Unit 1

Nature and Scope of Economics

Introduction:

The knowledge of economics is useful for everyone-individuals, households, business units, institutions as well as government.

Economic issues and problems are pervasive.

In the earlier years, economics was mixed with non-economic aspects of human knowledge and philosophy.

Some of the basic elements of discipline of economics are- (a) Study of working of an economy and the issues faced by it.

(b) The nature of economic problems and their solution is closely linked with the structure of economic system, and its progress and development.

(c) Economic problems of individuals and societies are not independent of other social, cultural and political aspects of human existence.

The primary task of the discipline of economics is to study the working of an economic system and issues faced by it.

In a simple economy, human beings are confronted with the problems of poverty and economic insecurity.

In a developed industrial economy, the problems are mainly of distributive justice and economic instability.

Some of the specific problems faced by market economics are-

(a) Labour management relations

(b) Exploitation of labour

(c) Inequalities of income and wealth (d) Cyclical fluctuations etc.

Economics is a study of an Economy:

Economics can be defined as a study of economic system in its various aspects like

(a) structure (b) working (c) performance (d) problems (d) and their possible solutions.

Study of economy includes-

(a) forms of economy (capitalist, socialist, mixed) (b) economic decisions and their implementation

(c) inter relationship between economic units and their groups.

(d) performance of economic units

(e) inter relationship with different economies.

Economic wants are those wants which can be satisfied by the consumption of goods and services.

Non-economic wants are those wants which do not need the consumption of goods and services.

Characteristics of wants are-

(a) even if they are satisfied, they have a tendency to re-emerge.

(b) with the passage of time, they tend to increase in number and variety.

Problems with wants:

(a) availability of insufficient resources, to satisfy them (b) mismatch between available means (resources) and wants! **Solution for the above problems:**

(a) Increase the availability of resources

(b) Ensure that the means (resources) are not wasted and used economically.

The entire set of arrangement for meeting the above objectives (a) increasing availability of resources (b) ensuring their economical use, is known as economy or economic system.

J. M. Keynes explained theory of economics as "It is a method rather than doctrine, an apparatus of the mind, a technique of thinking which helps its possessors to draw correct conclusions.

Defining Economics:

The subject matter of economies is too wide and therefore, no single opinion can be established for defining it.

The various reasons for difference in opinion while defining economics are -

(a) structure of economy

(b) stage of its development

(c) expertise of economist providing the definition (d) purpose of studying economics.

Economics as a science of wealth:

(a) This view of economics was expressed by Adam Smith (who is known as father of Economics)

(b) He wrote a book named "An Enquiry into the nature and causes of wealth of nation" in 1776, in which he explained economics as

"The great object of Political Economy of every country is to increase the riches and power of that country"

(c) Objectives of economics according to Adam smith:

to grow rich acquire political

and military strength

(d) Features of wealth definition:

Ignores the problem of distributive justice

Wealth does not have a universally accepted meaning.

Wealth represents only material goods.

(e) Merits of wealth definition:

The definitions were concerned with creation of wealth, which is the main problem of economics.

During early times, inequality of income was not a big problem, so Adam smith ignored this problem.

(f) Demerits of economics as a wealth:

Neglects welfare aspect

With the development of economy, the problem of income inequality has arisen.

Economics has been reduced to a dismal science.

Definition is limited only to goods and not to services.

Concept of wealth is very narrow.

(g) Shift by Ricardo:

Ricardo emphasized on distribution of wealth (which was ignored by Adam Smith.

(h) Other views on economics:

Inductive reasoning (Historical School of Economics) - they believed in deriving generalisations from historical or fact or data base of economics.

Deductive reasoning - they believed in deducing conclusions logically.

Economics on a welfare aspect:

(a) The welfare aspect of economics was given by Alfred Marshall.

(b) He expressed economics as-"study of mankind in the ordinary business of life, it examines that part of individual and social action which is most closely connected with the attainment and use of material requisites of well being". "Thus it is on one side a study of wealth and on the other and more important side, a part of study of man".

(c) Features of welfare definition-(Merits)

Economics is the study of both wealth and man (but man is more important)

The core subject matter of economics is economic

welfare **(d) Demerits:**

It ignores creation of immaterial wealth like services of doctors etc . The term welfare is vague.

(e) Another aspect of welfare definition was given by A.C. Pigou

(f) Features of Pigou's definition:

Economics is only that part of social welfare which can be measured in terms of money.

This definition is both wide and restrictive.

Scarcity Definition of Economics:

(a) The scarcity approach of economics was represented by Lionel Robbins.

(b) This discipline of economics is based on pure reasoning and logical investigation.

(c) Lionel Robbins expressed economics as "it is the science that studies human behaviour between ends and scarce means which have alternative uses". **(d) Features of this definition:** Limited means (resources)

Unlimited ends (wants)

Alternative uses of means

According to Robbins, economics should be studied only in terms of "what is" and not "what ought to be."

He also expressed "whatever economics is concerned with, it is not concerned with the causes of material welfare".

The main problem is of choice making.

The "Fundamental Premise of Economics" is that individual should choose the alternative for which they believe the net gain to be greatest.

(e) Demerits of the definition:

The definition makes economics a human science rather than social science. C Narrow and restricted scope

Shortage of merit goods (goods which not only benefit the consumers but also non consumers like education)

Some public services like defense, justice etc cannot be provided by the market.

Growth Definition of Economics:

(a) This definition was propounded by Paul A. Samuelson (b) He expressed economics as-

"Economics is the study of how people and society end up choosing, with or without the use of money, to employ scarce productive resources that could have alternative uses, to various commodities and distribute them for consumption new or in future among various persons and groups in society. It analyses the cost and benefits of improving patterns of resource allocation".

Scope of Economics:

Our economy is dynamic in nature which means as economy develops, the nature of problems keeps on changing.

In order to understand economics model building approach is used which assumes whole economy as a small model

The knowledge of economics can be used for the benefit of the society by-

(a) increasing collective welfare

(b) accelerating rate of economic growth

(c) reducing fluctuations in income and employment.

Nature of Economics - Science or an Art:

Economics as a Science:

(a) **Science is a body of knowledge which shows relationship between cause and effect:**
Economics is a body of generalizations or laws and like science shows cause and effect relationship. **For e.g -** The law of demand in economics says "when price of a commodity rises (cause), its quantity demanded falls (effect).

(b) **Science is capable of measurement:** Like science, economics is also measured.

For e.g. In economics, measurement is in terms of money.

(c) **Science has a methodological apparatus:**
Economics can also be studied using various methods

For e.g. Inductive Reasoning and Deductive Reasoning are the two methods of studying economics.

(d) **Science has an ability to forecast:**
Like science, the various laws of economics can help in forecasting which are beneficial for making policies.

For e.g. - Consumer demand, supply of a product etc can be predicted using various laws.

Economics is not a Perfect Science:

(a) Reliance cannot be placed on accuracy of economic laws as these are based on humans who are unpredictable.

(b) Economics does not have controlled experiments (i.e. the conditions are not stable) as a result actual results differ from predicted ones.

(c) There is no fixed pattern of human behavior which may be used to formulate economic laws.

(d) While deriving economic laws only the "most important" causes are considered, which reduces the reliability of economic predictions. Hence, economics is not an exact science but it can be termed as a science on account of nature and quality of its reasoning.

Economics as an Art:

(a) Art tells us how to do the thing i.e. to achieve a objective. Economics is also used for achieving a variety of goals.

For e.g. All policies etc made in economics has the ultimate objective of solving economic problems.

(b) Art is the practical application of theoretical knowledge Like Art, Economics also practices its theoretical laws.

For e.g. The various policies are made only after having a theoretical knowledge of the society and country as a whole.

Hence, economics is also an art.

Economics as a Positive or Normative Science:

"Economics is a science and economics is a positive science mean the same thing"

"Economies as an art and normative economics means two related but different things"

Let us see what is positive/normative science:

(a) Positive Economics:

It investigates "what is".

It does not pass value judgements.

It is not concerned with welfare propositions.

This approach of economics was propounded by Lionel Robbins.

(b) Normative Economics:

Normative is derived from the word "Norm" or "Standard" which implies "what ought to be". It passes value judgements.

It is concerned with welfare propositions.

It decides standards which should be adhered to in achieving economic objectives. This approach was propounded by Alfred Marshall.

Hence, economics is both a positive and normative science however in spite of using normative economics, our economy cannot reach a happy state of affairs because of the following reasons :

(a) Lack of uniformity in choice of objectives so the question of "what ought to be" remains undecided.
(b) Lack of information of the economy due to which we cannot ascertain which steps should be taken to achieve the goals.
(c) Several courses of action cannot be attained at the same time.

Contribution of kautilya in Indian economics thought

Kautilya, also known as Chanakya or Vishnugupta, was an ancient Indian teacher, philosopher, economist, jurist, and royal advisor (4th century BCE). His main contribution to economics comes from his classic work Arthashastra ("Science of Wealth/Statecraft"), which is considered one of the earliest treatises on economics, political science, and administration.
Here are the major contributions of Kautilya in economics:

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1. Concept of Arthashastra (Science of Economics and Statecraft)
   - He emphasized Artha (wealth, economy) as one of the four goals of life (along with Dharma, Kama, Moksha).
   - He linked economics with politics, administration, and ethics, showing an integrated approach to governance and economic welfare.

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2. Role of the State in Economy
   - The king was seen as the guardian of the economy responsible for welfare of his subjects.
   - Suggested state control over key industries like mining, forests, salt, liquor, weapons, and trade.
   - Advocated a mixed economy where private enterprise and state intervention coexisted.

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3. Taxation System
   - Kautilya designed a progressive taxation system based on ability to pay.
   - He stressed that taxes should be collected like a bee gathers honey—without harming the flower.
   - Introduced taxes on agriculture, trade, industries, and customs duties.

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4. Agriculture as the Economic Base

- Considered agriculture the backbone of the economy.
- Emphasized irrigation systems, storage facilities, and protection from natural calamities.
- State was to help farmers with seeds, cattle, and tax relief during famines or floods.

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5. Trade and Commerce
   - Advocated regulation of markets and prevention of black marketing, hoarding, and adulteration.
   - Suggested trade routes security and establishment of trade centers.
   - Supported both internal and foreign trade, with customs duties levied on imports/exports.

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6. Labor and Wages
   - Prescribed minimum wages for workers and ensured fair treatment of laborers.
   - Recognized the role of different occupational groups in contributing to the economy.

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7. Public Finance & Treasury Management
   - Stressed proper budgeting, accounting, and auditing of state revenues and expenditures.
   - Advocated surplus accumulation in the treasury for emergencies like wars or famines.

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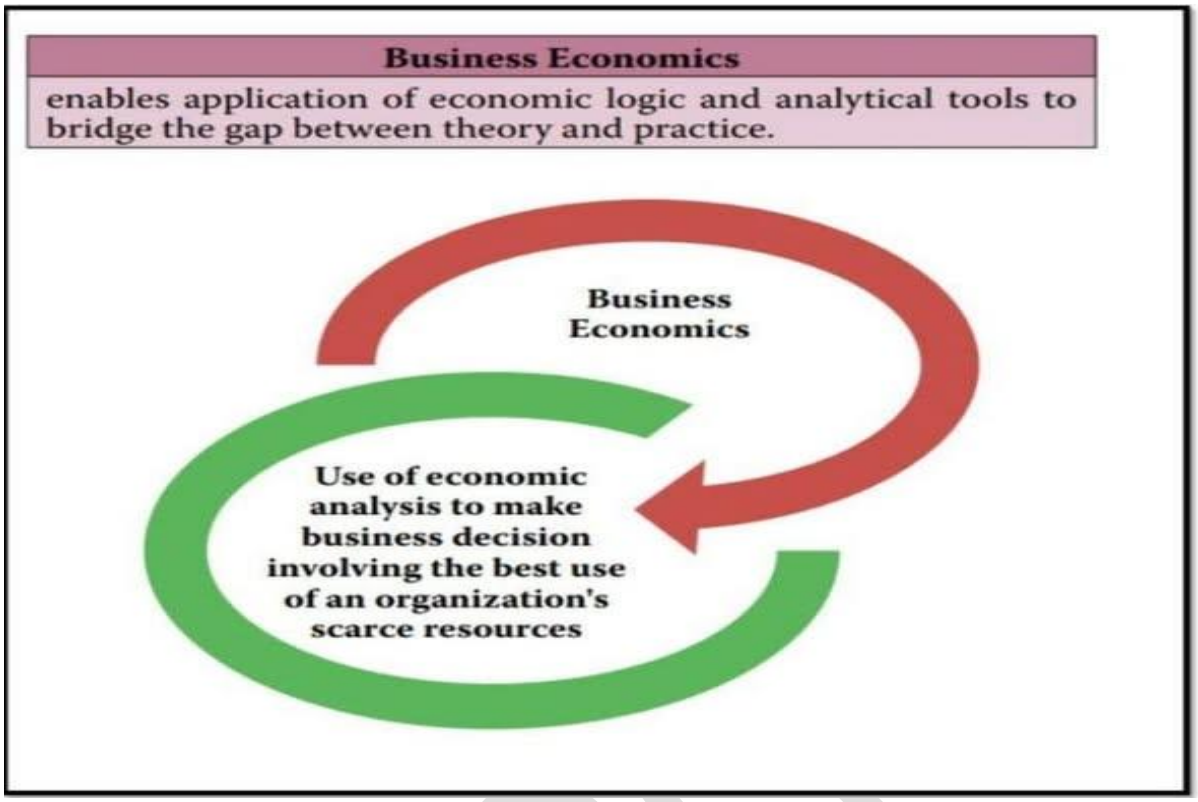
8. Economic Justice and Welfare
   - Linked economic prosperity with social justice.
   - Suggested welfare measures like relief during famines, protection of orphans, widows, and the poor.
   - Believed economic stability was the foundation of political stability.

UNIT 2

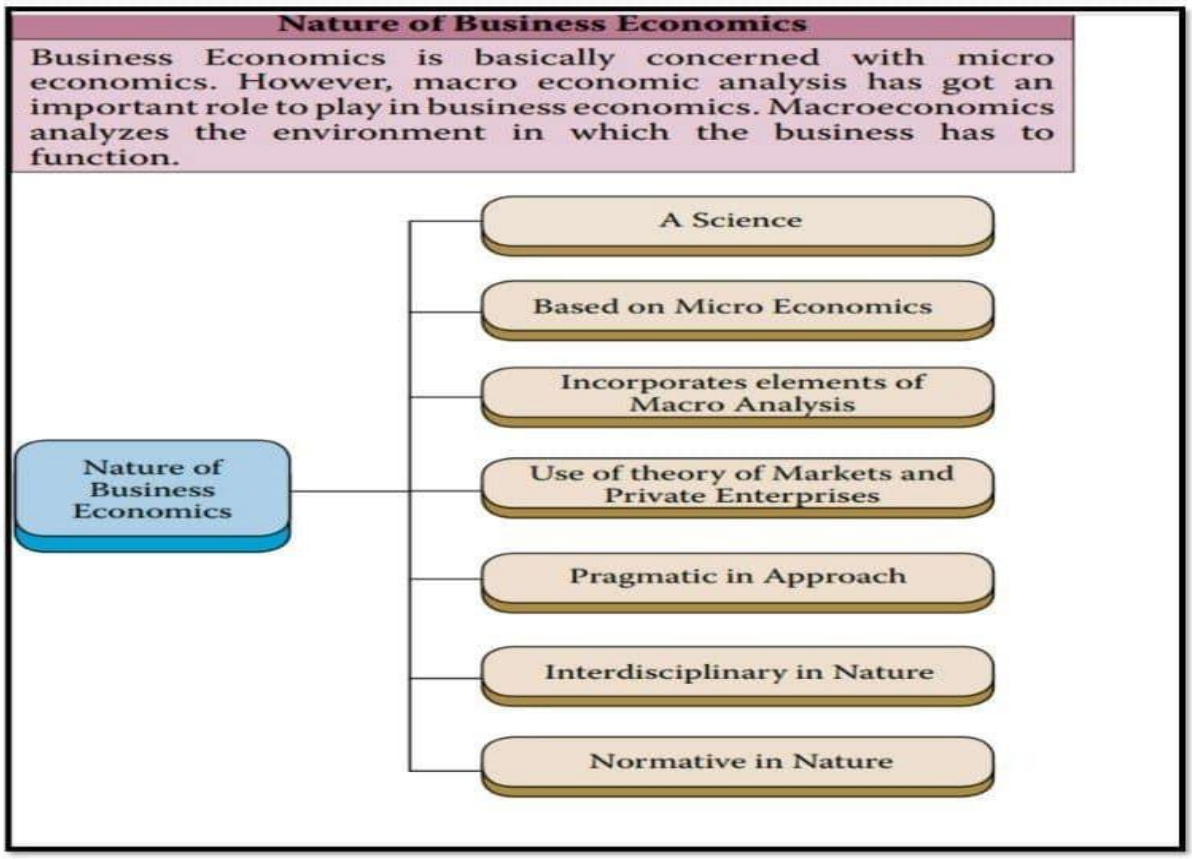
Managerial Economics

Managerial Economics = Management + Economics



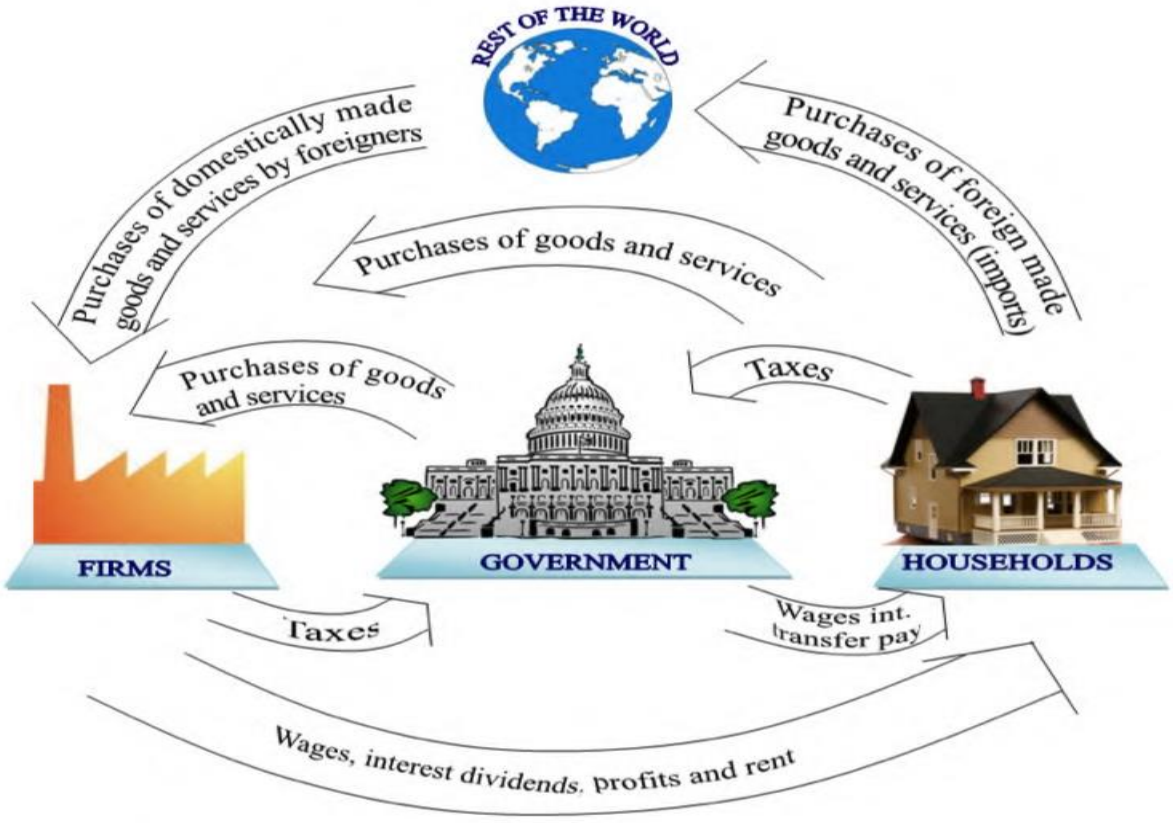
Definitions

- Managerial economics is the study of how scarce resources are directed most efficiently to achieve managerial goals. It is a valuable tool for analyzing business situations to take better decisions.
- Prof. Evan J Douglas defines Managerial Economics as "Managerial Economics is concerned with the application of economic principles and methodologies to the decision making process within the firm or organization under the conditions of uncertainty"
- According to Milton H Spencer and Louis Siegelman "Managerial Economics is the integration of economic theory with business practices for the purpose of facilitating decision making and forward planning by management"

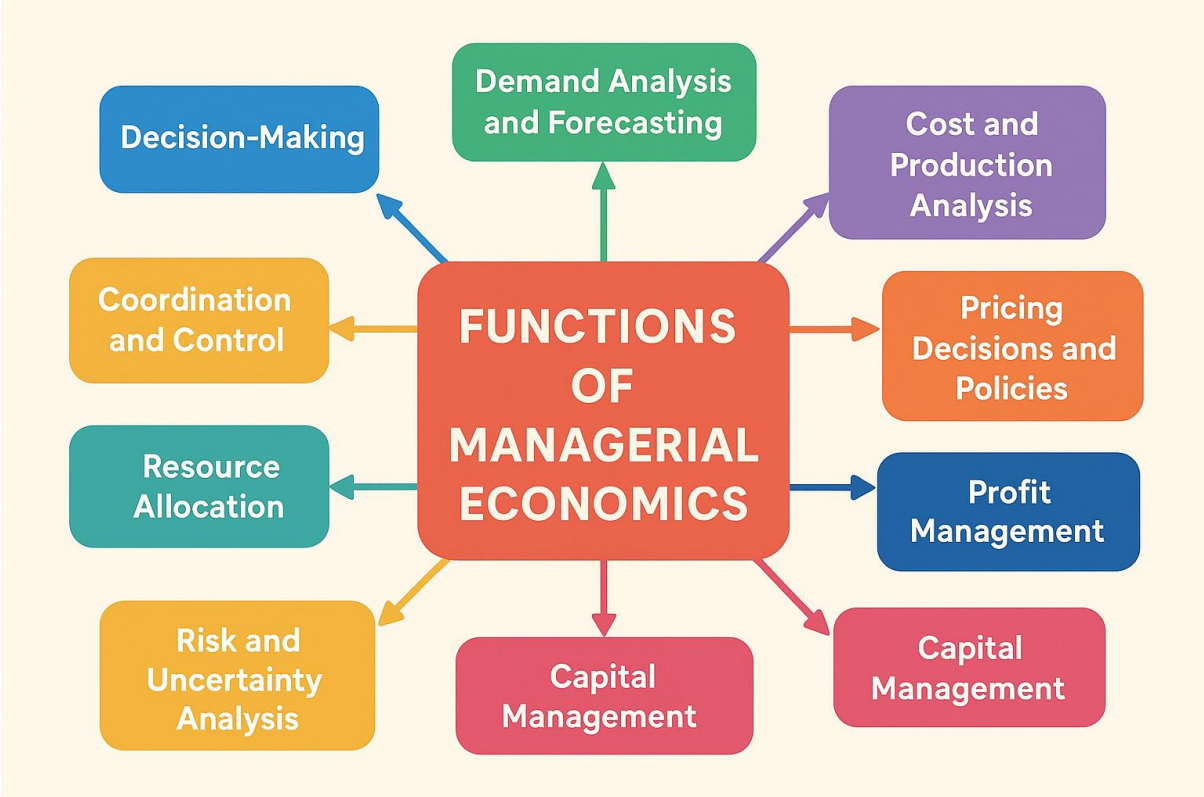


- **Practical and Applied Science:**
- It provides solutions to real-world business problems.
- Example: An airline uses demand forecasting models to decide ticket prices during festival seasons.
- **Base on Micro Economics**
- Business Economics mainly deals with individual firms, industries, and consumers.
- Example: Zomato studies consumer demand for online food delivery in a city to set prices and discounts.
- **Normative and Prescriptive**
- It guides managers in choosing the best course of action.
- Example: A car manufacturer studies whether to produce more electric cars based on future demand and environmental policies

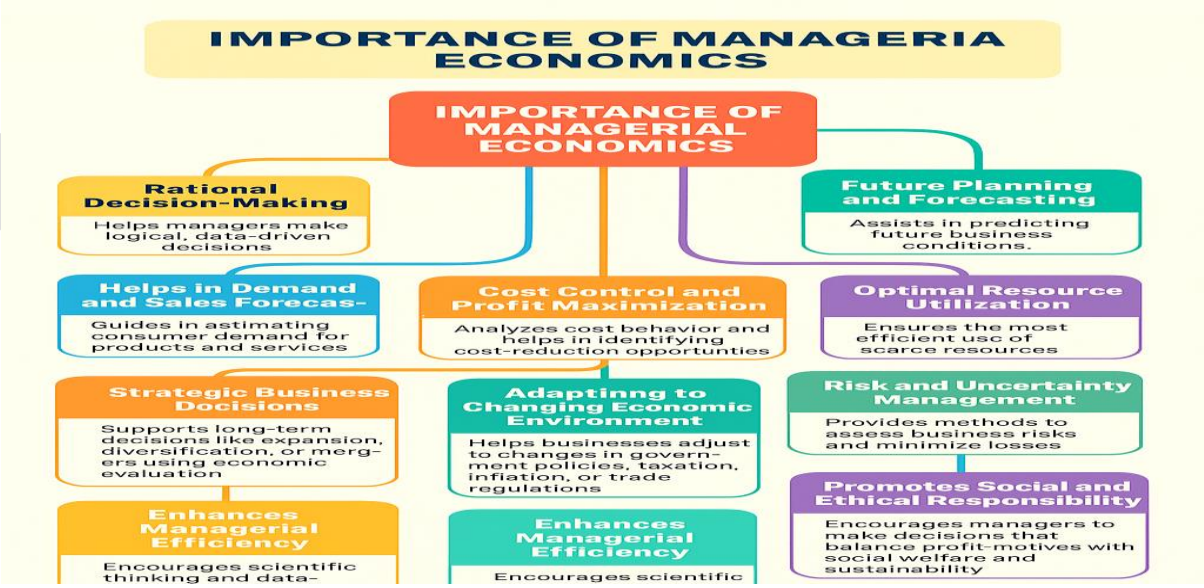
- **Interdisciplinary in Nature**
- It uses knowledge from economics, statistics, mathematics, accounting, finance, and psychology.
- Example: Amazon uses psychology, statistics, and economics for pricing strategies
- **Dynamic in Nature**
- Deals with changing business environments.
- Example: Ola and Uber adjust fares due to fuel price changes and competition



- **Functions of Managerial Economics**
- Managerial economics performs several key functions to assist managers in effective decision-making and business planning.



Importance of Managerial Economics



1. Rational Decision-Making

- **Helps managers make logical, data-driven decisions instead of relying on intuition.**

- **It applies tools like marginal analysis, cost-benefit analysis, and optimization to choose the best business strategy.**
  🔷 *Example:* Choosing between manufacturing in-house or outsourcing after analyzing cost and profit implications.

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2. Future Planning and Forecasting

- **Assists in predicting future business conditions such as demand, cost, and market trends.**
- **Enables firms to prepare long-term strategic and financial plans.**
  🔷 *Example:* A retail chain forecasting festive season sales to plan inventory and staff requirements.

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3. Helps in Demand and Sales Forecasting

- **Guides in estimating consumer demand for products and services.**
- **Supports production scheduling, marketing, and budgeting decisions.**
  🔷 *Example:* A car company forecasting demand for electric vehicles before launching a new model.

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4. Optimal Resource Utilization

- **Ensures the most efficient use of scarce resources like capital, labor, and materials.**
- **Aims to achieve maximum output at minimum cost.**
  🔷 *Example:* A company using automation to reduce labor costs and increase productivity.

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5. Cost Control and Profit Maximization

- **Analyzes cost behavior and helps in identifying cost-reduction opportunities.**

- **Aids in setting production and pricing strategies that maximize profits.**
  🔷 ***Example:*** **A restaurant chain reducing food waste to improve profit margins.**

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6. Adapting to Changing Economic Environment

- **Helps businesses adjust to changes in government policies, taxation, inflation, or trade regulations.**
  🔷 ***Example:*** **An exporter modifying pricing strategy after a change in exchange rate or import duty.**

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7. Strategic Business Decisions

- **Supports long-term decisions like expansion, diversification, or mergers using economic evaluation.**
  🔷 ***Example:*** **A telecom company deciding to merge with another firm after analyzing cost benefits and market share.**

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8. Risk and Uncertainty Management

- **Provides methods to assess business risks and minimize losses.**
- **Uses tools like probability analysis and scenario planning.**
  🔷 ***Example:*** **An insurance firm using statistical data to price policies and estimate risk exposure.**

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9. Enhances Managerial Efficiency

- **Encourages scientific thinking and data-based management practices.**
- **Improves coordination between departments through informed decision-making.**
  🔷 ***Example:*** **A production manager aligning manufacturing targets with sales projections.**

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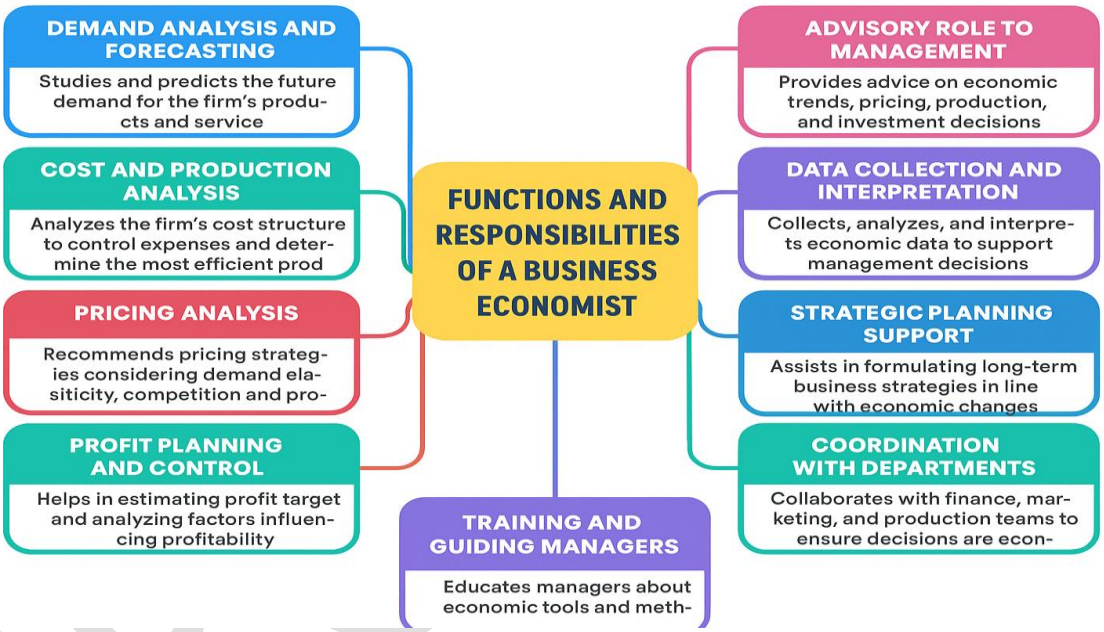
10. Promotes Social and Ethical Responsibility

- **Encourages managers to make decisions that balance profit motives with social welfare and sustainability.**
  ◆ ***Example:*** **A company deciding to use eco-friendly packaging even if it increases cost slightly.**



- **Functions of a Business Economist**
- 1. Demand Analysis and Forecasting
- Helps in understanding customer demand for products and services.
- Studies factors affecting demand such as price, income level, consumer preferences, and seasonal changes.
- Forecasts future demand using statistical and econometric models like trend analysis or regression analysis.
- Assists management in production planning, inventory management, and marketing strategy.

- **Example:** Forecasting the future demand for air conditioners before the summer season to plan production levels efficiently.

2. Cost and Production Analysis

- Focuses on analyzing various costs involved in production — fixed, variable, and total costs.
- Helps identify cost-saving opportunities and the most efficient production techniques.
- Determines the optimal combination of inputs (labor, raw material, machinery) for maximum output.
- Assists management in controlling costs and improving productivity.
- **Example:** Evaluating labor and material costs to minimize total production costs and improve profitability.

3. Pricing Analysis

- Pricing decisions are crucial for maximizing revenue and staying competitive.
- Considers factors like cost of production, market demand, competition, and elasticity of demand.
- Suggests appropriate pricing strategies — cost-plus, competitive, penetration, or skimming.
- Ensures that pricing decisions align with company objectives and market conditions.
- **Example:** Recommending a discount pricing strategy to attract new customers and increase market share.

4. Profit Planning and Control

- Helps managers set profit targets and design strategies to achieve them.
- Involves estimating future profits and identifying factors affecting profitability such as cost, price, and output.
- Uses tools like break-even analysis to determine the level of sales required for no-loss situations.

- Supports management in controlling costs and improving financial performance.
- **Example:** Preparing profit forecasts for the next financial year based on past performance and expected market trends.

5. Capital Budgeting and Investment Decisions

- Deals with planning and managing long-term investments and capital expenditures.
- Evaluates alternative investment options using financial tools like Net Present Value (NPV) and Internal Rate of Return (IRR).
- Helps decide where to allocate funds for the highest returns.
- Balances risk and profitability for sustainable growth.
- **Example:** Analyzing whether to invest in new machinery or launch a new marketing campaign.

6. Economic and Business Forecasting

- Predicts future trends in the economy such as inflation, GDP growth, interest rates, and government policies.
- Helps management prepare for changes in the external business environment.
- Enables better long-term planning and decision-making.
- Reduces uncertainty by anticipating future challenges.
- **Example:** Forecasting the impact of rising oil prices on transportation and logistics costs.

7. Risk and Uncertainty Analysis

- Business decisions always involve some level of risk due to changing markets and unpredictable events.
- Managerial economics provides tools like probability analysis, decision trees, and sensitivity analysis to assess risks.
- Helps management design strategies to minimize potential losses.
- Encourages calculated risk-taking based on data-driven insights.

- **Example:** Using probability models to assess market risks before launching a new product.

8. Policy Formulation and Planning

- Assists top management in forming internal policies for pricing, production, employment, and investment.
- Ensures that company policies align with economic principles and market realities.
- Supports long-term strategic planning and goal setting.
- Promotes efficient resource utilization and sustainable development.
- **Example:** Framing company policy for eco-friendly production after analyzing costs and benefits.

9. Market Research and Competition Analysis

- Involves systematic study of market conditions, competitors, and consumer preferences.
- Provides insights for product development, pricing, and promotion strategies.
- Helps the firm understand competitive strengths and weaknesses.
- Guides market entry, expansion, or diversification decisions.
- **Example:** Conducting market research before launching a product in a new regional market.

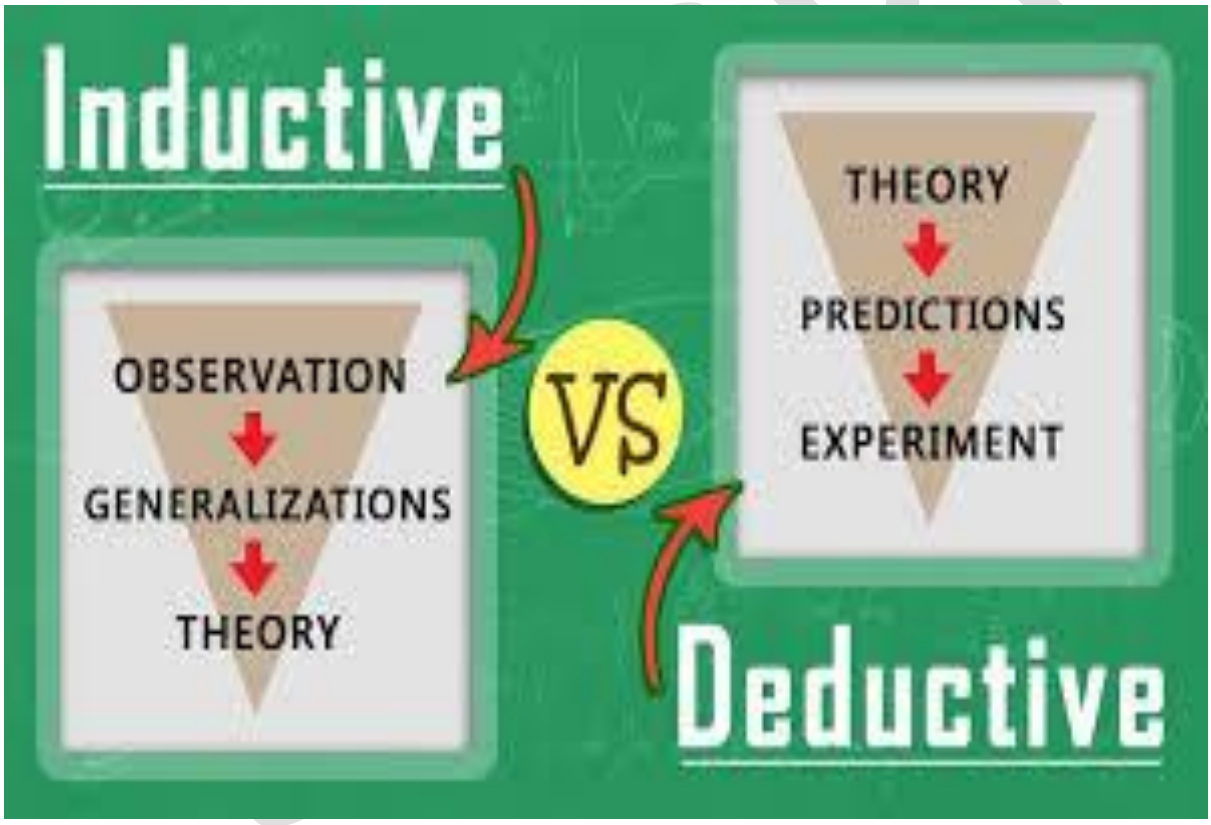
10. Performance Evaluation

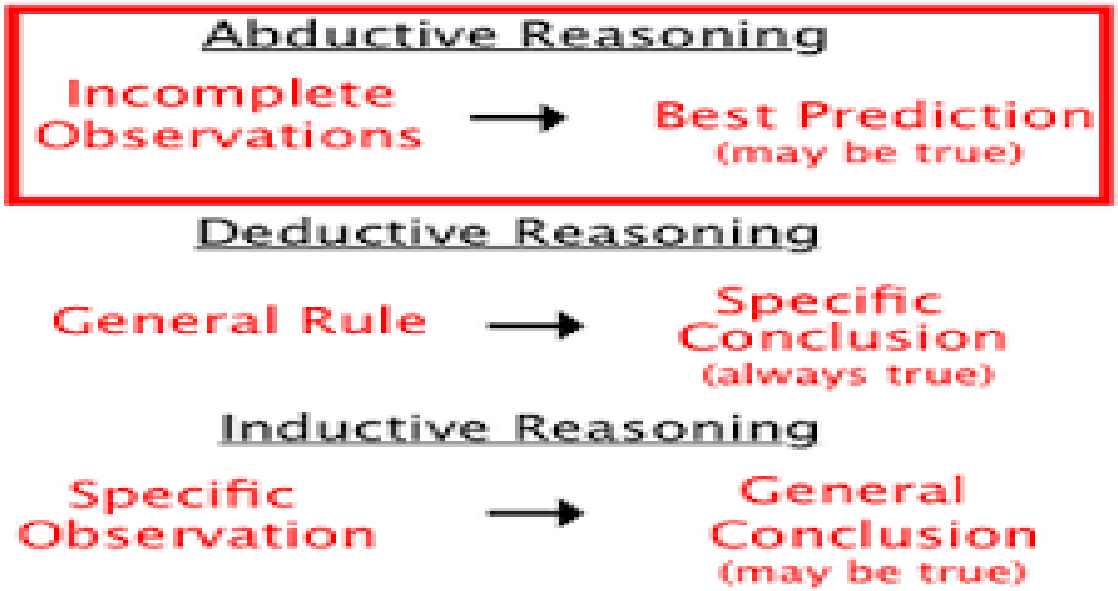
- Measures the efficiency and effectiveness of management decisions.
- Uses performance indicators such as profit margins, cost efficiency, and productivity levels.
- Compares actual performance with planned targets to identify deviations.
- Helps management take corrective actions for better future performance.
- **Example:** Comparing actual profit margins with projected profits to assess business performance.

Unit 3

Methods of Economic Study – Inductive and Deductive Methods

- Economics, like other sciences, uses systematic methods to study and analyze economic problems.
  The two main approaches used in economic analysis are:
- **Inductive Method (Empirical Method)**
- **Deductive Method (Abstract or Theoretical Method)**
- These methods help economists understand how an economy functions, formulate theories, and apply them to real-world situations.





Inductive MethodMeaning

- The Inductive Method involves studying facts, data, and observations first and then drawing general conclusions or laws based on them.
  In simple words, it moves from particular to general.
- Example:
  If we observe that a rise in income leads to an increase in consumption for many individuals, we conclude that "consumption increases with income."
- **Nature**
- Empirical in nature: Based on real-world data, surveys, and statistics.
- Observation-based: Begins with the collection of facts.
- Bottom-up approach: Builds general principles from observed cases.
- Scientific and practical: It depends on real-life experiences and evidence.

Historical Background

- The **Inductive Method** became popular during the **19th century**, especially through the works of **Alfred Marshall**, **J.S. Mill**, and other classical economists.
- It was developed as a response to the overly theoretical nature of earlier economic theories.

Merits

- **Realistic and Practical:** Based on actual facts and data, so conclusions are reliable.
- **Useful for Developing New Theories:** Helps discover new economic laws.
- **Flexible:** Can adapt to new evidence and situations.

- **Encourages Research:** Promotes data collection, statistical studies, and fieldwork.
- **Applicable to Complex Economies:** Useful in modern economies with varied human behavior.

Demerits

- **Time-Consuming:** Requires large data collection and analysis.
- **Expensive:** Involves research, surveys, and statistical work.
- **Possibility of Wrong Conclusions:** Errors in data can lead to false generalizations.
- **Limited Usefulness Without Theory:** Facts alone can't explain causes; theories are still needed.
- **Difficult to Generalize:** Economic behavior changes across countries and cultures.
- **Example**
- A government may collect data on income and spending patterns across regions. After analyzing data, they conclude that **consumers tend to save more as income rises**, forming the **Law of Saving**.

Deductive Method

- **Meaning**
- The **Deductive Method** starts with **general principles or theories** and applies them to **specific situations** to draw conclusions.
  In simple words, it moves **from general to particular**.
- **Example:**
  If we accept the general law that "demand falls when price rises," then we can **deduce** that in a particular market, an increase in the price of apples will reduce their demand.
- **Nature**
- **Theoretical in nature:** Based on logic and reasoning rather than direct observation.
- **Top-down approach:** Begins with general assumptions.
- **Abstract reasoning:** Uses logical steps to derive conclusions.
- **Analytical:** Helps understand economic relationships through logic.

  Historical Background

- The **Deductive Method** was first developed by **Classical Economists** like **Adam Smith**, **David Ricardo**, and **J.B. Say** in the 18th and 19th centuries.
  They believed economics should be developed like mathematics — through reasoning and logical deduction.

- Merits
- **Quick and Economical:** Does not need extensive data collection.
- **Logical and Clear:** Based on reasoning, so conclusions are logically sound.
- **Useful for Theory Building:** Helps form economic laws and models.
- **Predictive Power:** Can forecast likely outcomes based on assumptions.
- **Foundation of Economic Theories:** Most classical and modern theories are based on deduction.

Demerits

- **Based on Assumptions:** Often depends on unrealistic assumptions (e.g., perfect competition).
- **Less Practical:** May not fit real-world complexities.
- **Ignores Facts:** Sometimes conclusions don't match reality.
- **Risk of Misleading Results:** Wrong assumptions lead to wrong conclusions.
- **Difficult to Verify:** Must be tested later with real data.
- **Example**
- From the general law: "When price increases, demand decreases," we can **deduce** that if the price of petrol rises, people will use less of it or shift to public transport.

Differences between Inductive and Deductive Methods

Basis	Inductive Method	Deductive Method
Direction of reasoning	From particular to general	From general to particular
Nature	Empirical and practical	Theoretical and logical
Data use	Based on observation and data collection	Based on assumptions and reasoning
Example	Studying income and consumption data to form the law of demand	Assuming the law of demand to predict market behavior
Origin	Developed by economists like Alfred Marshall	Used by classical economists like Adam Smith
Verification	Facts lead to theory	Theories must be verified with facts
Cost & Time	Time-consuming and expensive	Quick and less costly

Utility of Both Methods

- Both methods are **complementary** rather than contradictory. Economists often use both together:
- **Deductive method** helps in **formulating theories**.
- **Inductive method** helps in **testing and verifying** those theories with real-world data.
- **Example:**
  Economists first **deduce** the law of demand logically.
  Then they **test** it using real data on prices and quantities to confirm its validity.

Unit 4

TOPIC: LAW OF DEMAND

Meaning of Demand

Demand refers to the *quantity of a good or service* that a consumer is willing and able to purchase at different prices during a specific period of time.

Key Points

- Demand ≠ Desire.

- A person must have willingness + ability (income) to buy.

Example

- You may desire a luxury car (desire), but if you cannot afford it, there is no demand.

Meaning of Law of Demand

The Law of Demand states that:

When the price of a commodity rises, its quantity demanded falls, and when the price falls, its quantity demanded increases — other things remain constant (ceteris paribus).

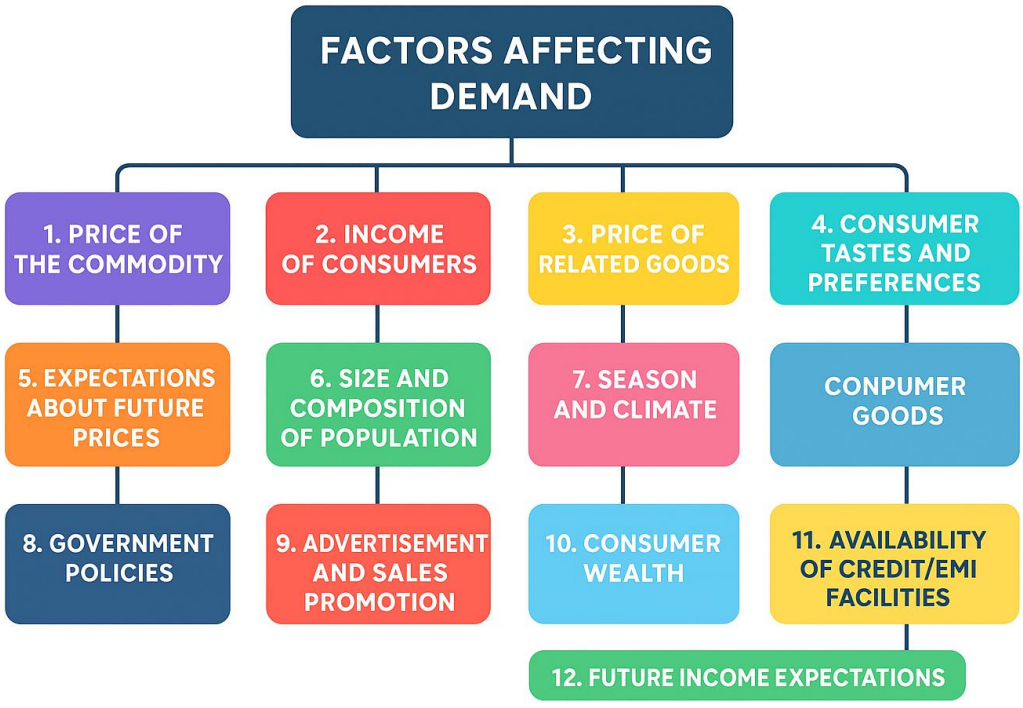
This creates an inverse (negative) relationship between price and quantity demanded.

Example

- If mango price rises from ₹60/kg to ₹90/kg, consumers buy fewer mangoes.
- If price falls, people buy more.

Factors Affecting Demand (Determinants of Demand)

Below are the major factors that influence demand:



📘 FACTORS AFFECTING DEMAND

Demand for a product depends on many forces. These forces are called determinants of demand. Below are the main factors with clear explanations and real examples.

1️⃣ Price of the Commodity

This is the most basic and most important factor.

- When price increases, fewer people buy the product → Demand falls.
- When price decreases, more people buy the product → Demand rises.

This is based on the law of demand (inverse relationship between price & demand).

Example

- Price of sugar drops from ₹50 to ₹40 per kg → People buy more sugar.
- If onion price rises sharply, people buy less or switch to alternatives.

2️⃣ Income of the Consumer

A consumer's income has a direct impact on their purchasing power.

(a) Normal Goods

Goods for which demand increases when income increases.

Example:
If income increases, people buy more milk, fruits, branded clothes, better phones.

(b) Inferior Goods

Goods for which demand decreases when income increases.

Example:
People stop buying low-quality rice, cheap clothes, or using local buses when their income rises.

(c) Luxury Goods

Demand increases more than proportionately when income rises.

Example:
Demand for jewellery, cars, foreign holidays increases with rising incomes.

3️⃣ Price of Related Goods

Goods are related as substitutes or complements. Changes in their prices affect demand.

(a) Substitute Goods

Goods that can be used instead of each other.
If the price of one rises → demand for the substitute increases.

Example:

- If tea price rises → people buy more coffee.
- If Ola becomes costly → people use Uber more.

(b) Complementary Goods

Goods used together.
If the price of one rises → demand for the complementary good falls.

Example:

- Car & petrol: If petrol becomes expensive → demand for cars decreases.
- Printer & ink cartridges: If printer becomes cheaper → more demand for cartridges.

---

4 Consumer Tastes and Preferences

Demand increases when goods become attractive, fashionable, or trending.

- Influenced by culture, lifestyle, social media, and celebrities.

Examples

- High demand for smartwatches due to fitness trends.
- If Virat Kohli promotes a brand, its demand increases.
- Fashionable clothes, gadgets, and hairstyles become popular and see a rise in demand.

---

5 Expectations About Future Prices

Consumers make buying decisions based on what they *expect* will happen.

If consumers expect prices to rise

→ They buy *more today*.
Demand increases now.

Example:
Before Diwali, people buy gold because they expect prices to rise.

If consumers expect prices to fall

→ They delay purchases.
Demand decreases.

Example:
People wait for festive sales on Amazon/Flipkart to buy electronics.

---

6 Size and Composition of Population

Demand depends on:

- Total population
- Age group distribution
- Gender ratio
- Rural/urban population

Examples

- Large population → high demand for food, mobiles, clothes.
- More young people → high demand for bikes, jeans, fast food.
- More elderly population → higher demand for medicines, healthcare.

---

7 Season and Climate

Demand changes as per seasons.

Examples

- Demand for umbrellas, raincoats, tea increases in monsoon.
- Demand for woolen clothes increases in winter.
- Demand for ACs, cold drinks, ice cream increases in summer.

---

8 Government Policies

Government decisions can increase or decrease demand.

Examples

- Increase in GST on cigarettes → demand falls.

- Subsidy on electric vehicles → demand rises.
- Ban on single-use plastic → demand for cloth bags increases.

---

9 Advertisement and Sales Promotion

Good advertising can change consumer preferences.

Examples

- Colgate ads increase toothpaste demand.
- iPhone demand rises with strong marketing.
- Offers like "Buy 1 Get 1 Free" increase demand.

---

10 Consumer Wealth

People with more assets (property, savings, investments) tend to spend more.

Examples

- Wealthy families buy more premium cars, luxury watches.
- Middle-class families avoid very expensive goods even if they desire them.

---

11 Availability of Credit / EMI Facilities

Easy loans and EMIs increase demand for expensive goods.

Examples

- Easy EMI on mobile phones increases demand for iPhones.
- Car demand rises because banks offer flexible auto loans.

---

12 Future Income Expectations

If people expect higher income in future, they spend more today.

Example

If a person expects promotion next month, he may buy a new AC or TV now.

Types of Demand

---

1. Price Demand

Demand changes due to changes in price.

Example:
Demand for fruits increases when prices fall during season.

---

2. Income Demand

Demand changes due to change in consumer income.

Example:
Higher income → more demand for AC, car, branded clothes.

---

3. Cross Demand

Demand changes due to change in price of related goods.

Types:

- Substitute Goods
- Complementary Goods

Example:
Tea price rises → Coffee demand rises (substitute).
Car price rises → Petrol demand falls (complement) .

---

4. Joint (Complementary) Demand

Goods demanded together.

Example:
Pen & ink, mobile & charger, bread & butter.

---

5. Composite Demand

A commodity used for multiple purposes.

Example:
Electricity is used for AC, fan, fridge, factories → more uses → higher demand.

---

6. Direct Demand

Demand for final goods that directly satisfy human wants.

Example:
Food, clothes, laptop, TV.

---

7. Indirect (Derived) Demand

Demand for goods that help produce other goods.

Example:
Demand for steel depends on demand for cars.

---

8. Individual & Market Demand

- Individual Demand: Demand of a single consumer.
- Market Demand: Total demand of all consumers in the market.

Example:
If 100 people each want 2 kg wheat → Market demand = 200 kg.

MEASUREMENT OF DEMAND & DEMAND FORECASTING

1️⃣ MEASUREMENT OF DEMAND

Meaning

Measurement of demand refers to the **quantitative estimation** of demand for a product at different levels of price, income, and other factors.

It helps firms understand:

- How much consumers will buy
- How demand changes with price and income

Methods of Measuring Demand

---

1. Demand Schedule

A **table** showing different quantities demanded at different prices.

Types:

(a) Individual Demand Schedule

Shows demand of **one consumer**.

Price (₹)	Quantity Demanded
10	5 units
20	3 units
30	1 unit

Explanation:
As price increases, quantity demanded decreases.

(b) Market Demand Schedule

Shows total demand of **all consumers**.

Price (₹)	Demand A	Demand B	Market Demand
10	5	4	9
20	3	2	5

---

2. Demand Curve

A **graphical representation** of demand schedule.

- Price on **Y-axis**
- Quantity on **X-axis**
- Curve slopes **downward** (inverse relationship)

---

3. Demand Function

Mathematical relationship between demand and its determinants.

General Form:

[
D = f(P, I, T, P_r, E)
]

Where:

- **P** = Price of the product

- **I** = Income
- **T** = Taste
- **Pr** = Price of related goods
- **E** = Expectations

---

4. Statistical Methods

Used for more accurate measurement.

(a) Regression Analysis

- Shows relationship between demand and factors like price, income.

Example:
Demand = a + bP + cI

(b) Correlation Analysis

- Measures degree of relationship between variables.

Example:
Relationship between income and demand for luxury goods.

---

5. Elasticity of Demand

Measures responsiveness of demand to changes in factors.

Types:

- Price Elasticity
- Income Elasticity
- Cross Elasticity

Example:
If price increases by 10% and demand falls by 20% → demand is elastic.

Importance of Measuring Demand

- Helps in pricing decisions
- Production planning
- Profit maximization

- Market analysis

DEMAND FORECASTING

Meaning

Demand forecasting means **predicting future demand** for a product based on past data and present trends.

Objectives

- Estimate future sales
- Reduce business risk
- Plan production and inventory
- Make investment decisions

Types of Demand Forecasting

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1. Short-Term Forecasting

- Period: Up to 1 year
- Used for day-to-day operations

Example:
Monthly demand for milk or bread.

---

2. Long-Term Forecasting

- Period: More than 1 year
- Used for strategic planning

Example:
Demand for electric vehicles in next 5 years.

Methods of Demand Forecasting

A. Survey Methods (Qualitative Methods)

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1. Consumer Survey Method

Directly asking consumers about future demand.

Types:

- Complete Enumeration (all consumers)
- Sample Survey (selected consumers)

Example:
Survey asking customers if they will buy a new smartphone.

---

2. Expert Opinion Method

Taking advice from experts, dealers, and professionals.

Example:
Consulting industry experts to predict real estate demand.

---

3. Delphi Method

- Group of experts give opinions anonymously.
- Final decision based on combined views.

B. Statistical Methods (Quantitative Methods)

---

1. Trend Projection Method

Uses past data to predict future demand.

Techniques:

- Graphical method
- Least square method

Example:
Using past 5 years sales to predict next year demand.

---

2. Regression Analysis

Finds relationship between demand and factors like price and income.

---

3. Time Series Analysis

Studies patterns over time.

Components:

- Trend
- Seasonal variation
- Cyclical variation
- Random variation

---

4. Barometric Method

Uses economic indicators:

- Leading indicators
- Lagging indicators

Example:
Increase in income → future demand for cars.

C. Experimental Method

Test Marketing

- Product is launched in a small area before full launch.

Example:
New soft drink tested in one city before national launch.

Factors Affecting Demand Forecasting

- Accuracy of data
- Market conditions

- Consumer behavior
- Government policies
- Economic conditions

Limitations of Demand Forecasting

- Uncertainty of future
- Sudden market changes
- Consumer behavior is unpredictable
- Requires expert knowledge

Unit 5

MARKET IN ECONOMICS

1. Meaning of Market

In economics, a market does not necessarily mean a physical place. It refers to a system or arrangement where buyers and sellers come into contact with each other to buy and sell goods and services at a mutually agreed price.

A market exists when:

- There are buyers and sellers
- They are willing to exchange goods/services
- There is communication between them
- A price is determined

Thus, a market can be physical (shop, mandi) or virtual (online platforms like Amazon, Flipkart).

---

2. Definitions of Market

1. Alfred Marshall

“A market is not a place but the whole of any region in which buyers and sellers are in such free intercourse with one another that the prices of the same goods tend to equality easily and quickly.”

2. Cournot

“A market is a region where buyers and sellers are in free intercourse with one another.”

3. A. K. Cairncross

“A market is a set of arrangements by which buyers and sellers are in contact to exchange goods and services.”

4. F. Benham

“Any area over which buyers and sellers are in close touch with one another is called a market.”

From all definitions, it is clear that price, buyers, sellers, and communication are the core elements of a market.

Classification of Market

1. Perfect Competition

Concept

Perfect competition is a market structure where a large number of buyers and sellers trade identical products, and no single firm can influence the market price. The price is determined by market demand and supply.

In this market, firms are price takers, meaning they must accept the price determined by the market.

Characteristics of Perfect Competition

Pricing under Perfect Competition

- **1. . Large Number of Buyers and Sellers**
- In perfect competition, there are many sellers and many buyers in the market. Because of the large number, no single seller or buyer can influence the market price.
- Example:
  In a wheat market, thousands of farmers sell wheat and thousands of buyers purchase it. If one farmer increases or decreases the price, it does not affect the market price.
- **2. Homogeneous Products**
- All firms sell identical or homogeneous products. There is no difference in quality, size, or design, so buyers have no preference for a particular seller.

- Example:
  Wheat sold by one farmer is almost the same as wheat sold by another farmer in a mandi.

- **3. Free Entry and Exit of Firms**
- Firms can enter or leave the market easily without restrictions.
- If firms earn high profits, new firms enter the market.
- If firms suffer losses, some firms leave the market.
- This keeps profits normal in the long run.
- Example:
  If vegetable sellers earn high profits in a local market, new sellers can start selling vegetables easily.

4. Perfect Knowledge of Market

- Buyers and sellers have complete information about price, quality, and market conditions.
- Because of this knowledge, no seller can charge a higher price than others.
- Example:
  If tomatoes are selling for ₹40 per kg in the market, buyers know the price and will not buy from a seller charging ₹60.

- **5. Price Takers**
- Firms in perfect competition are **price takers**, not price makers. They must **accept the price decided by the market**.
- If a firm charges more, buyers will purchase from other sellers.
- **Example:**
  A rice farmer cannot increase the price of rice above the market rate because many other farmers sell the same rice.

- **6. Perfect Mobility of Factors of Production**
- Factors of production such as **labour, land, and capital can move freely** from one industry to another.
- **Example:**
  If farming becomes less profitable and dairy farming becomes more profitable, farmers may **shift from crop farming to dairy farming**.

- **7. No Government Intervention**
- In perfect competition, there are **no government restrictions, taxes, or regulations affecting price or production**.

- **Example:**
  In a simple village vegetable market where sellers freely sell their products without strict regulations.
- **8. No Transportation Cost (or Equal Cost)**
- Transportation cost is either **ignored or assumed to be the same for all sellers**, so prices remain uniform.
- **Example:**
  Vegetables sold in the same market have the **same price because transportation cost is similar for all sellers**.

1. Meaning of Pricing under Perfect Competition

Pricing under perfect competition refers to the process where the price of a product is determined by the interaction of market demand and market supply, not by individual firms.

In this market structure, firms do not have the power to set prices. They must accept the price determined by the market, therefore firms are called price takers.

Example:
Farmers selling wheat in agricultural markets often sell at the price determined by the market or government agencies like Food Corporation of India, rather than deciding their own price.

---

2. Determination of Price in Perfect Competition

Price determination takes place at two levels:

1. Industry level (Market level)
2. Firm level

---

3. Price Determination at Industry Level

At the industry level, price is determined by demand and supply forces.

- Demand represents the quantity buyers are willing to buy at different prices.
- Supply represents the quantity producers are willing to sell at different prices.

The equilibrium price is determined where demand equals supply.

Equilibrium Condition

Price is determined where:

Demand = Supply

At this point:

- Market price becomes stable.
- No shortage or surplus exists.

Example:
If the demand and supply of rice meet at ₹40 per **kg, then ₹40 becomes the market price.**

All firms in the market must sell at this price.

---

4. Role of Individual Firm in Pricing

An individual firm cannot influence the market price because:

- There are many sellers
- Products are identical
- Buyers have perfect knowledge

Therefore, the firm must accept the market price.

This means:

Price = Average Revenue (AR) = Marginal Revenue (MR)

Revenue Concepts under Perfect Competition

1. Total Revenue (TR)

Total revenue is the total income earned from selling goods.

Formula:

TR = Price × Quantity

Example:
If price of wheat is ₹20 per kg and a farmer sells 100 kg:

TR = 20 × 100 = ₹2000

---

2. Average Revenue (AR)

Average revenue is the revenue earned per unit sold.

Formula:

AR = TR / Quantity

In perfect competition:

AR = Price

---

3. Marginal Revenue (MR)

Marginal revenue is the additional revenue earned by selling one more unit of output.

Formula:

MR = Change in TR / Change in Quantity

In perfect competition:

MR = AR = Price

- MR = Marginal Revenue
- MC = Marginal Cost

According to this rule:

- If MR > MC, the firm should increase production.
- If MR < MC, the firm should reduce production.

The firm reaches equilibrium when MR = MC.

---

6. Short Run Pricing under Perfect Competition

In the short run, firms may experience:

1. Supernormal Profit

When price is greater than average cost (P > AC).

Example:
If price of wheat is ₹50 and cost is ₹35, the firm earns extra profit.

---

2. Normal Profit

When price equals average cost (P = AC).

Firms earn just enough profit to stay in business.

---

3. Loss

When price is less than average cost (P < AC).

Firms may continue production if price covers variable costs.

---

7. Long Run Pricing under Perfect Competition

In the long run:

- Firms can enter or leave the market freely.
- Supernormal profits attract new firms.
- Losses cause firms to exit.

As a result, in the long run:

Price = MC = AC

This means firms earn only normal profit.

---

8. Demand Curve of Firm under Perfect Competition

The demand curve for an individual firm is perfectly elastic (horizontal line).

Reason:

- Firms sell any quantity at the given market price.
- If they increase price even slightly, buyers shift to other sellers.

---

9. Importance of Pricing under Perfect Competition

Pricing under perfect competition helps in:

1. Efficient allocation of resources
2. Fair pricing for consumers
3. Encouraging competition
4. Eliminating abnormal profits in the long run

---

10. Examples of Markets Close to Perfect Competition

Some real-world markets that resemble perfect competition include:

- Agricultural markets (wheat, rice)
- Vegetable markets

- Flower markets
- Fish markets

Example:
Farmers selling crops through government procurement agencies such as Food Corporation of India operate in conditions close to perfect competition.

---

2. Imperfect Competition

Concept

Imperfect competition is a market structure where firms have some control over price because products are not identical or the number of firms is limited.

Most real-world markets fall under imperfect competition.

Types of Imperfect Competition

1. Monopoly
2. Monopolistic Competition
3. Oligopoly

General Characteristics

1. Limited number of sellers
2. Product differentiation
3. Firms have price control
4. Barriers to entry
5. Advertising and branding important

Pricing under Imperfect Competition

Firms can influence price depending on:

- Product differentiation
- Market power
- Brand reputation

Pricing under Imperfect Competition

Firms can influence price depending on:

- Product differentiation
- Market power
- Brand reputation

Price is generally higher than marginal cost.

Profit maximization condition remains:

MR=MCMR = MCMR=MC

But MR ≠ AR unlike perfect competition.

Examples

- Mobile phone companies
- Automobile companies
- Restaurants
- Clothing brands

Example: Apple Inc. selling differentiated smartphones.

---

3. Monopoly

Concept

A monopoly is a market structure where a single seller controls the entire market and there are no close substitutes for the product.

The monopolist has complete control over price and output.

Characteristics of Monopoly

Characteristics of Monopoly (Detailed Notes for BBA Students)

A monopoly is a market structure where a single seller controls the entire market and there are no close substitutes for the product. The firm has complete control over price and supply.

---

1. Single Seller

In a monopoly, there is only one producer or seller in the market.

- The firm itself is the industry.
- There is no competition.

Example:
In India, passenger railway services are mainly provided by Indian Railways, making it a classic example of a monopoly.

---

2. No Close Substitutes

The product offered by a monopolist has no close substitutes, so consumers have no alternative choices.

Example:
Electricity supplied by a local electricity board has no close substitute for households.

---

3. High Barriers to Entry

New firms cannot easily enter the market due to strong barriers such as:

- Legal restrictions (licenses, patents)
- High capital requirements
- Control over raw materials
- Technology advantages

Example:
Government regulations prevent private companies from easily entering railway operations.

---

4. Price Maker (Control over Price)

A monopolist is a price maker, not a price taker.

- The firm can decide the price of its product.
- However, price is still influenced by consumer demand.

Example:
Electricity boards decide tariff rates (subject to regulation).

---

5. Profit Maximization

The main objective of a monopoly firm is to maximize profit.

- It produces output where Marginal Revenue (MR) = Marginal Cost (MC).
- It then charges the highest possible price consumers are willing to pay.

---

6. Price Discrimination (Possible)

A monopolist may charge different prices to different customers for the same product.

Types:

- Based on income
- Based on usage
- Based on location

Example:
Different electricity tariffs for domestic and industrial users.

---

7. Restricted Output

A monopolist often restricts output to keep prices high and earn more profit.

Example:
Reducing supply to increase price in the market.

---

8. Lack of Competition

Since there are no competitors, the monopolist:

- Faces no pressure to reduce price
- May not focus much on quality improvement

---

9. Downward Sloping Demand Curve

The demand curve faced by a monopolist is downward sloping, meaning:

- To sell more units, the firm must reduce price.

---

10. Possibility of Supernormal Profits

In the long run, a monopolist can earn abnormal (supernormal) profits because:

- No new firms can enter
- Competition is absent

Pricing under Monopoly

The monopolist determines price by controlling output.

Profit maximization occurs when:

MR=MCMR = MCMR=MC

However,

Price>MRPrice > MRPrice>MR

Unlike perfect competition.

The monopolist chooses the output level where MC = MR, then sets the highest price consumers are willing to pay.

Examples of Monopoly

Examples include:

- Government railways in many countries
- Local electricity boards
- Patent-holding companies

Example: **Indian Railways operating passenger railway services in India.

Pricing and Firm Equilibrium

1. Meaning of Pricing

Pricing refers to the process of determining the price of a product in the market.

- In perfect competition, price is determined by demand and supply.
- Firms do not fix price → they accept market price (price takers).

---

2. Meaning of Firm Equilibrium

A firm is said to be in equilibrium when it:

- Has no tendency to change output
- Earns maximum profit (or minimum loss)

Equilibrium = Stable position of the firm

---

3. Conditions of Firm Equilibrium

(A) First Condition (Necessary Condition)

MR = MC

- MR (Marginal Revenue) = Revenue from selling one more unit
- MC (Marginal Cost) = Cost of producing one more unit

A firm reaches equilibrium when MR = MC

(B) Second Condition (Sufficient Condition)

- MC curve must cut MR from below

This ensures maximum profit, not minimum **profit.**

---

4. Pricing and Equilibrium under Perfect Competition

Key Feature:

- Price = MR = AR

P = MR = AR

Because:

- Firms are price takers
- Demand curve is perfectly elastic

Profit Maximization Rule

A firm maximizes profit where:

MR = MC

---

5. Short Run Equilibrium of Firm

In the short run, a firm can be in three situations:

---

1. Supernormal Profit (Abnormal Profit)

Condition:

- Price > Average Cost (AC)

Firm earns extra profit

Example:
If cost = ₹30 and price = ₹50 → profit = ₹20 per unit

---

2. Normal Profit

Condition:

- Price = Average Cost

Firm earns just enough to stay in business

---

3. Loss Situation

Condition:

- Price < Average Cost

Firm incurs loss

BUT:

- If Price ≥ AVC (Average Variable Cost) → continue production
- If Price < AVC → shut down

---

6. Shutdown Point

- The point where Price = AVC
- Below this, firm stops production

Called Shutdown Decision

---

7. Long Run Equilibrium of Firm

In the long run:

- Free entry and exit of firms
- Abnormal profits disappear

Final Equilibrium Condition:

P = MR = MC = AC

This means:

- Firm earns only normal profit
- No incentive to enter or exit

---

8. Graphical Explanation (Concept)

In equilibrium:

- MC curve intersects MR curve
- Price line is horizontal
- At equilibrium output:
    - Profit is maximized

---

9. Important Concepts for Exams

✓ Price Taker

Firm accepts market price

✓ Profit Formula

Profit = TR – TC

✓ Decision Rules

Situation	Action
MR > MC	Increase output
MR < MC	Decrease output
MR = MC	Equilibrium

---

10. Practical Example

Consider a farmer selling wheat:

- Market price = ₹20/kg
- Farmer cannot change price
- He produces where MC = MR (₹20)

That output level is his equilibrium output
