



**DEPARTMENT OF MANAGEMENT STUDIES**

**MBA / CF / 2025-27 / MB25C03**

**COURSE FILE - THEORY**

**SUBJECT : MANAGERIAL ECONOMICS**

**SUBJECT CODE : MB25C03**

**BRANCH : MBA**

**SEMESTER : I**

**YEAR : I**

**PREPARED BY : MS. HARITHA HARI K  
ASSISTANT PROFESSOR**



**DEPARTMENT OF MANAGEMENT STUDIES**

**MANAGERIAL ECONOMICS**

**MB25C03**

**I YEAR / I SEMESTER**



Anna University Chennai

**Regulation 2025**

## **DEPARTMENT OF MANAGEMENT STUDIES**

### **VISION**

To build Jeppiaar Engineering College as an institution of academic excellence in technology and management education, leading to become a world class university.

### **MISSION**

- To excel in teaching and learning, research and innovation by promoting the principles of scientific analysis and creative thinking.
- To participate in the production, development and dissemination of knowledge and interact with national and international communities.
- To equip students with values, ethics and life skills needed to enrich their lives and enable them to contribute for the progress of society.
- To prepare students for higher studies and lifelong learning, enrich them with the practical skills necessary to excel as future professionals and entrepreneurs for the benefit of Nation's economy.

### **PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):**

MBA programme curriculum is designed to prepare the post graduate students

- I. To have a thorough understanding of the core aspects of the business.
- II. To provide the learners with the management tools to identify, analyze and create business opportunities as well as solve business problems.
- III. To prepare them to have a holistic approach towards management functions.
- IV. To inspire and make them practice ethical standards in business

### **PROGRAMME OUTCOMES (POs)**

- Ability to apply the business acumen gained in practice.
- Ability to understand and solve managerial issues.
- Ability to communicate and negotiate effectively, to achieve organizational and individual goals.
- Ability to understand one's own ability to set achievable targets and complete them.
- Ability to fulfill social outreach
- Ability to take up challenging assignment



# JEPPIAAR

## ENGINEERING COLLEGE

Rajiv Gandhi Salai, Chennai-119  
(NAAC Accredited Institution)  
DEPARTMENT OF MANAGEMENT STUDIES

### DETAILED SYLLABUS

MB25C03	Managérial Economics	L	T	P	C
		4	0	0	4
<p><b>Course Objectives:</b></p> <p>The course is designed to provide a strong foundation in economic principles and tools applicable to managerial decision-making. It introduces the concepts of scarcity, efficiency, and market mechanisms in both micro and macroeconomic settings.</p>					
<p><b>Introduction to Managerial Economics and Fundamental Concepts:</b> The themes of economics, scarcity and efficiency, three fundamental economic problems, CREDITS: 3 8 society's capability, Production possibility frontiers (PPF), Productive efficiency Vs economic efficiency, economic growth &amp; stability, Micro economics and Macro economics, the role of markets and government, Positive Vs negative externalities.</p>					
<p><b>Demand, Supply and Consumer Behavior:</b> Market, Demand and Supply, Determinants, Market equilibrium, elasticity of demand and supply, consumer behavior, consumer equilibrium, Approaches to consumer behavior</p>					
<p><b>Production, Costs and Firm-Level Analysis:</b> Production, Short-run and long-run Production Function, Returns to scale, economics Vs dis-economics of scale, Analysis of cost, Short-run and long-run cost function, Relation between Production and cost function - Production Pricing Model - Types of Pricing Model</p>					
<p><b>Market Structures and Factor Pricing:</b> Product market–perfect and imperfect market–different market structures–Firm's equilibrium and supply, Market efficiency, Economic costs of imperfect competition, factor market–Land, Labour and capital–Demand and supply–determination of factor price–Interaction of product and factor market–General equilibrium and efficiency of competitive markets.</p>					
<p><b>Macroeconomic Performance Indicators:</b> Macro-economic aggregates, circular flow of macroeconomic activity, National income determination, Aggregate demand and supply, Macroeconomic equilibrium, Components of aggregate demand and national income, multiplier effect, Demand side management, Fiscal policy in theory.</p>					

Monetary Economics and Supply-Side Perspectives: Short-run and Long-run supply curve– Unemployment and its impact–Okun’s law, Inflation and the impact–reasons for inflation–Demand Vs Supply factors–Inflation Vs unemployment trade off, Phillips curve –short- run and long-run – Supply side Policy and management- Money market- Demand and supply of money, money- market equilibrium and national income, the role of monetary policy.

Weightage: Continuous Assessment: 40%, End Semester Examinations: 60%.

Assessment Methodology: Written Test I & II (60%) Assignment, Presentation, Case Study, Quiz, Simulation, Online Certification, Seminar, Mini project (40%)

#### References:

1. Samuelson, P. A., Nordhaus, W. D., Chaudhuri, S., & Sen, A. (2019). Economics (20th ed.). Tata McGraw Hill.
2. Boyes, W., & Melvin, M. Text book of economics. Biztantra. (Note: No year provided—if you can share that, I can add it.)
3. Mankiw, N. G. (2022). Principles of economics (8th ed., India release). Thomson Learning/Cengage India.
4. Lipsey, R., & Chrystal, A. (2015). Economics (13th ed.). Oxford University Press.

## CO PO MATRIX

**SUBJECT** : MANAGERIAL ECONOMICS

**SUBJECT CODE** : MB25CO3

### COURSE OBJECTIVES:

The course is designed to provide a strong foundation in economic principles and tools applicable to managerial decision-making. It introduces the concepts of scarcity, efficiency, and market mechanisms in both micro and macroeconomic settings.

	CO description	PO Mapping	PSO 1	PSO 2
CO1	Demonstrate conceptual knowledge of managerial economics, fundamental concepts, demand and supply, production, costs, market structures, factor pricing, macroeconomic performance indicators, and monetary and fiscal policies.	PO5(3)	-	-
CO2	Interpret and relate foundational concepts, consumer behavior, production and cost functions, different market structures, macroeconomic aggregates, and the role of monetary and fiscal policies in influencing the business environment.	PO1(1) PO5(3)	-	-
CO3	Apply theories and concepts of management to planning, organising, execution, design, control and individual and group behavior in organizations.	PO1(3) PO4(2)	1	-
CO4	Analyze fundamental economic problems, consumer behavior, market structures, firm-level costs and pricing, macroeconomic indicators, and the effects of monetary and fiscal policies on business cycles.	PO1(3) PO3(1) PO4(2)	3	-
CO5	Evaluate the theories related to scarcity and efficiency, consumer demand, market structures, factor pricing, and macroeconomic policy frameworks to assess their impact on business performance in global and Indian contexts..	PO1(3)	3	-
CO6	Develop economic reasoning and apply contemporary practices to adapt managerial economic principles to address real-world business problems across various market structures, macroeconomic conditions, and policy landscapes.	PO3(2) PO4(2)	2	-



# **JEPIAAR**

## **ENGINEERING COLLEGE**

**Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai - 119.**  
**(ISO 9001:2008 & NBA Accredited Institution)**

### **DEPARTMENT OF MANAGEMENT STUDIES**

**Name of the Subject : MANAGERIAL ECONOMICS**

**Semester, Year & Branch : I, I & MBA**

**Subject Code : MB25CO3**

**Name of the Staff Handling  
the Subject : MS. HARITHA HARI K**

**Students Batch : 2025-2027**

**Signature of HOD**

**Date : 18-12-25**



Rajiv Gandhi Salai, Chennai-119 (NAAC Accredited Institution)

**DEPARTMENT OF MANAGEMENT STUDIES**

**MANAGERIAL ECONOMICS**

**MB25CO3**

**LECTURE NOTES**

**Ms. Haritha Hari k**

# UNIT 1

## INTRODUCTION TO MANAGERIAL ECONOMICS AND FUNDAMENTAL CONCEPTS

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### INTRODUCTION TO ECONOMICS

Economics is the study of how people, businesses and governments make choices when resources are limited and human wants are unlimited.

It explains how goods and services are produced, distributed and consumed, and how individuals and societies decide what to produce, how to produce and for whom to produce.

Economics helps to understand:

- Scarcity and efficiency
- Analyse production and consumption
- Make better financial, business and policy decision.

Thus economics is the study of how people and society manage their resources. The key idea is that “resources are limited, but human wants are unlimited, because of this we face the problem of scarcity.

### SCARCITY AND EFFICIENCY

#### SCARCITY

The gap between limited resources and unlimited wants is called scarcity.

*Examples:*

- A country may have only a limited supply of oil, but industries, households, and transport all demand it.
- You want to buy a car, bike, and a laptop but with limited money you must choose which one is more important.

The situation of having to choose due to limited resources is what we call scarcity.

## **EFFICIENCY**

The best use of scarce resources to maximize output and welfare. It's about producing maximum output with minimum inputs.

Example:

If a farmer has limited land efficiency means using it in such a way that he gets the maximum possible, crop yields.

So efficiency ensures that the scarce resources are not wasted and are used where they give the highest benefit.

**Scarcity = limited resources**

**Efficiency = best use of those resources**

## **THREE FUNDAMENTAL ECONOMIC PROBLEMS**

### **1. *What to produce?***

Deciding which goods and services should be produced and in what quantities. Resources are limited, so society must choose between different alternatives. Producing more of one good means producing less of another (opportunity cost).

*Examples:*

- Should India produce more food grains (like rice, wheat) or luxury cars?
- During the COVID-19 pandemic, countries reduced production of non-essential goods (like automobiles) and increased production of medicines, masks, and ventilators.
- Should a country produce more food or more weapons?

### **2. *How to produce?***

Choosing the method of production—labour-intensive (more workers) or capital-intensive (more machines). Different techniques of production exist. The choice depends on the **availability of resources, cost of production, and social objectives.**

Example:

- Should electricity be generated from coal, solar, or nuclear power?
- In India, textile industry uses labour-intensive methods because labour is cheap and abundant.
- In the US, farming is capital-intensive, using modern machinery like harvesters and drones.\

**Labour-Intensive Technique:** More human labour is used (common in developing countries with abundant labour).

**Capital-Intensive Technique:** More machinery and technology is used (common in developed countries).

### 3. *For whom to produce?*

Deciding how the output will be distributed among people in society. **who will consume the goods and services** produced in the economy. Total production must be distributed among different sections of society. Since all cannot get everything, distribution depends on **income, wealth, and government policies.**

Example:

- Will healthcare be free for all (equity) or only for those who can pay (market-based)?
- Luxury cars are produced for rich people, while basic food grains are produced for the general population.
- In socialist systems (like Cuba), the government ensures basic necessities for all. In capitalist economies, distribution depends on purchasing power.

**What to produce = Allocation of resources among goods.**

**How to produce = Choice of production techniques.**

**For whom to produce = Distribution of output among people.**

## OPPORTUNITY COST

**Opportunity Cost** refers to the value of the next best alternative that you forego when making a decision. It's the cost of not choosing the next best option available to you. In other words, it's the benefit you could have gained by taking a different decision.

The core idea behind opportunity cost is that resources (like time, money, and effort) are limited, so every choice involves trade-offs. It helps individuals and

businesses make more informed decisions by considering not just the benefits of the chosen option, but also what's being sacrificed in the process.

Opportunity cost is not just about money; it also includes time, effort, and resources. It's a concept widely used in economics and business for decision-making and resource allocation.

For example:

- If you decide to spend your Saturday working instead of going to a concert, the opportunity cost would be the enjoyment and experience you missed out on by not attending the concert.
- Deciding between saving money and spending it today comes with opportunity costs. If you spend today, the opportunity cost is the future value of that money
- **Watching TV instead of studying** has the opportunity cost of missing out on better grades.

## **MANAGERIAL ECONOMICS**

**Managerial Economics** is the study of how economic theories and methods are used in business and managerial decision-making.

It means **using economics to solve real business problems** like:

- What price to set?
- How much to produce?
- Whether to invest in a new project?
- How to reduce costs and increase profits?

### NATURE OF MANAGERIAL ECONOMICS:

**1. Microeconomic in Nature:**

Managerial Economics mainly uses microeconomic concepts (like demand, supply, cost, pricing).

**2. Practical and Applied:**

It applies economic ideas directly to real business situations.

**3. Decision-Making Focused:**

The goal is to help managers make better choices using economic principles.

**4. Interdisciplinary:**

It combines economics with finance, statistics, marketing, operations research, etc.

## SCOPE OF MANAGERIAL ECONOMICS:

1. *Demand Analysis and Forecasting:*
  - Understanding customer needs
  - Predicting future demand
  - Helps in planning production and inventory
2. *Cost and Production Analysis:*
  - Finding ways to reduce costs
  - Studying how production changes with inputs
  - Helps in maximizing output with minimum cost
3. *Pricing Decisions:*
  - Setting the right price for products or services
  - Considering market structure, demand, and competition
4. *Profit Management:*
  - Planning for profit
  - Analysing how changes in cost, price, or output affect profits
5. *Capital Management:*
  - Making investment decisions
  - Managing working capital and long-term capital planning
6. *Risk and Uncertainty Analysis:*
  - Making decisions in uncertain situations
  - Using tools like probability and statistics

## IMPORTANCE OF MANAGERIAL ECONOMICS:

1. *Improves Decision-Making:*  
Provides a logical way to analyse choices.
2. *Efficient Use of Resources:*  
Helps avoid waste and use resources wisely.
3. *Helps in Planning and Forecasting:*  
Makes business planning more accurate.
4. *Supports Strategic Thinking:*  
Useful in long-term business decisions like expansion or investment.
5. *Solves Business Problems:*  
Deals with day-to-day and long-term business challenges.

## MICROECONOMICS

Microeconomics is the branch of economics that studies the **behaviour of individual economic units** such as consumers, firms, and markets. It focuses on

how decisions are made regarding the allocation of scarce resources and how these decisions affect supply and demand for goods and services.

Scope of Microeconomics:

- Analysing consumer demand and preferences.
- Studying production techniques and cost efficiency.
- Understanding pricing strategies and market competition.
- Evaluating the impact of government policies on individual markets.

*Examples of Microeconomics:*

- A coffee shop sets the price of a cup based on the cost of ingredients, demand from customers, and competition from other shops.
- A company decides how many workers to employ based on the wage rate and productivity.
- A family decides to buy more vegetables and fewer sweets when their income changes.
- **A clothing store deciding whether to offer discounts** during a sale season.
- *A restaurant choosing between offering vegan or non-vegan dishes* based on customer preferences.
- **A company analysing how changes in the price of raw materials** affect its production costs.
- **An airline company setting ticket prices** for different routes to maximize profits.

## MACROECONOMICS

Macroeconomics studies the **overall economy** or large-scale economic phenomena. It looks at aggregate indicators and the interrelationships among major economic sectors to understand how the economy functions as a whole.

Scope of Macroeconomics:

- Studying trends in GDP and economic growth.
- Analysing causes and effects of inflation and unemployment.
- Formulating government policies for economic stabilization.
- Examining international trade and currency exchange rates.
- Understanding business cycles (periods of expansion and recession).

Examples of Macroeconomics:

- The central bank raises interest rates to reduce inflation.

- A country experiences a 4% increase in GDP due to increased industrial production.
- The government increases spending on infrastructure to stimulate the economy during a slowdown.
- **A country experiencing high inflation** leading to rising prices of everyday goods.
- **The government increasing public spending on infrastructure** to boost economic growth.
- **Rising unemployment during an economic recession** causing social and economic issues.

#### PRODUCTIVE EFFICIENCY

It means a firm or economy produces goods and services at the lowest possible cost, using all available resources efficiently.

It focusses on cost minimization and maximum output with given input.

Managers ensures optimal use of labour, machinery and raw materials to avoid idle resources and cut down unnecessary costs.

*Example:*

- A car manufacturer uses advanced machinery and trained workers so that each car is produced at the minimum cost possible. If they can produce 100 cars with the same resources but currently produce only 80, they are not productively efficient.
- If a factory producing 1000 shirts at the lowest cost per unit using available machines and labour is productively efficient. If it produced fewer shirts with the same resources (wasting time and machines) it would be inefficient.

#### ECONOMIC EFFICIENCY

When resources are used to produce the right combination of goods and services that maximizes society's welfare.

It's not about producing cheaply but producing what people actually want. Economic efficiency occurs when we are both productively efficient and allocatively efficient.

**Examples:**

- The same car manufacturer might be producing cars at the lowest cost (productive efficiency), but if consumers actually demand electric vehicles

instead of petrol cars, then resources are misallocated. Only when the firm shifts production to EVs (as per demand) will it achieve economic efficiency.

- A country producing only military goods at low cost (productive efficiency) but not enough food for its citizens is not economically efficient. Economic efficiency means balancing resources producing both food and defence according to society needs.

**PRODUCTIVE EFFICIENCY = Doing Things the Cheapest Way**

**ECONOMIC EFFICIENCY = Doing the Right Things in The Cheapest Way**

Managers must first achieve productive efficiency by cutting costs. Then ensure economic efficiency by aligning production with consumer demand and market trends.

## **ECONOMIC GROWTH AND ECONOMIC STABILITY**

### **ECONOMIC GROWTH**

An Increase in the total output of goods and services in a country over time is called economic growth. It is usually measured by the rise in **Gross Domestic Product** (Total monetary value of all final goods and services produced within a country in a given period of time) **or Gross National Product** (GDP plus income earned from abroad.). Growth means the economy is producing more, creating jobs and improving living standards.

*Economic growth means the economy is producing more than it did before.*

Suppose a factory last year produced 1000 cars and this year produces 1200 cars with the same resources. That extra 200 cars reflect economic growth.

*How Can We Say an Economy is Growing?*

An economy is considered to be growing when its production of goods and services, income, and employment increase over time. This growth is generally measured through quantitative indicators.

#### **1. Increase in GDP (Gross Domestic Product)**

- **Definition:** Total value of all goods and services produced within a country in a year.
- **Indicator of Growth:** Rising GDP indicates that more goods and services are being produced.
- **Example:** India's GDP growth of 6–7% per year (pre-pandemic) shows economic growth.

## 2. Increase in GNP (Gross National Product)

- **Definition:** GDP plus income earned by citizens from abroad.
- **Indicator of Growth:** Rising GNP shows that the economy is generating more income for its citizens.

## 3. Higher Per Capita Income

- **Definition:** Average income per person, calculated as GDP divided by population.
- **Indicator of Growth:** Rising per capita income suggests improved living standards and better purchasing power.

## 4. Growth in Employment

- **Indicator:** Increasing employment and declining unemployment show that more people are engaged in productive activities.
- **Example:** Expansion of the IT and manufacturing sectors in India created millions of jobs, indicating economic growth.

## 5. Increase in Production in Key Sectors

- **Agriculture, Industry, and Services:** Growth in these sectors reflects overall economic growth.
- **Example:** Growth of India's service sector (IT, banking, tourism) contributes significantly to GDP.

## 6. Rise in Investment

- **Indicator:** Higher capital formation (investment in factories, machinery, infrastructure) expands production capacity.
- **Example:** FDI inflows and government infrastructure projects signal economic growth.

## 7. Improvement in Trade

- **Indicator:** Increasing exports and a growing share in global trade indicate that the economy is competitive and expanding.
- **Example:** India's software exports and pharmaceutical exports have steadily increased over the years.

Indicator	How It Shows Growth	Example
GDP Growth	More goods & services produced	India 6–7% GDP growth pre-pandemic
GNP Growth	More income for citizens	Remittances and foreign earnings
Per Capita Income	Higher average income	Rising purchasing power
Employment	More people working	IT, manufacturing job growth
Sectoral Output	Growth in agriculture, industry, services	IT, pharma, industrial production
Investment	Expansion of productive capacity	FDI, infrastructure projects
Trade	Competitive economy	Rising exports of software & goods

## ECONOMIC STABILITY

A condition where an economy experiences low inflation, low employment and steady growth without large fluctuations in output and price over time. Economic stability means the economy grows smoothly without big ups and downs (no booms or recessions).

### EXAMPLES:

- RBI's monetary policies and GST implementation helped reduce inflation volatility
- Government schemes (MGNREGA, infrastructure projects) stabilize employment
- GST implementation simplifying tax structure; government infrastructure projects.

**ECONOMIC GROWTH – How much the economy is expanding**  
**ECONOMIC STABILITY – How smooth and sustainable that expansion is**

## PRODUCTION POSSIBILITY FRONTIER

A **Production Possibility Frontier (PPF)** is an economic model that illustrates the **maximum possible output combinations** of two goods or services that an economy can produce when **all resources are fully and efficiently utilized**, given current technology.

The PPF demonstrates fundamental economic concepts such as scarcity, choice, and opportunity cost, showing that producing more of one good requires sacrificing some of the other. Points on the curve represent efficient production, while points inside the curve indicate inefficient resource use, and points outside the curve are unattainable with current resources.

### Key Concepts of the PPF:

1. *Scarcity and Trade-offs:*
  - Resources (labour, capital, land) are limited.
  - Producing more of one good means producing less of another (opportunity cost).
2. *Opportunity Cost:*
  - The cost of giving up the next best alternative when making a choice.
  - On a PPF, this is shown by the **slope** of the curve.
3. *Efficiency:*
  - Points **on the curve** represent efficient production.
  - Points **inside the curve** represent underutilization or inefficiency.
  - Points **outside the curve** are unattainable with current resources and technology.
4. *Economic Growth:*
  - If the PPF shifts **outward**, it shows economic growth (more resources, better technology).
  - A **shift inward** indicates economic decline.
5. *Shape of the PPF:*
  - Typically, **concave (bowed out)** from the origin.
  - This reflects **increasing opportunity costs**: as more of one good is produced, more and more of the other good must be given up.

### ASSUMPTIONS OF PPF:

- Resources are limited (scarcity).
- Resources can be shifted between production of two goods.
- Technology is fixed.

- Resources are used efficiently.

### SHAPE OF THE PPF:

Usually concave (bowed outward) due to the law of increasing opportunity cost – producing more of one good requires giving up increasing amounts of the other.

Sometimes shown as a straight line if opportunity cost is constant.

### POINTS ON THE PPF:

On the curve → efficient use of resources.

Inside the curve → inefficient use (unemployment, underutilization of resources).

Outside the curve → unattainable with current resources and technology.

### SHIFTS OF THE PPF:

**Outward shift** → **economic growth (more resources, better technology)**.

**Inward shift** → **loss of resources** (natural disasters, war, etc.).

Example:

Let's say a country can produce **two goods: Cars and Computers**.

Here is a simple **PPF table**:

<b>Option</b>	<b>Cars Produced</b>	<b>Computers Produced</b>
A	0	100
B	10	90
C	20	70
D	30	40
E	40	0

- If all resources go to **computers**, 100 computers can be made (Point A).
- If all resources go to **cars**, 40 cars can be made (Point E).
- Any point **on the curve** (A to E) represents **efficient use** of resources.
- Any point **inside** the curve means **underutilization** of resources.
- Any point **outside** the curve is **unattainable** with current resources.

## CONCEPTS ILLUSTRATED BY THE PPF:

1. *Opportunity Cost:*
  - Moving from Point B to C: To produce 10 more cars, you must give up 20 computers.
  - Opportunity cost of 10 cars = 20 computers → 1 car = 2 computer.
2. *Law of Increasing Opportunity Cost:*
  - As you produce more of one good, the opportunity cost of producing additional unit's increases.
3. *Economic Growth:*
  - If the PPF shifts outward, it means an increase in resources or technology.

## SOCIETY'S CAPABILITY

### What Determines Society's Capability?

1. *Resources:*
  - **Land** (natural resources)
  - **Labour** (human effort and skills)
  - **Capital** (tools, machinery, infrastructure)
  - **Entrepreneurship** (innovation, risk-taking)
2. *Technology:*
  - Improvements in technology allow for more output with the same resources, pushing the PPF outward.
3. *Efficiency:*
  - If society uses its resources efficiently, it operates on the PPF.
  - If resources are wasted or idle (e.g., unemployment), society operates inside the PPF.
4. *Education and Skill Development:*
  - Better education increases labour productivity, which can expand the PPF.
5. *Institutional and Political Stability:*
  - A stable environment allows for better planning, investment, and use of resources.

## HOW SOCIETY'S CAPABILITY IS REPRESENTED:

- The PPF Curve itself shows the limits of what a society can produce.
- Shifts in the PPF show changes in capability:
  - **Outward Shift** → Increased capability (economic growth)

- **Inward Shift** → Decreased capability (war, disaster, resource depletion)

Society's capability refers to:

“The maximum amount of goods and services it can produce using all available resources efficiently, at current levels of technology.”

## **THE ROLE OF MARKETS AND GOVERNMENT IN THE ECONOMY**

### **Role of Markets:**

A **market** is any place where buyers and sellers interact — physically or digitally — to exchange goods and services.

Main Functions of Markets:

1. **Efficient Allocation of Resources:**
  - Prices act as signals.
  - If something is in demand, its price rises, attracting more production.
2. **Supply and Demand Coordination:**
  - Market forces determine what gets produced and in what quantity.
3. **Encouraging Innovation and Competition:**
  - Businesses innovate to attract consumers and stay ahead of competitors.
4. **Consumer Sovereignty:**
  - Consumers, through their choices, "vote" for what they want produced.

*Limitations of Markets:*

- May lead to inequality.
- Can ignore social goals like public health or education.
- Cannot efficiently provide **public goods** (e.g. national defence).
- Cannot correct **externalities** (pollution, vaccinations).

### **Role of Government:**

Governments intervene in the economy when the market alone cannot produce the fairest or **efficient** outcomes.

Main Functions of Government:

1. **Correcting Market Failures:**

- Address **externalities** (pollution, vaccinations).
  - Provide **public goods** (roads, defence).
  - Regulate **monopolies** and promote fair competition.
2. Redistributing Income and Wealth:
    - Through **taxes and welfare programs** to reduce inequality.
  3. Ensuring Economic Stability:
    - Use **fiscal policy** (spending and taxes) and **monetary policy** (interest rates) to reduce inflation and unemployment.
  4. Protecting Property Rights and Legal Framework:
    - Enforcing contracts and protecting ownership encourages investment and entrepreneurship.
  5. Providing Merit Goods:
    - Goods like **education, healthcare, and vaccines** that benefit society are often under-provided by the market, so the government steps in.

## WHAT IS AN EXTERNALITY?

An **externality** is a **side effect** (or "spill over") of an economic activity that *affects third parties (people not directly involved in the activity)*.

- **Positive externalities** = benefits to others.
- **Negative externalities** = costs to others.

Externalities are a type of **market failure** — meaning that if left unaddressed, markets produce **too little** or **too much** of certain goods.

### Positive Externalities

A **positive externality** occurs when an activity creates **benefits for third parties** (people who are not directly involved in the activity).

*Examples:*

- **Education:** Benefits the individual, but also society (more skilled workers, less crime, informed voting).
- **Vaccination:** Helps the person, but also protects others through herd immunity.
- **Public transportation:** Reduces traffic and pollution for everyone, not just riders.

**Market Problem:**

**Because third-party benefits are not reflected in the market price, such goods are under-produced and under-consumed.**

**Government Intervention:**

- **Subsidies** (e.g., for students or vaccines) – to promote positive externalities
- **Free provision** (e.g., public schools) -
- **Public campaigns** (e.g., promoting recycling or health checks)

**Negative Externalities**

A **negative externality** occurs when an activity imposes **costs on third parties** who aren't part of the decision-making process.

*Examples:*

- **Air pollution** from factories: Hurts nearby residents' health.
- **Smoking in public:** Affects non-smokers through second hand smoke.
- **Noise pollution:** From construction or loud music disturbs others.

*Market Problem:*

Because third-party costs are **not paid by the producer/consumer**, such goods are **over-produced** and **over-consumed**.

*Government Intervention:*

- **Taxes** (e.g., carbon tax on emissions)
- **Regulations** (e.g., pollution limits, smoking bans)
- **Fines** (e.g., for littering or noise violations)

**Positive externality:** You enjoy the flowers without planting them.

**Negative externality:** They burn trash, and the smoke comes into your window.

## UNIT 2

### DEMAND SUPPLY AND CONSUMER BEHAVIOUR

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#### MARKET

A **market** is a place or system where buyers and sellers interact to exchange goods and services. This can be physical (like a grocery store) or virtual (like Amazon).

#### Types of markets:

- **Perfect competition**
- **Monopoly**
- **Oligopoly**
- **Monopolistic competition**

#### 1. PERFECT COMPETITION

A market structure with **many buyers and sellers (large number of buyers and sellers)**, where all firms sell **identical (homogeneous) products** and **no single firm can influence the market price (price determined by demand and supply)**.

##### Key Features:

- Many small firms
- Homogeneous products
- Free entry and exit
- Perfect knowledge (buyers/sellers know all prices)
- Price takers (firms accept market price)

##### Example:

**Agricultural markets** like wheat or rice: Many farmers sell similar-quality wheat, and none can set the price.

#### 2. MONOPOLY

A market structure with **only one seller** of a product with **no close substitutes**. The firm has **significant control over price**.

##### Key Features:

- Single seller
- Unique product
- High barriers to entry

- Price maker  
**Example:**
- **Railways in many countries** (e.g., Indian Railways) Government-owned and the only provider of national train transport.
- **Utility companies** (like electricity providers in some areas)

### 3. MONOPOLISTIC COMPETITION

A market with **many sellers** offering **similar but slightly differentiated products**. Firms have **some control over price**.

Key Features:

- Many sellers
- Product differentiation (brand, quality, etc.)
- Free entry and exit
- Some price-setting power due to brand loyalty

**Example:**

- **Fast food chains:** McDonald's, Burger King, KFC  
All sell burgers but differentiate by taste, brand, and service.
- **Clothing brands:** Zara, H&M, Levi's, etc.

### 4. OLIGOPOLY

A market dominated by **a few large firms** that **may collude** or compete. Products may be **identical or differentiated**.

Key Features:

- Few large firms dominate
- High barriers to entry
- Interdependence between firms
- Potential for collusion (price-fixing)

**Example:**

- **Smartphone market:** Apple, Samsung, Xiaomi Few firms dominate and strongly influence prices and innovation.
- **Airlines:** In many regions, a few major airlines dominate routes.

<b>Market Type</b>	<b>No. of Sellers</b>	<b>Product Type</b>	<b>Price Control</b>	<b>Example</b>
<b>Perfect Competition</b>	Many	Identical	None	Wheat, rice, vegetables
<b>Monopoly</b>	One	Unique	High	Railways, local water supply
<b>Monopolistic Comp.</b>	Many	Slightly Differentiated	Some	Fast food, clothing brands
<b>Oligopoly</b>	Few	Identical or Differentiated	High	Smartphones, airlines

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## DEMAND AND SUPPLY

These are fundamental forces that determine prices and quantities in a market.

### DEMAND:

Quantity of a good that consumers are willing and able to buy at various prices.

According to Hibdon, “Demand Means the various quantities of goods that would be purchased per time period at different prices in a given market”

### Law of Demand

When the price of a goods and services decreases, quantity demanded increases, and when its price increases its quantity demand decreases. Thus there is an Inverse Relationship between the price of a commodity and the quantity demanded. In economics this relationship is known as “**Law of Demand**”. The Law of demand is known as the first law of market and it was propounded by Marshall.

The law of demand states that at higher price lower quantity will be demanded and at lower price higher quantity will be demanded.

According to Samuelson “Law of demand states that people will buy more at lower prices and buy less at higher prices”.

### ASSUMPTIONS OF LAW OF DEMAND

- The income of the buyer remains constant.
- Taste and preferences of the consumers remains the same.
- Price of related goods (substitutes and complements) remain the same.
- Consumers do not know about any new substitute products

- There is no expectation of change in the price of commodity in the near future.
- The commodity should not be a prestige commodity.
- The size of population remains constant.

## DEMAND SCHEDULE

The law of demand can be explained with the help of demand schedule. The law of demand presented in a table is known as a demand schedule. A demand schedule does not say what the price is. It only says what quantities would be bought at different possible prices.

Types of Demand Schedules:

### 1. Individual Demand Schedule

Shows the quantity demanded by **one consumer** at various price levels.

### 2. Market Demand Schedule

Shows the **total quantity demanded by all consumers in the market** at each price level (sum of all individual demand schedules).

### Example for Demand Schedule:

Let's assume three individuals have the following demand at different prices:

Price	Person A	Person B	Person C	Market Demand
\$5	1	0	1	2
\$4	2	1	2	5
\$3	3	2	3	8
\$2	5	3	4	12
\$1	8	5	6	19

## DEMAND CURVE

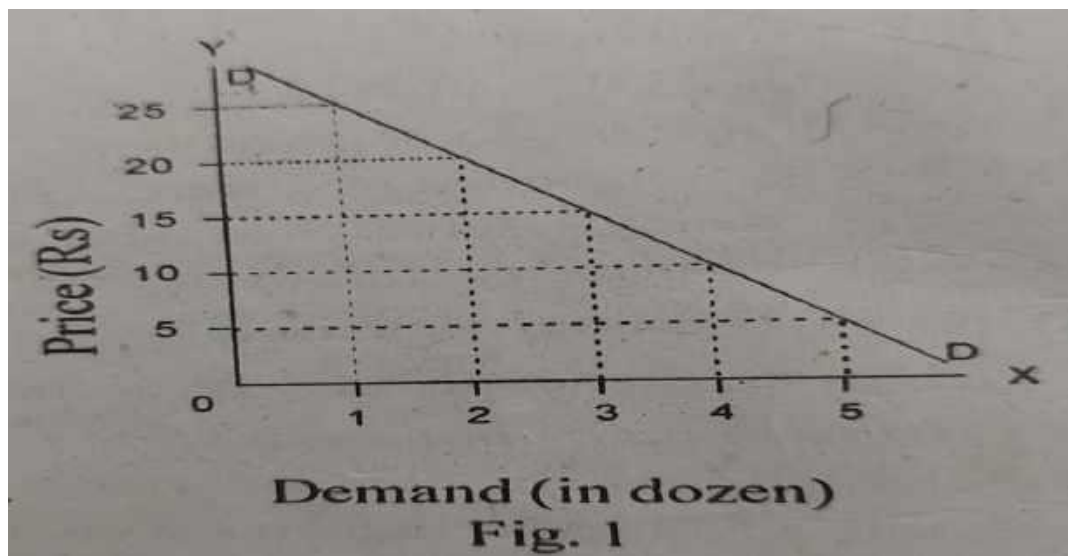
**When the demand schedule is shown graphically**, it is called a demand curve. Thus demand curve is a graphical representation of demand schedule. It shows the relationship between the **price of a good** and the **quantity demanded** by consumers, holding all other factors constant.

### Key Features:

- **Downward sloping** from left to right.
- Illustrates the **Law of Demand**: As price falls, quantity demanded rises (and vice versa).
- Can be for **an individual** or the **entire market**.

Let's Construct a demand curve by taking the price and quantity demanded by buyer A

Price	Quantity Demanded (mangoes)
\$5	1
\$10	2
\$15	3
\$20	4
\$25	5



In the given diagram OX axis measures the quantity of mangoes demanded and OY axis measures the price per dozens of mangoes. When the price of mango is rs 5 per dozen 5 dozen mangoes are demanded. Similarly, when the price of mango is rs 10 per dozen only 4 dozen mangoes are demanded. DD is the demand curve. Any point on the demand curve will tell us as what quantity is demanded at what price. The demand curve slopes downwards, from left to right.

### Why Demand Curve Slopes Downwards?

A demand curve slopes downwards from left to right. This means it has a negative slope. There are certain reasons behind this. The following are the important reasons for the operation of the law of demand.

**1. Law of diminishing marginal utility**

Law of demand is derived from the law of diminishing marginal utility. Law of diminishing marginal utility states that when a consumer consumes more of a commodity, every additional unit of that commodity will give him less satisfaction. Therefore, the consumer will buy more only at a lower price. If the price is higher, he will restrict his consumption. For this reason, the demand of a commodity increases at a lower price and decreases at a higher price and thus the demand curve slopes downwards.

**2. Income Effect**

When the real income of a consumer increases, people can afford to buy more. When the income decreases people reduce their consumption.

**3. Substitution Effect**

Consumers always substitute cheaper commodity in place of costlier commodity. For example, when the price of tea falls, some people may shift their demand from coffee to tea and the demand for tea increases. This is known as Substitution or complementary Effect.

**4. Price Effect**

When there is a fall in the price of any commodity, the consumers who were not purchasing that commodity earlier will now purchase some units of the commodity. In addition to this, the existing consumers will buy more quantity because the price has fallen. In both cases the demand increases due to fall in price. When there is an increase in the price of any commodity, some consumers will stop buying of the commodity and they will switch to substitutes. In addition to this, the existing consumers will buy less quantity of it. In both cases the demand falls due to increases in price.

**5. Different uses of commodity**

If a commodity can be used for several purposes, its demand will be effected by a change in its price. For example, electricity can be used for several uses. If the price of electricity increases, it will be used only for limited or more important purposes.

**6. Tendency to satisfy unsatisfied wants**

Every person has some unsatisfied wants. Suppose the price of apple is rs 100 most of the people have not purchased apple because of its high price. Suppose the price falls to rs 30 now these people want to satisfy their unsatisfied want. This leads to increase in the demand of apple. Because of this tendency the demand curve slopes downwards to the right.

## **EXCEPTION TO THE LAW OF DEMAND**

The demand curve slopes downwards from left to right. But there are certain few cases in which the law of demand will not hold true. In such cases people will buy more at higher prices and less at lower prices. In such cases the demand curve will rise upwards from left to right. Such types of demand curve is called Exceptional Demand curve or perverse demand curve. The exceptional demand curve has a positive slope.

### **1. Inferior or Giffen Goods**

Sir Robert Giffen established that sometimes people buy less quantities of a commodity at a lower price and more quantity of a commodity at a higher price. He gave the example of low-paid British workers. During the early period of the 19<sup>th</sup> century in Ireland people were so poor that they spent the major portion of their incomes on bread (inferior goods) and a small portion on meat (superior goods). When the price of bread decreased, they did not buy more of it. They spent the saved income on meat. Thus when the price of bread had fallen, its demand had fallen. Similarly, when the price of bread had increased people purchased more bread because meat was already costly to them. This means that when the price of bread had went up, its demand had increased. Thus the law of demand does not apply to inferior goods like second hand appliances, unbranded products, jower, bajra etc. such inferior goods are called giffen goods and this exception is called giffen paradox. Giffen goods are those goods whose demand increases with increase in price and decrease with decrease in price.

### **2. Prestige Goods**

There are certain goods which purchased because of their status, value e.g diamond, precious stones, luxury cars, designer handbags etc. these are purchased by rich people to impress others. As the price of such goods increases, their quantity of demand also increases.

### **3. Demand for necessities**

The law of demand does not apply to necessary goods. Whatever may be the prices. We buy certain quantity of necessary goods like

salt, kerosene, matches, medicine etc. An increase in price of such goods will not affect its demand.

#### **4. Emergency**

During national emergencies like a war or civil war, goods become scarce. Consumers fear that the prices will rise. Then they buy more to keep stock for future, though the price has risen.

#### **5. Speculation effect**

When prices are falling, people may demand less expecting a further price fall. Similarly, when prices are raising, people may demand more. This is because they expect that prices will raise further. This is common in stock exchange. This is called speculation effect.

#### **6. Ignorance**

Sometimes the consumer may not know the prices prevailing in the market. A consumer may buy more quantity at higher prices due to ignorance. Sometimes consumer may feel that high priced commodity is of better quality. When the price of such goods falls they may feel that its quality also has declined and therefore they do not buy it. This is called illusion effect.

#### **7. Commodities which are out of fashion**

If a commodity goes out of fashion, its demand may fall even when prices are falling.

#### **8. Festival, Marriage etc**

In the season of festivals, marriage etc. people buy more even the prices are high.

#### **9. Brand Loyalty**

If a consumer is loyal to a particular brand of a commodity, he will not like to change the brand even on a change in its price. For example: if a man always uses the Bata footwear he will continue to use it even if its price increases.\

#### **10. Cosmetics**

Modern civilization made cosmetics a necessary. Even if the price of cosmetics increase their demand will not decrease because people consider them as necessary. Hence the law of demand does not hold true in case of cosmetics.

## **DETERMINANTS OF DEMAND AND SUPPLY**

### **DETERMINANTS OF DEMAND:**

The **Determinants of Demand** are the key factors that influence how much of a product or service consumers are willing and able to purchase at various prices. These go **beyond just the price** of the good and explain **why demand might shift** even if the price stays the same.

#### **1. DETERMINANTS OF INDIVIDUAL DEMAND**

##### ➤ **Price of the good (movement along the curve)**

Price is the basic factor influencing the demand. As the price of a good increases, the quantity demanded falls, and vice versa.

Why?

- Substitution effect: Consumers switch to cheaper alternatives.
- Income effect: Higher prices reduce real purchasing power.
- **Example:** If the price of apples rises from \$2 to \$4, people may buy fewer apples and more oranges (a substitute).

##### ➤ **Nature of commodity**

Demand depends on whether the commodity is a necessity, or a luxury or prestigious etc. Demand for necessary goods remain constant. Demand for comforts and luxuries change with the change in their prices. Demand of prestige goods, remains constant. Demand of durable goods changes with change in their price. Thus the nature of commodity determines the demand.

##### ➤ **Income and Wealth of consumers**

Change in income can bring about a change in demand. If the income of consumer increases, the demand for normal goods will also increase because with the increase in income, he can spend more amount on the purchase of such goods. If the income decreases the demand for normal goods also decrease.

##### ➤ **Tastes and preferences**

Any change in fashion, taste and preference of consumers brings about changes in demand. For instance, today more ladies have begun to use jeans. So the demand for jeans have now increased. Today, children have

developed a taste for eating chocolate. Hence there is an Increase in demand for chocolate. When goods go out of fashion, they will be demanded less. Similarly, if a consumer is habitual of consuming a particular commodity he will purchase it irrespective of its prices.

For examples, Increasing awareness of fitness increases demand for gym memberships and sportswear.

Shift towards eco-friendly products boosts demand for electric vehicles and paper straws.

### ➤ **Prices of related goods (substitutes and complements)**

The demand for a commodity is affected not only by its own price but also by the price of related goods. These related goods fall into two categories: substitutes and compliments.

**Substitute goods:** two goods are said to be substitutes of each other when one can be used in place of other. For example, tea and coffee are substitute goods. If the price of a substitute commodity increases, the demand for original commodity will increase. On the other hand, if the price of a substitute commodity falls, the demand for coffee will decrease. This is because buyers of coffee will buy less of it and more of tea.

**Complementary goods:** two goods are said to be complementary of each other when they are used together. In case of complementary goods, if the demand of original commodity increases, the demand of complementary goods will also increase. Similarly, if the demand of original commodity decreases, the demand of complementary goods also decreases. For example, the demand for pen decreases, the demand for ink will also decrease.

### ➤ **Consumer's Expectations**

Consumers expectation about a further rise or fall in future price will affect the demand of a commodity. If consumers expect a rise in the price of a commodity in the near future, they may purchase large quantity. When the price of a commodity decreases, people expect a further fall in the price and postpone their purchase. Similarly, if consumers believe that their incomes will rise in the near future they are more induced to buy more expensive items today. On the other hand, if consumers are worried about losing their jobs, they are likely to postpone purchase of expensive items.

## ➤ Advertisement

Advertisement will create, maintain and increase the demand of goods. For example, Coca-cola and pepsi advertise heavily during festivals and sports event, leading to a raise in demand. Influencer promotions on social media boost demand for cosmetics or gadgets. Festive sales like amazon great indian festival or flipkart big billion days increase demand for electronics and fashion items.

## 2. DETERMINANTS OF MARKET DEMAND

Market demand for a product refers to the total demand of all buyers taken together. The following factors affect the market demand of a product:

1. **Price of product:** The market demand of a product depends on its price. When the price falls, demand increase and vice versa.
2. **Usefulness:** Changes in usefulness cause changes in demand. For example, the demand for coats rise at the beginning of winter not because peoples tastes change but because coats are more useful in the winter than in summer. Similarly, the demand for Christmas cards rises in November and falls in January. The demand for air conditioners rises each summer and falls afterwards. The demand for low-fat foods increased when people learned that these foods could help them to produce good health.
3. **Change in population:** a change in the population of the country may cause change in the demand for various goods and services. For instance, India had a population of 43 crores in 1961 which increase to 118 crores in 2010. With the increase in the population, we have seen that there is an increased demand for foods, clothing and many items. In short, an increase in Population will lead to an increase in the demand and vice-versa.
4. **Distribution of income and wealth:** Distribution of income and wealth in the society also affects the demand of commodities. If there is an unequal distribution of income and wealth in the country, demand of the goods of comforts and luxuries will be greater. If there is an equal distribution of income and wealth, demand of necessary goods and comforts will be greater.
5. **Change in the quantity of money in circulation:**

When the money in circulation increases, people will have more purchasing power. Hence demand will increase. Conversely, if money in circulation decreases, people will have less purchasing power and therefore, demand for goods and services also decreases.

6. **Change in Climate:** variation in climate may bring about changes in demand for particular goods. For example, the demand for woollen clothes will be heavy during the winter season. The demand of fans, coolers etc. Increases in summer. The demand of umbrellas and rain coats increases in rains. During hot summer day ice cream will have higher demand. During rainy season ice cream is not so much demanded.
7. **Govt. Policy:** Govt. policy also affects the demand of commodities. For example, if heavy taxes are imposed on certain goods, the demand for such goods will decrease. On the other hand, if govt. announces tax concession for certain commodities, their demand will increase.
8. **Business Cycle:** In the period of boom, demand for almost all commodities increases. In the period of recession, demand of commodities decreases.

### **DETERMINANTS OF SUPPLY:**

- Price of the good (movement along the curve)
- Input prices (cost of production)
- Technology
- Taxes and subsidies
- Expectations
- Number of sellers

### **MARKET EQUILIBRIUM**

This is the point where **quantity demanded = quantity supplied.**

- **Equilibrium Price (P\*):** The price at which the market clears.
- **Equilibrium Quantity (Q\*):** The quantity bought and sold at the equilibrium price.

If:

- **Price > P\*:** Surplus (excess supply)
- **Price < P\*:** Shortage (excess demand)

### **ELASTICITY OF DEMAND AND SUPPLY**

#### **Price Elasticity of Demand (PED):**

Measures how responsive quantity demanded is to a change in price.

- Formula:

$$PED = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}}$$

- **Elastic (>1):** Quantity changes more than price.
- **Inelastic (<1):** Quantity changes less than price.

### **Price Elasticity of Supply (PES):**

Measures how responsive quantity supplied is to a change in price.

- Formula:

$$PES = \frac{\% \text{ change in quantity supplied}}{\% \text{ change in price}}$$

## **CONSUMER BEHAVIOUR**

This is how consumers make choices to allocate their limited income to various goods and services to maximize utility (satisfaction).

### **Key concepts:**

- **Utility:** Satisfaction from consuming goods.
- **Total utility** vs. **Marginal utility** (additional satisfaction from one more unit).
- **Law of Diminishing Marginal Utility:** As more units are consumed, marginal utility declines.

## **CONSUMER EQUILIBRIUM**

Occurs when a consumer maximizes utility given their budget.

*In one-good case:*

- Equilibrium is when marginal utility = price.

*In two-good case:*

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y}$$

Where:

- MU = Marginal Utility
- P = Price
- x and y = two goods

This means the consumer is allocating their income so that the **last dollar spent on each good gives the same marginal utility.**

# UNIT 3

## PRODUCTION, COSTS AND FIRM-LEVEL ANALYSIS

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### **MEANING OF PRODUCTION**

Production refers to the process of transforming inputs such as land, labour, capital, and entrepreneurship into goods and services that satisfy human wants. It does not only mean manufacturing tangible goods, but also includes services that add utility. The objective of production is to maximize output efficiently using available resources.

Production creates different types of utility such as form utility (changing shape or form), place utility (transporting goods), time utility (storing goods), and service utility (providing services like education and healthcare).

### **PRODUCTION FUNCTION**

A production function expresses the technical relationship between inputs used and output produced during a given period of time.

General form:

$$Q = f(L, K, N, E)$$

Where Q = Output, L = Labour, K = Capital, N = Land, E = Entrepreneurship.

The production function shows the maximum output that can be obtained from a given combination of inputs, assuming efficient use of resources and existing technology.

### **SHORT-RUN PRODUCTION FUNCTION**

The short run is a period in which at least one factor of production is fixed, usually capital, while other factors like labour are variable.

Key Concepts of Short-Run Production

a) Total Product (TP)

Total Product refers to the total quantity of output produced by a firm using a

given amount of variable inputs. TP initially increases at an increasing rate, then at a decreasing rate, and finally may decline.

#### b) Average Product (AP)

Average Product is the output per unit of variable input. It is calculated as:

$$AP = TP / \text{Units of Labour}$$

AP rises when TP increases faster than labour and falls when TP increases at a slower rate.

#### c) Marginal Product (MP)

Marginal Product is the additional output produced by employing one extra unit of variable input, keeping other inputs constant.

$$MP = \text{Change in TP} / \text{Change in Labour}$$

MP first increases, reaches a maximum, and then declines due to inefficiencies.

#### Law of Diminishing Returns

This law states that as more units of a variable factor are combined with a fixed factor, the marginal product of the variable factor will eventually decline. This occurs due to overutilization of fixed factors and lack of coordination among inputs.

## **LONG-RUN PRODUCTION FUNCTION**

The long run is a period in which all factors of production are variable. Firms can change plant size, technology, and scale of operation.

In the long run, output can be increased by changing all inputs proportionately. The focus is on efficiency, optimal input combination, and scale of production.

## **RETURNS TO SCALE**

Returns to scale explain how output responds when all inputs are increased proportionately in the long run.

#### a) Increasing Returns to Scale

When output increases by a greater proportion than the increase in inputs, increasing returns to scale occur. This happens due to specialization, division of labour, better use of technology, and managerial efficiency.

#### b) Constant Returns to Scale

When output increases in the same proportion as inputs, constant returns to scale exist. Firms operate efficiently and managerial advantages are fully utilized.

### c) Decreasing Returns to Scale

When output increases by a smaller proportion than the increase in inputs, decreasing returns to scale occur. This is mainly due to managerial inefficiencies, coordination problems, and administrative difficulties in large firms.

## **ECONOMIES OF SCALE**

Economies of scale refer to the cost advantages that a firm enjoys as it increases its scale of production, leading to a reduction in average cost.

Types of Economies of Scale

### a) Internal Economies

These arise within the firm due to expansion.

- Technical economies from use of large machines
- Managerial economies from specialization
- Financial economies from easier access to credit
- Marketing economies from bulk buying and advertising

### b) External Economies

These arise due to the growth of the industry as a whole.

- Skilled labour availability
- Improved infrastructure
- Technological spillovers

## **DISECONOMIES OF SCALE**

Diseconomies of scale occur when an increase in output leads to a rise in average cost.

Causes of Diseconomies of Scale

- Managerial inefficiency
- Communication gaps
- Lack of coordination
- Bureaucratic delays

As firms grow too large, controlling operations becomes difficult, leading to increased costs.

## **CONCEPT OF COST**

Cost refers to the monetary value of resources used in the production process. It

represents the sacrifice made to produce goods or services.

Costs help firms determine pricing, output levels, and profit maximization strategies.

## **ANALYSIS OF COST**

### a) Fixed Cost (FC)

Fixed costs do not change with the level of output in the short run. Examples include rent, salaries, and insurance.

### b) Variable Cost (VC)

Variable costs change directly with output. Examples include raw materials, wages of casual labour, and power usage.

### c) Total Cost (TC)

Total cost is the sum of fixed cost and variable cost.

$$TC = FC + VC$$

## **SHORT-RUN COST FUNCTION**

In the short run, at least one factor is fixed.

Types of Short-Run Costs

- Average Fixed Cost ( $AFC = FC / Q$ )
- Average Variable Cost ( $AVC = VC / Q$ )
- Average Cost ( $AC = TC / Q$ )
- Marginal Cost ( $MC = \text{Change in } TC / \text{Change in } Q$ )

MC initially falls due to better utilization of resources and then rises due to diminishing returns.

## **LONG-RUN COST FUNCTION**

In the long run, all factors are variable and firms can change plant size.

The Long-Run Average Cost (LAC) curve is derived from several Short-Run Average Cost curves. It is U-shaped due to economies and diseconomies of scale. The long run represents the planning horizon where firms aim for optimal scale and minimum cost.

## **RELATIONSHIP BETWEEN PRODUCTION AND COST FUNCTION**

Production and cost functions are inversely related. Higher productivity of inputs leads to lower costs of production.

- When marginal product increases, marginal cost decreases
- When marginal product decreases, marginal cost increases

Thus, efficiency in production directly affects cost behavior.

## **PRODUCTION PRICING MODEL**

The production pricing model emphasizes setting prices based on production costs and output levels. Firms aim to cover costs and earn reasonable profits. Price determination depends on cost structure, demand conditions, and market form.

## **TYPES OF PRICING MODELS**

### a) Cost-Plus Pricing

Price is determined by adding a fixed margin to the cost of production. Common in manufacturing and public sector enterprises.

### b) Marginal Cost Pricing

Price is set equal to marginal cost. Used for efficiency and welfare maximization, especially in public utilities.

### c) Break-Even Pricing

Price is fixed to cover total costs without profit or loss. Useful during market entry.

### d) Penetration Pricing

Low prices are set initially to attract customers and gain market share.

### e) Skimming Pricing

High prices are charged initially to recover costs quickly, usually for innovative products.

# UNIT 4 MARKET STRUCTURES AND FACTOR PRICING

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## PRODUCT MARKET

The product market refers to the market where final goods and services are produced and sold to consumers. Firms supply goods and services in this market, while consumers create demand. The interaction between demand and supply in the product market determines the price and quantity of goods produced. The structure of the product market influences the behavior of firms, pricing strategies, and the level of competition.

*Example:* The smartphone market where companies like Apple and Samsung sell mobile phones to consumers.

## PERFECT MARKET (PERFECT COMPETITION)

A perfect market, also known as perfect competition, is a market structure where a large number of buyers and sellers trade homogeneous products at a uniform price. No single firm can influence the market price, and all firms are price takers.

### **Features of Perfect Market**

There are many buyers and sellers, ensuring no individual control over price. Products are homogeneous, meaning goods are identical in quality and features. Firms have free entry and exit, allowing new firms to enter when profits exist and inefficient firms to leave the market. Perfect knowledge exists among buyers and sellers regarding prices and quality.

### **Price Determination**

Price is determined by the interaction of industry demand and supply. Individual firms accept this price and adjust their output accordingly.

*Example:* Agricultural markets such as wheat or rice markets where products are

standardized and many sellers exist.

## **IMPERFECT MARKET**

An imperfect market is a market structure where one or more conditions of perfect competition are not satisfied. Firms have some control over price due to limited competition, product differentiation, or entry barriers. Imperfect markets often result in inefficiency and higher prices.

### **Causes of Imperfection**

Product differentiation, monopoly power, barriers to entry, limited sellers, and imperfect information lead to market imperfection.

*Example:* Automobile industry where firms differentiate products based on brand, design, and features.

## **DIFFERENT MARKET STRUCTURES**

### **Monopoly**

Monopoly is a market structure with a single seller and no close substitutes. The monopolist has complete control over price and output. Entry barriers such as patents or government licenses prevent competition.

*Example:* A government-owned electricity supply company in a region.

### **Monopolistic Competition**

This market structure consists of many firms selling differentiated products. Firms have limited price control due to brand loyalty, but close substitutes exist. In the long run, firms earn normal profits.

*Example:* Restaurants and clothing brands.

### **Oligopoly**

Oligopoly is dominated by a few large firms. Firms are interdependent and their decisions affect each other. Strategic behavior such as price leadership or collusion is common.

*Example:* Telecom companies and airline industries.

## **FIRM'S EQUILIBRIUM AND SUPPLY**

A firm is said to be in equilibrium when it maximizes profit and has no incentive to change its output level. The equilibrium condition is achieved when marginal revenue equals marginal cost, and marginal cost cuts marginal revenue from below.

### **Supply of the Firm**

In perfect competition, the marginal cost curve above the average variable cost acts as the firm's supply curve. In imperfect competition, firms do not have a clear supply curve because they control prices.

*Example:* A competitive vegetable seller increases supply when market price rises.

## **MARKET EFFICIENCY**

Market efficiency refers to the optimal use of resources to maximize social welfare. An efficient market produces the right goods, in the right quantity, at the lowest possible cost.

### **Types of Efficiency**

Allocative efficiency occurs when price equals marginal cost. Productive efficiency occurs when goods are produced at minimum average cost. Dynamic efficiency refers to innovation and technological improvement over time. Perfect competition achieves maximum efficiency.

*Example:* Competitive manufacturing industries adopting cost-saving technologies.

## **ECONOMIC COSTS OF IMPERFECT COMPETITION**

Imperfect competition leads to several economic costs. Prices are higher and output is lower compared to perfect competition. Resources are misallocated as price exceeds marginal cost, causing allocative inefficiency. Deadweight loss occurs, reducing social welfare. Consumers bear higher costs while firms earn supernormal profits.

*Example:* Monopoly pricing in essential medicines increases consumer burden.

## **FACTOR MARKET**

The factor market is a market where factors of production such as land, labour, and capital are bought and sold. Firms demand factors to produce goods, while households supply factors in exchange for income. The demand for factors is derived from the demand for final goods.

*Example:* A factory hiring workers and renting land for production.

### **LAND**

Land includes all natural resources used in production such as soil, water, and minerals. The supply of land is fixed and perfectly inelastic. Rent is the reward for land and arises due to differences in fertility and location. *Example:* Agricultural land near cities earns higher rent due to better location.

### **LABOUR**

Labour refers to human physical and mental effort used in production. Labour is heterogeneous, perishable, and relatively immobile. Wages are the reward for labour services and are determined by the demand and supply of labour. Demand depends on marginal productivity, while supply depends on population, skills, and working conditions.

*Example:* Skilled IT professionals earn higher wages due to high demand.

### **CAPITAL**

Capital consists of man-made productive assets such as machinery, tools, and equipment. Interest is the reward for capital. Demand for capital depends on its productivity, while supply depends on savings and investment behavior.

*Example:* Machines used in textile industries to increase output.

## **DEMAND AND SUPPLY OF FACTORS**

Demand for factors is based on marginal revenue productivity, which measures the additional revenue generated by employing an extra unit of a factor. Firms employ factors until marginal revenue product equals factor price. Supply of factors depends on opportunity cost and alternative uses. *Example:* Firms hiring workers until the wage equals their productivity.

## **DETERMINATION OF FACTOR PRICE**

Factor prices such as rent, wages, and interest are determined by the interaction of demand and supply in factor markets. Productivity, institutional factors, trade unions, and government policies also influence factor pricing. *Example:* Minimum wage laws affecting wage levels.

### **INTERACTION OF PRODUCT AND FACTOR MARKETS**

Product and factor markets are closely interrelated. Demand in the product market determines firm revenue, which influences the demand for factors. Factor prices affect production costs and output decisions. A change in one market directly impacts the other.

*Example:* Increased demand for smartphones raises demand for skilled labor and capital.

### **GENERAL EQUILIBRIUM AND EFFICIENCY OF COMPETITIVE MARKETS**

General equilibrium refers to a situation where all product and factor markets in an economy are simultaneously in equilibrium. Competitive markets achieve general equilibrium through the price mechanism, ensuring efficient allocation of resources and maximum social welfare.

*Example:* A well-functioning market economy where supply and demand balance across industries.

## UNIT 5

### MACROECONOMIC PERFORMANCE INDICATORS

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### MACROECONOMIC PERFORMANCE INDICATORS

Macroeconomic performance indicators are statistical measures used to assess the overall health and functioning of an economy. They help policymakers, economists, and researchers evaluate economic growth, stability, employment levels, and price conditions. These indicators provide a broad picture of how an economy performs over time.

### MACRO-ECONOMIC AGGREGATES

Macroeconomic aggregates are total values of economic variables measured at the national level. They include national income, aggregate consumption, aggregate savings, investment, government expenditure, and net exports. These aggregates help in understanding the overall economic activity of a country. *Example:* Gross Domestic Product (GDP) represents the total value of goods and services produced within a country during a year.

### CIRCULAR FLOW OF MACROECONOMIC ACTIVITY

The circular flow of macroeconomic activity explains how income and expenditure move continuously between households and firms in an economy. Households provide factors of production such as land, labour, and capital to firms and receive income in the form of wages, rent, interest, and profit. Firms use these factors to produce goods and services, which are purchased by households, creating a continuous flow of money and resources.

#### **Two-Sector Model**

In a simple economy, households and firms interact without government or foreign trade. Households supply factors and receive income, while firms supply goods and services.

#### **Extended Circular Flow**

When government and foreign sectors are included, taxes, government spending, exports, and imports become part of the flow.

*Example:* Government collects taxes from households and firms and spends on public infrastructure.

## **NATIONAL INCOME DETERMINATION**

National income determination explains how the level of national income is decided in an economy based on aggregate demand and aggregate supply. According to Keynesian theory, national income is determined where aggregate demand equals aggregate supply.

## **METHODS OF NATIONAL INCOME DETERMINATION**

National income can be determined by three main methods. Each method approaches the measurement of national income from a different angle but, in theory, all yield the same result because they represent different aspects of the same economic activity. The three methods are the Income Method, Expenditure Method, and Value Added (Product) Method.

### **1. INCOME METHOD**

The income method measures national income by adding all incomes earned by the factors of production during a year. It focuses on the distribution side of production and includes payments made to land, labour, capital, and entrepreneurship.

#### **Components of Income Method**

Wages and salaries represent income earned by labour for physical and mental work. Rent is the income earned by land and natural resources. Interest is the reward for the use of capital. Profits represent the income of entrepreneurs for organizing production and taking risks. Mixed income earned by self-employed persons is also included.

#### **Example**

If workers earn wages, landowners receive rent, capital owners earn interest, and entrepreneurs make profits from production, the total of all these incomes

represents national income.

### **Precautions**

Transfer payments such as pensions and scholarships are excluded as they do not result from current production. Income from illegal activities is not included. Only income earned from productive activities is considered.

## **2. EXPENDITURE METHOD**

The expenditure method calculates national income by adding all final expenditures made on goods and services in an economy during a year. It focuses on the spending side of economic activity.

### **Components of Expenditure Method**

Consumption expenditure includes household spending on goods and services. Investment expenditure includes spending on capital goods like machinery and buildings. Government expenditure includes spending on public goods and services. Net exports represent exports minus imports.

### **Formula**

National Income = Consumption + Investment + Government Expenditure + (Exports – Imports)

### **Example**

If households spend on food and clothing, firms invest in machinery, the government spends on infrastructure, and exports exceed imports, the total expenditure equals national income.

### **Precautions**

Only final goods are included to avoid double counting. Second-hand goods and purely financial transactions are excluded.

## **3. VALUE ADDED (PRODUCT) METHOD**

The value added method measures national income by adding the value added by each producing unit at different stages of production. Value added is the difference between the value of output and the value of intermediate consumption.

## **Calculation of Value Added**

Value Added = Value of Output – Value of Intermediate Goods

### **Example**

In bread production, a farmer produces wheat, a miller produces flour, and a baker produces bread. The value added at each stage is added to obtain national income, avoiding double counting.

### **Precautions**

Intermediate goods are excluded to avoid duplication. Depreciation is deducted to arrive at net values.

## **AGGREGATE DEMAND**

Aggregate demand represents the total demand for goods and services in an economy at a given price level and time period. It shows the relationship between overall demand and price levels.

### **Components of Aggregate Demand**

Aggregate demand consists of consumption expenditure, investment expenditure, government expenditure, and net exports.

*Example:* Increase in government spending during a recession raises aggregate demand.

## **AGGREGATE SUPPLY**

Aggregate supply refers to the total supply of goods and services produced in an economy at a given price level. It reflects the productive capacity of an economy.

### **Short-Run and Long-Run Aggregate Supply**

In the short run, aggregate supply may be influenced by wages and input prices. In the long run, it depends on factors such as technology, capital stock, and labour force.

*Example:* Technological improvement shifts aggregate supply to the right.

## **MACROECONOMIC EQUILIBRIUM**

Macroeconomic equilibrium occurs when aggregate demand equals aggregate supply. At this point, the economy experiences stable output and price levels. Any imbalance between aggregate demand and aggregate supply leads to inflationary or deflationary gaps.

*Example:* Excess aggregate demand causes inflation, while insufficient demand leads to unemployment.

## **COMPONENTS OF AGGREGATE DEMAND AND NATIONAL INCOME**

Consumption is the largest component of aggregate demand and depends on income levels and consumer confidence. Investment refers to spending on capital goods and depends on interest rates and business expectations. Government expenditure includes spending on public goods and services. Net exports represent the difference between exports and imports.

National income is the sum of all factor incomes earned in an economy, including wages, rent, interest, and profits.

*Example:* Increase in exports raises both aggregate demand and national income.

## **MULTIPLIER EFFECT**

The multiplier effect refers to the process by which an initial increase in investment leads to a larger increase in national income. This occurs because increased income leads to higher consumption, which further raises income.

### **Investment Multiplier**

The value of the multiplier depends on the marginal propensity to consume (MPC). Higher MPC results in a larger multiplier effect.

*Example:* Government investment in infrastructure increases income and employment multiple times.

## **DEMAND SIDE MANAGEMENT**

Demand side management involves government policies aimed at regulating aggregate demand to achieve economic stability. It is mainly associated with

Keynesian economics and focuses on managing consumption, investment, and government spending.

### **Objectives**

Demand side management aims to control inflation, reduce unemployment, and stabilize economic growth.

*Example:* Increasing public expenditure during a recession to boost demand.

## **FISCAL POLICY IN THEORY**

Fiscal policy refers to the use of government expenditure and taxation to influence economic activity. It is a powerful tool for achieving macroeconomic objectives such as growth, stability, and equity.

## **TYPES OF FISCAL POLICY**

Fiscal policy refers to the use of government expenditure, taxation, and public borrowing to influence economic activity. Governments use different types of fiscal policy depending on economic conditions such as inflation, unemployment, or recession.

### **1. EXPANSIONARY FISCAL POLICY**

Expansionary fiscal policy is adopted during periods of economic slowdown, recession, or high unemployment. The objective is to increase aggregate demand and stimulate economic growth.

#### **Instruments of Expansionary Fiscal Policy**

Government increases public expenditure on infrastructure, education, healthcare, and welfare programs. Taxes are reduced to increase disposable income and encourage consumption and investment. Public borrowing may be increased to finance higher expenditure.

#### **Effects**

Expansionary fiscal policy raises aggregate demand, increases output and employment, and reduces unemployment. However, it may lead to budget deficits and inflation if overused.

### **Example**

During an economic recession, the government increases spending on road construction and reduces income tax to boost demand and employment.

## **2. CONTRACTIONARY FISCAL POLICY**

Contractionary fiscal policy is used during periods of inflation or overheating of the economy. The main objective is to reduce aggregate demand and control price levels.

### **Instruments of Contractionary Fiscal Policy**

Government reduces public expenditure and increases taxes to decrease disposable income. Public borrowing is reduced to limit excess demand.

### **Effects**

Contractionary fiscal policy helps control inflation and stabilize the economy but may slow economic growth and increase unemployment in the short run.

### **Example**

To control rising inflation, the government increases indirect taxes and cuts non-essential public spending.

## **3. NEUTRAL FISCAL POLICY**

Neutral fiscal policy is adopted when the economy is stable and operating at full employment. The government maintains a balance between expenditure and taxation.

### **Characteristics**

Government spending is matched with tax revenue. The objective is neither to stimulate nor to restrict economic activity.

### **Example**

In a stable economy with steady growth, the government maintains a balanced budget.

## **4. AUTOMATIC STABILIZERS**

Automatic stabilizers are fiscal mechanisms that automatically adjust government spending and taxation without direct government intervention.

### **Examples of Automatic Stabilizers**

Progressive income taxes increase tax revenue during economic expansion and reduce it during recession. Unemployment benefits increase during recession and decrease during expansion.

### **Importance**

They help smooth economic fluctuations and stabilize income and consumption.

## **5. DISCRETIONARY FISCAL POLICY**

Discretionary fiscal policy involves deliberate changes in government spending and taxation to influence economic conditions.

### **Characteristics**

Requires government decision and legislative approval. Used to address specific economic problems.

### **Example**

Introducing a special stimulus package to revive the economy during a financial crisis.

## **6. DEFICIT AND SURPLUS FISCAL POLICY**

Deficit fiscal policy occurs when government expenditure exceeds revenue, often used to stimulate economic growth. Surplus fiscal policy occurs when revenue exceeds expenditure, often used to control inflation or repay public debt.

### **Example**

Running a budget deficit during a recession and a surplus during an economic boom.

## **ROLE OF FISCAL POLICY**

Fiscal policy helps correct economic fluctuations, redistribute income, and promote development.

*Example:* Tax cuts during economic slowdown to encourage spending and investment.

Fiscal policy plays a crucial role in managing the overall economic performance of a country. It refers to the use of government expenditure, taxation, and public

borrowing to achieve macroeconomic objectives such as economic growth, stability, employment, and equity. Fiscal policy is an important tool of government intervention in the economy, especially in times of economic instability.

### **1. PROMOTING ECONOMIC GROWTH**

Fiscal policy helps in accelerating economic growth by increasing public expenditure on infrastructure, education, healthcare, and industrial development. Government investment in roads, power, transport, and technology enhances productive capacity and stimulates private investment.

*Example:* Increased government spending on infrastructure projects boosts production and employment, leading to higher economic growth.

### **2. REDUCTION OF UNEMPLOYMENT**

Through expansionary fiscal policy, the government increases spending and reduces taxes to stimulate aggregate demand. Higher demand leads to increased production, which creates more employment opportunities.

*Example:* Public works programs generate employment during periods of high unemployment.

### **3. CONTROL OF INFLATION**

Fiscal policy helps control inflation by reducing aggregate demand through contractionary measures. The government may reduce public expenditure or increase taxes to curb excess demand and rising prices.

*Example:* Increasing indirect taxes to reduce consumer spending during inflationary periods.

### **4. REDUCTION OF INCOME INEQUALITY**

Fiscal policy plays a key role in redistributing income through progressive taxation and welfare spending. Higher taxes on the rich and subsidies or social security benefits for the poor help reduce income disparities.

*Example:* Subsidized food programs and direct benefit transfers support low-income groups.

### **5. ECONOMIC STABILITY**

Fiscal policy helps maintain economic stability by countering business cycles. Expansionary policy is used during recessions, while contractionary policy is applied during booms. This stabilizing role reduces economic fluctuations.

*Example:* Stimulus packages during economic downturns help stabilize

the economy.

#### **6. PROMOTION OF REGIONAL DEVELOPMENT**

The government uses fiscal policy to reduce regional imbalances by directing public expenditure to backward and underdeveloped regions. Tax incentives are also provided to encourage private investment in such areas.

*Example:* Special tax exemptions for industries set up in backward regions.

#### **7. MOBILIZATION OF RESOURCES**

Fiscal policy helps mobilize financial resources for development through taxation and public borrowing. These resources are used to finance development projects and public welfare programs. *Example:* Government borrowing to finance large infrastructure projects.

#### **8. ENCOURAGING SAVINGS AND INVESTMENT**

Fiscal measures such as tax incentives, subsidies, and depreciation allowances encourage savings and investment. This leads to capital formation and economic development.

*Example:* Tax deductions for investments in savings schemes.

#### **9. SOCIAL WELFARE AND PUBLIC SERVICES**

Fiscal policy ensures the provision of essential public goods and services such as education, healthcare, sanitation, and defense. Government expenditure improves the quality of life and social welfare.

*Example:* Free education and public healthcare programs.

#### **10. CORRECTION OF MARKET FAILURES**

Fiscal policy helps correct market failures by providing public goods, reducing externalities, and regulating monopolies. Government intervention ensures efficient allocation of resources.

*Example:* Government spending on pollution control to reduce environmental damage.

## UNIT 6

# MONETARY ECONOMICS AND SUPPLY-SIDE PERSPECTIVES

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### MONETARY ECONOMICS AND SUPPLY-SIDE PERSPECTIVES

Monetary economics studies the role of money, credit, and monetary policy in influencing economic activity. Supply-side perspectives focus on improving the productive capacity of the economy by enhancing efficiency, incentives, and resource utilization rather than merely managing demand.

### SHORT-RUN AND LONG-RUN AGGREGATE SUPPLY CURVE

The short-run aggregate supply curve shows the relationship between price level and quantity of output when wages and some input prices are fixed. In the short run, an increase in price level leads to higher output as firms respond to higher profits.

The long-run aggregate supply curve represents the level of output when all prices, including wages, are fully flexible. It is vertical, indicating that output depends on factors such as technology, capital, and labour rather than price level.

*Example:* A temporary rise in demand increases output in the short run, but in the long run output returns to its natural level.

### UNEMPLOYMENT AND ITS IMPACT

Unemployment refers to a situation where people who are willing and able to work at prevailing wages cannot find jobs. It leads to loss of income, reduced living standards, and social problems such as poverty and inequality. High unemployment reduces aggregate demand and slows economic growth. *Example:* During economic recessions, unemployment rises due to reduced production.

## **OKUN'S LAW**

Okun's Law explains the inverse relationship between unemployment and economic growth. According to this law, when actual output falls below potential output, unemployment rises. Conversely, higher economic growth reduces unemployment.

*Example:* A 1% increase in unemployment is associated with a fall in GDP below its potential level.

Okun's Law was proposed by economist Arthur Okun in 1962. He observed a stable empirical relationship between changes in unemployment and changes in real Gross Domestic Product (GDP) in the United States. Although it is not a strict economic law, it is widely used as a rule of thumb to estimate the impact of unemployment on economic growth.

### **STATEMENT OF OKUN'S LAW**

Okun's Law states that for every one percentage point increase in the unemployment rate above the natural rate, real GDP falls below its potential level by about two to three percent. Conversely, a decrease in unemployment is associated with an increase in economic output.

### **TYPES OF OKUN'S LAW**

- **Gap Version**

The gap version explains the relationship between the unemployment gap and the output gap. When unemployment is higher than its natural rate, the economy operates below its potential output.

- **Growth Rate Version**

The growth rate version explains the relationship between changes in unemployment and changes in GDP growth. Higher economic growth leads to a reduction in unemployment.

### **ECONOMIC INTERPRETATION**

Okun's Law indicates that unemployment leads to underutilization of labour resources. When fewer people are employed, less output is produced, resulting in lower national income. Economic growth generates employment opportunities, which in turn increases production and income.

### **IMPORTANCE OF OKUN'S LAW**

Okun's Law helps policymakers estimate how much economic growth is required to reduce unemployment. It is useful for evaluating the performance of an economy and understanding the costs of economic downturns. It also assists in designing fiscal and monetary policies aimed at employment generation.

### **EXAMPLE OF OKUN'S LAW**

If the unemployment rate increases from 5 percent to 6 percent, Okun's Law suggests that the economy may be producing about 2 to 3 percent less than its potential output. Similarly, strong economic growth above the normal rate can reduce unemployment.

### **INFLATION AND ITS IMPACT**

Inflation refers to a sustained increase in the general price level of goods and services over time. It reduces the purchasing power of money and creates uncertainty in the economy.

Moderate inflation may encourage investment, but high inflation harms economic stability.

*Example:* Rising food prices increase cost of living for households.

### **TYPES OF INFLATION**

Inflation can be classified based on the rate of price increase, causes, and coverage.

#### **Based on Rate of Inflation**

Creeping inflation refers to a slow and gradual rise in prices and is considered normal for economic growth. Walking inflation occurs at a moderate rate and begins to affect purchasing power. Galloping inflation is a rapid rise in prices that disrupts economic stability. Hyperinflation is an extreme form of inflation where prices rise uncontrollably.

#### **Based on Causes**

Demand-pull inflation arises when aggregate demand exceeds aggregate supply. Cost-push inflation occurs due to rising production costs such as wages and raw materials. Built-in inflation results from wage-price spirals.

#### **➤ IMPACT OF INFLATION ON THE ECONOMY**

- **Impact on Purchasing Power**

Inflation reduces the purchasing power of money. Consumers can buy fewer goods and services with the same amount of income, which lowers the standard of living, especially for fixed-income groups.

- **Impact on Income Distribution**

Inflation redistributes income in favor of profit earners and borrowers while harming fixed-income earners such as pensioners and salaried employees. Debtors benefit as they repay loans with money of lower value, while creditors lose.

- **Impact on Savings and Investment**

High inflation discourages savings because the real value of money declines. It creates uncertainty, which may reduce long-term investment. However, moderate inflation may encourage investment due to higher expected profits.

- **Impact on Economic Growth**

Moderate inflation can stimulate production and growth by encouraging spending and investment. However, high and unpredictable inflation hampers growth by increasing costs and uncertainty.

- **Impact on Employment**

Inflation may temporarily reduce unemployment as higher demand leads to increased production. In the long run, high inflation can increase unemployment due to economic instability.

- **IMPACT OF INFLATION ON BUSINESS**

Inflation increases the cost of raw materials, wages, and production, reducing profit margins. It creates uncertainty in pricing and planning. Businesses may pass higher costs to consumers, leading to further inflation.

*Example:* Rising fuel prices increase transportation and production costs for firms.

- **IMPACT OF INFLATION ON GOVERNMENT**

Inflation increases government expenditure due to higher costs of public projects and welfare programs. Tax revenue may increase in nominal terms, but real revenue may not improve. Governments may face pressure to control inflation through fiscal and monetary policies.

- **SOCIAL IMPACT OF INFLATION**

Inflation affects social stability by increasing poverty and inequality. Fixed-income groups suffer the most, while speculative activities may increase. Social

unrest and dissatisfaction may arise due to rising cost of living.

## **CONTROL OF INFLATION**

Inflation can be controlled through monetary measures such as increasing interest rates and reducing money supply, fiscal measures such as reducing government expenditure and increasing taxes, and supply-side measures such as increasing production and improving productivity.

## **EXAMPLE OF INFLATION**

A continuous rise in food, fuel, and housing prices increases the cost of living for households and forces them to reduce consumption or savings.

## **REASONS FOR INFLATION**

Inflation occurs when there is a persistent increase in the general price level of goods and services in an economy. It is caused by various demand-side, supply-side, and structural factors. Understanding the reasons for inflation helps governments and policymakers design appropriate measures to control price rise.

## **DEMAND-PULL FACTORS**

Demand-pull inflation arises when aggregate demand increases faster than aggregate supply. Excess demand leads to higher prices.

### **Increase in Money Supply**

An excessive increase in money supply raises purchasing power and demand for goods and services without a corresponding increase in output. *Example:* Expansionary monetary policy increasing credit availability.

### **Increase in Government Expenditure**

Higher public spending on welfare, defense, or infrastructure increases aggregate demand and pushes prices upward. *Example:* Large government stimulus packages during economic recovery.

### **Rise in Private Consumption**

Increase in disposable income due to tax cuts or higher wages raises consumer demand, leading to inflation.

*Example:* Reduction in income tax increasing household spending.

### **Increase in Investment Demand**

Higher business confidence and low interest rates increase investment spending, contributing to demand-pull inflation.

## **COST-PUSH FACTORS**

Cost-push inflation occurs when production costs increase, forcing producers to raise prices.

### **Increase in Wages**

Higher wages increase production costs, leading to higher prices.

*Example:* Strong trade unions demanding higher wages.

### **Rise in Raw Material and Fuel Prices**

Increase in prices of oil, electricity, and raw materials raises overall production and transportation costs.

*Example:* Global crude oil price hikes increasing domestic inflation.

### **Higher Taxes and Duties**

Increase in indirect taxes raises the cost of production and prices of goods.

*Example:* Increase in GST rates on essential commodities.

### **Supply Shocks**

Natural disasters, wars, or pandemics reduce supply, leading to higher prices.

*Example:* Crop failure due to drought causing food inflation.

## **STRUCTURAL FACTORS**

Structural inflation arises due to long-term structural issues in the economy.

### **Inelastic Supply of Goods**

When supply cannot be increased quickly to meet rising demand, prices increase.

*Example:* Housing shortages in urban areas.

### **Inefficient Distribution System**

Poor transport and storage facilities cause shortages and price rise.  
*Example:* Food wastage due to lack of cold storage.

### **Market Imperfections**

Monopolies and oligopolies may restrict supply to increase prices.  
*Example:* Price control by dominant firms.

### **IMPORTED INFLATION**

Imported inflation occurs when prices of imported goods rise. This may be due to increase in global prices or depreciation of domestic currency. *Example:* Weak domestic currency making imports more expensive.

### **EXPECTATIONAL FACTORS**

Inflation expectations lead consumers and producers to anticipate future price increases, causing them to increase prices and wages in advance. This creates a self-fulfilling inflationary cycle.

*Example:* Workers demanding higher wages anticipating future inflation.

### **DEFICIT FINANCING**

When government finances budget deficits by printing money, it increases money supply and leads to inflation.

*Example:* Excessive borrowing from the central bank.

### **DEMAND-PULL INFLATION**

Demand-pull inflation arises when aggregate demand exceeds aggregate supply. Excess demand leads to higher prices.

*Example:* Increased government spending without a corresponding increase in output causes inflation.

### **COST-PUSH INFLATION**

Cost-push inflation occurs due to an increase in production costs such as wages, raw materials, or energy prices. Higher costs force producers to raise prices.

*Example:* Increase in fuel prices raises transportation and production costs.

## **DEMAND VS SUPPLY FACTORS OF INFLATION**

Demand factors include increased consumption, investment, government spending, and money supply. Supply factors include shortages of raw materials, higher wages, taxes, and technological constraints. Both demand and supply forces often operate together to cause inflation.

## **INFLATION VS UNEMPLOYMENT TRADE-OFF**

There exists a trade-off between inflation and unemployment in the short run. Policies that reduce unemployment may increase inflation, while policies that reduce inflation may increase unemployment.

*Example:* Expansionary policies reduce unemployment but raise inflation.

## **PHILLIPS CURVE**

The Phillips curve shows the inverse relationship between inflation and unemployment.

### **Short-Run Phillips Curve**

In the short run, lower unemployment is associated with higher inflation due to increased demand for labour and higher wages.

### **Long-Run Phillips Curve**

In the long run, the Phillips curve is vertical, indicating no trade-off between inflation and unemployment. The economy returns to its natural rate of unemployment.

*Example:* Attempts to permanently reduce unemployment lead only to higher inflation.

## **SUPPLY-SIDE POLICY AND MANAGEMENT**

Supply-side policies focus on increasing productivity and efficiency by improving incentives to work, save, and invest. These policies include tax reforms, deregulation, labour market flexibility, and investment in education and technology.

*Example:* Reducing corporate taxes to encourage investment and job creation.

## **MONEY MARKET**

The money market refers to the market for short-term funds and financial instruments. It facilitates liquidity and smooth functioning of the financial system.

*Example:* Treasury bills and commercial papers are traded in the money market.

## **DEMAND AND SUPPLY OF MONEY**

Demand for money arises for transaction, precautionary, and speculative motives.

Supply of money is controlled by the central bank through monetary policy tools.

*Example:* People hold money for daily transactions and emergencies.

## **MONEY MARKET EQUILIBRIUM AND NATIONAL INCOME**

Money market equilibrium occurs when demand for money equals supply of money. Changes in money supply influence interest rates, investment, and national income.

*Example:* Increase in money supply lowers interest rates and raises investment and income.

## **ROLE OF MONETARY POLICY**

Monetary policy refers to actions taken by the central bank to control money supply and credit conditions. It aims to control inflation, promote growth, and ensure financial stability.

Tools of monetary policy include bank rate, open market operations, cash reserve ratio, and repo rate.

*Example:* Raising interest rates to control inflation.



# JEPIAAR ENGINEERING COLLEGE

## DEPARTMENT OF MANAGEMENT STUDIES

### QUESTION BANK

**SUBJECT: MB25C03 – MANAGERIAL ECONOMICS**

**SEM / YEAR: I Semester / I Year**

#### UNIT – I INTRODUCTION TO MANAGERIAL ECONOMICS AND FUNDAMENTAL CONCEPTS

##### PART – A (2 MARKS)

SL.NO	QUESTION	BT LEVEL	COMPETENCE
1	Define Economics.	L1	Remembering
2	State the meaning of efficiency.	L1	Remembering
3	Brief on externalities.	L1	Remembering
4	What do you mean by scarcity?	L1	Remembering
5	Differentiate Micro and Macro Economy.	L1	Remembering
6	State the fundamental economic problems.	L1	Remembering
7	List out the three fundamental economic problems.	L1	Remembering
8	What do you mean by positive externalities?	L1	Remembering
9	What do you understand by productive efficiency?	L1	Remembering
10	State the meaning of micro economics.	L1	Remembering
11	What is macroeconomics?	L1	Remembering
12	What is foreign exchange rate?	L1	Remembering
13	What is economic efficiency?	L1	Remembering
14	How is resource-based economy significant?	L1	Remembering
15	What do you mean by PPF?	L1	Remembering
16	What do you mean by economic development?	L1	Remembering
17	What is mixed economy?	L1	Remembering
18	What do you understand by production possibility curve?	L1	Remembering
19	What do you mean by economic growth?	L1	Remembering
20	What are the themes of economics?	L1	Remembering

##### PART – B (16 MARKS)

SL.NO	QUESTION	BT LEVEL	COMPETENCE
1	Enumerate and explain the fundamental economic problems.	L4	Analysing
2	Examine the factors that determine economic growth.	L4	Analysing
3	Explain production possibility frontier and state its importance.	L4	Analysing
4	How do markets solve the three economic problems? Explain with suitable examples.	L4	Analysing
5	Explain the themes of economics.	L4	Analysing

6	Compare productive efficiency and economic efficiency.	L4	Analysing
7	As an economist, explain how you will plan for productive efficiency and economic efficiency.	L4	Analysing
8	Explain the positive and negative economic externalities.	L4	Analysing
9	How can economic growth and stability be balanced?	L4	Analysing
10	Enumerate the economic role of Government and Markets and examine their role in the present economic scenario.	L4	Analysing

**UNIT 2**  
**DEMAND, SUPPLY AND CONSUMER BEHAVIOR**

**PART A**

Sl.No	Question	BT Level	Competence
1	Define demand.	L1	Remembering
2	Define supply.	L1	Remembering
3	What is a market?	L1	Remembering
4	State the law of demand.	L2	Understanding
5	State the law of supply.	L2	Understanding
6	List the determinants of demand.	L1	Remembering
7	List the determinants of supply.	L1	Remembering
8	What is market equilibrium?	L2	Understanding
9	Define elasticity of demand.	L1	Remembering
10	What is price elasticity of supply?	L1	Remembering
11	What do you mean by consumer behaviour?	L2	Understanding
12	Define consumer equilibrium.	L1	Remembering
13	What is utility?	L1	Remembering
14	State the law of diminishing marginal utility.	L2	Understanding

15	What is marginal utility?	L1	Remembering
16	What is cardinal utility?	L1	Remembering
17	What is ordinal utility?	L1	Remembering

Sl.No	Question	BT Level	Competence
18	Define income elasticity of demand.	L1	Remembering
19	What is cross elasticity of demand?	L1	Remembering
20	What is consumer surplus?	L2	Understanding

### UNIT 3 PRODUCTION, COSTS AND FIRM-LEVEL ANALYSIS

#### PART A

Sl. No	Question	BT Level	Competence
1	Define production.	L1	Remembering
2	What is a production function?	L1	Remembering
3	Distinguish between short-run and long-run production function.	L2	Understanding
4	Define returns to scale.	L1	Remembering

Sl. No	Question	BT Level	Competence
5	What is increasing returns to scale?	L1	Remembering
6	What is constant returns to scale?	L1	Remembering
7	What is decreasing returns to scale?	L1	Remembering
8	Define economies of scale.	L1	Remembering
9	Define diseconomies of scale.	L1	Remembering
10	What is total cost?	L1	Remembering
11	What is marginal cost?	L1	Remembering
12	Define average cost.	L1	Remembering
13	Define short-run cost function.	L2	Understanding
14	Define long-run cost function.	L2	Understanding
15	Explain the relation between production function and cost function.	L2	Understanding
16	Define production pricing model.	L1	Remembering
17	List the types of pricing models.	L1	Remembering

18	What is cost-plus pricing?	L2	Understanding
19	What is marginal cost pricing?	L2	Understanding
20	What is price skimming?	L2	Understanding

### **PART B**

<b>Sl. No</b>	<b>Question</b>	<b>BT Level</b>	<b>Competence</b>
1	Explain the short-run and long-run production function with examples.	L3	Applying
2	Discuss the concept of returns to scale with suitable diagrams.	L3	Applying
3	Explain economies and diseconomies of scale with examples.	L3	Applying
4	Explain the short-run and long-run cost functions with diagrams.	L3	Applying
5	Analyse the relationship between production function and cost function.	L4	Analysing
6	Discuss the concept of production pricing model and its importance.	L3	Applying
7	Explain different types of pricing models with examples.	L4	Analysing
8	Compare cost-plus pricing and marginal cost pricing methods.	L5	Evaluating

<b>Sl. No</b>	<b>Question</b>	<b>BT Level</b>	<b>Competence</b>
9	Explain how firms determine prices using average cost pricing.	L4	Analysing
10	Evaluate the advantages and disadvantages of penetration and price skimming strategies.	L5	Evaluating

## **UNIT 4**

### **MARKET STRUCTURES AND FACTOR PRICING**

<b>Sl. No</b>	<b>Question</b>	<b>BT Level</b>	<b>Competence</b>
1	Define a perfect market.	L1	Remembering
2	Define an imperfect market.	L1	Remembering
3	List different types of market structures.	L1	Remembering
4	What is firm's equilibrium?	L2	Understanding
5	Define market efficiency.	L1	Remembering

6	What are economic costs of imperfect competition?	L2	Understanding
7	Define factor market.	L1	Remembering
8	List the factors of production.	L1	Remembering
9	Define demand for labor.	L1	Remembering
10	Define supply of labor.	L1	Remembering
11	What is rent in factor pricing?	L1	Remembering
12	What is wage rate?	L1	Remembering
13	Define interest in factor pricing.	L1	Remembering
14	Define profit as a factor return.	L1	Remembering
15	What is the interaction of product and factor market?	L2	Understanding
16	Define general equilibrium.	L1	Remembering
17	What is efficiency in competitive markets?	L2	Understanding
18	What is marginal productivity of a factor?	L1	Remembering
19	State the law of diminishing marginal returns.	L2	Understanding
20	Define derived demand.	L1	Remembering

### PART B

Sl. No	Question	BT Level	Competence
1	Explain the features of a perfect market with diagram.	L3	Applying
2	Explain the features of an imperfect market with examples.	L3	Applying

Sl. No	Question	BT Level	Competence
3	Discuss different market structures and their characteristics.	L3	Applying
4	Explain firm's equilibrium in perfect competition.	L4	Analysing
5	Explain firm's equilibrium in monopoly and monopolistic competition.	L4	Analysing
6	Analyse the economic costs of imperfect competition.	L4	Analysing
7	Explain the demand and supply for labour with diagram.	L3	Applying
8	Explain the determination of factor prices (rent, wages, interest, and profit).	L4	Analysing
9	Discuss the interaction between product and factor markets with example.	L4	Analysing

10	Explain general equilibrium and efficiency of competitive markets.	L5	Evaluating
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**UNIT 5**  
**MACROECONOMIC PERFORMANCE INDICATORS**

Sl. No	Question	BT Level	Competence
1	Define macroeconomic aggregates.	L1	Remembering
2	What is circular flow of macroeconomic activity?	L1	Remembering
3	Define national income.	L1	Remembering
4	List the methods of national income calculation.	L1	Remembering
5	Define aggregate demand.	L1	Remembering
6	Define aggregate supply.	L1	Remembering
7	What is macroeconomic equilibrium?	L2	Understanding
8	List the components of aggregate demand.	L1	Remembering
9	List the components of national income.	L1	Remembering
10	What is the multiplier effect?	L2	Understanding
11	Define demand-side management.	L1	Remembering
12	What is fiscal policy?	L1	Remembering
13	Differentiate between aggregate demand and aggregate supply.	L2	Understanding
14	State the relationship between national income and aggregate demand.	L2	Understanding
15	What are injections and withdrawals in circular flow?	L2	Understanding

Sl. No	Question	BT Level	Competence
16	Define consumption function.	L1	Remembering
17	Define investment function.	L1	Remembering
18	What is government expenditure?	L1	Remembering
19	Define taxation in fiscal policy.	L1	Remembering
20	What is balanced budget multiplier?	L2	Understanding

**PART B**

Sl. No	Question	BT Level	Competence
1	Explain macroeconomic aggregates and their significance.	L3	Applying

2	Describe the circular flow of macroeconomic activity with a diagram.	L3	Applying
3	Explain the methods of measuring national income.	L3	Applying
4	Discuss aggregate demand and aggregate supply with diagrams.	L4	Analysing
5	Explain macroeconomic equilibrium and its determination.	L4	Analysing
6	Discuss the components of aggregate demand and national income.	L4	Analysing
7	Explain the multiplier effect and its impact on national income.	L4	Analysing
8	Discuss demand-side management and its tools.	L4	Analysing
9	Explain fiscal policy and its role in stabilizing the economy.	L4	Analysing
10	Evaluate the effectiveness of fiscal policy in theory.	L5	Evaluating

## UNIT 6

### MACROECONOMIC PERFORMANCE INDICATORS

Sl. No	Question	BT Level	Competence
1	Define monetary policy.	L1	Remembering
2	What are the objectives of monetary policy?	L1	Remembering
3	List the instruments of monetary policy.	L1	Remembering
4	Define money supply.	L1	Remembering
5	What is credit control?	L1	Remembering
6	Define short-term credit instruments.	L1	Remembering
7	Define long-term credit instruments.	L1	Remembering
8	What is the role of central bank in monetary policy?	L2	Understanding
9	Define quantitative tools of monetary policy.	L1	Remembering
10	Define qualitative tools of monetary policy.	L1	Remembering
11	What is aggregate supply?	L1	Remembering
12	List the components of supply-side policies.	L1	Remembering
13	What is the supply-side approach to inflation control?	L2	Understanding
14	Define demand for money.	L1	Remembering
15	Define supply-side policies.	L1	Remembering
16	What is the role of supply-side policies in economic		
17	Define inflation.	L1	Remembering

<b>No.</b>	<b>Question</b>	<b>Bloom's Level</b>	<b>Competency</b>
1	Explain the difference between short-run and long-run aggregate supply curves.	L2	Understand
2	Describe different types of unemployment and analyze their impact on an economy.	L4	Analyze
3	Explain Okun's Law and evaluate its relevance.	L4	Analyze
4	Discuss the economic and social effects of inflation.	L2	Understand
5	Distinguish between demand-pull and cost-push inflation with examples.	L4	Analyze
6	Explain short-run and long-run Phillips Curve.	L2	Understand
7	Explain demand and supply of money and money market equilibrium.	L2	Understand
8	Discuss the role of monetary policy in controlling inflation.	L5	Evaluate

<b>No.</b>	<b>Question</b>	<b>Bloom's Level</b>	<b>Competency</b>
1	Critically analyze short-run and long-run aggregate supply curves and policy implications.	L5	Evaluate
2	Using Okun's Law, examine the relationship between unemployment and national income.	L4	Analyze
3	Examine causes of inflation (demand vs supply) and their impact.	L4	Analyze
4	Evaluate inflation-unemployment trade-off using Phillips Curve.	L5	Evaluate
5	Discuss supply-side policies and their effectiveness.	L5	Evaluate
6	Explain how money market equilibrium influences national income.	L4	Analyze
7	Critically evaluate the role of monetary policy in economic stabilization.	L5	Evaluate

Reg. No. :

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**Question Paper Code : 70157**

M.B.A. DEGREE EXAMINATIONS, APRIL/MAY 2022.

First Semester

BA 5101 – ECONOMIC ANALYSIS FOR BUSINESS

(Regulations 2017)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

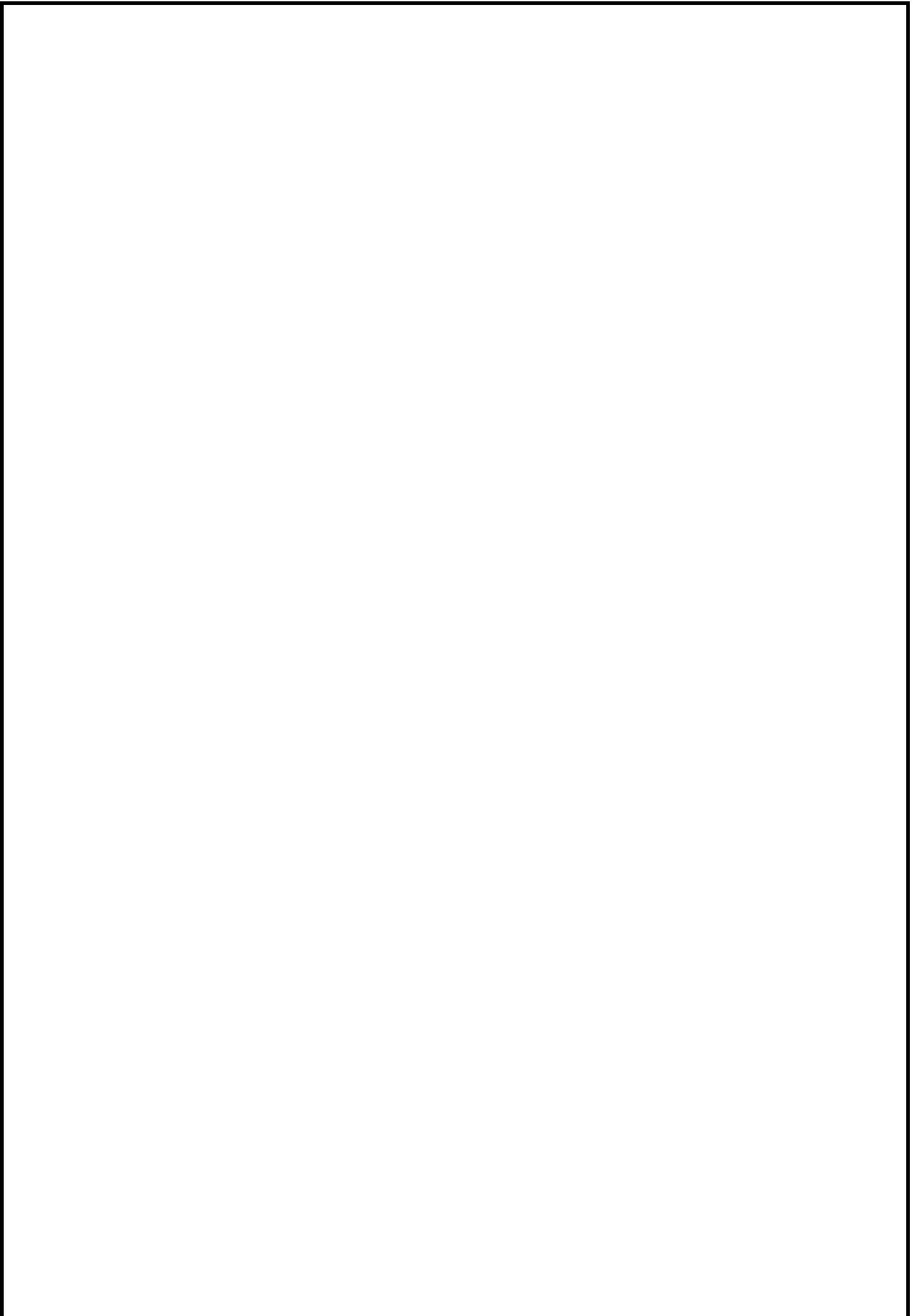
1. What does economics deal with?
2. When does productive efficiency occur?
3. State the meaning of consumer equilibrium.
4. Bring out the meaning of diseconomies of scale.
5. When does imperfect competition occur?
6. What is capital?
7. What is multiplier?
8. What are the components of aggregate demand?
9. Bring out the purpose of Phillips curve.
10. What do you understand from unemployment trade off?

PART B — (5 × 13 = 65 marks)

11. (a) "Scarcity and Efficiency are the twin themes of Economics" – Justify your view.  
Or  
(b) Identify the three fundamental economic problems? Examine the role of Government in solving these three problems.
12. (a) Discuss the elasticity of demand and supply with suitable illustrations.  
Or  
(b) Examine the relation between Production and Cost function in detail.
13. (a) What are the determinants of supply of labour? Explain with suitable evidences.  
Or  
(b) Describe the different types of market structures and their characteristics.
14. (a) Discuss in detail the circular money flow with saving and investment.  
Or  
(b) What is national income? Explain the methods employed to determine it.
15. (a) What are the causes of unemployment? Discuss the policy measures to solve the unemployment problem.  
Or  
(b) Analyse the role of monetary policy in containing supply of money.

PART C — (1 × 15 = 15 marks)

16. (a) Examine the impact of fiscal policy on the development of a nation.  
Or  
(b) "Inflation has an adverse effect on output and distribution of income"-  
Elucidate.



Reg. No. :

**Question Paper Code : 90072**

M.B.A. DEGREE EXAMINATIONS, APRIL/MAY 2022.

First Semester

BA 4103 – MANAGERIAL ECONOMICS

(Regulations 2021)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What do you mean by scarcity in economics?
2. What does it mean to be efficient in economics?
3. In a free market, disequilibrium itself creates the condition for equilibrium. Elucidate.
4. How does isoquant curve differ from indifference curve?
5. Identify the factors that give rise to oligopoly.
6. What do you mean by interest?
7. What are the two main flows in an economy? How do they arise? What do they signify?
8. What is aggregate demand?
9. State Okun's law.
10. The following demand for money function is given:  $M_d = 0.6Y - 75i$  where income  $Y$  is in crores of rupees, and interest rate is in percentage. Calculate the demand for money when income is 4000 crores and the interest is 5 per cent.

PART B — (5 × 13 = 65 marks)

11. (a) (i) Explain the fundamental problems faced by an economy. (10.5)  
(ii) What is Production Possibility Frontier? (2.5)

Or

- (b) (i) Explain the role of the Government in a market economy. (10)  
(ii) Distinguish between positive and negative externalities with suitable examples. (3)

12. (a) Explain the determinants of Price Elasticity.

Or

(b) What are internal economics of scale? Explain its types.

13. (a) Explain and illustrate the process of price determination under perfect competition.

Or

(b) (i) What is derived demand? (3)

(ii) Identify the various factors influencing demand for and supply of labour in an economy. (10)

14. (a) Explain the theory of multiplier. Bring down its limitations.

Or

(b) What is fiscal policy? What are its components and objectives?

15. (a) What is unemployment? Examine its impact on individuals and economy.

Or

(b) Explain the various determinants of money supply in India.

PART C — (1 × 15 = 15 marks)

16. (a) (i) Due to 5% fall in price of a commodity its demand rises by 7.5%. Calculate and state coefficient of price elasticity of demand. Whether the demand is elastic or inelastic? Give reason. (3)

(ii) Write formula for measuring price elasticity of demand at a point on a straight line demand curve. (3)

(iii) The total expenditure on a commodity falls when its price rises. Comment on the price elasticity of demand of the commodity. (3)

(iv) State any two factors which may affect price elasticity of demand of a commodity. (3)

(v) Why is the demand for water inelastic? (3)

Or

(b) Inflation is called a necessary evil--no one likes it but it is needed for economic growth. Too much inflation can create major problems for policy makers. Both wholesale and retail inflation continued to increase month-on-month in April 2021, though the rise in the former has been much sharper. What's more, there are chances it may rise further.

(i) What is causing this rise in inflation? (7.5)

(ii) How will it impact the Indian economy and the financial markets? (7.5)