coffee affect consumer demand? What determines the price of steel?)
- **Macroeconomics:** The study of economy-wide phenomena, including inflation, unemployment, and economic growth. (e.g., What are the effects of government borrowing on the national economy? Why do some countries grow faster than others?)

1.6 Positive versus Normative Analysis

Economists play two roles: as scientists and as policy advisors. This distinction leads to two types of statements:

- **Positive Analysis:** Descriptive statements that attempt to describe the world as it is. These statements can be confirmed or refuted by examining data. (e.g., "Minimum-wage laws cause unemployment.")
- **Normative Analysis:** Prescriptive statements that attempt to prescribe how the world should be. These involve values and cannot be judged solely by data. (e.g., "The government should raise the minimum wage.")

1.7 Conclusion (Chapter 1)

All economic activity boils down to scarcity, choice, and trade-offs. Rational individuals weigh costs (especially opportunity costs) and benefits, responding to incentives in their pursuit of efficiency.

The Market Forces of Demand and Supply

1.8 Demand Schedule and the Law of Demand

Demand is the quantity of a good or service that consumers are willing and able to purchase at various prices during a specified period of time.

- **a) Law of Demand:** All other things being equal (ceteris paribus), the quantity demanded of a good falls when the price of the good rises. This inverse relationship occurs because of the **substitution effect** (consumers switch to cheaper alternatives) and the **income effect** (higher prices reduce consumers' purchasing power).
- **b) Demand Schedule:** A table that shows the relationship between the price of a good and the quantity demanded.
- **c) Demand Curve:** A graph of the relationship between the price of a good and the quantity demanded. It is always downward-sloping.
- **d) Individual Demand and Market Demand:**
    - **Individual Demand:** The demand of a single buyer.
    - **Market Demand:** The sum of all individual demands for a particular good or service. Graphically, the market demand curve is found by horizontally summing the individual demand curves.

1.9 Shifts in the Demand Curve

A change in price causes a **movement along** the demand curve (a change in quantity demanded). A change in any other factor causes the entire demand curve to **shift** (a change in demand).

Factors that shift the demand curve:

- **Tastes/Preferences:** (e.g., A new health study on coffee shifts the coffee demand curve).
- **Number of Buyers:** (e.g., An increase in population shifts demand).
- **Expectations:** (e.g., Expecting lower prices tomorrow shifts current demand left).
- **Incomes:** (For *Normal Goods*, higher income shifts demand right; for *Inferior Goods*, higher income shifts demand left).
- **Prices of Related Goods:**
    - **Substitutes:** Goods used in place of one another (e.g., If the price of tea rises, the demand for coffee shifts right).
    - **Complements:** Goods used together (e.g., If the price of milk rises, the demand for coffee shifts left).

1.10 Supply Schedule and the Law of Supply

Supply is the quantity of a good or service that producers are willing and able to sell at various prices during a specified period of time.

- **e) Law of Supply:** All other things being equal (ceteris paribus), the quantity supplied of a good rises when the price of the good rises. This positive relationship reflects that producers are willing to incur higher costs to produce more output when prices are higher.
- **f) The Supply Schedule:** A table that shows the relationship between the price of a good and the quantity supplied.
- **g) Supply Curve:** A graph of the relationship between the price of a good and the quantity supplied. It is always upward-sloping.

1.11 Individual Supply versus Market Supply

- **Individual Supply:** The supply of a single seller.
- **Market Supply:** The sum of the supplies of all sellers.
- **a) Shifts in Supply:** A change in price causes a **movement along** the supply curve (change in quantity supplied). A change in any other factor causes the entire supply curve to **shift** (change in supply).

Factors that shift the supply curve:

- **Input Prices:** (e.g., A fall in the price of sugar shifts coffee supply right).
- **Technology:** (e.g., New efficient production methods shift supply right).
- **Expectations:** (e.g., Expecting higher prices next month shifts current supply left).
- **Number of Sellers:** (e.g., More coffee shops shifts supply right).
- **b) Market Equilibrium:**

Equilibrium is a situation where the quantity demanded equals the quantity supplied. At the **equilibrium price** (or market-clearing price), the buyers are purchasing all they want to buy, and sellers are selling all they want to sell.

- **Surplus (Excess Supply):** When the price is above the equilibrium price, quantity supplied is greater than quantity demanded. Sellers lower prices to clear excess inventory.
- **Shortage (Excess Demand):** When the price is below the equilibrium price, quantity demanded is greater than quantity supplied. Sellers raise prices due to intense buyer competition.

1.12 Elasticity of Demand & Supply

Elasticity measures the responsiveness of quantity demanded or quantity supplied to a change in one of its determinants.

- **Price Elasticity of Demand:** Measures how much the quantity demanded responds to a change in price.

Price Elasticity of Demand = %Change in Quantity Demanded / %Change in Price

- *Elastic Demand:* When elasticity > 1, consumers are very responsive to price changes (e.g., luxury items).
- *Inelastic Demand:* When elasticity < 1, consumers are not very responsive (e.g., necessities like medicine).
- **Price Elasticity of Supply:** Measures how much the quantity supplied responds to a change in price.

Price Elasticity of Supply = %Change in Quantity Supplied / %Change in Price

1.13 Law of Diminishing Returns (Diminishing Marginal Product)

The **Law of Diminishing Returns** states that, in the short run, adding more units of a variable input (like labor) to a fixed input (like capital or land) will eventually lead to smaller increases in output.

- *Example:* If a bakery has one oven (fixed input) and hires more and more bakers (variable input), initially output rises quickly. But eventually, the new bakers start getting in each other's way, and the oven becomes a bottleneck, causing the output increase from each additional baker to diminish.

Chapter 2: THE THEORY OF FIRM AND MARKET STRUCTURE: COMPETITIVE MARKET

2.1 Competitive Market

- **a) The Meaning of Competition:** A **perfectly competitive market** (or competitive market) is defined by three main characteristics:
    1. **Many Buyers and Many Sellers:** There are so many participants that no single buyer or seller has a noticeable impact on the market price.

2. **Homogeneous Goods:** The goods offered by the various sellers are largely the same.
3. **Free Entry and Exit:** Firms can enter or leave the market without restriction.

- *Key Implication:* Due to these features, firms in a competitive market are **Price Takers**, meaning they must accept the price determined by the overall market.
- **b) Demand for an Individual Firm's Product:** Since a competitive firm is a price taker, it faces a perfectly elastic (horizontal) demand curve at the market price (P).

Demand Curve for a Competitive Firm: P = Average Revenue (AR) = Marginal Revenue (MR)

- **c) Profit Maximization and Competitive Firm's Supply Curve:** The goal of any firm is to maximize economic profit (π).

Economic Profit (π) = Total Revenue (TR) - Total Cost (TC)

The **Profit-Maximization Rule** for all firms is to produce the quantity of output where **Marginal Revenue (MR) equals Marginal Cost (MC)**. Since, for a competitive firm, MR = P, the rule becomes:

Profit Maximization: P = MC

The competitive firm's short-run supply curve is its **Marginal Cost (MC) curve** above the Average Variable Cost (AVC) curve.

- **d) Short-run Equilibrium of the Firm (Economic Profit, Loss, Breakeven):**

In the short run, a firm's fixed costs are sunk costs, and the firm must decide whether to produce or temporarily shut down.

1. **Economic Profit:** P > Average Total Cost (ATC). The firm is earning positive economic profit.
2. **Breakeven Point:** P = Average Total Cost (ATC). The firm is earning zero economic profit (it covers all costs, including the opportunity cost of the owner's time and capital, or **normal profit**).
3. **Loss:** Average Variable Cost (AVC) < P < Average Total Cost (ATC). The firm operates at a loss, but continues to produce because the price covers its variable costs and contributes toward covering some fixed costs.
4. **Shutdown Point:** P < Average Variable Cost (AVC). The firm should shut down immediately to minimize loss, as it cannot even cover its variable costs of production.

2.2 The Supply Curve in the Competitive Market

The market supply curve in the short run is the horizontal summation of the MC curves (above AVC) for all active firms in the market.

2.3 Long-run Equilibrium of the Firm

The long run is characterized by **free entry and exit**.

1. **Entry/Exit Process:**
    - If firms are earning **economic profits** ($\pi > 0$), new firms will be **attracted to enter** the market. This increases market supply, pushing the market price down.
    - If firms are experiencing **economic losses** ($\pi < 0$), existing firms will **exit** the market. This decreases market supply, pushing the market price up.
2. **Long-run Outcome:** The process of entry and exit continues until the market reaches a **long-run equilibrium** where **economic profit is zero**.

Long-run Equilibrium: P = Minimum ATC

In the long run, competitive firms produce at the minimum of their Average Total Cost, leading to both **allocative efficiency** (P = MC) and **productive efficiency** (production at minimum cost).

Chapter 3: TYPES OF COMPETITIONS AND THEIR CHARACTERISTICS (Monopoly)

3.1 Monopoly

- **a) Monopoly and Monopolistic Competition:** These are types of imperfect competition where firms have some control over the price they charge.
- **b) Monopoly:** A market structure where there is a **single seller** of a product that has no close substitutes. The monopolist is a **Price Maker**.

Barriers to entry are the source of monopoly power:

1. **Exclusive Ownership of a Key Resource** (e.g., De Beers and diamonds).
2. **Government-created Monopolies** (e.g., Patents and copyrights).
3. **Natural Monopoly:** A single firm can supply a good or service to an entire market at a lower cost than two or more firms could. (e.g., Local water company).

- **c) Demand Curve for the Monopolist:** Because the monopolist is the sole producer, it faces the entire **market demand curve**, which is **downward-sloping**. If the monopolist wants to sell more, it must lower the price. Consequently, for a monopolist, the Marginal Revenue (MR) curve is always below the Demand (Average Revenue, AR) curve.

MR < P (for all output levels greater than one)

- **d) Profit Maximization/Equilibrium in Monopoly:**

The monopolist also maximizes profit by choosing the output level where **Marginal Revenue (MR) equals Marginal Cost (MC)**.

1. **Quantity Choice:** Find the output where MR = MC.
2. **Price Choice:** Once the profit-maximizing quantity (Qm) is determined, the monopolist sets the price (Pm) that consumers are willing to pay for that quantity by reading up to the **Demand Curve**.

3. **Profit:** The profit is given by Qm * (Pm - ATC). Monopolies can earn positive economic profit in the long run because barriers prevent entry.

Chapter 4: MONOPOLISTIC COMPETITION & OLIGOPOLY

4.1 Monopolistic Competition

- **a) Feature of the Market:** A market structure characterized by:
    1. **Many Sellers:** There are numerous firms competing for the same customers.
    2. **Product Differentiation:** Each firm sells a slightly different product (e.g., brand, quality, location). This gives them a downward-sloping demand curve.
    3. **Free Entry and Exit:** Firms can enter or leave the market without restriction. (e.g., restaurants, clothing stores).
- **b) The Short-run Equilibrium (Profit or Loss):** In the short run, a monopolistically competitive firm behaves much like a monopolist. It faces a downward-sloping demand curve and maximizes profit where MR = MC. The firm can earn short-run economic profits or suffer losses.
- **c) The Long-run Equilibrium:** Due to free entry and exit, the long run eliminates economic profit.

- If firms are earning profits, new firms enter, taking some demand away from existing firms. The demand curve for existing firms shifts **left**.
- If firms are suffering losses, firms exit, increasing the demand for the remaining firms. The demand curve shifts **right**. This process continues until the demand curve is **tangent** to the Average Total Cost (ATC) curve.

Long-run Equilibrium: P = ATC (zero economic profit)

- **d) Monopolistic versus Perfect Competition:** Monopolistic competition is less efficient than perfect competition for two reasons:

- **Excess Capacity:** The firm produces less than the output that minimizes ATC (the efficient scale).
- **Markup:** Price is greater than Marginal Cost (P > MC). This is allocative inefficiency.
- **e) Price Discrimination:** The practice of selling the same good at different prices to different customers, even though the costs of production are the same. (e.g., Movie ticket prices for seniors/students, airline prices). This requires the ability to segment the market and prevent arbitrage.

4.2 Oligopoly

- **a) Characteristics of Oligopoly:** A market structure in which only a **few sellers** offer similar or identical products. (e.g., automotive industry, commercial airlines, soft drinks).
- **b) Behavior of a Firm in an Oligopolistic Market:** The small number of firms means that each firm must consider how its output and pricing decisions will affect the profits of its rivals and how its rivals will react.
- **c) Mutual Interdependence:** The key characteristic of oligopoly. The profit of any one firm depends not only on its own actions but also on the actions of the other

firms. Firms can cooperate and act like a monopoly (**collusion** and **cartel**) or compete fiercely.

- **d) Leadership Pricing (Price Leadership):** A form of implicit collusion where one dominant firm sets the price, and other smaller firms follow suit, avoiding price wars.
- **e) Kinked Demand Curve:** A model often used to explain price rigidity in oligopolies. The theory suggests that if a firm **raises** its price, rivals will **not** follow, leading to a large drop in demand (elastic demand). If a firm **lowers** its price, rivals **will** follow to avoid losing market share, leading to only a small increase in demand (inelastic demand). This creates a "kink" in the demand curve and a vertical gap in the MR curve, meaning costs can fluctuate without changing the profit-maximizing price.

Chapter 5: INTRODUCTION TO MACROECONOMICS

5.1 The Circular Flow Model

- **a) The Circular Flow Model:** A visual model of the economy that shows how dollars flow through markets among households and firms.
    - **Households:** Own the factors of production (labor, land, capital) and sell/rent them to firms in the **Market for Factors of Production**. They also buy goods and services in the **Market for Goods and Services**.
    - **Firms:** Produce goods and services using the factors of production.
    - **Two Loops:**
        1. **Inner Loop (Inputs/Outputs):** Represents the flow of factors of production and goods/services.
        2. **Outer Loop (Money):** Represents the flow of money (income, expenditures).

5.2 National Income Accounts: GDP

- **b) National Income Accounts: GDP: Gross Domestic Product (GDP)** is the market value of all final goods and services produced within a country's borders in a given period of time.
    - **The Expenditure Approach (C + I + G + NX):** GDP is the sum of spending in four components:
        1. **Consumption (C):** Spending by households on goods and services (excluding new housing).
        2. **Investment (I):** Spending on capital equipment, inventories, and structures (including new housing).
        3. **Government Purchases (G):** Spending on goods and services by local, state, and federal governments (excluding transfer payments).
        4. **Net Exports (NX):** Exports minus Imports.
- **c) Real GDP and Nominal GDP:**
    - **Nominal GDP:** The production of goods and services valued at **current prices**. Changes can reflect changes in quantity or changes in price.
    - **Real GDP:** The production of goods and services valued at **constant prices** (from a base year). This measures the economy's actual production of goods and services, isolated from the effects of inflation.
    - **GDP Deflator:** A measure of the overall level of prices, calculated as:

GDP Deflator = (Nominal GDP / Real GDP) * 100

- **d) Other Measures of Income:**
    - **Gross National Product (GNP):** The market value of all final goods and services produced by a country's citizens, *regardless* of where they are located.
    - **Net National Product (NNP):** GNP minus **Depreciation** (the consumption of fixed capital).
    - **National Income:** NNP minus indirect business taxes (and plus business subsidies).
    - **Personal Income:** Income received by households and noncorporate businesses.
    - **Disposable Income:** Personal income minus personal taxes.

5.3 Financial Market and Interest Rates

- **e) Financial Market:** Institutions that channel funds from those who have saved (suppliers of money) to those who want to borrow (demanders of money). (e.g., Stock Market, Bond Market, Banks).
- **f) The Demand & Supply for Money:**
    - **Demand for Money:** The amount of money (currency and bank deposits) that people choose to hold. Driven by the need for transactions (purchasing power) and speculative reasons (as a store of wealth).
    - **Supply of Money:** Controlled by the central bank (e.g., the Federal Reserve in the U.S.).
- **g) The Determinants of Interest Rate:** The interest rate can be viewed as the **price of money** or the return on savings. It is determined by the supply and demand for loanable funds (money available for lending). Key determinants include:
    - Saving incentives (affecting supply).
    - Investment opportunities (affecting demand).
    - Government budget deficits (affecting demand, known as **crowding out**).
- **h) Equilibrium in Financial Market:** The **equilibrium interest rate** is the rate at which the quantity of loanable funds supplied equals the quantity of loanable funds demanded.

5.4 Macroeconomic Goals and Policy

- **Unemployment:** The percentage of the labor force that is jobless.
    - **Frictional Unemployment:** Temporary, short-term job search.
    - **Structural Unemployment:** Mismatch between worker skills and job openings.
    - **Cyclical Unemployment:** Unemployment caused by a recession or downturn. The goal is to minimize cyclical unemployment.
- **Inflation:** An increase in the overall level of prices in the economy. Measured by the Consumer Price Index (CPI) or the GDP Deflator.
- **Growth:** The long-run increase in real GDP, often measured as the growth rate of real GDP per person. Key determinants are productivity (physical capital, human capital, natural resources, and technological knowledge).
- **Fiscal and Monetary Policy:** Governments use these tools to influence the overall economy:
    - **Fiscal Policy:** The use of government spending and taxation to influence the economy. (Controlled by the legislative and executive branches).

- **Monetary Policy:** The setting of the money supply by policymakers in the central bank. The central bank uses tools like open-market operations (buying/selling bonds) to manage interest rates and control inflation.

Important Questions for Full Subject:

Chapter 1: BASIC PRINCIPLES OF ECONOMICS (Scarcity, Demand, Supply, and Elasticity)

Section A: Basic Principles

1. What is the fundamental economic problem, and how does it necessitate making choices? Define the term associated with this problem.

2. Explain the concept of a trade-off. Illustrate this by describing the "Guns and Butter" trade-off.

3. Define and contrast **efficiency** and **equity**. Why does society often face a trade-off between these two goals?

4. What is **opportunity cost**? Provide an example of the opportunity cost of attending a major concert, listing both explicit and implicit costs.

5. Differentiate between **Microeconomics** and **Macroeconomics**, providing two distinct examples for each field of study.

6. Distinguish between **Positive Analysis** and **Normative Analysis**. Which type of statement can be tested using real-world data?

Section B: Demand and Supply

7. State the **Law of Demand**. Explain why the demand curve slopes downward using the concepts of the substitution effect and the income effect.

8. List and explain five non-price determinants that cause the entire **demand curve** to shift.

9. Define **Market Demand** and explain how it is derived from individual demand schedules.

10. State the **Law of Supply**. Why do producers typically increase the quantity supplied when the price rises?

11. List and explain four non-price determinants that cause the entire **supply curve** to shift.

12. Define **Market Equilibrium**. What situation occurs when the market price is set below the equilibrium price, and how does the market naturally adjust back to equilibrium?

13. Describe the **Law of Diminishing Returns**. How does this concept explain the short-run shape of a firm's cost curves?

Section C: Elasticity

14. Define **Price Elasticity of Demand**. What does an elasticity coefficient of 0.5 mean in practical terms for consumers' responsiveness to price?

15. What are the key determinants of the Price Elasticity of Demand (e.g., availability of substitutes, necessity vs. luxury)?

16. If a business needs to increase its total revenue, should it raise or lower its price if its product has an elastic demand? Explain your reasoning.

17. Define **Price Elasticity of Supply**. Why might supply be more elastic in the long run than in the short run?

Chapter 2: THE THEORY OF FIRM AND MARKET STRUCTURE: COMPETITIVE MARKET

Section A: Characteristics and Short-Run Equilibrium

18. List and describe the three defining characteristics of a **Perfectly Competitive Market**. What is the key implication of these characteristics regarding the firm's relationship with the market price?

19. Why is the demand curve for an individual competitive firm perfectly elastic (horizontal)? What does this imply about the relationship between Price (P), Marginal Revenue (MR), and Average Revenue (AR)?

20. State the universal rule for **Profit Maximization** for any firm. How does this rule simplify for a perfectly competitive firm?

21. Define **Economic Profit**. Explain the difference between accounting profit and economic profit.

22. Under what condition will a competitive firm continue to operate in the short run even if it is experiencing an economic loss?

23. What is the **Shutdown Point** for a firm in the short run? What happens if the price drops below this point?

24. Explain why the competitive firm's short-run supply curve is its Marginal Cost (MC) curve above the Average Variable Cost (AVC) curve.

Section B: Long-Run Adjustment

25. Describe the process of **entry** into a competitive market. What drives this entry, and what effect does it have on the market supply curve and the equilibrium price?

26. Describe the process of **exit** from a competitive market. What drives this exit, and what effect does it have on the market supply curve and the equilibrium price?

27. State the condition for the **Long-run Equilibrium** in a perfectly competitive market. What is the level of economic profit in this equilibrium?

28. Explain how the long-run equilibrium in perfect competition results in both **productive efficiency** and **allocative efficiency**.

Chapter 3: TYPES OF COMPETITIONS AND THEIR CHARACTERISTICS (Monopoly)

1. What is a **Monopoly**? How does a monopolist differ from a competitive firm in terms of its ability to influence price?

2. List and briefly explain the three main sources of **Barriers to Entry** that allow a monopoly to persist.

3. Why is the **Marginal Revenue (**MR**) curve** always below the **Demand (**P **or** AR**) curve** for a monopolist?

4. Explain the two steps a monopolist must take to determine its profit-maximizing price and quantity. Use the MR=MC rule.

5. Can a monopolist earn positive economic profit in the long run? Explain why or why not, referencing barriers to entry.

6. How does a monopoly lead to a market outcome that is inefficient compared to perfect competition (i.e., explain the deadweight loss)?

Chapter 4: MONOPOLISTIC COMPETITION & OLIGOPOLY

Section A: Monopolistic Competition

7. What are the three core features of **Monopolistic Competition**? Provide two real-world examples of this market structure.

8. In the short run, how does the profit-maximization behavior of a monopolistically competitive firm compare to that of a monopolist?

9. Explain the long-run adjustment process in monopolistic competition. What causes the firm's demand curve to shift, and what is the resulting long-run equilibrium condition?

10. Describe the phenomenon of **Excess Capacity** in monopolistic competition and explain why it is considered an inefficiency.

11. What is the meaning of a **Markup** in this market, and how does it relate to the pricing condition (P > MC)?

12. Define **Price Discrimination**. What two conditions must a firm meet for price discrimination to be successful?

Section B: Oligopoly

13. Define an **Oligopoly** and state its most critical distinguishing characteristic. Provide an example.

14. Explain the concept of **Mutual Interdependence** in an oligopolistic market. How does this make the analysis of oligopoly difficult?

15. What is **Collusion**, and why is a **Cartel** difficult to maintain in the long run, even though it maximizes group profits?

16. Describe the model of **Leadership Pricing (Price Leadership)**.

17. Explain the theory of the **Kinked Demand Curve**. How does this model attempt to explain price rigidity in oligopoly?

Chapter 5: INTRODUCTION TO MACROECONOMICS

Section A: Measuring the Economy

18. What is the purpose of the **Circular Flow Model**? Identify the two main decision-makers (households and firms) and the two main markets in the simplified model.

19. Define **Gross Domestic Product (GDP)**. Why is it a measure of production *within* a country's borders?

20. List and define the four components of GDP using the **Expenditure Approach** (C + I + G + NX).

21. Differentiate between **Nominal GDP** and **Real GDP**. Which measure is a better gauge of economic well-being and why?

22. Explain how the **GDP Deflator** is calculated and what it measures.

23. Briefly distinguish between **GDP**, **GNP**, and **Disposable Income**.

Section B: Financial Markets and Macroeconomic Indicators

24. What are **Financial Markets**, and what essential role do they play in the macroeconomy?

25. What drives the **Demand for Money**? Who controls the **Supply of Money**?

26. How is the **Equilibrium Interest Rate** determined in the market for loanable funds?

27. Differentiate between the three types of unemployment: **Frictional**, **Structural**, and **Cyclical**. Which type is the primary focus of short-run stabilization policy?

28. Define **Inflation**. How is the rate of inflation typically measured?

29. What is the key determinant of long-run economic growth (measured by real GDP per person)?

Section C: Macroeconomic Policy

30. Define **Fiscal Policy**. Which branches of government are responsible for setting fiscal policy?

31. Define **Monetary Policy**. Which institution is responsible for setting monetary policy?

32. Explain the concept of **Crowding Out** and how it relates to government budget deficits and the financial market.