OPERATION ECO STRIKE

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Definition & Meaning

- **Economics** studies how **limited resources** are used to satisfy **unlimited human wants**.
- **Business Economics** is the application of **economic principles** and analysis to make **business decisions**, focusing on the **efficient use of scarce resources**.
- The foundational work in Economics is **'An Inquiry into the Nature and Causes of the Wealth of Nations' (1776)** by **Adam Smith**, known as **'The Wealth of Nations'**.

🔹 Branches of Economics

📌 Micro Economics:

- Studies the **behaviour of individual units** such as:
    - Consumers
    - Firms
    - Industries
- Focuses on **price determination**, **consumer behaviour**, **factor pricing**, **firm decision-making**, and **industry location**.

📌 Macro Economics:

- Studies **aggregate economic variables**, such as:
    - **National income & output**
    - **General price level & interest rates**
    - **Employment level & economic growth**
    - **Savings & investment**

- **External value of currency**
- **Exports, imports & foreign investment**

🔹 Nature of Business Economics

✅ **A Science** – Uses analytical tools to study problems logically.
✅ **Based on Micro Economics** – It is largely rooted in microeconomic theory.
✅ **Incorporates Macro Elements** – Especially for understanding external environments.
✅ **Market-Oriented** – Based on theory of markets and private enterprises.
✅ **Interdisciplinary** – Combines economics with finance, statistics, accounting, etc.
✅ **An Art** – Involves practical application of knowledge.
✅ **Pragmatic** – Focuses on real-world problems and solutions.
✅ **Normative** – Deals with what **should be** done.

🔹 Positive vs Normative Economics

Basis	Positive Economics (Pure Science)	Normative Economics
Meaning	Based on **facts and data**	Based on **values, opinions, and judgments**
Nature	**Descriptive**	**Prescriptive**
Function	**Explains** cause and effect	**Suggests** what ought to be
Focus	What **is**	What **ought to be**
Testing	Can be tested **scientifically**	**Cannot be tested** empirically
Purpose	Describes **economic problems**	Provides **value-based solutions**

📘 CENTRAL ECONOMIC PROBLEMS & TYPES OF ECONOMIES – REVISION NOTES

🔹 Central Economic Problems

Every economy, whether developed or underdeveloped, faces the following **basic economic problems** due to the problem of **scarcity of resources** and **unlimited human wants**:

1. **What to Produce?**
   ➤ Decision regarding **types and quantity** of goods and services to be produced.

2. **How to Produce?**
   ➤ Selection of **technique of production** – **labour-intensive** or **capital-intensive**.

3. **For Whom to Produce?**
   ➤ Decision regarding **distribution of goods and services** among different sections of society.

4. **What Provisions for Economic Growth?**
   ➤ How much **resources should be allocated** for **capital formation**, R&D, etc., to ensure future economic growth.

🔹 Types of Economic Systems

✅ 1. Capitalist Economy (Free Market / Laissez-Faire Economy)

📌 **Definition**:
An economy where **all means of production** are **owned and managed by private individuals**.
Government has a **minimal role**.
Examples: United States, United Kingdom, Hong Kong, South Korea.

📌 **Characteristics**:

- **Profit Motive**
- **Consumer Sovereignty**
- **Competition**
- **Absence of Government Interference**
- **Right to Private Property**
- **Freedom of Enterprise**
- **Freedom of Economic Choice**

📌 **Merits**:

- Self-regulating via **price mechanism**
- High **efficiency** and **incentive** to work
- **Faster economic growth**
- **Optimal resource allocation**
- Low **cost of production**
- **Innovation & technological progress**
- Benefits of **competition** to consumers
- Ensures **freedom** and **private property rights**

📌 **Demerits**:

- **Economic inequality** and social injustice
- **Human welfare** often ignored
- Promotes **monopolies** and **exploitation of labour**
- Produces more **harmful goods** and less **merit goods** (e.g., education, healthcare)

- **Misallocation** of resources
- **Strikes and lockouts** due to labour exploitation
- **Precedence of property rights** over human rights

✅ 2. Socialist Economy (Command / Centrally Planned Economy)

📌 **Definition**:
All means of production are **owned by the State** on behalf of the community.
Resource allocation is done by the **central planning authority**, not by the market.
Propounded by: Karl Marx & Frederic Engels in **'The Communist Manifesto'**
Examples (Historical): USSR, North Korea (no pure socialist economy today)

📌 **Characteristics**:

- **Public ownership** of resources
- **Central planning**
- No role of **market forces**
- Focus on **welfare of society**
- No **private property rights**

📌 **Merits**:

- **Equitable distribution** of income & wealth
- **Rapid and balanced development**
- Minimization of **wastage** and **unemployment**
- Provides **social security**
- Ensures **right to work** and **basic living standards**
- **Economic stability**

📌 **Demerits**:

- Excessive **bureaucracy**, inefficiencies, and corruption
- **No incentive** for hard work
- **No private property rights**
- **Restricted freedom** of individuals
- **Administered prices** not based on demand-supply
- **Limited consumer choice**
- Extreme socialism is **impracticable** in modern times

✅ 3. Mixed Economy

📌 **Definition**:
An economic system that combines **features of both capitalism and socialism**.
Both **private and public sectors** coexist and share responsibility for economic development.
Government regulates and controls certain industries to prevent excessive inequality.

📌 **Features**:

- **Co-existence** of:
  a) **Private Sector**
  b) **Public Sector**
  c) **Joint/Combined Sector**
- **Government regulation** to balance social objectives with individual freedom

📌 **Merits**:

- **Economic freedom** with **state regulation**
- Promotes **innovation** and **enterprise**
- Encourages **investment and risk-taking**

- Provides **consumer choice** and **sovereignty**
- Avoids **cut-throat competition**
- **Comparative economic and social equality**
- Ensures **social justice** and **welfare**

📌 **Demerits**:

- **Excessive controls** reduce private sector motivation
- **Wastage of resources**, corruption, and inefficiency
- **Poor public sector performance**
- **High taxes**
- **Delays in decision-making**
- **Difficult to maintain balance** between the sectors

📘 DEMAND – DETERMINANTS & RELATED CONCEPTS

Demand = Desire + Willingness to purchase + Ability to pay

🔹 Determinants of Demand

1. Price of the Commodity (P↑ → QD↓)

- **Inverse Relation** as per **Law of Demand**

2. Disposable Income (DI↑ → QD↑)

- **Positive Relation**
- **Depends on nature of goods**:
    - **Normal Goods** – Positive relation (e.g., furniture)
    - **Essential Consumer Goods** – Positive relation (e.g., food grains)
    - **Durable Goods** – Positive relation (e.g., TV)
    - **Inferior Goods** – Negative relation (e.g., cheap substitutes)
    - **Luxury Goods** – Complex relation (e.g., Rolls Royce)

3. Related Commodities

- **Complementary Goods** (e.g., pen & ink)
  ➤ **Inverse Relation**: P↑ of one → QD↓ of other
- **Substitute Goods** (e.g., Pepsi & Coke)
  ➤ **Direct Relation**: P↑ of one → QD↑ of other

4. Taste & Preferences

- **Demonstration Effect** – People copy others
- **Bandwagon Effect** – Following trends
- **Snob Effect** – Desire for uniqueness
- **Veblen Goods** – High price = High demand (conspicuous consumption)

5. Consumer Expectations

- **Future price expectations** (FP↑ expected → QD↑ today)
  ➤ **Direct Relation**

6. Other Factors

- Population size
- Income distribution
- National income level
- Consumer credit availability & interest rates
- Government regulations

🔹 Law of Demand

Ceteris Paribus – All other things being equal
When **price falls**, **quantity demanded rises**.

✅ Reasons (Rationale) for Downward Sloping Demand Curve

- **Law of Diminishing Marginal Utility (DMU)**
- **Income Effect**
- **Substitution Effect**
- **Multiple Uses of Goods**
- **New Consumers**

❌ Exceptions to the Law of Demand

- Giffen goods
- Conspicuous goods (Veblen)

- Speculative goods
- Necessities
- Future price expectations
- Irrational behaviour

🔹 Change in Demand vs Change in Quantity Demanded

➤ **Change in Quantity Demanded (Movement Along Curve)**

- **Due to Price change only**
- Expansion (↓Price) / Contraction (↑Price)

➤ **Change in Demand (Shift of Curve)**

- **Due to other factors** (income, preferences, etc.)
- Increase in demand: Rightward shift
- Decrease in demand: Leftward shift

Elasticity of Demand

Elasticity is the degree of responsiveness of the quantity demanded of a good to changes in any of its determining variables (price, income, price of related goods, advertisement, etc.).

🔹 1. Price Elasticity of Demand (Ep)

Measures responsiveness of **quantity demanded** to **change in price**.

$$E_p = \frac{\%\ \text{Change in QD}}{\%\ \text{Change in Price}} \quad \text{or} \quad E_p = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

🔸 **Arc Elasticity (Mid-point formula):**

$$E_p = \frac{Q_2 - Q_1}{Q_2 + Q_1} \div \frac{P_2 - P_1}{P_2 + P_1}$$

🔸 **Geometric Method:**

- Upper Segment / Lower Segment of demand curve (RT/lower segment)

🔸 **Determinants of Price Elasticity:**

- Availability of substitutes
- Position in the consumer's budget
- Nature of the good (necessity/luxury)
- Time period
- Habits
- Consumer income
- Number of complementary goods

🔹 2. Income Elasticity of Demand (Ey)

Measures responsiveness of demand to **change in income**.

$$E_y = \frac{\%\ \text{Change in QD}}{\%\ \text{Change in Income}} = \frac{\Delta Q}{\Delta Y} \times \frac{Y}{Q}$$

🔸 **Types:**

- **Positive** (Normal goods)

- **Negative** (Inferior goods)
- **Zero** (Essential or necessity goods)

🔹 3. Cross Price Elasticity of Demand (Exy)

Measures the responsiveness of demand for one good **X** to a change in price of another good **Y**.

Exy=% Change in Qd of X% / Change in Price of Y

$$E_{xy} = \frac{\%\ \text{Change in Qd of X}}{\%\ \text{Change in Price of Y}} = \frac{\Delta Q_x}{\Delta P_y} \times \frac{P_y}{Q_x}$$

🔸 **Types:**

- **Substitute Goods** → Positive Exy (e.g., Coke & Pepsi)
- **Complementary Goods** → Negative Exy (e.g., Tea & Sugar)
- **Unrelated Goods** → Exy = 0

🔹 4. Advertisement Elasticity of Demand (AED)

Measures the responsiveness of demand to changes in **advertising expenditure**.

$$AED = \frac{\%\ \text{Change in QD}}{\%\ \text{Change in Ad Expenditure}} = \frac{\Delta Q_d}{Q_d} \div \frac{\Delta A}{A}$$

🔹 Types of Price Elasticity (Ep)

Type	Value	Meaning
Perfectly Elastic	Ep=∞	Demand changes infinitely with no price change
Perfectly Inelastic	Ep=0	No change in demand despite price change
Highly Elastic	Ep>	%Δ in demand > %Δ in price
Less Elastic	Ep<1	%Δ in demand < %Δ in price
Unitary Elastic	Ep=1	%Δ in demand = %Δ in price

📦 SUPPLY – Meaning and Law

🔹 Definition of Supply:

Supply refers to the **willingness** and **ability** of a producer to **offer goods for sale at a particular price** and **during a specific period of time**.

Supply=Willingness to Produce+Ability to Produce+At a Price\text{Supply} = \text{Willingness to Produce} + \text{Ability to Produce} + \text{At a Price}Supply=Willingness to Produce+Ability to Produce+At a Price

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📜 Law of Supply:

"Other things being equal (ceteris paribus), the **quantity supplied** of a commodity **rises with a rise in its price** and **falls with a fall in its price."**

- **Direct Relationship** between **Price** and **Quantity Supplied (QS)**
- Supply curve is **upward sloping**

📌 DETERMINANTS OF SUPPLY

Factor	Relation with Supply	Explanation
1. Price of the Good (P)	📈 **Direct**	As price increases, profit motive encourages more production
2. Price of Related Goods		
– Substitute Goods (Comp)**	📈 **Direct**	Higher price of substitute → shift towards producing current good
– Complementary Goods**	📉 **Inverse**	Rise in complementary good's price may reduce supply of current good
3. Prices of Factors of Production (PFOP)	📉 **Inverse**	Higher input costs reduce supply due to lower profitability
4. Technology	📈 **Direct**	Improved technology increases production efficiency
5. Government Policy	Depends	Subsidies increase supply; Taxes may reduce it
6. Nature of Competition & Size of Industry	📈 **Direct**	More firms & healthy competition increase total supply
7. Expectations of Future Price	📉 **Inverse**	If future prices are expected to rise, current supply may reduce
8. Number of Sellers	📈 **Direct**	More sellers in the market increases market supply

Ceteris Paribus: *Other things being constant* – Assumption for the law to hold true.

📈 ELASTICITY OF SUPPLY

🔹 Definition:

The **Elasticity of Supply** measures the **responsiveness of quantity supplied** of a good to a **change in its price**.

$$E_s = \frac{\%\text{Change in Quantity Supplied}}{\%\text{Change in Price}} = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$$

🧮 Degrees of Elasticity of Supply:

Type	Value	Meaning
Perfectly Elastic	Es = ∞	Infinite supply at same price
Perfectly Inelastic	Es = 0	Supply remains same, even with price change
Unitary Elastic	Es = 1	% Change in QS = % Change in Price
Relatively Elastic	Es > 1	% Change in QS > % Change in Price
Relatively Inelastic	Es < 1	% Change in QS < % Change in Price

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🧠 Determinants of Elasticity of Supply

1. **Nature of Commodity**:
    - Complex products → **Inelastic Supply**
    - Simple or mass-produced → **Elastic Supply**
2. **Time Period**:
    - **Short Run**: Less elastic (limited adjustment time)

- **Long Run**: More elastic (more time to adjust resources)

3. **Spare Production Capacity**:
   - Greater spare capacity → **more elastic supply**
4. **Availability of Inputs**:
   - Easily and cheaply available → **higher elasticity**
5. **Storage Possibility**:
   - Easy and inexpensive storage → **more elastic**
6. **Production Continuity**:
   - Continuously produced goods → **greater elasticity**
7. **Expectations of Future Price**:
   - If price expected to rise, current supply may fall → **inelastic in short run**

🧠 THEORY OF CONSUMER BEHAVIOUR

🔹 Utility

Utility is the want-satisfying power of a commodity.

⚖️ LAW OF DIMINISHING MARGINAL UTILITY (DMU)

📘 Statement:

As more units of a good are consumed, the marginal utility derived from each additional unit declines, keeping other factors constant.

📊 Example Table:

Quantity Consumed	Total Utility (TU)	Marginal Utility (MU)
1	30	30
2	50	20
3	60	10
4	65	5
5	65	0
6	60	-5
7	50	-10

✅ Key Point:

- **TU increases at a diminishing rate, then remains constant, and finally declines.**
- **MU becomes zero and may turn negative.**

💰 CONSUMER SURPLUS

Consumer Surplus = What a consumer is willing to pay – What the consumer actually pays

📈 Diagram Explanation:

- **Area under Demand curve above Price line represents Consumer Surplus (CS).**

📉 Limitations:

- **Cannot be precisely measured**
- **In case of necessities, CS may be infinite**
- **Affected by availability of substitutes**
- **No simple rule for measuring CS in prestige goods**
- **Can be measured in monetary terms only**

🧩 Applications of Consumer Surplus:

1. **Measures consumer welfare (gain from purchase)**
2. **Helps businesses in pricing and product strategy**
3. **Assists in project evaluation and investment decisions**
4. **Useful in setting agricultural support prices**
5. **Used in taxation decisions**

🌀 INDIFFERENCE CURVE ANALYSIS

🔺 Indifference Curve (IC):

- **Represents combinations of two goods that give the same level of satisfaction to the consumer**

🗒️ Characteristics of Indifference Curves:

- **Always downward sloping from left to right**
- **Convex to the origin due to diminishing Marginal Rate of Substitution (MRS)**
- **Never intersect**
- **Higher IC = Higher utility level**
- **Do not touch axes**

🧮 BUDGET LINE / PRICE LINE

Budget Line shows combinations of two goods that a consumer can purchase with a given income at given prices

Formula:

$P_x \cdot Q_x + P_y \cdot Q_y = M$

Where:

- **P_x, P_y = Prices of commodities X and Y**
- **Q_x, Q_y = Quantities of X and Y**
- **M = Consumer's income**
-

💡 Equilibrium Condition:

At equilibrium, the rate at which a consumer is willing to substitute X for Y equals the price ratio of the two goods.

What is Production?

- **Production = Creation of Utility**
  - ➤ ***Form Utility*** **– Changing form (wood → furniture)**
  - ➤ ***Place Utility*** **– Making goods available where needed**

➢ *Time Utility* – Storing goods for future use
➢ *Personal Utility* – Satisfying individual needs

🎯 Goal: Achieve maximum efficiency by minimizing cost.

🔹 Factors of Production

1️⃣ LAND

➡ Includes natural resources – soil, water, sunlight, etc.

Key Features:

1. Free gift of nature
2. Fixed supply – Can't be increased
3. Permanent – Can't be destroyed
4. Passive – Needs human effort
5. Immobile – Location-bound
6. Multiple uses – Farming, building, etc.
7. Heterogeneous – Varies in fertility

2️⃣ LABOUR

➡ Human effort – physical or mental, to produce goods/services.

Key Features:

1. Perishable – Can't be stored

2. Active factor – Drives production
3. Inseparable from labourer
4. Varies – Skills differ
5. Not always productive
6. Poor bargaining power
7. Mobile – Can change jobs/places
8. No quick supply adjustment
9. Trade-off – Work vs. Leisure

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3 CAPITAL

➡ Man-made tools/machines used for further production.

Defined as: "Produced means of production"

Capital Formation – 3 Stages:

1. Savings – By individuals/firms
2. Mobilisation – Through banks/markets
3. Investment – In machines, factories, etc.

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4 ENTREPRENEUR

➡ Combines all factors, takes risks, initiates production

Functions:

- Initiate enterprise

- **Coordinate resources**
- **Bear risk**
- **Innovate**

PRODUCTION FUNCTION

➢ General Form:

Q = f(a, b, c, d…n)
(*Output depends on input factors*)

➢ Cobb-Douglas Production Function:

Q = K·L^a · C^(1–a)
Where:

- **Q = Output**
- **L = Labour**
- **C = Capital**
- **a = Output elasticity of labour**

🔶 LAW OF VARIABLE PROPORTIONS (Short Run)

✅ Definition:

When one input (e.g., labor) increases while others are fixed (e.g., land, capital), output increases initially at an increasing rate, then at a decreasing rate, and eventually may decline.

✅ Key Formulas:

- **TP (Total Product) = Total output produced**

- MP (Marginal Product) = TP□ − TP□₋₁
- AP (Average Product) = TP / Units of Variable Factor

✅ Three Stages of Production:

Stage	TP Behavior	MP Behavior	AP Behavior	Explanation
I	Increases at increasing rate	Rises, reaches max	Rises	Underutilization of fixed factors
II	Increases at diminishing rate	Declines, becomes zero	Falls	Optimal utilization – stage of actual production
III	Starts falling	Becomes negative	Declines	Overcrowding, overuse of variable factor

📝 Important: Stage II is most relevant for firms as it gives maximum efficiency.

🔶 ISOQUANTS

- Curve showing different combinations of two inputs (like labor and capital) giving the same level of output.
- Similar to indifference curves in consumer theory.

🔶 RETURNS TO SCALE (Long Run)

✅ Definition:

Change in output due to proportionate change in all inputs (both labor and capital). It deals with long-run production.

✅ Types of Returns to Scale:

Type	Condition	Meaning
Increasing Returns to Scale	Output increases > input	Efficiency gains due to specialization, better tech
Constant Returns to Scale	Output = input change	Output rises in the same proportion as input
Decreasing Returns to Scale	Output < input change	Inefficiencies due to complexity, mismanagement

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🔶 COBB-DOUGLAS PRODUCTION FUNCTION

Form:
$Q=A \cdot La \cdot KbQ = A \cdot L^a \cdot K^bQ=A \cdot La \cdot Kb$
Where:

- **Q = Output**
- **L = Labor input**
- **K = Capital input**
- **A, a, b = Constants**

✅ Interpretation:

- **a + b = 1 → Constant returns to scale**
- **a + b > 1 → Increasing returns to scale**
- **a + b < 1 → Decreasing returns to scale**

🔑 QUICK TIPS:

- **MP > AP → AP is rising**
- **MP < AP → AP is falling**
- **MP = 0 → TP is maximum**
- **MP < 0 → TP falls**
- **AP = MP → AP is at maximum**

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1. Economic Cost

- Useful for decision-making by businessmen.
- Must be covered to earn **normal profits**.
- Includes both **explicit** (accounting) and **implicit** costs.

🔷 2. Types of Costs

🔹 Explicit Costs / Accounting Costs

- Actual payments to suppliers (wages, rent, materials).
- Recorded in financial statements.
- Example: Salary paid to workers.

🔹 Implicit Costs

- Earnings foregone by using self-owned resources.
- Not recorded in books, but crucial for decisions.
- Example: Foregone salary if the entrepreneur works in his own firm.

🔹 Opportunity Cost

- **Value of the next best alternative** forgone.
- Broader concept; **implicit cost** is a specific type of opportunity cost.
- **Not recorded** in accounts but essential for rational decisions.

🔹 Outlay Costs

- Actual expenditure of funds (e.g., wages, rent, interest).
- Also called **accounting costs**.

🔷 3. Cost Classification Based on Traceability

🔹 Direct / Traceable Costs

- Directly related to a product, machine, process, or plant.
- Example: Raw materials used in production.

🔹 Indirect / Non-Traceable Costs

- Not directly identifiable with any specific activity.
- Example: Factory lighting cost.

🔷 4. Other Important Cost Concepts

Cost Type	Description
Incremental Cost	Extra cost due to a new decision or change in business activity. Related to marginal cost.
Sunk Cost	Past cost already incurred and unrecoverable. Should be ignored in future decisions.
Historical Cost	Original price paid for acquiring assets (e.g., machinery).
Replacement Cost	Current cost required to replace an asset.

🔷 5. Social vs Private Costs

Type	Meaning
Private Cost	Costs incurred by the firm (explicit + implicit). Internalised in decisions.
Social Cost	Total cost to society = Private cost + External cost (e.g., pollution).

🔷 6. Fixed vs Variable Costs

Type	Description
Fixed Costs	Do not vary with output (up to a level). E.g., Rent, salaries.
Variable Costs	Vary directly with output. E.g., Raw materials, power, wages per unit.

🔷 Short Run Cost Concepts

✅ Cost Types:

Term	Formula	Meaning
TFC	Constant	Total Fixed Cost (unchanged with output)
TVC	Increases with output	Total Variable Cost
TC	TFC + TVC	Total Cost
AFC	TFC / Output	Average Fixed Cost (falls as output rises)
AVC	TVC / Output	Average Variable Cost
ATC	TC / Output or AFC + AVC	Average Total Cost
MC	ΔTC / ΔQ or ΔTVC / ΔQ	Marginal Cost – change in cost due to one more unit of output

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🔷 Cost Curve Behavior (Short Run)

- **AFC**: Downward sloping (spreads over more units)
- **AVC & ATC**: U-shaped (fall first, then rise)
- **MC**: U-shaped, cuts both **AVC & ATC** at their **minimum points**

🔷 Key Relationship Between MC & AC (AVC/ATC):

Condition	Implication
When **MC < AC**,	AC is **falling**
When **MC > AC**,	AC is **rising**
When **MC = AC**,	AC is at **minimum**

🧠 **TIP**: Think of MC as the "trend-setter" for AC.

🔷 Long Run Cost Curves

- **LAC (Long-Run Average Cost)** = Planning Curve / Envelope Curve
- LAC is U-shaped due to **economies and diseconomies of scale**
- Formed by touching the **lowest points** of all **short-run ATC curves (SAC)**

🔷 Economies and Diseconomies of Scale

✅ Internal Economies of Scale (within the firm):

- **Technical** (advanced machines)
- **Managerial** (specialized managers)
- **Marketing**, **Financial**, **Risk-bearing**, etc.

✅ Internal Diseconomies of Scale:

- **Inefficiency**, **coordination issues**, **managerial overload**, etc.

✅ External Economies of Scale (industry-level):

- **Cheaper inputs**, **skilled labor**, **better transport**, **technology access**, etc.

✅ External Diseconomies:

- **Resource scarcity**, **infrastructure issues**, **pollution**, etc.

Markets & Revenue Concepts – Quick Revision Notes

🔷 Classification of Markets

1. On the basis of AREA:

- **Local Market** – Limited to a locality
- **Regional Market** – Covers a region/state
- **National Market** – Entire nation
- **World Market** – Global reach

2. On the basis of TIME:

- **Very Short Period** – Supply fixed (e.g., perishables)
- **Short Period** – Limited adjustment
- **Long Period** – All factors variable
- **Very Long Period** – Structural changes possible

3. On the basis of NATURE OF TRANSACTION:

- **Spot Market** – Immediate delivery
- **Future Market** – Future delivery

4. On the basis of REGULATION:

- **Regulated Market** – Govt rules apply (e.g., SEBI)
- **Unregulated Market** – No formal control

5. On the basis of VOLUME OF BUSINESS:

- **Wholesale Market** – Bulk sale

- **Retail Market** – Final consumer sale

🔷 Types of Market Structures (Based on Competition)

Type	Key Feature
Perfect Competition	Many sellers, homogeneous product
Monopoly	One seller, no close substitute
Oligopoly	Few sellers, interdependence
Monopolistic Comp.	Many sellers, product differentiation

🔷 Revenue Concepts

✅ Formulas:

Concept	Formula
Total Revenue (TR)	TR = Price (P) × Quantity (Q)
Average Revenue (AR)	AR = TR / Q or AR = Price (P)
Marginal Revenue (MR)	MR = ΔTR / ΔQ or MR = TR□ - TR□₋₁

✅ Important AR–MR Relationship:

✔️ **Perfect Competition:**

- **Price = AR = MR** (horizontal AR curve)

✔️ **Imperfect Competition (e.g., Monopoly):**

- **AR falls** as quantity increases

- **MR < AR**
- **MR can be zero or negative** when TR starts falling

🔷 Graphical Summary

1. **TR Curve**:
    - Increases at first
    - Peaks when **MR = 0**
    - Declines when **MR < 0**
2. **AR & MR Curve (Monopoly/Oligopoly)**:
    - Both downward sloping
    - MR falls faster than AR
3. **AR = MR = Price** in perfect competition.

🔷 Numerical Table Insights

Units Sold	Price (₹)	TR (₹)	AR (₹)	MR (₹)
1	10	10	10	10
2	10	20	10	10
3	10	30	10	10

- Here: **Price = AR = MR = 10 → Perfect Competition**

🔑 Quick Recap Keywords

- **TR = P × Q**
- **AR = TR ÷ Q**
- **MR = Change in TR**
- **MR cuts TR at max point**
- **AR > MR in Monopoly**
- **Price = AR = MR in Perfect Comp.**

Market Equilibrium (Perfect Competition)

📌 Key Terms:

- **Equilibrium Point (E)**: Where demand = supply
- **Equilibrium Price**: ₹6 (from example)
- **Equilibrium Quantity**: 60 chocolates
- **Excess Supply**: Supply > Demand → downward pressure on price
- **Excess Demand**: Demand > Supply → upward pressure on price

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✅ Conditions for Equilibrium of a Firm:

1. **MR = MC**
2. **MC should cut MR from below**
3. **MC must be rising (positive slope)**

🔁 Effect of Change in Demand and Supply on Price & Quantity

Scenario	Price Change	Quantity Change
No Change (D & S)	Same	Same
↑ Demand, No Supply	↑	↑
↓ Demand, No Supply	↓	↓
↑ Demand, ↑ Supply	Ambiguous	↑
↓ Demand, ↓ Supply	Ambiguous	↓
↑ Demand, ↓ Supply	↑	Ambiguous
↓ Demand, ↑ Supply	↓	Ambiguous

🔷 Market Structure Comparison Table

Basis of Comparison	Perfect Competition	Monopoly	Monopolistic Competition	Oligopoly
No. of Sellers	Large	One	Fairly large	Few
No. of Buyers	Large	Large	Large	Large
Nature of Product	Homogenous	Unique	Differentiated	Either
Knowledge	Perfect	Some	Some	Some
Entry & Exit	Free	Restricted	Free	Restricted
Market Power	None	Full	Slight	Partial/Significant
Price Influence	Price taker	Price maker	Price maker	Price maker
Demand Curve	Perfectly elastic	Negatively sloped	Negatively sloped	Kinked/Downward Sloping

AR-MR Relationship	AR = MR	AR > MR	AR > MR	AR > MR
Profit (Short/Long Run)	Normal	Abnormal	Normal (LR) / Abnormal (SR)	Abnormal

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🔑 Important Quick Points

- **Perfect Competition**: Many sellers, price taker, free entry/exit
- **Monopoly**: One seller, price maker, abnormal profit
- **Monopolistic Competition**: Many sellers, product differentiation
- **Oligopoly**: Few sellers, interdependence, kinked demand

📈 Business Cycles – Quick Revision Notes

🔄 Definition

- Business cycles (or trade cycles) are **rhythmic fluctuations** in aggregate economic activity over time.
- These are **recurring but not periodic**, and may vary in length and intensity.
- Each cycle has **4 main phases**:

🔹 1. Expansion (Boom/Upswing)

✔ Rising GDP (Output)
✔ Low unemployment
✔ Increasing income & demand
✔ Higher investment and stock market optimism
✔ Easy bank credit, high business confidence
✔ Stable inflation
✔ **People enjoy high standard of living**

🔺 2. Peak (Prosperity)

✔ Output, employment & demand at **maximum**
✔ Full utilization of resources
✔ Inflationary pressures may build up
✔ Shortage of inputs & rising costs
✔ **Demand starts exceeding supply**

🔻 3. Contraction (Recession/Downswing)

✔ **Falling GDP**
✔ Rising unemployment
✔ Drop in income, demand, profits, investment
✔ Consumers & businesses lose confidence
✔ Credit tightening begins
✔ Business pessimism, stock market decline
✔ Often triggered by overproduction or financial panic
✔ **Deflation** may occur

🔻 4. Trough (Depression)

✔ **Lowest point of economic activity**
✔ Severe decline in output, income, employment
✔ High business failures & bankruptcies
✔ Long-term unemployment
✔ Reduced consumption, investment & demand
✔ **Hard to recover** unless aided by policy measures

🔼 Recovery

✔ Gradual increase in GDP
✔ Decline in unemployment
✔ Aggregate demand begins to rise
✔ Consumer & investor confidence restored
✔ Banks ease credit
✔ Leads into the **next Expansion phase**

🔸 Features of Business Cycles

1. **Periodic but not regular – Vary in intensity & duration.**
2. **Four phases exist, but no fixed length or symmetry.**
3. **Common in market economies (free markets).**
4. **Affects all sectors, not just one industry.**

5. Hard to predict – due to external/global influences.
6. Contagious & international – can spread globally.
7. Impact society deeply – unemployment, inflation, etc.

🔸 Causes of Business Cycle

🟢 Internal Factors (within the economy)

- Fluctuations in Demand – major cause.
- Fluctuations in Investment
- Variations in govt. spending or taxation
- Money supply changes
- Psychological factors – optimism/pessimism

🔴 External Factors (outside influences)

- Wars
- Post-war reconstruction
- Technological shocks (e.g. AI, internet)
- Natural factors (disasters, pandemics)
- Population growth

📈 Economic Indicators

🔹 Leading Indicators *(Predict future trends)*

- **Stock Prices**
- **New orders for capital/consumer goods**

🔹 **Lagging Indicators *(Follow trends)***

- **Unemployment**
- **Corporate profit**
- **Labour cost/unit**

🔹 **Coincident Indicators *(Show current status)***

- **GDP**
- **Inflation**
- **Industrial production**
